

GRE

WITH:

PROJECT ID: 1009-30-13

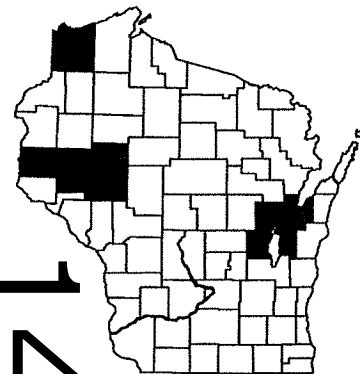
COUNTY: BROWN

MAY 2018

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 = 86



DESIGN DESIGNATION

A.A.D.T.	=	N/A
A.A.D.T.	=	N/A
D.H.V.	=	N/A
D.D.	=	N/A
T.	=	N/A
DESIGN SPEED	=	N/A
ESALS	=	N/A

CONVENTIONAL SYMBOLS

PLAN	
CORPORATE LIMITS	////
PROPERTY LINE	---
LOT LINE	- - - -
LIMITED HIGHWAY EASEMENT	L---
EXISTING RIGHT OF WAY	=====
PROPOSED OR NEW R/W LINE	=====
SLOPE INTERCEPT	- - - -
REFERENCE LINE	=====
EXISTING CULVERT	- - - -
PROPOSED CULVERT (Box or Pipe)	=====
COMBUSTIBLE FLUIDS	CAUTION
MARSH AREA	~~~~~
WOODED OR SHRUB AREA	~~~~~

PROFILE	
GRADE LINE	=====
ORIGINAL GROUND	=====
MARSH OR ROCK PROFILE (To be noted as such)	=====
SPECIAL DITCH	=====
GRADE ELEVATION	95.36
CULVERT (Profile View)	=====
UTILITIES	
ELECTRIC	— E —
FIBER OPTIC	— FO —
GAS	— G —
SANITARY SEWER	— SAN —
STORM SEWER	— SS —
TELEPHONE	— T —
WATER	— W —
UTILITY PEDESTAL	=====
POWER POLE	=====
TELEPHONE POLE	=====

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
SIGN BRIDGE REPLACEMENT
REGIONWIDE VARIOUS ROUTES
VAR HWY
BROWN COUNTY

STATE PROJECT NUMBER
1009-30-13



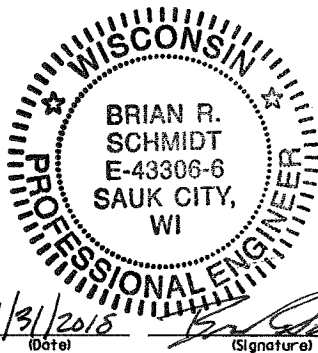
LAYOUT
SCALE 0 0 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.0 MI.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1009-30-13	WISC 2018241	1

ORIGINAL PLANS PREPARED BY

FICKETT 3148 Deming Way
Suite 160
Structural Solutions Middleton, WI 53562



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	
Designer	FICKETT STRUCTURAL SOLUTIONS
Project Manager	KYLE TREML
Regional Examiner	
Regional Supervisor	CHRISTIAN BLAZEK
C.O. Examiner	

APPROVED FOR THE DEPARTMENT
DATE: 1/31/18 (Signature)

GENERAL NOTES

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

DESIGN CONTACT

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AMY LESIK (715) 836-6571 AMYL.LESIK@WISCONSIN.GOV
BUFFALO, DUNN, PIERCE, PEPIN, TREMPLEAU, ST. CROIX COUNTIES

TRAFFIC CONTACTS

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NORTHWEST REGION: CHAD HINES (715) 836-7276 CHAD.HINES@DOT.WI.GOV

REGIONAL ANCILLARY ENGINEER CONTACTS

NORTHEAST REGION: BRADY RADES (920) 492-4152 BRADY.RADES@DOT.WI.GOV

NORTHWEST REGION: KYLE HARRIS (715) 579-3516 KYLE.HARRIS@DOT.WI.GOV



BROWN COUNTY

STRUCTURE NUMBER	HIGHWAY	DIRECTION	LOCATION
S-05-0101	IH-43	NB	IH 43 NB AT EXIT RAMP TO CTH JJ
S-05-0103	STH 32	NB	STH 32 NB JUST SOUTH OF GLORY ROAD

CALUMET COUNTY

STRUCTURE NUMBER	HIGHWAY	DIRECTION	LOCATION
S-08-0001	STH 441	SB	0.7 MILE NORTH OF JCT USH 10
S-08-0008	STH 441	NB	STH 441 NB AT EXIT RAMP TO CTH KK

CHIPPEWA COUNTY

STRUCTURE NUMBER	HIGHWAY	DIRECTION	LOCATION
S-09-0013	STH 29	EB	STH 29 EB, 0.12 MI E OF USH 53 UNDER
S-09-0032	USH 53	SB	USH 53 SB EXIT RAMP TO CTH OO

DOUGLAS COUNTY

STRUCTURE NUMBER	HIGHWAY	DIRECTION	LOCATION
S-16-0022	USH 2/53	NB/SB	USH 2/53, INSIDE SWEF 72

DUNN COUNTY

STRUCTURE NUMBER	HIGHWAY	DIRECTION	LOCATION
S-17-0004	IH-94	EB	EB IH 94 ON WILSON ST OVER (BRIDGE B-17-40)

EAU CLAIRE COUNTY

STRUCTURE NUMBER	HIGHWAY	DIRECTION	LOCATION
S-18-0009	IH-94	EB	RAMP TO USH 53 N, 0.10 MI E OF 53 OVER
S-18-0101	USH 53	SB	USH 53-S, RAMP TO CTH AA
S-18-0120	IH-94	EB	RAMP TO USH 53 N, 0.10 MI E OF 53 OVER

OUTAGAMIE COUNTY

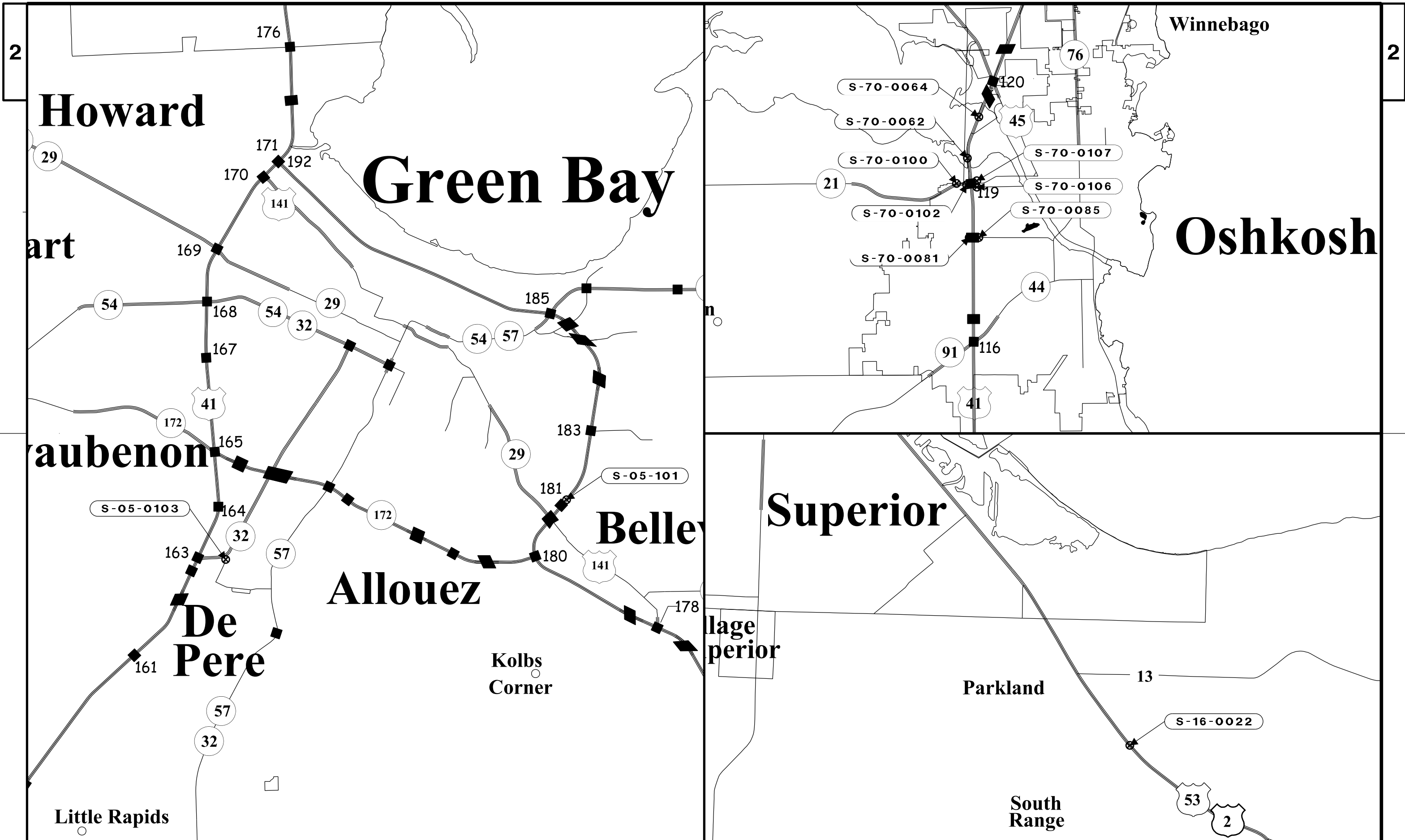
STRUCTURE NUMBER	HIGHWAY	DIRECTION	LOCATION
S-44-0002	STH 441	NB	STH 441 NB, 1/4 MILE SOUTH OF IH 41
S-44-0006	STH 441	NB/SB	STH 441 NB/SB, 1/4 MILE SOUTH OF CTH E
S-44-0020	STH 96	WB	STH 96 WB AT STH 76 INTERSECTION
S-44-0028	STH 441	NB	STH 441 NB AT SPLIT TO IH-41
S-44-0034	IH-41	NB	IH-41 NB, 1/2 MI WEST OF STH 441
S-44-0035	IH-41	NB	IH 41 NB AT EXIT TO STH 441 SOUTH

SAINT CROIX COUNTY

STRUCTURE NUMBER	HIGHWAY	DIRECTION	LOCATION
L-55-0004	IH-94	WB	IH-94 WB. 0.35 MI W OF 11TH ST OVER. NE QUADRANT STH 35-N / IH-94

WINNEBAGO COUNTY

STRUCTURE NUMBER	HIGHWAY	DIRECTION	LOCATION
S-70-0036	IH-41	NB	IH-41 NB, AT EXIT TO CTH BB
S-70-0041	USH 10	WB	USH 10 WB AT GORE TO USH 45 NB/SB
S-70-0042	USH 10	WB	USH 10 WB AT USH 45 NB ENTRANCE RAMP
S-70-0046	USH 45	SB	USH 45 SB AT GORE TO USH 10 WB
S-70-0062	IH-41	SB	IH-41 SB, 500' NORTH OF STH 21
S-70-0064	IH-41	SB	IH-41 SB, LAKE BUTTE DES MORTS, 3/4MI NORTH OF STH 21
S-70-0081	IH-41	SB	IH-41 SB OFF RAMP TO 9TH AVE
S-70-0085	LRD	WB	9TH AVE WB JUST WEST OF KOELLER ST. (OSHKOSH)
S-70-0100	STH 21	WB	STH 21 WB JUST EAST OF OMRO RD
S-70-0102	STH 21	EB	STH 21 EB, 500' WEST OF IH-41
S-70-0106	IH-41	NB	IH-41 NB AT EXIT TO STH 21
S-70-0107	STH 21	EB	STH 21 JUST EAST OF IH-41
S-70-0125	LRD	WB	WB BELL STREET JUST WEST OF HARRISON STREET (NEENAH)



PROJECT NO: 1009-30-13

HWY: VARIOUS

COUNTY: BROWN, DOUGLAS, WINNEBAGO

COUNTY STRUCTURE LOCATION

SCALE: NOT TO SCALE

SHEET 1 OF 3 E

FILE NAME : ...\\10093013_Microstation File.dgn

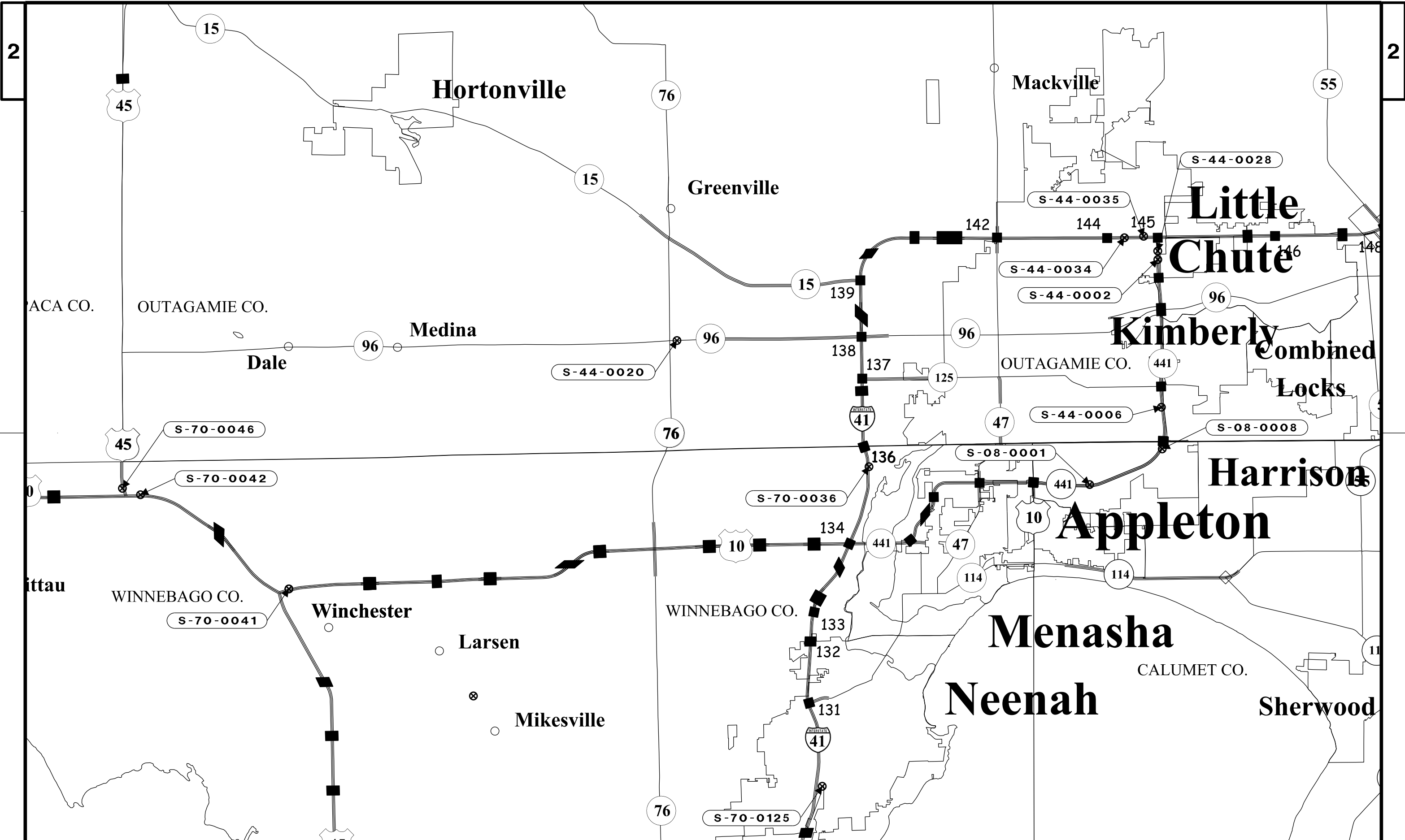
PLOT DATE : 1/31/2018

PLOT BY : BSchmidt

PLOT NAME : _____

PLOT SCALE : Not to Scale

WISDOT/CADDs SHEET 42



PROJECT NO: 1009-30-13

HWY: VARIOUS

COUNTY: CALUMET, OUTAGAMIE, WINNEBAGO

COUNTY STRUCTURE LOCATION

SCALE: NOT TO SCALE

SHEET 2 OF 3 E

FILE NAME : ...\\10093013_Microstation File.dgn

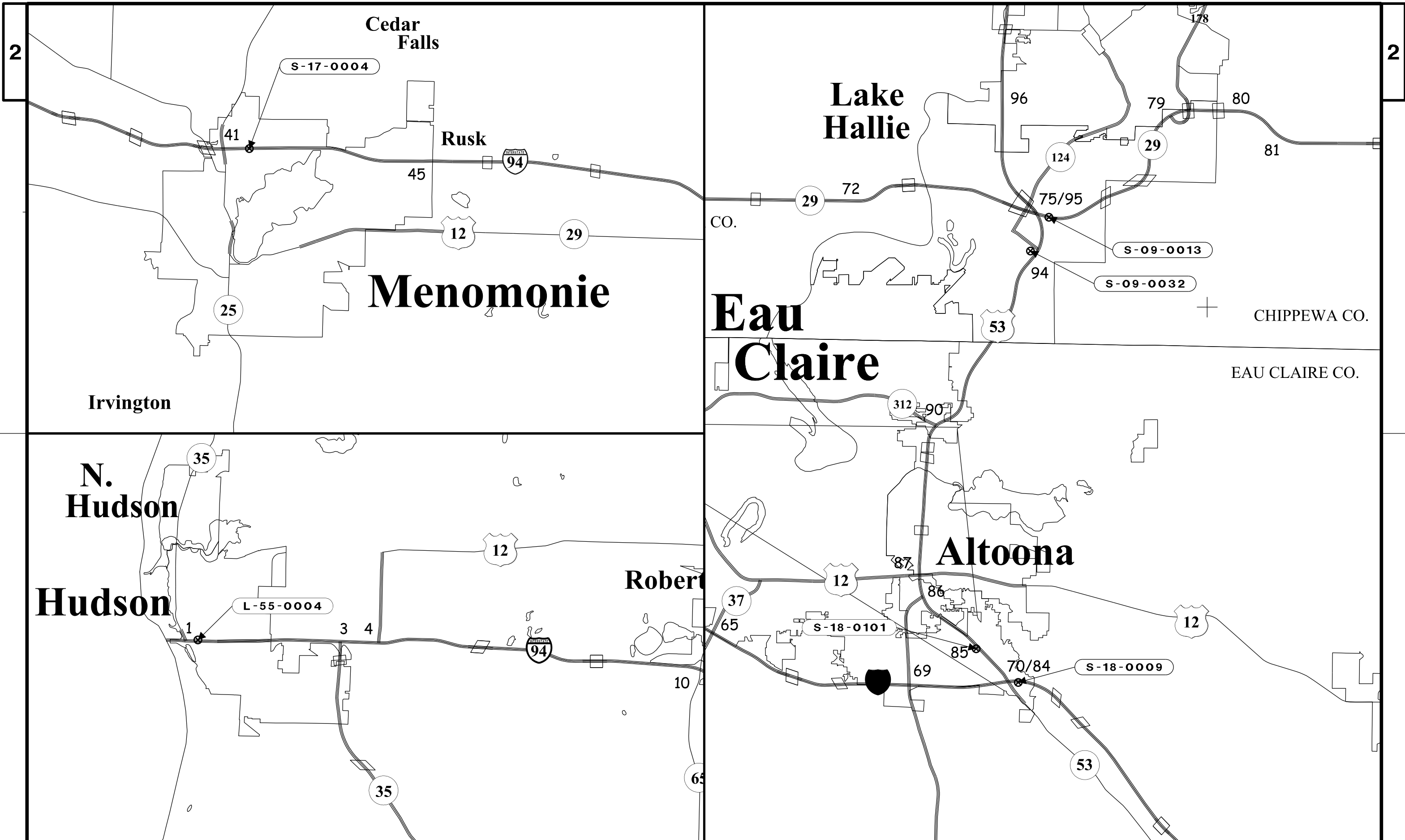
PLOT DATE : 1/31/2018

PLOT BY : BSchmidt

PLOT NAME : _____

PLOT SCALE : Not to Scale

WISDOT/CADDs SHEET 42

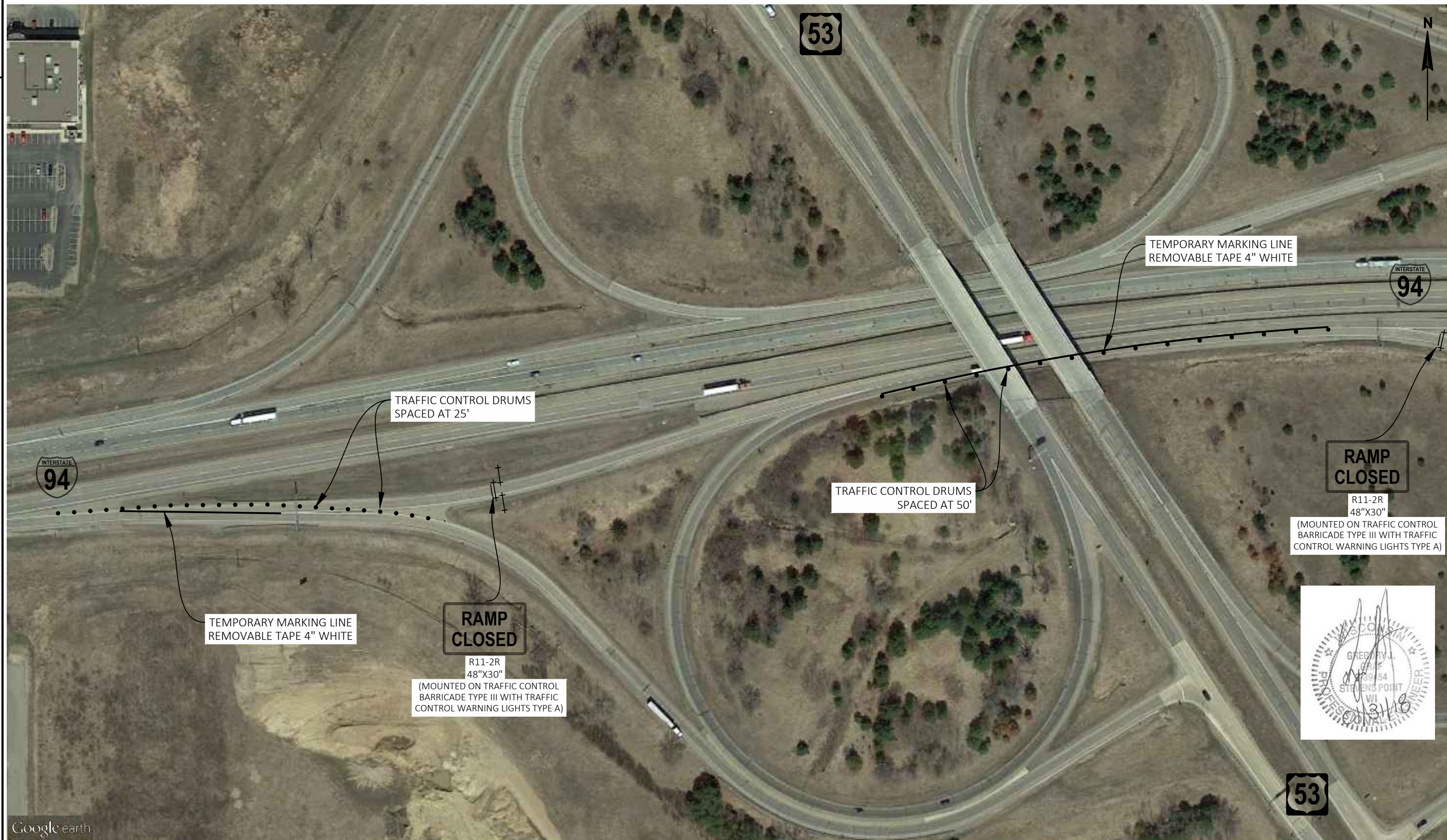


TRAFFIC CONTROL AND WORK RESTRICTIONS

REGION	STRUCTURE NUMBER	HIGHWAY	DIRECTION OF TRAVEL	LOCATION	TRAFFIC CONTROL	RESTRICTED HOURS
Northeast	S-05-0101	IH-43	NB	IH 43 NB AT EXIT RAMP TO CTH JJ	SDD15d12	NONE
Northeast	S-05-0103	STH 32	NB	STH 32 NB JUST SOUTH OF GLORY ROAD	SDD15d20	NONE
Northeast	S-08-0001	STH 441	NB/SB	0.7 MILE NORTH OF JCT USH 10	SDD15d12	NORTHBOUND: MONDAY-FRIDAY 7:00 AM - 8:00 AM, 2:00 PM-7:00 PM SOUTHBOUND: MONDAY - FRIDAY 6:00 AM - 9:00 AM, 3:00PM - 6:00PM
Northeast	S-08-0008	STH 441	NB	STH 441 NB AT EXIT RAMP TO CTH FF	SDD15d12	NONE
Northwest	S-09-0013	STH 29	EB	0.12 MI E OF USH 53 UNDER	NOTE 4, SDD15d12	FRIDAY: 11-00 AM - 7:00 PM
Northwest	S-09-0032	USH 53	SB	USH 53 SB EXIT RAMP TO CTH OO	SDD15d12, SDD15d14	NONE
Northwest	S-16-0022	USH 2/53	NB/SB	LOCATED INSIDE SWEF 72, SOUTH OF SUPERIOR	NOTE 5	NONE
Northwest	S-17-0004	IH-94	EB	EB IH 94 ON WILSON ST OVER (BRIDGE B-17-40)	SDD15d12	9:00 AM TO 6:00 PM
Northwest	S-18-0009	IH-94	EB	RAMP TO USH 53 N, 0.10 MI E OF 53 OVERPASS	SEE TRAFFIC CONTROL DETAILS	NONE
Northwest	S-18-0101	USH 53	SB	USH 53-S, RAMP TO CTH AA	SDD15d16	NONE
Northwest	S-18-0120	IH-94	EB	RAMP TO USH 53 N, 0.10 MI E OF 53 OVERPASS	SEE TRAFFIC CONTROL DETAILS	NONE
Northeast	S-44-0002	STH 441	NB	STH 441 NB, 1/4 MILE SOUTH OF IH 41	SDD15d12	MONDAY - FRIDAY 7:00 AM - 10:00 AM, 4:00 PM - 7:00 PM
Northeast	S-44-0006	STH 441	NB/SB	STH 441 NB/SB, 1/4 MILE SOUTH OF CTH E	SDD15d12	NONE
Northeast	S-44-0020	STH 96	WB	STH 96 WB AT STH 76 INTERSECTION	SDD15d28	NONE
Northeast	S-44-0028	STH 441	NB	STH 441 NB AT SPLIT TO USH-41	SDD15d12	MONDAY - FRIDAY 7:00 AM - 10:00 AM, 4:00 PM - 7:00 PM
Northeast	S-44-0034	IH-41	NB	IH-41 NB, 1/2 MI WEST OF STH 441	SDD15d12	MONDAY - SATURDAY 6:00 AM - 7:00 PM, SUNDAY 10:00 AM - 7:00 PM
Northeast	S-44-0035	IH-41	NB	IH 41 NB AT EXIT TO STH 441 SOUTH	SDD15d12	MONDAY - SATURDAY 6:00 AM - 7:00 PM, SUNDAY 10:00 AM - 7:00 PM
Northwest	L-55-0004	IH-94	WB	I-94 WB. 0.35 MI W OF 11TH ST OVER. NE QUADRANT STH 35-N / IH-94	NOTE 3, SDD15d12	5:00 AM TO 7:00 PM
Northeast	S-70-0036	IH-41	NB	IH-41 NB, AT EXIT TO CTH BB	SDD15d12	MONDAY - FRIDAY 2:00 PM - 6:00 PM
Northeast	S-70-0041	USH 10	WB	USH 10 WB AT GORE TO USH 45 NB/SB	SDD15d27	NONE
Northeast	S-70-0042	USH 10	WB	USH 10 WB AT USH 45 NB ENTRANCE RAMP	SDD15d27	NONE
Northeast	S-70-0046	USH 45	SB	USH 45 SB AT GORE TO USH 10 WB	SDD15d16, SDD15d27	RAMP CLOSURE
Northeast	S-70-0062	IH-41	SB	IH-41 SB, 500' NORTH OF STH 21	SDD15d27	NONE
Northeast	S-70-0064	IH-41	SB	IH-41 SB, LAKE BUTTE DES MORTS, 3/4MI NORTH OF STH 21	SDD15d12	MONDAY - FRIDAY 3:00 PM - 6:00 PM
Northeast	S-70-0081	IH-41	SB	IH-41 SB OFF RAMP TO 9TH AVE	SDD15d12	NONE
Northeast	S-70-0085	LRD	WB	9TH AVE WB JUST WEST OF KOELLER ST. (OSHKOSH)		NONE
Northeast	S-70-0100	STH 21	WB	STH 21 WB JUST EAST OF OMRO RD		NONE
Northeast	S-70-0102	STH 21	EB	STH 21 EB, 500' WEST OF IH-41	SDD15d12	MONDAY - FRIDAY 6:00 AM - 8:00 AM, 4:00 PM - 6:00 PM
Northeast	S-70-0106	IH-41	NB	IH-41 NB AT EXIT TO STH 21		NONE
Northeast	S-70-0107	STH 21	WB	STH 21 JUST EAST OF IH-41		NONE
Northeast	S-70-0125	LRD	WB	WB BELL STREET JUST WEST OF HARRISON STREET (NEENAH)		NONE

TRAFFIC CONTROL NOTES

1. RESTRICTED HOUR TABLE INDICATES TIME FRAMES WHEN LANE CLOSURES ARE NOT PERMITTED.
2. PRE-WARN TRAFFIC WITH PCMS AND PRESS RELEASE AS DESIGNATED.
3. COORDINATE WITH PROJECT 1020-06-75.
4. WHEN CLOSING RIGHT LANE, ALSO CLOSE AUXILLARY LANE KEEP RAMPS OPEN WHEN POSSIBLE USING SSD15D15.
5. COORDINATE WITH WISCONSIN STATE PATROL TO PERFORM REPAIRS OF STRUCTURES RELATED TO SWEF 72.



PROJECT NO: 47-0306.00

HWY: USH 53

COUNTY: EAU CLAIRE

TRAFFIC CONTROL DETAILS

SHEET

E

FILE NAME : V:\TRANS-MD\470306\025001_TC.DWG
LAYOUT NAME - 01

PLOT DATE : 1/31/2018 1:31 PM

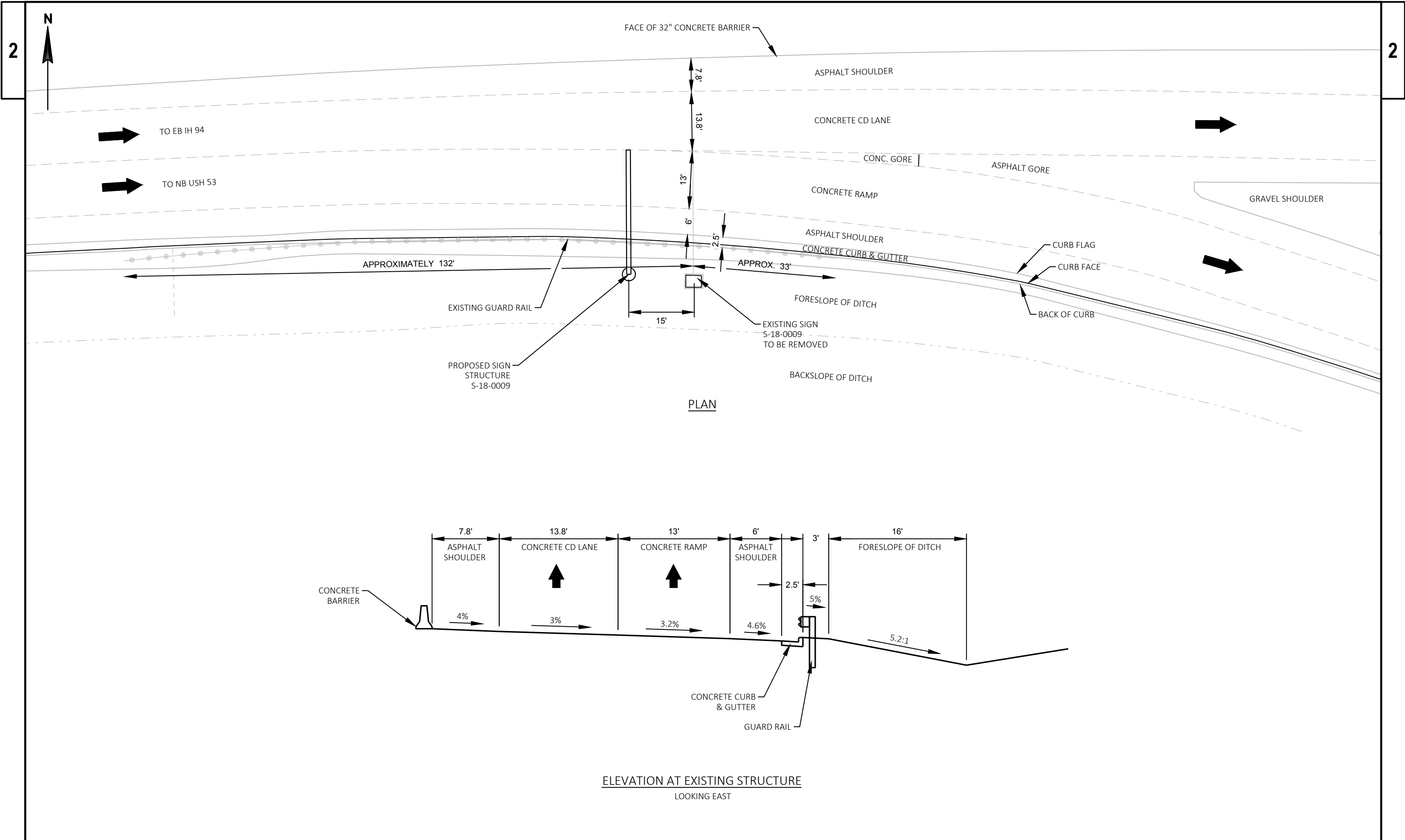
PLOT BY : MUENCH, DOUGLAS

PLOT NAME :

PLOT SCALE : #####

WISDOT/CADDs SHEET 42





Estimate Of Quantities

1009-30-13

Line	Item	Item Description	Unit	Total	Qty
0002	619.1000	Mobilization	EACH	1.000	1.000
0004	625.0100	Topsoil	SY	330.000	330.000
0006	628.1504	Silt Fence	LF	300.000	300.000
0008	628.1520	Silt Fence Maintenance	LF	300.000	300.000
0010	628.1905	Mobilizations Erosion Control	EACH	1.000	1.000
0012	628.2002	Erosion Mat Class I Type A	SY	330.000	330.000
0014	629.0210	Fertilizer Type B	CWT	0.210	0.210
0016	630.0120	Seeding Mixture No. 20	LB	6.000	6.000
0018	636.0100	Sign Supports Concrete Masonry	CY	8.000	8.000
0020	636.1500	Sign Supports Steel Coated Reinforcement HS	LB	990.000	990.000
0022	637.2210	Signs Type II Reflective H	SF	12.000	12.000
0024	638.2101	Moving Signs Type I	EACH	1.000	1.000
0026	638.2601	Removing Signs Type I	EACH	1.000	1.000
0028	638.2602	Removing Signs Type II	EACH	1.000	1.000
0030	638.3150	Removing Overhead Sign Supports Cantilever (structure) 01. S-18-0009	EACH	1.000	1.000
0032	641.1200	Sign Bridge Cantilevered (structure) 01. S-18-0120	LS	1.000	1.000
0034	643.0300	Traffic Control Drums	DAY	840.000	840.000
0036	643.0420	Traffic Control Barricades Type III	DAY	84.000	84.000
0038	643.0705	Traffic Control Warning Lights Type A	DAY	112.000	112.000
0040	643.0900	Traffic Control Signs	DAY	364.000	364.000
0042	643.0910	Traffic Control Covering Signs Type I	EACH	2.000	2.000
0044	643.0920	Traffic Control Covering Signs Type II	EACH	2.000	2.000
0046	643.5000	Traffic Control	EACH	1.000	1.000
0048	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	1,050.000	1,050.000
0050	650.6500	Construction Staking Structure Layout (structure) 01. S-18-0009	LS	1.000	1.000
0052	SPV.0060	Special 01. Tension Anchor Rod	EACH	136.000	136.000
0054	SPV.0060	Special 02. Fill Erosion	EACH	1.000	1.000
0056	SPV.0060	Special 04. Repair Foundation	EACH	2.000	2.000
0058	SPV.0060	Special 05. Replace Rodent Screen	EACH	2.000	2.000
0060	SPV.0060	Special 06. Remove Grout Pad	EACH	1.000	1.000
0062	SPV.0060	Special 10. Tension Structural Connection Bolt	EACH	63.000	63.000
0064	SPV.0060	Special 12. Replace End Cap	EACH	1.000	1.000
0066	SPV.0060	Special 13. Secure/Replace Post Cap	EACH	12.000	12.000
0068	SPV.0060	Special 16. Tighten Connection Bolt (Non-Friction)	EACH	9.000	9.000
0070	SPV.0060	Special 17. Replace Dampener	EACH	2.000	2.000
0072	SPV.0060	Special 20. Replace Sign Panel Connector	EACH	6.000	6.000
0074	SPV.0060	Special 21. Replace Type II Sign Support Bracket	EACH	3.000	3.000
0076	SPV.0060	Special 26. Replace Sign Bridge ID plaque	EACH	2.000	2.000

Estimate Of Quantities

1009-30-13

Line	Item	Item Description	Unit	Total	Qty
0078	SPV.0060	Special 45. Adjust Bridge Mounted Type I Sign Support	EACH	1.000	1.000
0080	SPV.0060	Special 46. Repair Type I Sign	EACH	1.000	1.000
0082	SPV.0060	Special 50. Traffic Control - Single Lane Closure	EACH	19.000	19.000
0084	SPV.0060	Special 51. Traffic Control - Double Lane Closure	EACH	1.000	1.000
0086	SPV.0060	Special 52. Traffic Control - Ramp Closure	EACH	1.000	1.000
0088	SPV.0105	Special 01. Structure Repainting Organic Zinc Rich System	LS	1.000	1.000

BID ITEM QUANTITIES

STRUCTURE NUMBER	Region	COUNTY	636.0100	636.1500	637.2210	638.2101	638.2602	638.3150	641.1200	SPV.0060.01	SPV.0060.02	SPV.0060.04	SPV.0060.05	SPV.0060.06	SPV.0060.10	SPV.0060.12	SPV.0060.13
			SIGN SUPPORTS CONCRETE MASONRY	SIGN SUPPORTS STEEL COATED REINFORCEMEN T HS	SIGNS TYPE II REFLECTIVE H	MOVING SIGNS TYPE I	REMOVING SIGNS TYPE II	REMOVING OVERHEAD SIGN SUPPORTS CANTILEVER (S-18-0009)	SIGN BRIDGE CANTILEVERED S-18-0120	TENSION ANCHOR ROD	FILL EROSION	REPAIR FOUNDATION	REPLACE RODENT SCREEN	REMOVE GROUT PAD	TENSION STRUCTURAL CONNECTION BOLT	REPLACE END CAP	SECURE/ REPLACE POST CAP
			CY	LB	SF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
S-05-0101	Northeast	Brown								8							
S-05-0103	Northeast	Brown															1
S-08-0001	Northeast	Calumet												1			1
S-08-0008	Northeast	Calumet								6							2
S-09-0013	Northwest	Chippewa															4
S-09-0032	Northwest	Chippewa			12		1										
S-16-0022	Northwest	Douglas								6			1				
S-17-0004	Northwest	Dunn															
S-18-0009	Northwest	Eau Claire				1		1									
S-18-0101	Northwest	Eau Claire														1	
S-18-0120	Northwest	Eau Claire	8	990					1								
S-44-0002	Northeast	Outagamie									1						
S-44-0006	Northeast	Outagamie															1
S-44-0020	Northeast	Outagamie								4							
S-44-0028	Northeast	Outagamie								16							3
S-44-0034	Northeast	Outagamie													3		
S-44-0035	Northeast	Outagamie													16		
L-55-0004	Northwest	Saint Croix											1				
S-70-0036	Northeast	Winnebago													32		
S-70-0041	Northeast	Winnebago								16							
S-70-0042	Northeast	Winnebago													3		
S-70-0046	Northeast	Winnebago										2			3		
S-70-0062	Northeast	Winnebago								8							
S-70-0064	Northeast	Winnebago													6		
S-70-0081	Northeast	Winnebago								12							
S-70-0085	Northeast	Winnebago								12							
S-70-0100	Northeast	Winnebago								12							
S-70-0102	Northeast	Winnebago															
S-70-0106	Northeast	Winnebago								12							
S-70-0107	Northeast	Winnebago								12							
S-70-0125	Northeast	Winnebago								12							
TOTAL QUANTITY			8	990	12	1	1	1	1	136	1	2	2	1	63	1	12

GENERAL NOTES

1. SEE STRUCTURE PLANS FOR MORE INFORMATION ON QUANTITIES.

BID ITEM QUANTITES

STRUCTURE NUMBER	Region	COUNTY	SPV.0060.16	SPV.0060.17	SPV.0060.20	SPV.0060.21	SPV.0060.26	SPV.0060.45	SPV.0060.46	SPV.0060.50	SPV.0060.51	SPV.0060.52	SPV.0105.01
			TIGHTEN CONNECTION BOLT (NON-FRICTION)	REPLACE DAMPENER	REPLACE SIGN PANEL CONNECTOR	REPLACE TYPE II SIGN SUPPORT BRACKET	REPLACE SIGN BRIDGE ID PLAQUE	REPAIR BRIDGE MOUNTED TYPE I SIGN SUPPORT	REPAIR TYPE I SIGN	TRAFFIC CONTROL - SINGLE LANE CLOSURE	TRAFFIC CONTROL - DOUBLE LANE CLOSURE	TRAFFIC CONTROL - RAMP CLOSURE	STRUCTURE REPAINTING ORGANIC ZINC RICH SYSTEM
			EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	LS
S-05-0101	Northeast	Brown											
S-05-0103	Northeast	Brown								1			
S-08-0001	Northeast	Calumet								1			
S-08-0008	Northeast	Calumet								2			
S-09-0013	Northwest	Chippewa								2			
S-09-0032	Northwest	Chippewa		1		3	1			1	1		
S-16-0022	Northwest	Douglas					1						
S-17-0004	Northwest	Dunn			6			1		1			
S-18-0009	Northwest	Eau Claire											
S-18-0101	Northwest	Eau Claire										1	
S-18-0120	Northwest	Eau Claire											
S-44-0002	Northeast	Outagamie		1						1			
S-44-0006	Northeast	Outagamie											
S-44-0020	Northeast	Outagamie											
S-44-0028	Northeast	Outagamie	2							1			
S-44-0034	Northeast	Outagamie								1			
S-44-0035	Northeast	Outagamie							1	1			
L-55-0004	Northwest	Saint Croix								1			1
S-70-0036	Northeast	Winnebago								1			
S-70-0041	Northeast	Winnebago											
S-70-0042	Northeast	Winnebago											
S-70-0046	Northeast	Winnebago								1			
S-70-0062	Northeast	Winnebago											
S-70-0064	Northeast	Winnebago								1			
S-70-0081	Northeast	Winnebago	2							1			
S-70-0085	Northeast	Winnebago											
S-70-0100	Northeast	Winnebago	1										
S-70-0102	Northeast	Winnebago	4							2			
S-70-0106	Northeast	Winnebago											
S-70-0107	Northeast	Winnebago											
S-70-0125	Northeast	Winnebago											
TOTAL QUANTITY			9	2	6	3	2	1	1	19	1	1	1

GENERAL NOTES

1. SEE STRUCTURE PLANS FOR MORE INFORMATION ON QUANTITIES.

CONSTRUCTION STAKING

650.6500
CONSTRUCTION
STAKING

STRUCTURE LAY OUT
(S-18-0009)
LS

LOCATION	
PROJECT	1
TOTALS	1

TOPSOIL, FERTILIZER, AND SEED

625.0100 629.0210 630.0120
TOPSOIL FERTILIZER SEEDING
TYPE B MIXTURE NO. 20

LOCATION	SY	CWT	LB
EXISTING S-18-0009	50	0.03	1
PROPOSED S-18-0009	280	0.18	5
TOTALS	330	0.21	6

EROSION MAT

628.2002
EROSION MAT
CLASS I
TYPE A
SY

LOCATION	SY
EXISTING S-18-0009	50
PROPOSED S-18-0009	280
TOTALS	330

SILT FENCE

628.1504 628.1520
SILT FENCE SILT FENCE
LF MAINTENANCE
LF

LOCATION		
UNDISTRIBUTED	300	300
TOTALS	300	300

EROSION CONTROL MOBILIZATION

628.1905
MOBILIZATION
EROSION CONTROL
EACH

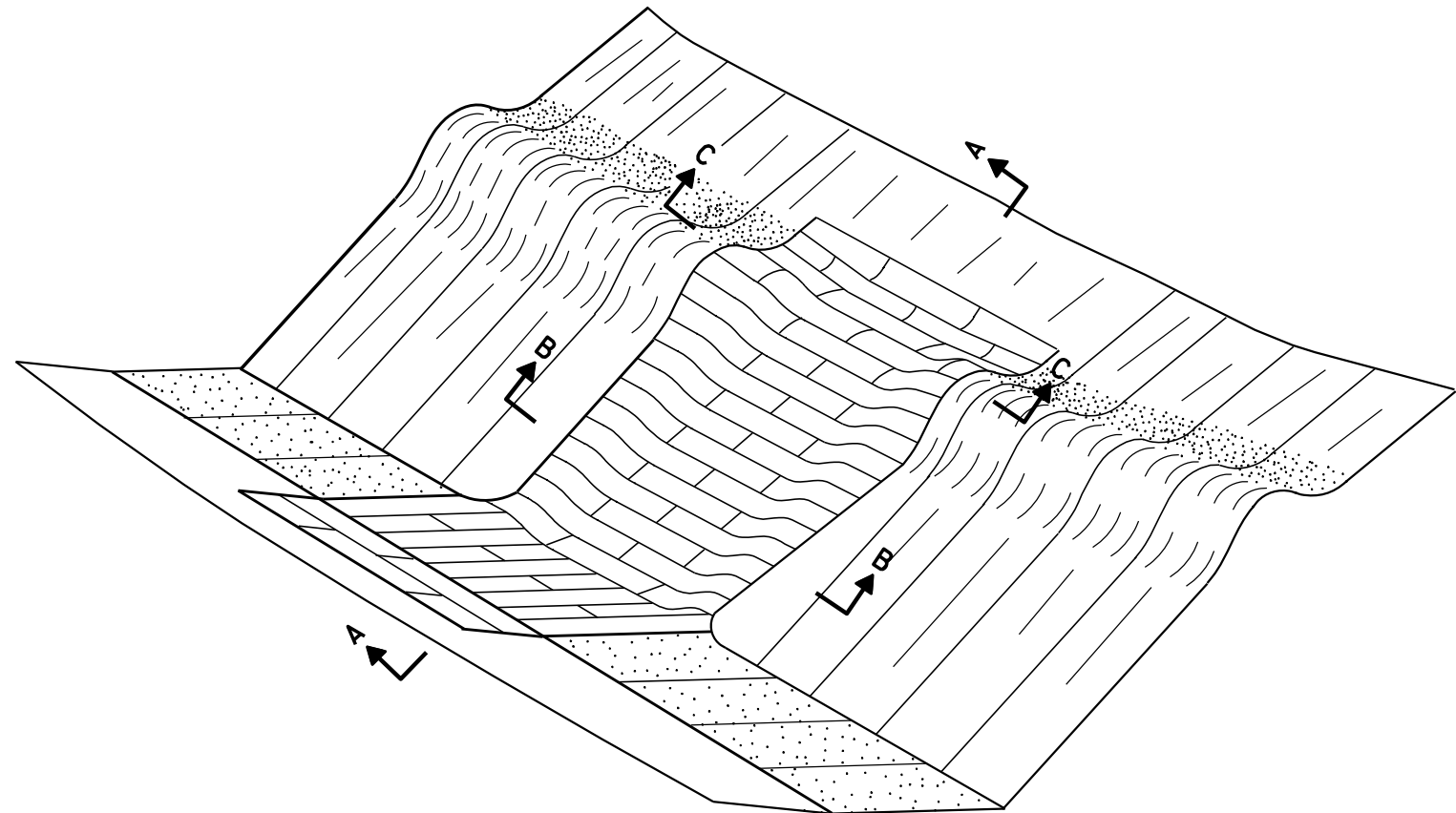
LOCATION	
PROJECT	1
TOTALS	1

TRAFFIC CONTROL SUMMARY

LOCATION	APPROXIMATE SERVICE DAYS	643.0300 TRAFFIC CONTROL DRUMS		643.0420 TRAFFIC CONTROL BARRICADES TYPE III		643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A		643.0900 TRAFFIC CONTROL SIGNS		643.0910 TRAFFIC CONTROL COVERING SIGNS		643.0920 TRAFFIC CONTROL COVERING SIGNS		649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4" (WHITE) LF		638.2601 REMOVE SIGNS TYPE 1		643.5000 TRAFFIC CONTROL		NOTES
		SERVICE	DAYS	SERVICE	DAYS	SERVICE	DAYS	SERVICE	DAYS	TYPE 1 EACH	TYPE 2 EACH	TYPE 2 EACH	TYPE 2 EACH	TYPE 1 EACH	TYPE 1 EACH	TYPE 1 EACH	TYPE 1 EACH	TYPE 1 EACH	TYPE 1 EACH	
B IH 94 to NB/SB USH 53	14	40	560	3	42	4	56	1	14	1	0	0	0	300	0	1				Cover "53 North Eau Claire", 1 cycle only
EB IH 94 - NB USH 53	14	20	280	3	42	4	56	1	14	0	1	1	1	750	0	0				Cover "Exit 35 MPH", 1 cycle only
EB IH 94 - NB USH 53	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0				Cover "Exit Arrow"/ Remove "53 North Eau Claire Arrow", 1 cycle only
H 94 - NB USH 53, DETOUR	14	0	0	0	0	0	0	21	294	0	0	0	0	0	0	0				Detour Signs, Cover "South" with "Eau Claire", 1 cycle only
SB USH 53 - EB IH 94	14	0	0	0	0	0	0	3	42	0	1	1	1	0	0	0				Advance Warning Signs/ Cover "East 94 Use Left Lane", 1 cycle only
TOTALS			840		84		112		364	2	2	2	2	1,050	1	1				

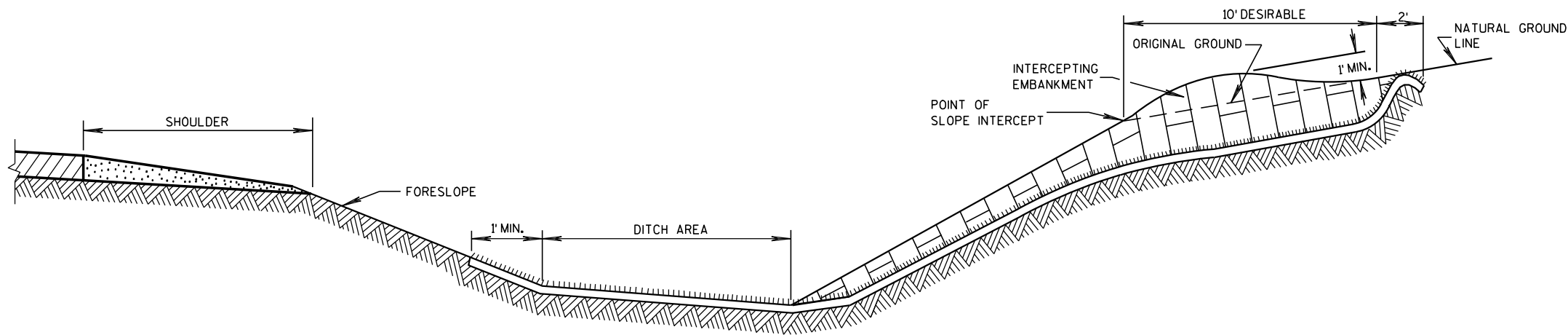
Standard Detail Drawing List

08E05-02	SODDED BACKSLOPE FLUME AND INTERCEPTING EMBANKMENT
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15D12-06A	TRAFFIC CONTROL, LANE CLOSURE
15D12-06B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D14-03	TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS)
15D15-04A	TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-04B	TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE
15D16-03	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-04	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS

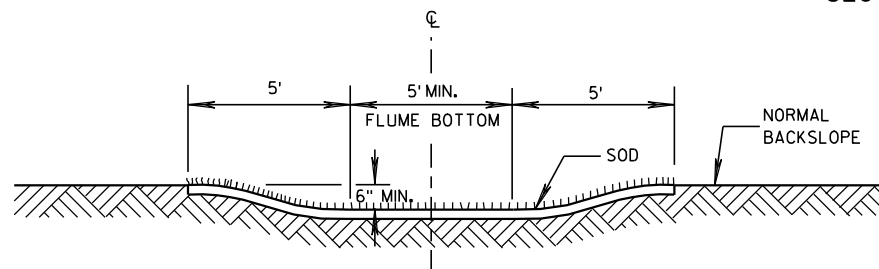


PERSPECTIVE

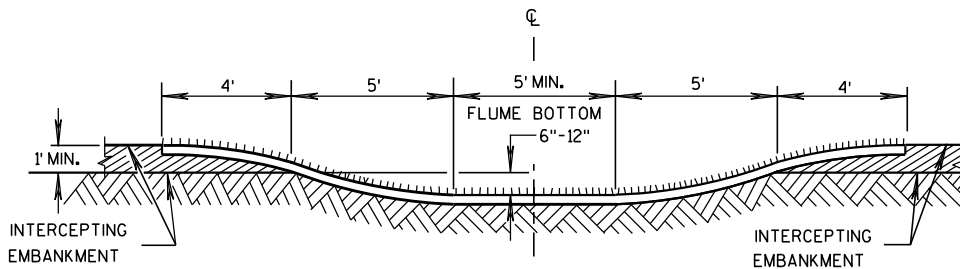
BACKSLOPE WITH FLUME AND INTERCEPTING EMBANKMENT



SECTION A-A



SECTION B-B



SECTION C-C

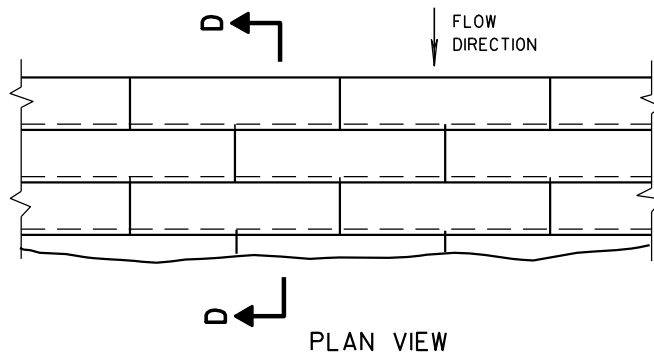
GENERAL NOTES

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

GRADING AND SHAPING INTERCEPTING EMBANKMENT WILL BE MEASURED AND PAID FOR IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTION 205, "ROADWAY AND DRAINAGE EXCAVATION".

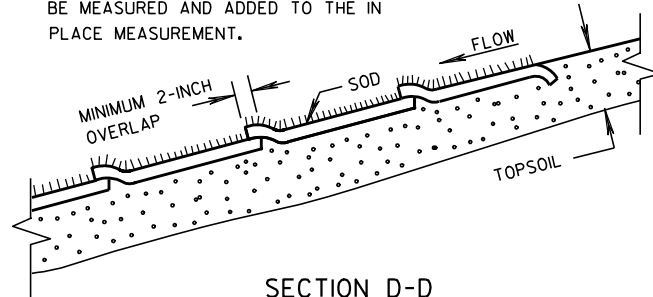
SOD STRIPS SHALL BE LAID TRANSVERSELY TO THE DIRECTION OF THE WATER FLOW.

DIMENSIONS SHALL BE ADJUSTED TO FIT SITE CONDITIONS AS DIRECTED BY THE ENGINEER.



PLAN VIEW

NOTE:
SOD SHALL BE LAID AS SHOWN ON THE PLAN VIEW, AND AS DIRECTED BY THE ENGINEER. THE SOD OVERLAP WILL BE MEASURED AND ADDED TO THE IN PLACE MEASUREMENT.



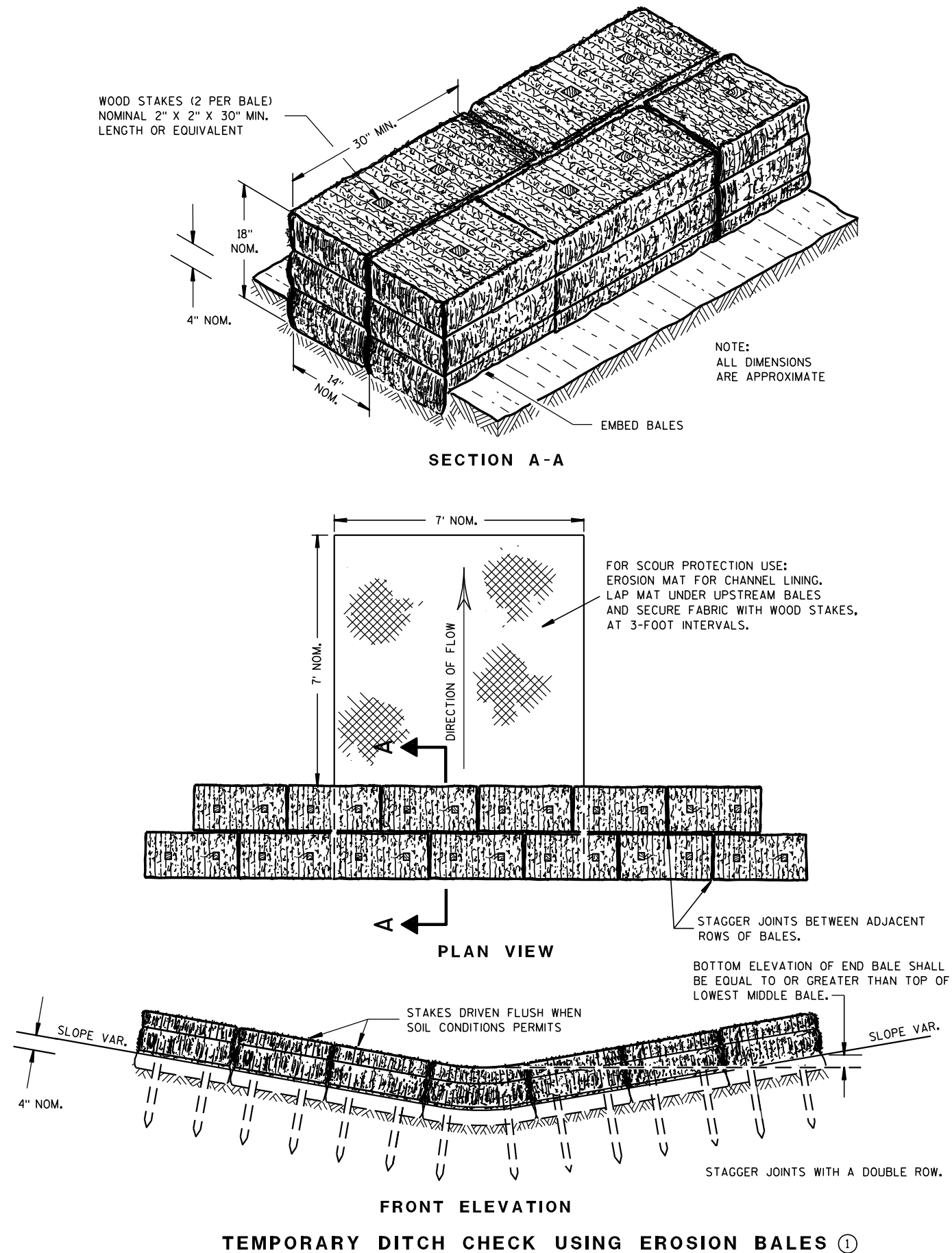
SECTION D-D

DETAIL FOR OVERLAP OF SOD STRIPS

SODDED BACKSLOPE FLUME AND INTERCEPTING EMBANKMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

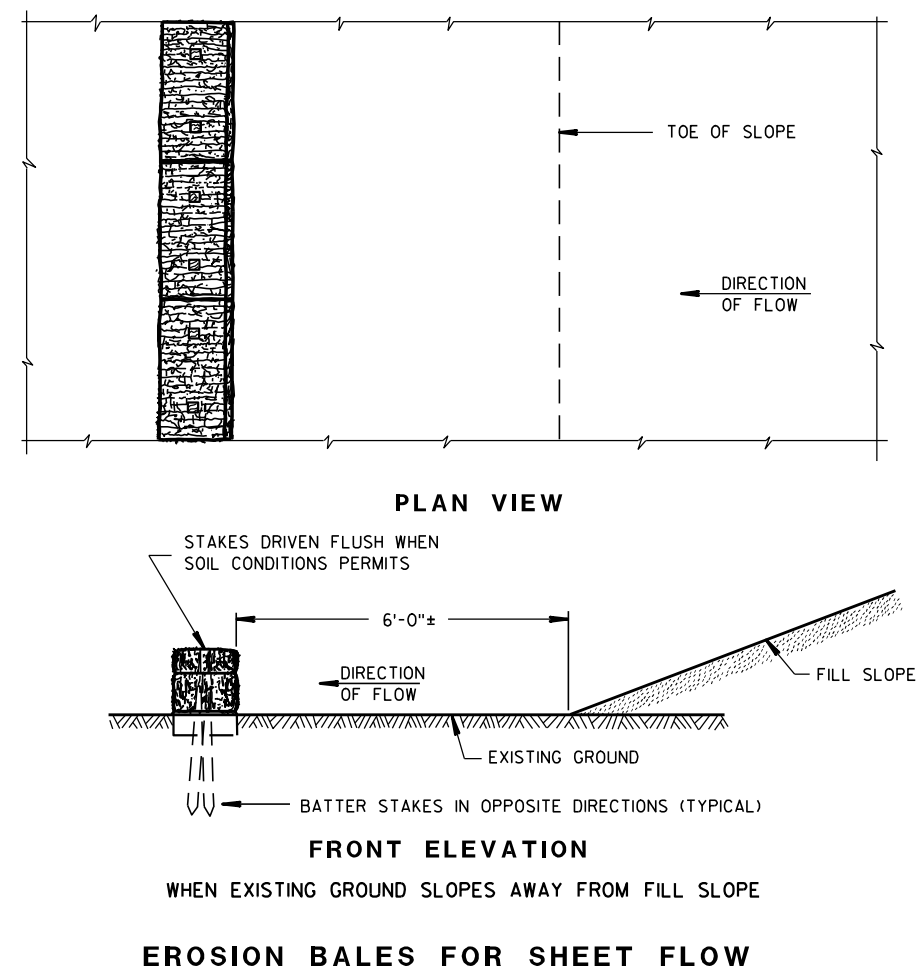
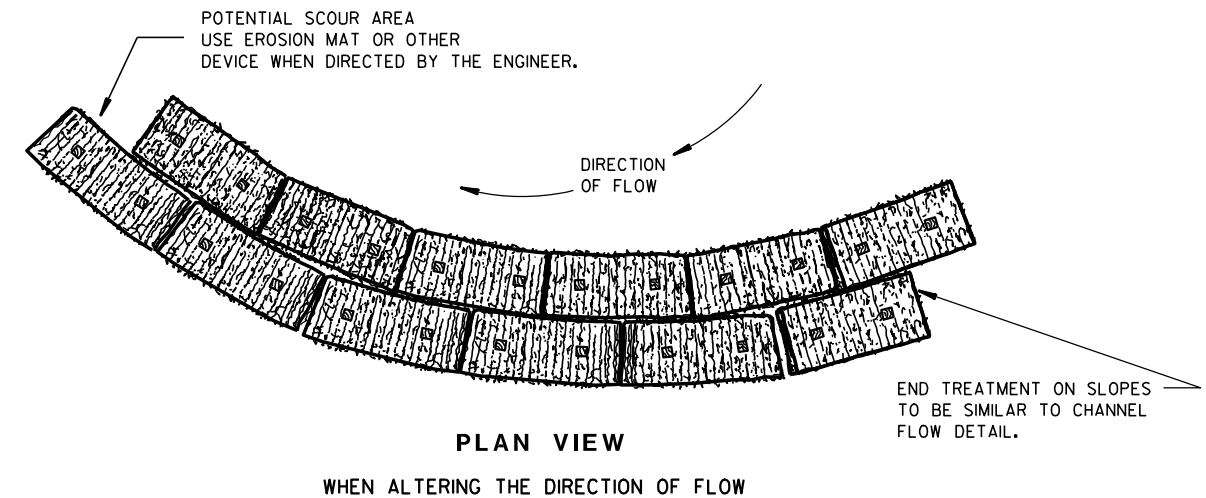
APPROVED
10/24/95 /S/ Rory L. Rhinesmith
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



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.

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

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02
DATE

FHWA

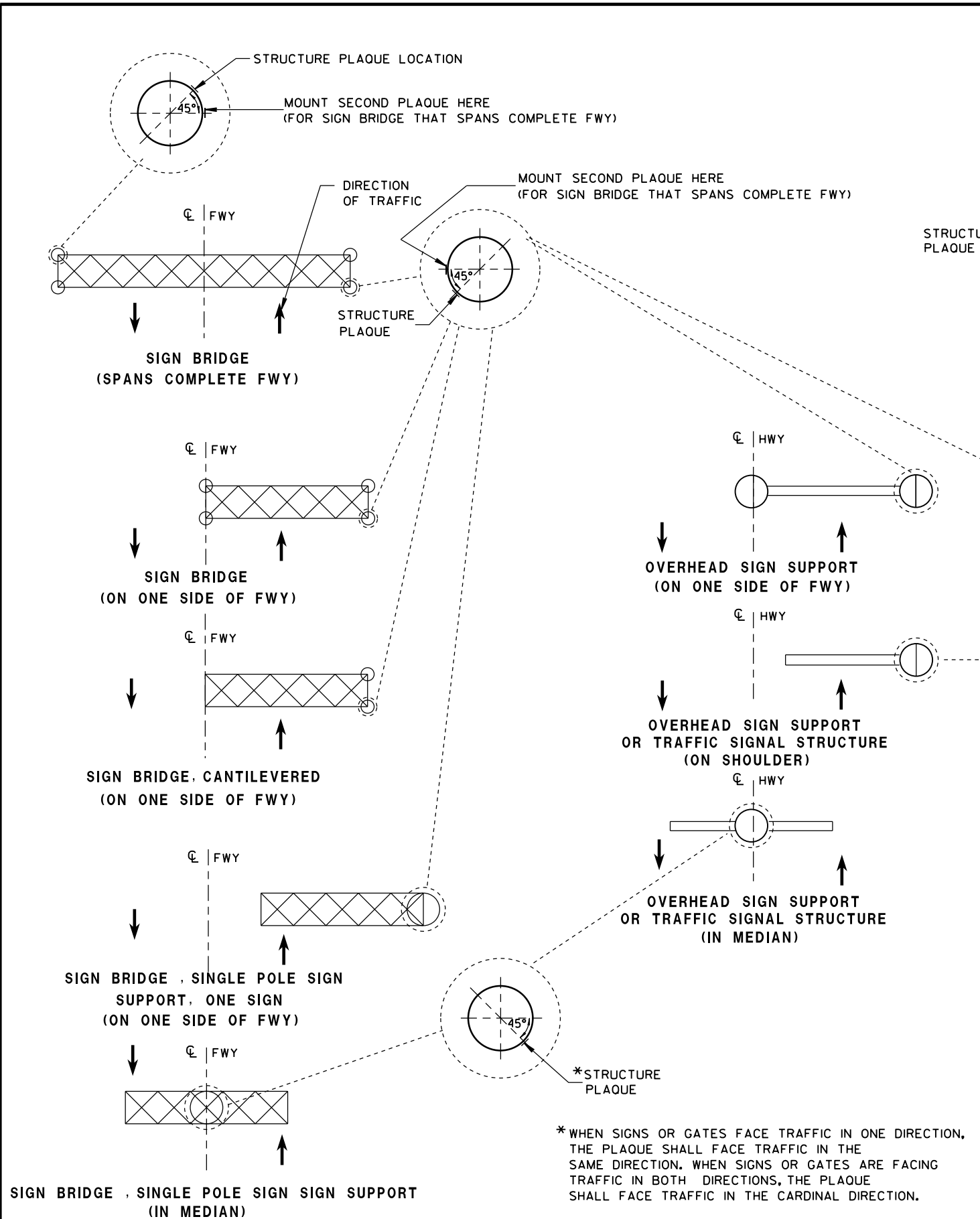
/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER



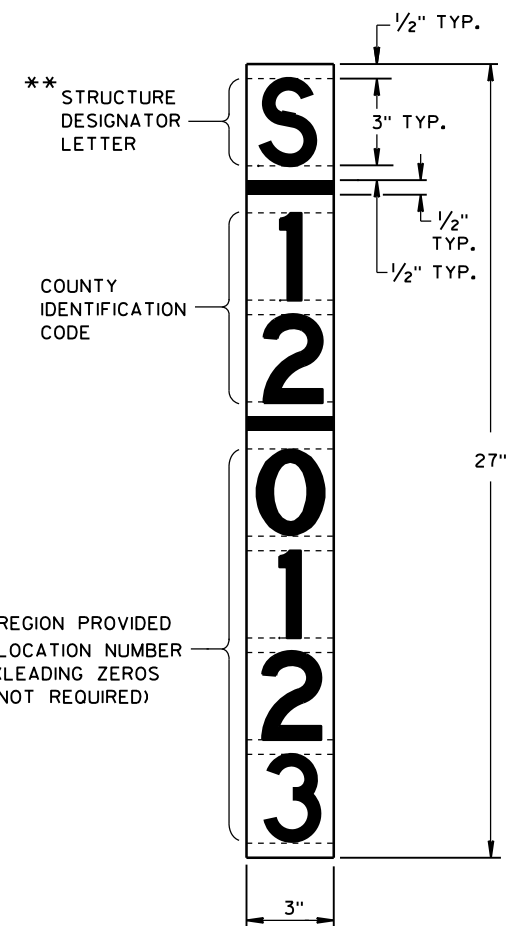
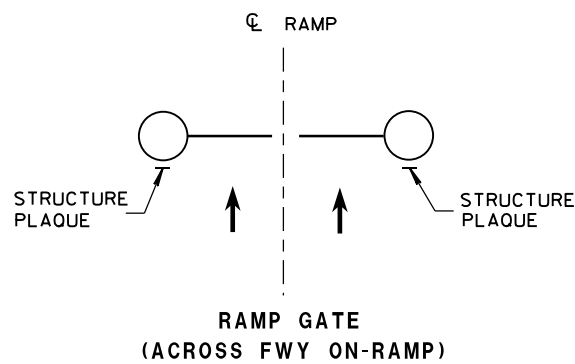
- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1½" X 1½" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



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



LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD
SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES



RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL
STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN
SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

GENERAL NOTES

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

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS;
FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

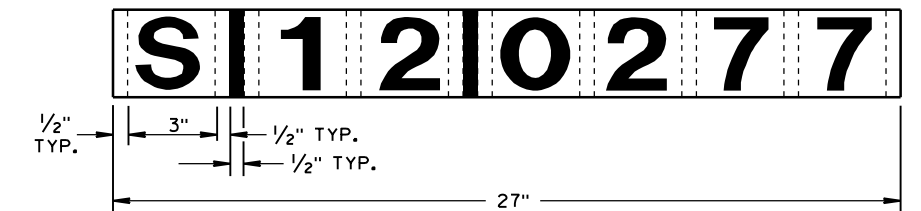
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, 1/2" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

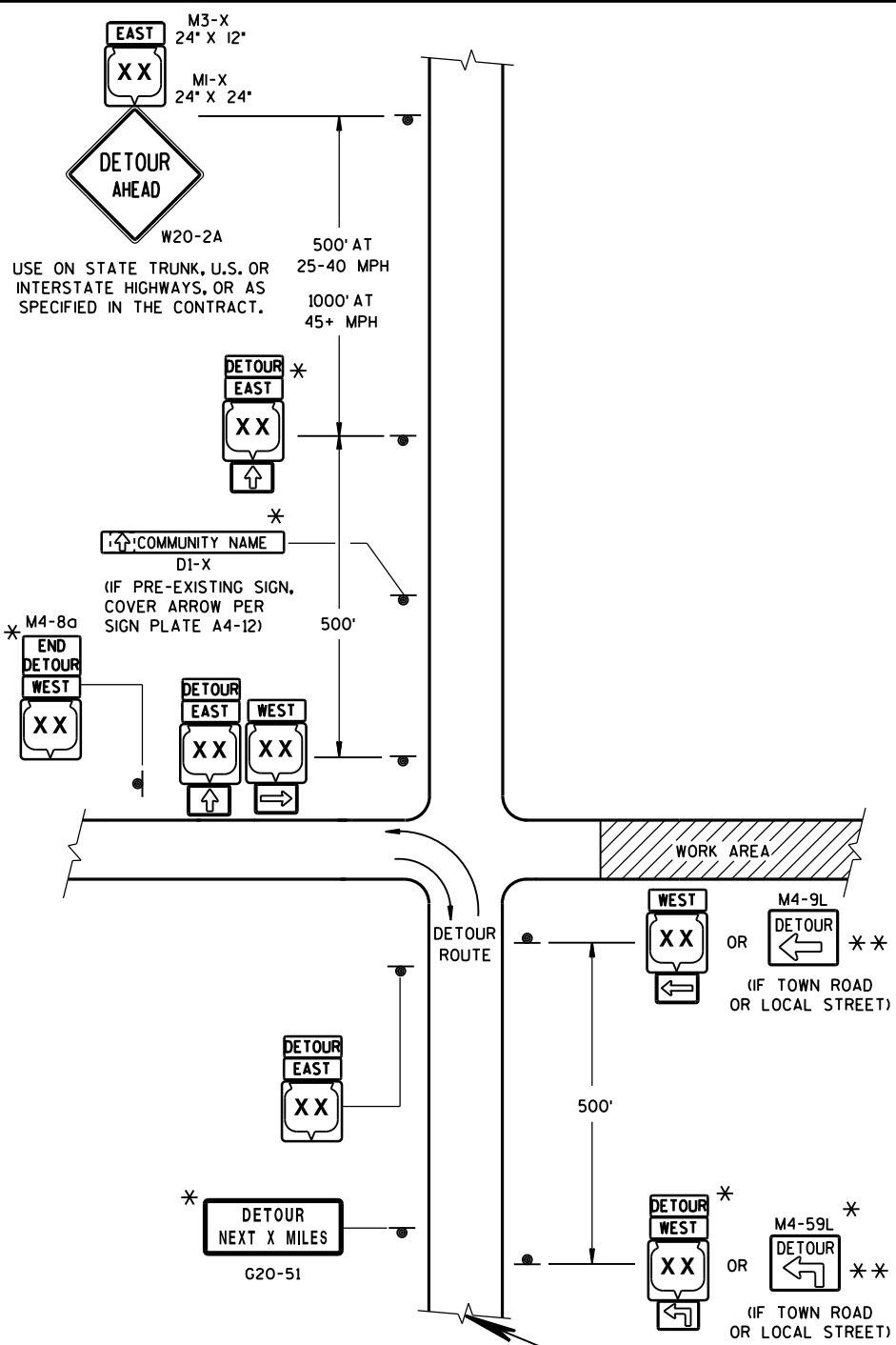
WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE,
STRUCTURE MOUNTED

** LETTER "G" UTILIZED FOR RAMP GATES.
LETTER "S" UTILIZED FOR SIGN BRIDGES,
OVERHEAD SIGN SUPPORTS, AND TRAFFIC
SIGNALS.

STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 12/4/2012 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



LEGEND

SIGN ON PERMANENT SUPPORT

WORK AREA

M4-8
M3-X

OR OR
MI-4 MI-5A MI-6

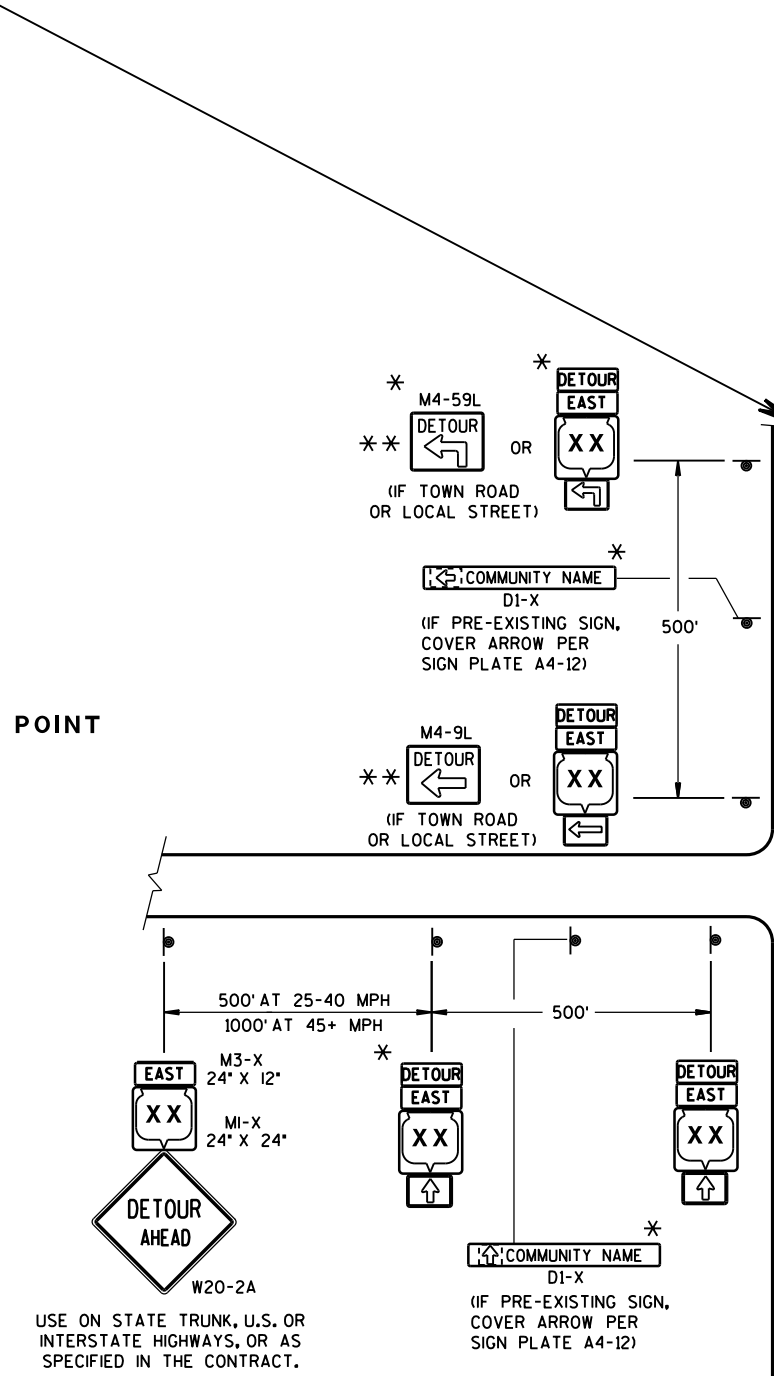
OR OR
M05-1 M06-1 M06-1

SEE SPECIFIC PROJECT DETOUR
SIGNING DETAIL SHEETS AND
DETAIL A OR B ON SDD 15C2-SHEET "a"

THIS DRAWING PROVIDES GENERAL GUIDANCE
ON TYPICAL DETOUR SIGN LAYOUT AND SPACING.
SEE PROJECT DETOUR SIGNING SHEETS FOR
SPECIFIC DETAILS FOR EACH PROJECT.

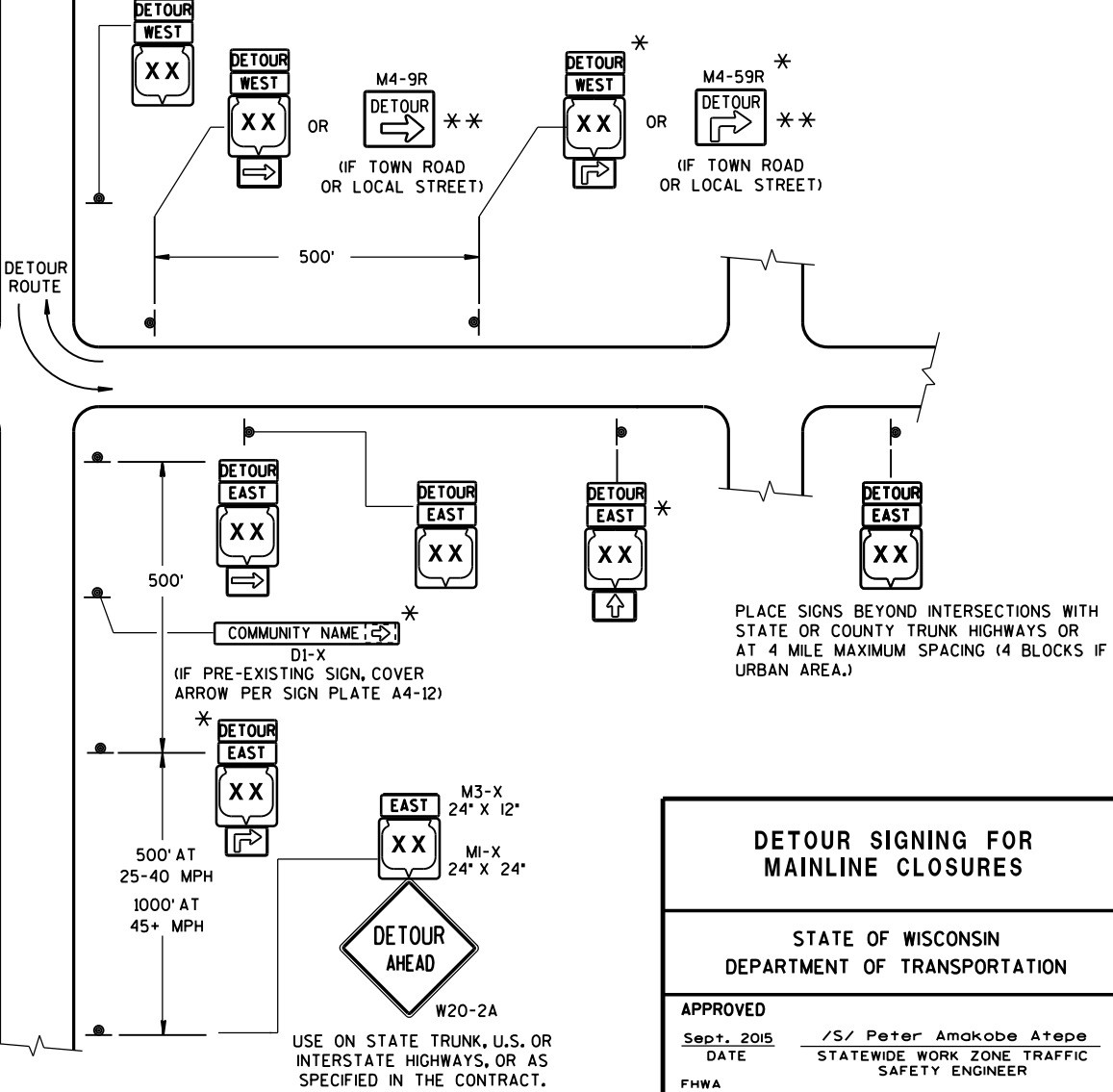
MATCH POINT

DETAIL F
DETOUR SIGNING



GENERAL NOTES

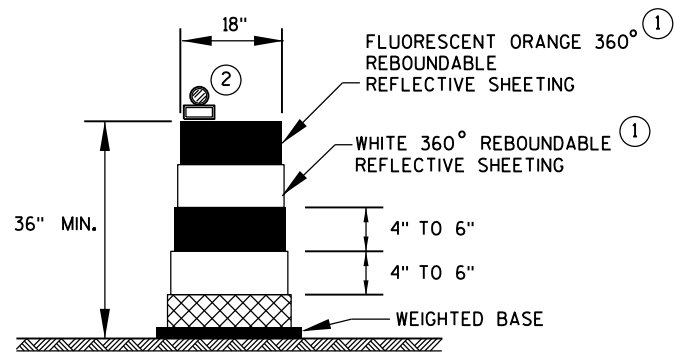
- THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS, MODIFY EXISTING SIGNS WHERE POSSIBLE.
- THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.
- ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.
- SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
- "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- SIGN SIZES SHALL BE AS FOLLOWS:
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
 - M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
 - MI-4, MI-5A, AND MI-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
 - M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
 - M4-9 SHALL BE 30" X 24".
 - M4-8a SHALL BE 24" X 18".
 - G20-51 SHALL BE 60" X 24".
 - W20-2 SHALL BE 48" X 48".
 - D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- * OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.
- ** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



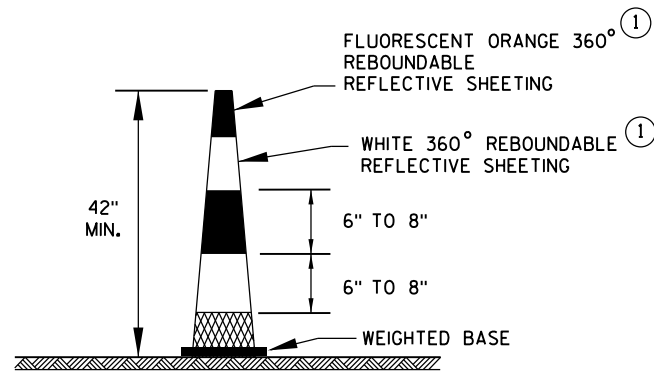
**DETOUR SIGNING FOR
MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE Sept. 2015 /S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC
SAFETY ENGINEER
FHWA



DRUM

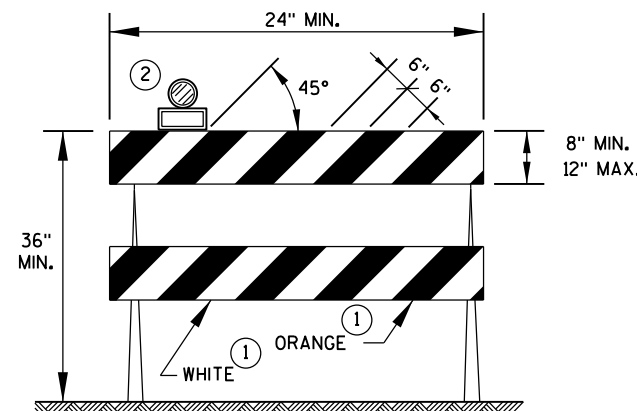


42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

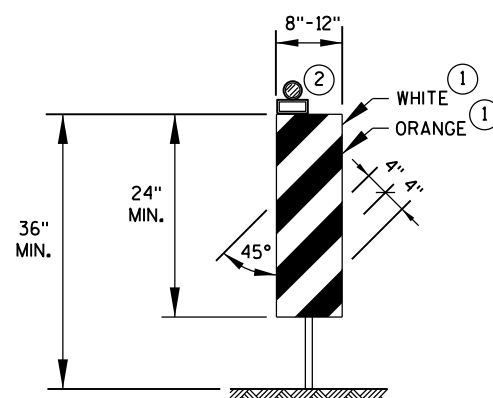
GENERAL NOTES

- 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.



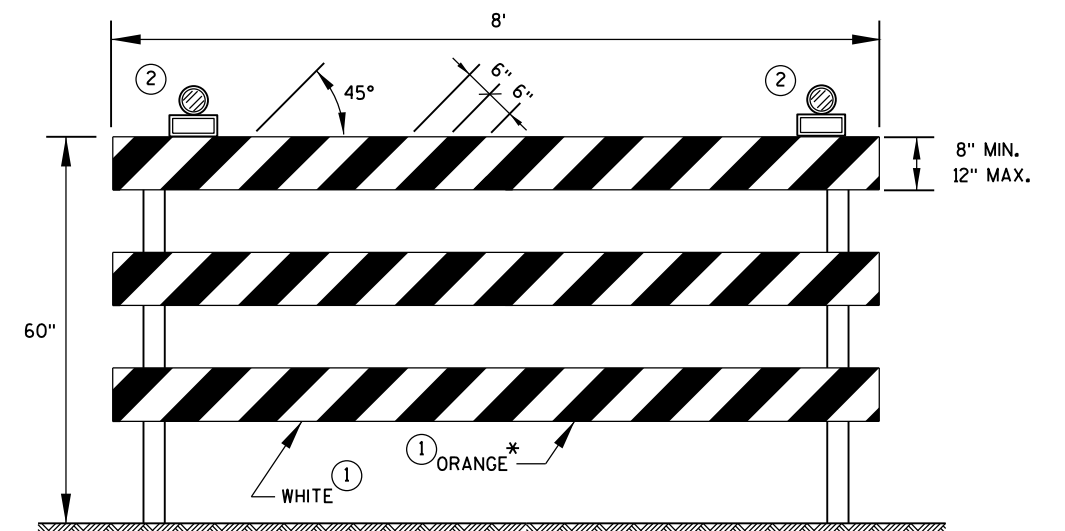
TYPE 2 BARRICADE

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



VERTICAL PANEL

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



TYPE 3 BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION, USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017
DATE

FHWA

/S/ Andrew Heidtke
WORK ZONE ENGINEER

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMENENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"W0" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

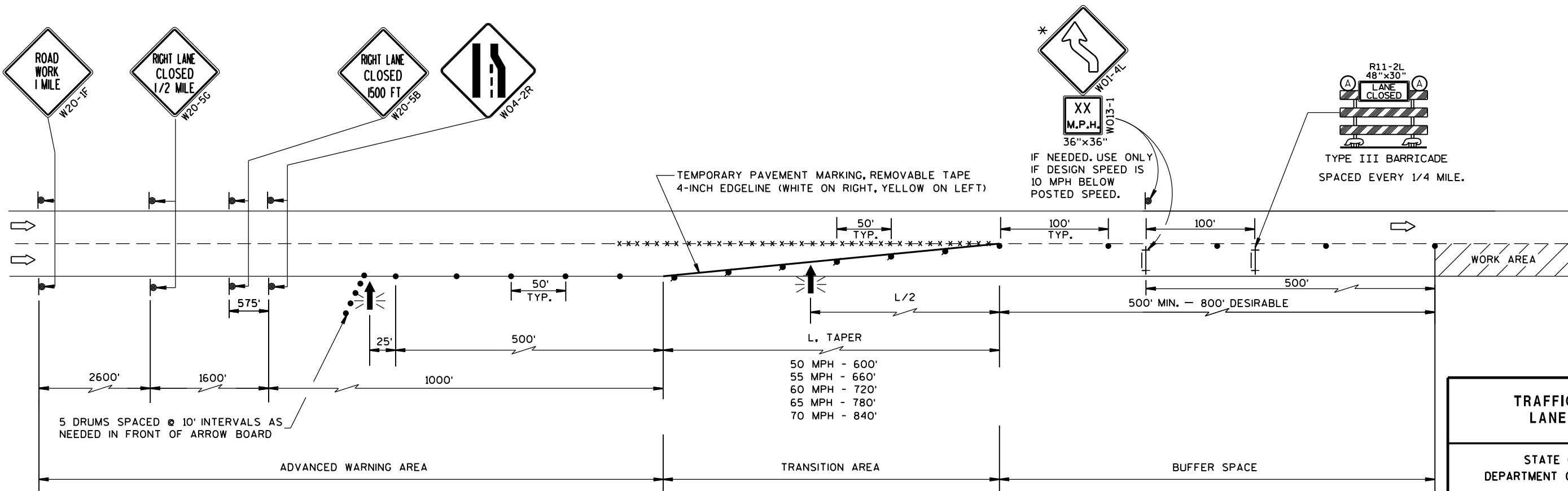
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (W01-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



TRAFFIC CONTROL, LANE CLOSURE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March 2016 DATE	/S/ Peter Amakobe Atepe 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
- FLASHING ARROW BOARD
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"W0" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

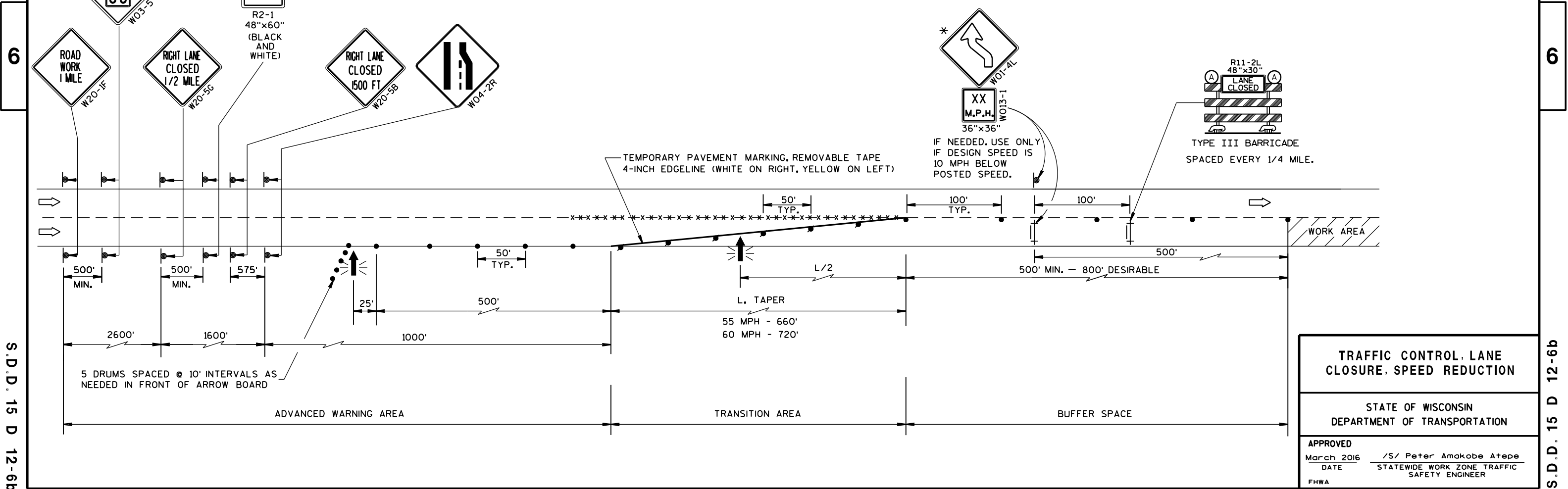
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

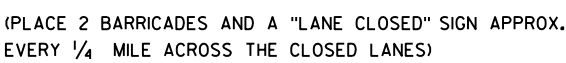
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (W01-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.

** A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIREABLE) BEYOND THE "END OF ROADWORK" SIGN.

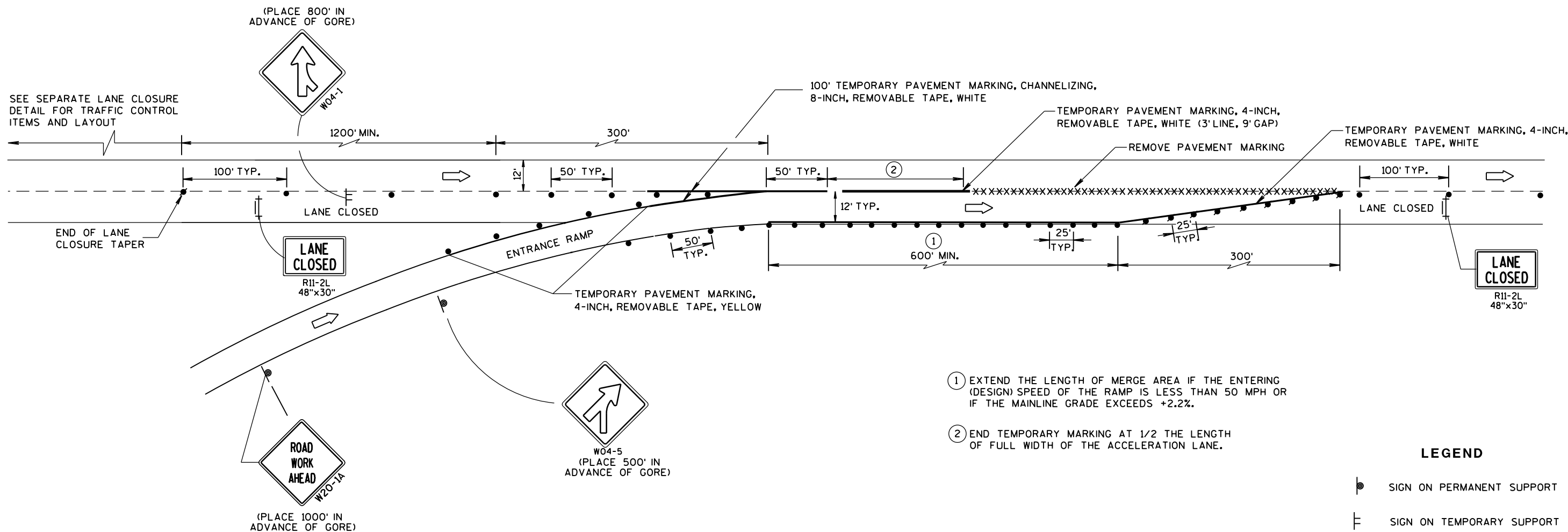


TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March 2016 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	



TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT TERM (LESS THAN 24 HOURS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED July 14, 2015	/s/ Peter Amakobe Atepe
DATE	STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FWHA	

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN RIGHT LANE CLOSURE



PARALLEL ENTRANCE RAMP

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

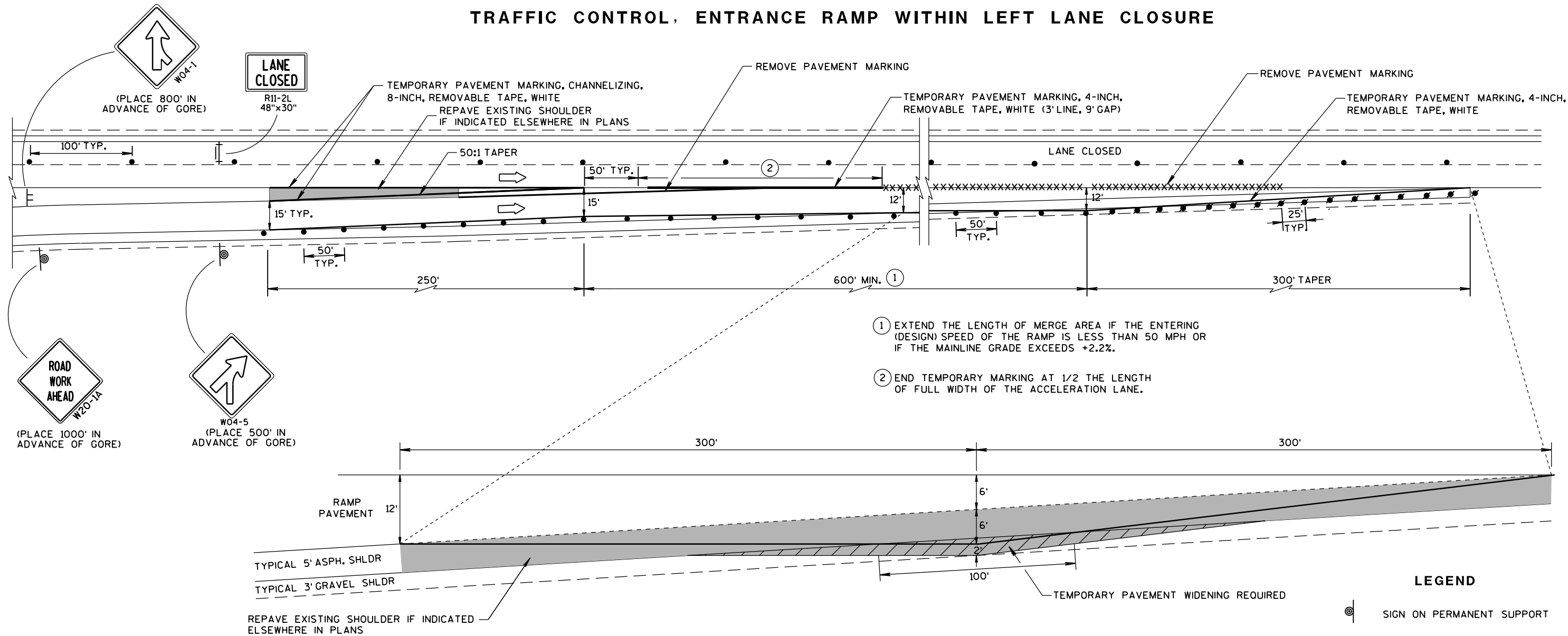
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

LEGEND

- SIGN ON PERMANENT SUPPORT
- ├ SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- ├ TYPE III BARRICADE WITH ATTACHED SIGN
- XXXXX REMOVING PAVEMENT MARKING
- ➡ DIRECTION OF TRAFFIC

TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Sept., 2017 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LEFT LANE CLOSURE



TEMPORARY PAVEMENT DETAIL

(EXISTING RAMP DIMENSIONS MAY VARY. ADJUST
TEMPORARY PAVEMENT ACCORDINGLY)

LEGEND

- ⊙ SIGN ON PERMANENT SUPPORT
- ⌄ SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- ⌄ TYPE III BARRICADE WITH ATTACHED SIGN
- XXXXX REMOVING PAVEMENT MARKING
- ➡ DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"W0" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

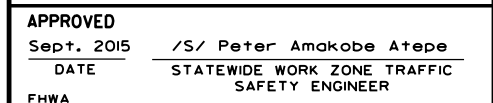
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

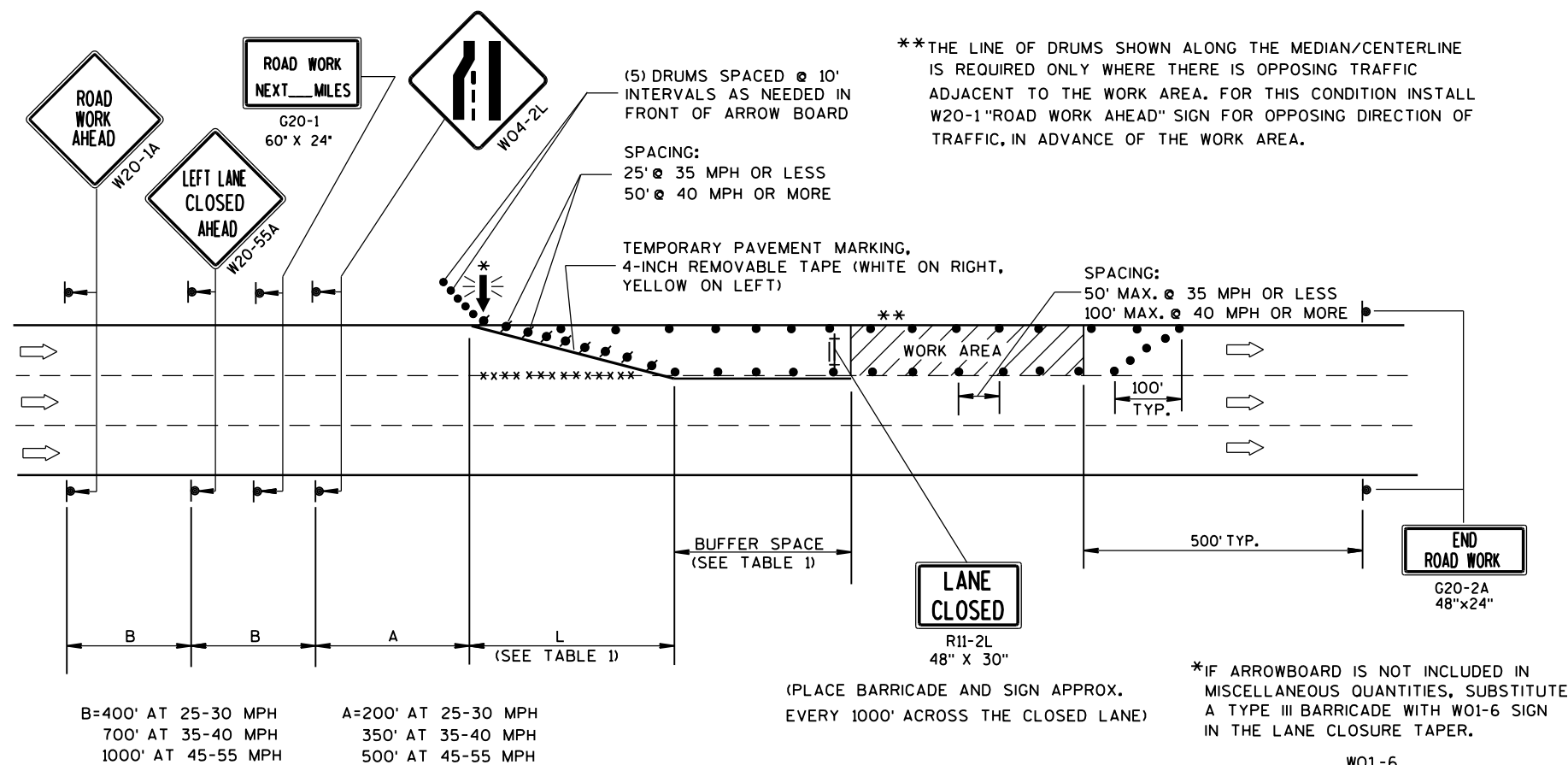
TRAFFIC CONTROL,
ENTRANCE RAMP
WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2017 /S/ Andrew Heldtke
DATE WORK ZONE ENGINEER
FHWA

** PLACE "RAMP WILL BE CLOSED" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.





**TRAFFIC CONTROL,
SINGLE LANE CLOSURE,
NON-FREEWAY/EXPRESSWAY**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 /S/ Peter Amakobe Atepe
DATE STATEWIDE WORK ZONE TRAFFIC
FHWA SAFETY ENGINEER

LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ⚡➡ FLASHING ARROW BOARD
- ▨ WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

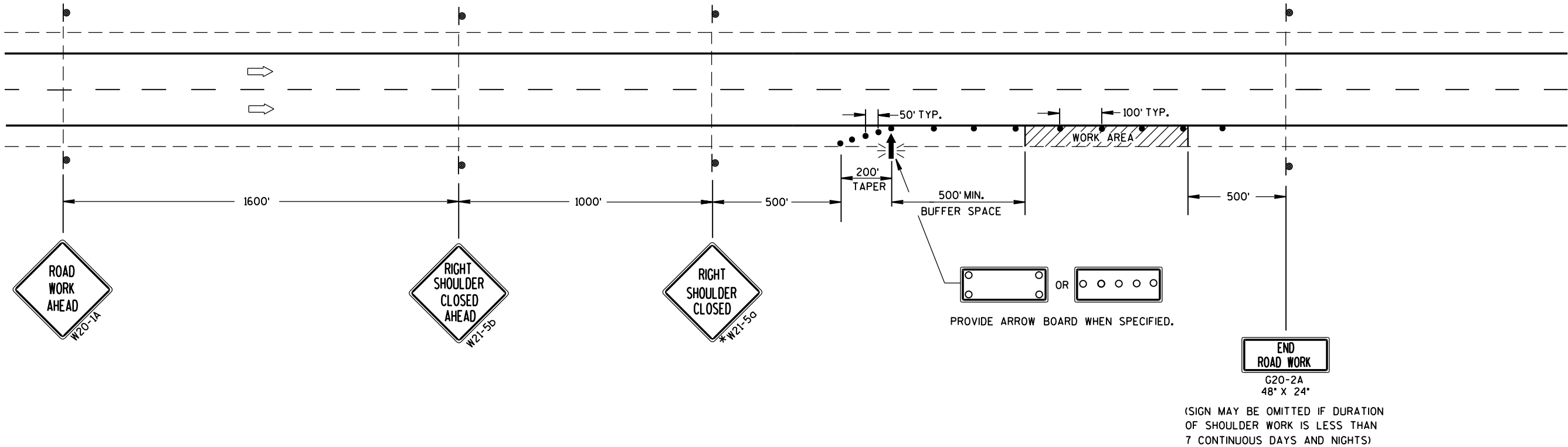
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL
SHOULDER CLOSURE ON DIVIDED
ROADWAY, SPEEDS GREATER
THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 /S/ Peter Amakobe Atepe
DATE STATEWIDE WORK ZONE TRAFFIC
FHWA SAFETY ENGINEER

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.

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

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

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

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

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.

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

TABLE A

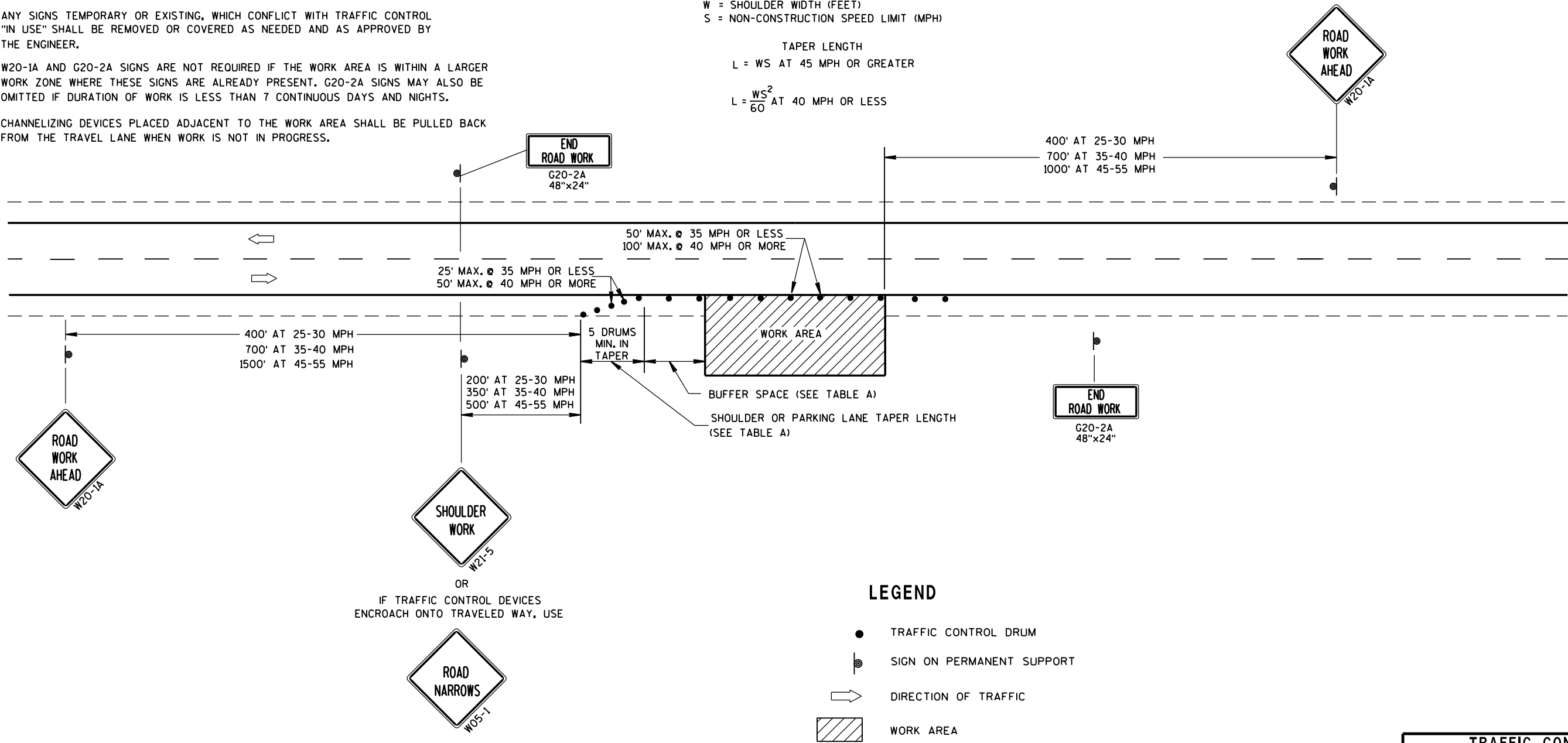
SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S \ W	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH
L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = $\frac{1}{3}L$



LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ▨ WORK AREA

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED July 14, 2015 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	



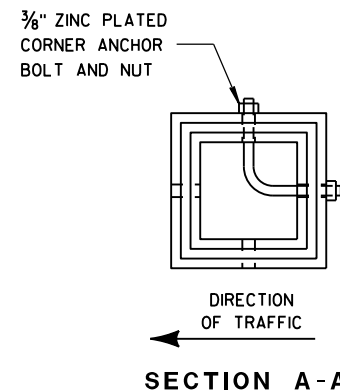
DETAIL OF TUBULAR
STEEL SIGN POST

TUBULAR STEEL POSTS

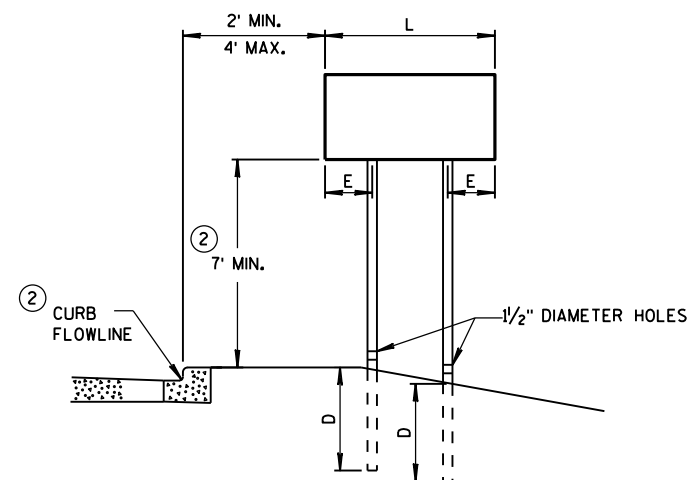
AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL
BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED
ON TUBULAR STEEL POSTS.



SECTION A-A

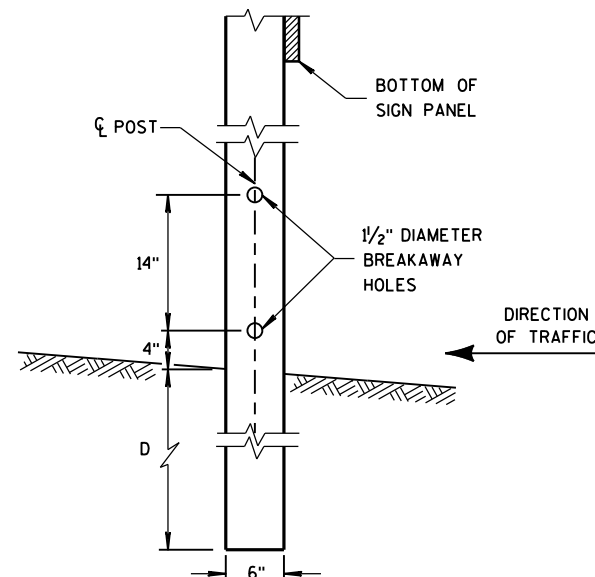


URBAN AREA

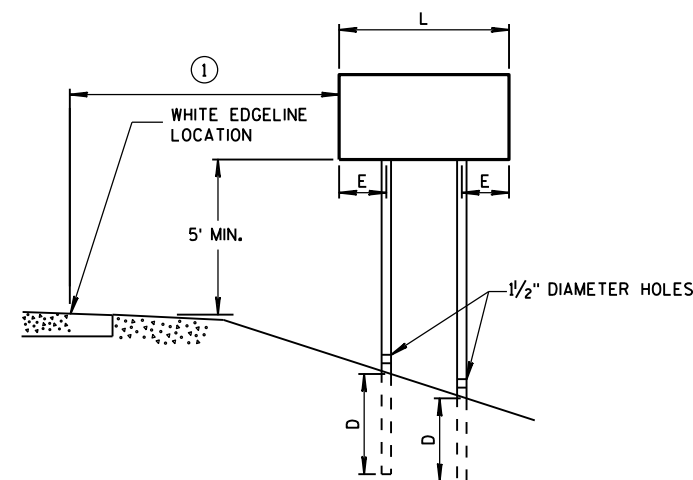
POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST
EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'



4 "x6 " WOOD POST
MODIFICATION



RURAL AREA

4 " X 6 " WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

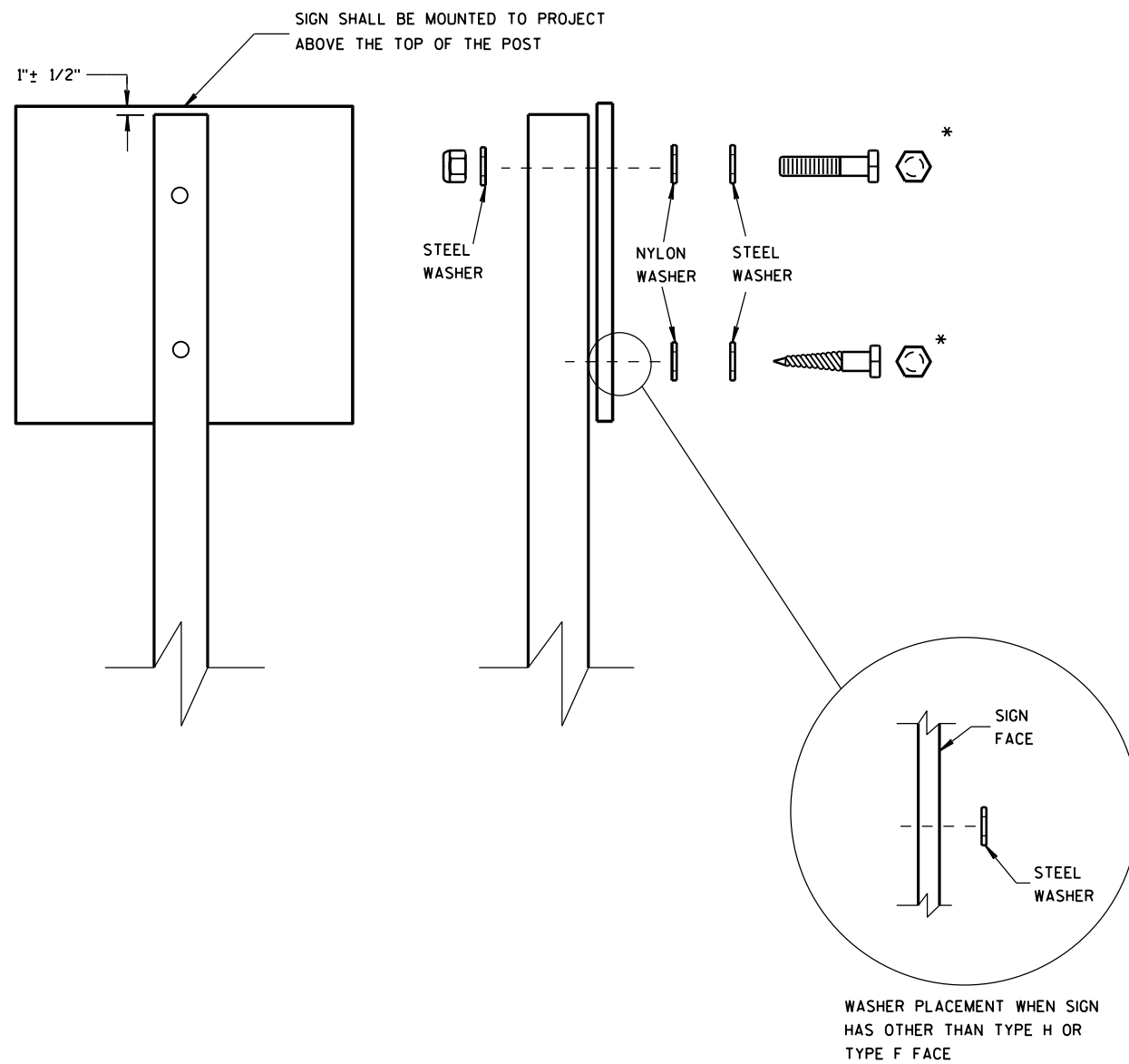
SEE NOTE ③

GENERAL NOTES

- ① 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS
OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD
BE ADJUSTED TO AVOID THE DITCH FLOWLINE.
- ② THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF
MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT
HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK
ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN
THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED
FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING,
VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET
OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.
- ③ FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.

TEMPORARY TRAFFIC CONTROL
SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" x 3"

MACHINE BOLTS - 5/16" x 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" x 3-1/4" LENGTH W/ NUTS

RIVETS - 3/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. x 3/8" I.D. x 1/16" STEEL

1-1/4" O.D. x 3/8" I.D. x .080 NYLON FOR ALL TYPE H SIGNS

* 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

ATTACHMENT OF SIGNS
TO POSTS

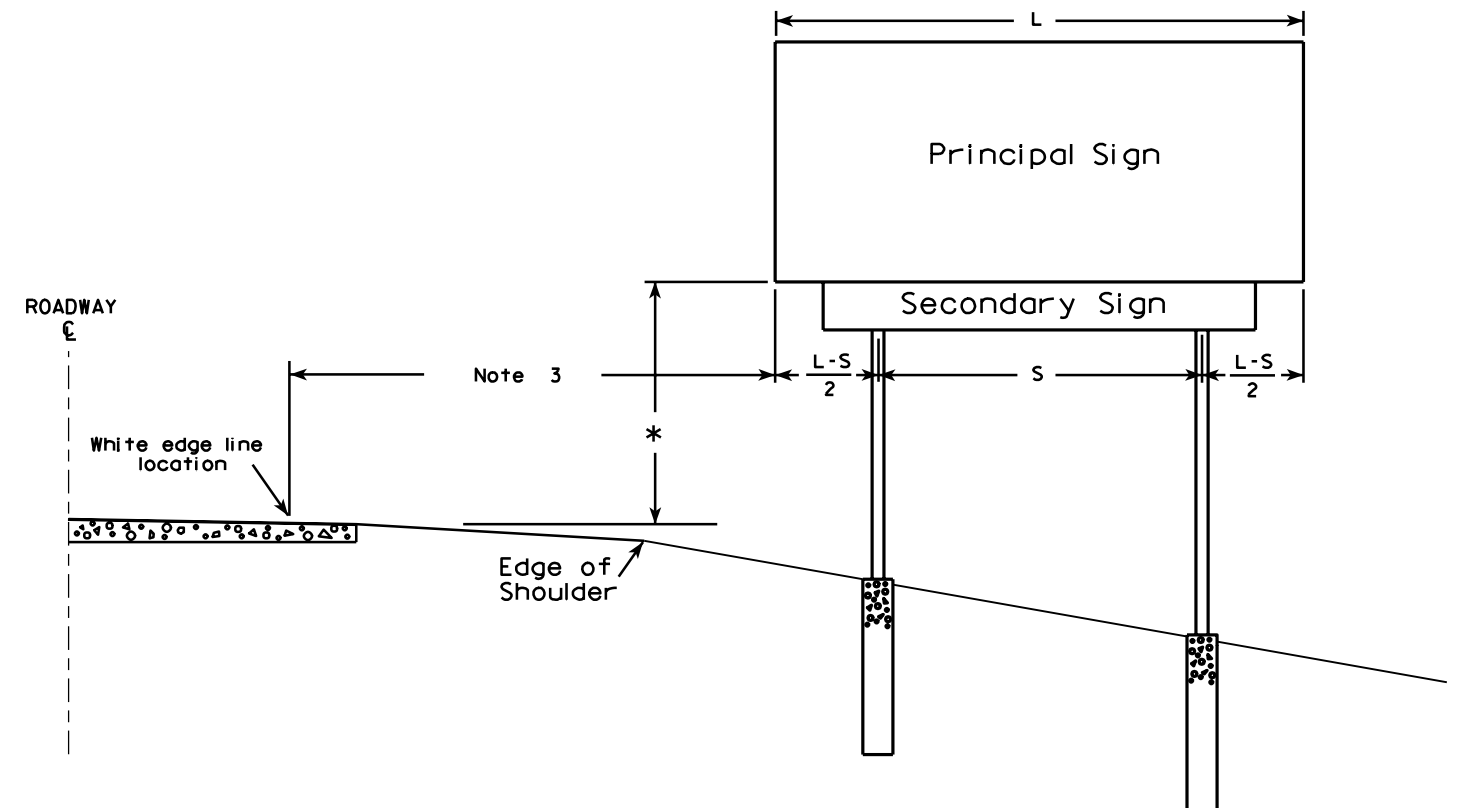
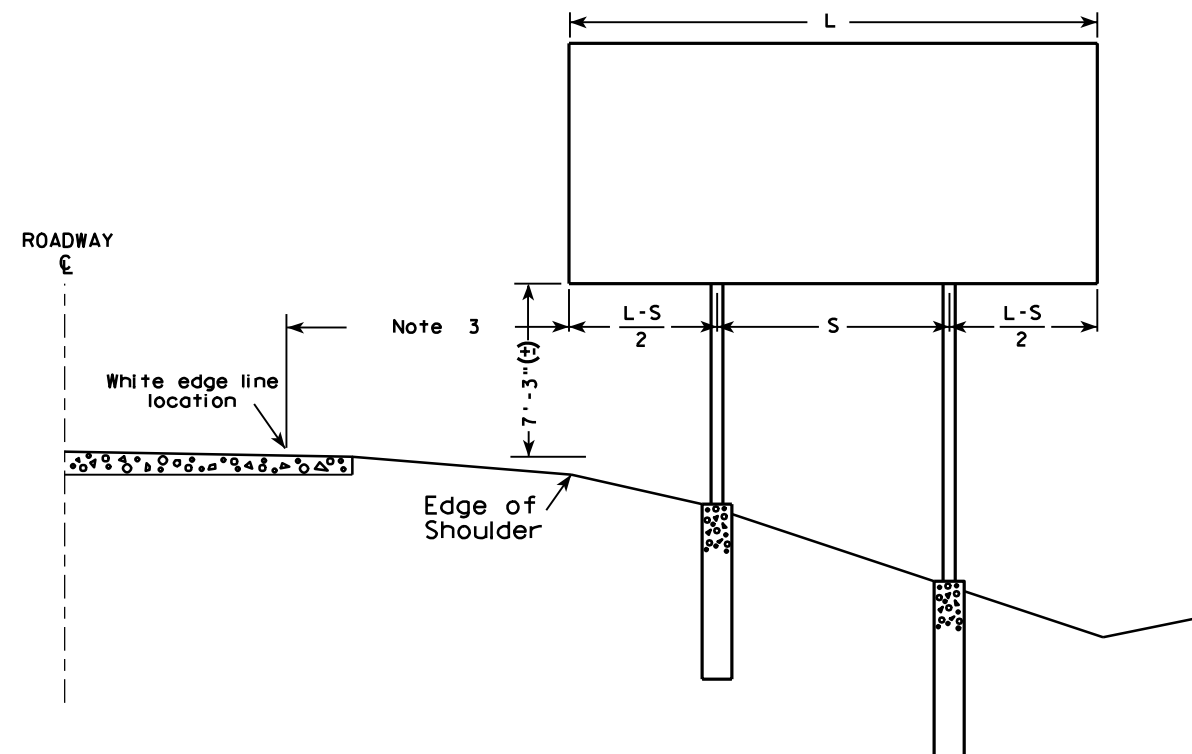
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENGINEER

FHWA



GENERAL NOTES

1. For a 2 post installation, S equals $3L/5$, but shall not be less than 9 ft.
2. For a 3 post installation, S equals $5L/7$, but shall not be less than 18 ft., and the space between any two posts shall not be less than 9 ft.
3. Unless noted in the plan, the sign offset distance shall be a minimum of 17'-6", desirable 30'-0".
4. The (±) tolerance shown on this sheet is 3 in.
5. The vertical sign height clearance detailed is measured from the bottom of the sign to the near edge of pavement.
6. Post lengths shown in the miscellaneous quantities are estimated lengths. The contractor shall verify post lengths at the time of final grading.
7. Refer to the Traffic Guidelines Manual for further guidance on minimum vertical clearance requirements.

* Clearance is 8'-3" (±) when the secondary sign is 3 ft. or less in height. For secondary signs larger than 3 ft., the clearance to the bottom of the secondary sign shall be 5'-3" (±).

TYPICAL INSTALLATION OF TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 4/02/08

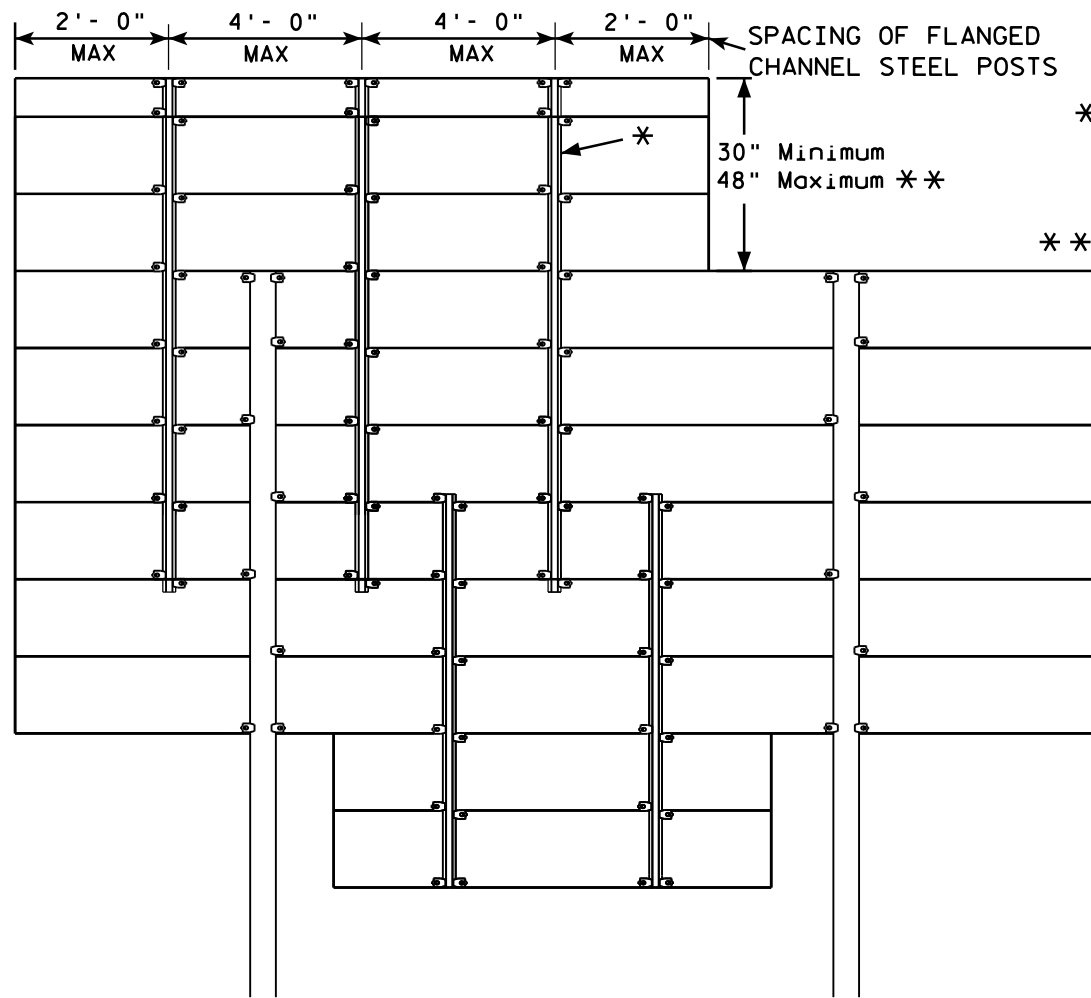
PLATE NO. A4-1.9

PROJECT NO:

SHEET NO:

E

GROUND MOUNTED SIGN

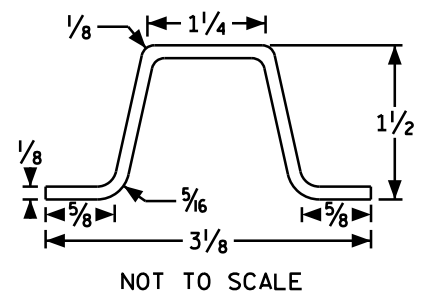


* = 2.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

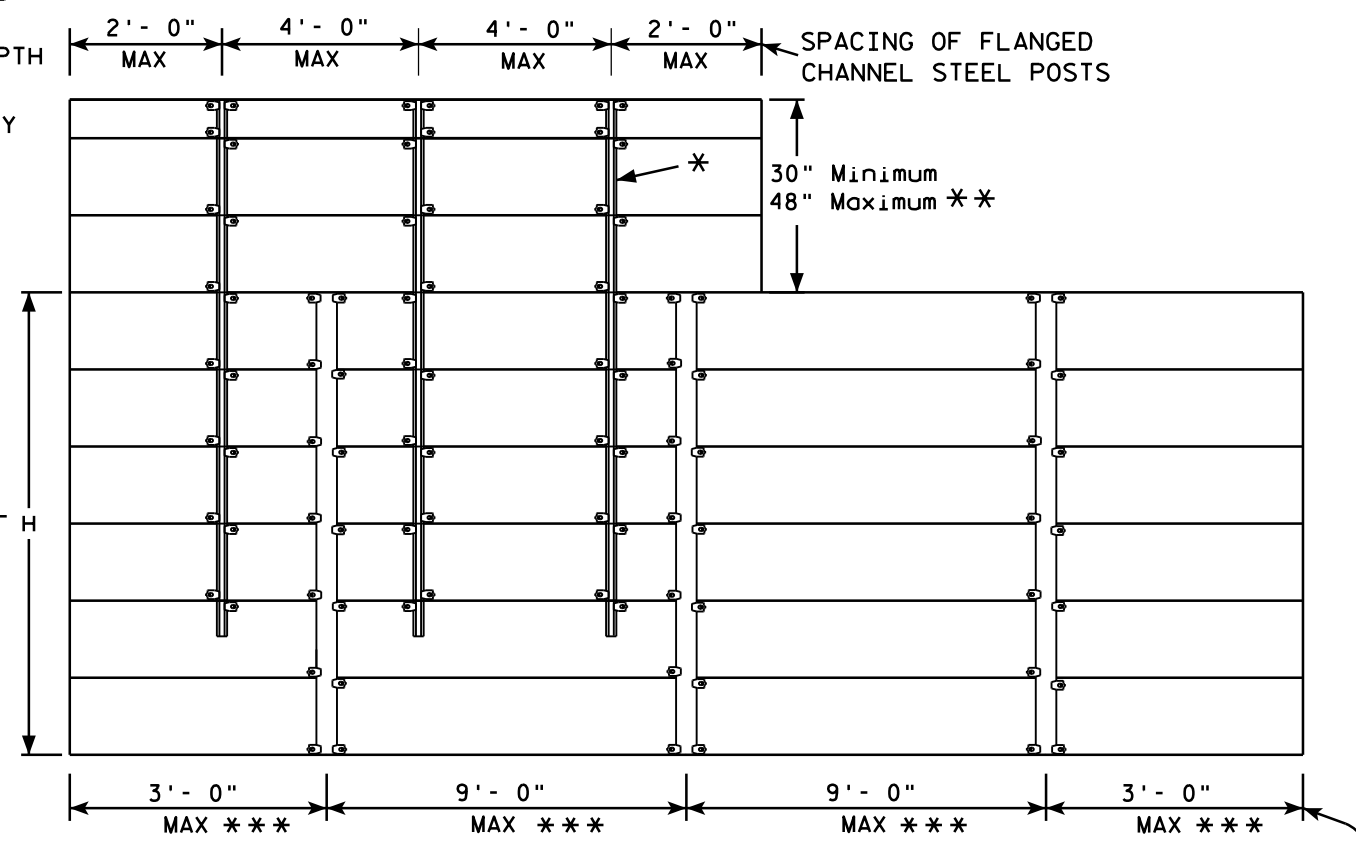
** = FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

*** THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 16 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 16 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

FLANGE CHANNEL DETAIL



SIGN BRIDGE MOUNTED SIGN



SPACING OF ALUMINUM SIGN SUPPORTS
5" X 3.5" X 3.7 LBS./ft.

GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:
PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
PANEL LENGTH 9'-0" - 12'-0" = 3 CHANNELS
PANEL LENGTH 13'-0" OR MORE = 4 CHANNELS
If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.

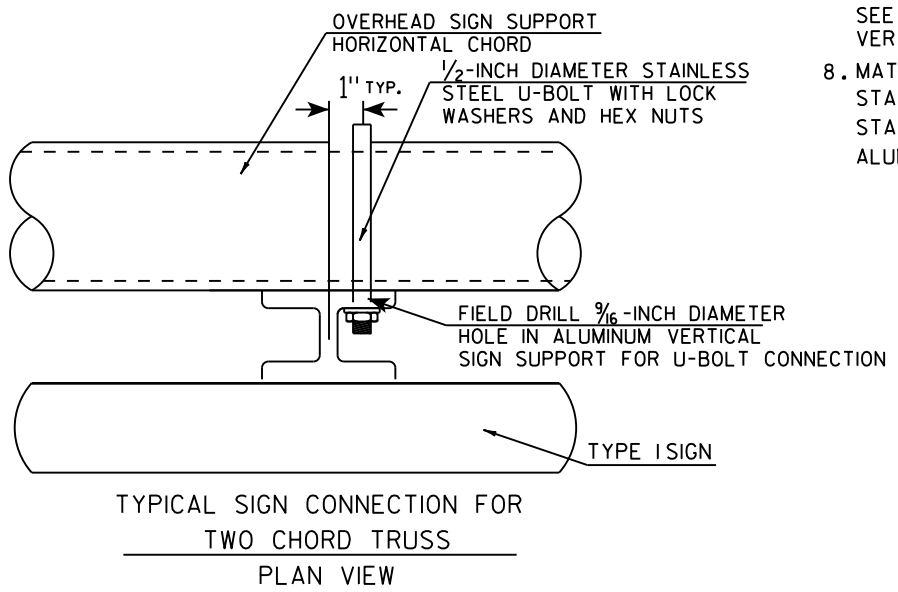
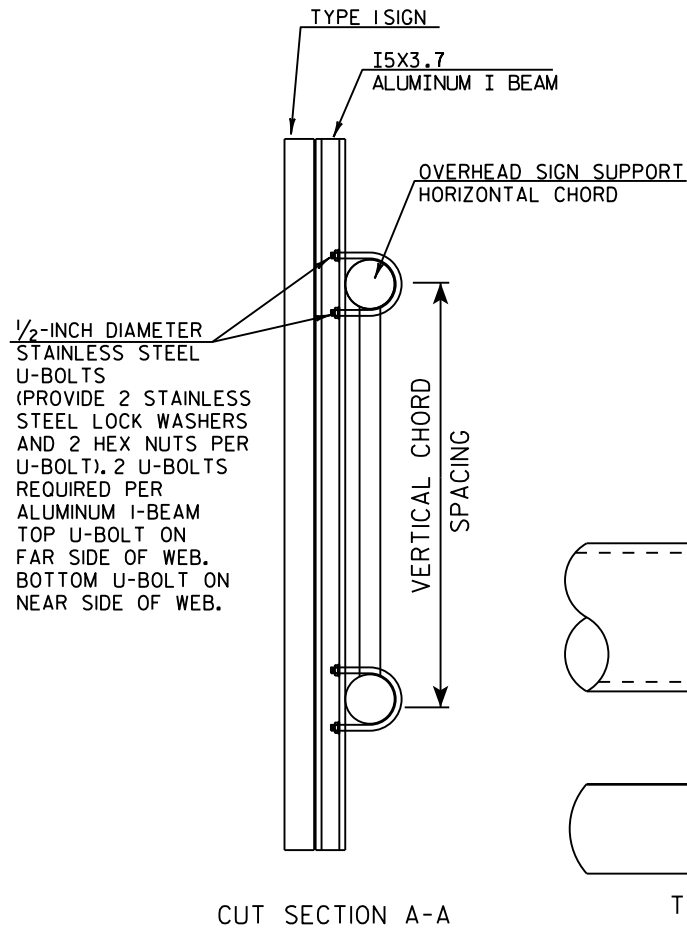
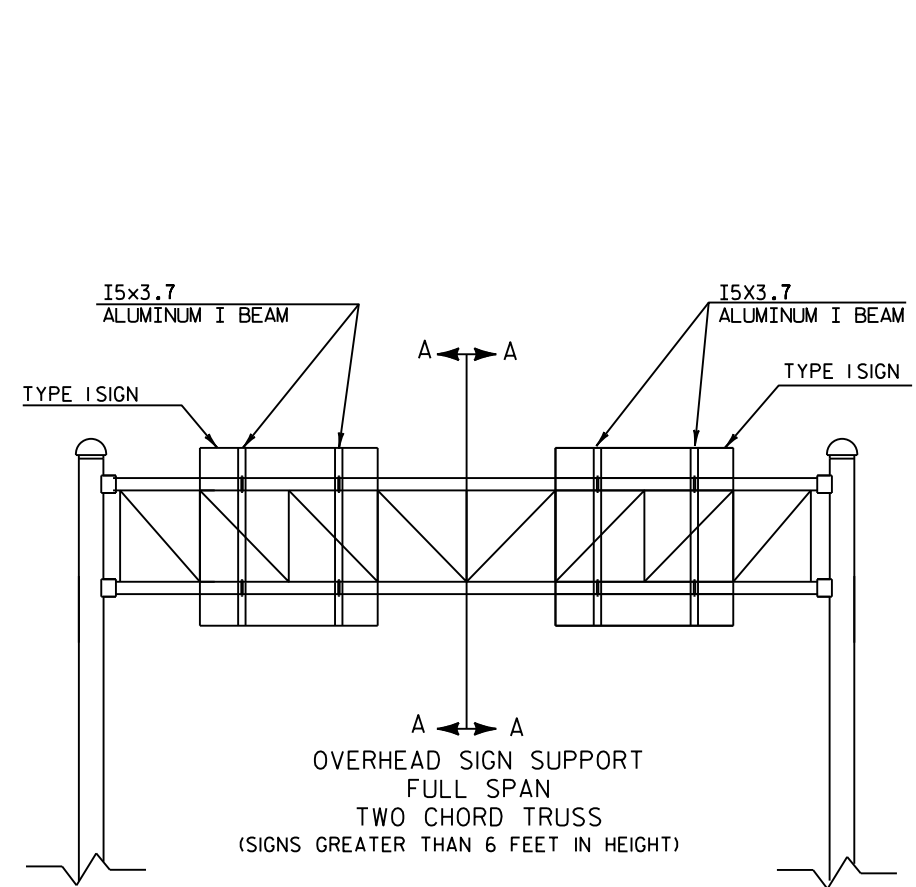
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)
6. Structural steel sign supports shall extend to the top of the main signs, as shown on the above details.

ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

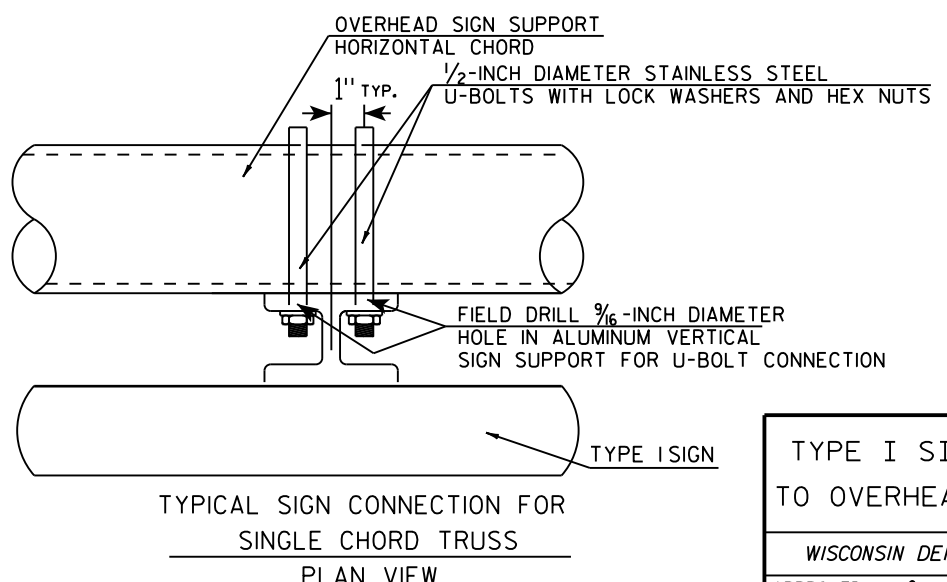
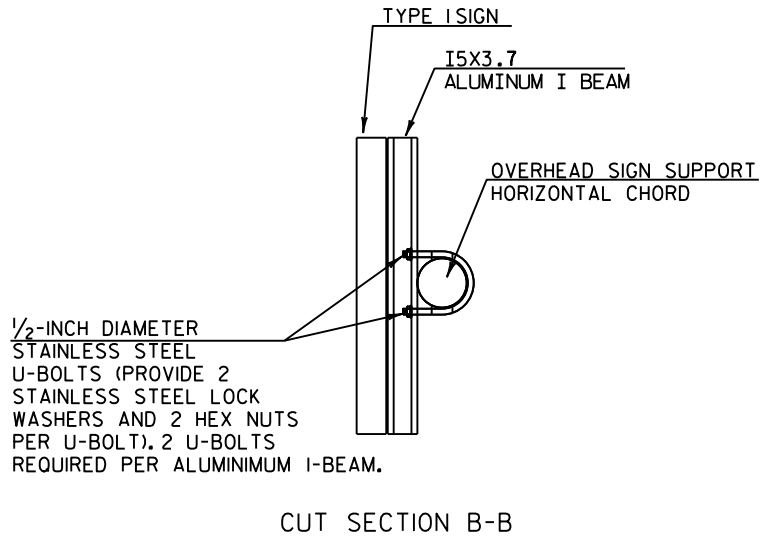
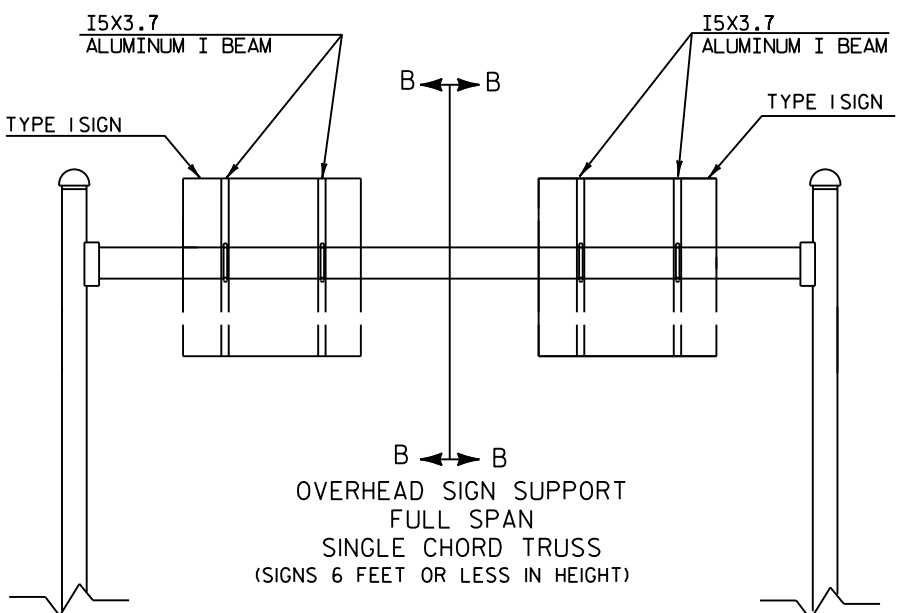
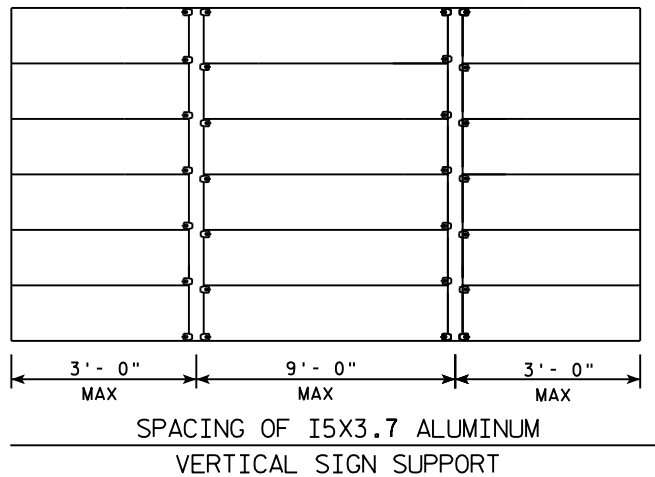
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/05/13 PLATE NO. A4-6.12



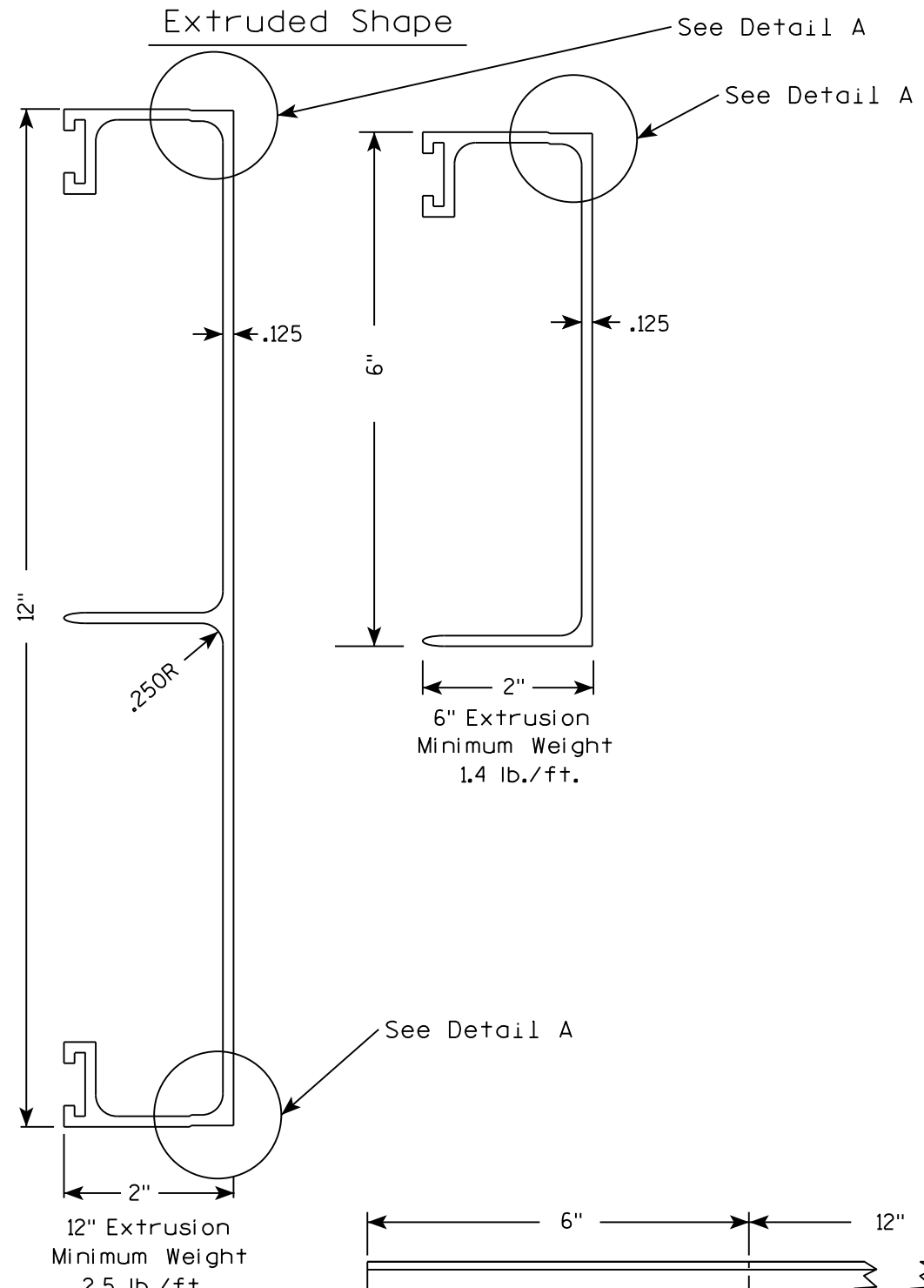
- GENERAL NOTES**
1. USE STAINLESS STEEL U-BOLTS, WASHERS, AND NUTS.
 2. USE CLIPS ON EVERY EXTRUDED PANEL JOINT PER SIGN PLATE A4-6.
 3. USE ALUMINUM VERTICAL SIGN SUPPORT BEAMS HAVING A 5 INCH BEAM DEPTH AND WEIGHT OF 3.7 LBS PER FOOT.
 4. U-BOLTS SHALL BE STAINLESS STEEL AND MANUFACTURED TO THE PROPER SIZE TO FIT THE CHORDS OF THE OVERHEAD SIGN STRUCTURE.
 5. DIAMETER OF U-BOLTS SHALL BE AS SHOWN.
 6. THE LENGTH OF THE ALUMINUM VERTICAL SIGN SUPPORT BEAMS SHALL BE THE SAME AS THE HEIGHT OF THE SIGN THEY ARE SUPPORTING. BEAM LENGTHS MAY BE LONGER FOR PROPER ATTACHMENT TO CHORDS.
 7. MINIMUM NUMBER OF BRACKETS PER SIGN IS TWO. SEE DETAIL BELOW FOR SPACING OF ALUMINUM VERTICAL SIGN SUPPORTS
 8. MATERIAL NOTES:
STAINLESS STEEL U-BOLTS AND LOCKWASHERS ASTM 304.
STAINLESS STEEL HEX NUTS ASTM A276.
ALUMINUM I-BEAMS ARE 6061-T6.



TYPE I SIGN CONNECTION TO OVERHEAD SIGN SUPPORT	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> State Traffic Engineer
DATE 11/10/15	PLATE NO. A4-7.4

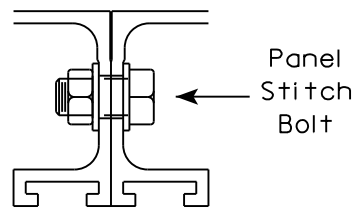
Extruded Shape

Hardware



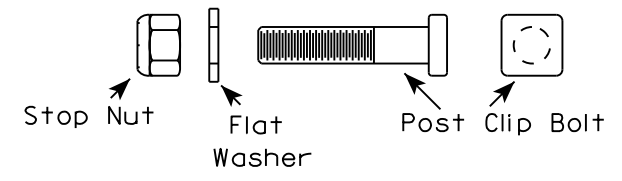
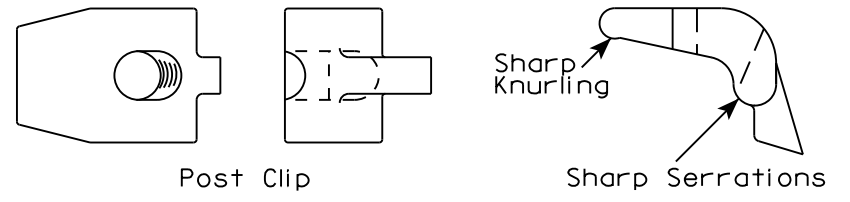
STITCH BOLT, WASHER & NUT

The hardware includes:
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



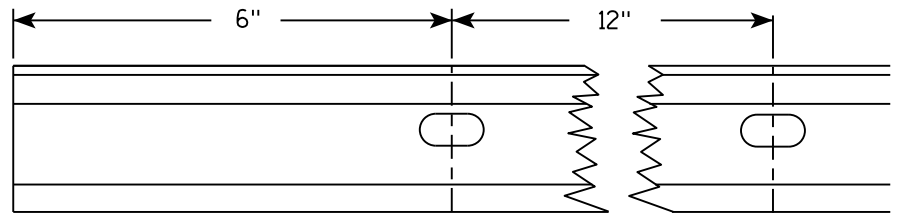
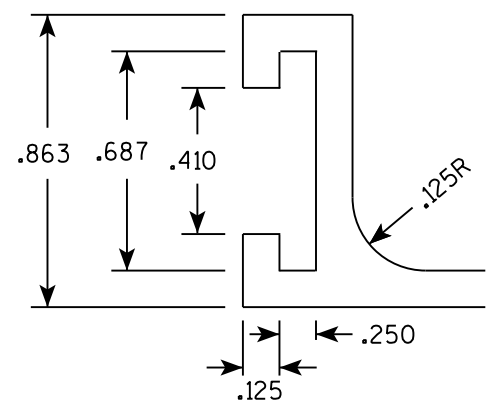
POST CLIP, POST CLIP BOLT, WASHER & NUT

Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.

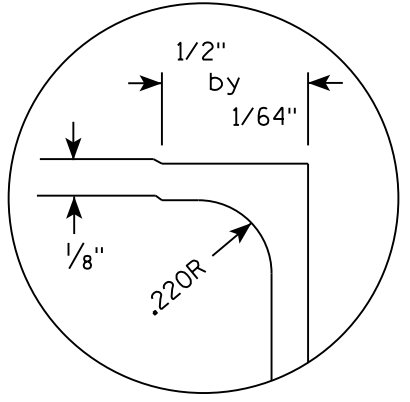


NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.
4. Edge wrapping of sign sheeting required on all extrusions joints shown in Detail A.



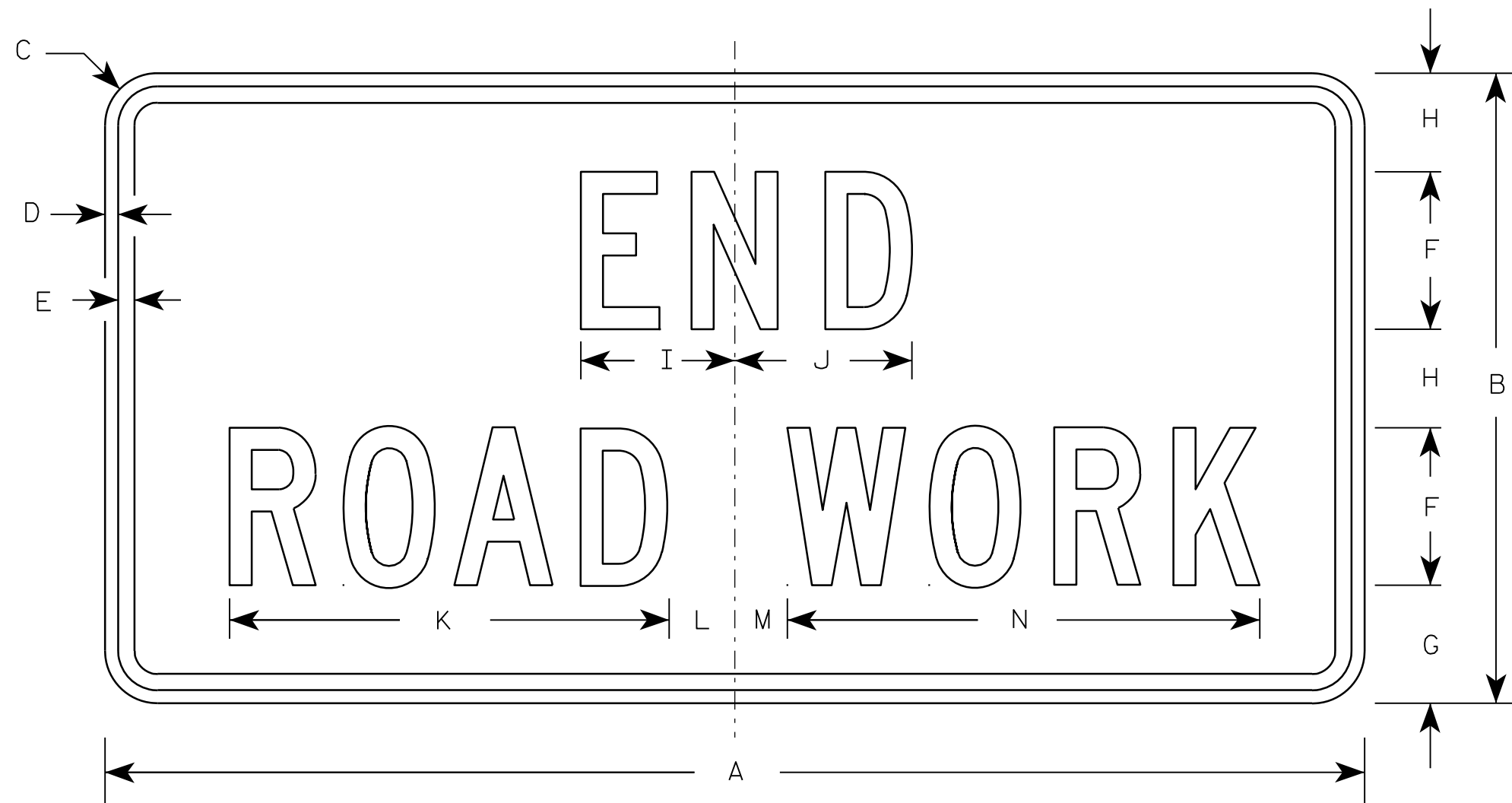
Punch 7/16" x 7/8" ovalholes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.



DETAIL A (EDGE WRAP JOINT)

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 11/30/16	PLATE NO. A5-2.10

7



G20-2A

Metric equivalent
for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

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.	Area sq. m.
1	36	18	1 1/8	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	0.41
2	48	24	1 1/2	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	0.72
3	48	24	1 1/2	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	0.72
4	48	24	1 1/2	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	0.72
5	48	24	1 1/2	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	0.72

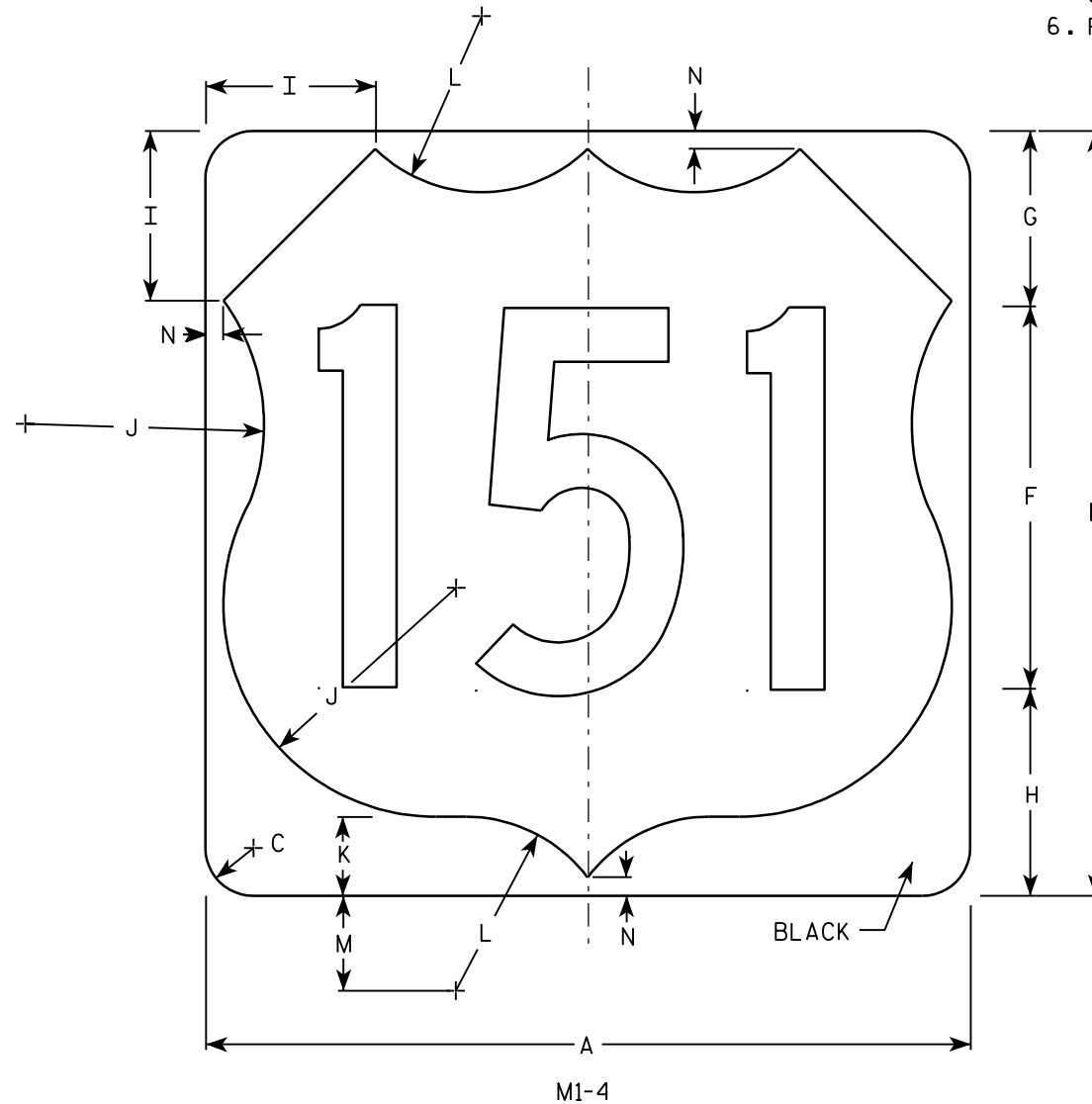
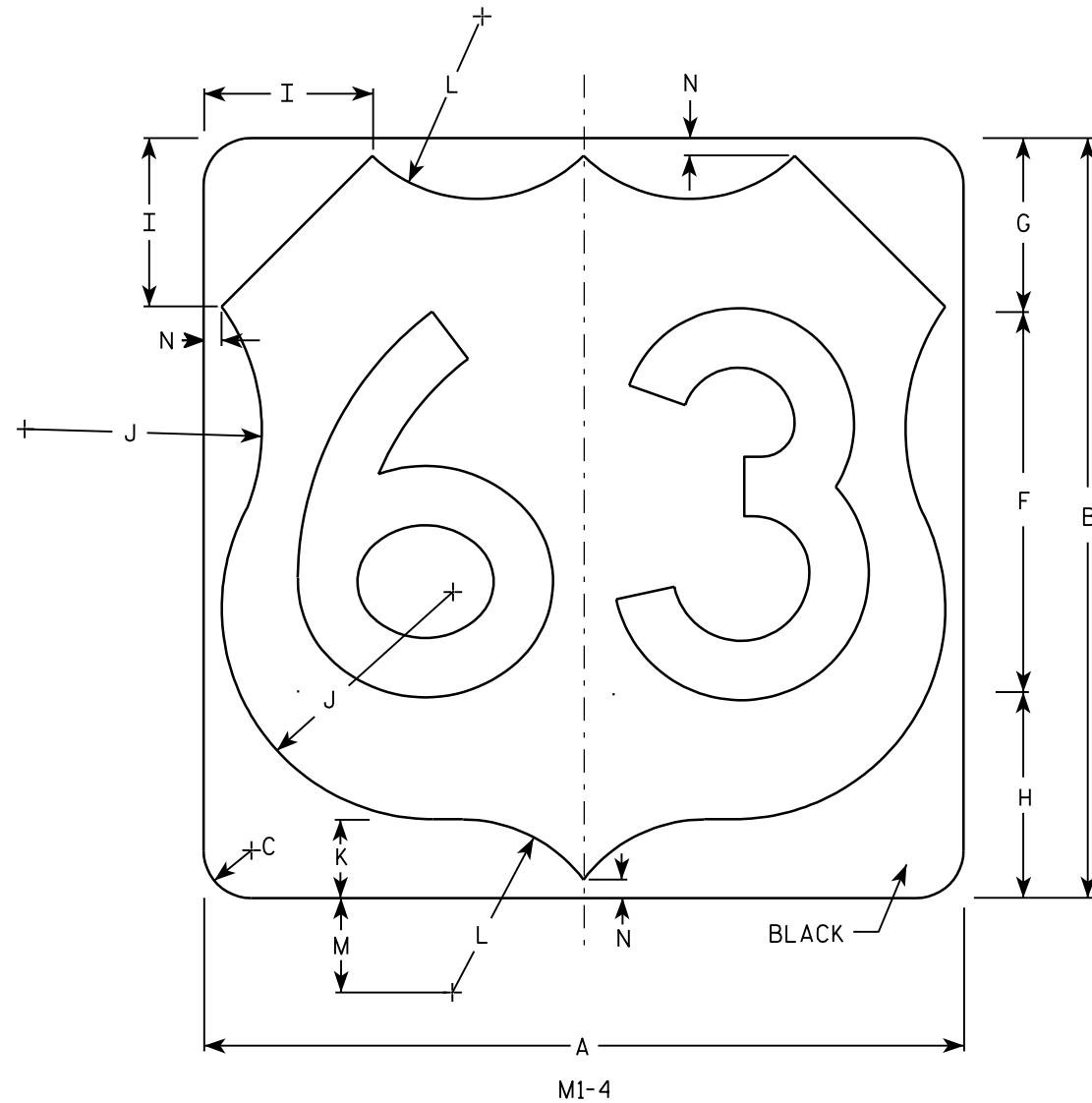
NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Orange
Message - Black
- Message Series - C
- 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

NOTES

1. Sign is Type II - See Note 6 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 6
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. Substitute appropriate numerals and adjust
spacing as per Plate A10-1.
6. Permanent Signs
Background - Type H Reflective
Detour or other temporary signs
Background - Reflective

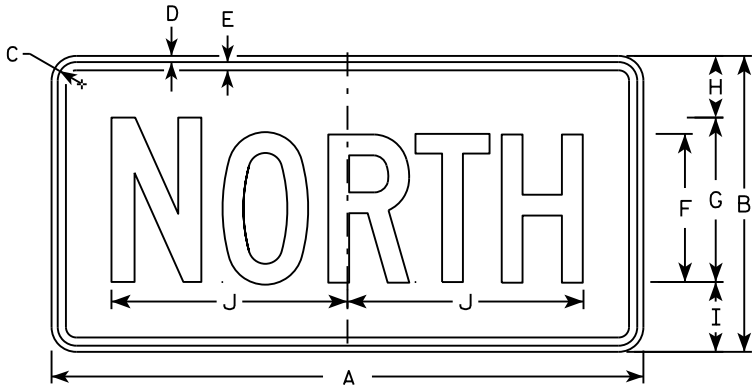


Metric equivalent
for this sign is:

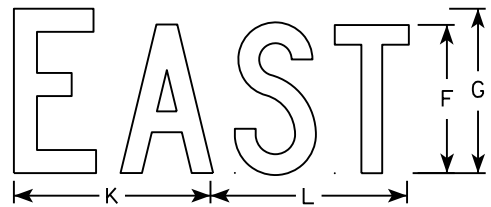
SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

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.	Area m ²
1																												
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

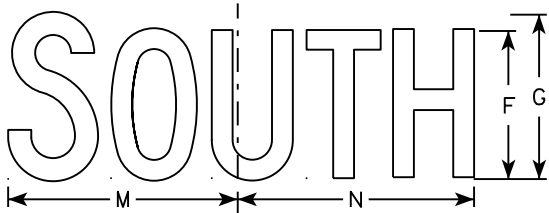
PROJECT NO: HWY: COUNTY: SHEET NO: E



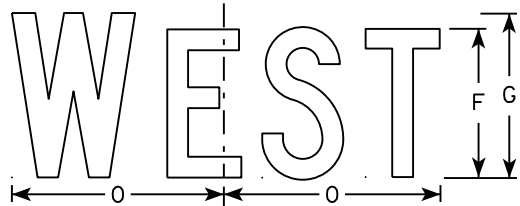
M3-1
MM3-1
MP3-1



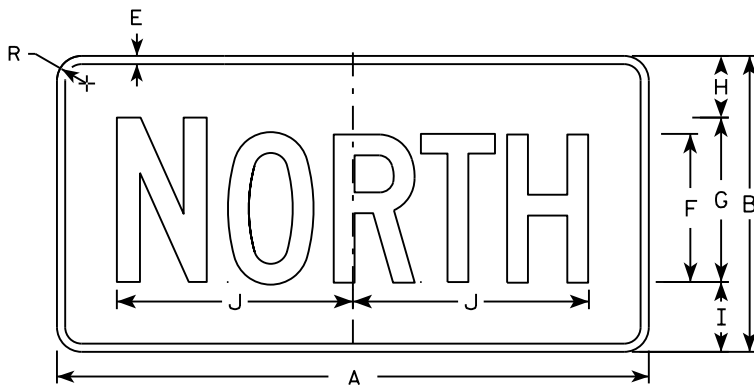
M3-2
MM3-2
MP3-2



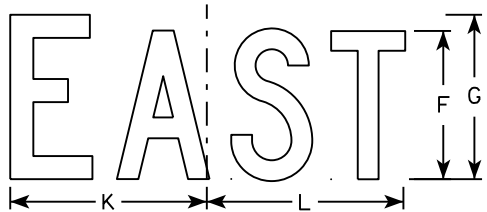
M3-3
MM3-3
MP3-3



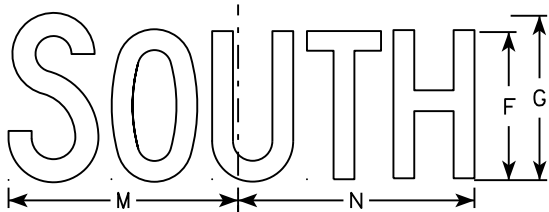
M3-4
MM3-4
MP3-4



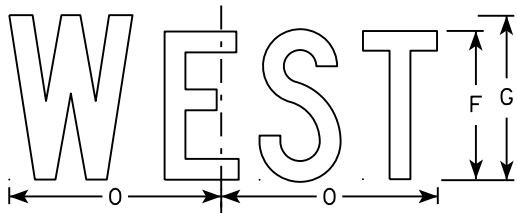
MB3-1
MK3-1
MN3-1



MB3-2
MK3-2
MN3-2



MB3-3
MK3-3
MN3-3



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
Background - See note 5
Message - See note 5
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.
5. M3-1 thru M3-4 Background - White
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White
MK3-1 thru MK3-4 Background - Green
Message - White
MM3-1 thru MM3-4 Background - White
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White
MP3-1 thru MP3-4 Background - White
Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

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																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thru M3-4
SERIES

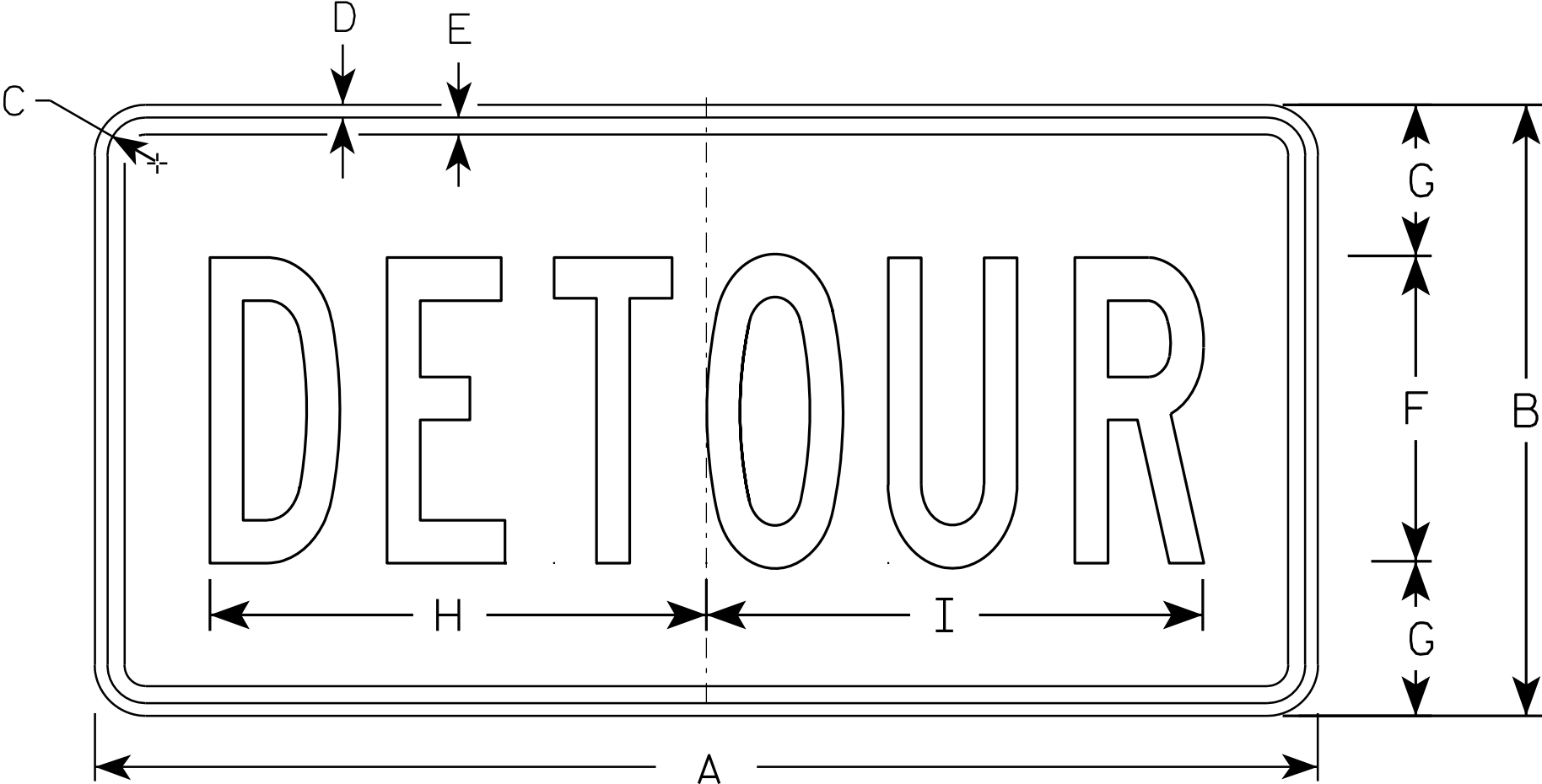
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M3-1.14

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
 - Background - Orange
 - Message - Black
- 3. Message Series - B
- 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.



M4 - 8

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																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

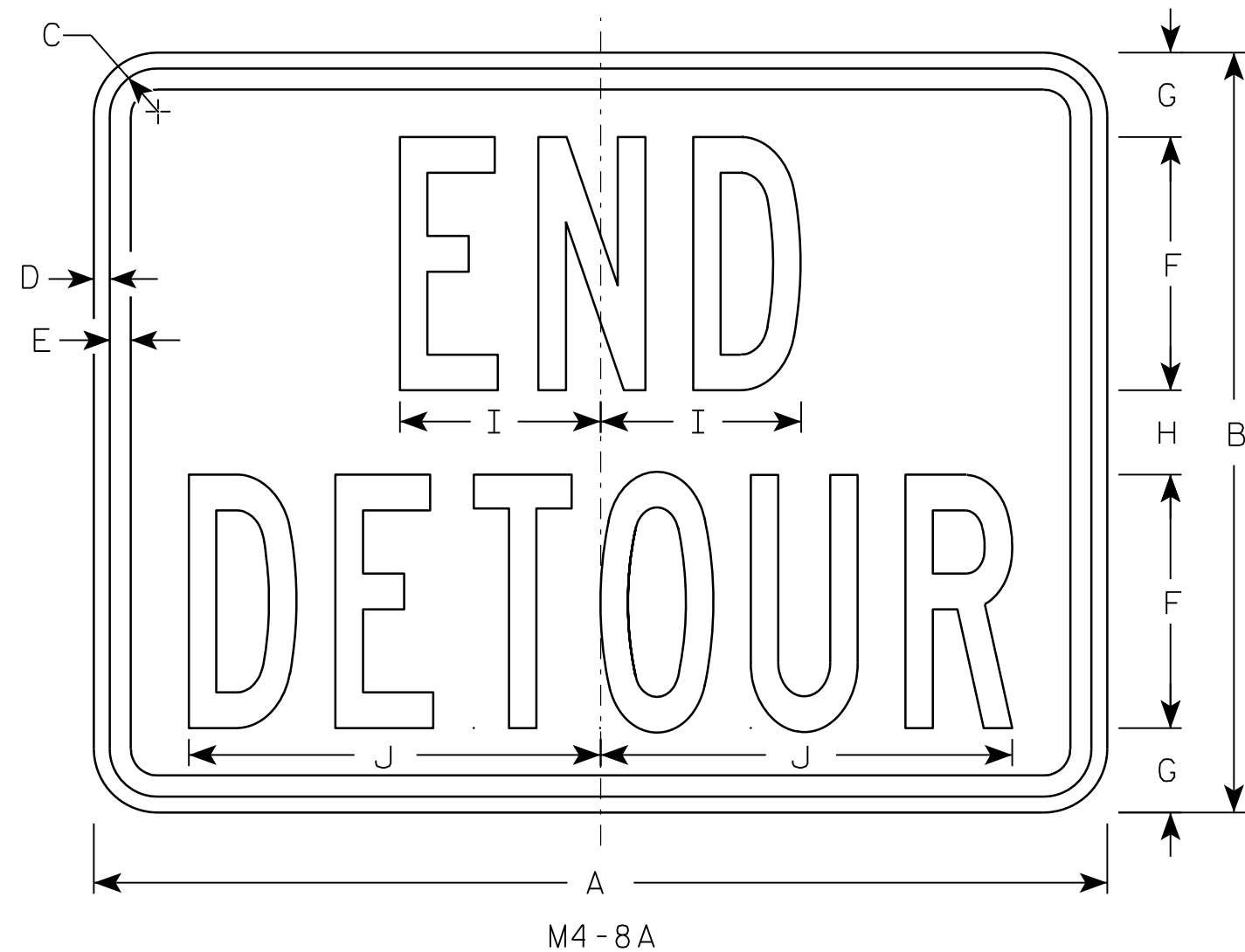
STANDARD SIGN
M4 - 8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

7



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - B
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.

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																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

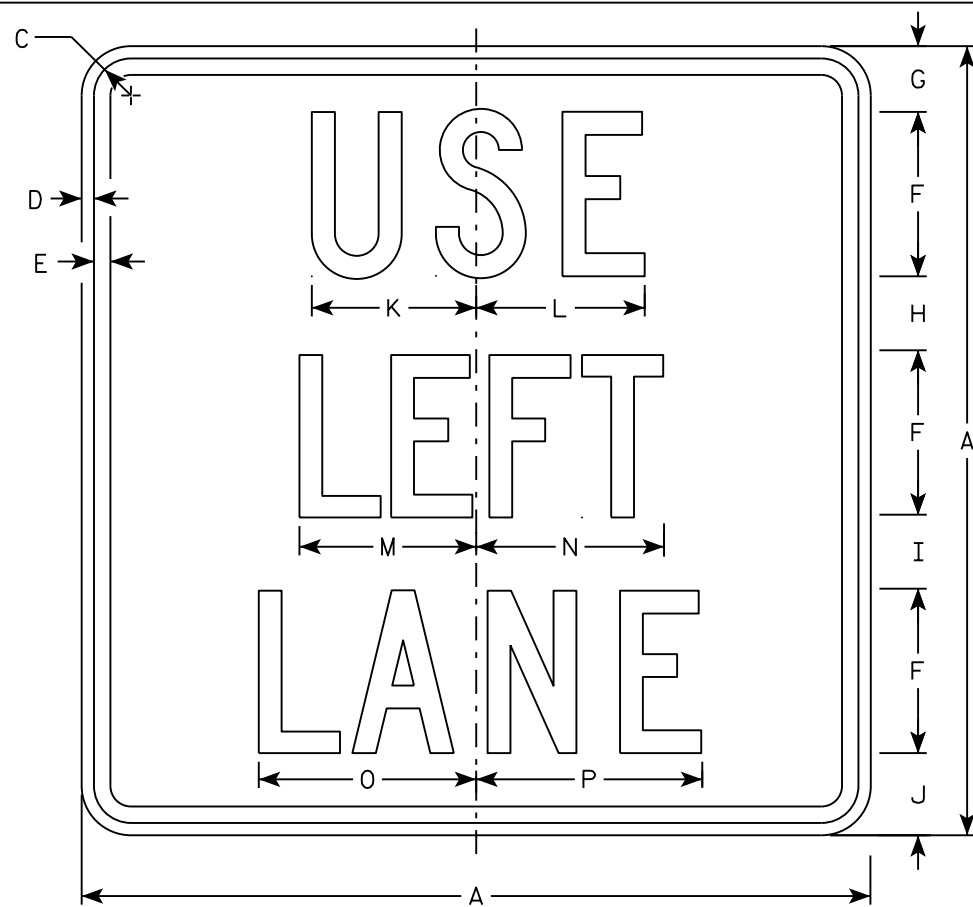
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E
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STANDARD SIGN
M4-8A

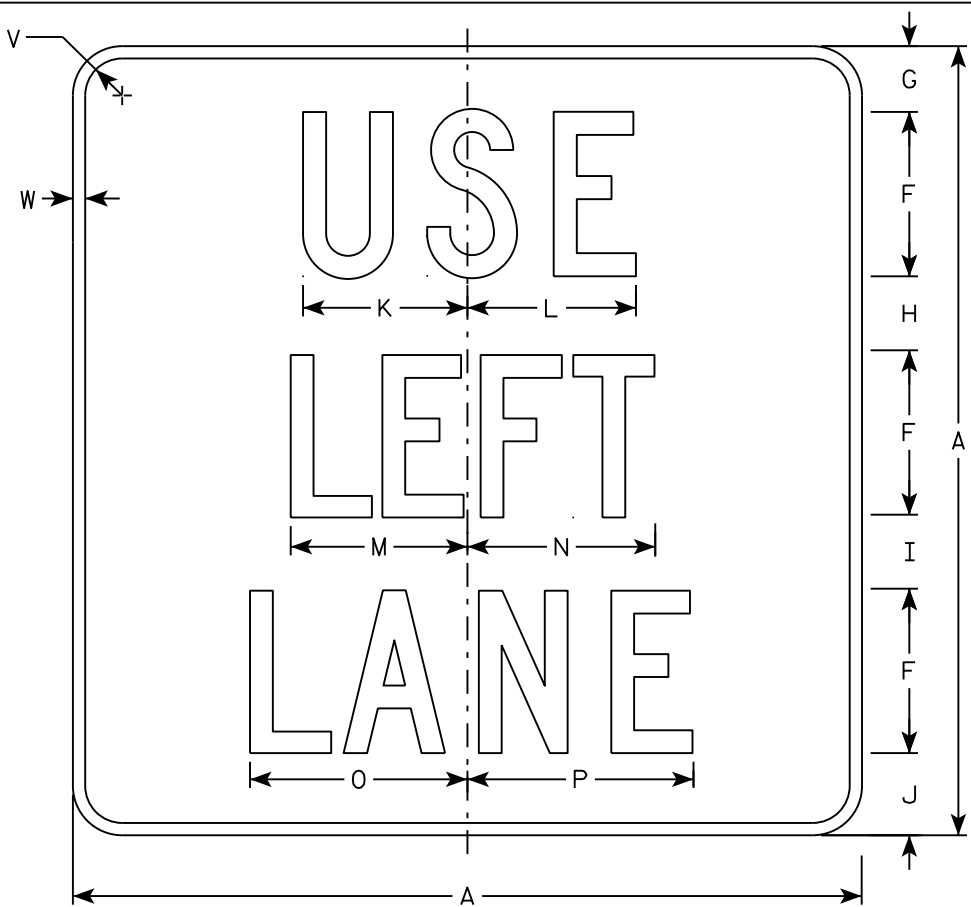
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

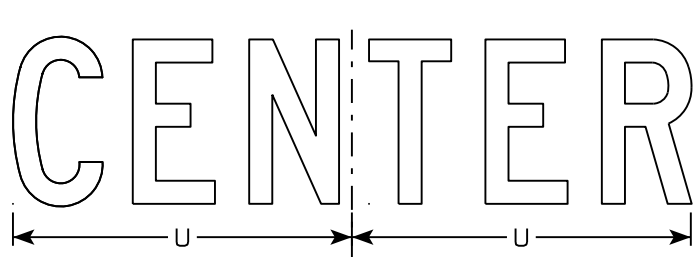
DATE 3/9/11 PLATE NO. M4-8A.2



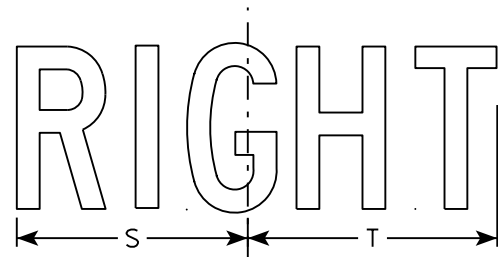
M4-20L
MM4-20L
M04-20L
MP4-20L



MB4-20L
MK4-20L
MN4-20L
MR4-20L



M4-20C
MB4-20C
MK4-20C
MM4-20C
MN4-20C
M04-20C
MP4-20C
MR4-20C



M4-20R
MB4-20R
MK4-20R
MM4-20R
MN4-20R
M04-20R
MP4-20R
MR4-20R

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																											
2	24		1 1/8	3/8	1/2	5	2	2 1/4	2 1/4	2 1/2	5	5 1/8	5 3/8	5 3/4	6 5/8	6 7/8			7	7 5/8	10 1/4	1 1/2	1/2				4.0
3	36		1 5/8	5/8	3/4	7	4	3	3 1/2	4 1/2	7 1/2	7 3/4	8	8 5/8	9 7/8	10 1/4			10 3/8	11 3/8	14 3/8	1 7/8	1/2				9.0
4																											
5																											

NOTES

1. Sign is Type II - Type H except as Shown
2. Color:

Background - See note 5

Message - See note 5
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.
5. M4-20 Background - White

Message - Black

MB4-20 Background - Blue

Message - White

MK4-20 Background - Green

Message - White

MM4-20 Background - White

Message - Green

MN4-20 Background - Brown

Message - White

M04-20 Background - Orange - Type F Reflective

Message - Black

MP4-20 Background - White

Message - Blue

MR4-20 Background - Brown

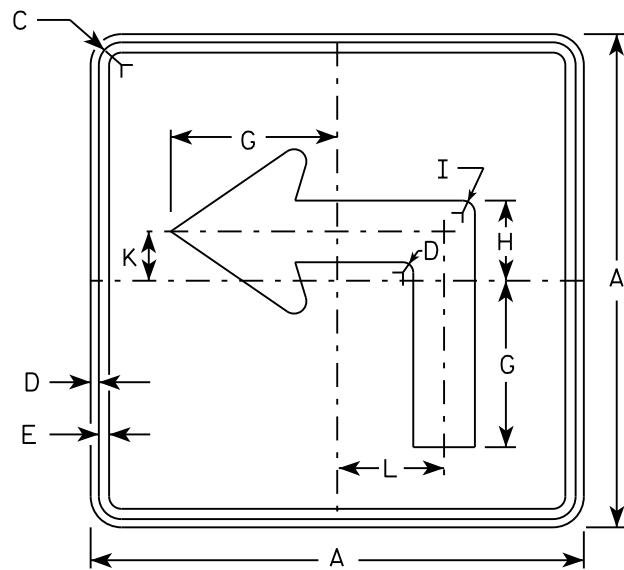
Message - Yellow

STANDARD SIGN
M4-20

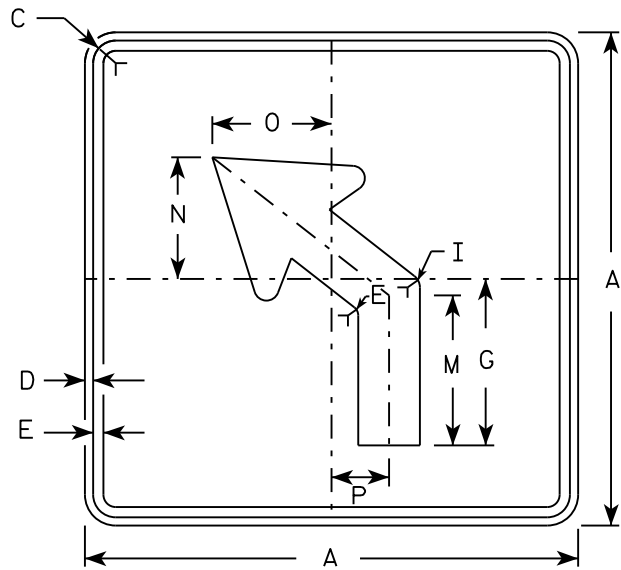
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

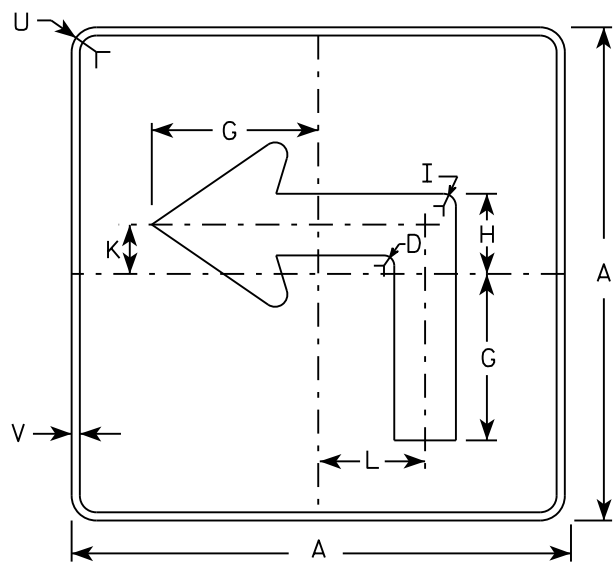
DATE 10/15/15 PLATE NO. M4-20.5



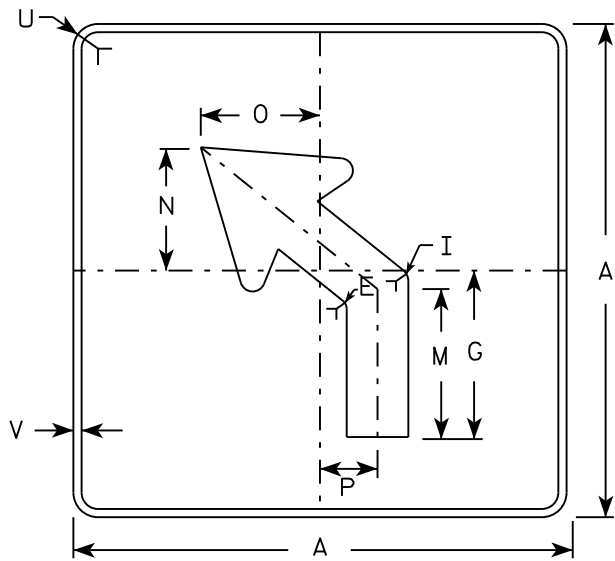
M5-1L
MM5-1L
M05-1L
MP5-1L



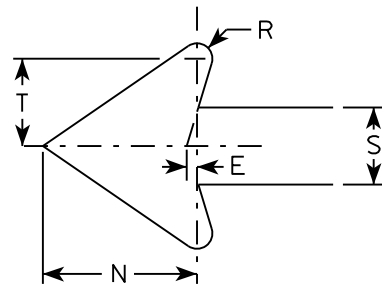
M5-2L
MM5-2L
M05-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

- Signs are Type II - Type H reflective except as shown
- Color:
Background - See note 4
Message - See note 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.
- | | |
|-----------------|---|
| M5-1 and M5-2 | Background - White |
| | Message - Black |
| MB5-1 and MB5-2 | Background - Blue |
| | Message - White |
| MK5-1 and MK5-2 | Background - Green |
| | Message - White |
| MM5-1 and MM5-2 | Background - White |
| | Message - Green |
| MN5-1 and MN5-2 | Background - Brown |
| | Message - White |
| M05-1 and M05-2 | Background - Orange - Type F Reflective |
| | Message - Black |
| MP5-1 and MP5-2 | Background - White - Type H Reflective |
| | Message - Blue |
| MR5-1 and MR5-2 | Background - Brown |
| | Message - Yellow |
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

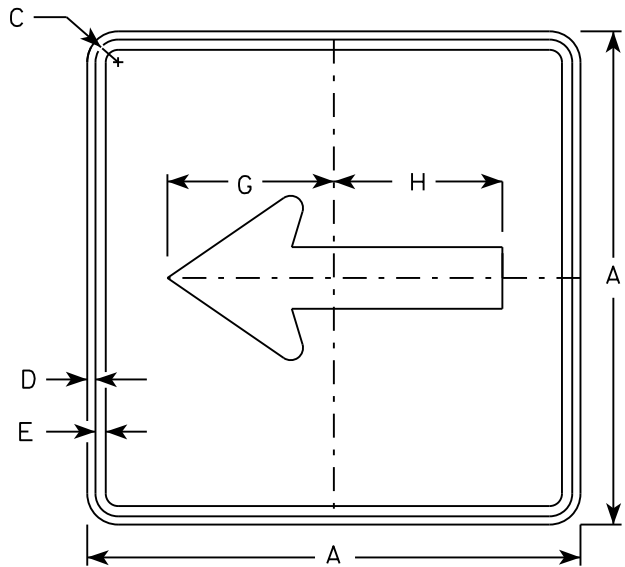
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

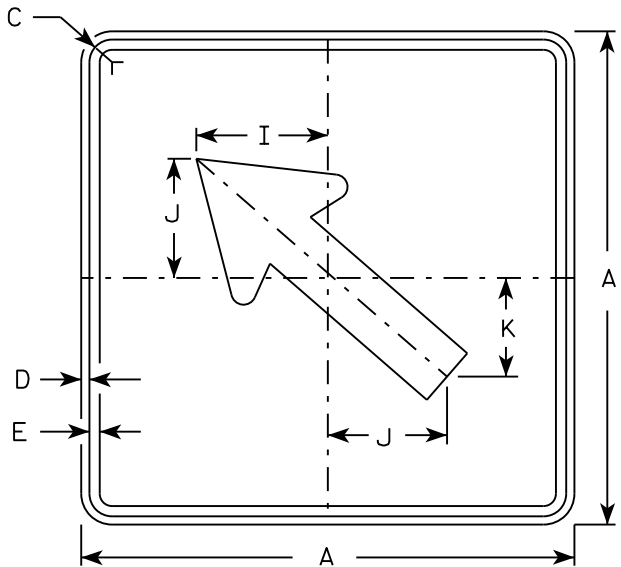
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

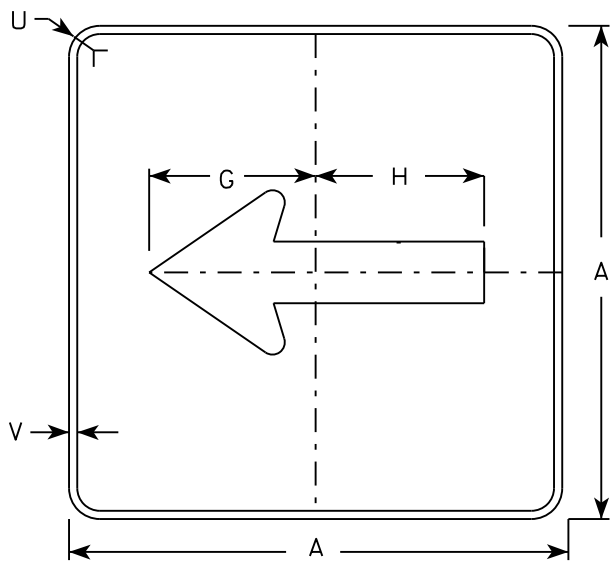
DATE 10/15/15 PLATE NO. M5-1.13



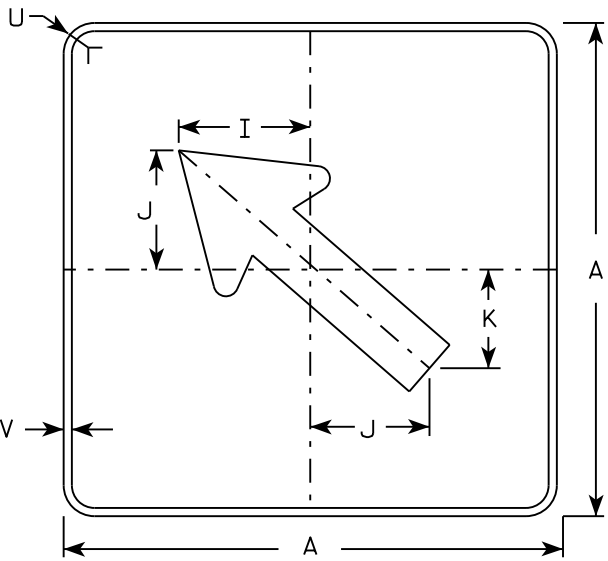
M6 - 1
MM6 - 1
M06 - 1
MP6 - 1



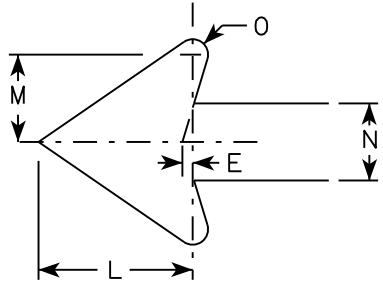
M6 - 2
MM6 - 2
M06 - 2
MP6 - 2



MB6 - 1
MK6 - 1
MN6 - 1
MR6 - 1



MB6 - 2
MK6 - 2
MN6 - 2
MR6 - 2



NOTES

- 1. Signs are Type II - Type H except as Shown
- 2. Color:
Background - See note 4
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. M6-1 and M6-2 Background - White
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White
MK6-1 and MK6-2 Background - Green
Message - White
MM6-1 and MM6-2 Background - White
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White
M06-1 and M06-2 Background - Orange - Type F Reflective
Message - Black
MP6-1 and MP6-2 Background - White
Message - Blue
MR6-1 and MR6-2 Background - Brown
Message - Yellow

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																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

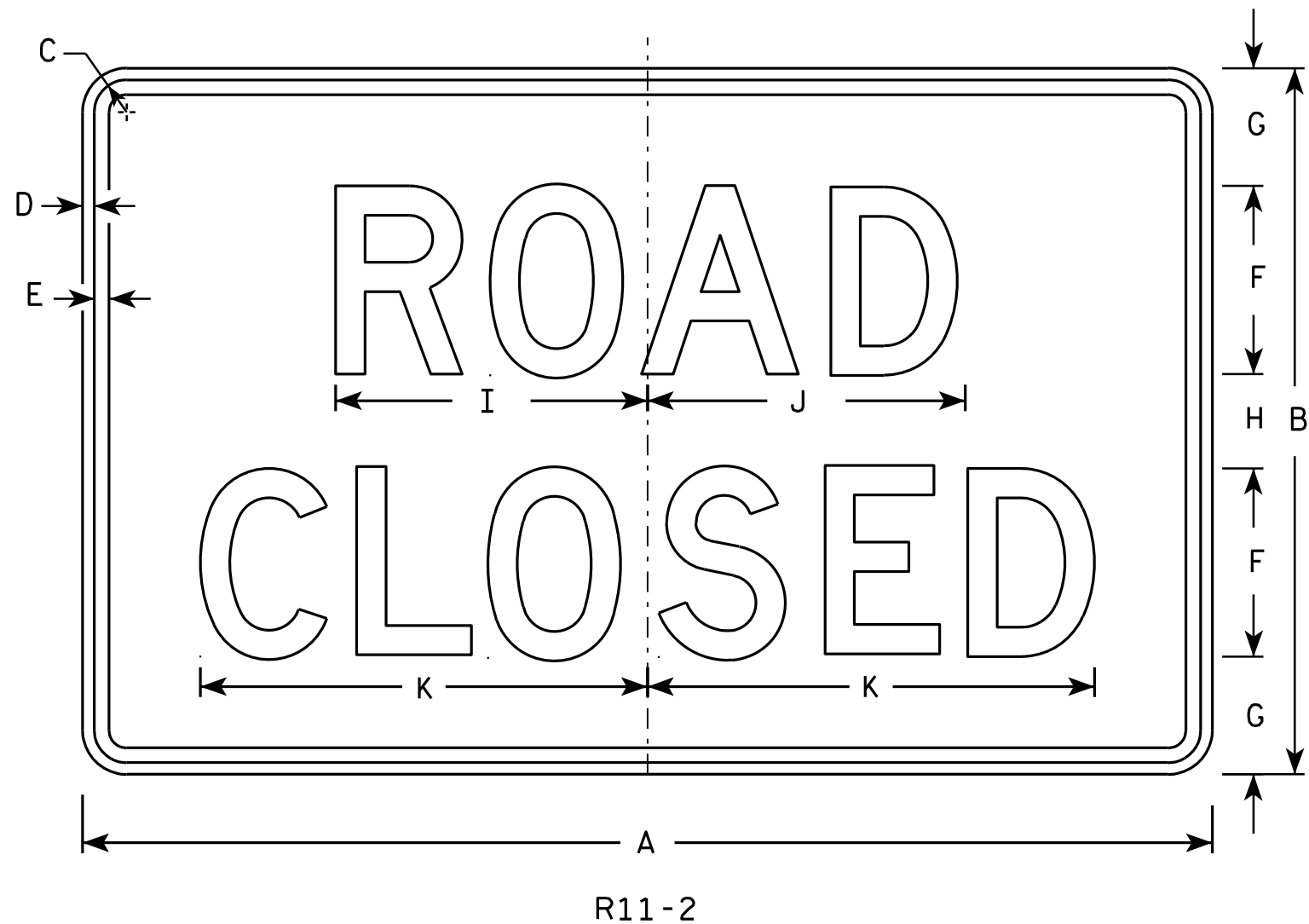
E

STANDARD SIGN
M6 - 1 & M6 - 2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

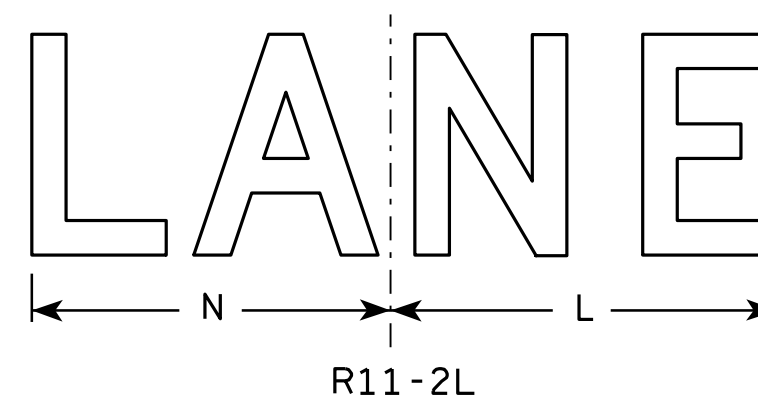
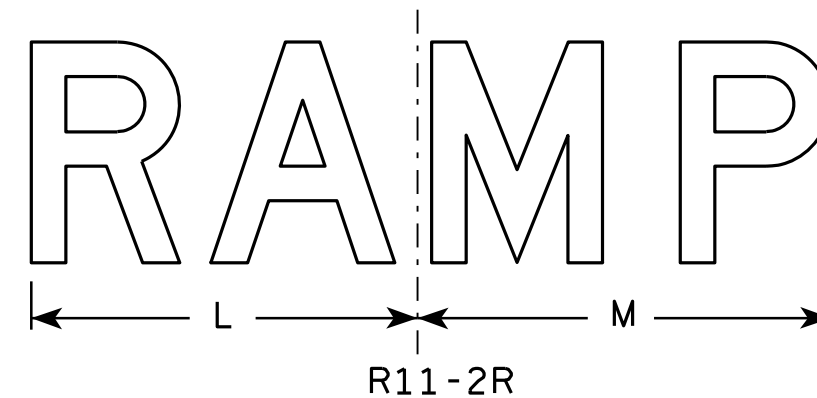
APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-1.15



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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.



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 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
2M	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
3	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
4	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
5	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0

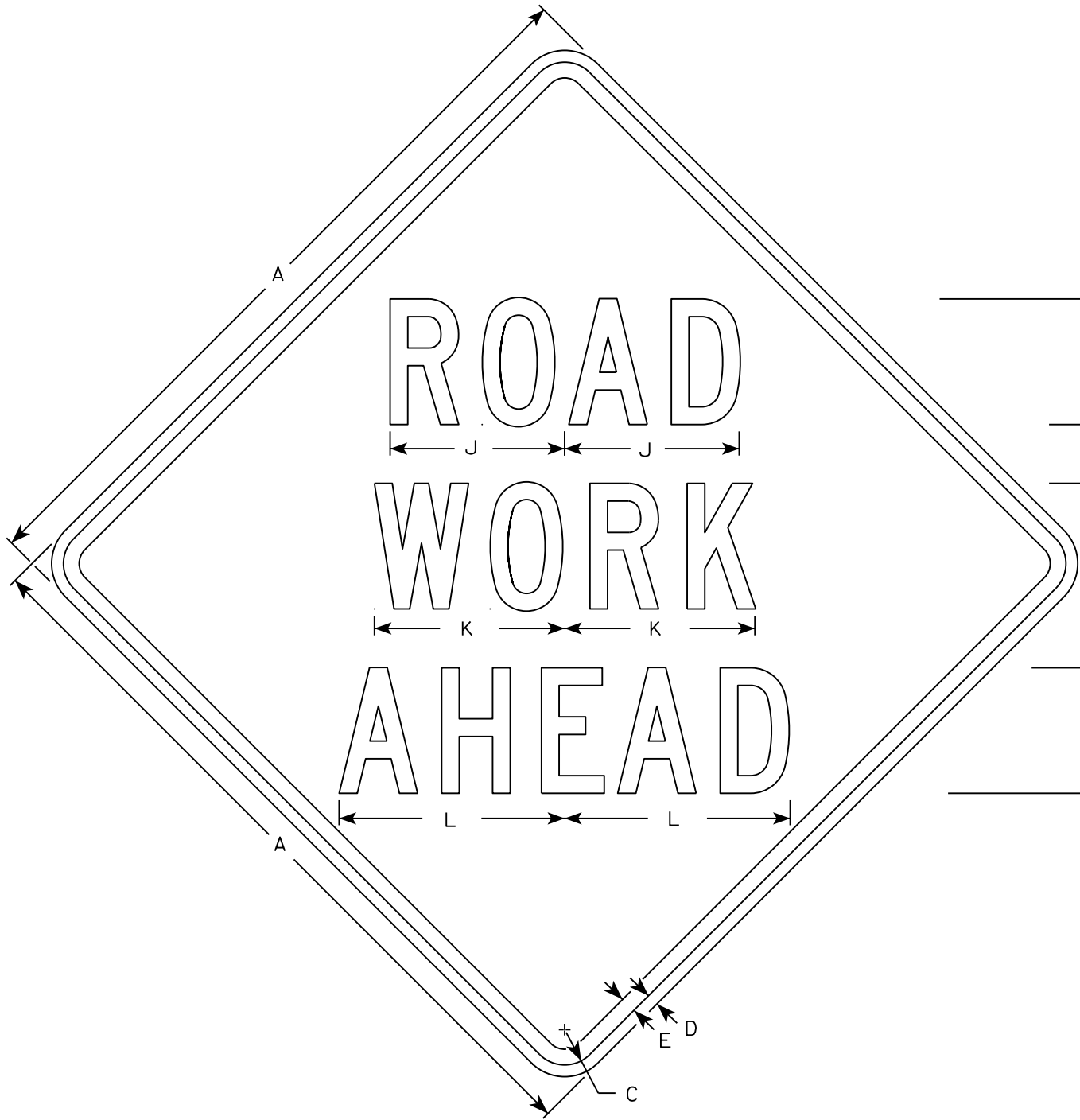
STANDARD SIGN R11-2

WISCONSIN DEPT OF TRANSPORTATION

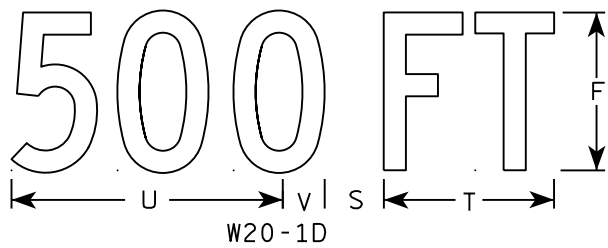
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

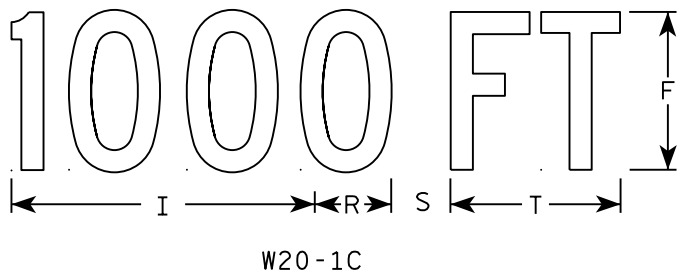
PROJECT NO: HWY: COUNTY: SHEET NO: E



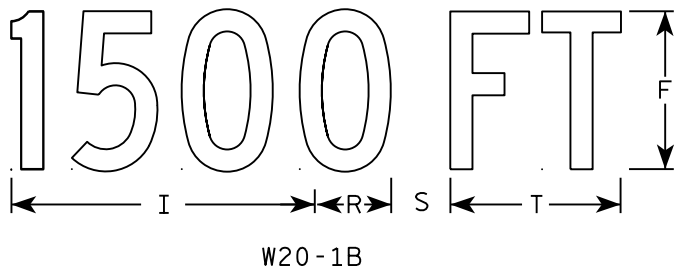
W20-1A



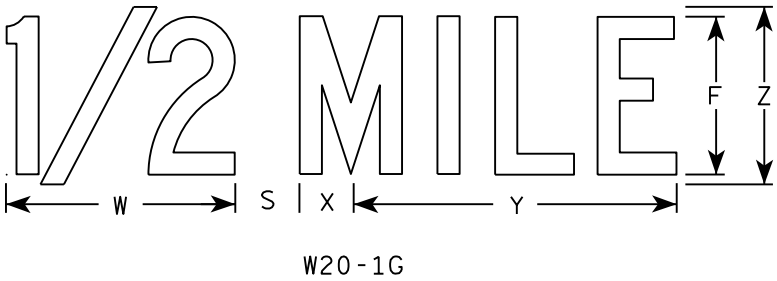
W20-1D



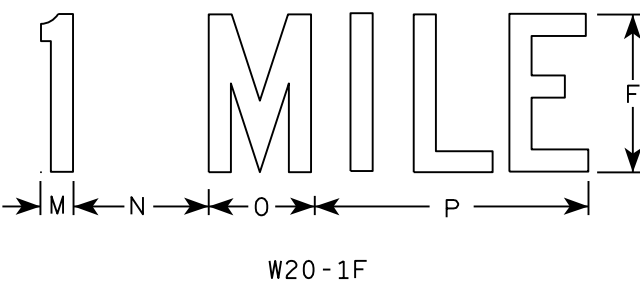
W20-1C



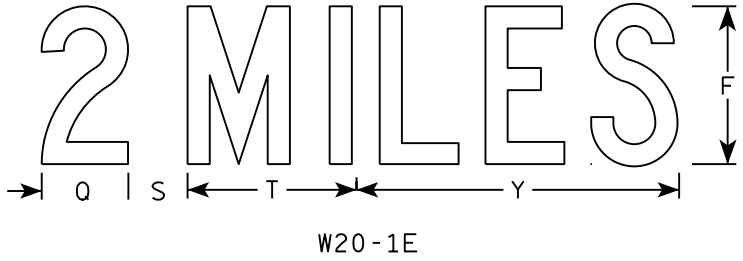
W20-1B



W20-1G



W20-1F



W20-1E

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.

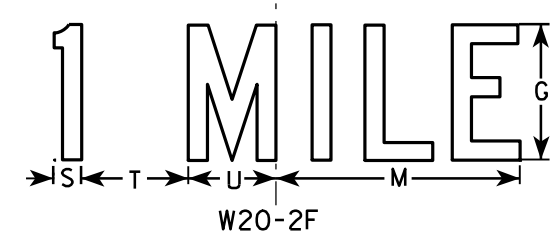
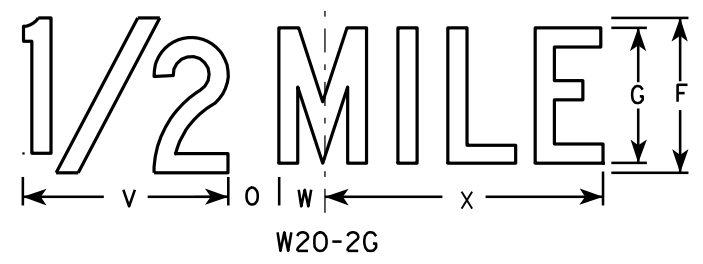
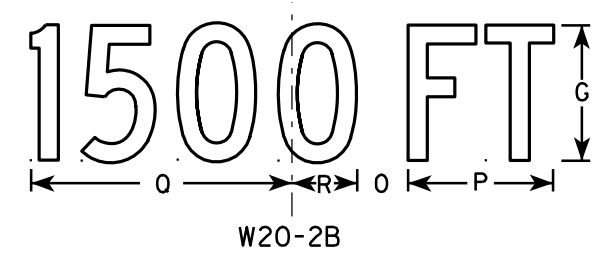
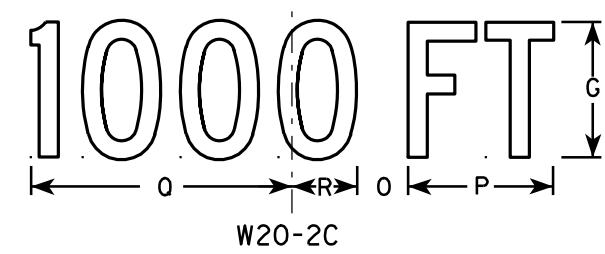
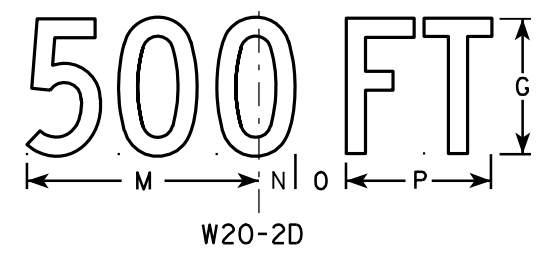
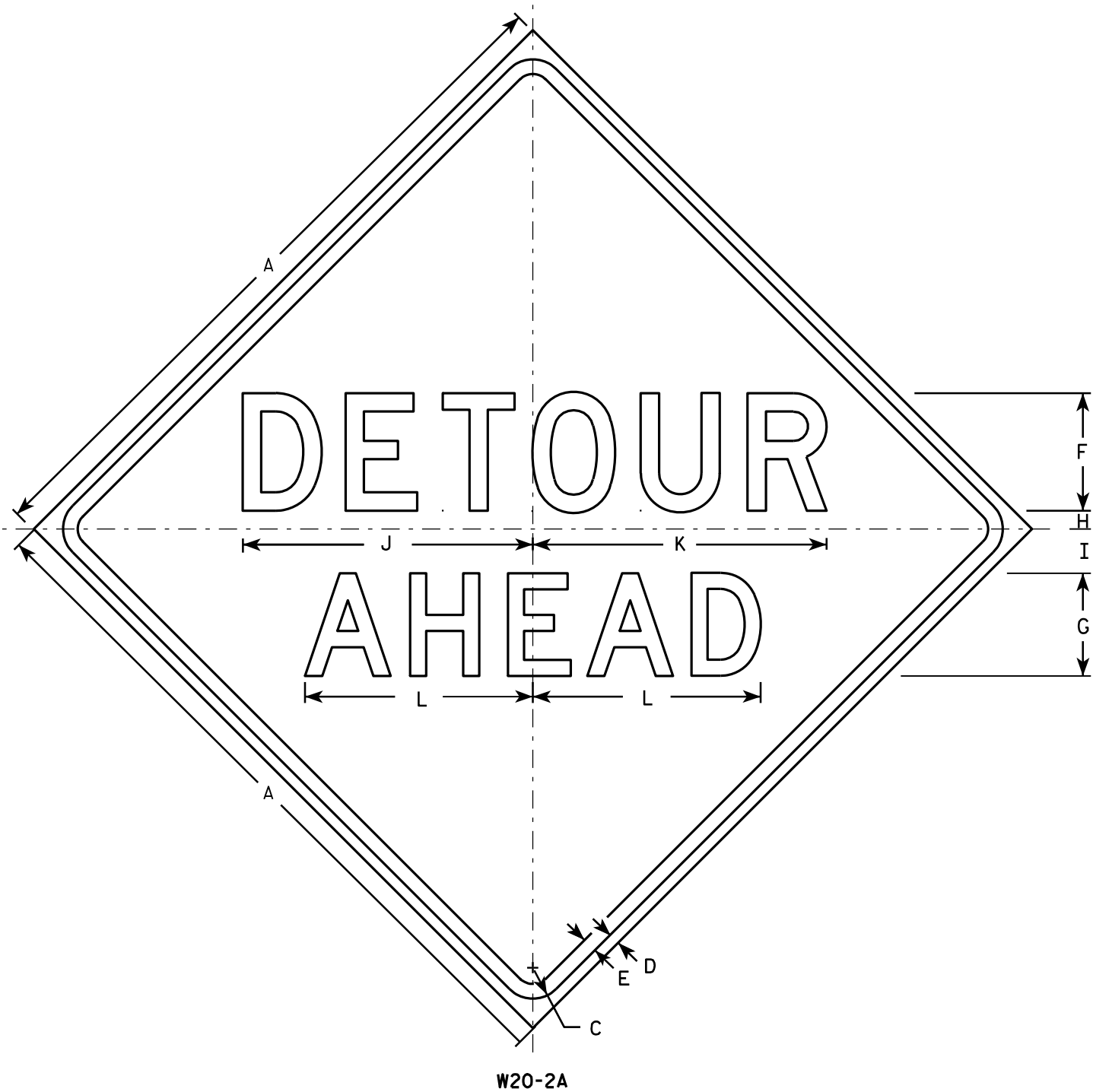
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13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

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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. Line 1 is Series D.
Line 2 is Series D for AHEAD and Series C for all other distances.

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		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	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	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALTERNATE DESIGNS ARE NOT ALLOWED.

ALL STRUCTURAL STEEL MEMBERS, PLATES, ANCHOR RODS, H.S. BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED PER SECTION 641 OF THE WISDOT STANDARD SPECIFICATIONS.

ALL H.S. BOLTED CONNECTIONS SHALL BE MADE WITH $\frac{3}{4}$ " ϕ (DIAMETER) A325 GALVANIZED BOLTS. FIELD CONNECTIONS SHALL BE INSTALLED WITH DTI WASHERS.

CONTRACTOR SHALL VERIFY DIMENSIONS PRIOR TO FABRICATION OF STRUCTURE.

PREFABRICATE CAMBER INTO THE HORIZONTAL SUPPORT PROVIDING AN AMOUNT "Y" AT END OF TRUSS SHOWN IN "CAMBER DIAGRAM". DO NOT RAKE COLUMN BY ADJUSTMENT OF LEVELING NUTS.

WELD TEST AS PER AWS D11.

THE STRUCTURE MUST BE ASSEMBLED IN THE SHOP TO ASSURE FIT UP PER SECTION 641.3.3 OF THE WISDOT STANDARD SPECIFICATIONS.

EXACT LOCATION OF SIGN BRIDGE SHALL BE DETERMINED BY THE REGION TRAFFIC ENGINEER.

CONTRACTOR SHALL VERIFY UTILITY CONFLICTS PRIOR TO CONSTRUCTION OF FOOTINGS.

CENTER 17.0' X 7.5' SIGN VERTICALLY ON TRUSS.

SUBMIT SHOP DRAWINGS TO THE REGIONAL ANCILLARY ENGINEER

PROVIDE AN IDENTIFICATION PLAQUE FOR THE SIGN BRIDGE IN ACCORDANCE WITH SDD STRUCTURE IDENTIFICATION PLAQUES, SIGN BRIDGES AND OVERHEAD SIGN SUPPORT. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN BRIDGE CANTILEVERED S-18-0120"

ULTIMATE DESIGN STRESSES

CONCRETE MASONRY - $f'_c = 3,500$ P.S.I.BAR STEEL REINFORCEMENT, GRADE 60 - $f_y = 60,000$ P.S.I.COLUMN PIPE, APISPEC. 5L GRADE X42, PSL-2 - $f_y = 42,000$ P.S.I. **CHORD PIPE, APISPEC. 5L GRADE X42 - $f_y = 42,000$ P.S.I. **PLATES, BARS AND STRUCTURAL ANGLES, ASTM A709 GRADE 36 - $f_y = 36,000$ P.S.I.ANCHOR RODS, ASTM F1554, GRADE 55 - $f_y = 55,000$ P.S.I.
ASTM A563A HEAVY HEX NUTS, AND ASTM F436 WASHERS.

** CONTRACTOR MAY SUBSTITUTE ALTERNATE MATERIALS PER WISDOT BRIDGE MANUAL SECTION 39.3 AT NO ADDITIONAL COST, PROVIDED THAT APPROVAL IS OBTAINED FROM THE DEPARTMENT.

DESIGN DATA

DEAD LOAD - 3 PSF OF SIGN (INCLUDING SUPPORTING BRACKETS), CATWALK, LIGHTS AND RAILINGS.
ICE LOAD - 3 PSF TO ONE FACE OF SIGN & AROUND SURFACE OF MEMBERS.
WIND PRESSURE - 90 MPH (3-SECOND GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS.
FATIGUE - CATEGORY I WITHOUT GALLOPING WIND EFFECTS.

DESIGNED ACCORDING TO THE 4TH EDITION AND INTERIM REVISIONS OF AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS."

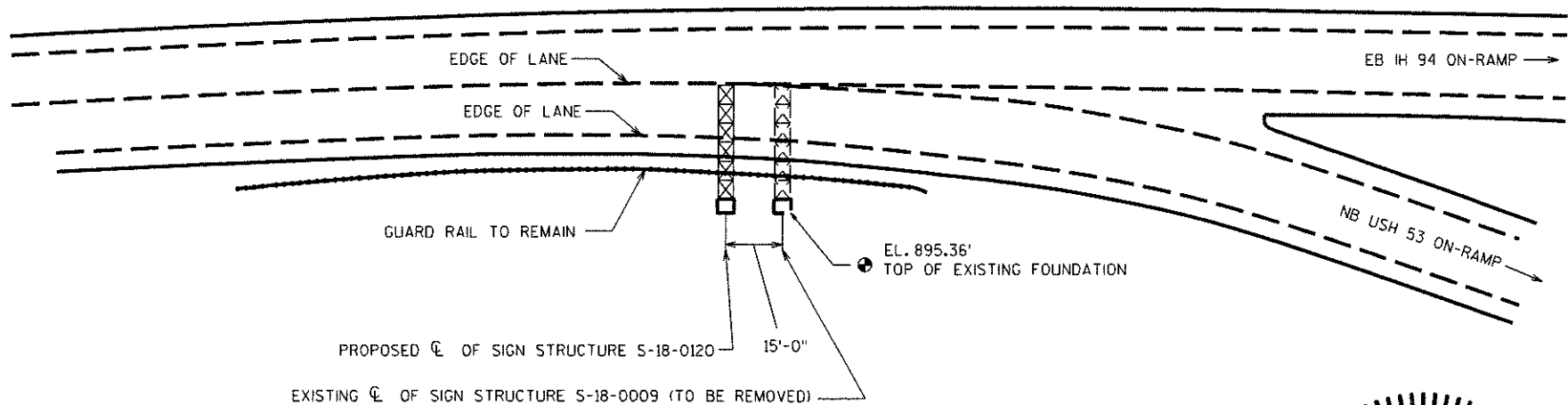
STRUCTURE	DESIGN SIGN AREA	MAX. SIGN DEPTH
S-18-0120	128 SF	12.0'

LEGEND

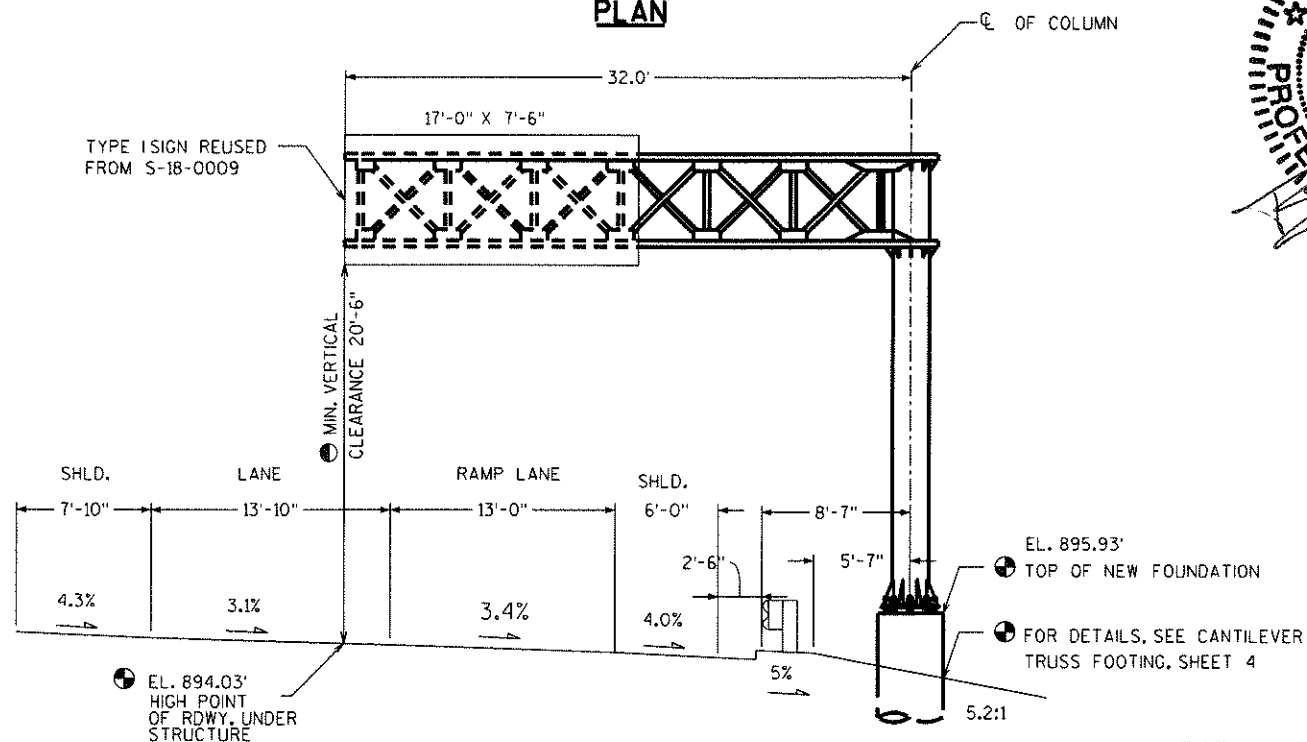
- ① VERTICAL CLEARANCE TO ACCOUNT FOR MAX. SIGN DEPTH OF 12'-0" WITH MIN. VERTICAL CLEARANCE OF 18'-3"
- ▲ PAYMENT FOR EXCAVATION IS INCLUDED WITH "SIGN SUPPORTS CONCRETE MASONRY".
- THIS LUMP SUM PAY ITEM INCLUDES HORIZONTAL TRUSS, VERTICAL STEEL COLUMN, AND ANCHOR ASSEMBLIES.
- ⊗ PAYMENT FOR REMOVAL OF CONCRETE AND BACK FILL MATERIAL IS INCLUDED WITH "REMOVING OVERHEAD SIGN SUPPORTS CANTILEVER (S-18-0009)".

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	S-18-0009	S-18-0120
▲ 636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY		8
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	LB		990
■ 641.1200	SIGN BRIDGE CANTILEVERED S-18-0120	LS		1
638.2101	MOVING SIGNS TYPE I	EA	1	
⊗ 638.3150	REMOVING OVERHEAD SIGN SUPPORTS CANTILEVER (S-18-0009)	EA	1	

BUREAU OF STRUCTURE CONTACT:
WILLIAM DREHER (608) 266-8489CONSULTANT CONTACT:
BRIAN SCHMIDT (608) 831-3238

PLAN



S-18-0120

(LOOKING AT FRONT FACE OF SIGN)

LIST OF DRAWINGS

1. S-18-0120 GENERAL LAYOUT	16. S-17-0004 MAINTENANCE ITEMS	31. S-70-0081 MAINTENANCE ITEMS
2. GALVANIZED STEEL CANTILEVER SIGN TRUSS	17. S-18-0101 MAINTENANCE ITEMS	32. S-70-0085 MAINTENANCE ITEMS
3. GALVANIZED STEEL CANTILEVER SIGN TRUSS DETAILS	18. S-44-0002 MAINTENANCE ITEMS	33. S-70-0100 MAINTENANCE ITEMS
4. CANTILEVER TRUSS FOOTING	19. S-44-0006 MAINTENANCE ITEMS	34. S-70-0102 MAINTENANCE ITEMS
5. FOUNDATION REPAIR DETAILS	20. S-44-0020 MAINTENANCE ITEMS	35. S-70-0106 MAINTENANCE ITEMS
6. TRUSS REPAIR DETAILS	21. S-44-0028 MAINTENANCE ITEMS	36. S-70-0107 MAINTENANCE ITEMS
7. SIGN REPAIR DETAILS (1 OF 2)	22. S-44-0034 MAINTENANCE ITEMS	37. S-70-0125 MAINTENANCE ITEMS
8. SIGN REPAIR DETAILS (2 OF 2)	23. S-44-0035 MAINTENANCE ITEMS	
9. S-05-0101 MAINTENANCE ITEMS	24. L-55-0004 MAINTENANCE ITEMS	
10. S-05-0103 MAINTENANCE ITEMS	25. S-70-0036 MAINTENANCE ITEMS	
11. S-08-0001 MAINTENANCE ITEMS	26. S-70-0041 MAINTENANCE ITEMS	
12. S-08-0008 MAINTENANCE ITEMS	27. S-70-0042 MAINTENANCE ITEMS	
13. S-09-0013 MAINTENANCE ITEMS	28. S-70-0046 MAINTENANCE ITEMS	
14. S-09-0032 MAINTENANCE ITEMS	29. S-70-0062 MAINTENANCE ITEMS	
15. S-16-0022 MAINTENANCE ITEMS	30. S-70-0064 MAINTENANCE ITEMS	

NO.	DATE	REVISION	BY
-----	------	----------	----

ORIGINAL PLANS PREPARED BY:

FICKET
 Structural Solutions

 3148 Deming Way
 Suite 160
 Middleton, WI 53562

 Plans Prepared for **WISDOT**
BUREAU OF STRUCTURES

 ACCEPTED *William C. Dreher* **02/02/18**
 CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE S-18-0120

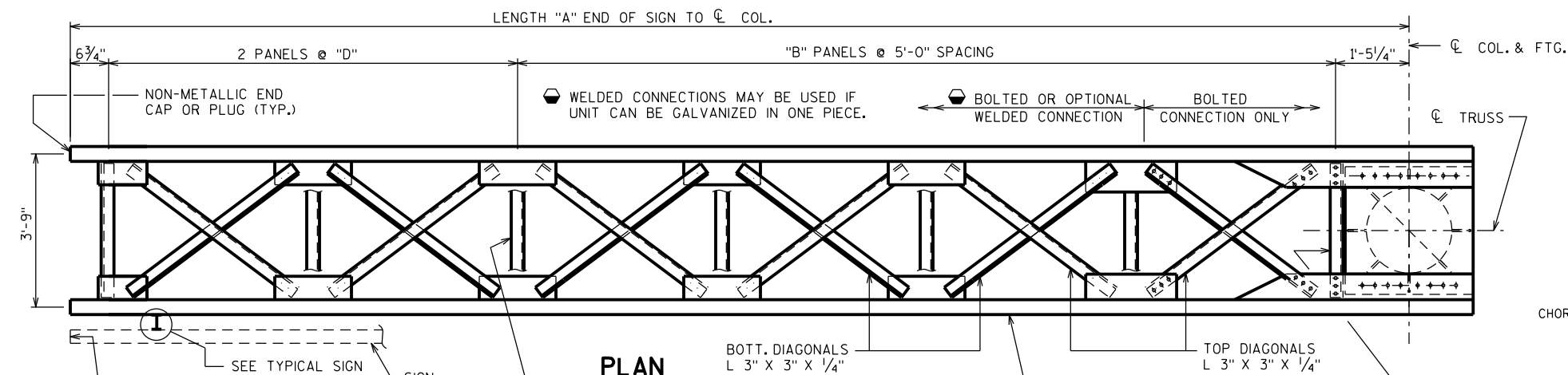
COUNTY EAU CLAIRE TOWN/CITY/VILLAGE EAU CLAIRE

DESIGN SPEC. AASHTO STD. SPEC. FOR HIGHWAY BRIDGES, 17TH EDITION

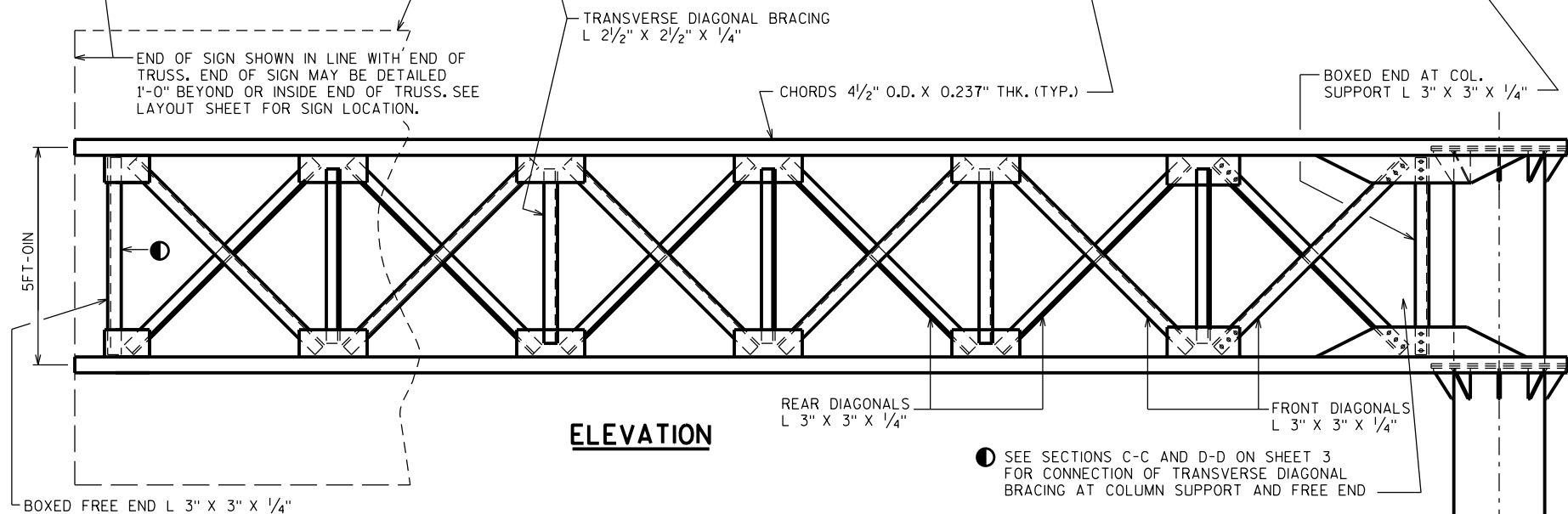
DESIGNED BY BRS/CK'D. TAD BY BRS/CK'D. TAD

S-18-0120
GENERAL LAYOUT

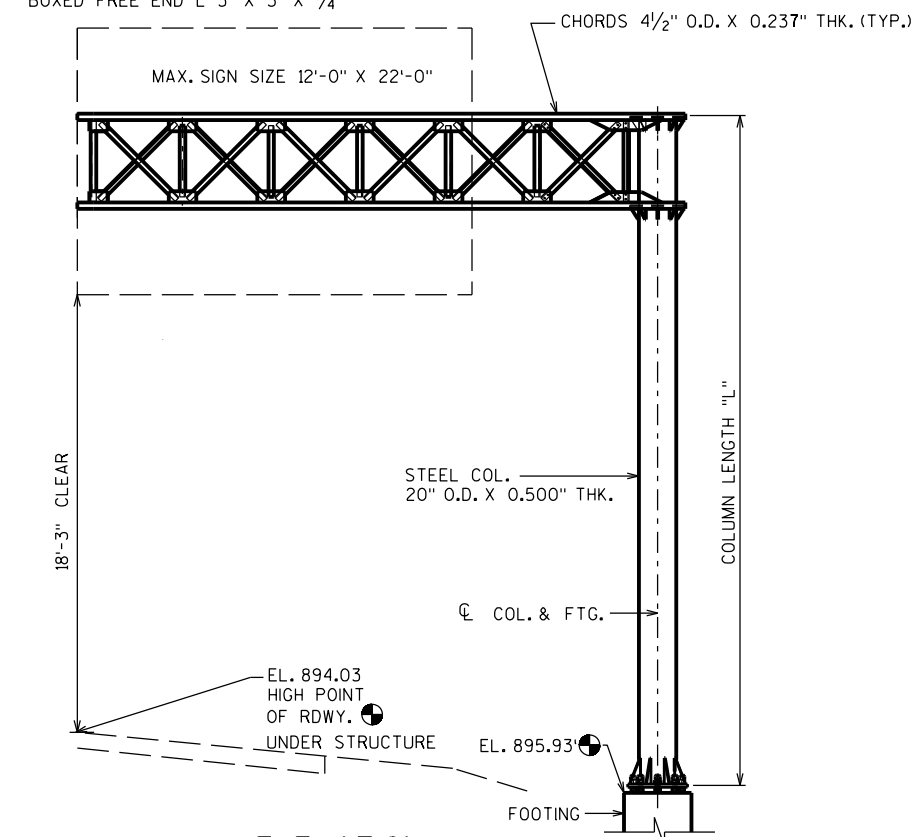
SHEET 1 OF 37



PLAN



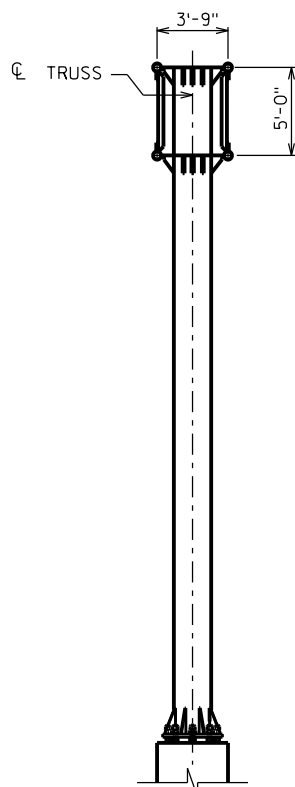
ELEVATION



ELEVATION

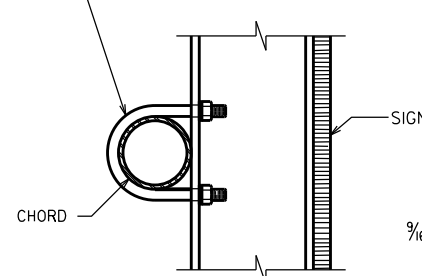
LOOKING AT F.F. OF SIGN RAILING NOT SHOWN

SEE GENERAL LAYOUT SHEET FOR ELEVATIONS.



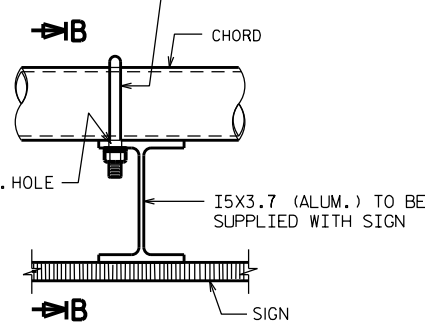
END VIEW

1/2" ϕ STAINLESS STEEL U-BOLT WITH 2 LOCK WASHERS AND 2 HEX NUTS PER BOLT. 2 BOLTS REQUIRED PER I5X3.7. LOCATE TOP & BOTTOM U-BOLT ON OPPOSITE SIDE OF FLANGE.



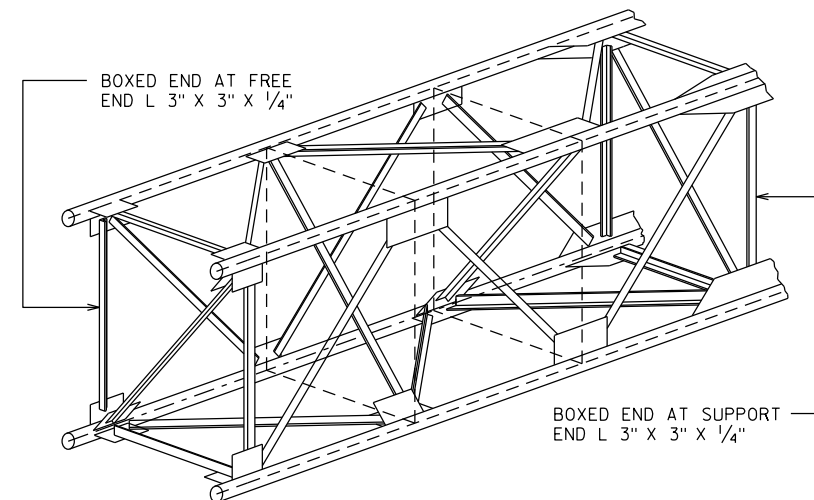
SECTION B-B

LOCATE SIGN SUPPORTS AS NEAR AS POSSIBLE TO CHORD AND WEB INTERSECTION POINTS.



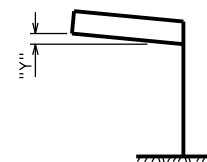
TYPICAL SIGN CONNECTION

FOR TYPE I AND II SIGNS ONLY



TYPICAL TRUSS SECTION

THE GENERAL PATTERN SHOWN ABOVE IS TO BE MAINTAINED WHEN ASSEMBLING TRUSSES.



CAMBER DIAGRAM

PREFABRICATE CAMBER INTO THE HORIZONTAL SUPPORT PROVIDING AN AMOUNT "Y" AT END OF TRUSS SHOWN. DO NOT RAKE VERTICAL UPRIGHT BY ADJUSTMENT OF LEVELING NUTS.

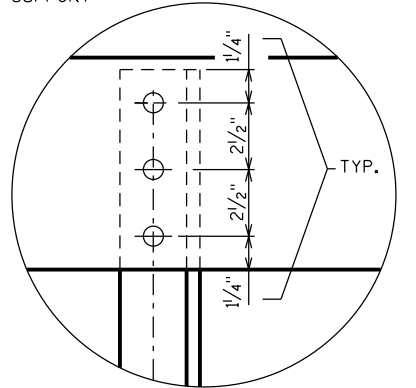
DIMENSIONS & CAMBER VALUES

STRUCTURE	"A"	"L"	"B"	"D"	"Y"
S-18-0120	32.0'	25.0'	4	5	2.52"

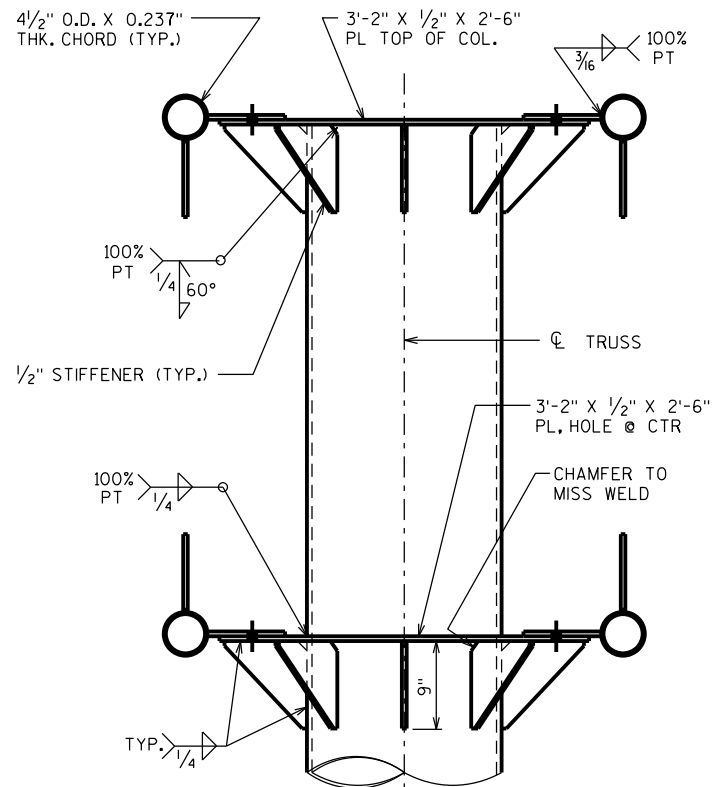
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE S-18-0120			
DRAWN BY BRS		PLANS CK'D. XXX	
GALVANIZED STEEL CANTILEVER SIGN TRUSS		SHEET 2 OF 37	

TRANSVERSE
DIAGONAL BRACING
L 2½" X 2½" X ¼"

L 3" X 3" X ¼"
BOXED END @ SUPPORT

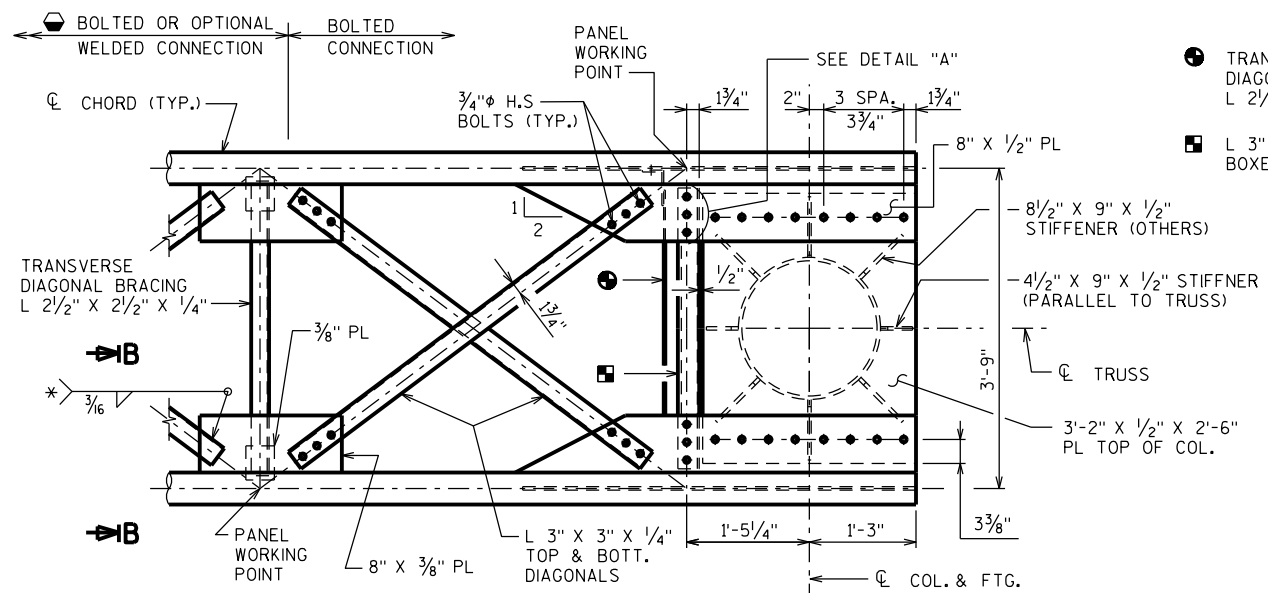


DETAIL "A"

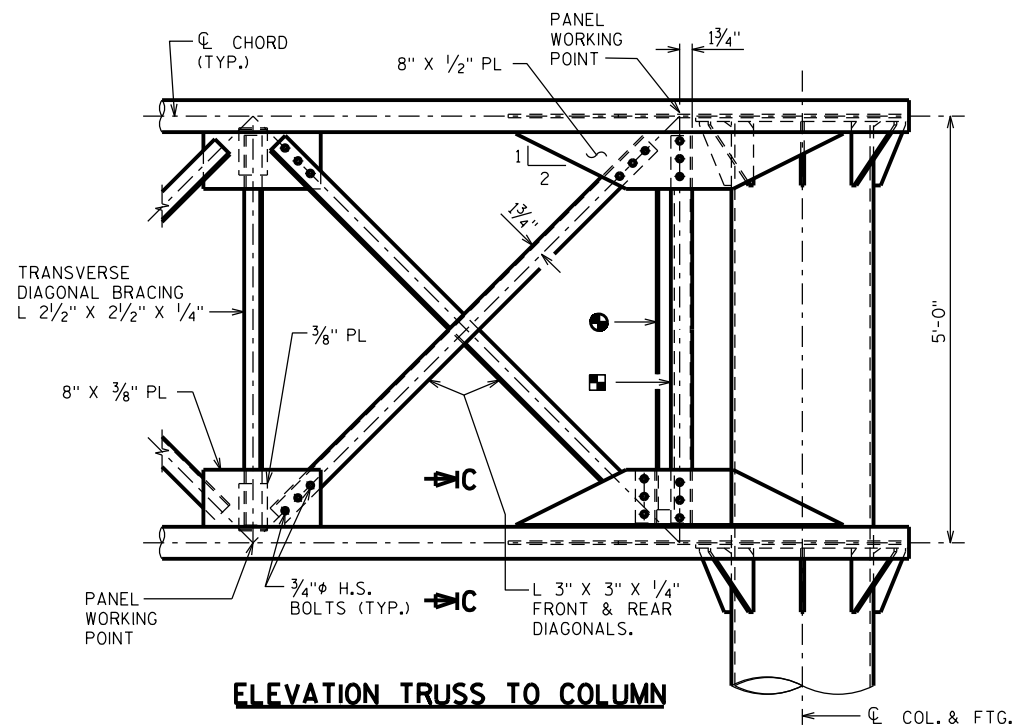


END VIEW TRUSS TO COLUMN

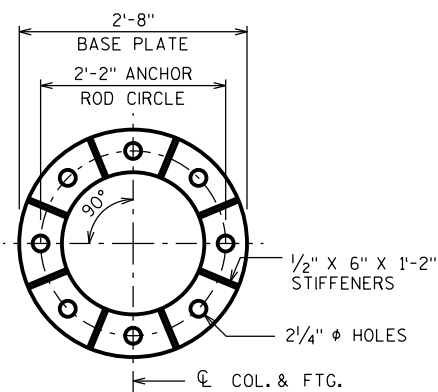
(WEB MEMBERS NOT SHOWN)



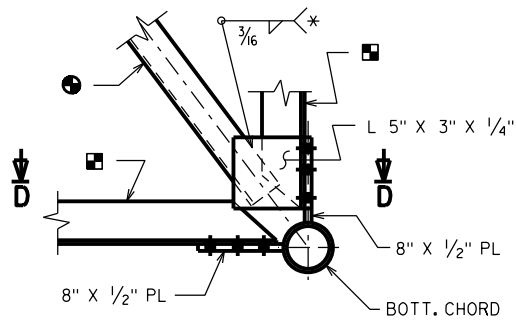
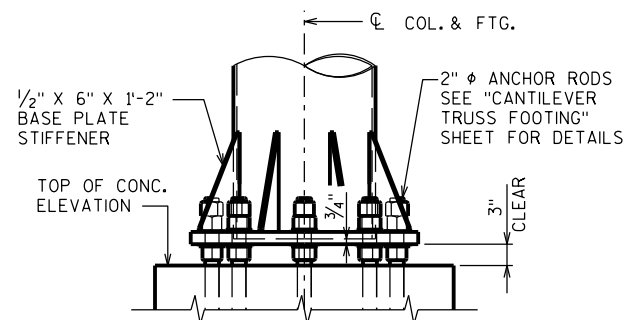
PLAN TRUSS TO COLUMN



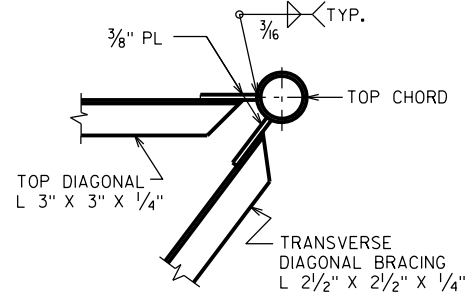
ELEVATION TRUSS TO COLUMN



BASE PLATE DETAILS



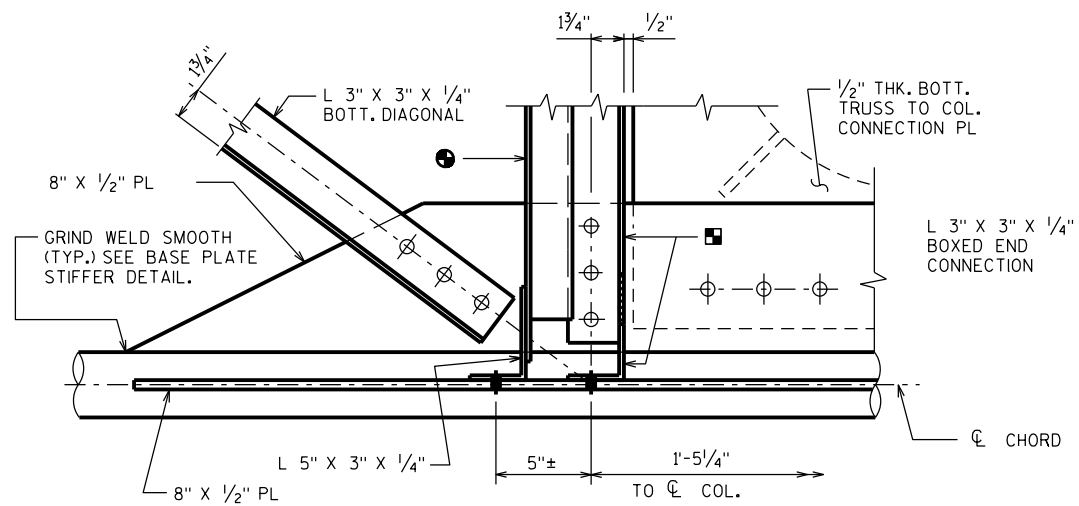
SECTION C-C



SECTION B-B

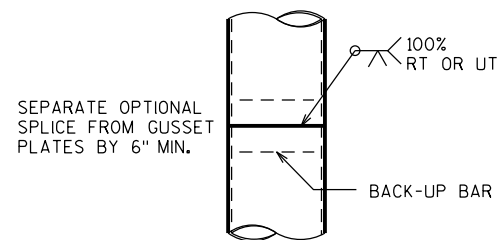
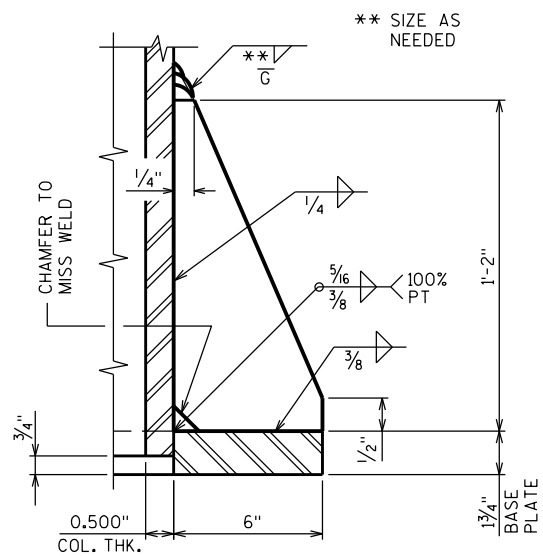
ANGLE SIZE	*WELD LENGTH (MIN.)
L 2½" x 2½" x ¼"	7"
L 3" x 3" x ¼"	8"

WELDED CONNECTIONS MAY
BE USED IF UNIT CAN BE
GALVANIZED IN ONE PIECE.



SECTION D-D

(LOOKING DOWN @ BOTT. HORIZ. PLANE @ FRONT CHORD)

OPTIONAL COLUMN OR
CHORD SPLICE DETAIL

BASE PLATE STIFFENER DETAIL

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE			
DRAWN BY BRS		PLANS CK'D. XXX	
GALVANIZED STEEL CANTILEVER SIGN TRUSS DETAILS		SHEET 3 OF 37	

NOTES

CONTRACTOR SHALL VERIFY UTILITY CONFLICTS PRIOR TO CONSTRUCTION OF FOOTING.

FOOTING BELOW THE WINGS SHALL BE EXCAVATED BY THE USE OF CIRCULAR AUGER.

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

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR UNLESS DETAILED OTHERWISE.

BENDING DIMENSIONS ARE OUT TO OUT OF BAR.

CENTER ANCHOR ROD ASSEMBLY TO MISS BAR STEEL REINFORCEMENT AND MAKE SURE IT IS PLUMB. MAINTAIN ANCHOR ROD PROJECTION ABOVE FOOTING AS DETAILED ON PLAN. ANCHOR ROD ASSEMBLY SHALL BE RIGIDLY SECURE IN POSITION DURING AND AFTER CONCRETE PLACEMENT. DO NOT WELD THE ANCHOR RODS.

PROVIDE A 3/4" CHAMFER ON ALL EXPOSED CONCRETE EDGES.

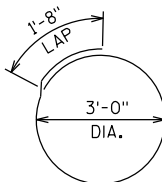
UNLESS NOTED ON PLAN, REMOVE ALL CASING AND FORMS USED TO CONSTRUCT THE FOOTING PRIOR TO BACKFILLING AROUND THE FOOTING. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE IN LAYERS OF 1'-0" OR LESS.

FOUNDATION DATA

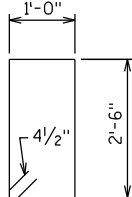
ALLOWABLE $Q_p = 4,000$ P.S.F.

BILL OF BARS

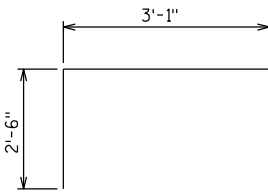
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A701	X	12	15'-6"			FOOTING - COLUMN/TOP
A402	X	16	11'-2"	X		FOOTING - COLUMN/TOP
A703	X	12	15'-0"			FOOTING - WINGS
A404	X	12	7'-6"	X		FOOTING - WINGS
A405	X	10	7'-11"	X		FOOTING - TOP
A406	X	4	3'-6"			FOOTING - TOP - COLUMNS



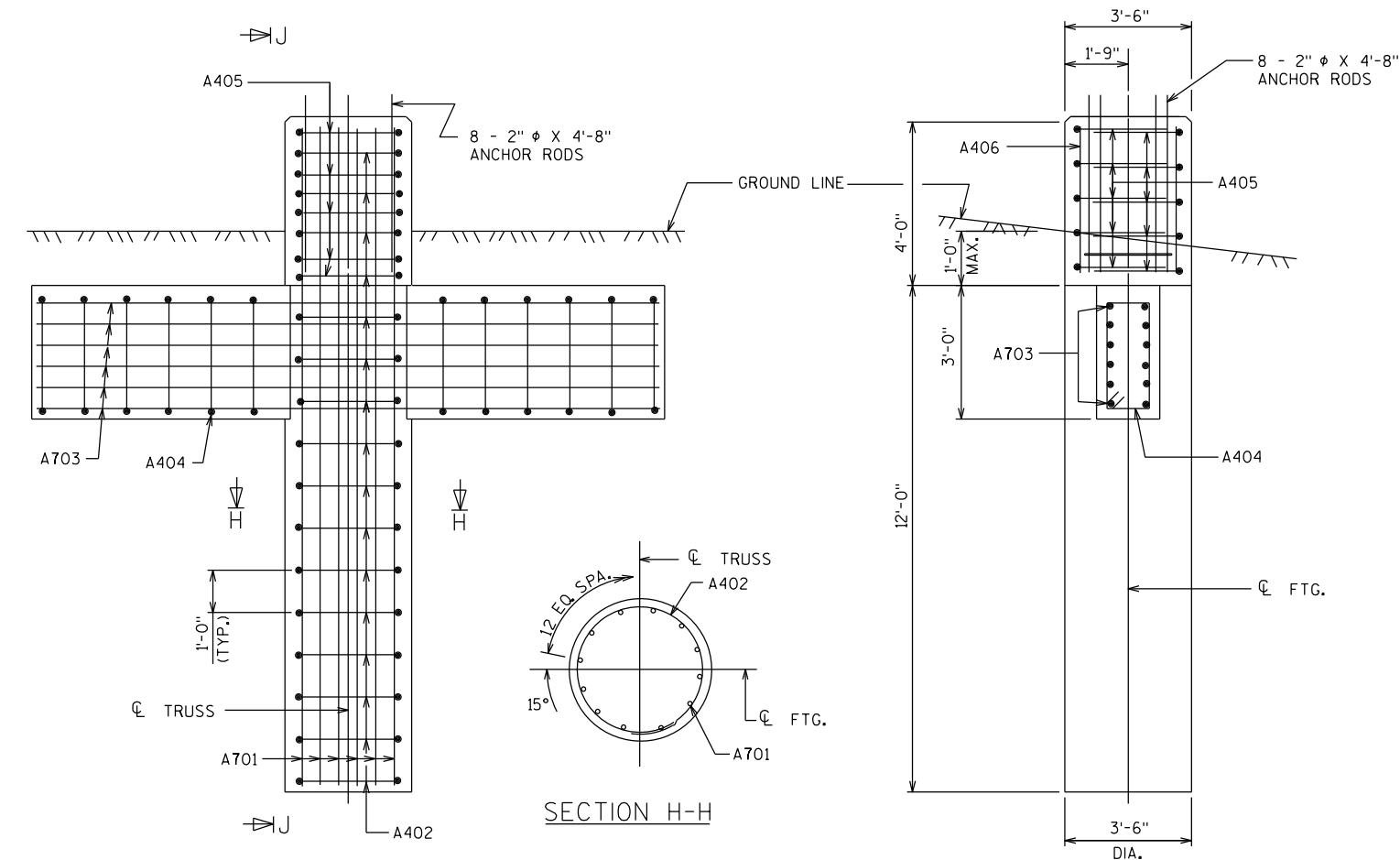
A402



A404



A405

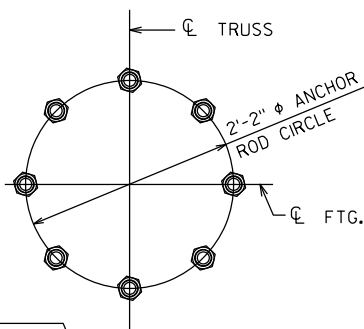


ELEVATION

SECTION H-H

SECTION J-J

SHOWING WING AND CAP STEEL ONLY

TOP TEMPLATE AND
BOTTOM ANCHOR PLATE

TOP TEMPLATE, 1/4" THICK,
REMOVE AFTER CONCRETE SET.

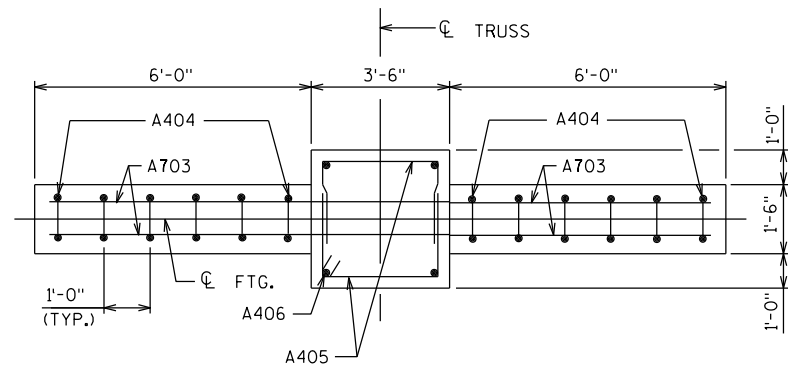
TOP OF CONCRETE

8 - 2" ϕ X 4'-8" ANCHOR RODS,
ASTM F1554. TOP: 3 NUTS AND
2 WASHERS, BOTTOM: 2 NUTS.

5 1/2" THREAD

BOTTOM ANCHOR
PLATE, 1/2" THICK

ANCHOR ROD ASSEMBLY DETAILS



PLAN

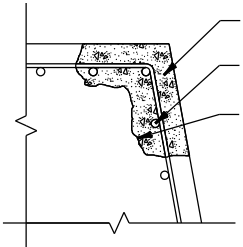
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE S-18-0120			
DRAWN BY		BRS	PLANS CK'D. XXX
CANTILEVER TRUSS FOOTING			SHEET 4 OF 37

FOUNDATION NOTES

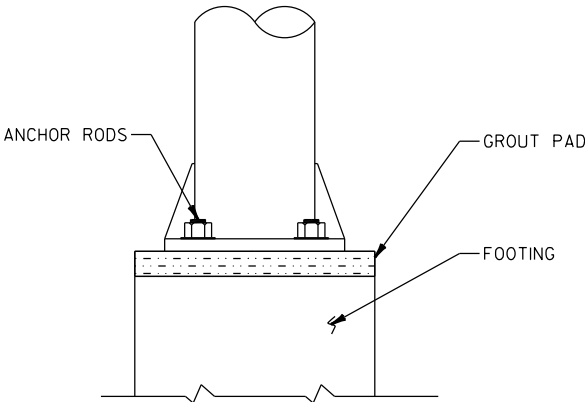
- 1. CONCRETE - f_c' = 3,500 PSI
- 2. BAR STEEL REINF. - GRADE 60
 f_y = 60,000 PSI
- 3. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS OF ALL REPAIRS.
- 4. THE CONTRACTOR SHALL FIELD VERIFY DIMENSION OF THE ITEM REQUIRED. DISCREPANCIES SHALL BE SUBMITTED TO THE ENGINEER FOR CLARIFICATION PRIOR TO BEGINNING WORK.
- 5. APPLY ZINC-RICH PAINT TO THE ANCHOR RODS, NUTS, WASHERS, AND LEVELING NUTS IN ACCORDANCE WITH SPECIFICATIONS AFTER REMOVING THE GROUT PAD, OR TENSIONING THE ANCHOR ROD. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM, "REMOVE GROUT PAD" OR "TENSION ANCHOR RODS".
- 6. STEEL ANCHOR ROD NUTS AND WASHERS SHALL BE AASHTO M314 GRADE 55
 f_y = 55,000 PSI
- 7. THE TOP OF THE FOOTING SHALL BE SMOOTHED AND SLOPED TO DRAIN.

STATE PROJECT NUMBER

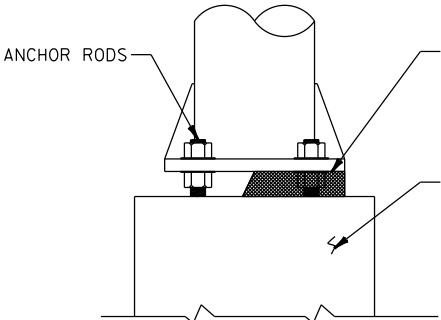
1009-30-13



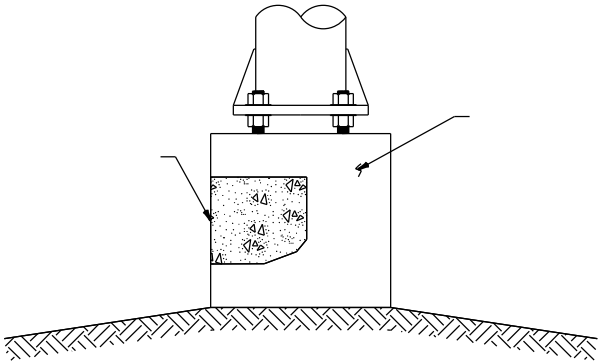
REPAIR FOUNDATION DETAIL



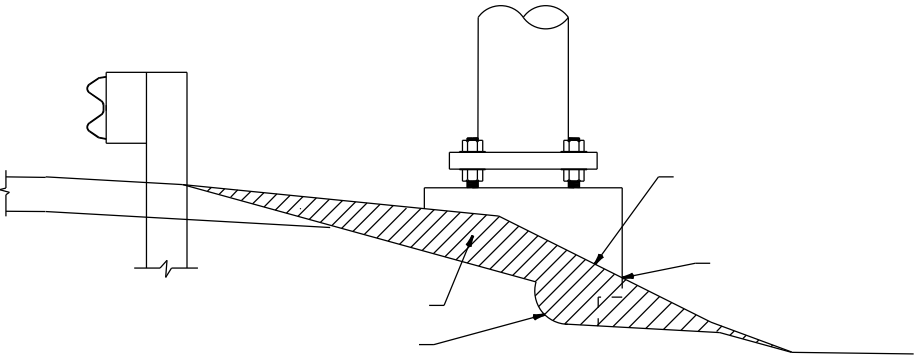
GROUT PAD DETAIL



RODENT SCREEN DETAIL



FOUNDATION DETAIL

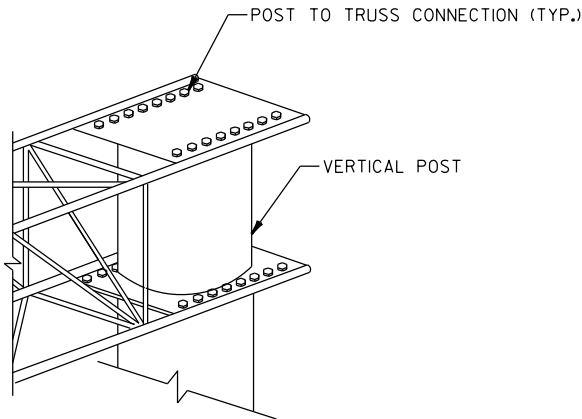


REGRADE/FILL EROSION AT STRUCTURE FOUNDATION

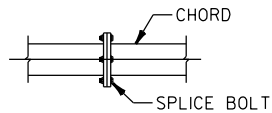
NO.	DATE	REVISION	BY
SIGN BRIDGE REPLACEMENT			
DRAWN BY: BRS		CHECKED BY: TD	
FOUNDATION REPAIR DETAILS		SHEET 5 OF 37	

TRUSS NOTES

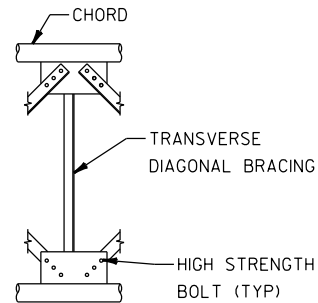
1. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL REPAIRS.
2. THE CONTRACTOR SHALL FIELD VERIFY THE DIMENSIONS OF THE ITEM REQUIRED. DISCREPANCIES SHALL BE SUBMITTED TO THE ENGINEER FOR CLARIFICATION PRIOR TO BEGINNING WORK.
3. ALL STAINLESS STEEL BOLTS, LOCK WASHERS, FLAT WASHERS, AND NUTS SHALL CONFORM TO:
- ANCHOR BOLTS/HEX BOLTS ASTM F593 ANY ALLOW GROUPS 1,2, OR 3
 - HEX NUTS ASTM F594
 - WASHERS ASTM A240
 - ANY OF THE 300 SERIES WHICH HAVE A MINIMUM YIELD OF 40,000 PSI AND ELONGATION OF 15% FOR OVER 3/4" DIAMETER AND 12% FOR 3/4" DIAMETER AND SMALLER.
4. REPLACE MISSING BOLTS ON TOWER CAPS WITH STAINLESS STEEL BOLTS.
5. IF A DAMPENER IS CURRENTLY INSTALLED, REPLACEMENT DAMPENER TO BE OF THE SAME SIZE, SHAPE, AND WEIGHT OF CURRENT DAMPENER INSTALLED.
6. INSTALL DAMPENER ON A TOP CHORD DIAGONAL NEAR MID-SPAN IF LOCATED ON A TRUSSED STRUCTURE.



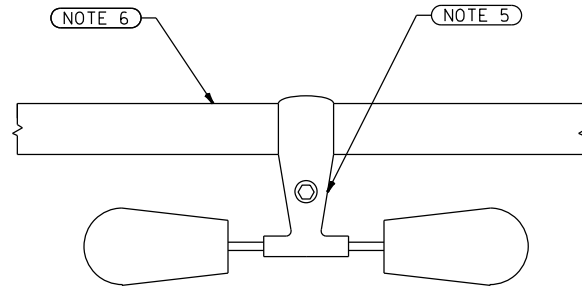
CANTILEVER SIGN BRIDGE
POST TO TRUSS CONNECTION DETAIL



SPLICE CONNECTION BOLT DETAIL



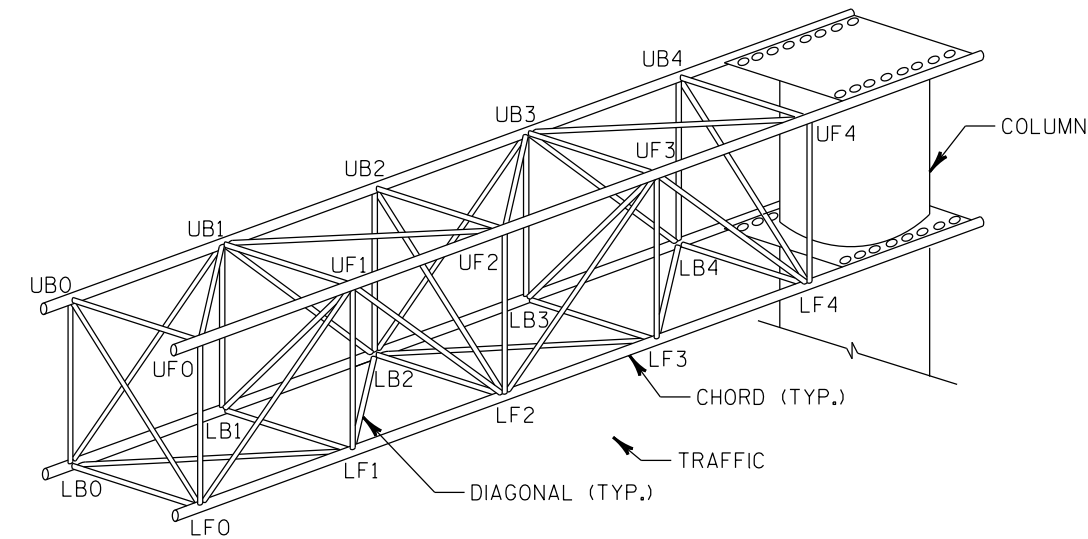
TYPICAL TRUSS ELEVATION



REPAIR DAMPENER DETAIL

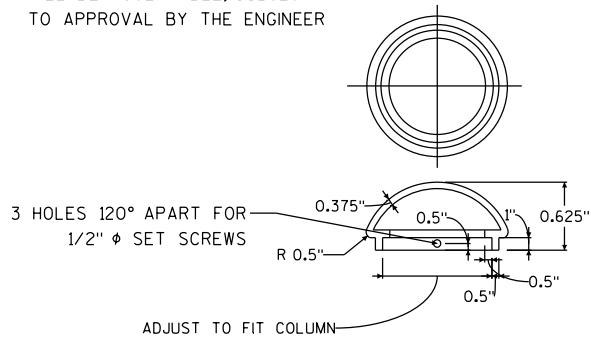
TENSION STRUCTURAL CONNECTION BOLT REPAIR DETAIL

REPAIR CAN VARY BY LOCATION, SEE INDIVIDUAL STRUCTURE SHEET FOR DETAILS

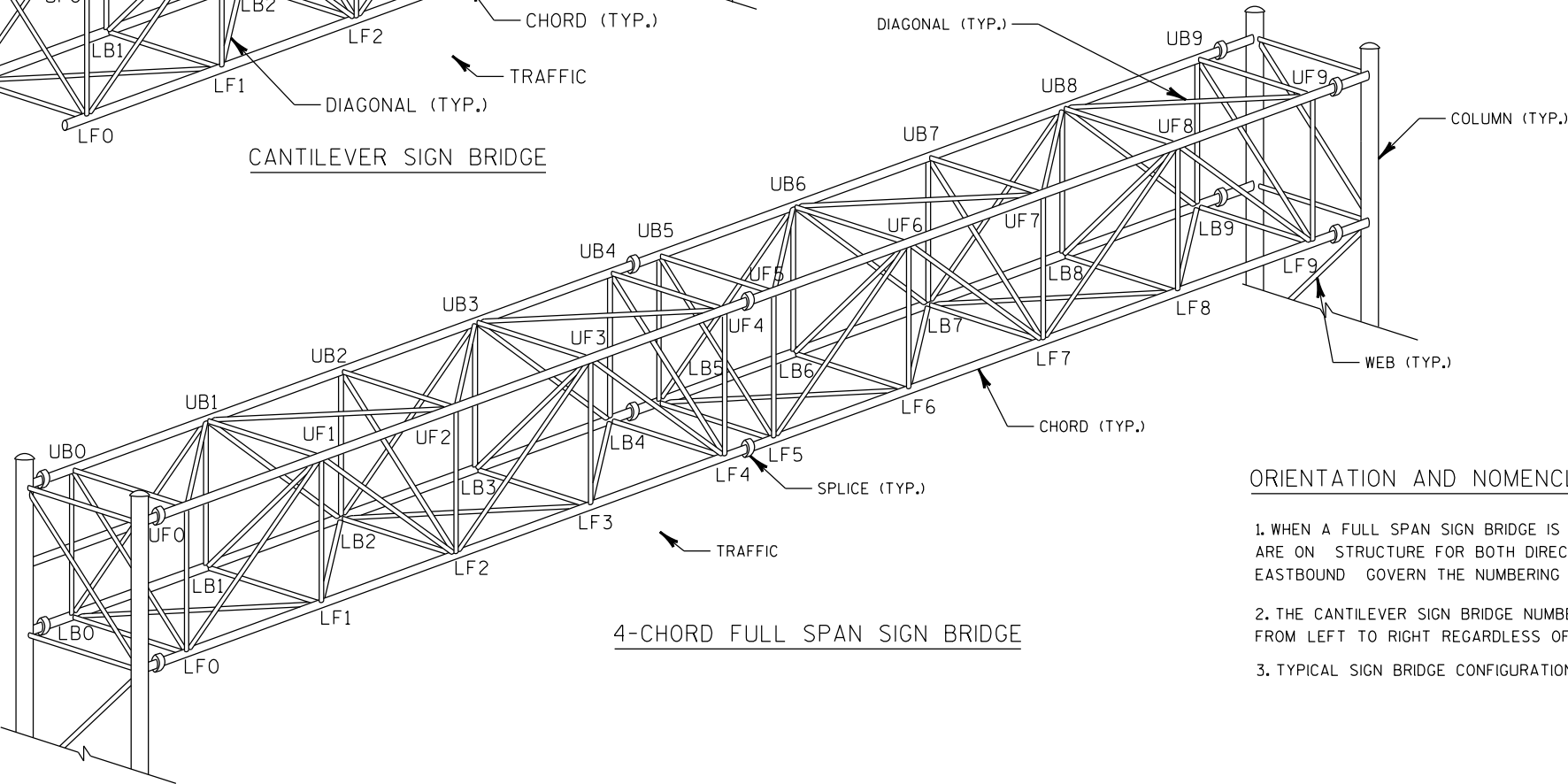


CANTILEVER SIGN BRIDGE

CAP FABRICATED FROM STEEL PLATES (MIN. THICKNESS = 3/16") WILL BE ACCEPTABLE, SUBJECT TO APPROVAL BY THE ENGINEER



POST/END CAP DETAIL



4-CHORD FULL SPAN SIGN BRIDGE

ORIENTATION AND NOMENCLATURE NOTES

1. WHEN A FULL SPAN SIGN BRIDGE IS OVER BOTH DIRECTIONS AND SIGNS ARE ON STRUCTURE FOR BOTH DIRECTIONS, THEN NORTHBOUND AND EASTBOUND GOVERN THE NUMBERING SYSTEM.
2. THE CANTILEVER SIGN BRIDGE NUMBERING SYSTEM ALWAYS COUNTS UP FROM LEFT TO RIGHT REGARDLESS OF COLUMN LOCATION.
3. TYPICAL SIGN BRIDGE CONFIGURATION FOR INFORMATION ONLY.

NO.	DATE	REVISION	BY
SIGN BRIDGE REPLACEMENT			
DRAWN BY: BRS		CHECKED BY: TD	
TRUSS REPAIR DETAILS		SHEET 6 OF 37	

SIGN PANEL NOTES

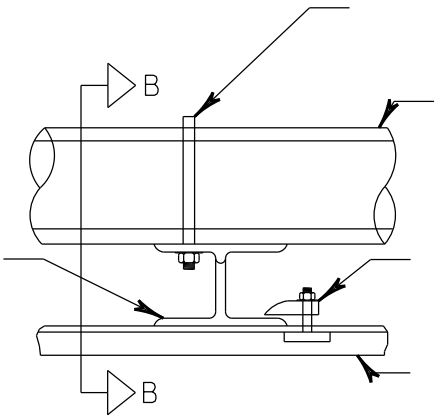
1. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL REPAIRS.
2. THE CONTRACTOR SHALL FIELD VERIFY THE DIMENSIONS OF THE ITEM REQUIRED. DISCREPANCIES SHALL BE SUBMITTED TO THE ENGINEER FOR CLARIFICATION PRIOR TO BEGINNING WORK.
3. ALL STAINLESS STEEL BOLTS, LOCK WASHERS, FLAT WASHERS, AND NUTS SHALL CONFORM TO:

-ANCHOR BOLTS/HEX BOLTS ASTM F593 ANY ALLOW GROUPS 1, 2, OR 3

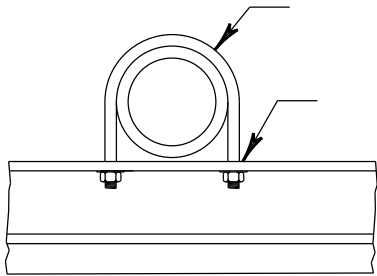
-HEX NUTS ASTM F594

-WASHERS ASTM A240

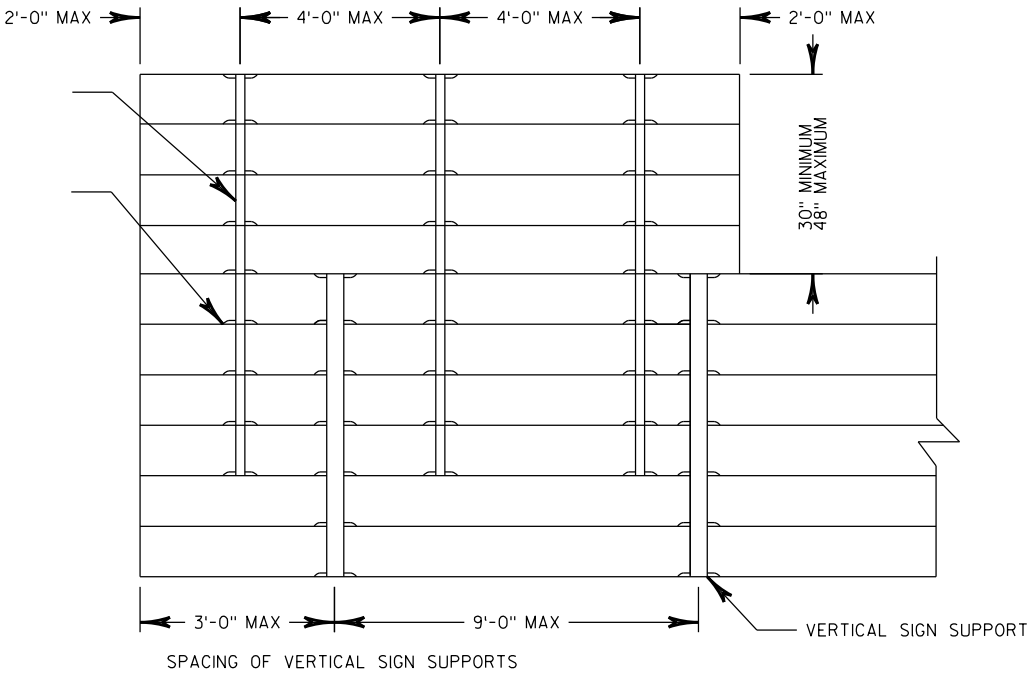
-ANY OF THE 300 SERIES WHICH HAVE A MINIMUM YIELD OF 40,000 PSI AND ELONGATION OF 15% FOR OVER 3/4" DIAMETER AND 12% FOR 3/4" DIAMETER AND SMALLER.



TYPICAL SIGN PANEL CONNECTION (TYPE I SIGN)

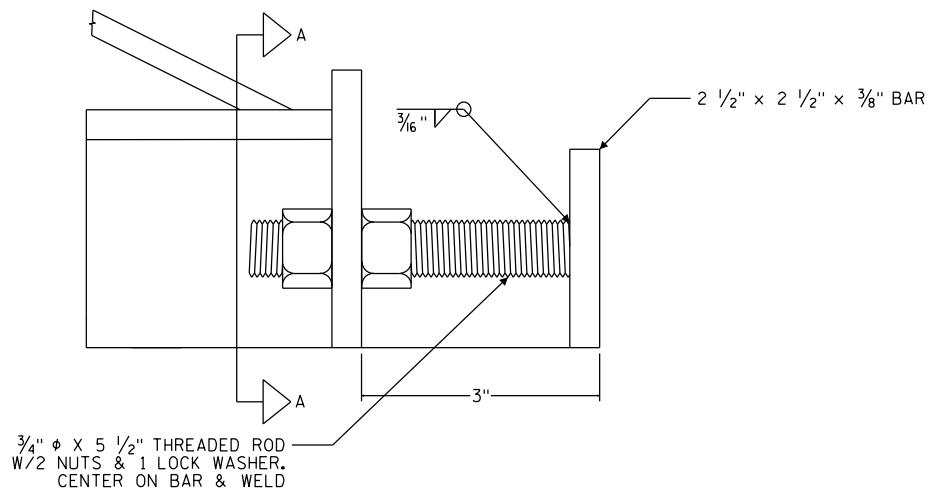


SECTION B-B

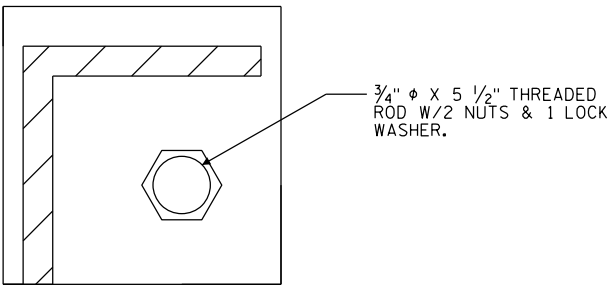


FLANGE CHANNEL SUPPORT/VERTICAL SIGN SUPPORT DETAILS

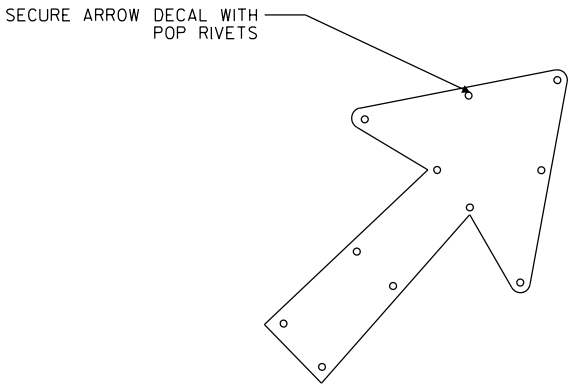
NO.	DATE	REVISION	BY
SIGN BRIDGE REPLACEMENT			
		DRAWN BY: BRS	CHECKED BY: TD
SIGN REPAIR DETAILS (1 OF 2)		SHEET 7 OF 37	



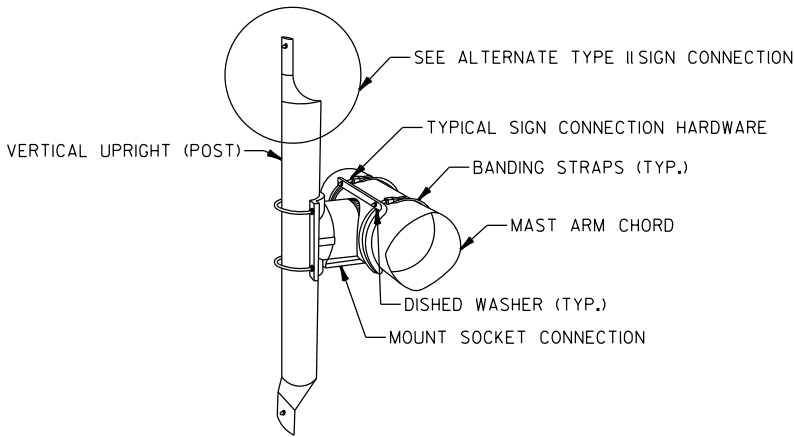
ADJUST TYPE I SIGN CONNECTION



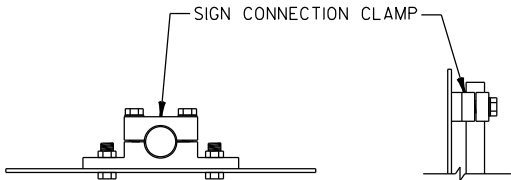
SECTION A-A



REPAIR TYPE I SIGN CONNECTION

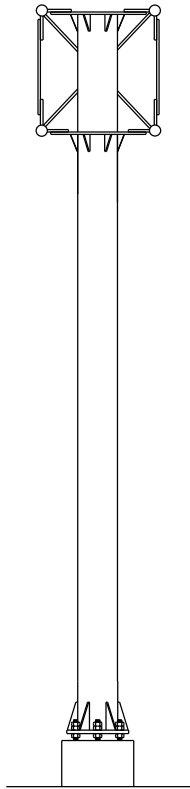
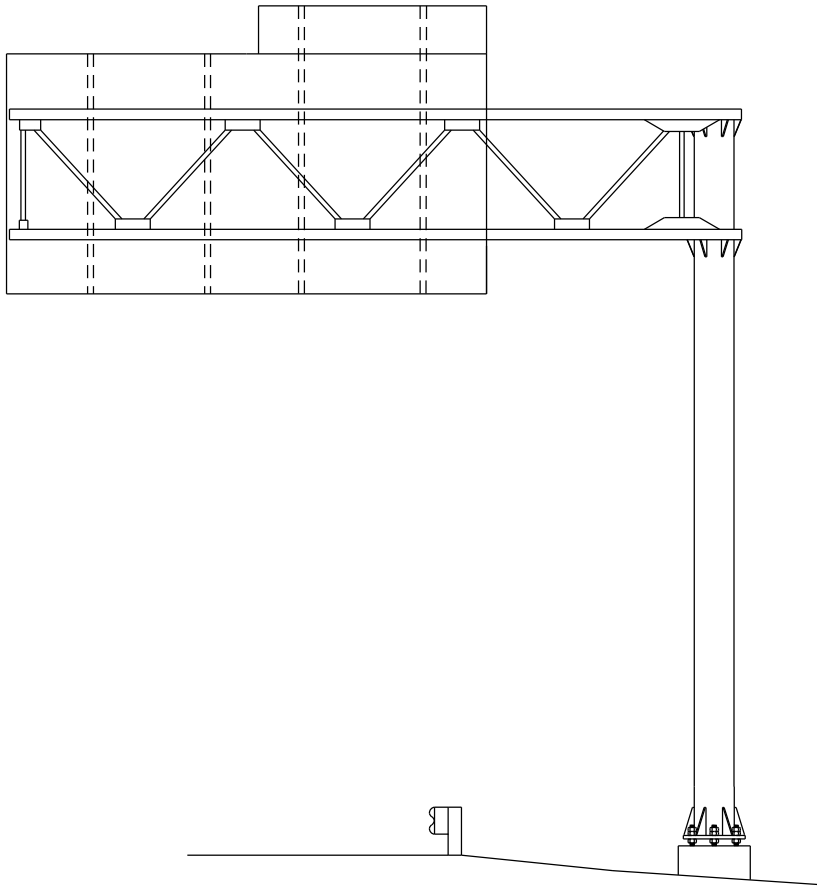
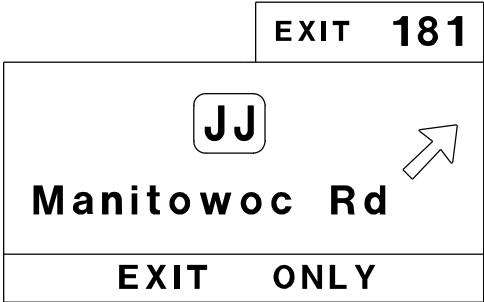


POST TO CHORD CONNECTION DETAIL (TYPE II SIGN)/SIGN CONNECTION ASSEMBLY DETAIL



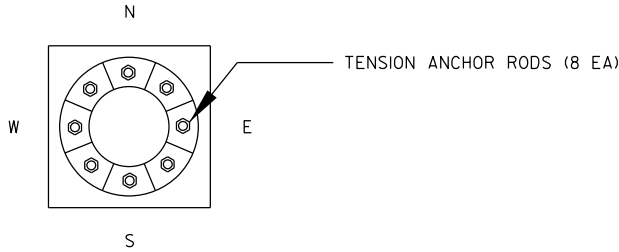
ALTERNATE TYPE II SIGN CONNECTION DETAIL - SIGN CONNECTION CLAMP

NO.	DATE	REVISION	BY
SIGN BRIDGE REPLACEMENT			
DRAWN BY: BRS		CHECKED BY: TD	
SIGN REPAIR DETAILS (2 OF 2)		SHEET 8 OF 37	



LOOKING NORTH

LOOKING WEST



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	8 EA	NONE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-05-0101			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 9 OF 37



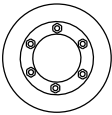
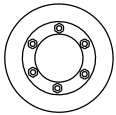
SECURE POST CAP (1EA)



LOOKING EAST

LOOKING NORTH

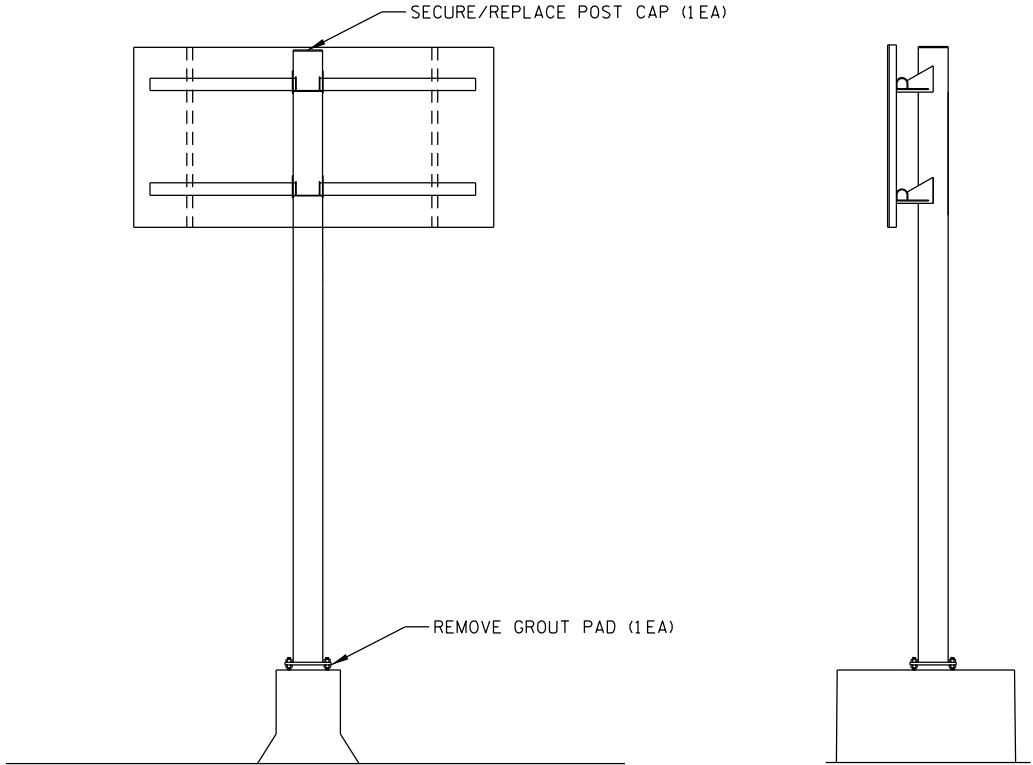
LOOKING WEST



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.13	SECURE/REPLACE POST CAP	1 EA	SHEET 6

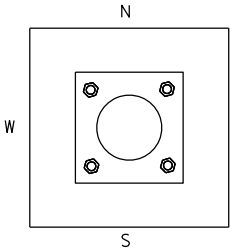
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-05-0103			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 10 OF 37

Hwy 10 3/4
Hwy 47 1 3/4
Hwy AP 2 3/4



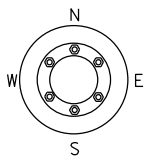
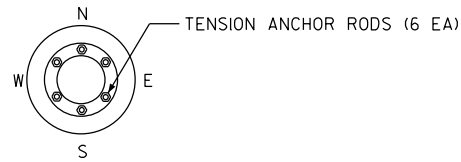
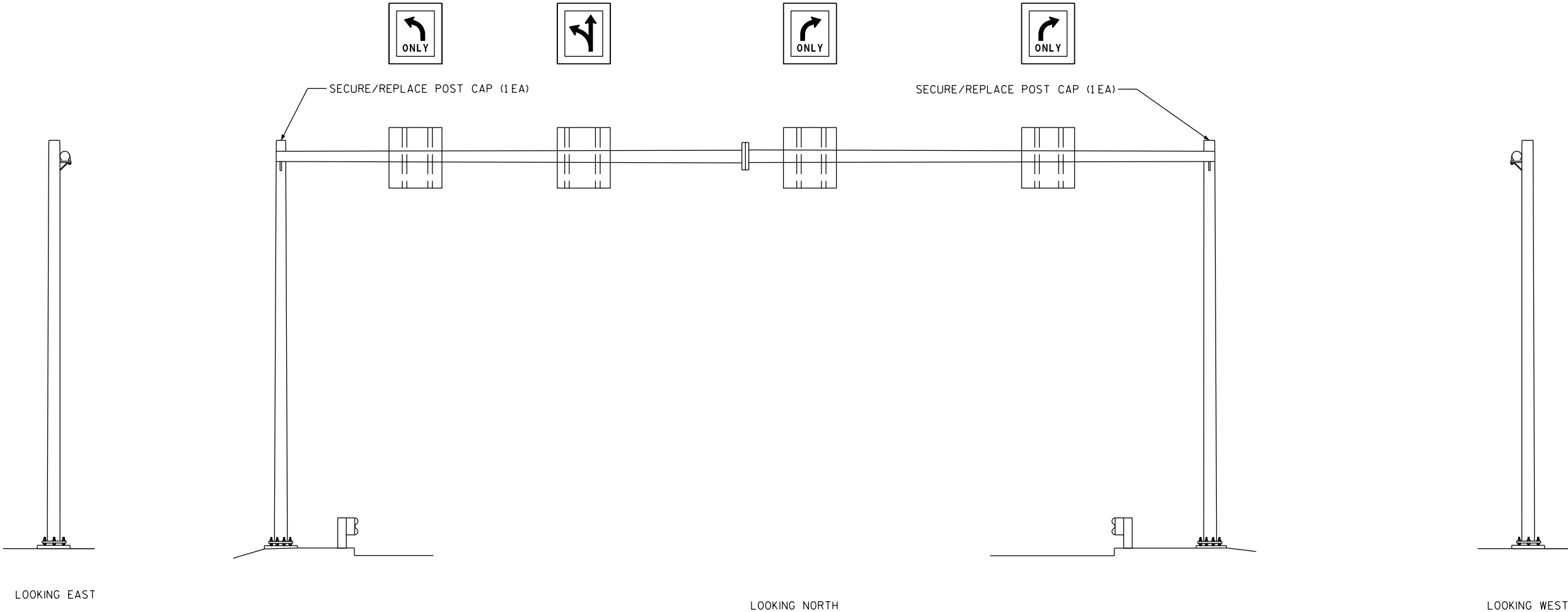
LOOKING WEST

LOOKING SOUTH



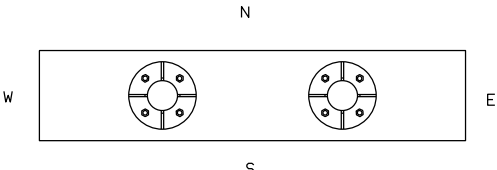
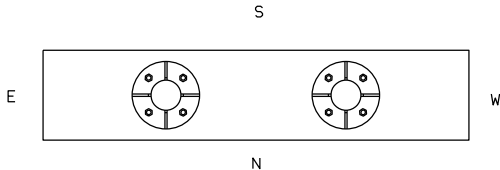
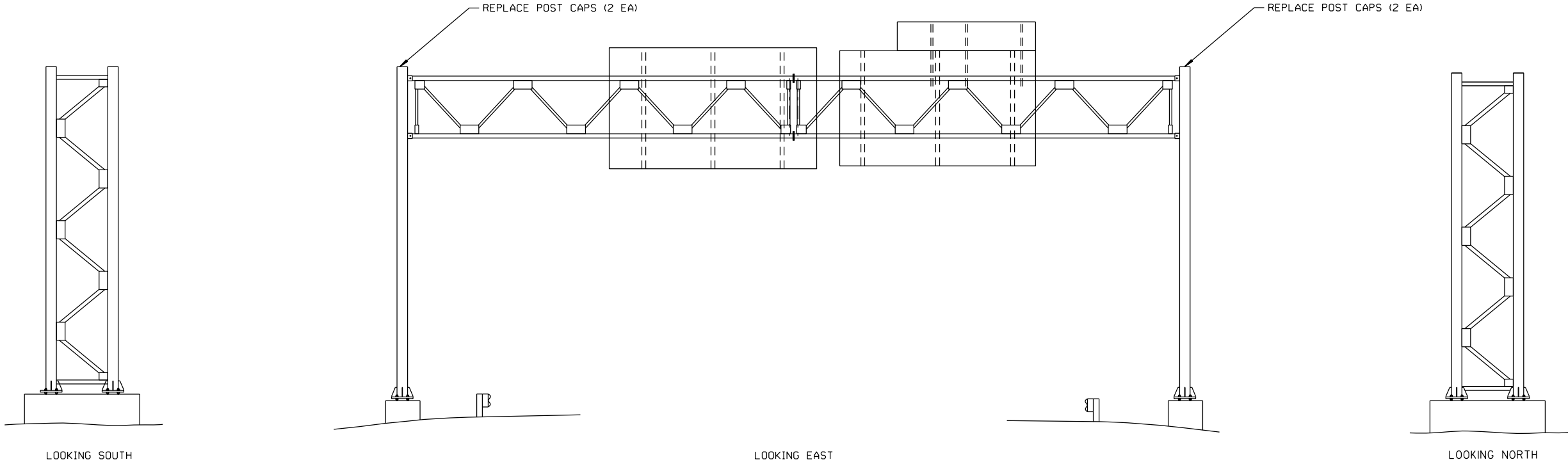
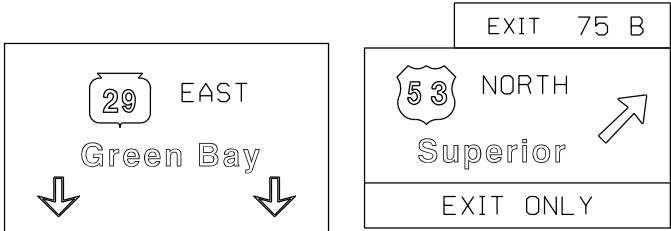
ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.06	REMOVE GROUT PAD	1 EA	SHEET 5
SPV.0060.13	SECURE/REPLACE POST CAP	1 EA	SHEET 6

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-08-0001			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 11 OF 37



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	6 EA	NONE
SPV.0060.13	SECURE/REPLACE POST CAP	2 EA	SHEET 6

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-08-0008			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 12 OF 37

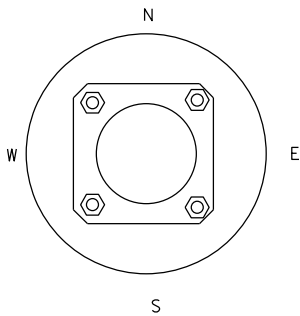


8

8

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.13	SECURE/REPLACE POST CAP	4 EA	SHEET 6

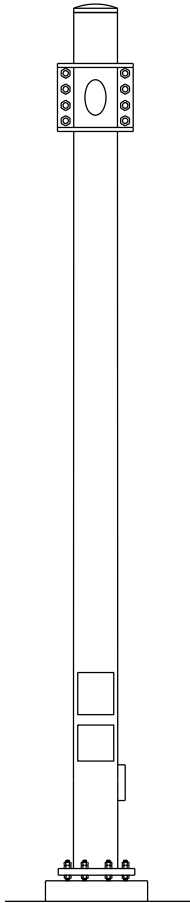
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-09-0013			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 13 OF 37



								NO.	DATE	REVISION		BY
ITEM NO.	DESCRIPTION		QTY	DETAIL SHEET	ITEM NO.	DESCRIPTION		QTY	DETAIL SHEET		STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
638.2602	REMOVING TYPE IISIGN		1EA	NONE	637.2210	SIGNS TYPE IIREFLECTIVE SH		12 SF	NONE		STRUCTURE S-09-0032	
					SPV.0060.17	REPLACE DAMPENER		1 EA	SHEET 6		DRAWN BY TTH PLANS CK'D. BRS	
					SPV.0060.21	REPLACE TYPE IISIGN SUPPORT BRACKET		3 EA	SHEET 7		MAINTENANCE ITEMS SHEET 14 OF 37	
					SPV.0060.26	REPLACE SIGN BRIDGE ID PLAQUE		1 EA	SDD 12A04			

STOP

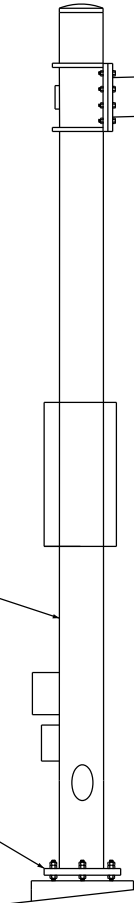
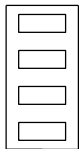
25
MPH



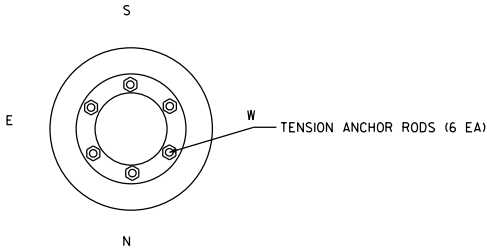
LOOKING WEST

REPLACE SIGN BRIDGE ID PLAQUE (1 EA)

INSTALL RODENT SCREEN (1 EA)

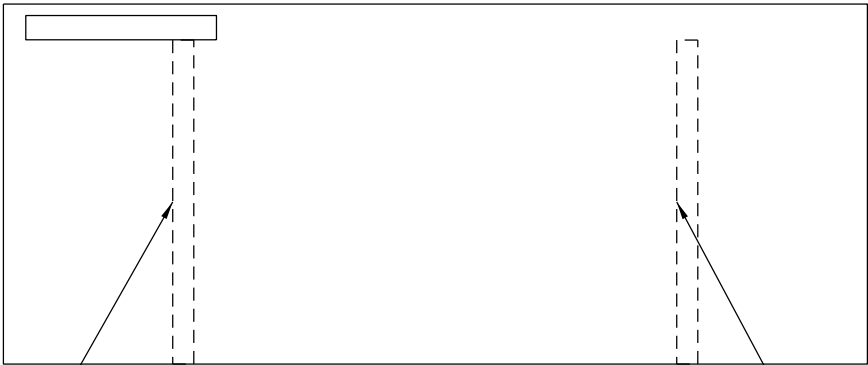


LOOKING SOUTH



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	6 EA	NONE
SPV.0060.05	REPLACE RODENT SCREEN	1 EA	SHEET 5
SPV.0060.26	REPLACE SIGN BRIDGE ID PLAQUE	1 EA	SDD 12A04

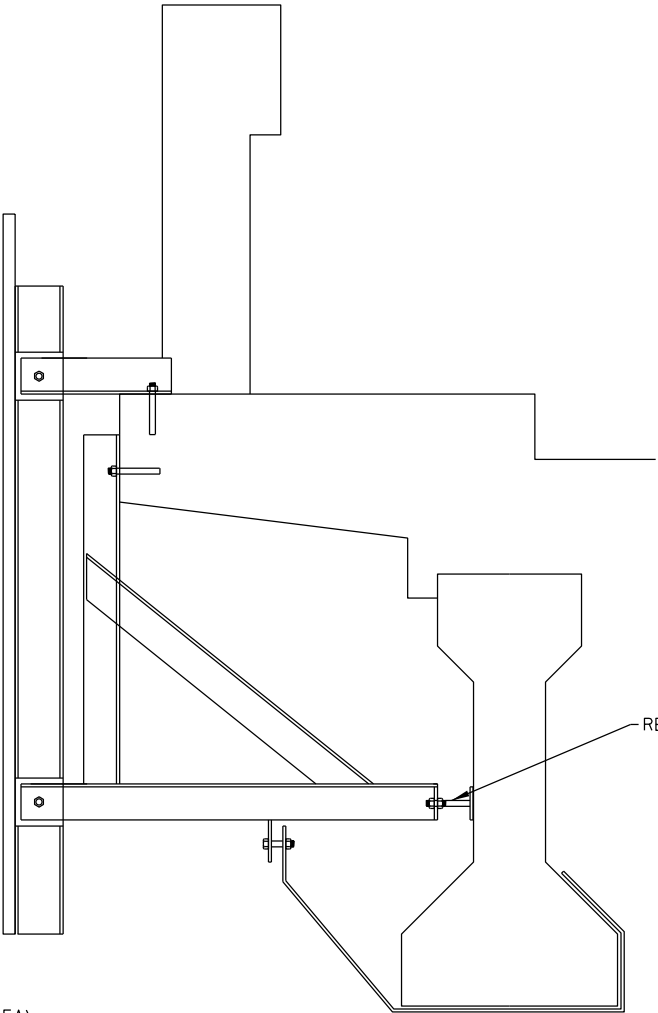
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-16-0022			
DRAWN BY		TTH	PLANS CK'D. BRS
MAINTENANCE ITEMS			SHEET 15 OF 37



REPLACE SIGN PANEL CONNECTORS (3 EA)

REPLACE SIGN PANEL CONNECTORS (3 EA)

WEST ELEVATION



REPAIR BRIDGE MOUNTED TYPE I SIGN SUPPORT (1EA)

SOUTH ELEVATION

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.20	REPLACE SIGN PANEL CONNECTOR	6 EA	SHEET 7
SPV.0060.45	REPAIR BRIDGE MOUNTED TYPE I SIGN SUPPORT	1EA	SHEET 8

	NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION				
STRUCTURE S-17-0004				
		DRAWN BY ZRW	PLANS CK'D.	BRS
MAINTENANCE ITEMS				SHEET 16 OF 37

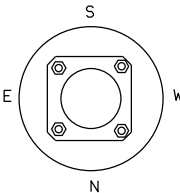
West Golf Rd
Commonwealth Ave



Oakwood
Mall
Drive



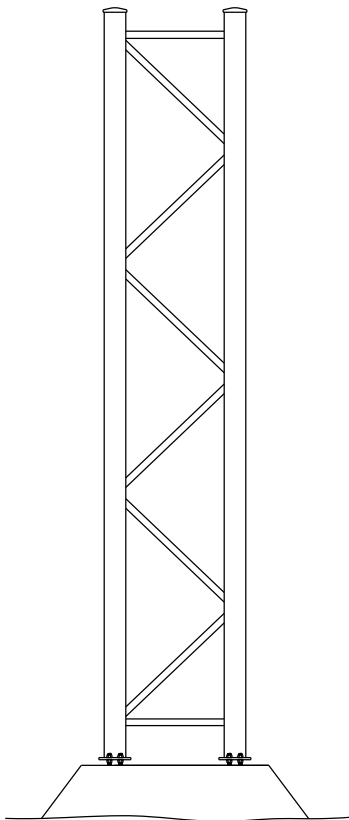
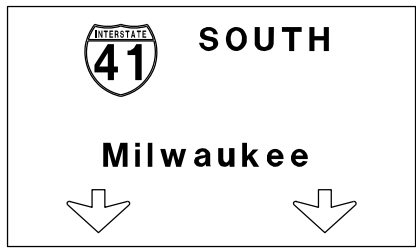
REPLACE END CAP (1 EA)



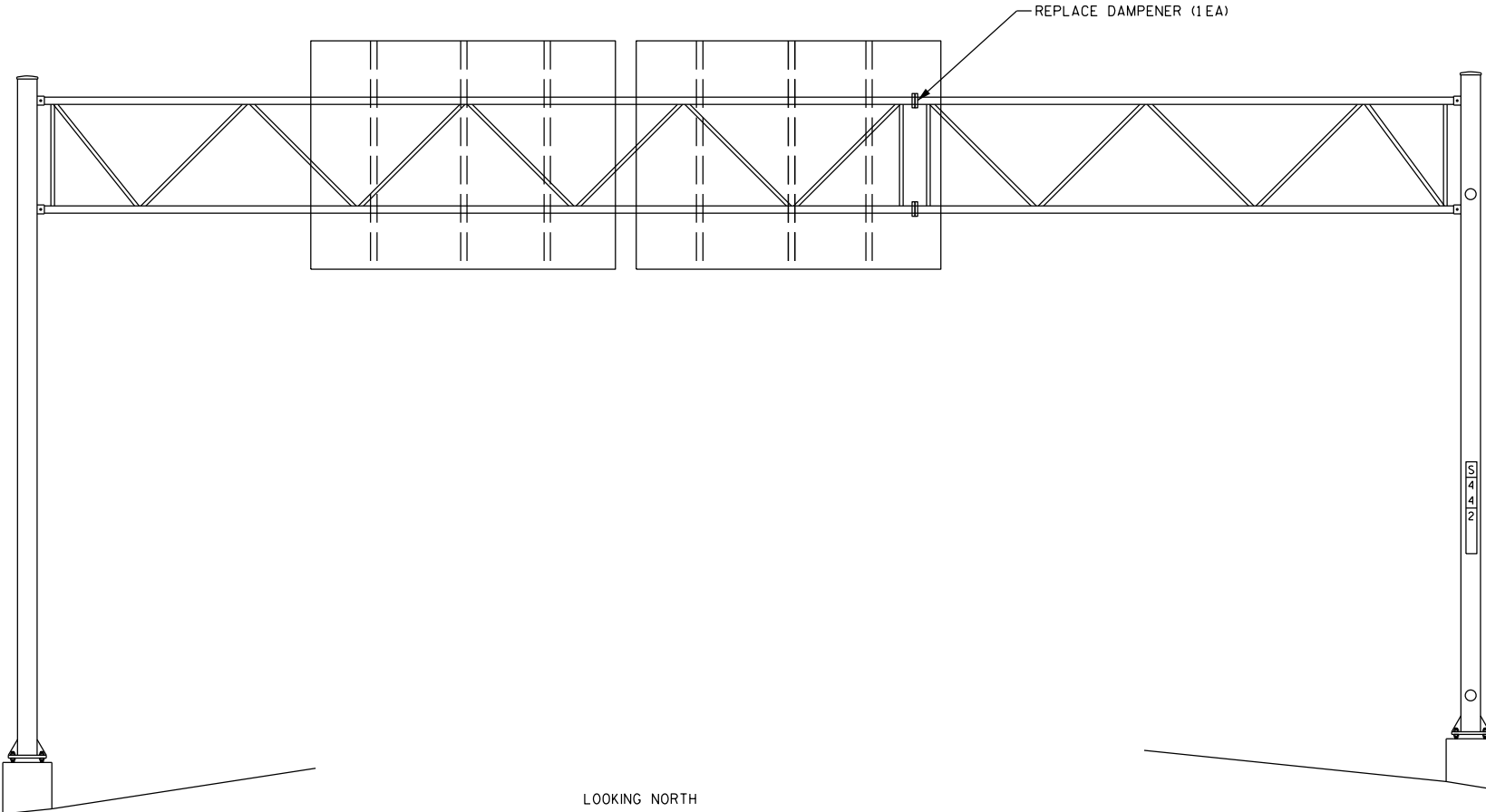
LOOKING SOUTH

LOOKING EAST

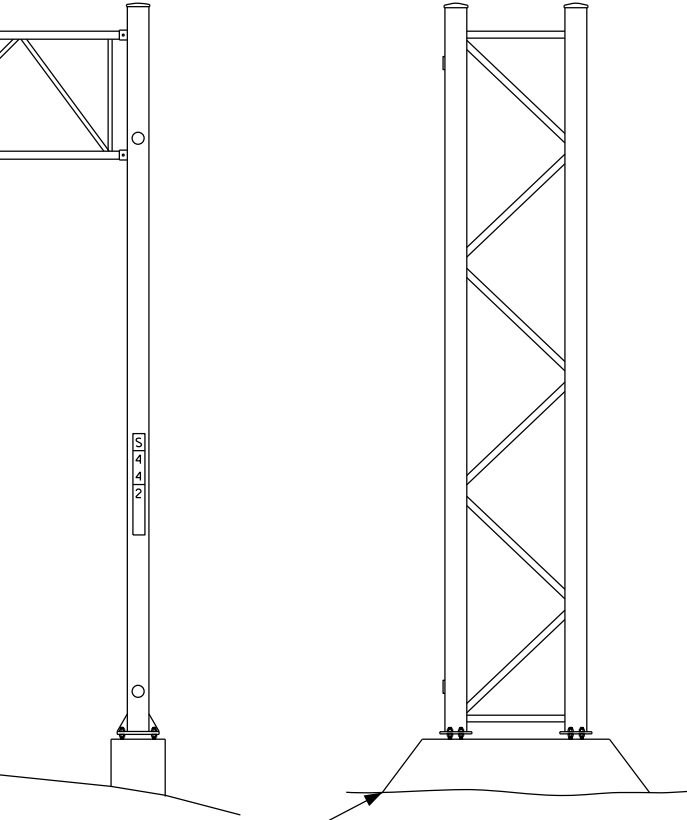
ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET	NO.	DATE	REVISION	BY
SPV.0060.12	REPLACE END CAP	1 EA	SHEET 5	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
				STRUCTURE S-18-0101			
				DRAWN BY ZRW		PLANS CK'D. BRS	
				MAINTENANCE ITEMS		SHEET 17 OF 37	



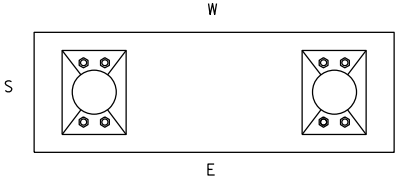
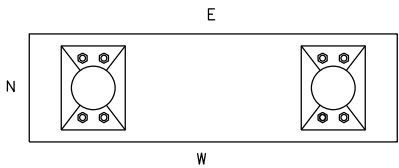
LOOKING EAST



LOOKING NORTH



LOOKING WEST



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.02	FILL EROSION	1 EA	SHEET 5
SPV.0060.17	REPLACE DAMPENER	1 EA	SHEET 6

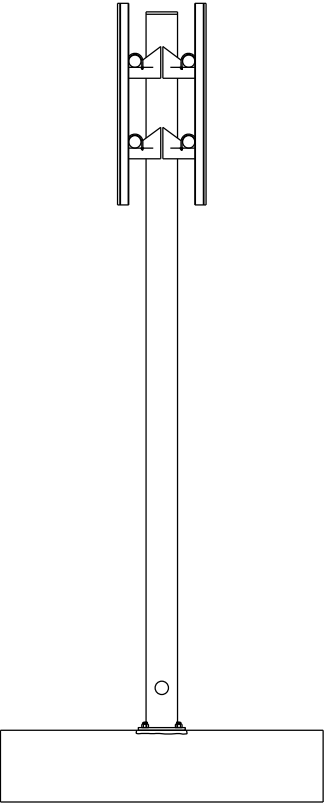
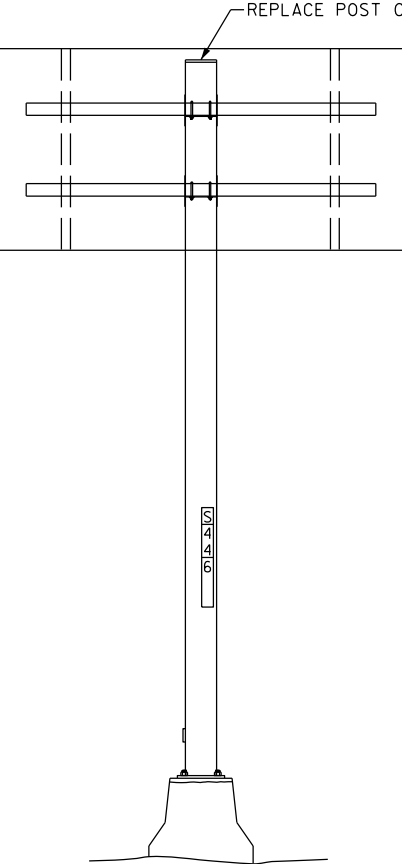
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-44-0002			
DRAWN BY ZRW		PLANS CK'D. ZRW	
MAINTENANCE ITEMS			SHEET 18 OF 37

Hwy	KK	1/4
Hwy	10	3
Hwy	47	4

Hwy	CE	1/4
Hwy	00	2 1/4
Hwy	41	3

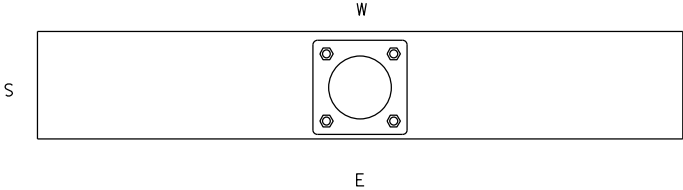
LOOKING SOUTH

LOOKING NORTH



LOOKING NORTH

LOOKING EAST

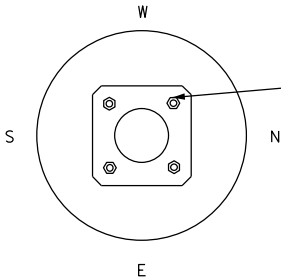
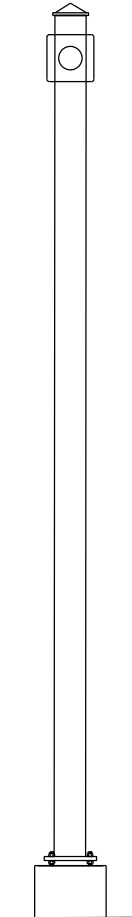
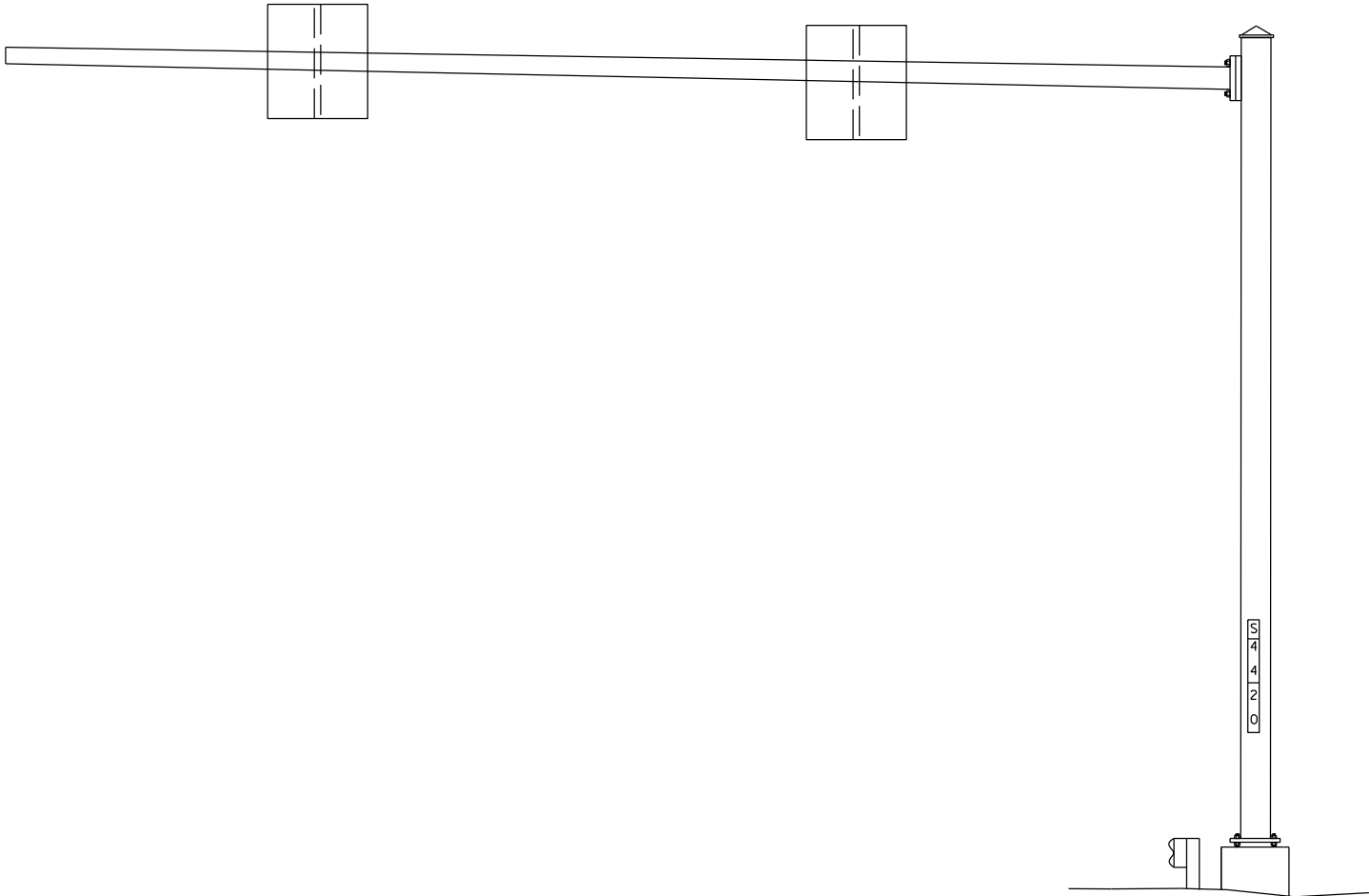


8

8

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.13	SEQUIRE/REPLACE POST CAP	1 EA	SHEET 6

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-44-0006			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 19 OF 37



TENSION ANCHOR RODS (4 EA)

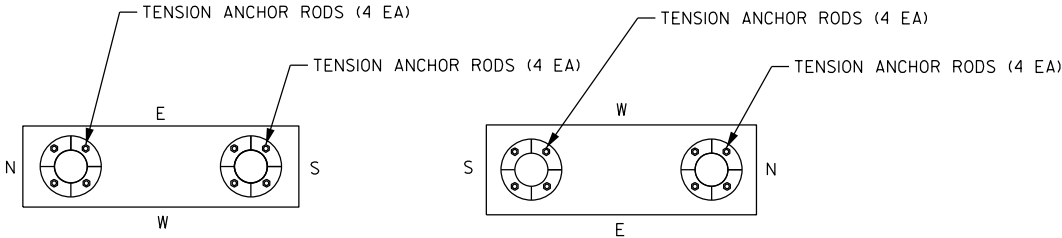
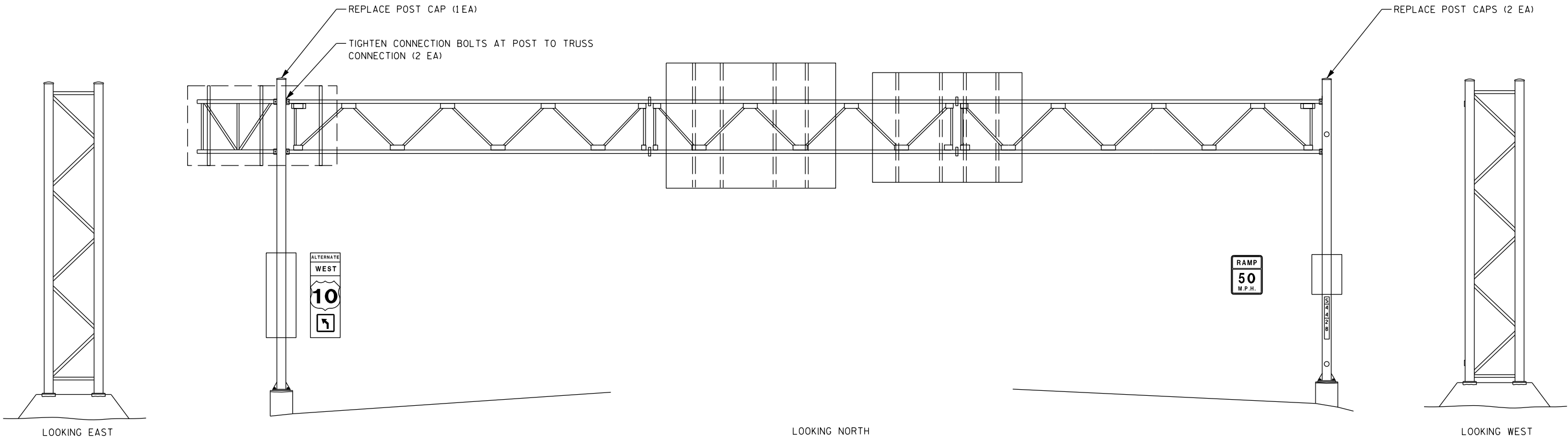
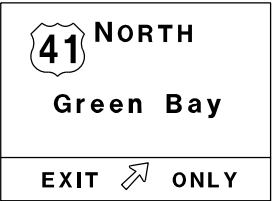
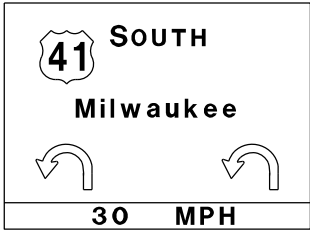
LOOKING WEST

LOOKING SOUTH

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	4 EA	NONE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-44-0020			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 20 OF 37

Hwy OO	1/4
Hwy CE	2
Hwy KK	3



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	16 EA	NONE
SPV.0060.16	TIGHTEN CONNECTION BOLT (NON-FRICTION)	2 EA	SHEET 6
SPV.0060.13	SECURE/REPLACE POST CAP	3 EA	SHEET 6


NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-44-0028			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 21 OF 37

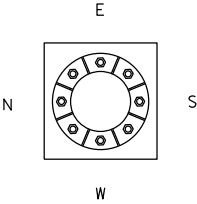
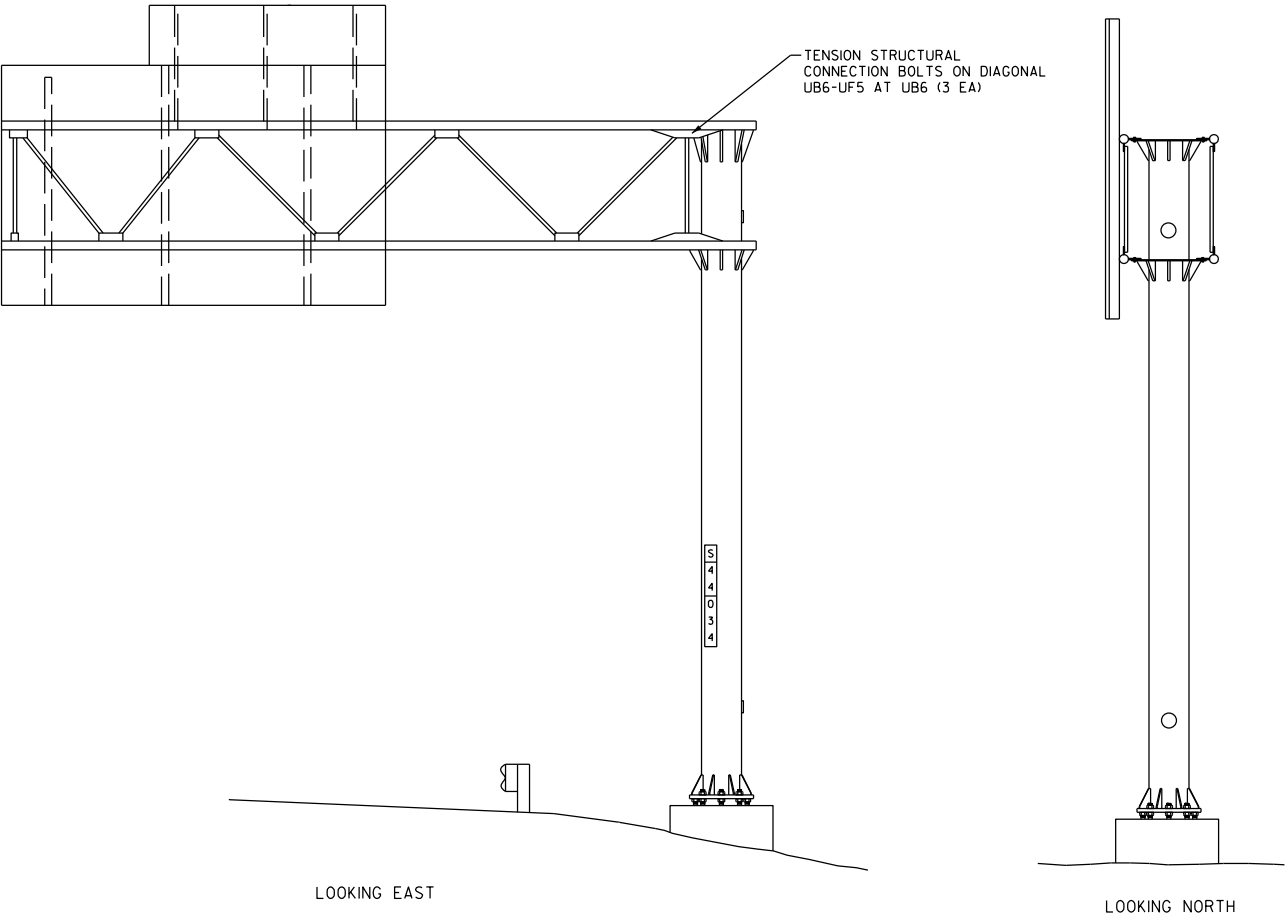
EXIT 145

441

SOUTH

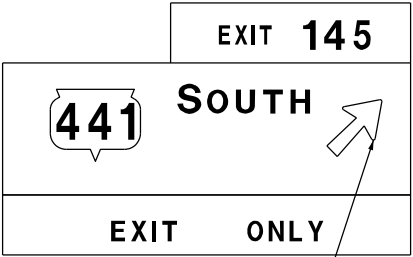
1/2 MILE

EXIT  ONLY

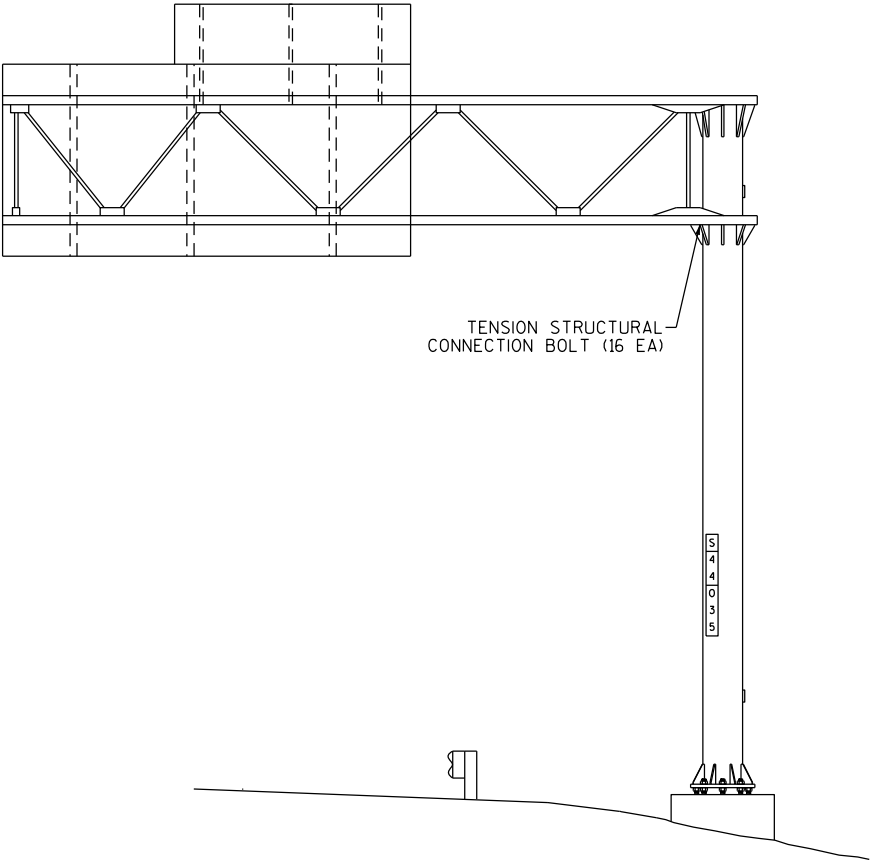


ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.10	TENSION STRUCTURAL CONNECTION BOLT	3 EA	SHEET 6

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-44-0034			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS		SHEET 22 OF 37	

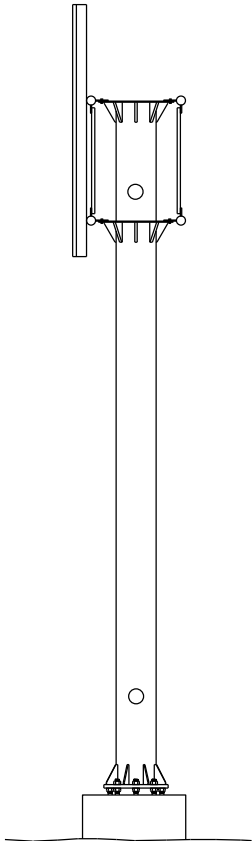


REPAIR ARROW DECAL ON TYPE 1 SIGN (1EA)

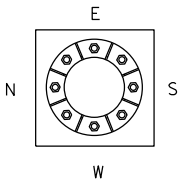


TENSION STRUCTURAL
CONNECTION BOLT (16 EA)

LOOKING EAST

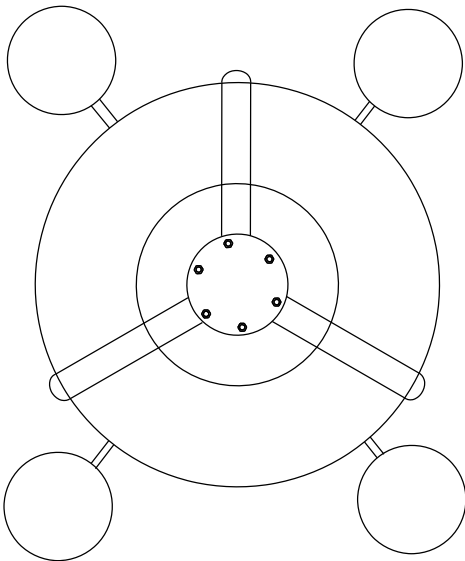


LOOKING NORTH

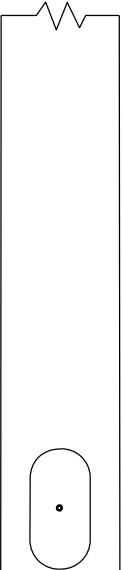
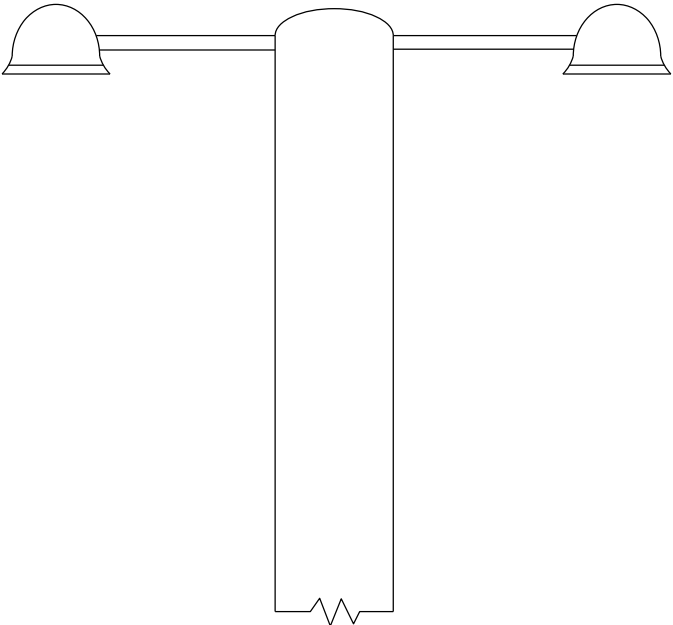


ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.10	TENSION STRUCTURAL CONNECTION BOLT	16 EA	SHEET 6
SPV.0060.46	REPAIR TYPE 1 SIGN	1 EA	SHEET 8

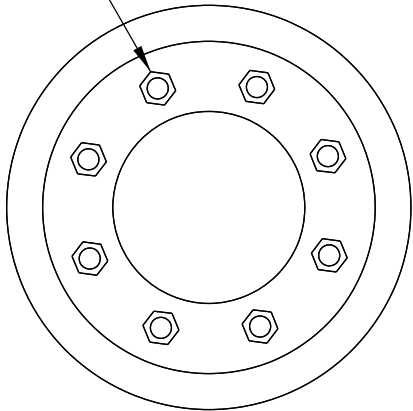
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-44-0035			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 23 OF 37



LIGHTING ASSEMBLY

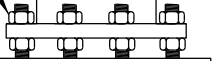
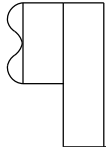


CLEAN AND PAINT BASE PLATE, LEVELING NUTS, ANCHOR RODS, AND ANCHOR BOLTS



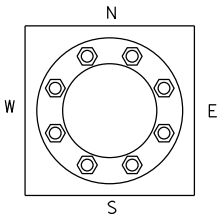
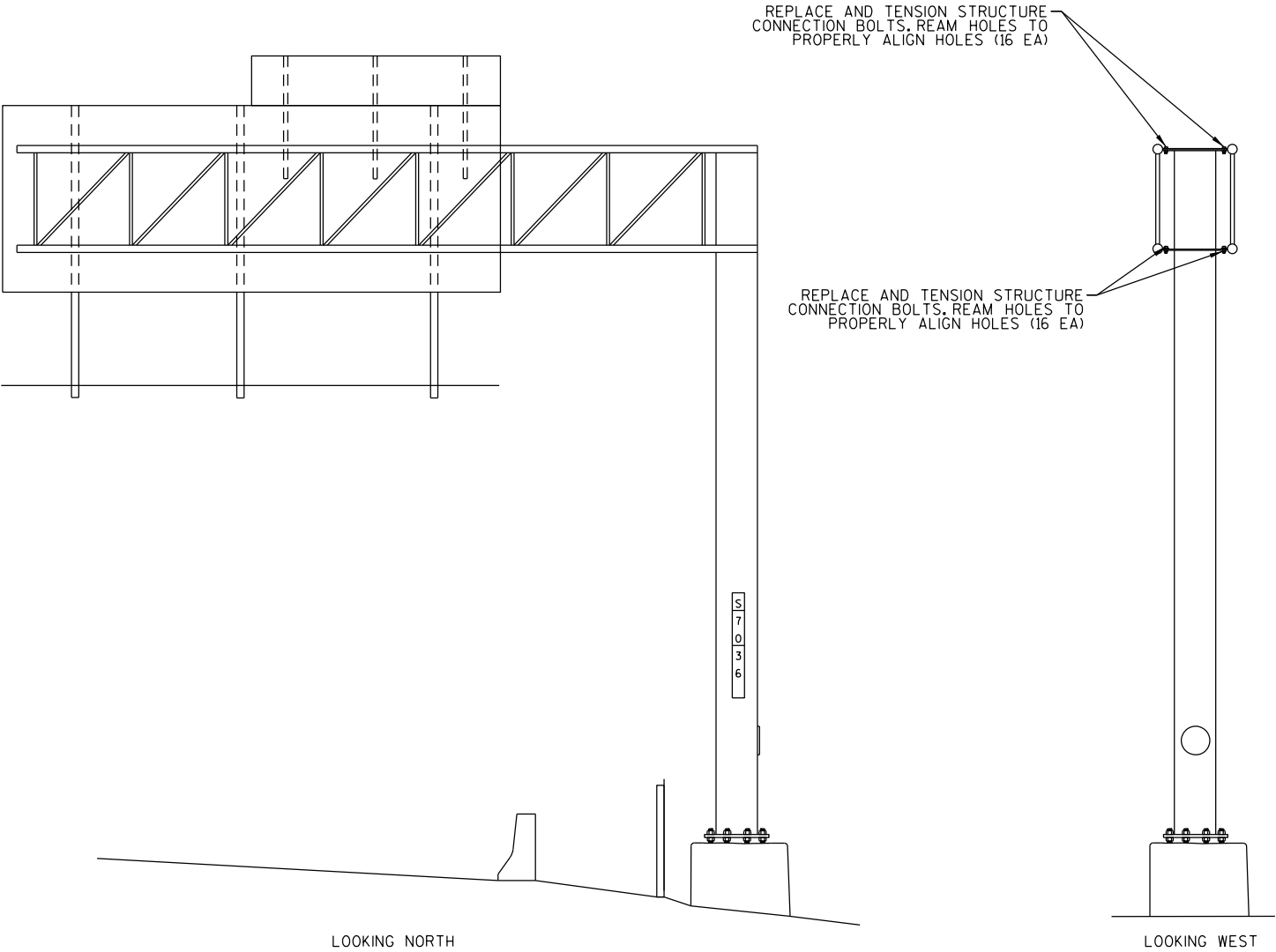
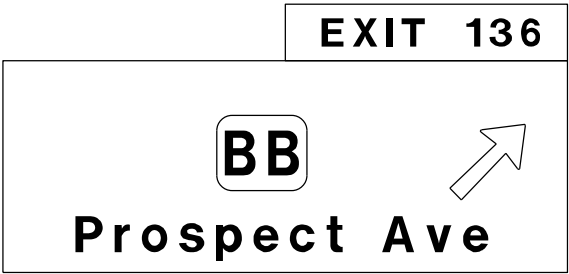
REPLACE RODENT SCREEN (1EA)

LOOKING WEST



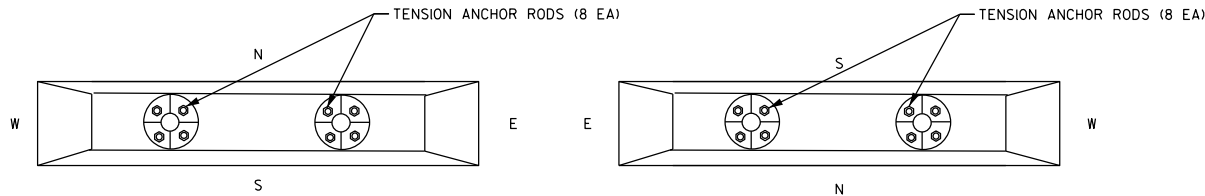
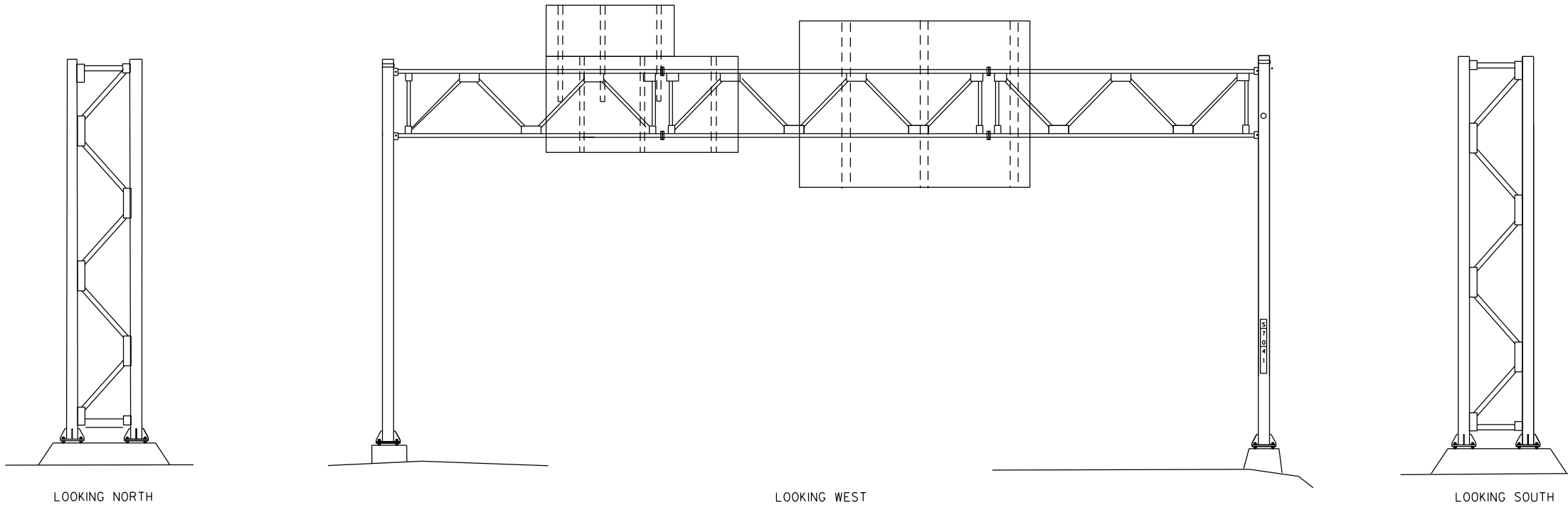
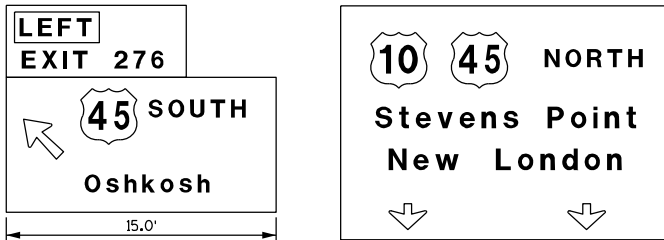
ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.05	REPLACE RODENT SCREEN	1 EA	SHEET 5
SPV.0105.01	STRUCTURE REPAINTING ORGANIC ZINC RICH SYSTEM	LS	NONE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE L-55-0004			
DRAWN BY		TTH	PLANS CK'D. BRS
MAINTENANCE ITEMS			SHEET 24 OF 37



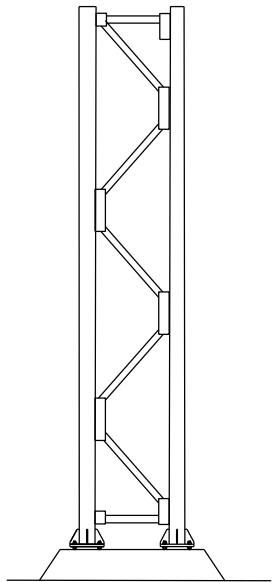
ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.10	TENSION STRUCTURAL CONNECTION BOLT	32 EA	SHEET 6

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-70-0036			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 25 OF 37

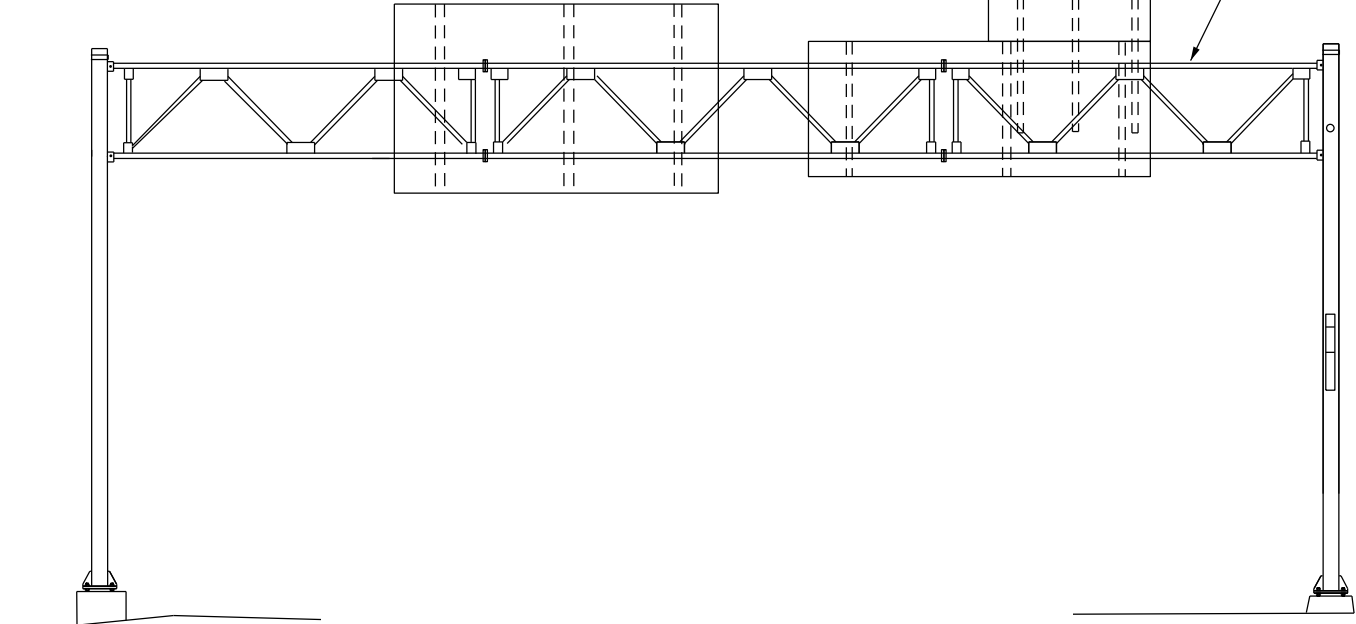


ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	16 EA	NONE

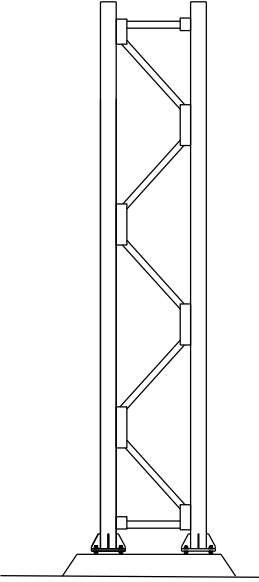
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-70-0041			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 26 OF 37



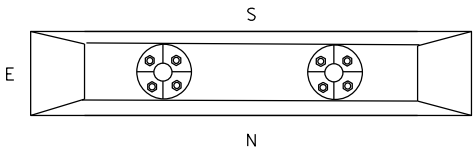
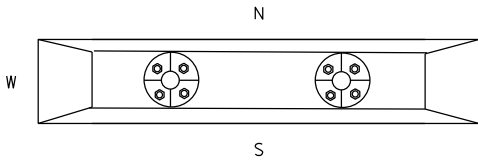
LOOKING NORTH



LOOKING WEST

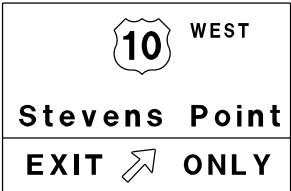


LOOKING SOUTH

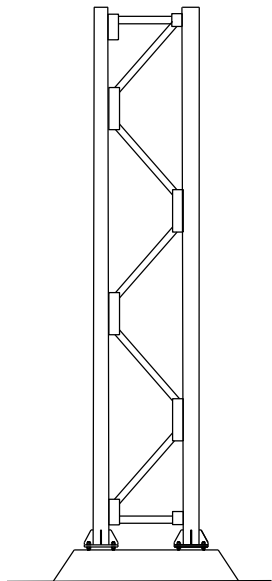


ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.10	TENSION STRUCTURAL CONNECTION BOLT	3 EA	SHEET 6

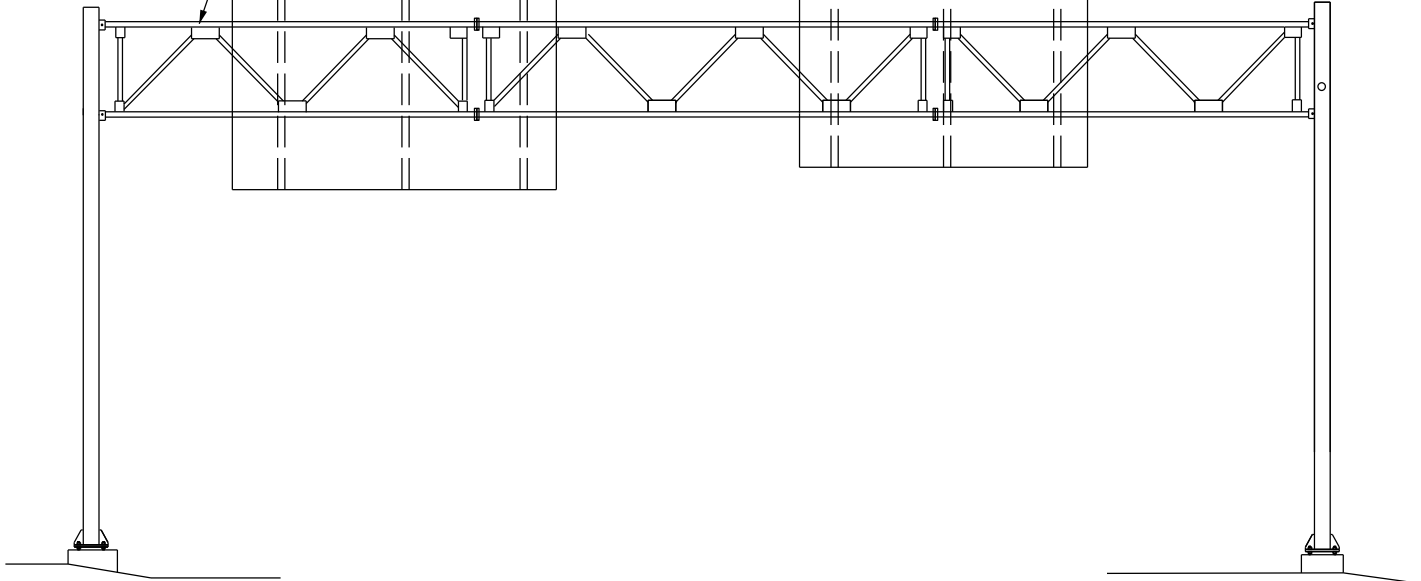
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-70-0042			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 27 OF 37



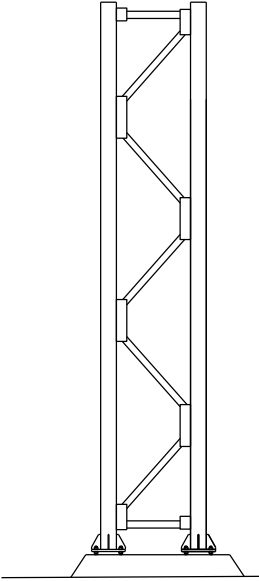
TENSION STRUCTURAL CONNECTION
BOLTS ON MEMBER UF1 TO LB1 AT UF1



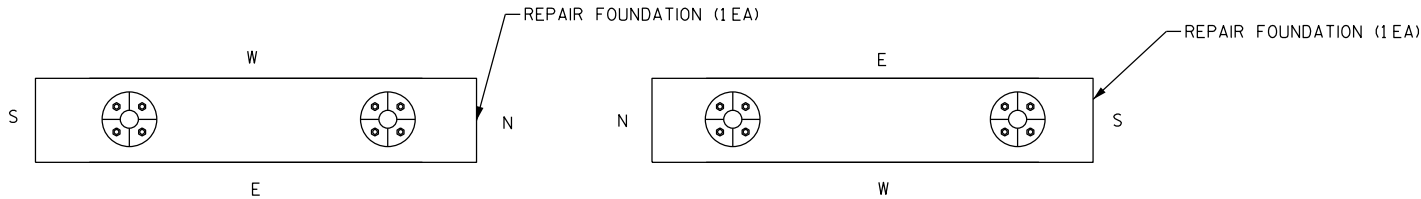
LOOKING WEST



LOOKING SOUTH

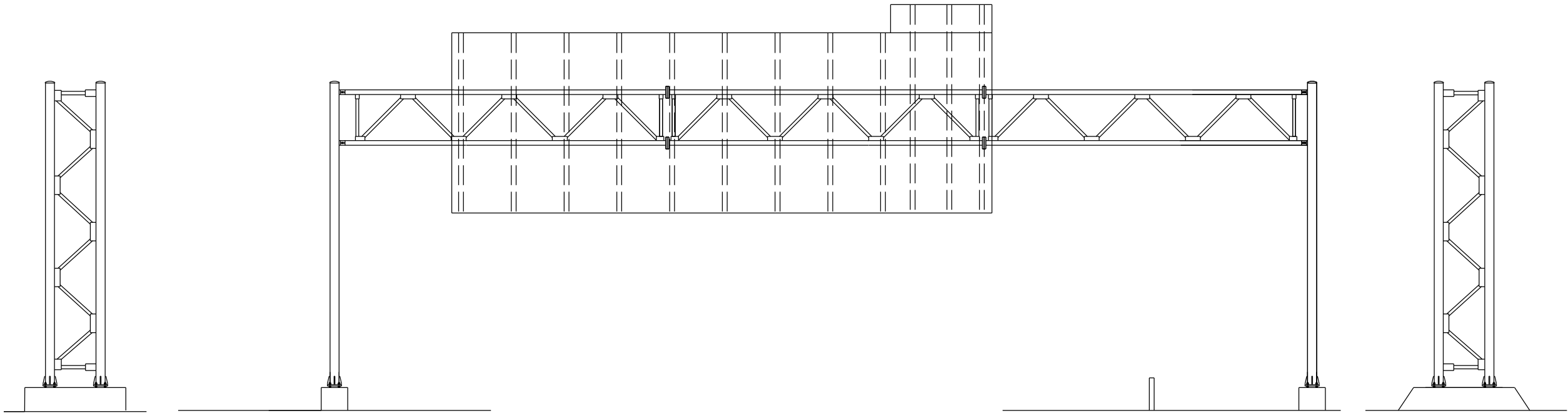
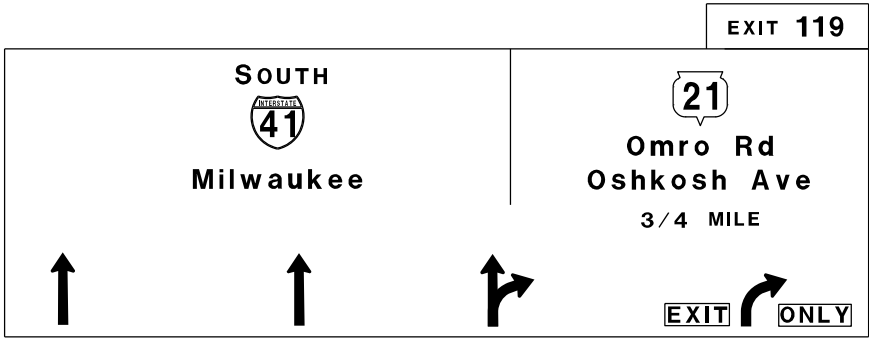


LOOKING EAST



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.04	REPAIR FOUNDATION	2 EA	SHEET 5
SPV.0060.10	TENSION STRUCTURAL CONNECTION BOLT	3 EA	SHEET 6

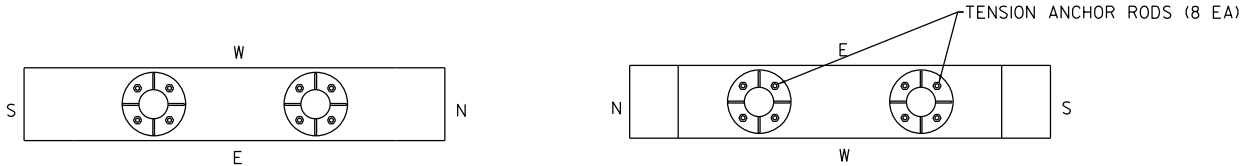
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-70-0046			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 28 OF 37



LOOKING WEST

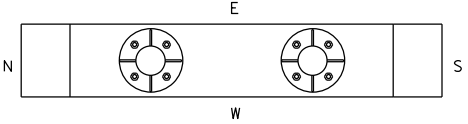
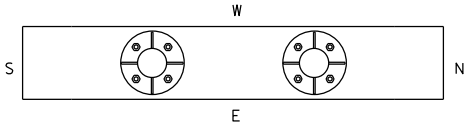
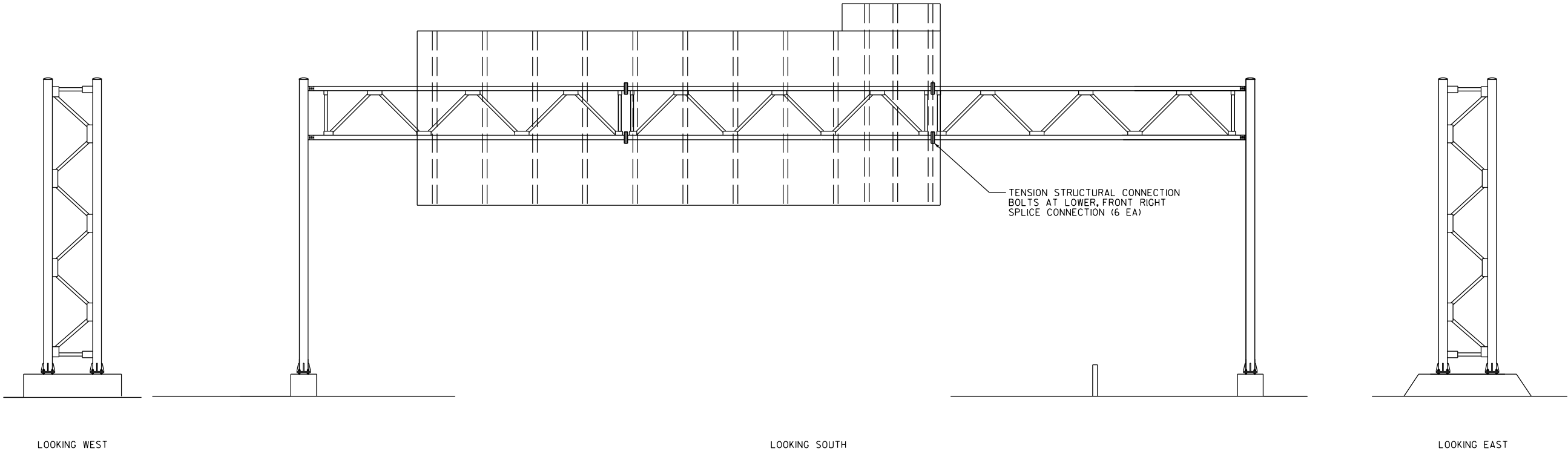
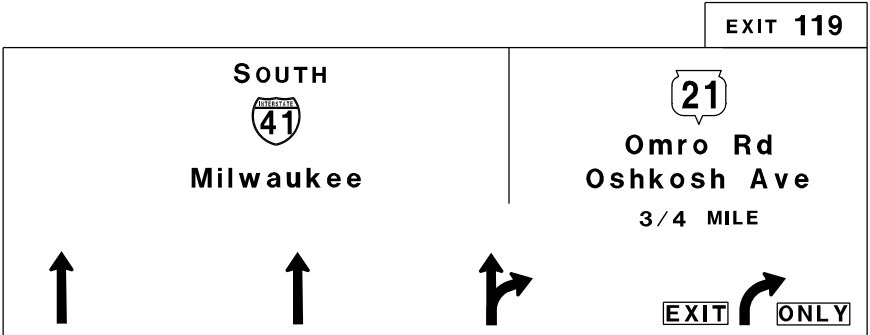
LOOKING SOUTH

LOOKING EAST



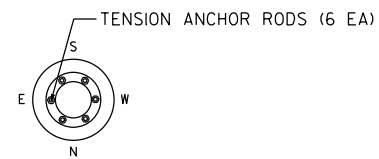
ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	8 EA	NONE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-70-0062			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 29 OF 37

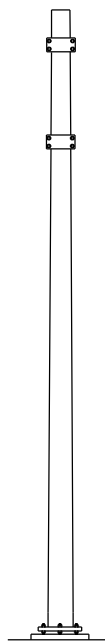
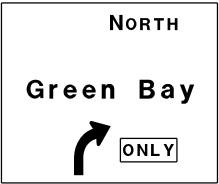


ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.10	TENSION STRUCTURAL CONNECTION BOLT	6 EA	SHEET 7

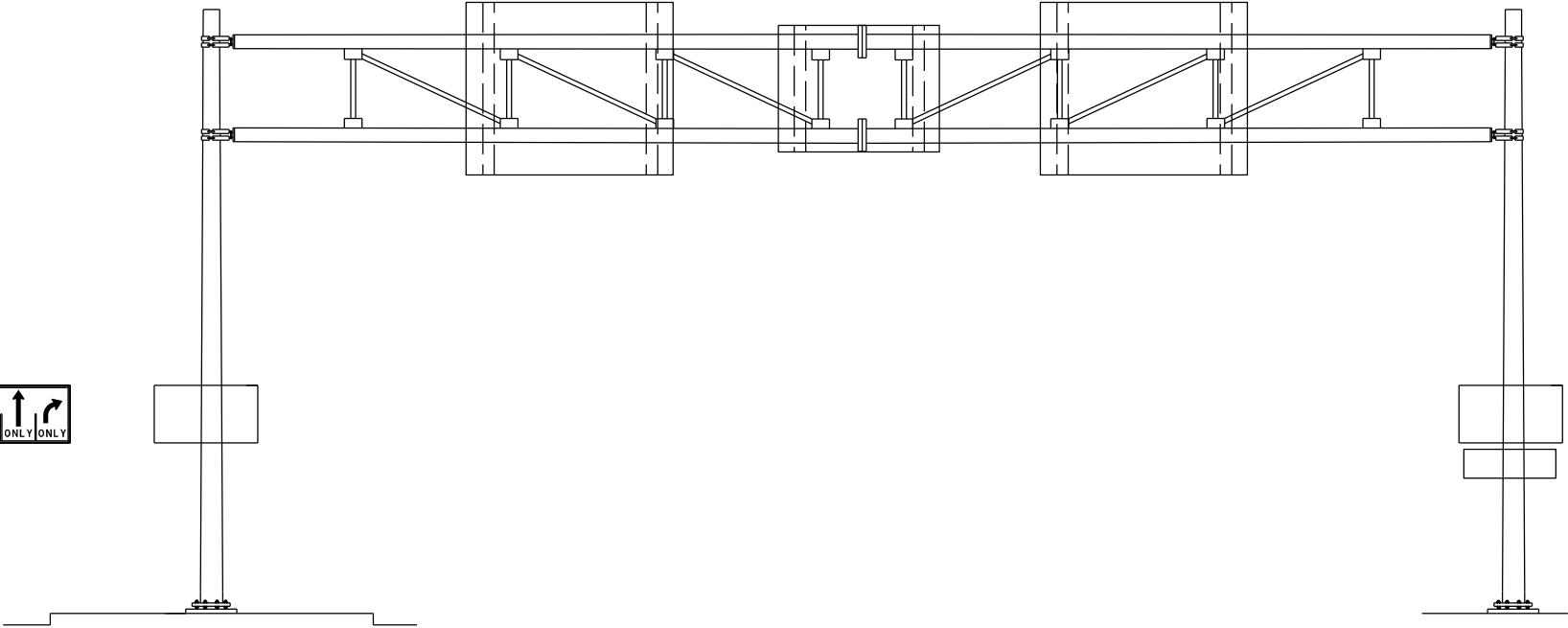
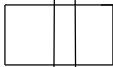
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-70-0064			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 30 OF 37



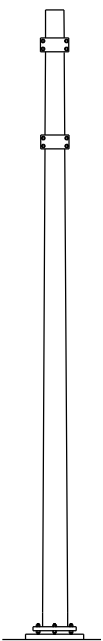
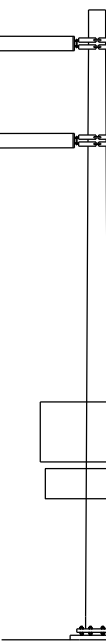
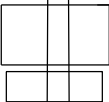
				<table><tr><td></td><td></td></tr><tr><td>NO.</td><td>DATE</td></tr></table>				NO.	DATE	<table><tr><td colspan="2">REVISION</td></tr><tr><td colspan="2">BY</td></tr></table>		REVISION		BY	
NO.	DATE														
REVISION															
BY															
ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION											
SPV.0060.01	TENSION ANCHOR ROD	12 EA	NONE	STRUCTURE S-70-0081											
SPV.0060.16	TIGHTEN CONNECTION BOLT (NON-FRICTION)	2 EA	NONE	DRAWN BY ZRW		PLANS CK'D. BRS									
				MAINTENANCE ITEMS		SHEET 31 OF 37									



LOOKING NORTH

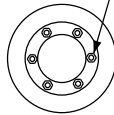


LOOKING WEST

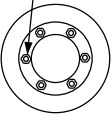


LOOKING SOUTH

8



TENSION ANCHOR RODS (6 EA)

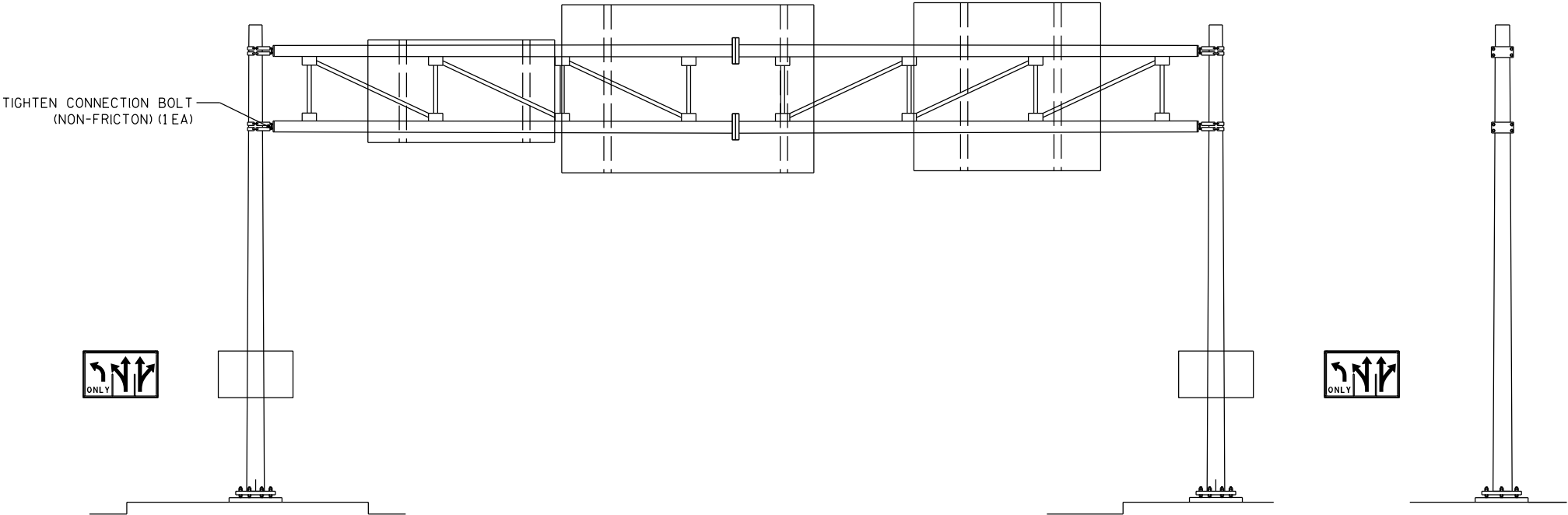
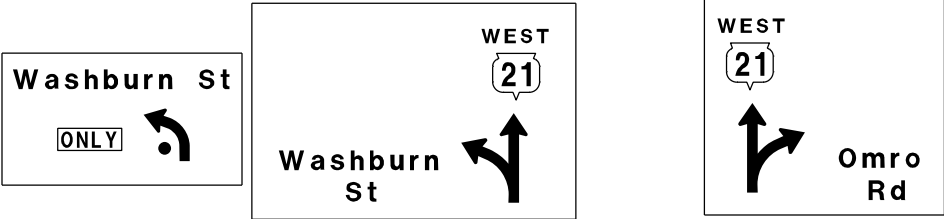


TENSION ANCHOR RODS (6 EA)

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	12 EA	NONE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-70-0085			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 32 OF 37

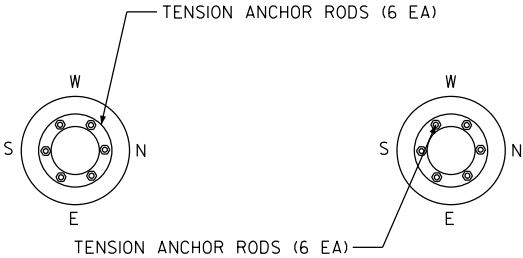
8



LOOKING NORTH

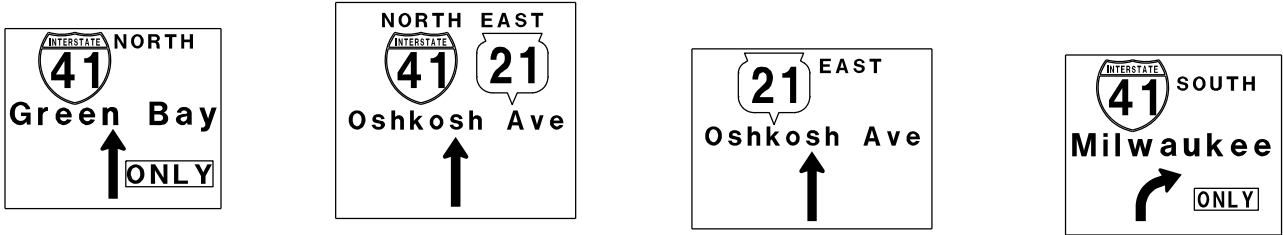
LOOKING WEST

LOOKING SOUTH



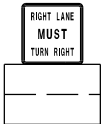
ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	12 EA	NONE
SPV.0060.16	TIGHTEN CONNECTION BOLT (NON-FRICTION)	1 EA	NONE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-70-0100			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 33 OF 37



TIGHTEN CONNECTION BOLTS
(NON-FRICTION) (2 EA)

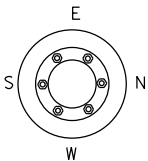
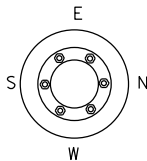
TIGHTEN CONNECTION BOLTS
(NON-FRICTION) (2 EA)



LOOKING SOUTH

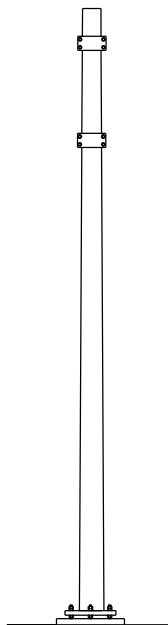
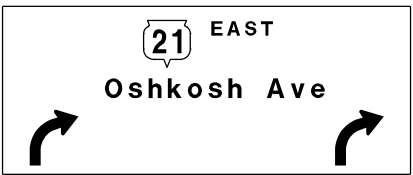
LOOKING EAST

LOOKING NORTH

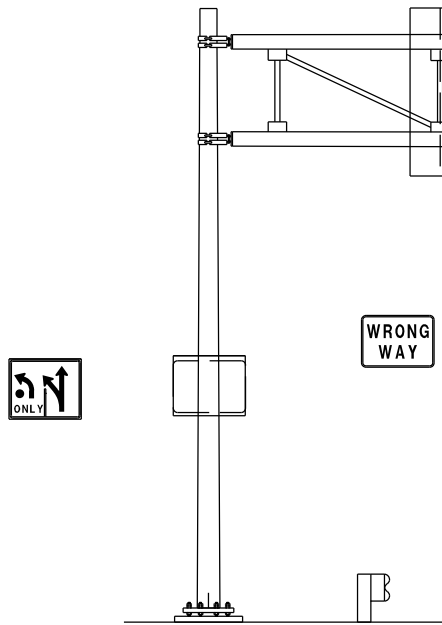


ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.16	TIGHTEN CONNECTION BOLT (NON-FRICTION)	4 EA	NONE

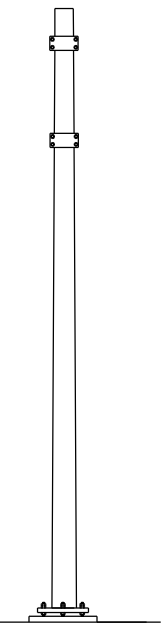
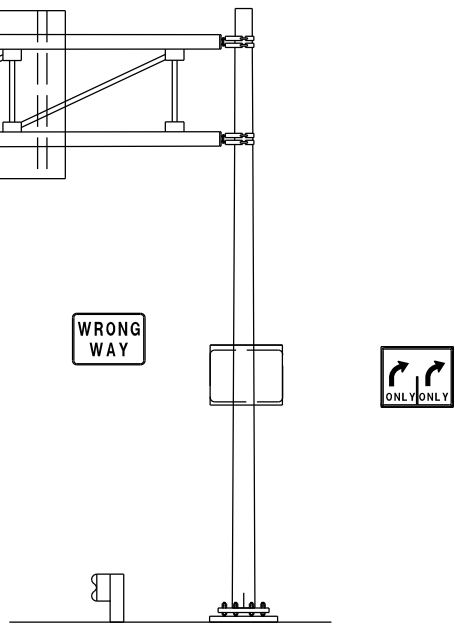
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-70-0102			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 34 OF 37



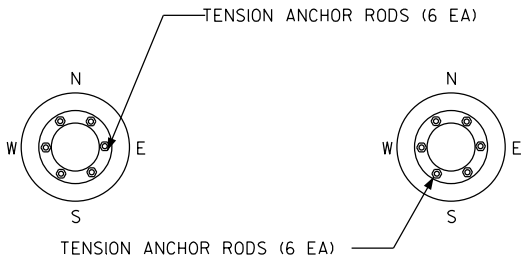
LOOKING EAST



LOOKING NORTH

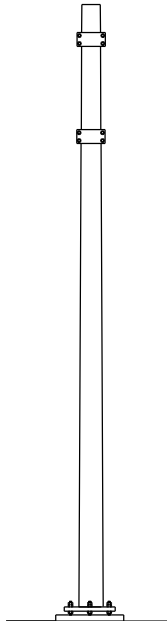


LOOKING WEST

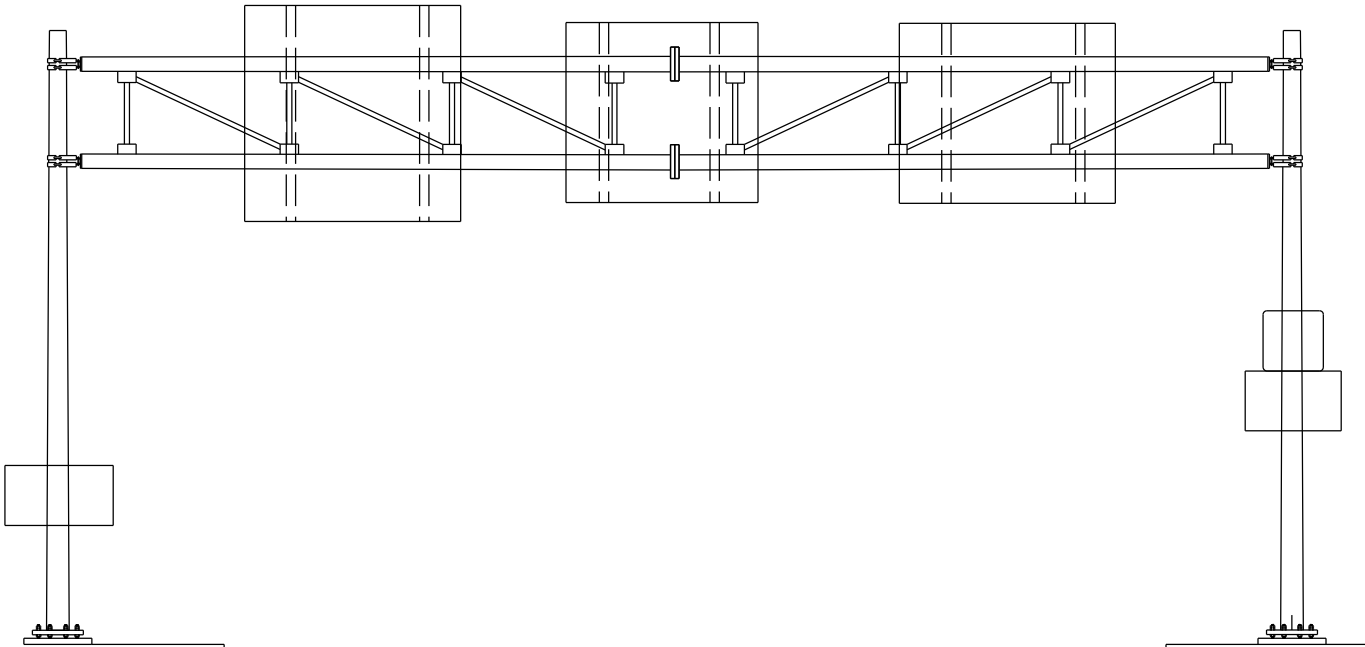


ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	12 EA	NONE

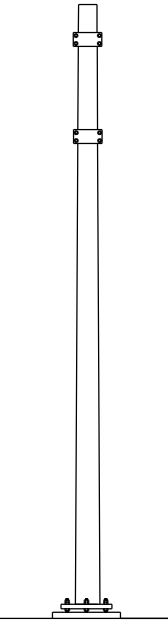
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-70-0106			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 35 OF 37



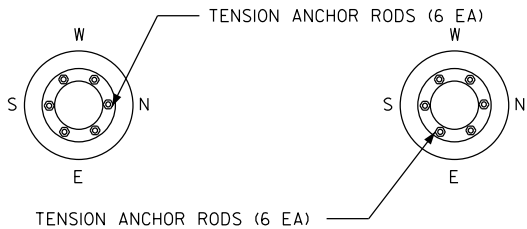
LOOKING NORTH



LOOKING WEST

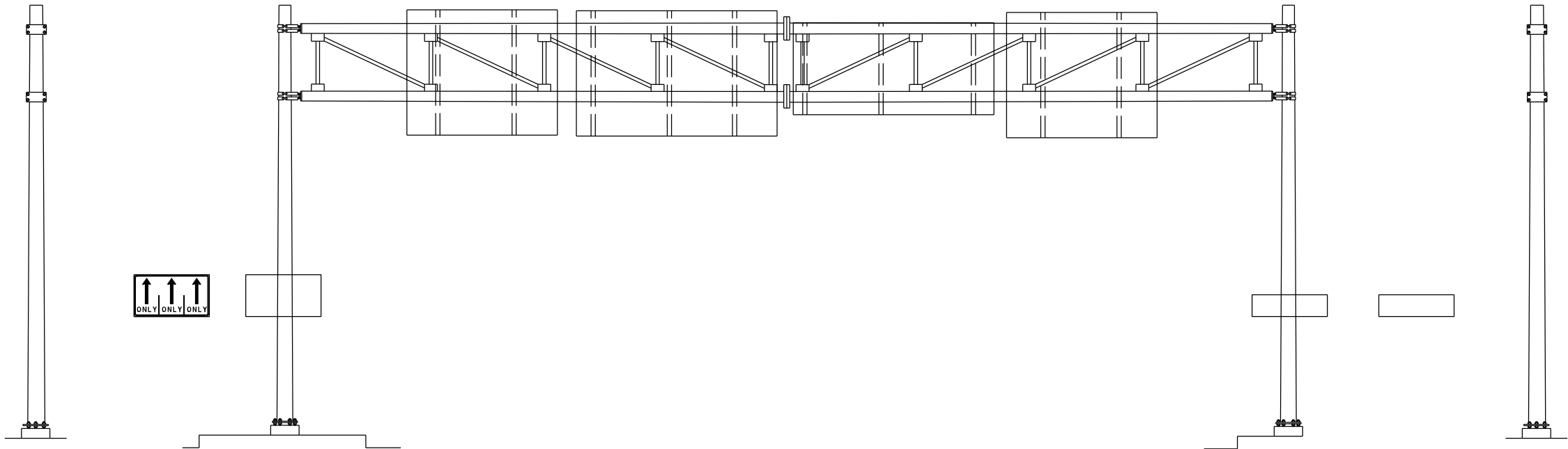
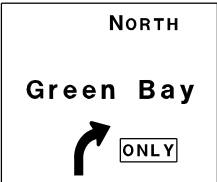
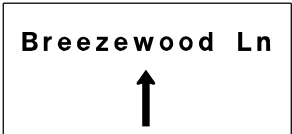
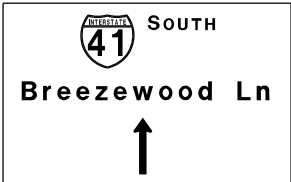


LOOKING SOUTH



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	12 EA	NONE

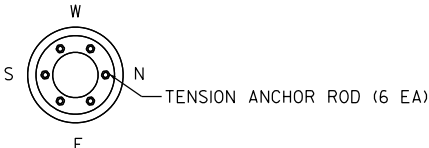
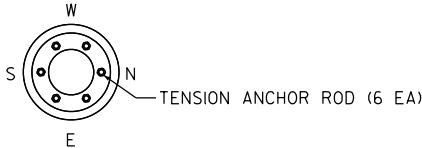
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-70-0107			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 36 OF 37



LOOKING NORTH

LOOKING WEST

LOOKING SOUTH



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	12 EA	NONE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-70-0125			
DRAWN BY ZRW		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 37 OF 37



Wisconsin Department of Transportation

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