

ORDER OF SHEETS

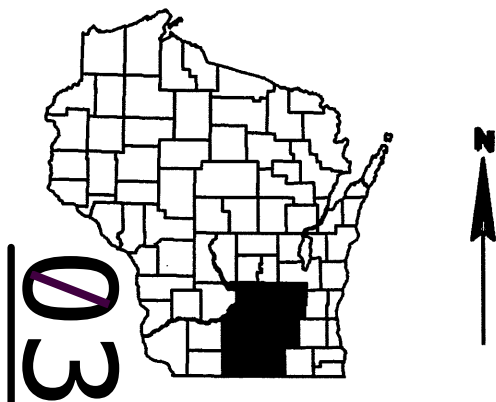
- Section No. 1 Title
Section No. 2 Typical Sections and Details
Section No. 3 Estimate of Quantities
Section No. 3 Miscellaneous Quantities
~~Section No. 4 Right of Way Plot~~
~~Section No. 5 Plan and Profile~~
Section No. 6 Standard Detail Drawings
Section No. 7 Sign Plates
Section No. 8 Structure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

TOTAL SHEETS = 68

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
SIGN BRIDGE REPLACEMENT
LOCATIONS ON STN PER ANNUAL PLAN
NON HWY
SOUTHWEST REGION WIDE

STATE PROJECT NUMBER
5105-17-63

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5105-17-63		



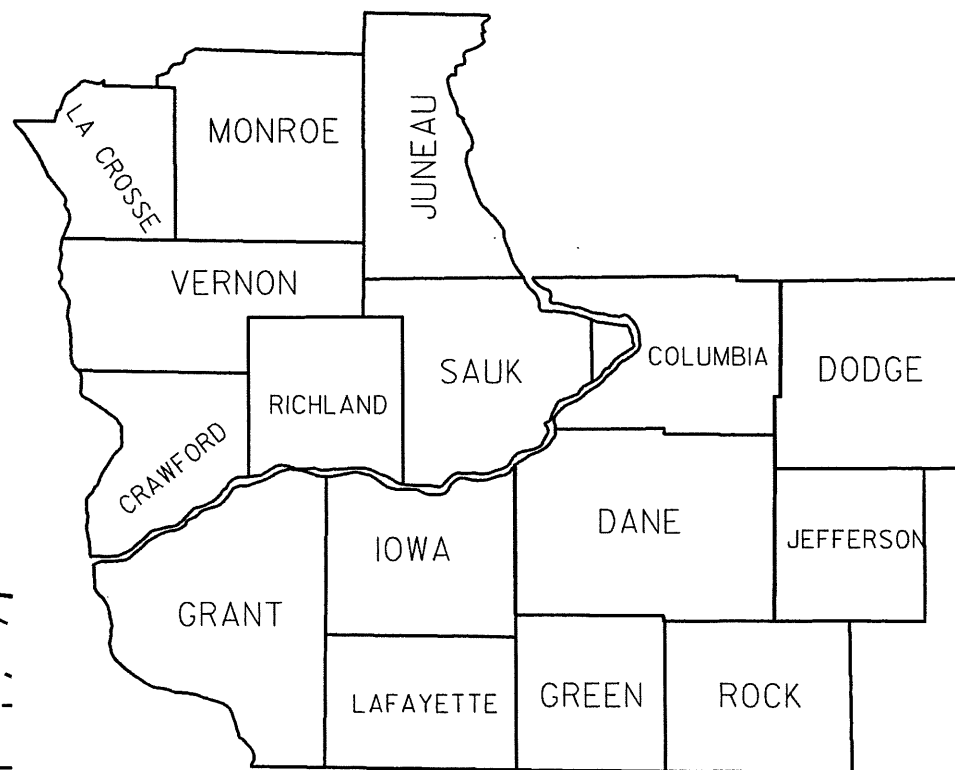
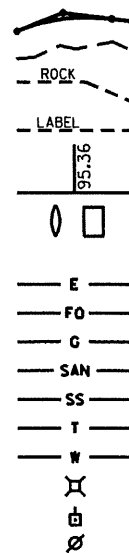
DESIGN DESIGNATION

- 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
EXISTING RIGHT OF WAY
PROPOSED OR NEW R/W LINE
SLOPE INTERCEPT
REFERENCE LINE
EXISTING CULVERT
PROPOSED CULVERT (Box or Pipe)
COMBUSTIBLE FLUIDS
MARSH AREA
WOODED OR SHRUB AREA

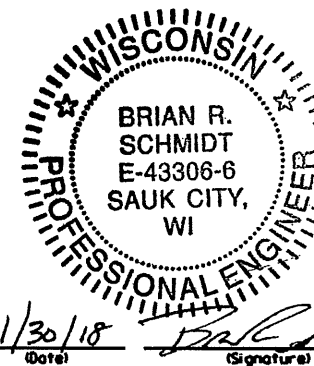
- PROFILE
GRADE LINE
ORIGINAL GROUND
MARSH OR ROCK PROFILE (To be noted as such)
SPECIAL DITCH
GRADE ELEVATION
CULVERT (Profile View)
UTILITIES
ELECTRIC
FIBER OPTIC
GAS
SANITARY SEWER
STORM SEWER
TELEPHONE
WATER
UTILITY PEDESTAL
POWER POLE
TELEPHONE POLE



LAYOUT
SCALE 0 0 MI.
TOTAL NET LENGTH OF CENTERLINE = 0.0 MI.

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 **SHIV GUPTA**
Regional Examiner
Regional Supervisor **RICH VELA**
C.O. Examiner

APPROVED FOR THE DEPARTMENT
DATE: 1.31.18 *Richard R. Del*
(Signature)

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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

FICKETT STRUCTURAL SOLUTIONS
3148 DEMING WAY, SUITE 160
MIDDLETON, WI 53562
ATTN: BRIAN R. SCHMIDT
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IOWA, SAUK COUNTIES		
LAURA BUB	(608) 275-3485	LAURA.BUB@WISCONSIN.GOV
GREEN, JEFFERSON, LAFAYETTE, ROCK COUNTIES		
ERIC HEGGELUND	(608) 275-3301	ERIC.HEGGELUND@WISCONSIN.GOV
COLUMBIA, DANE, DODGE COUNTIES		

TRAFFIC CONTROL CONTACTS

RICHARD CANNON	(608) 246-5635	RICHARD.CANNON@DOT.WI.GOV
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Dial 811 or (800) 242-8511
www.DiggersHotline.com

COLUMBIA COUNTY

STRUCTURE NUMBER	HIGHWAY	DIRECTION OF TRAVEL	LOCATION
S-11-0019	STH 78	NB	STH 78 NB, 1/8 MILE NORTH OF I-90/94

DANE COUNTY

STRUCTURE NUMBER	HIGHWAY	DIRECTION OF TRAVEL	LOCATION
S-13-0039	USH 12/18	EB	USH 12/18 EB AT SOUTH TOWNE EXIT
S-13-0042	USH 12/18	WB	USH 12/18 WB AT EXIT TO MONONA DRIVE
S-13-0085	USH 151	SB	USH 151 SB, 1/2 MILE NORTH OF 1-39 NB/90-94 WB BRIDGE
S-13-0086	USH 151	NB	USH 151 NB, AT EXIT TO NELSON RD. & AMERICAN PARKWAY
S-13-0087	USH 151	NB	USH 151 NB AT EXIT TO AMERICAN PARKWAY
S-13-0088	USH 151	NB	USH 151 NB, ON RAMP FROM AMERICAN PARKWAY
S-13-0090	USH 151	SB	USH 151 SB RAMP TO AMERICAN PARKWAY
S-13-0094	USH 51	SB	USH 51 SB AT USH 151
S-13-0114	STH 30	WB	STH 30 WB, 1/4 MI EAST OF FAIR OAKS AVE.
S-13-0115	STH 30	WB	STH 30 WB AT EXIT TO FAIR OAKS AVE.
S-13-0116	USH 51	NB	USH 51 NB, 1/8 MILE SOUTH OF STH 30
S-13-0118	USH 51	SB	USH 51 SB AT THE EXIT TO MILWAUKEE ST
S-13-0154	IH-39	SB	IH-39 SB JUST SOUTH OF USH 151 ON-RAMP
S-13-0155	IH-39	NB	IH-39 NB, 1-3/4 MI NORTH OF USH 12/18
S-13-0157	IH-94	WB	IH-94 WB AT EXIT RAMP TO IH-39 NB/IH-90 WB
S-13-0181	USH 151	NB	USH 151 NB AT IH-39 NB/IH-90/94 WB
S-13-0188	USH 12/18	WB	USH 12/18 WB, 0.5 MI EAST OF USH 51
S-13-0281	USH 12/18	EB	USH 12/18 EB AT RIMROCK RD EXIT
S-13-0291	IH-94	EB	IH-94 EB, 2 MILES WEST OF CTH N
S-13-0322	MAIN ST.	WB	MAIN ST. WB (SUN PRAIRIE) AT USH 151 NB RAMP
S-13-0323	USH 151	NB	USH 151 NB ON OFF-RAMP TO MAIN ST. (SUN PRARIRE)
S-13-0337	IH-39	SB	IH-39 SB JUST NORTH OF STH 19

DODGE COUNTY

STRUCTURE NUMBER	HIGHWAY	DIRECTION OF TRAVEL	LOCATION
S-14-0004	STH 60	WB	STH 60 WB AT STH 67

GREEN COUNTY

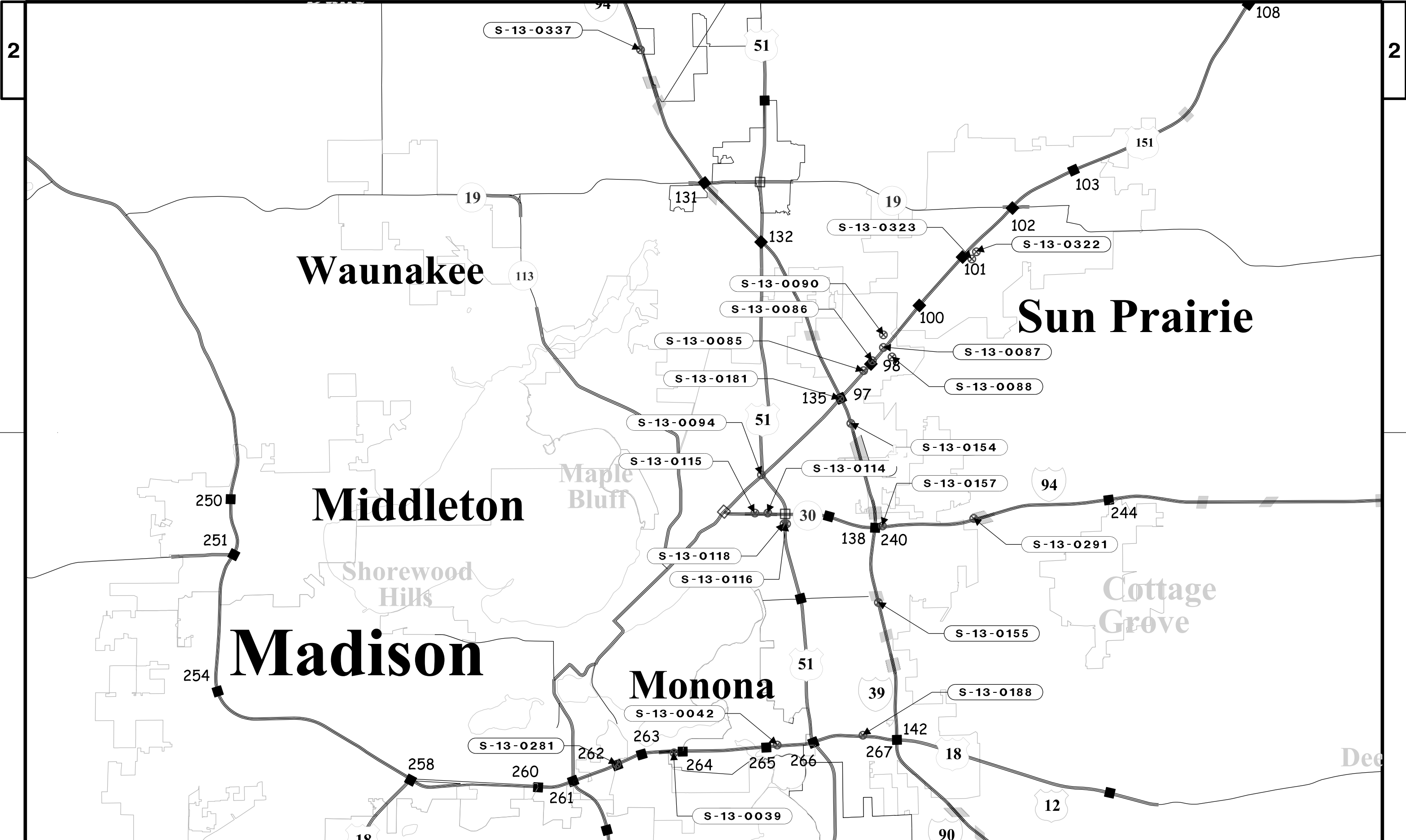
STRUCTURE NUMBER	HIGHWAY	DIRECTION OF TRAVEL	LOCATION
S-23-0002	STH 11	EB	STH 11 EB AT USH 81 WB/STH 69 SB EXIT

JEFFERSON COUNTY

STRUCTURE NUMBER	HIGHWAY	DIRECTION OF TRAVEL	LOCATION
S-28-0001	IH-94	EB	IH-94 EB ON OFF-RAMP TO STH 26
S-28-0002	IH-94	EB	IH-94 EB ON OFF-RAMP TO STH 26
S-28-0003	IH-94	WB	IH-94 WB ON OFF-RAMP TO STH 26
S-28-0004	IH-94	WB	IH-94 WB ON OFF-RAMP TO STH 26
S-28-0005	STH 26	NB	STH 26 NB AT IH-94 EB ON RAMP
S-28-0006	STH 26	SB	STH 26 SB, JUST NORTH OF IH-94
S-28-0014	STH 16	WB	STH 16 WB AT WEST END OF OCONTOMOWOC BYPASS

ROCK COUNTY

STRUCTURE NUMBER	HIGHWAY	DIRECTION OF TRAVEL	LOCATION
S-53-0036	IH-39	NB	IH-39 NB, LA PRAIRIE WEIGHT STATION OVERHEAD INSTRUCTIONAL SIGNAL



PROJECT NO: 5105-17-63

HWY: VARIOUS

COUNTY: DANE

COUNTY STRUCTURE LOCATION

SCALE: NOT TO SCALE

SHEET

E

FILE NAME : ...\\51051763_Microstation File.dgn

PLOT DATE : 1/30/2018

PLOT BY : BSchmidt

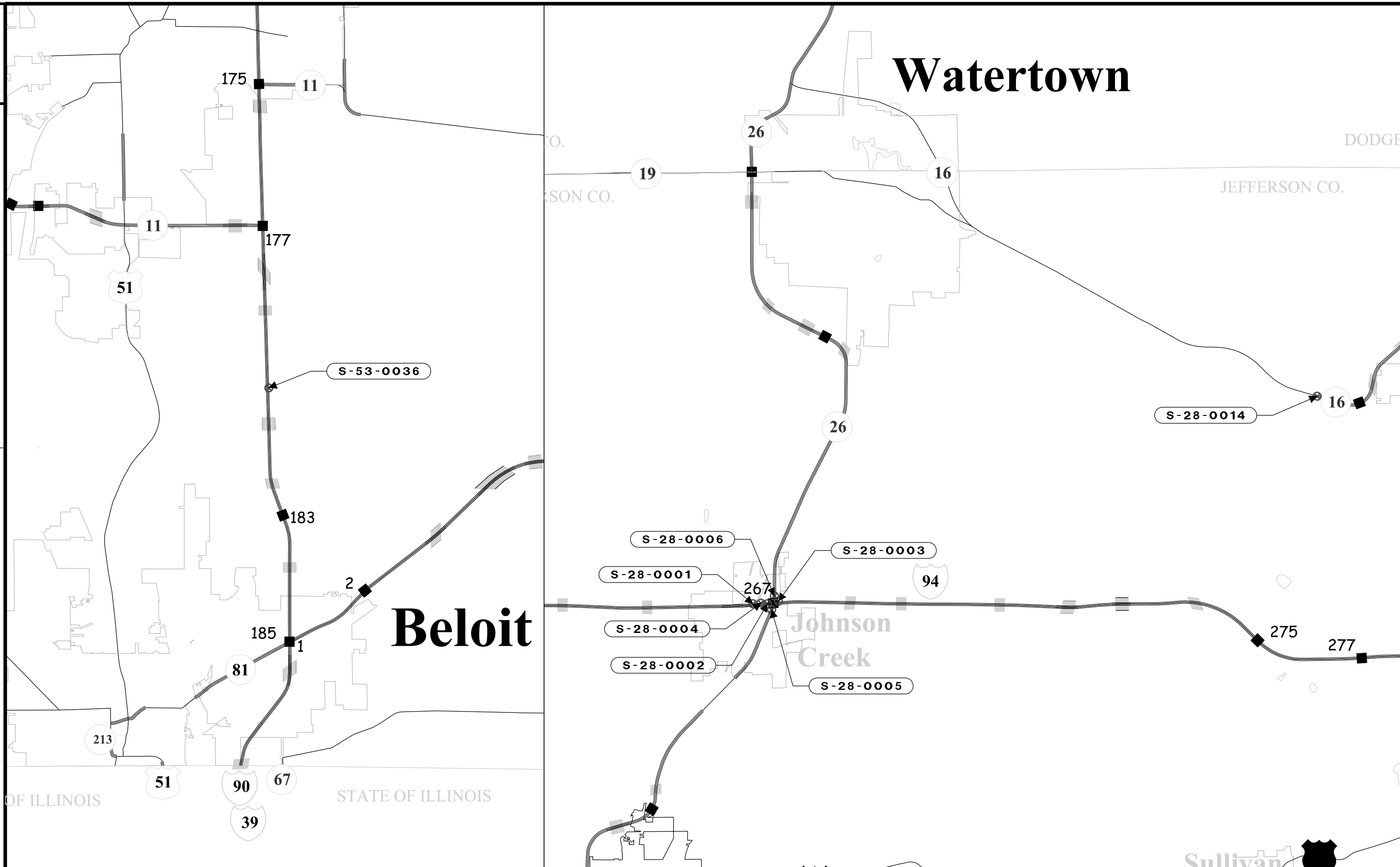
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PLOT SCALE : Not to Scale

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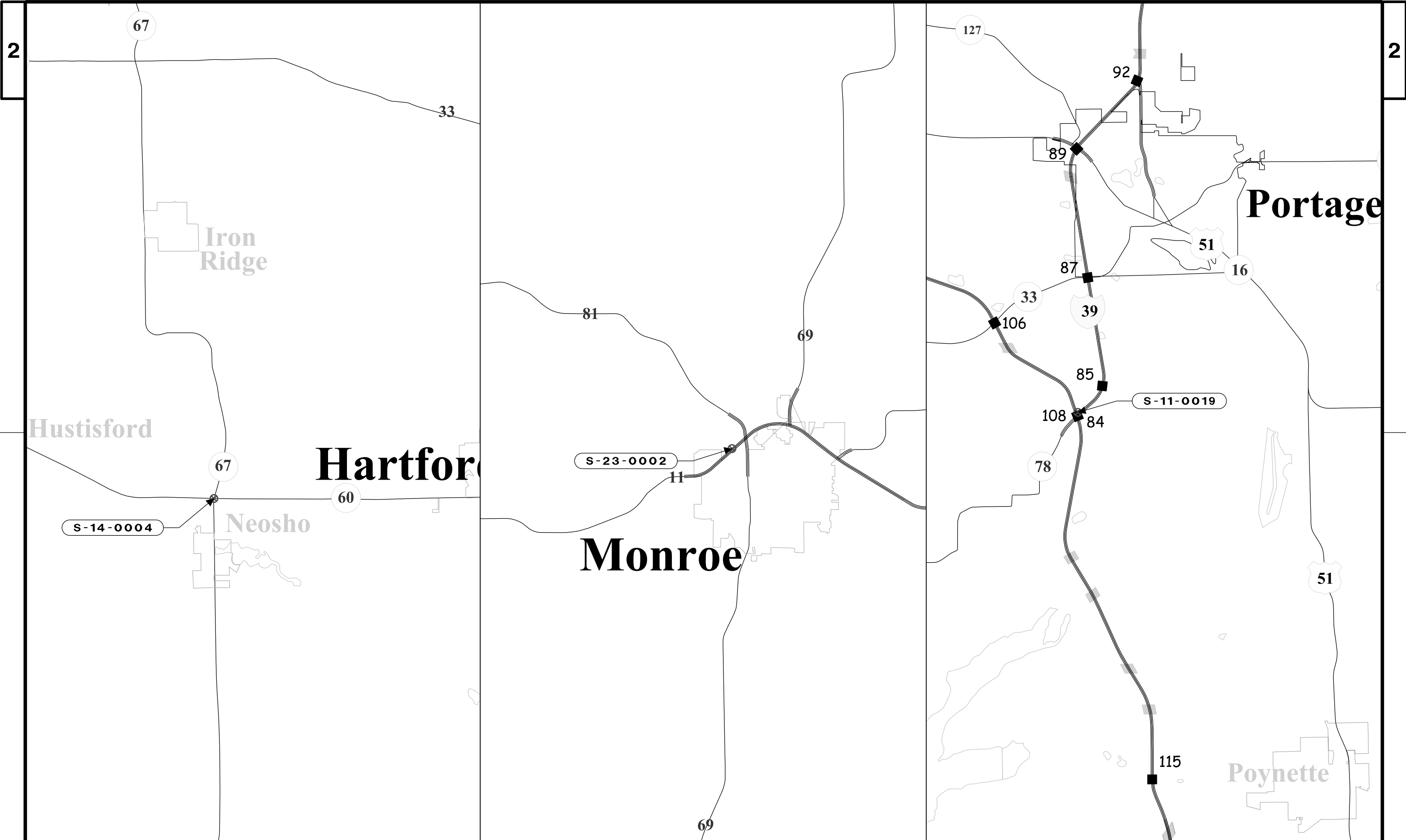
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PROJECT NO: 5105-17-63	HWY: VARIOUS	COUNTY: JEFFERSON, ROCK	COUNTY STRUCTURE LOCATION	SCALE: NOT TO SCALE	SHEET	E
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FILE NAME : ...\\51051763_Microstation File.dgn PLOT DATE : 1/30/2018 PLOT BY : BSchmidt PLOT NAME : PLOT SCALE : Not to Scale



TRAFFIC CONTROL AND WORK RESTRICTION

STRUCTURE NUMBER	COUNTY	HIGHWAY	DIRECTION OF TRAVEL	LOCATION	TRAFFIC CONTROL	RESTRICTED HOURS
S-11-0019	COLUMBIA	STH 78	NB	STH 78 NB, 1/8 MILE NORTH OF I-90/94	SDD15d12	NO SINGLE LANE CLOSURE RESTRICTIONS
S-13-0039	DANE	USH 12/18	EB	USH 12/18 EB AT SOUTH TOWNE EXIT	SDD15d12	NO SINGLE LANE CLOSURES 6:00 AM - 8:00 PM
S-13-0042	DANE	USH 12/18	WB	USH 12/18 WB AT EXIT TO MONONA DRIVE	SDD15d12	NO SINGLE LANE CLOSURES 6:00 AM - 8:00 PM
S-13-0085	DANE	USH 151	SB	USH 151 SB, 1/2 MILE NORTH OF IH-39 NB/90-94 WB BRIDGE	SDD15d12, SDD15d14	NO DOUBLE LANE CLOSURES 6:00 AM - 8:00 PM
S-13-0086	DANE	USH 151	NB	USH 151 NB, AT EXIT TO NELSON RD. & AMERICAN PARKWAY	SDD15d14	NO DOUBLE LANE CLOSURES 6:00 AM - 8:00 PM
S-13-0087	DANE	USH 151	NB	USH 151 NB AT EXIT TO AMERICAN PARKWAY	SDD15d16, NOTE 2	NO RAMP CLOSURES 6:00 AM - 8:00 PM
S-13-0088	DANE	USH 151	NB	USH 151 NB, ON RAMP FROM AMERICAN PARKWAY	SDD15d27	
S-13-0090	DANE	USH 151	SB	USH 151 SB RAMP TO AMERICAN PARKWAY	SDD15d20	NO SINGLE LANE CLOSURES 6:00 AM - 8:00 AM AND 4:00 PM - 6:00 PM
S-13-0094	DANE	USH 51	SB	USH 51 SB AT USH 151	SDD15d20	NO SINGLE LANE CLOSURES 6:00 AM - 8:00 AM AND 4:00 PM - 6:00 PM
S-13-0114	DANE	STH 30	WB	STH 30 WB, 1/4 MI EAST OF FAIR OAKS AVE.	SDD15d12	NO SINGLE LANE CLOSURES 6:00 AM - 8:00 AM AND 4:00 PM - 6:00 PM
S-13-0115	DANE	STH 30	WB	STH 30 WB AT EXIT TO FAIR OAKS AVE.	SDD15d12	NO SINGLE LANE CLOSURES 6:00 AM - 8:00 AM AND 4:00 PM - 6:00 PM
S-13-0116	DANE	USH 51	NB	USH 51 NB, 1/8 MILE SOUTH OF STH 30	SDD15d14	NO DOUBLE LANE CLOSURES 6:00 AM - 8:00 PM
S-13-0118	DANE	USH 51	SB	USH 51 SB AT THE EXIT TO MILWAUKEE ST	SDD15d20	NO SINGLE LANE CLOSURES 6:00 AM - 8:00 AM AND 4:00 PM - 6:00 PM
S-13-0154	DANE	IH-39	SB	IH-39 SB JUST SOUTH OF USH 151 ON-RAMP	SDD15d12	NO SINGLE LANE CLOSURES 6:00 AM - 8:00 PM
S-13-0155	DANE	IH-39	NB	IH-39 NB, 1-3/4 MI NORTH OF USH 12/18	SDD15d12	NO SINGLE LANE CLOSURES 6:00 AM - 8:00 PM
S-13-0157	DANE	IH-94	WB	IH-94 WB AT EXIT RAMP TO IH-39 NB/IH-90 WB	SDD15d27	
S-13-0181	DANE	USH 151	NB	USH 151 NB AT IH-39 NB/IH-90/94 WB	SDD15d14	NO DOUBLE LANE CLOSURES 6:00 AM - 8:00 PM, SUBMIT A TRAFFIC CONTROL PLAN
S-13-0188	DANE	USH 12/18	WB	USH 12/18 WB, 0.5 MI EAST OF USH 51	SDD15d12	NO SINGLE LANE CLOSURES 6:00 AM - 8:00 PM
S-13-0281	DANE	USH 12/18	EB	USH 12/18 EB AT RIMROCK RD EXIT	SDD15d12	NO SINGLE LANE CLOSURES 6:00 AM - 8:00 PM
S-13-0291	DANE	IH-94	EB	IH-94 EB, 2 MILES WEST OF CTH N	SDD15d12	NO SINGLE LANE CLOSURE RESTRICTIONS
S-13-0322	DANE	MAIN ST.	WB	MAIN ST. WB (SUN PRAIRIE) AT USH 151 NB RAMP	SDD15d20	NO SINGLE LANE CLOSURES 6:00 AM - 8:00 AM AND 4:00 PM - 6:00 PM
S-13-0323	DANE	USH 151	NB	USH 151 NB ON OFF-RAMP TO MAIN ST. (SUN PRARIRE)	SDD15d12	NO SINGLE LANE CLOSURES 6:00 AM - 8:00 PM
S-13-0337	DANE	IH-39	SB	IH-39 SB JUST NORTH OF STH 19	SDD15d27	
S-14-0004	DODGE	STH 60	WB	STH 60 WB AT STH 67	SDD15d20	NO SINGLE LANE CLOSURE RESTRICTIONS
S-23-0002	GREEN	STH 11	EB	STH 11 EB AT USH 81 WB/STH 69 SB EXIT	SDD15d12	NO SINGLE LANE CLOSURE RESTRICTIONS
S-28-0001	JEFFERSON	IH-94	EB	IH-94 EB ON OFF-RAMP TO STH 26	SDD15d12	NO SINGLE LANE CLOSURE RESTRICTIONS
S-28-0002	JEFFERSON	IH-94	EB	IH-94 EB ON OFF-RAMP TO STH 26	SDD15d22, NOTE 2	NO SINGLE LANE CLOSURE RESTRICTIONS
S-28-0003	JEFFERSON	IH-94	WB	IH-94 WB ON OFF-RAMP TO STH 26	SDD15d22, NOTE 2	NO DOUBLE LANE CLOSURES 6:00 AM - 8:00 PM
S-28-0004	JEFFERSON	IH-94	WB	IH-94 WB ON OFF-RAMP TO STH 26	SDD15d12	NO SINGLE LANE CLOSURE RESTRICTIONS
S-28-0005	JEFFERSON	STH 26	NB	STH 26 NB AT IH-94 EB ON RAMP	SDD15d20, SDD15d22	NO SINGLE LANE CLOSURES 2:00 PM - 7:00 PM, NO DOUBLE LANE CLOSURES 6:00 AM - 8:00 PM
S-28-0006	JEFFERSON	STH 26	SB	STH 26 SB, JUST NORTH OF IH-94	SDD15d20	NO SINGLE LANE CLOSURES 2:00 PM - 7:00 PM
S-28-0014	JEFFERSON	STH 16	WB	STH 16 WB AT WEST END OF OCONTOMOWOC BYPASS	SDD15d12	NO SINGLE LANE CLOSURES 6:00 AM - 8:00 AM AND 4:00 PM - 6:00 PM
S-53-0036	ROCK	IH-39	NB	IH-39 NB, LA PRAIRIE WEIGHT STATION OVERHEAD INSTRUCTIONAL SIGNAL	NOTE 3	

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 WISCONSIN STATE PATROL TO PERFORM REPAIRS OF STRUCTURES RELATED TO SWEF 19 - BELOIT

STRUCTURE NUMBER	TRAFFIC CONTROL SINGLE LANE CLOSURE	TRAFFIC CONTROL DOUBLE LANE CLOSURE	TRAFFIC CONTROL RAMP CLOSURE
	SPV.0060.50	SPV.0060.51	SPV.0060.52
	EACH	EACH	EACH
S-11-0019	1		
S-13-0039	1		
S-13-0042	1		
S-13-0085		2	
S-13-0086		1	
S-13-0087			1
S-13-0088			
S-13-0090	2		
S-13-0094	1		
S-13-0114	1		
S-13-0115	1		
S-13-0116		2	
S-13-0118	1		
S-13-0154	1		
S-13-0155	1		
S-13-0157			
S-13-0181		2	
S-13-0188	2		
S-13-0281	1		
S-13-0291	2		
S-13-0322	1		
S-13-0323	1		
S-13-0337			
S-14-0004	1		
S-23-0002	1		
S-28-0001	1		
S-28-0002		1	
S-28-0003		2	
S-28-0004	2		
S-28-0005	1	2	
S-28-0006	1		
S-28-0014	1		
S-53-0036			
UNDISTRIBUTED			
TOTAL QUANTITY	26	12	1

Estimate Of Quantities

5105-17-63

Line	Item	Item Description	Unit	Total	Qty
0002	619.1000	Mobilization	EACH	1.000	1.000
0004	637.2210	Signs Type II Reflective H	SF	1.000	1.000
0006	638.2602	Removing Signs Type II	EACH	1.000	1.000
0008	638.3100	Removing Structural Steel Sign Supports	EACH	1.000	1.000
0010	643.5000	Traffic Control	EACH	1.000	1.000
0012	SPV.0060	Special 01. Tension Anchor Rod	EACH	66.000	66.000
0014	SPV.0060	Special 05. Replace Rodent Screen	EACH	1.000	1.000
0016	SPV.0060	Special 06. Remove Grout Pad	EACH	12.000	12.000
0018	SPV.0060	Special 10. Tension Structural Connection Bolt	EACH	44.000	44.000
0020	SPV.0060	Special 12. Secure/Replace End/Post Caps	EACH	9.000	9.000
0022	SPV.0060	Special 18. Reinstall Truss	EACH	1.000	1.000
0024	SPV.0060	Special 20. Replace Sign Panel Connector	EACH	962.000	962.000
0026	SPV.0060	Special 24. Replace Sign Connection Clamp	EACH	21.000	21.000
0028	SPV.0060	Special 25. Replace U-bolt	EACH	2.000	2.000
0030	SPV.0060	Special 26. Replace Structure ID Plaque	EACH	15.000	15.000
0032	SPV.0060	Special 30. Replace Handrail Hinge Pins	EACH	2.000	2.000
0034	SPV.0060	Special 31. Replace Safety Chain	EACH	5.000	5.000
0036	SPV.0060	Special 40. Replace Conduit Plug	EACH	9.000	9.000
0038	SPV.0060	Special 41. Replace Handhole Cover	EACH	10.000	10.000
0040	SPV.0060	Special 42. Tighten/Replace Handhole Cover Bolt	EACH	3.000	3.000
0042	SPV.0060	Special 43. Tighten Connection Bolts (Non-friction)	EACH	1.000	1.000
0044	SPV.0060	Special 44. Install Cotter Pin	EACH	1.000	1.000
0046	SPV.0060	Special 45. Adjust Vertical Sign Support	EACH	1.000	1.000
0048	SPV.0060	Special 50. Traffic Control - Single Lane Closure	EACH	26.000	26.000
0050	SPV.0060	Special 51. Traffic Control - Double Lane Closure	EACH	12.000	12.000
0052	SPV.0060	Special 52. Traffic Control - Ramp Closure	EACH	1.000	1.000
0054	SPV.0105	Special 01. Adjust Handrail	LS	1.000	1.000

BID ITEM QUANTITES

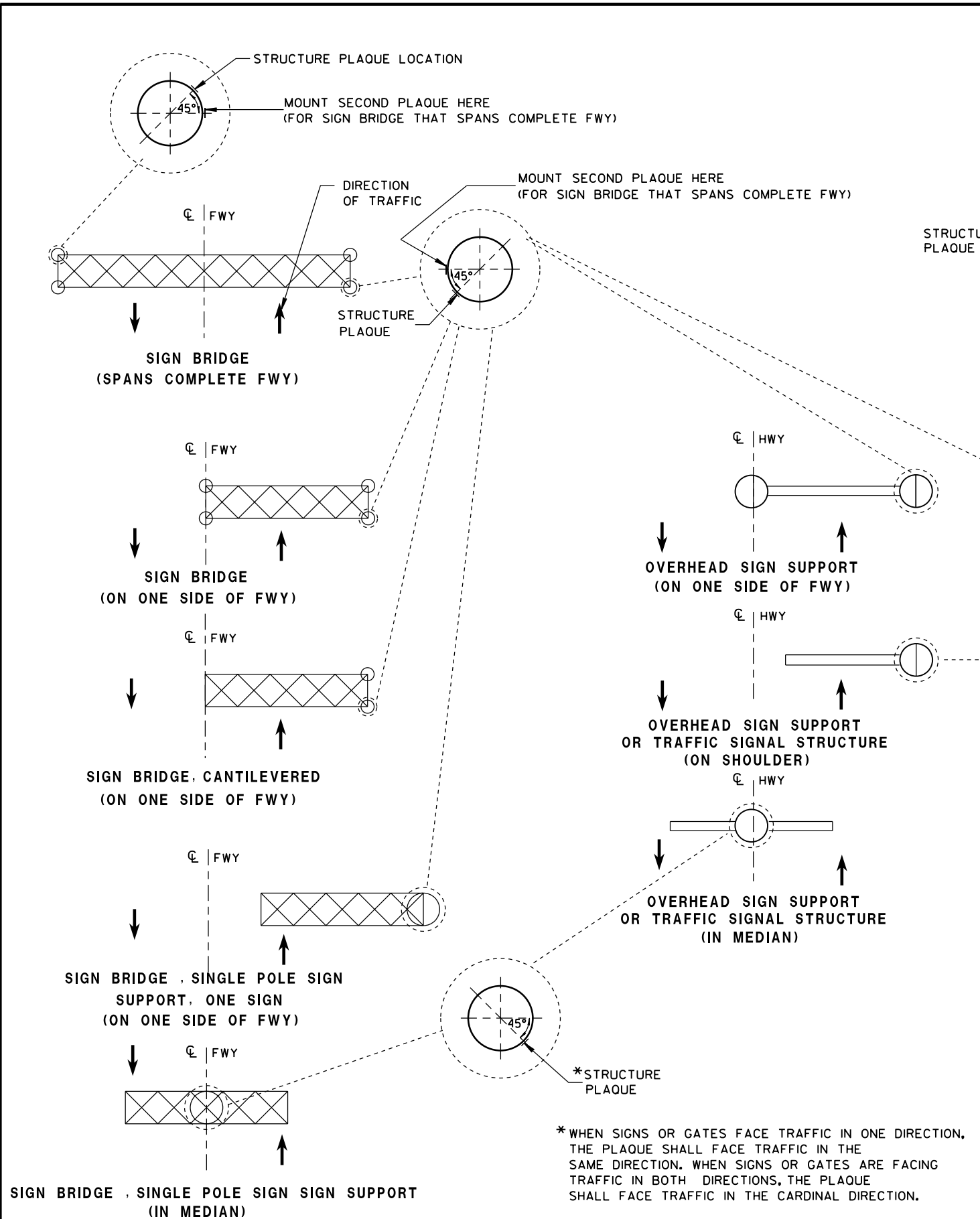
STRUCTURE NUMBER	SIGNS TYPE II REFLECTIVE H	REMOVING SIGNS TYPE II	REMOVING STRUCTURAL STEEL SIGN SUPPORTS	TENSION ANCHOR ROD	REPLACE RODENT SCREEN	REMOVE GROUT PAD	TENSION STRUCTURAL CONNECTION BOLT	SECURE/ REPLACE END/POST CAPS	REINSTALL TRUSS	REPLACE SIGN PANEL CONNECTOR	REPLACE SIGN CONNECTION CLAMP	REPLACE U-BOLT	REPLACE STRUCTURE ID PLAQUE	REPLACE HANDRAIL HINGE PINS	REPLACE SAFETY CHAIN	REPLACE CONDUIT PLUG
	637.2210	638.2602	638.3100	SPV.0060.01	SPV.0060.05	SPV.0060.06	SPV.0060.10	SPV.0060.12	SPV.0060.18	SPV.0060.20	SPV.0060.24	SPV.0060.25	SPV.0060.26	SPV.0060.30	SPV.0060.31	SPV.0060.40
	SF	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EA	EACH	EACH	EACH	EACH	EACH	EACH	EACH
S-11-0019				8			4									
S-13-0039						1									2	
S-13-0042						1								2	1	
S-13-0085										78						1
S-13-0086						4				150						
S-13-0087						1				22			1			
S-13-0088				4												
S-13-0090						4				30						
S-13-0094			1													
S-13-0114										60			1			1
S-13-0115										48			1			1
S-13-0116										54			1			1
S-13-0118										25			1			1
S-13-0154										29			1			1
S-13-0155										56			1			
S-13-0157				8												
S-13-0181				16			24			210						
S-13-0188								4		57						
S-13-0281												1				
S-13-0291							16								2	
S-13-0322									1							
S-13-0323								1				1				
S-13-0337					1											
S-14-0004	1	1											1			3
S-23-0002				6		1				43			1			
S-28-0001				8				1					1			
S-28-0002				8							2		1			
S-28-0003				8							7		1			
S-28-0004								1			2		1			
S-28-0005											6		1			
S-28-0006								1					1			
S-28-0014											4					
S-53-0036								1								
UNDISTRIBUTED										100						
TOTAL QUANTITY	1	1	1	66	1	12	44	9	1	962	21	2	15	2	5	9

BID ITEM QUANTITES (CONT.)

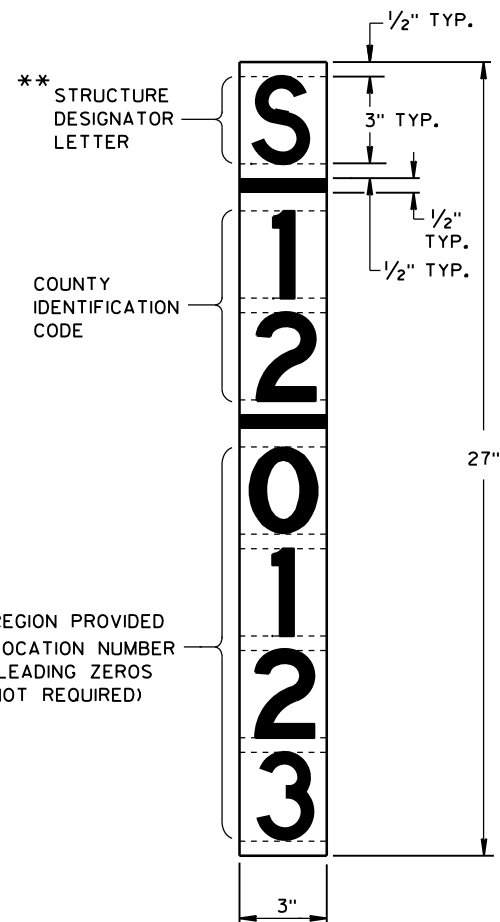
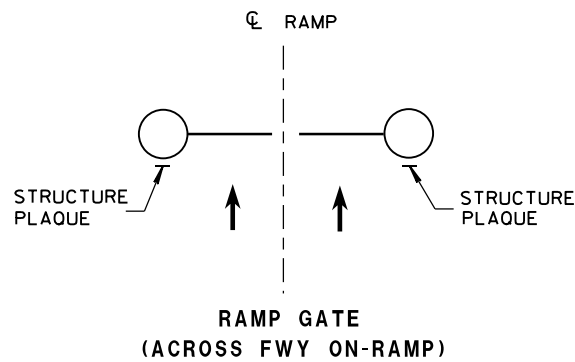
STRUCTURE NUMBER	REPLACE HANDHOLE COVER	TIGHTEN/ REPLACE HANDHOLE COVER BOLT	TIGHTEN CONNECTION BOLTS (NON- FRICTION)	INSTALL COTTER PIN	ADJUST VERTICAL SIGN SUPPORT	ADJUST HANDRAIL
	SPV.0060.41	SPV.0060.42	SPV.0060.43	SPV.0060.44	SPV.0060.45	SPV.0105.01
	EACH	EACH	EACH	EACH	EACH	LS
S-11-0019						
S-13-0039						
S-13-0042						
S-13-0085						
S-13-0086						
S-13-0087						
S-13-0088						
S-13-0090						
S-13-0094						
S-13-0114						
S-13-0115						
S-13-0116						
S-13-0118		2				
S-13-0154	1					
S-13-0155						
S-13-0157						
S-13-0181						
S-13-0188		1				
S-13-0281					1	
S-13-0291						
S-13-0322						
S-13-0323						
S-13-0337						1
S-14-0004						
S-23-0002						
S-28-0001	1					
S-28-0002	2					
S-28-0003	2					
S-28-0004						
S-28-0005	2					
S-28-0006	2			1		
S-28-0014						
S-53-0036			1			
UNDISTRIBUTED						
TOTAL QUANTITY	10	3	1	1	1	1

Standard Detail Drawing List

12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD	SIGN SUPPORTS & TRAFFIC SIGNALS
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)	
15D15-04B	TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE	
15D16-03	TRAFFIC CONTROL, EXIT RAMP CLOSURE	
15D20-04	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY	
15D22-03	TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY	
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH	
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING	
15D38-02B	ATTACHMENT OF SIGNS TO POSTS	



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.

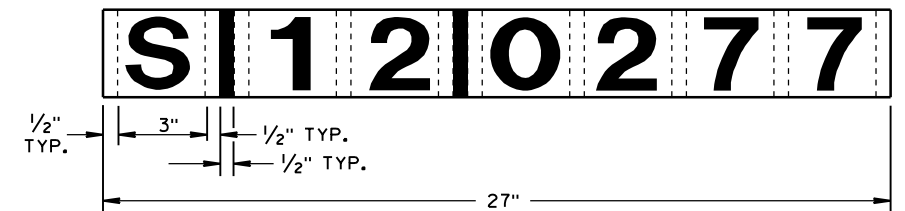
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

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.

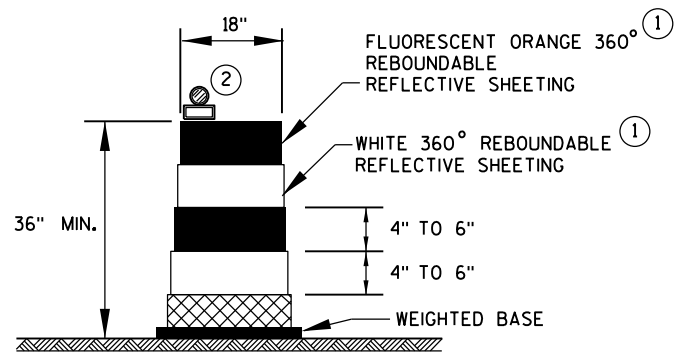
WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



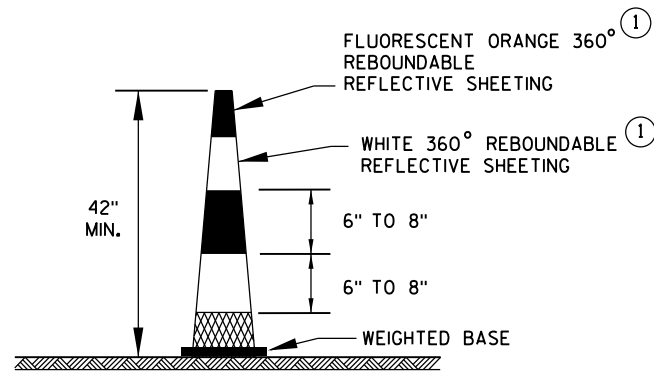
IDENTIFICATION PLAQUE FOR SIGN BRIDGE,
STRUCTURE MOUNTED

** 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	



DRUM

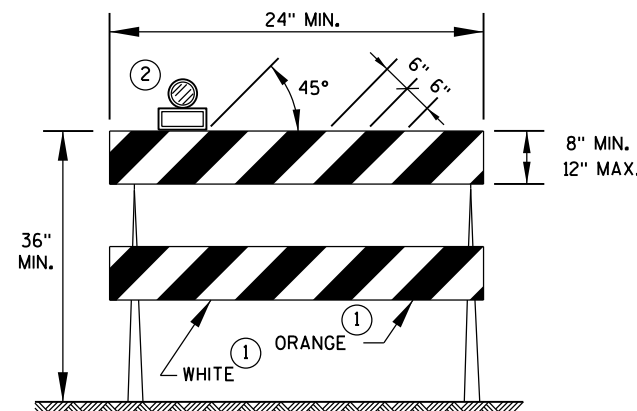


42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

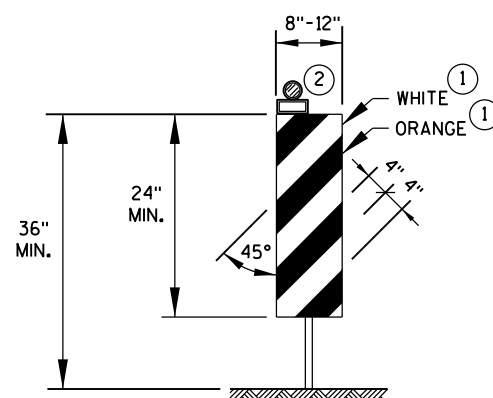
GENERAL NOTES

- 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.



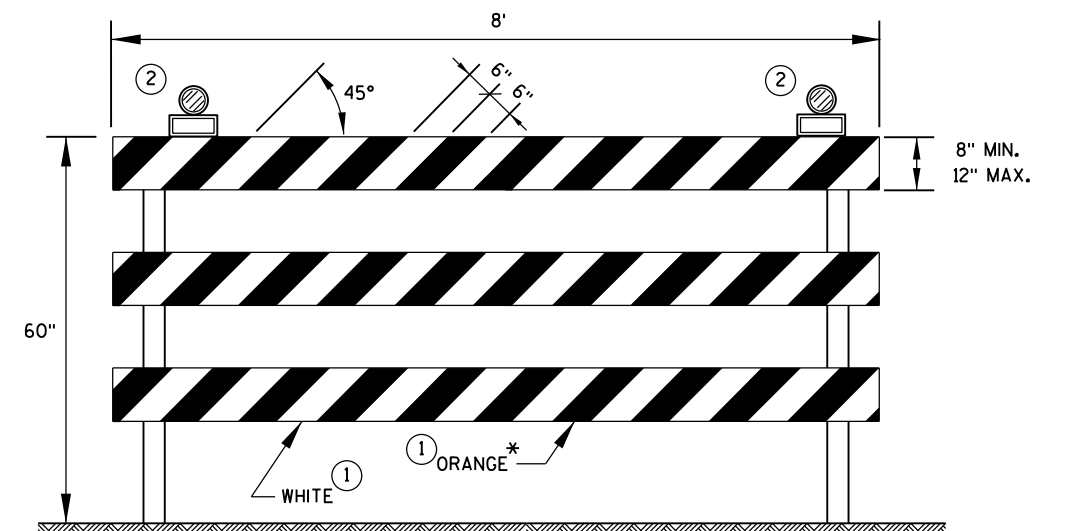
TYPE 2 BARRICADE

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.

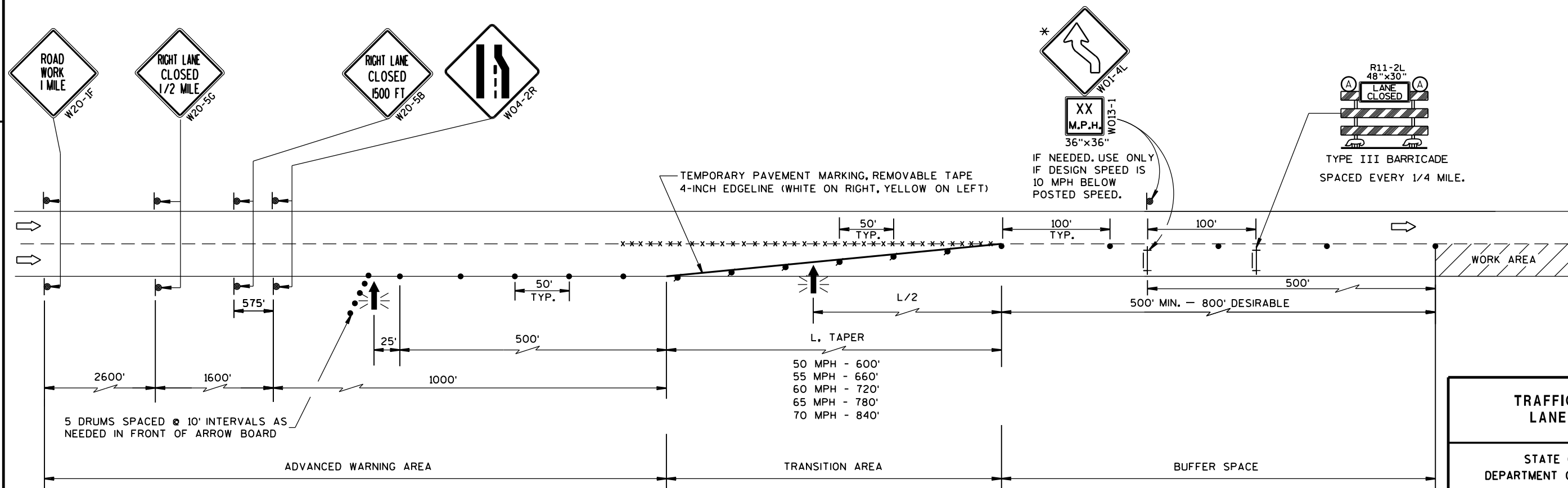
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

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.

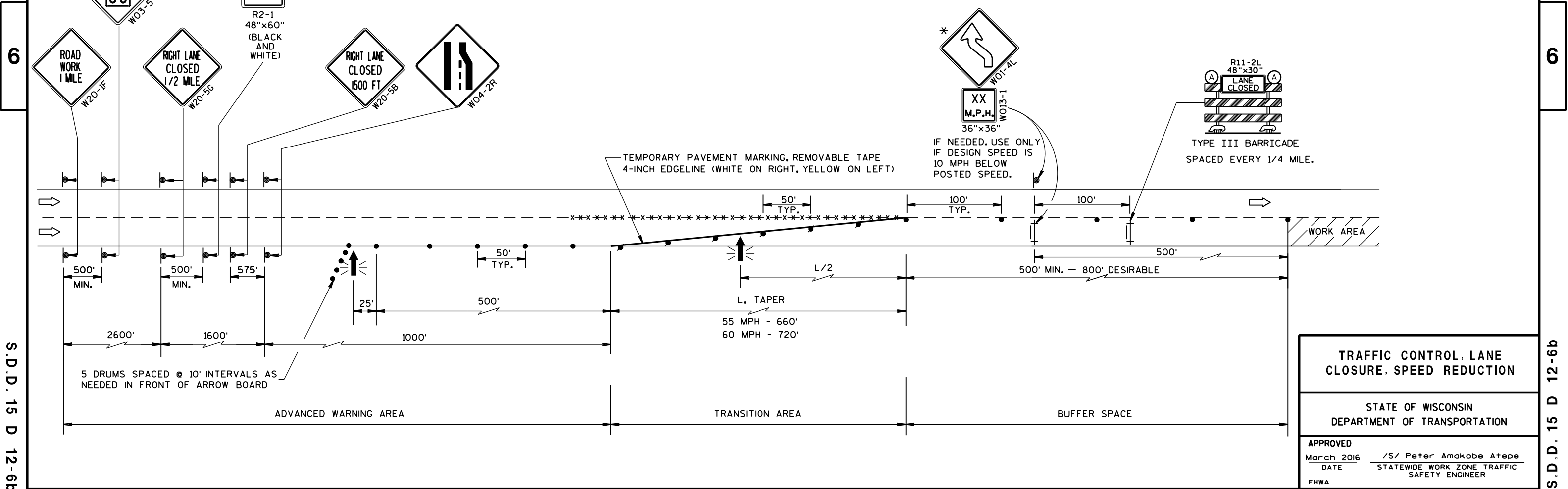
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

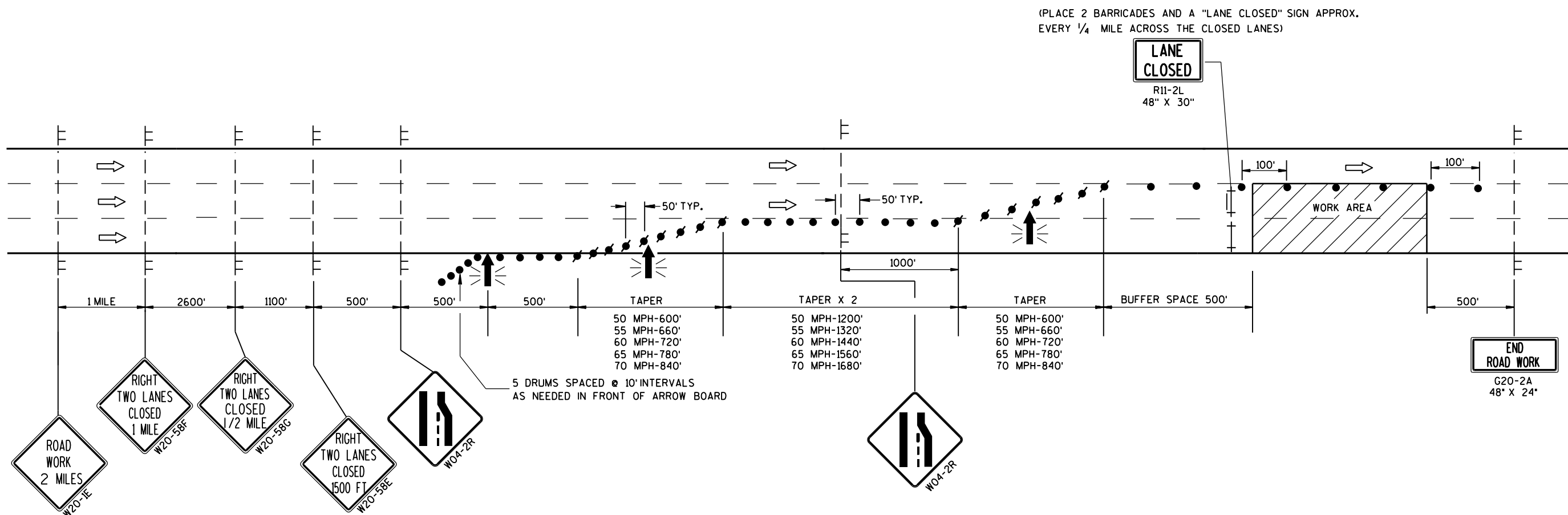
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN 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	



LEGEND

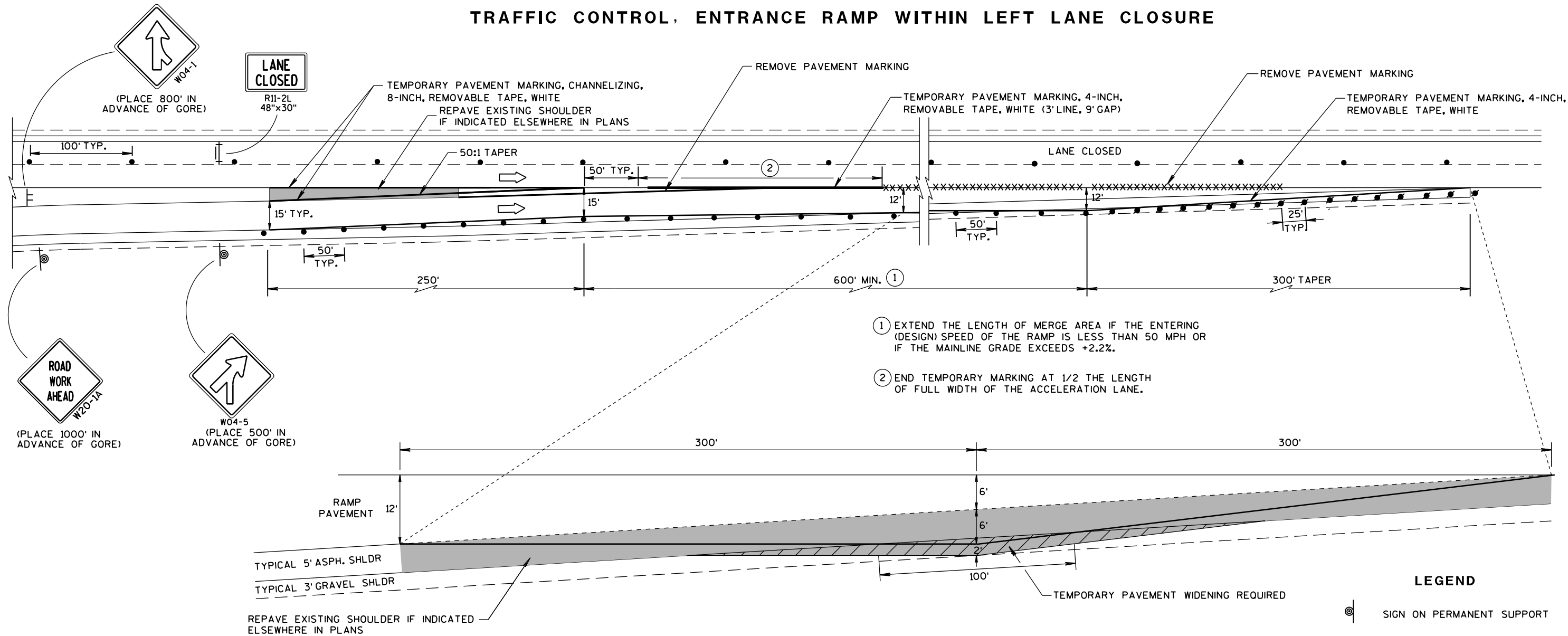
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

- THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES. FOR CLOSING THE LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.
- 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" X 48" UNLESS OTHERWISE NOTED.
- "WO" SIGNS ARE THE SAME AS "W" SIGNS 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.
- W20-1E AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.
- CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.
- WHEN A RAMP OR SIDE ROAD INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.
- BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.
- CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.
- WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LEFT LANE CLOSURE



TEMPORARY PAVEMENT DETAIL

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

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

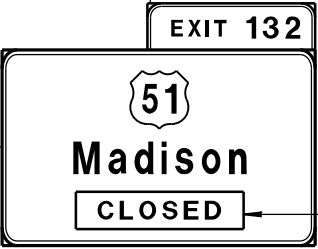
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

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



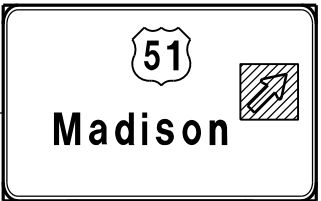
G20-60
108"x24"

OR



G20-60
108"x24"

PLACE SIGN G20-60 OVER MILEAGE
ON EXISTING E1-1A SIGN



COVER ARROW ON
EXISTING E4-1A
SIGN (COVERING
SIGNS TYPE I)

G20-61
120"x30"

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

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" X 48" UNLESS OTHERWISE NOTED.

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.

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

WORK AREAS WITH A DROPOFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN THE WORK IS NOT IN PROGRESS.

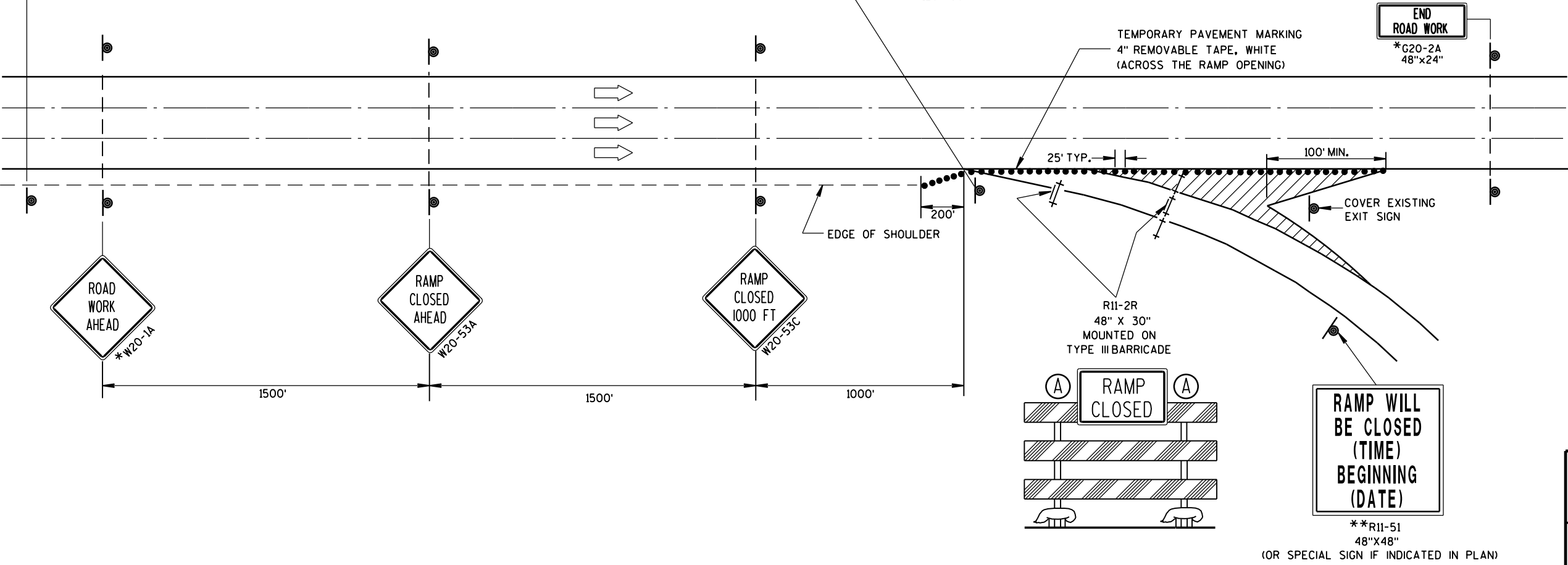
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12-HOUR DURATION.

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

** 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.

6

6



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL,
EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

S.D.D. 15 D 16-3

S.D.D. 15 D 16-3

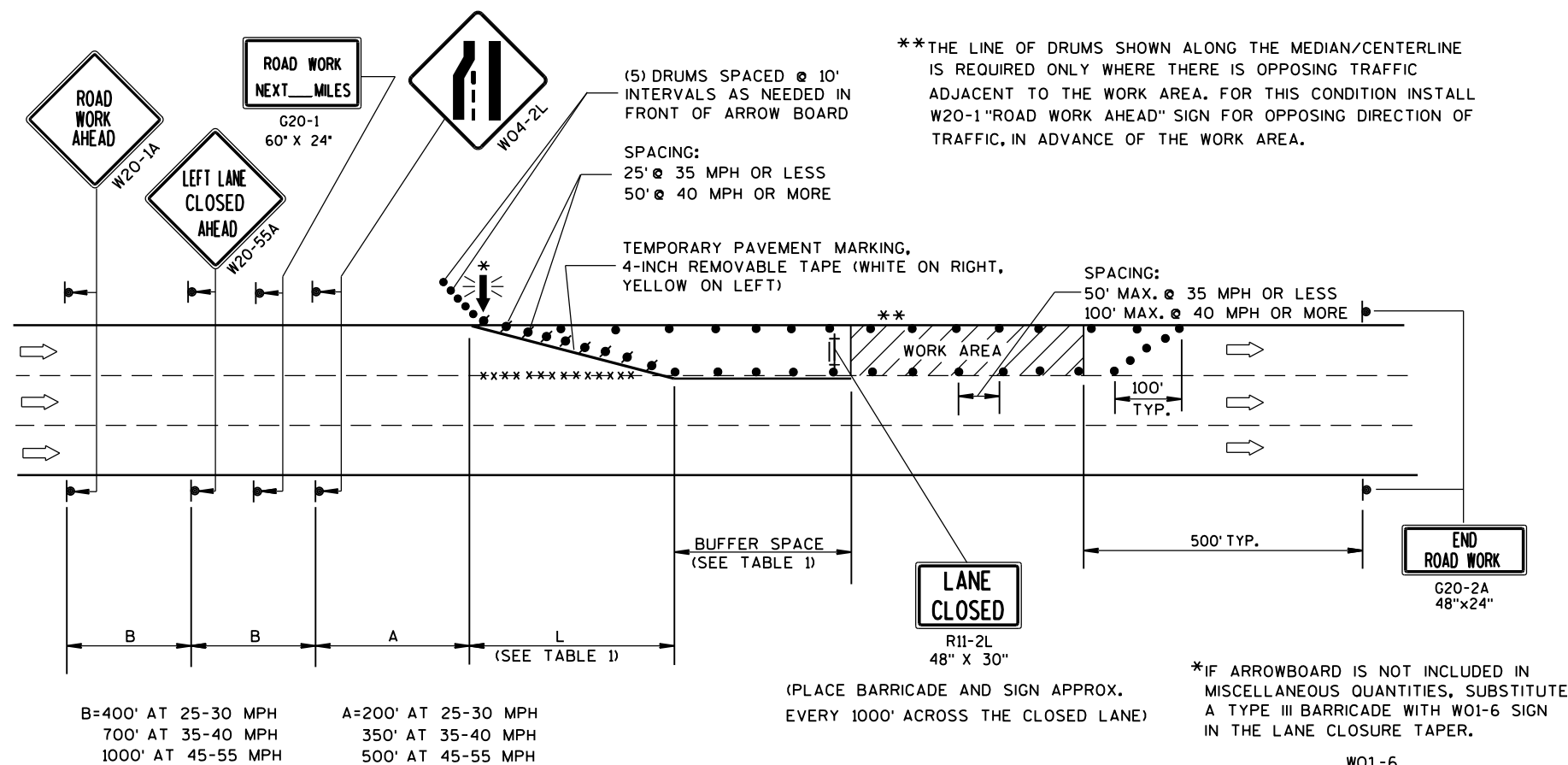


TABLE 1
TAPER AND BUFFER SPACE
FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

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

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

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
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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 DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY 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, OR THAT WILL BE PLACED IN A CLOSED LANE, 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.

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.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

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

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

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

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

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016

DATE

FHWA

/S/ Peter Amakobe Atepe

STATEWIDE WORK ZONE TRAFFIC

SAFETY ENGINEER

TABLE 1
TAPER AND BUFFER SPACE
FOR 12' LANE WIDTH

s	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

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

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

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

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 SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE 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, OR THAT WILL BE PLACED IN A CLOSED LANE, 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.

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.

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

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

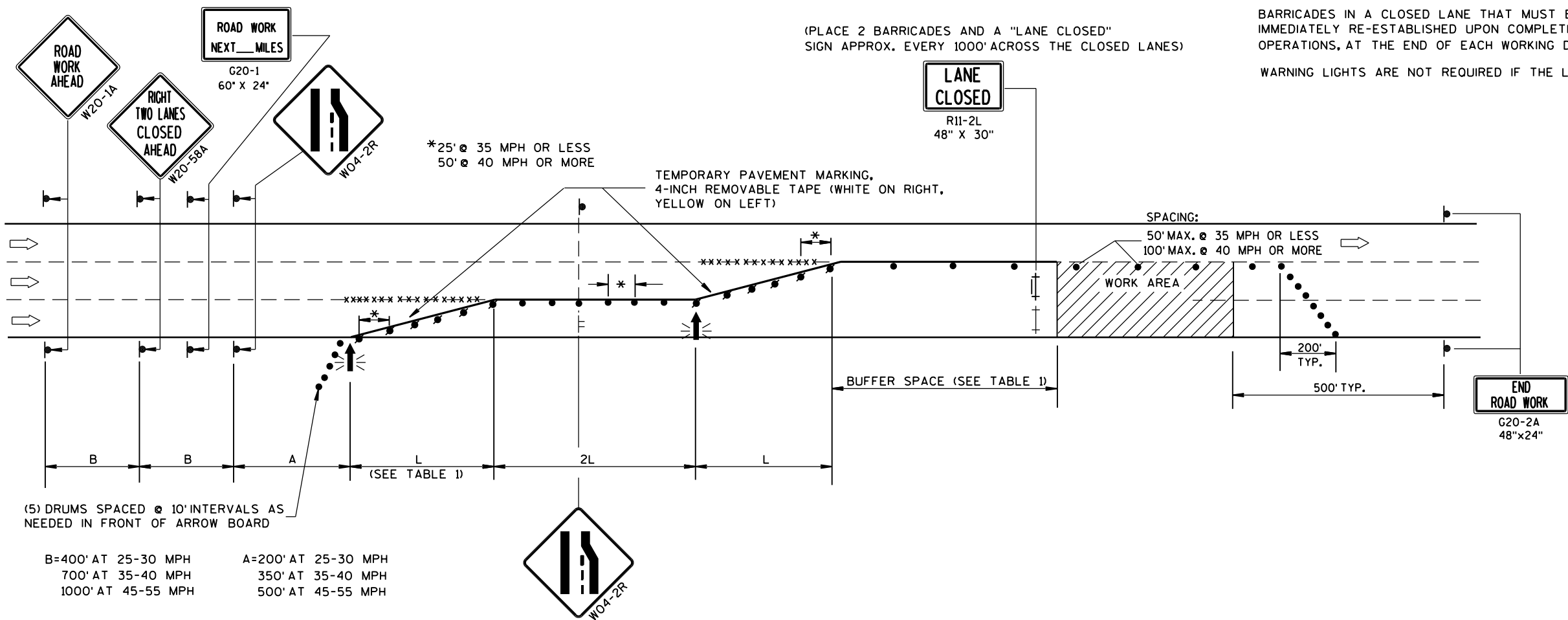
CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO LOCATE THE ARROWBOARD AS SHOWN, PLACE THE ARROWBOARD IN THE LANE CLOSURE TAPER AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE TAPER.

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

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

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



TRAFFIC CONTROL,
TWO 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.

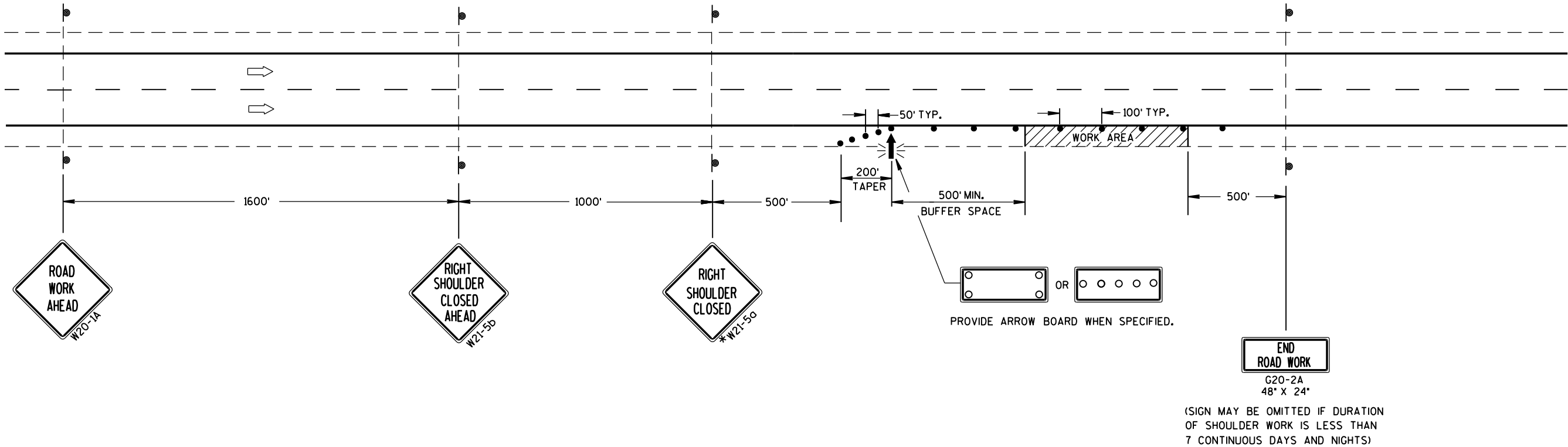
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

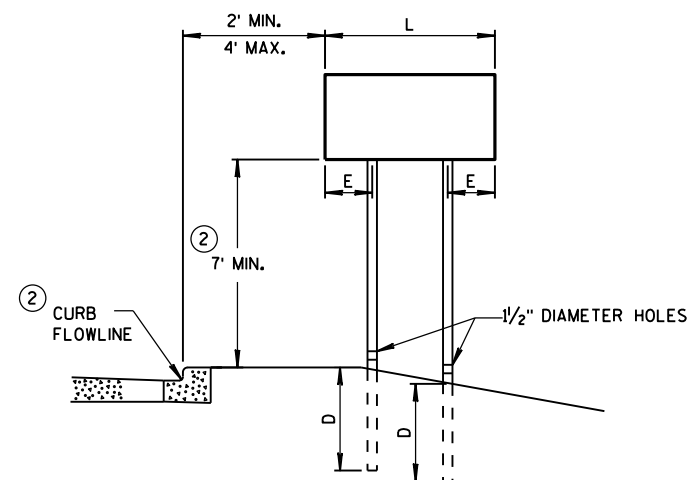
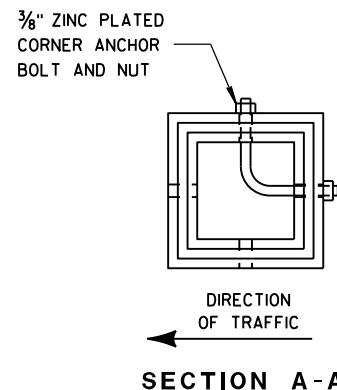


DETAIL OF TUBULAR STEEL SIGN POST

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.

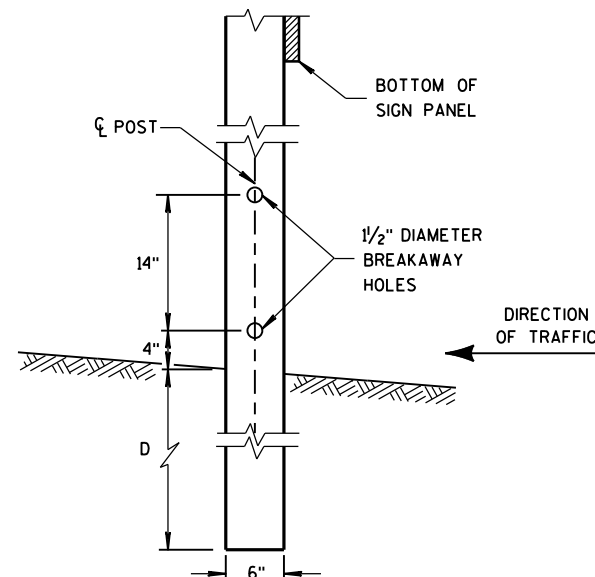


URBAN AREA

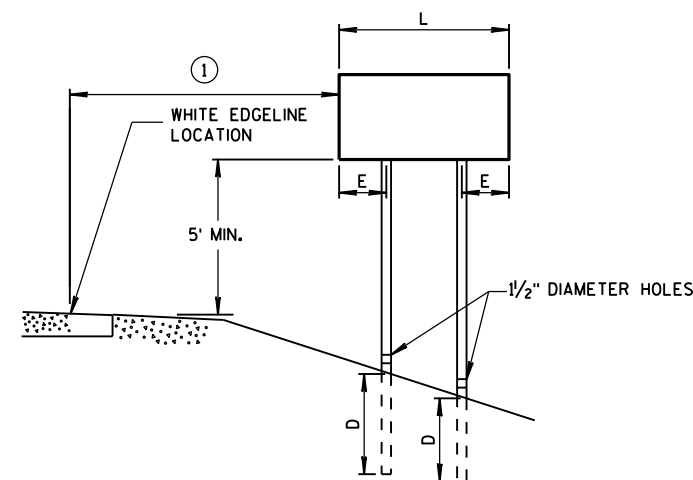
POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

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.

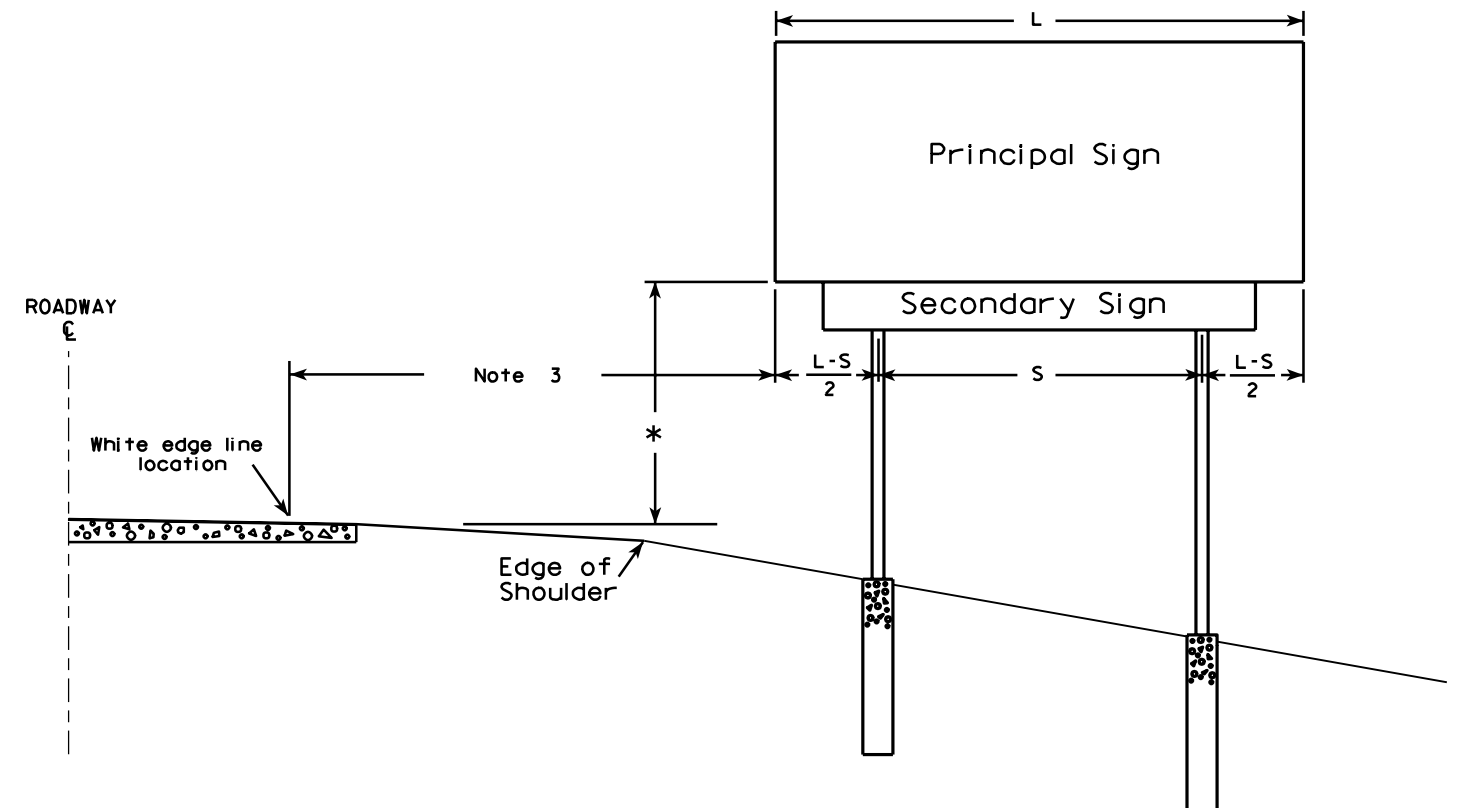
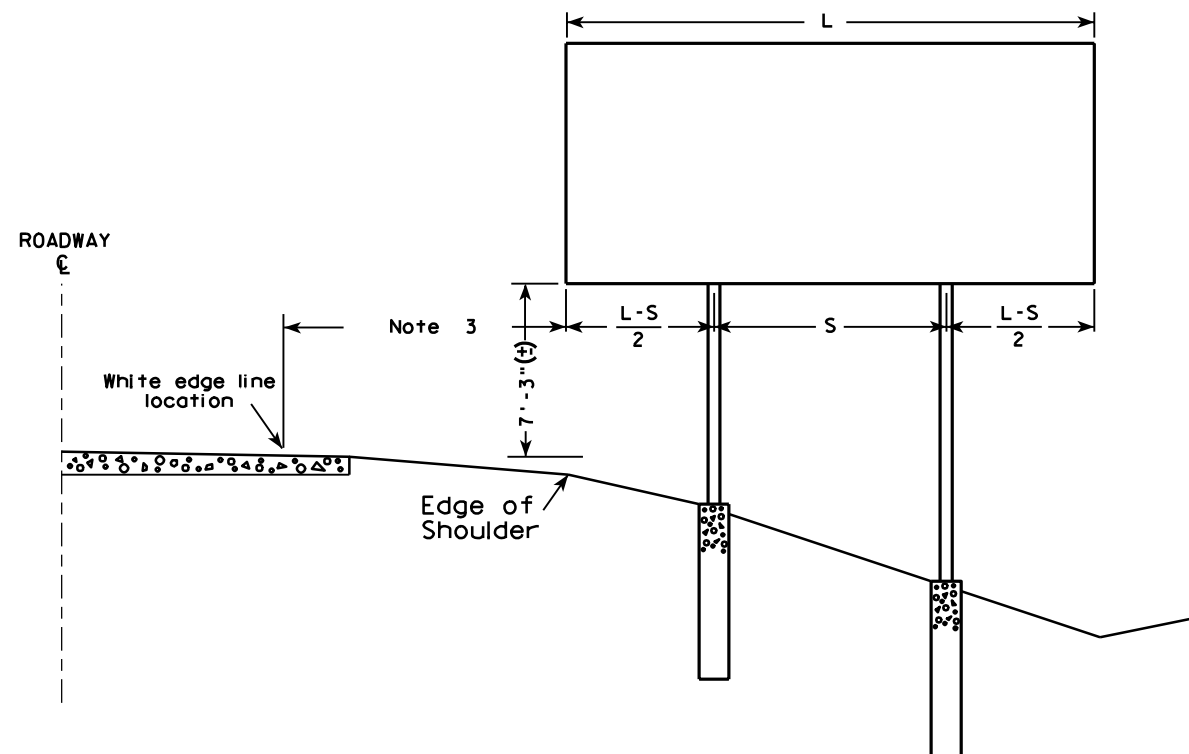
- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" X 3"
 - MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS
 - RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X 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 Heidtke 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

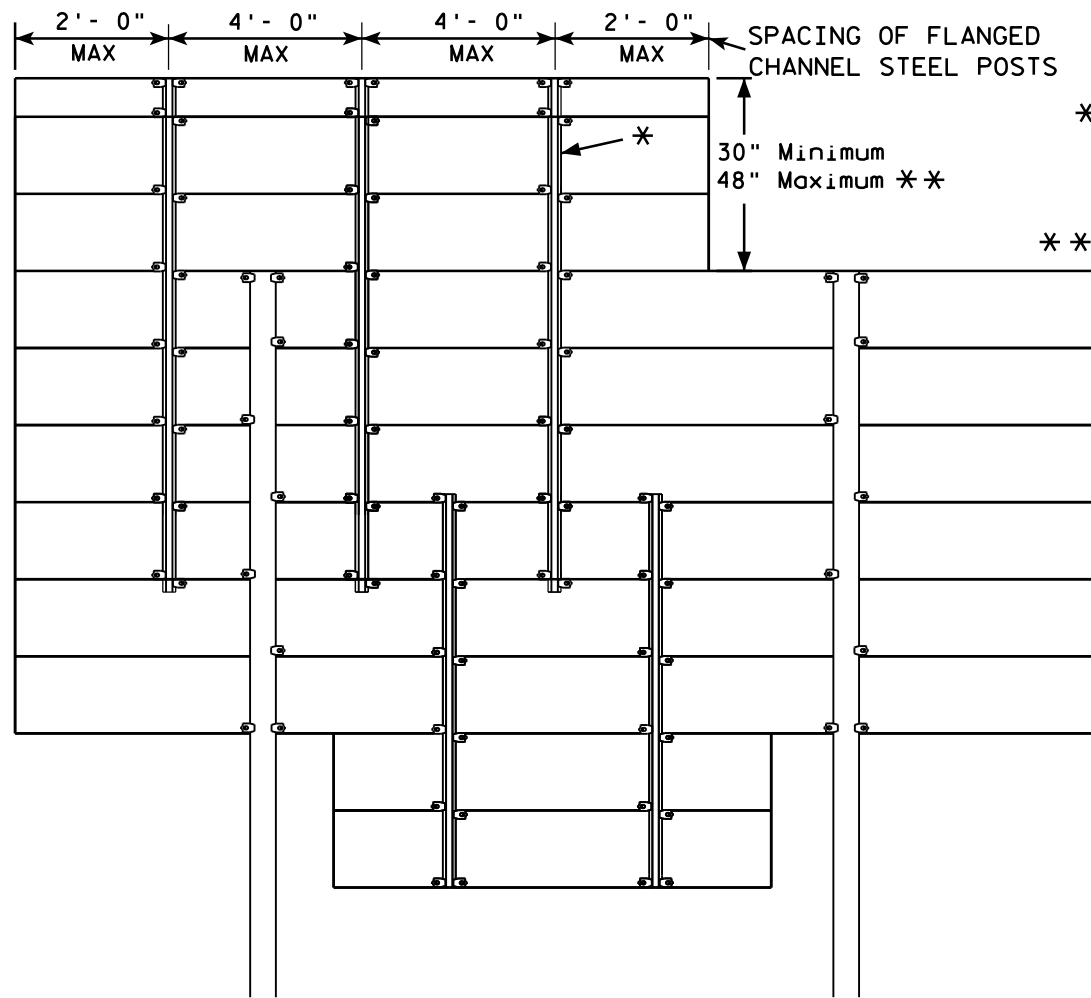
DATE 4/02/08 PLATE NO. A4-1.9

PROJECT NO:

SHEET NO:

E

GROUND MOUNTED SIGN

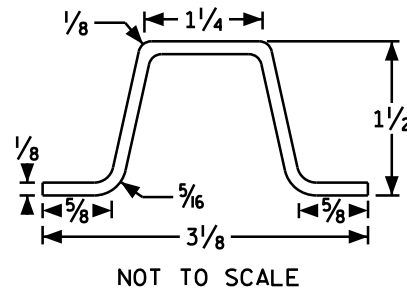


* = 2.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

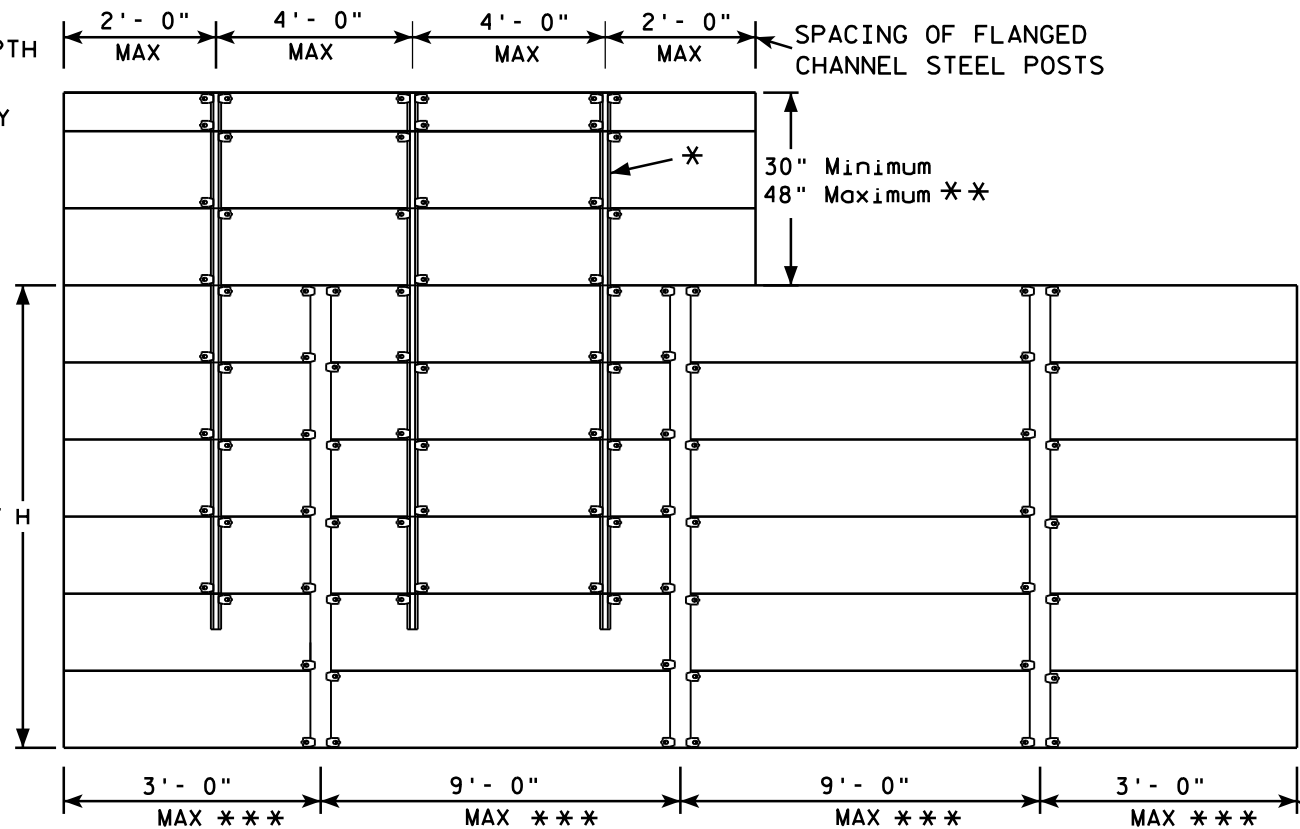
** = FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

*** 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.

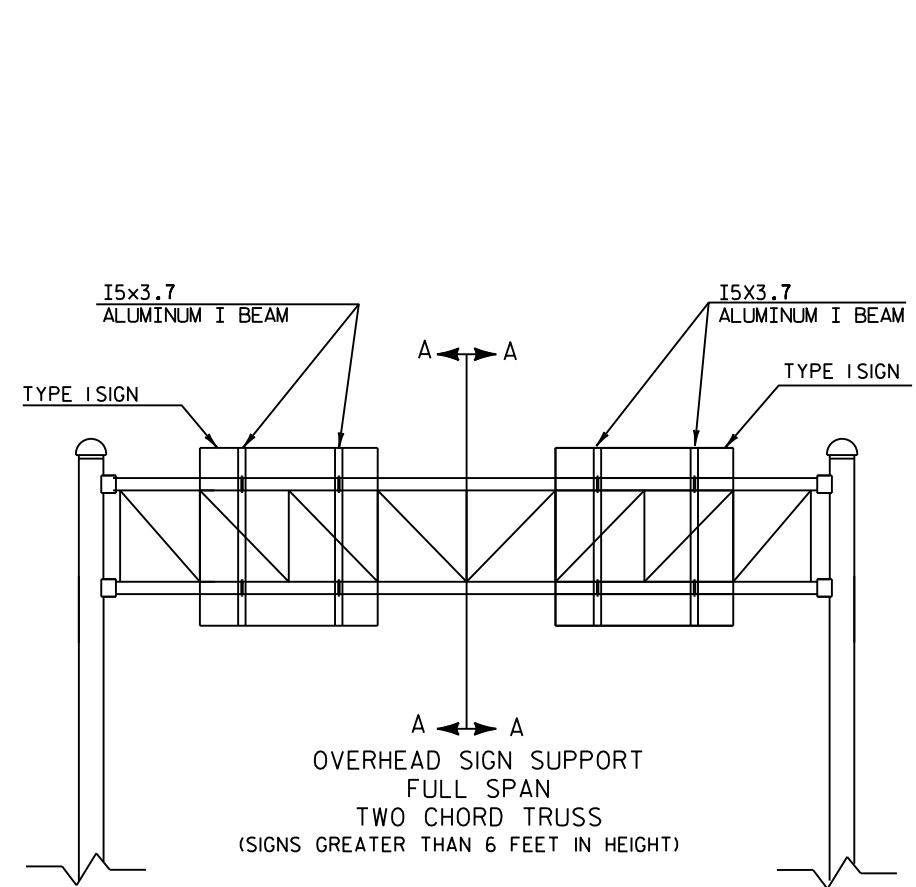
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (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

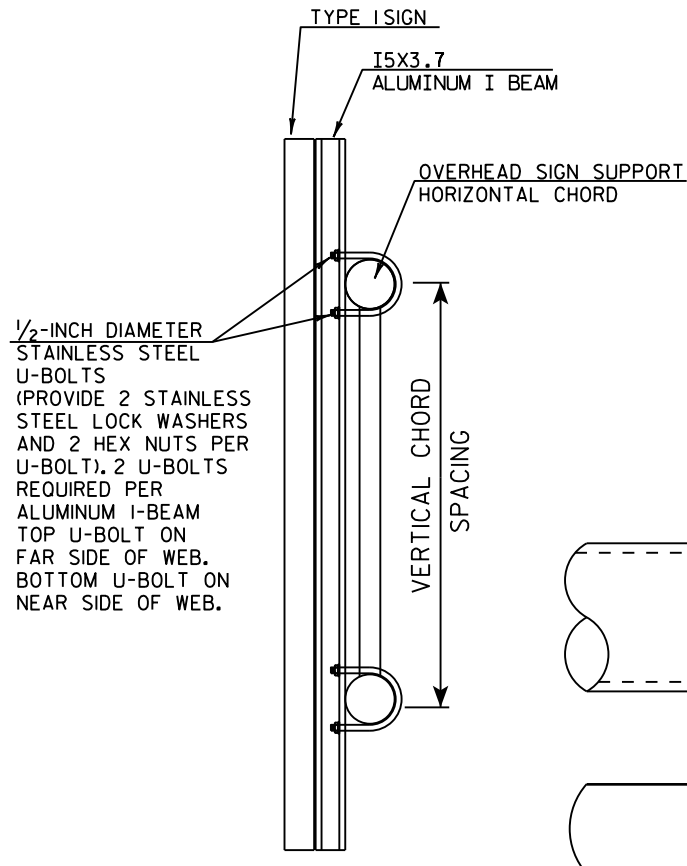
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

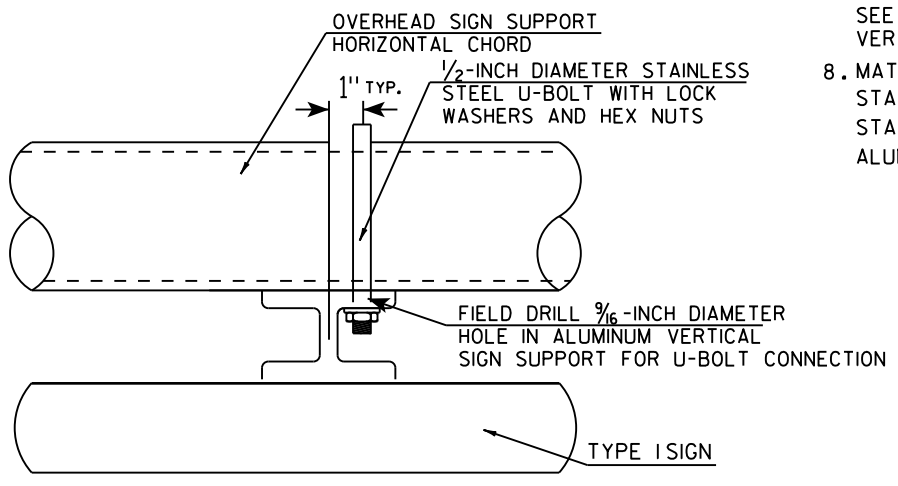
DATE 12/05/13 PLATE NO. A4-6.12



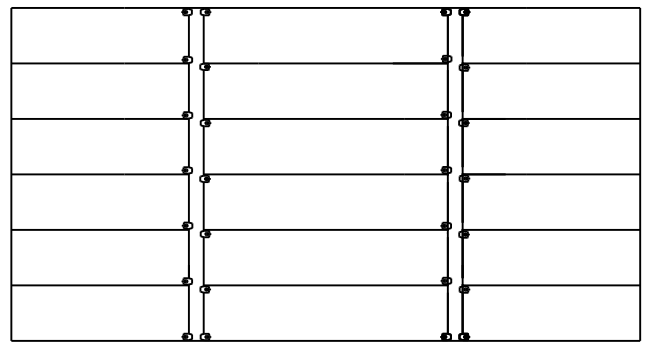
OVERHEAD SIGN SUPPORT
FULL SPAN
TWO CHORD TRUSS
(SIGNS GREATER THAN 6 FEET IN HEIGHT)



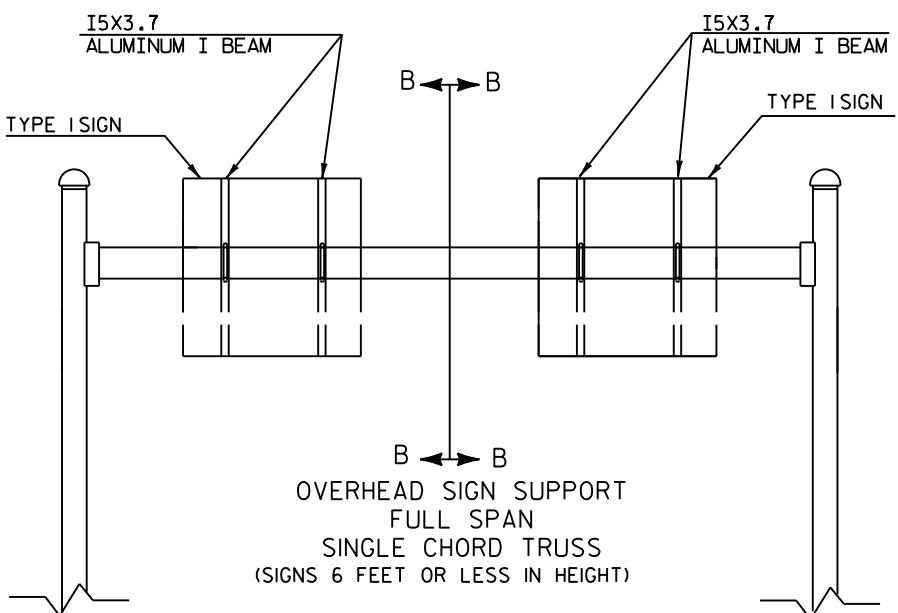
CUT SECTION A-A



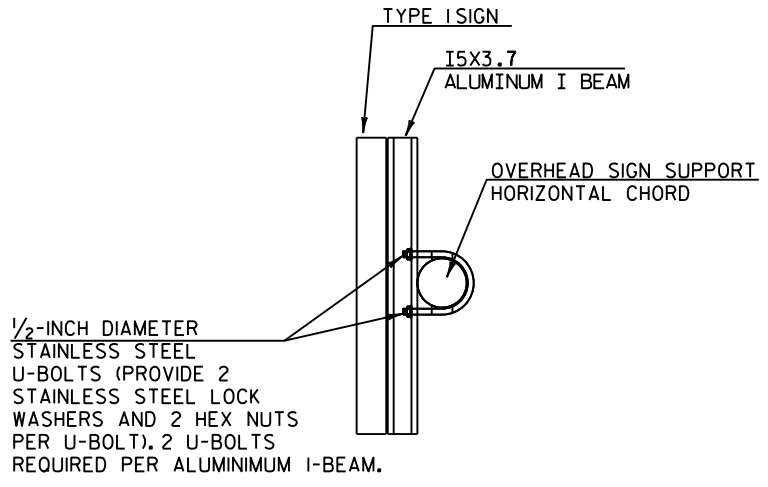
TYPICAL SIGN CONNECTION FOR
TWO CHORD TRUSS
PLAN VIEW



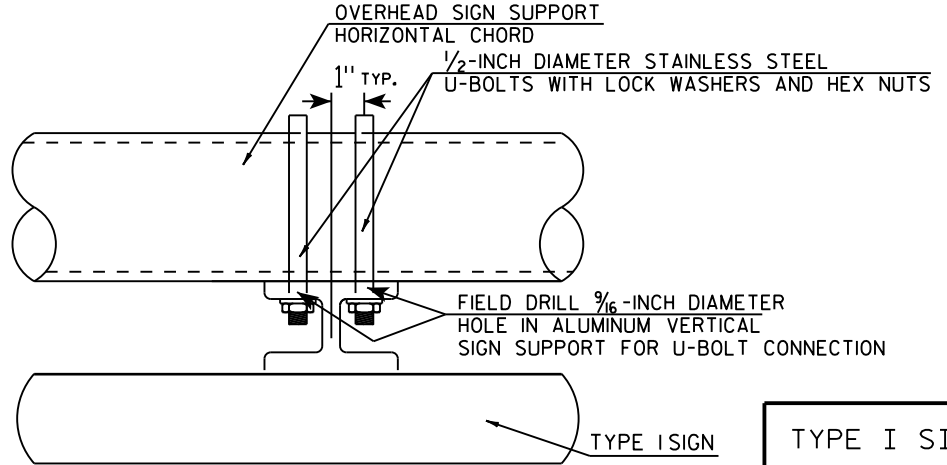
SPACING OF I5X3.7 ALUMINUM
VERTICAL SIGN SUPPORT



OVERHEAD SIGN SUPPORT
FULL SPAN
SINGLE CHORD TRUSS
(SIGNS 6 FEET OR LESS IN HEIGHT)



CUT SECTION B-B



TYPICAL SIGN CONNECTION FOR
SINGLE CHORD TRUSS
PLAN VIEW

- 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 *Matthew R. Rauch*
for State Traffic Engineer
DATE 11/10/15 PLATE NO. A4-7.4

7

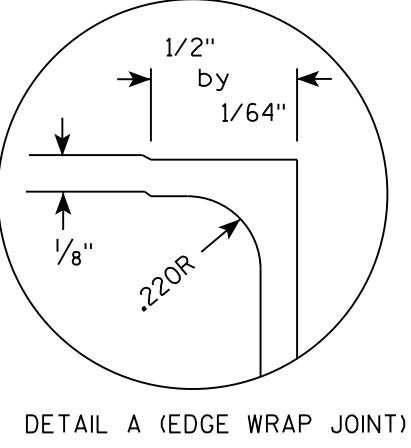


Punch 7/16" x 7/8" ovalholes beginning 6" in from end
of extrusion 12" CC on both edges of 6" and 12" panels.

Diagram illustrating Detail A (Edge Wrap Joint). The joint is defined by dimensions: $\frac{1}{2}$ " by $\frac{1}{64}$ " and $\frac{1}{8}$ ". The fillet radius is labeled $.220R$.

Diagram illustrating Detail A (Edge Wrap Joint). The joint is defined by dimensions: $\frac{1}{2}$ " by $\frac{1}{64}$ " and $\frac{1}{8}$ ". The fillet radius is labeled $.220R$.

Diagram illustrating Detail A (Edge Wrap Joint). The joint is defined by dimensions: $\frac{1}{2}$ " by $\frac{1}{64}$ " and $\frac{1}{8}$ ". The fillet radius is labeled $.220R$.



POST CLIP, POST CLIP BOLT, WASHER & NUT

POST CLIP, POST CLIP BOLT, WASHER & NUT

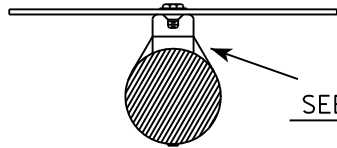
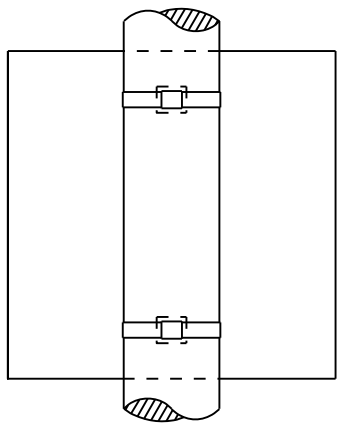


1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 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.

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

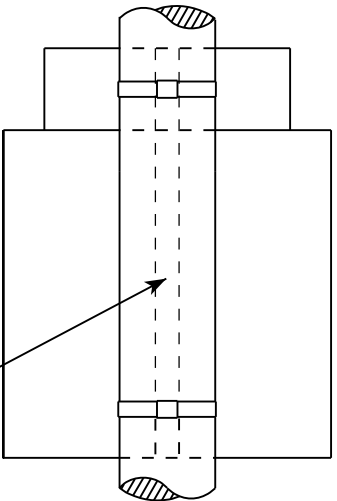
BANDING

SINGLE SIGN

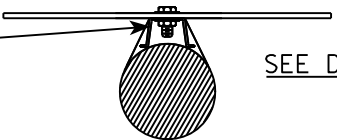


SEE DETAIL A

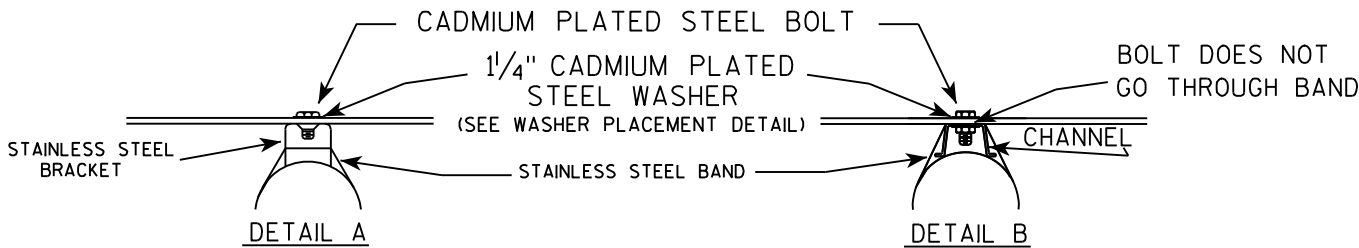
"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



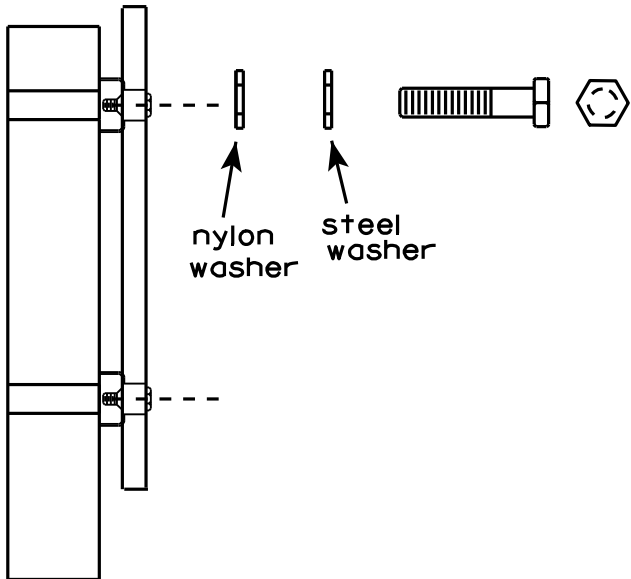
SEE DETAIL B



GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be $\frac{3}{4}$ " in width and 0.025" thickness.

WASHER PLACEMENT



nylon washer

steel washer

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

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 8/16/13

PLATE NO. A5-9.3

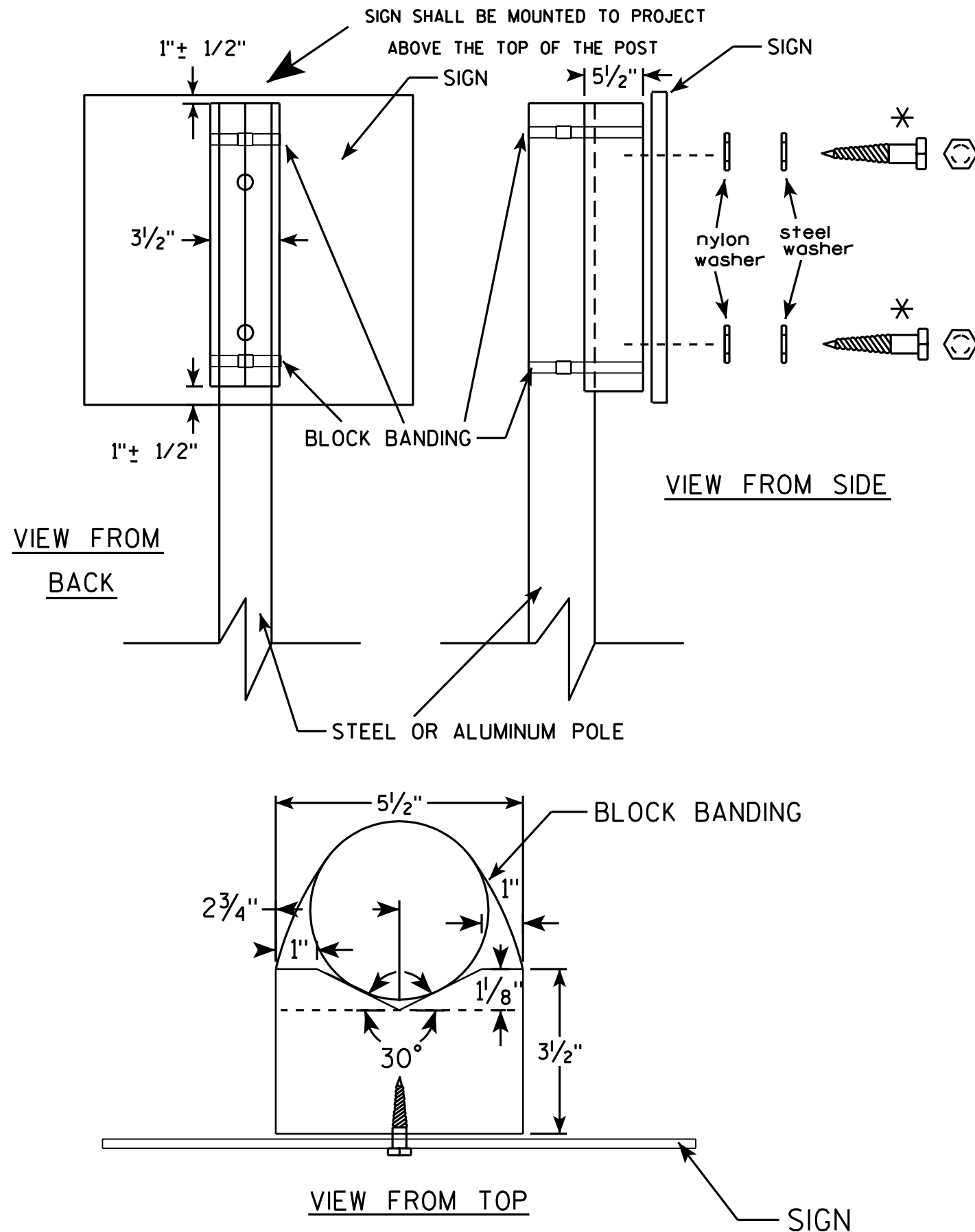
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WISDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, $\frac{3}{4}$ " WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORMALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
 - b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
 - c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
8. NYLON WASHERS SHALL BE $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

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

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO:

E

LIST OF REPAIR DRAWINGS

1. FOUNDATION DETAILS

2. TRUSS DETAILS (1 OF 2)

3. TRUSS DETAILS (2 OF 2)

4. SIGN PANEL DETAILS/ELECTRICAL DETAILS

5. CATWALK DETAILS

6. S-11-0019

7. S-13-0039

8. S-13-0042

9. S-13-0085

10. S-13-0086

11. S-13-0087

12. S-13-0088

13. S-13-0090

14. S-13-0094

15. S-13-0114

16. S-13-0115

17. S-13-0116

18. S-13-0118

19. S-13-0154

20. S-13-0155

21. S-13-0157

22. S-13-0181

23. S-13-0188

24. S-13-0281

25. S-13-0291

26. S-13-0322

27. S-13-0323

28. S-13-0337
29. S-14-0004

30. S-23-0002

31. S-28-0001

32. S-28-0002

33. S-28-0003

34. S-28-0004

35. S-28-0005

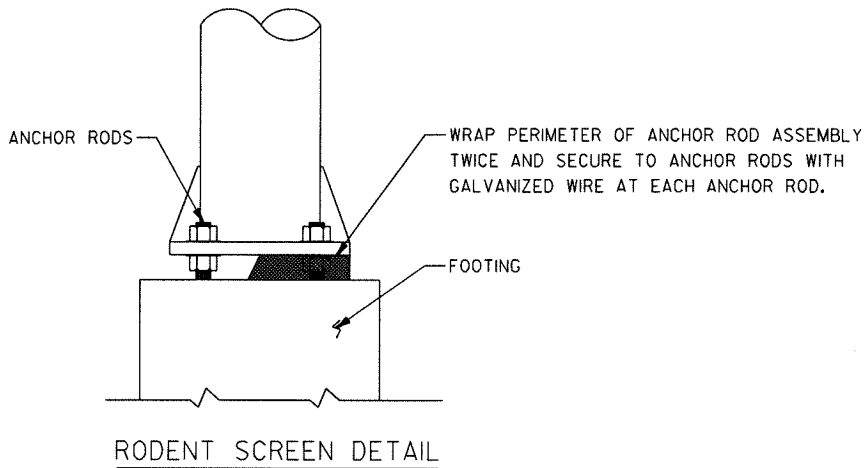
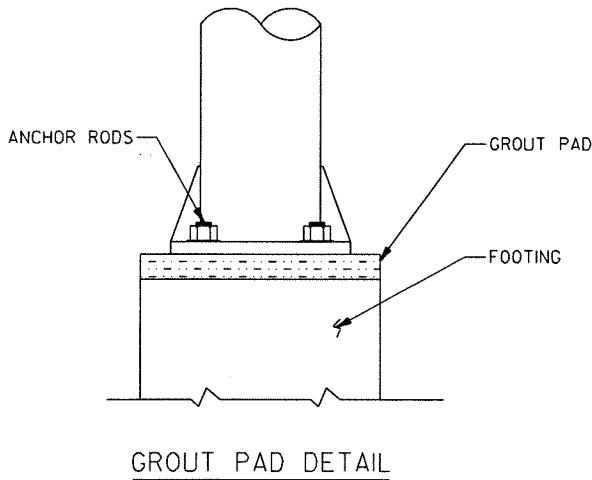
36. S-28-0006

37. S-28-0014

38. S-53-0036

FOUNDATION NOTES

1. CONCRETE - $f_c' = 3,500$ PSI
2. BAR STEEL REINF. - GRADE 60
 $f_y = 60,000$ PSI
3. THE CONTRACOR 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 ROD".
6. STEEL ANCHOR BOLT 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.
8. RODENT SCREEN ONLY REQUIRED WHEN ELECTRICAL DEVICES ARE PRESENT.



STATE PROJECT NUMBER

5105-17-63

BUREAU OF STRUCTURES CONTACT:
WILLIAM DREHER (608) 266-8489

CONSULTANT CONTACT
BRIAN SCHMIDT (608) 831-3238

ORIGINAL PLANS PREPARED BY



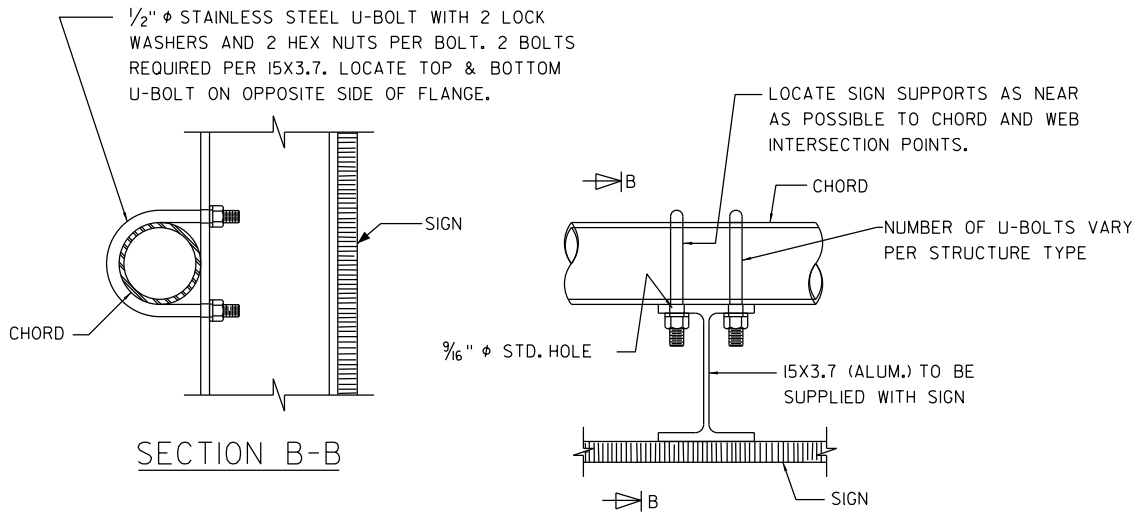
1/30/18
(Date)

B. Schmidt
(Signature)

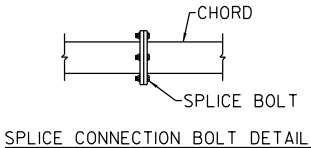
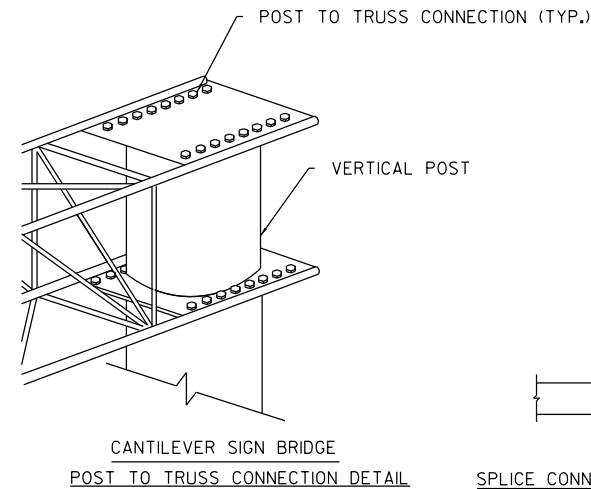
NO.	DATE	REVISION	BY
FICKET Structural Solutions 3148 Deming Way Suite 160 Middleton, WI 53562			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED	<i>William C. Dreher</i> SDR	02/02/18	DATE
CHIEF STRUCTURES DESIGN ENGINEER			
SIGN BRIDGE REPLACEMENT			
LOCATIONS ON STN PER ANNUAL PLAN			
COUNTY	SOUTHWEST REGION WIDE	TOWN/CITY/VILLAGE	VARIOUS
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS			
DESIGNED BY	DESIGN CKD. BRS	FKH	DRAWN BY ZW
PLANS CKD. BRS		SHEET 1 OF 38	
FOUNDATION DETAILS			

TRUSS NOTES

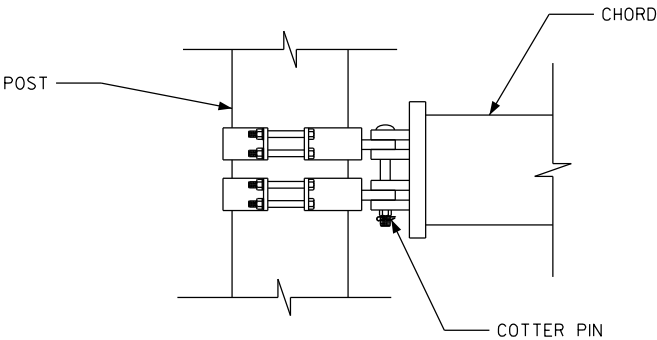
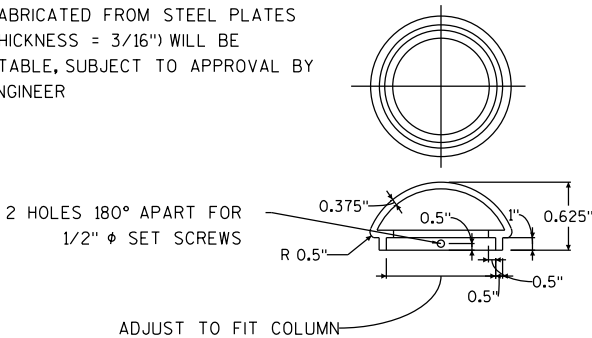
1. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL REPAIRS.
2. THE CONTRACTOR SHALL FIELD VERIFY THE DIMENSIONS OF THE ITEM REQUIRED. DISCREPANCIES SHALL BE SUBMITTED TO THE ENGINEER FOR CLARIFICATION PRIOR TO BEGINNING WORK.
3. ALL STAINLESS STEEL BOLTS, LOCK WASHERS, FLAT WASHERS, AND NUTS SHALL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



TYPICAL SIGN CONNECTION



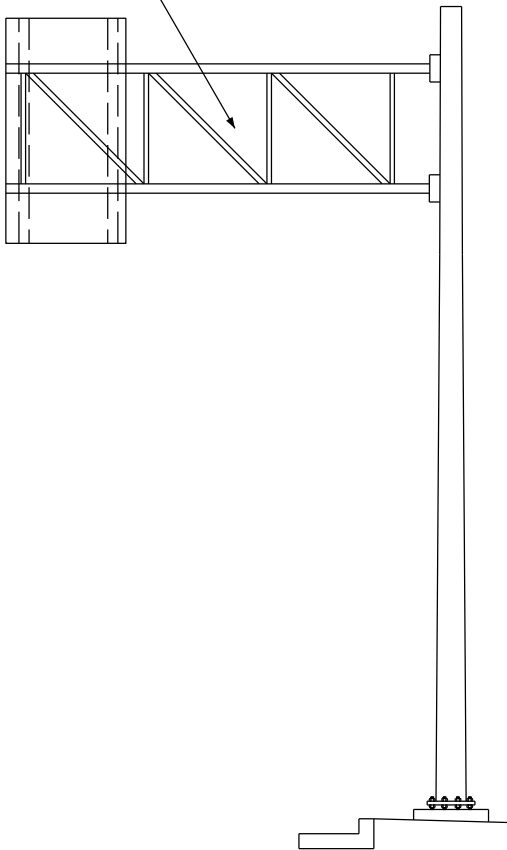
CAP FABRICATED FROM STEEL PLATES (MIN. THICKNESS = 3/16") WILL BE ACCEPTABLE, SUBJECT TO APPROVAL BY THE ENGINEER



TENSION STRUCTURAL CONNECTION BOLT REPAIR DETAIL
REPAIR CAN VARY BY LOCATION, SEE INDIVIDUAL STRUCTURE SHEET FOR DETAILS

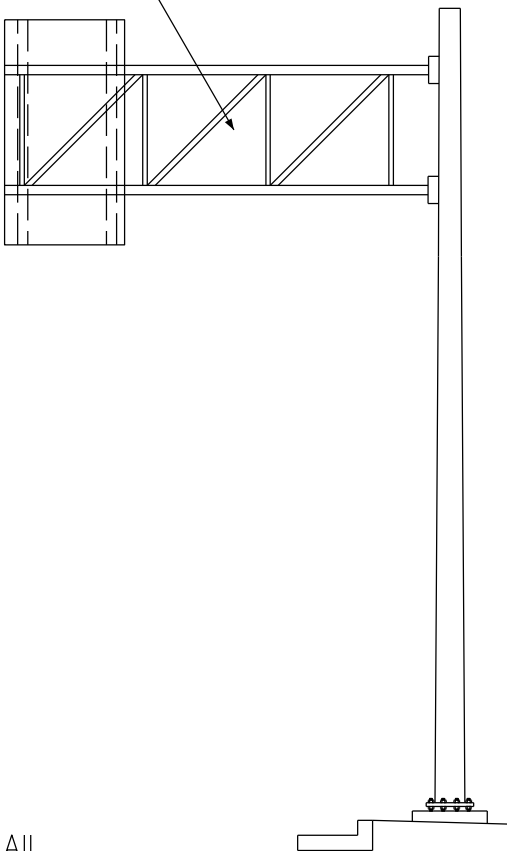
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
SIGN BRIDGE REPLACEMENT			
DESIGNED BY: BRS	DESIGN CK'D. FKH	DRAWN BY: BRS	CHECKED BY: FKH
TRUSS DETAILS (1 OF 2)			SHEET 2 OF 38

INCORRECT TRUSS ORIENTATION



EXISTING TRUSS ELEVATION

CORRECT TRUSS ORIENTATION



REINSTALL TRUSS DETAIL

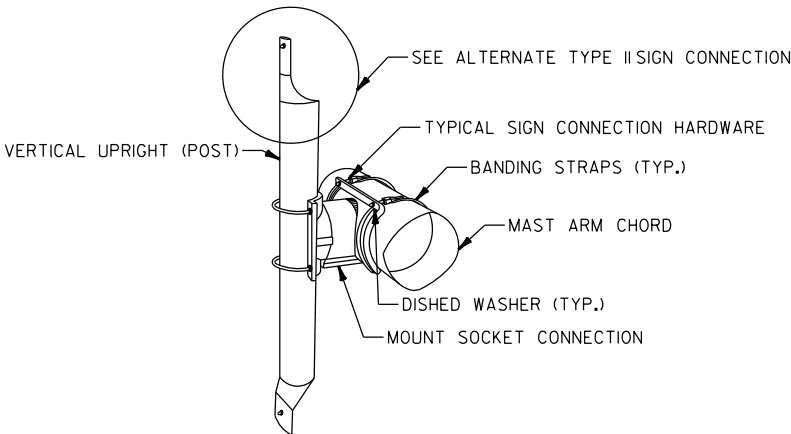
REINSTALL TRUSS NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY THE DIMENSIONS OF ALL ITEMS ASSOCIATED WITH THE REPAIR THAT MAY NEED TO BE REPLACED DURING TRUSS REINSTALLATION. ALL REPLACED BOLTS AND OTHER ITEMS WILL BE CONSIDERED INCIDENTAL TO SPV.0060.18 - REINSTALL TRUSS
2. 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.
3. REMOVE ALL OVERHEAD SIGNS PRIOR TO TRUSS DISASSEMBLY.
4. REINSTALL ALL SIGNS TO THEIR ORIGINAL CONFIGURATION AFTER TRUSS HAS BEEN CORRECTLY REINSTALLED.
5. ALL REMOVAL AND INSTALLATION OF OVERHEAD TYPE I & TYPE II SIGNS ON THE TRUSS SHALL BE CONSIDERED INCIDENTAL TO SPV.0060.18 - REINSTALL TRUSS.

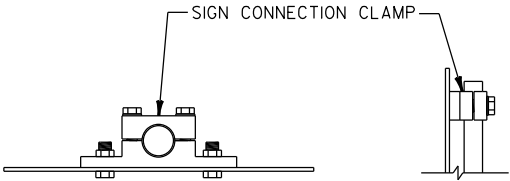
NO.	DATE	REVISION			BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION					
SIGN BRIDGE REPLACEMENT					
DESIGNED BY	BRS	DESIGN CK'D.	FKH	DRAWN BY:	BRS
		CHECKED BY:	FKH		
TRUSS DETAILS (2 OF 2)				SHEET	
				3 OF 38	

SIGN PANEL & ELECTRICAL NOTES

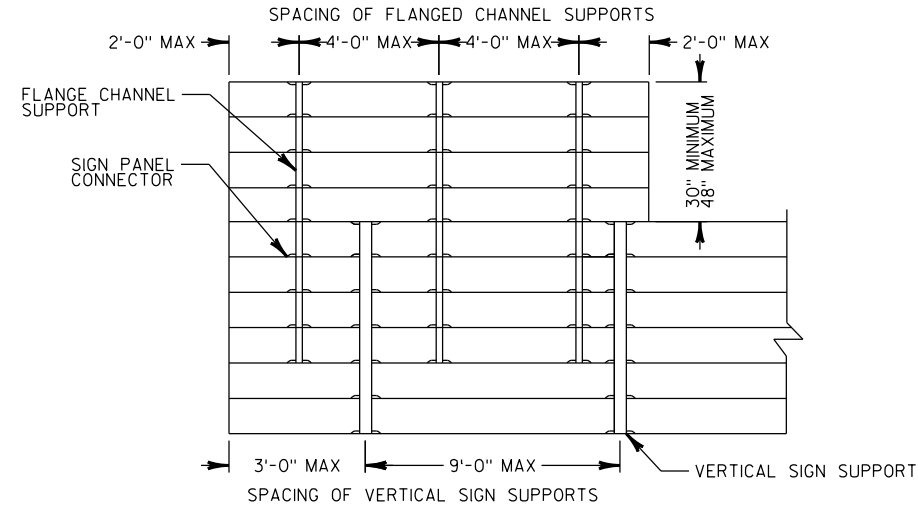
1. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL REPAIRS.
2. THE CONTRACTOR SHALL FIELD VERIFY THE DIMENSIONS OF THE ITEM REQUIRED. DISCREPANCIES SHALL BE SUBMITTED TO THE ENGINEER FOR CLARIFICATION PRIOR TO BEGINNING WORK.
3. ALL STAINLESS STEEL BOLTS, LOCK WASHERS, FLAT WASHERS, AND NUTS SHALL 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. THE CONTRACTOR SHALL USE ANTI-SIEZE COMOUND ON ELECTRICAL HANDHOLE COVER BOLTS, JUNCTION BOX BOLTS, LUMINIARE COVER BOLTS, AND CONDUIT PLUGS PER SECTION 651.3.1(5) OF THE WISDOT STANDARD SPECIFICATION.



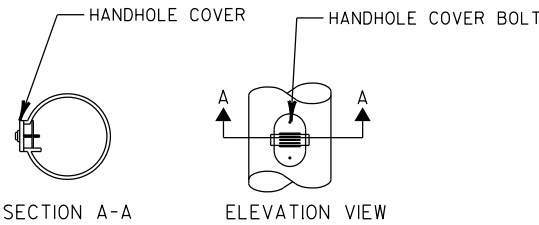
POST TO CHORD CONNECTION DETAIL (TYPE II SIGN)/SIGN CONNECTION ASSEMBLY DETAIL



ALTERNATE TYPE II SIGN CONNECTION DETAIL - SIGN CONNECTION CLAMP



FLANGE CHANNEL SUPPORT/VERTICAL SIGN SUPPORT DETAILS



HANDHOLE DETAILS

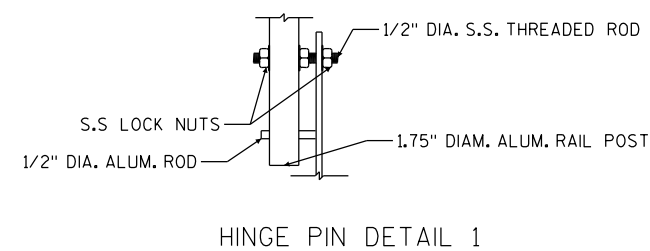
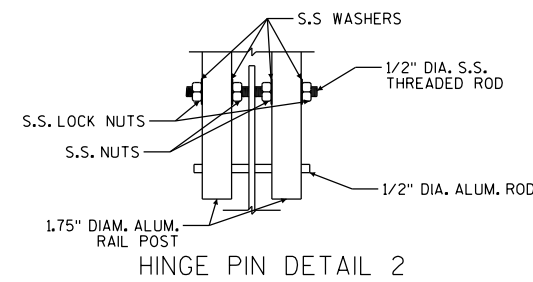
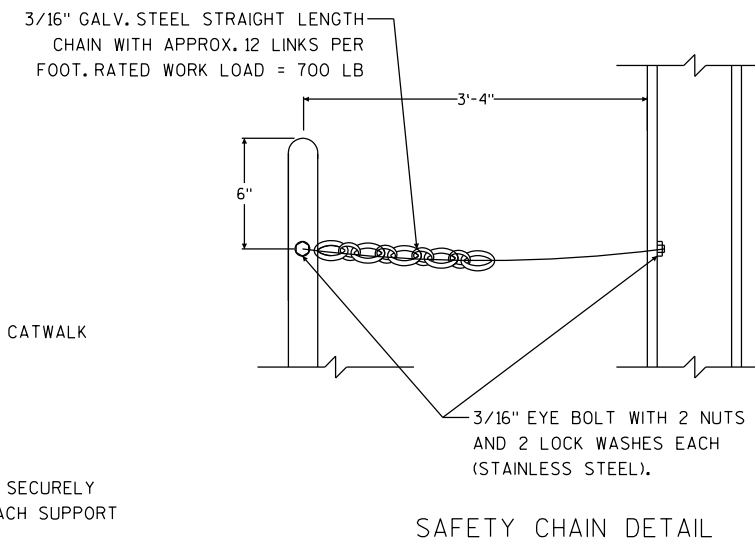
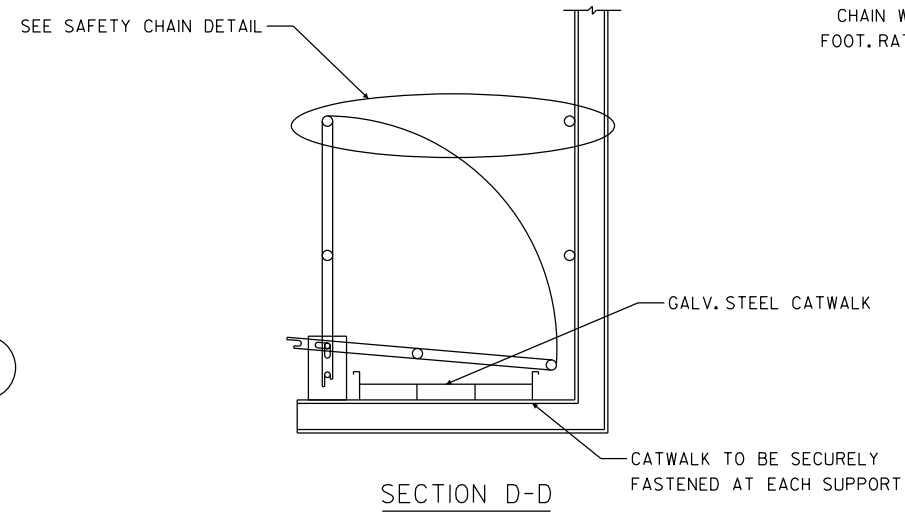
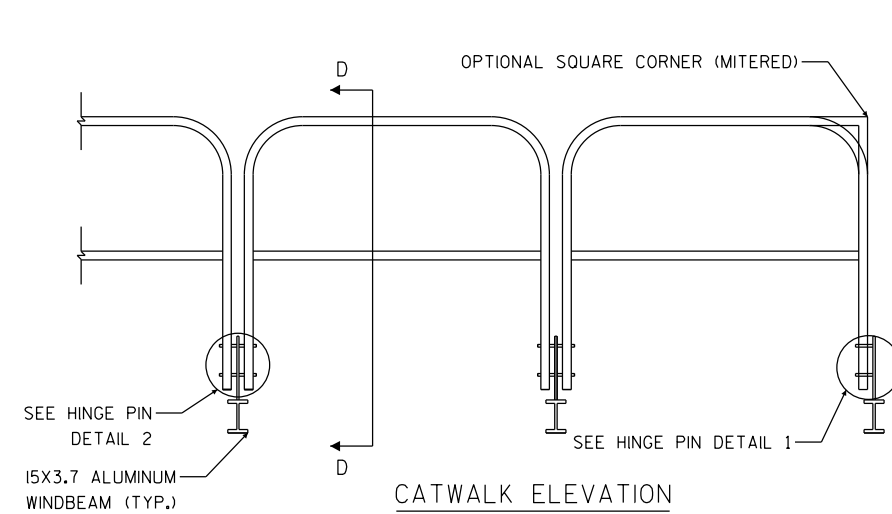
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
SIGN BRIDGE REPLACEMENT			
DESIGNED BY: BRS	DESIGN CK'D: FKH	DRAWN BY: BRS	CHECKED BY: FKH
ELECTRICAL & SIGN PANEL DETAILS			SHEET 4 OF 38

CATWALK NOTES

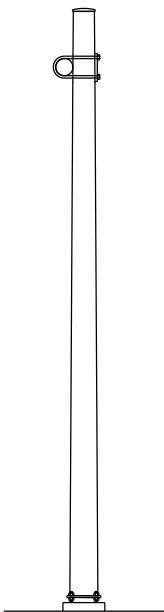
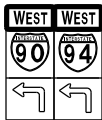
- THE CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL REPAIRS.
- THE CONTRACTOR SHALL FIELD VERIFY THE SIZE OF THE ITEM REQUIRED.
- ALL STAINLESS STEEL BOLTS, LOCK WASHERS, FLAT WASHERS, AND NUTS SHALL CONFORM TO:
 - ANCHOR BOLTS/HEX BOLTS ASTM F593 ANY ALLOW GROUPS 1, 2, OR 3
 - HEX NUTS ASTM F594
 - 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.

STATE PROJECT NUMBER

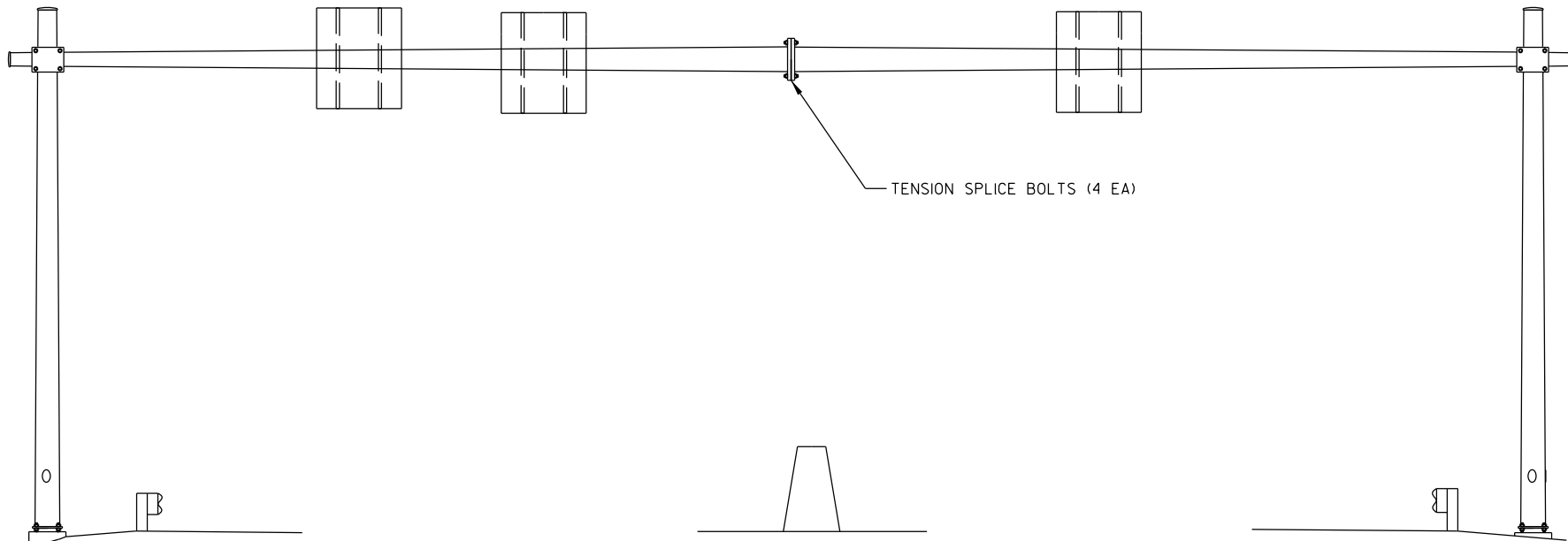
5105-17-63



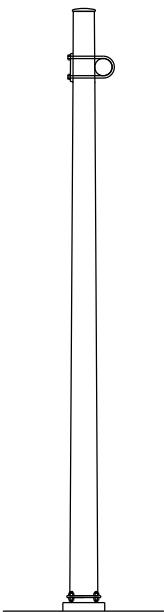
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
SIGN BRIDGE REPLACEMENT			
DESIGNED BY: BRS	DESIGN CK'D: FKH	DRAWN BY: BRS	CHECKED BY: FKH
CATWALK DETAILS			SHEET 5 OF 38



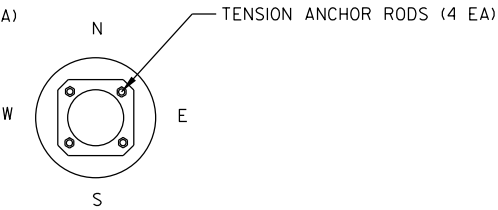
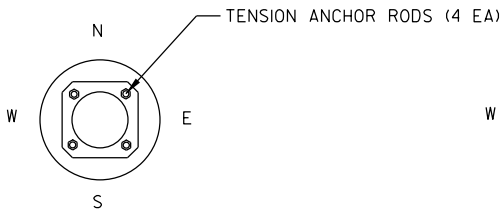
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LOOKING NORTH

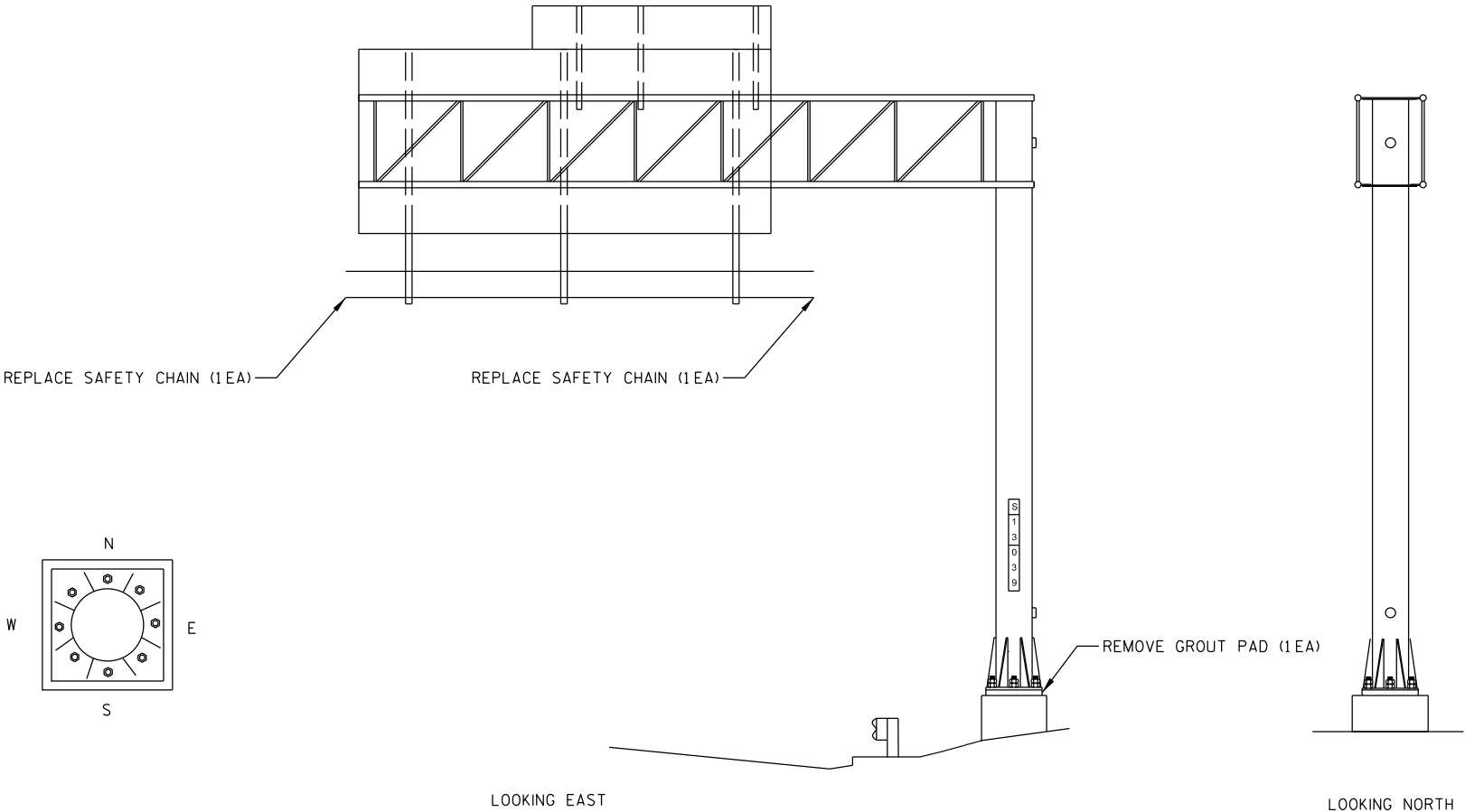
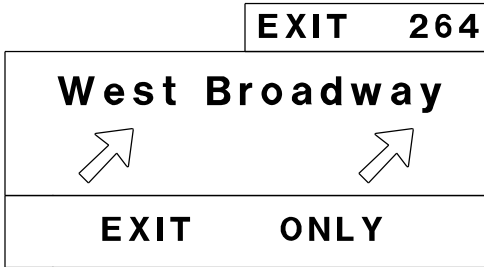


LOOKING WEST



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	8 EA	NONE
SPV.0060.10	TENSION STRUCTURAL CONNECTION BOLT	4 EA	SHEET 2


NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-11-0019			
DRAWN BY		RAS	PLANS CK'D. BRS
MAINTENANCE ITEMS			SHEET 6 OF 38



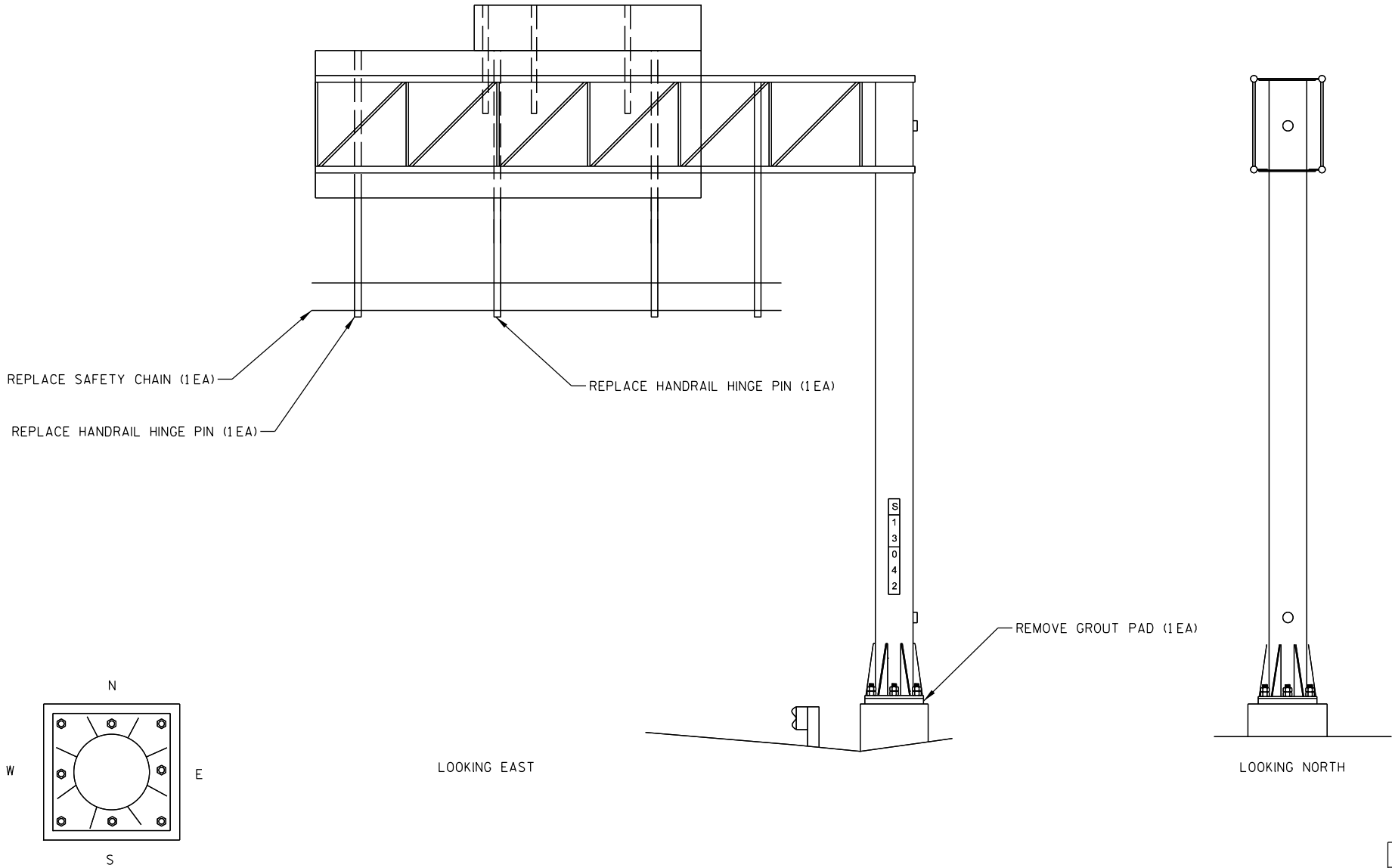
ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.06	REMOVE GROUT PAD	1 EA	SHEET 1
SPV.0060.31	REPLACE SAFETY CHAIN	2 EA	SHEET 5

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-0039			
DRAWN BY		TTH	PLANS CK'D. BRS
MAINTENANCE ITEMS			SHEET 7 OF 38

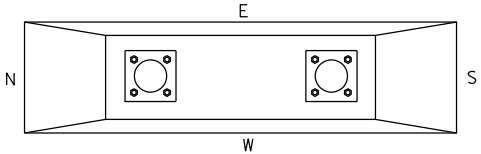
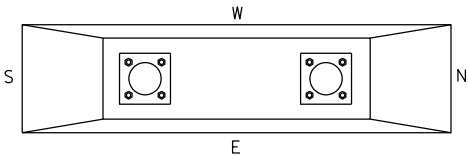
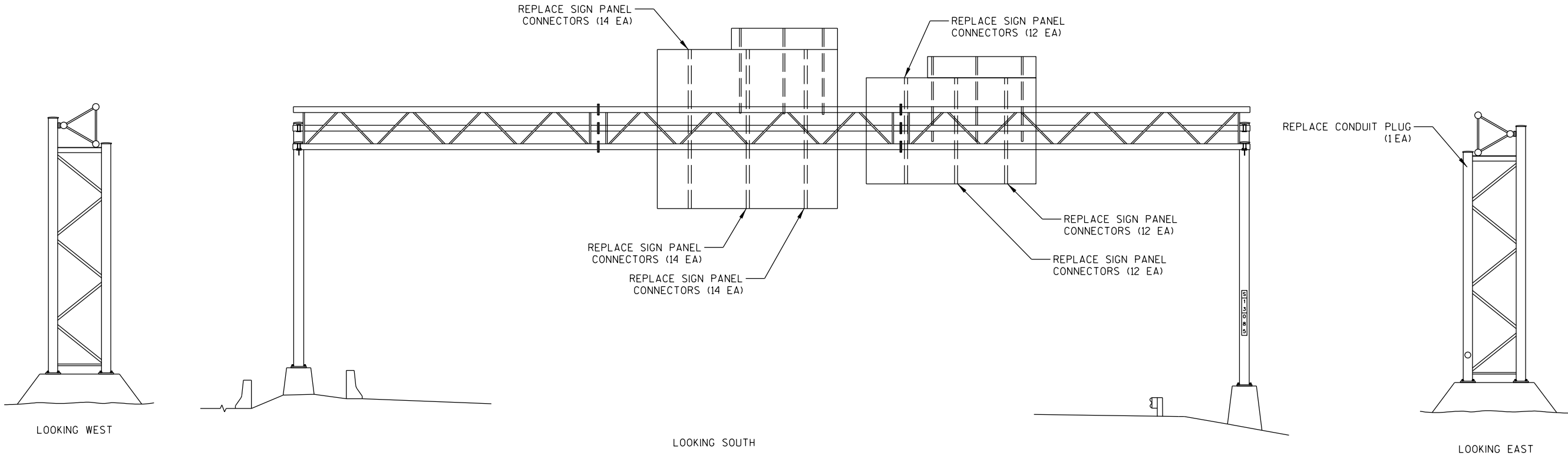
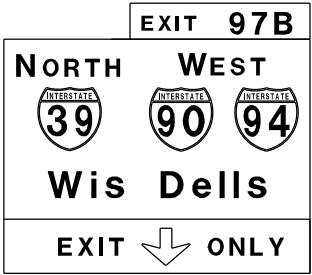
EXIT 265

Monona Dr 

EXIT ONLY

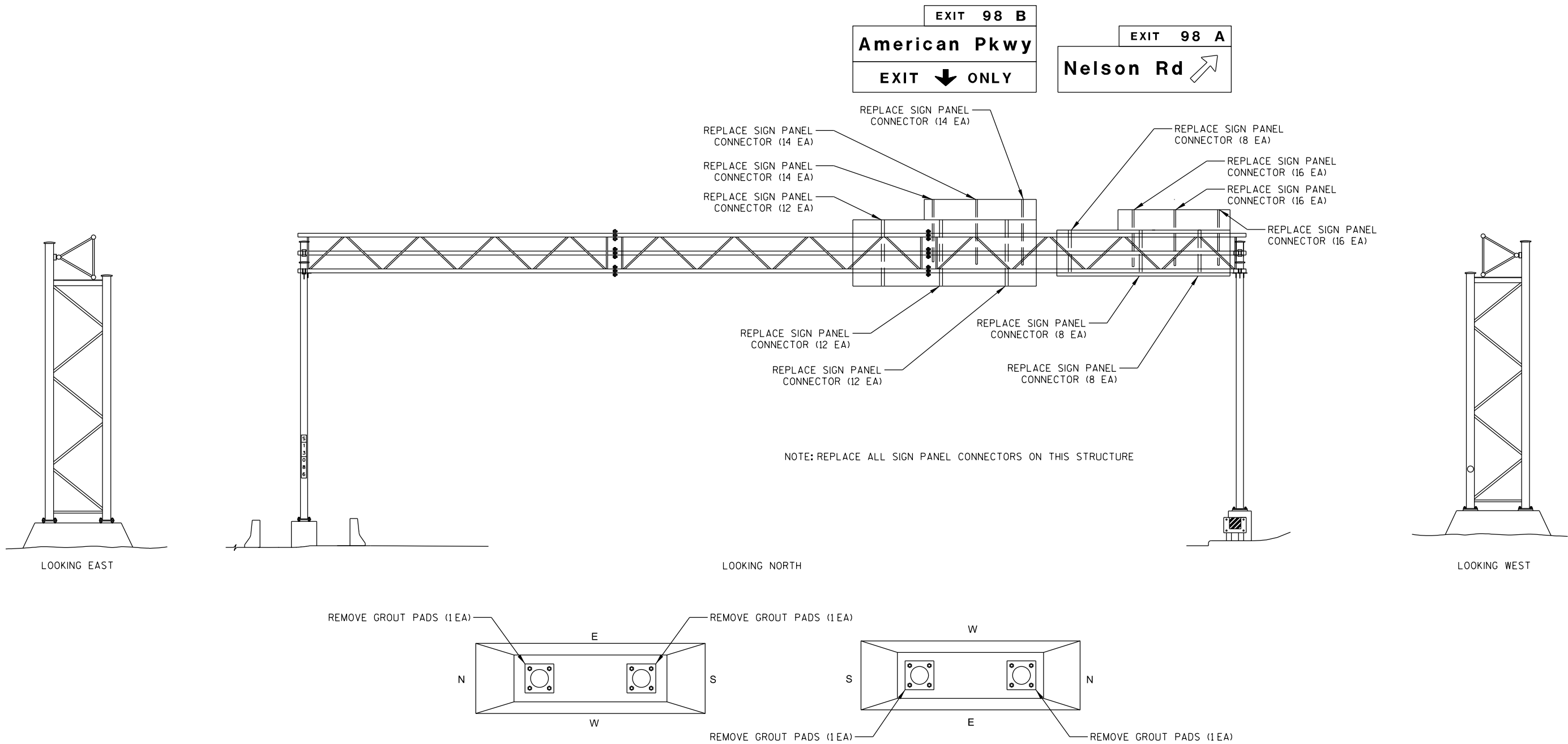


ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET	NO.	DATE	REVISION	BY
SPV.0060.06	REMOVE GROUT PAD	1 EA	SHEET 1	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
SPV.0060.30	REPLACE HANDRAIL HINGE PINS	2 EA	SHEET 5	STRUCTURE S-13-0042			
SPV.0060.31	REPLACE SAFETY CHAIN	1 EA	SHEET 5	DRAWN BY TTH		PLANS CK'D. BRS	
				MAINTENANCE ITEMS		SHEET 8 OF 38	



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.20	REPLACE SIGN PANEL CONNECTOR	78 EA	SHEET 4
SPV.0060.40	REPLACE CONDUIT PLUG	1 EA	NONE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-0085			
DRAWN BY		TTH	PLANS CK'D. BRS
MAINTENANCE ITEMS			SHEET 9 OF 38



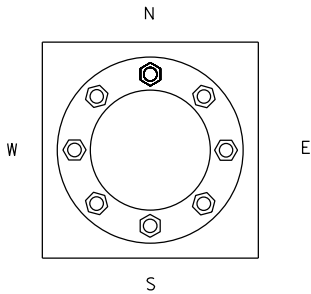
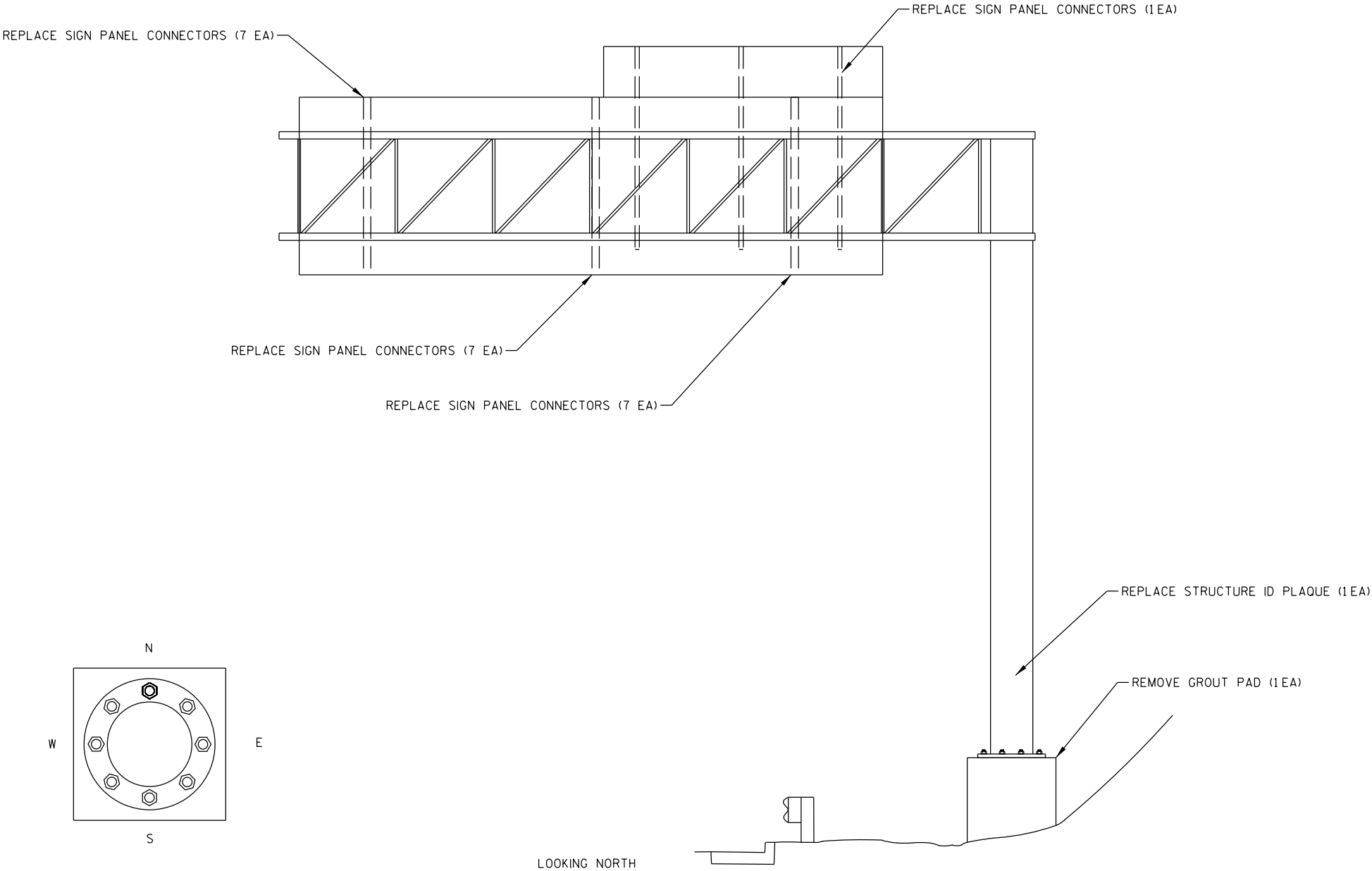
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				STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
				STRUCTURE S-13-0086			
				DRAWN BY TTH		PLANS CK'D. BRS	
				MAINTENANCE ITEMS			SHEET 10 OF 38
ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET				
SPV.0060.06	REMOVE GROUT PAD	4 EA	SHEET 1				
SPV.0060.20	REPLACE SIGN PANEL CONNECTOR	150 EA	SHEET 4				

EXIT 98B

American Pkwy ↗
EXIT ONLY

STATE PROJECT NUMBER

5105-17-63



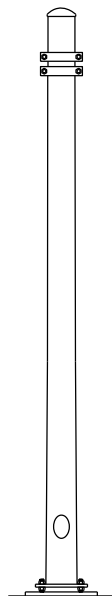
ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.06	REMOVE GROUT PAD	1 EA	SHEET 1
SPV.0060.20	REPLACE SIGN PANEL CONNECTOR	22 EA	SHEET 4
SPV.0060.26	REPLACE STRUCTURE ID PLAQUE	1 EA	NONE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-0087			
DRAWN BY		RAS	PLANS CK'D. BRS
MAINTENANCE ITEMS			SHEET 11 OF 38

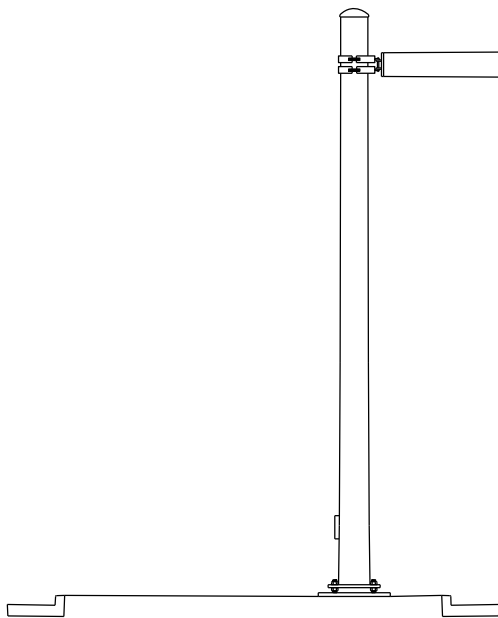
Madison



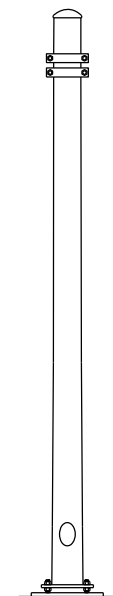
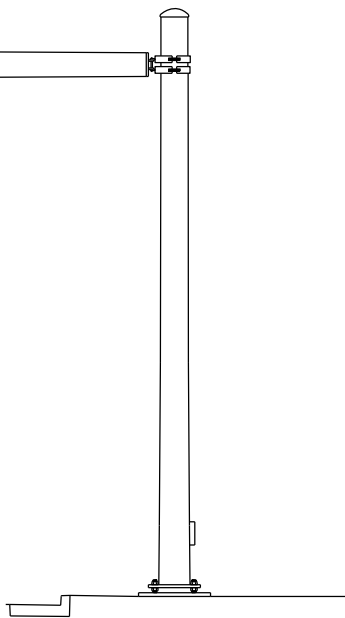
Sun Prairie



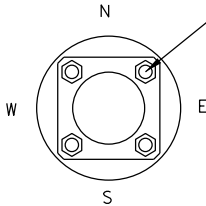
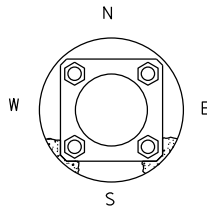
LOOKING EAST



LOOKING NORTH



LOOKING WEST



TENSION ANCHOR RODS (4 EA)

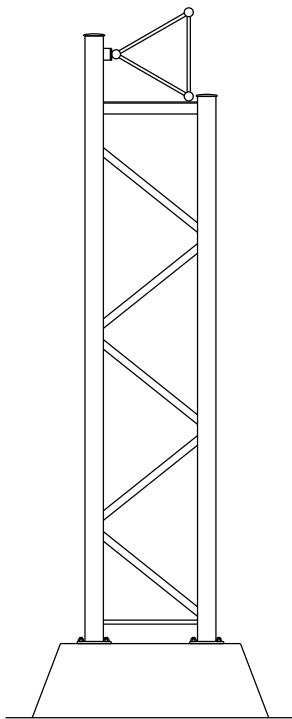
ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	4 EA	NONE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-0088			
DRAWN BY		RAS	PLANS CK'D. BRS
MAINTENANCE ITEMS			SHEET 12 OF 38

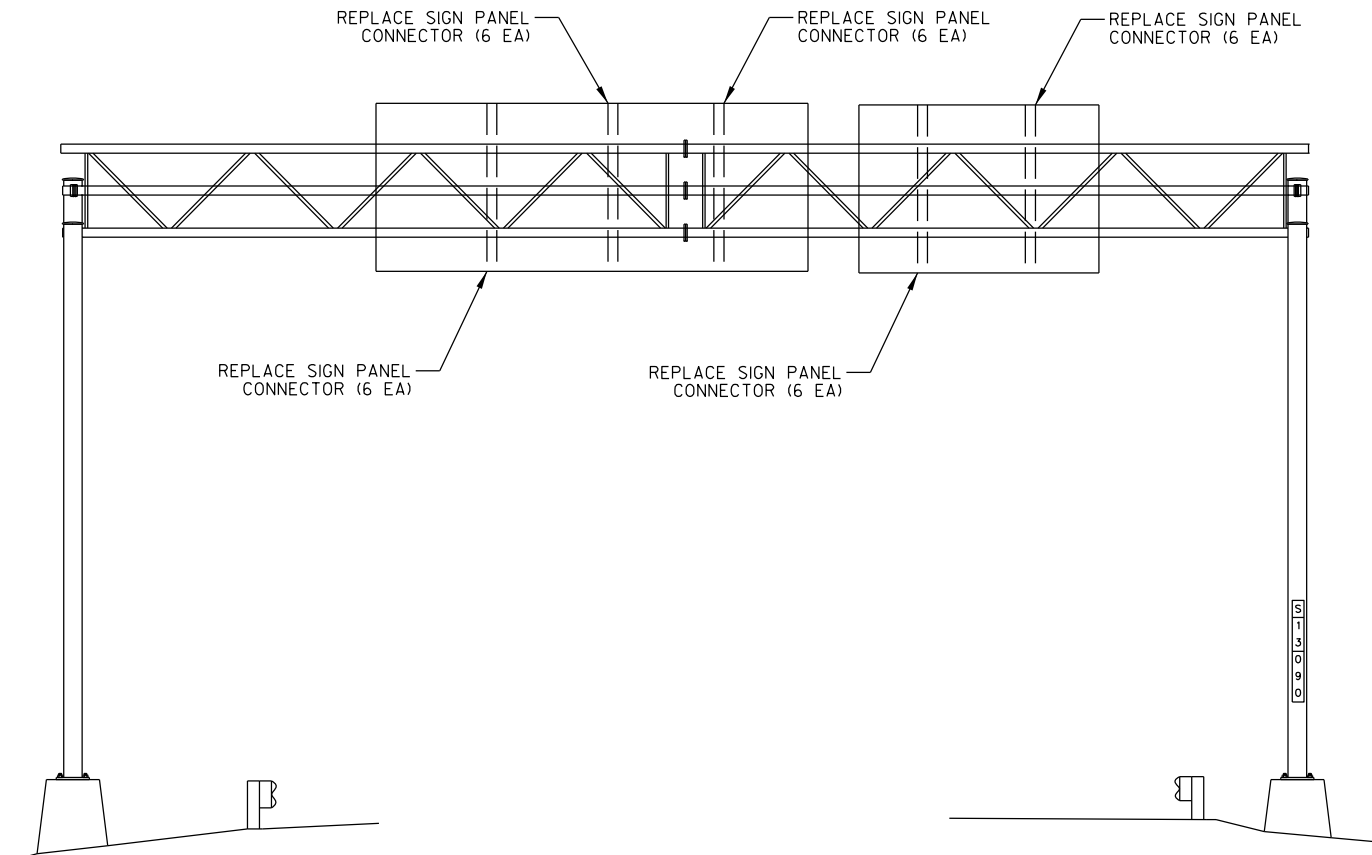
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High Crossing Blvd



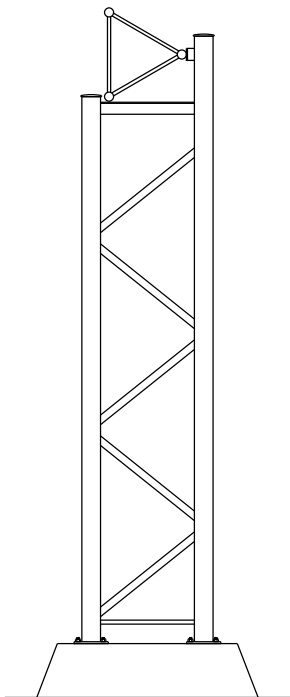
American
Parkway



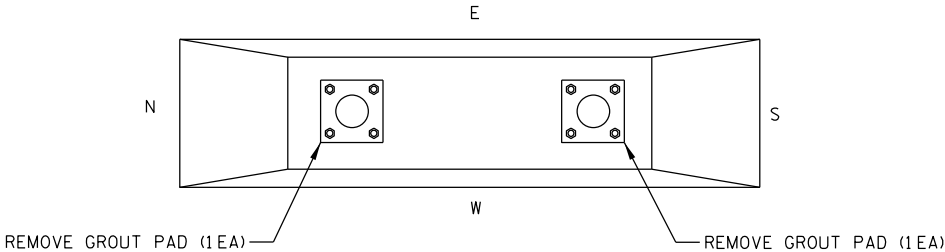
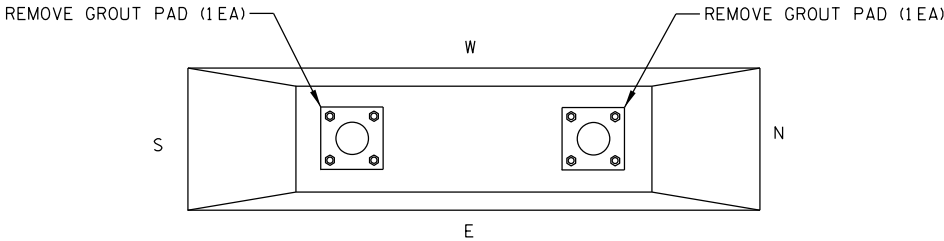
LOOKING WEST



LOOKING SOUTH

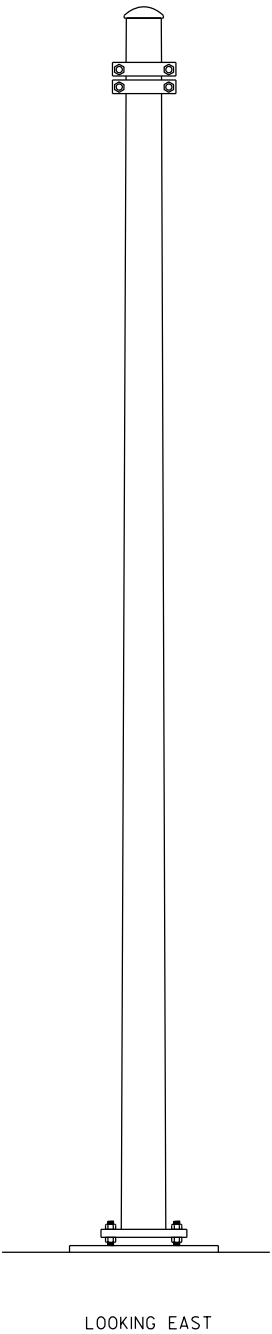
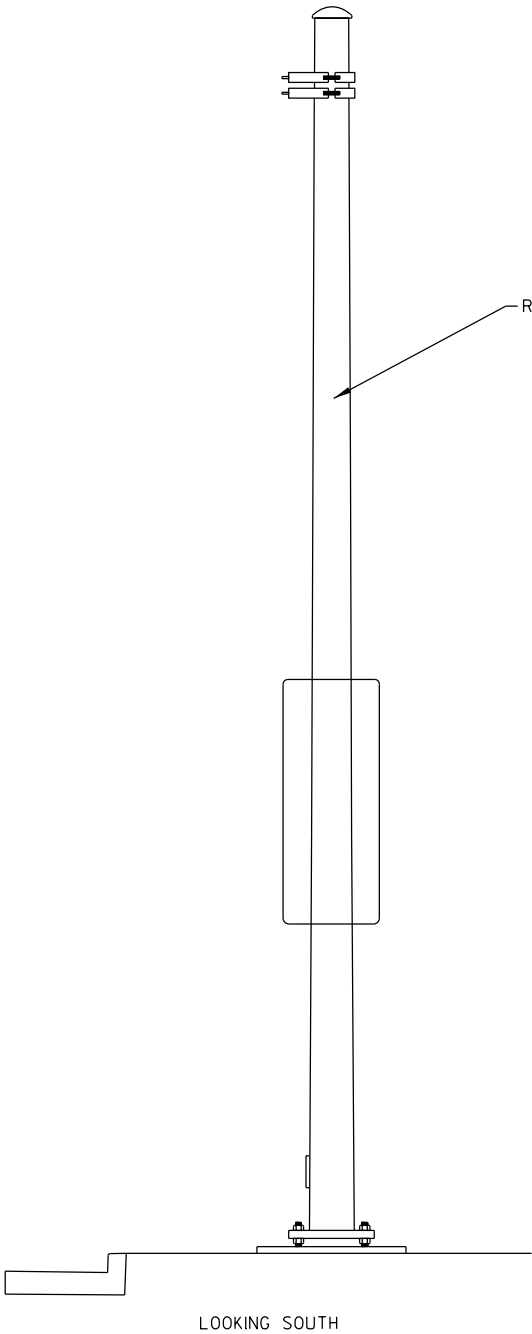
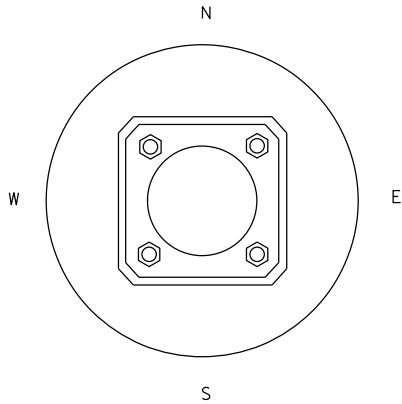


LOOKING EAST



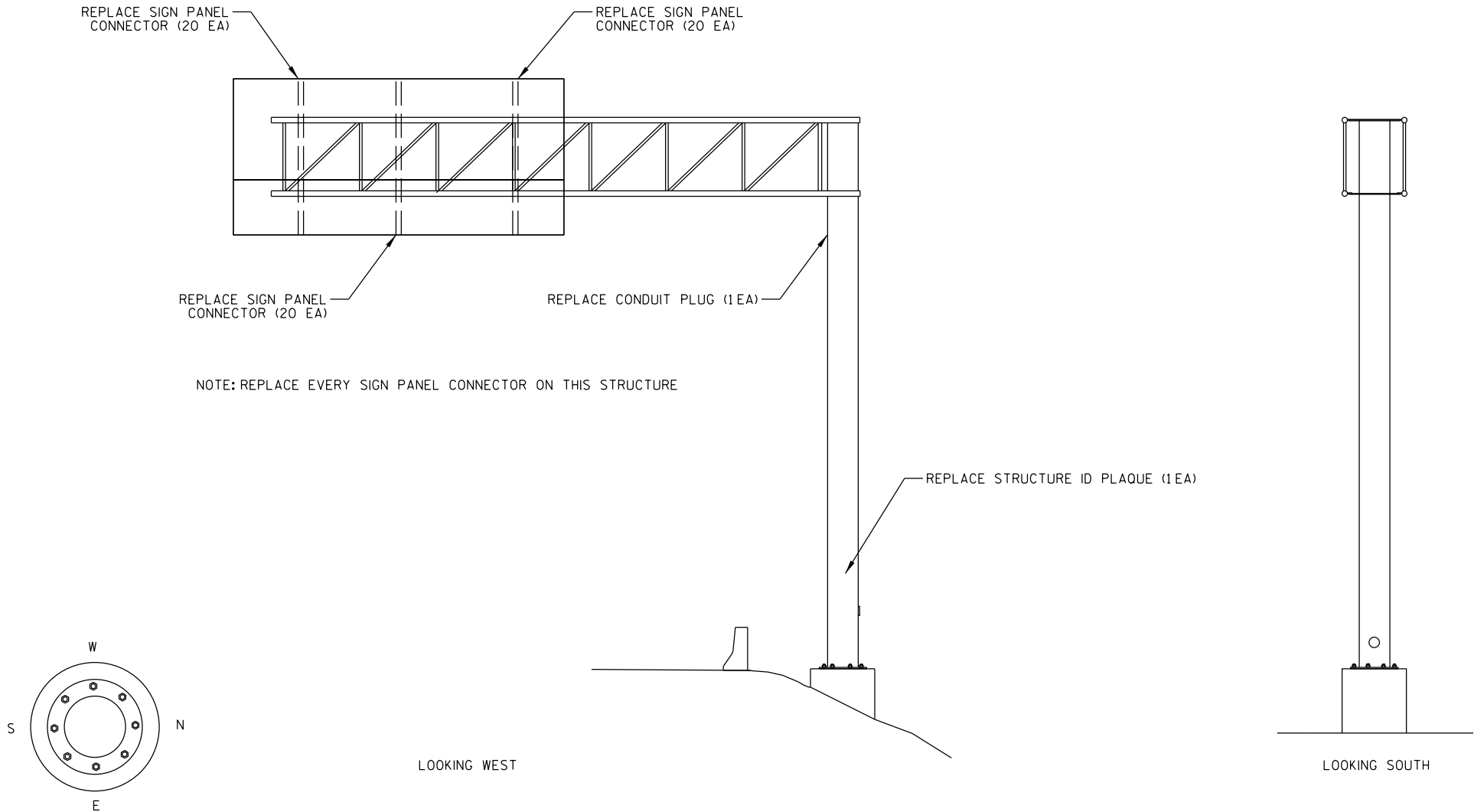
ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.06	REMOVE GROUT PAD	4 EA	SHEET 1
SPV.0060.20	REPLACE SIGN PANEL CONNECTOR	30 EA	SHEET 4

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-0090			
DRAWN BY		RAS	PLANS CK'D. BRS
MAINTENANCE ITEMS			SHEET 13 OF 38

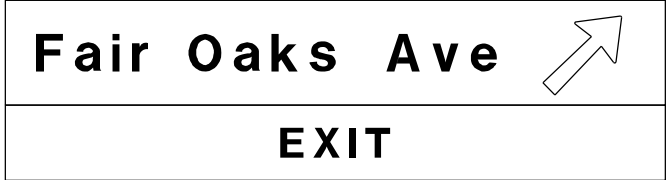


ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
683.3100	REMOVE STRUCTURAL STEEL SIGN SUPPORTS	1 EA	NONE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-0094			
DRAWN BY		RAS	PLANS CK'D. BRS
MAINTENANCE ITEMS			SHEET 14 OF 38



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
				STRUCTURE S-13-0114			
SPV.0060.20	REPLACE SIGN PANEL CONNECTOR	60 EA	SHEET 4	MAINTENANCE ITEMS	DRAWN BY RAS	PLANS CK'D. BRS	SHEET 15 OF 38
SPV.0060.26	REPLACE STRUCTURE ID PLAQUE	1 EA	NONE				
SPV.0060.40	REPLACE CONDUIT PLUG	1 EA	NONE				



REPLACE SIGN PANEL CONNECTOR (16 EA)

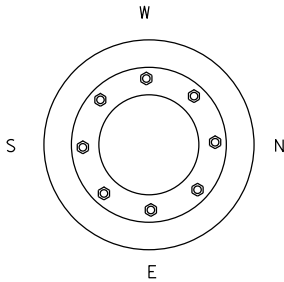
REPLACE SIGN PANEL CONNECTOR (16 EA)

REPLACE SIGN PANEL CONNECTOR (16 EA)

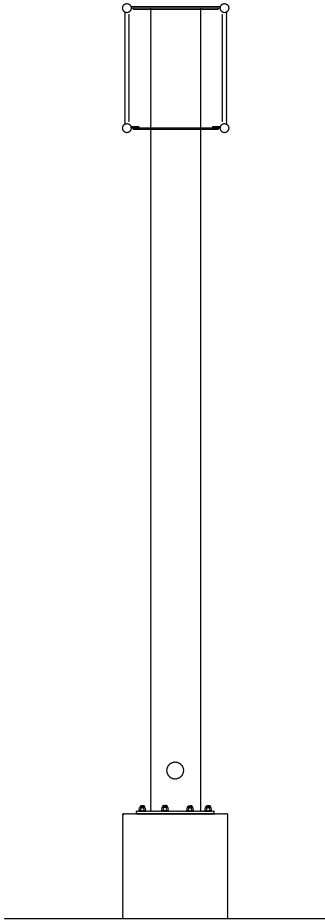
REPLACE CONDUIT PLUG (1 EA)

NOTE: REPLACE EVERY SIGN PANEL CONNECTOR ON THIS STRUCTURE

REPLACE STRUCTURE ID PLAQUE (1 EA)

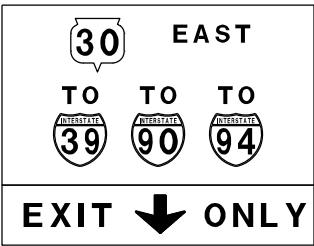
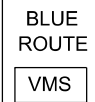


LOOKING WEST



LOOKING SOUTH

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION					
				STRUCTURE S-13-0115					
SPV.0060.20	REPLACE SIGN PANEL CONNECTOR	48 EA	SHEET 4		DRAWN BY	RAS	PLANS CK'D.	BRS	
SPV.0060.26	REPLACE STRUCTURE ID PLAQUE	1 EA	NONE						
SPV.0060.40	REPLACE CONDUIT PLUG	1 EA	NONE	MAINTENANCE ITEMS				SHEET 16 OF 38	



REPLACE SIGN PANEL
CONNECTORS (5 EA)

REPLACE SIGN PANEL
CONNECTORS (7 EA)

REPLACE SIGN PANEL
CONNECTORS (5 EA)

REPLACE SIGN PANEL
CONNECTORS (11 EA)

REPLACE CONDUIT
PLUG (1EA)

REPLACE SIGN PANEL
CONNECTORS (6 EA)

REPLACE SIGN PANEL
CONNECTORS (5 EA)

REPLACE SIGN PANEL
CONNECTORS (5 EA)

REPLACE SIGN PANEL
CONNECTORS (10 EA)

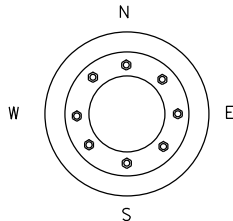
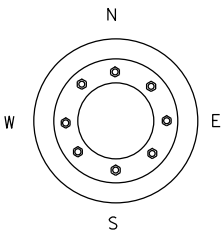


REPLACE STRUCTURE ID PLAQUE (1EA)

LOOKING EAST

LOOKING NORTH

LOOKING WEST



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.20	REPLACE SIGN PANEL CONNECTOR	54 EA	SHEET 4
SPV.0060.26	REPLACE STRUCTURE ID PLAQUE	1 EA	NONE
SPV.0060.40	REPLACE CONDUIT PLUG	1 EA	NONE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-0116			
DRAWN BY RAS		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 17 OF 38



REPLACE SIGN PANEL CONNECTORS (8 EA)

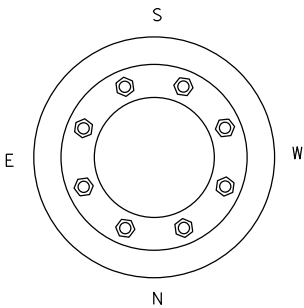
REPLACE SIGN PANEL CONNECTORS (8 EA)

REPLACE SIGN PANEL CONNECTORS (9 EA)

REPLACE CONDUIT PLUG (1EA)

REPLACE STRUCTURE ID PLAQUE (1EA)

TIGHTEN/REPLACE HANDHOLE COVER BOLTS (2 EA)



LOOKING SOUTH

LOOKING WEST

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.20	REPLACE SIGN PANEL CONNECTOR	25 EA	SHEET 4
SPV.0060.26	REPLACE STRUCTURE ID PLAQUE	1 EA	NONE
SPV.0060.40	REPLACE CONDUIT PLUG	1 EA	NONE
SPV.0060.42	TIGHTEN/REPLACE HANDHOLE COVER BOLTS	2 EA	SHEET 4

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-0118			
DRAWN BY RAS		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 18 OF 38

<div><div><div>94</div><div>WISCONSIN</div></div></div>	EAST	LEFT	1 ¼
<div><div><div>30</div><div></div></div></div>	WEST		1 ½
<div><div><div>12</div><div>18</div></div></div>			5 ¼

REPLACE SIGN PANEL
CONNECTOR (1 EA)

REPLACE SIGN PANEL
CONNECTORS (7 EA)

REPLACE SIGN PANEL
CONNECTORS (7 EA)

REPLACE SIGN PANEL
CONNECTORS (7 EA)

REPLACE SIGN PANEL
CONNECTORS (7 EA)

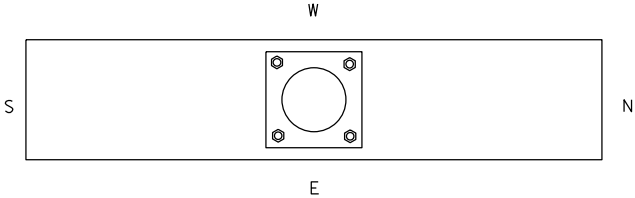
REPLACE STRUCTURE ID PLAQUE (1 EA)

REPLACE HANDHOLE COVER (1 EA)

REPLACE CONDUIT PLUG (1 EA)

LOOKING SOUTH

LOOKING WEST



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.20	REPLACE SIGN PANEL CONNECTOR	29 EA	SHEET 4
SPV.0060.26	REPLACE STRUCTURE ID PLAQUE	1 EA	NONE
SPV.0060.40	REPLACE CONDUIT PLUG	1 EA	NONE
SPV.0060.41	REPLACE HANDHOLE COVER	1 EA	SHEET 4

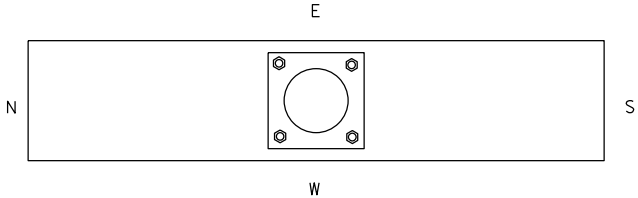
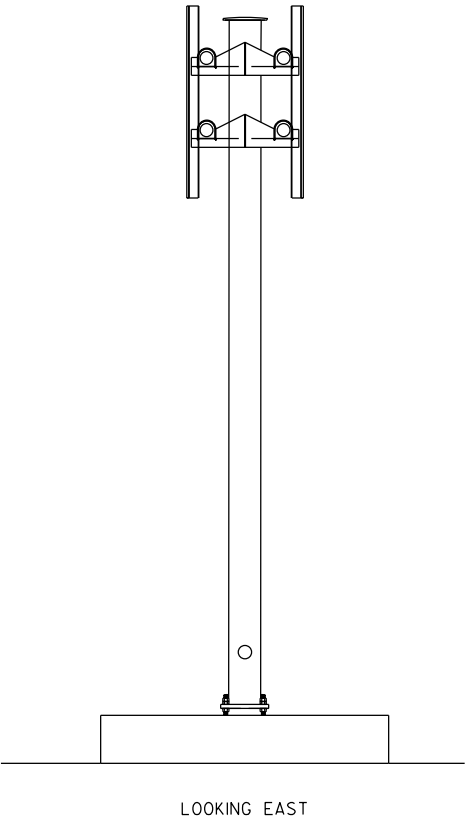
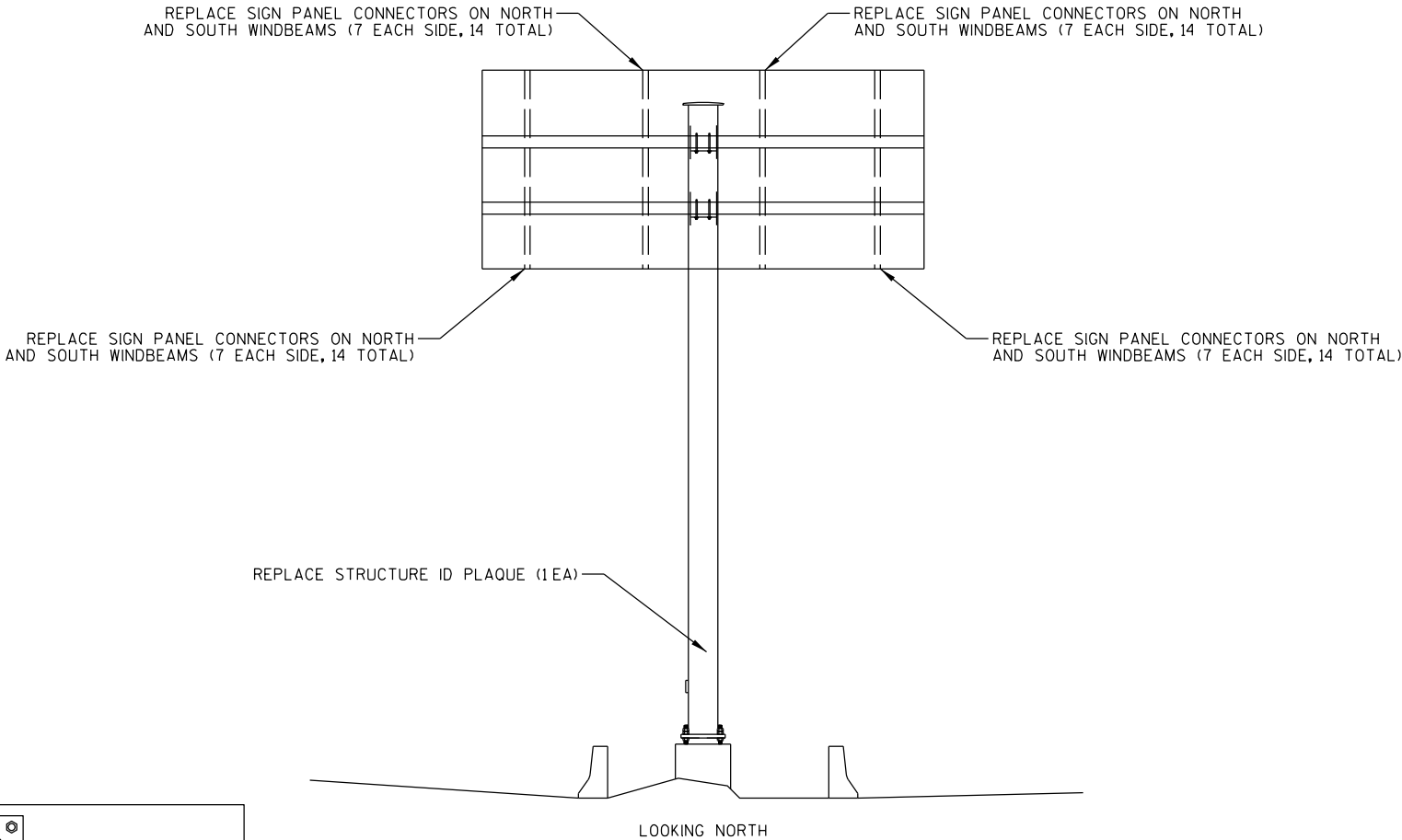
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-0154			
DRAWN BY		RAS	PLANS CK'D. BRS
MAINTENANCE ITEMS			SHEET 19 OF 38

30 WEST	LEFT	1 1/4
94 EAST		1 1/2
151		4

LOOKING NORTH

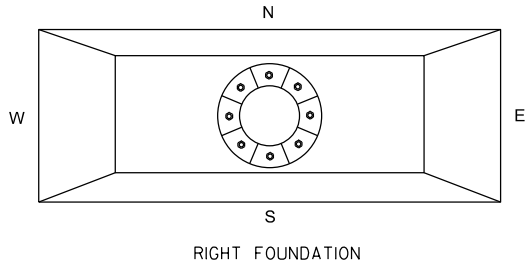
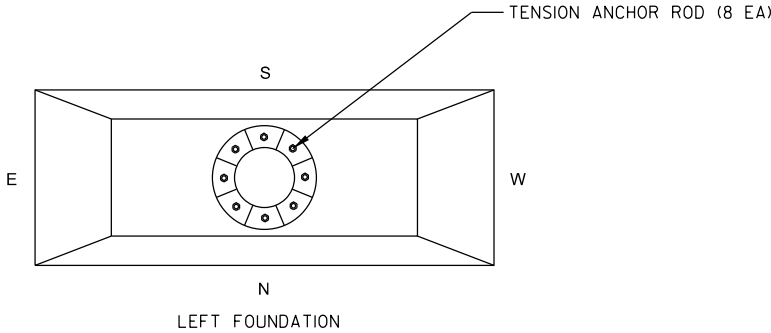
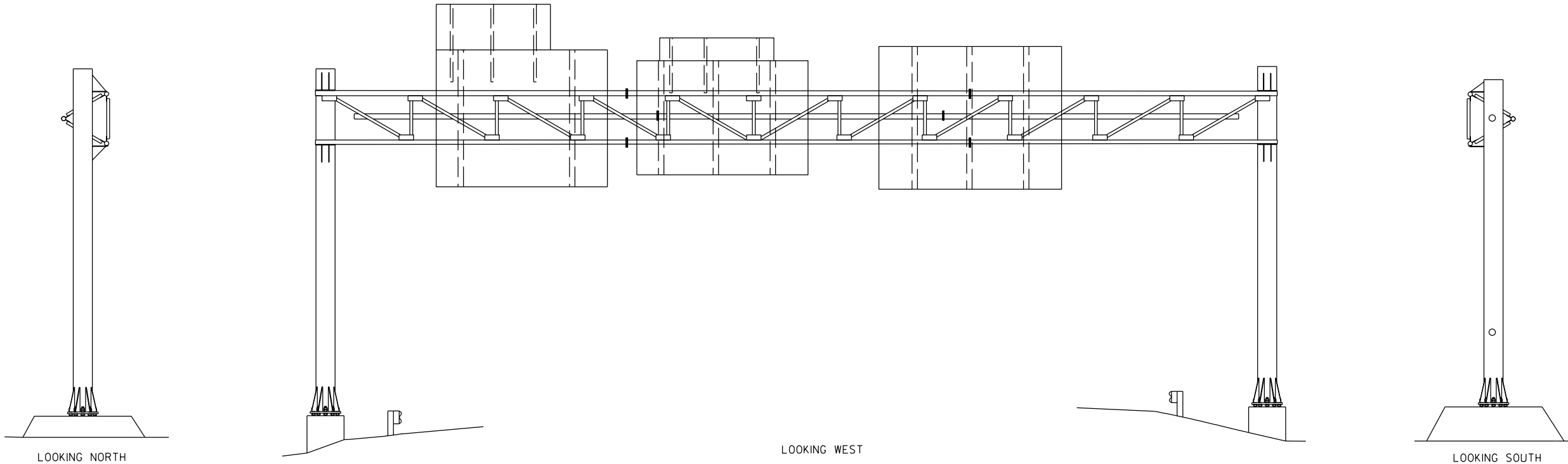
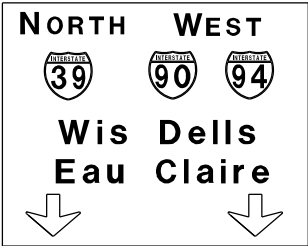
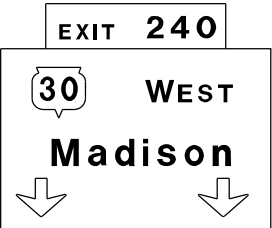
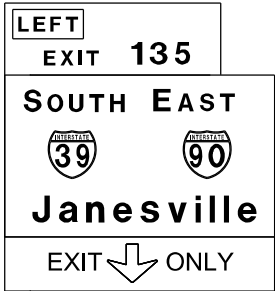
12/18 WEST	1 3/4
12/18 EAST	2 1/4
N	7

LOOKING SOUTH



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.20	REPLACE SIGN PANEL CONNECTOR	56 EA	SHEET 4
SPV.0060.26	REPLACE STRUCTURE ID PLAQUE	1EA	NONE

	NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION				
STRUCTURE S-13-0155				
	DRAWN BY	RAS	PLANS CK'D.	BRS
MAINTENANCE ITEMS				SHEET 20 OF 38



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-13-0157			
DRAWN BY		BRS	PLANS CK'D. FKH
MAINTENANCE ITEMS			SHEET 21 OF 38

EXITS 98A-B

Nelson Rd
American Pkwy
1/2 MILE

EXIT 97B

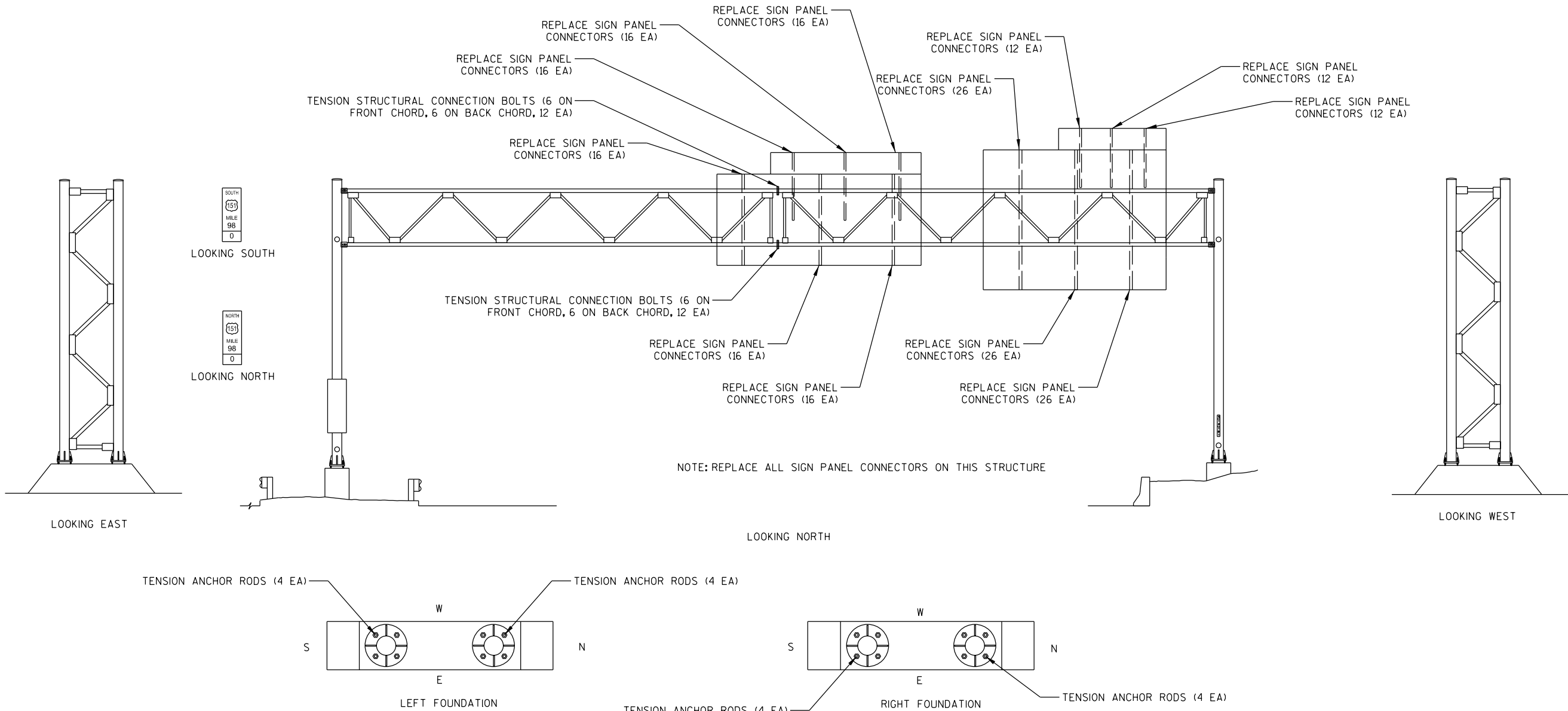
NORTH WEST



Wis Dells



EXIT ONLY



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	16 EA	NONE
SPV.0060.10	TENSION STRUCTURAL CONNECTION BOLT	24 EA	SHEET 2
SPV.0060.20	REPLACE SIGN PANEL CONNECTOR	210 EA	SHEET 4

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-0181			
DRAWN BY		RAS	PLANS CK'D. BRS
MAINTENANCE ITEMS			SHEET 22 OF 38

EXIT 266



Stoughton Rd
1/2 Mile

VMS

INSTALL POST CAPS (2 EA)

REPLACE SIGN PANEL
CONNECTOR (14 EA)

INSTALL POST CAPS (2 EA)

REPLACE SIGN PANEL
CONNECTOR (14 EA)

REPLACE SIGN PANEL
CONNECTOR (14 EA)

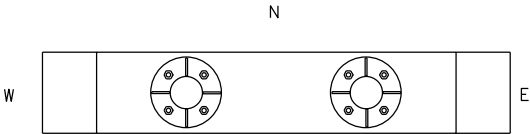
REPLACE SIGN PANEL
CONNECTOR (15 EA)

TIGHTEN/REPLACE
HANDHOLE COVER
BOLT (1EA)

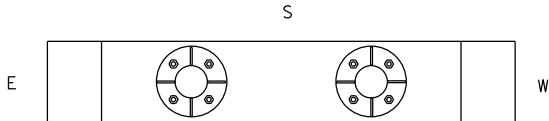
LOOKING NORTH

LOOKING WEST

LOOKING SOUTH



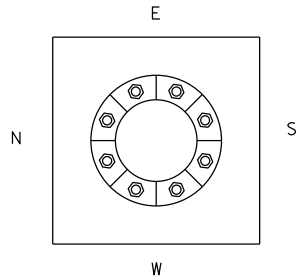
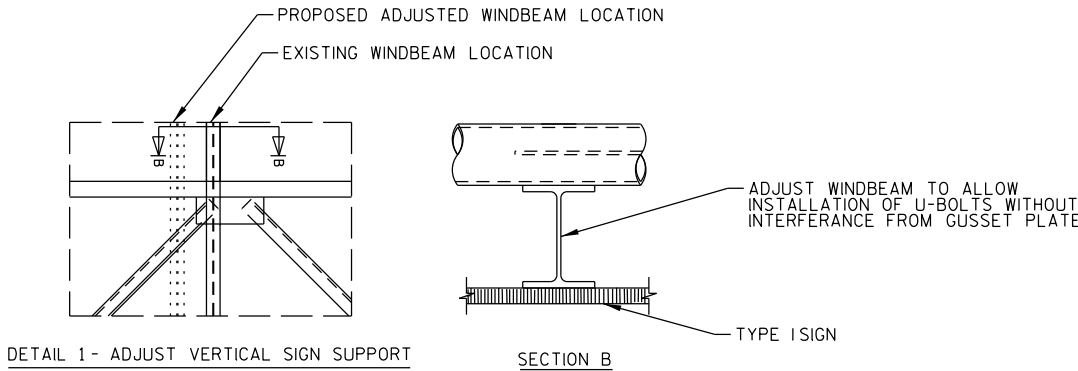
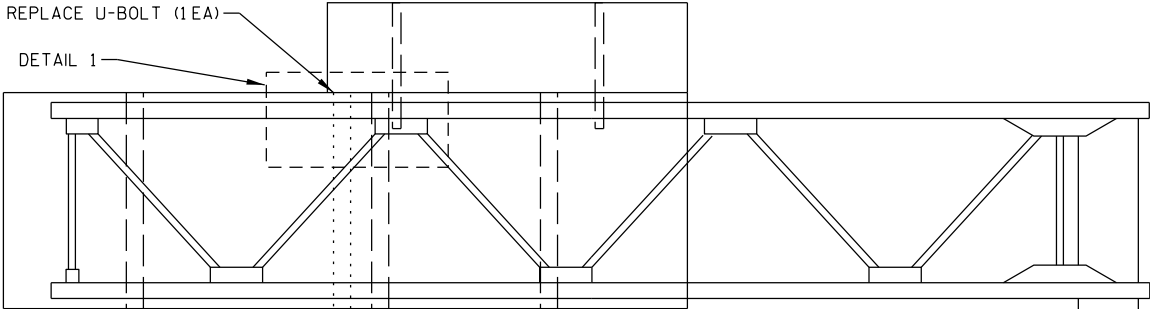
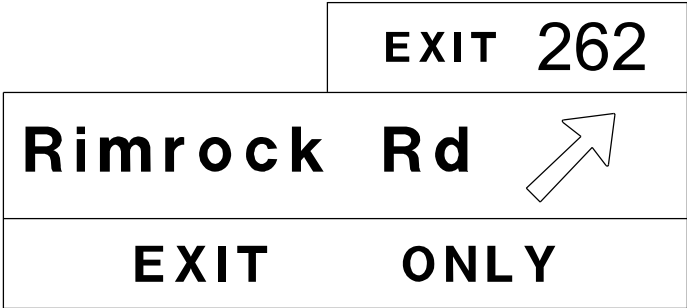
LEFT FOUNDATION



RIGHT FOUNDATION

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.12	SECURE/REPLACE END/POST CAPS	4 EA	SHEET 2
SPV.0060.20	REPLACE SIGN PANEL CONNECTOR	57 EA	SHEET 4
SPV.0060.42	TIGHTEN/REPLACE HANDHOLE COVER BOLT	1EA	SHEET 4

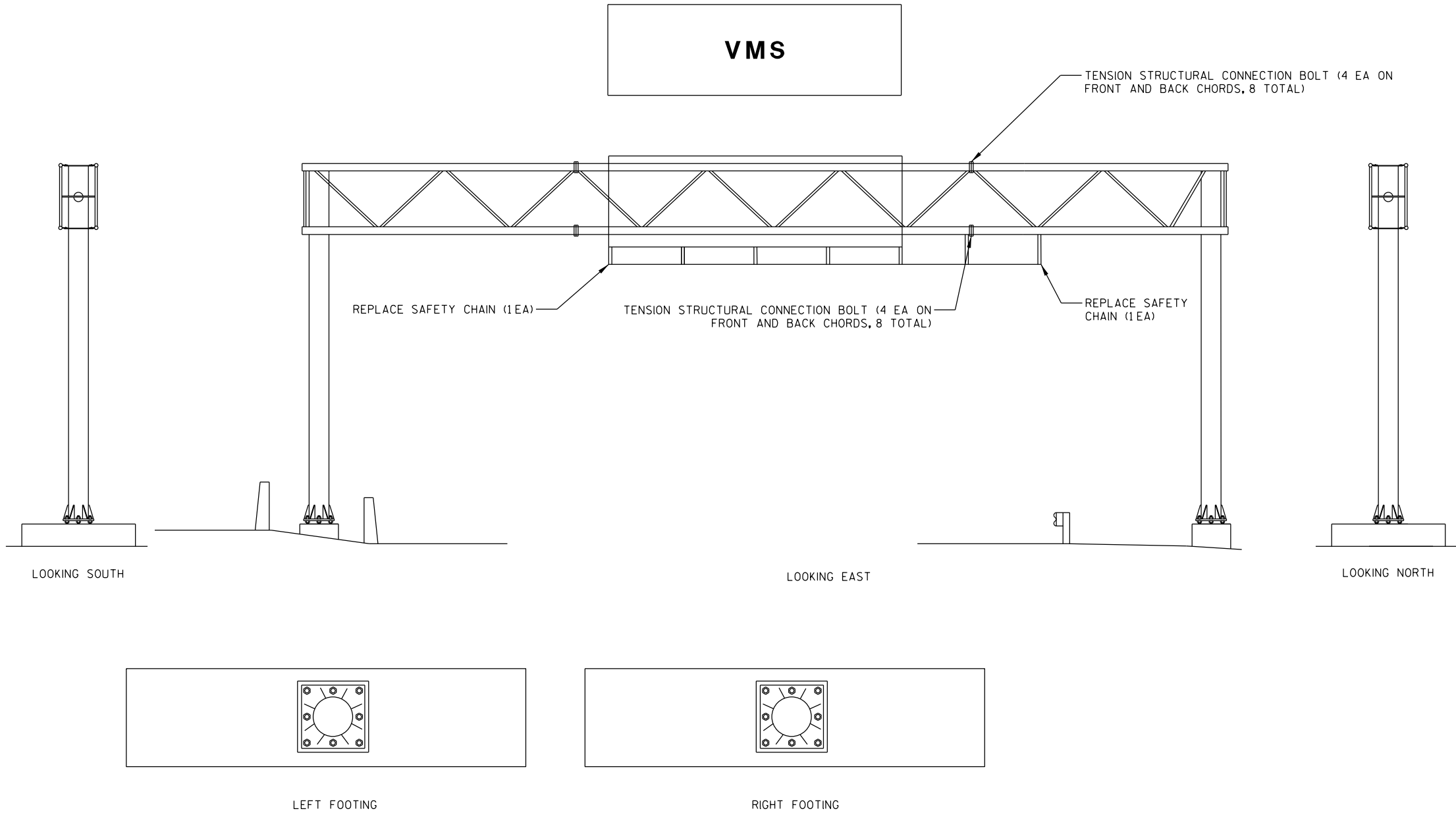
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-0188			
DRAWN BY		RAS	PLANS CK'D. BRS
MAINTENANCE ITEMS			SHEET 25 OF 38



LOOKING EAST

LOOKING NORTH

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
SPV.0060.25	REPLACE U-BOLT	1EA	SHEET 4	STRUCTURE S-13-0281			
SPV.0060.41	ADJUST VERTICAL SIGN SUPPORT	1EA	DETAIL 1, THIS SHEET	DRAWN BY	RAS	PLANS CK'D.	BRS
				MAINTENANCE ITEMS		SHEET 24 OF 38	



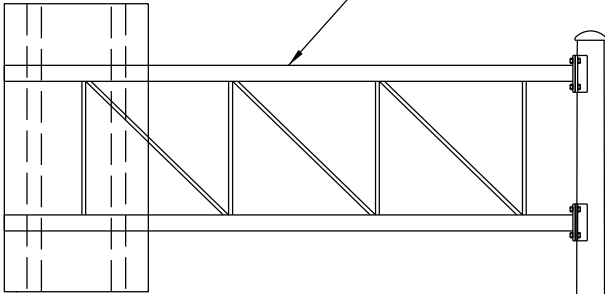
8

8

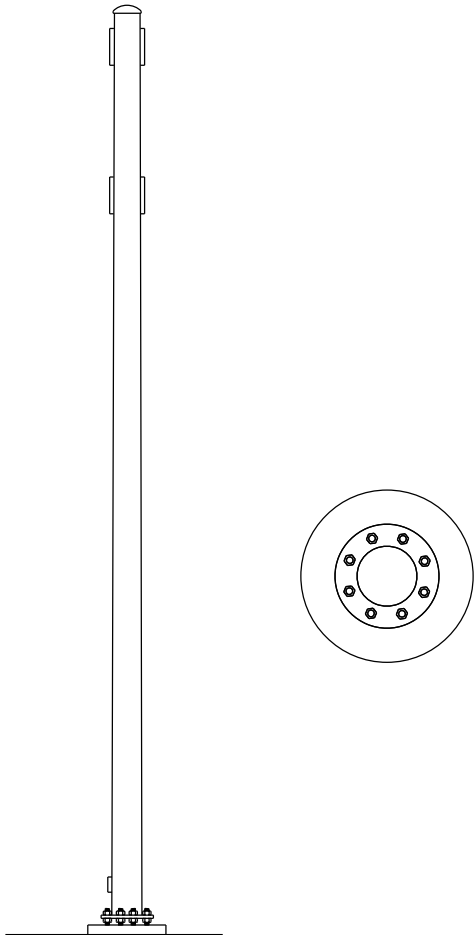
				NO.	DATE	REVISION		BY
ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION				
SPV.0060.10	TENSION STRUCTURAL CONNECTION BOLT	16 EA	SHEET 2	STRUCTURE S-13-0291				
SPV.0060.31	REPLACE SAFETY CHAIN	2 EA	SHEET 5			DRAWN BY	RAS	PLANS CK'D. BRS
				MAINTENANCE ITEMS			SHEET 25 OF 38	



REINSTALL TRUSS (1 EA)



LOOKING EAST



LOOKING SOUTH

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.18	REINSTALL TRUSS	1 EA	SHEET 3

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-0322			
DRAWN BY RAS		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 26 OF 38

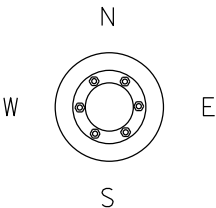
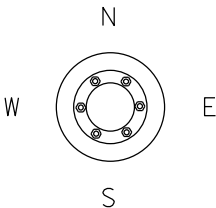
REPLACE/SECURE
POST CAP (1EA)

REPLACE U-BOLT (1EA)

LOOKING EAST

LOOKING NORTH

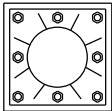
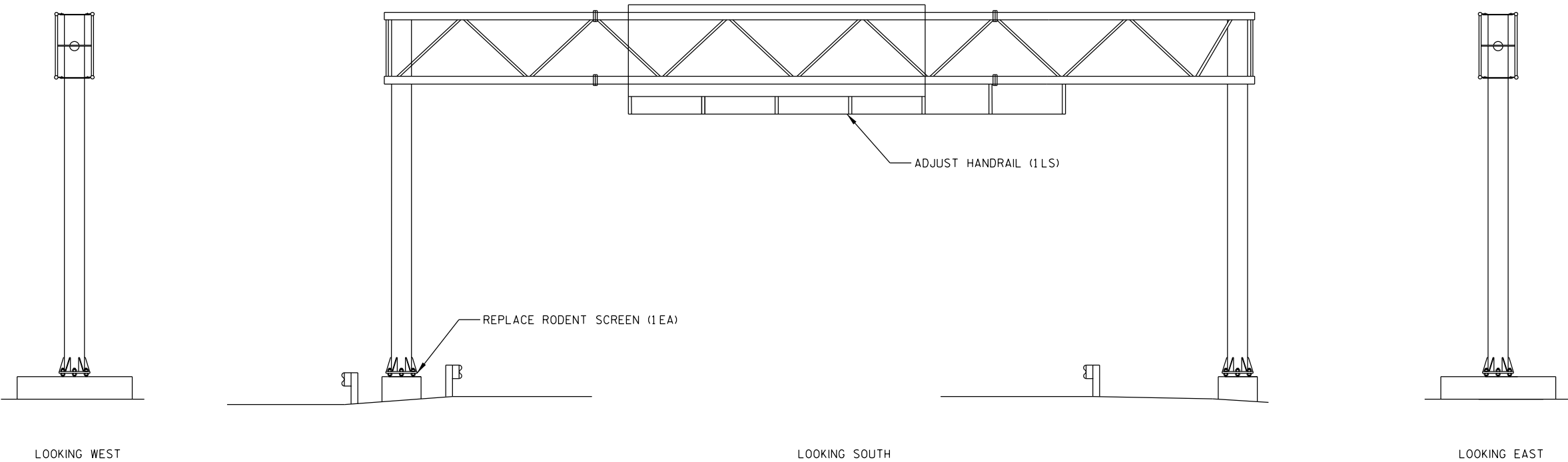
LOOKING WEST



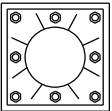
ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.12	SECURE/REPLACE END/POST CAPS	1 EA	SHEET 2
SPV.0060.25	REPLACE U-BOLT	1 EA	SHEET 2

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-0323			
DRAWN BY	BRS	PLANS CK'D.	FKH
MAINTENANCE ITEMS			SHEET 27 OF 38

VMS



LEFT FOOTING



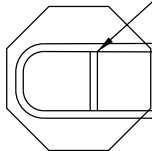
RIGHT FOOTING

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.05	REPLACE RODENT SCREEN	1 EA	SHEET 1
SPV.0105.01	ADJUST HANDRAIL	1 LS	SHEET 5

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-13-0337			
DRAWN BY		RAS	PLANS CK'D. BRS
MAINTENANCE ITEMS			SHEET 28 OF 38



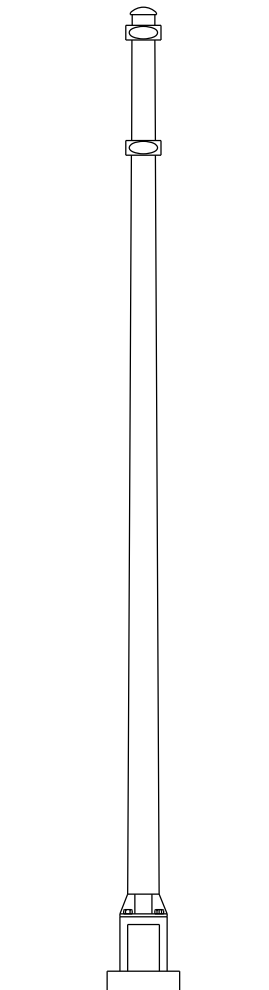
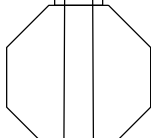
REPLACE CONDUIT PLUGS (3 EA)



SIGNS TYPE IIREFLECTIVE SH (1SF)

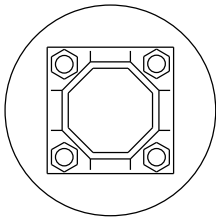
REMOVING SIGNS TYPE II(1EA)

REPLACE STRUCTURE ID PLAQUE (1EA)



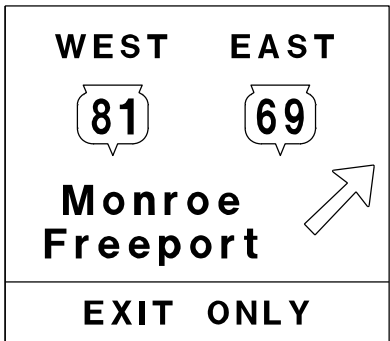
LOOKING WEST

LOOKING SOUTH



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
637.2210	SIGNS TYPE IIREFLECTIVE SH	1 SF	NONE
638.2602	REMOVING TYPE IIREFLECTIVE SH	1 EA	NONE
SPV.0060.26	REPLACE STRUCTURE ID PLAQUE	1 EA	NONE
SPV.0060.40	REPLACE CONDUIT PLUG	3 EA	NONE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-14-0004			
DRAWN BY RAS		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 29 OF 38



REPLACE SIGN PANEL CONNECTOR (15 EA)

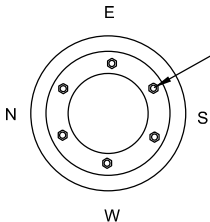
REPLACE SIGN PANEL CONNECTOR (14 EA)

REPLACE SIGN PANEL CONNECTOR (14 EA)



REPLACE STRUCTURE ID PLAQUE (1EA)

REMOVE GROUT PAD (1EA)

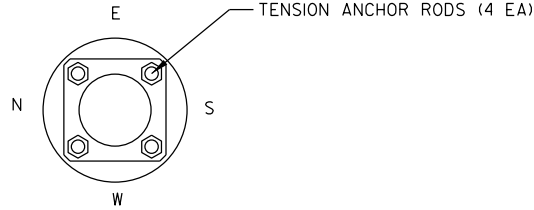
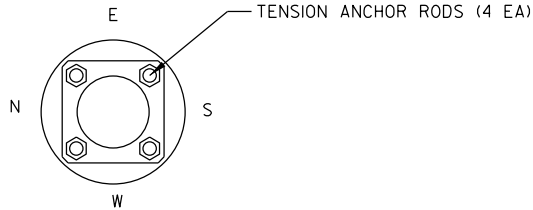
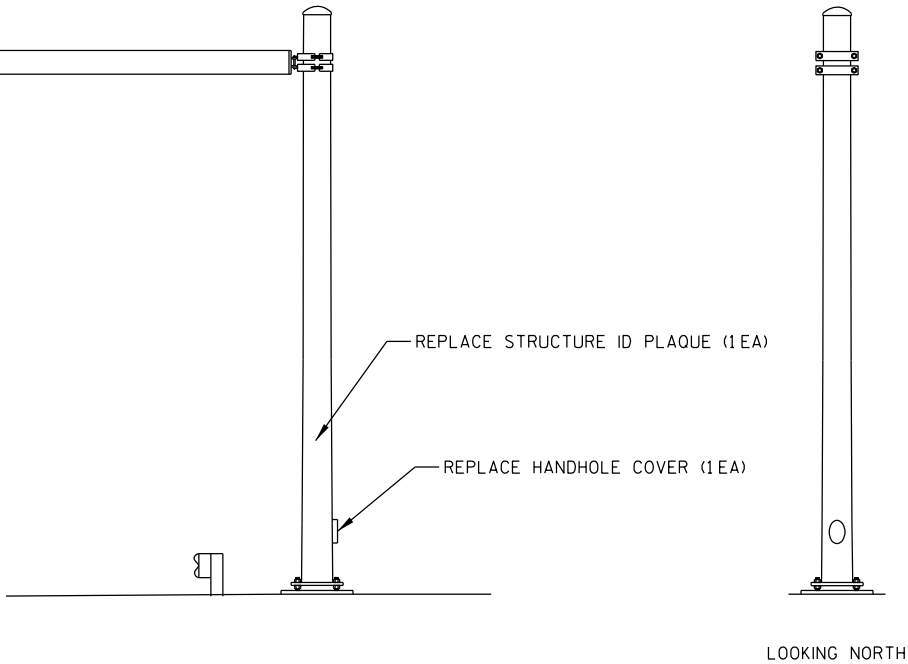
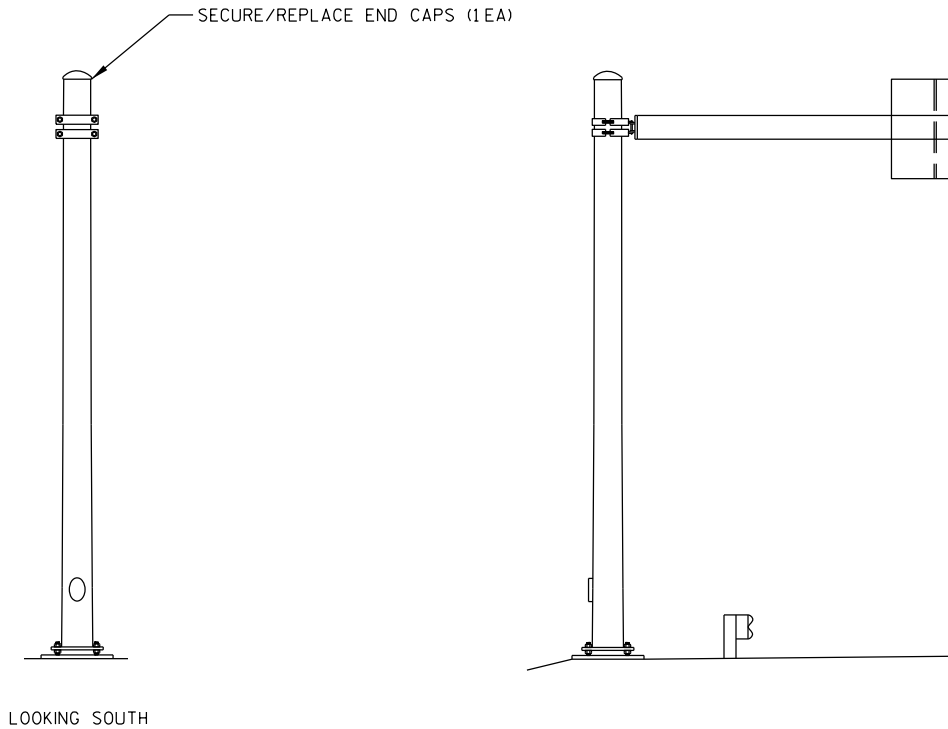


TENSION ANCHOR RODS (6 EA)

LOOKING EAST

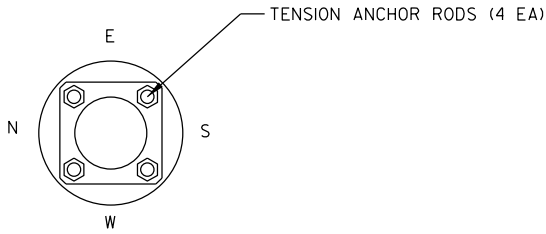
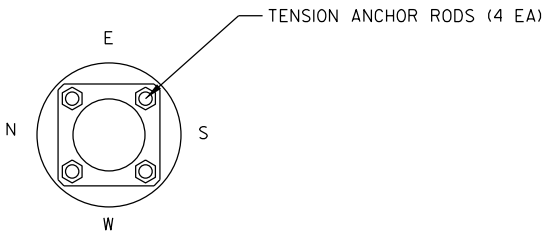
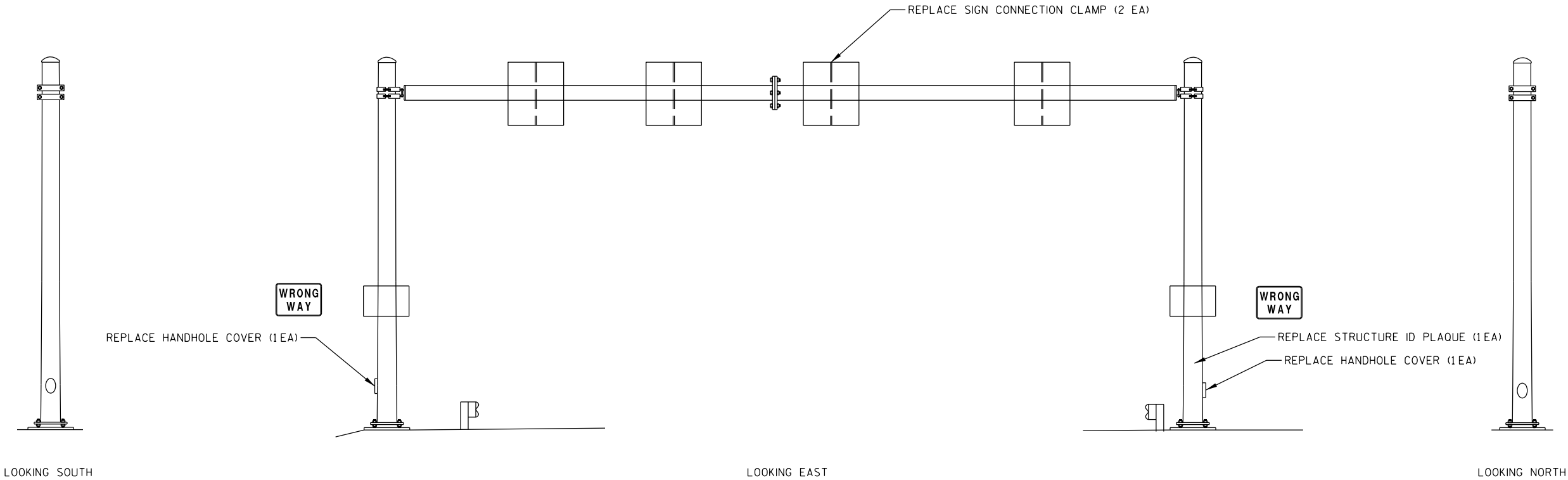
LOOKING NORTH

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
SPV.0060.01	TENSION ANCHOR ROD	6 EA	NONE	STRUCTURE S-23-0002			
SPV.0060.06	REMOVE GROUT PAD	1 EA	SHEET 1	DRAWN BY RAS		PLANS CK'D. BRS	
SPV.0060.20	REPLACE SIGN PANEL CONNECTOR	43 EA	SHEET 4	MAINTENANCE ITEMS		SHEET 30 OF 38	
SPV.0060.26	REPLACE STRUCTURE ID PLAQUE	1 EA	NONE				



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	8 EA	NONE
SPV.0060.12	SECURE/REPLACE END CAPS	1EA	SHEET 2
SPV.0060.26	REPLACE STRUCTURE ID PLAQUE	1EA	NONE
SPV.0060.41	REPLACE HANDHOLE COVER	1EA	SHEET 4

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-28-0001			
DRAWN BY		RAS	PLANS CK'D. BRS
MAINTENANCE ITEMS			SHEET 31 OF 38



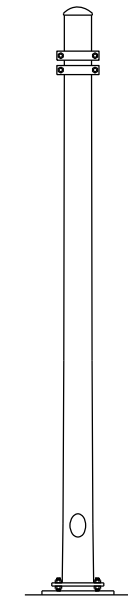
				NO.	DATE	REVISION		BY
ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION				
SPV.0060.01	TENSION ANCHOR ROD	8 EA	NONE	STRUCTURE S-28-0002				
SPV.0060.24	REPLACE SIGN CONNECTION CLAMP	2 EA	SHEET 4			DRAWN BY	RAS	PLANS CK'D. BRS
SPV.0060.26	REPLACE STRUCTURE ID PLAQUE	1 EA	NONE	MAINTENANCE ITEMS				SHEET 32 OF 38
SPV.0060.41	REPLACE HANDHOLE COVER	2 EA	SHEET 4					



REPLACE SIGN CONNECTION CLAMP (2 EA)

REPLACE SIGN CONNECTION CLAMP (3 EA)

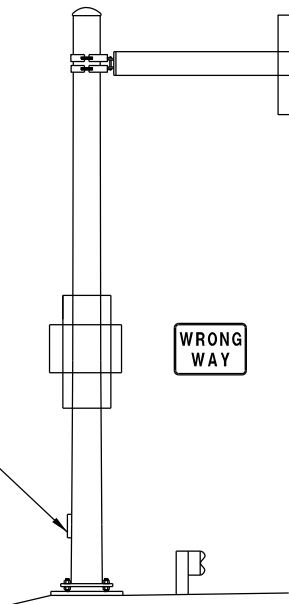
REPLACE SIGN CONNECTION CLAMP (2 EA)



LOOKING SOUTH



REPLACE HANDHOLE COVER (1 EA)

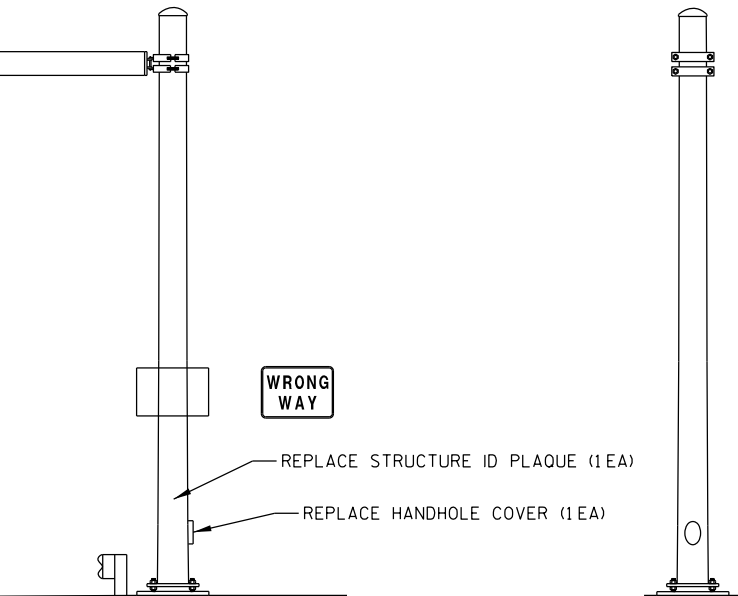


LOOKING EAST

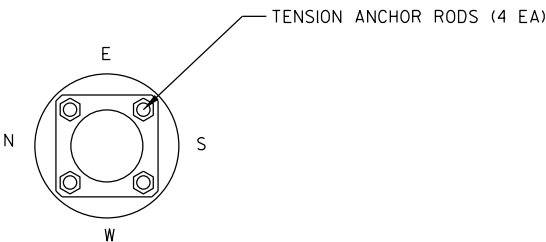


REPLACE STRUCTURE ID PLAQUE (1 EA)

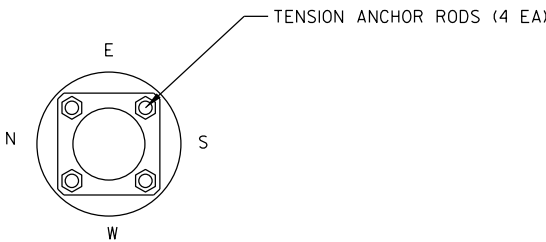
REPLACE HANDHOLE COVER (1 EA)



LOOKING NORTH



TENSION ANCHOR RODS (4 EA)



TENSION ANCHOR RODS (4 EA)

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	8 EA	NONE
SPV.0060.24	REPLACE SIGN CONNECTION CLAMP	7 EA	SHEET 4
SPV.0060.26	REPLACE STRUCTURE ID PLAQUE	1 EA	NONE
SPV.0060.41	REPLACE HANDHOLE COVER	2 EA	SHEET 4

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-28-0003			
DRAWN BY		RAS	PLANS CK'D. BRS
MAINTENANCE ITEMS			SHEET 33 OF 38

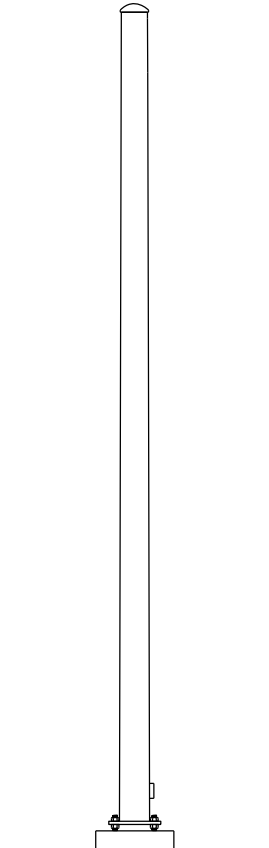


REPLACE SIGN CONNECTION CLAMP (2 EA)

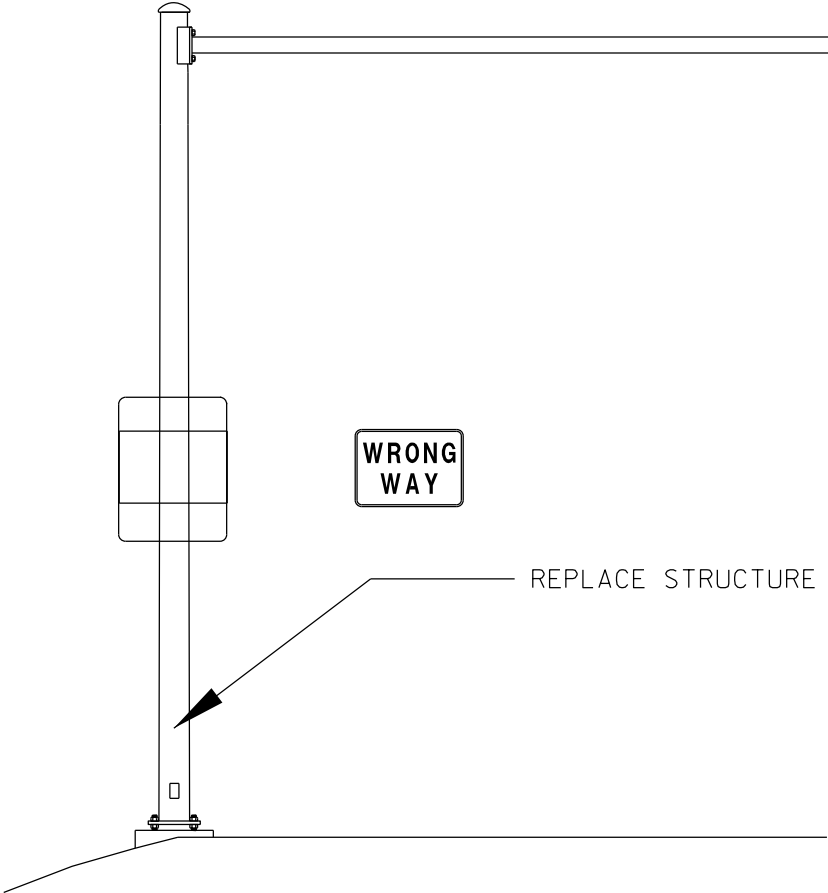
SECURE/REPLACE END CAPS (1EA)



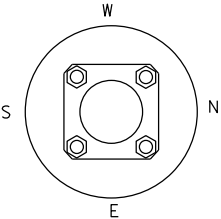
REPLACE STRUCTURE ID PLAQUE (1EA)



LOOKING NORTH



LOOKING WEST



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.12	SECURE/REPLACE END CAPS	1 EA	SHEET 2
SPV.0060.24	REPLACE SIGN CONNECTION CLAMP	2 EA	SHEET 4
SPV.0060.26	REPLACE STRUCTURE ID PLAQUE	1 EA	NONE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-28-0004			
DRAWN BY		RAS	PLANS CK'D. BRS
MAINTENANCE ITEMS			SHEET 34 OF 38



REPLACE SIGN CONNECTION CLAMP (1EA)

REPLACE SIGN CONNECTION CLAMP (1EA)

REPLACE SIGN CONNECTION CLAMP (1EA)

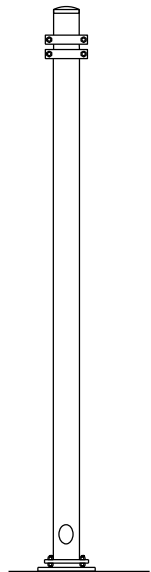
REPLACE SIGN CONNECTION CLAMP (1EA)

REPLACE SIGN CONNECTION CLAMP (2 EA)

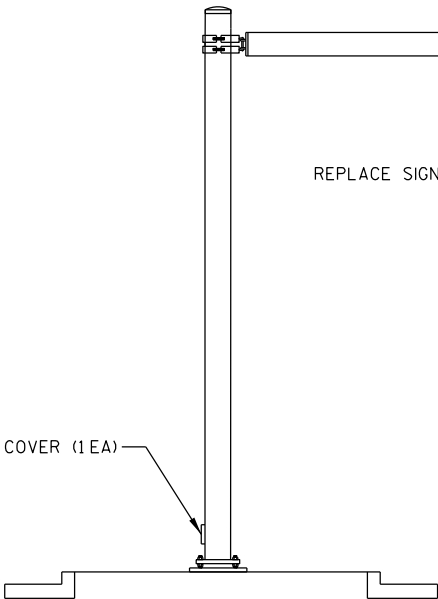
REPLACE STRUCTURE ID PLAQUE (1EA)

REPLACE HANDHOLE COVER (1EA)

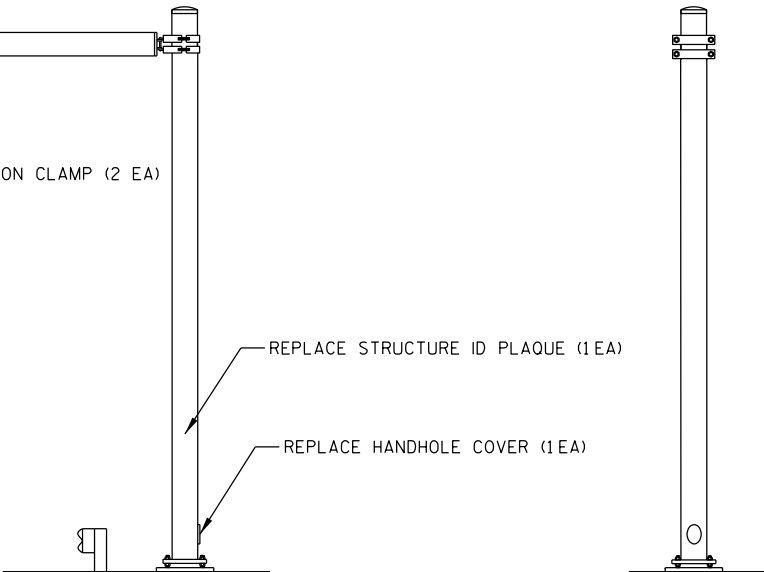
REPLACE HANDHOLE COVER (1EA)



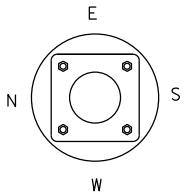
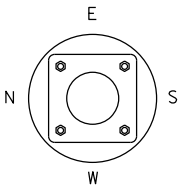
LOOKING EAST



LOOKING NORTH



LOOKING WEST

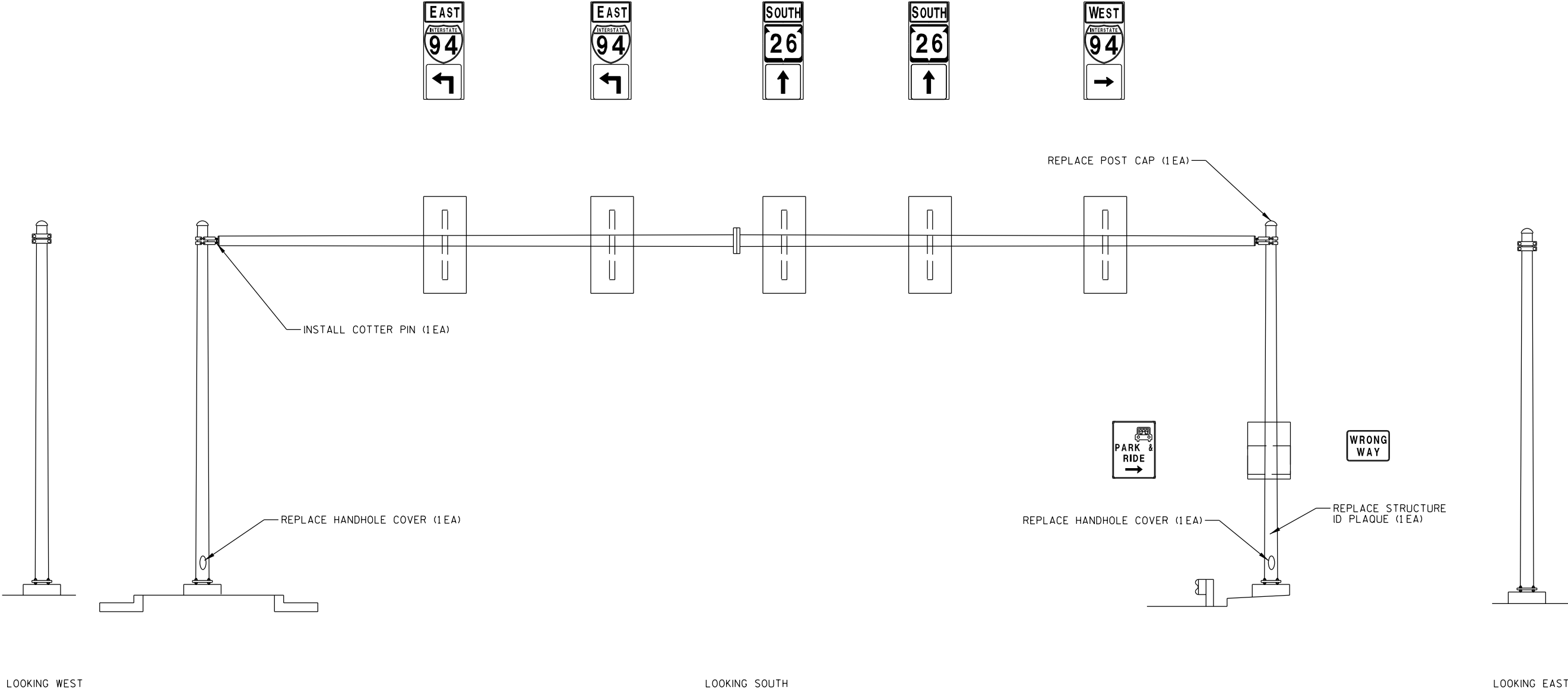


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ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.24	REPLACE SIGN CONNECTION CLAMP	6 EA	SHEET 4
SPV.0060.26	REPLACE STRUCTURE ID PLAQUE	1 EA	NONE
SPV.0060.41	REPLACE HANDHOLE COVER	2 EA	SHEET 4

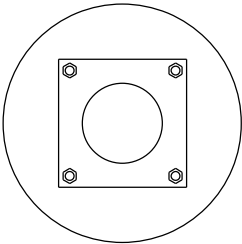
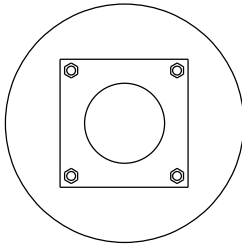
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-28-0005			
DRAWN BY RAS		PLANS CK'D. BRS	
MAINTENANCE ITEMS			SHEET 35 OF 38



LOOKING WEST

LOOKING SOUTH

LOOKING EAST

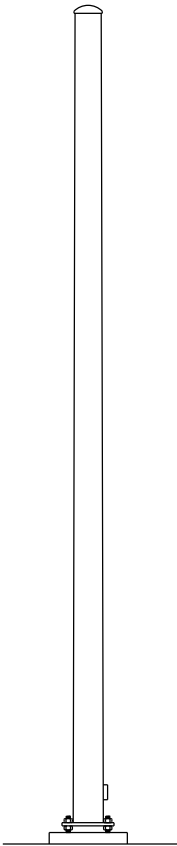


ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.12	SECURE/REPLACE END/POST CAPS	1 EA	SHEET 2
SPV.0060.26	REPLACE STRUCTURE ID PLAQUE	1 EA	NONE
SPV.0060.41	REPLACE HANDHOLE COVERS	2 EA	SHEET 4
SPV.0060.44	INSTALL COTTER PIN	1 EA	SHEET 2

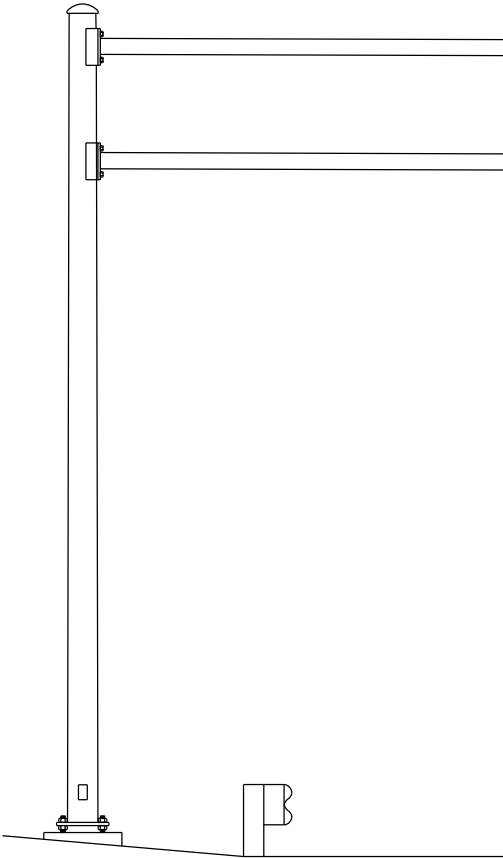
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-28-0006			
DRAWN BY		RAS	PLANS CK'D. BRS
MAINTENANCE ITEMS			SHEET 36 OF 38



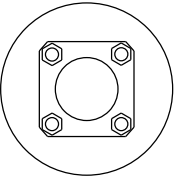
REPLACE SIGN CONNECTION CLAMP (4 EA)



LOOKING NORTH

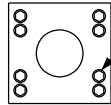


LOOKING WEST



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.24	REPLACE SIGN CONNECTION CLAMP	4 EA	SHEET 4

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-28-0014			
DRAWN BY		RAS	PLANS CK'D. BRS
MAINTENANCE ITEMS			SHEET 37 OF 38



SECTION A-A

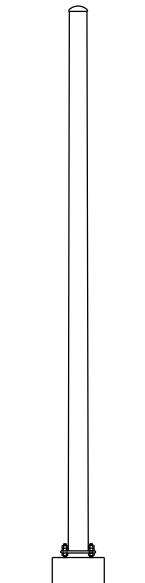
TIGHTEN CONNECTION BOLT (NON-FRICTION) (1 EA)

VARIABLE MESSAGE BOARD

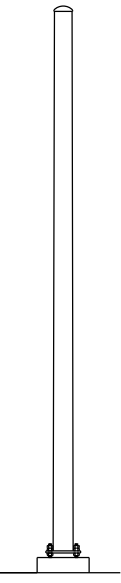
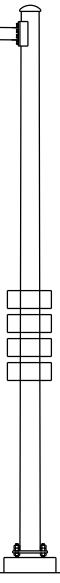
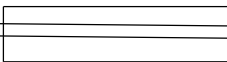
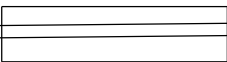
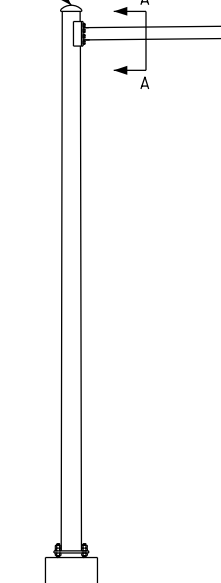
VARIABLE MESSAGE BOARD

SECURE POST CAP (1EA)

A
A

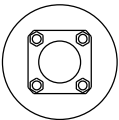
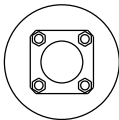


LOOKING EAST



LOOKING WEST

LOOKING NORTH



8

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ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.20	SECURE/REPLACE END/POST CAPS	1 EA	SHEET 2
SPV.0060.43	TIGHTEN CONNECTION BOLT (NON-FRICTION)	1 EA	NONE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-53-0036			
DRAWN BY		RAS	PLANS CK'D. BRS
MAINTENANCE ITEMS			SHEET 38 OF 38



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