

EAU

PROJECT ID:
WITH: N/A

1610-02-73

COUNTY:
CLARK

OCTOBER 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 = 92



DESIGN DESIGNATION

A.A.D.T.	(2026)	= 9,640
A.A.D.T.	(2046)	= 11,730
D.H.V.		= 1,400
D.D.		= 50/50
T.		= 22.1%
DESIGN SPEED		= 60 MPH
ESALS		= 4,300,000

CONVENTIONAL SYMBOLS

PLAN	PROFILE
CORPORATE LIMITS	GRADE LINE
PROPERTY LINE	ORIGINAL GROUND
LOT LINE	MARSH OR ROCK PROFILE (To be noted as such)
LIMITED HIGHWAY EASEMENT	SPECIAL DITCH
EXISTING RIGHT OF WAY	GRADE ELEVATION
PROPOSED OR NEW R/W LINE	CULVERT (Profile View)
SLOPE INTERCEPT	UTILITIES
REFERENCE LINE	ELECTRIC
EXISTING CULVERT	FIBER OPTIC
PROPOSED CULVERT (Box or Pipe)	GAS
COMBUSTIBLE FLUIDS	SANITARY SEWER
	STORM SEWER
	TELEPHONE
	WATER
MARSH AREA	UTILITY PEDESTAL
	POWER POLE
WOODED OR SHRUB AREA	TELEPHONE POLE

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

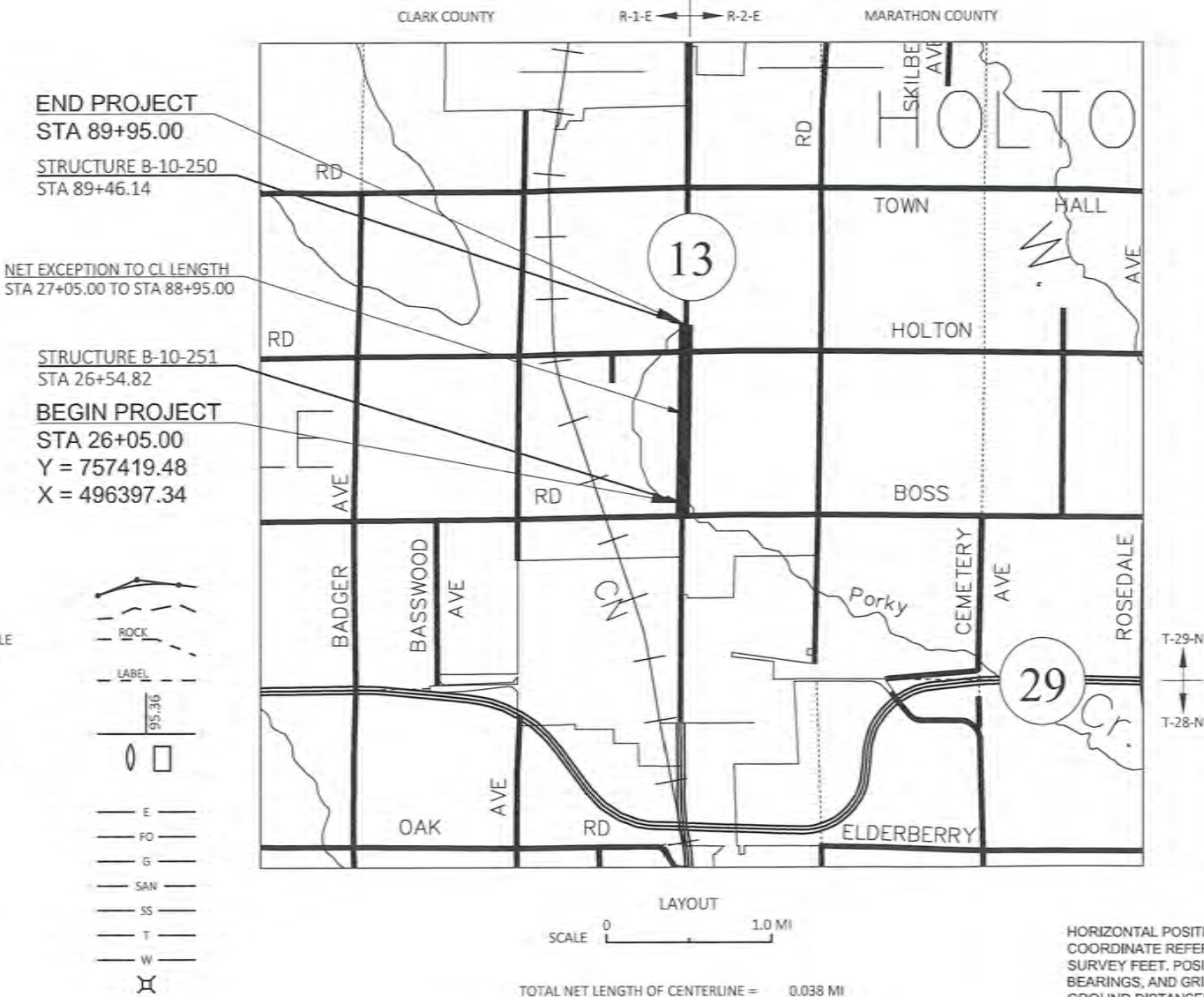
PLAN OF PROPOSED IMPROVEMENT

ABBOTSFORD - MEDFORD

PORKY CREEK B-10-0250 & B-10-0251

STH 13
CLARK COUNTY

STATE PROJECT NUMBER
1610-02-73



HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM, CLARK 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 PROJECT

1610-02-73

FEDERAL PROJECT

PROJECT

CONTRACT

ORIGINAL PLANS PREPARED BY
JT ENGINEERING, INC.

jt ENGINEERING



04/29/2025

DATE: 04/29/2025

Christopher Marcum
(Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	JT ENGINEERING, INC.
Designer	JT ENGINEERING, INC.
Project Manager	NATHAN ULNESS
Regional Examiner	WISDOT NW REGION
Regional Supervisor	NATHAN ULNESS

APPROVED FOR THE DEPARTMENT

DATE: 4/30/25

Signature

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RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIP- TURF	.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 SLOPE: TURF			.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 = 0.549 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.328 ACRES

STANDARD ABBREVIATIONS

AP	ACCESS POINT	INTERS	INTERSECTION
AC	ACRE	INV	INVERT
AGG	AGGREGATE	JT	JOINT
ASPH	ASPHALTIC	LT	LEFT
BL	BASELINE	LF	LINEAR FOOT
BM	BENCH MARK	MH	MANHOLE
CB	CATCH BASIN	MP	MARKER POST
CL	CENTER LINE	MB	MESSAGE BOARD
CONC	CONCRETE	NOM	NOMINAL
CO	COUNTY	NB	NORTHBOUND
CABC	CRUSHED AGGREGATE BASE	PAVT	PAVEMENT
	COURSE	PERM	PERMENANT
CY	CUBIC YARD	PU	PIPE UNDERDRAIN
CULV	CULVERT	PCC	PORTLAND CEMENT CONCRETE
CP	CULVERT PIPE	PE	PRIVATE ENTRANCE
C&G	CURB AND GUTTER	PROJ	PROJECT
DIA	DIAMETER	PL	PROPERTY LINE
DWY	DRIVEWAY	RL	REFERENCE LINE
EB	EASTBOUND	RT	RIGHT
ELEV	ELEVATION	R/W	RIGHT OF WAY
EW	ENDWALL	RDWY	ROADWAY
ENT	ENTRANCE	SHLDR	SHOULDER
EXC	EXCAVATION	SB	SOUTHBOUND
FP	FENCE POST	SS	STORM SEWER
FERT	FERTILIZE	TEL	TELEPHONE
F	FILL	TEMP	TEMPORARY
FG	FINISHED GRADE	TER	TERRACE
FL	FLOW LINE	TV	TELEVISION
FO	FIBER OPTIC	UG	UNDERGROUND
FT	FOOT	VOL	VOLUME
HYD	HYDRANT	W	WATER
INL	INLET	WB	WESTBOUND

GENERAL NOTES

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE.

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGER'S HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA.

WHEN THE QUANTITY OF BASE AGGREGATE IS MEASURED BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

CONDUCT CONSTRUCTION OPERATIONS SUCH THAT WATER IS NOT TRAPPED ON THE ROADWAY OR BASE AGGREGATE SURFACE.

THE EXISTING RIGHT OF WAY IS BASED OFF OF CHIPPEWA COUNTY GIS AND IS SHOWN FOR GRAPHICAL PURPOSES ONLY.

THE EXACT LOCATION OF THE EROSION CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD.

ALL TRAFFIC CONTROL SIGNING AND DEVICES SHALL BE IN CONFORMANCE WITH THE "WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (WMUTCD), THE STANDARD DETAIL DRAWINGS (SDD), AND THE GENERAL NOTES LISTED IN THE SDD'S.

UTILITY CONTACTS

CLARK ELECTRIC CO-OP
JOSH BURNS
1209 W DALL-BERG RD
GREENWOOD, WI 54437
(715) 267-6188
(715) 456-3364 (MOBILE)
JBURNS@CECOOP.COM

BUG TUSSEL
DUSTIN TEAFF
1262 CAMBER CT
DE PERE WI 54115
(920) 254-3539
DUSTIN.TEAFF@BTUSSEL.COM

FRONTIER COMMUNICATIONS OF WI LLC - COMMUNICATION LINE
BIMAL KOHLI
1222 VINE ST.
STE 30
PASO ROBLES, CA 93446
(763) 317-8414
BKOHLI@PEARCE-SERVICES.COM

WE ENERGIES
SANDRA BEHLEN
1921 8TH STREET SOUTH
WISCONSIN RAPIDS, WI 54494
(715) 421-7277
(715) 213-5189 (MOBILE)
SANDRA.BEHLEN@WE-ENERGIES.COM

SEQUENCE OF PLANS AND DETAILS IN SECTION 2

- GENERAL NOTES
- PROJECT OVERVIEW
- TYPICAL SECTIONS
- TRAFFIC CONTROL
- EROSION CONTROL
- CONSTRUCTION DETAILS



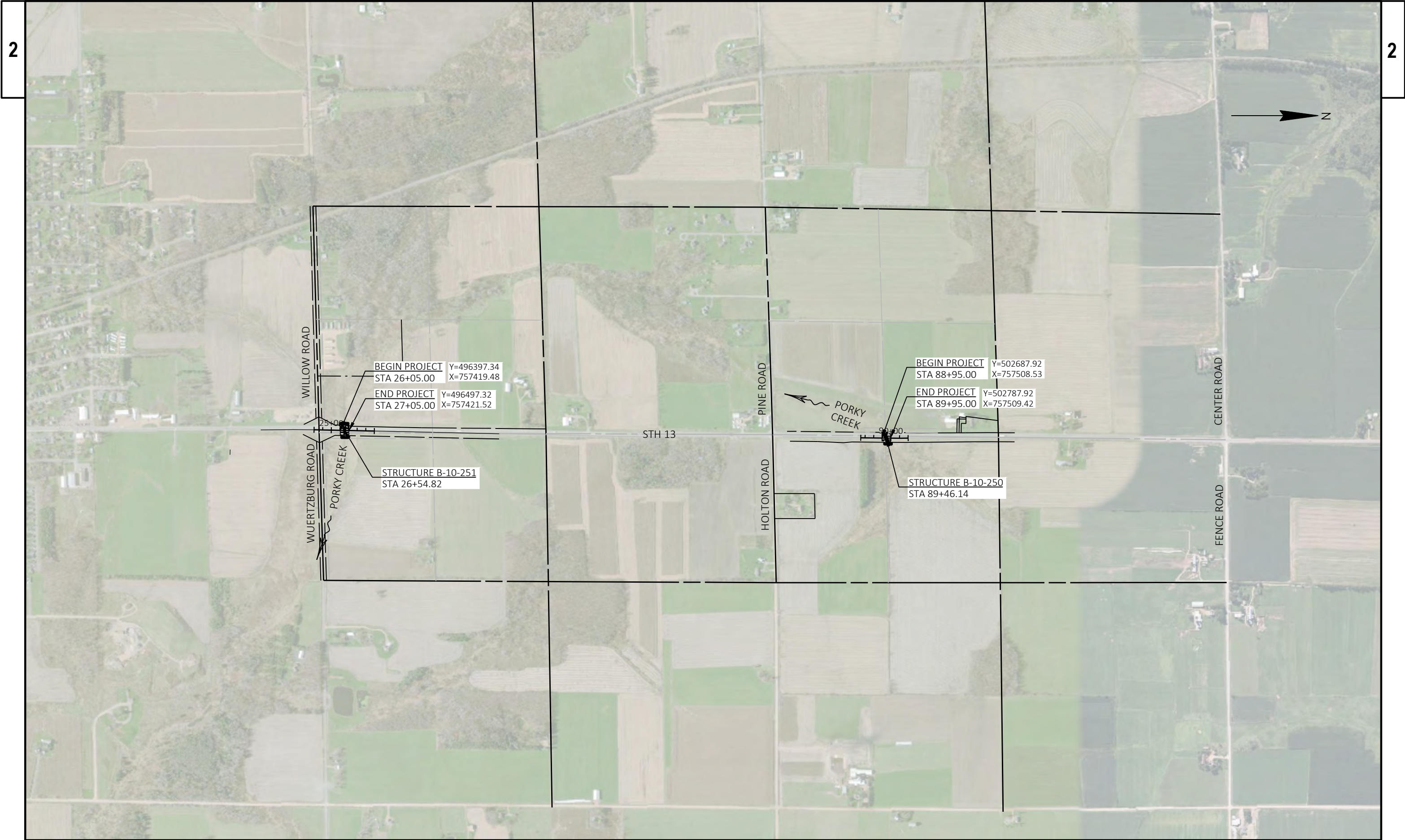
Dial 811 or (800)242-8511
www.DiggersHotline.com

WISCONSIN DNR LIAISON

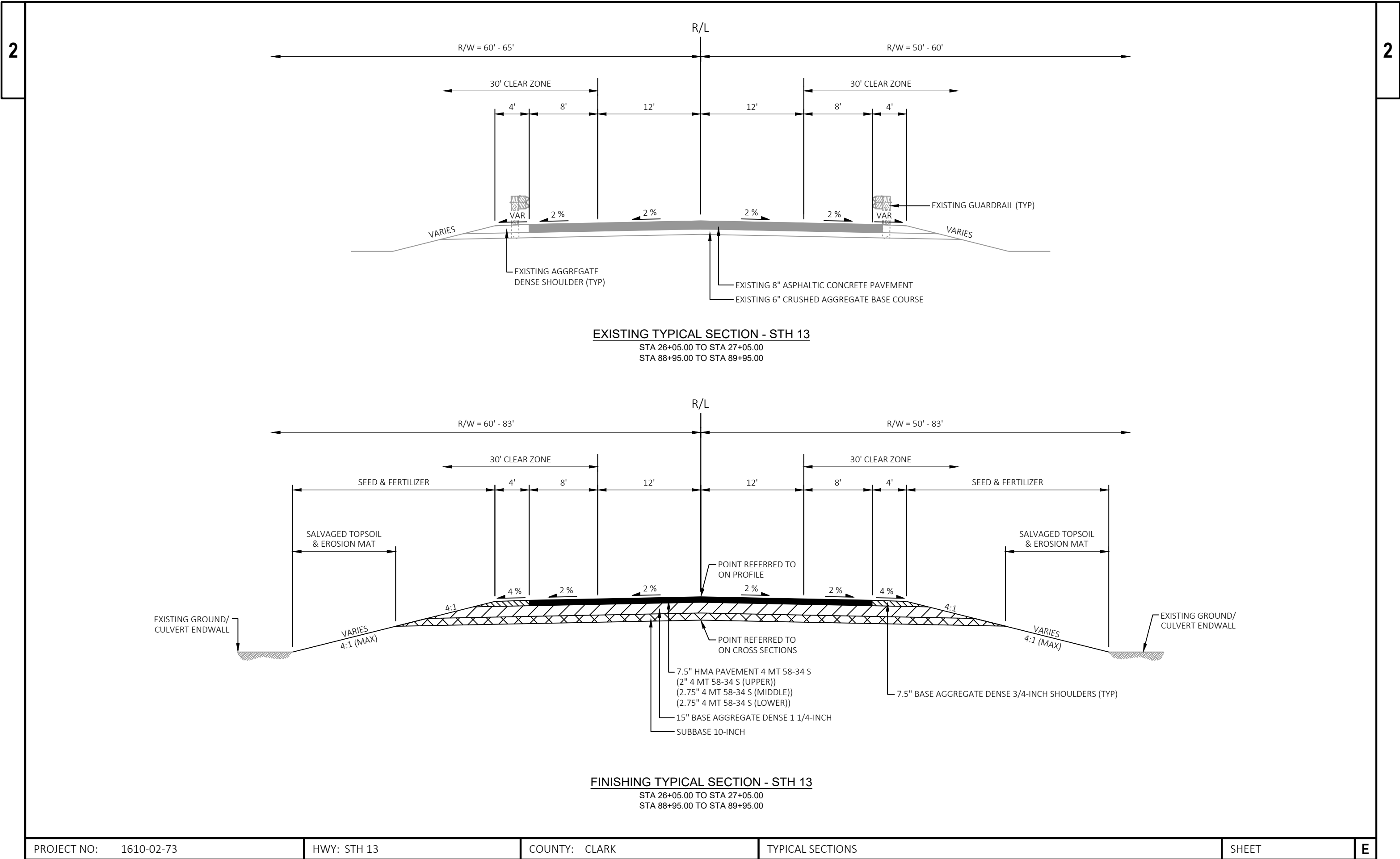
BRAD BETTHAUSER
DNR BLACK RIVER FALLS SERVICE CENTER
910 HWY 54 E
BLACK RIVER FALLS, WI 54615
715-213-9064
BRADLEY.BETTHAUSER@WISCONSIN.GOV

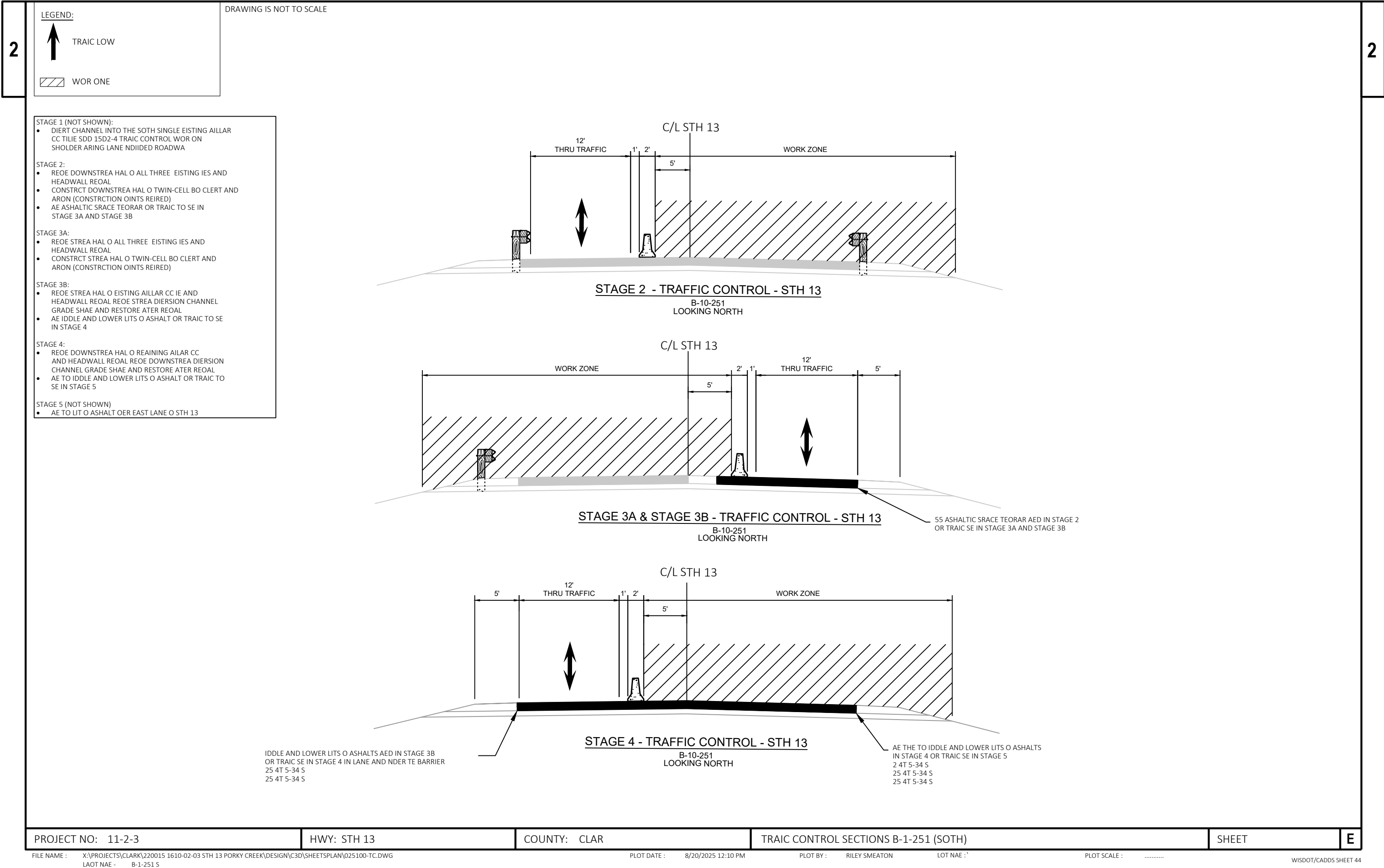
DESIGN CONTACT

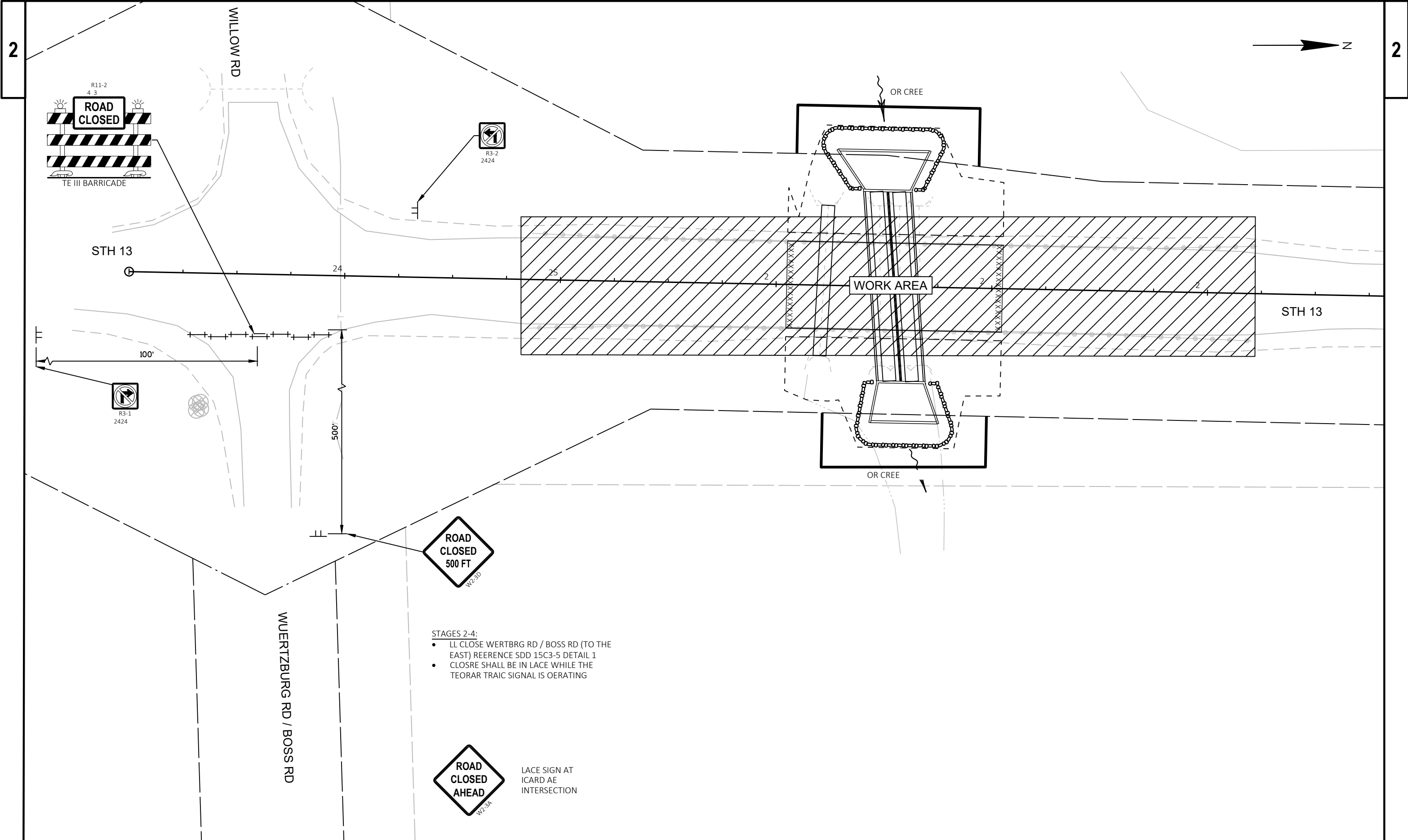
JT ENGINEERING
1403 122ND ST., SUITE C
CHIPPEWA FALLS, WI 54729
ATTN: CHRISTOPHER MARCUM, PE
(715) 861-4823
CHRISM@JT-ENGINEERING.COM

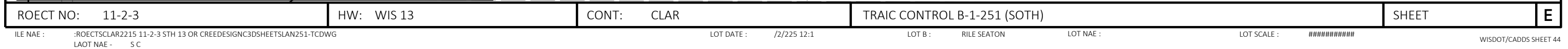


PROJECT NO: 1610-02-73	HWY: STH 13	COUNTY: CLARK	PROJECT OVERVIEW	SHEET	E
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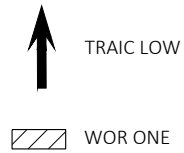








LEGEND:



DRAWING IS NOT TO SCALE

STAGE 1 (NOT SHOWN):

- DIERT CHANNEL INTO THE SOTH SINGLE EISTING AILLAR CC TILIE SDD 15D2 TRAIC CONTROL WOR ON SHOLDER ARING LANE NDIIDED ROADWA

STAGE 2A:

- REOE DOWNSTREA HAL O TWO NORTH EISTING IES AND ARTIAL HEADWALL REOAL

STAGE 2B:

- CONSTRCT DOWNSTREA HAL O TWO NORTH CRCHE AND SECTION O HEADWALL (CONSTRCTION OINTS REIRED)
- AE ASHALTIC SRACE TEORAR IN STAGE 2B OR TRAIC TO SE IN STAGE 3A AND STAGE 3B

STAGE 3A:

- REOE STREA HAL O TWO NORTH EISTING IES AND ARTIAL HEADWALL REOAL CONSTRCT STREA HAL O TWO NORTH CRCHE AND SECTION O HEADWALL (CONSTRCTION OINTS REIRED)

STAGE 3B:

- DIERT OR CREE BAC INTO THE CONSTRCTED TWO NORTHERN CRCHE AND HEADWALLS THEN REOE THE STREA EISTING SOTHERN IE AND HEADWALL RIOR TO STAGE 4
- AE IDDLLE AND LOWER LITS O ASHALT OR TRAIC TO SE IN STAGE 4

STAGE 4:

- REOE DOWNSTREA HAL O REAINING CC AND ARTIAL HEADWALL REOAL
- CONSTRCT DOWNSTREA HAL O ONE SOTH CRCHE AND SECTION O HEADWALL
- AE TO IDDLLE AND LOWER LITS O ASHALT OR TRAIC TO SE IN STAGE 5

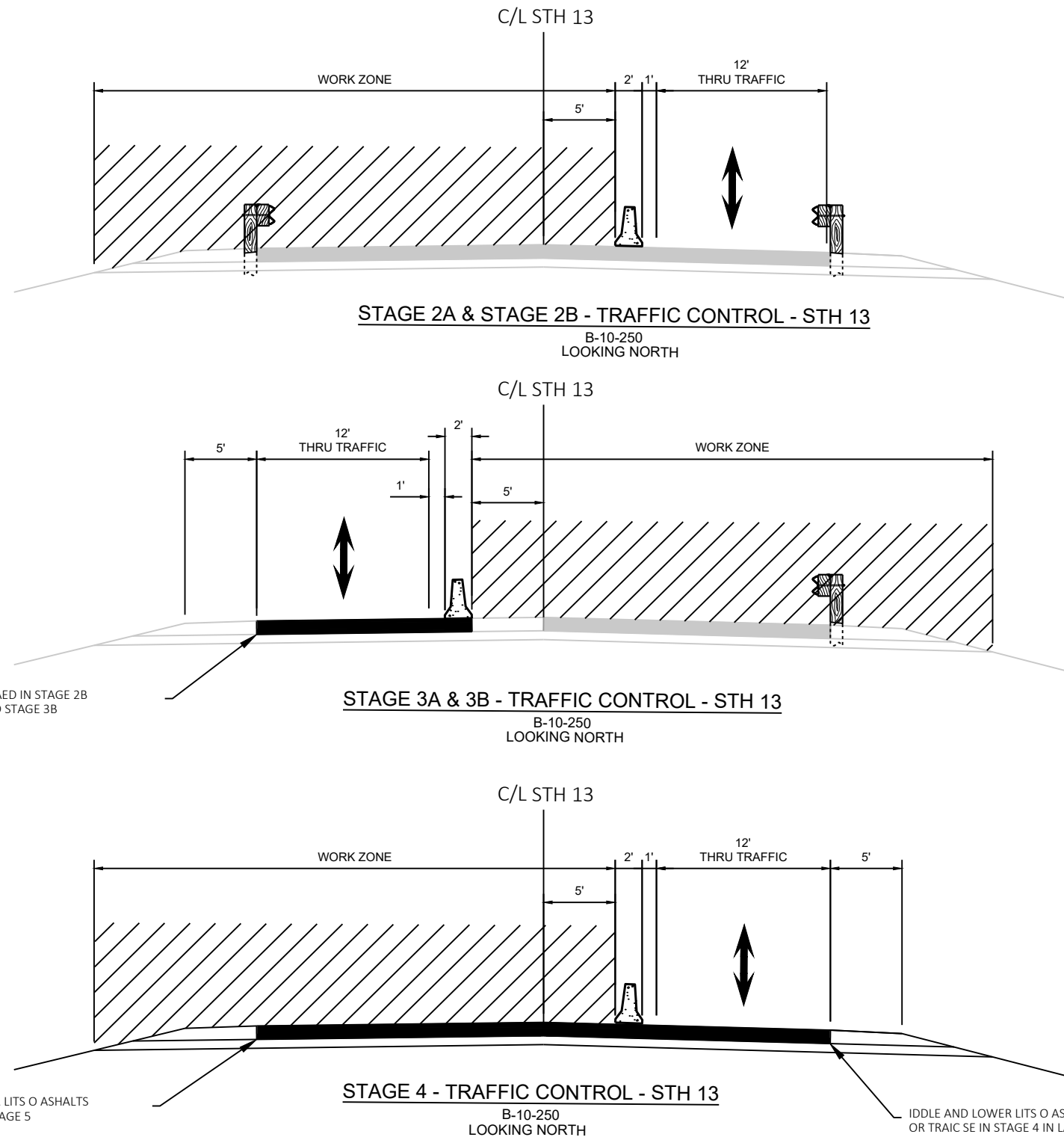
STAGE 5 (NOT SHOWN):

- AE TO LIT O ASHALT OER EAST LANE O STH 13

55 ASHALTIC SRACE TEORAR AED IN STAGE 2B
OR TRAIC SE IN STAGE 3A AND STAGE 3B

AE THE TO IDDLLE AND LOWER LITS O ASHALTS
IN STAGE 4 OR TRAIC SE IN STAGE 5
2 4T 5-34 S
25 4T 5-34 S
25 4T 5-34 S

IDDLLE AND LOWER LITS O ASHALTS AED IN STAGE 3B
OR TRAIC SE IN STAGE 4 IN LANE AND NDER TE BARRIER
25 4T 5-34 S
25 4T 5-34 S



ROECT NO: 11-2-3

HW: STH 13

CONT: CLAR

TRAIC CONTROL SECTIONS B-1-25 (NORTH)

SHEET

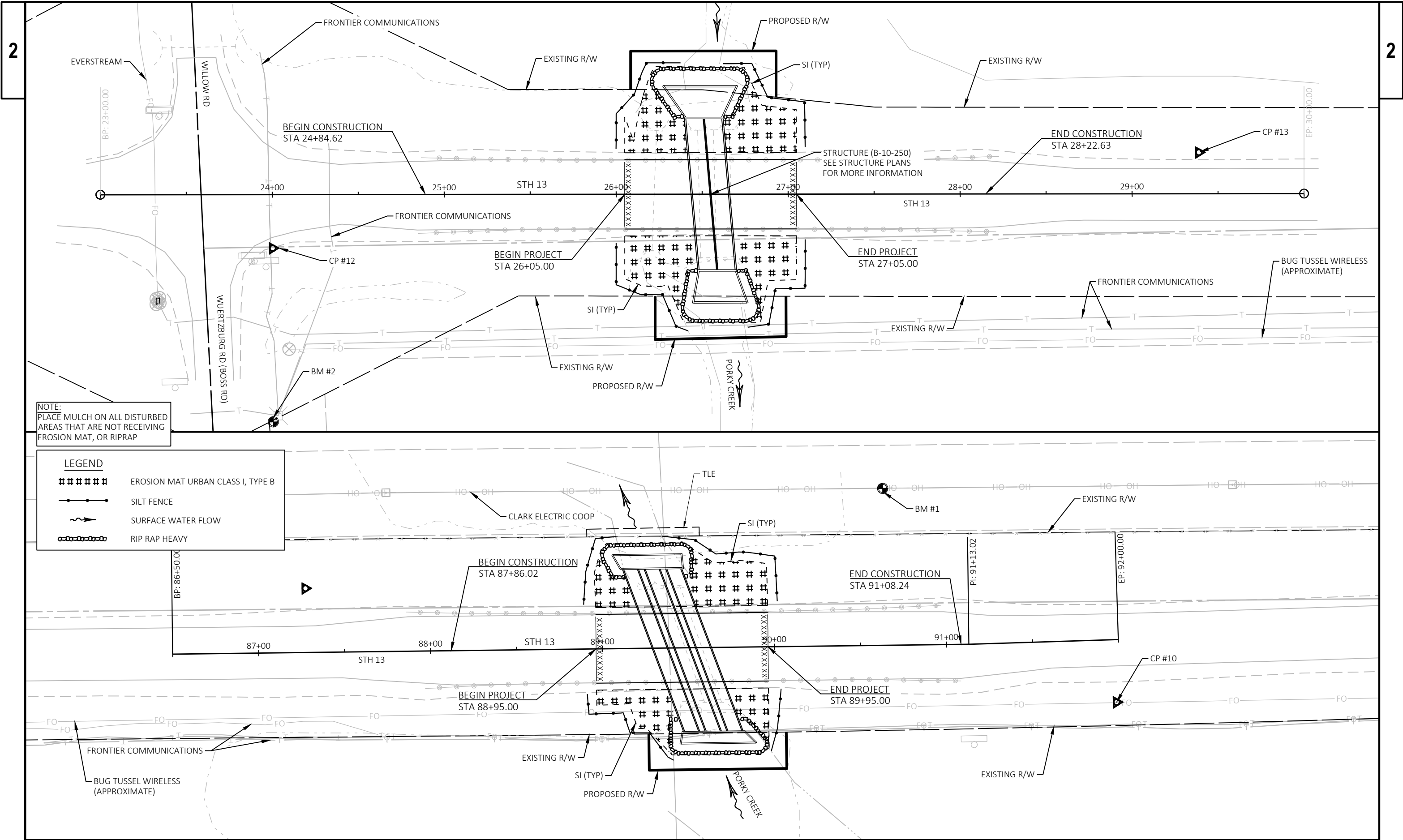
E

TEORAR SIGNAL NOTES:

- 1 INSTALL ER STANDARD DETAIL DRAWINGS BRIDGE TEORAR TRAIIC SIGNAL INSTALLATION AND TRAIIC CONTROL ONE LANE ROAD WITH TEORAR SIGNALS
- 2 GREEN TIES A BE ADSTED TO IT TRAIIC CONDITIONS
- 3 DO NOT REDCE ALL RED TIE



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NOTE:
PLACE MULCH ON ALL DISTURBED
AREAS THAT ARE NOT RECEIVING
EROSION MAT, OR RIPRAP

LEGEND

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EROSION MAT URBAN CLASS I, TYPE B

—●—●—●—

SILT FENCE

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SURFACE WATER FLOW

—●—●—●—

RIP RAP HEAVY



TRAFFIC ON EXISTING SB PAVEMENT

 INDICATES WINGWALL NUMBER
 VERTICAL CONSTRUCTION JOINT.
 INDICATES STAGE REMOVAL LIMITS.

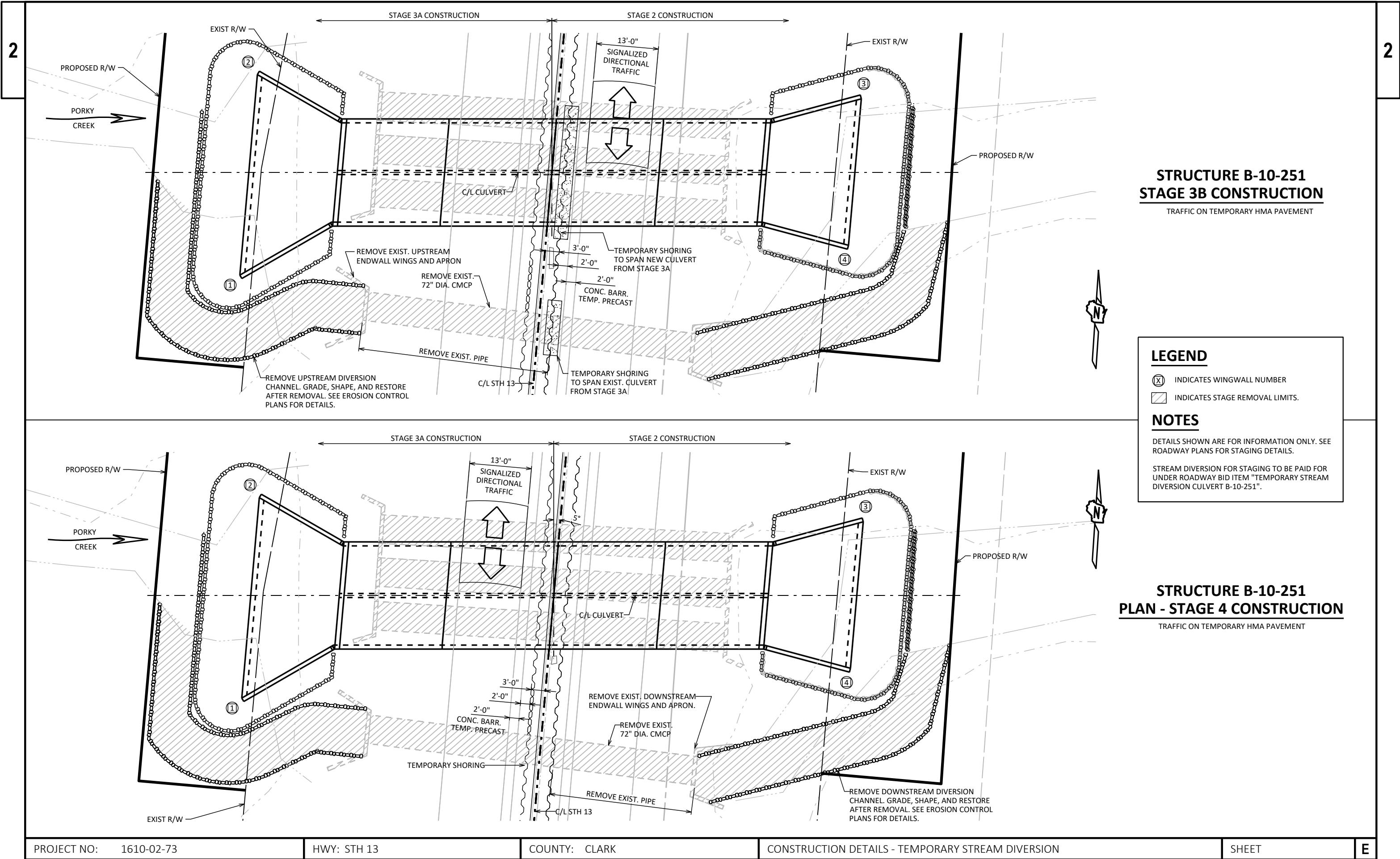
DETAILS SHOWN ARE FOR INFORMATION ONLY. SEE
ROADWAY PLANS FOR STAGING DETAILS.

STAGE 1 SHALL INCLUDE THE INSTALLATION OF
TEMPORARY DIVERSION CHANNELS AND IS NOT SHOWN
ON THIS SHEET. SEE ROADWAY PLANS FOR DETAILS.

STREAM DIVERSION FOR STAGING TO BE PAID FOR UNDER ROADWAY BID ITEM "TEMPORARY STREAM DIVERSION CULVERT B-10-251".

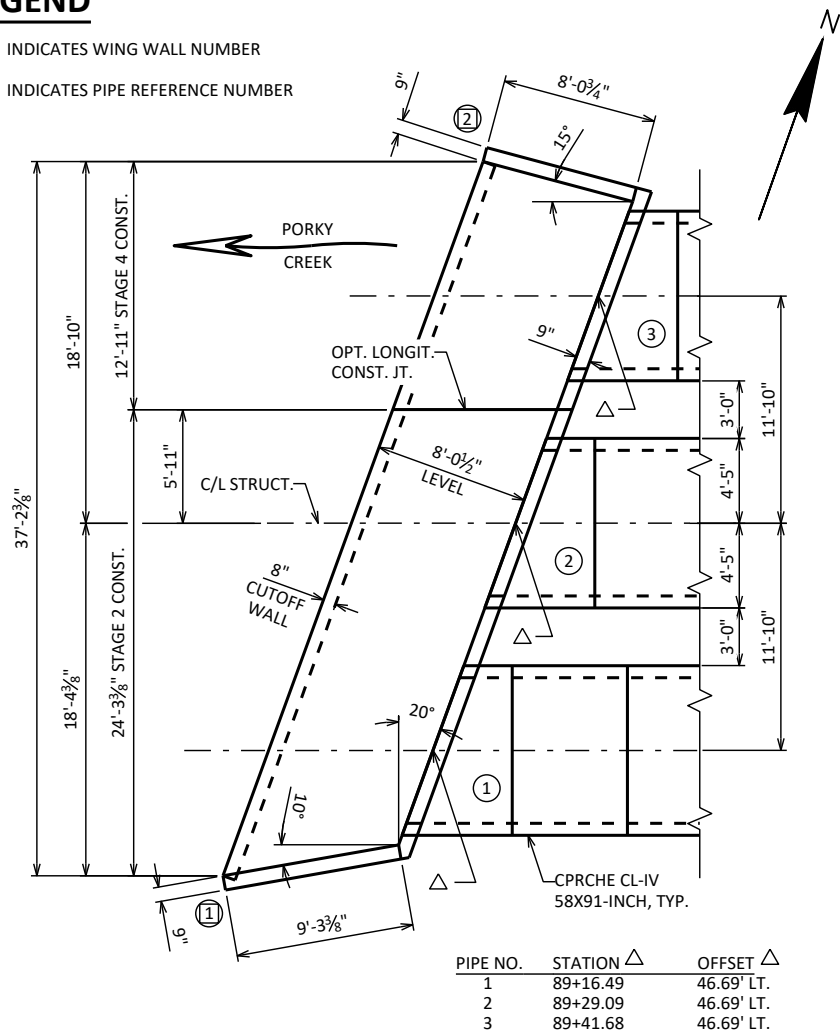
TRAFFIC ON TEMPORARY HMA PAVEMENT



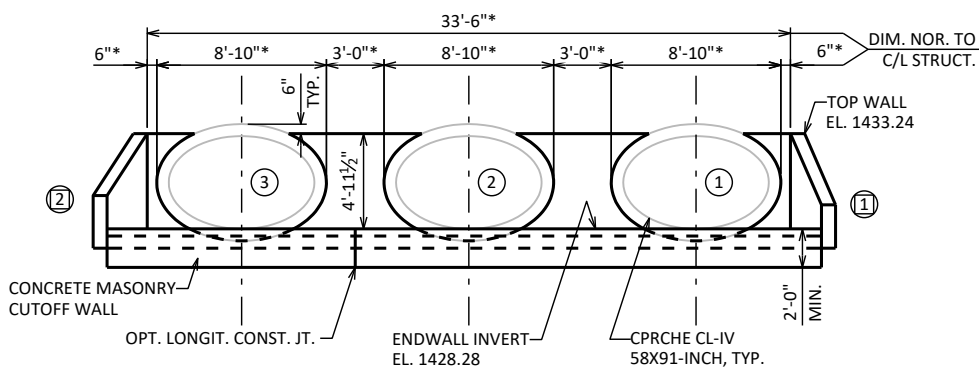


LEGEND

- (X) INDICATES WING WALL NUMBER
(X) INDICATES PIPE REFERENCE NUMBER

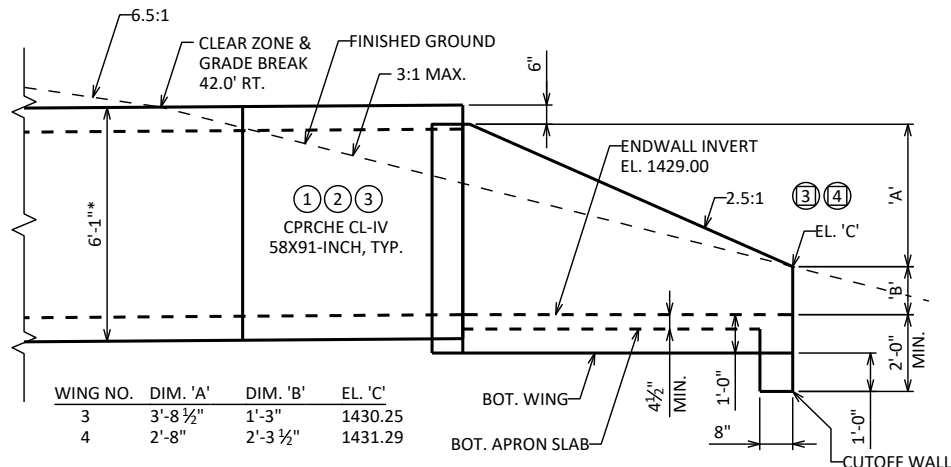


DOWNSTREAM/OUTLET ENDWALL - PLAN VIEW

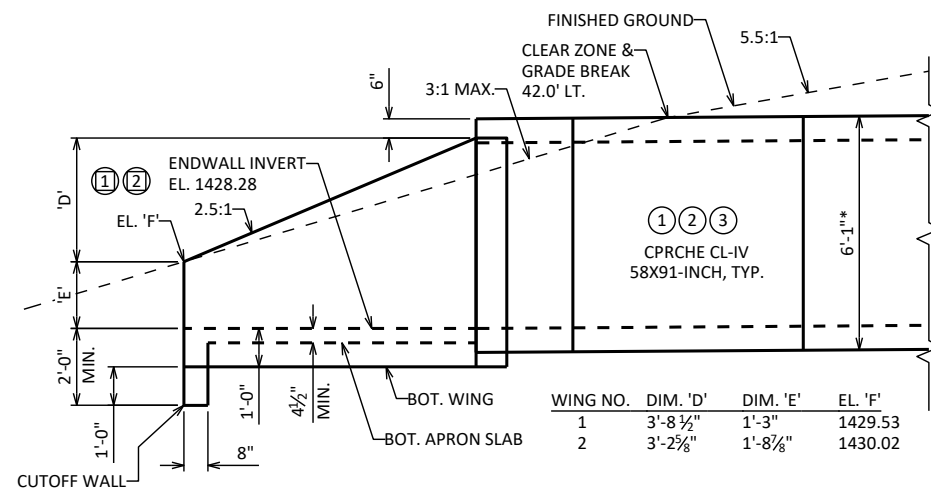


DOWNSTREAM/OUTLET ENDWALL - END ELEVATION

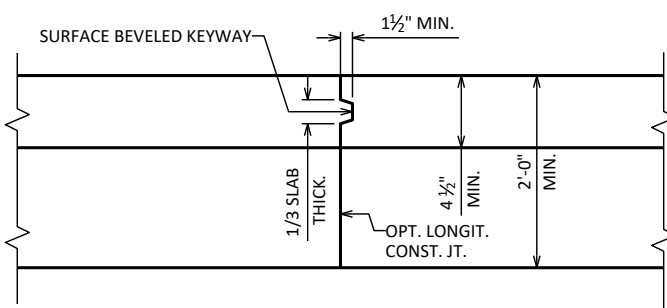
(LOOKING EAST)
* ASSUMED PIPE THICKNESS IS 7.5". ACTUAL PIPE THICKNESS MAY VARY. ADJUST DIMENSIONS ACCORDINGLY. DIMENSIONS ARE MEASURED NORMAL TO C/L STRUCTURE.



UPSTREAM/INLET WINGWALL - SIDE VIEW



DOWNSTREAM/OUTLET WINGWALL - SIDE VIEW



OPTIONAL LONGIT. CONST. JOINT DETAIL

IN CUTOFF WALLS AND APRON SLAB ONLY

NOTES

SEE S.D.D. "CONCRETE MASONRY ENDWALLS FOR CULVERT PIPES" FOR ADDITIONAL INFORMATION.

OPTIONAL LONGITUDINAL CONST. JOINT REQUIRES A SURFACE BEVELED KEYWAY AS SHOWN IN THE JOINT DETAIL ON THIS SHEET. PROVIDE A MINIMUM STEEL LAP OF 1'-5" IF OPTIONAL CONST. JOINT IS USED. ALL WORK ASSOCIATED WITH CONSTRUCTION OF OPTIONAL LONGITUDINAL CONST. JOINT IS INCIDENTAL TO BID ITEM "CONCRETE MASONRY ENDWALLS".

FURNISH A NAME PLATE FOLLOWING S.D.D. 12A3-10.

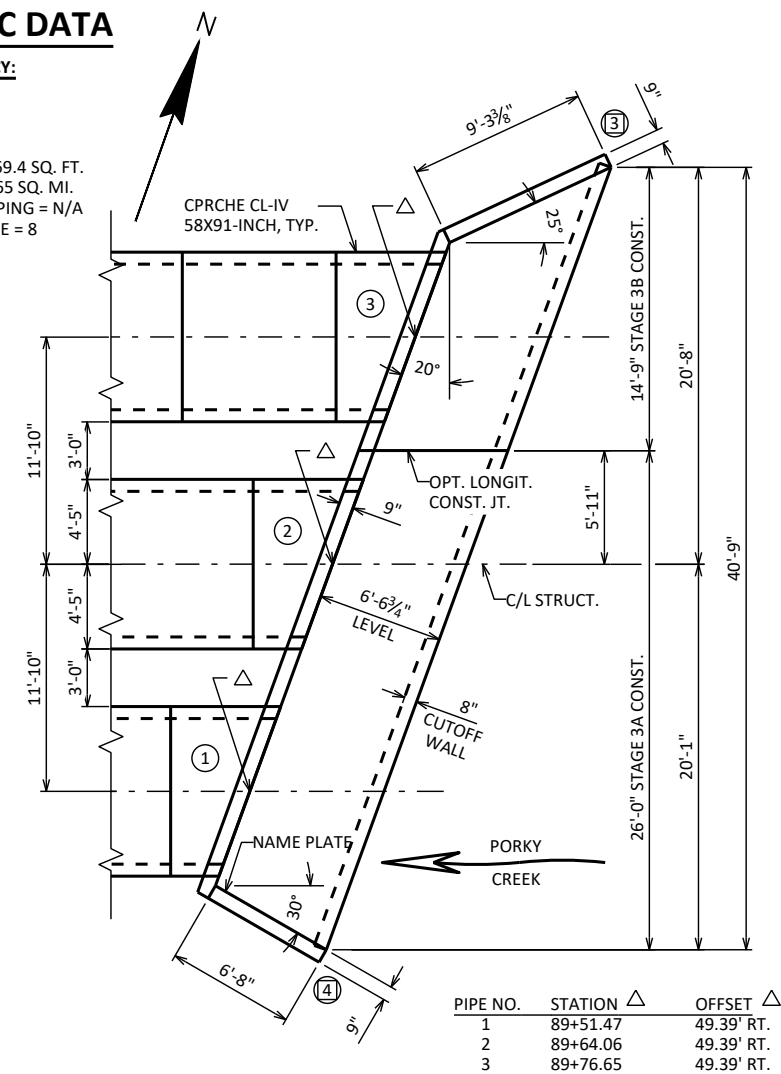
HYDRAULIC DATA

100-YEAR FREQUENCY:

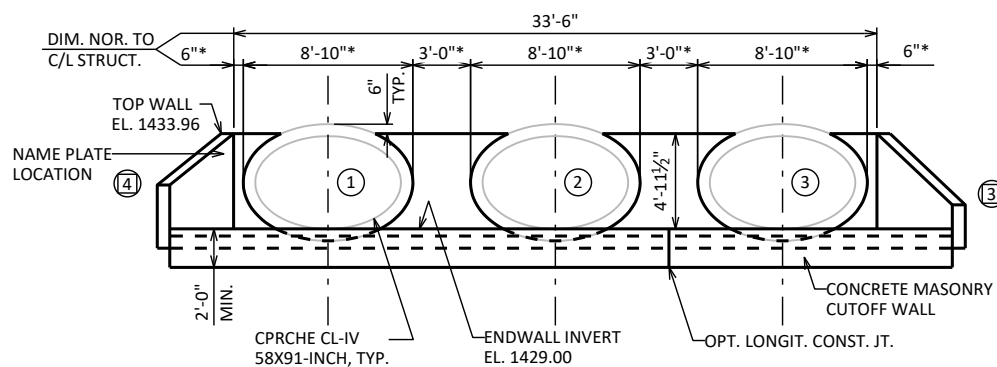
Q_{100} = 570 C.F.S.
 V_{100} = 8.21 F.P.S.
 HW_{100} = EL. 1434.44
WATERWAY AREA = 69.4 SQ. FT.
DRAINAGE AREA = 0.65 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 8

2-YEAR FREQUENCY:

Q_2 = 110 C.F.S.
 V_2 = 3.61 F.P.S.
 HW_2 = EL. 1431.45

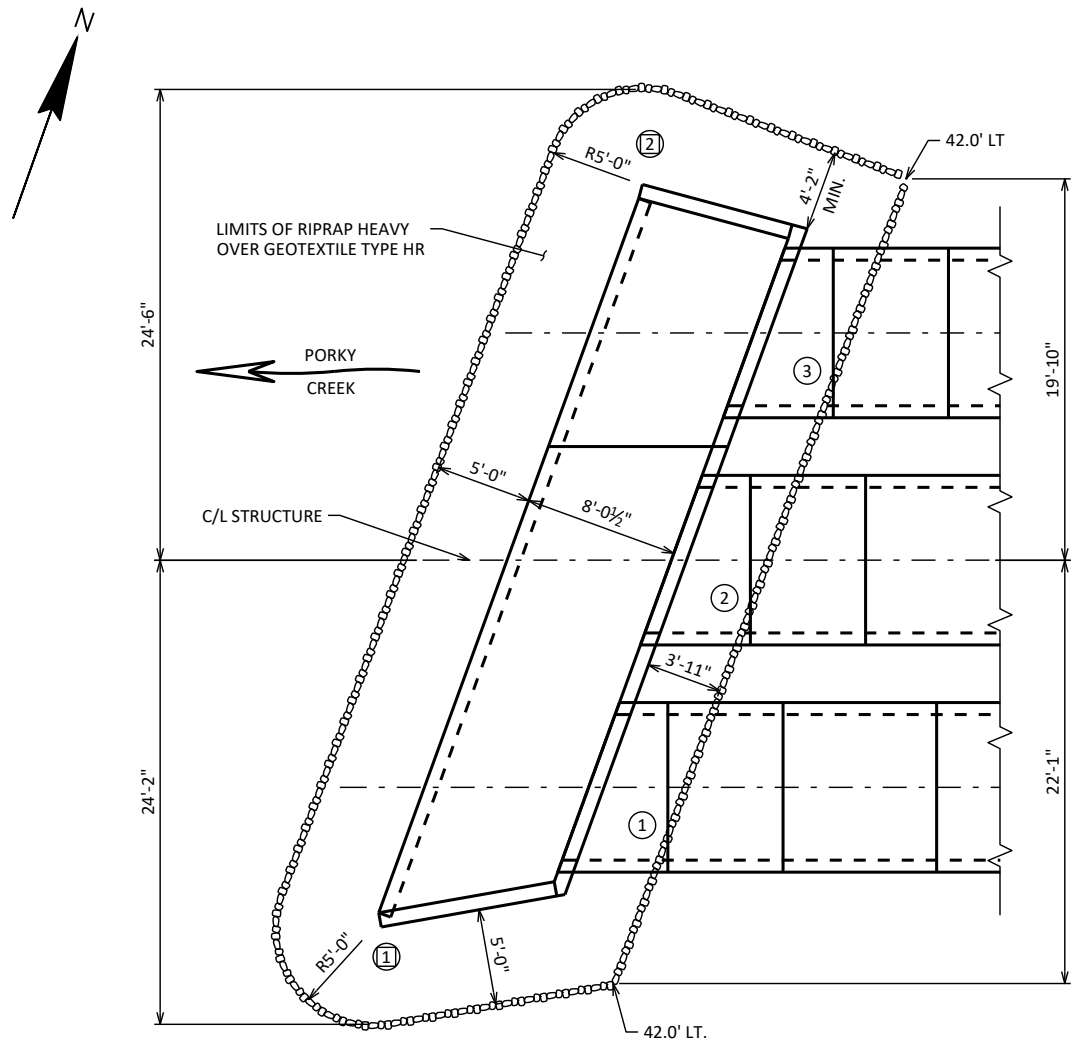


UPSTREAM/INLET ENDWALL - PLAN VIEW

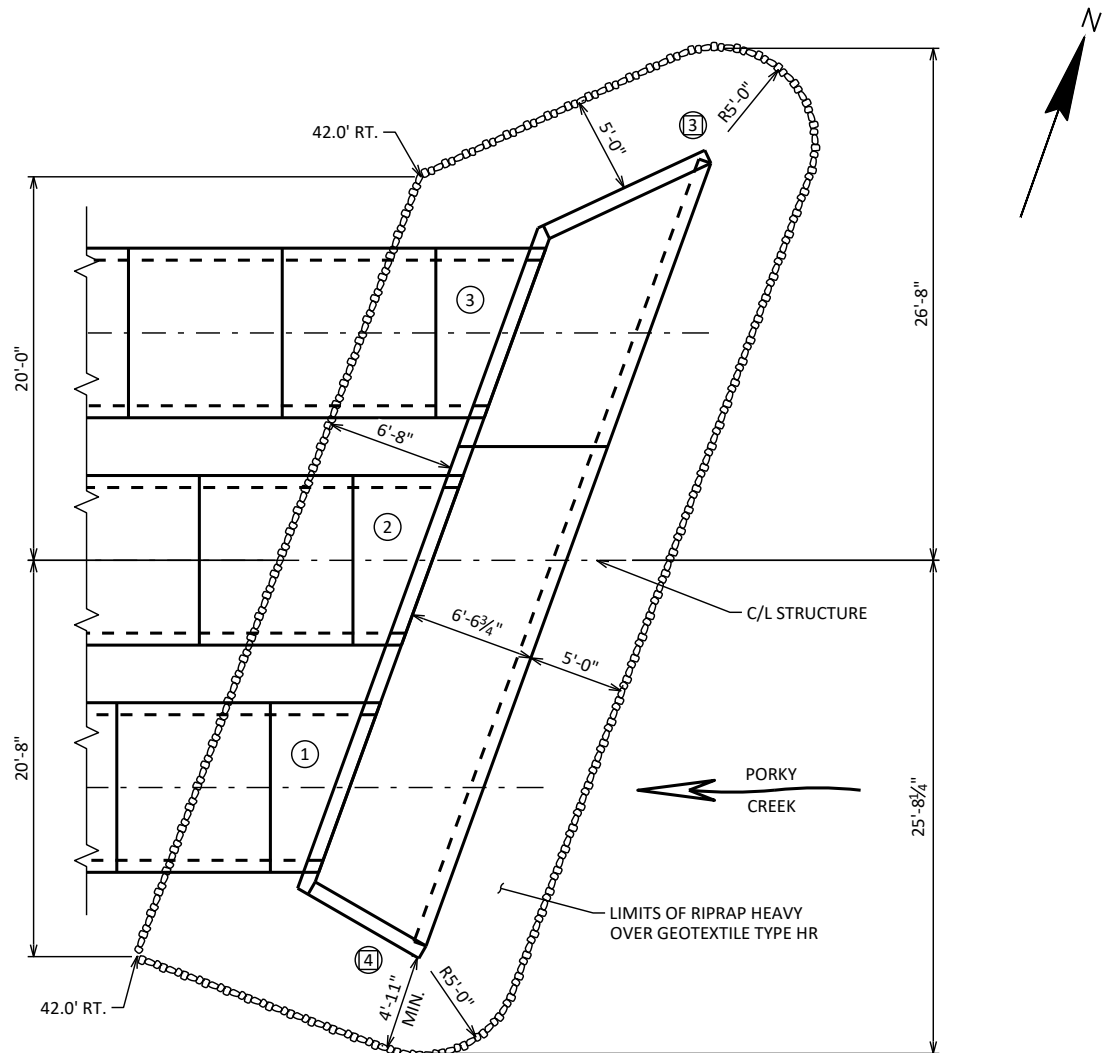


UPSTREAM/INLET ENDWALL - END ELEVATION

(LOOKING WEST)
* ASSUMED PIPE THICKNESS IS 7.5". ACTUAL PIPE THICKNESS MAY VARY. ADJUST DIMENSIONS ACCORDINGLY. DIMENSIONS ARE MEASURED NORMAL TO C/L STRUCTURE.



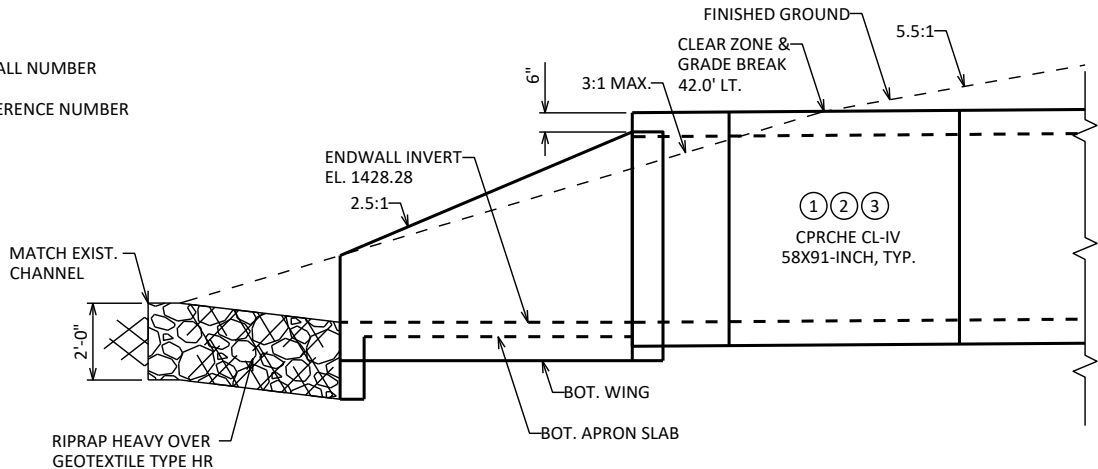
DOWNSTREAM/OUTLET ENDWALL - PLAN VIEW



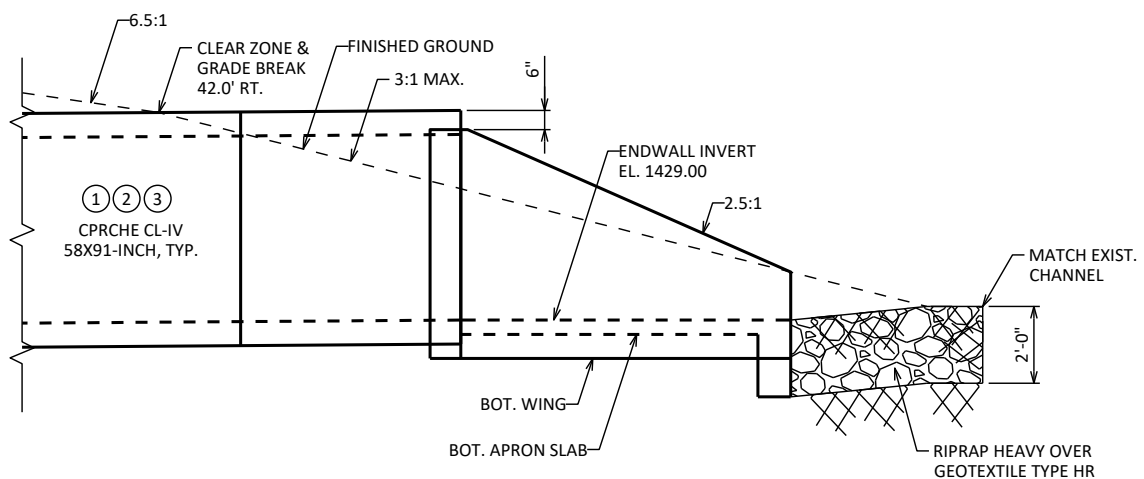
UPSTREAM/INLET ENDWALL - PLAN VIEW

LEGEND

- (X) INDICATES WING WALL NUMBER
- (X) INDICATES PIPE REFERENCE NUMBER



DOWNSTREAM/OUTLET WINGWALL - SIDE VIEW



UPSTREAM/INLET WINGWALL - SIDE VIEW

Estimate Of Quantities

1610-02-73

Line	Item	Item Description	Unit	Total	Qty
0002	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000
0004	203.0220	Removing Structure (structure) 01. B-10-240	EACH	1.000	1.000
0006	203.0220	Removing Structure (structure) 02. B-10-241	EACH	1.000	1.000
0008	204.0110	Removing Asphaltic Surface	SY	890.000	890.000
0010	206.2001	Excavation for Structures Culverts (structure) 01. B-10-251	EACH	1.000	1.000
0012	210.2500	Backfill Structure Type B	TON	1,840.000	1,840.000
0014	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 1610-02-73	EACH	1.000	1.000
0016	213.0100	Finishing Roadway (project) 01. 1610-02-73	EACH	1.000	1.000
0018	305.0110	Base Aggregate Dense 3/4-Inch	TON	78.000	78.000
0020	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	742.000	742.000
0022	305.0500	Shaping Shoulders	STA	14.000	14.000
0024	310.0110	Base Aggregate Open-Graded	TON	130.000	130.000
0026	312.0110	Select Crushed Material	TON	390.000	390.000
0028	350.0135	Subbase 10-Inch	SY	890.000	890.000
0030	455.0605	Tack Coat	GAL	178.000	178.000
0032	460.2000	Incentive Density HMA Pavement	DOL	240.000	240.000
0034	460.6244	HMA Pavement 4 MT 58-34 S	TON	374.000	374.000
0036	465.0125	Asphaltic Surface Temporary	TON	118.000	118.000
0038	504.0100	Concrete Masonry Culverts	CY	293.000	293.000
0040	504.0900	Concrete Masonry Endwalls	CY	19.000	19.000
0042	505.0400	Bar Steel Reinforcement HS Structures	LB	32,820.000	32,820.000
0044	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	2,500.000	2,500.000
0046	511.1200	Temporary Shoring (structure) 01. B-10-250	SF	1,330.000	1,330.000
0048	511.1200	Temporary Shoring (structure) 02. B-10-251	SF	1,935.000	1,935.000
0050	516.0500	Rubberized Membrane Waterproofing	SY	41.000	41.000
0052	603.8000	Concrete Barrier Temporary Precast Delivered	LF	550.000	550.000
0054	603.8125	Concrete Barrier Temporary Precast Installed	LF	1,650.000	1,650.000
0056	603.8500	Anchoring Concrete Barrier Temporary Precast	LF	1,200.000	1,200.000
0058	606.0300	Riprap Heavy	CY	177.000	177.000
0060	614.0905	Crash Cushions Temporary	EACH	6.000	6.000
0062	614.0920	Salvaged Rail	LF	1,295.000	1,295.000
0064	614.0925	Salvaged Guardrail End Treatments	EACH	8.000	8.000
0066	618.0100	Maintenance and Repair of Haul Roads (project) 01. 1610-02-73	EACH	1.000	1.000
0068	619.1000	Mobilization	EACH	1.000	1.000
0070	624.0100	Water	MGAL	20.000	20.000
0072	625.0500	Salvaged Topsoil	SY	1,025.000	1,025.000
0074	628.1504	Silt Fence	LF	400.000	400.000
0076	628.1520	Silt Fence Maintenance	LF	400.000	400.000
0078	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0080	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0082	628.2008	Erosion Mat Urban Class I Type B	SY	1,025.000	1,025.000
0084	629.0210	Fertilizer Type B	CWT	1.000	1.000
0086	630.0120	Seeding Mixture No. 20	LB	49.000	49.000
0088	630.0200	Seeding Temporary	LB	30.000	30.000
0090	630.0500	Seed Water	MGAL	25.000	25.000
0092	637.0620	Sign Flags Permanent Type II	EACH	24.000	24.000
0094	642.5001	Field Office Type B	EACH	1.000	1.000
0096	643.0300	Traffic Control Drums	DAY	3,640.000	3,640.000
0098	643.0420	Traffic Control Barricades Type III	DAY	4,720.000	4,720.000

Estimate Of Quantities

1610-02-73

Line	Item	Item Description	Unit	Total	Qty
0100	643.0705	Traffic Control Warning Lights Type A	DAY	720.000	720.000
0102	643.0715	Traffic Control Warning Lights Type C	DAY	1,920.000	1,920.000
0104	643.0900	Traffic Control Signs	DAY	4,840.000	4,840.000
0106	643.1000	Traffic Control Signs Fixed Message	SF	1,009.000	1,009.000
0108	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0110	643.3180	Temporary Marking Line Removable Tape 6-Inch	LF	5,385.000	5,385.000
0112	643.3850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	48.000	48.000
0114	643.5000	Traffic Control	EACH	1.000	1.000
0116	645.0120	Geotextile Type HR	SY	318.000	318.000
0118	645.0220	Geogrid Type SR	SY	575.000	575.000
0120	646.2020	Marking Line Epoxy 6-Inch	LF	1,800.000	1,800.000
0122	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	1,800.000	1,800.000
0124	646.9000	Marking Removal Line 4-Inch	LF	3,600.000	3,600.000
0126	650.4500	Construction Staking Subgrade	LF	200.000	200.000
0128	650.5000	Construction Staking Base	LF	200.000	200.000
0130	650.6501	Construction Staking Structure Layout (structure) 01. B-10-250	EACH	1.000	1.000
0132	650.6501	Construction Staking Structure Layout (structure) 02. B-10-251	EACH	1.000	1.000
0134	650.9911	Construction Staking Supplemental Control (project) 01. 1610-02-73	EACH	1.000	1.000
0136	650.9920	Construction Staking Slope Stakes	LF	200.000	200.000
0138	661.0101	Temporary Traffic Signals for Bridges (structure) 01. B-10-250	EACH	1.000	1.000
0140	661.0101	Temporary Traffic Signals for Bridges (structure) 02. B-10-251	EACH	1.000	1.000
0142	690.0150	Sawing Asphalt	LF	160.000	160.000
0144	715.0502	Incentive Strength Concrete Structures	DOL	1,758.000	1,758.000
0146	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. STA 89+45	EACH	1.000	1.000
0148	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 02. STA 26+55	EACH	1.000	1.000
0150	SPV.0060	Special 01. Temporary Stream Diversion Culvert B-10-250	EACH	1.000	1.000
0152	SPV.0060	Special 02. Temporary Stream Diversion Culvert B-10-251	EACH	1.000	1.000
0154	SPV.0090	Special 01.Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 58x91-Inch	LF	307.000	307.000

PIPE REMOVAL SUMMARY					
203.0100 203.0220.01 REMOVING SMALL (STRUCTURE) (01. PIPE CULVERTS B-10-240) EACH EACH REMARKS					
0010	22+66	STH 13	1	-	
		TOTAL 0010	1	0	
0020	26+57	B-10-240	-	1	
		TOTAL 0020	0	1	
		PROJECT TOTAL	1	1	

REMOVAL SUMMARY						
204.0110 REMOVING ASPHALTIC SURFACE SY REMARKS						
CATEGORY	STATION	TO	STATION	LOCATION		
0010	26+05	-	27+05	B-10-251	445	
0010	88+95	-	89+95	B-10-250	445	
				TOTAL 0010	890	

BASE AGGREGATE SUMMARY										
CATEGORY	STATION	TO	STATION	LOCATION	305.0110	305.0120	305.0500	350.0135	624.0100	REMARKS
					BASE AGGREGATE DENSE 3/4-INCH TON	BASE AGGREGATE DENSE 1 1/4-INCH TON	SHAPING SHOULDERS STA	SUBBASE 10-INCH SY	WATER MGAL	
0010	26+05	-	27+05	B-10-251	39	371	7	445	10	
0010	88+95	-	89+95	B-10-250	39	371	7	445	10	
				TOTAL 0010	78	742	14	890	20	

ASPHALT PAVEMENT SUMMARY								
455.0605 460.6244 465.0125 TACK COAT HMA PAVEMENT 4 ASPHALTIC MT 58-34 S SURFACE GAL TON TON REMARKS								
CATEGORY	STATION	TO	STATION	LOCATION				
0010	26+05	-	27+05	B-10-251	89	187	59	
0010	88+95	-	89+95	B-10-250	89	187	59	
				TOTAL 0010	178	374	118	

STRUCTURE B-10-0250 SUMMARY									
504.0900 511.1200.01 * * SPV.0090.01 CONCRETE TEMPORARY SPECIAL (01.CULVERT PIPE MASONRY SHORING REINFORCED CONCRETE ENDWALLS (STRUCTURE) GEOTEXTILE TYPE HORIZONTAL ELLIPTICAL (01. B-10-250) RIPRAP HEAVY CLASS HE-IV 58X91-INCH) CY SF CY SY LF REMARKS									
0020	88+95	-	89+95	B-10-250	19	1,330	62	93	307
				TOTAL 0020	19	1,330	62	93	307
*QUANTITIES ARE SHOWN ELSEWHERE IN PLANS									

CONCRETE BARRIER TEMPORARY SUMMARY

		603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	603.8500 ANCHORING CONCRETE BARRIER TEMPORARY PRECAST	REMARKS
CATEGORY	LOCATION	LF	LF	LF	
STAGE 2					
0010	B-10-251	275	275	200	
0010	B-10-250	275	275	200	
STAGE 3					
0010	B-10-251	-	275	200	
0010	B-10-250	-	275	200	
STAGE 4					
0010	B-10-251	-	275	200	
0010	B-10-250	-	275	200	
TOTAL 0010		550	1,650	1,200	

EROSION CONTROL SUMMARY

		628.1504 SILT FENCE	628.1520 SILT FENCE MAINTENANCE	628.1905 MOBILIZATIONS EROSION CONTROL	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL	628.2008 EROSION MAT URBAN CLASS I TYPE B	REMARKS
CATEGORY	STATION TO STATION LOCATION	LF	LF	EACH	EACH	SY	
0010	26+05 - 27+05 B-10-251 LT	100	100	-	-	232	
0010	26+05 - 27+05 B-10-251 RT	100	100	-	-	212	
0010	88+95 - 89+95 B-10-250 LT	100	100	-	-	201	
0010	88+95 - 89+95 B-10-250 RT	100	100	-	-	175	
0010	UNDISTRIBUTED STH 13	-	-	6	3	205	
TOTAL 0010		400	400	6	3	1,025	

SALVAGED GUARDRAIL SUMMARY

		614.0920 SALVAGED RAIL	614.0925 SALVAGED GUARDRAIL END TREATMENTS	REMARKS
CATEGORY	STATION TO STATION LOCATION	LF	EACH	
0010	24+85 - 28+21 STH 13 LT	336	2	
0010	24+87 - 28+23 STH 13 RT	336	2	
0010	87+97 - 91+08 STH 13 LT	311	2	
0010	87+86 - 90+97 STH 13 RT	312	2	
TOTAL 0010		1,295	8	

LANDSCAPING SUMMARY

		625.0500 SALVAGED TOPSOIL	629.0210 FERTILIZER TYPE B	630.0120 SEEDING MIXTURE NO. 20	630.0200 SEEDING TEMPORARY	630.0500 SEED WATER	REMARKS
CATEGORY	STATION TO STATION LOCATION	SY	CWT	LB	LB	MGAL	
0010	26+05 - 27+05 B-10-251 LT	232	0.20	11	7	6	
0010	26+05 - 27+05 B-10-251 RT	212	0.20	10	6	5	
0010	88+95 - 89+95 B-10-250 LT	201	0.20	10	6	5	
0010	88+95 - 89+95 B-10-250 RT	175	0.20	8	5	4	
0010	UNDISTRIBUTED STH 13	205	0.20	10	6	5	
TOTAL 0010		1,025	1	49	30	25	

TRAFFIC CONTROL SUMMARY																			
CATEGORY	LOCATION	DURATION DAYS	614.0905	637.0620	643.0300		643.0420		643.0705		643.0715		643.0900		643.1000	643.1050	643.5000		REMARKS
			CRASH CUSHIONS	SIGN FLAGS	TRAFFIC CONTROL		TRAFFIC CONTROL		TRAFFIC CONTROL		TRAFFIC CONTROL		TRAFFIC CONTROL	TRAFFIC CONTROL	TRAFFIC CONTROL				
			TEMPORARY	PERMANENT TYPE II	DRUMS	BARRICADES TYPE III	WARNING LIGHTS	WARNING LIGHTS	SIGNS	SIGNS FIXED	SIGNS PCMS	EACH							
			EACH	EACH	NO.	DAY	NO.	DAY	NO.	DAY	NO.	DAY	NO.	DAY	SF	DAY	EACH		
0010	PROJECT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	1	PREWARN SIGN	
	STAGE 2																		
0010	B-10-251	40	1	4	18	720	24	960	4	160	8	320	23	920	182	-	-		
0010	B-10-250	40	1	4	12	480	15	600	2	80	8	320	17	680	150	-	-		
	STAGE 3																		
0010	B-10-251	40	1	4	12	480	24	960	4	160	8	320	23	920	182	-	-		
0010	B-10-250	40	1	4	19	760	16	640	2	80	8	320	18	720	163	-	-		
	STAGE 4														182				
0010	B-10-251	40	1	4	18	720	24	960	4	160	8	320	23	920	150	-	-		
0010	B-10-250	40	1	4	12	480	15	600	2	80	8	320	17	680	-	-	-		
	TOTAL 0010		6	24		3,640		4,720		720		1,920		4,840	1,009	14	1		

TEMPORARY PAVEMENT MARKING SUMMARY

CATEGORY	LOCATION	643.3180	643.3850	646.9000	REMARKS
		TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH LF	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH LF	MARKING REMOVAL LINE 4- INCH LF	
	STAGE 2				
0010	B-10-251	890	24	1,800	
0010	B-10-250	890	24	1,800	
	STAGE 3				
0010	B-10-251	875	-	-	
0010	B-10-250	950	-	-	
	STAGE 4				
0010	B-10-251	890	-	-	
0010	B-10-250	890	-	-	
	TOTAL 0010	5,385	48	3,600	

PAVEMENT MARKING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	646.2020	646.2040	REMARKS
					MARKING LINE EPOXY 6-INCH LF	MARKING LINE GROOVED WET REF EPOXY 6-INCH LF	
0010	26+05	-	27+05	B-10-251	900	900	
0010	88+95	-	89+95	B-10-250	900	900	
				TOTAL 0010	1,800	1,800	

TEMPORARY TRAFFIC SIGNALS SUMMARY

CATEGORY	LOCATION	661.0101.01	661.0101.02	REMARKS
		TEMPORARY TRAFFIC SIGNALS FOR BRIDGES (STRUCTURE) (01. B-10-250) EACH	TEMPORARY TRAFFIC SIGNALS FOR BRIDGES (STRUCTURE) (02. B-10-251) EACH	
0010	B-10-250	1	-	
0010	B-10-251	-	1	
	TOTAL 0010	1	1	

CONSTRUCTION STAKING SUMMARY

					650.4500	650.5000	650.6501.01	650.6501.02	650.9911.01	650.9920	
CATEGORY	STATION	TO	STATION	LOCATION	CONSTRUCTION	CONSTRUCTION	CONSTRUCTION	CONSTRUCTION	CONSTRUCTION	CONSTRUCTION	REMARKS
					STAKING	CONSTRUCTION	STAKING STRUCTURE	STAKING STRUCTURE	STAKING SUPPLEMENTAL	CONSTRUCTION	
					SUBGRADE	STAKING BASE	LAYOUT (STRUCTURE)	LAYOUT (STRUCTURE)	CONTROL (PROJECT)	STAKING SLOPE	
					LF	LF	(01. B-10-250)	(02. B-10-251)	(01. 1610-02-73)	STAKES	
					LF	LF	EACH	EACH	EACH	LF	
0010	88+95	-	89+95	B-10-250	100	100	-	-	-	100	
0010	26+05	-	27+05	B-10-251	100	100	-	-	-	100	
0010	UNDISTRIBUTED				-	-	-	-	1	-	
TOTAL 0010					200	200	0	0	1	200	
0020	88+95	-	89+95	B-10-250	-	-	1	-	-	-	
TOTAL 0020					0	0	1	0	0	0	
0030	26+05	-	27+05	B-10-251	-	-	-	1	-	-	
TOTAL 0030					0	0	0	1	0	0	
PROJECT TOTAL					200	200	1	1	1	200	

SAWING SUMMARY

CATEGORY	STATION	LOCATION	690.0150 SAWING ASPHALT	REMARKS
			LF	
0010	26+05	B-10-251	40	
0010	27+05	B-10-251	40	
0010	88+95	B-10-250	40	
0010	89+95	B-10-250	40	
TOTAL 0010			160	

TEMPORARY STREAM DIVERSION AND BIRD DETERRENT SUMMARY

		999.2000.S.01 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM (STATION) (01. STA 89+45)	999.2000.S.02 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM (STATION) (02. STA 26+55)	SPV.0060.01 SPECIAL (01. TEMPORARY STREAM DIVERSION CULVERT B- 10-250)	SPV.0060.02 SPECIAL (02. TEMPORARY STREAM DIVERSION CULVERT B-10-251)	REMARKS
CATEGORY	LOCATION	EACH	EACH	EACH	EACH	
0010	B-10-250	1	-	1	-	
0010	B-10-251	-	1	-	1	
TOTAL 0010		1	1	1	1	

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
1610-02-23
ABBOTSFORD - MEDFORD
PORKY CREEK B-10-0240 & B-10-0241



CONVENTIONAL SYMBOLS

SECTION LINE	---	SECTION CORNER SYMBOL		R/W MONUMENT (TO BE SET)	•
QUARTER LINE	---	NON-MONUMENTED R/W POINT	○		
SIXTEENTH LINE	---	FOUND IRON PIN (1-INCH UNLESS NOTED)	IP		
NEW REFERENCE LINE	---				
NEW R/W LINE	---				
EXISTING R/W OR HE LINE	---				
PROPERTY LINE	---				
LOT, TIE & OTHER MINOR LINES	---				
SLOPE INTERCEPT	---				
CORPORATE LIMITS	---				
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)	---				
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)	---				
TEMPORARY LIMITED EASEMENT AREA	---				
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)	---				
TRANSMISSION STRUCTURES	---				
BUILDING	---				
TO BE REMOVED	---				
BRIDGE	---				
CULVERT	---				
PARALLEL OFFSETS	---				

CONVENTIONAL ABBREVIATIONS

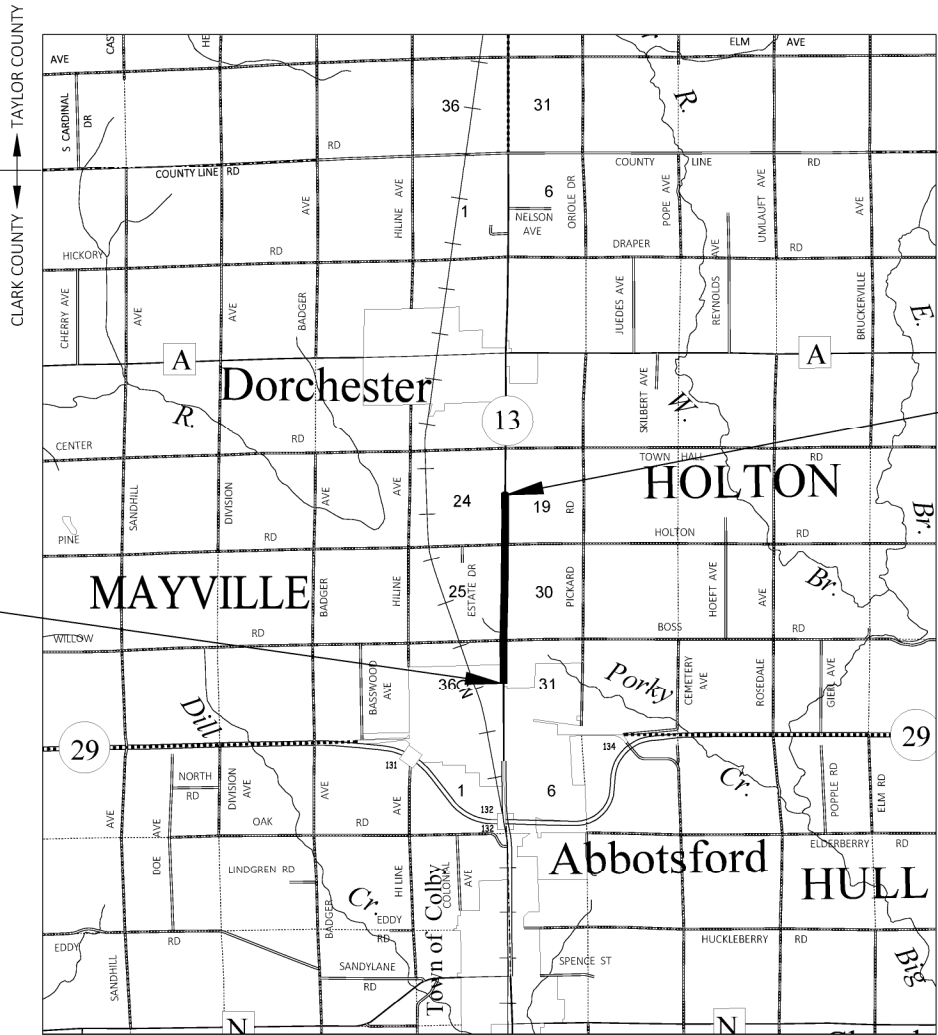
ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS (100')	
AND OTHERS	ET AL	REEL / IMAGE	R/I
BACK	BK	REFERENCE LINE	R/L
BLOCK	BLK	REMAINING	REM
CENTERLINE	C/L	RESTRICTIVE DEVELOPMENT	RDE
CERTIFIED SURVEY MAP	CSM	EASEMENT	
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	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

CONVENTIONAL UTILITY SYMBOLS

WATER	---
GAS	---
TELEPHONE	---
OVERHEAD TRANSMISSION LINES	---
ELECTRIC	---
CABLE TELEVISION	---
FIBER OPTIC	---
SANITARY SEWER	---
STORM SEWER	---
ELECTRIC TOWER	---



R-1-E → R-2-E
CLARK COUNTY → MARATHON COUNTY

LAYOUT
SCALE 0 1 MI.

THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 1610-02-23

NOTES:

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

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

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

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

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

A 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.

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

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

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

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN EAU CLAIRE AND WISCONSIN RAPIDS.

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

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

PROJECT NUMBER 1610-02-23 -4. 01
SHEET 2 OF 2
AMENDMENT NO:

TRANSPORTATION PROJECT PLAT NO: 1610-02-23 - 4.01

THAT PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4, SECTION 25, TOWNSHIP 29 NORTH, RANGE 1 EAST, TOWN OF MAYVILLE, CLARK COUNTY; THAT PART OF THE SOUTH 1/2 OF THE FRACTIONAL SOUTHWEST 1/4, SECTION 30, TOWNSHIP 29 NORTH, RANGE 2 EAST, TOWN OF HOLTON, MARATHON COUNTY, ALL IN WISCONSIN.

RELOCATION ORDER STH 13 ABBOTSFORD-MEDFORD PORKY CREEK B-10-0240 & B-10-0241 CLARK AND MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

- THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
- THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTEREST(S) REQUIRED	R/W S.F. REQUIRED			TLE S.F.
			NEW	EXISTING	TOTAL	
1	KATIE L. SCHEEL WALLER SIGNS	FEE	1998	---	1998	---
2	DONALD C. BOSS	FEE	1856	---	1856	---

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

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

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

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

FOUND IRON PINS ARE 1" PIPE WITH PLASTIC CAP, UNLESS OTHERWISE NOTED.

EXISTING RIGHT OF WAY FOR STH 13 ESTABLISHED FROM PREVIOUS PROJECT 1614-07-21.

EXISTING RIGHT OF WAY FOR WILLOW RD ESTABLISHED FROM STATE STATUTES CENTERED ON THE SOUTH LINE OF SECTION 25.

EXISTING RIGHT OF WAY FOR WUERTZBURG RD ESTABLISHED FROM PREVIOUS PROJECT 1614-07-21 AND CSM 15401 (NOT SHOWN).

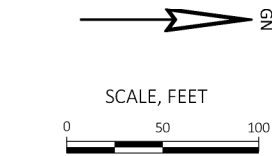
EXISTING ACCESS CONTROL ALONG STH 13 HAS BEEN ESTABLISHED FROM PREVIOUS PROJECT 1614-07-21.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN EAU CLAIRE AND WISCONSIN RAPIDS.

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTERESTS REQUIRED
200	FRONTIER COMMUNICATIONS VOL. 176, P. 430, DOC. 659894 - PARCEL 2	RELEASE OF RIGHTS
201	CLARK ELECTRIC COOPERATIVE DEED BOOK 290, P. 134 - PARCEL 2	RELEASE OF RIGHTS

- 200 FRONTIER COMMUNICATIONS
VOL. 176, P. 430, DOC. 659894 - PARCEL 2
- 201 CLARK ELECTRIC COOPERATIVE
DEED BOOK 290, P. 134 - PARCEL 2



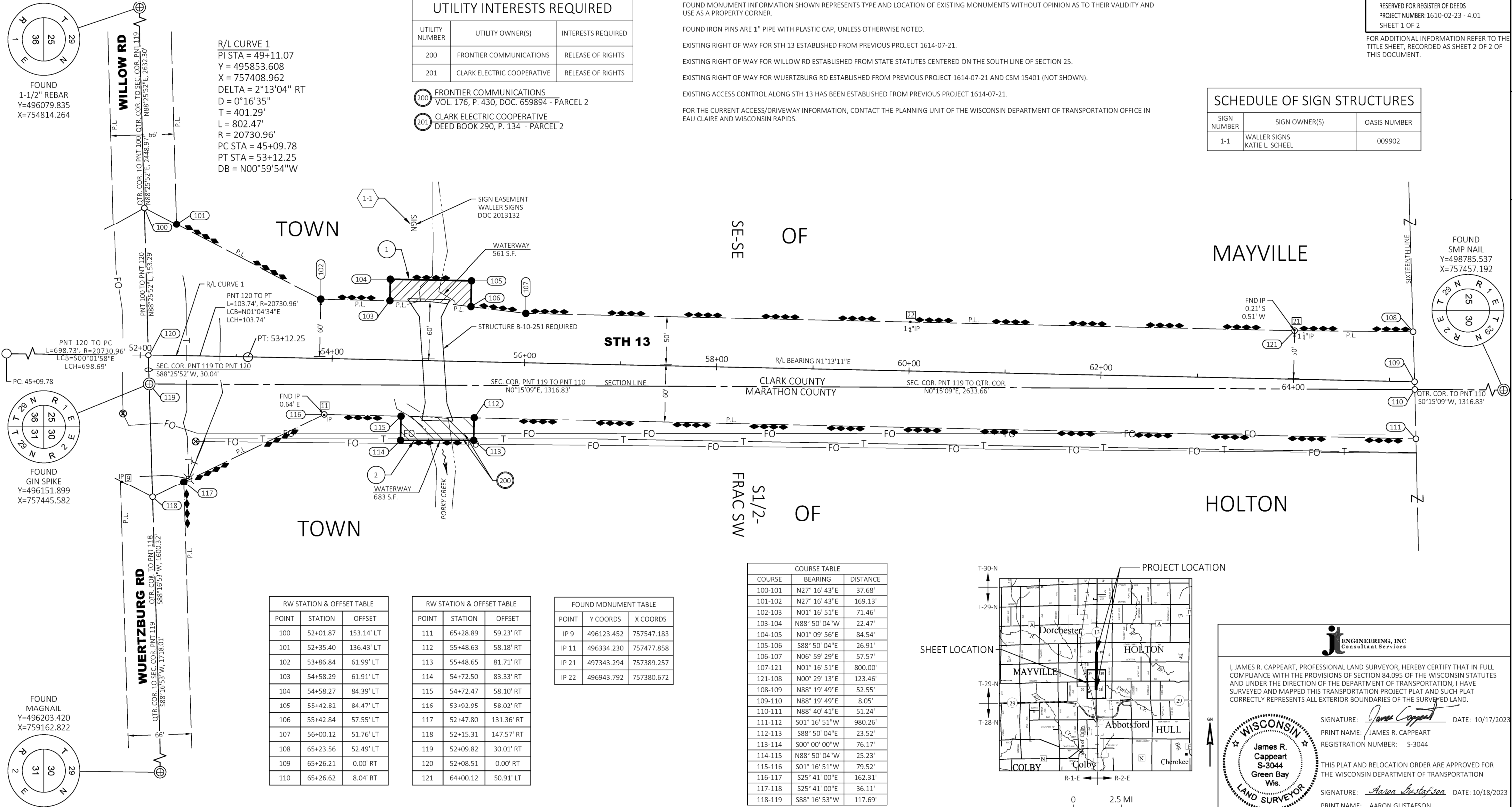
657740
RECORDED 10/18/2023 12:45 PM
Mary A. Denk
REGISTER OF DEEDS OFFICE
CLARK COUNTY, WI
Rec Fee: 25.00
PAGES: 2
The above recording information verifies this document has been electronically recorded and returned.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER: 1610-02-23 - 4.01
SHEET 1 OF 2

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF THIS DOCUMENT.

SCHEDULE OF SIGN STRUCTURES

SIGN NUMBER	SIGN OWNER(S)	OASIS NUMBER
1-1	WALLER SIGNS KATIE L. SCHEEL	009902



TRANSPORTATION PROJECT PLAT NO: 1610-02-23 - 4.02

THAT PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 AND THAT PART OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4, SECTION 24, TOWNSHIP 29 NORTH, RANGE 1 EAST, TOWN OF MAYVILLE, CLARK COUNTY; THAT PART OF THE SOUTH 1/2 OF THE FRACTIONAL SOUTHWEST 1/4 AND THAT PART OF THE NORTH 1/2 OF THE FRACTIONAL SOUTHWEST 1/4, SECTION 19, TOWNSHIP 29 NORTH, RANGE 2 EAST, TOWN OF HOLTON, MARATHON COUNTY, ALL IN WISCONSIN.

RELOCATION ORDER STH 13 ABBOTSFORD-MEDFORD PORKY CREEK B-10-0240 & B-10-0241 CLARK AND MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

- THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
- THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTEREST(S) REQUIRED	R/W S.F. REQUIRED			TLE S.F.
			NEW	EXISTING	TOTAL	
3	BLUME FARMS OF CLARK COUNTY, INC.	FEE	1691	---	1691	---
4	PERRY L. BRAUN AND MICHELLE BRAUN	TLE	---	---	---	313

ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED. THE PURPOSE FOR ALL TLE'S IS GRADING UNLESS OTHERWISE NOTED.

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

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

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

FOUND IRON PINS ARE 5/8" REBAR WITH PLASTIC CAP, UNLESS OTHERWISE NOTED.

EXISTING RIGHT OF WAY FOR STH 13 ESTABLISHED FROM PREVIOUS PROJECT 1614-07-21.

EXISTING ACCESS CONTROL ALONG STH 13 HAS BEEN ESTABLISHED FROM PREVIOUS PROJECT 1614-07-21.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN EAU CLAIRE AND WISCONSIN RAPIDS.

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

RW STATION & OFFSET TABLE		
POINT	STATION	OFFSET
200	111+28.23	26.53' LT
201	111+27.84	67.10' LT
202	122+86.61	57.29' LT
203	124+48.61	56.38' LT
204	124+48.09	13.31' LT
205	124+47.94	0.00' RT
206	124+47.34	50.40' RT
207	122+86.73	50.57' RT
208	118+56.02	49.32' RT
209	118+55.99	70.52' RT
210	117+76.21	70.53' RT
211	117+76.18	49.43' RT
212	117+13.70	49.36' RT
213	113+99.67	48.58' RT
214	112+99.65	58.33' RT
215	111+28.97	52.22' RT
216	111+28.48	0.00' RT

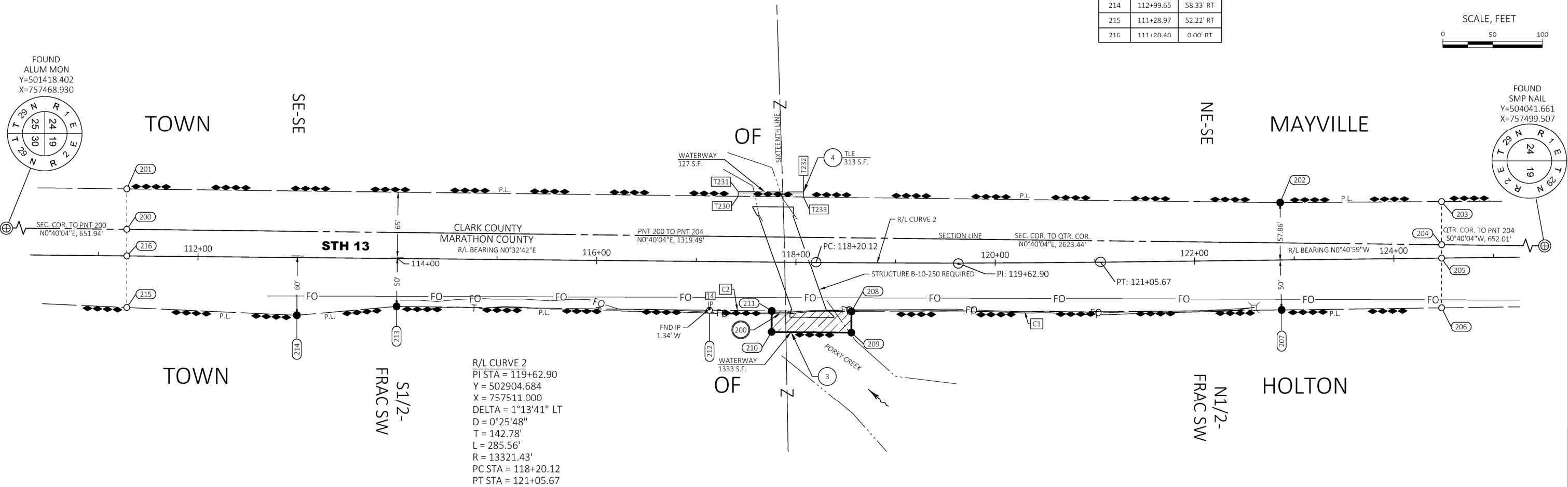
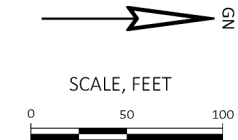
TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
T230	117+41.45	65.57' LT
T231	117+41.45	70.04' LT
T232	118+06.85	70.51' LT
T233	118+06.85	65.41' LT

FOUND MONUMENT TABLE		
POINT	Y COORDS	X COORDS
IP 14	502654.927	757556.646

657895
RECORDED 10/30/2023 09:11 AM
Mary A. Denk
REGISTER OF DEEDS OFFICE
CLARK COUNTY, WI
Rec Fee: 25.00
PAGES: 1
The above recording information verifies this document has been electronically recorded and returned.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER: 1610-02-23 - 4.02
SHEET 1 OF 1

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOCUMENT #657740.



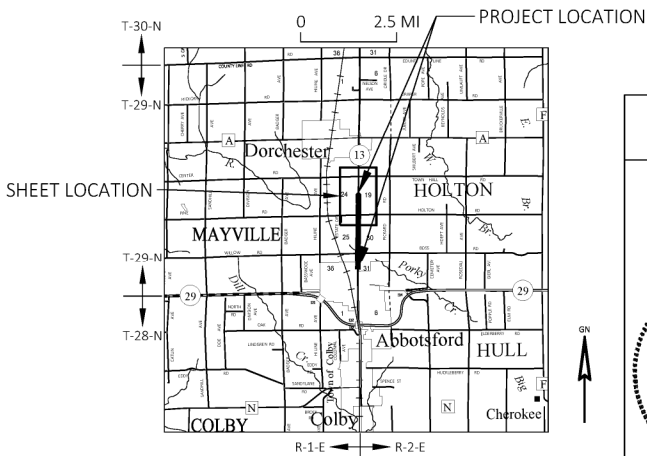
R/L CURVE 2
PI STA = 119+62.90
Y = 502904.684
X = 757511.000
DELTA = 1°13'41" LT
D = 0°25'48"
T = 142.78'
L = 285.56'
R = 13321.43'
PC STA = 118+20.12
PT STA = 121+05.67

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	UTILITY OWNER(S)	INTERESTS REQUIRED
200	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS
201	CLARK ELECTRIC COOPERATIVE	RELEASE OF RIGHTS

- 200 FRONTIER COMMUNICATIONS
VOL. 499, P. 510, DOC 557230 - PARCEL 3
VOL. 499, P. 508, DOC 557228 - PARCEL 3
- 201 CLARK ELECTRIC COOPERATIVE
VOL. 368, P. 216, DOC. 433870 - PARCEL 3
VOL. 149, P. 232, DOC. 222297 - PARCEL 4

COURSE TABLE		
COURSE	BEARING	DISTANCE
200-201	N90° 00' 00"W	40.57'
201-202	N00° 41' 16"E	1157.48'
202-203	N00° 21' 40"W	162.00'
203-204	N90° 00' 00"E	43.07'
204-205	N90° 00' 00"E	13.31'
205-206	N90° 00' 00"E	50.40'
206-207	S00° 44' 40"E	160.61'
207-208	SEE CURVE TABLE	
208-209	S89° 31' 35"E	21.20'
209-210	S00° 30' 24"W	79.97'
210-211	N89° 31' 35"W	21.09'
211-212	SEE CURVE TABLE	
212-213	S00° 41' 16"W	314.04'
213-214	S05° 01' 21"E	100.49'
214-215	S02° 35' 48"W	170.78'
215-216	N90° 00' 00"W	52.22'
216-200	N90° 00' 00"W	26.53'

CURVE TABLE				
CURVE	COURSE	ARC LENGTH	RADIUS	CHORD BEARING
C1	207-208	431.63'	22968.31'	S00°12'22"E
C2	211-212	62.48'	22968.31'	S00°36'35"W



I, JAMES R. CAPPEART, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: *James R. Cappeart* DATE: 10/23/2023
PRINT NAME: JAMES R. CAPPEART
REGISTRATION NUMBER: S-3044

SIGNATURE: *Aaron Gustafson* DATE: 10/25/2023
PRINT NAME: AARON GUSTAFSON

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

TRANSPORTATION PROJECT PLAT NO: 1610-02-23 - 4.01

THAT PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4, SECTION 25, TOWNSHIP 29 NORTH, RANGE 1 EAST, TOWN OF MAYVILLE, CLARK COUNTY; THAT PART OF THE SOUTH 1/2 OF THE FRACTIONAL SOUTHWEST 1/4, SECTION 30, TOWNSHIP 29 NORTH, RANGE 2 EAST, TOWN OF HOLTON, MARATHON COUNTY, ALL IN WISCONSIN.

RELOCATION ORDER STH 13 ABBOTSFORD-MEDFORD PORKY CREEK B-10-0240 & B-10-0241 CLARK AND MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

- THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
- THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTEREST(S) REQUIRED	R/W S.F. REQUIRED			TLE S.F.
			NEW	EXISTING	TOTAL	
1	KATIE L. SCHEEL WALLER SIGNS	FEE	1998	---	1998	---
2	DONALD C. BOSS	FEE	1856	---	1856	---

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

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

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

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

FOUND IRON PINS ARE 1" PIPE WITH PLASTIC CAP, UNLESS OTHERWISE NOTED.

EXISTING RIGHT OF WAY FOR STH 13 ESTABLISHED FROM PREVIOUS PROJECT 1614-07-21.

EXISTING RIGHT OF WAY FOR WILLOW RD ESTABLISHED FROM STATE STATUTES CENTERED ON THE SOUTH LINE OF SECTION 25.

EXISTING RIGHT OF WAY FOR WUERTZBURG RD ESTABLISHED FROM PREVIOUS PROJECT 1614-07-21 AND CSM 15401 (NOT SHOWN).

EXISTING ACCESS CONTROL ALONG STH 13 HAS BEEN ESTABLISHED FROM PREVIOUS PROJECT 1614-07-21.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN EAU CLAIRE AND WISCONSIN RAPIDS.

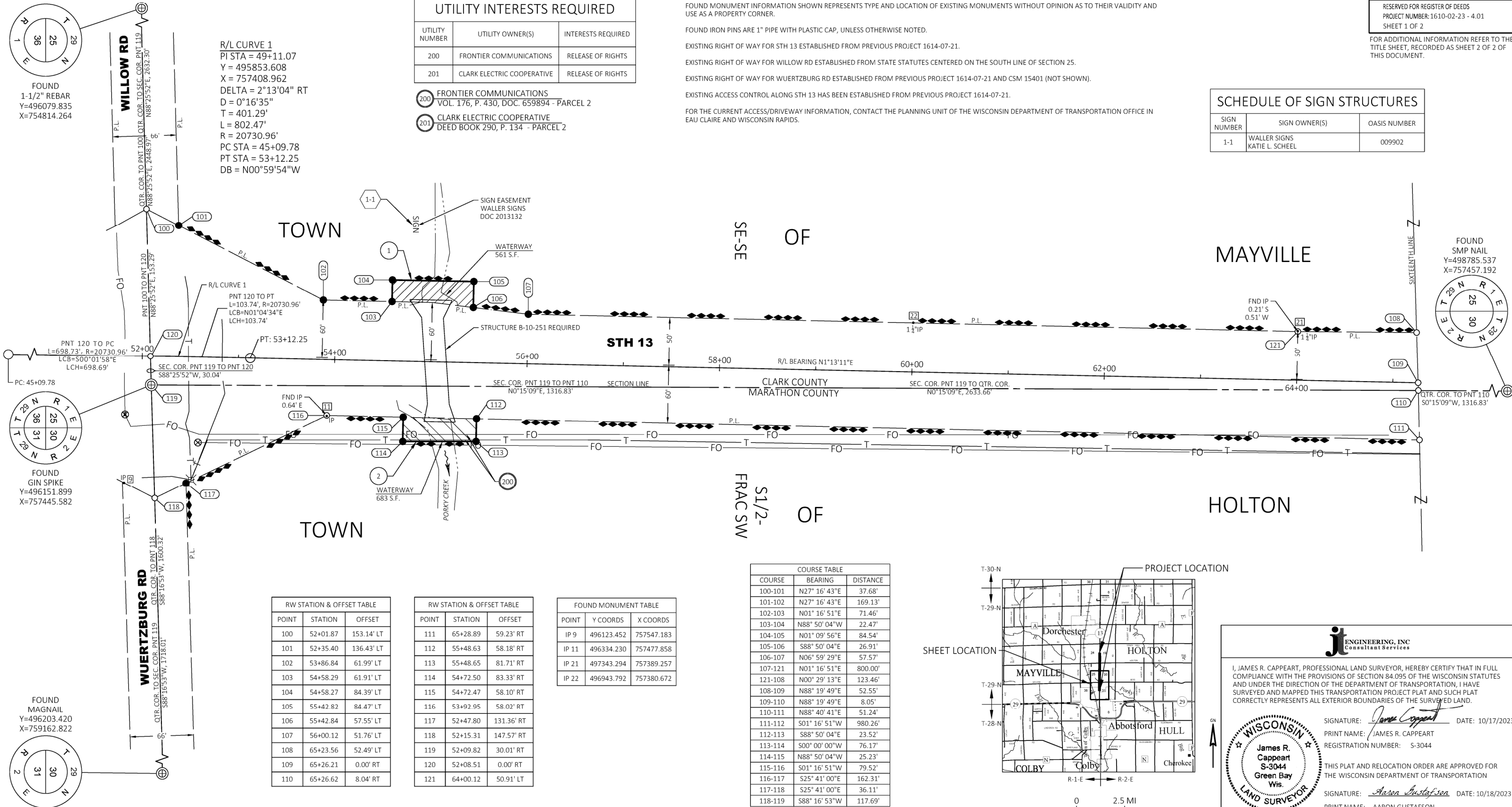
UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTERESTS REQUIRED
200	FRONTIER COMMUNICATIONS VOL. 176, P. 430, DOC. 659894 - PARCEL 2	RELEASE OF RIGHTS
201	CLARK ELECTRIC COOPERATIVE DEED BOOK 290, P. 134 - PARCEL 2	RELEASE OF RIGHTS

- 200 FRONTIER COMMUNICATIONS
VOL. 176, P. 430, DOC. 659894 - PARCEL 2
- 201 CLARK ELECTRIC COOPERATIVE
DEED BOOK 290, P. 134 - PARCEL 2

SCHEDULE OF SIGN STRUCTURES

SIGN NUMBER	SIGN OWNER(S)	OASIS NUMBER
1-1	WALLER SIGNS KATIE L. SCHEEL	009902

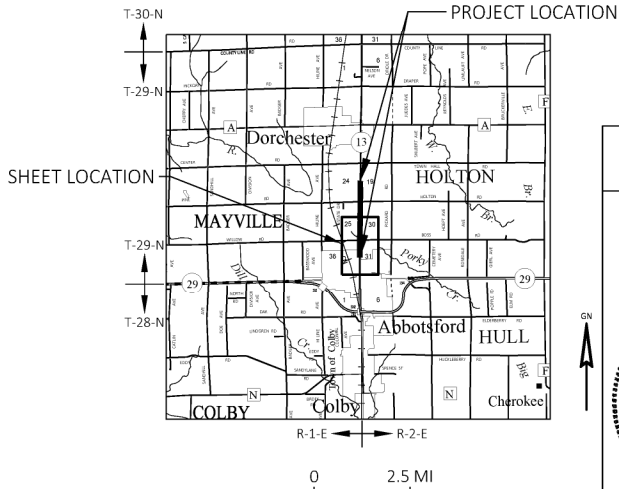


RW STATION & OFFSET TABLE		
POINT	STATION	OFFSET
100	52+01.87	153.14' LT
101	52+35.40	136.43' LT
102	53+86.84	61.99' LT
103	54+58.29	61.91' LT
104	54+58.27	84.39' LT
105	55+42.82	84.47' LT
106	55+42.84	57.55' LT
107	56+00.12	51.76' LT
108	65+23.56	52.49' LT
109	65+26.21	0.00' RT
110	65+26.62	8.04' RT

RW STATION & OFFSET TABLE		
POINT	STATION	OFFSET
111	65+28.89	59.23' RT
112	55+48.63	58.18' RT
113	55+48.65	81.71' RT
114	54+72.50	83.33' RT
115	54+72.47	58.10' RT
116	53+92.95	58.02' RT
117	52+47.80	131.36' RT
118	52+15.31	147.57' RT
119	52+09.82	30.01' RT
120	52+08.51	0.00' RT
121	64+00.12	50.91' LT

FOUND MONUMENT TABLE		
POINT	Y COORDS	X COORDS
IP 9	496123.452	757547.183
IP 11	496334.230	757477.858
IP 21	497343.294	757389.257
IP 22	496943.792	757380.672

COURSE TABLE		
COURSE	BEARING	DISTANCE
100-101	N27° 16' 43"E	37.68'
101-102	N27° 16' 43"E	169.13'
102-103	N01° 16' 51"E	71.46'
103-104	N88° 50' 04"W	22.47'
104-105	N01° 09' 56"E	84.54'
105-106	S88° 50' 04"E	26.91'
106-107	N06° 59' 29"E	57.57'
107-121	N01° 16' 51"E	800.00'
121-108	N00° 29' 13"E	123.46'
108-109	N88° 19' 49"E	52.55'
109-110	N88° 19' 49"E	8.05'
110-111	N88° 40' 41"E	51.24'
111-112	S01° 16' 51"W	980.26'
112-113	S88° 50' 04"E	23.52'
113-114	S00° 00' 00"W	76.17'
114-115	N88° 50' 04"W	25.23'
115-116	S01° 16' 51"W	79.52'
116-117	S25° 41' 00"E	162.31'
117-118	S25° 41' 00"E	36.11'
118-119	S88° 16' 53"W	117.69'



I, JAMES R. CAPPEART, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: *James R. Cappeart* DATE: 10/17/2023
PRINT NAME: JAMES R. CAPPEART
REGISTRATION NUMBER: S-3044

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

SIGNATURE: *Aaron Gustafson* DATE: 10/18/2023
PRINT NAME: AARON GUSTAFSON

James R. Cappeart
S-3044
Green Bay
Wis.

TRANSPORTATION PROJECT PLAT NO: 1610-02-23 - 4.02

THAT PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 AND THAT PART OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4, SECTION 24, TOWNSHIP 29 NORTH, RANGE 1 EAST, TOWN OF MAYVILLE, CLARK COUNTY; THAT PART OF THE SOUTH 1/2 OF THE FRACTIONAL SOUTHWEST 1/4 AND THAT PART OF THE NORTH 1/2 OF THE FRACTIONAL SOUTHWEST 1/4, SECTION 19, TOWNSHIP 29 NORTH, RANGE 2 EAST, TOWN OF HOLTON, MARATHON COUNTY, ALL IN WISCONSIN.

RELOCATION ORDER STH 13 ABBOTSFORD-MEDFORD PORKY CREEK B-10-0240 & B-10-0241 CLARK AND MARATHON COUNTY

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SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTEREST(S) REQUIRED	R/W S.F. REQUIRED			TLE S.F.
			NEW	EXISTING	TOTAL	
3	BLUME FARMS OF CLARK COUNTY, INC.	FEE	1691	---	1691	---
4	PERRY L. BRAUN AND MICHELLE BRAUN	TLE	---	---	---	313

ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED. THE PURPOSE FOR ALL TLE'S IS GRADING UNLESS OTHERWISE NOTED.

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

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EXISTING RIGHT OF WAY FOR STH 13 ESTABLISHED FROM PREVIOUS PROJECT 1614-07-21.

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FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN EAU CLAIRE AND WISCONSIN RAPIDS.

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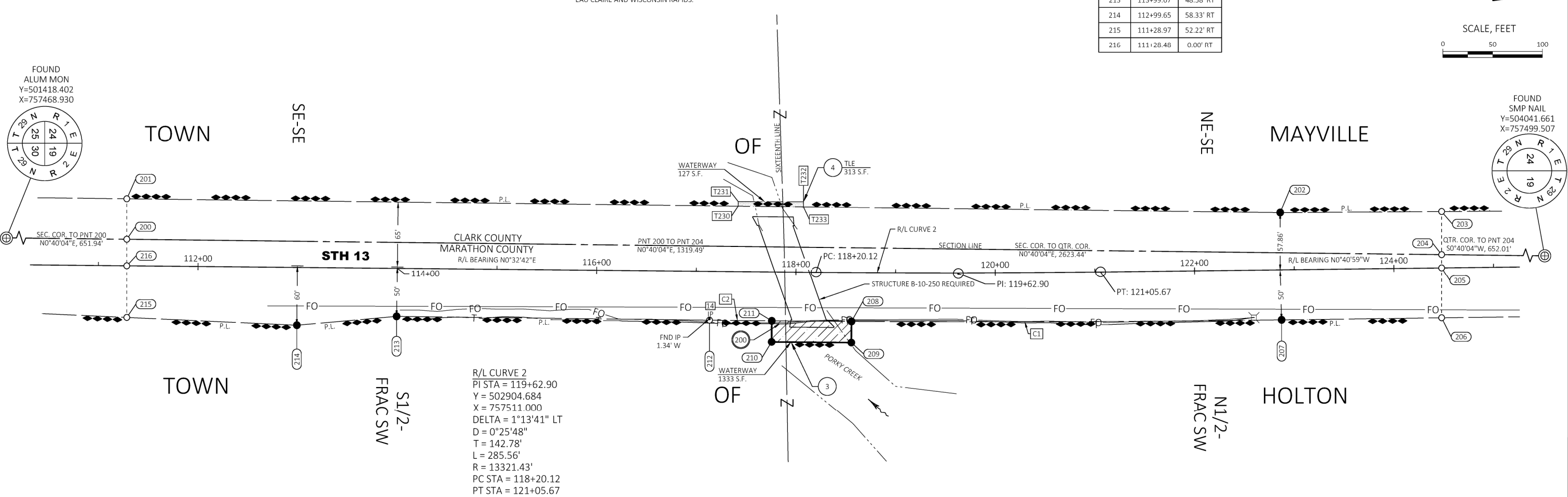
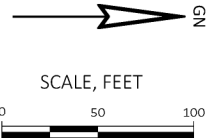
RW STATION & OFFSET TABLE		
POINT	STATION	OFFSET
200	111+28.23	26.53' LT
201	111+27.84	67.10' LT
202	122+86.61	57.29' LT
203	124+48.61	56.38' LT
204	124+48.09	13.31' LT
205	124+47.94	0.00' RT
206	124+47.34	50.40' RT
207	122+86.73	50.57' RT
208	118+56.02	49.32' RT
209	118+55.99	70.52' RT
210	117+76.21	70.53' RT
211	117+76.18	49.43' RT
212	117+13.70	49.36' RT
213	113+99.67	48.58' RT
214	112+99.65	58.33' RT
215	111+28.97	52.22' RT
216	111+28.48	0.00' RT

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
T230	117+41.45	65.57' LT
T231	117+41.45	70.04' LT
T232	118+06.85	70.51' LT
T233	118+06.85	65.41' LT

FOUND MONUMENT TABLE		
POINT	Y COORDS	X COORDS
IP 14	502654.927	757556.646

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER: 1610-02-23 - 4.02
SHEET 1 OF 1

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOCUMENT #1889219.

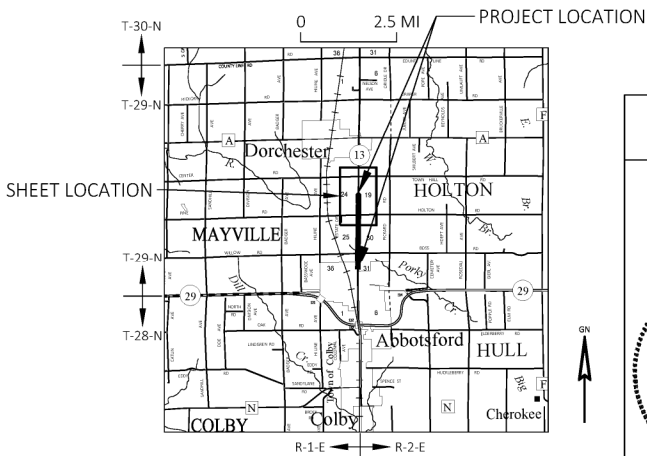


UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	UTILITY OWNER(S)	INTERESTS REQUIRED
200	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS
201	CLARK ELECTRIC COOPERATIVE	RELEASE OF RIGHTS

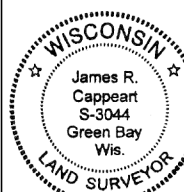
- 200 FRONTIER COMMUNICATIONS
VOL. 499, P. 510, DOC 557230 - PARCEL 3
VOL. 499, P. 508, DOC 557228 - PARCEL 3
- 201 CLARK ELECTRIC COOPERATIVE
VOL. 368, P. 216, DOC. 433870 - PARCEL 3
VOL. 149, P. 232, DOC. 222297 - PARCEL 4

COURSE TABLE		
COURSE	BEARING	DISTANCE
200-201	N90° 00' 00"W	40.57'
201-202	N00° 41' 16"E	1157.48'
202-203	N00° 21' 40"W	162.00'
203-204	N90° 00' 00"E	43.07'
204-205	N90° 00' 00"E	13.31'
205-206	N90° 00' 00"E	50.40'
206-207	S00° 44' 40"E	160.61'
207-208	SEE CURVE TABLE	
208-209	S89° 31' 35"E	21.20'
209-210	S00° 30' 24"W	79.97'
210-211	N89° 31' 35"W	21.09'
211-212	SEE CURVE TABLE	
212-213	S00° 41' 16"W	314.04'
213-214	S05° 01' 21"E	100.49'
214-215	S02° 35' 48"W	170.78'
215-216	N90° 00' 00"W	52.22'
216-200	N90° 00' 00"W	26.53'

CURVE TABLE				
CURVE	COURSE	ARC LENGTH	RADIUS	CHORD BEARING
C1	207-208	431.63'	22968.31'	S00°12'22"E
C2	211-212	62.48'	22968.31'	S00°36'35"W

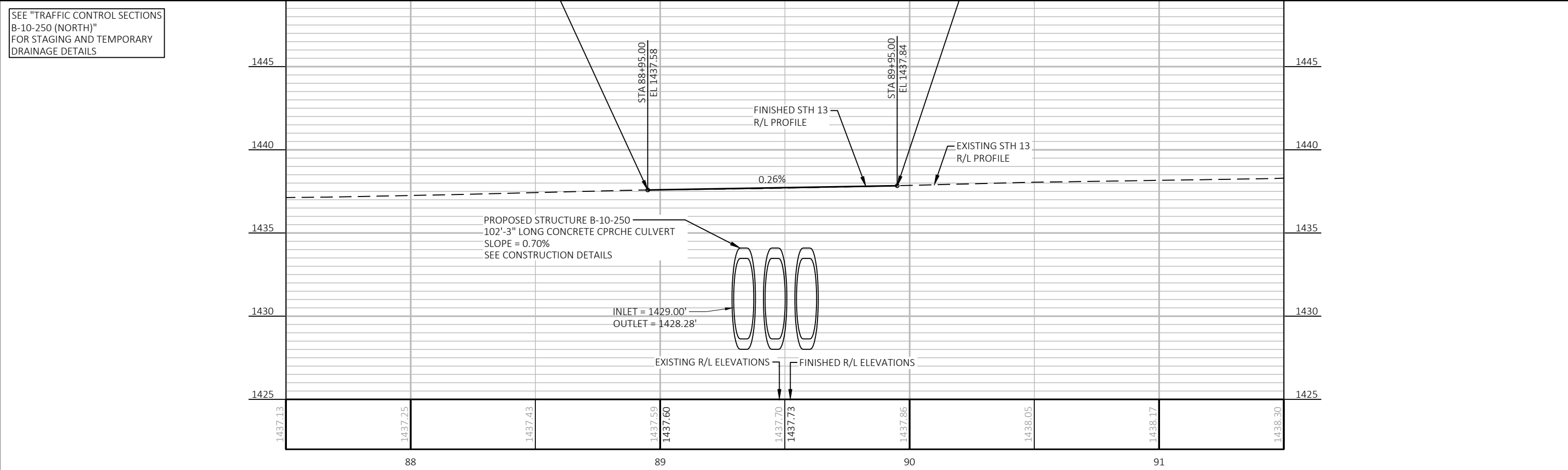
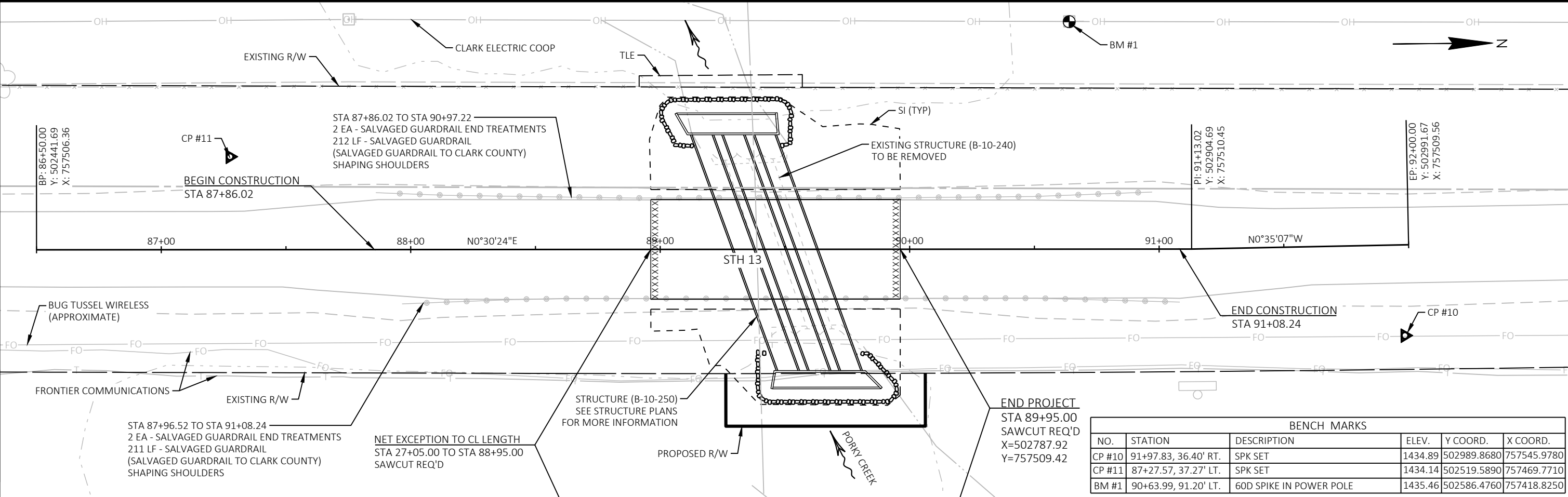


I, JAMES R. CAPPEART, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.



SIGNATURE: *James R. Cappeart* DATE: 10/23/2023
PRINT NAME: JAMES R. CAPPEART
REGISTRATION NUMBER: S-3044

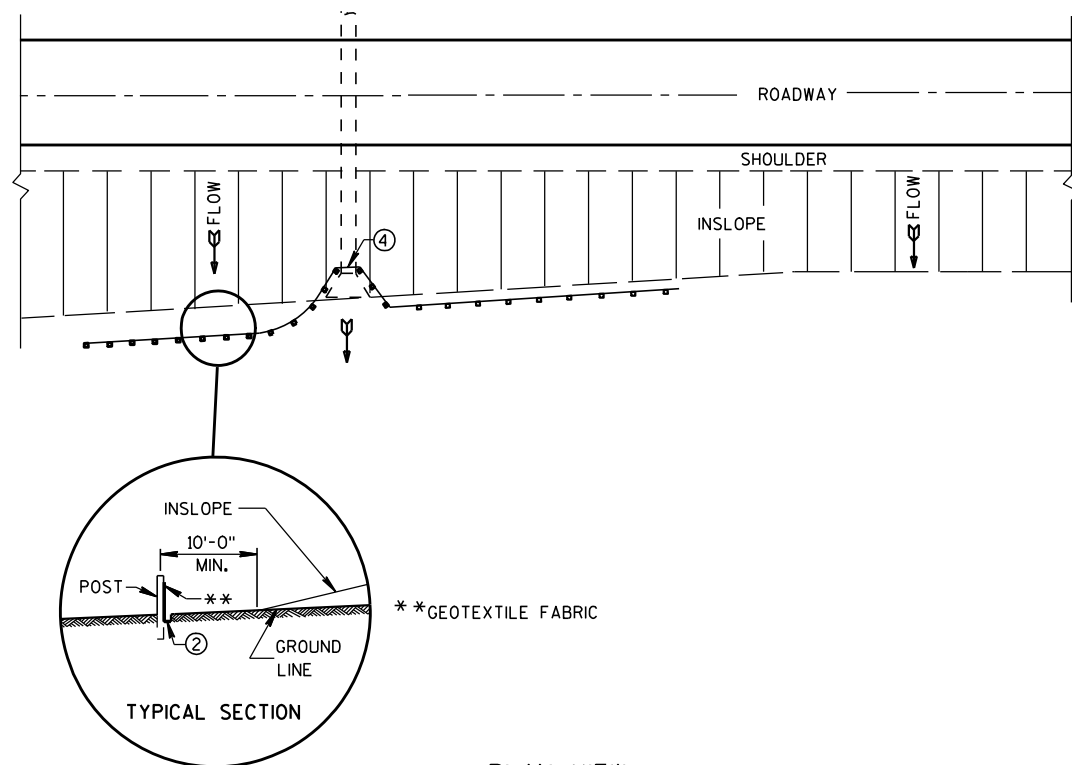
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
SIGNATURE: *Aaron Gustafson* DATE: 10/25/2023
PRINT NAME: AARON GUSTAFSON



PROJECT NO: 1610-02-73	HWY: STH 13	COUNTY: CLARK	PLAN AND PROFILE: STH 13 - STRUCTURE B-10-250	SHEET E
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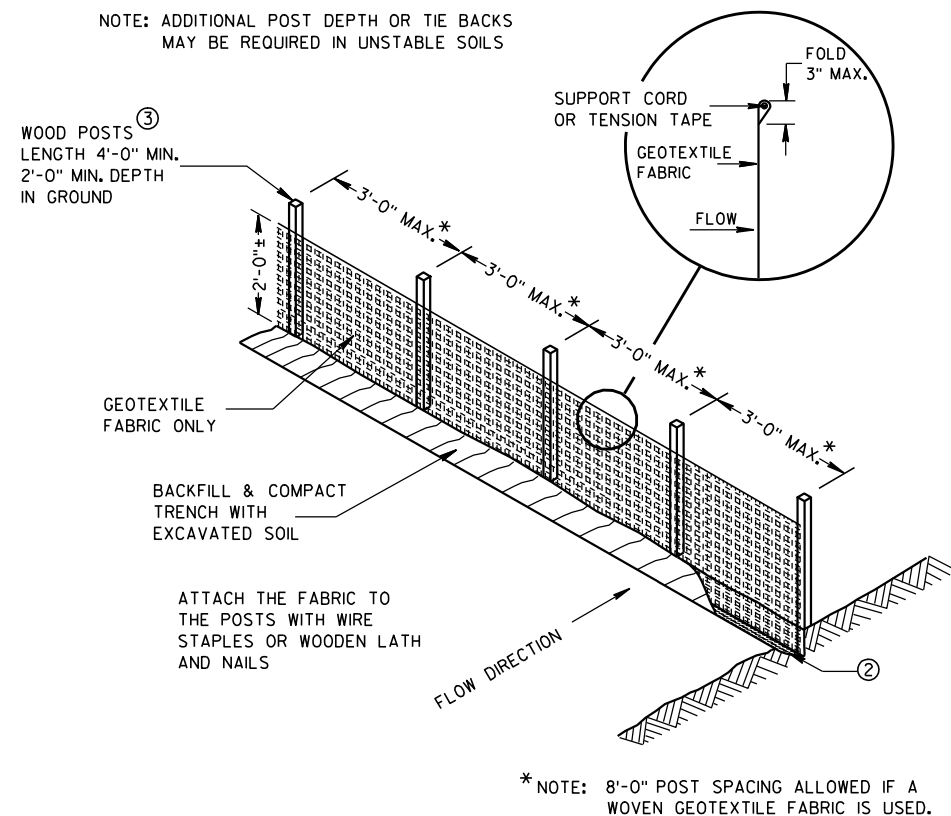
Standard Detail Drawing List

08E09-06	SILT FENCE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F10-02	CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
09G02-05A	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05B	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05C	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
12A03-10	NAME PLATE (STRUCTURES)
13C19-03	HMA LONGITUDINAL JOINTS
14B07-16A	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-16B	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-16C	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-16D	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-16E	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-16F	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-16G	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-16H	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-16I	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B08-02A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
15C02-09F	ADVANCED WIDTH RESTRICTION SIGNING
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D33-09	TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS

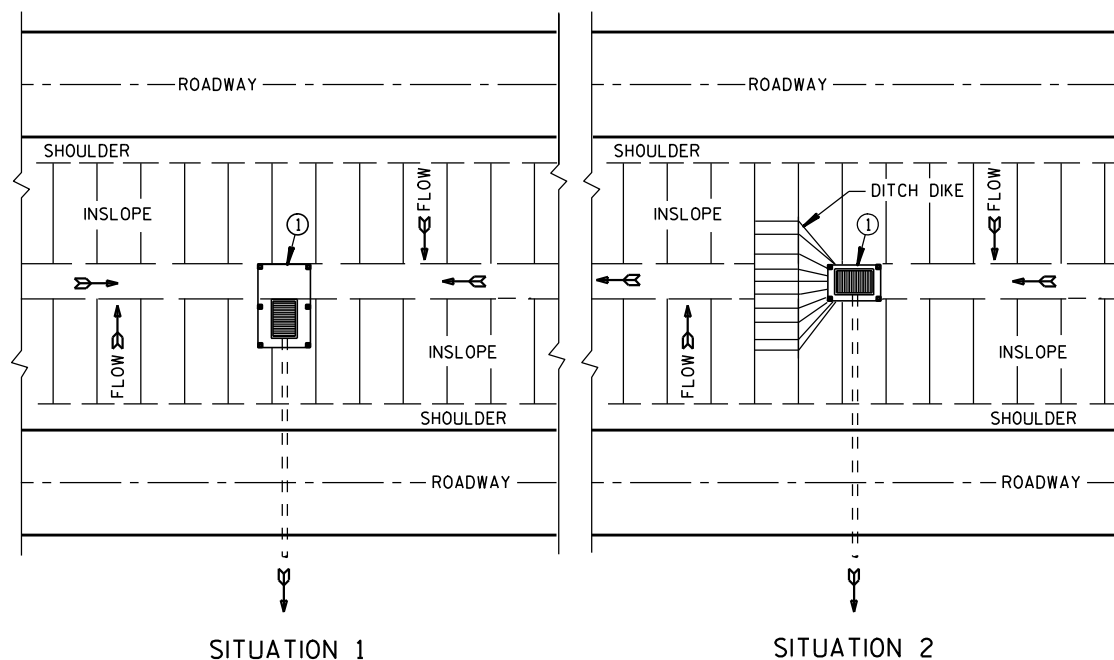


TYPICAL APPLICATION OF SILT FENCE

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

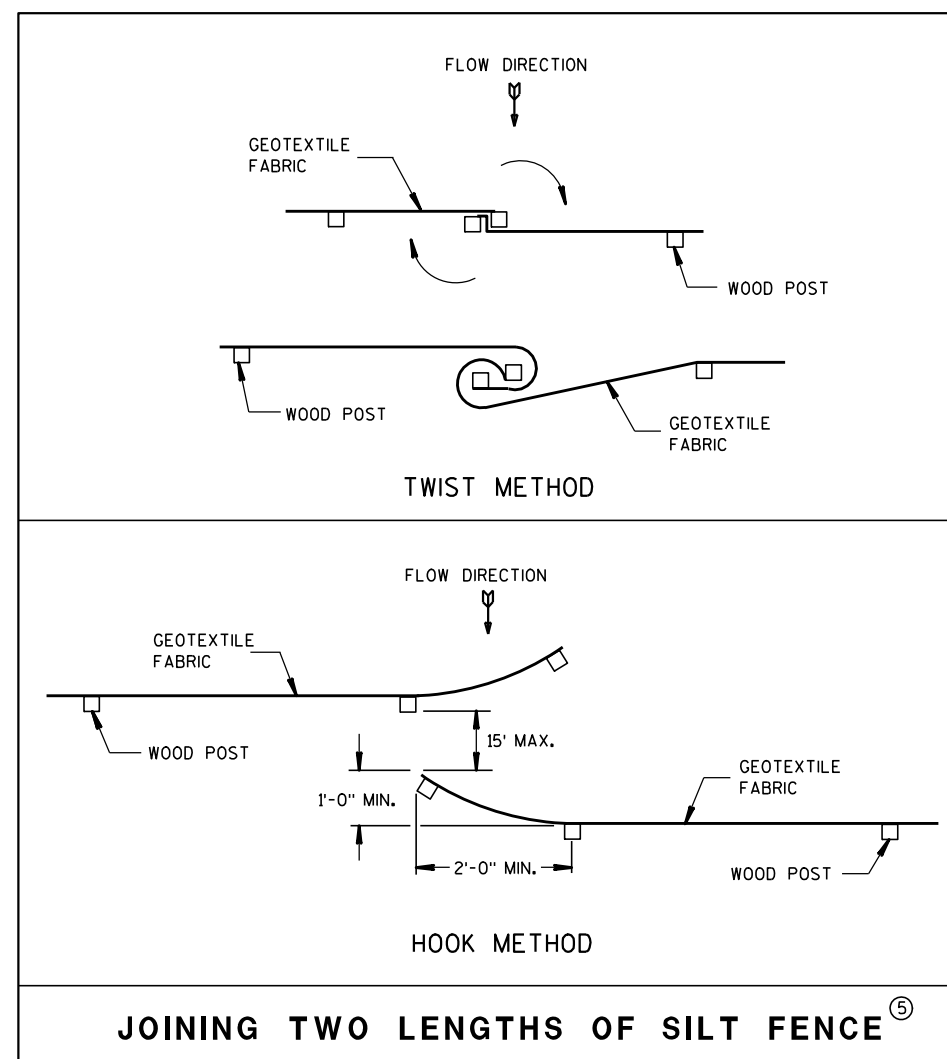


SILT FENCE



PLAN VIEW

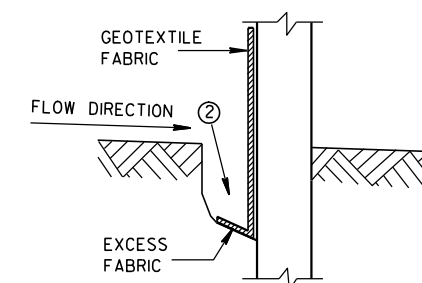
SILT FENCE AT MEDIAN SURFACE DRAINS



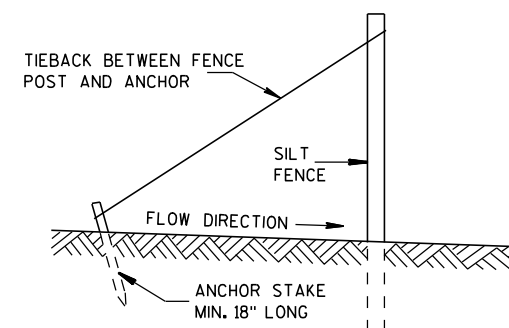
GENERAL NOTES

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

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



TRENCH DETAIL



SILT FENCE TIE BACK (WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

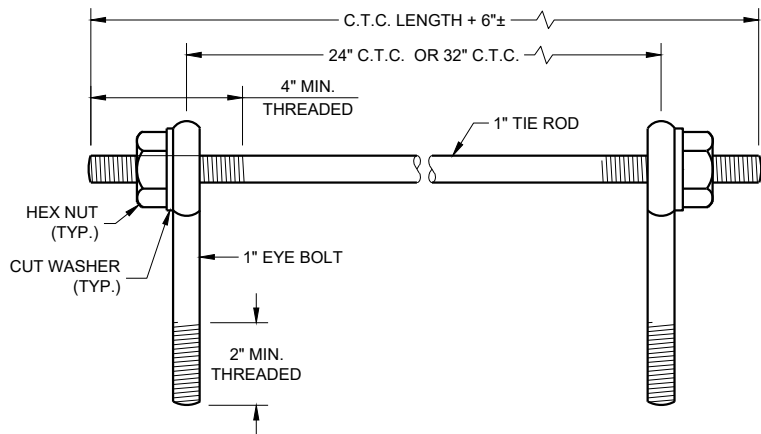
APPROVED

4-29-05

DATE

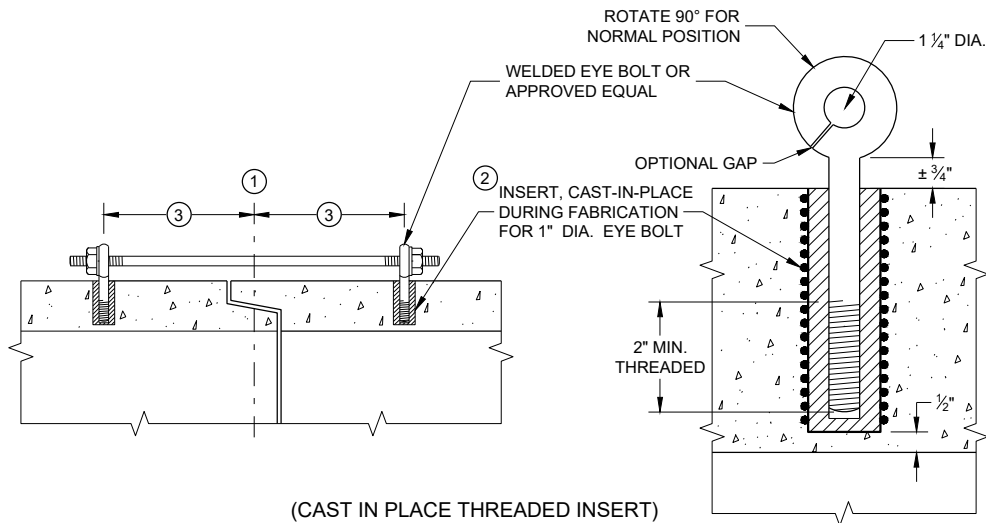
FHWA

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER



EYE BOLTS AND TIE ROD

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)



(CAST IN PLACE THREADED INSERT)
LONGITUDINAL SECTIONS

GENERAL NOTES

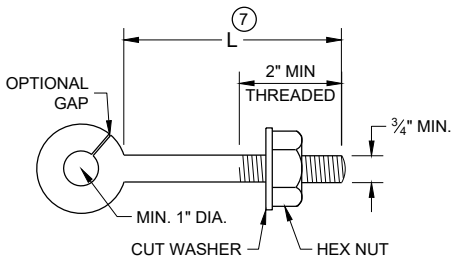
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

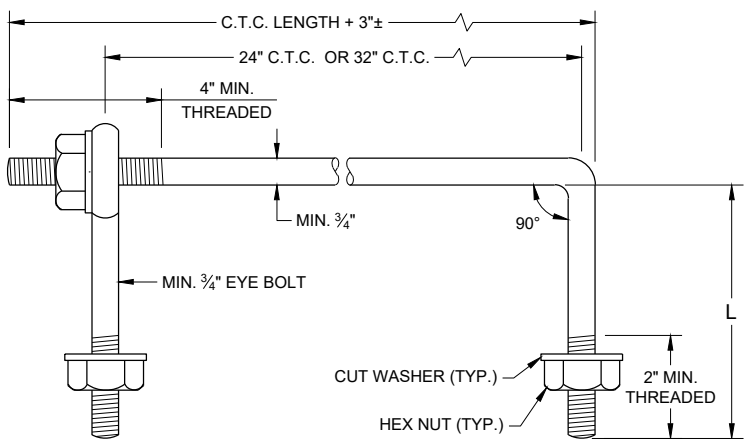
JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

- 1 CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.
- 2 THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.
- 3 HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.
- 4 BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.
- 5 OPENING TO BE ROD DIAMETER PLUS 1 INCH.
- 6 LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.
- 7 EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

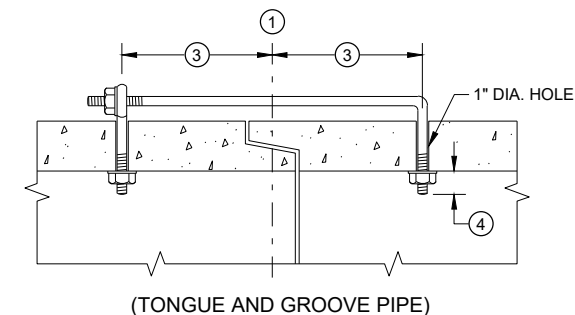


EYE BOLT 7

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



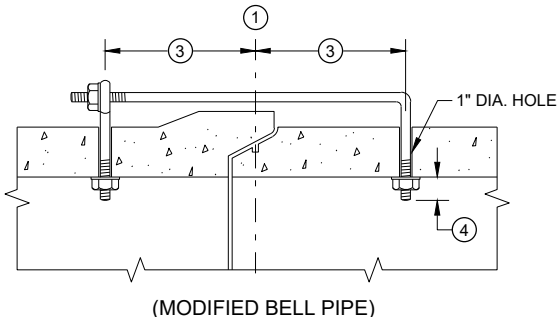
EYE BOLT AND TIE ROD



LONGITUDINAL SECTION

(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

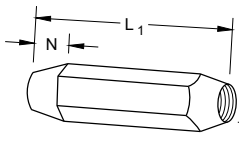


(MODIFIED BELL PIPE)

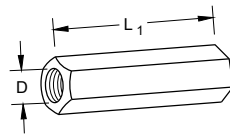
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L ₁	N
12 - 60	5/8	5/8	5	1/2
66 - 84	3/4	3/4	5	1/2
90 - 144	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES

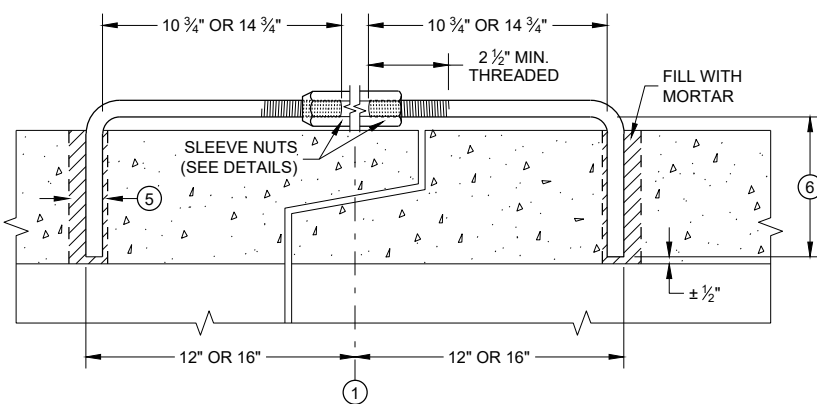


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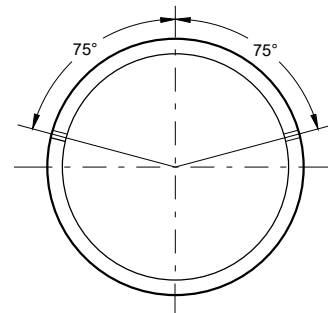
PLAIN

RIGHT AND LEFT THREADS
SLEEVE NUTS



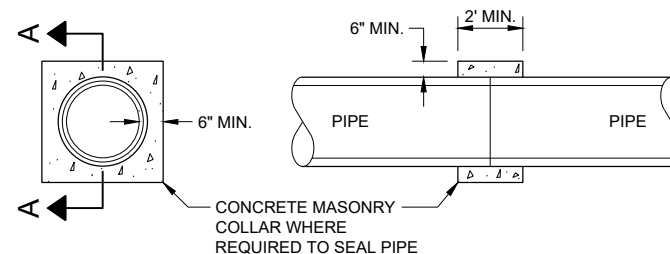
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

GENERAL NOTES

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

FILL SLOPES FLATTER THAN 2 1/2:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

ALL STEEL REINFORCEMENT AND WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

1 MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.

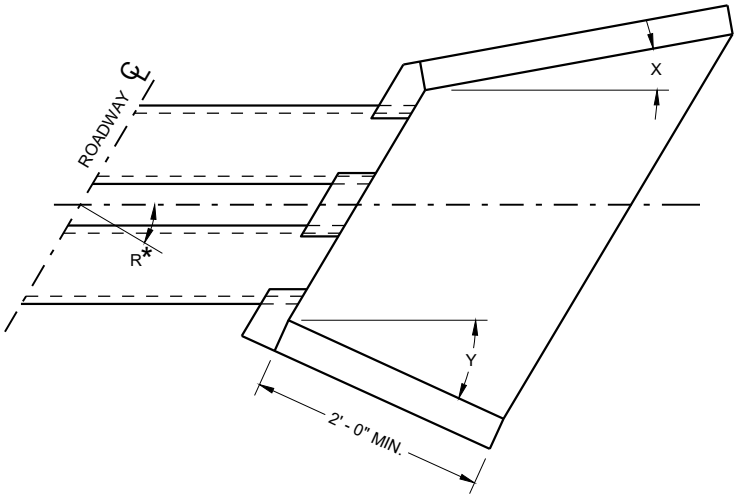
2 THE SPACE BETWEEN PIPES SHALL BE AS FOLLOWS:

DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 48"	2' - 0"
OVER 48" TO 72"	1/2 DIA. OR SPAN
OVER 72"	3' - 0"

- 3 LIMITS OF TRENCH BACKFILL
- 4 LIMITS OF FOUNDATION BACKFILL
- 5 FOUNDATION AND TRENCH BACKFILL ARE MATERIALS INCLUDED IN PAYMENT FOR CULVERT PIPE, PIPE ARCH, CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPSE OR CONCRETE MASONRY ENDWALLS.
- 6 DO NOT PLACE FOUNDATION BACK FILL OR ANY OTHER GRANULAR BACKFILL AROUND OR BELOW CUT OFF WALL. POUR CUT OFF WALL AGAINST NATIVE SOIL
- 7 MINIMUM HEIGHT SHALL BE THE GREATER OF 1'- 0" OR 1/4 HEIGHT OF CULVERT PIPE.

TRENCH BACKFILL

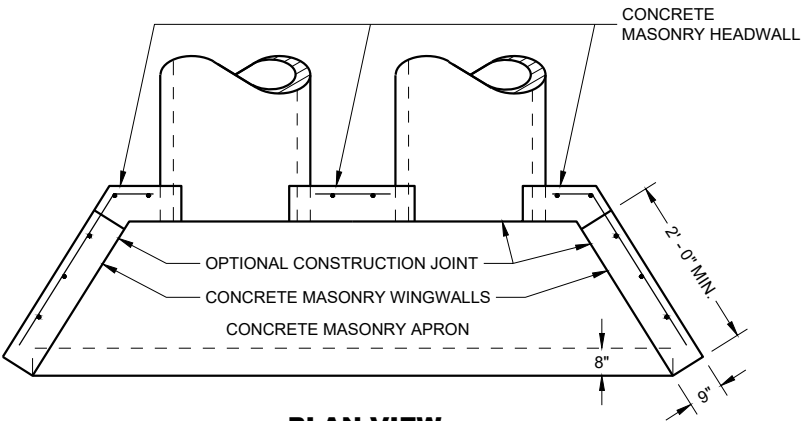
FOUNDATION BACKFILL



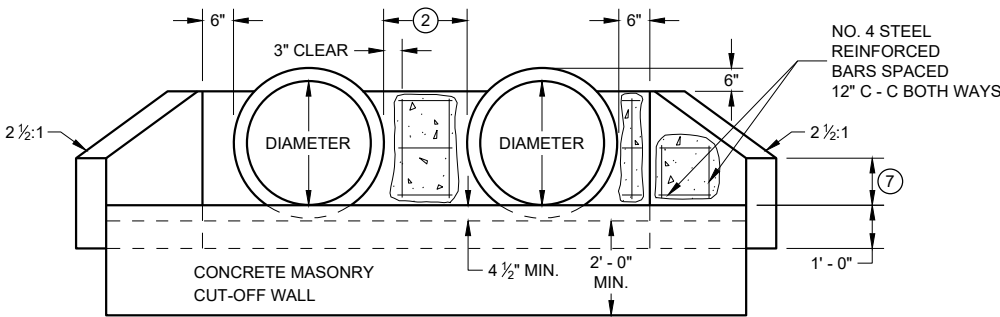
INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	30°	16 - 45°	10°	15°
23 - 37°	20°	30°	46 - 75°	5°	15°
38 - 52°	15°	30°	OVER 75°	0°	15°
53 - 67°	10°	30°			
68 - 82°	5°	30°			
OVER 82°	0°	30°			

R* = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

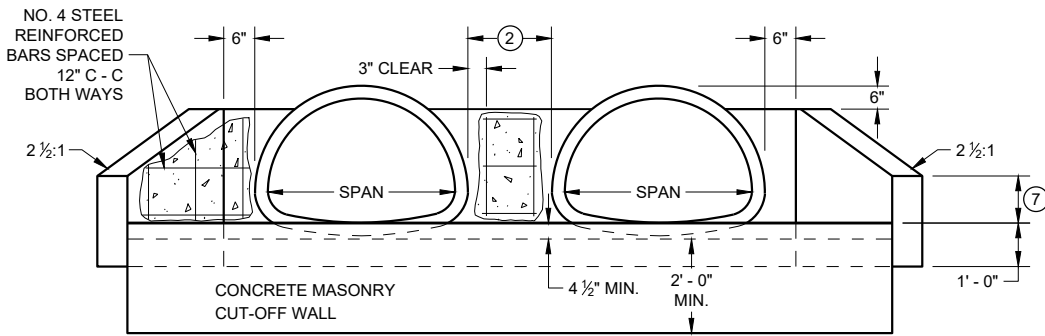
WINGWALL ANGLE DETAILS



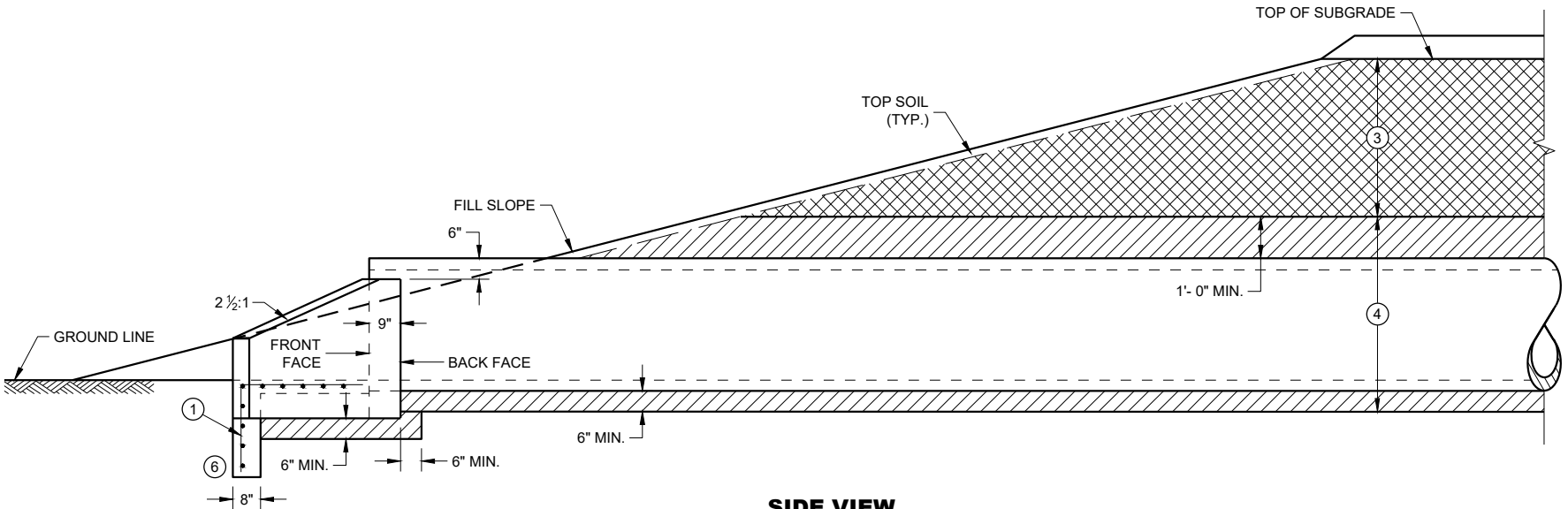
PLAN VIEW



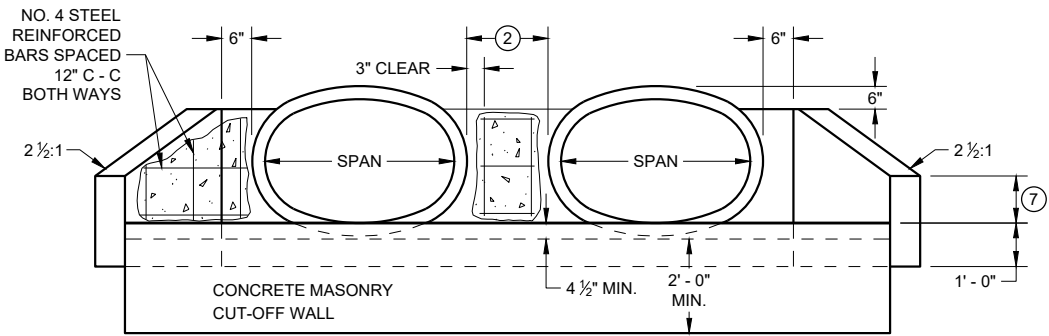
END VIEW
CIRCULAR PIPE



END VIEW
PIPE ARCH



SIDE VIEW
CIRCULAR PIPE, PIPE ARCH OR HORIZONTAL ELLIPSE



END VIEW
HORIZONTAL ELLIPSE

CONCRETE MASONRY
ENDWALLS FOR CULVERT
PIPE AND PIPE ARCH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2022

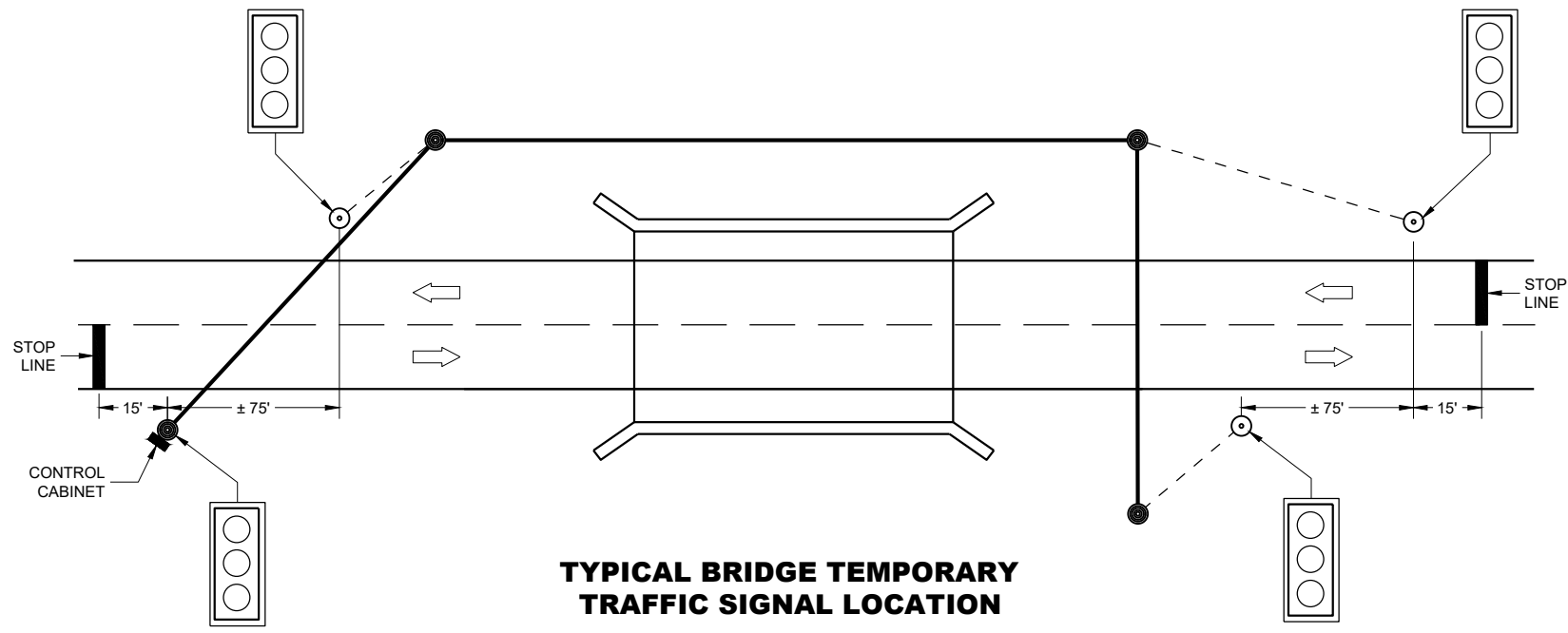
DATE

FHWA

/S/ Rodney Taylor

ROADWAY STANDARDS DEVELOPMENT

ENGINEER



TYPICAL BRIDGE TEMPORARY TRAFFIC SIGNAL LOCATION

LEGEND

- WOOD POLE (NON-BREAKAWAY)
- WOOD POST (BREAKAWAY)
- SIGNAL CABLE
- SIGNAL CABLE W/MESSENGER
- DIRECTION OF TRAFFIC
- LED TRAFFIC SIGNAL WITH BACKPLATE

GENERAL NOTES

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

POLE MOUNTED TRAFFIC SIGNAL CONTROL CABINET MAY BE MOUNTED ON THE SERVICE POLE IF THE ELECTRICAL UTILITY ALLOWS THE INSTALLATION.

WHEN UTILITY POLES ARE USED TO SPAN THE TEMPORARY OVERHEAD CABLE, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER OF THE POLES AND GIVEN TO THE PROJECT MANAGER. ALL PERTINENT UTILITY AND CODE CLEARANCES SHALL BE MAINTAINED.

WOOD POLES (NON-BREAKAWAY) SHALL BE NO CLOSER TO EDGE OF PAVEMENT THAN OFFSET DISTANCE CHART ALLOWS OR 4 FEET BEHIND PROTECTIVE BARRIER (BEAM GUARD, ETC.).

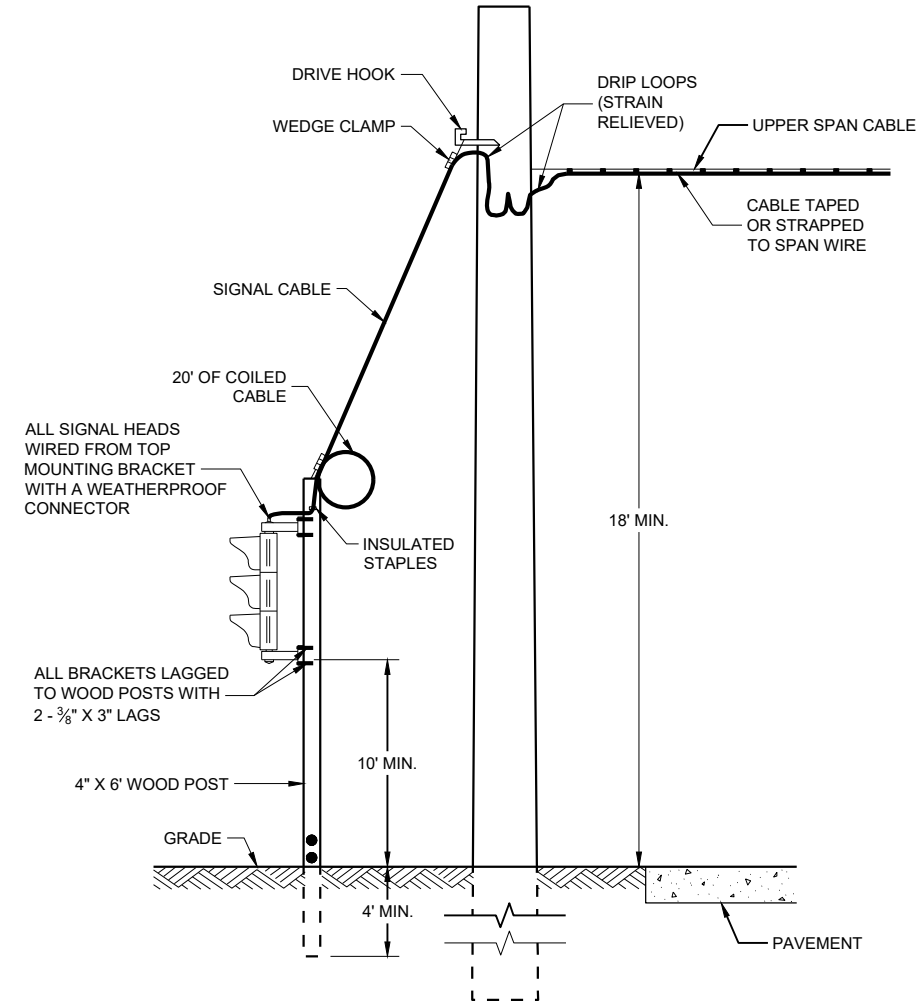
WOOD POSTS (BREAKAWAY) SHALL BE NO CLOSER THAN 2 FEET OUTSIDE OF SHOULDER.

VERTICAL CLEARANCE ETC. PER NEC.

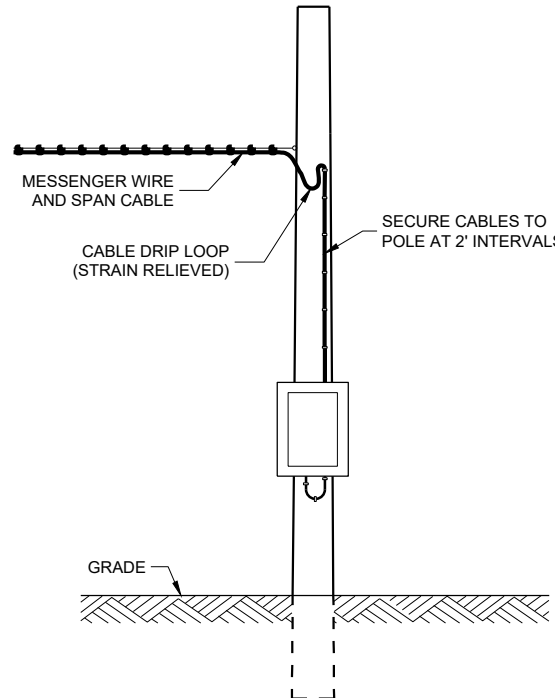
TRAFFIC SIGNAL FACES SHALL BE TYPICALLY PLACED 12 FEET FROM EDGE OF PAVEMENT.

EACH TRAFFIC SIGNAL SHALL HAVE A BACKPLATE.

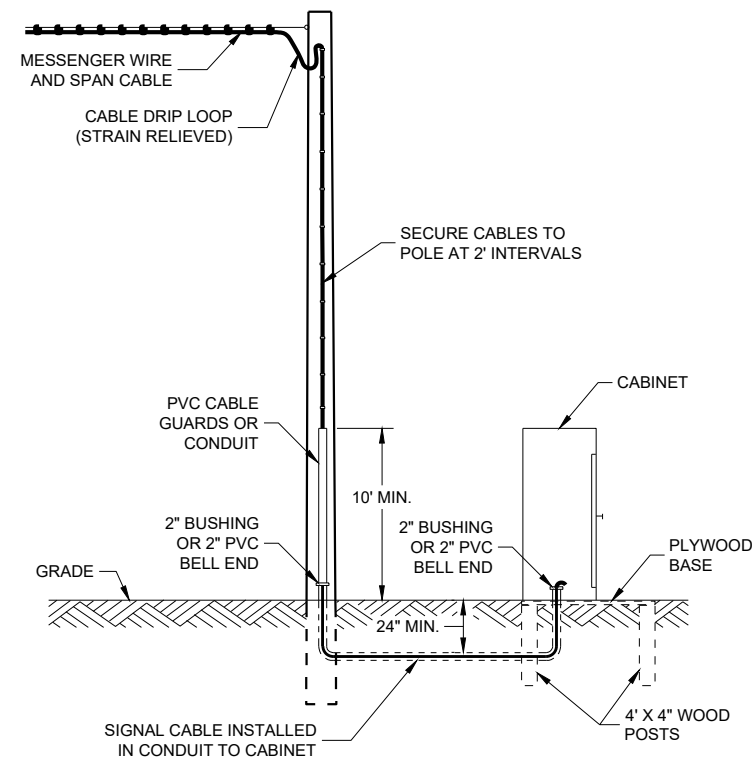
SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15D33.



TYPICAL DROP TO TRAFFIC SIGNAL FACE



POLE MOUNT CABINET INSTALLATION



GROUND MOUNT CABINET INSTALLATION

MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

OFFSET DISTANCES FOR TEMPORARY NON-BREAKAWAY POLES	
SPEED LIMIT	OFFSET DISTANCE*
GREATER THAN 45 MPH	18 FT
45 MPH OR LESS	12 FT
45 MPH OR LESS W/CURBS	2 FT

* NOTE: OFFSET MEASURED FROM OUTER EDGE OF OUTSIDE THRU LANE.

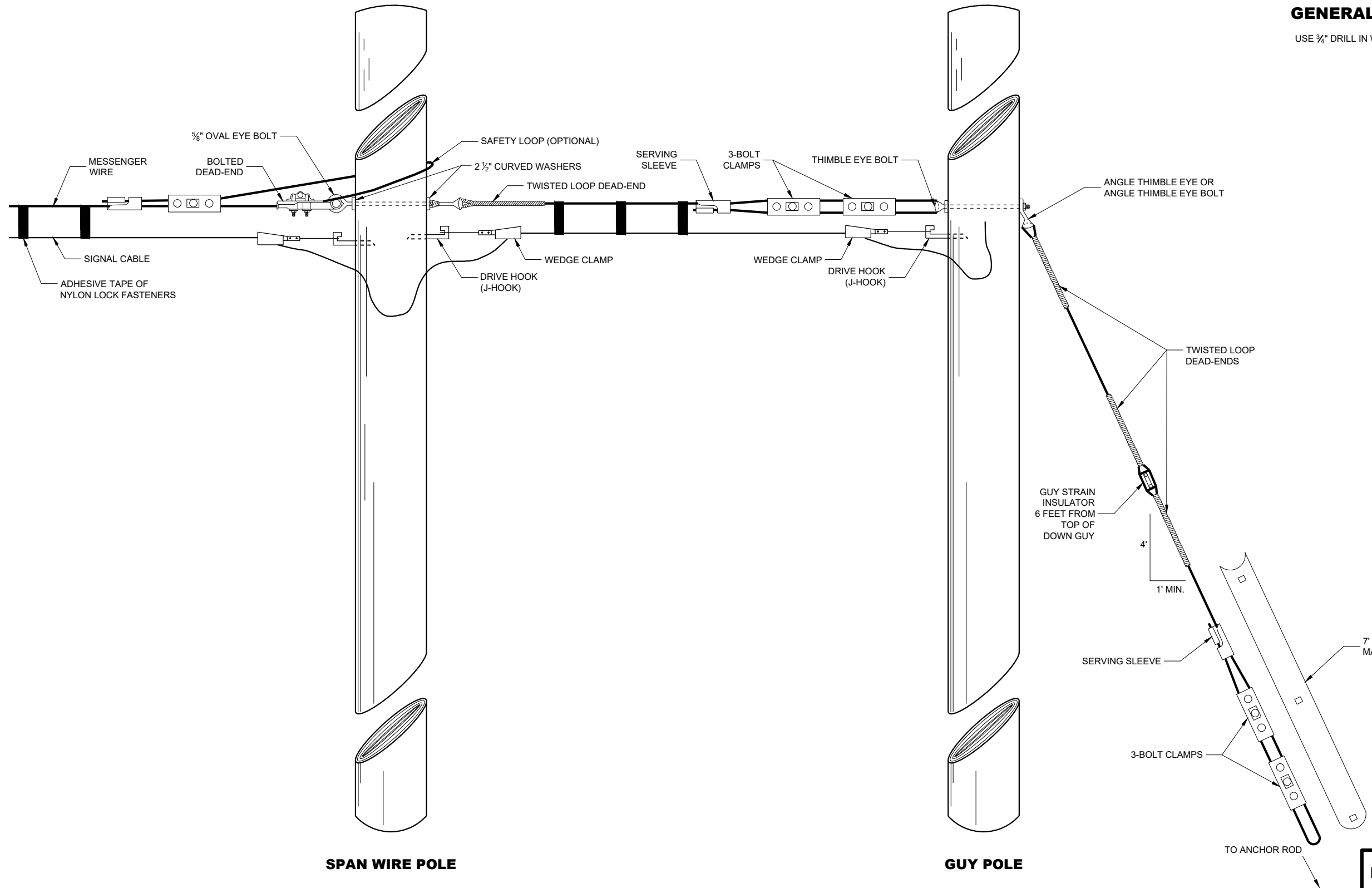
BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Ahmet Demirbilek
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

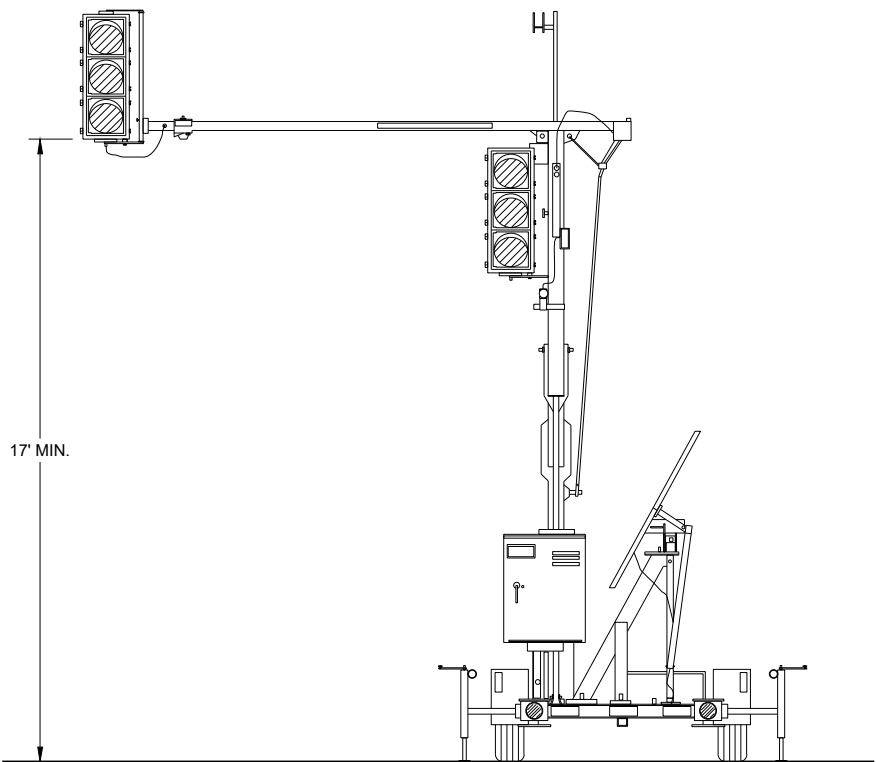
FHWA



GENERAL NOTES
USE 3/4" DRILL IN WOOD POLE TO PROVIDE FOR 5/8" BOLTS.

TYPICAL DEAD-ENDINGS OR GUYING

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2015 DATE	/S/ Ahmet Demerbilek ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

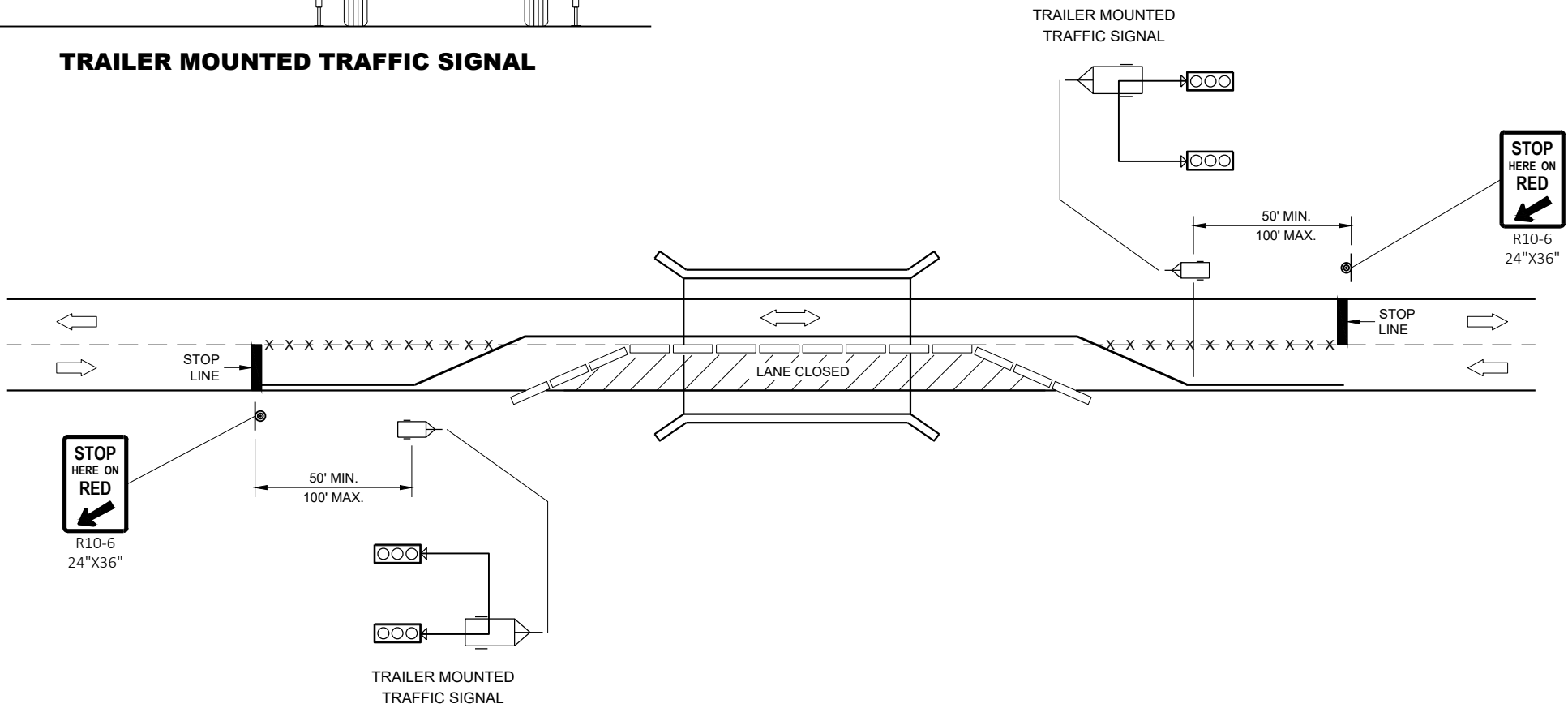


TRAILER MOUNTED TRAFFIC SIGNAL

GENERAL NOTES

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

SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15D33.



TYPICAL TRAILER MOUNTED TRAFFIC SIGNAL LOCATION

LEGEND

- POST MOUNTED SIGN
- TEMPORARY PRECAST CONCRETE BARRIER
- TRAILER MOUNTED TRAFFIC SIGNAL
- REMOVE PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC

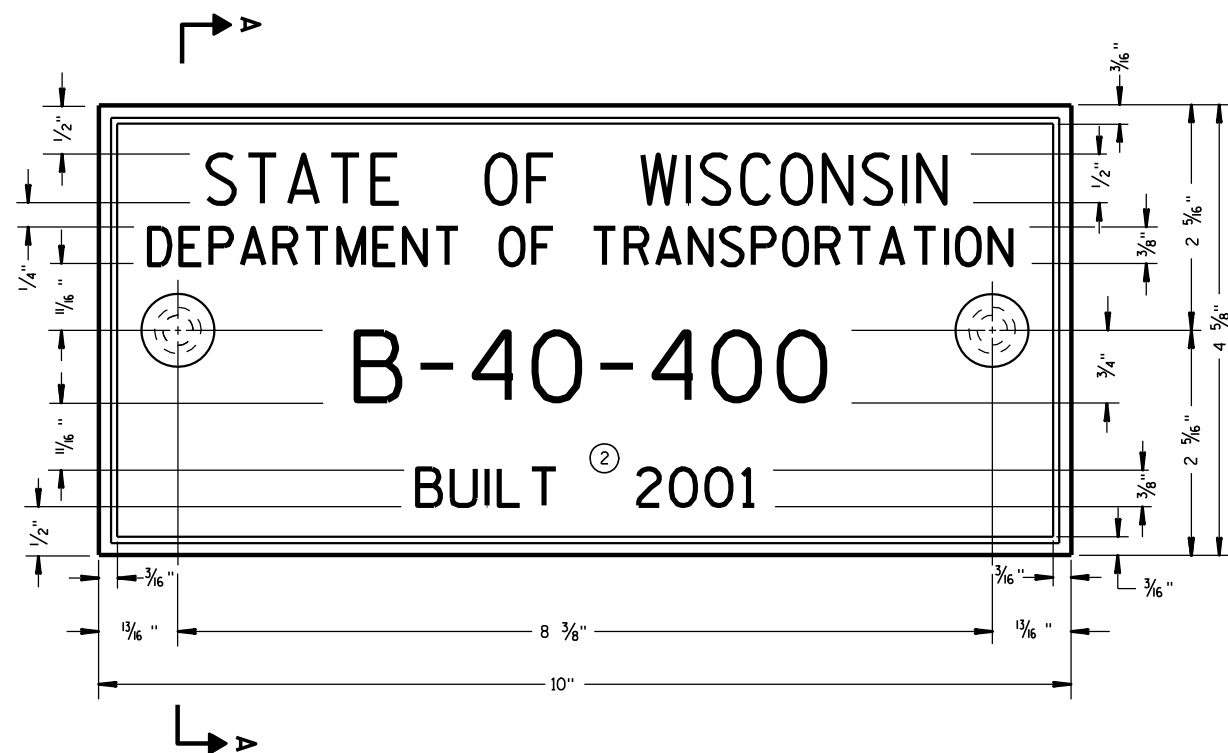
BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

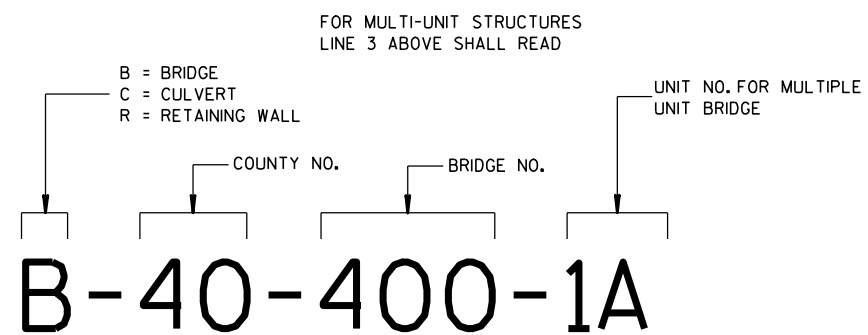
APPROVED
June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

FHWA



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



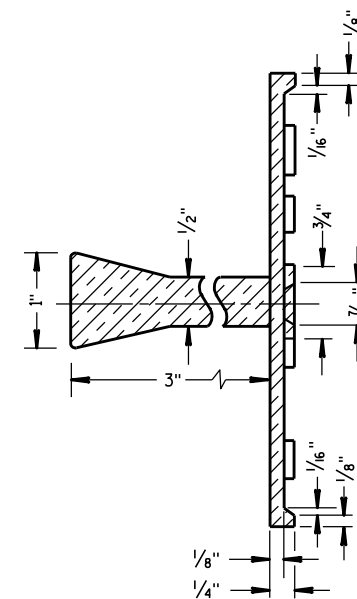
**NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES**

GENERAL NOTES

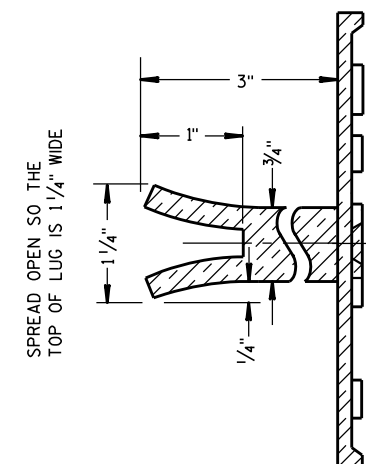
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

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.

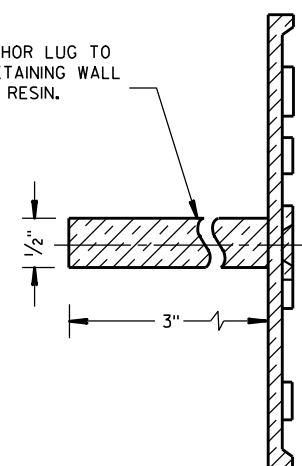


SECTION A-A



ALTERNATE LUG

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



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

**NAME PLATE
(STRUCTURES)**

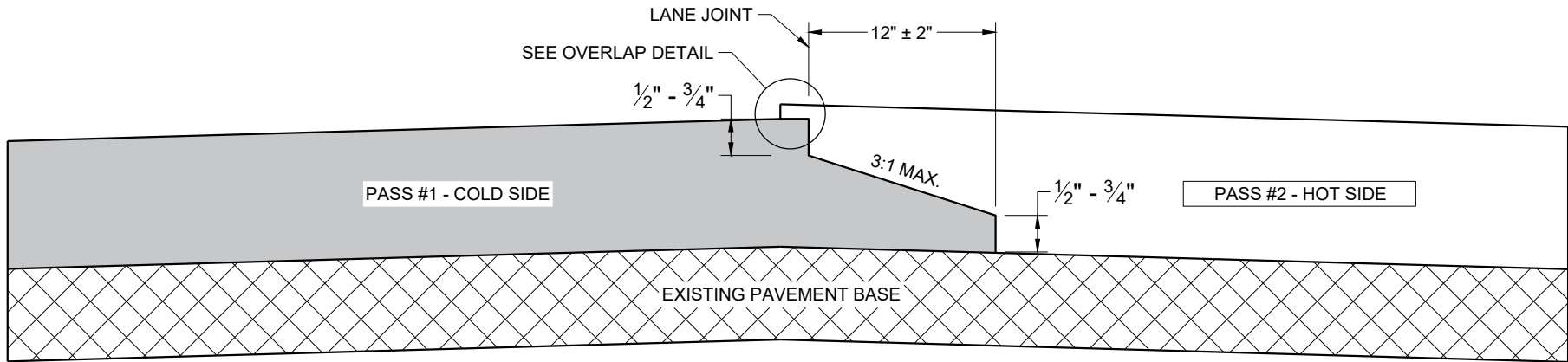
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

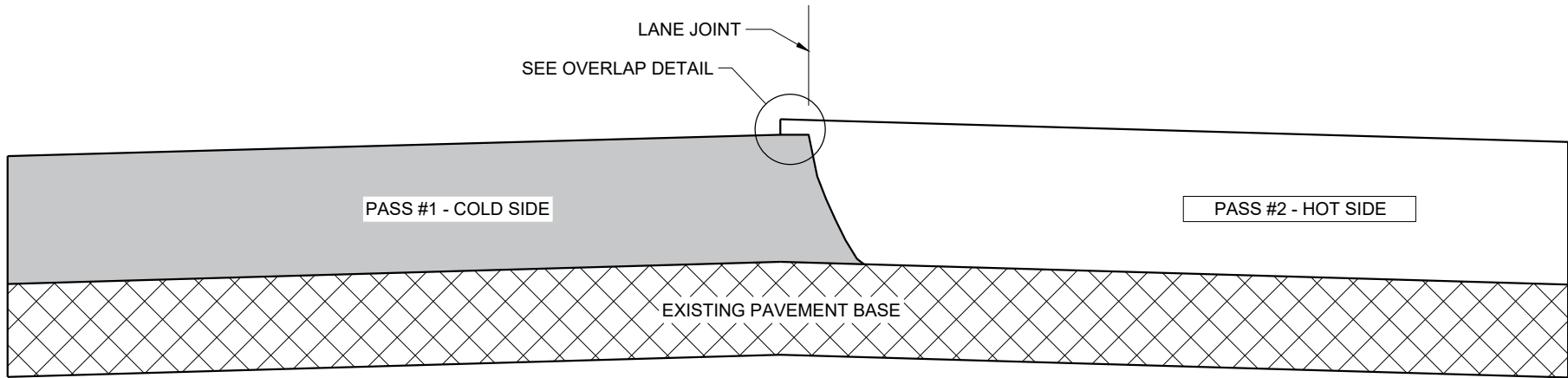
3/26/10
DATE

FHWA

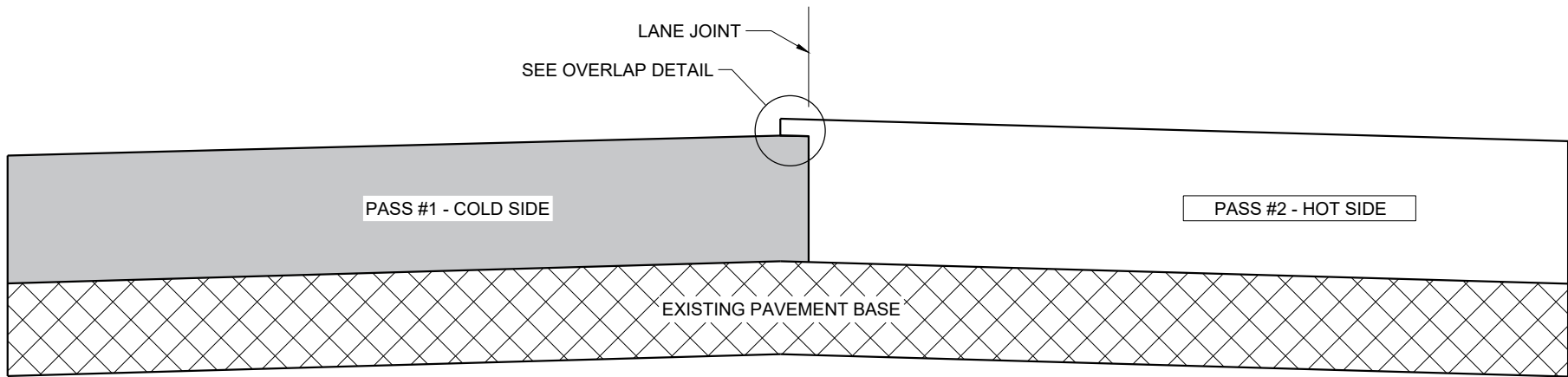
/S/ Scot Becker
CHIEF STRUCTURAL DEVELOPMENT ENGINEER



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

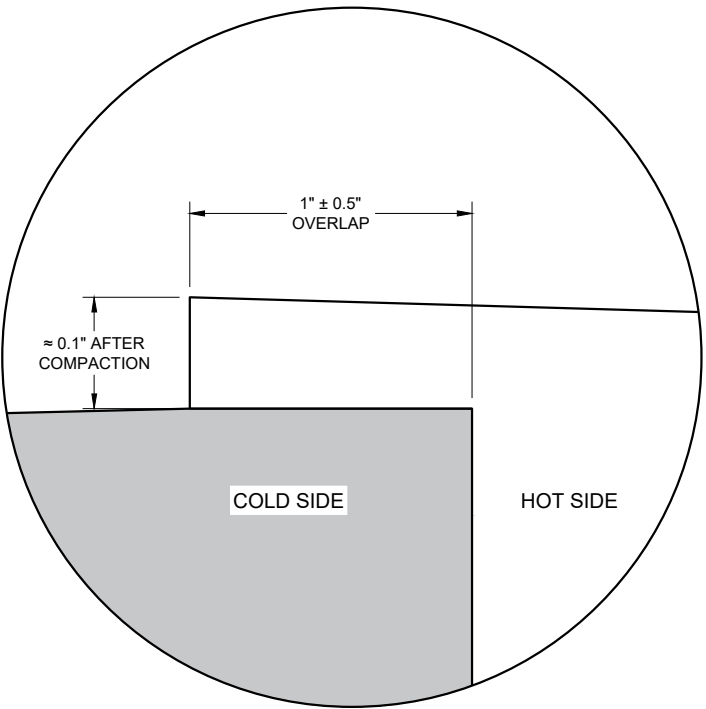
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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.

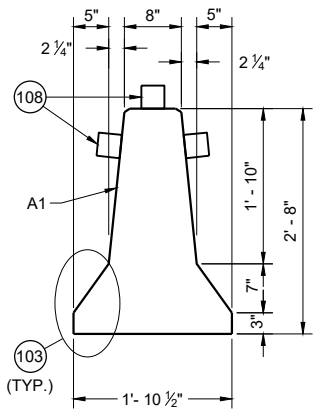


OVERLAP DETAIL (TYPICAL)

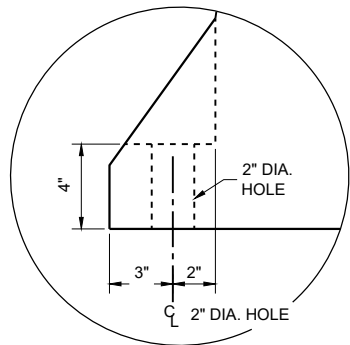
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

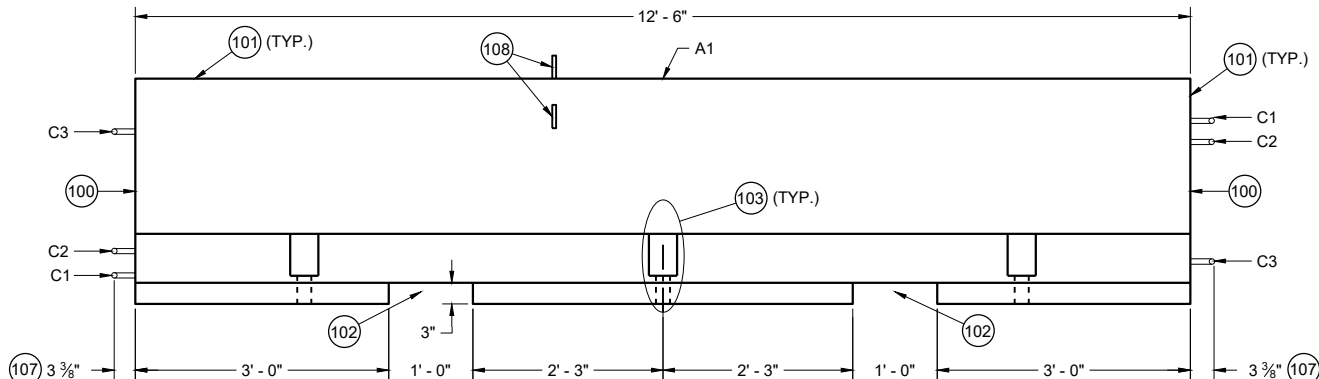
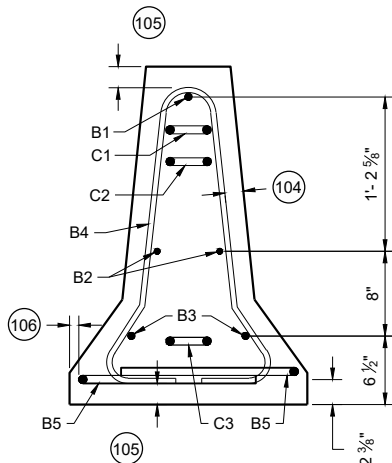
APPROVED
November 2020 /S/ Steven Hefel
DATE HMA PAVEMENT ENGINEER
FHWA



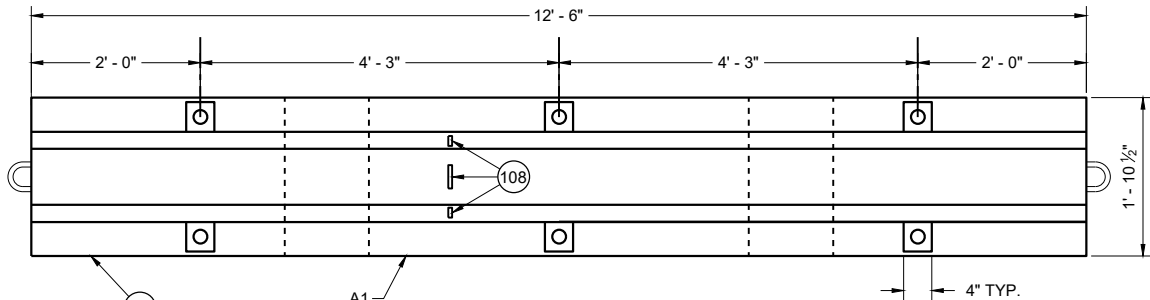
CROSS SECTION



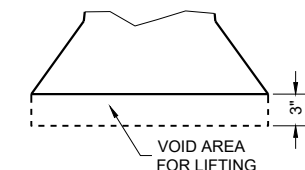
ANCHOR BLOCK
DETAIL



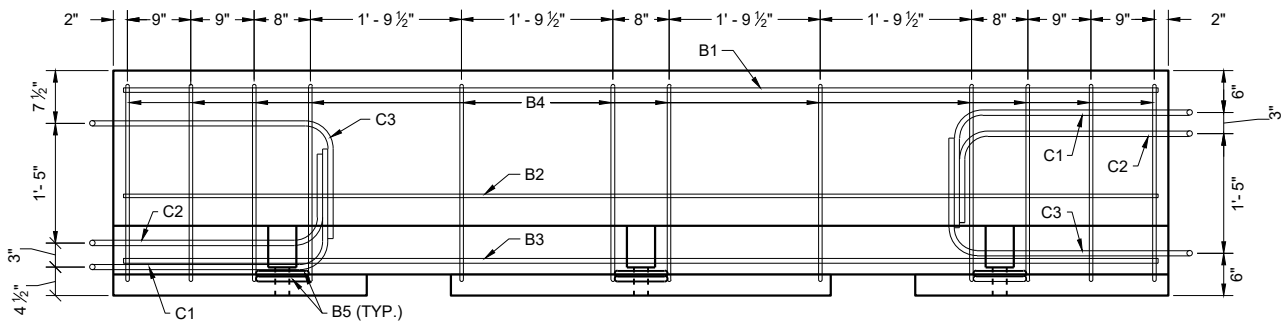
PROFILE VIEW



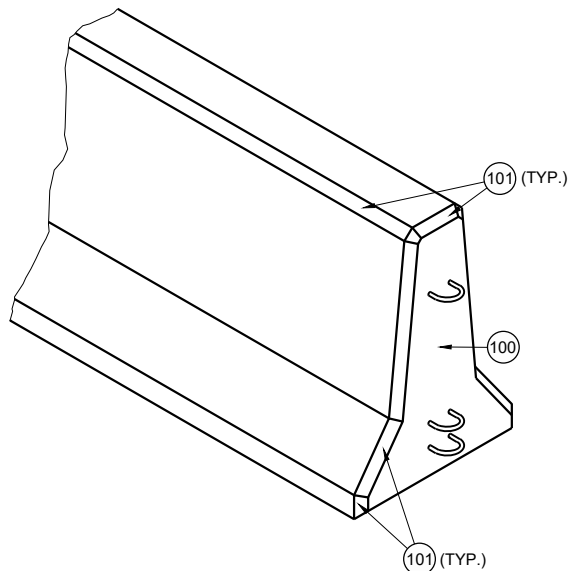
PLAN VIEW
TEMPORARY BARRIER



LIFTING SLOT DETAIL
(TYP.)



PROFILE VIEW
TEMPORARY BARRIER REINFORCEMENT



GENERAL NOTES

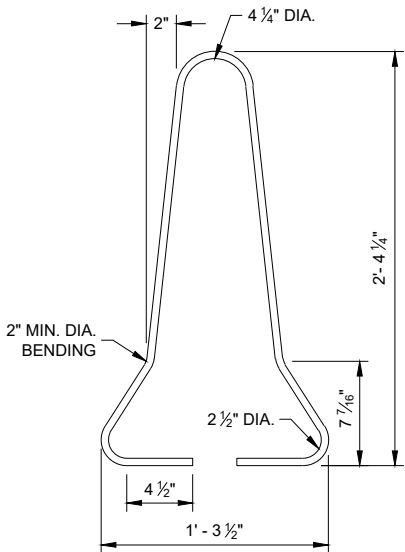
PLACE BARRIER ON PAVED SURFACE. BEFORE PLACEMENT OF TEMPORARY BARRIER, REMOVE ALL LOOSE MATERIAL FROM PAVED SURFACE.

LOOP BARS C1, C2 AND C3 ARE NOT FOR PLACEMENT OR MOVEMENT OF BARRIER.

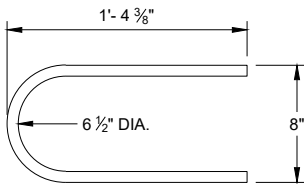
- 100 PERMANENTLY FORM INTO ONE END OF BARRIER THE FOLLOWING INFORMATION:
 - A. TYPE OF BARRIER: WI-CBTP
 - B. MANUFACTURER
 - C. DATE OF MANUFACTURE (MONTH AND YEAR)
- 101 1" OPTIONAL CHAMFER
- 102 SEE LIFTING SLOT DETAIL
- 103 SEE ANCHOR BLOCK DETAIL
- 104 1 3/4" MIN. CLEAR COVER
- 105 2" MIN. CLEAR COVER
- 106 1" MIN. CLEAR COVER
- 107 ± 1/8" MEASURED FROM FACE OF CONCRETE BARRIER TO OUTSIDE OF LOOP BAR (TYP.)
- 108 USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURERS INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED LEFT OF TRAFFIC AND WHITE WHEN BARRIER IS LOCATED RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART, PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO SIDE MOUNTED DELINEATORS ON BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAT 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

CONCRETE BARRIER
TEMPORARY PRECAST,
12' - 6"

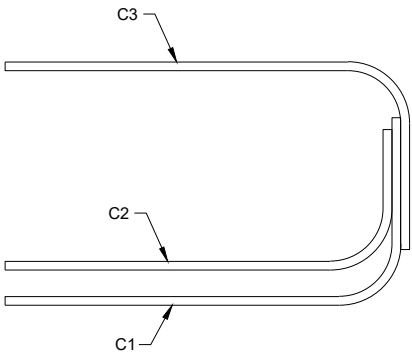
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



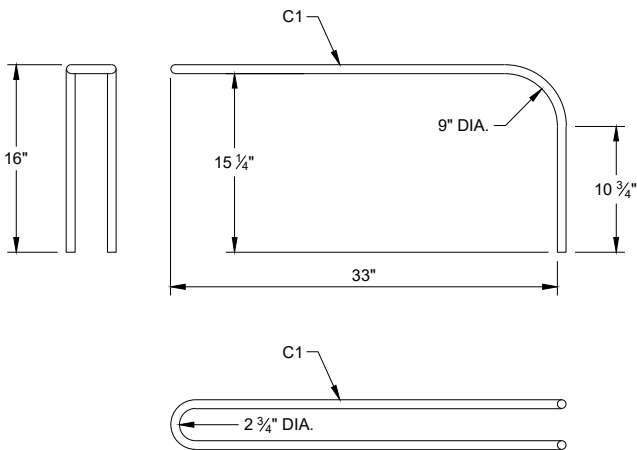
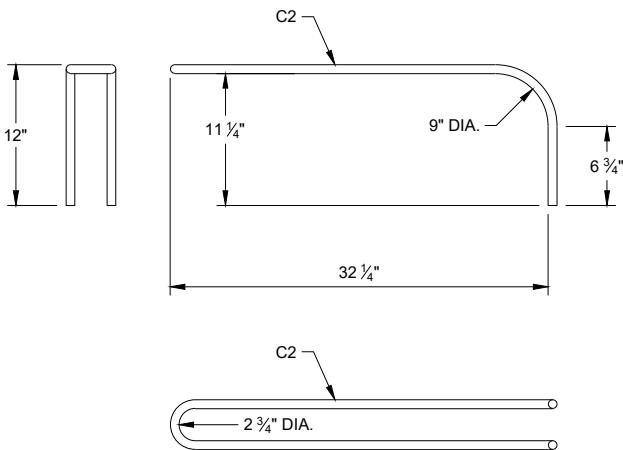
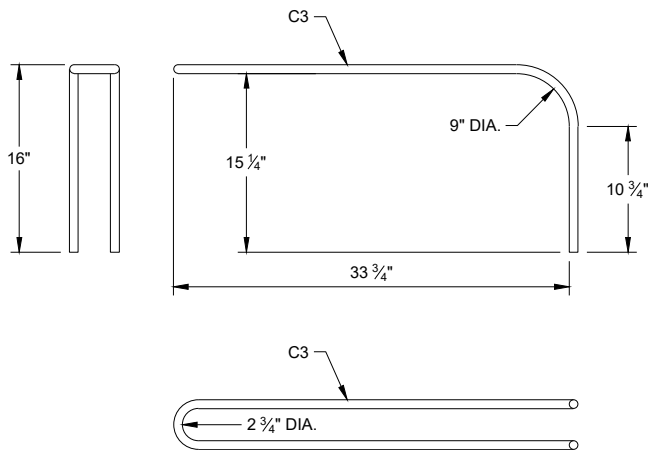
B4 BAR DETAIL



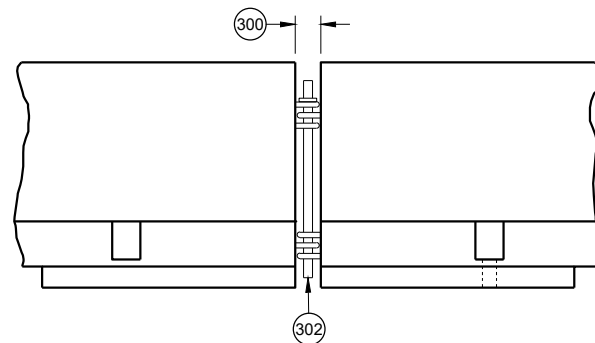
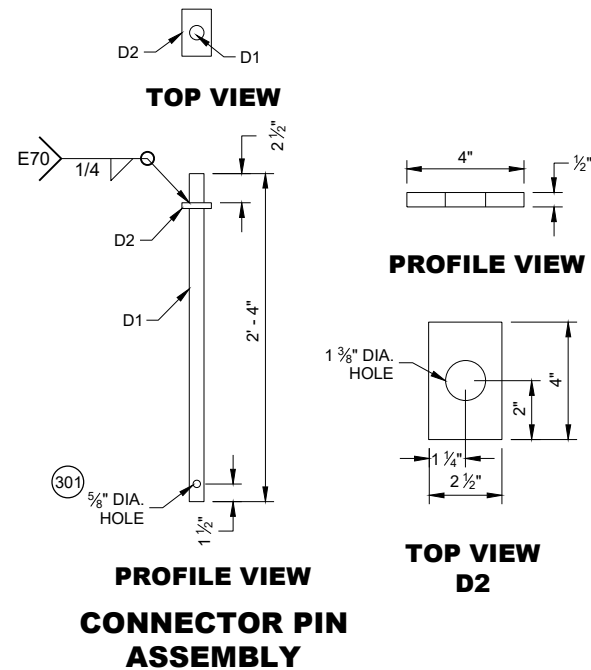
B5 BAR DETAIL



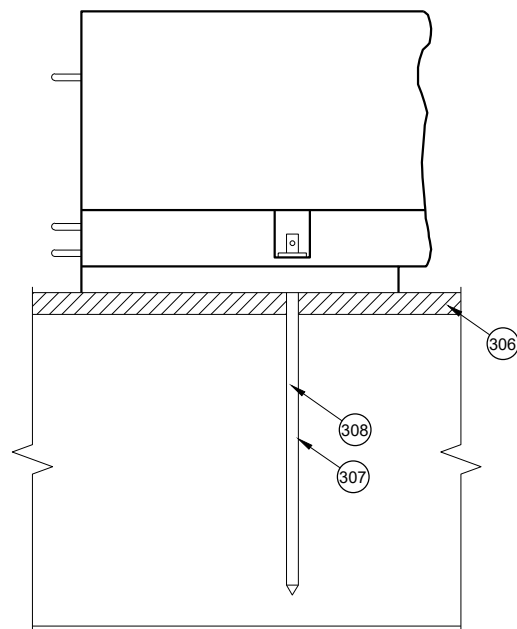
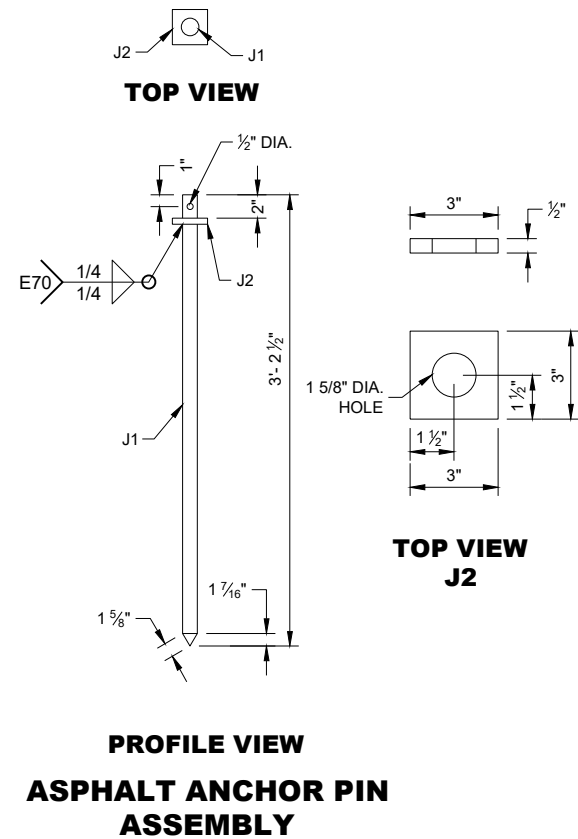
PROFILE VIEW
LOOP BAR ASSEMBLY



C BAR DETAILS

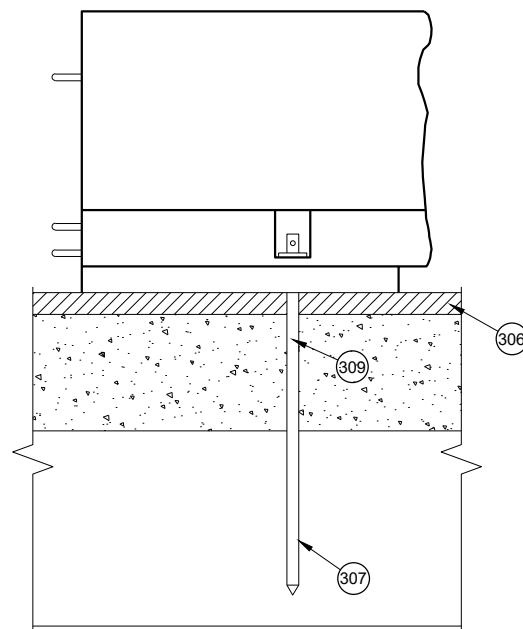


**CONNECTING TEMPORARY
BARRIER SECTIONS**



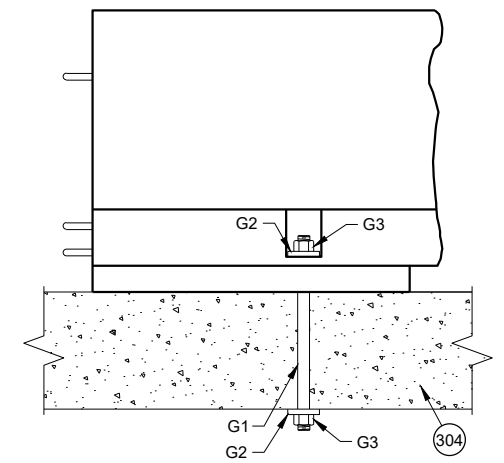
SIDE VIEW

**ASPHALT ANCHOR
INSTALLATION
THROUGH
ASPHALT PAVEMENT**



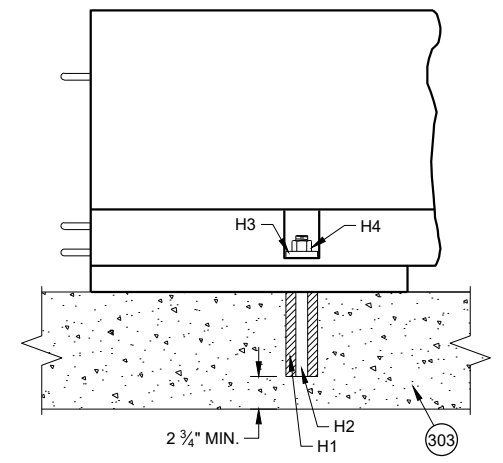
SIDE VIEW

**ASPHALT ANCHOR
INSTALLATION
THROUGH
ASPHALT OVERLAY
ON TOP OF
CONCRETE PAVEMENT**



SIDE VIEW

**THROUGH BOLT ANCHOR
INSTALLATION**



SIDE VIEW

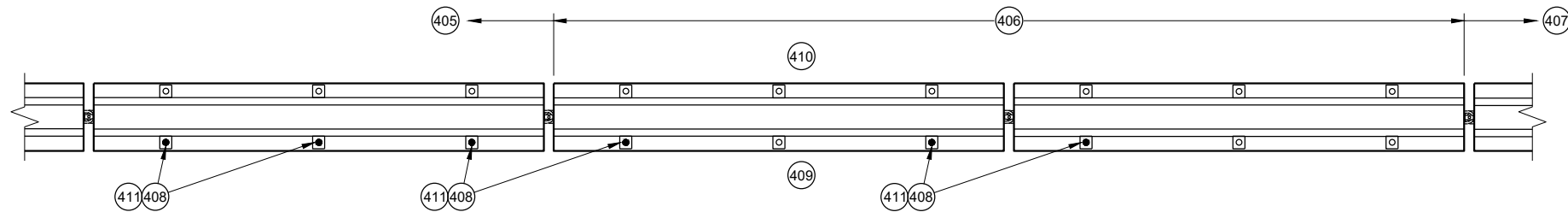
**ADHESIVE ANCHOR
INSTALLATION**

GENERAL NOTES

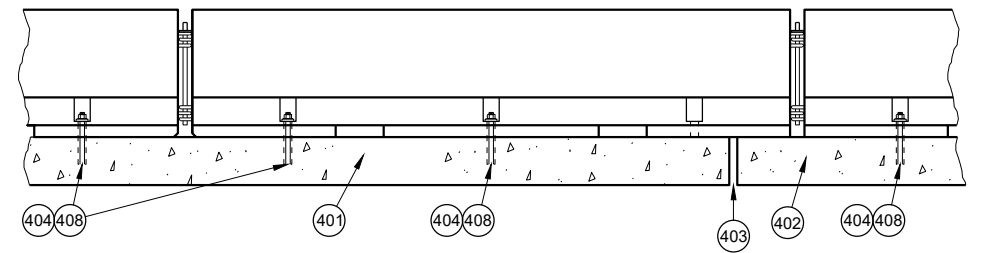
- (300) SET WITH 3 5/8" WOOD BLOCK.
- (301) HOLE IS OPTIONAL.
- (302) CONNECTOR PIN ASSEMBLY.
- (303) CONCRETE PAVEMENT, APPROACH SLAB, OR DECK.
- (304) CONCRETE DECK.
- (305) DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY OR CONCRETE PAVEMENT WITH ASPHALT OVERLAY.
- (306) MINIMUM OF 2" OF ASPHALT.
- (307) ASPHALT ANCHOR PIN ASSEMBLY
- (308) IF DRILLING A PILOT HOLE, THE MAX. DIA. OF THE HOLE IS 3/4"
- (309) WHEN THERE IS ASPHALT OVERLAYING CONCRETE PAVEMENT, A 1 5/8" DIA. PILOT HOLE CAN BE DRILLED INTO THE OVERLAY AND CONCRETE. IF NEEDED DRILL A 3/4" PILOT HOLE IN BASE COURSE.

**CONCRETE BARRIER
TEMPORARY PRECAST,
12' - 6"**

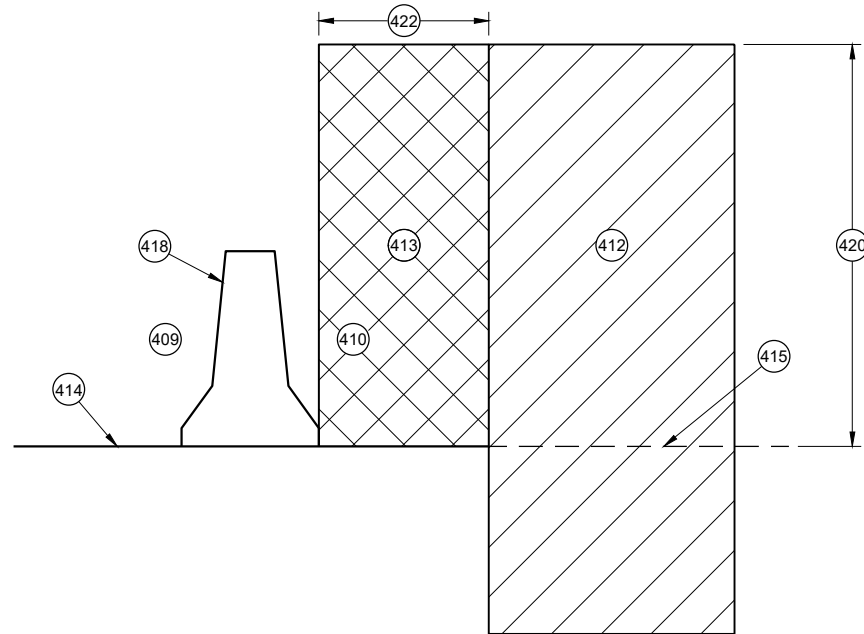
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



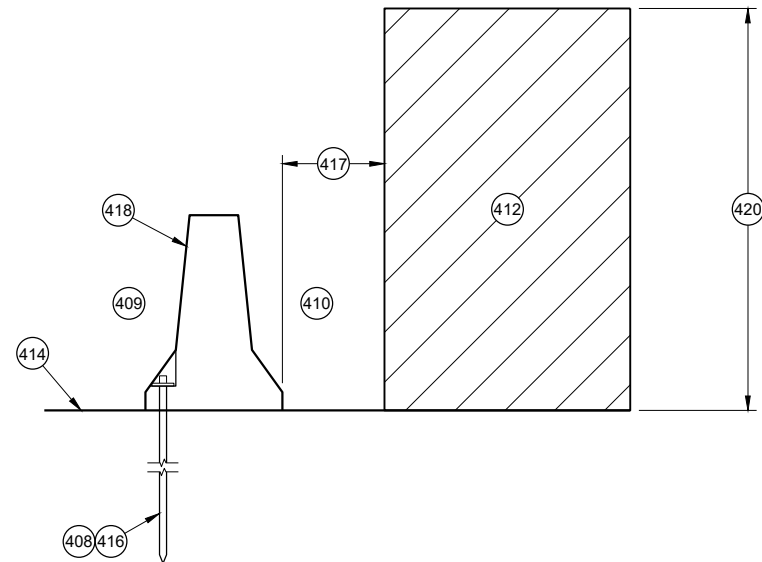
PLAN VIEW
TRANSITION FROM FREE STANDING TO ANCHORED BARRIER



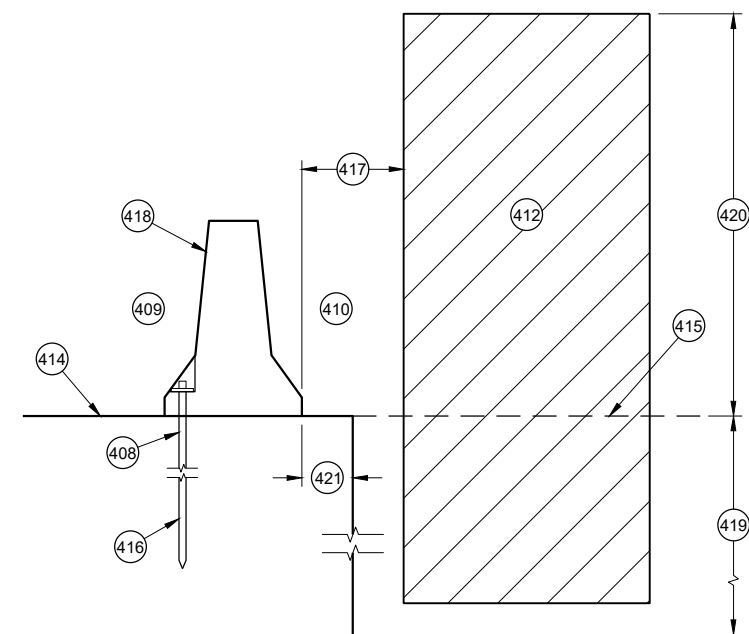
PROFILE VIEW
ANCHORED BARRIER NEAR EXPANSION JOINT



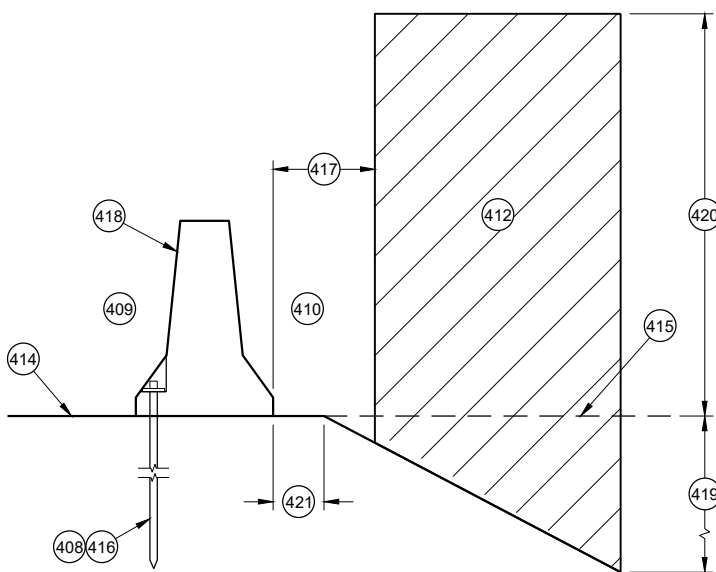
CROSS SECTION
FREE STANDING BARRIER



CROSS SECTION
ANCHORED BARRIER FOR OBJECTS ABOVE THE GRADE LINE AND NEAR THE BARRIER



CROSS SECTION
ANCHORED BARRIER NEAR VERTICAL DROP OFF



CROSS SECTION
ANCHORED BARRIER NEAR A SLOPE

GENERAL NOTES

- (400) NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.
- (401) CONCRETE DECK
- (402) CONCRETE DECK OR APPROACH SLAB.
- (403) EXPANSION JOINT
- (404) ADHESIVE ANCHOR SHOWN. SEE ANCHOR DETAILS.
- (405) ANCHORED TEMPORARY BARRIER
- (406) TRANSITION FROM ANCHORED TEMPORARY BARRIER TO FREE STANDING
- (407) FREE STANDING BARRIER
- (408) REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERCIAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.
- (409) TRAFFIC SIDE
- (410) NON-TRAFFIC SIDE
- (411) ANCHOR LOCATION. SEE ANCHORING DETAILS.
- (412) WORK AREA
- (413) AREA FREE OF OBJECTS AND WORKERS
- (414) GRADE LINE
- (415) EXTENDED GRADE LINE
- (416) ANCHORED TEMPORARY BARRIER. SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR AN ASPHALT ANCHOR ROD DETAILS FOR MORE INFORMATION. ASPHALT ANCHOR ROD SHOWN.
- (417) WHEN OBJECTS EXTEND ABOVE THE GRADE. A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT.
- (418) OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR ALLOWED TO LEAN AGAINST THE BARRIER WITHOUT WRITTEN PERMISSION OF THE PROJECT ENGINEER.
- (419) DEPTHS OF 3 FEET OR MORE.
- (420) $Y = 6.5'$
- (421) OFFSET FROM BACK OF BARRIER EDGE:
- | | |
|-------------------|------|
| CONCRETE PAVEMENT | 0.5' |
| ASPHALT | 0.5' |
- (422) POSTED SPEED (MPH):
- | | |
|---------------|------|
| 45 OR GREATER | 4.0' |
| 40 OR LOWER | 2.0' |

CONCRETE BARRIER
TEMPORARY PRECAST,
12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

- 500 EXISTING RIGID BARRIERS (VARIES)

501 TEMPORARY BARRIER

502 SEE OTHER DETAIL ON HOW TO ANCHOR TEMPORARY BARRIER (BARRIER ASPHALT ANCHOR SHOWN).

503 ANCHORS ARE REQUIRED ON BOTH SIDE OF THE TEMPORARY BARRIER.

504 NESTED RAILS ARE REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS.

505 TRAFFIC TRAVELS FROM PERMANENT BARRIER TO TEMPORARY BARRIER.
- 506 TRAFFIC TRAVELS FROM TEMPORARY BARRIER TO PERMANENT BARRIER.

507 VERTICAL BARRIER

508 SAFETY SHAPE BARRIER

509 SINGLE SLOPE BARRIER

510 CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF RIGID BARRIER.

511 BENT THRIE BEAM TO FIT.

512 THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
- 513 TWO (2) P1, P2 AND P3 ARE REQUIRED

514 FIVE (5) N1, N2 AND N3 ARE REQUIRED

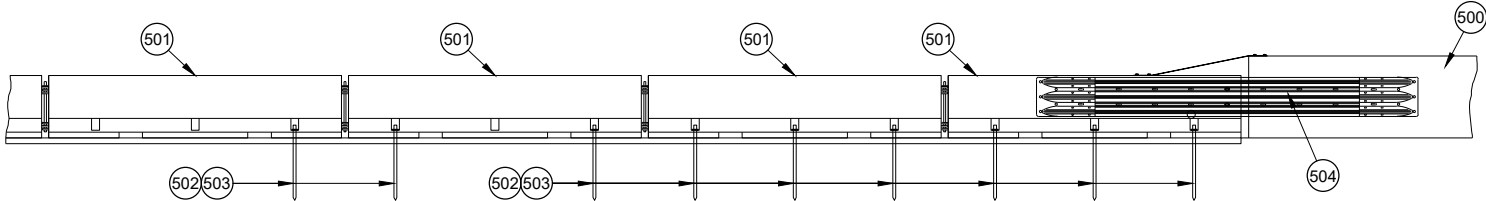
515 TWO (2) R1, R2 AND R3 ARE REQUIRED

516 CUT WOOD BLOCK TO FIT.

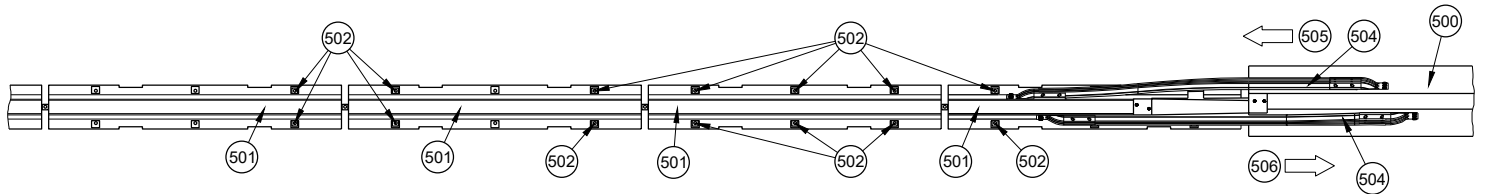
517 SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL ASSEMBLY.

518 CAP ASSEMBLY

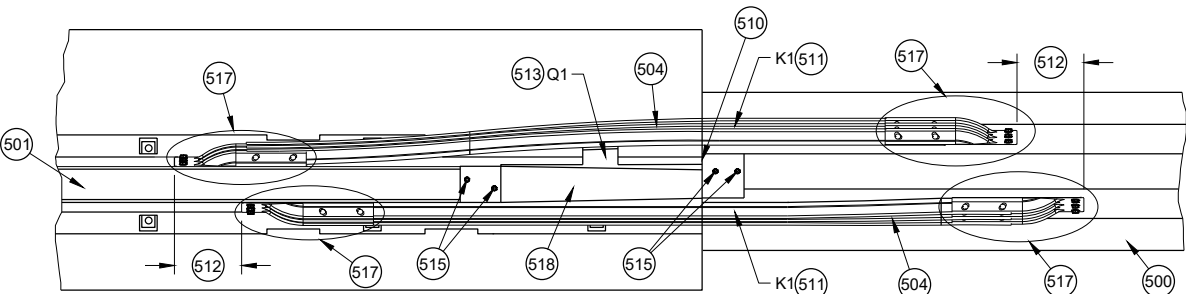
519 4" MAX. GAP BETWEEN TEMPORARY BARRIER AND RIGID BARRIER.
- 520 ALL TWELVE SPLICE HOLES REQUIRE M1 AND M2



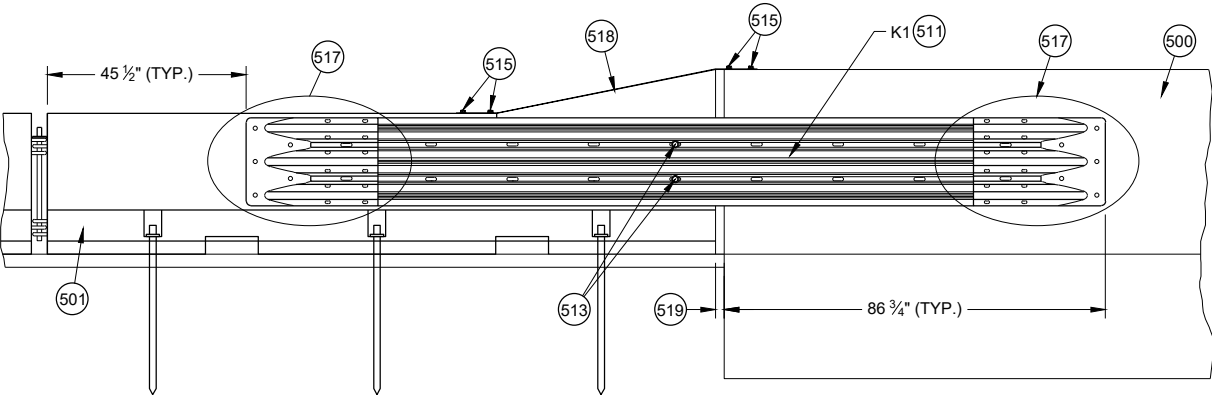
PROFILE VIEW



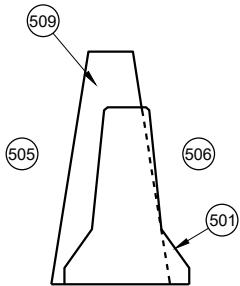
PLAN VIEW
TRANSITION TO RIGID BARRIER



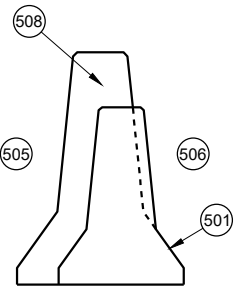
PLAN DETAIL VIEW
TRANSITION TO RIGID BARRIER



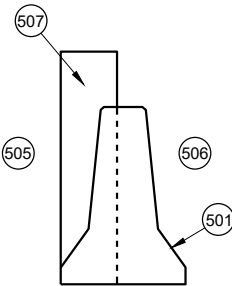
FRONT DETAIL VIEW
TRANSITION TO RIGID BARRIER



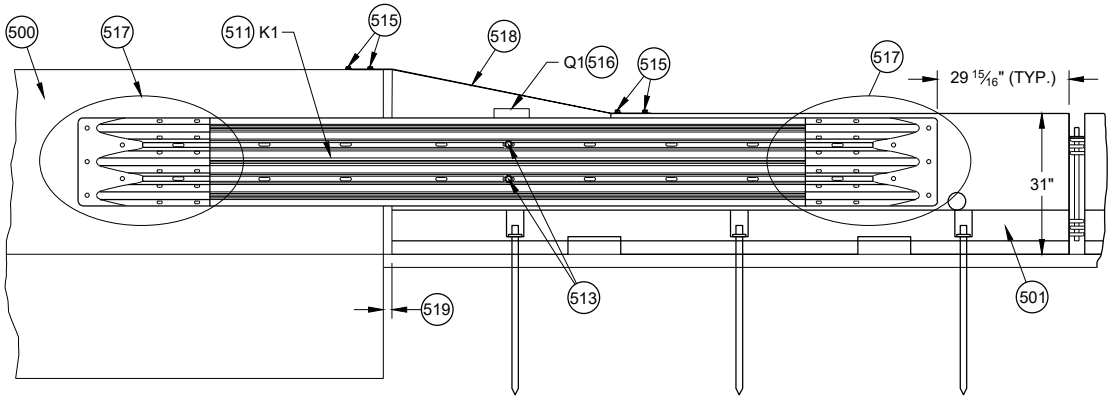
CROSS SECTION
TEMPORARY BARRIER
PLACEMENT SINGLE SLOPE



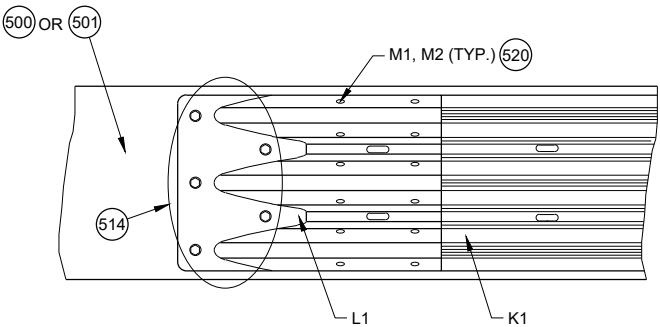
CROSS SECTION
TEMPORARY BARRIER
PLACEMENT SAFETY SHAPE



CROSS SECTION
TEMPORARY BARRIER
PLACEMENT VERTICAL



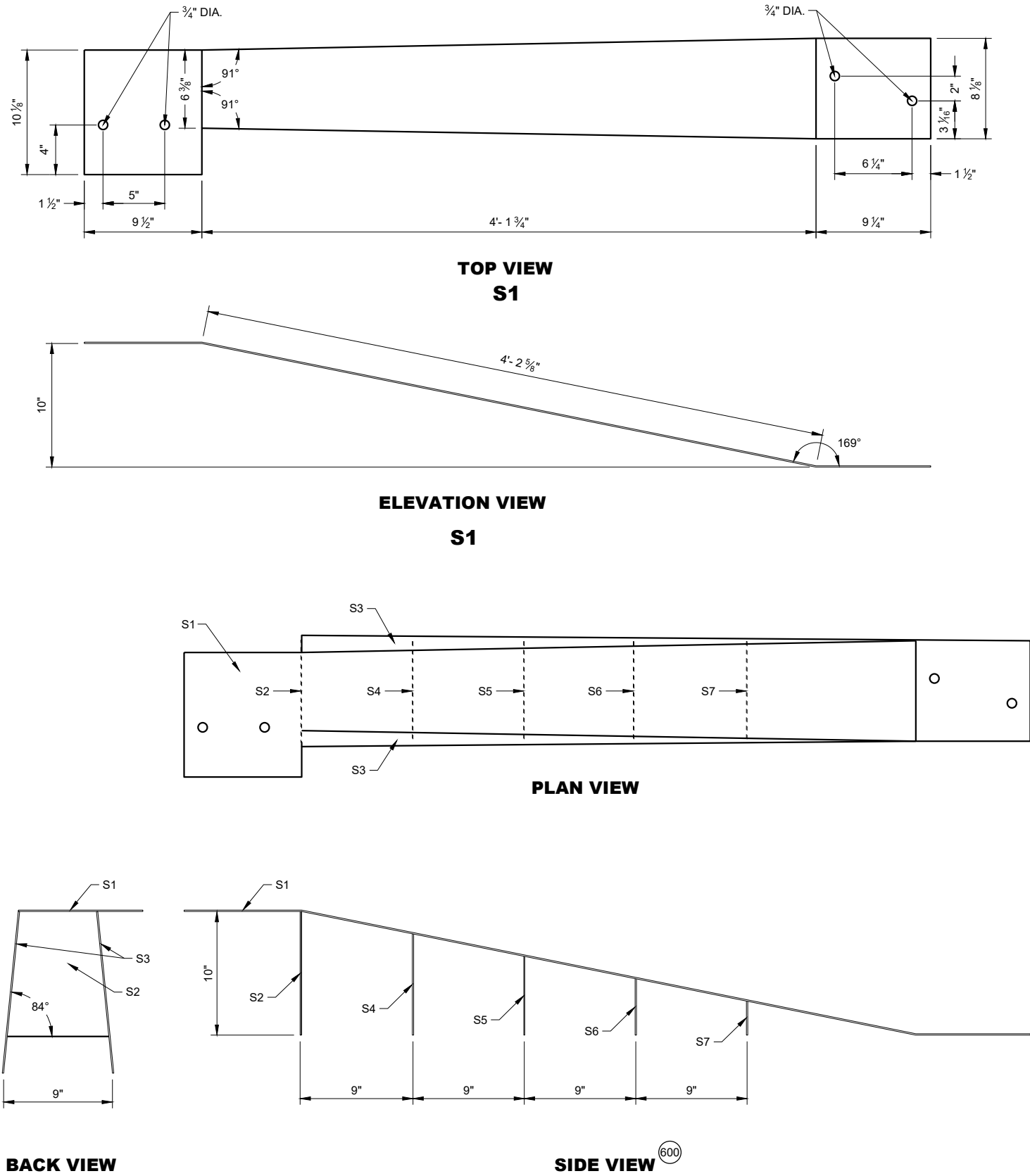
BACK DETAIL VIEW
TRANSITION TO RIGID BARRIER



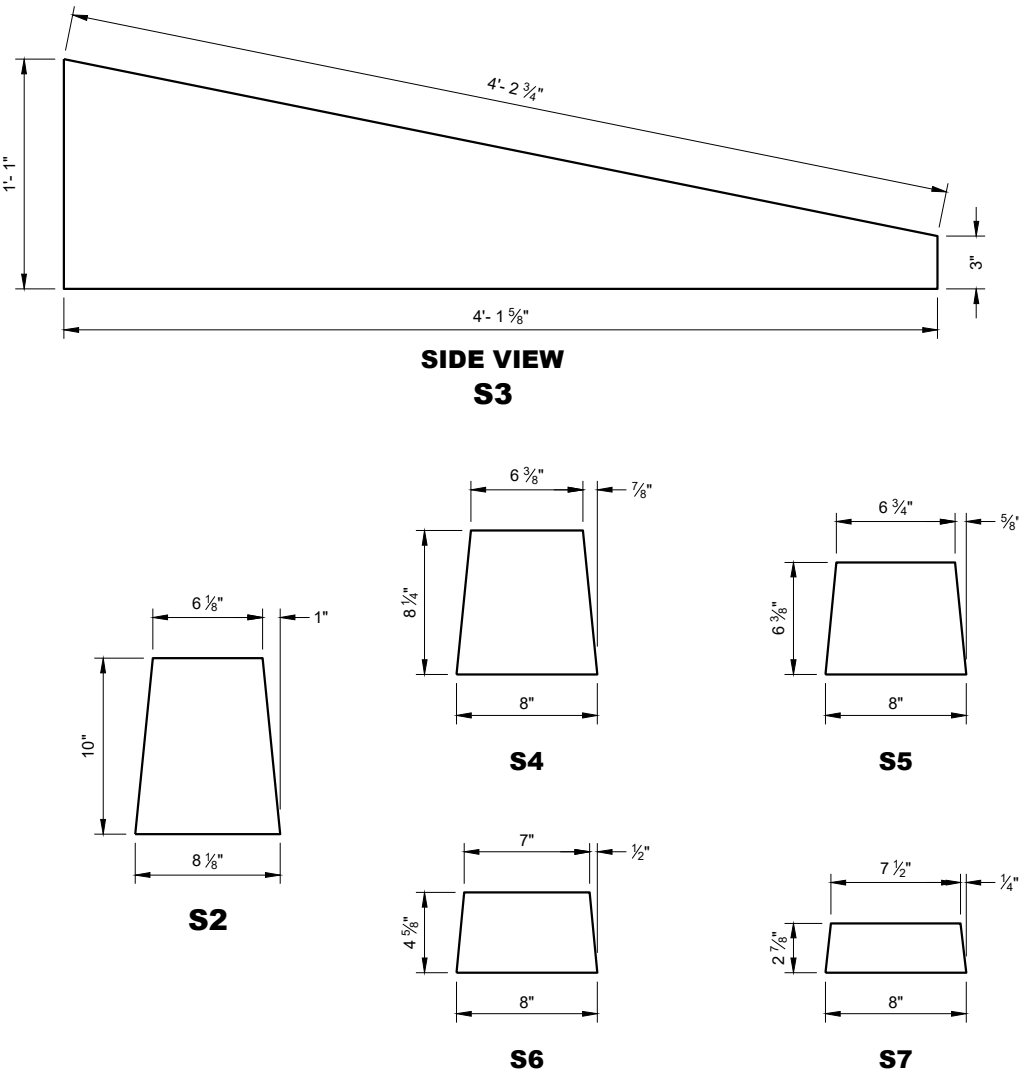
517 DETAIL PLAN VIEW
THRIE BEAM RAIL TERMINAL CONNECTOR ASSEMBLY

CONCRETE BARRIER
TEMPORARY PRECAST,
12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



42" TOP CAP ASSEMBLY



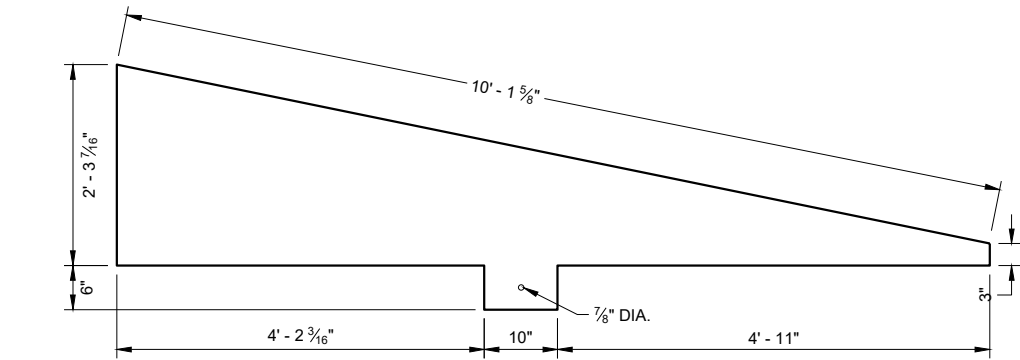
GENERAL NOTES

STITCH WELD GUSSET PLATES AND END PLATES ON THREE SIDES

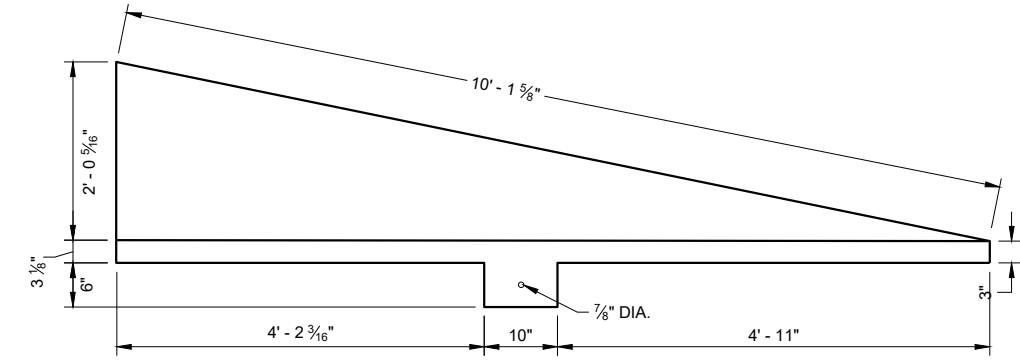
STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

(600) SIDE PLATES (S3) NOT SHOWN FOR CLARITY.

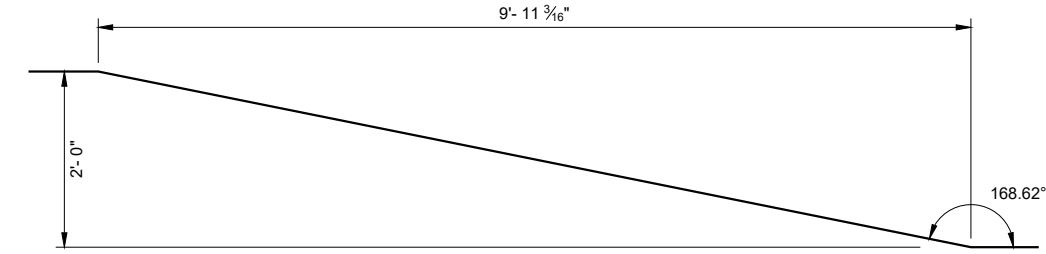
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION



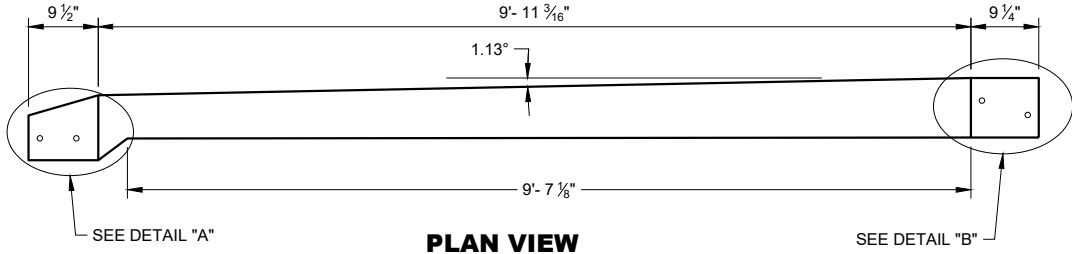
SIDE VIEW
T4



SIDE VIEW
T3

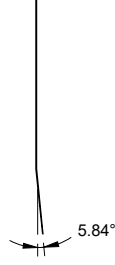


SIDE VIEW
TOP PLATE T1



PLAN VIEW
TOP PLATE T1

END
VIEW



END
VIEW

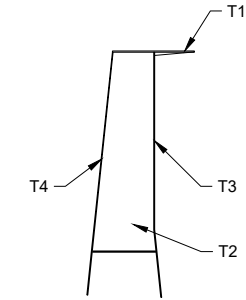
GENERAL NOTES

STITCH WELD GUSSET PLATES AND END PLATES ON THRIE SIDES

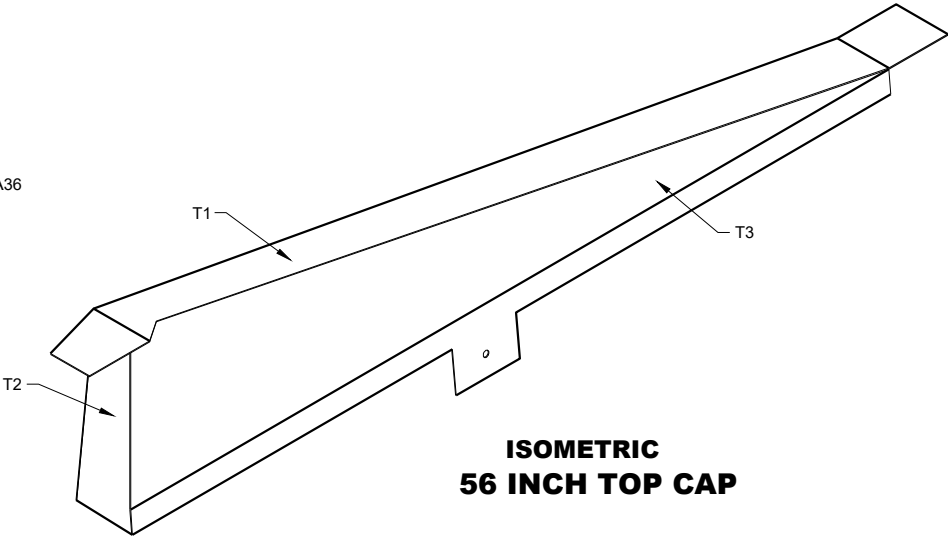
STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.

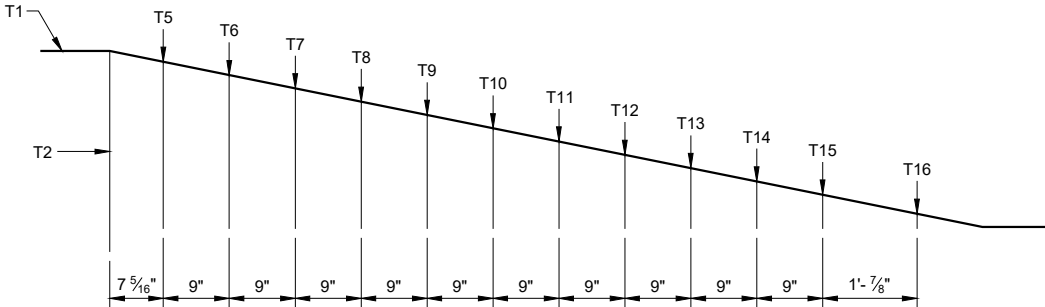
(700) SIDE PLATES (T3 AND T4) NOT SHOWN FOR CLARITY.



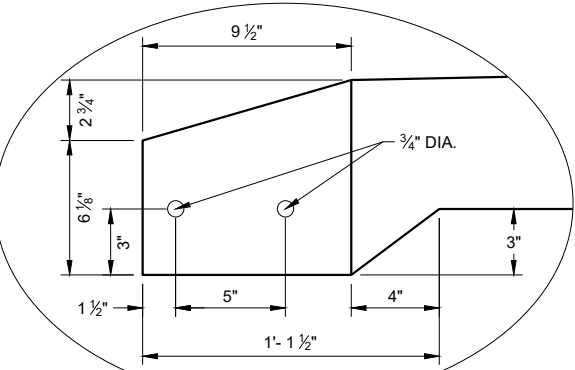
END VIEW
56 INCH TOP CAP



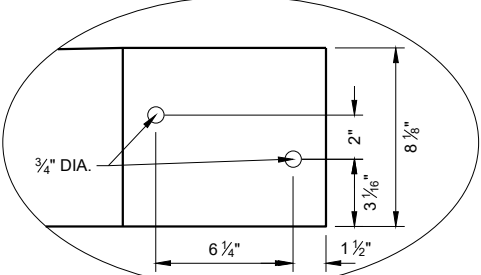
ISOMETRIC
56 INCH TOP CAP



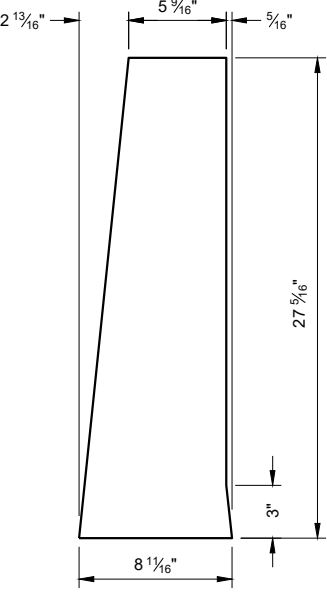
SIDE VIEW
56 INCH TOP CAP (700)



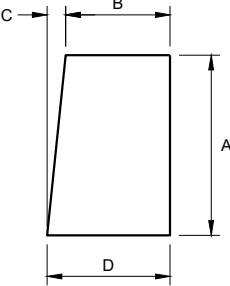
DETAIL "A"



DETAIL "B"



END PLATE T2

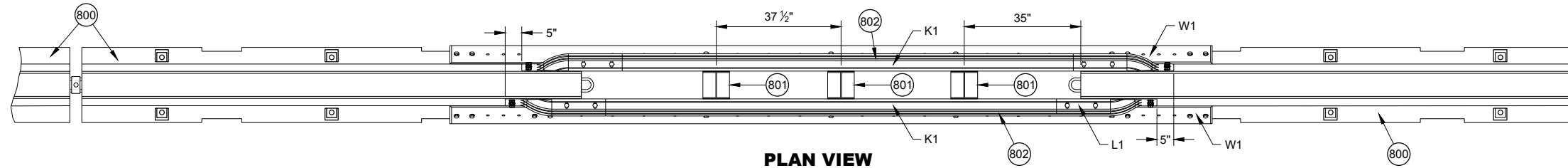
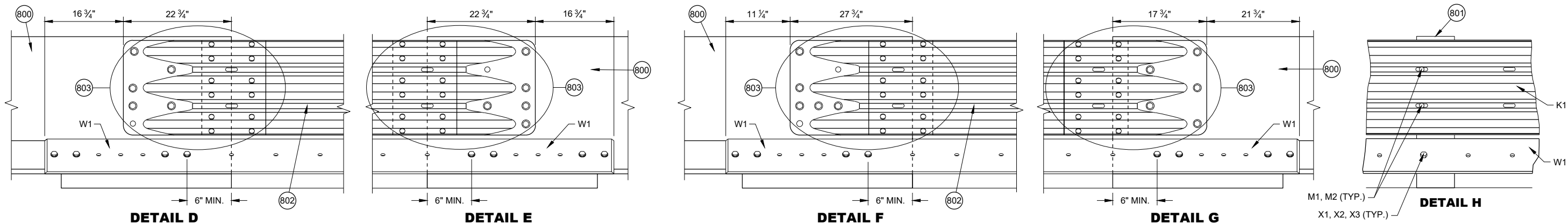


GUSSET PLATES
T5 - T16

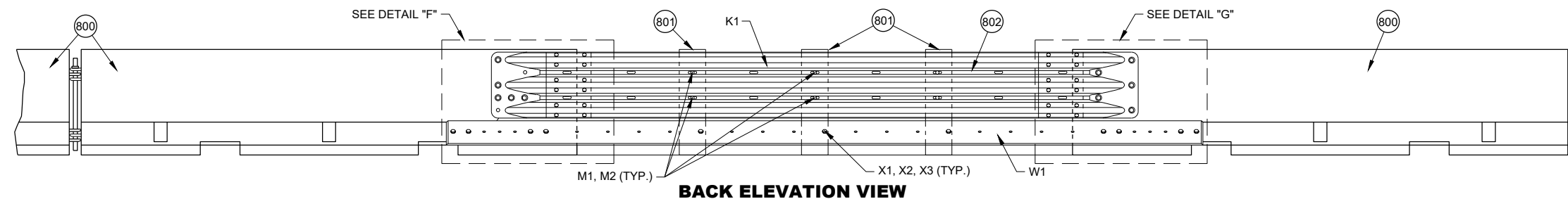
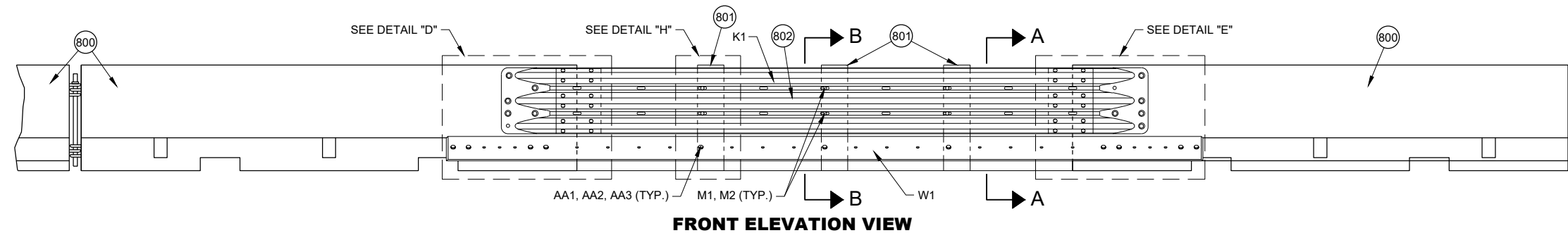
GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
T5	22 13/16"	5 1/16"	2 5/16"	8 1/16"
T6	21"	5 7/8"	2 3/16"	8 1/16"
T7	19 3/16"	6 1/16"	1 15/16"	8 1/16"
T8	17 3/8"	6 1/4"	1 13/16"	8 1/16"
T9	15 9/16"	6 5/16"	1 9/16"	8 1/16"
T10	13 3/4"	6 5/8"	1 7/16"	8 1/16"
T11	11 15/16"	6 13/16"	1 1/4"	8 1/16"
T12	10 1/8"	7"	1 1/16"	8 1/16"
T13	8 5/16"	7 3/16"	7/8"	8 1/16"
T14	6 1/2"	7 3/8"	1 1/16"	8 1/16"
T15	4 1/16"	7 9/16"	1/2"	8"
T16	2 7/8"	7 3/4"	1/4"	8"

CONCRETE BARRIER
TEMPORARY PRECAST,
12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



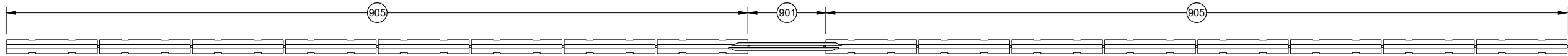
- GENERAL NOTES**
- 800 FREE STANDING TEMPORARY BARRIER
 - 801 GAP STIFFENER ASSEMBLY
 - 802 THRIE BEAMS ARE NESTED ON BOTH SIDES OF THE TEMPORARY BARRIER.
 - 803 SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL



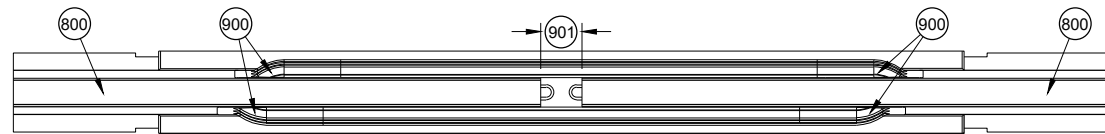
PORTABLE CONCRETE BARRIER GAP THRIE BEAM COVER

**CONCRETE BARRIER
TEMPORARY PRECAST,
12' - 6"**

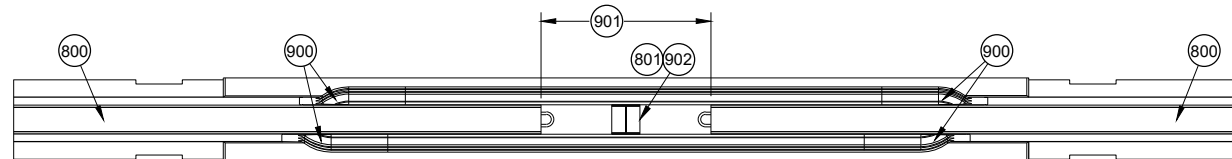
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



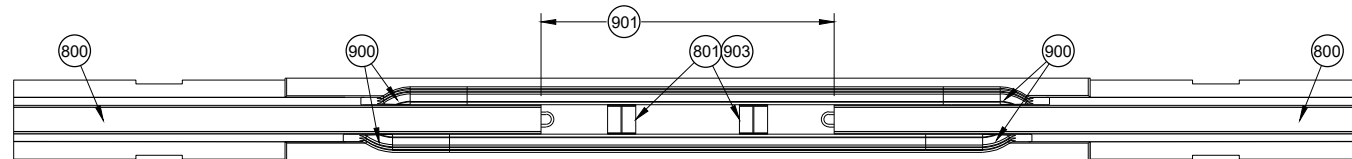
**PLAN VIEW
GAP WITHIN SPACING**



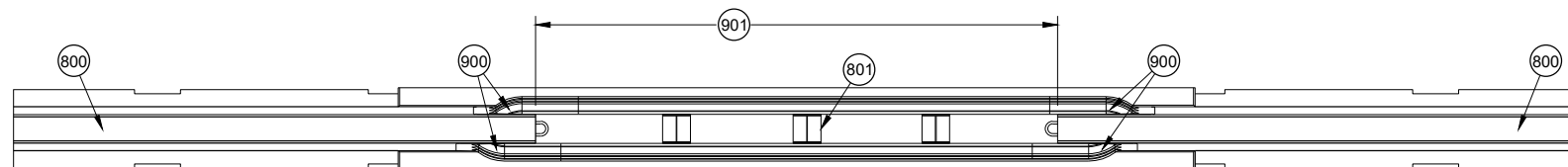
**PLAN VIEW
TEMPORARY BARRIER GAP OVER 4" TO 1' MAX.**



**PLAN VIEW
TEMPORARY BARRIER GAP OVER 1' TO 4' MAX.**



**PLAN VIEW
TEMPORARY BARRIER GAP OVER 4' TO 7' MAX.**



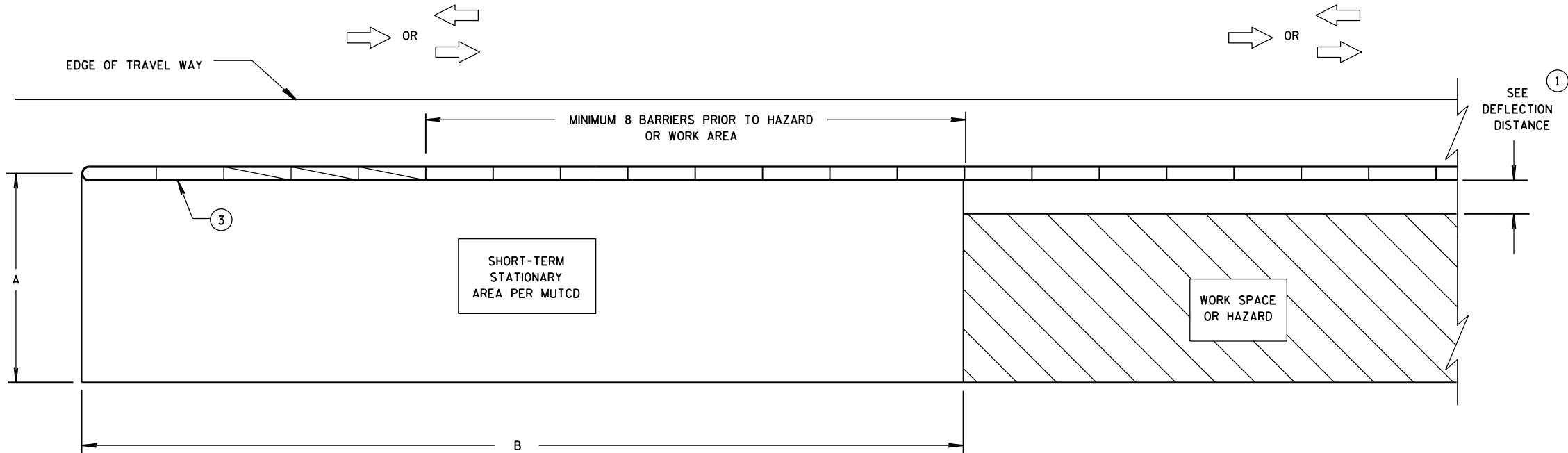
**PLAN VIEW
TEMPORARY BARRIER GAP OVER 7' TO 12.5' MAX.**

GENERAL NOTES

- (900) SEE OTHER DETAILS FOR TEMPORARY GAP HARDWARE (TYP.)
- (901) TEMPORARY BARRIER GAP
- (902) GAP STIFFENER ASSEMBLY CENTERED IN THE GAP.
- (903) GAP STIFFENER ASSEMBLY IS OFFSET 18 ¾" FROM CENTER
- (904) MINIMUM NUMBER OF GAP STIFFENERS SHOWN FOR THE GAP RANGE SHOWN.
- (905) MINIMUM OF 8 CONTINUOUS FREE STANDING TEMPORARY BARRIERS

**CONCRETE BARRIER
TEMPORARY PRECAST,
12' - 6"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



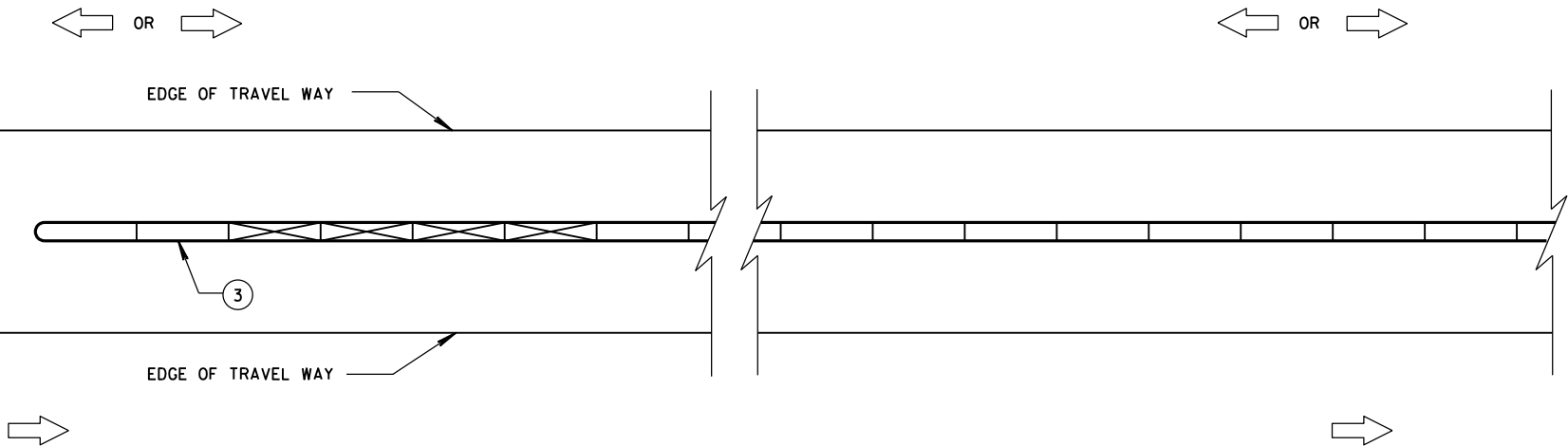
CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER
INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

DIMENSION A TABLE ②

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE ②

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER
INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

LEGEND

DIRECTION OF TRAVEL	
CRASH CUSHION OR SAND BARREL ARRAY	
SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS	
SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS	
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER	
PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET	
FREE STANDING TEMPORARY BARRIER	

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

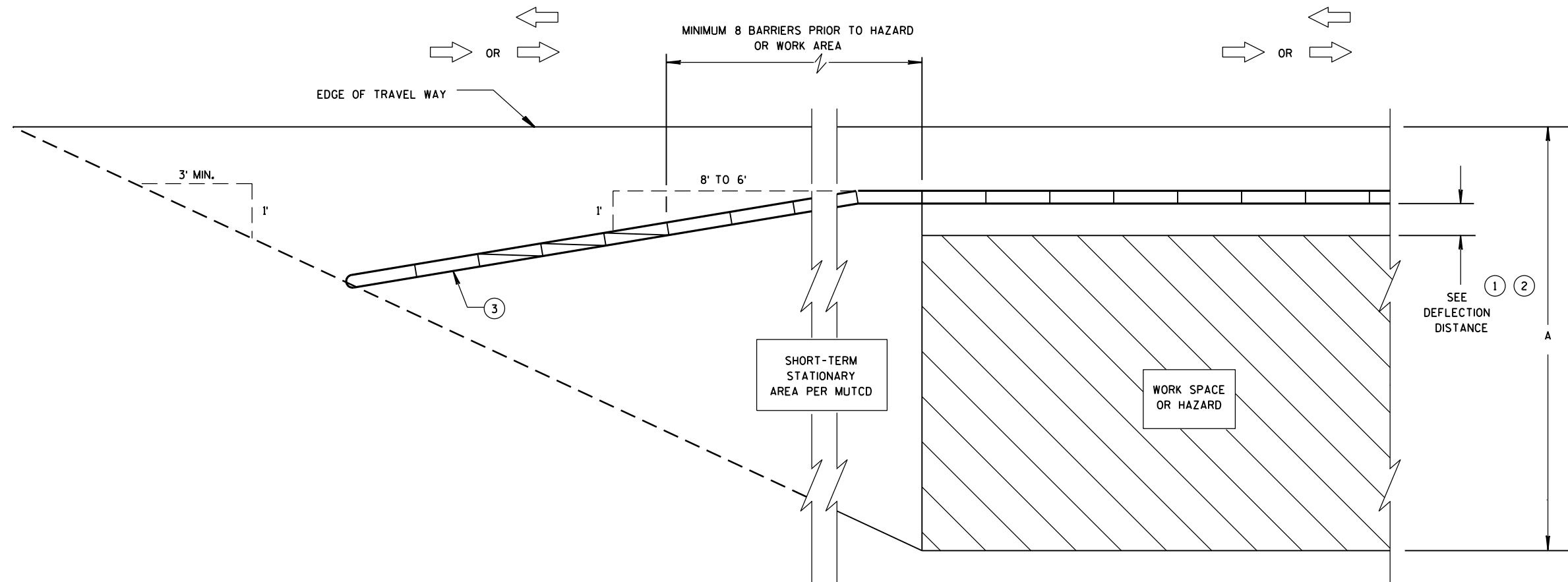
FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

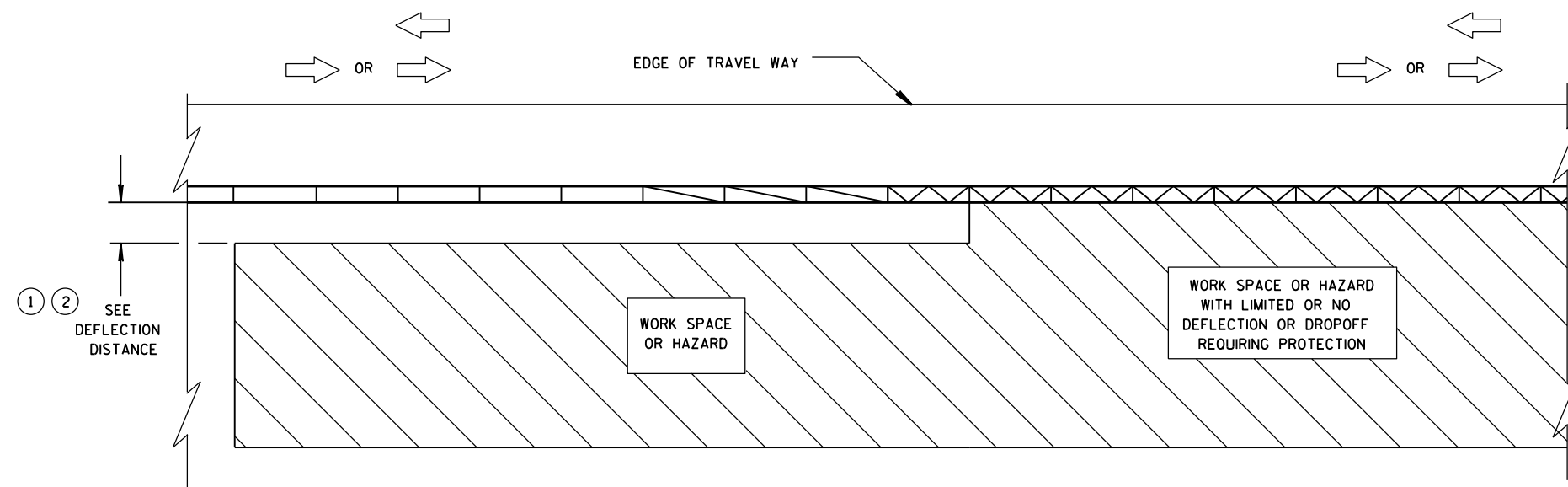
- ① FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.
- ② VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.
- ③ ANCHOR TEMPORARY BARRIER ACCORDING TO CRASH CUSHION OR SAND BARREL MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS ARE NOT PROVIDED, ANCHOR 3 PINS ON TRAFFIC SIDE.

CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER
INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION**



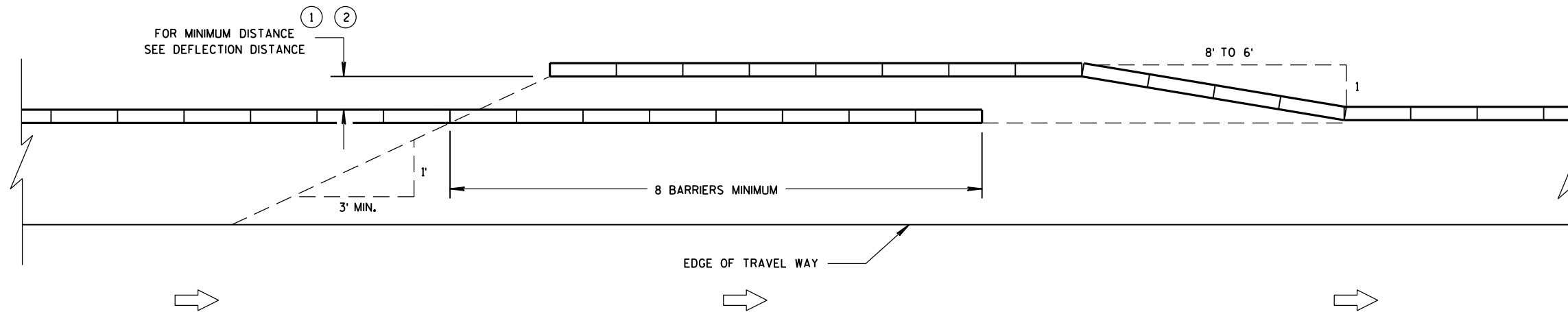
**TRANSITION FROM FREE STANDING TEMPORARY BARRIER
TO ANCHORED BARRIER**

LEGEND

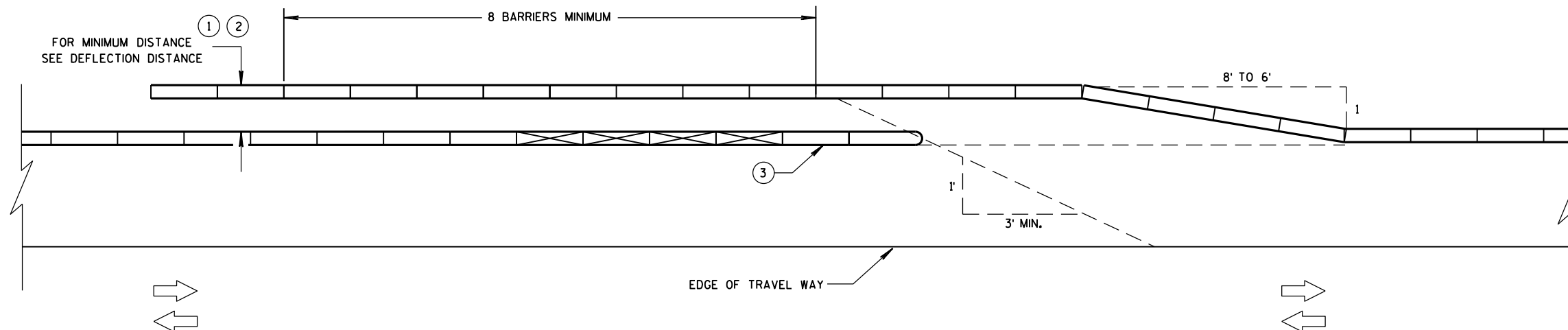
DIRECTION OF TRAVEL	
CRASH CUSHION OR SAND BARREL ARRAY	
SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS	
SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS	
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER	
PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET	
FREE STANDING TEMPORARY BARRIER	

**CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS**

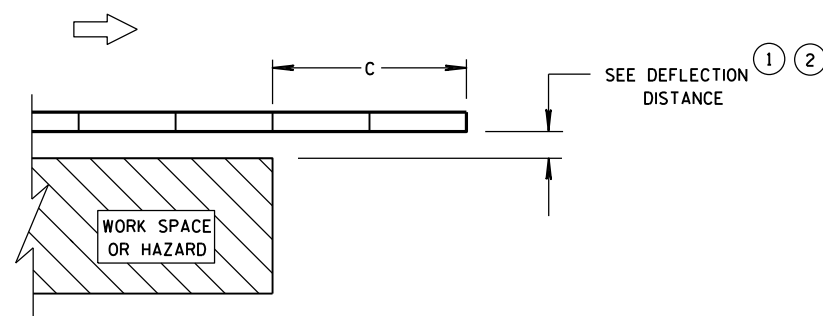
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



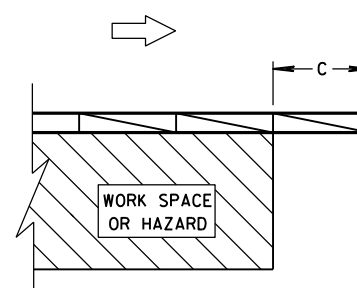
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



**ENDING TEMPORARY BARRIER
DOWNSTREAM - UNANCHORED**



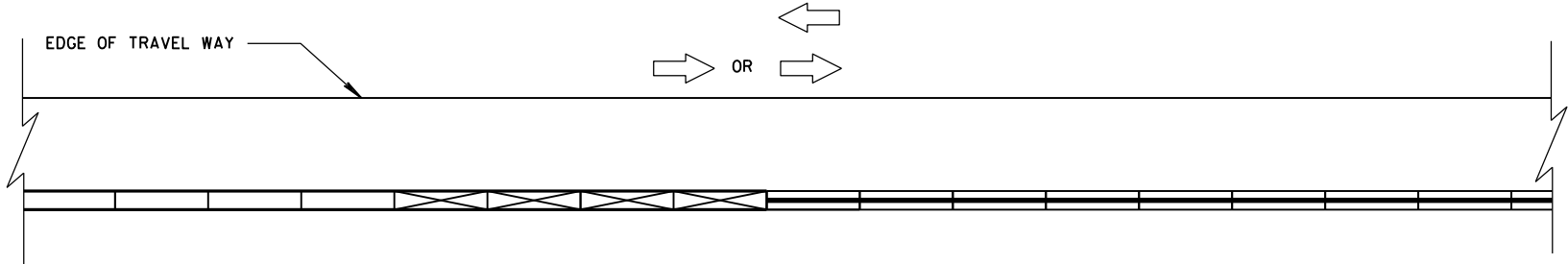
**ENDING TEMPORARY BARRIER
DOWNSTREAM - ANCHORED**

LEGEND

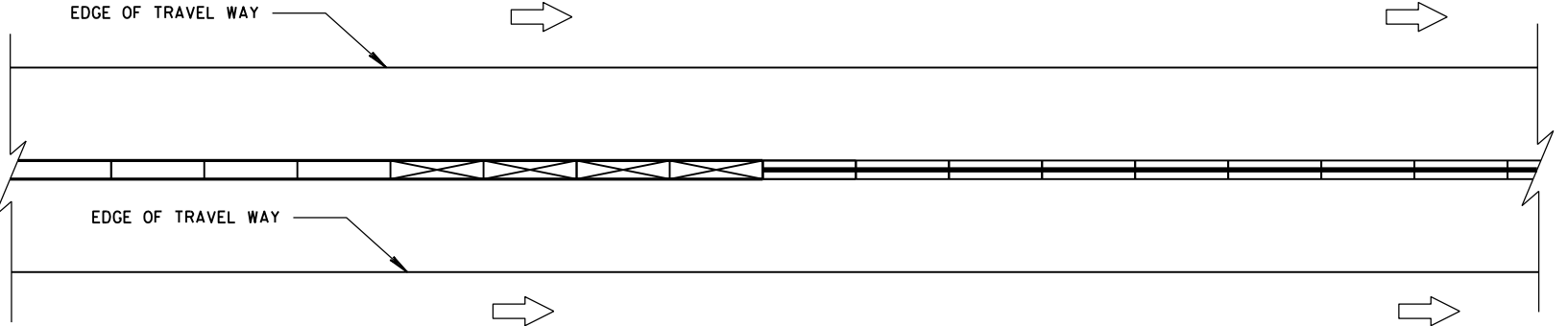
DIRECTION OF TRAVEL	
CRASH CUSHION OR SAND BARREL ARRAY	
SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS	
SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS	
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER	
PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET	
FREE STANDING TEMPORARY BARRIER	

**CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



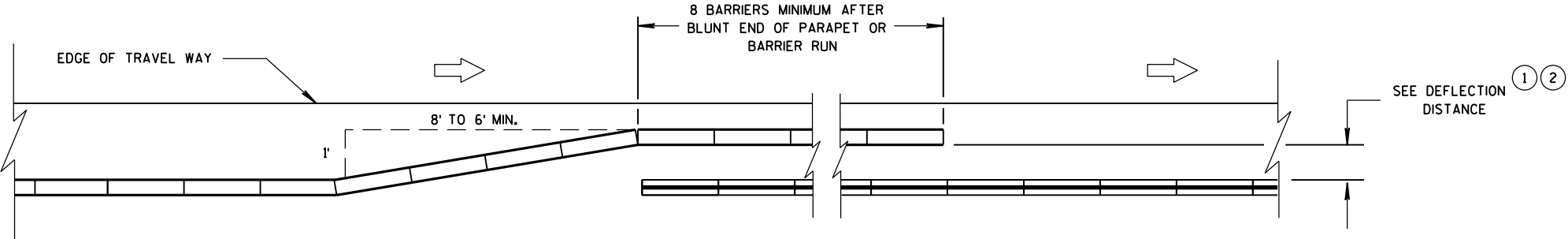
CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



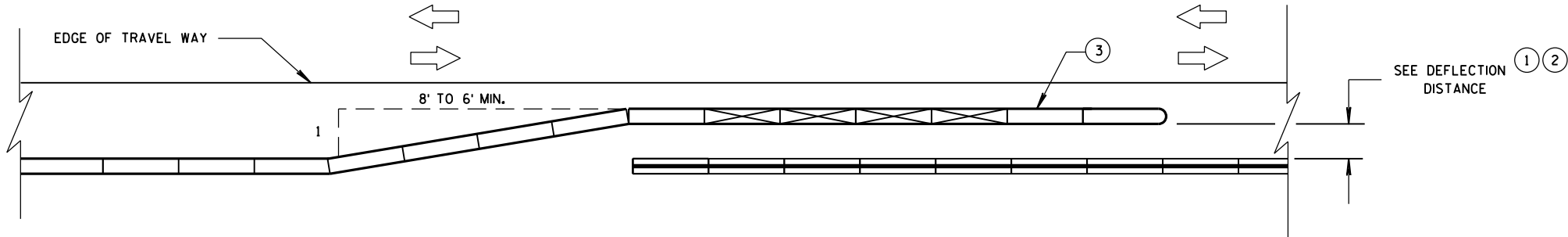
CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC

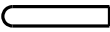


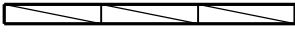
OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC

LEGEND

- DIRECTION OF TRAVEL

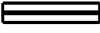

- CRASH CUSHION OR SAND BARREL ARRAY

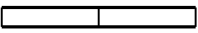

- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS


- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS


- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER


- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET


- FREE STANDING TEMPORARY BARRIER



DIMENSION C TABLE

2

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100

6

6

CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June, 2015

DATE

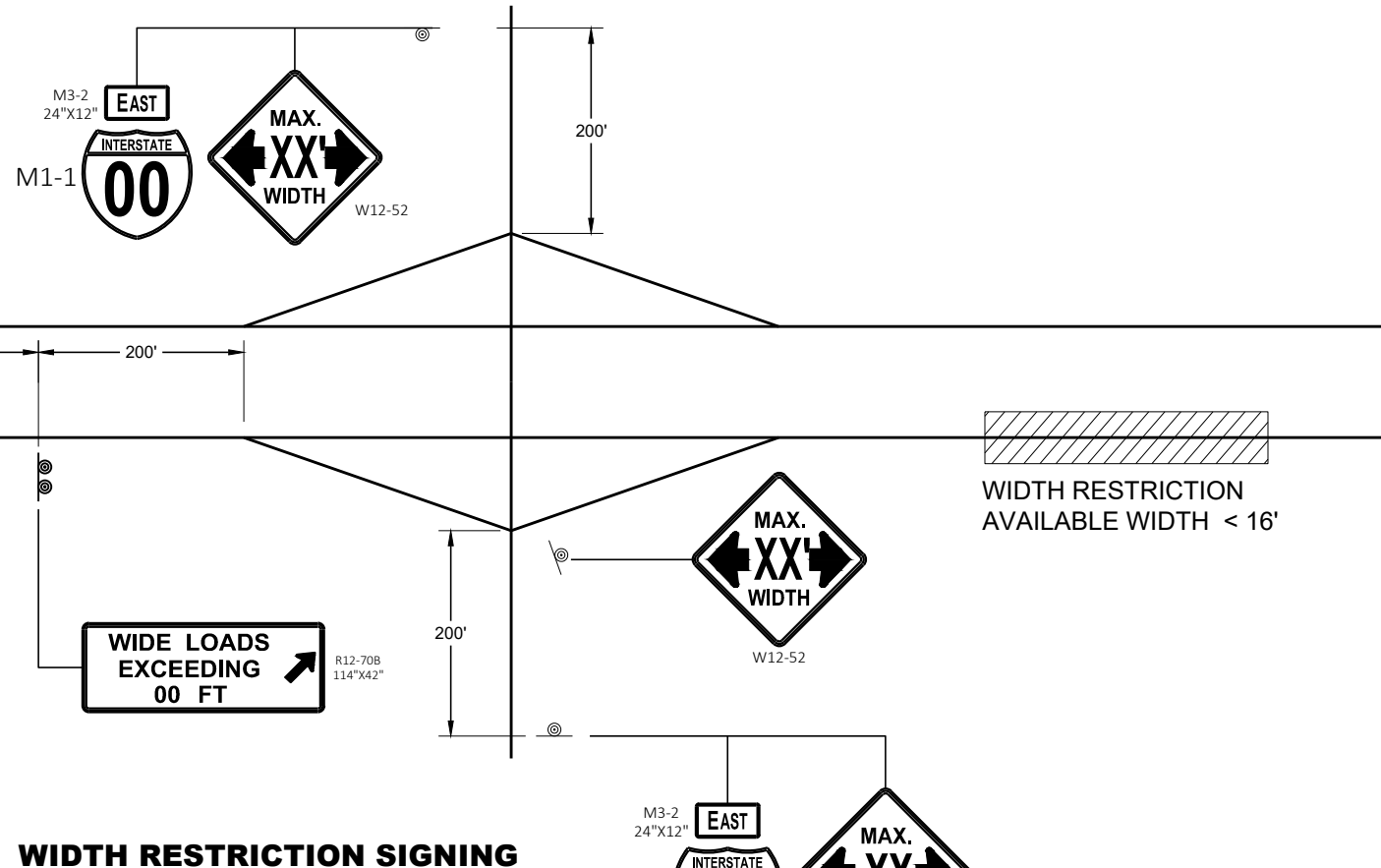
FHWA

/S/ Jerry H. Zogg

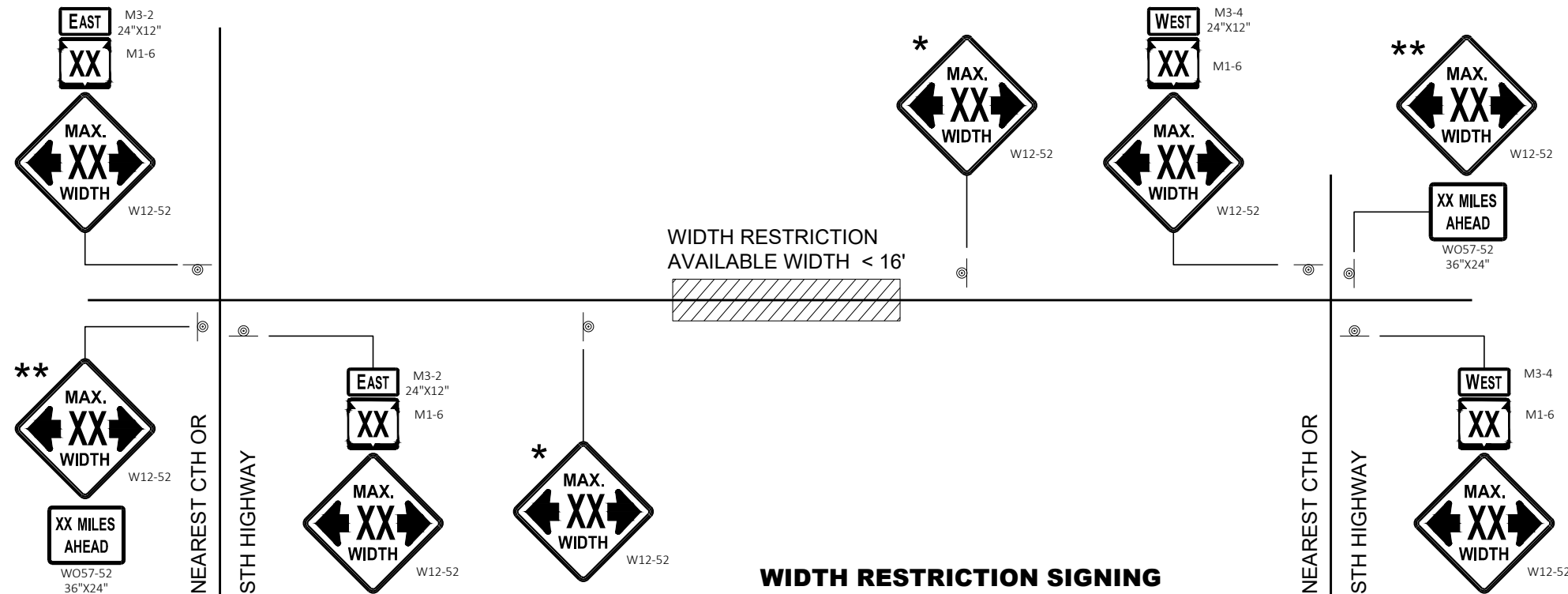
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

S.D.D. 14 B 8-2e

S.D.D. 14 B 8-2e



WIDTH RESTRICTION SIGNING



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

LEGEND

⊙ SIGN ON PERMANENT SUPPORT

GENERAL NOTES

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

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

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

- * PLACE 500 FEET AFTER THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.
- ** SIGN SHALL BE VISIBLE FROM ROADWAY.
- *** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.



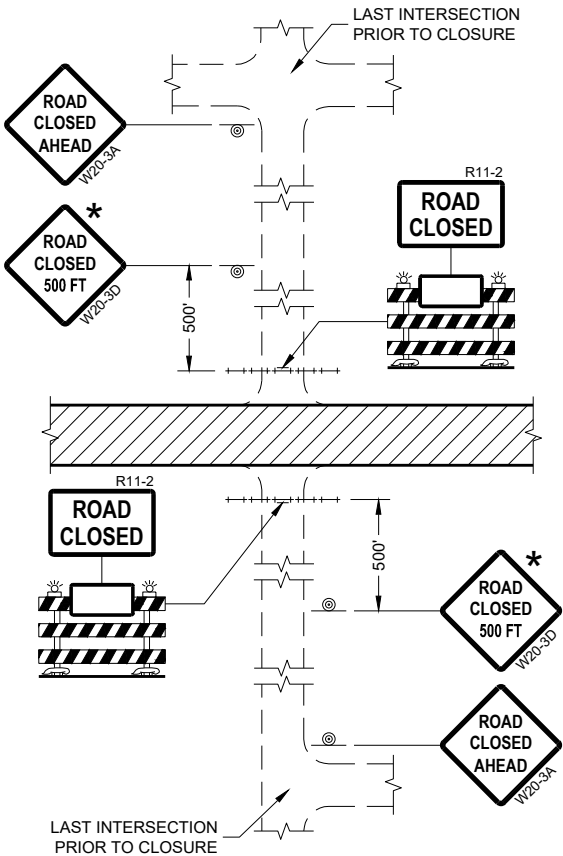
WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH

ADVANCED WIDTH
RESTRICTION SIGNING

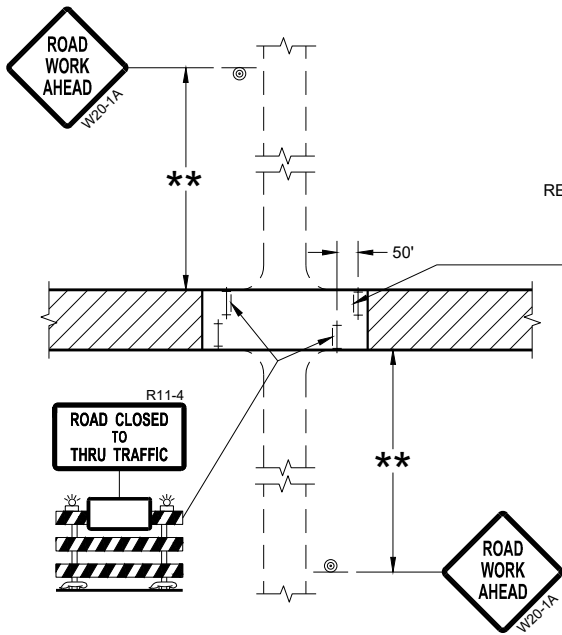
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

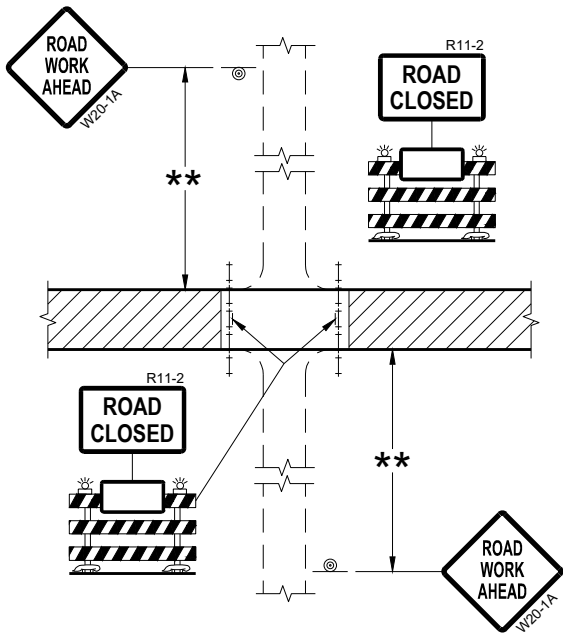
FHWA



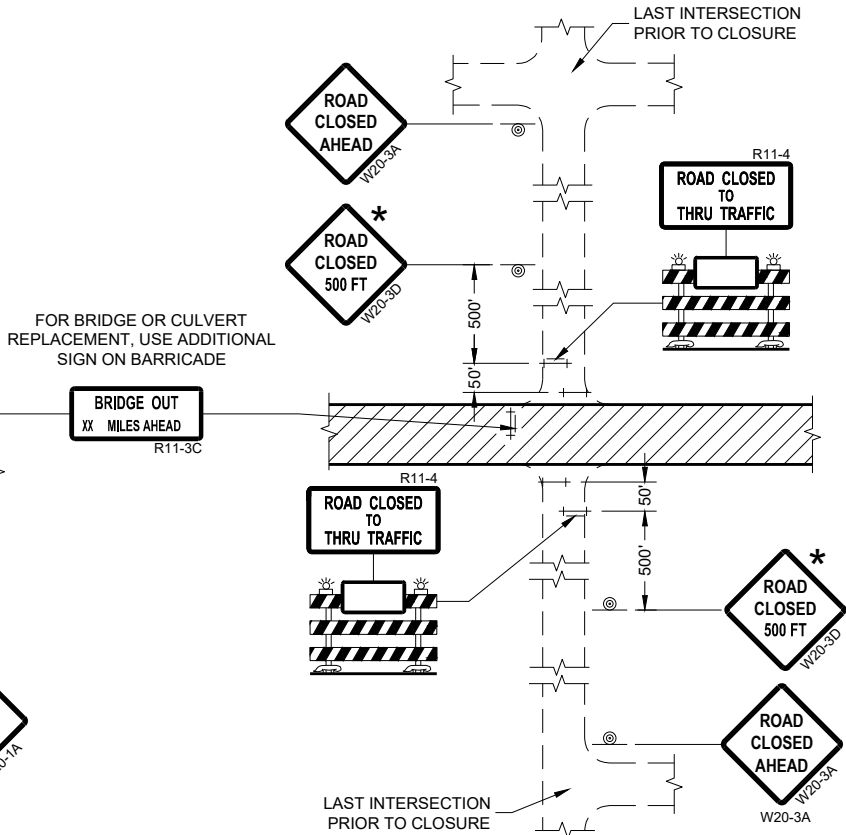
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

- * OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.
- ** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

**BARRICADES AND SIGNS
FOR
SIDEROAD CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA

GENERAL NOTES

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

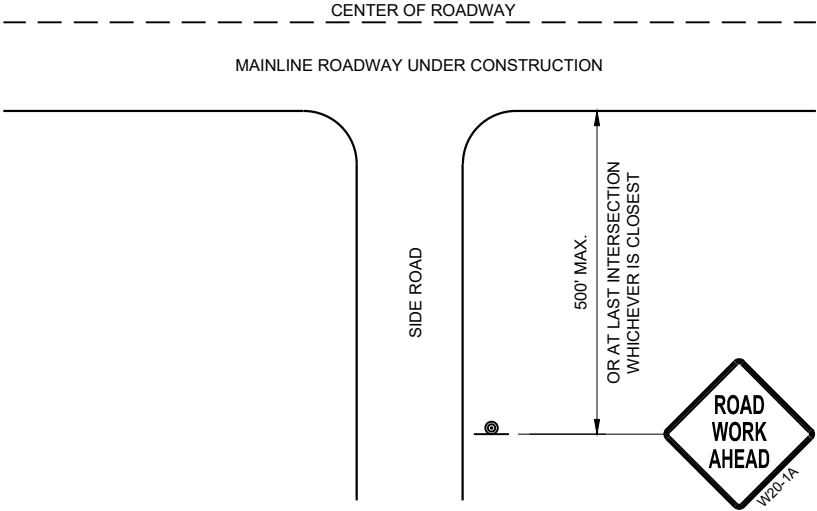
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

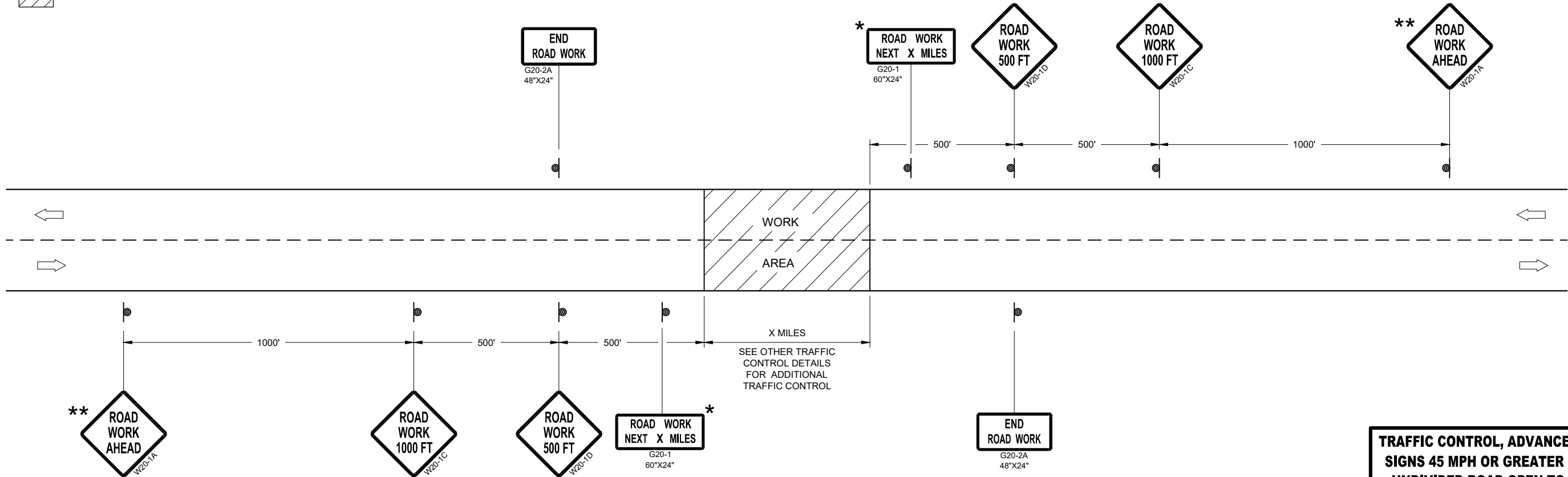
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- ** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA



TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

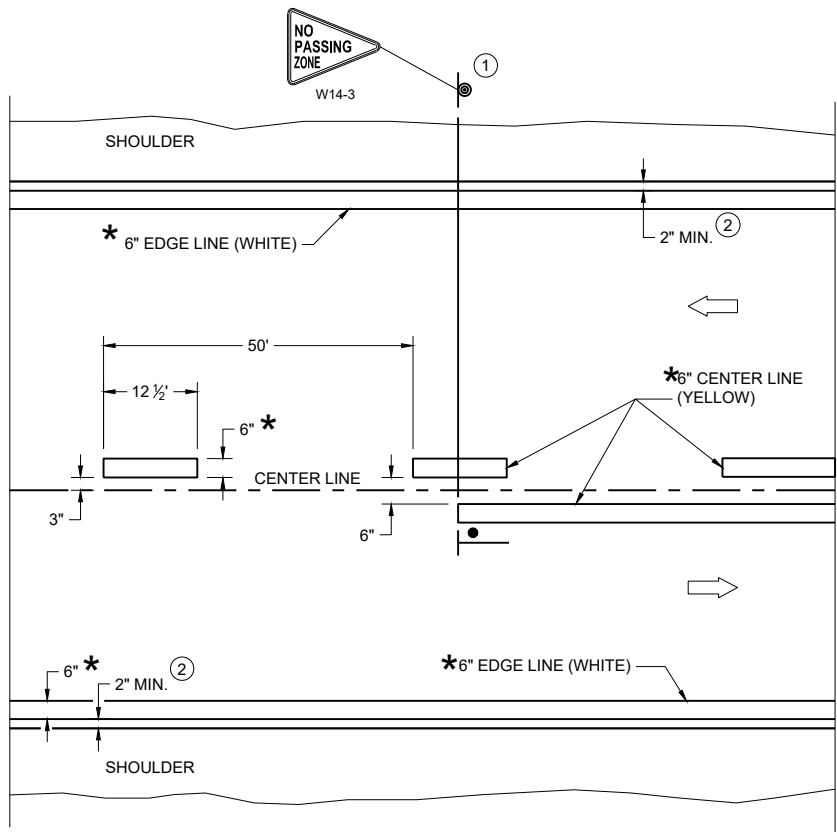
TRAFFIC CONTROL, ADVANCE WARNING
SIGNS 45 MPH OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

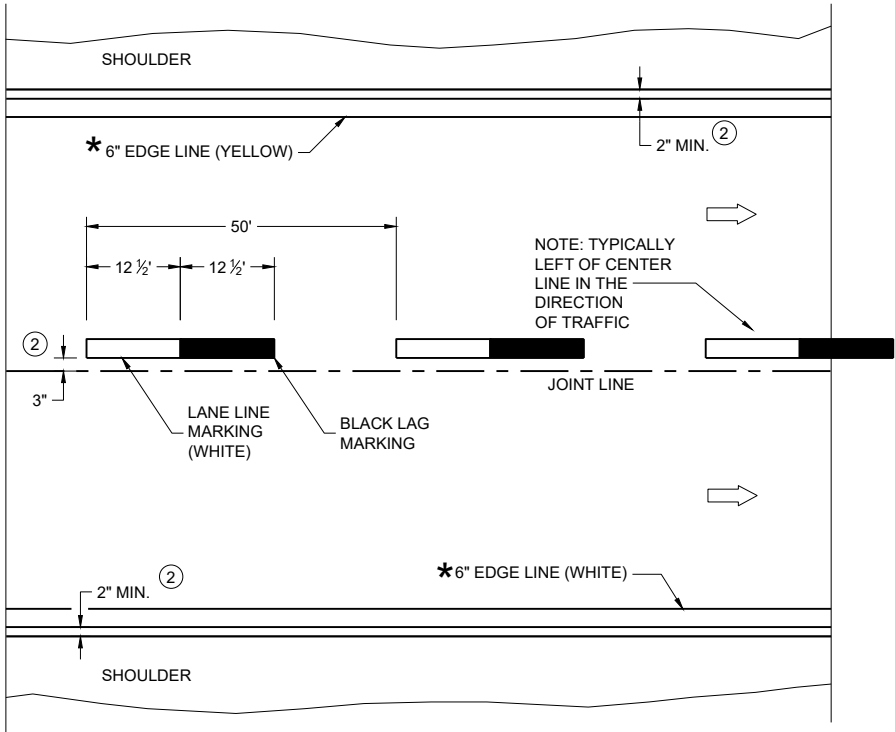
APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

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

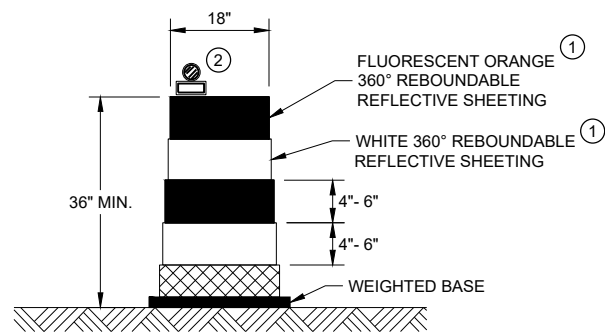
- ① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
- ② MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

- "T" MARKING
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC

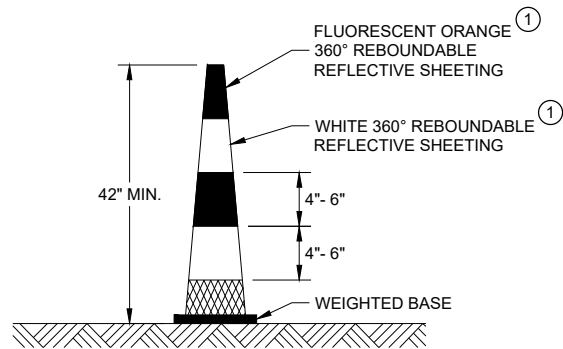
PERMANENT LONGITUDINAL PAVEMENT MARKINGS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ Jeannie Silver Statewide Pavement Marking Engineer

FHWA



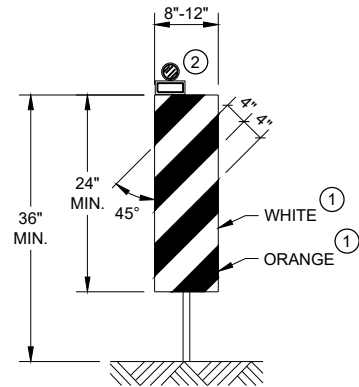
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



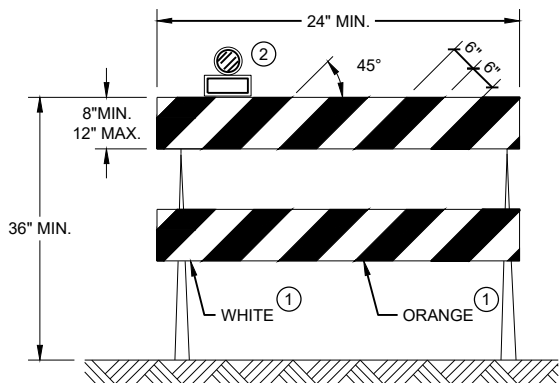
42" CONE

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



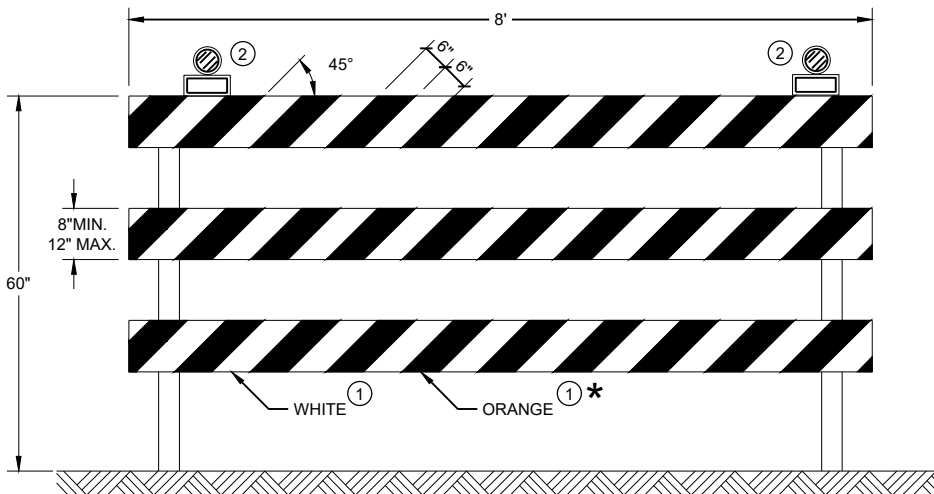
VERTICAL PANEL

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

LEGEND

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

GENERAL NOTES

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

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

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

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

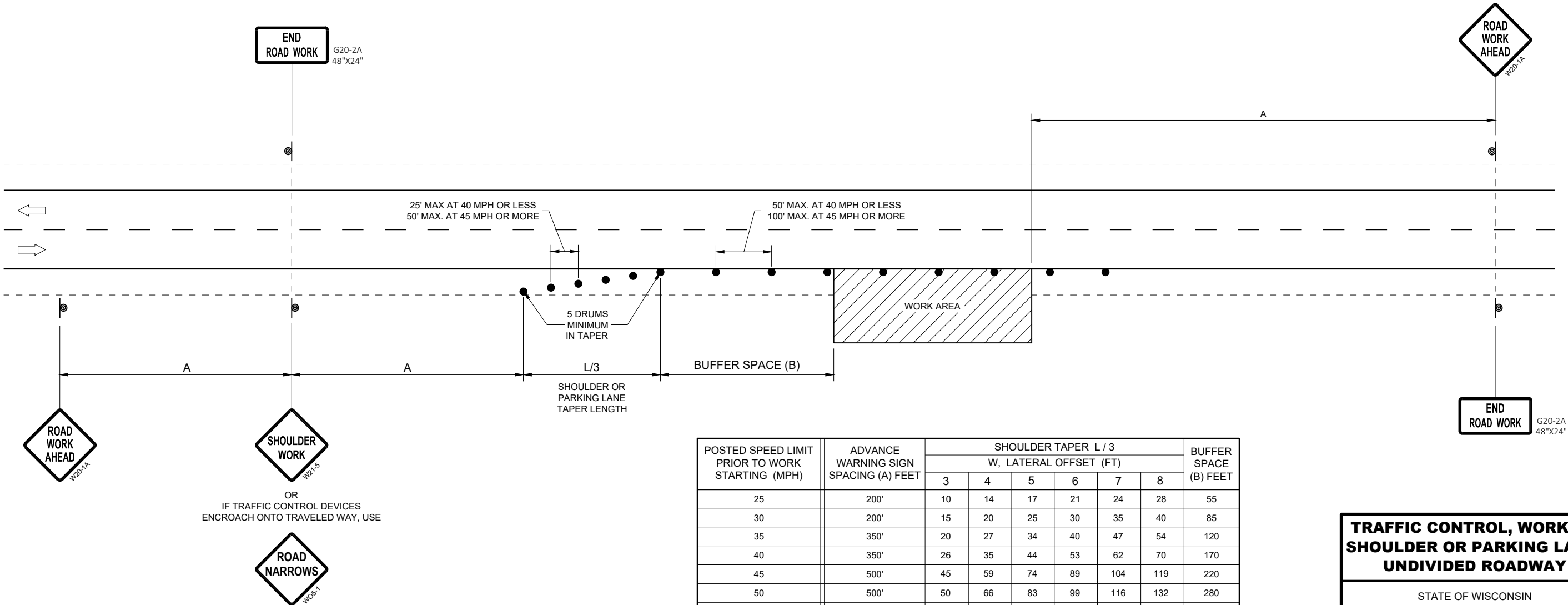
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

6

6



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

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

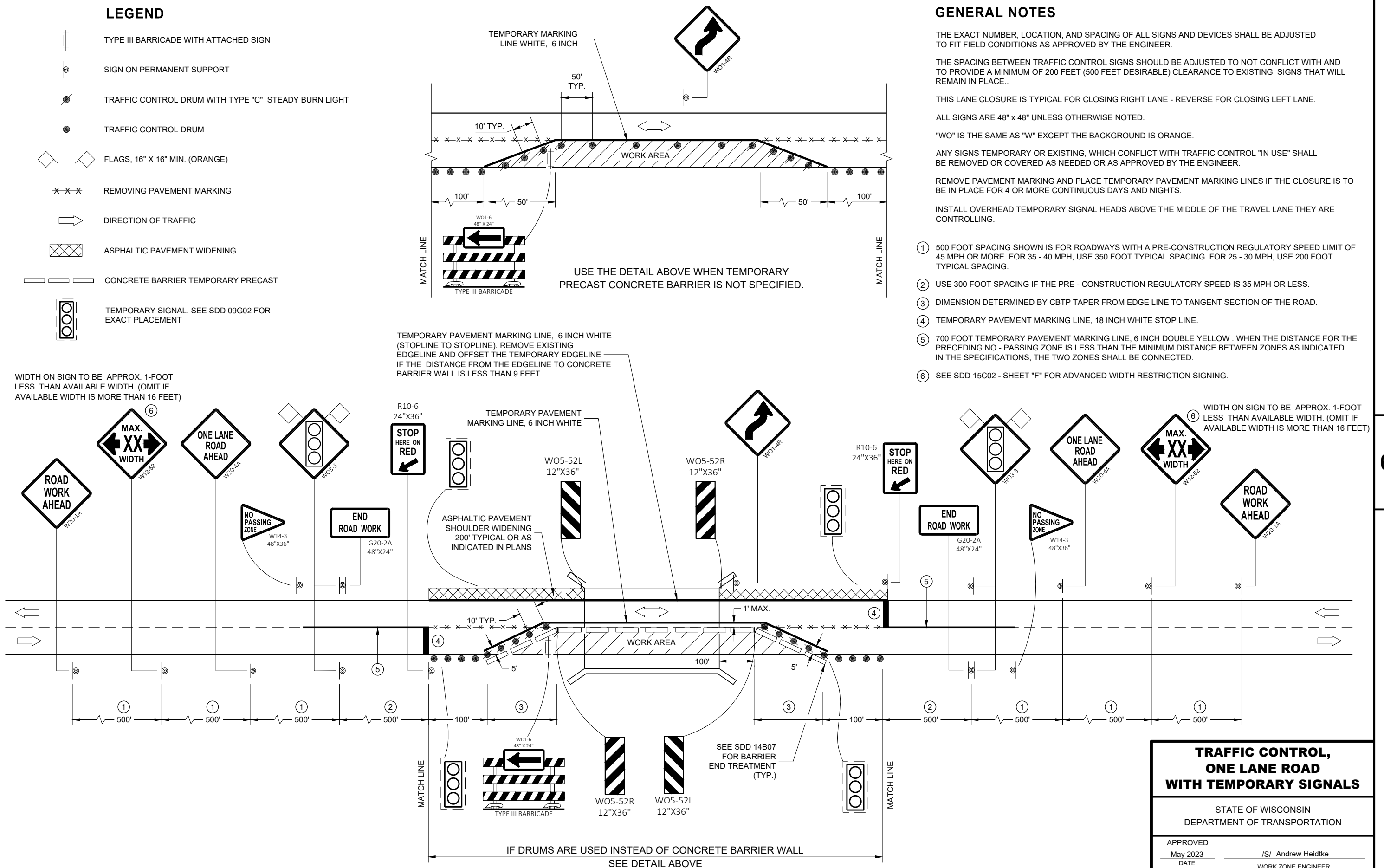
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020 /S/ Andrew Heidtke
DATE STATEWIDE WORK ZONE TRAFFIC
SAFETY ENGINEER
FHWA

LEGEND

- | | |
|---|--|
|  | TYPE III BARRICADE WITH ATTACHED SIGN |
|  | SIGN ON PERMANENT SUPPORT |
|  | TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT |
|  | TRAFFIC CONTROL DRUM |
|  | FLAGS, 16" X 16" MIN. (ORANGE) |
|  | REMOVING PAVEMENT MARKING |
|  | DIRECTION OF TRAFFIC |
|  | ASPHALTIC PAVEMENT WIDENING |
|  | CONCRETE BARRIER TEMPORARY PRECAST |
|  | TEMPORARY SIGNAL. SEE SDD 09G02 FOR EXACT PLACEMENT |

WIDTH ON SIGN TO BE APPROX. 1-FOOT
LESS THAN AVAILABLE WIDTH. (OMIT IF
AVAILABLE WIDTH IS MORE THAN 16 FEET)



GENERAL NOTES

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE..

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.

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

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

REMOVE PAVEMENT MARKING AND PLACE TEMPORARY PAVEMENT MARKING LINES IF THE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

INSTALL OVERHEAD TEMPORARY SIGNAL HEADS ABOVE THE MIDDLE OF THE TRAVEL LANE THEY ARE CONTROLLING.

- ① 500 FOOT SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35 - 40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25 - 30 MPH, USE 200 FOOT TYPICAL SPACING.
- ② USE 300 FOOT SPACING IF THE PRE - CONSTRUCTION REGULATORY SPEED IS 35 MPH OR LESS.
- ③ DIMENSION DETERMINED BY CBTP TAPER FROM EDGE LINE TO TANGENT SECTION OF THE ROAD.
- ④ TEMPORARY PAVEMENT MARKING LINE, 18 INCH WHITE STOP LINE.
- ⑤ 700 FOOT TEMPORARY PAVEMENT MARKING LINE, 6 INCH DOUBLE YELLOW . WHEN THE DISTANCE FOR THE PRECEDING NO - PASSING ZONE IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES AS INDICATED IN THE SPECIFICATIONS, THE TWO ZONES SHALL BE CONNECTED.
- ⑥ SEE SDD 15C02 - SHEET "F" FOR ADVANCED WIDTH RESTRICTION SIGNING.

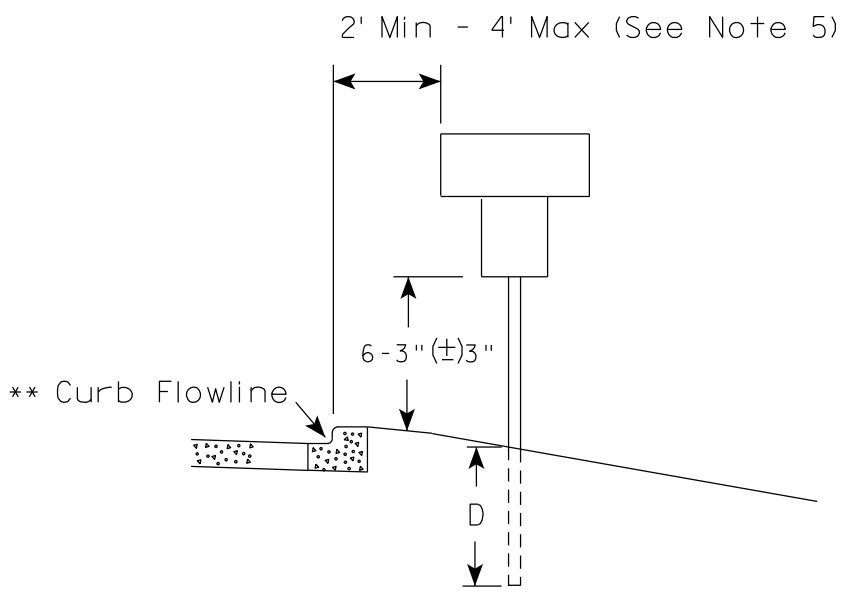
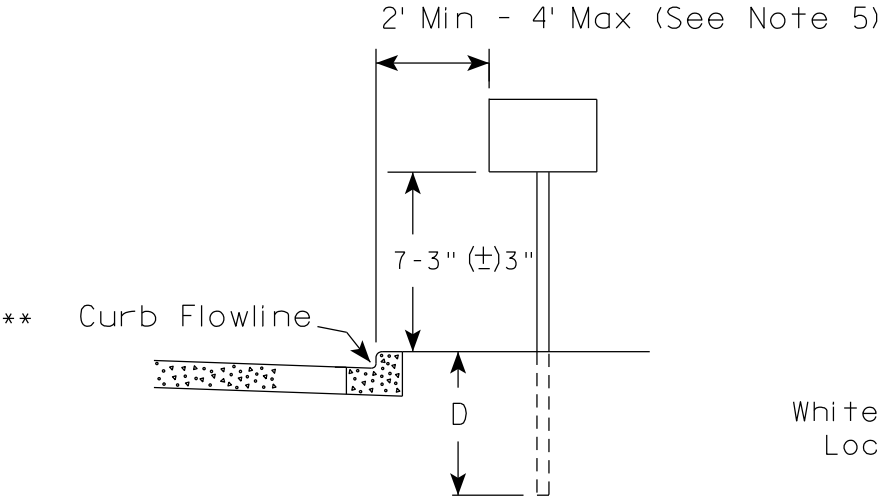
**TRAFFIC CONTROL,
ONE LANE ROAD
WITH TEMPORARY SIGNALS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

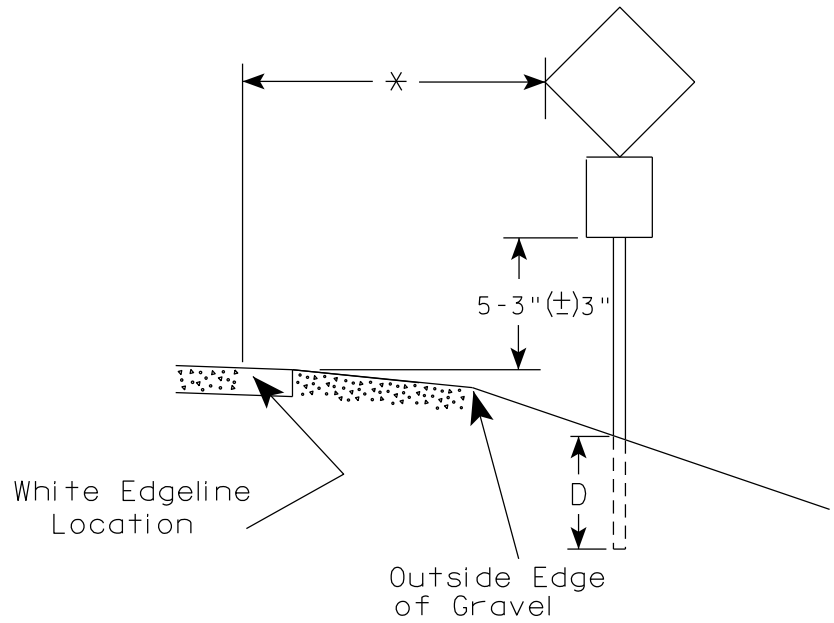
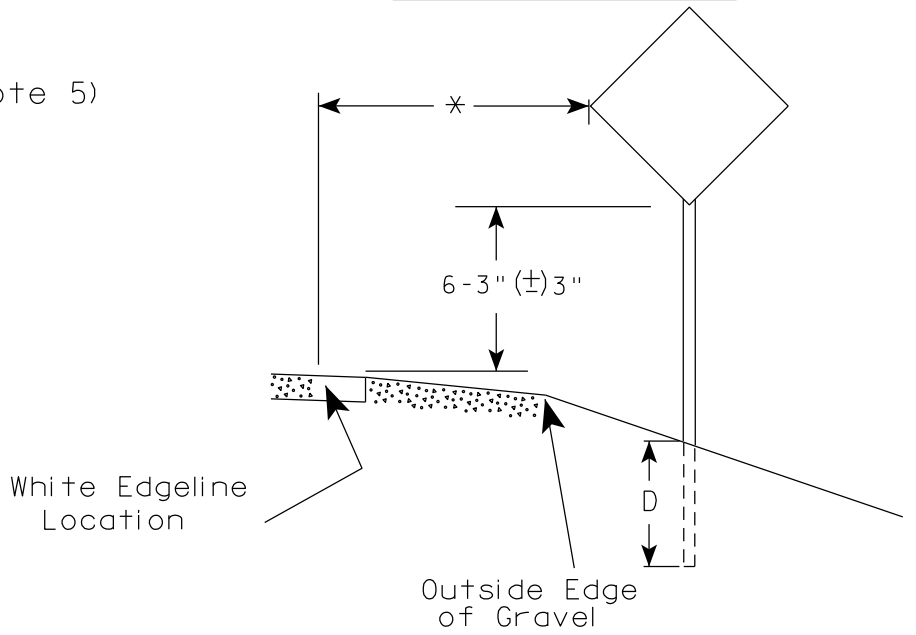
APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

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.

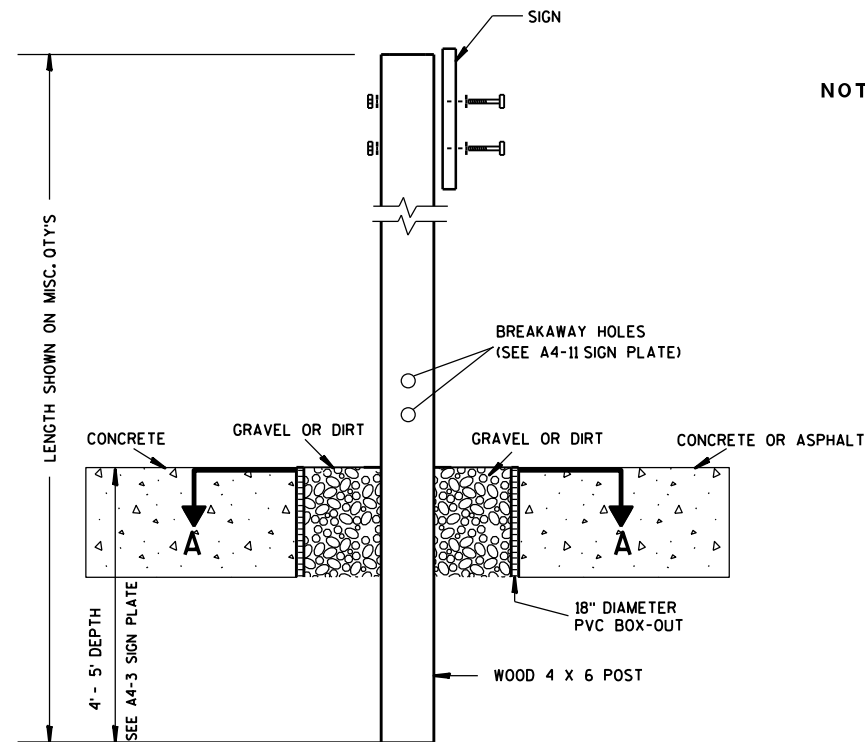
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

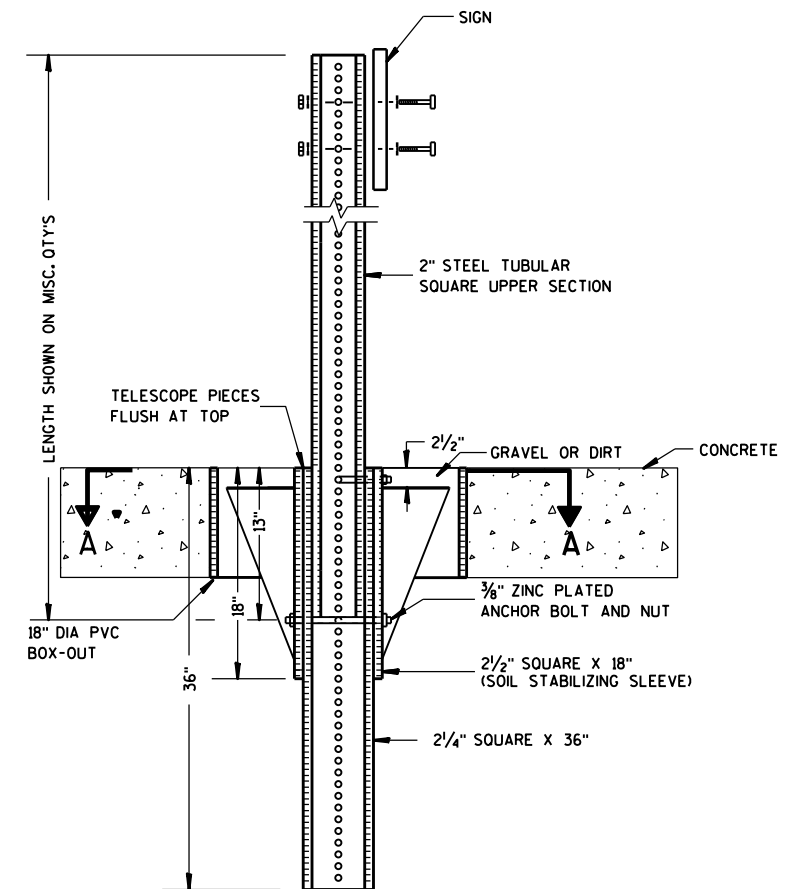
DATE 12/6/23 PLATE NO. A4-3.23



ELEVATION VIEW

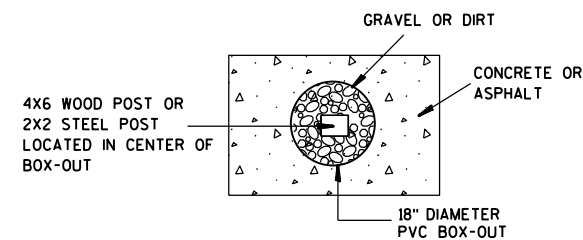
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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:

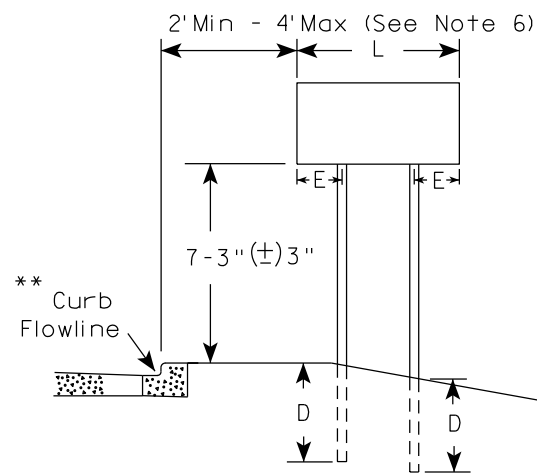
HWY:

COUNTY:

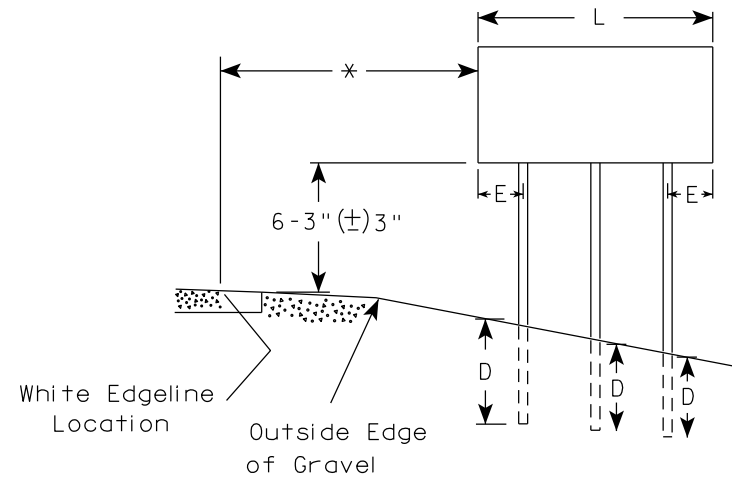
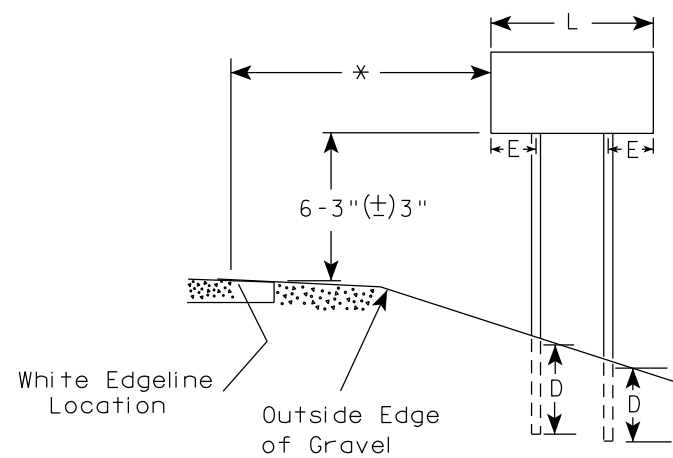
SHEET NO:

E

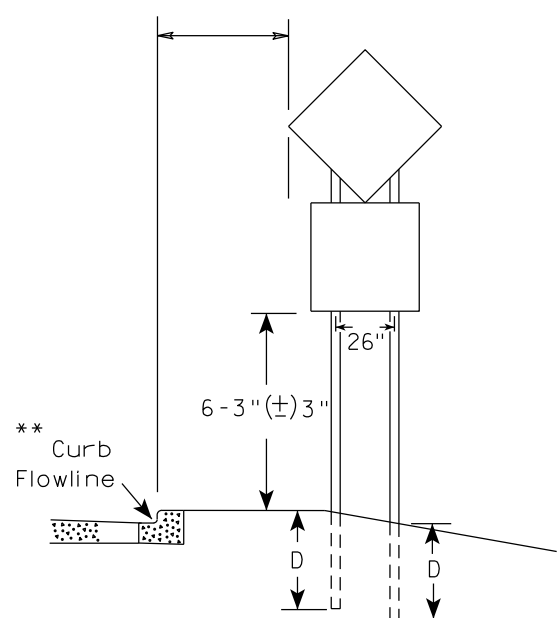
URBAN AREA



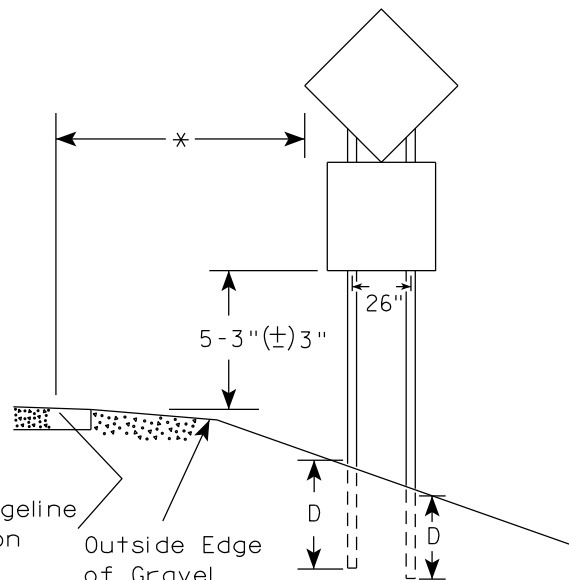
RURAL AREA (See Note 3)



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

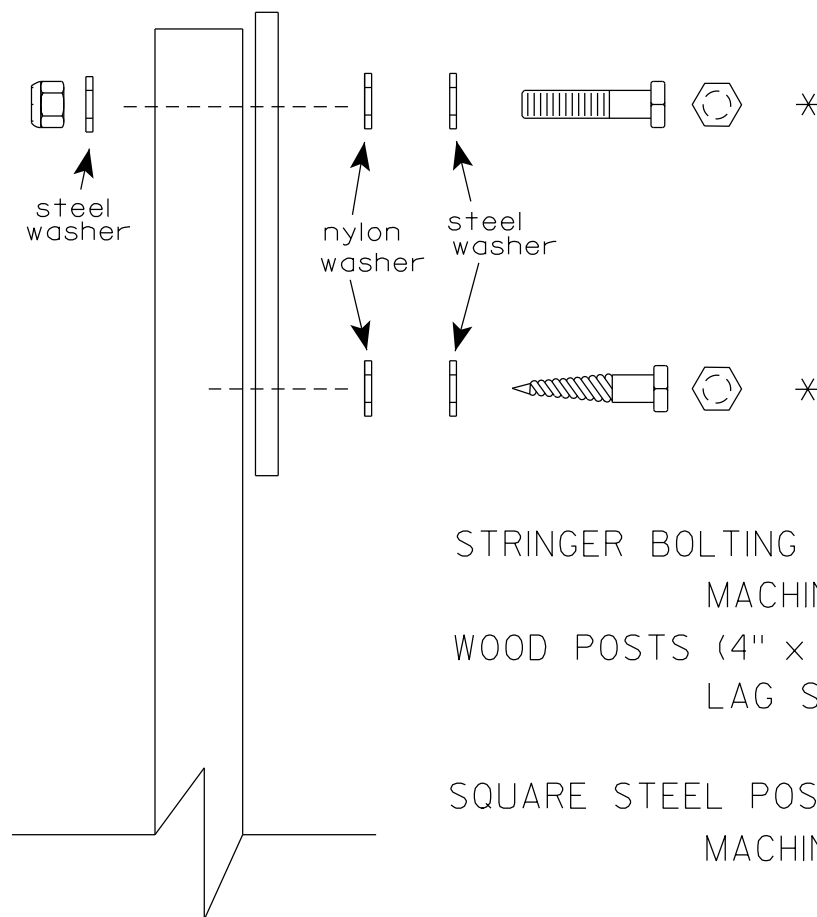
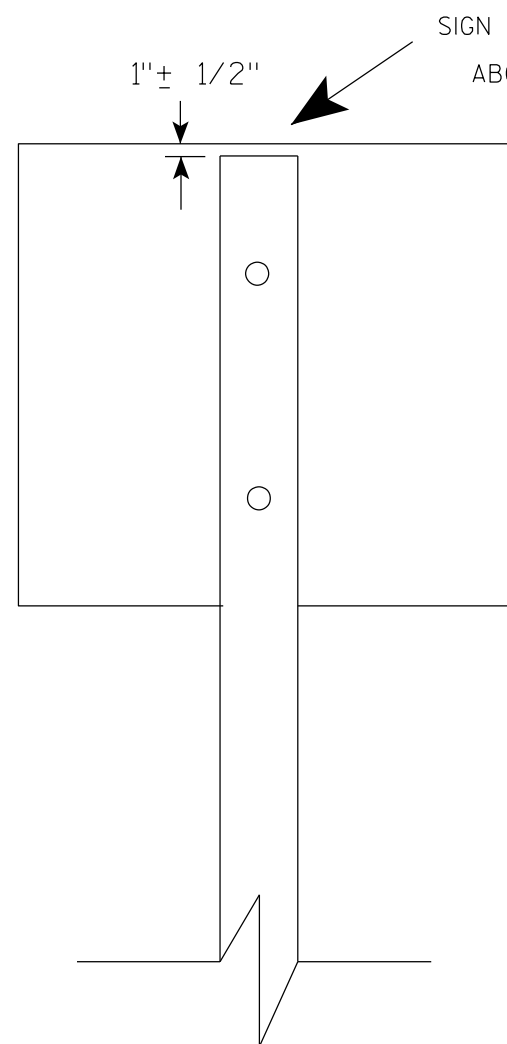
Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

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.

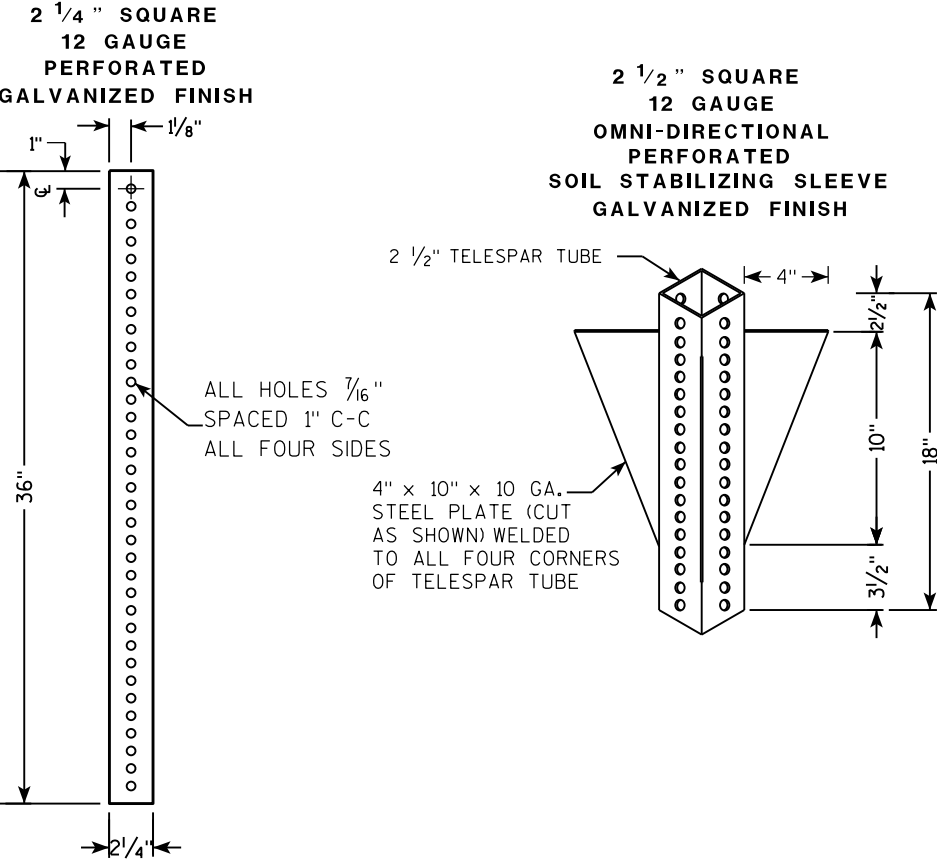
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- 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

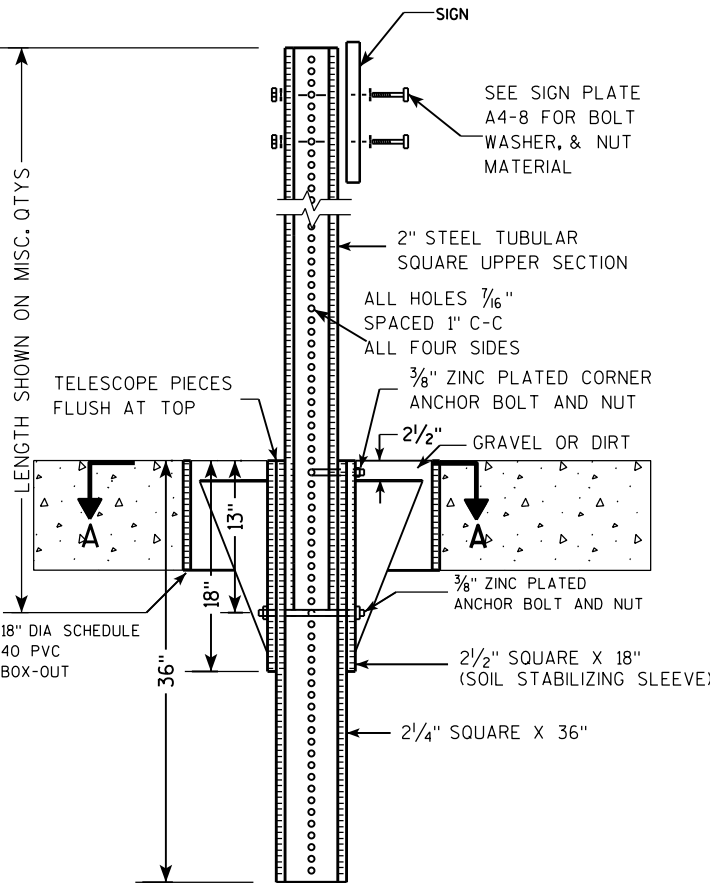
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

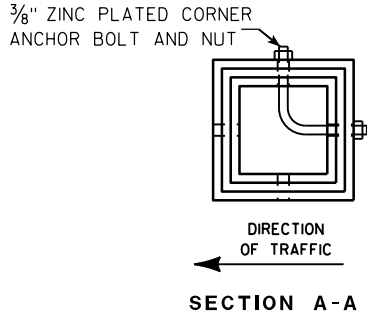
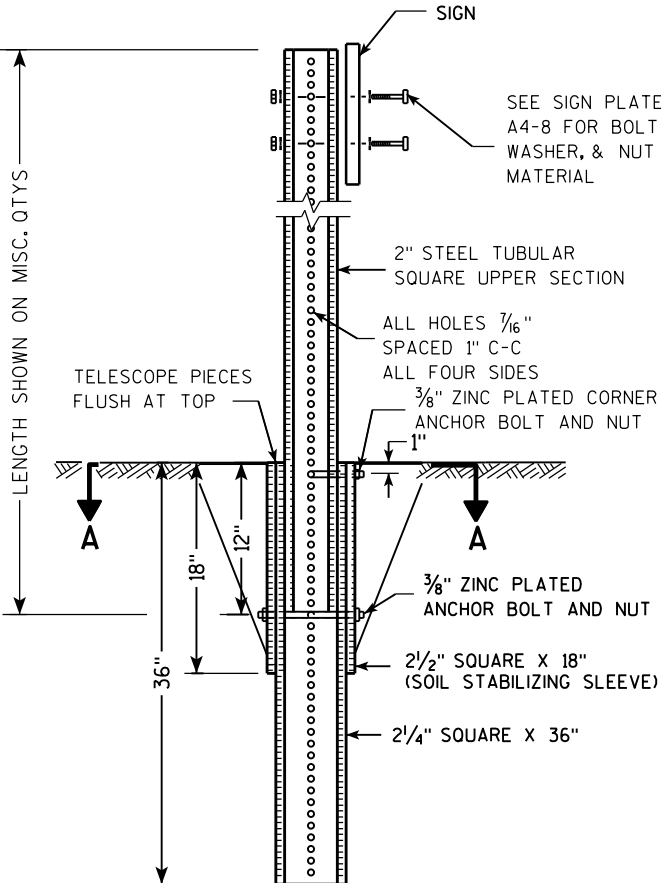
TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



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).

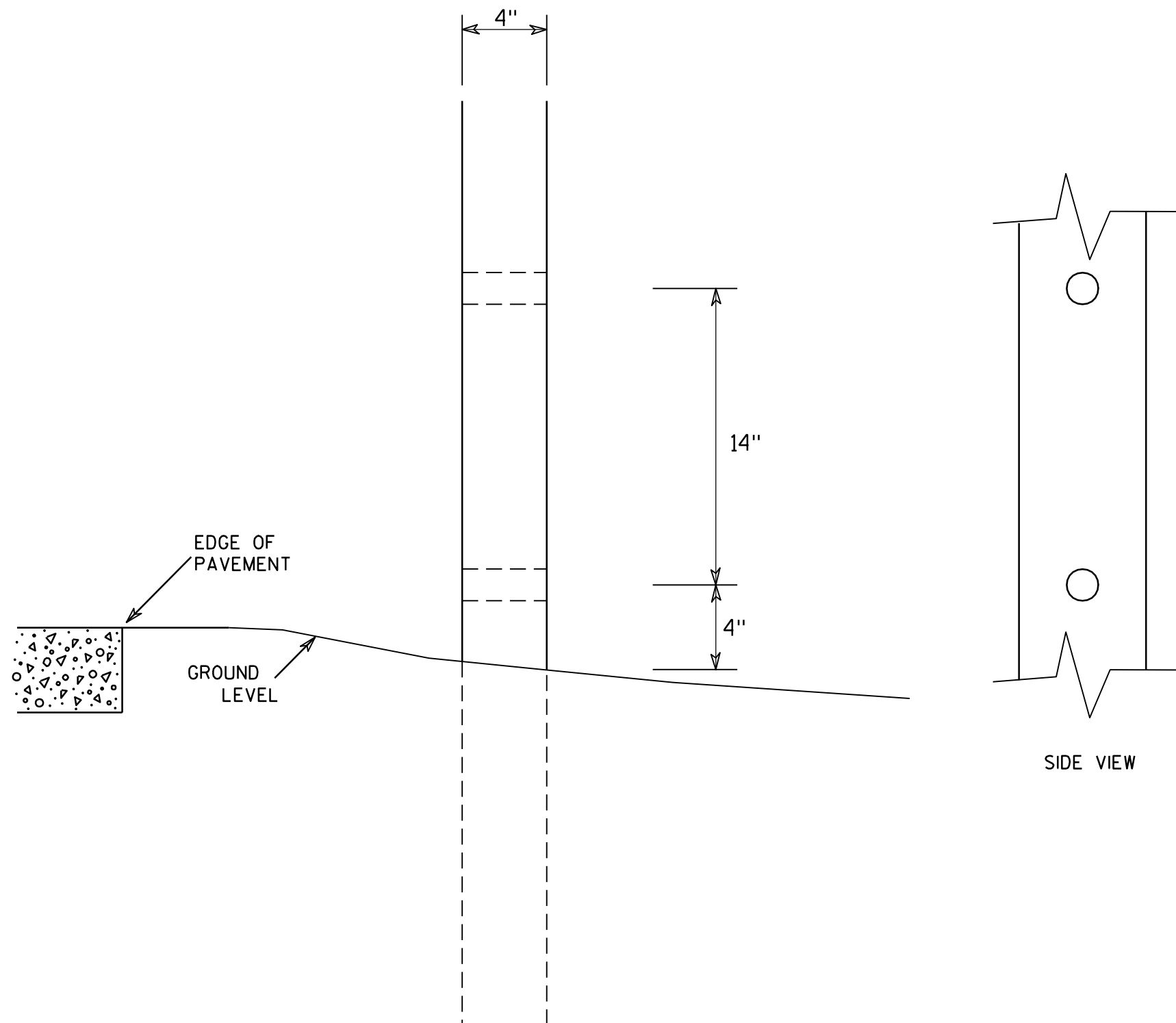
TUBULAR STEEL
SIGN POST
A4-9

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:

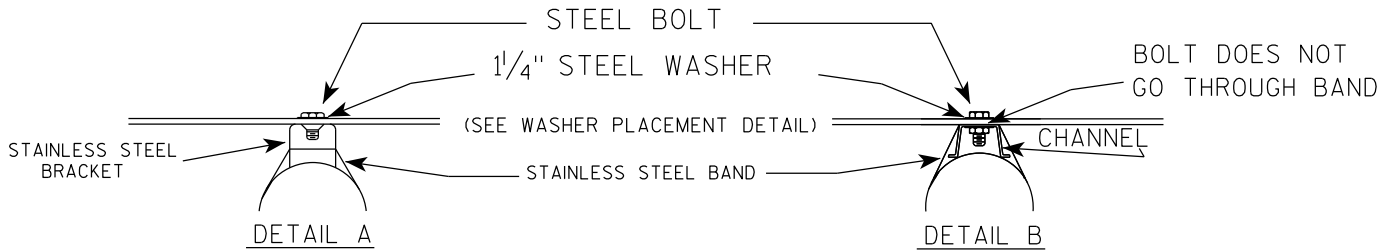
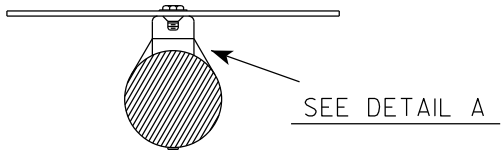
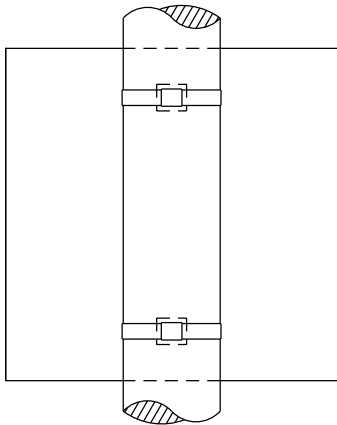
COUNTY:

SHEET NO:

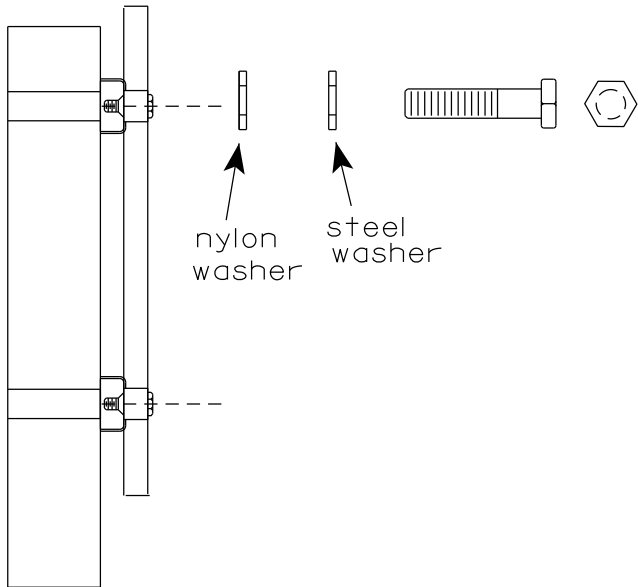
E

BANDING

SINGLE SIGN



WASHER PLACEMENT

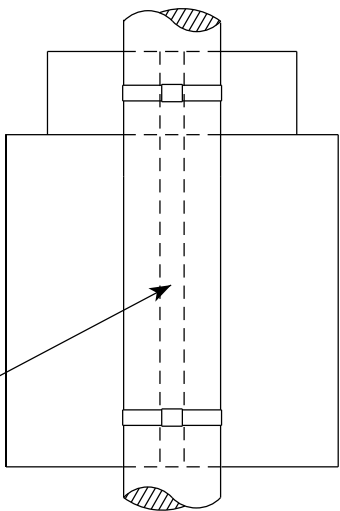


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

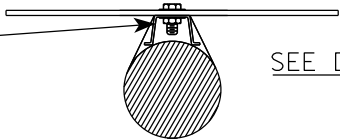
GENERAL NOTES

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



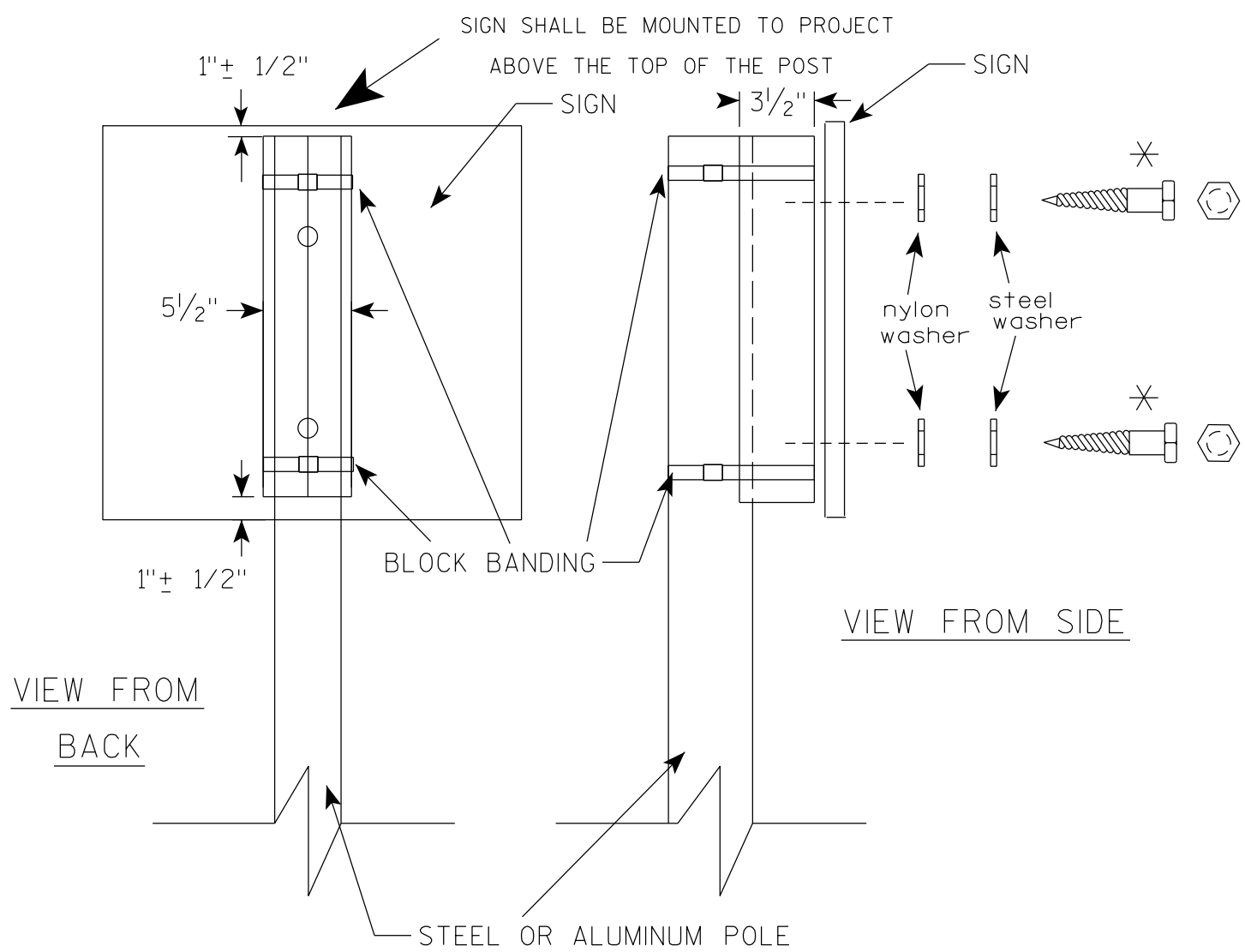
CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



STANDARD SIGN
SIGN BANDING DETAILS

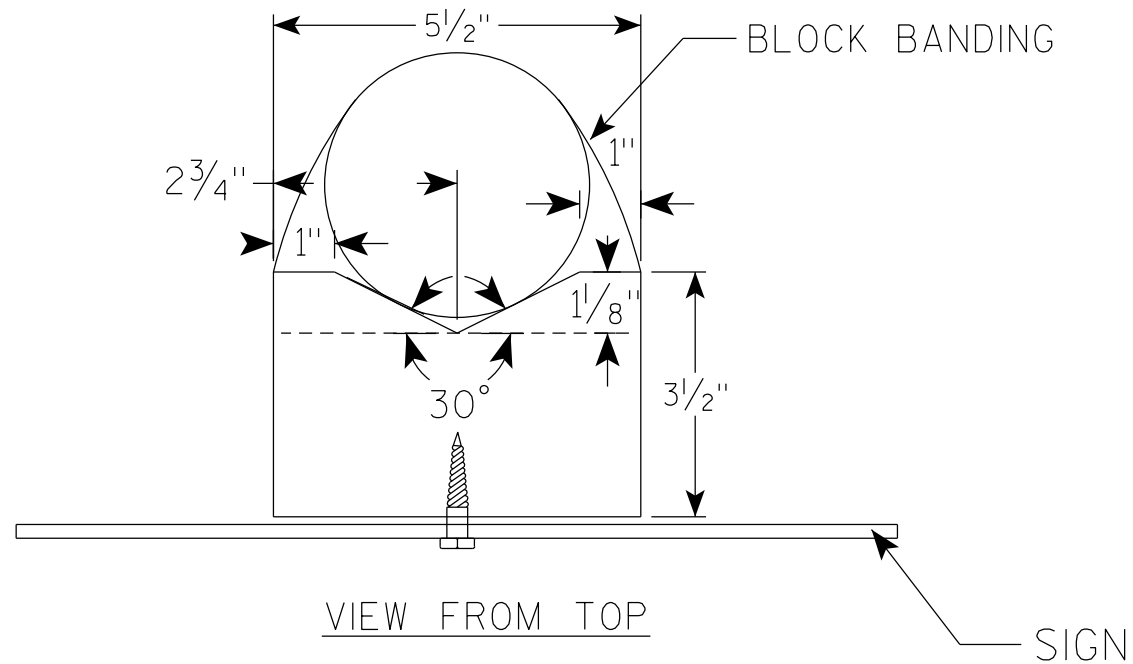
WISCONSIN DEPT OF TRANSPORTATION

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

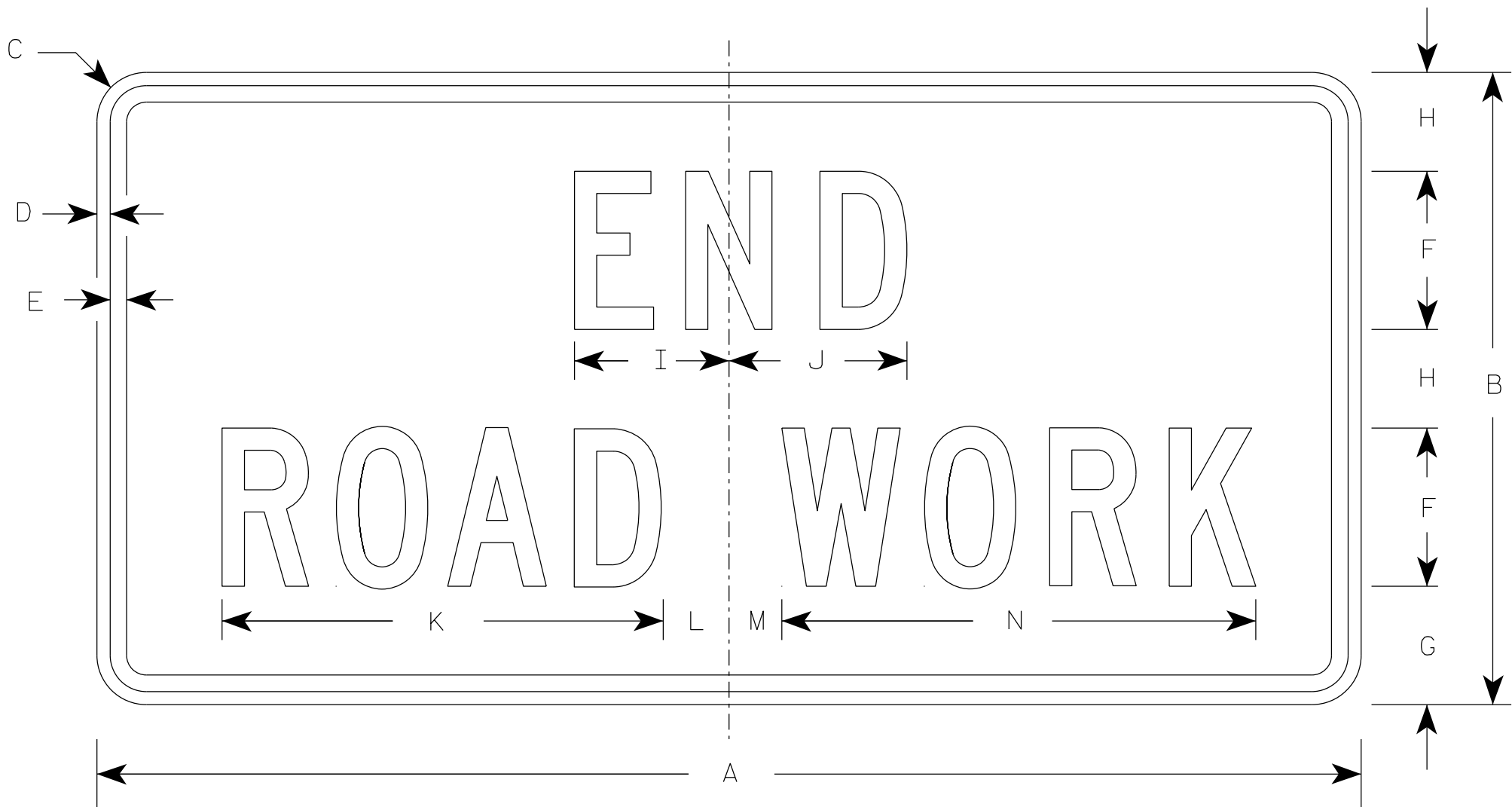
PROJECT NO:

SHEET NO:

E

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
 - Background - Orange
 - Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



G20-2A

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/2	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5
2	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
2M	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
3	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
4	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
5	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0

STANDARD SIGN

G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. G20-2A.10

PROJECT NO:

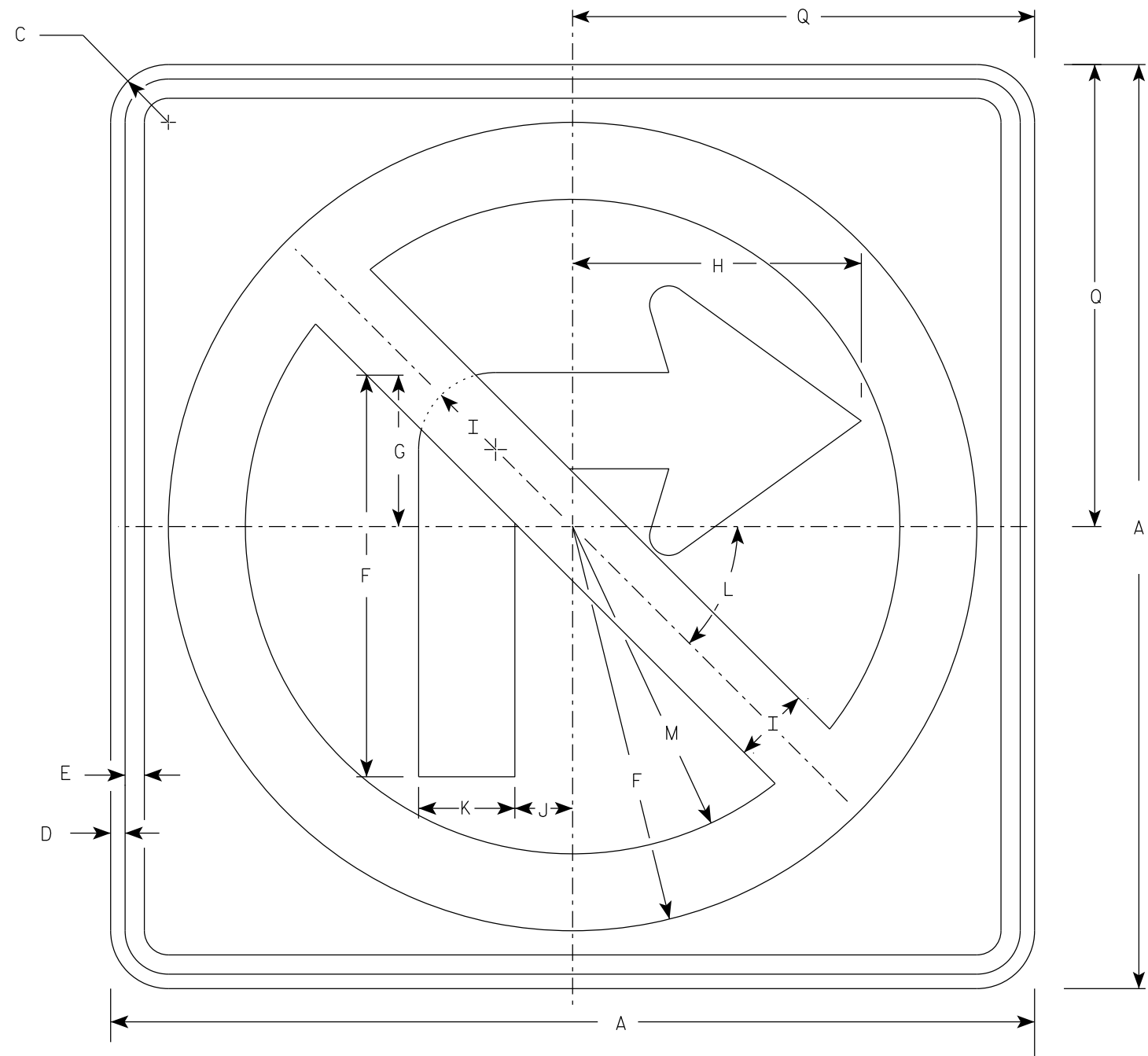
HWY:

COUNTY:

SHEET NO:

E

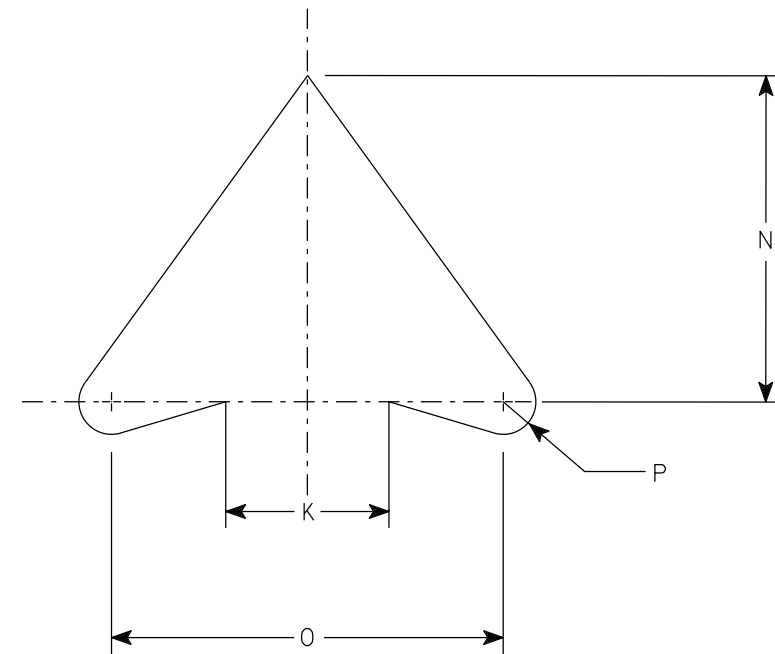
7



R3-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
Background - White
Message - See note 3
3. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.

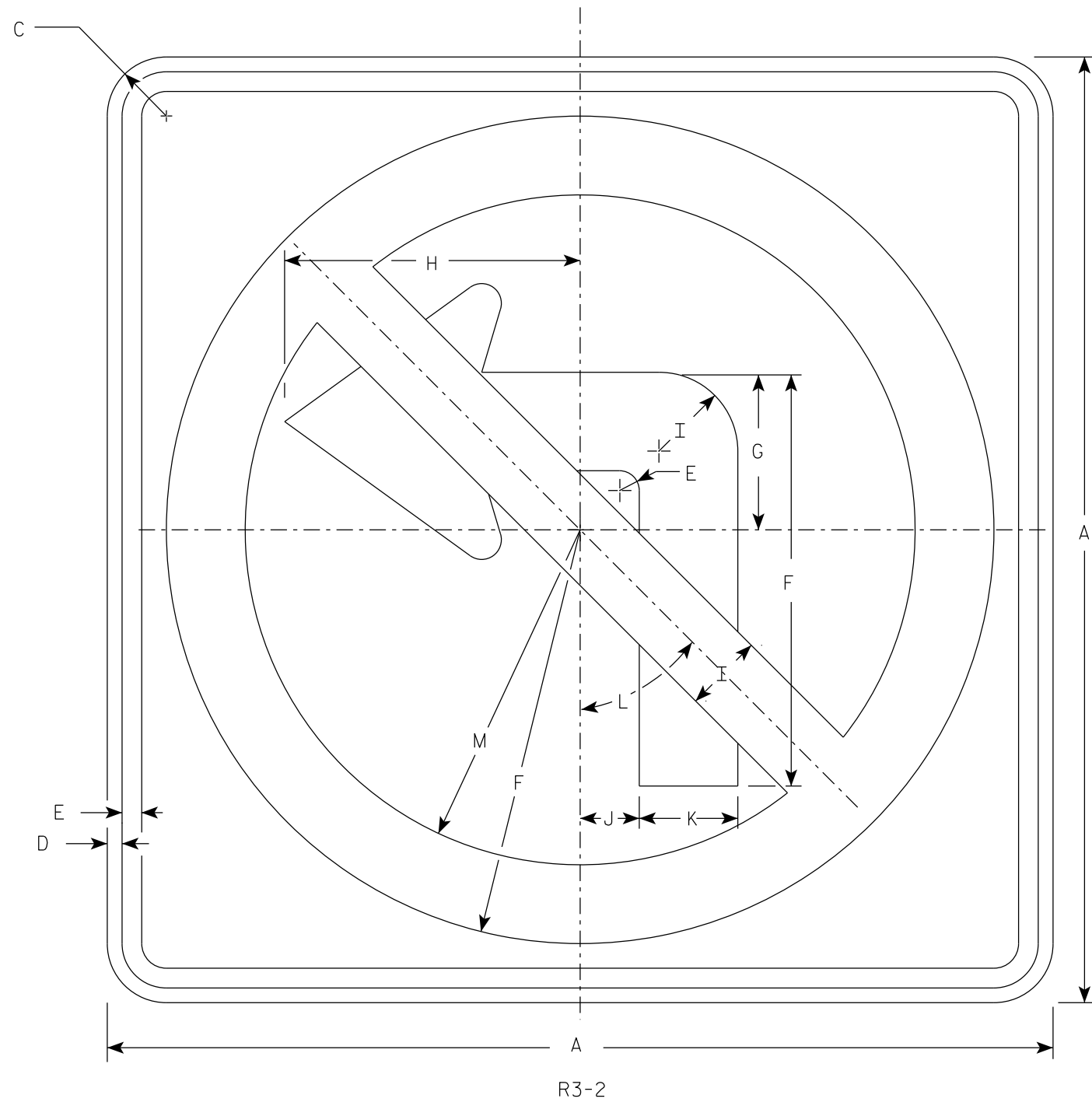


ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/2	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/2	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		2 1/4	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		2 1/4	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		2 1/4	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

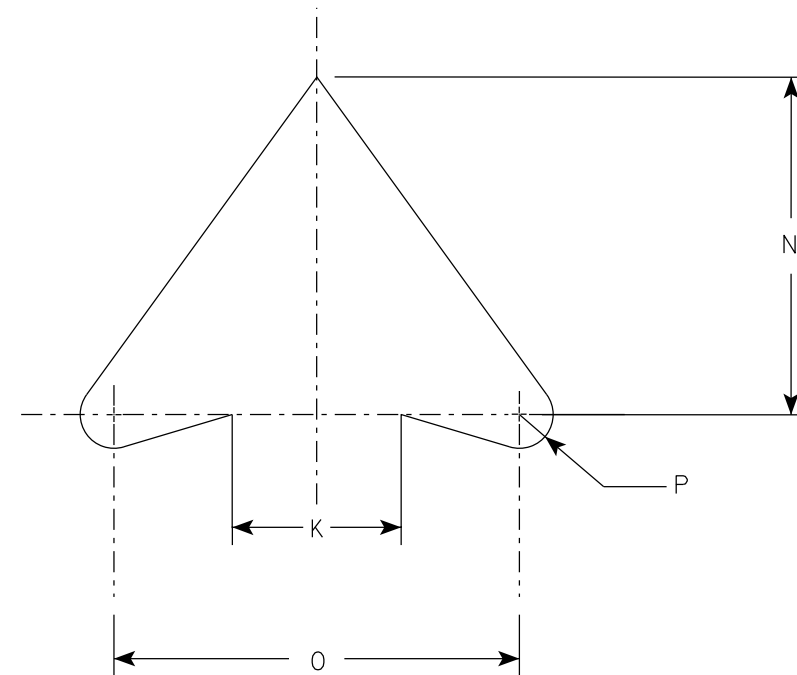
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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7



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
Background - White
Message - See note 3
3. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/2	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/2	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		2 1/4	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		2 1/4	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		2 1/4	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

PROJECT NO:

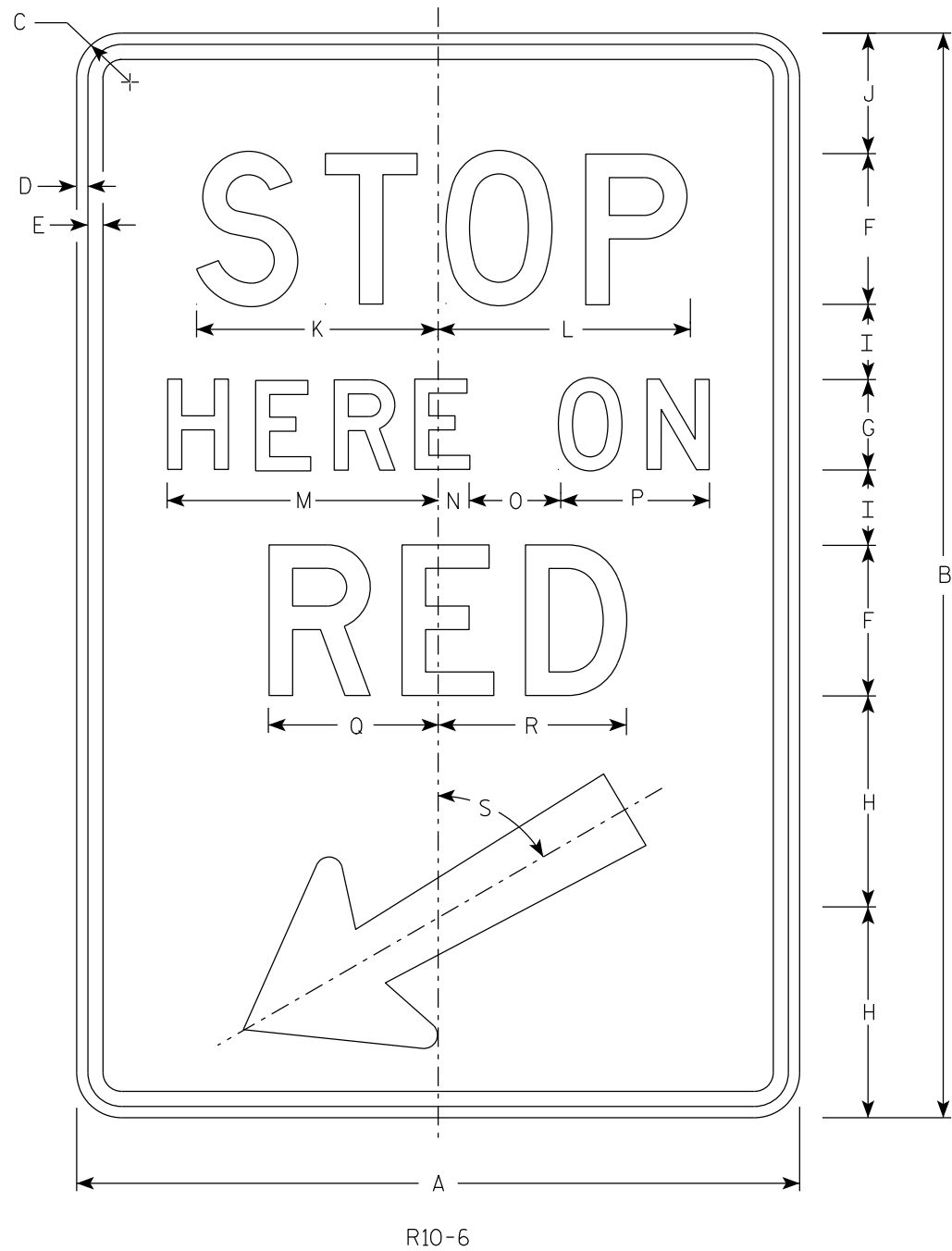
HWY:

COUNTY:

SHEET NO:

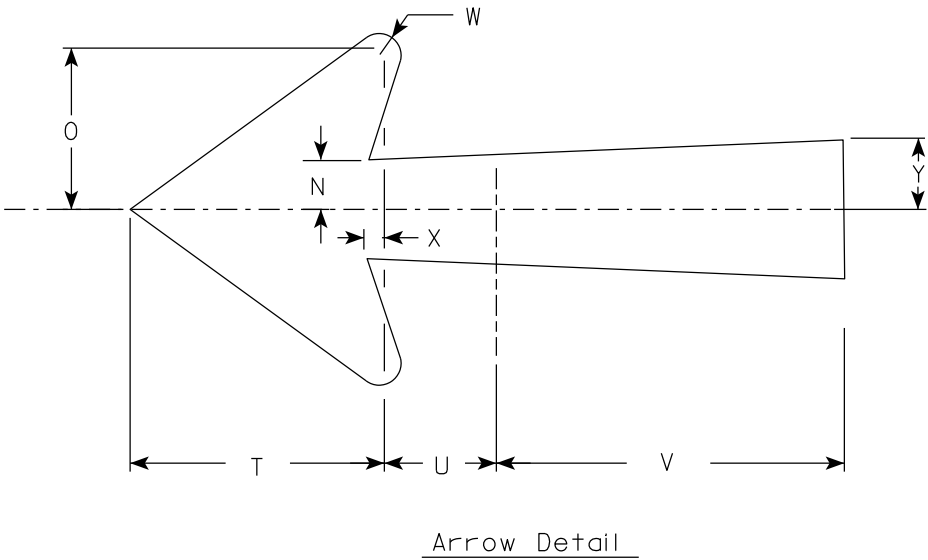
E

7



NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - D



7

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	Areq. sq. ft.
1																											
2S	24	36	1 1/2	3/8	1/2	5	3	7	2 1/2	4	8	8 3/8	9	1	3	5	5 5/8	6 1/4	60°	5 1/4	2 1/4	7 1/8	1/2	3/8	1 3/8		6.0
2M	24	36	1 1/2	3/8	1/2	5	3	7	2 1/2	4	8	8 3/8	9	1	3	5	5 5/8	6 1/4	60°	5 1/4	2 1/4	7 1/8	1/2	3/8	1 3/8		6.0
3																											
4																											
5																											

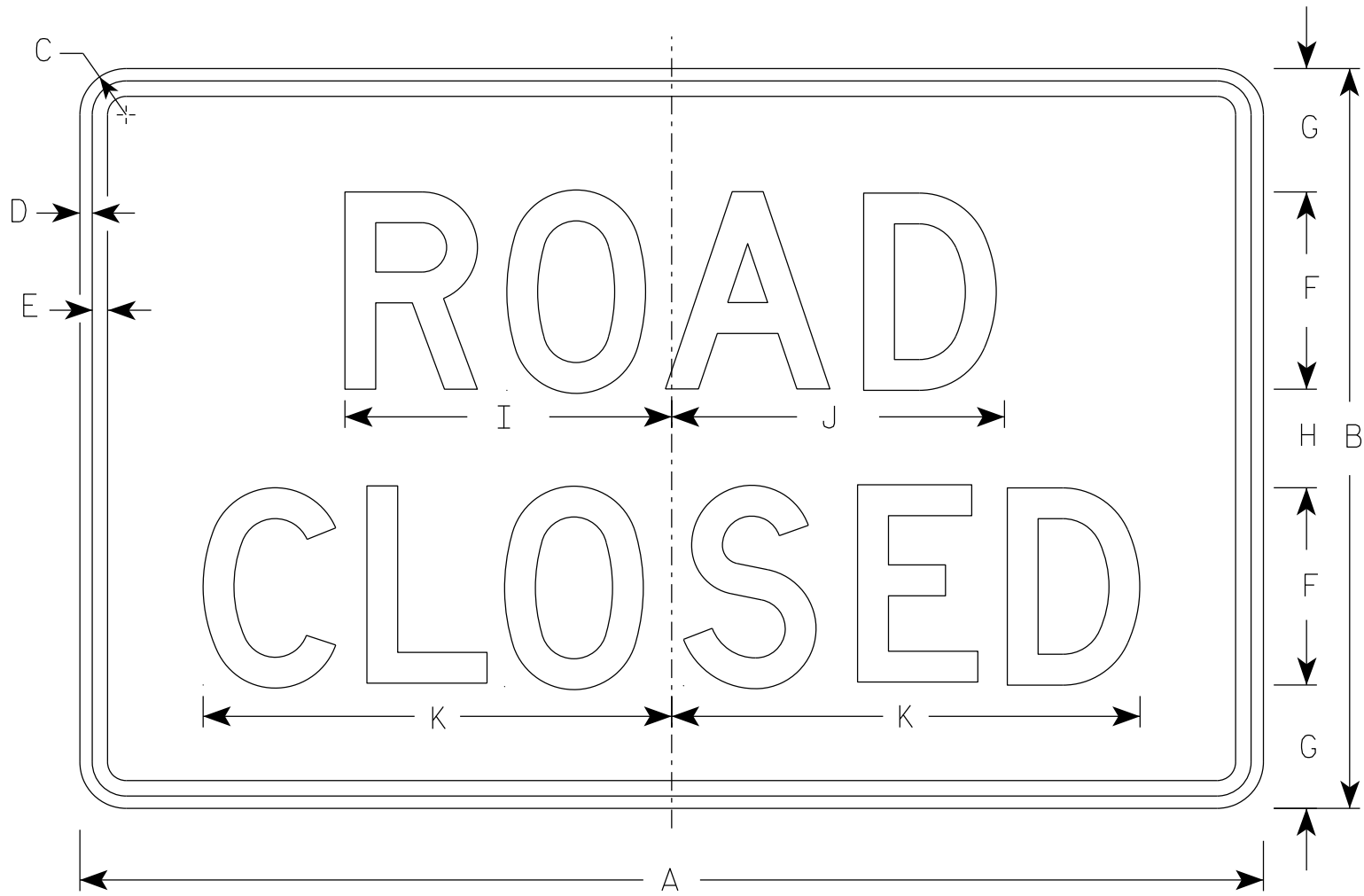
PROJECT NO:

HWY:

COUNTY:

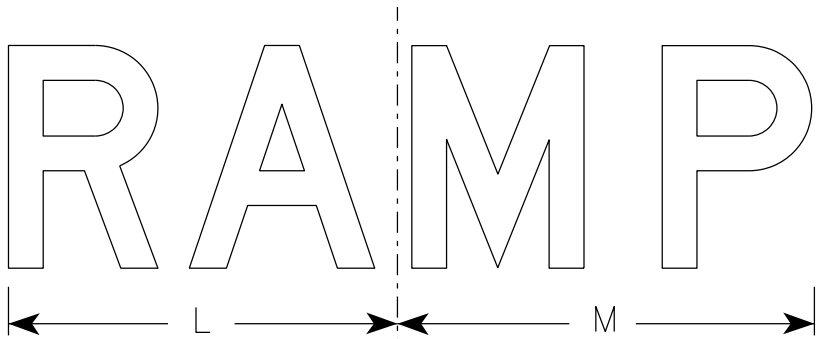
SHEET NO:

E

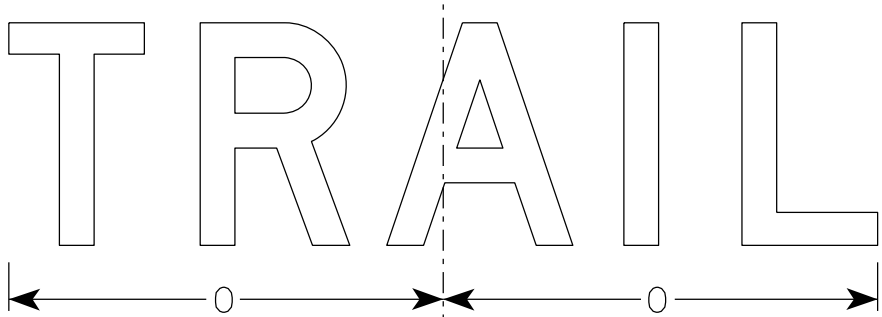


R11-2

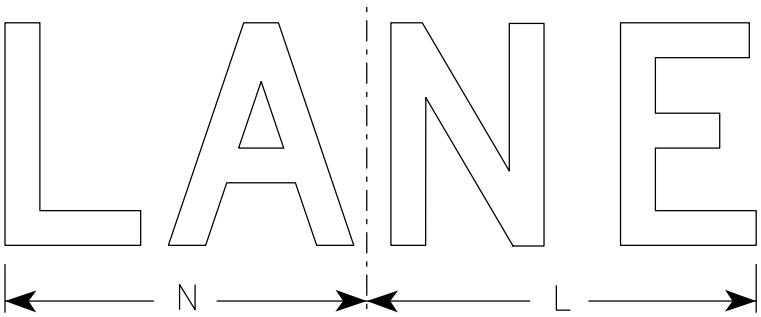
- NOTES
1. Sign is Type II - Type H Reflective
 2. Color:
Background - White
Message - Black
 3. Message Series - D
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
 5. Modify the message as required.



R11-2R



R11-2T

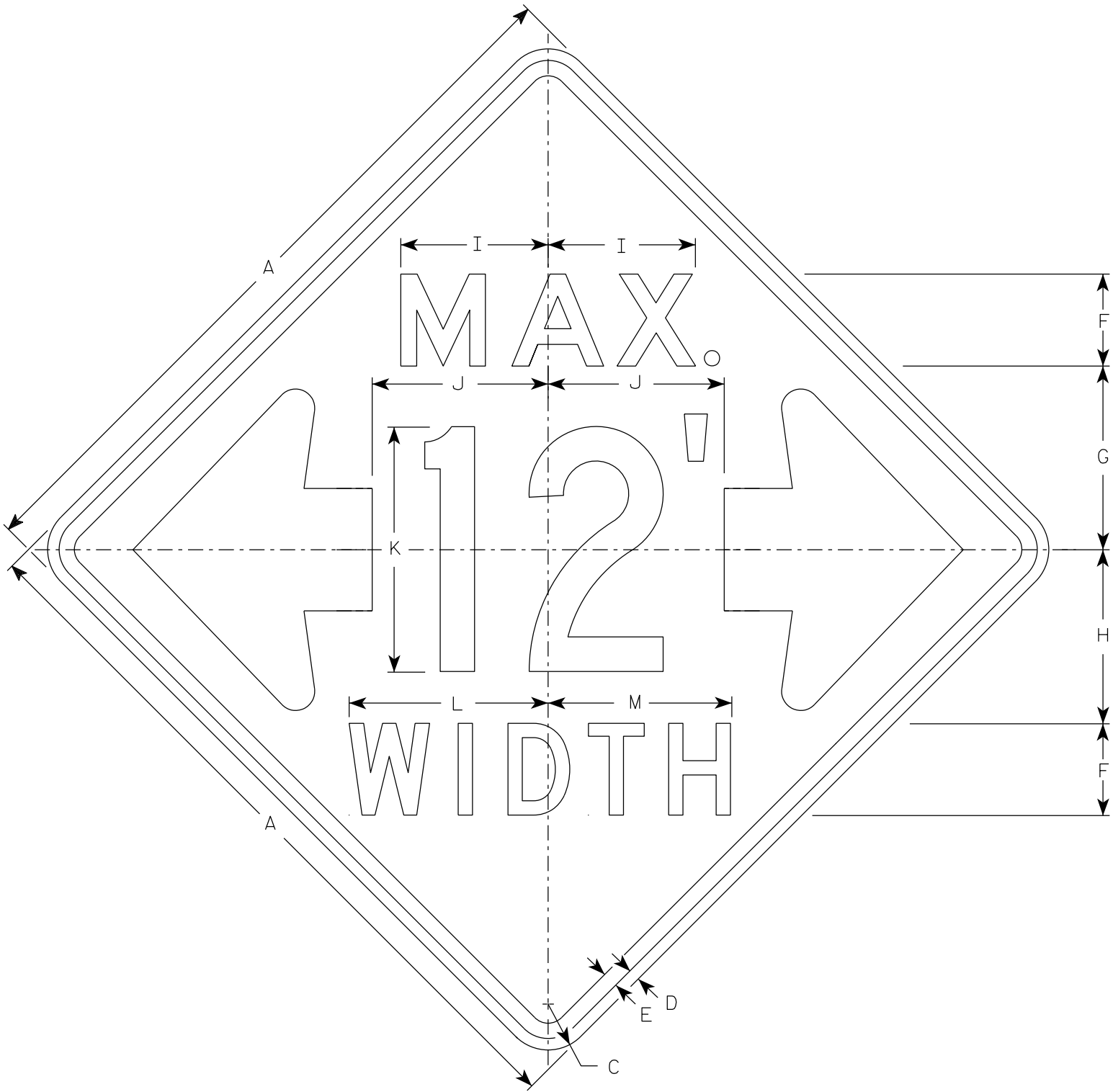


R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN R11-2	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 2/5/24	PLATE NO. R11-2.12

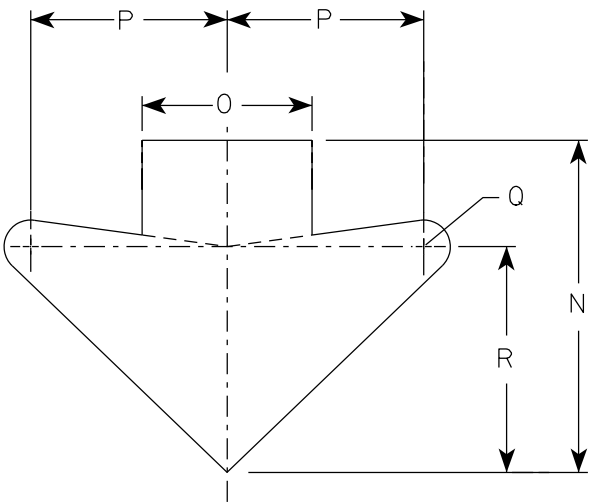
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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W12-52

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - See note 5
- 4. The top line is series E, the numerals are series C, and the bottom line is series D.
- 5. Substitute appropriate numerals and adjust spacing as required.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		3	¾	1	6	12	11 ⅜	9 ⅝	11 ½	16	13	12	15 ⅝	8	9 ¼	1 ¼	10 ⅝									16.0
2M	48		3	¾	1	6	12	11 ⅜	9 ⅝	11 ½	16	13	12	15 ⅝	8	9 ¼	1 ¼	10 ⅝									16.0
3																											
4																											
5																											

STANDARD SIGN

W12-52

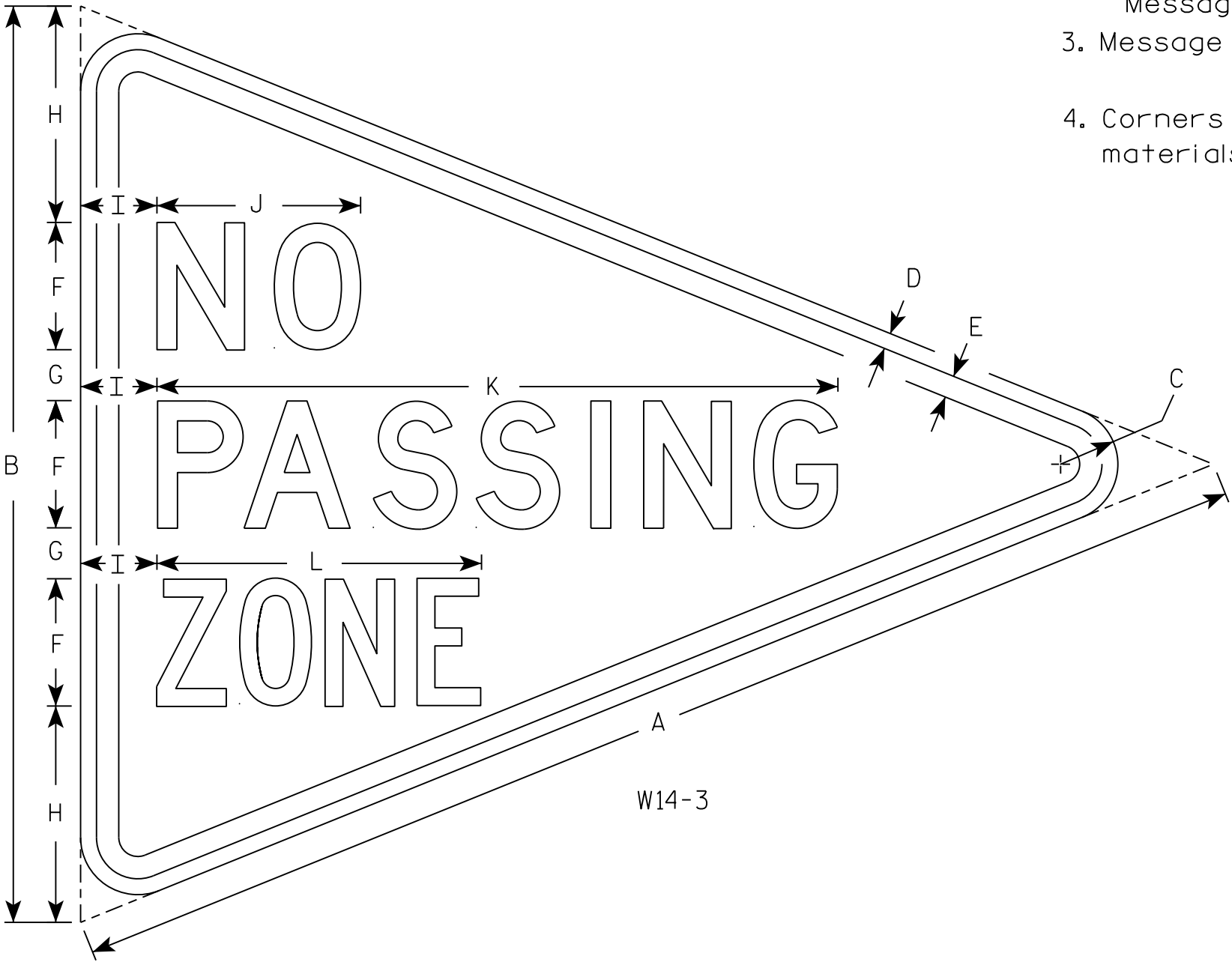
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/10/2024 PLATE NO. W12-52.8

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Yellow
Message - Black
- 3. Message Series - Lines 1 and 2 are Series D.
Line 3 is series C.
- 4. Corners and borders shall be rounded on all base materials for this sign.



7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															5.56
2M																											
3																											
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

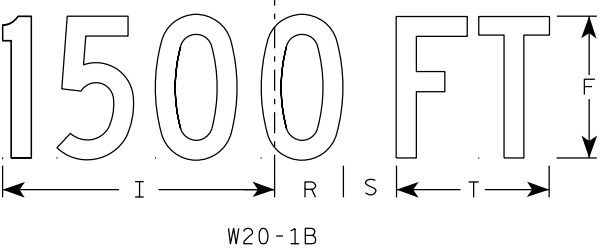
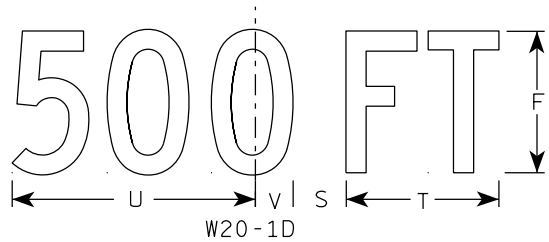
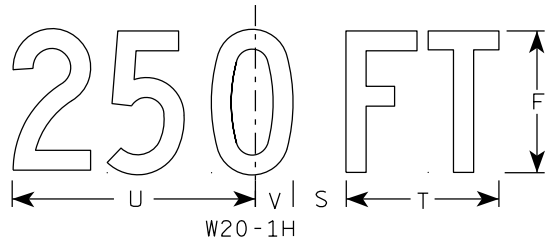
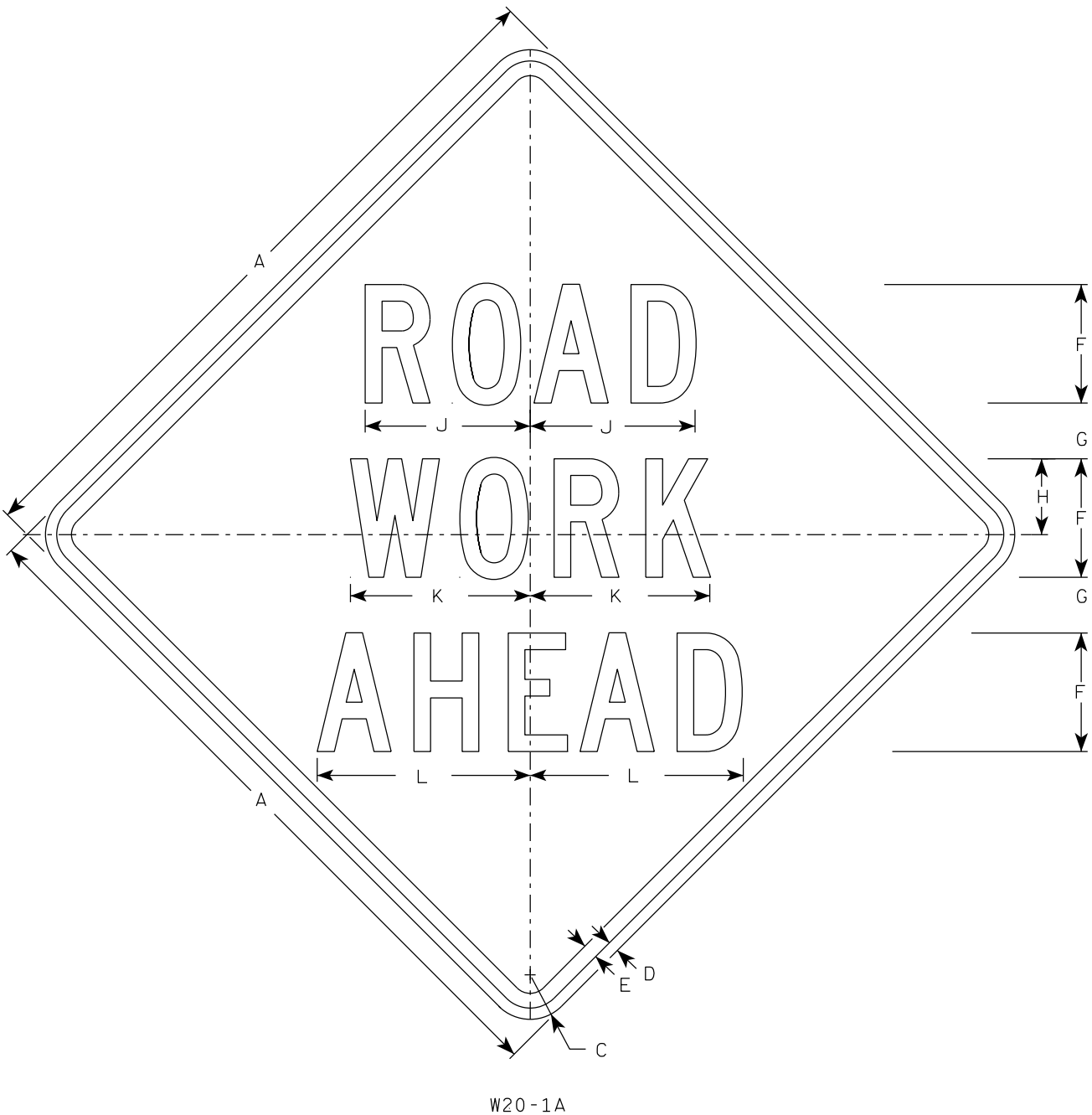
E

STANDARD SIGN
W14-3

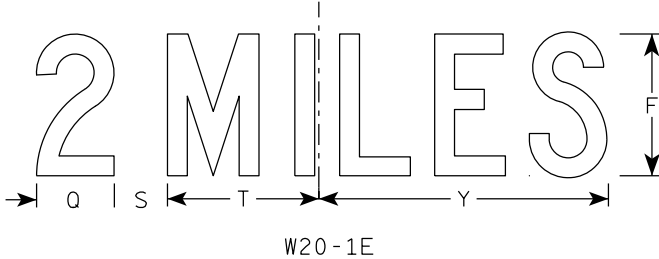
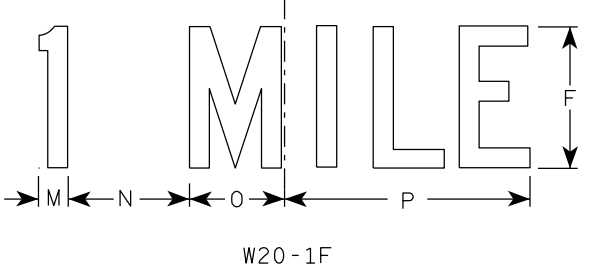
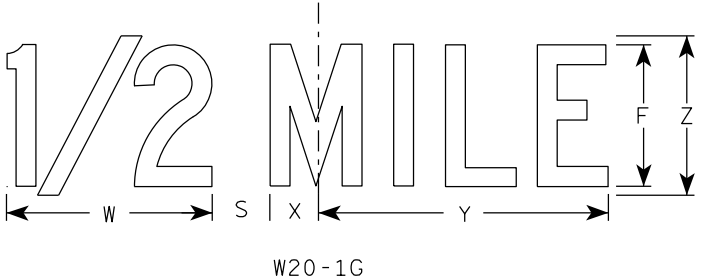
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W14-3.10



- NOTES
1. Sign is Type II - Type F Reflective
 2. Color:
Background - Orange
Message - Black
 3. Message Series - C
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

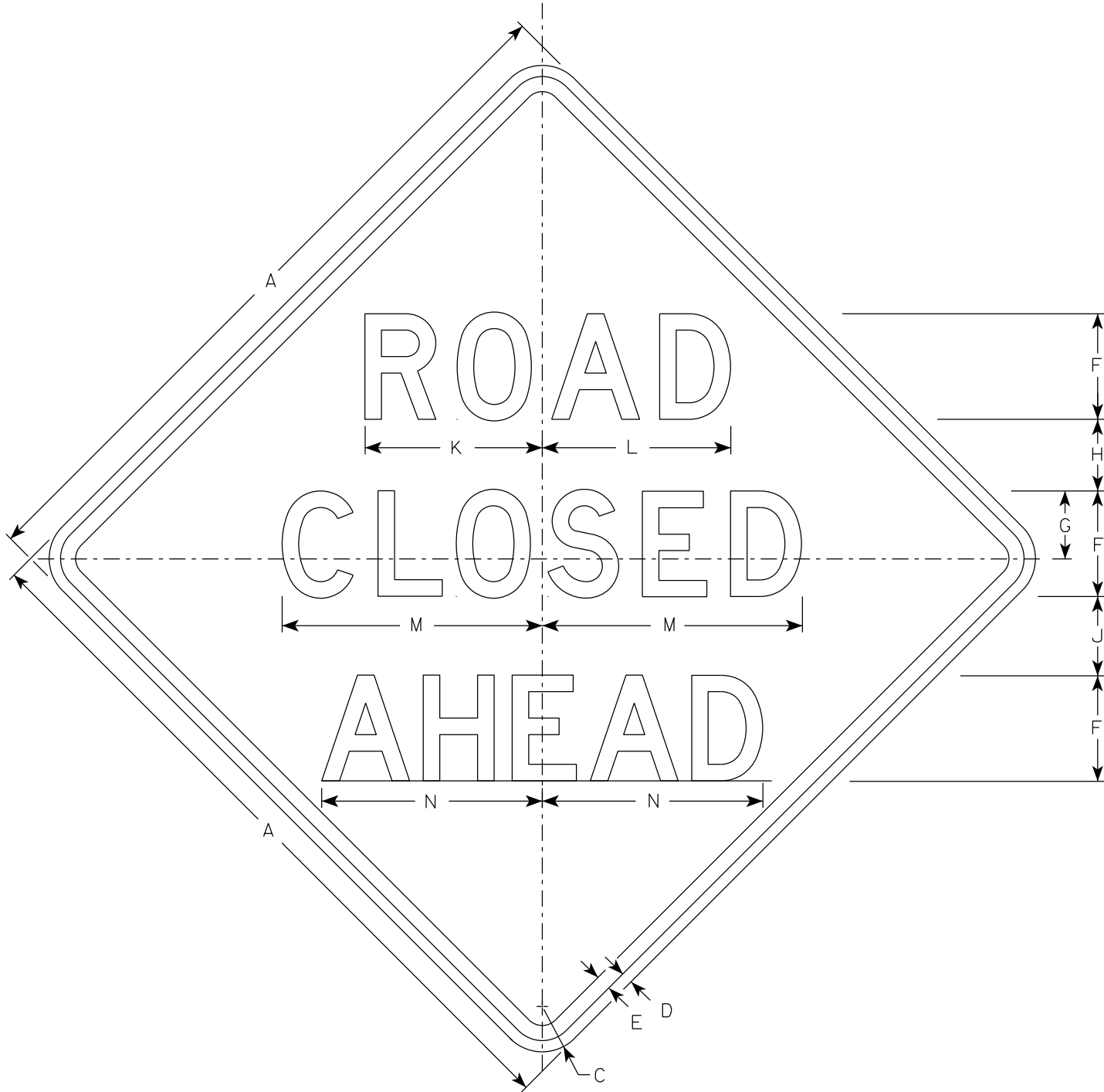
STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

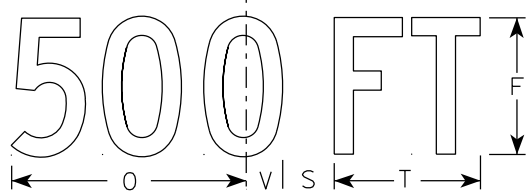
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-1.12

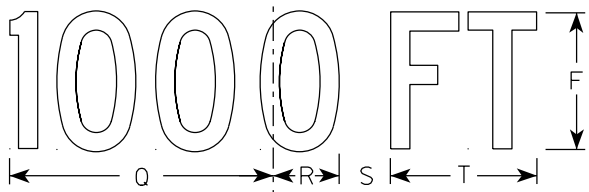
7



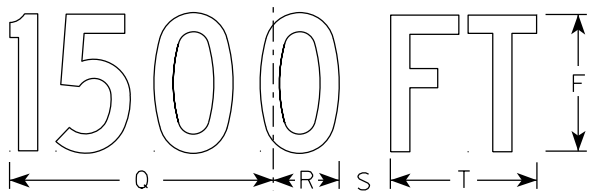
W20-3A



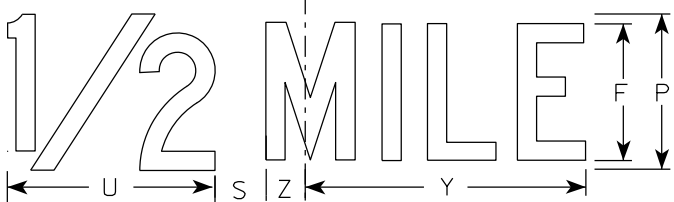
W20-3D



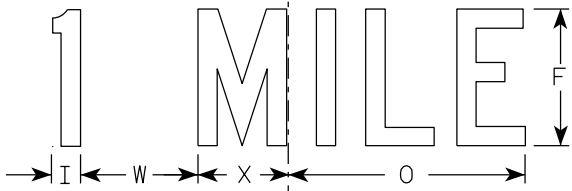
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
Background - Orange
Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
Line 3 is Series D for AHEAD and Series C for all other distances.

7

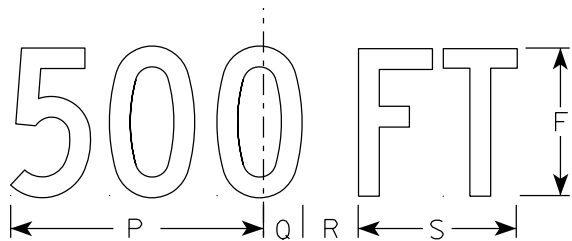
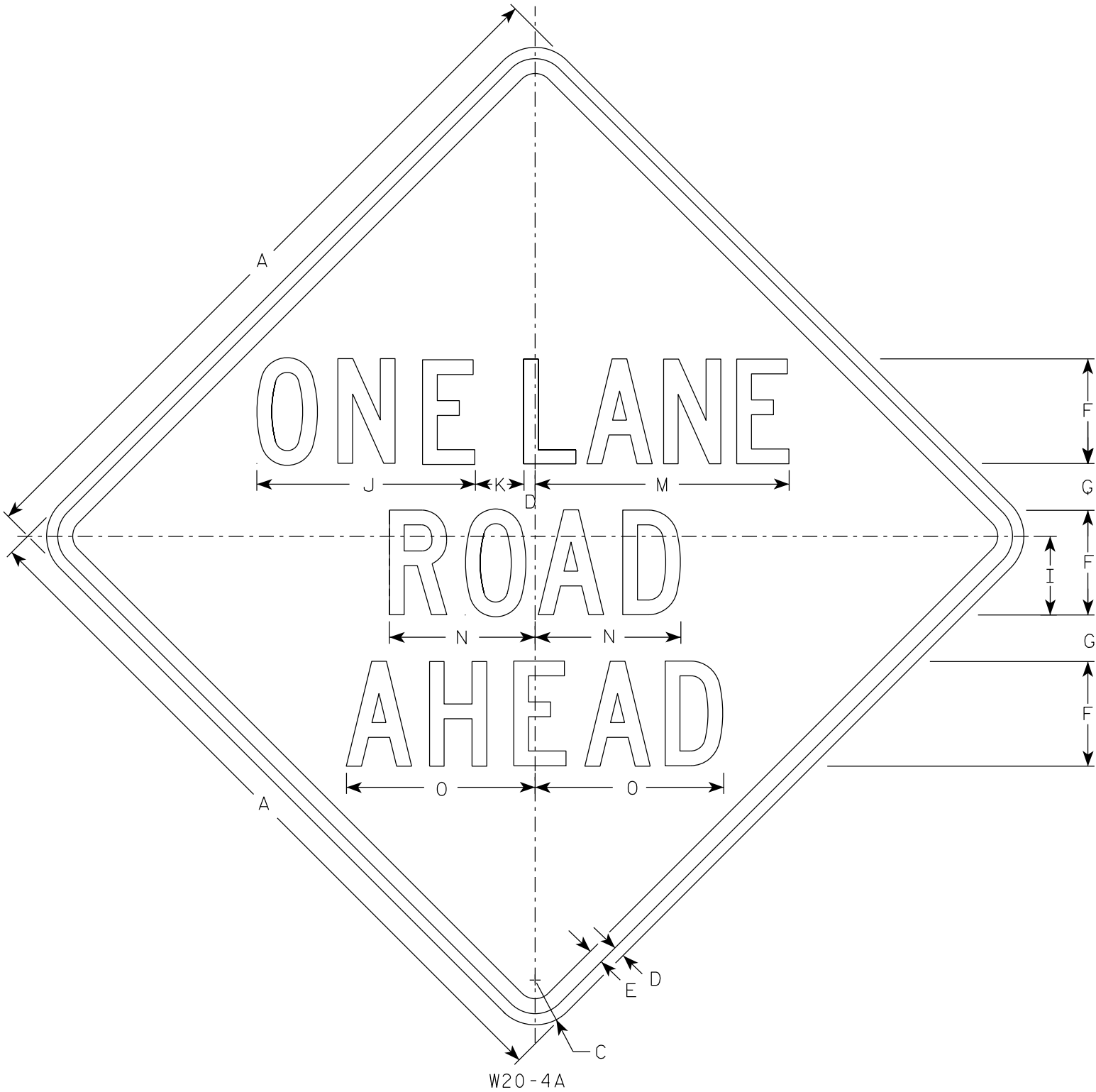
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

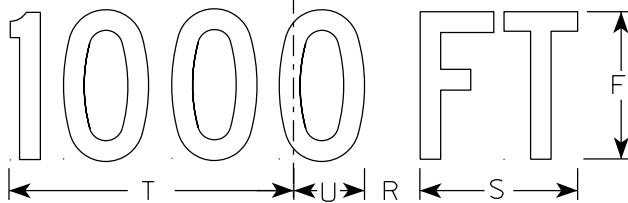
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

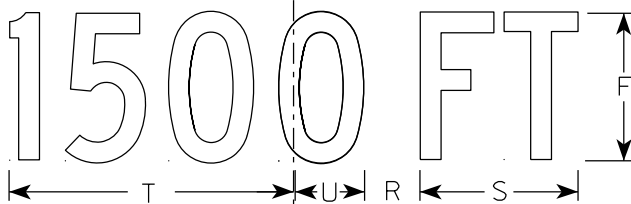
DATE 1/10/2024 PLATE NO. W20-3.8



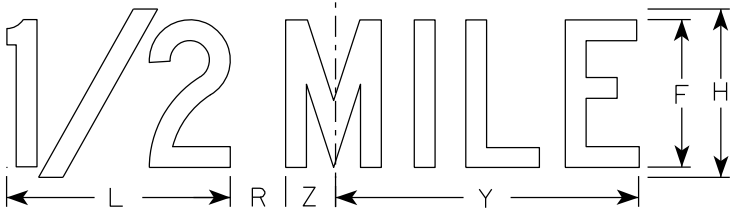
W20-4D



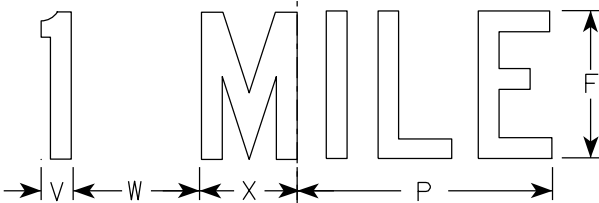
W20-4C



W20-4B



W20-4G



W20-4F

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
 - Background - Orange
 - Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

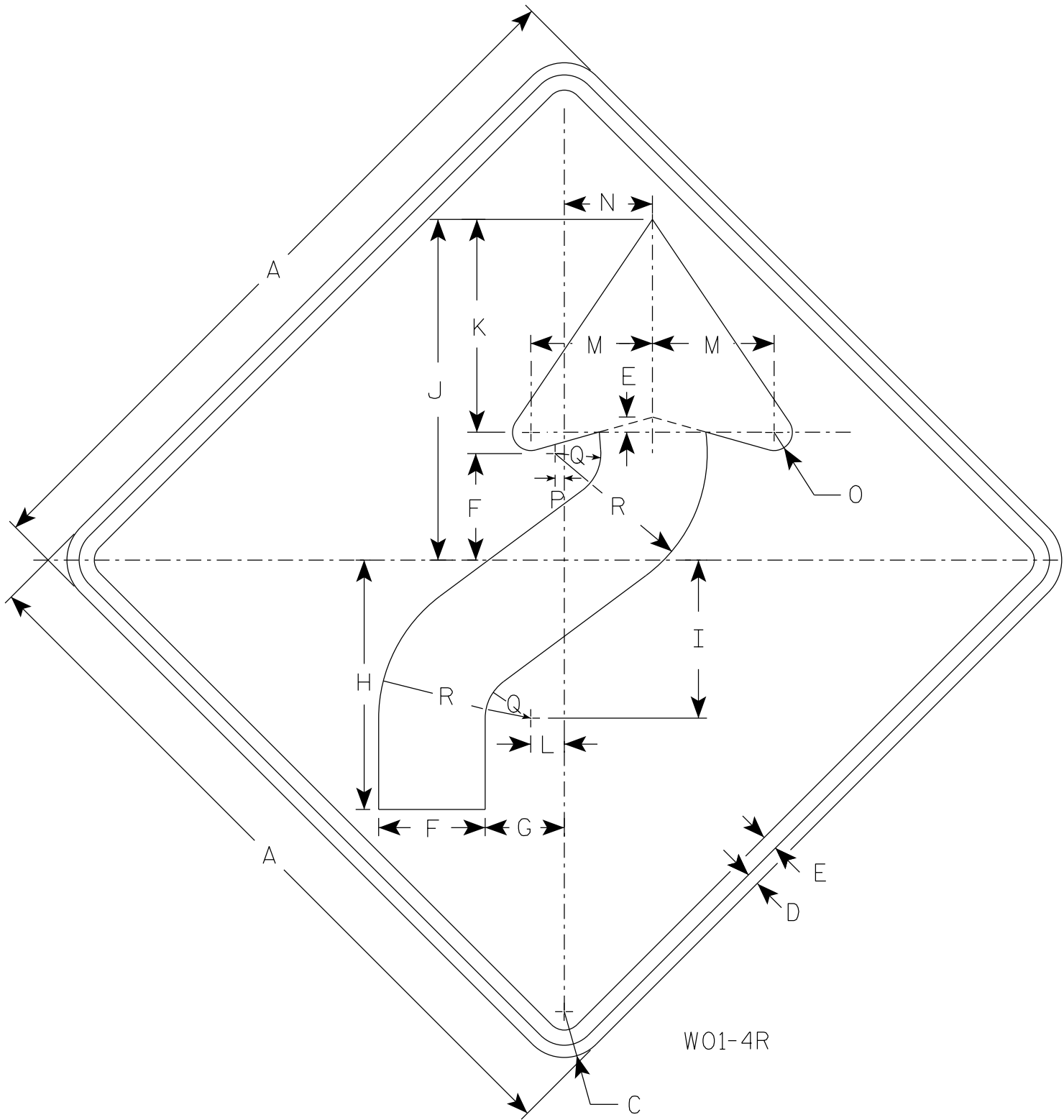
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	2 3/8	6	3 3/4	10 3/8	2 3/8	8	13 1/2	7	8 7/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		3	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		3	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
3	48		3	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
4	48		3	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
5	48		3	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-4A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-4.10



NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

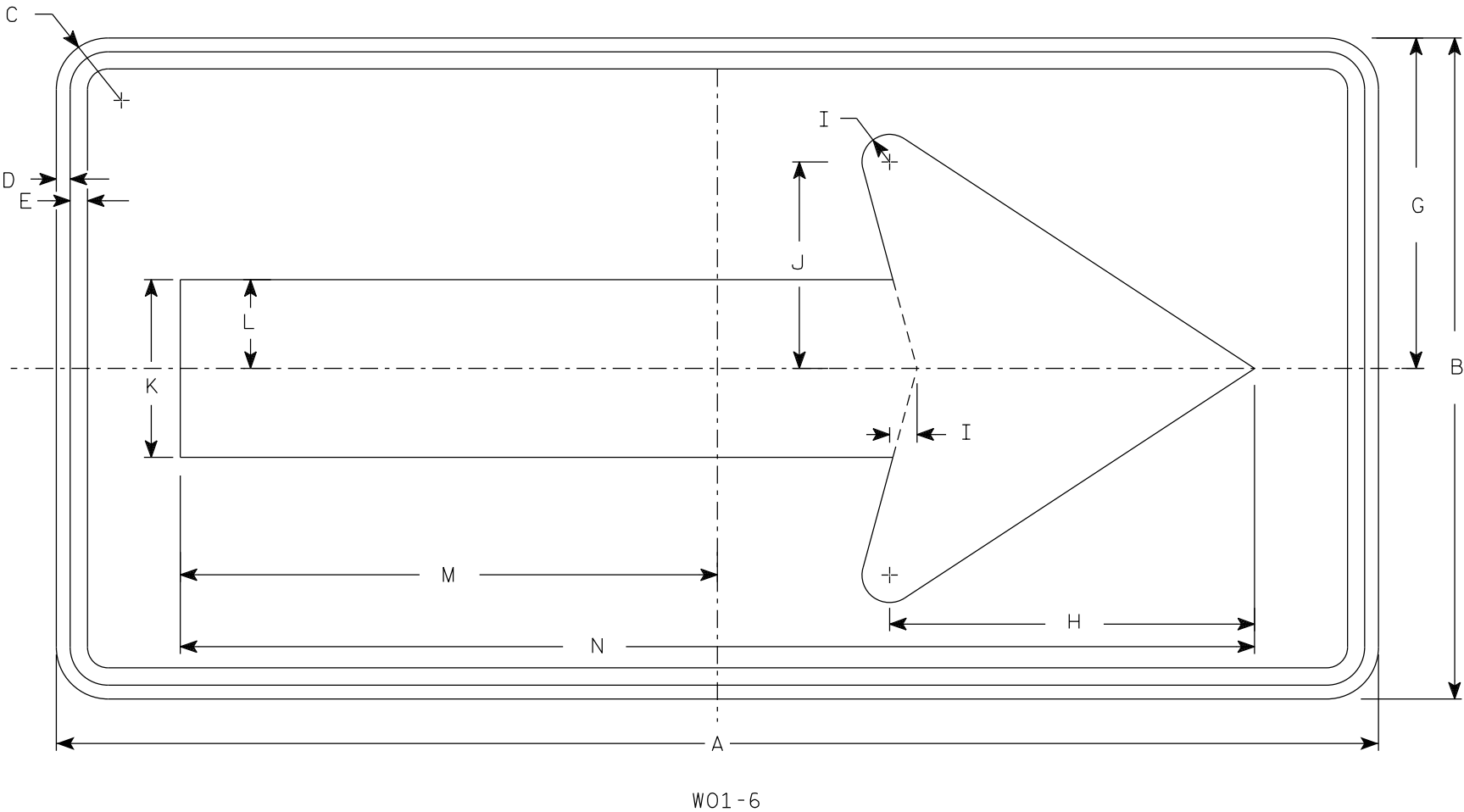
STANDARD SIGN
W01-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-4.2

7



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
Background - Orange
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 7⁄8	1⁄2	5⁄8		12	13 1⁄4	1	7 1⁄2	6 1⁄2	3 1⁄4	19 1⁄2	39													8.0
2M	48	24	1 7⁄8	1⁄2	5⁄8		12	13 1⁄4	1	7 1⁄2	6 1⁄2	3 1⁄4	19 1⁄2	39													8.0
3	60	30	1 7⁄8	1⁄2	5⁄8		15	16 1⁄4	1 1⁄4	9 1⁄4	8	4	24 3⁄8	48 3⁄4													12.5
4	60	30	1 7⁄8	1⁄2	5⁄8		15	16 1⁄4	1 1⁄4	9 1⁄4	8	4	24 3⁄8	48 3⁄4													12.5
5	60	30	1 7⁄8	1⁄2	5⁄8		15	16 1⁄4	1 1⁄4	9 1⁄4	8	4	24 3⁄8	48 3⁄4													12.5

STANDARD SIGN
W01-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-6.2

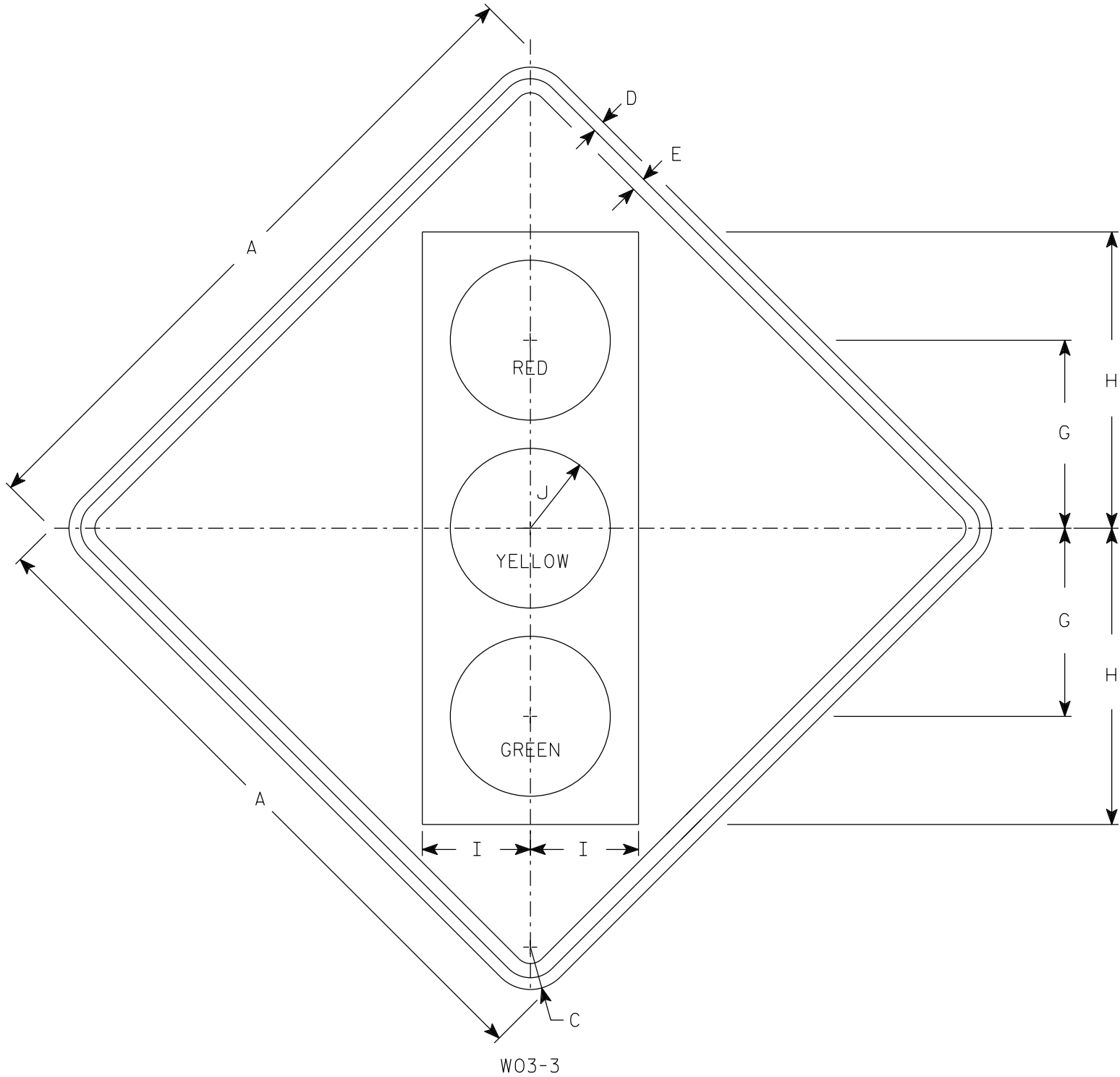
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



NOTES

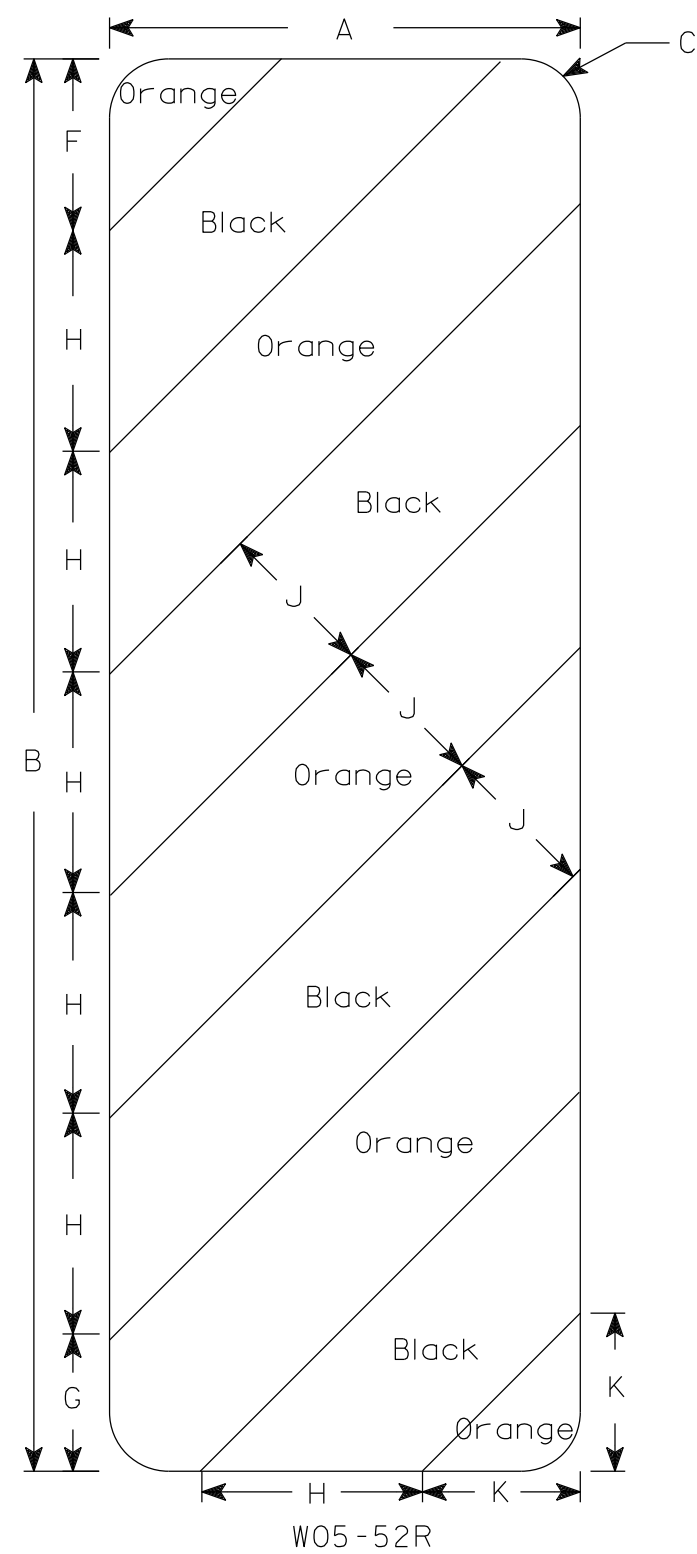
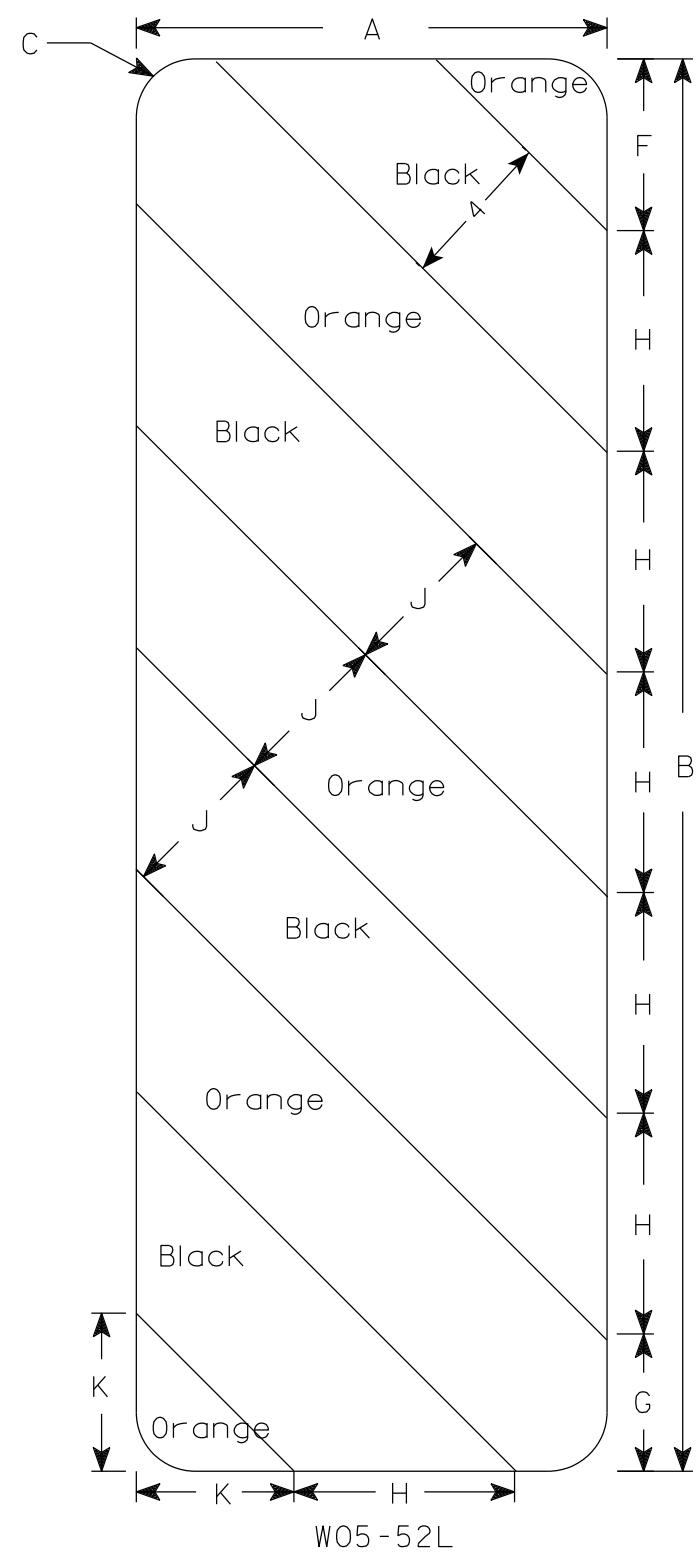
- 1. Sign is Type II - Type F Reflective
- 2. Color:
 - Background - Orange
 - Message - See Note 4
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. Symbol and border are non-reflective black.
 - Top circle - Type H Reflectorized Red
 - Center circle - Same as background
 - Bottom circle - Type H Reflectorized Green

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2S	48		3	3/4	1		12 1/2	20	7 1/2	5																	16.0
2M	48		3	3/4	1		12 1/2	20	7 1/2	5																	16.0
3	48		3	3/4	1		12 1/2	20	7 1/2	5																	16.0
4	48		3	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		3	3/4	1		12 1/2	20	7 1/2	5																	16.0

STANDARD SIGN
W03-3

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 1/24/2024 PLATE NO. W03-3.2



NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
 - Background - Orange
 - Message - Black
- 4. 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

W05-52L & W05-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/13/2024 PLATE NO. W05-52.2

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

DESIGN DATA

LIVE LOAD:
DESIGN LOAD: HL-93
INVENTORY RATING FACTOR = 1.31
OPERATING RATING FACTOR = 1.70
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS

EARTH LOAD:
DESIGNED FOR 2.0 TO 3.0 FEET OF FILL

MATERIAL PROPERTIES:
CONCRETE MASONRY: $f'_c = 3,500$ PSI
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60: $f_y = 60,000$ PSI

BENCH MARK

NO.	STATION	DESCRIPTION	ELEV.
BM #2	24+00.43, 132.15 RT.	60D NAIL SET IN POWER POLE	1382.74

HYDRAULIC DATA

100 YEAR FREQUENCY
 $Q_{100} = 960$ C.F.S.
VEL. = 7.70 F.P.S.
HW₁₀₀ = EL. 1385.50
WATERWAY AREA = 124.7 SQ. FT.
DRAINAGE AREA = 1.90 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 8

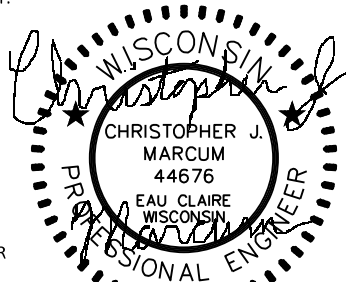
TRAFFIC DATA

STH 13
A.D.T. = 7,600 (2026)
A.D.T. = 9,400 (2046)
R.D.S. = 60 MPH

2 YEAR FREQUENCY
 $Q_2 = 200$ C.F.S.
VEL. = 2.64 F.P.S.
HW₂ = EL. 1381.58

LEGEND

- INDICATES WING NUMBER
- VERTICAL CONSTRUCTION JOINT
- NAME PLATE LOCATION
- BUILD APRON LEVEL



05/01/2025

LIST OF DRAWINGS:

- GENERAL PLAN
- CROSS SECTION AND NOTES
- SUBSURFACE EXPLORATION
- BARREL REINFORCEMENT
- BARREL DETAILS
- INLET APRON AND WINGWALLS
- OUTLET APRON AND WINGWALLS
- APRON DETAILS
- APRON BAR STEEL DETAILS

STRUCTURE DESIGN CONTACTS

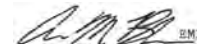
BRIDGE OFFICE:
AARON BONK, P.E. (608) 261-0261

CONSULTANT:
CHRISTOPHER MARCUM, P.E. (715) 861-4823

NO.	DATE	REVISION	BY
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it ENGINEERING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED  **05/05/25**
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-10-251

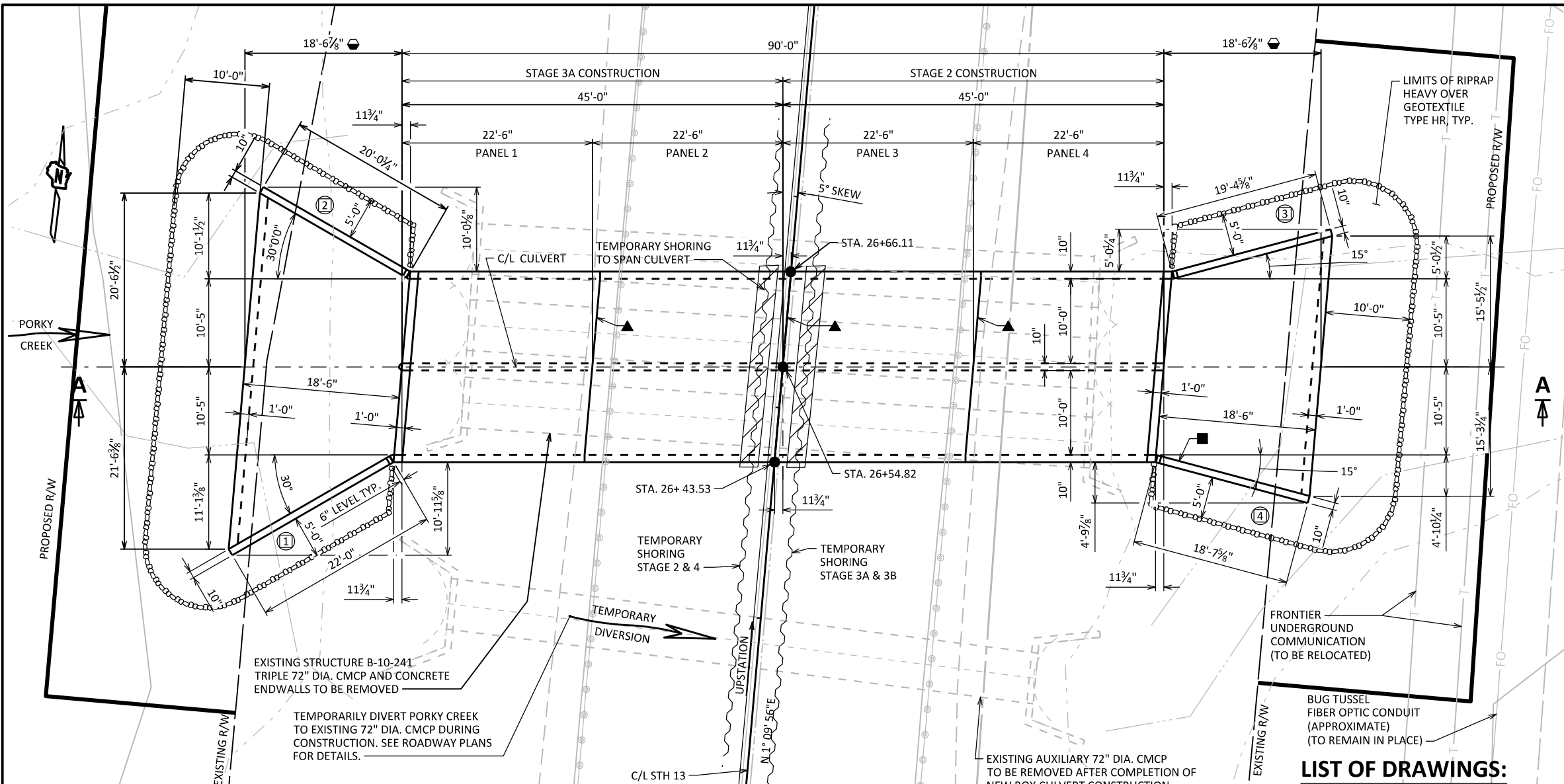
STH 13 OVER PORKY CREEK (SOUTH)

COUNTY CLARK TOWN MAYVILLE

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION
DESIGNED BY MPG CK'D CJM DRAWN BY CJM PLANS CK'D VJD

GENERAL PLAN

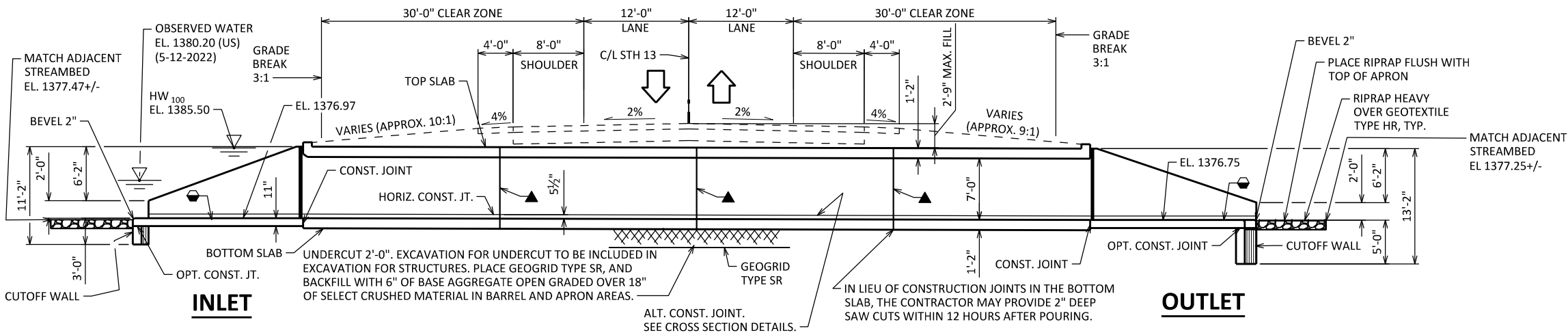
SHEET 1 OF 9



NOTE: STRUCTURE BACKFILL
REQUIRED BEHIND ALL WING WALLS.

PLAN

TWO CELL CONCRETE BOX CULVERT



SECTION A-A

ROADWAY DIMENSIONS ARE NORMAL TO C/L STH 13

ITEM NO.	BID ITEMS	UNIT	TOTALS
203.0220	REMOVING STRUCTURE B-10-241	EACH	1
206.2001	EXCAVATION FOR STRUCTURES CULVERTS B-10-251	EACH	1
210.2500	BACKFILL STRUCTURE TYPE B	TON	1,840
310.0110	BASE AGGREGATE OPEN-GRADED	TON	130
312.0110	SELECTED CRUSHED MATERIAL	TON	390
504.0100	CONCRETE MASONRY CULVERTS	CY	293
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	32,820
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	2,500
511.1200	TEMPORARY SHORING B-10-251	SF	1,935
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	41
606.0300	RIPRAP HEAVY	CY	115
645.0120	GEOTEXTILE TYPE HR	SY	225
645.0220	GEOGRID TYPE SR	SY	575
	NON-BID ITEMS		
	PREFORMED JOINT FILLER	SIZE	½", ¾"
	NAME PLATE	EACH	1

A01 STRUCTURE TO BE REMOVED IN STAGES. CUT EXISTING STRUCTURE PERPENDICULAR TO STRUCTURE DURING STAGES 2, 3A, 3B & 4. REMOVAL TO ENSURE STRUCTURE STABILITY. ONLY REMOVE PORTIONS OF THE CORNER OF THE EXISTING STRUCTURE THAT CONFLICT WITH PLACEMENT OF THE STAGE 1 PORTION OF THE NEW CULVERT.

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



DRAWINGS SHALL NOT BE SCALED.

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

BEVEL EXPOSED EDGES OF CONCRETE $\frac{3}{4}$ " UNLESS OTHERWISE NOTED.

ALL VOLUME WHICH CANNOT BE PLACED BEFORE CULVERT CONSTRUCTION AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL WITHIN THE LENGTH OF THE CULVERT INCLUDING THE APRON WING WALLS.

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

THE CONCRETE IN THE CUTOFF WALLS MAY BE PLACED UNDER WATER IF THE EXCAVATION CANNOT BE DEWATERED.

THE ALTERNATE CUTOFF WALL ON DETAIL SHOWN ON SHEET 8 MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONCRETE CUT OFF WALLS. PAYMENT SHALL BE BASED ON CONCRETE CUT OFF WALLS.

THE CONTRACTOR MAY FURNISH A PRECAST BOX CULVERT IN LIEU OF THE CAST-IN-PLACE BOX CULVERT WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES MAINTENANCE SECTION. THE PRECAST CONCRETE BOX CULVERT SHALL CONFORM TO PRECAST DETAILS IN CHAPTER 36 STANDARDS OF THE CURRENT WISCONSIN DOT BRIDGE MANUAL. PAYMENT FOR THE PRECAST CULVERT SHALL BE BASED ON THE QUANTITIES AND PRICE BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES."

THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE B" REQUIRED ON THE BOX CULVERT SIDES AND BEHIND APRON WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.

"REMOVING STRUCTURE B-10-241" INCLUDES REMOVING OUTLET AND INLET WINGS AND APPROXIMATELY 100' OF EXISTING APPROXIMATELY 10' HIGH AND FOUR EXISTING CULVERT BARRELS.

PLACE 18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING UP WALLS AND ACROSS TOP SLAB AT VERTICAL CONSTRUCTION JOINTS. EXTEND 6" MIN. BELOW TOP OF BOTTOM SLAB.

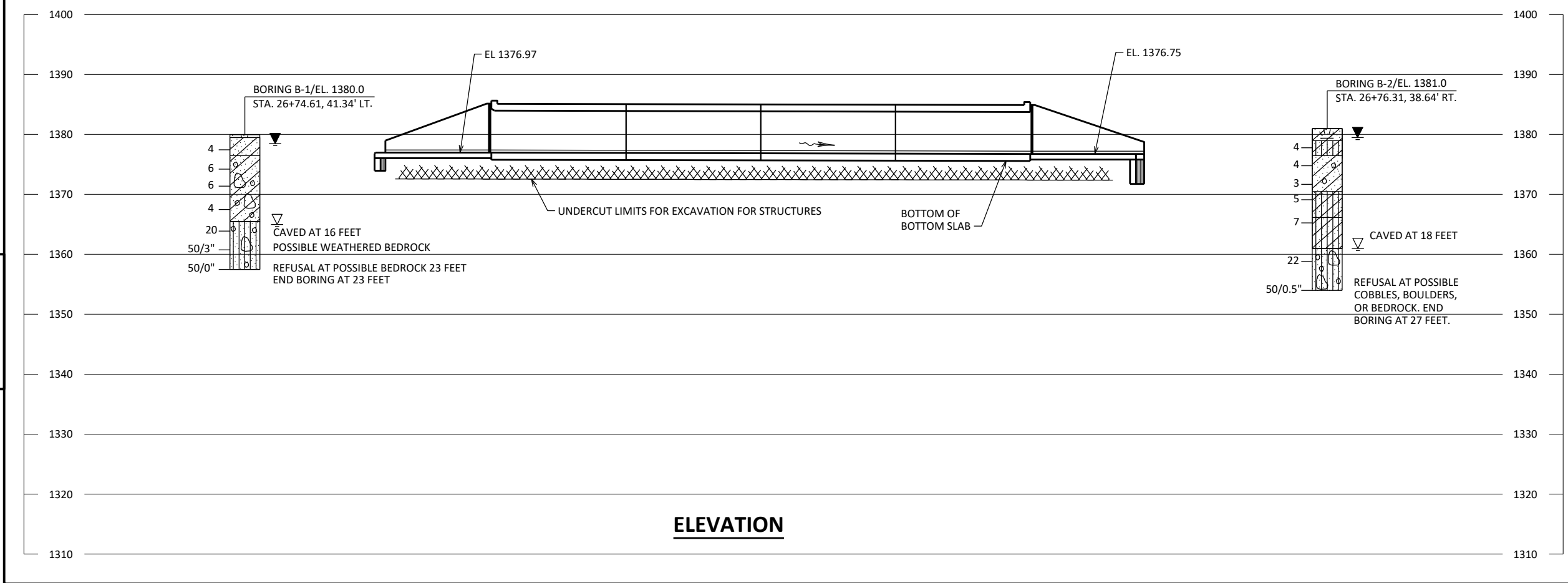
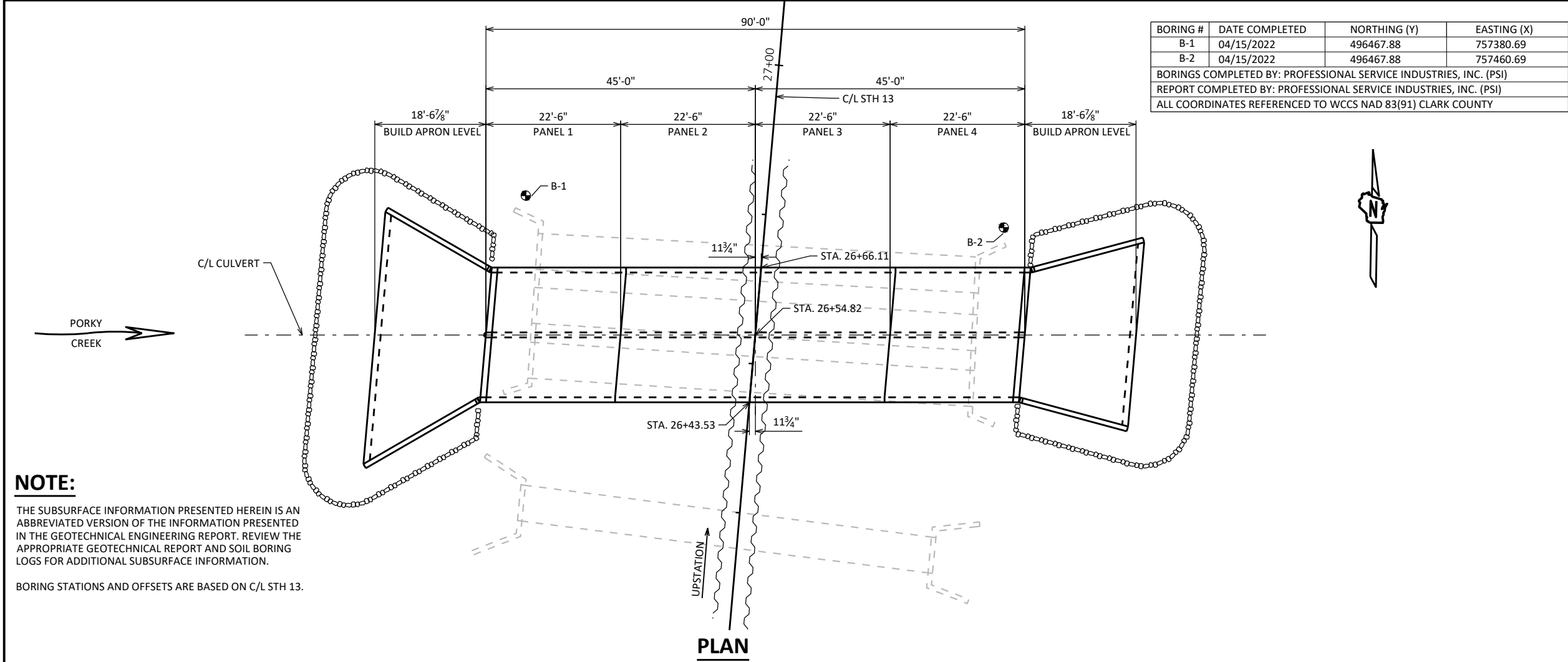
THE EXISTING STRUCTURE, B-10-241, TO BE REMOVED IS A TRIPLE 72" DIA. CORRUGATED METAL CULVERT, WITH A BARREL LENGTH OF 73'-0". A FOURTH AUXILIARY METAL PIPE IS LOCATED SOUTH. THE EXISTING STRUCTURE AND AUXILIARY PIPE SHALL BE USED FOR TEMPORARY DRAINAGE AND REMOVED AFTER BOX CULVERT CONSTRUCTION. REMOVAL OF AUXILIARY CULVERT SHALL BE INCLUDED IN BID ITEM "REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS B-10-241".

STREAM DIVERSION DURING CONSTRUCTION TO BE PAID UNDER ROADWAY ITEM "TEMPORARY
STREAM DIVERSION CULVERT B-10-251". SEE SPECIAL PROVISIONS AND ROADWAY PLANS FOR
DIVERSION DETAILS.



NO.	DATE	REVISION		BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION				
STRUCTURE B-10-251				
DRAWN BY		CJM	PLANS CK'D	VJD
CROSS SECTION AND NOTES			SHEET 2 OF 9	

SCALE =



STATE PROJECT NUMBER
1610-02-73

MATERIAL SYMBOLS

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

LEGEND OF BORING

⁽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 ELEVATION

▽ AT TIME OF DRILLING

▼ END OF DRILLING

▼ AFTER DRILLING

ABBREVIATIONS

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-10-251			
DRAWN BY		CJM	PLANS CK'D VJD
SUBSURFACE EXPLORATION		SHEET 3 OF 9	
		SCALE =	

FOR BILL OF BARS, SEE SHEET 11.



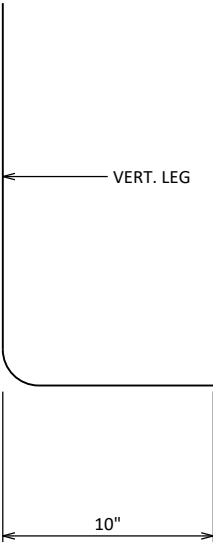
NO.	DATE	REVISION	B
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		B-10-251	
	DRAWN BY	MPG	PLANS CK'D CJM
BARREL REINFORCEMENT		SHEET 4 OF 9	



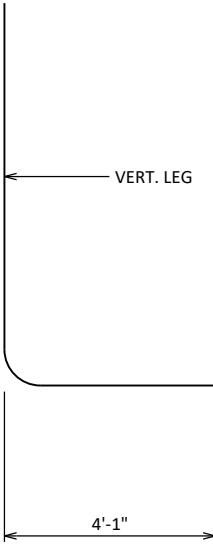
BILL OF BARS

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

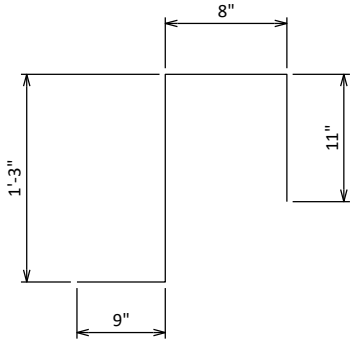
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
C601		544	9'-5"	X		BARREL - ALL CORNERS
C602		136	9'-9"			BOT. SLAB BOT MAT INTERIOR TRANS.
C503		136	22'-3"			BOT. SLAB TOP MAT TRANS.
C404		460	22'-2"			BARREL HORIZONTAL BARS
C505		184	2'-9"			INT. WALL VERT. DOWELS
C406		184	2'-6"			EXT. WALL VERT. DOWELS
C507		184	8'-2"	X		INT. WALL VERT.
C408		184	7'-5"			EXT. WALL VERT.
C609		136	22'-3"			TOP SLAB BOT. MAT TRANS.
C610		136	7'-11"			TOP SLAB TOP MAT INTERIOR TRANS.
C411		136	7'-0"			TOP SLAB TOP MAT MIDSPAN TRANS.
C512		247	4'-0"			LONGIT. CONST. JOINT & APRON DOWELS
C413		4	22'-3"			TOP HEADER HORIZ.
C314		28	3'-4"	X		HEADER INLET VERT.
C315		28	3'-8"	X		HEADER OUTLET VERT.



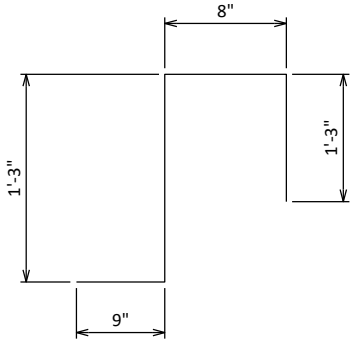
C507



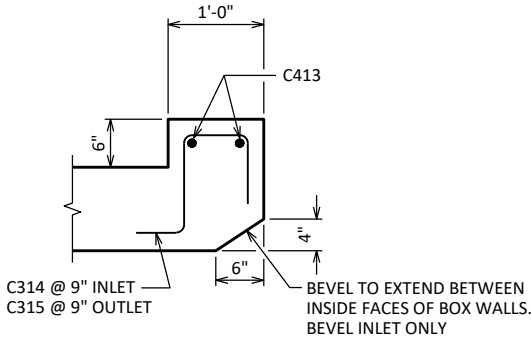
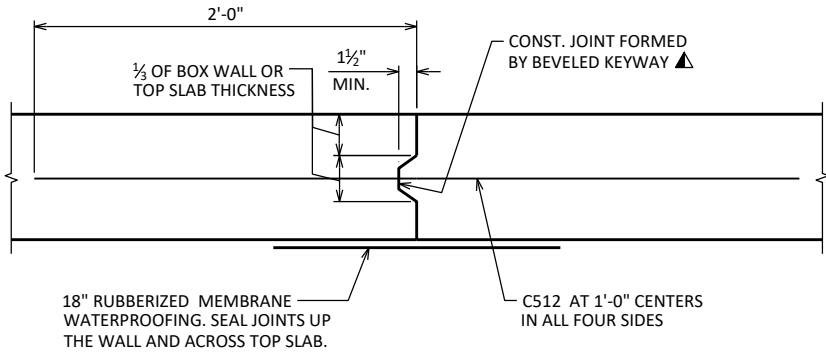
C601



C314



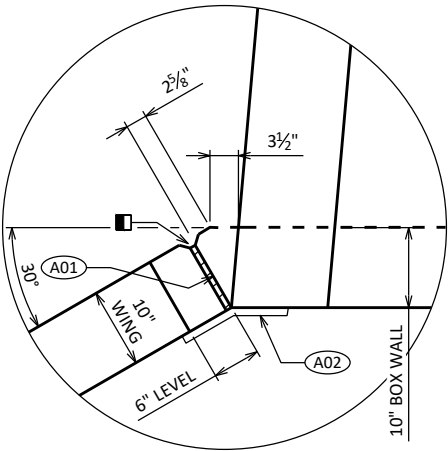
C315



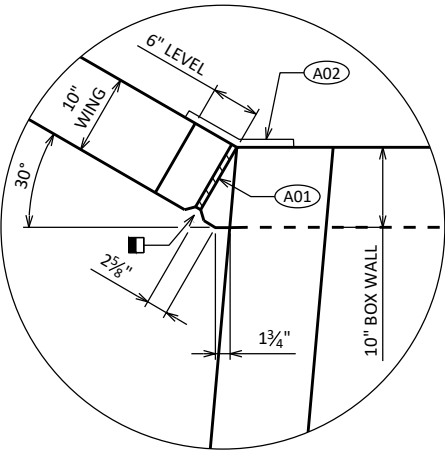
SECTION THRU HEADER

VERTICAL CONSTRUCTION JOINT

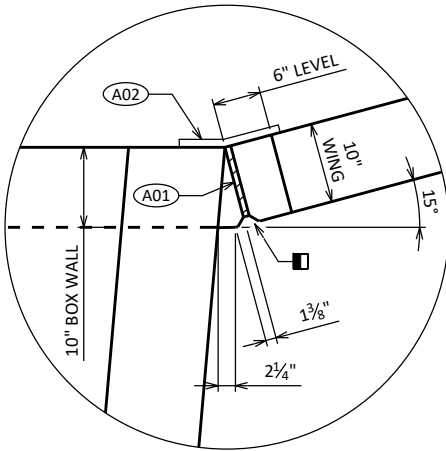
IN LIEU OF CONSTRUCTION JOINTS IN THE BOTTOM SLAB, THE CONTRACTOR MAY USE 2" DEEP SAW CUTS WITHIN 12 HOURS AFTER POURING. #5 BARS 4'-0" AT 1'-0" CENTERS REQUIRED.



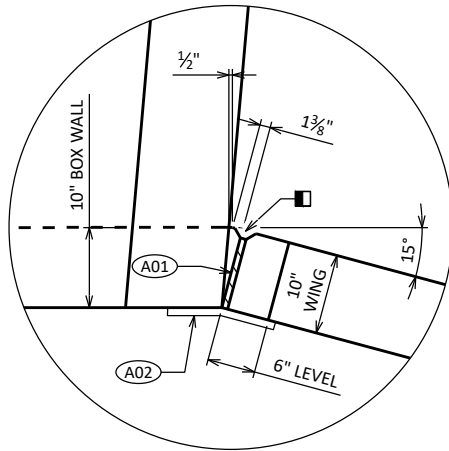
WING 1



WING 2



WING 3



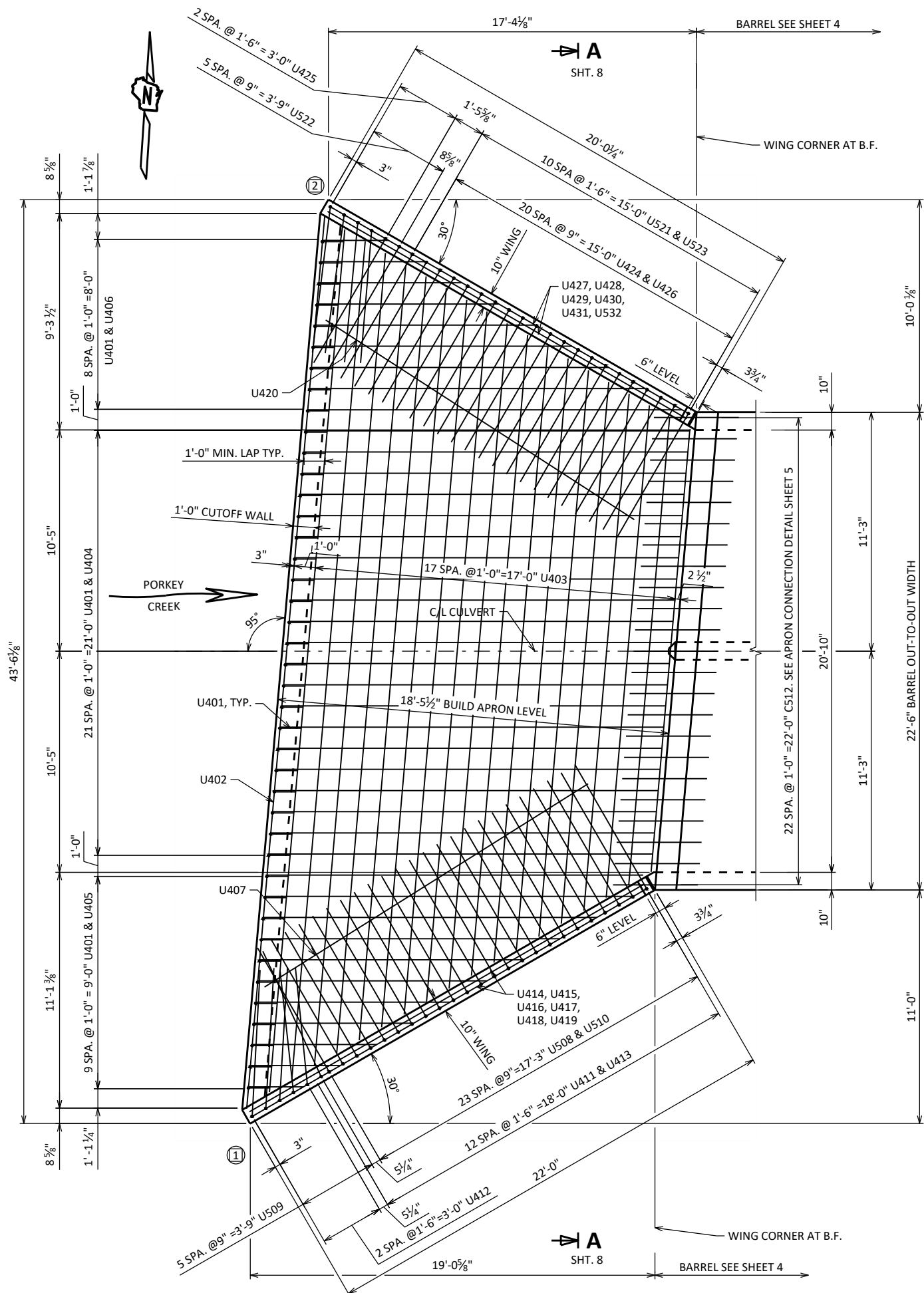
WING 4

CORNER DETAILS

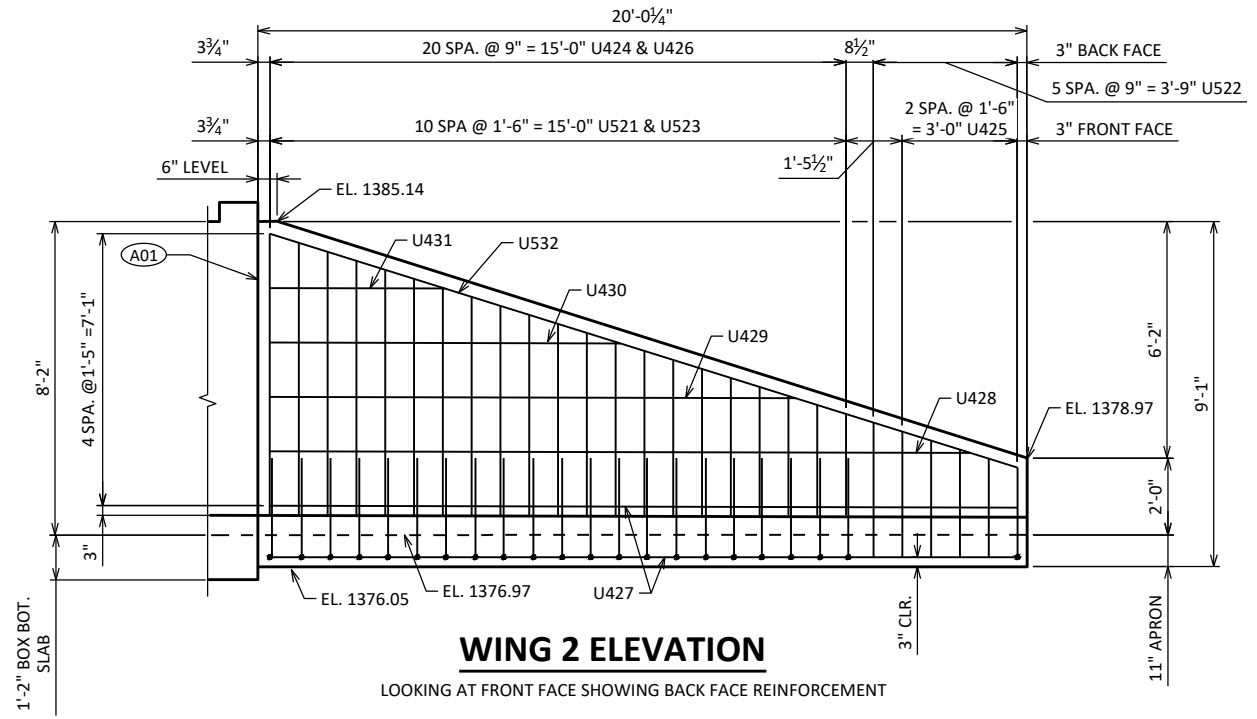
LEGEND

- A01 3/4" FILLER TO EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING
- A02 18-INCH RUBBERIZED MEMBRANE WATERPROOFING. EXTEND FROM HORIZ. CONST. JOINT TO TOP OF WALL (FLUSH WITH FACE OF CONCRETE)
- TYP. 1-INCH BEVEL

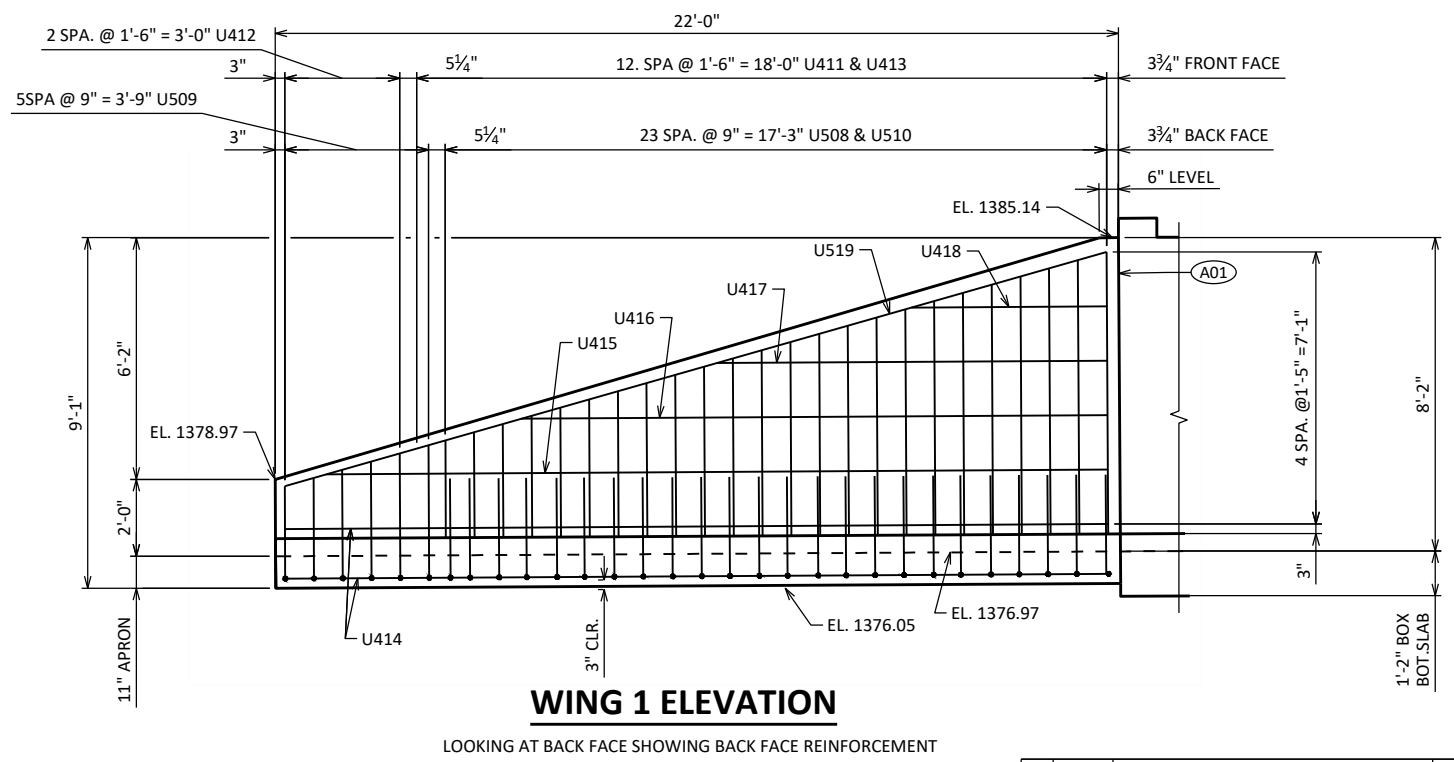
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-10-251			
DRAWN BY		MPG	PLANS CK'D CJM
BARREL DETAILS			SHEET 5 OF 9



INLET APRON PLAN



WING 2 ELEVATION
LOOKING AT FRONT FACE SHOWING BACK FACE REINFORCEMENT



WING 1 ELEVATION
LOOKING AT BACK FACE SHOWING BACK FACE REINFORCEMENT

LEGEND

- (A01) 3/4" FILLER TO EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING FILLER IS INCLUDED IN WING LENGTH
- F.F. = FRONT FACE
B.F. = BACK FACE
- (X) WING NUMBER

NOTES

- DO NOT EXTEND REINFORCEMENT THRU JOINT FILLER
- FOR BILL OF BARS, SEE SHEET 9.
- FOR INLET NOSE DETAILS, SEE APRON DETAILS ON SHEET 8.
- FOR SECTION THRU CUTOFF WALLS, SEE APRON DETAILS ON SHEET 8.
- SEE CORNER DETAILS ON SHEET 5.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-10-251			
DRAWN BY		ZRT	PLANS CK'D CJM
INLET APRON AND WINGWALLS		SHEET 6 OF 9	



LOOKING AT BACK FACE SHOWING BACK FACE REINFORCEMENT

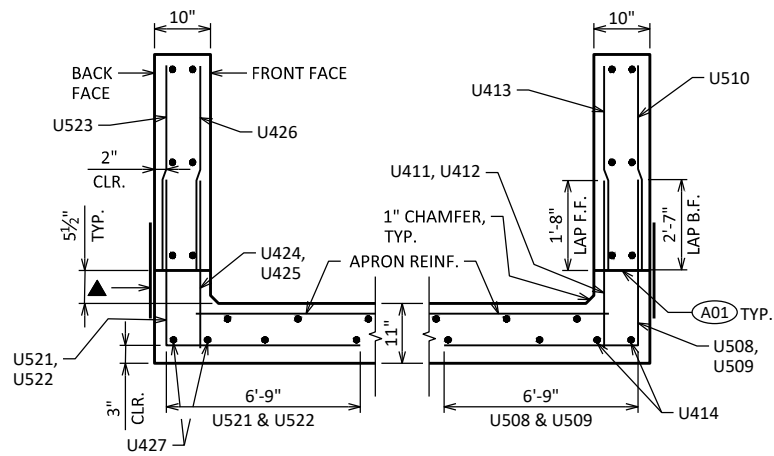


LOOKING AT FRONT FACE SHOWING BACK FACE REINFORCEMENT

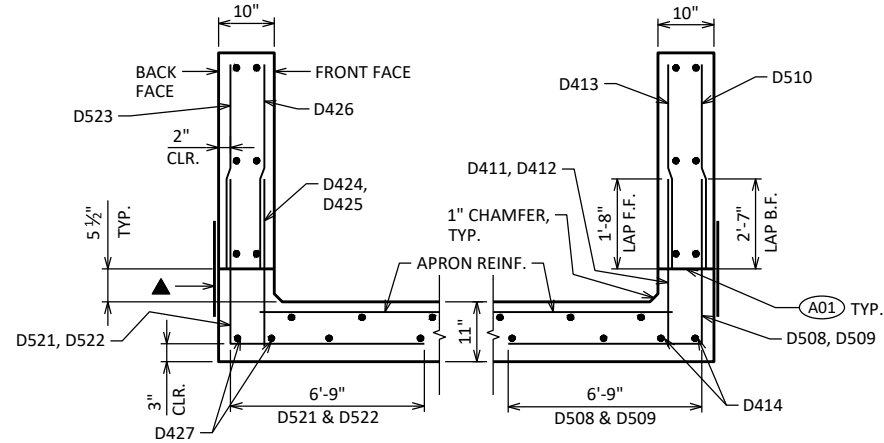
 WING NUMBER

SEE CORNER DETAILS ON SHEET 5.

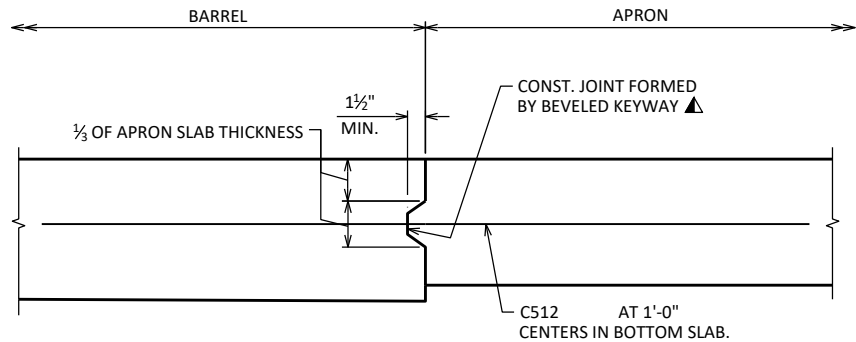
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-10-251			
DRAWN BY		ZRT	PLANS CK'D CJM
OUTLET APRON AND WINGWALLS		SHEET 7 OF 9	



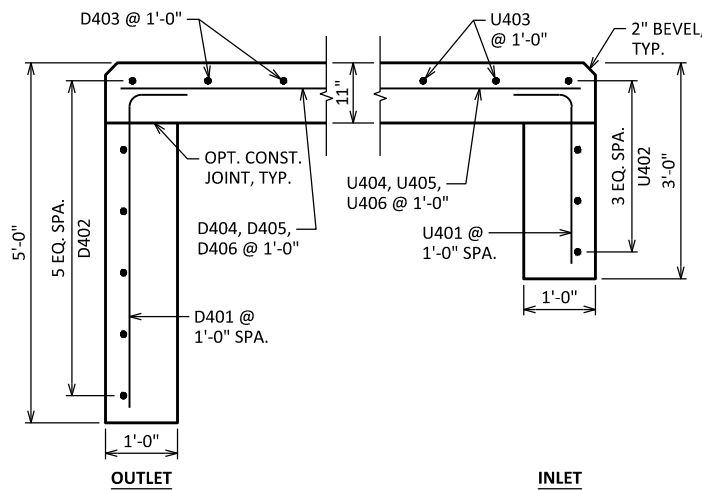
SECTION A THRU WINGS - INLET



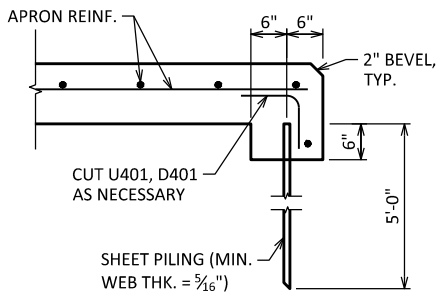
SECTION B - THRU WINGS - OUTLET



APRON CONNECTION DETAIL

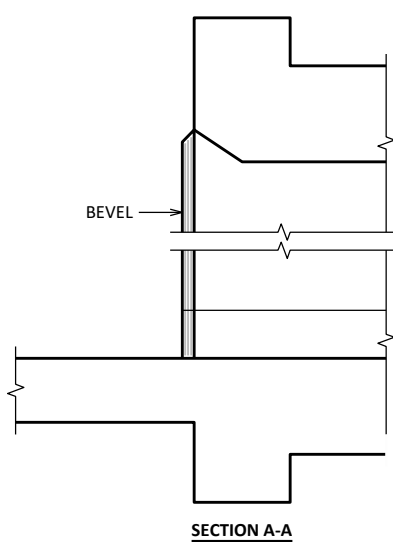
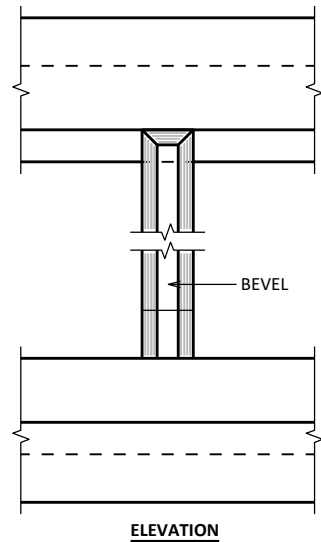
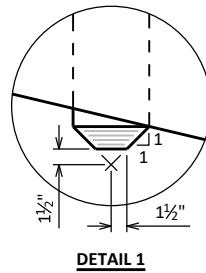
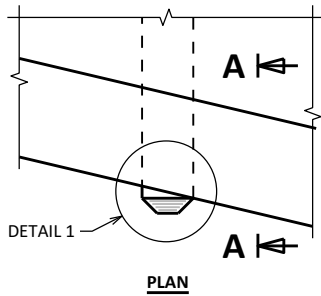


CUT-OFF WALLS

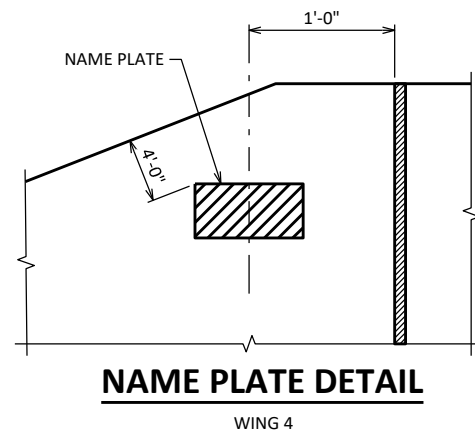


ALTERNATE CUT-OFF WALLS

THE ABOVE ALTERNATIVE MAY BE USED IN LIEU OF CAST-IN-PLACE CONCRETE CUT-OFF WALLS. PAYMENT WILL BE BASED ON THE CONCRETE CUT-OFF WALLS.



INLET NOSE DETAILS



LEGEND

A01 3/4" FILLER TO EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING FILLER IS INCLUDED IN WING LENGTH

▲ 18" RUBBERIZED MEMBRANE WATERPROOFING, PLACE ALONG HORIZ. CONST. JT. FOR ENTIRE LENGTH OF WING, TYP.

▲ IN LIEU OF CONSTRUCTION JOINTS IN THE BOTTOM SLAB, THE CONTRACTOR MAY USE 2" DEEP SAW CUTS WITHIN 12 HOURS AFTER POURING. #5 BARS 4'-0" AT 1'-0" CENTERS REQUIRED.

F.F. = FRONT FACE
B.F. = BACK FACE

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BILL OF BARS - INLET

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
U401		41	3'-8"	X		VERT. CUTOFF WALL
U402		4	41'-8"			HORIZ. CUTOFF WALL
▲ U403		18	31'-10"		X	APRON SLAB TRANS.
U404		22	18'-1"			APRON SLAB LONGIT.
▲ U405		10	10'-0"		X	APRON SLAB LONGIT. @ WING 1
▲ U406		9	10'-0"		X	APRON SLAB LONGIT. @ WING 2
U407	X	1	17'-0"			APRON SLAB - WING 1 BAR SPACER
U508	X	24	10'-5"	X		WING 1 B.F. DOWEL
▲ U509	X	6	9'-7"	X	X	WING 1 B.F. DOWEL
▲ U510	X	24	4'-11"		X	WING 1 B.F. VERT.
U411	X	13	2'-10"			WING 1 F.F. DOWEL
▲ U412	X	3	3'-0"		X	WING 1 F.F. DOWEL
▲ U413	X	13	5'-0"		X	WING 1 F.F. VERT
U414	X	4	21'-5"			WING 1 E.F. HORIZ.
U415	X	2	21'-0"			WING 1 E.F. HORIZ.
U416	X	2	16'-4"			WING 1 E.F. HORIZ.
U417	X	2	11'-4"			WING 1 E.F. HORIZ.
U418	X	2	6'-5"			WING 1 E.F. HORIZ.
U519	X	2	22'-0"			WING 1 E.F. DIAG.
U420	X	1	16'-5"			APRON SLAB - WING 2 BAR SPACER
U521	X	11	10'-5"	X		WING 2 B.F. DOWEL
▲ U522	X	6	9'-8"	X	X	WING 2 B.F. DOWEL
▲ U523	X	11	5'-1"		X	WING 2 B.F. VERT.
U424	X	21	2'-11"			WING 2 F.F. DOWEL
▲ U425	X	3	2'-11"		X	WING 2 F.F. DOWEL
▲ U426	X	21	6'-3"		X	WING 2 F.F. VERT.
U427	X	4	19'-6"			WING 2 E.F. HORIZ.
U428	X	2	18'-11"			WING 2 E.F. HORIZ.
U429	X	2	14'-5"			WING 2 E.F. HORIZ.
U430	X	2	9'-11"			WING 2 E.F. HORIZ.
U431	X	2	5'-5"			WING 2 E.F. HORIZ.
U532	X	2	20'-2"			WING 2 E.F. DIAG.

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

BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO REQ'D.	LENGTH
U403	1 SERIES OF 18	22'-1" TO 41'-7"
U405	1 SERIES OF 10	2'-7" TO 17'-5"
U406	1 SERIES OF 9	2'-8" TO 17'-4"
U509	1 SERIES OF 6	9'-1" TO 10'-1"
U510	1 SERIES OF 24	2'-6" TO 7'-4"
U412	1 SERIES OF 3	2'-7" TO 3'-5"
U413	1 SERIES OF 13	2'-6" TO 7'-6"
U522	1 SERIES OF 6	9'-1" TO 10'-3"
U523	1 SERIES OF 11	2'-9" TO 7'-5"
U425	1 SERIES OF 3	2'-6" TO 3'-4"
U426	1 SERIES OF 21	3'-11" TO 8'-7"

BILL OF BARS - OUTLET

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

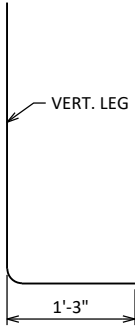
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
D401		30	5'-8"	X		VERT. CUTOFF WALL
D402		6	30'-7"			HORIZ. CUTOFF WALL
▲ D403		18	26'-10"		X	APRON SLAB TRANS.
D404		22	18'-2"			APRON SLAB LONGIT.
▲ D405		4	11'-0"		X	APRON SLAB LONGIT. @ WING 3
▲ D406		4	10'-7"		X	APRON SLAB LONGIT. @ WING 4
D407	X	1	16'-6"			APRON SLAB - WING 3 BAR SPACER
D508	X	21	10'-5"	X		WING 3 B.F. DOWEL
▲ D509	X	4	9'-7"	X	X	WING 3 B.F. DOWEL
▲ D510	X	21	5'-3"		X	WING 3 B.F. VERT.
D411	X	11	2'-9"			WING 3 F.F. DOWEL
▲ D412	X	3	2'-11"		X	WING 3 F.F. DOWEL
▲ D413	X	11	6'-0"		X	WING 3 F.F. VERT
D414	X	4	18'-11"			WING 3 E.F. HORIZ.
D415	X	2	18'-2"			WING 3 E.F. HORIZ.
D416	X	2	13'-10"			WING 3 E.F. HORIZ.
D417	X	2	9'-7"			WING 3 E.F. HORIZ.
D418	X	2	5'-3"			WING 3 E.F. HORIZ.
D519	X	2	19'-11"			WING 3 E.F. DIAG.
D420	X	1	17'-1"			APRON SLAB - WING 4 BAR SPACER
D521	X	20	10'-5"	X		WING 4 B.F. DOWEL
▲ D522	X	5	9'-7"	X	X	WING 4 B.F. DOWEL
▲ D523	X	20	5'-0"		X	WING 4 B.F. VERT.
D424	X	10	2'-10"			WING 4 F.F. DOWEL
▲ D425	X	3	2'-11"		X	WING 4 F.F. DOWEL
▲ D426	X	10	6'-2"		X	WING 4 F.F. VERT.
D427	X	4	18'-2"			WING 4 E.F. HORIZ.
D428	X	2	17'-6"			WING 4 E.F. HORIZ.
D429	X	2	13'-4"			WING 4 E.F. HORIZ.
D430	X	2	9'-1"			WING 4 E.F. HORIZ.
D431	X	2	4'-11"			WING 4 E.F. HORIZ.
D532	X	2	18'-8"			WING 4 E.F. DIAG.

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

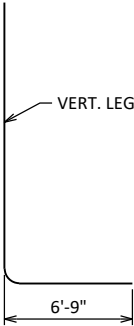
BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO REQ'D.	LENGTH
D403	1 SERIES OF 18	22'-3" TO 31'-5"
D405	1 SERIES OF 4	5'-7" TO 16'-5"
D406	1 SERIES OF 4	4'-10" TO 16'-4"
D509	1 SERIES OF 4	9'-1" TO 10'-1"
D510	1 SERIES OF 21	2'-10" TO 7'-8"
D412	1 SERIES OF 3	2'-5" TO 3'-5"
D413	1 SERIES OF 11	3'-7" TO 8'-5"
D522	1 SERIES OF 5	9'-1" TO 10'-1"
D523	1 SERIES OF 20	2'-7" TO 7'-5"
D425	1 SERIES OF 3	2'-5" TO 3'-5"
D426	1 SERIES OF 10	3'-11" TO 8'-5"

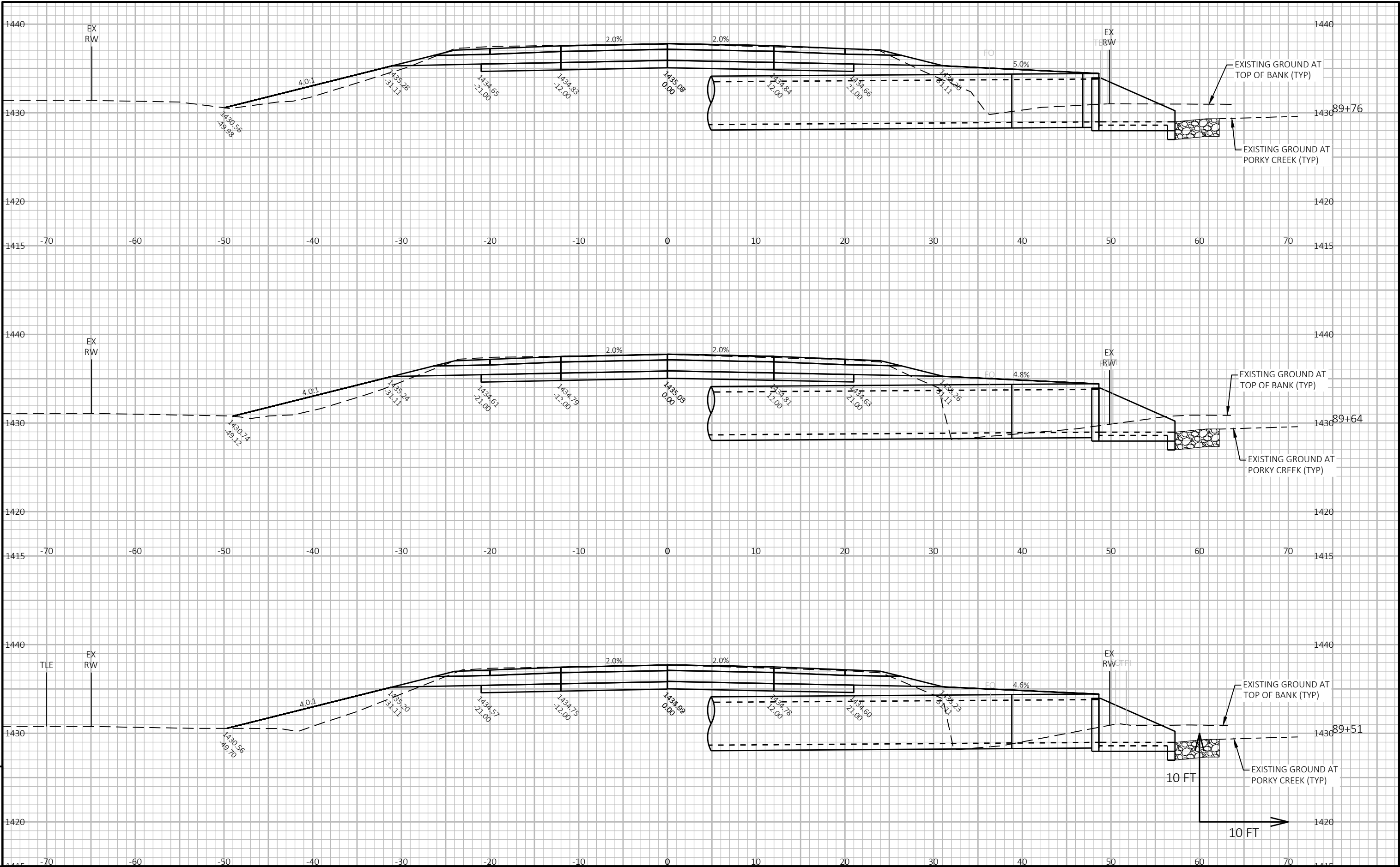


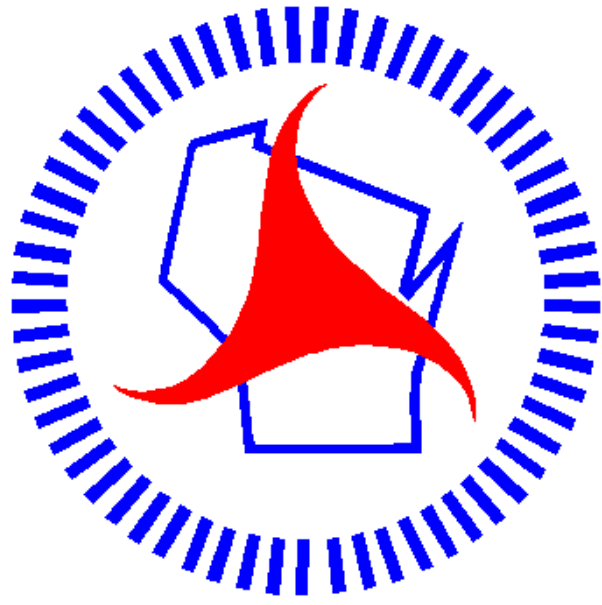
U401, D401



U508, U509, U521, U522
D508, D509, D521, D522,

NO.	DATE	REVISION	BY
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		ZRT	CJM
APRON BAR STEEL DETAILS		SHEET 9 OF 9	





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