

SECTION 905 -- PROPOSAL (CONTINUED)

I (We) hereby certify by digital signature and electronic submission via Bid Express of the Section 905 proposal below, that all certifications, disclosures and affidavits incorporated herein are deemed to be duly executed in the aggregate, fully enforceable and binding upon delivery of the bid proposal. I (We) further acknowledge that this certification shall not extend to the bid bond or alternate security which must be separately executed for the benefit of the Commission. This signature does not cure deficiencies in any required certifications, disclosures and/or affidavits. I (We) also acknowledge the right of the Commission to require full and final execution on any certification, disclosure or affidavit contained in the proposal at the Commission's election upon award. Failure to so execute at the Commission's request within the time allowed in the Standard Specifications for execution of all contract documents will result in forfeiture of the bid bond or alternate security.

Bidder acknowledges receipt of and has added to and made a part of the proposal and contract documents the following addendum (addenda):

ADDENDUM NO. <u> 1 </u>	DATED <u> 11/14/2022 </u>	ADDENDUM NO. <u> </u>	DATED <u> </u>
ADDENDUM NO. <u> </u>	DATED <u> </u>	ADDENDUM NO. <u> </u>	DATED <u> </u>
ADDENDUM NO. <u> </u>	DATED <u> </u>	ADDENDUM NO. <u> </u>	DATED <u> </u>

Number	Description
1	Revised NTB No. 4622; Revised Bid items; Amendment EBSx Download Required.

TOTAL ADDENDA: 1
 (Must agree with total addenda issued prior to opening of bids)

Respectfully Submitted,

DATE _____

 Contractor

BY _____
 Signature

TITLE _____

ADDRESS _____

CITY, STATE, ZIP _____

PHONE _____

FAX _____

E-MAIL _____

(To be filled in if a corporation)

Our corporation is chartered under the Laws of the State of _____ and the names, titles and business addresses of the executives are as follows:

_____	President	Address
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_____	Secretary	Address
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_____	Treasurer	Address
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The following is my (our) itemized proposal.

SP-0060-03(025)/ 108962301000 & SP-0060-03(025)/ 108962302000

Marshall & Benton County(ies)

Revised 01/26/2016

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 4622

CODE: (SP)

DATE: 08/03/2022

SUBJECT: Scope of Work

PROJECT: SP-0060-03(025) / 108962301 & 302 -- Marshall & Benton Counties

The contract documents do not include an official set of construction plans but may, by reference; include some Standard Drawings when so specified in a Notice to Bidders entitled, "Standard Drawings".

The work to be accomplished using the pay items and corresponding specifications set forth in this contract is for the overlaying of approximately 13.7 miles of MS Highway 4 in the following locations.

Marshall County beginning at the MS Highway 4 Holly Springs Bypass (MP:20.009) and going easterly to the Benton County Line (MP27.166).

Benton County beginning at the Marshall County Line (MP:0.000) and going easterly MS Highway 5 (MP:6.573).

Bidders are advised that cross-slopes for curve super elevations shall be constructed in accordance with information provided by the Department. To assist the Contractor in correctly placing the cross slope transitions, the Department will provide the stationing and percent slope information at the preconstruction conference.

It shall be the responsibility of the Contractor to protect the roadway and all existing structures, such as bridges and curb, from damage occurring as a result of the Contractor's operations. Damages to existing features caused by the Contractor's operations shall be repaired or replaced at no cost to the Department.

At bridge ends and at the end of work day, a taper of one vertical inch (1") for each three horizontal feet (3') shall be provided.

The Contractor shall make a utility location request to 811 prior to any excavation, except for trench widening or pavement removal/repair.

Shoulders shall be maintained throughout the duration of the project to assure traffic safety.

In order to expedite the safe movement of traffic and to protect each phase of the work as it is performed, a firm sequence of operations is essential. The work shall begin and be continually prosecuted.

The work shall consist of the following.

1. Failed areas on MS Highway 5 shall be repaired as needed using the following:

- 202-B, Removal of Asphalt Pavement, All Depths
- 203-G, Excess Excavation
- 403-A, 19-mm, ST Asphalt Pavement
- 503-C, Saw Cut Full Depth

Station	Lane	Length (ft)	Width (ft)	Area (SY)
219+12	RT	80	6	53.33
226+56	RT	119	11	145.44
234+19	LT&RT	28	22	68.44
302+80	RT	85	11	103.89
401+90	RT	110	6	73.33
			Marshall County	444.44
428+10	LT	40	8	35.56
435+52	RT	40	6	26.67
519+80	RT	152	6	101.33
590+26	LT&RT	75	22	183.33
608+60	RT	120	8	106.67
713+62	RT	135	6	90.00
			Benton County	543.56
			Project Total	989

NOTE: Failed areas are estimated as one foot (1') of excavation and backfilled with one foot (1') (maximum 3½" lifts) of 19-mm. ST asphalt. The asphalt shall be placed per the Project Engineer's instructions. Saw cuts will be required and will be paid for separately.

NOTE: Failed areas shall be backfilled the same day as excavation.

2. The Contractor shall place ¾" and variable of 9.5-mm, ST, Leveling asphalt for the leveling of the mainline to correct cross slopes on all sections. Additional quantities of leveling asphalt have been included to correct the cross slope on existing horizontal curves according to information provided by the Department. A maximum lift of three inches (3") shall be maintained for curve leveling. Granular material shall be placed on the shoulder prior to leveling of curves to maintain the legal drop-off requirements.

9.5-mm, ST, Leveling Asphalt (Tons)			
Area	Marshall	Benton	Total
Tangent Sections	3,600	2,675	6,275
Curve Corrections	3,750	2,225	5,975
Totals	7,350	4,900	12,250

3. The Contractor shall fine mill the existing asphalt pavement at the channelized SR 4 Bypass intersection, local road tie-ins, bridge ends (to be milled to the length of the guardrail pads), and EOP at SR 5 to a depth of 1½” and variable in order to provide a smooth transition. The entire roadway section will not be milled.

The milling material obtained shall become the property of the Contractor.

Payment for fine milling of pavement will be made under pay item 406-D, per square yard, and shall include all cost associated with the milling operation.

NOTE: During this operation and prior to placement of the asphalt, due care shall be required to keep surface water from ponding on the roadway surface. Continuous monitoring of the project may be required.

NOTE: During this operation and prior to placement of the asphalt, the Contractor shall repair and maintain all pot holes.

4. The Contractor shall excavate 3” deep and 2’ wide at the pavement edges for trench widening. The overall pavement width shall be 26’ wide.

NOTE: Prior to this excavation, sufficient granular material shall be in place to provide an acceptable trench widening operation.

NOTE: Any material removed from the excavation operation of trench widening that cannot be reasonably used as part of the final shoulder shall be removed; and this material shall be moved simultaneous with the trench widening operation. Cost of this work will not be measured for separate payment and all costs should be included in the cost bid for trench widening. Neither shall this material be allowed to remain rolled up on the existing shoulder or bladed down the existing slope.

NOTE: Due care shall be taken during this operation to blade material to the roadway and away from the ditch line. Material inadvertently bladed to the roadway vegetation shall be removed at no cost to the Department.

NOTE: The Contractor shall take due care to only remove the amount of trench widening that can be replaced before the end of each day in order to not leave an open trench overnight.

5. Three inches (3”) of 19-mm, ST, Trench Widening asphalt shall be placed in the previous excavated trench.
6. One and one-half inches (1½”) of 9.5-mm, ST asphalt shall be placed as a surface course.

9.5-mm, ST, Asphalt (Tons)			
Area	Marshall	Benton	Total
Mainline	11,000	8,525	19,525
Local Roads and Pads	950	1,200	2,150
Totals	11,950	9,725	21,675

7. Granular material shall be placed on the shoulders as directed to raise the existing shoulders to the new surface course grade.

NOTE: Shoulders shall be bladed, shaped and compacted throughout the length of the project regardless of whether granular material is required.

NOTE: Granular material not required for the final shape of the shoulders may require removal under the pay item for excess excavation and may include small amounts of asphalt.

NOTE: Due care shall be taken during this operation to blade material to the roadway and away from the ditch line. Material inadvertently bladed to the roadway vegetation shall be removed at no cost to the Department.

8. Temporary traffic stripe shall be placed daily as per Section 618 of the Standard Specifications.
9. Guardrails shall be removed and replaced at the following locations:

BR #	Guardrail Removal	Guardrail Installation	Terminal Section	Bridge Section Type H	Delineators, Guard Rail White
19.7	650	400	4	4	22
20.6	650	400	4	4	22
Marshall	1300	800	8	8	44
85.8	475	225	4	4	20
87.9	475	225	4	4	20
Benton	950	450	8	8	40
Totals	2,250	1,250	16	16	84

NOTE: The Contractor shall match the length, taper rate, and offset of the existing guardrail. The Contractor will be required to lay out the proposed rail for approval by the Project Engineer prior to installation.

10. Rumble strips for rumble stripe shall be installed on the outside of edge of the roadway.

- 11. Existing traffic stripe shall be removed from 785 linear feet of concrete bridge deck and replace with double drop thermoplastic striping. Permanent pavement markings (double drop thermoplastic striping, two-way clear high performance raised pavement markers, two-way yellow reflective high performance raised markers and red-clear high performance raised pavement markers) shall be placed as required.
- 12. All existing post mounted standard roadside signs estimated in the attached table shall be replaced. The Contractor shall deliver the removed signs to the Benton County Maintenance Shop located on SR 5 in Ashland. All existing u-channel posts shall be replaced with 2 lb./ft. square posts. Signs on existing pipe posts shall be replaced on the existing post. The sign removal will be absorbed in the cost of the replacement sign. All signs and hardware shall be removed from post prior to delivery. The Contractor shall verify the sign quantity prior to ordering materials. All hardware and footings required for the erection of new signs and post shall be included in other items of work.

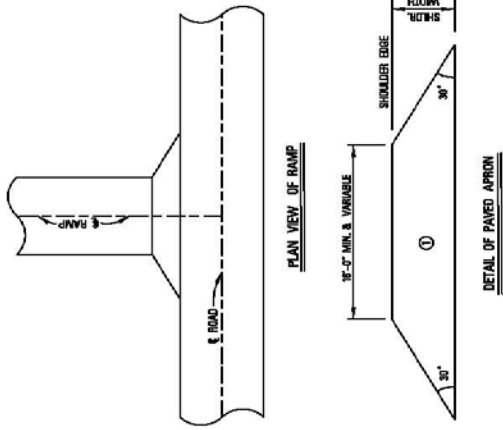
Pay Item	Description	Unit	Marshall	Benton	Total
202-B	Removal of Sign, Including Post and Footing	EA	49	63	112
630-A	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness	SF	198	58	256
630-A	Standard Roadside Signs, Sheet Aluminum, 0.125" Thickness	SF	190	295	485
630-A	Standard Roadside Signs, Sheet Aluminum, 0.1" Thickness	SF	30	75	105
630-C	Square Tube Post, 2.0 lb/ft	LF	720	735	1,455
630-G	Type 3 Object Marker, OM-3R or OM-3L	EA	12	14	26

The Contractor shall provide all signs and traffic handling devices necessary to safely maintain traffic around or through the work areas.

Incidental work such as removing vegetation, shaping and compaction of shoulder, necessary and incidental grading of roadway ditches and other incidental work that is necessary to complete the work will not be measured for separate payment and the cost will be included in the bid items provided.

The Engineer may direct the use of additional cones at County Roads or intersections within lane closures and will be included in pay item 618-A: Maintenance of Traffic.

STATE	PROJECT NO.
MISS.	



① 1-1/2" & VARIABLE DEPTH ASPHALT PAVEMENT REQUIRED



MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
MISCELLANEOUS DETAIL	
PROJECT NUMBER	MS-1
FILE NAME	DATE
ESTIMATOR	SCALE
DATE	DATE

Removal and Replacement of Existing Signs

Station #	Lane	Sign Description	Sign Code	Removal U-Channel	Notes	Type 3 OM	0.08"	0.1"	0.125"	Square Tube Post 2.0 lb/ft
19.631	R	Left Curve	W1-2L	1					9	15
19.197	L	Speed Limit 40	R2-1	1			5			15
19.197	R	Speed Limit 40	R2-1	1			5			15
19.631	L	Speed Limit 55	R2-1	1			5			15
19.631	R	Route Marker 4	M1-5	1			4			15
19.631	R	Junction	M2-1		Same Post		2.19			
19.631	R	Up Arrow	M6-3		Same Post		2.19			
19.631	R	Hospital	D9-2		pipe post					
19.631	R	Right Arrow (Blue)	M6-1R		pipe post					
19.631	L	Route Marker 4	M1-5	1			4			15
19.631	L	West	M3-4		Same Post		2			
19.631	R	Route Marker 4	M1-5	1			4			15
19.631	R	West	M3-4		Same Post		2			
19.631	R	Right Angle	M5-1R		Same Post		2.19			
19.631	R	Route Marker 4	M1-5	1			4			15
19.631	R	East	M3-2		Same Post		2			
19.631	R	Up Arrow	M6-3		Same Post		2.19			
19.525	R	Stop Ahead Symbol	W3-1a		on pipe post				16	
19.631	L	Two Direction Arrow	W1-7	2					8	30
19.612	L	Yield	R1-2	1			4.5			15
19.612	L	Do Not Enter	R5-1		Same Post				9	
19.55	R	Chevron Left	W1-8L	1			5			15
19.626	L	Stop	R1-1		on pipe post				13.25	
19.57	R	Chevron Left	W1-8L	1			5			15
19.577	R	Chevron Left	W1-8L	1			5			15
19.584	R	Chevron Left	W1-8L	1			5			15
19.606	R	Route Marker 4	M1-5		pipe post		4			
19.606	R	Route Marker 4	M1-5		pipe post		4			
19.606	R	East	M3-2		pipe post		2			
19.606	R	West	M3-4		pipe post		2			
19.606	R	Left Arrow	M6-1L		pipe post		2.19			
19.606	R	Right Angle	M6-2R		pipe post		2.19			
19.643	L	Yield	R1-2	1			4.5			15
19.643	L	Do Not Enter	R5-1		same post				9	
19.674	L	Route Marker 4	M1-5	1			4			15
19.674	L	West	M3-4		same post		2			
19.674	L	Left Angle	M5-1L		Same Post		2.19			
19.687	L	Hospital	D9-2		pipe post				9	
19.687	L	Left Arrow (Blue)	M6-1L		pipe post		2.19			
19.884	L	Right Curve	W1-2R	1					9	15
19.961	L	Speed Limit 40	R2-1	1			5			15
19.961	R	Speed Limit 55	R2-1	1			5			15
20.06	L	Stop	R1-1	1				7.46		15
20.724	R	Brdge May Ice	W8-13	1					9	15
20.86	R	Type 3 OM's	OM-3R	1		1				
20.869	R	Type 3 OM's	OM-3L	1		1				
20.9	L	Type 3 OM's	OM-3L	1		1				
20.891	L	Type 3 OM's	OM-3R	1		1				
21.067	L	Brdge May Ice	W8-13	1					9	15
21.115	R	Do Not Pass	R4-1	1			4			15
21.566	R	Two Direction Arrow	W1-7	2					8	30
22.861	R	Brdge May Ice	W8-13	1					9	15
22.996	R	Type 3 OM's	OM-3L	1		1				
22.996	R	Type 3 OM's	OM-3R		Same Post	1				
23.031	L	Type 3 OM's	OM-3L	1		1				
23.031	L	Type 3 OM's	OM-3R		Same Post	1				
23.147	L	Brdge May Ice	W8-13	1					9	15
24.432	R	Side Road Left	W2-2L	1					9	15
24.527	L	Stop	R1-1	1				7.46		15
25.261	L	Route Marker 4	M1-5	1			4			15
25.261	L	West	M3-4		Same Post		2			

Removal and Replacement of Existing Signs

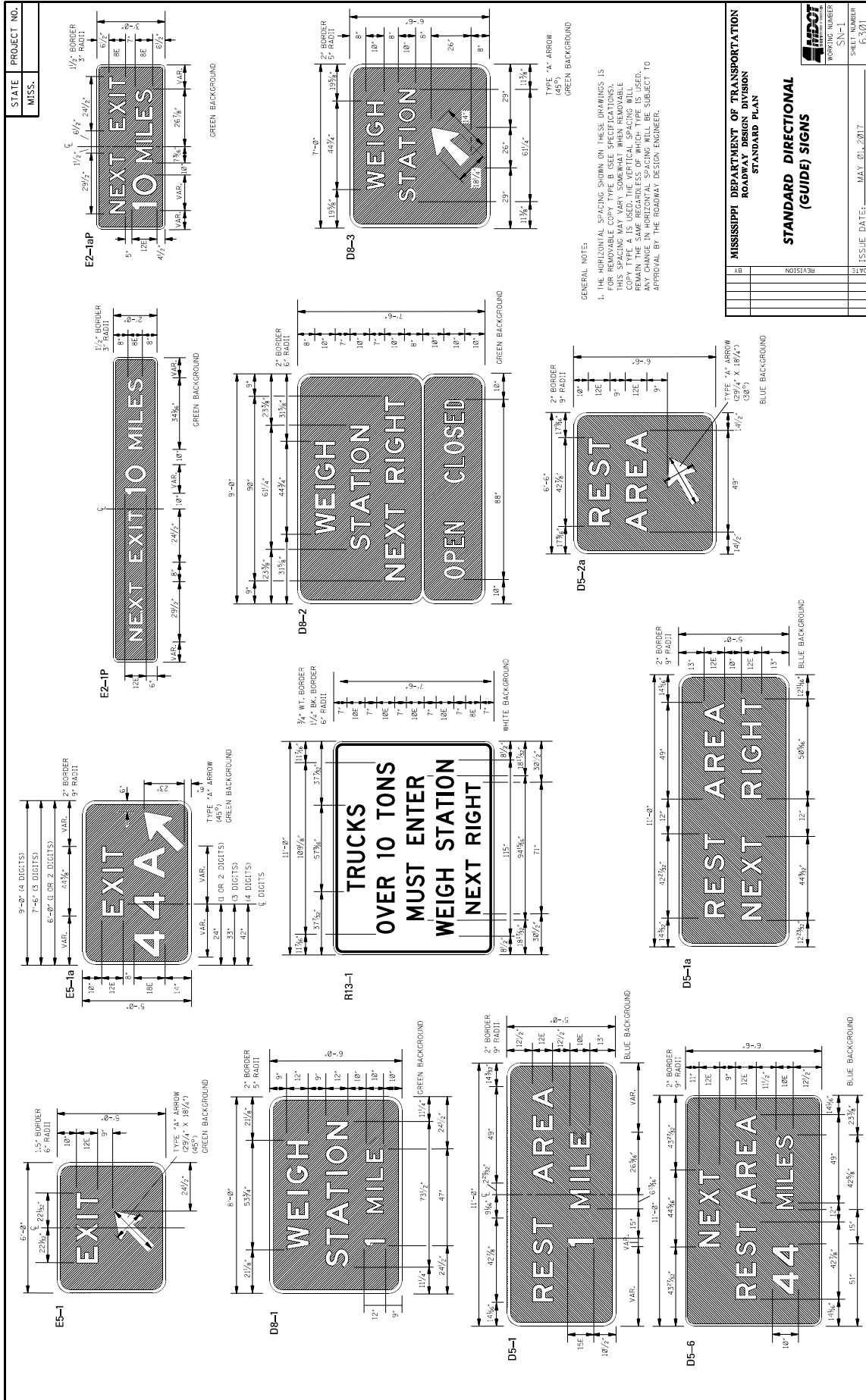
25.261	L	West	M3-4		Same Post		2				
25.266	R	Route Marker 4	M1-5	1			4			15	
25.266	R	East	M3-2		Same Post		2				
25.332	L	Type 3 OM's	OM-3L	1		1					
25.332	L	Type 3 OM's	OM-3R			1					
25.432	R	Right Curve	W1-2R	1					9	15	
25.734	L	Left Curve	W1-2L	1					9	15	
25.882	R	Side Road Offset	W2-7R	1					9	15	
25.996	R	Stop	R1-1	1				7.46		15	
26.056	L	Stop	R1-1	1				7.46		15	
26.109	L	Side Road Offset	W2-7L	1					9	15	
26.558	R	Right Curve	W1-2R	1					9	15	
26.628	L	Chevron Left	W1-8L				5			15	
26.653	R	Type 3 OM's	OM-3R	1		1					
26.664	L	Type 3 OM's	OM-3L	1		1					
26.667	L	Chevron Left	W1-8L				5			15	
26.667	L	Chevron Right	W1-8R		Same Post		5				
26.706	L	Chevron Left	W1-8L				5			15	
26.706	L	Chevron Right	W1-8R		Same Post		5				
26.745	L	Chevron Left	W1-8L				5			15	
26.745	L	Chevron Right	W1-8R		Same Post		5				
26.783	L	Chevron Left	W1-8L				5			15	
26.783	L	Chevron Right	W1-8R		Same Post		5				
26.822	L	Chevron Left	W1-8L				5			15	
26.822	L	Chevron Right	W1-8R		Same Post		5				
26.861	L	Chevron Left	W1-8L				5			15	
26.861	L	Chevron Right	W1-8R		Same Post		5				
26.9	L	Chevron Right	W1-8R				5			15	
26.981	L	Left Curve	W1-2L	1					9	15	
		Total Marshall		49			12	197.52	29.84	189.25	720

Removal and Replacement of Existing Signs

Station #	Lane	Sign Description	Sign Code	Removal U-Channel	Notes	Type 3 OM	0.08"	0.1"	0.125"	Square Tube Post 2.0 lb/ft
0.535	R	Left Curve	W1-2L	1					9	15
0.829	L	Right Curve	W1-2R	1					9	15
1.234	R	Brdge May Ice	W8-13	1					9	15
1.395	R	Type 3 OM's	OM-3R	1		1				
1.446	L	Type 3 OM's	OM-3L	1		1				
1.499	L	Type 3 OM's	OM-3L	1		1				
1.541	R	Type 3 OM's	OM-3R	1		1				
1.594	L	Brdge May Ice	W8-13	1					9	15
1.72	L	Brdge May Ice	W8-13	1					9	15
1.852	L	Type 3 OM's	OM-3R	1		1				
1.86	L	Type 3 OM's	OM-3L	1		1				
2.061	R	Crossroad	W2-1	1					9	15
2.197	R	Stop	R1-1	1				7.46		15
2.208	R	Stop Ahead	W3-1a	1					9	15
2.333	L	Stop	R1-1	1				7.46		15
2.333	L	Crossroad	W2-1	1					9	15
3.043	R	Truck Crossing	W8-6	1					9	15
3.14	R	Side Road Left	W2-2L	1					9	15
3.248	L	Stop Ahead	W3-1a	1					9	15
3.254	L	Stop	R1-1	1				7.46		15
3.254	R	Two Direction Arrow	W1-7	2					8	30
3.328	R	Side Road Left	W2-2L	1					9	15
3.407	L	Side Road Right	W2-2R	1					9	15
3.413	R	Brdge May Ice	W8-13	1					9	15
3.51	L	Type 3 OM's	OM-3R	1		1				
3.51	L	Stop	R1-1	1				7.46		15
3.573	R	Type 3 OM's	OM-3L	1		1				
3.584	R	Type 3 OM's	OM-3R	1		1				
3.601	R	Type 3 OM's	OM-3R	1		1				
3.652	R	Emergency Vehicle	W11-8	1					9	15
3.658	L	Type 3 OM's	OM-3R	1		1				
3.693	L	Stop	R1-1	1				7.46		15
3.855	L	Stop	R1-1	1				7.46		15
3.867	L	Side Road Right	W2-2R	1					9	15
3.926	L	Emergency Vehicle	W11-8	1					9	15
4.008	R	School Bus Stop	S3-1	1					9	15
4.307	L	Type 3 OM's	OM-3R	1		1				
4.318	L	Type 3 OM's	OM-3L	1		1				
4.321	L	Type 3 OM's	OM-3L	1		1				
4.294	L	School Bus Stop	S3-1	1					9	15
4.67	R	Side Road Right	W2-2R	1					9	15
4.749	R	Stop	R1-1	1				7.46		15
4.733	R	Stop Ahead	W3-1a	1					9	15
4.872	L	Side Road Right	W2-2R	1					9	15
4.878	L	Two Direction Arrow	W1-7	2					8	30
5.055	L	Stop	R1-1	1				7.46		15
5.182	R	Side Road	W2-2R	1					9	15
5.277	R	Stop	R1-1	1				7.46		15
5.385	L	Side Road Right	W2-2R	1					9	15
5.723	L	Stop Ahead	W3-1a	1					9	15
5.808	L	Stop	R1-1	1				7.46		15
5.871	R	Side Road Left	W2-2L	1					9	15
5.947	L	Side Road Right	W2-2R	1					9	15
6.115	R	Right Curve	W1-2R	1					9	15
6.115	R	35 M.P.H.	W13-1P		Same Post		2.25			
6.32	R	Advisory Speed (35)	W1-1a	1					9	15
6.355	R	Route Marker 5	M1-5	1			4			15
6.355	R	Route Marker 4	M1-5		Same Post		4			
6.355	R	JCT.	M2-1		Same Post		2.19			
6.355	R	Load 57,650 lbs	R12-5		Same Post		5			
6.371	R	Speed Limit 55	R2-1	1			5			15

Removal and Replacement of Existing Signs

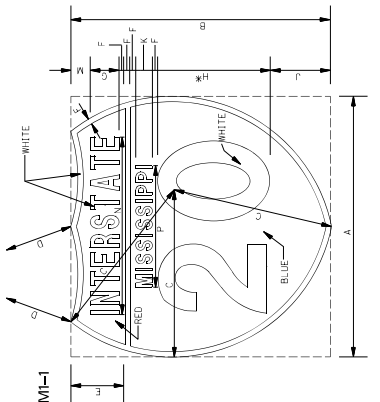
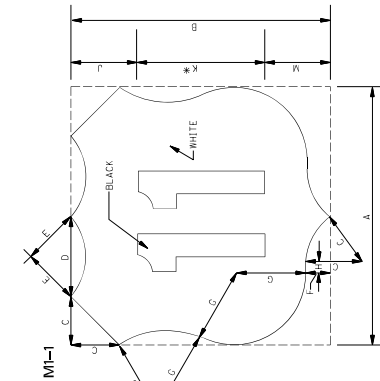
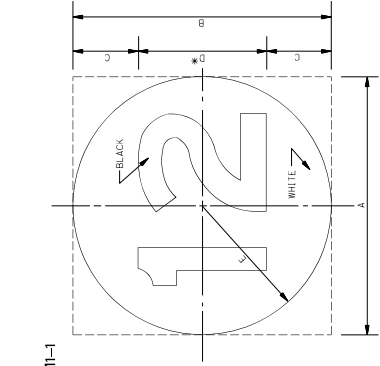
Station #	Lane	Sign Description	Sign Code	Removal U-Channel	Notes	Type 3 OM	0.08"	0.1"	0.125"	Square Tube Post 2.0 lb/ft
6.435	L	Do Not Pass	R4-1	1			4			15
6.435	R	Stop Ahead	W3-1a	1					9	15
6.47	L	Left Curve	W1-2L	1					9	15
6.47	L	35 M.P.H.	W13-1P		Same Post		2.25			
6.488	L	Do Not Pass	R4-1	1			4			15
6.534	R	Route Marker 4	M1-5		Pipe Post		4			
6.534	R	Route Marker 5	M1-5		Pipe Post		4			
6.534	R	Route Marker 5	M1-5		Pipe Post		4			
6.534	R	North	M3-1		Pipe Post		2			
6.534	R	East	M3-2		Pipe Post		2			
6.534	R	South	M3-3		Pipe Post		2			
6.534	R	Right Arrow	M6-1		Pipe Post		2.19			
6.534	R	Right Arrow	M6-1		Pipe Post		2.19			
6.534	R	Right Arrow	M6-1		Pipe Post		2.19			
		Total Benton		63		14	57.26	74.6	295	735



STATE	PROJECT NO.
MISS.	

GENERAL NOTES:

- U.S. AND MISSISSIPPI SHIELDS DO NOT HAVE AN OUTSIDE BORDER.
- INTERSTATE, U.S. AND MISSISSIPPI SHIELDS ARE TO BE USED ONLY ON GUIDE SIGNS. SEE OTHER DRAWINGS FOR SHIELDS TO BE USED INDEPENDENTLY AS ROUTE NUMBERS.
- ON INTERSTATE SHIELDS, THE LEGEND AND BACKGROUND SHALL BE REFLECTORIZED.
- ON U.S. AND MISSISSIPPI SHIELDS, THE BACKGROUND SHALL BE REFLECTORIZED.
- IN SOME CASES, NUMERALS CANNOT BE ACCOMMODATED WITHIN THE SHIELD. IN THESE SITUATIONS, THE STANDARD SERIES "D" NUMERALS MAY BE REDUCED TO SERIES "C" NUMERALS OR AS SMALLER HEIGHT COMMONLY AVAILABLE.



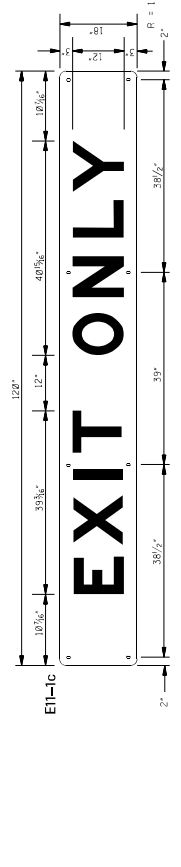
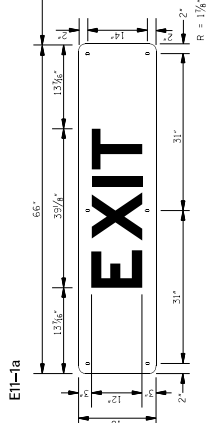
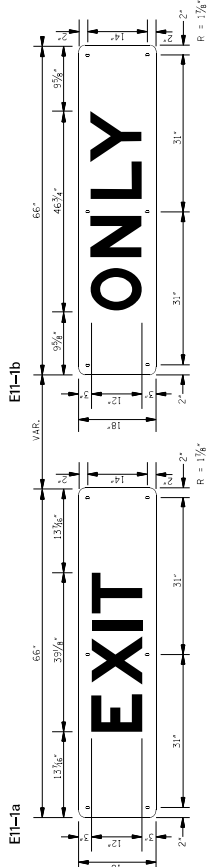
	DIMENSIONS (INCHES)				
	A	B	C	D	E
12-DIGITS	24"	36"	36"	18"	18"
12-DIGITS	36"	54"	54"	27"	27"
12-DIGITS	48"	72"	72"	36"	36"
12-DIGITS	60"	90"	90"	45"	45"
12-DIGITS	72"	108"	108"	54"	54"
12-DIGITS	84"	126"	126"	63"	63"
12-DIGITS	96"	144"	144"	72"	72"
12-DIGITS	108"	162"	162"	81"	81"
12-DIGITS	120"	180"	180"	90"	90"

	12" NUMERALS	18" NUMERALS	24" NUMERALS
A	24"	36"	48"
B	36"	54"	72"
C	36"	54"	72"
D	18"	27"	36"
E	18"	27"	36"
F	18"	27"	36"
G	18"	27"	36"
H	18"	27"	36"
I	18"	27"	36"
J	18"	27"	36"
K	18"	27"	36"
L	18"	27"	36"
M	18"	27"	36"
N	18"	27"	36"
O	18"	27"	36"
P	18"	27"	36"
Q	18"	27"	36"
R	18"	27"	36"
S	18"	27"	36"
T	18"	27"	36"
U	18"	27"	36"
V	18"	27"	36"
W	18"	27"	36"
X	18"	27"	36"
Y	18"	27"	36"
Z	18"	27"	36"

	12" NUMERALS	18" NUMERALS	24" NUMERALS
A	24"	36"	48"
B	36"	54"	72"
C	36"	54"	72"
D	18"	27"	36"
E	18"	27"	36"
F	18"	27"	36"
G	18"	27"	36"
H	18"	27"	36"
I	18"	27"	36"
J	18"	27"	36"
K	18"	27"	36"
L	18"	27"	36"
M	18"	27"	36"
N	18"	27"	36"
O	18"	27"	36"
P	18"	27"	36"
Q	18"	27"	36"
R	18"	27"	36"
S	18"	27"	36"
T	18"	27"	36"
U	18"	27"	36"
V	18"	27"	36"
W	18"	27"	36"
X	18"	27"	36"
Y	18"	27"	36"
Z	18"	27"	36"

GENERAL NOTES:

- THESE SIGNS SHALL BE MANUFACTURED ON 0.063" THICK ALUMINUM SHEET. ALL LETTERS AND NUMERALS SHALL BE REVERSE PAID FOR AS SEPARATE SIGNS BUT SHALL BE CONSIDERED AS PART OF THE MAJOR SIGNS TO WHICH THEY ARE AFFIXED.
- LETTER SIZE: 12" SERIES "D"
- COLOR: LEGEND - BLACK; BACKGROUND - HI-INTENSITY YELLOW



MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

ROUTE SHIELDS
AND
"EXIT ONLY" PANELS

ISSUE DATE: MAY 01, 2012

WORKING NUMBER: SN-2
SHEET NUMBER: 63/62

SIGN NUMBER	ALUMINUM (6061-T6) SIGN BLANK THICKNESS	D19-2	D18-1	D18-2	D18-3	D18-1a	D18-2a	D18-3a	D18-4	D18-5	M1-1	M1-1	M1-4	M1-6	STATE PROJECT NO.	
															MISS.	MISS.
LETTER & NUMERAL SERIES	29" SERIES 30" SERIES "E" MOD. "F" MOD.	4" SERIES "B" 10" SERIES "D"	4" SERIES "B" 10" SERIES "D"	4" SERIES "B" 10" SERIES "D"	4" SERIES "B" 10" SERIES "D"	4" SERIES "B" 10" SERIES "D"	4" SERIES "B" 10" SERIES "D"	4" SERIES "B" 10" SERIES "D"	6.6" 6" SERIES "B" 6" SERIES "B" 8" SERIES "B"	6.6" 6" SERIES "B" 6" SERIES "B" 8" SERIES "B"	1/2" WHITE	1/2" WHITE	1/2" WHITE	1/2" WHITE		
WIDTH OF BORDER INSIDE	1/2" WHITE	1/2" WHITE	1/2" WHITE	1/2" WHITE	1/2" WHITE	1/2" WHITE	1/2" WHITE	1/2" WHITE	1/2" WHITE	1/2" WHITE	3/4" WHITE	3/4" WHITE	3/4" WHITE	3/4" WHITE		
WIDTH OF BORDER OUTSIDE	1/2" WHITE	1/2" WHITE	1/2" WHITE	1/2" WHITE	1/2" WHITE	1/2" WHITE	1/2" WHITE	1/2" WHITE	1/2" WHITE	1/2" WHITE	3/4" WHITE	3/4" WHITE	3/4" WHITE	3/4" WHITE		
SIZE (WIDTH X HEIGHT)	24" X 24"	36" X 36"	12" X 36"	12" X 48"	12" X 48"	12" X 96"	12" X 48"	12" X 48"	18" X 54"	18" X 60"	36" X 36" (1 OR 2 DIGITS)	36" X 36" (1 OR 2 DIGITS)	36" X 36" (1 OR 2 DIGITS)	36" X 24" (1 OR 2 DIGITS)	24" X 24" (1 OR 2 DIGITS)	
COLORS	WHITE BLUE	WHITE GREEN	WHITE GREEN	WHITE GREEN	WHITE GREEN	WHITE GREEN	WHITE GREEN	WHITE GREEN	WHITE RED BLUE	WHITE RED BLUE	WHITE RED BLUE	WHITE RED BLUE	WHITE RED BLUE	WHITE RED BLUE	WHITE RED BLUE	
REFLECTORIZATION	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	
NUMBER OF POSTS FOR MOUNTING	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
NUMBER OF HOLES TO BE PUNCHED	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
PUNCHING DISTANCE FROM EACH VERTICAL EDGE FROM TOP EDGE	3" 21"	6" 30"	3" 33"	6" 42"	6" 42"	6" 42"	6" 42"	6" 42"	6" 48"	6" 54"	6" 54"	6" 54"	6" 54"	6" 54"	6" 54"	
STICK NUMBER	M2-1	M3-3*	M3-3*	M4-5	M4-5	M5-1L	M5-1L	M5-1L	M5-2L	M5-2R	M5-2L	M5-2L	M5-2L	M5-2L	M5-2L	
STICK BLANK THICKNESS	0.080"	0.080"	0.080"	0.080"	0.080"	0.080"	0.080"	0.080"	0.080"	0.080"	0.080"	0.080"	0.080"	0.080"	0.080"	
LEGEND																
LETTER & NUMERAL SERIES	9" SERIES "C" 10" SERIES "C" 8" SERIES "C"	7" SERIES "C" 8" SERIES "C" 10" SERIES "C" 8" SERIES "C"	7" SERIES "C" 8" SERIES "C" 10" SERIES "C" 8" SERIES "C"	6" SERIES "E"	6" SERIES "E"	6" SERIES "E"	6" SERIES "E"	6" SERIES "E"	6" SERIES "E"	6" SERIES "E"	6" SERIES "E"	6" SERIES "E"	6" SERIES "E"	6" SERIES "E"	6" SERIES "E"	
WIDTH OF BORDER INSIDE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	
WIDTH OF BORDER OUTSIDE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	3/4" BLACK 3/4" WHITE	
SIZE (WIDTH X HEIGHT)	21" X 15"	24" X 12"	30" X 15"	24" X 12"	24" X 12"	21" X 15"	21" X 15"	21" X 15"	21" X 15"	21" X 15"	21" X 15"	21" X 15"	21" X 15"	21" X 15"	21" X 15"	
COLORS	BLACK WHITE BLUE	WHITE BLUE	WHITE BLUE	WHITE BLUE	WHITE BLUE	WHITE BLUE	WHITE BLUE	WHITE BLUE	WHITE BLUE	WHITE BLUE	WHITE BLUE	WHITE BLUE	WHITE BLUE	WHITE BLUE	WHITE BLUE	
REFLECTORIZATION	BACKGROUND	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	
NUMBER OF POSTS FOR MOUNTING	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
PUNCHING DISTANCE FROM EACH VERTICAL EDGE FROM TOP EDGE	12" (6" PUNCH 7" (4" JUNCH) 5" (4" J)	12" (6" PUNCH 7" (4" JUNCH) 5" (4" J)	12" (6" PUNCH 7" (4" JUNCH) 5" (4" J)	12" (6" PUNCH 7" (4" JUNCH) 5" (4" J)	12" (6" PUNCH 7" (4" JUNCH) 5" (4" J)	12" (6" PUNCH 7" (4" JUNCH) 5" (4" J)	12" (6" PUNCH 7" (4" JUNCH) 5" (4" J)	12" (6" PUNCH 7" (4" JUNCH) 5" (4" J)	12" (6" PUNCH 7" (4" JUNCH) 5" (4" J)	12" (6" PUNCH 7" (4" JUNCH) 5" (4" J)	12" (6" PUNCH 7" (4" JUNCH) 5" (4" J)	12" (6" PUNCH 7" (4" JUNCH) 5" (4" J)	12" (6" PUNCH 7" (4" JUNCH) 5" (4" J)	12" (6" PUNCH 7" (4" JUNCH) 5" (4" J)	12" (6" PUNCH 7" (4" JUNCH) 5" (4" J)	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

STANDARD
ROADSIDE SIGNS

ISSUE DATE: MAY 01, 2017
SHEET NUMBER 51-3
WORKING NUMBER 6203

REVISION	DATE	BY

- GENERAL NOTES:
- THE DIMENSIONS FOR THE INTERSTATE AND U.S. SHIELDS SHALL CONFORM WITH THOSE SHOWN IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
 - ROUTE MARKERS AND SHIELDS SHOWN ON THIS SHEET ARE FOR USE INDEPENDENTLY FOR INTERSTATE DIRECTIONAL GUIDES SIGNS. SEE OTHER DRAWINGS FOR SHIELDS TO BE USED ON INTERSTATE DIRECTIONAL GUIDES SIGNS.
 - THE QUANTITIES LISTED ON THIS SUMMARY SHEET FOR THE SIGNS SHOWN ON THIS SHEET WILL BE USED AS THE BASIS FOR FINAL PAYMENT, EXCEPT WHERE SIGNS ARE MODIFIED FROM THAT SHOWN.
4. UNLESS IN SOME CASES, NUMERALS CANNOT BE ACCOMMODATED WITHIN THE SPACE AVAILABLE FOR THESE SITUATIONS, THE STANDARD SERIES "D" NUMERAL SHALL BE REDUCED TO SERIES "C".

SIGN NUMBER	R1-1		R1-2		R2-1		R2-4g		R3-1		R3-2		R3-4		R3-5		R4-3		
	ALUMINUM (6061-T6) SIGN BLANK THICKNESS	0.125"	0.080"	0.100"	0.080"	0.125"	0.100"	0.080"	0.125"	0.080"	0.100"	0.080"	0.100"	0.080"	0.100"	0.080"	0.125"	0.100"	0.125"
STOP																			
YIELD																			
SPEED LIMIT 70																			
SPEED LIMIT 70 MINIMUM 40																			
ONE WAY																			
EMERGENCY PARKING ONLY																			
WRONG WAY																			
DO NOT ENTER																			
DIVIDED HIGHWAY																			
SLOWER TRAFFIC KEEP RIGHT																			
KEEP OFF MEDIAN																			

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

**STANDARD
ROADSIDE SIGNS**

ISSUE DATE: MAY 01, 2017
SHEET NUMBER: SN-3A
WORKING NUMBER: 62304

GENERAL NOTES:
1. THE QUANTITIES LISTED ON THE SUMMARY OF QUANTITIES SHEET FOR THE SIGNS SHOWN ON THIS SHEET WILL BE USED AS THE BASIS FOR FINAL PAYMENT, EXCEPT WHERE SIGNS ARE MODIFIED FROM THAT SHOWN.
2. THE SPEED LIMITS REQUIRED ON SIGNS R2-1 AND R2-4g WILL BE SHOWN ON INDIVIDUAL PLAN SHEETS.

STATE PROJECT NO.		MISS.		W-1011 W-101R		W-3		W-3-2a		W-1a		W-4L W-4R		W-2L W-2R		W-1L W-1R		W-1-1		W-1-2		W-1-3		W-1-4		W-1-5				
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	0.125"																													
LETTERS & NUMERAL SERIES	R-2/4"	R-3"	R-2/4"	R-3"	R-2/4"	R-3"	R-2/4"	R-3"	R-2/4"	R-3"	R-1 1/4"	R-1 1/4"	R-3"	R-2/4"	R-3"	R-2/4"	R-3"	R-2/4"	R-3"	R-2/4"	R-3"	R-1 1/4"	R-3"	R-2/4"	R-3"	R-2/4"	R-3"	R-2/4"	R-3"	
WIDTH OF BORDER	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	
SIZE (WIDTH X HEIGHT)	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	48" X 24"	48" X 24"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"
COLORS	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW
REFLECTORIZATION	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND
NUMBER OF POSTS	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
SPACING BETWEEN POSTS TO BE PUNCHED (5% DIA.)																														
PUNCHING DISTANCE FROM EACH VERT. FOR. TO EACH VERT. FOR. FROM TOP EDGE	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"
LETTERS & NUMERAL SERIES	R-2/4"	R-3"	R-2/4"	R-3"	R-2/4"	R-3"	R-2/4"	R-3"	R-2/4"	R-3"	R-1 1/4"	R-1 1/4"	R-3"	R-2/4"	R-3"	R-2/4"	R-3"	R-2/4"	R-3"	R-2/4"	R-3"	R-1 1/4"	R-3"	R-2/4"	R-3"	R-2/4"	R-3"	R-2/4"	R-3"	
WIDTH OF BORDER	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	
SIZE (WIDTH X HEIGHT)	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	48" X 24"	48" X 24"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"
COLORS	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW
REFLECTORIZATION	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND
NUMBER OF POSTS	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
SPACING BETWEEN POSTS TO BE PUNCHED (5% DIA.)																														
PUNCHING DISTANCE FROM EACH VERT. FOR. TO EACH VERT. FOR. FROM TOP EDGE	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	15" FROM VERT. CENTER 15" FROM VERT. CENTER	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

STANDARD
ROADSIDE SIGNS

ISSUE DATE: MAY 01, 2017

SHEET NUMBER
SN-38

TOTAL SHEETS
63/65

REVISION

GENERAL NOTES:

- THE QUANTITIES LISTED ON THE SUMMARY OF QUANTITIES SHEET FOR THE SIGNS SHOWN ON THIS SHEET WILL BE USED AS THE BASIS FOR FINAL PAYMENT, EXCEPT WHERE SIGNS ARE MODIFIED FROM THAT SHOWN.
- SIGNS W13-2 AND W13-3, THE STRIKE WIDTH OF THE LETTERS AND NUMERALS SHALL BE INCREASED TO 20% OF THE LETTER OR NUMERAL HEIGHT.
- THE SPEEDS REQUIRED ON SIGNS W13-1, W13-2 AND W13-3 WILL BE SHOWN ON INDIVIDUAL PLAN SHEETS.

STATE MISS.	PROJECT NO.	
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ROADSIDE SIGN IN RURAL AREA

ROADSIDE SIGN IN BUSINESS, COMMERCIAL, OR RESIDENTIAL AREA

WARNING SIGN WITH ADVISORY SPEED PLAQUE IN RURAL AREA

ROADSIDE SIGN IN RURAL AREA

ROADSIDE ASSEMBLY IN RURAL AREA

INTERSTATE OR FREEWAY SIGN WITH SECONDARY SIGN

OVERHEAD SIGN

SIGNS IN ISLANDS OR BEHIND CURB USING U-POSTS OR PIPE POSTS

SIGN ON NOSE OF MEDIAN

GENERAL NOTES:

- SEE SECTION 2A-19 OF THE MUTCD FOR REDUCED LATERAL OFFSET DISTANCES THAT MAY BE USED IN AREAS WHERE LATERAL OFFSETS ARE LIMITED, AND IN BUSINESS, COMMERCIAL, OR RESIDENTIAL AREAS WHERE SIDEWALK WIDTH IS LIMITED OR WHERE EXISTING POLES ARE CLOSE TO THE CURB.
- LOCATED OUTSIDE THE CLEAR ZONE UNLESS PLACED ON A BREAKAWAY OR YIELDING SUPPORT.

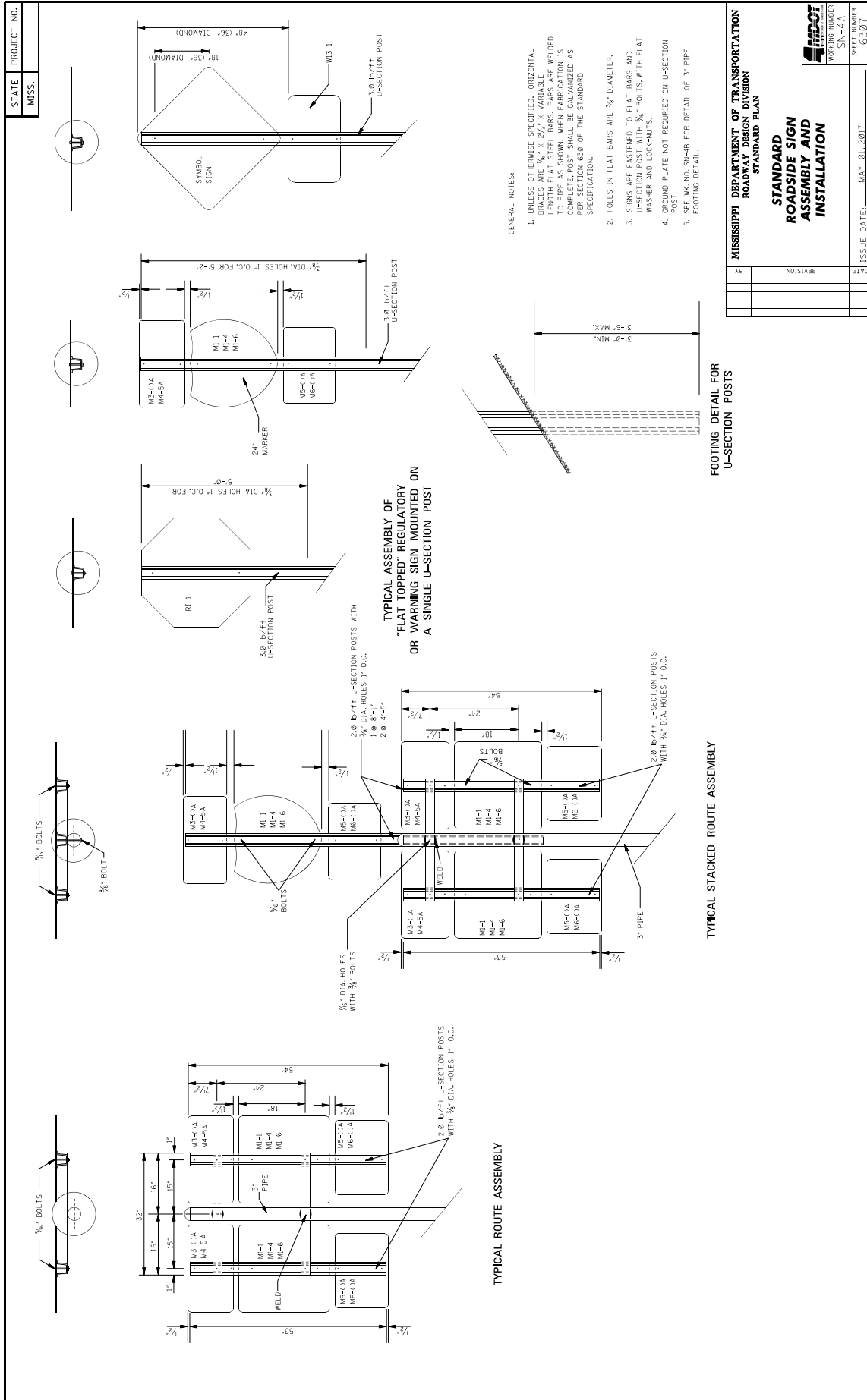
*** THE 2 FT. MINIMUM OFFSET APPLIES ONLY TO STANDARD SIGNS MOUNTED ON U-POSTS. ALL STANDARD SIGNS MOUNTED ON PIPE WILL BE OFFSET 4 FT. FROM THE SHOULDERS.**

*** THE 2 FT. MINIMUM OFFSET APPLIES ONLY TO STANDARD SIGNS MOUNTED ON U-POSTS. ALL STANDARD SIGNS MOUNTED ON PIPE WILL BE OFFSET 4 FT. FROM THE SHOULDERS.**

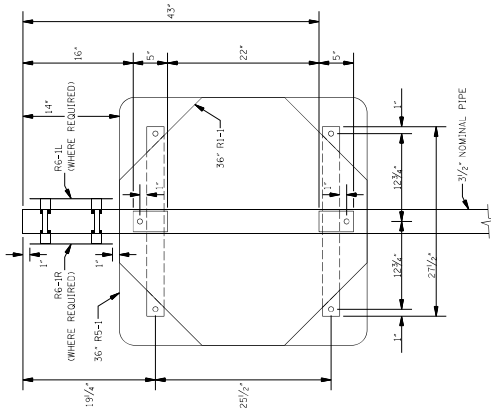
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

STANDARD SIGN ASSEMBLY AND INSTALLATION

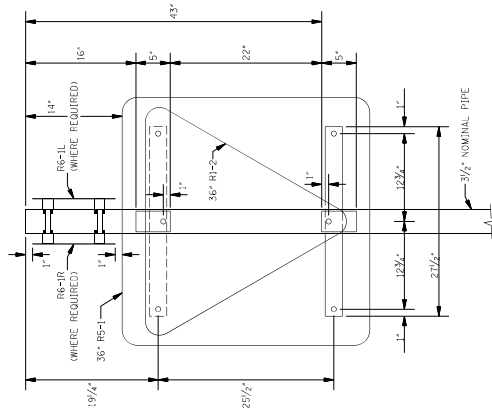
ISSUE DATE: MAY 01, 2017
SHEET NUMBER: 6306
WORKING NUMBER: SN-4



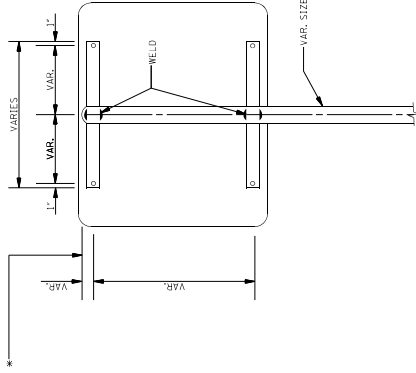
STATE	PROJECT NO.
MISS.	



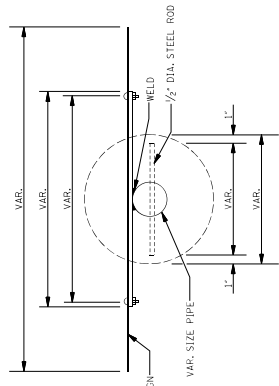
TYPICAL BACK-TO-BACK SIGN MOUNT
SHOWING RS-1 WITH R1-1



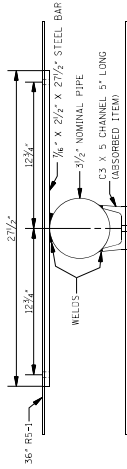
TYPICAL BACK-TO-BACK SIGN MOUNT
SHOWING RS-1 WITH R1-2



TYPICAL ASSEMBLY ON PIPE

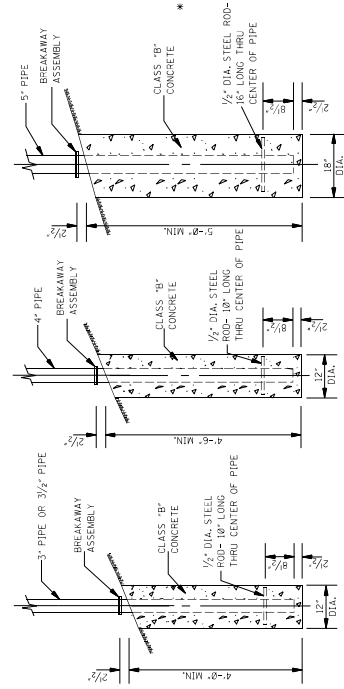


TYPICAL PLAN VIEW



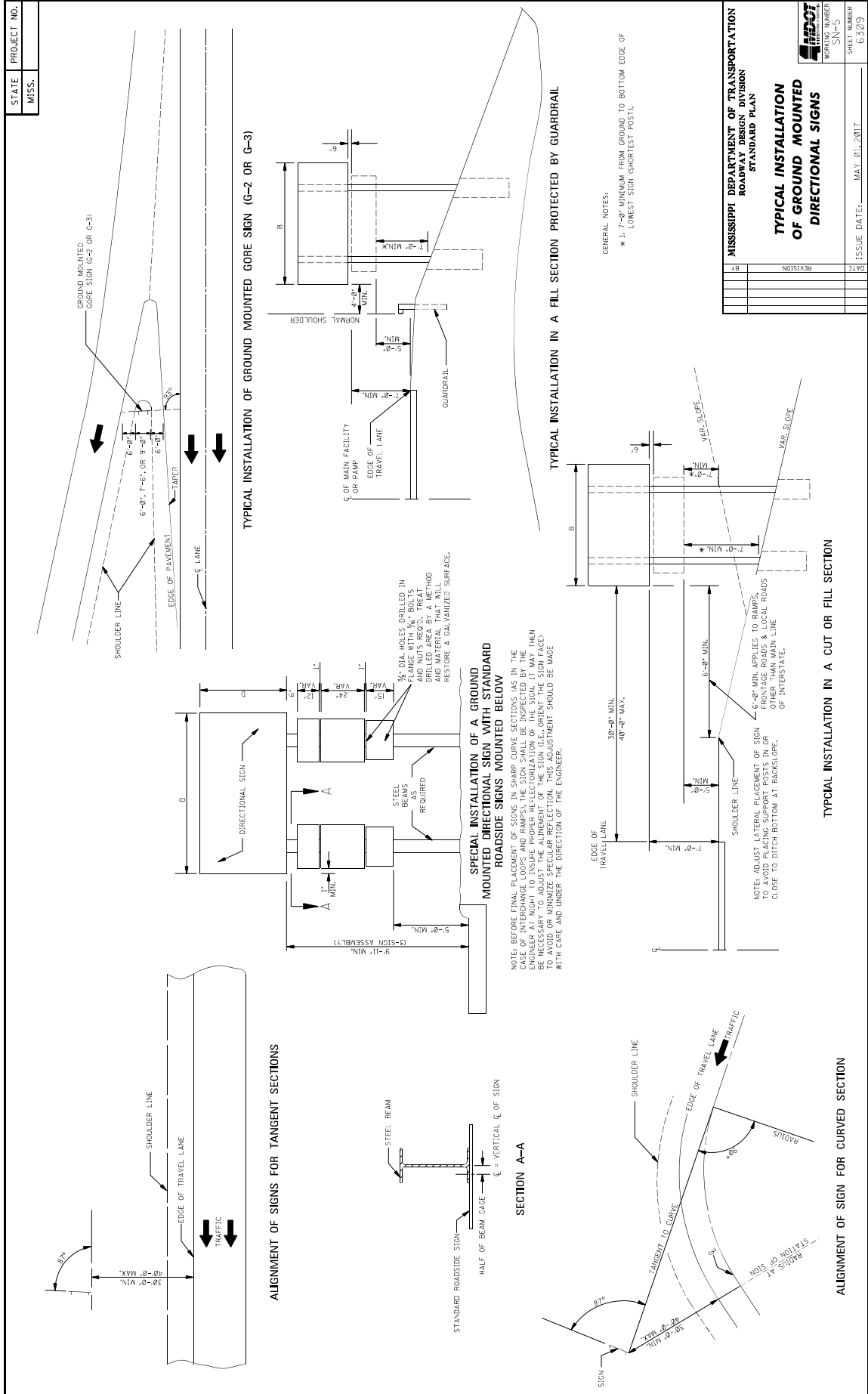
PLAN VIEW OF DOUBLE MOUNTING OF SIGNS

- GENERAL NOTES:
- UNLESS OTHERWISE SPECIFIED, HORIZONTAL BRACES ARE 3/4" X 2 1/2" X VARIABLE LENGTH FLAT STEEL BARS. BARS ARE WELDED TO PIPE AS SHOWN. WHEN FABRICATION LIST OR DETAILS SHOW OTHERWISE, POSTS SHALL BE GALVANIZED AS PER SECTION 658 OF THE STANDARD SPECIFICATION.
 - HOLES IN FLAT BARS ARE 3/8" DIAMETER.
 - STONS ARE FASTENED TO THE FLAT BARS AND I-SECTION POSTS WITH W8 BOLTS WITH FLAT WASHERS AND LOCK NUTS.
 - WHERE REQUIRED, STONS, BUCKLE AND RS-1R ARE TO BE MOUNTED ON PIPES WITH CLAMPS OR BUCKLE BRACKETS (NOT A PAY ITEM).
 - ALL WELDS SHALL BE 3/8" FILLET.
 - TOP OF POST



FOOTING DETAILS

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
STANDARD ROADSIDE SIGN ASSEMBLY AND INSTALLATION	
DATE	ISSUE DATE: MAY 01, 2017
BY	SHEET NUMBER SN-413
REVISION	WORKING NUMBER 6208



STATE	PROJECT NO.
MISS.	

GENERAL NOTES FOR WORKING SHEETS SN-6, SN-6A AND SN-6B:

- FOUNDING**
ALL FOOTINGS SHALL BE CLASS 'B' CONCRETE. POST STUBS SHALL BE SET IN CONCRETE FOOTING AT REQUIRED GRADE AND ALLOWMENT WITH CARE SO THAT MINIMUM SHIMMING WILL BE REQUIRED.
- BASE CONNECTION PROCEDURE**
ASSEMBLE POST TO STUB WITH BOLTS AND WITH A FLAT WASHER ON EACH BOLT BETWEEN PLATES. SHIM AS REQUIRED TO PLUMB POST. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH A 12" TO 15" WRENCH TO BED WASHERS AND STUBS AND TO CLEAR BOLT HEADS. THEN LOOSEN EACH BOLT TO 1/2 TURN. REMOVE WASHERS AND STUBS FROM POST. REPEAT THIS PROCEDURE BY TURNING BOLT HEADS AT JUNCTION WITH NUT USING A CENTER PUNCH. HIGH STRENGTH BOLTS IN BASE CONNECTIONS SHALL BE TIGHTENED TO TORQUE AS SHOWN BY TABLE ON SN-6A. DO NOT OVER TIGHTEN.
- POST LENGTH**
ALL POST LENGTHS SHALL BE VERIFIED AND APPROVED BY THE ENGINEER PRIOR TO FABRICATION. WHERE FIELD CONDITIONS REQUIRE THE POST LENGTH TO VARY MORE THAN 12", IT MAY BE NECESSARY TO CHANGE THE SIZE OR NUMBER OF POSTS. SUCH DETERMINATION WILL BE MADE BY THE ROADWAY DESIGN ENGINEER. ANY CHANGE OF SIZE OR NUMBER OF POSTS SHALL NOT BE JUSTIFICATION FOR ANY CONTRACT PRICE ADJUSTMENTS.
- FABRICATOR NOTE**
IMPORTANT - ALL FRICTION FUSE BOLTS SHALL BE TIGHTENED IN SHOP BY A METHOD APPROVED BY THE ENGINEER. DESIGN ENGINEER. TIGHTENING SHALL BE TO SUCH A DEGREE AS TO PROVIDE THE MINIMUM TENSION IN EACH BOLT WHEN ALL BOLTS ARE TIGHT, AS SHOWN BY TABLE SN-6A.
- ALL HOLES IN FUSE PLATES AND HINGE PLATES SHALL BE DRILLED.
- ALL PLATE CUTS SHALL PREFERABLY BE SAW CUTS. FLAME CUTTING WILL BE PERMITTED PROVIDED ALL EDGES ARE GRINDING. METAL PROJECTING BEYOND THE PLANE OF THE PLATE FACE WILL NOT BE ACCEPTABLE.
- WELDING FOR STEEL SIGN SUPPORTS**
WELDING SHALL BE PERFORMED IN SHOP BY ELECTRIC ARC PROCESS.
- MATERIAL SPECIFICATIONS**
THE MATERIALS USED IN THE CONSTRUCTION OF THE GROUND MOUNTED SIGN SUPPORT STRUCTURES, AS LISTED BELOW SHALL CONFORM WITH THE REQUIREMENTS OF THE DESIGNATED ASTM SPECIFICATION. ALL OTHER MATERIALS, FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFICATIONS, EXCEPT AS OTHERWISE NOTED ON THE PLANS.

DESCRIPTION	MATERIALS PER ASTM SPECIFICATION	GALVANIZE PER ASTM DESIGNATION
POSTS OF STEEL PIPE	A 53 (GRADE 20) (2)	A 153
BASE CONNECTION PLATES FOR PIPES	A 36	A 123
POSTS OF STEEL W. A. AND T BEAMS INCLUDING BASE CONNECTION, FUSE AND HINGE PLATES, ANGLES AND FLAT BARS USED IN FABRICATION AND ERECTION OF SIGN SUPPORTS	A 572 GRADE 50 OR A 36	A 123
HIGH STRENGTH BOLTS, NUTS AND WASHERS OTHER THAN HIGH STRENGTH (3)	A 307 (GRADE 24)	A 153

- ALL STEEL SHALL BE GALVANIZED AFTER FABRICATION EXCEPT AS NOTED ON THE PLANS.
- PIPES MAY BE WELDED OR SEAMLESS.
- BOLTS, WASHERS, AND NUTS USED FOR FASTENING ALUMINUM SIGN SHEETS AND PANELS SHALL BE ALUMINUM AS PER FOLLOWING TABLE.

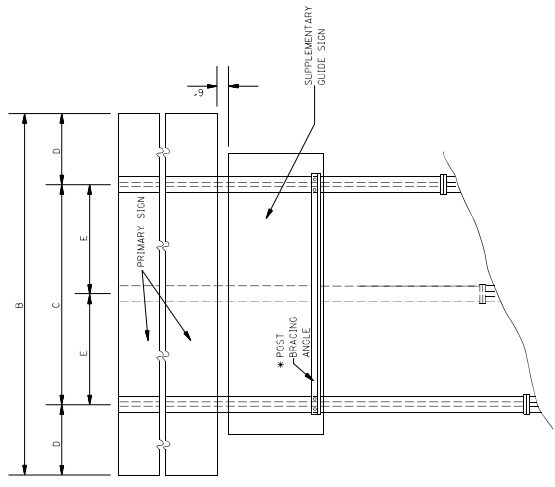
DESCRIPTION	ASTM DESIGNATION	ALLOY
BOLTS AND WASHERS	B 228	2024-T4
PANEL BOLT NUTS	B 211	6063-T6
STOP NUTS	B 211	2017-T4

NO.	DATE	REVISION

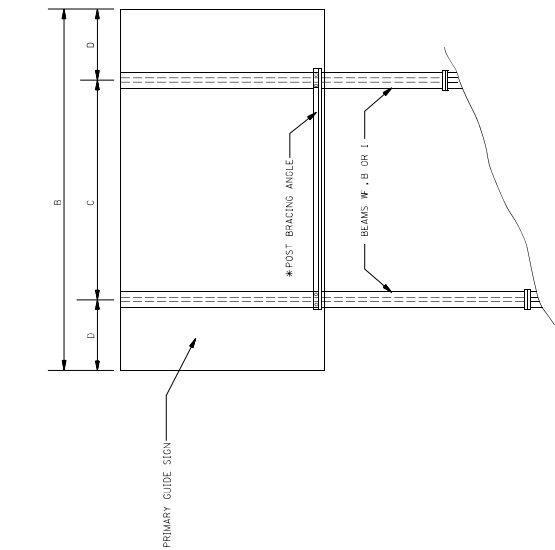
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
BREAKAWAY SIGN SUPPORTS

WORKING NUMBER	SN-6
SHEET NUMBER	6310

ISSUE DATE: MAY 01, 2017



TYPICAL 2-POST INSTALLATION WITH SUPPLEMENTARY GUIDE SIGN AND POST BRACING ANGLE LOCATION



TYPICAL 2-POST INSTALLATION WITHOUT EXIT SIGN

* NOTE: PLACE POST BRACING ANGLE AT BOTTOM OF PRIMARY OR SUPPLEMENTARY SIGN WHICHEVER IS LOWER. (SEE "END ELEVATION OF POST AND FOOTING" ON SN-6A.)

POST HEIGHT	2 POST CENTER		3 POST	
	MIN	MAX	MIN	MAX
4'-0"	1'-0"	2'-0"	1'-0"	2'-0"
4'-6"	1'-0"	2'-0"	1'-0"	2'-0"
5'-0"	1'-0"	2'-0"	1'-0"	2'-0"
5'-6"	1'-0"	2'-0"	1'-0"	2'-0"
6'-0"	1'-0"	2'-0"	1'-0"	2'-0"
6'-6"	1'-0"	2'-0"	1'-0"	2'-0"
7'-0"	1'-0"	2'-0"	1'-0"	2'-0"
7'-6"	1'-0"	2'-0"	1'-0"	2'-0"
8'-0"	1'-0"	2'-0"	1'-0"	2'-0"
8'-6"	1'-0"	2'-0"	1'-0"	2'-0"
9'-0"	1'-0"	2'-0"	1'-0"	2'-0"
9'-6"	1'-0"	2'-0"	1'-0"	2'-0"
10'-0"	1'-0"	2'-0"	1'-0"	2'-0"
10'-6"	1'-0"	2'-0"	1'-0"	2'-0"
11'-0"	1'-0"	2'-0"	1'-0"	2'-0"
11'-6"	1'-0"	2'-0"	1'-0"	2'-0"
12'-0"	1'-0"	2'-0"	1'-0"	2'-0"
12'-6"	1'-0"	2'-0"	1'-0"	2'-0"
13'-0"	1'-0"	2'-0"	1'-0"	2'-0"
13'-6"	1'-0"	2'-0"	1'-0"	2'-0"
14'-0"	1'-0"	2'-0"	1'-0"	2'-0"

STATE MISS.	PROJECT NO.	
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BREAKAWAY SUPPORT STUD CLEARANCE DIAGRAM

5'-0" CHORD
2'-0" CHORD
4'-0"

BASE CONNECTION DETAILS FOR W SHAPED POSTS

HINGE PLATE

NOTE: INSTALLATION SIMILAR TO DETAIL "A", USE PLATE.

FUSE PLATE DETAIL

NOTE: HOLE DIA. = 0.125" IN EXCESS OF FUSION RODS. WITH HEX HEAD, HEX NUTS, ONE FLAT WASHER UNDER EACH BOLT HEAD AND BEVEL OF FLAT WASHERS UNDER HEADS/NECKS UNDER NUTS.

STIFFENER PLATE DETAIL

NOTE: SEE TABLE FOR DIMENSIONS

DIAGRAM OF "BOLT KEEPER"

NOTE: FABRICATED FROM ZB USE GALVANIZED STEEL. DIMENSIONS AS REQUIRED FOR EACH INSTALLATION.

SECTION A-A

SECTION B-B

END ELEVATION OF POST AND FOOTING

POST BRACING DATA

POST SIZE	WE X 9	WE X 12	WE X 15	WE X 18	WE X 21	WE X 24	WE X 26
DESCRIPTION	1/2" X 26	1/2" X 26	1/2" X 26	1/2" X 26	1/2" X 26	1/2" X 26	1/2" X 26
BOLT SIZE	3/4" X 2 1/2"	3/4" X 2 1/2"	3/4" X 2 1/2"	3/4" X 2 1/2"	3/4" X 2 1/2"	3/4" X 2 1/2"	3/4" X 2 1/2"
ANGLE LENGTH	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"
ANGLE SIZE FOR POST SPACING OF	L 4" X 4" X 3/8"	L 3 1/2" X 3 1/2" X 1/4"	L 3 1/2" X 3 1/2" X 1/4"	L 3 1/2" X 3 1/2" X 1/4"	L 3 1/2" X 3 1/2" X 1/4"	L 3 1/2" X 3 1/2" X 1/4"	L 4" X 4" X 3/8"

NOTE: Z = DISTANCE BETWEEN 1/3 OF EXTERIOR POSTS.

FOOTING DATA

FOOTING DEPTH	FOOTING DIAMETER	STUB LENGTH	STUB PROJECTION	STUB **	FOOTING BARS V	FOOTING DEPTH
2'-0"	3'	2'-0"	3'	2'-0"	#4	SEE NOTE BELOW
2'-0"	3'	2'-0"	3'	2'-0"	#5	SEE NOTE BELOW
2'-0"	3'	2'-0"	3'	2'-0"	#6	SEE NOTE BELOW
2'-0"	3'	2'-0"	3'	2'-0"	#7	SEE NOTE BELOW
2'-0"	3'	2'-0"	3'	2'-0"	#8	SEE NOTE BELOW
2'-0"	3'	2'-0"	3'	2'-0"	#9	SEE NOTE BELOW
2'-0"	3'	2'-0"	3'	2'-0"	#10	SEE NOTE BELOW
2'-0"	3'	2'-0"	3'	2'-0"	#11	SEE NOTE BELOW

** NOTE: STUB PROJECTION OVERLAP REQUIRED OVER A 30° CONE FOR HIGHWAY SIGNS, LAMPARIS AND TRAFFIC SIGNALS. LATEST EDITION.

*** NOTE: FOOTING DEPTH TO BE SHOWN ELSEWHERE IN THE PLANS.

BASE CONNECTION DATA

DIMENSION	BASE CONNECTION DATA																	
	A	B	C	D	E	T ₁	T ₂	W	R	F	G	H	J	K	L	N	O ₁	T ₃
WE X 9	5"	2"	1/4"	1/8"	1/8"	3/4"	1/2"	1/4"	1/4"	3/8"	2"	1 1/4"	4"	2 1/4"	3/4"	1/2"	1/2"	12,050
WE X 15	5"	2"	1/4"	1/8"	1/8"	3/4"	1/2"	1/4"	1/4"	3/8"	2"	1 1/4"	4"	2 1/4"	3/4"	1/2"	1/2"	19,200
WE X 21	6"	2 1/4"	1/4"	1/8"	1/8"	3/4"	1/2"	1/4"	1/4"	3/8"	2"	1 1/4"	4"	2 1/4"	3/4"	1/2"	1/2"	28,400
WE X 24	6"	2 1/4"	1/4"	1/8"	1/8"	3/4"	1/2"	1/4"	1/4"	3/8"	2"	1 1/4"	4"	2 1/4"	3/4"	1/2"	1/2"	28,400
WE X 26	6"	2 1/4"	1/4"	1/8"	1/8"	3/4"	1/2"	1/4"	1/4"	3/8"	2"	1 1/4"	4"	2 1/4"	3/4"	1/2"	1/2"	39,250

GENERAL NOTES:

1. SEE SHEET FOR GENERAL NOTES.

POST BRACING DATA

POST SIZE	WE X 9	WE X 12	WE X 15	WE X 18	WE X 21	WE X 24	WE X 26
DESCRIPTION	1/2" X 26	1/2" X 26	1/2" X 26	1/2" X 26	1/2" X 26	1/2" X 26	1/2" X 26
BOLT SIZE	3/4" X 2 1/2"	3/4" X 2 1/2"	3/4" X 2 1/2"	3/4" X 2 1/2"	3/4" X 2 1/2"	3/4" X 2 1/2"	3/4" X 2 1/2"
ANGLE LENGTH	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"
ANGLE SIZE FOR POST SPACING OF	L 4" X 4" X 3/8"	L 3 1/2" X 3 1/2" X 1/4"	L 3 1/2" X 3 1/2" X 1/4"	L 3 1/2" X 3 1/2" X 1/4"	L 3 1/2" X 3 1/2" X 1/4"	L 3 1/2" X 3 1/2" X 1/4"	L 4" X 4" X 3/8"

NOTE: Z = DISTANCE BETWEEN 1/3 OF EXTERIOR POSTS.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

BREAKAWAY SIGN SUPPORTS

ISSUE DATE: MAY 01, 2017

SHEET NUMBER: 8311

STATE PROJECT NO.
MISS.

WORKING NUMBER
SH-05

SHEET NUMBER
6312

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

BREAKAWAY
SIGN SUPPORTS

DATE: _____

ISSUE DATE: MAY 01, 2017

FRICION CAP DETAIL (SEE DETAIL)

FRICION CAP DETAIL
NOTE: SEE NOTE 3

SHIM DETAIL

SHIM DETAIL
NOTE: FINISH TO 20/32\"/>

MULTI-DIRECTIONAL SIGN POST & STUB POST

U.S. HEX. BOLT
3 WASHERS ALSO
REQUIRED PER BOLT.

BOLT KEEPER PLATE DETAIL

BOLT KEEPER PLATE DETAIL
NOTE: TO BE FABRICATED FROM 28 GAGE
TRIPLEX GALVANIZED STEEL. CAPS TO BE INSTALLED
AS SHOWN IN DETAIL AT UPPER LEFT.

GENERAL NOTES: (SEE MK. NO. SN-6 FOR ADDITIONAL GENERAL NOTES)

- THE TOP PLATE OF THE TRIANGULAR SLIP BASE SHALL HAVE THE SAME EXTERIOR DIMENSIONS AS THE BOTTOM PLATE. THE LIFTING CONE SHALL BE WELDED TO THE BOTTOM PLATE ONLY. A HOLE EQUAL TO THE INSIDE DIAMETER OF THE SIGN POST SHALL BE LOCATED AT THE CENTER OF THE TOP PLATE WITH THE HOLE EDGE BEVELLED AS DETAILED. TOP & BOTTOM PLATES SHALL BE SYMMETRICAL FOR THE PURPOSE OF ASSEMBLY IN ANY POSITION.
- BASE CONNECTION ASSEMBLY AS FOLLOWS:
 - ASSEMBLE POST TO STUB WITH 3 BOLTS AND WITH 3 FLAT WASHERS PER BOLT.
 - SHIM AS REQUIRED TO PLUMB POST TO BE ASSEMBLED WITH A 1/2" TO 1/4" GAP BETWEEN SHIMS AND STUB POST.
 - 1/2" WRENCH TO BED WASHERS, KEEPER PLATE, SHIMS AND TO CLEAN THREADS.
 - LOOSEN EACH BOLT IN TURN & RETIGHTEN IN A SYSTEMATIC MANNER TO PRESCRIBED TORQUE. (SEE BASE CONNECTION DATA TABLE).
 - BURR THREADS AT JUNCTION WITH NUT WITH A CENTER PUNCH TO PREVENT NUT FROM LOOSENING.
- FRICION CAPS TO BE MANUFACTURED FROM HOT ROLLED OR COLD ROLLED STEEL SHEETS. FOR ALL PIPE SIZES, MINIMUM THICKNESS SHALL BE 28 GAGE SHEET METAL. RIM EDGES SHALL BE REASONABLY STRAIGHT AND SMOOTH. CAPS SHALL BE MANUFACTURED TO FIT THE SIGN POST. CAPS SHALL BE A DRIVE-IN FRICION FIT AND HAVE NO TENDENCY TO ROCK WHEN SEATED ON PIPE. THE DEPTH SHALL BE SUFFICIENT TO GIVE POSITIVE PROTECTION AGAINST ENTRANCE OF RAINWATER. CAPS SHALL BE MANUFACTURED TO FIT THE SIGN POST AND SHOW NO SIGNS OF METAL FRACTURE. ALL CAPS TO BE SAME IN SHAPE AND GENERAL APPEARANCE AS APPROVED BY THE ENGINEER.
- STUB PROTECTION SHOULD BE MEASURED OVER A 5'-0" CHORD AS PER AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR SIGN STRUCTURES. SEE MK. NO. SN-6 FOR DIAGRAM. LATEST EDITION. SEE MK. NO. SN-6A FOR DIAGRAM.

POST ELEVATION

STUB LENGTH
SEE DETAILS ELSEWHERE ON PLANS

POST LENGTH
SEE DETAILS ELSEWHERE ON PLANS

PAY LENGTH FOR POST = POST LENGTH + STUB LENGTH

SPACE BETWEEN PLATES DUE TO WASHERS & BOLT KEEPER

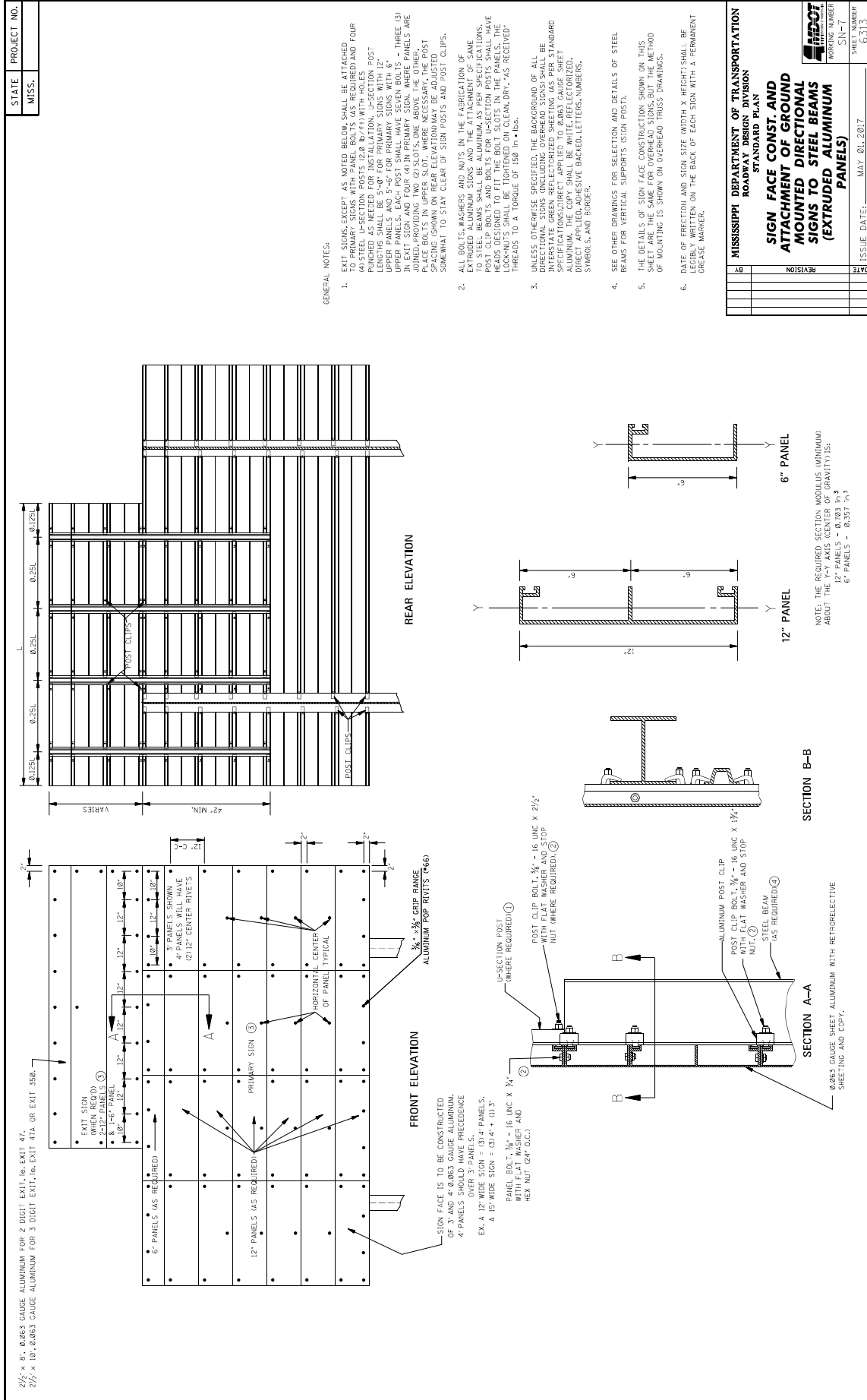
SECTION A-A

NOTE: SEE DATA TABLE FOR DIMENSIONS

BASE CONNECTION DATA TABLE

DIMENSIONS	BOLT	WASHER	T	W	C	D	E	F	G	H	J	K	L	M	N	P	S	U	V	R
3"	3/8"	3/8"	3/8"	3/8"	1"	100%	2%	1/2"	3/8"	1/2"	1 3/4"	3/2"	1 3/4"	1 1/4"	2 3/4"	6"	9"	2"	4 1/4"	3/4"
3 1/2"	3/8"	3/8"	3/8"	3/8"	1 1/4"	100%	2%	1/2"	3/8"	1/2"	1 3/4"	3/2"	1 3/4"	1 1/4"	2 3/4"	6"	9"	2"	4 1/4"	3/4"
5"	3/8"	3/8"	3/8"	3/8"	1 3/4"	100%	2%	1/2"	3/8"	1/2"	1 3/4"	3/2"	1 3/4"	1 1/4"	2 3/4"	6"	9"	2"	4 1/4"	3/4"

* NOTE: APPROXIMATE DIMENSIONS



STATE	PROJECT NO.
MISS.	

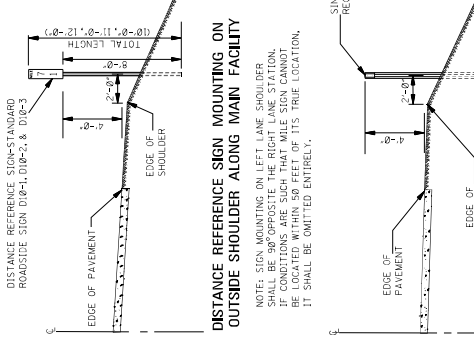
2 1/2" x 8", 0.063 GAUGE ALUMINUM FOR 2 DIGIT EXIT, 16" EXIT 47,
 2 1/2" x 10", 0.063 GAUGE ALUMINUM FOR 3 DIGIT EXIT, 16" EXIT 47A OR EXIT 350A,
 6" PANELS (AS REQUIRED)
 12" PANELS (AS REQUIRED)
 3" PANELS SHOWN
 4" PANELS WILL HAVE
 (3) 12" CENTER RIVETS
 PRIMARY SIGN (3)
 HORIZONTAL CENTER
 OF PANEL TYPICAL
 ALUMINUM POST RIVETS (F46)
 3/16" - 3/4" GRIP RANGE
 SIGN FACE IS TO BE CONSTRUCTED
 OF 1/2" ANGLE BOLTS. SIGNING
 OVER 3" PANELS.
 EX. A 12" WIDE SIGN = (3) 4" PANELS,
 A 15" WIDE SIGN = (3) 4" + (3) 3"
 PANEL BOLT: 3/8" - 16 UNC X 3/4"
 WITH FLAT WASHER AND
 HEX NUT (24" O.C.)
 POST CLIP BOLT: 3/8" - 16 UNC X 2 1/2"
 NUT (WHERE REQUIRED) (2)
 U-SECTION POST
 (WHERE REQUIRED) (1)
 ALUMINUM POST CLIP
 WITH FLAT WASHER AND STOP
 NUT (WHERE REQUIRED) (2)
 STEEL BEAM
 WITH FLAT WASHER AND
 STOP NUT (WHERE REQUIRED) (4)
 0.063 GAUGE SHEET ALUMINUM WITH RETROREFLECTIVE
 SHEETING AND COPY.

GENERAL NOTES

1. EXIT SIGNS, EXCEPT AS NOTED BELOW, SHALL BE ATTACHED TO PERMANENT SUPPORTS AS PER SPECIFICATIONS AND FOUR (4) STEEL U-SECTION POSTS (2 @ 16" (11) WITH HOLES AND FOUR (4) STEEL BEAMS (2 @ 16" (11) WITH HOLES) WITH 12" UPPER PANELS AND 3"-6" FOR PRIMARY SIGNS WITH 12" UPPER PANELS. EACH POST SHALL HAVE SEVEN BOLTS - THREE (3) IN EXIT SIGN AND FOUR (4) IN PRIMARY SIGN, WHERE PANELS ARE MOUNTED TO THE POSTS. THE BOLTS SHALL BE TIGHTENED TO THE PLACE BOLTS IN UPPER SLOT WHERE NECESSARY. THE POST SPACING SHOWN ON REAR ELEVATION MAY BE ADJUSTED SOMEWHAT TO STAY CLEAR OF SIGN POSTS AND POST CLIPS.
2. ALL BOLTS, WASHERS AND NUTS IN THE FABRICATION OF EXTRUDED ALUMINUM SIGNS AND THE ATTACHMENT OF SAME TO STEEL BEAMS SHALL BE ALUMINUM, AS PER SPECIFICATIONS, UNLESS OTHERWISE SPECIFIED. THE BOLTS SHALL BE HEADS DESIGNED TO FIT THE BOLT SLOTS IN THE PANELS. THE LOCK-NUTS SHALL BE TIGHTENED ON CLEAN, DRY, "AS RECEIVED" THREADS TO A TORQUE OF 150 $\text{in} \cdot \text{lb}$.
3. UNLESS OTHERWISE SPECIFIED, THE BACKGROUND OF ALL DIRECTIONAL SIGNS (INCLUDING OVERHEAD SIGNS) SHALL BE INTERSTATE GREEN REFLECTORIZED SHEETING (AS PER STANDARD SPECIFICATIONS) MOUNTED TO THE SIGN FACE SHEET OF ALUMINUM. THE COPY SHALL BE WHITE, REFLECTORIZED, DIRECT APPLIED, ADHESIVE BACKED, LETTERS, NUMBERS, SYMBOLS, AND BORDER.
4. SEE OTHER DRAWINGS FOR SELECTION AND DETAILS OF STEEL BEAMS FOR VERTICAL SUPPORTS (SIGN POSTS).
5. THE DETAILS OF SIGN FACE CONSTRUCTION SHOWN ON THIS SHEET ARE THE SAME FOR OVERHEAD SIGNS, BUT THE METHOD OF MOUNTING IS SHOWN ON OVERHEAD TRUSS DRAWINGS.
6. PLATE OF FABRICATION AND SIGN SIZE WITHIN X HEIGHT SHALL BE LEGIBLY WRITTEN ON THE BACK OF EACH SIGN WITH A PERMANENT GREASE MARKER.

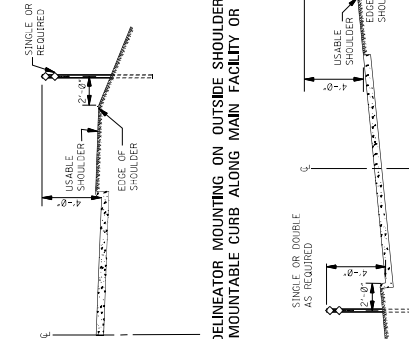
MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
ROADWAY DESIGN DIVISION	
STANDARD PLAN	
SIGN FACE CONST. AND ATTACHMENT OF GROUND MOUNTED DIRECTIONAL SIGNS TO STEEL BEAMS (EXTRUDED ALUMINUM)	
BY	REVISION
DATE	ISSUE DATE: MAY 01, 2017
	SHEET NUMBER 6315
	WORKING NUMBER SN-7

STATE PROJECT NO.
 MISS.

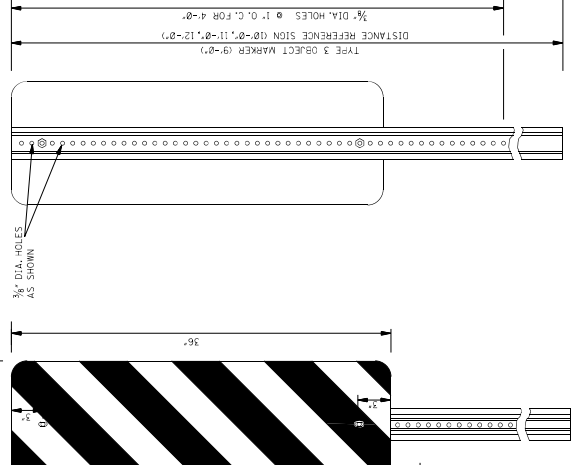


DISTANCE REFERENCE SIGN MOUNTING ON OUTSIDE SHOULDER ALONG MAIN FACILITY

NOTE: SIGN MOUNTING ON LEFT LANE SHOULDER SHALL BE 90° OPPOSITE THE RIGHT LANE STATION. SIGN MOUNTING ON OUTSIDE SHOULDER SHALL BE LOCATED WITHIN 500 FEET OF ITS TRUE LOCATION. IT SHALL BE OMITTED ENTIRELY.

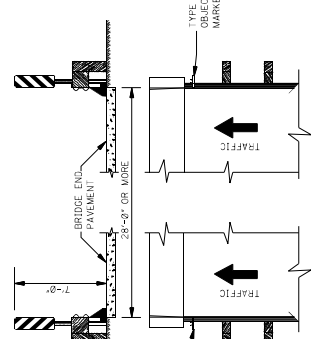


DELINATOR MOUNTING ON INTERCHANGE LOOPS WITH UNMOUNTABLE CURB ON INSIDE

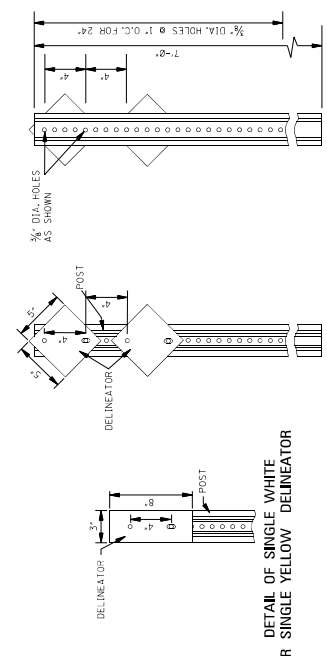


REAR VIEW OF TYPE 3 OBJECT MARKER OR DISTANCE REFERENCE SIGN ASSEMBLY

NOTE: TYPE 3 OBJECT MARKER AND DISTANCE REFERENCE SIGNS ARE TO BE FASTENED TO U-SECTION POSTS WITH 3/8" DIA. HICK FASTENERS OR CHERRY RIVETS OF THE COLLAR TYPE OR OTHER APPROVED EQUAL.



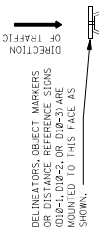
DETAIL OF TYPE 3 OBJECT MARKER INSTALLATION



DETAIL OF SINGLE YELLOW DELINEATOR OR DOUBLE YELLOW DELINEATOR

REAR VIEW OF DELINEATOR ASSEMBLY

NOTE: DELINEATORS ARE TO BE FASTENED TO U-SECTION POSTS WITH 1/4" DIA. HICK FASTENERS OR CHERRY RIVETS OF THE COLLAR TYPE OR OTHER APPROVED EQUAL.



MOUNTING DETAIL

GENERAL NOTES:

1. DELINEATORS AND TYPE 3 OBJECT MARKER SHALL BE REFLECTIVE SHEETING ON .020" THICK ALUMINUM SHEET OR 14 GAGE GALVANIZED SHEET STEEL.
2. DELINEATOR, TYPE 3 OBJECT MARKER AND DISTANCE REFERENCE SIGN POSTS SHALL BE GALVANIZED STEEL. THE POSTS ARE TO BE FABRICATED BEFORE THE METAL IS GALVANIZED.
3. WEIGHT WITHOUT GROUND PLATES:
 - A. DELINEATOR POST 7'-0" - 2.0 lb/ft TO 2.5 lb/ft
 - B. DISTANCE REFERENCE SIGN POSTS 9'-0" - 2.5 lb/ft TO 3.0 lb/ft
 - C. DELINEATOR SIGN POSTS 12'-0" - 3.0 lb/ft TO 3.5 lb/ft
4. UNIT PRICE OF DELINEATORS AND TYPE 3 OBJECT MARKERS SHALL INCLUDE COST OF POST, DISTANCE REFERENCE SIGN POST WILL BE PAID FOR PER FOOT.
5. RADIUS IN BENDS OF POST CROSS SECTION NOT TO EXCEED 5/8" FOR HOT ROLLED SECTION.
6. GROUND PLATE NOT REQUIRED ON U-SECTION POST.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN

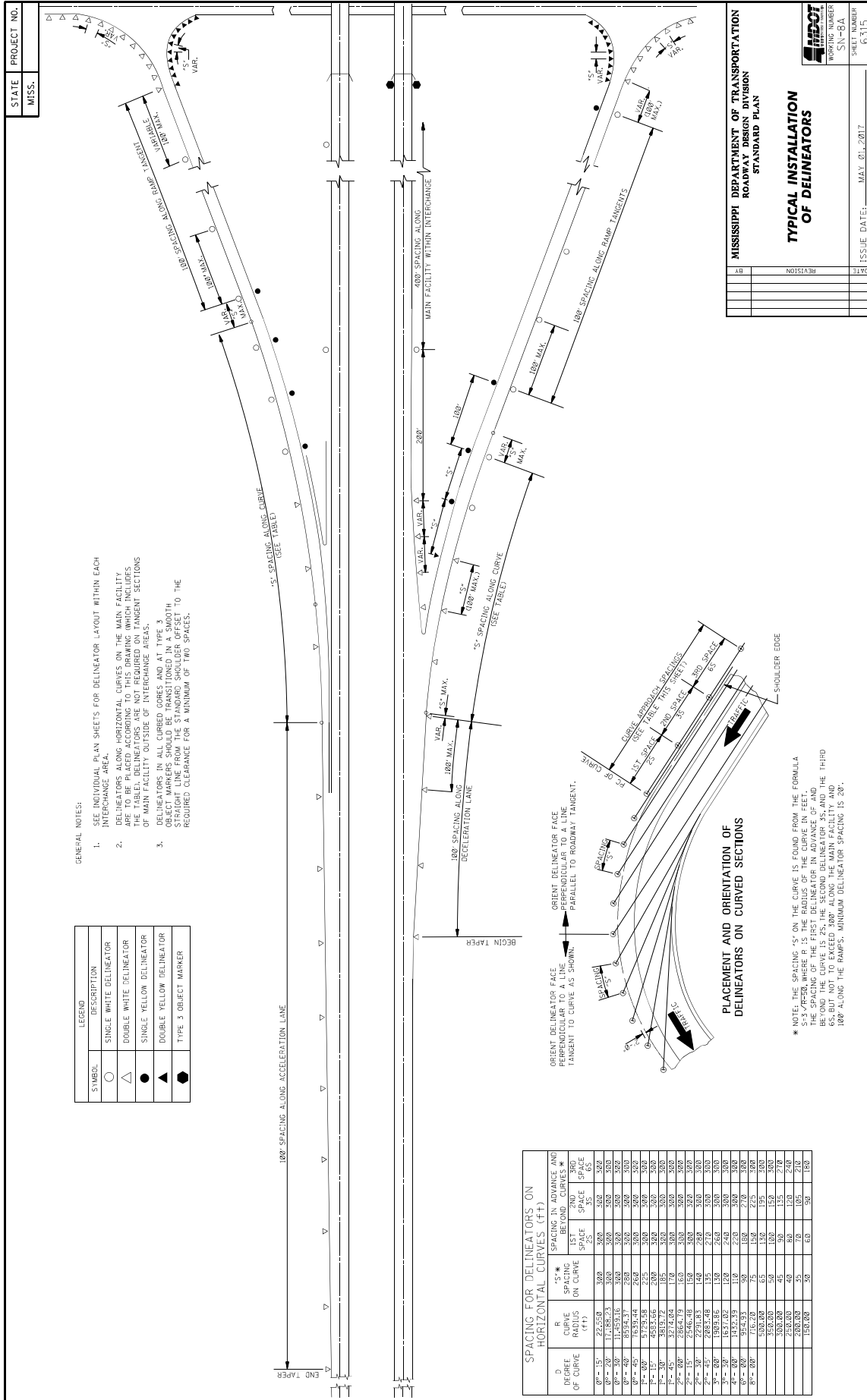
TYPICAL INSTALLATION AND DETAILS OF DELINEATORS AND DISTANCE REFERENCE SIGNS

DATE	REVISION

ISSUE DATE: MAY 01, 2017

WORKING NUMBER: SN-5

SHEET NUMBER: 62/14



STATE PROJECT NO.
MISS.

- GENERAL NOTES:
- SEE INDIVIDUAL PLAN SHEETS FOR DELINEATOR LAYOUT WITHIN EACH INTERCHANGE AREA.
 - DELINEATORS ALONG HORIZONTAL CURVES ON THE MAIN FACILITY ARE TO BE PLACED ACCORDING TO THIS DRAWING (WHICH INCLUDES THE TABLES FOR DELINEATOR SPACING AND INTERCHANGE SECTIONS OF MAIN FACILITY). SEE INTERCHANGE SHEETS.
 - DELINEATORS IN ALL CURBED CORERS AND AT TYPE 3 OBJECT MARKERS SHOULD BE TRANSITIONED IN A SMOOTH STRAIGHT LINE FROM THE STANDARD SHOULDER OFFSET TO THE REQUIRED CLEARANCE FOR A MINIMUM OF TWO SPACES.

LEGEND	
SYMBOL	DESCRIPTION
○	SINGLE WHITE DELINEATOR
△	DOUBLE WHITE DELINEATOR
●	SINGLE YELLOW DELINEATOR
▲	DOUBLE YELLOW DELINEATOR
●	TYPE 3 OBJECT MARKER

D DEGREE OF CURVE	R RADIUS (ft)	*S* SPACING ON CURVE	SPACING IN ADVANCE AND BEYOND CURVES * SPACE 25	SPACE 35	SPACE 65
1/2°	11,250.00	300	300	300	300
1°	5,625.00	300	300	300	300
2°	2,812.50	300	300	300	300
3°	1,875.00	300	300	300	300
4°	1,406.25	300	300	300	300
5°	1,125.00	300	300	300	300
6°	937.50	300	300	300	300
7°	804.69	300	300	300	300
8°	703.12	300	300	300	300
9°	625.00	300	300	300	300
10°	562.50	300	300	300	300
12°	437.50	300	300	300	300
15°	300.00	300	300	300	300
20°	150.00	300	300	300	300
25°	75.00	300	300	300	300
30°	37.50	300	300	300	300
35°	18.75	300	300	300	300
40°	9.375	300	300	300	300
45°	4.6875	300	300	300	300
50°	2.34375	300	300	300	300
55°	1.171875	300	300	300	300
60°	0.5859375	300	300	300	300
65°	0.29296875	300	300	300	300
70°	0.146484375	300	300	300	300
75°	0.0732421875	300	300	300	300
80°	0.03662109375	300	300	300	300
85°	0.018310546875	300	300	300	300
90°	0.0091552734375	300	300	300	300
100°	0.00457763671875	300	300	300	300
110°	0.002288818359375	300	300	300	300
120°	0.0011444091796875	300	300	300	300
130°	0.00057220458984375	300	300	300	300
140°	0.000286102294921875	300	300	300	300
150°	0.0001430511474609375	300	300	300	300
160°	7.1525576171875e-05	300	300	300	300
170°	3.57627880859375e-05	300	300	300	300
180°	1.788139404296875e-05	300	300	300	300
190°	8.940697021484375e-06	300	300	300	300
200°	4.4703485107421875e-06	300	300	300	300
210°	2.23517425537109375e-06	300	300	300	300
220°	1.117587127685546875e-06	300	300	300	300
230°	5.587935638427734375e-07	300	300	300	300
240°	2.7939678192138671875e-07	300	300	300	300
250°	1.39698390960693359375e-07	300	300	300	300
260°	6.98491954803466796875e-08	300	300	300	300
270°	3.492459774017333984375e-08	300	300	300	300
280°	1.7462298870086669921875e-08	300	300	300	300
290°	8.7311494350433349609375e-09	300	300	300	300
300°	4.36557471752166748046875e-09	300	300	300	300

* NOTE: THE SPACING "S" ON THE CURVE IS FOUND FROM THE FORMULA: $S = \sqrt{R \cdot D}$.
 * THE SPACING OF THE FIRST DELINEATOR IN ADVANCE OF AND BEYOND THE CURVE IS 25', THE SECOND DELINEATOR IN ADVANCE OF AND BEYOND THE CURVE IS 35', THE THIRD DELINEATOR IN ADVANCE OF AND BEYOND THE CURVE IS 65', BUT NOT TO EXCEED 300' ALONG THE MAIN FACILITY AND 100' ALONG THE RAMPS. MINIMUM DELINEATOR SPACING IS 20'.

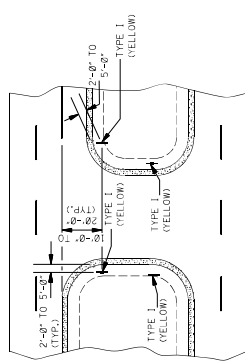
PLACEMENT AND ORIENTATION OF DELINEATORS ON CURVED SECTIONS

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

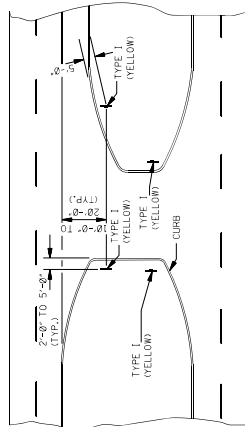
TYPICAL INSTALLATION OF DELINEATORS

DATE: _____ REVISION: _____
 ISSUE DATE: MAY 01, 2017
 SHEET NUMBER: 6315
 WORKING NUMBER: SN-8A

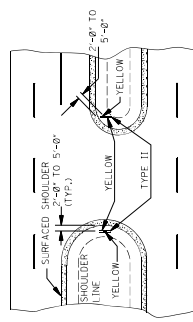
STATE	PROJECT NO.
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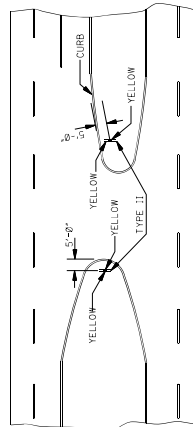
TYPICAL DELINEATION AT A CROSSOVER WITH USABLE SHOULDERS AND A MEDIAN WIDTH OVER 42'-0"



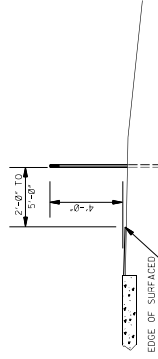
TYPICAL DELINEATION AT A CURBED CROSSOVER WITH A MEDIAN WIDTH OVER 42'-0"



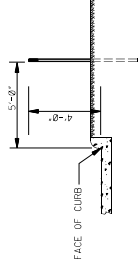
TYPICAL DELINEATION AT A CROSSOVER WITH USABLE SHOULDERS AND A MEDIAN WIDTH OF 42'-0" OR LESS



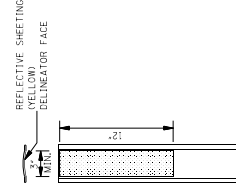
TYPICAL DELINEATION AT A CURBED CROSSOVER WITH A MEDIAN WIDTH OF 42'-0" OR LESS



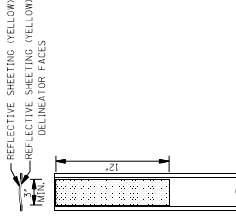
DELINEATOR MOUNTING ON CROSSOVER WITH USABLE SHOULDER



DELINEATOR MOUNTING ON CURBED CROSSOVER



DETAIL OF TYPE I FLEXIBLE POST DELINEATOR



DETAIL OF TYPE II FLEXIBLE POST DELINEATOR

NOTE: CARBONITES UNPAIRED DELINEATOR POSTS ARE SHOWN. OTHER FLEXIBLE POSTS COMMONLY BEING APPROVED FOR USE IN THIS DEPARTMENT'S 'APPROVED SOURCE OF MATERIALS' MAY BE FURNISHED.

GENERAL NOTES:

1. THE UNIT PRICE OF DELINEATORS INCLUDES COSTS OF DELINEATOR FACES, POST, HARDWARE AND INSTALLATION. DELINEATOR FACE WILL BE ENCAPSULATED LENS REFLECTIVE SHEETING.
2. POST REQUIRING THE INSTALLATION OF A BASE SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.
3. THE COLOR OF DELINEATORS SHALL BE THE COLOR OF THE ADJACENT EDGE LINE PER MUTCD SECTION 3F.02.

NOTE: PLACE DELINEATORS NO MORE THAN 20'-0" FROM EDGE OF TRAVEL LINES EDGES.

NO.	DATE	BY	REVISION

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

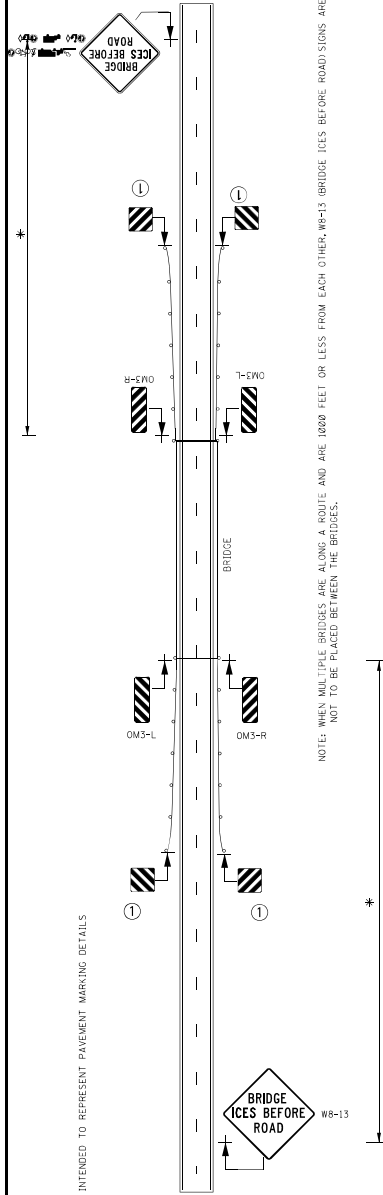
TYPICAL CROSSOVER DELINEATION

ISSUE DATE: MAY 01, 2017

SHEET NUMBER: 0316

WORKING NUMBER: SN-88

STATE	PROJECT NO.
MISS.	

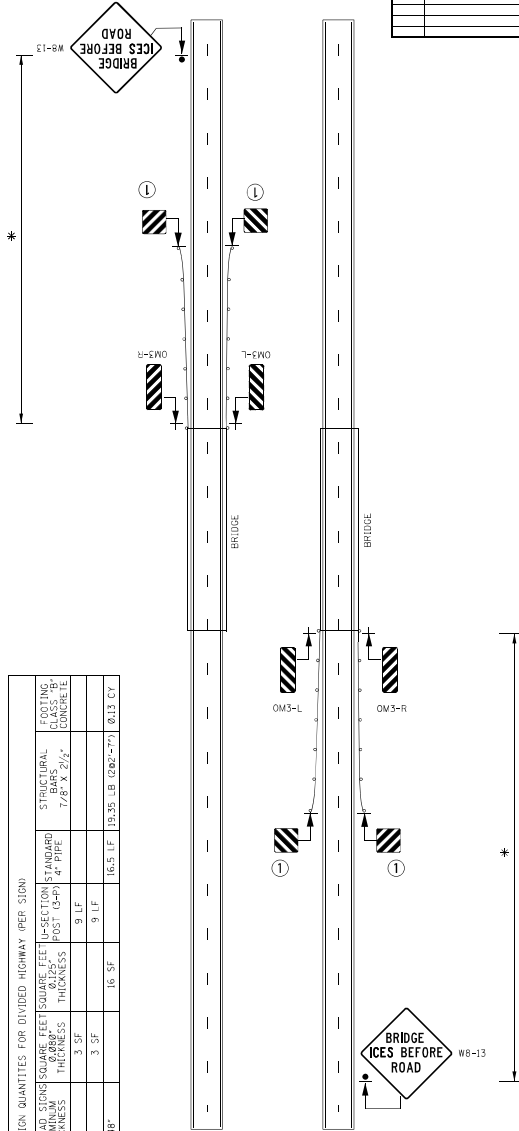


NOTE: WHEN MULTIPLE BRIDGES ARE ALONG A ROUTE AND ARE 1000 FEET OR LESS FROM EACH OTHER, W8-13 BRIDGE ICES BEFORE ROAD SIGNS ARE NOT TO BE PLACED BETWEEN THE BRIDGES.

UNDIVIDED HIGHWAY DETAIL

MUTCD NUMBER	STANDARD ROAD SIGN SHEET ALUMINUM THICKNESS	SQUARE FEET	SQUARE FEET	OPERATION
OM3-L	12' X 36"	3 SF	9 SF	POST (S-P)
OM3-R	12' X 36"	3 SF	9 SF	POST (S-P)
W8-13	36" X 36"	3 SF	9 SF	15 LF

MUTCD NUMBER	STANDARD ROAD SIGN SHEET ALUMINUM THICKNESS	SQUARE FEET	SQUARE FEET	OPERATION
OM3-L	12' X 36"	3 SF	9 LF	POST (S-P)
OM3-R	12' X 36"	3 SF	9 LF	POST (S-P)
W8-13	48" X 48"	16 SF	16 SF	16.5 LF (267=75) 0.13 CF



DIVIDED HIGHWAY DETAIL

SPEED (MPH)	MINIMUM PLACEMENT (FEET)
35	100
40	120
45	135
50	150
55	165
60	180
65	195
70	210
75	225
80	240
85	255
90	270
95	285
100	300

* TABLE 7C-4 MUTCD

① REFLECTIVE ADHESIVE SHEETING WITH ALTERNATING BLACK AND YELLOW STRIPES (SLOPING DOWNWARD AT AN ANGLE OF 45 DEGREES IN THE DIRECTION TRAFFIC IS TO PASS) IS REQUIRED ON THE END OF THE TERMINAL END SECTION. NOT A SEPARATE PAY ITEM. COST TO BE ABSORBED IN GUARD RAIL.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

SIGNING DETAILS FOR BRIDGE APPROACHES

ISSUE DATE: MAY 01, 2017

SHEET NUMBER: 6318

WORKING NUMBER: SVA-9

DATE	REVISION

DRAWING NOT INTENDED TO REPRESENT PAVEMENT MARKING DETAILS

Overlay approximately 14 miles of SR 4 from the Holly Springs Bypass to SR 5, known as State Project Nos. SP-0060-03(025) / 108962301 & 302 in Marshall & Benton Counties.

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
Roadway Items					
0010	202-B007		989	Square Yard	Removal of Asphalt Pavement, All Depths
0020	202-B158		2,250	Linear Feet	Removal of Guard Rail, Including Rails, Posts and Terminal Ends
0030	202-B215		112	Each	Removal of Sign Including Post & Footing
0040	202-B240		2,260	Linear Feet	Removal of Traffic Stripe
0050	203-G001	(E)	173	Cubic Yard	Excess Excavation, FM, AH
0060	304-B004	(GT)	7,320	Ton	Granular Material, Class 5, Group D
0070	403-A006	(BA1)	700	Ton	19-mm, ST, Asphalt Pavement
0080	403-A015	(BA1)	21,675	Ton	9.5-mm, ST, Asphalt Pavement
0090	403-B012	(BA1)	12,250	Ton	9.5-mm, ST, Asphalt Pavement, Leveling
0100	403-C003	(BA1)	5,775	Ton	19-mm, ST, Asphalt Pavement, Trench Widening
0110	406-D001		18,007	Square Yard	Fine Milling of Bituminous Pavement, All Depths
0120	407-A001	(A2)	99,650	Gallon	Asphalt for Tack Coat
0130	423-A001		29	Mile	Rumble Strips, Ground In
0140	503-C010		1,260	Linear Feet	Saw Cut, Full Depth
0150	606-B002		1,250	Linear Feet	Guard Rail, Class A, Type 1, 'W' Beam
0160	606-D019		16	Each	Guard Rail, Bridge End Section, Type H
0170	606-E001		16	Each	Guard Rail, Terminal End Section
0180	618-A001		1	Lump Sum	Maintenance of Traffic
0190	618-B001		2	Square Feet	Additional Construction Signs [\$10.00]
0200	619-A1001		58	Mile	Temporary Traffic Stripe, Continuous White
0210	619-A2001		40	Mile	Temporary Traffic Stripe, Continuous Yellow
0220	619-A4002		16	Mile	Temporary Traffic Stripe, Skip Yellow
0230	619-A5001		6,800	Linear Feet	Temporary Traffic Stripe, Detail
0240	619-A6002		7,275	Linear Feet	Temporary Traffic Stripe, Legend
0250	620-A001		1	Lump Sum	Mobilization
0260	626-C002		29	Mile	6" Thermoplastic Double Drop Edge Stripe, Continuous White
0270	626-D001		8	Mile	6" Thermoplastic Double Drop Traffic Stripe, Skip Yellow
0280	626-E001		21	Mile	6" Thermoplastic Double Drop Traffic Stripe, Continuous Yellow
0290	626-G004		3,940	Linear Feet	Thermoplastic Double Drop Detail Stripe, White
0300	626-G005		2,865	Linear Feet	Thermoplastic Double Drop Detail Stripe, Yellow
0310	626-H001		58	Square Feet	Thermoplastic Double Drop Legend, White
0320	626-H002		3,625	Linear Feet	Thermoplastic Double Drop Legend, White

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
0330	627-J001		565	Each	Two-Way Clear Reflective High Performance Raised Markers
0340	627-K001		14	Each	Red-Clear Reflective High Performance Raised Markers
0350	627-L001		1,227	Each	Two-Way Yellow Reflective High Performance Raised Markers
0360	630-A001		256	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness
0370	630-A003		485	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.125" Thickness
0380	630-A005		105	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.1" Thickness
0390	630-C005		1,455	Linear Feet	Square Tube Posts, 2.0 lb/ft
0400	630-F006		84	Each	Delineators, Guard Rail, White
0410	630-G004		26	Each	Type 3 Object Markers, OM-3R or OM-3L
0420	907-619-B001		66	Linear Feet	Temporary Portable Rumble Strips