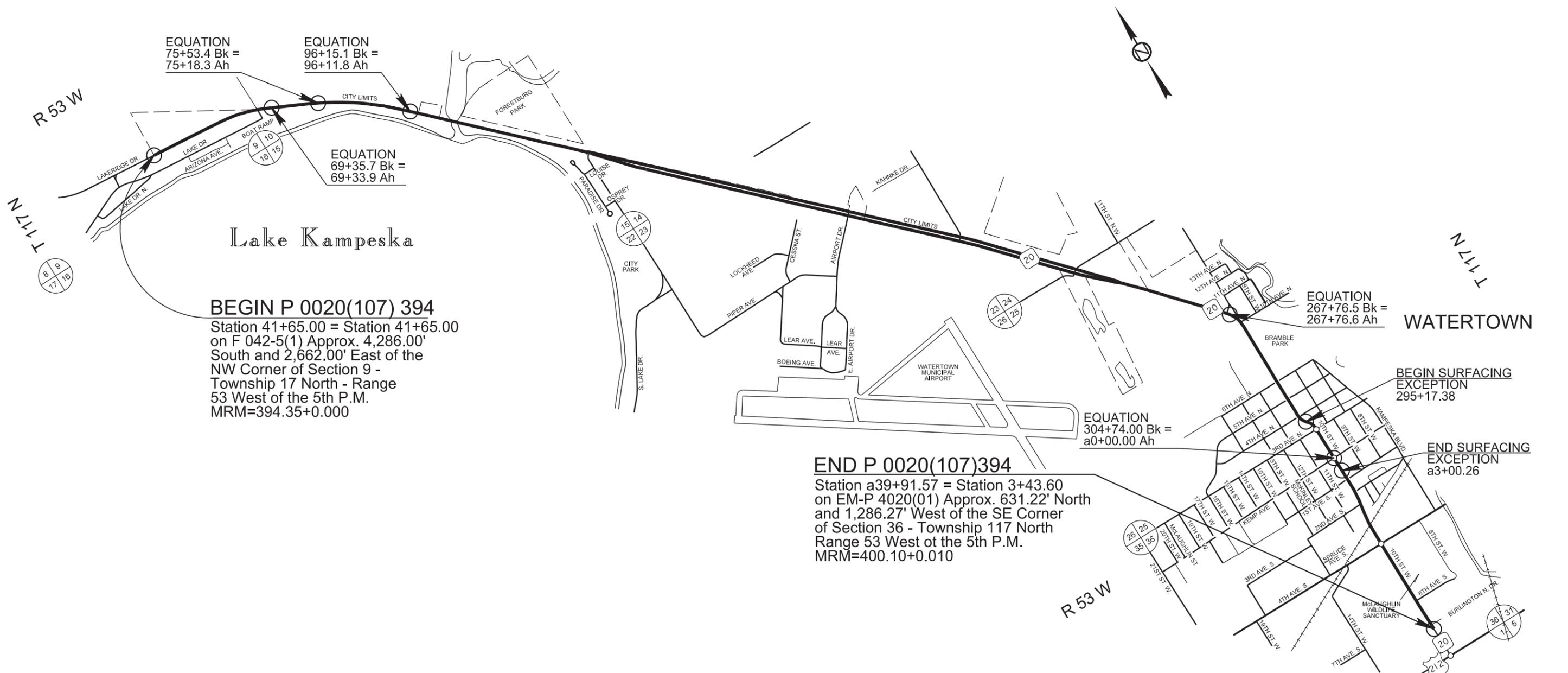


# Section S: Permanent Signing

## INDEX OF SHEETS

- Sheet S1: Title Sheet W/Layout Map
- Sheet S2: Plan Notes
- Sheet S3-S4: Sign Summary
- Sheet S5-S11: Sign Installation Table
- Sheet S12-S24: Sign Installation Details
- Sheet S25: Standard Plate



**BEGIN P 0020(107) 394**  
 Station 41+65.00 = Station 41+65.00  
 on F 042-5(1) Approx. 4,286.00'  
 South and 2,662.00' East of the  
 NW Corner of Section 9 -  
 Township 17 North - Range  
 53 West of the 5th P.M.  
 MRM=394.35+0.000

**END P 0020(107)394**  
 Station a39+91.57 = Station 3+43.60  
 on EM-P 4020(01) Approx. 631.22' North  
 and 1,286.27' West of the SE Corner  
 of Section 36 - Township 117 North  
 Range 53 West of the 5th P.M.  
 MRM=400.10+0.010

**BEGIN SURFACING  
EXCEPTION**  
 295+17.38

**END SURFACING  
EXCEPTION**  
 a3+00.26

Plot Scale - 1:200

Plotted From - trab12222

Plot Name - 4

File - ...apj\Cocm027\U\Signing\Title.dgn

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P 0020( 107 )394	S2	S25
Plotting Date: 12/09/2013			

### SECTION S ESTIMATE OF QUANTITIES

Bid Item Number	Item	Quantity	Unit
110E0130	Remove Traffic Sign	199	Each
110E7150	Remove Sign for Reset	31	Each
632E1320	2.0"x2.0" Perforated Tube Post	756.0	Ft
632E1340	2.5"x2.5" Perforated Tube Post	335.0	Ft
632E2530	Type 3 Object Marker	4	Each
632E3203	Flat Aluminum Sign, Nonremovable Copy High Intensity	730.5	SqFt
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	538.1	SqFt
632E3500	Reset Sign	31	Each

### GENERAL PERMANENT SIGNING NOTES

Permanent sign locations shall be staked in the field by the Contractor and checked by the Engineer. The Contractor shall give the Engineer a minimum of one week to check staked locations prior to sign/post installation.

The Contractor shall be responsible for contacting South Dakota One Call to locate the utilities at the staked sign installation locations.

Prior to ordering sign posts, the Contractor shall verify post lengths.

City street signs are to be reattached to signs as listed in the Permanent Sign Installation Table. The Contractor shall supply hardware to attach these signs. All costs for labor and hardware to reattach city street signs shall be incidental to the various signing contract items.

### REMOVE EXISTING SIGNS

Existing signs within the project limits are summarized in the Sign Table. This table provides the approximate MRM location for each sign. Existing signs in the table are indicated to be removed and not reused.

All existing signs and hardware listed to be removed shall become the property of the Contractor.

Holes remaining from the removal of 4"x6" sign posts shall be backfilled and compacted with material placed in layers not to exceed 6 inches in depth.

All costs associated with the removal of existing signs, posts, and hardware shall be incidental to the contract unit price per each for REMOVE TRAFFIC SIGN.

### DATE DECALS

The Contractor shall furnish and affix a date decal to each new sign installed. Date decals shall be self-adhesive weather resistant stickers with removable paper backing, approximately 2" X 2" in size. The date decal shall display the last two digits of the year the sign was manufactured with black numerals on a white background.

One decal shall be placed in the extreme lower left corner of the front of each extruded aluminum panel sign, or the extreme lower left corner of the back of each flat aluminum sign.

Sign supports or other obstructions shall not block the view of the date decal upon completion of the sign installation.

All costs to furnish and install date decals on new signs shall be incidental to the contract unit price per square foot for, FLAT ALUMINUM SIGN, NONREMOVEABLE COPY HIGH INTENSITY, or FLAT ALUMINUM SIGN, NONREMOVEABLE COPY SUPER/VERY HIGH INTENSITY.

### NEW PERMANENT SIGNING

New signs for installation are summarized in the Permanent Sign Table.

#### Sign Design

Signs shall be constructed as required per the Manual on Uniform Traffic Control Devices (MUTCD), the latest edition of "Standard Highway Signs", and as specified on the Special Sign Design sheets.

All sign material shall comply with Section 982 of the Standard Specifications.

All upper/lower case letters and numerals shall be as required per the MUTCD, the latest edition of "Standard Highway Signs", and as illustrated on the Special Sign Design sheets.

The Contractor shall furnish the Aberdeen Region Traffic Engineer (P.O. Box 1767; Aberdeen, SD 57402) with a detailed sign layout sheet for each sign shown. These detailed sign layout shall be approved by the Region Traffic Engineer prior to ordering the signs.

#### Sign Sheeting

Signs shall be constructed using High Intensity (ASTM D4956) or Super/Very High Intensity (ASTM D4956 Type XI) reflective sheeting as summarized in the SD 20 Permanent Sign Installation Tables.

All signs shall be manufactured in accordance with the sheeting manufacturer's recommendations utilizing a matched component system, including inks, electronic cuttable films, and protective overlay films. Digitally printed signs will not be accepted.

All black legend and borders shall be nonreflectorized (unless otherwise specified in these plans).

#### Sign Installation Hardware

Aluminum U-Channel stiffeners shall be used on all standard highway signs greater than 36 inches in width and shall conform to Alloy 6063-T6 or 6061-T6. The U-Channel shall be 2 inches in width and free of holes. The U-Channel stiffeners shall also be used to connect various signs together so that an entire sign assembly can be erected on a single installation.

Stiffeners may be fastened to signs by use of ¼ inch diameter drive rivets.

Refer to the Breakaway Sign Supports diagram for typical sign and stiffener details.

The Contractor shall use 3/8 inch diameter rust proof machine sign bolts, flat metal washers, neoprene washers (against the sign sheeting), lock washers, and nuts to fasten the sign to the channel aluminum and posts. A minimum of two bolts shall extend through each post.

All costs associated with furnishing and installing the new permanent signs, furnishing and installing stiffeners and hardware shall be incidental to the contract unit price per square foot for FLAT ALUMINUM SIGN, NONREMOVEABLE COPY HIGH INTENSITY, or FLAT ALUMINUM SIGN, NONREMOVEABLE COPY SUPER/VERY HIGH INTENSITY.

### SQUARE TUBE ANCHOR SLEEVE

The Contractor shall furnish and install new square tube anchor sleeve as follows:

2.5" x 18", 12 Gauge square tube anchor sleeve, (or equivalent components as approved by the Engineer).

A 2.25" x 2.25" x 4' perforated tube post (12 Gauge) shall be used as the anchor post for installation with the square tube anchor sleeve.

### SQUARE TUBE POST SLEEVE

All 2.5"x2.5" perforated tube post (10 Gauge) shall be sleeved with a 2 3/16"x2 3/16"x4' perforated tube post (10 Gauge).

### WINGED SLIP BASE ANCHOR

The Contractor shall furnish and install new winged anchor as required per the plans.

Winged anchor shall be installed using direct drive method.

Winged anchor shall consist of a slip base (upper), 48 inch long winged anchor (lower), and hardware kit.

### MILEAGE REFERENCE MARKERS

MRMs (Mileage Reference Markers) are not to be disturbed. If an MRM is attached to a sign listed for replacement it shall be salvaged and reattached to the new sign in the same location. Payment for this work shall be incidental to the various signing contract items.

### SIGN BANDING

All costs associated with furnishing and installing the sign banding hardware, stainless steel banding strap, flared leg bracket, stainless steel banding buckle, bolts, nuts and washers shall be incidental to the contract unit price per square foot for FLAT ALUMINUM SIGN, NONREMOVEABLE COPY HIGH INTENSITY, or FLAT ALUMINUM SIGN, NONREMOVEABLE COPY SUPER/VERY HIGH INTENSITY.

# Sign Summary SD 20

STATE OF SOUTH DAKOTA	PROJECT P 0020( 107 )394	SHEET NO. S3	TOTAL SHEETS S25
Plotting Date: 12/09/2013			

Sign Code	Description	Width	Height	Sq. Ft.	No.	Flat Aluminum Sign, Nonremovable Copy High Intensity (SQFT)	Flat Aluminum Sign, Nonremovable Copy Super or Very High Intensity (SQFT)	Text / Background
Special	No Fishing From Bridge	30	36	7.5	4	30.0		Black On White
CSP	Conspicuity Marker	4	48	1.3	9		12.0	Florescent Yellow
D1-1	Stadium/Ag Building	42	24	7.0	1	7.0		White on Green
D1-1	Watertown Municipal Airport >/<---	42	48	14.0	2	28.0		White on Green
D1-1	Lake Area Tech. Institute Av. Annex	90	54	33.8	2	67.5		White on Green
D1-1	Big Sioux State Tree Nursery <-- 3 Miles/ 3 Miles --->	120	42	35.0	2	70.0		White on Green
D1-1	Humane Society--->/<---	36	24	6.0	2	12.0		White on Green
D1-1	Business District	42	30	8.8	1	8.8		White on Green
D2-1	Flourence 16	66	18	8.3	1	8.3		White on Green
D9-2	Hospital	24	24	4.0	3	12.0		White On Blue
I-2	Watertown/Population	84	24	14.0	2	28.0		White on Green
I-5	Airport	24	24	4.0	3	12.0		White on Green
I-8	Library	24	24	4.0	2	8.0		White on Green
2M-2	Lake Access	96	36	24.0	2	48.0		White On Brown
M1-5	SD 20	24	24	4.0	5	20.0		See Standard Plate 632.20
M3-2	East	24	12	2.0	2	4.0		Black on White/Green Border
M3-4	West	24	12	2.0	3	6.0		Black on White/Green Border
M6-1	Arrow	21	15	2.2	4	8.8		White on Green
M6-1	Arrow	21	15	2.2	3	6.6		White On Blue
M6-3	Ahead Arrow	21	15	2.2	1	2.2		Black on White/Green Border
R1-1	Stop Sign	30	30	5.2	24		124.8	White on Red
R1-2	Yield	36	36	3.9	6		23.4	White on Red

PLOT SCALE - 1:1,7657

PLOTTED FROM - TRAB12222

PLOT NAME - 3

FILE - ... \SIGNING\SPECIAL SIGNS.DGN

# Sign Summary SD 20

STATE OF SOUTH DAKOTA	PROJECT P 0020(107)394	SHEET NO. S4	TOTAL SHEETS S25
Plotting Date: 12/09/2013			

R2-1	35 MPH	30	36	7.5	7	52.5		Black on White
R2-1	45 MPH	30	36	7.5	6	45.0		Black on White
R2-1	55 MPH	30	36	7.5	2	15.0		Black on White
R3-9b	Center Turnlane Only	24	36	6.0	5	30.0		Black on White
R3-9cP	Begin	30	12	2.5	1	2.5		Black on White
R3-9dP	End	30	12	2.5	2	5.0		Black on White
R4-7	Keep Right Symbol	30	36	7.5	2	15.0		Black on White
R5-1	Do Not Enter	36	36	9.0	13		117.0	White on Red
R5-1 a	Wrong Way	36	24	6.0	3		18.0	White on Red
R6-1L	One Way	54	18	6.8	8	54.0		Black on White
R6-1R	One Way	54	18	6.8	6	40.5		Black on White
R8-3	No Parking Symbol	24	24	4.0	21	84.0		Black/Red on White
S1-1	School	36	36	9.0	5		45.0	Black on Fluorescent Yellow
T-2	Type 2 Object Marker	4	8	0.2	12		2.7	Fluorescent Yellow
W1-2R	Right Hand Curve	36	36	9.0	1		9.0	Black on Yellow
W3-3	Traffic Signal Ahead	36	36	9.0	1		9.0	Black on Yellow
W3-5	Reduce Speed	36	36	9.0	2		18.0	Black on Yellow
W4-2	Right Lane Merges	36	36	9.0	1		9.0	Black on Yellow
W6-2	Divided Hwy. Ends Symbol	36	36	9.0	1		9.0	Black on Yellow
W6-3	Two Way Traffic Symbol	36	36	9.0	4		36.0	Black on Yellow
W11-1	Bicycle	36	36	9.0	8		72.0	Black on Fluorescent Yellow
W14-3	No Passing Pennant	48X48X30		5.6	2		11.2	Black on Fluorescent Yellow
W16-7 P	Down Arrow	24	12	2.0	7		14.0	Black on Fluorescent Yellow
W16-9 P	Ahead	24	12	2.0	4		8.0	Black on Fluorescent Yellow
<b>Totals</b>						<b>730.5</b>	<b>538.1</b>	

PLOT SCALE - 1:1.7657

PLOTTED FROM - TRAB1222

PLOT NAME - 3

FILE - ... \SIGNING\SPECIAL SIGNS.DGN

### SD 20 Permanent Sign Installation Table

PLOT SCALE - 1:1,7657

PLOTTED FROM - TRAB12222

PLOT NAME - 3

FILE - ... \SIGNING\SPECIAL SIGNS.DGN

MRM	Side of Road	Description	Sign Code	Width (Inches)	Height (Inches)	High Intensity (SQFT)	Super or Very High Intensity (SQFT)	2.0"x2.0" Perforated Tube Post 12 ga. (FT)	2.5"x2.5" Perforated Tube Post 10 Ga. (FT)	(N.A.B.I.) Square Tube Anchor Sleeve (Each)	(N.A.B.I.) 48" Winged Slip Base Anchor (Each)	Remove Traffic Sign (Each)	Remove Sign For Reset (Each)	Reset Sign (Each)	Direction Sign Faces	Current Type of Post	Remarks
394.450	Rt.	Watertown/Pop	I-2	84	24	14.0		22		2		1			W	2-4"X6" Wood Posts	
394.494	Rt.	No Passing Pennant	W14-3	48X48X36			5.6	11		1		1			E	U-Channel	
394.692	Rt.	Bicycle	W11-1	36	36		9.0		12		2	1		W	4"X6" Wood		
		Ahead	W16-9 P	24	12	2.0	1										
		Conspicuity Marker	CSP	4	48	1.3	1										
394.729	Lt.	No Passing Pennant	W14-3	48X48X36			5.6	11		1		1			W	4"X6" Wood	
394.748	Rt.	Lake Access	2M-2	96	36	24.0			24		2	1			W	4"X6" Wood	
394.804	Lt.	45 MPH Speed Limit	R2-1	30	36	7.5		11		1		1			E	U-Channel	
394.844	Rt.	Bicycle	W11-1	36	36		9.0		12		2	1		W	4"X6" Wood		
		Arrow	W16-7 P	24	12	2.0	1										
		Conspicuity Marker	CSP	4	48	1.3	1										
394.844	Lt.	Bicycle	W11-1	36	36		9.0		12		2	1		E	4"X6" Wood		
		Arrow	W16-7 P	24	12	2.0	1										
		Conspicuity Marker	CSP	4	48	1.3	1										
394.849	Lt.	Stop Sign	R1-1	30	30	5.2		10		1		1			M	4"X6" Wood	
394.869	Rt.	Stop Sign	R1-1	30	30	5.2		10		1		1				4"X6" Wood	With Two Street Signs
394.884	Rt.	No Driving On Shoulder No Parking Symbol													W	Square Tube	Leave in Place
394.929	Rt.	East	M3-2	24	12	2.0						1		W	Square Tube	Place New Sign On Existing Post	
		SD 20	M1-5	24	24	4.0				1							
		45 MPH Speed Limit	R2-1	30	36	7.5				1							
394.929	Rt.	Bicycle	W11-1	36	36		9.0		12		2	1		W	4"X6" Wood		
		Ahead	W16-9 P	24	12	2.0	1										
		Conspicuity Marker	CSP	4	48	1.3	1										
394.949	Lt.	Lake Access	2M-2	96	36	24.0			12		2	1		E	2-4"X6" Wood		
		No Parking Symbol	R8-3	24	24	4.0						1					
394.999	Lt.	Right Lane Merges	W4-2	36	36	9.0		12		1		1			E	4"X6" Wood	
395.208	Rt.	45 MPH Speed Limit	R2-1	30	36	7.5		11		1		1		W	Square Tube		
		No Parking Symbol	R8-3	24	24	4.0											
395.348	Rt.	No Driving On Shoulder												W	Mounted On Wooden Utility Pole	Leave in Place	
		No Parking Symbol	R8-3	24	24	4.0											
395.363	Lt.	45 MPH Speed Limit	R2-1	30	36	7.5		11		1		1		E	U-Channel		
		No Parking Symbol	R8-3	24	24	4.0							1				
395.409	Rt.	East	M3-2	24	12	2.0						1		W	Square Tube		
		SD 20	M1-5	24	24	4.0				1							
		45 MPH Speed Limit	R2-1	30	36	7.5				1							
395.569	Rt.	No Driving On Shoulder												W	Square Tube	Leave in Place	
		No Parking Symbol	R8-3	24	24	4.0				1							
395.569	Lt.	No Parking Symbol	R8-3	24	24	4.0		10		1		1			E	U-Channel	
395.640	Lt./Rt.	4-No Fishing From Bridge	Special	30	36	30.0		16		4		4			E/W	U-Channel	Install At Each Bridge Corner
395.640	Lt./Rt.	Type 3 Object Markers													E/W	U-Channel	Install At Each Bridge Corner
395.783	Lt.	No Parking Symbol	R8-3	24	24	4.0		10		1		1			E	U-Channel	

### SD 20 Permanent Sign Installation Table

PLOT SCALE - 1:1,7657

PLOTTED FROM - TRAB12222

PLOT NAME - 3

FILE - ... \SIGNING\SPECIAL SIGNS.DGN

MRM	Side of Road	Description	Sign Code	Width (Inches)	Height (Inches)	High Intensity (SQFT)	Super or Very High Intensity (SQFT)	2.0"x2.0" Perforated Tube Post 12 ga. (FT)	2.5"x2.5" Perforated Tube Post 10 Ga. (FT)	(N.A.B.I.) Square Tube Anchor Sleeve (Each)	(N.A.B.I.) 48" Winged Slip Base Anchor (Each)	Remove Traffic Sign (Each)	Remove Sign For Reset (Each)	Reset Sign (Each)	Direction Sign Faces	Current Type of Post	Remarks
395.843	Rt.	No Driving On Shoulder No Parking Symbol	R8-3	24	24	4.0						1			W	Square Tube	Leave in Place Mount on Existing Post
395.998	Lt.	Turn In Poachers Sign															Leave in Place
396.013	Rt.	Bicycle	W11-1	36	36		9.0					1			W	Mounted On Wooden Utility Pole	Mount On Utility Pole
		Ahead	W16-9 P	24	12		2.0					1					
		Conspicuity Marker	CSP	4	48		1.3					1					
396.040	Lt.	45 MPH Speed Limit	R2-1	30	36	7.5		11		1		1			E	U-Channel	
396.055	Rt.	Divide Hwy. Symbol	W6-1	36	36		9.0					1			W	Mounted On Wooden Utility Pole	Mount On Utility Pole
396.075	Lt.	Veterans Memorial Hwy.													E	4"X6" Wood	Leave in Place
396.080	Rt.	Veterans Memorial													W	Mounted On Wooden Utility Pole	Leave in Place
		Historical Marker 1000 Ft.												Leave in Place			
		Right Arrow												Leave in Place			
396.125	Rt.	Bicycle	W11-1	36	36		9.0					1			W	4"X6" Wood	
		Arrow	W16-7 P	24	12		2.0		12		2		1				
		Conspicuity Marker	CSP	4	48		1.3						1				
396.125	Lt.	Bicycle	W11-1	36	36		9.0					1			E	4"X6" Wood	
		Arrow	W16-7 P	24	12		2.0		12		2		1				
		Conspicuity Marker	CSP	4	48		1.3						1				
396.125	Rt.	City Park												W	Mounted On Wooden Utility Pole	Leave in Place	
396.130	Lt.	AADH W/3 Street Signs												E	2-4"X6" Wood	Leave in Place	
396.139	Rt.	Stop Sign	R1-1	30	30		5.2	10		1		1			S	4"X6" Wood	
396.145	Rt.	55 MPH	R2-1	30	36	7.5		11		1		1			W	U-Channel	
396.155	Lt.	Speed Zone Ahead	W3-5	36	36		9.0	11		1		1			E	U-Channel	
396.160	Lt.	Do Not Enter	R5-1	36	36		9.0					1			W	4"X6" Wood	
		Two Way Traffic Symbol	W6-3	36	36		9.0		11		1		1		E		
396.160	Median	Keep Right	R4-7	30	36	7.5						1			W	4"X6" Wood	
		Two Way Traffic Symbol	W6-3	36	36		9.0		11		1		1		E		
		Conspicuity Marker	CSP	4	48		1.3						1		W		
396.170	Rt.	Veterans Memorial Hwy.												W	4"X6" Wood	Leave in Place	
396.174	Lt.	Bicycle	W11-1	36	36		9.0								E	4"X6" Wood	
		Ahead	W16-9 P	24	12		2.0		12		2						
		Conspicuity Marker	CSP	4	48		1.3										

### SD 20 Permanent Sign Installation Table

PLOT SCALE - 1:1,7657

PLOTTED FROM - TRAB12222

PLOT NAME - 3

FILE - ... \SIGNING\SPECIAL SIGNS.DGN

MRM	Side of Road	Description	Sign Code	Width (Inches)	Height (Inches)	High Intensity (SQFT)	Super or Very High Intensity (SQFT)	2.0"x2.0" Perforated Tube Post 12 ga. (FT)	2.5"x2.5" Perforated Tube Post 10 Ga. (FT)	(N.A.B.I.) Square Tube Anchor Sleeve (Each)	(N.A.B.I.) 48" Winged Slip Base Anchor (Each)	Remove Traffic Sign (Each)	Remove Sign For Reset (Each)	Reset Sign (Each)	Direction Sign Faces	Current Type of Post	Remarks
396.194	Lt.	Veterans Memorial													E		Leave in Place
		Historical Marker 1000 Ft.															
		Right Arrow															
396.229	Lt.	Wrong Way	R5-1a	36	24		6.0					1			W	U-Channel	Reset on new Post
		City Park w/arrow								1			1	1	E		
396.429	Rt.	Do Not Enter	R5-1	36	36		9.0	11		1		1			E	4"X6" Wood	
396.487	Lt.	One Way Arrow Left	R6-1L	54	18	6.8		10		1		1			S	4"X6" Wood	
396.453	Lt.	Do Not Enter	R5-1	36	36		9.0	11		1		1			W	4"X6" Wood	
396.453	Rt.	Stop Sign	R1-1	30	30		5.2					1			S	4"X6" Wood	
		One Way Arrow Right	R6-1R	54	18	6.8		22		2		1			S		
397.091	Rt.	Watertown Regional Airport	D1-1	42	48	14.0						1			W	2-4"X6" Wood	
		Lake Area Tech. Institute Av. Annex	D1-1	90	54	33.8				30	2		1		W		
		Welcome To Watertown											1	1	1		W
397.161	Rt.	Do Not Enter	R5-1	36	36		9.0	11		1		1			E	4"X6" Wood	
397.161	Median	Airport	I-5	24	24	4.0						1			W	Banded to Green Light Pole	
		Right Arrow	M6-1	21	15	2.2						1			W		
		Airport	I-5	24	24	4.0						1			E		
		Right Arrow	M6-1	21	15	2.2						1			E		
397.161	Lt.	One Way	R6-1L	54	18	6.8		11		1		1			S	4"X6" Wood	
397.165	Median	Yield	R1-2	36	36		3.9					1			N	Square Tube Post	
		One Way	R6-1R	54	18	6.8						1					
		Two Type 2 Object Markers	T-2	4	8	0.22						1					
397.167	Median	Yield	R1-2	36	36	3.9						1			S	Square Tube Post	
		One Way	R6-1L	54	18	6.8						1					
		Two Type 2 Object Markers	T-2	4	8	0.22						1					
		Two Street Signs											2	2			
397.170	Rt.	Stop Sign	R1-1	30	30		5.2					1			s	4"X6" Wood	
		One Way Right	R6-1R	54	18	6.8				12		1			s		
		One Way Left	R6-1L	54	18	6.8						1			N		
397.181	Lt.	Do Not Enter	R5-1	36	36		9.0	11		1		1			E	4"X6" Wood	
397.091	Lt	Watertown Regional Airport	D1-1	42	48	14.0						1			E	2-4"X6" Wood	
		Lake Area Tech. Institute Av. Annex	D1-1	90	54	33.8				30		2		1			E
397.466	Rt.	2-TOD signs/ Redlin's Farm Toys & Dolls Store/ Dakota Sioux Casino													W	2-4"X6" Wood	Leave in Place
397.519	Lt.	Veterans Memorial Highway													E	4"X6" Wood	Leave in Place

### SD 20 Permanent Sign Installation Table

PLOT SCALE - 1:1,7657

PLOTTED FROM - TRAB12222

PLOT NAME - 3

FILE - ... \SIGNING\SPECIAL SIGNS.DGN

MRM	Side of Road	Description	Sign Code	Width (Inches)	Height (Inches)	High Intensity (SQFT)	Super or Very High Intensity (SQFT)	2.0"x2.0" Perforated Tube Post 12 ga. (FT)	2.5"x2.5" Perforated Tube Post 10 Ga. (FT)	(N.A.B.I.) Square Tube Anchor Sleeve (Each)	(N.A.B.I.) 48" Winged Slip Base Anchor (Each)	Remove Traffic Sign (Each)	Remove Sign For Reset (Each)	Reset Sign (Each)	Direction Sign Faces	Current Type of Post	Remarks
397.556	Rt.	Big Sioux State Tree Nursery <-- 3 Miles	D1-1	120	42	35.0			22		2				W	2-4"X6" Wood	
397.565	Lt.	West SD 20	M3-4 M1-5	24	12 24	2.0 4.0		11		1			1 1	1 1	E	U-Channel	
597.591	Rt.	Do Not Enter	R5-1	36	36		9.0	11		1		1			E	U-Channel	
397.595	Lt.	One Way Stop Sign	R6-1R R1-1	54 30	18 30	6.8 5.2			11	1		1 1				4"X6" Wood	
397.595	Median	One Way Yield Two Type 2 Object Markers	R6-1L R1-2 T-2 T-2	54 36 4 4	18 36 8 8	6.8 3.9 0.22 0.22						1 1 1 1			N	Square Tube Post	
397.606	Rt.	One Way	R6-1L	54	18	6.8		10				1			N	4"X6" Wood	
397.610	Median	One Way Yield Two Type 2 Object Markers	R6-1R R1-2 T-2 T-2	54 36 4 4	18 36 8 8	6.8 3.9 0.22 0.22						1 1 1 1			S	Square Tube Post	
397.625	Lt.	Do Not Enter	R5-1	36	36		9.0	11		1		1			W	U-Channel	
397.630	Rt.	Veterans Memorial Highway													W	4"X6" Wood	Leave in Place
397.650	Lt.	Big Sioux State Tree Nursery <-- 3 Miles	D1-1	120	42	35.0			22		2	1			E	2-4"X6" Wood	
397.671	Rt.	Do Not Enter	R5-1	36	36		9.0	11		1		1			E	U-Channel	
397.675	Lt.	Stop Sign	R1-1	30	30		5.2					1			N	Square Tubing	
397.685	Lt.	Do Not Enter	R5-1	36	36		9.0					1			W	Square Tubing	
397.770	Lt.	2-TOD signs/ Redlin's Farm Toys & Dolls Store/ Dakota Sioux Casino													E	2-4"X6" Wood	Leave in Place
398.000	Lt.	Airport Ahead Arrow	I-5 M6-3	24	24 15	4.0 2.2		11		1		1 1			E	4"X6" Wood	
398.051	Rt.	Do Not Enter	R5-1	36	36		9.0	11		1		1			E	U-Channel	
398.079	Lt.	Stop Sign One Way	R1-1 R6-1L	30 54	30 18	5.2 6.8		10		2		1 1			N S	4"X6" Wood	
398.056	Median	One Way Yield Two Type 2 Object Markers	R6-1R R1-2 T-2 T-2	54 36 4 4	18 36 8 8	6.8 3.9 0.22 0.22			11			1 1 1 1			N	Square Tube Post	
398.066	Rt.	Stop Sign	R1-1	30	30		5.2	10		1		1			S	4"X6" Wood	
398.071	Median	One Way Yield Two Type 2 Object Markers	R6-1L R1-2 T-2 T-2	54 36 4 4	18 36 8 8	6.8 3.9 0.22 0.22						1 1 1 1			S	Square Tube Post	
398.094	Lt.	Do Not Enter	R5-1	36	36		9.0	11		1		1			W	4"X6" Wood	
398.101	Rt.	Divided Hwy. Ends Symbol Wrong Way	W6-2 R5-1a	36	36 24		9.0 6.0		11		1	1 1			W E	4"X6" Wood	

### SD 20 Permanent Sign Installation Table

PLOT SCALE - 1:1,7657

PLOTTED FROM - TRAB12222

PLOT NAME - 3

FILE - ... \SIGNING\SPECIAL SIGNS.DGN

MRM	Side of Road	Description	Sign Code	Width (Inches)	Height (Inches)	High Intensity (SQFT)	Super or Very High Intensity (SQFT)	2.0"x2.0" Perforated Tube Post 12 ga. (FT)	2.5"x2.5" Perforated Tube Post 10 Ga. (FT)	(N.A.B.I.) Square Tube Anchor Sleeve (Each)	(N.A.B.I.) 48" Winged Slip Base Anchor (Each)	Remove Traffic Sign (Each)	Remove Sign For Reset (Each)	Reset Sign (Each)	Direction Sign Faces	Current Type of Post	Remarks
398.136	Rt.	Veterans Memorial Highway													W	4"X6" Wood	Leave In Place
398.191	Rt.	Two Way Traffic Symbol	W6-3	36	36	9.0			11		1	1			W	4"X6" Wood	
		Wrong Way	R5-1a	36	24	6.0						1			E		
398.191	Median	Two Way Traffic Symbol	W6-3	36	36	9.0			11			1			W	4"X6" Wood	
		Keep Right	R4-7	30	36	7.5						1			E		
398.251	Rt.	Dynamic Engine Breaking Prohibited													W	Square Tube	Leave In Place
		By City Ordinance															
398.331	Lt.	Divided Hwy. Ahead Symbol	W6-1	36	36	9.0		11		1		1			E	4"X6" Wood	
398.343	Rt.	Speed Zone Ahead 35 MPH	W3-5	36	36	9.0		11		1		1			W	4"X6" Wood	
398.450	Lt.	Speed Limit 55 MPH	R2-1	30	36	7.5		11		1		1			E	U-Channel	
398.458	Rt.	Speed Limit 35 MPH	R2-1	30	36	7.5		11		1		1			W	4"X6" Wood	
398.505	Lt.	Vetrans Memorial Highway													E	4"X6" Wood	Leave in Place
398.550	Lt.	West	M3-4	24	12	2.0				1		1			E	U-Channel	
		SD 20	M1-5	24	24	4.0						1			E		
398.578	Rt.	Right hand Curve	W1-2R	36	36	9.0						1			W	4"X6" Wood	
		Begin	R3-9cP	30	12	2.5			11			1					
		Center Turn Lane Only	R3-9b	24	36	6.0						1					
398.606	Lt.	AADH													E	4"X6" Wood	Leave in Place
398.641	Lt.	End	R3-9dP	30	12	2.5				1		1			E	4"X6" Wood	
		Center Turn Lane Only	R3-9b	24	36	6.0			11			1					
398.665	Lt.	Stop Sign	R1-1	30	30	5.2		10		1		1			N	U-Channel	
398.680	Lt.	Speed Limit 35 MPH	R2-1	30	36	7.5		11		1		1			E	U-Channel	
398.684	Rt.	Speed Limit 35 MPH	R2-1	30	36	7.5		11		1		1			E	4"X6" Wood	
		No Parking Symbol	R8-3	24	24	4.0		10				1					
398.713	Rt.	Hospital	D9-2	24	24	4.0				1		1			W	U-Channel	
		Right Arrow	M6-1	21	15	2.2		11				1					
398.731		No Parking Symbol	R8-3	24	24	4.0						1			E	Mounted to Wooden Utility Pole	Mount on Utility Pole
398.732	Lt.	Stop Sign	R1-1	30	30	5.2		11		1		1			N	Mounted to Metal Pipe	
398.753	Rt.	No Parking Symbol	R8-3	24	24	4.0									N	Mounted to Wooden Utility Pole	Mount on Utility Pole
398.781	Lt.	Hospital	D9-2	24	24	4.0				1		1			S		
		Left Arrow	M6-1	21	15	2.2		11				1					
398.783	Rt.	No Parking Symbol	R8-3	24	24	4.0						1			N	Mounted to Wooden Utility Pole	Mount on Utility Pole
398.786	Lt.	Hospital	D9-2	24	24	4.0						1			E	4"X6"Wood	Band to Luminare L4
		Right Arrow	M6-1	21	15	2.2						1					
398.803	Rt.	No Parking Symbol	R8-3	24	24	4.0						1			N	Mounted to Wooden Utility Pole	Mount on Utility Pole

### SD 20 Permanent Sign Installation Table

PLOT SCALE - 1:1,7657

PLOTTED FROM - TRAB12222

PLOT NAME - 3

FILE - ... \SIGNING\SPECIAL SIGNS.DGN

MRM	Side of Road	Description	Sign Code	Width (Inches)	Height (Inches)	High Intensity (SQFT)	Super or Very High Intensity (SQFT)	2.0"x2.0" Perforated Tube Post 12 ga. (FT)	2.5"x2.5" Perforated Tube Post 10 Ga. (FT)	(N.A.B.I.) Square Tube Anchor Sleeve (Each)	(N.A.B.I.) 48" Winged Slip Base Anchor (Each)	Remove Traffic Sign (Each)	Remove Sign For Reset (Each)	Reset Sign (Each)	Direction Sign Faces	Current Type of Post	Remarks
398.845	Lt.	No Parking Symbol	R8-3	24	24	4.0									S	U-Channel	Mount on Luminaire L7
398.850	Lt.	Do Not Enter	R5-1	36	36		9.0	11		1		1			S	U-Channel	
398.865	Lt.	Do Not Enter	R5-1	36	36		9.0	11		1		1			S	U-Channel	
398.882	Lt.	No Parking Symbol	R8-3	24	24	4.0		10							S	U-Channel	
398.986	Lt.	Stop Sign	R1-1	30	30		5.2	10		1		1	2	2	E	U-Channel	
398.971	Lt.	No Parking Symbol	R8-3	24	24	4.0		10		1		1			S	U-Channel	Mount on Luminaire L8
398.898	Rt.	Speed Limit 35 MPH	R2-1	30	36	7.5						1			N	Mounted to Wooden Utility Pole	Mount on Utility Pole
398.948	Rt.	No Parking Symbol	R8-3	24	24	4.0						1			N	Mounted to Wooden Utility Pole	Mount on Utility Pole
398.969	Rt.	Humane Society -->	D1-1	36	24	6.0						1			N	Mounted to Wooden Utility Pole	Mount on Utility Pole
398.980	Lt.	No Parking Symbol	R8-3	24	24	4.0						1			E	U-Channel	Mount on Luminaire L9
398.995		Stop Sign	R1-1	30	30		5.2	10		1		1	2	2	N	U-Channel	
399.015	Rt.	Stop Sign	R1-1	30	30		5.2	10		1		1			S	4"X6" Wood Post	
399.026	Lt.	Humane Society -->	D1-1	36	24	6.0						1			S	Mounted to Green Luminaire Pole	Mount on Luminaire L10
		No Parking Symbol	R8-3	24	24	4.0						1					
399.036	Lt.	Speed Limit 35 MPH	R2-1	30	36	7.5						1			S	4"X6" Wood	Mount on Luminaire L12
399.070	Lt.	Center Turn Lane Only	R3-9b	24	36	6.0						1			S	Mounted to Green Luminaire Pole	Mount on Luminaire L12
399.075	Lt.	Stop Sign	R1-1	30	30		5.2	10		1		1	2	2	E	U-Channel	
399.095	Rt.	Stop Sign	R1-1	30	30		5.2	10		1		1			S	Square Tube Post	
399.101	Rt.	Center Turn Lane Only	R3-9b	24	36	6.0						1			W	Mounted on Green Luminaire Pole	Mount on Luminaire L11
399.140	Rt.	Stop Light Ahead	W3-3	30	30		6.3								W	Mounted to Green Luminaire Pole	Mount on Luminaire L13
399.155	Lt.	Stop Sign	R1-1	30	30		5.2	10		1		1	2	2	E	Mounted on Green Luminaire Pole	
399.170	Rt.	Stop Sign	R1-1	30	30		5.2	10		1		1			S	4"X6" Wood Post	
399.201	Rt.	Library Sign	I-8	24	24	4.0						1			W	Mounted to Green Luminaire Pole	Mount on Luminaire L14
		Left Arrow	M6-1	21	15	2.2						1					
399.245	Center	4 th Ave											2	2		Mounted on Mast Arms	Band to Mast Arm
399.321	Lt.	Library Sign	I-8	24	24	4.0						1			S	Banded to Green Light Pole	Mount To Utility Pole
		Left Arrow	M6-1	21	15	2.2						1					
399.325	Lt.	No Parking Symbol	R8-3	24	24	4.0						1			S	Mounted on Green Luminaire Pole	Mount on Luminaire L15
		West	M3-4	24	12	2.0						1					
399.296		School Sign	S1-1	36	36		9.0					1			S	Banded to Signal Pole	Band to Traffic Signal
		Down Arrow	W16-7P	24	12		2.0					1		S			

### SD 20 Permanent Sign Installation Table

PLOT SCALE - 1:1,7657

PLOT NAME - 3

PLOTTED FROM - TRAB1222

FILE - ... \SIGNING\SPECIAL SIGNS.DGN

MRM	Side of Road	Description	Sign Code	Width (Inches)	Height (Inches)	High Intensity (SQFT)	Super or Very High Intensity (SQFT)	2.0"x2.0" Perforated Tube Post 12 ga. (FT)	2.5"x2.5" Perforated Tube Post 10 Ga. (FT)	(N.A.B.I.) Square Tube Anchor Sleeve (Each)	(N.A.B.I.) 48" Winged Slip Base Anchor (Each)	Remove Traffic Sign (Each)	Remove Sign For Reset (Each)	Reset Sign (Each)	Direction Sign Faces	Current Type of Post	Remarks
399.310	Rt.	School Sign	S1-1	36	36	9.0						1			N	Banded to Green Light Pole	Mount on Luminare L16
399.345	Rt.	Center Turn Lane Only	R3-9b	24	36	6.0			11		1	1			W	Banded to Green Light Pole	Mount on Luminare L17
		End	R3-9dP	30	12	2.5				1			W	Banded to Green Light Pole			
		Stadium/Ag Building Sign	D1-1	42	24	7.0				1				Banded to Green Light Pole			
399.370	Rt.	School Sign	S1-1	36	36	9.0						1				Banded to Traffic Signal	Band to Traffic Signal
		Down Arrow	W16-7P	24	12	2.0						1					
399.374	Center	Kemp/School Signs											4	4		Banded to Signal Mast Arm	Band to Mast Arm
399.384	Lt.	School Sign	S1-1	36	36	9.0						1			S	Banded to Signal Pole	Band to Traffic Signal
		Down Arrow	W16-7P	24	12	2.0						1					
399.375	Lt.	Stop Sign	R1-1	30	30	5.2		10		1		1			E	U-Channel	
399.430	Rt.	Speed Limit 35 MPH	R2-1	30	36	7.5		10		1		1			N	Banded to Green Luminair Pole	Mount on Luminare L 19
399.435	Lt.	Stop Sign	R1-1	30	30	5.2		10		1		1	2	2	E	Square Tube	
399.444	Lt.	School Sign	S1-1	36	36	9.0						1			S	Banded to Green Luminair Pole	Mount on Luminare L18
		Business District	D1-1	42	30	8.8						1					
399.470	Lt.	No Parking Symbol	R8-3	24	24	4.0						1			S	Banded to Green Luminair Pole	Mount on Luminare L 20
399.474	Lt.	Traffic Signal Ahead	W3-3									1			S	Banded to Green Luminair Pole	Remove Do Not Replace
399.480	Rt.	Stop Sign	R1-1	30	30	5.2		10		1		1			S	U-Channel	With Two Street Signs
399.575	Rt.	2nd AV SW											1	1	W	Banded to Green Luminair Pole	Reset Sign on Mast Arm
	Rt/ Lt.	10th St. SW											2	2	W		
399.590	Rt.	Stop Sign	R1-1	30	30	5.2		10		1		1			S	U-Channel	
399.760	Rt/ Lt.	10th St. SW											2	2	W/W	Mounted to Signal Mast Arm	Reset Sign on Mast Arm
399.760	Center	4th Ave SW											2	2	N/S	Mounted to Signal Mast Arm	Reset Sign on Mast Arm
399.825	Rt.	Speed Limit 35 MPH	R2-1	30	36	7.5		11		1		1			W	U-Channel	
399.913	Lt.	Stop Sign	R1-1	30	30	5.2		10		1		1	2	2	E	Square Tube	
399.988	Lt.	Florence 16	D2-1	66	18	8.3		20		2		1			S	2-4"X6" Wood	
400.000	Rt.	Traffic Signal Ahead	W3-3									1			W	Mounted to Wooden Utility Pole	Remove Do Not Replace
400.097	Lt.	Stop Sign	R1-1	30	30	5.2		10		1		1			E	U-Channel	
						<b>Totals</b>	<b>730.5</b>	<b>538.1</b>	<b>756</b>	<b>335</b>	<b>74</b>	<b>31</b>	<b>199</b>	<b>31</b>	<b>31</b>		

# SPECIAL SIGN DESIGNS



BORDER  
R=1.5"  
TH=0.63"  
IN=0.47"



BORDER  
R=1.5"  
TH=0.63"  
IN=0.47"



BORDER  
R=1.5"  
TH=0.63"  
IN=0.47"



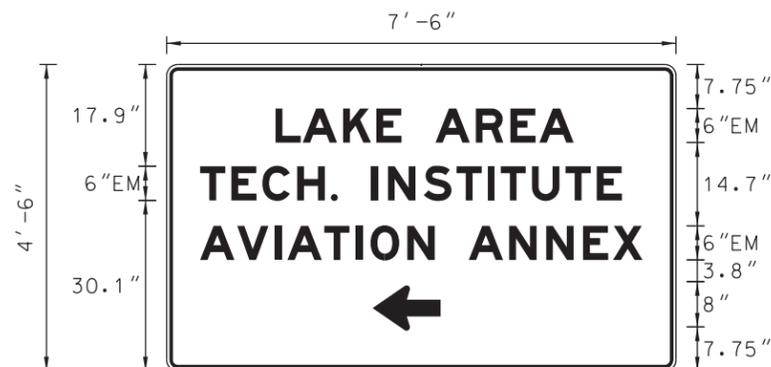
BORDER  
R=1.5"  
TH=0.63"  
IN=0.47"



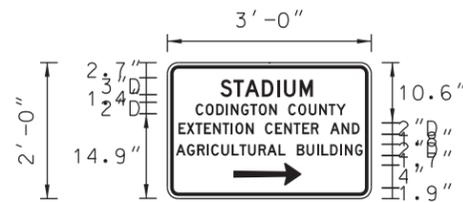
BORDER  
R=3"  
TH=1.25"



BORDER  
R=1.5"  
TH=0.63"  
IN=0.47"



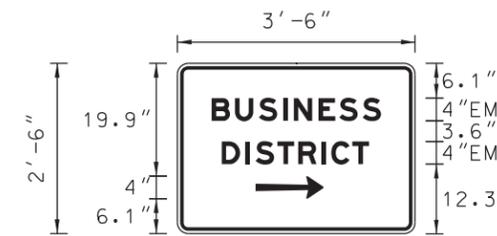
BORDER  
R=1.5"  
TH=0.63"  
IN=0.47"



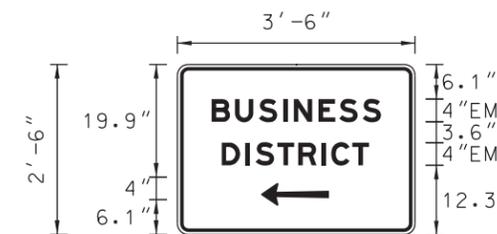
BORDER  
R=1.5"  
TH=0.63"  
IN=0.47"



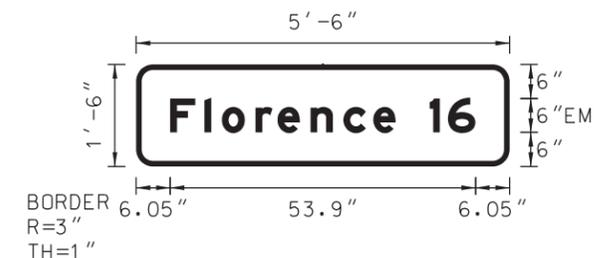
BORDER  
R=1.5"  
TH=0.63"  
IN=0.47"



BORDER  
R=1.5"  
TH=0.63"  
IN=0.47"



BORDER  
R=1.5"  
TH=0.63"  
IN=0.47"

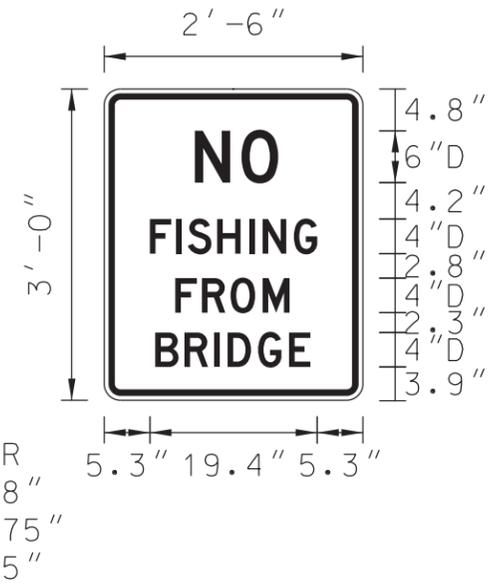
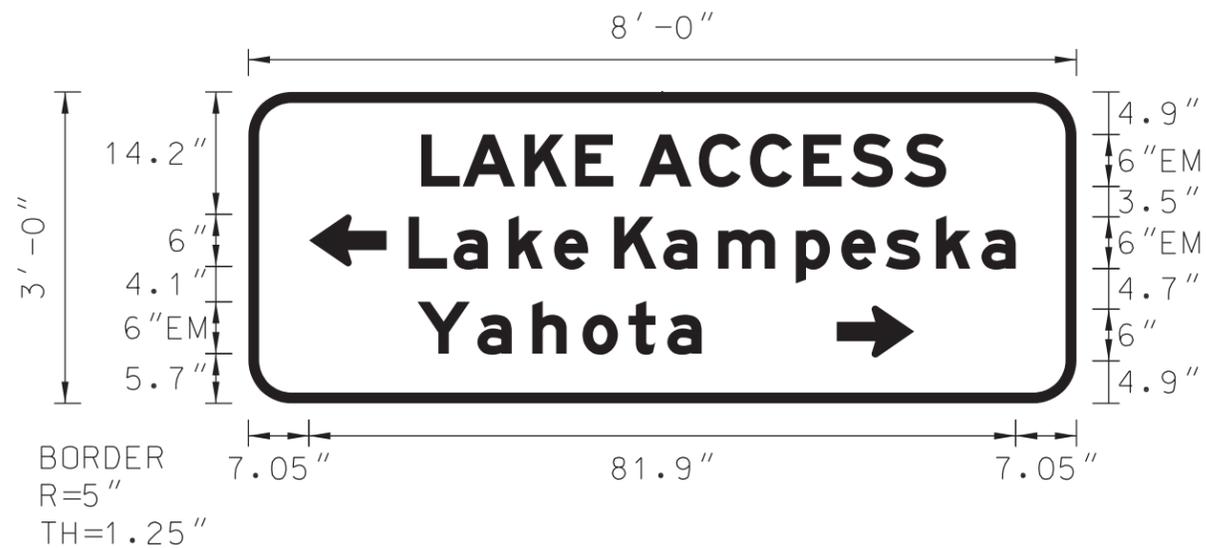
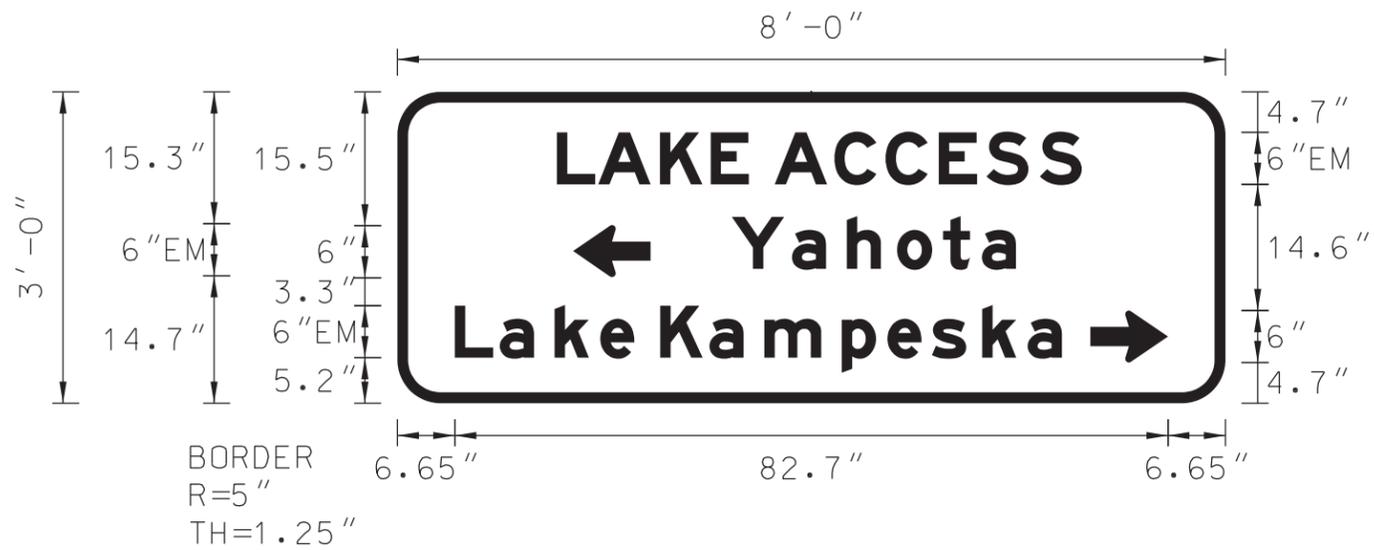


BORDER  
R=3"  
TH=1"

All Signs on This Page Shall Have a Green Background With A White Border and White Lettering

# SPECIAL SIGN DESIGNS

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P 0020(107)394	S13	S25
Plotting Date: 01/16/2014			



The Sign Shown Above Shall Have a White Background With A Black Border and Black Lettering

The Signs Shown Above Shall Have a Brown Background With A White Border and White Lettering

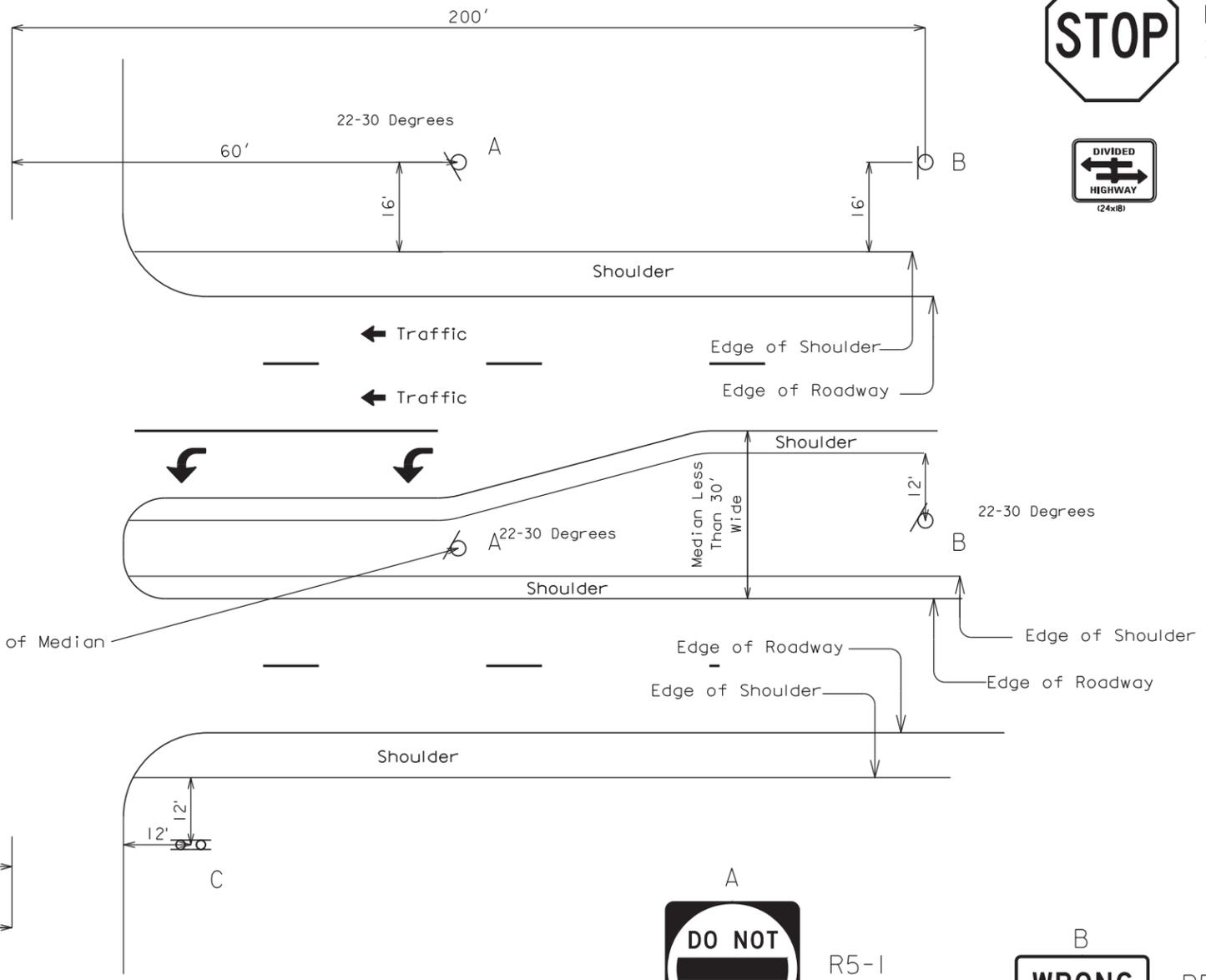
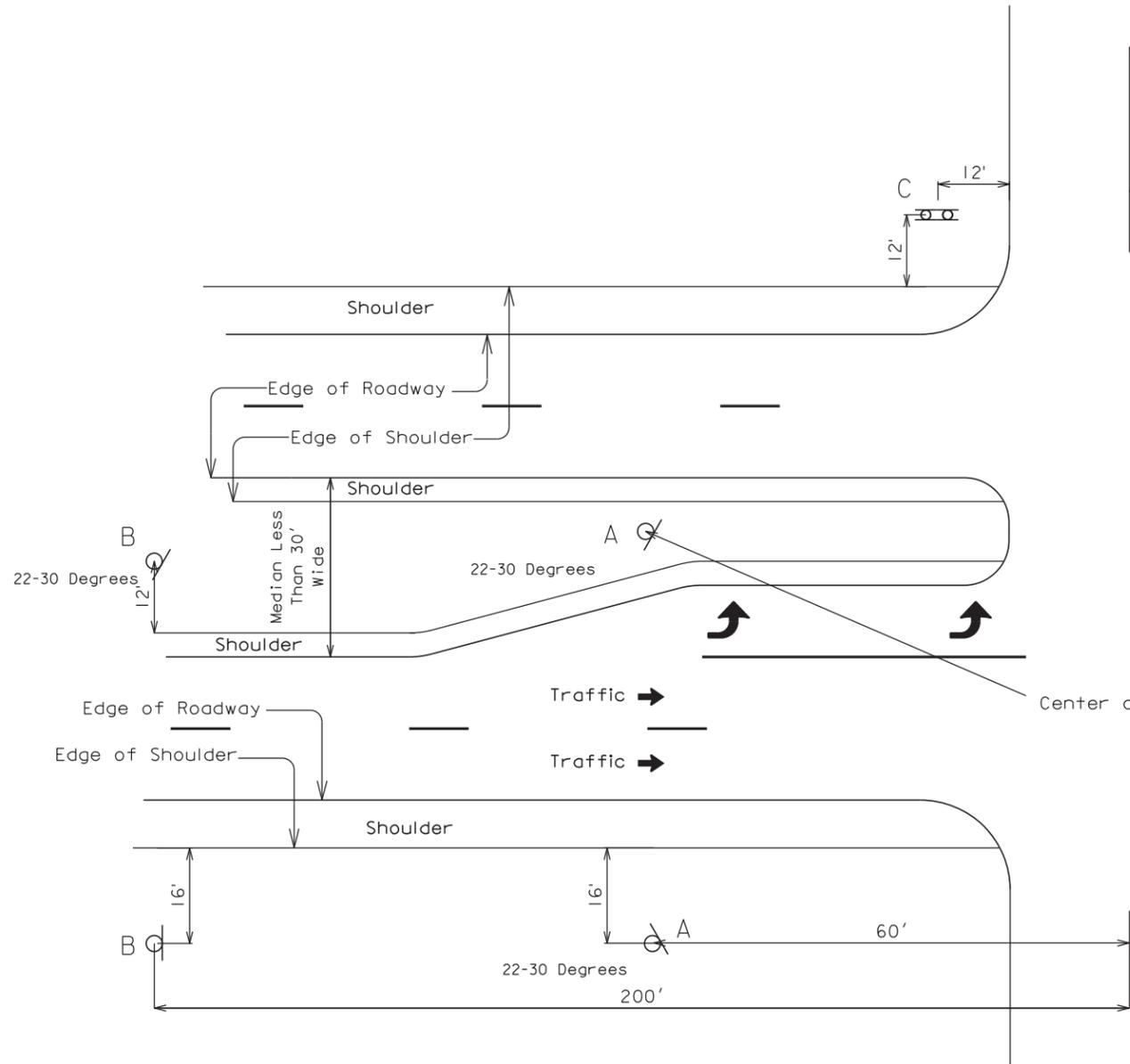
PLOT SCALE - 1:27,3375

PLOTTED FROM - TRAB12222

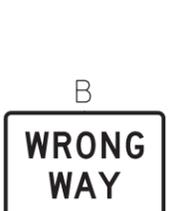
# Signing for Divided Highways

## with Median Widths Narrower than 30 Feet

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P 0020(107)394	S14	S25
Plotting Date: 01/16/2014			



-  R6-1L  
54"x18"
-  R6-1R  
54"x18"
-  R1-1  
36"x36"
-  R6-3  
30"x24"

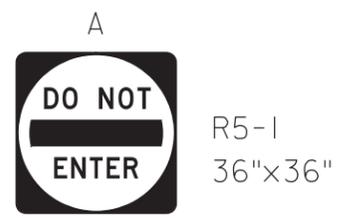
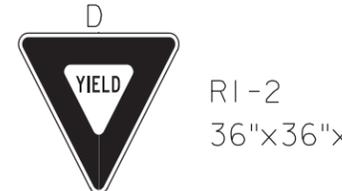
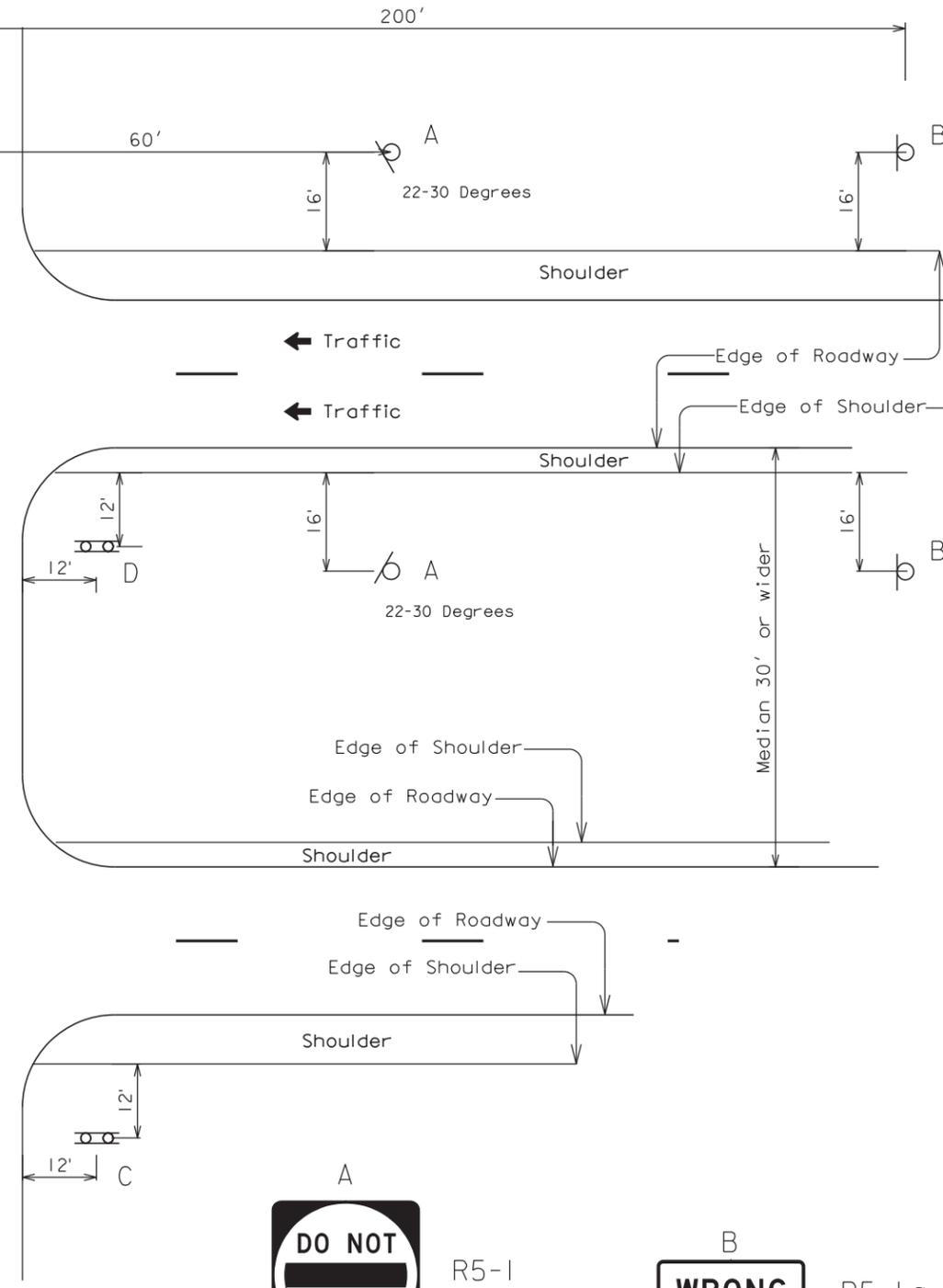
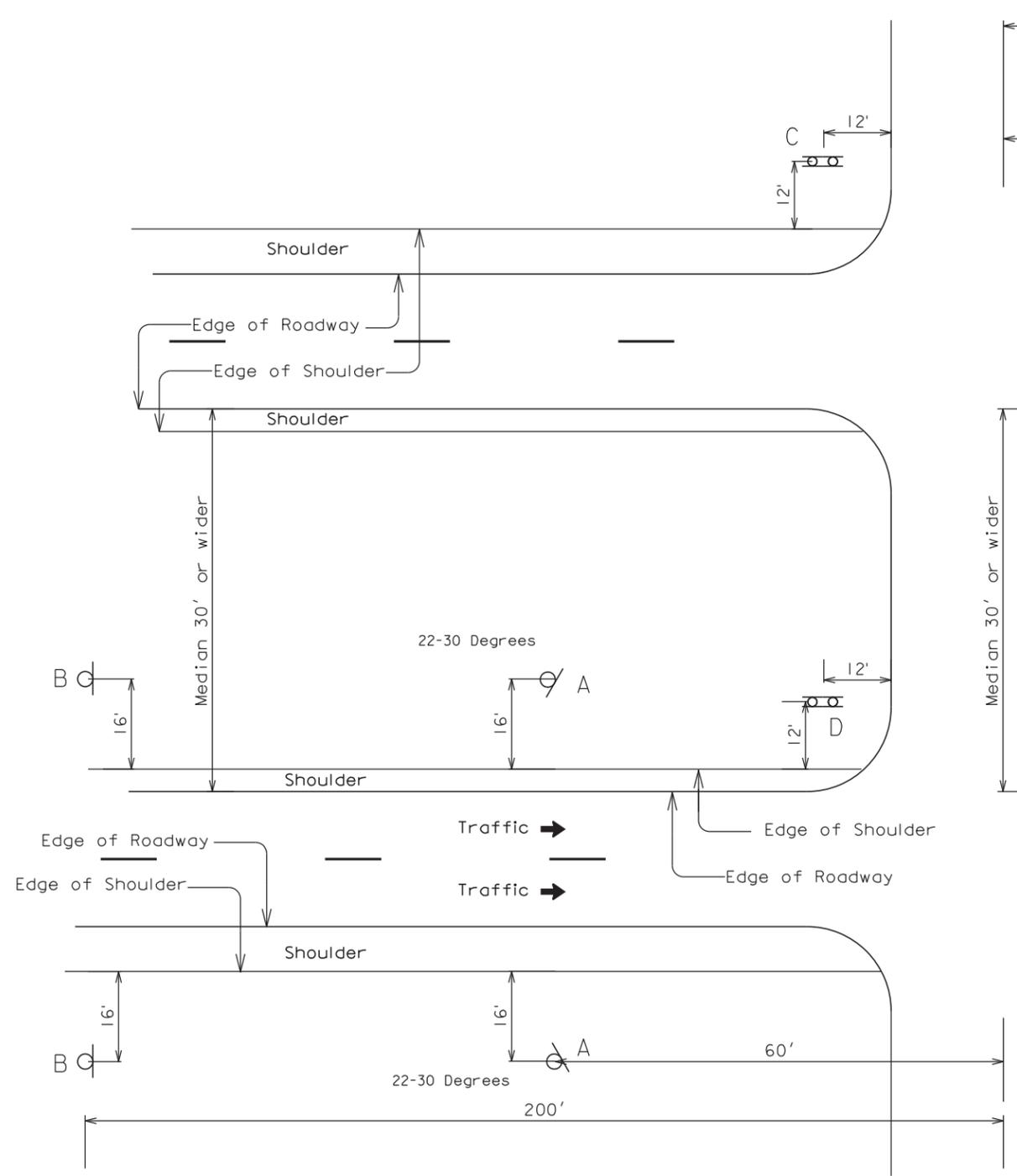
-  R5-1  
36"x36"
-  R5-1a  
36"x24"

Sign Post "G" - Install Type II Object Markers back to back @ 4' mounting height

FILE ... \022J DIVIDED HIGHWAY MEDIAN XING SIGNING.DGN PLOT NAME - 1

# Signing for Divided Highways with Median Widths of 30 Feet or Wider

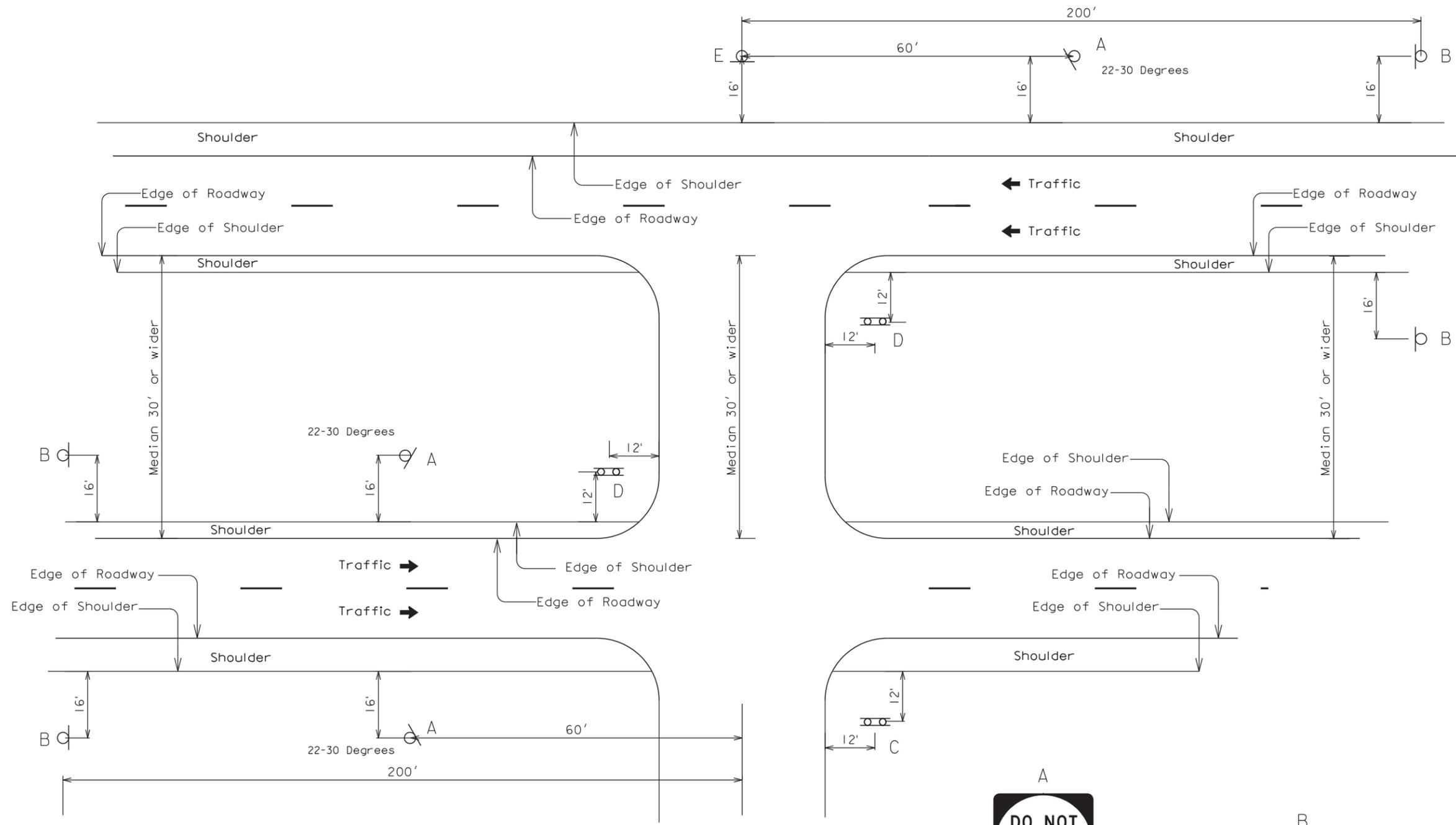
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P 0020(107)394	S15	S25
Plotting Date: 01/16/2014			



Sign Post "D" - Install Type II Object Markers back to back @ 4' mounting height

# Signing for Divided Highways with Median Widths of 30 Feet or Wider

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P 0020(107)394	S16	S25
Plotting Date: 01/16/2014			



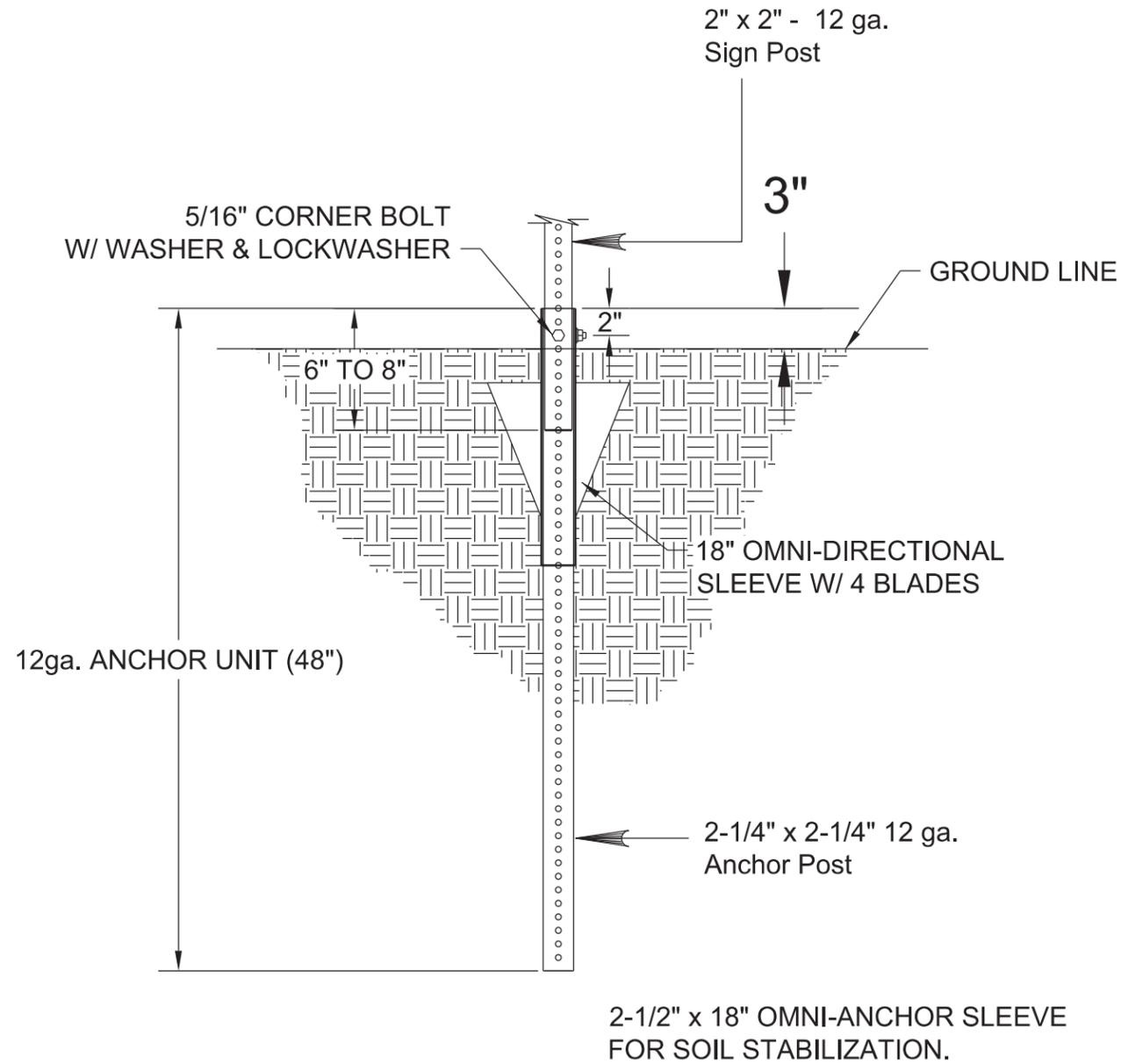
-  R6-1L  
54"x18"
-  R6-1R  
54"x18"
-  R1-1  
36"x36"
-  R6-3a  
30"x24"
-  R6-1L  
54"x18"
-  R6-1R  
54"x18"
-  R1-2  
36"x36"x36"
-  R6-1L  
54"x18"



Sign Post "D" - Install Type II Object Markers back to back @ 4' mounting height

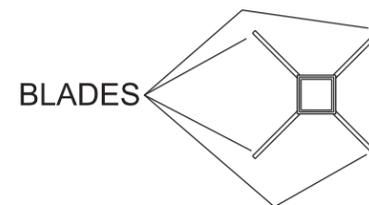
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P 0020(107)394	S17	S25
Plotting Date: 12/09/2013			

# SQUARE TUBE 4 BLADE ANCHOR DETAIL



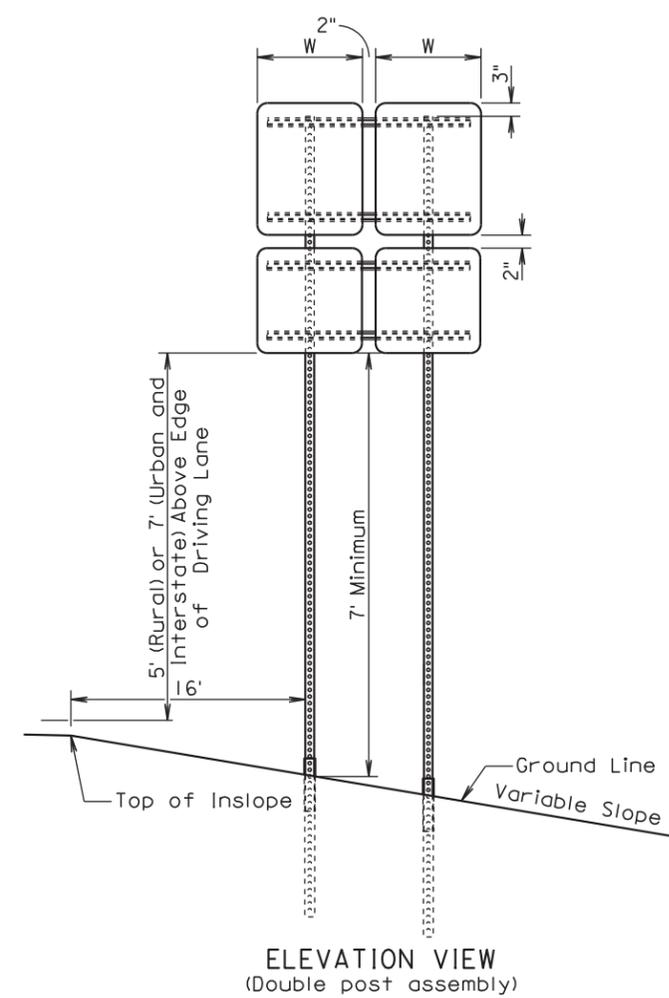
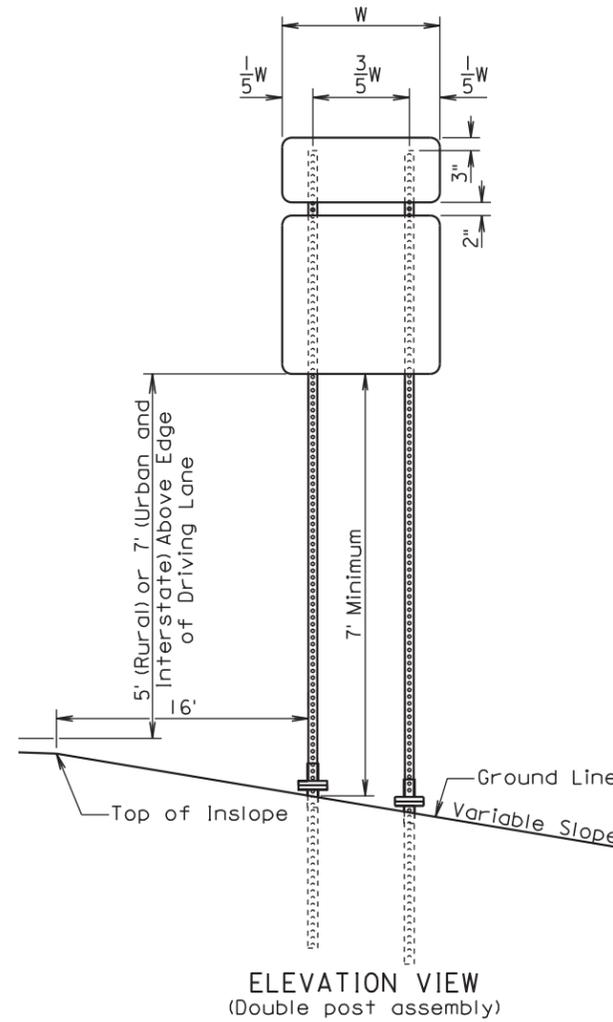
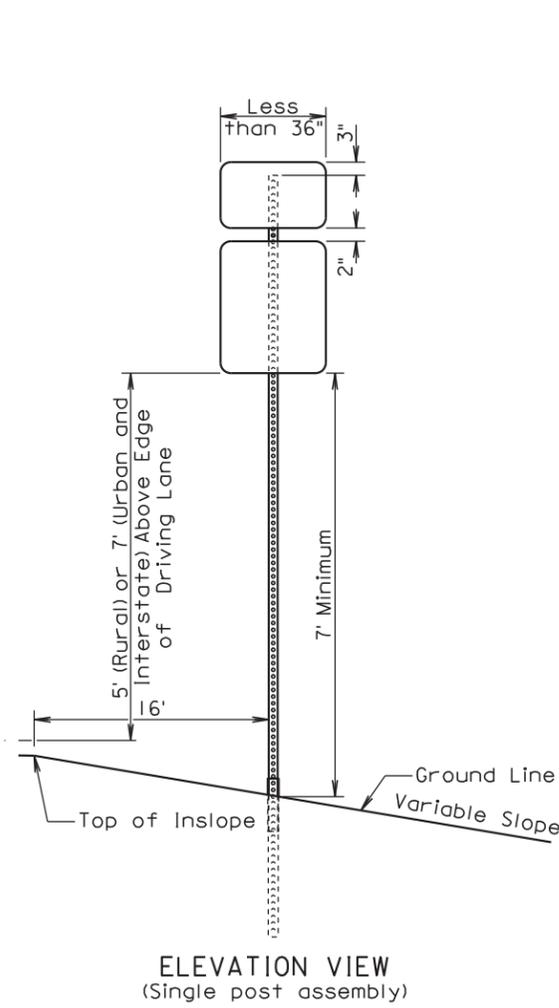
ANCHOR SLEEVE  
TOP VIEW

2-1/2" x 18" 12 ga. Omni-Sleeve



STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P 0020(107)394	S18	S25
Plotting Date: 12/09/2013			

# INSTALLATION DETAILS FOR MULTIPLE SIGN ASSEMBLIES

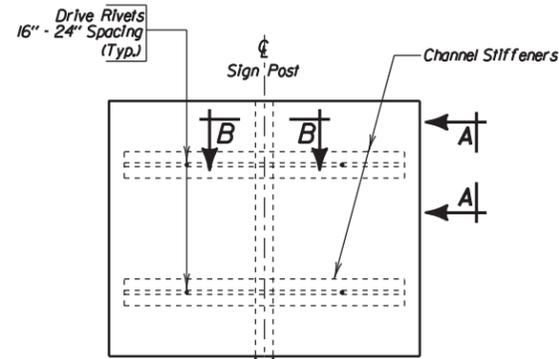


### GENERAL NOTES:

The sign posts and bases shown are for illustrative purpose. The post type required shall be the type specified in the plans.

All breakaway sign supports shall comply with NCHRP 350 or MASH crash testing requirements and FHWA requirements. The Contractor shall provide post installation details at the preconstruction meeting for all breakaway sign support assemblies.

# ONE POST BREAKAWAY SIGN SUPPORTS

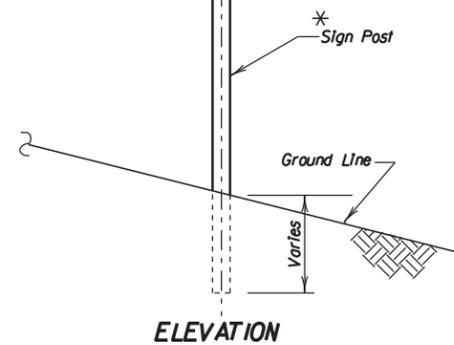


∅ A plastic washer, as recommended by the sheeting manufacturer, shall be installed between the sign face and the metal washer shown.

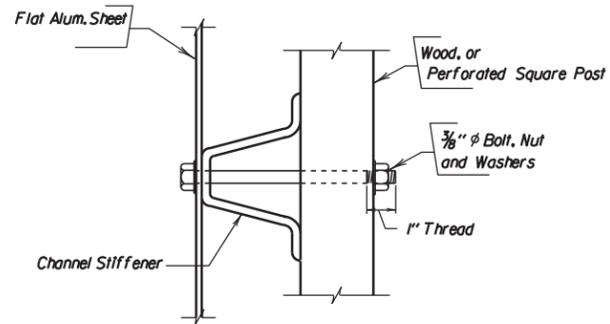
Height and lateral distance as recommended by latest edition of MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

\* Single post installation shown. (See applicable Details or Standard Plates shown in these plans for multiple post spacing requirements.)

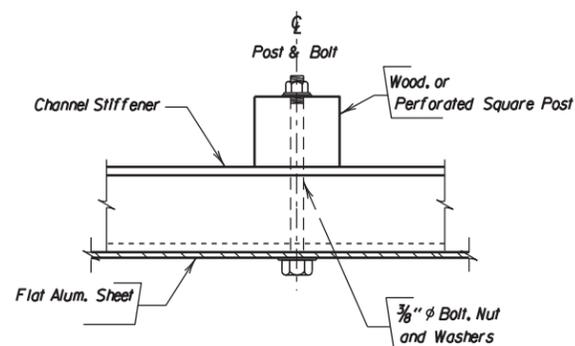
## (Typical Sign and Stiffener Details)



ELEVATION

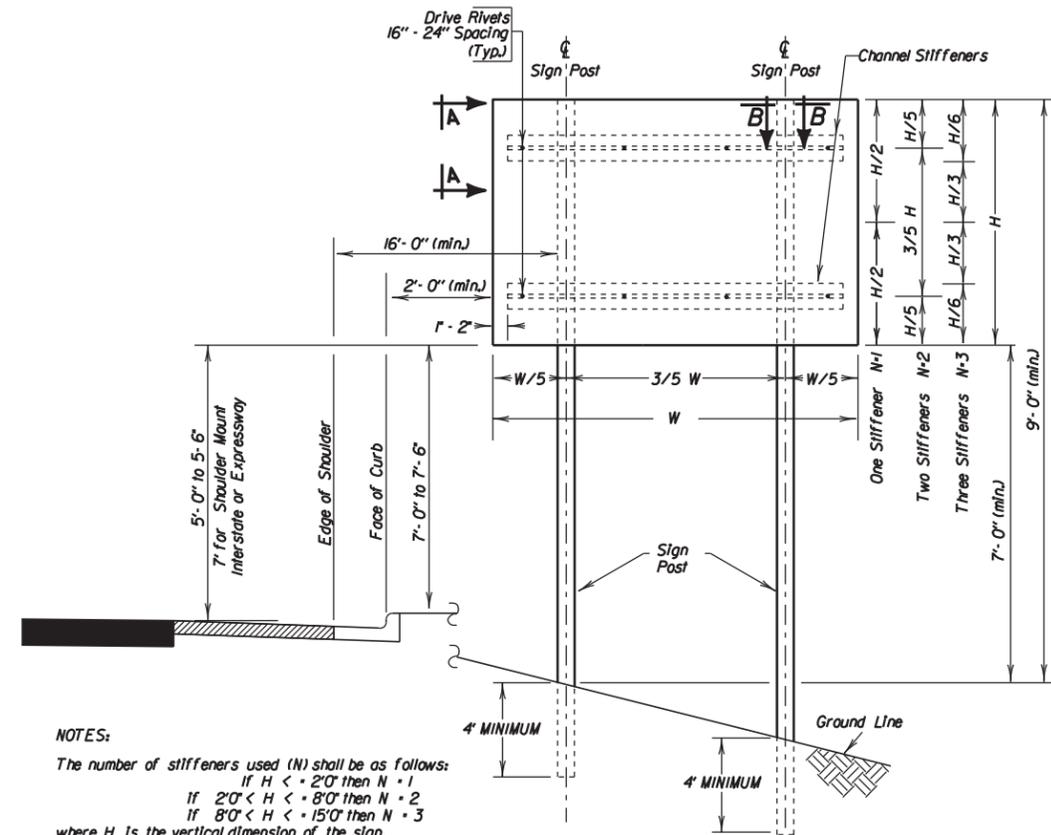


SEC. A-A



SEC. B-B

# TWO POST BREAKAWAY SIGN SUPPORTS



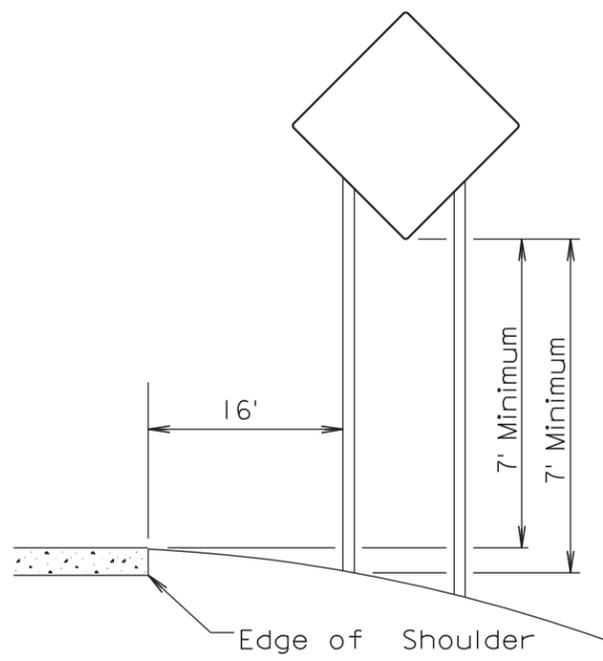
**NOTES:**

The number of stiffeners used (N) shall be as follows:  
 If  $H < 2'0"$  then  $N = 1$   
 If  $2'0" < H < 8'0"$  then  $N = 2$   
 If  $8'0" < H < 15'0"$  then  $N = 3$   
 where H is the vertical dimension of the sign.

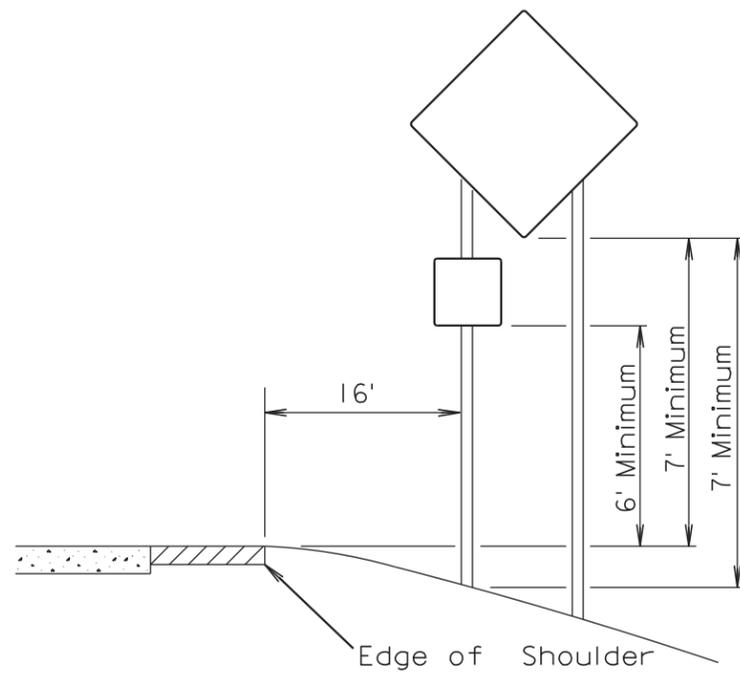
A minimum of two bolts shall be required to fasten the sign to each post.

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
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Plotting Date: 12/09/2013			

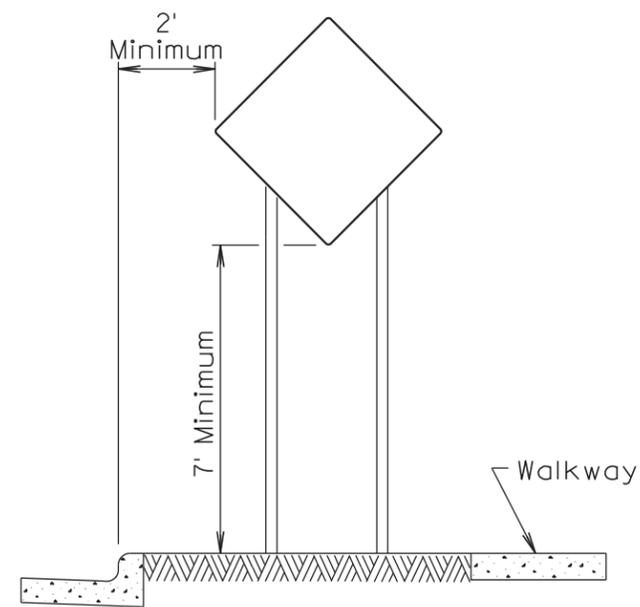
# SIGN SUPPORTS (Lateral Off-Sets)



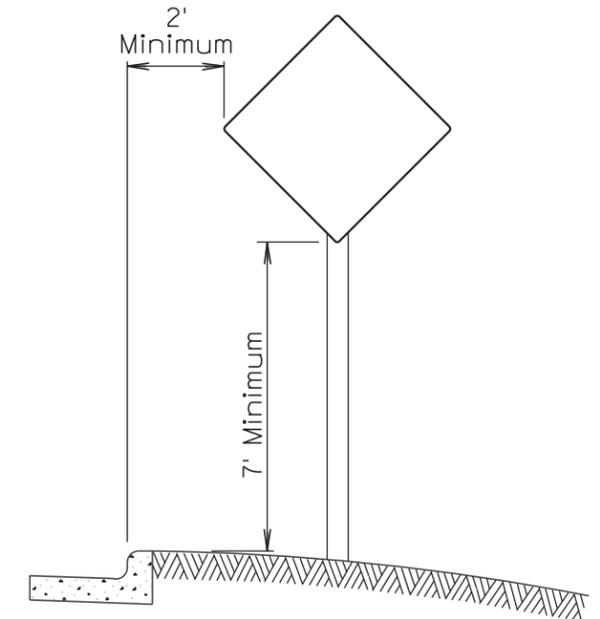
RURAL DISTRICT



RURAL DISTRICT WITH  
SUPPLEMENTAL PLATE



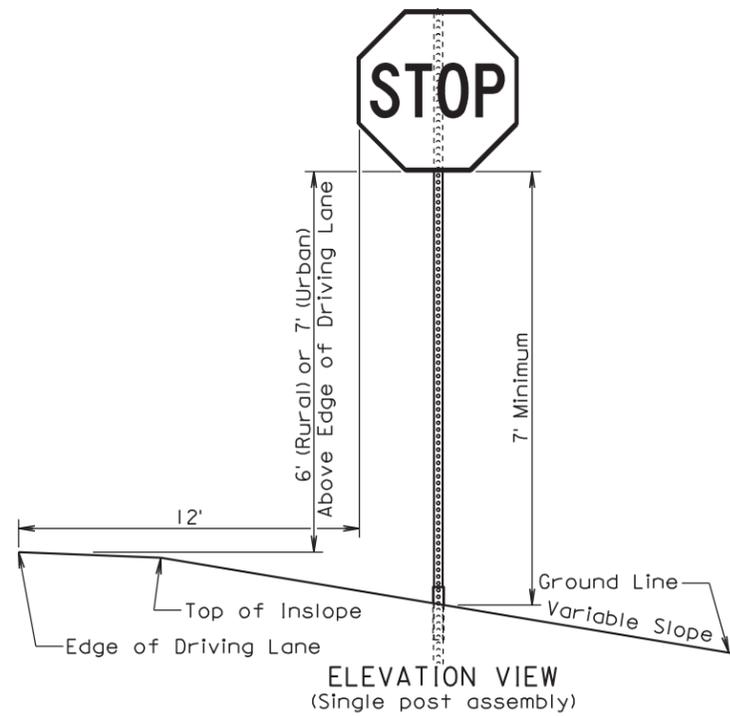
URBAN DISTRICT



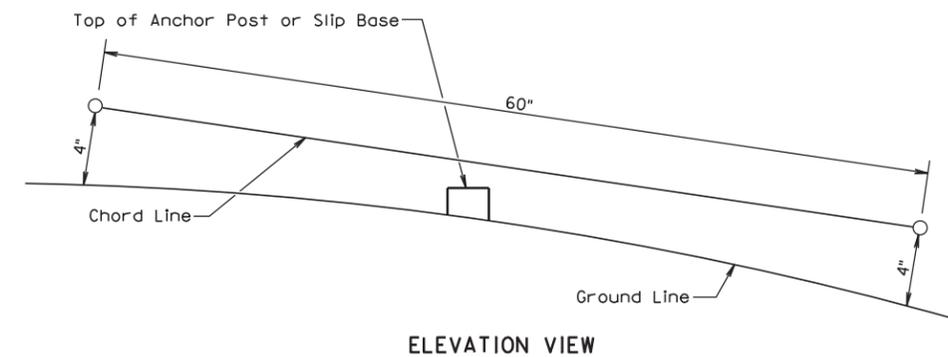
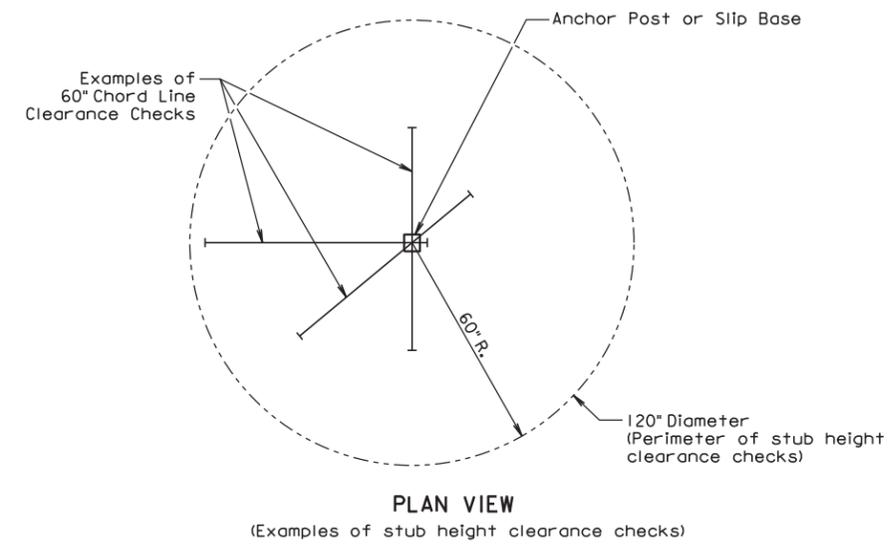
URBAN DISTRICT

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P 0020(107)394	S21	S25
Plotting Date: 12/09/2013			

# INSTALLATION DETAILS FOR STOP SIGNS



# BREAKAWAY SUPPORT STUB CLEARANCE



**GENERAL NOTES:**

The top of anchor posts and slip bases SHALL NOT extend above a 60" chord line within a 120" diameter circle around the post with ends 4" above the ground.

At locations where there is curb and gutter adjacent to the breakaway sign support, the stub height shall be a maximum of 4" above the ground line at the localized area adjacent to the breakaway support stub.

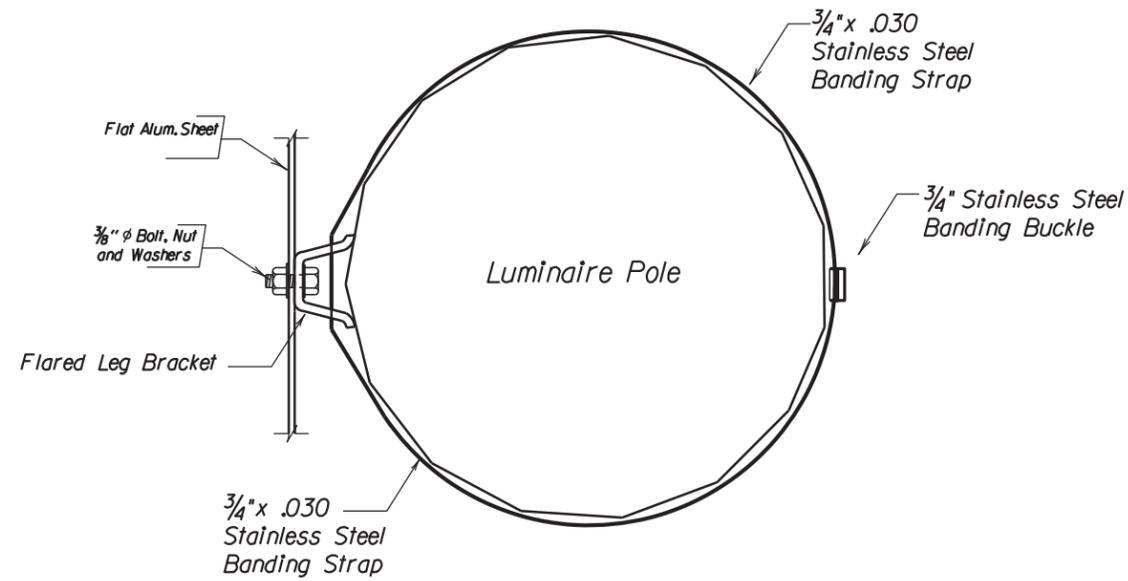
# SIGN BANDING TO LUMINAIRE/SIGNAL POLE

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P 0020(107)394	S22	S25
Plotting Date: 12/09/2013			

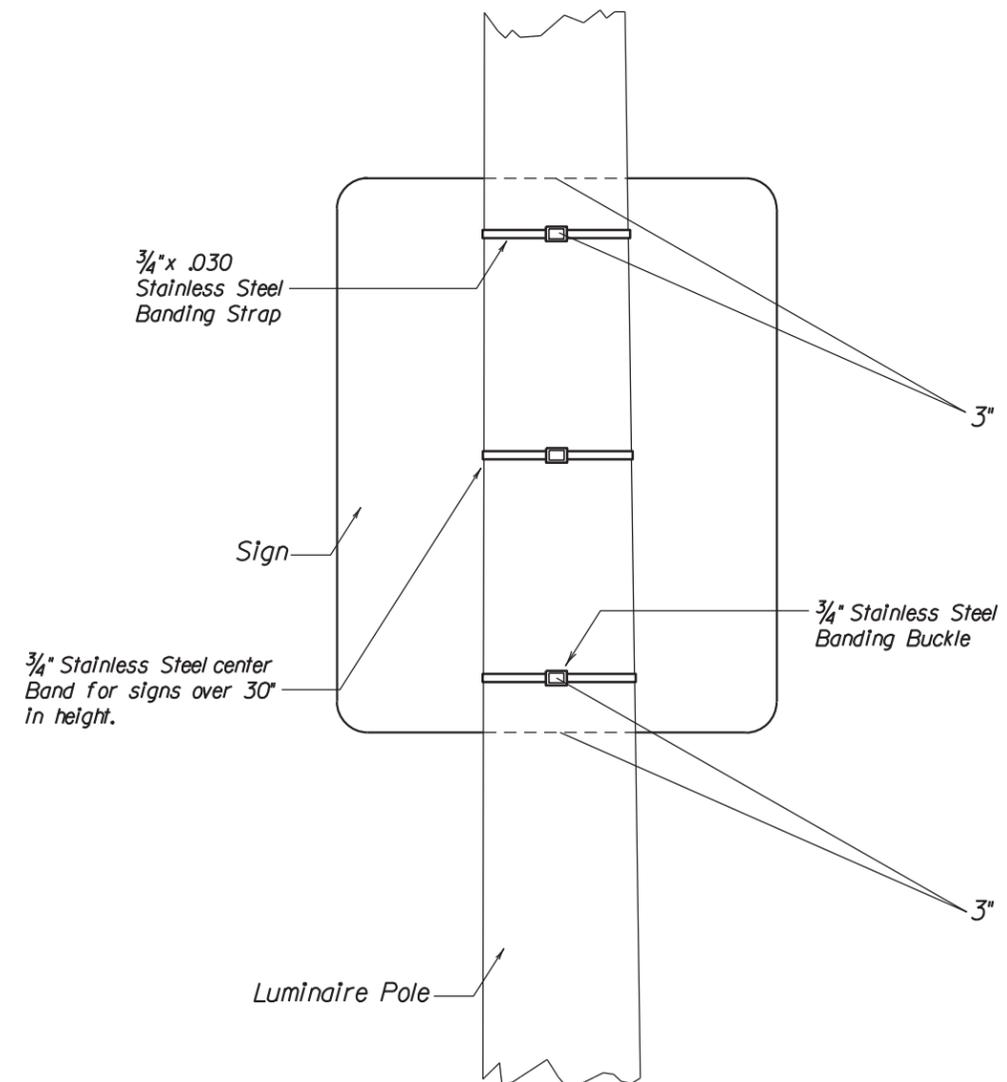
PLOT SCALE - 1:1.7657

PLOT NAME - 3

*Top View*



*Back View*



∅ A plastic washer, as recommended by the sheeting manufacture, shall be installed between the sign face and the metal washer shown.

PLOTTED FROM - TRAB12222

FILE - ... \SIGNING\SPECIAL SIGNS.DGN

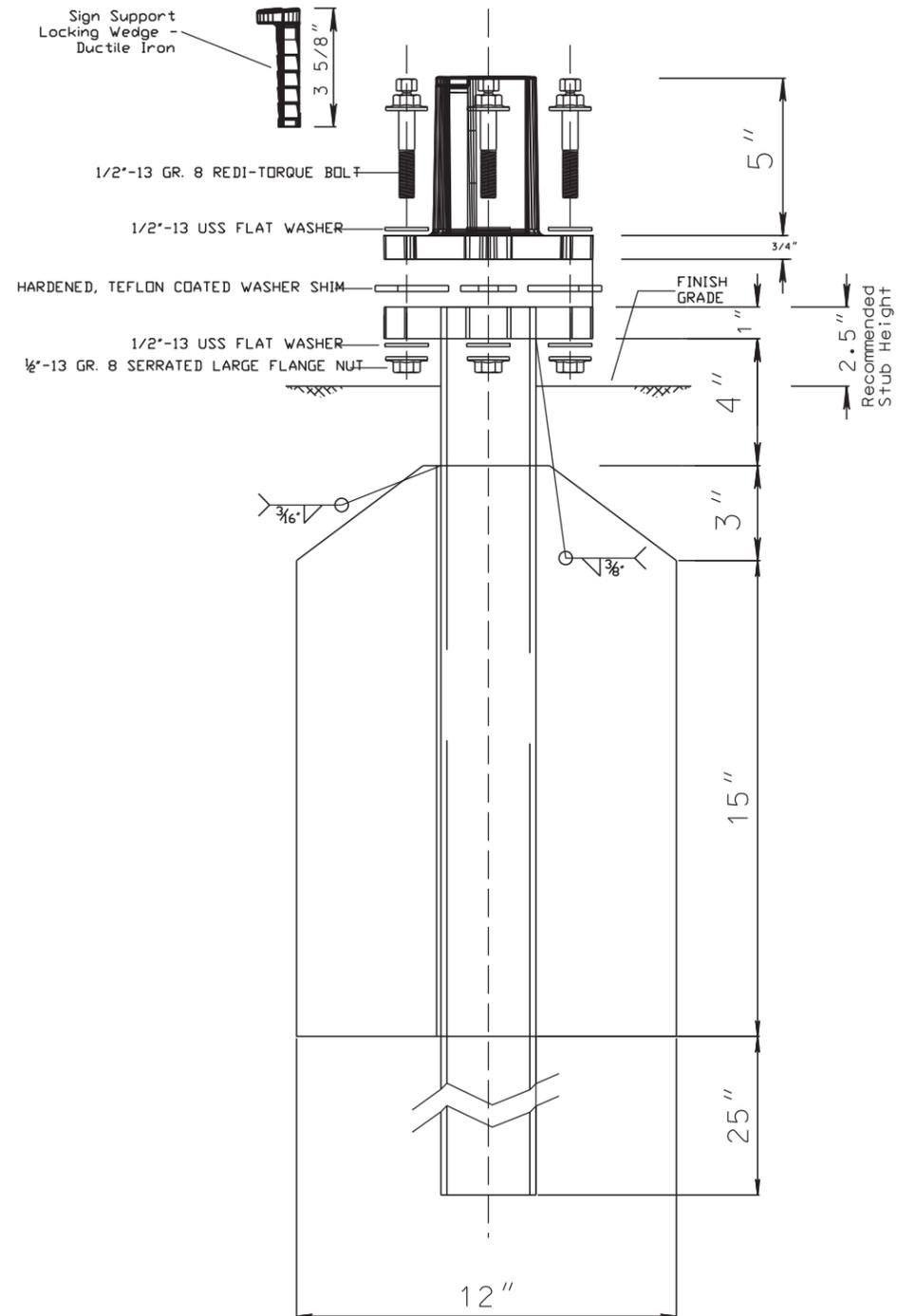
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P 0020(107)394	S23	S25
Plotting Date: 12/09/2013			

PLOT SCALE - 1:1.7657

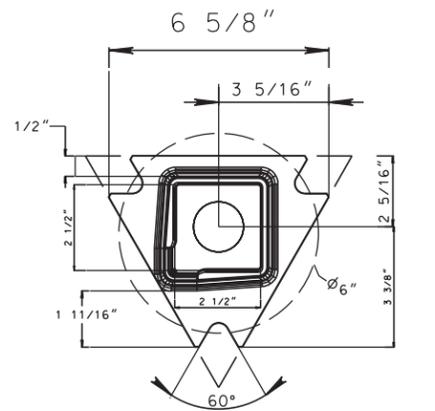
PLOT NAME - 3

FILE - ... \SIGNING\SPECIAL SIGNS.DGN

# 48" WINGED ANCHOR SLIP BASE

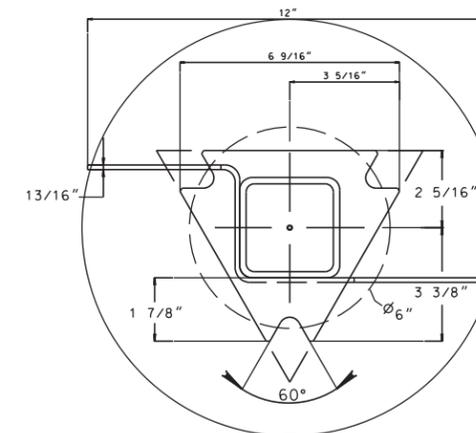


TOP POST RECEIVER  
for 2-1/2" SQUARE POST



MATERIAL:  
DUCTILE IRON CASTING, CLASS 65-45-12

BOTTOM UNIBASE  
SOIL STUB

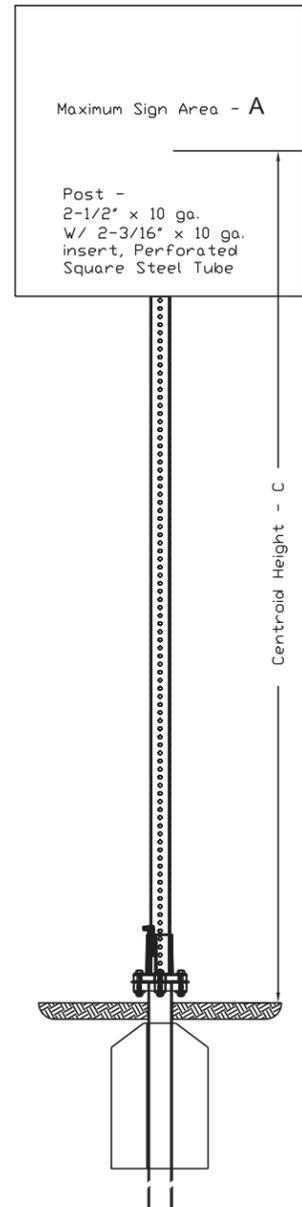


MATERIALS:  
Tube - 3' x 3' x 7 ga. ASTM A500 Grade B tube  
Stabilizing Wing - 7 ga. H.R.P.D. ASTM A 569  
Plate - ASTM A572 grade 50

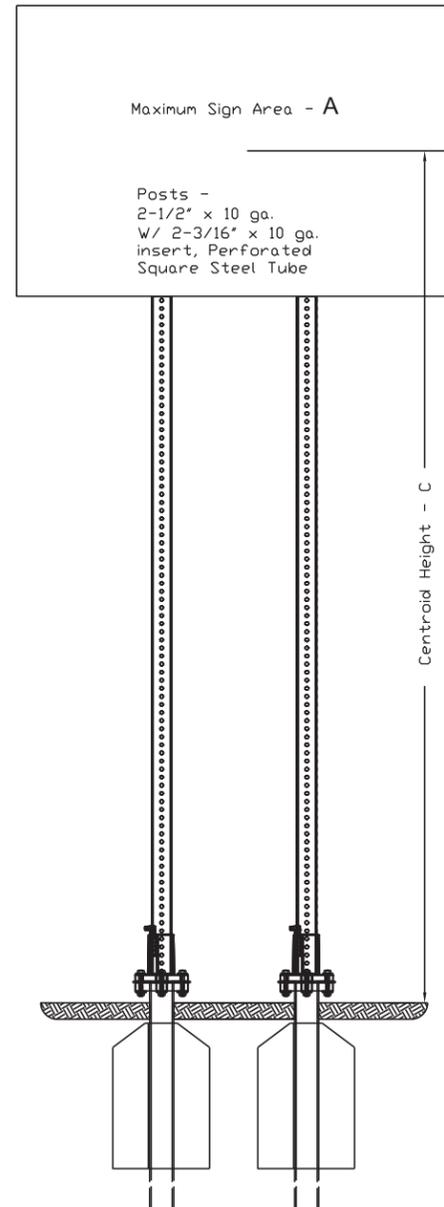
PLOTTED FROM - TRAB12222

# 48" WINGED SLIP BASE

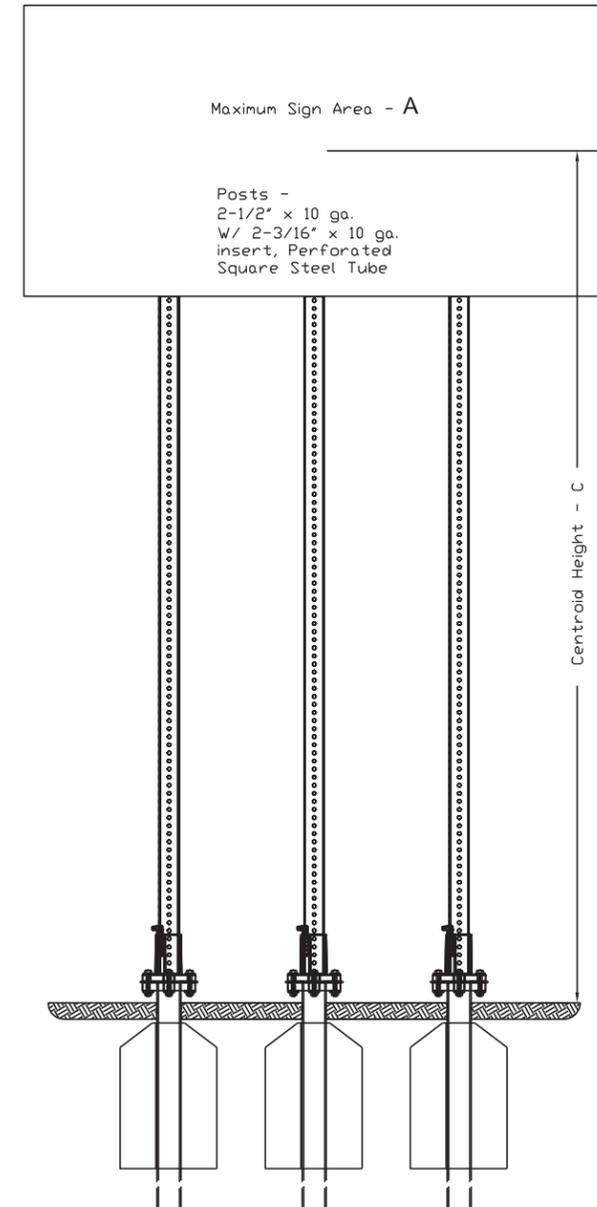
## Post and Wind Load Information



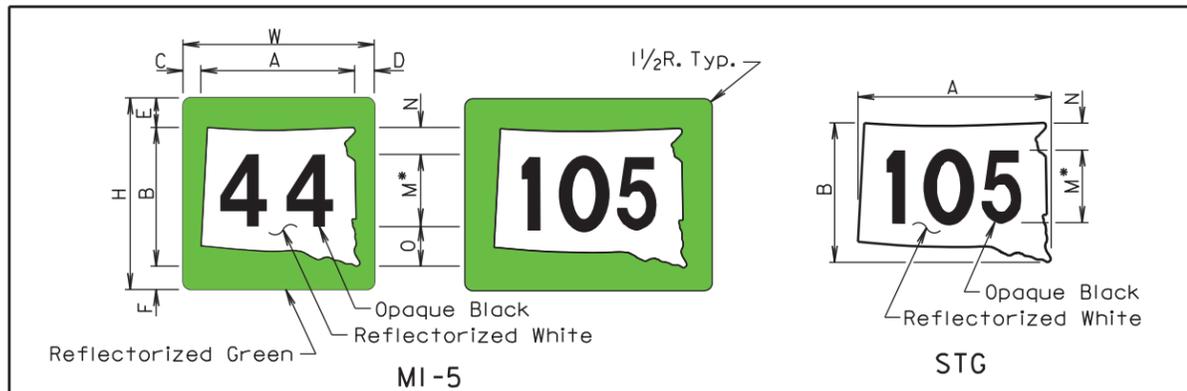
centroid - C	Maximum Sign Area - A
8 ft.	42 ft <sup>2</sup>
9 ft.	38 ft <sup>2</sup>
10 ft.	34 ft <sup>2</sup>
11 ft.	30 ft <sup>2</sup>
12 ft.	28 ft <sup>2</sup>
13 ft.	26 ft <sup>2</sup>
14 ft.	24 ft <sup>2</sup>
15 ft.	22 ft <sup>2</sup>
16 ft.	20 ft <sup>2</sup>



centroid - C	Maximum Sign Area - A
8 ft.	84 ft <sup>2</sup>
9 ft.	76 ft <sup>2</sup>
10 ft.	68 ft <sup>2</sup>
11 ft.	60 ft <sup>2</sup>
12 ft.	56 ft <sup>2</sup>
13 ft.	52 ft <sup>2</sup>
14 ft.	48 ft <sup>2</sup>
15 ft.	44 ft <sup>2</sup>
16 ft.	40 ft <sup>2</sup>



centroid - C	Maximum Sign Area - A
8 ft.	126 ft <sup>2</sup>
9 ft.	114 ft <sup>2</sup>
10 ft.	102 ft <sup>2</sup>
11 ft.	90 ft <sup>2</sup>
12 ft.	84 ft <sup>2</sup>
13 ft.	78 ft <sup>2</sup>
14 ft.	72 ft <sup>2</sup>
15 ft.	66 ft <sup>2</sup>
16 ft.	60 ft <sup>2</sup>

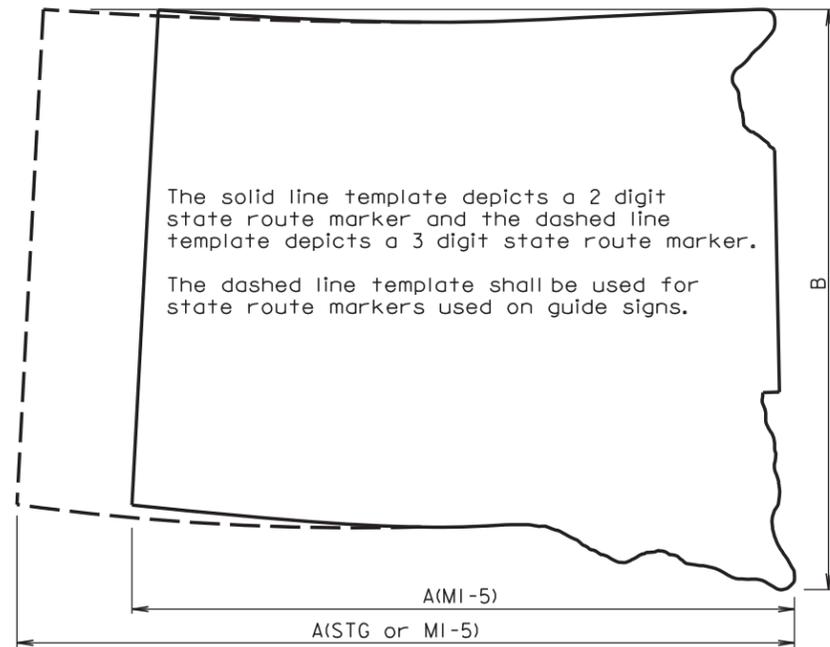


SIGN CODE	WxH	A	B	C	D	E	F	M*	N	O
MI-5	24x24	20 1/2	18	2	1 1/2	3 1/2	2 1/2	12D	2	4
MI-5**	30x24	24	18	2 1/4	1 3/4	3 1/2	2 1/2	12D	2	4
MI-5	30x30	25 5/8	22 1/2	2 1/2	1 7/8	4 3/8	3 1/8	15D	2 1/2	5
MI-5	36x36	30 3/4	27	3	2 1/4	5 1/4	3 3/4	18D	3	6

SIGN CODE	AxB	M*	N
STG-24	24x18	10D	4
STG-32	32x24	12D	4 3/4
STG-48	48x36	18D	7
STG-64	64x48	24D	9 1/2

\*In the few cases where there is not enough space for the numerals, the standard "D" series font may be replaced with "C" series font if approved by the Engineer.

\*\* 3 Digits



TEMPLATE FOR STATE ROUTE MARKER

GENERAL NOTES:

The unit for all dimensions shown is inches.

Numerals shall be "D" series font for all state route markers except as noted above.

December 23, 2003

Published Date: 1st Qtr. 2014	S D D O T	STATE ROUTE MARKERS	PLATE NUMBER 632.20
			Sheet 1 of 1