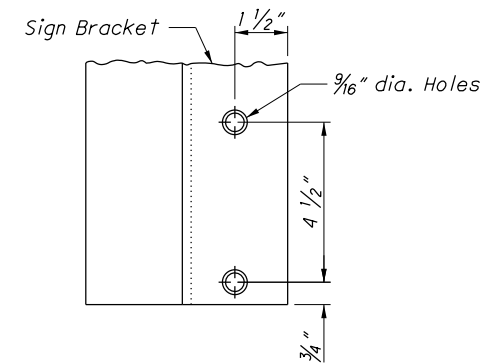
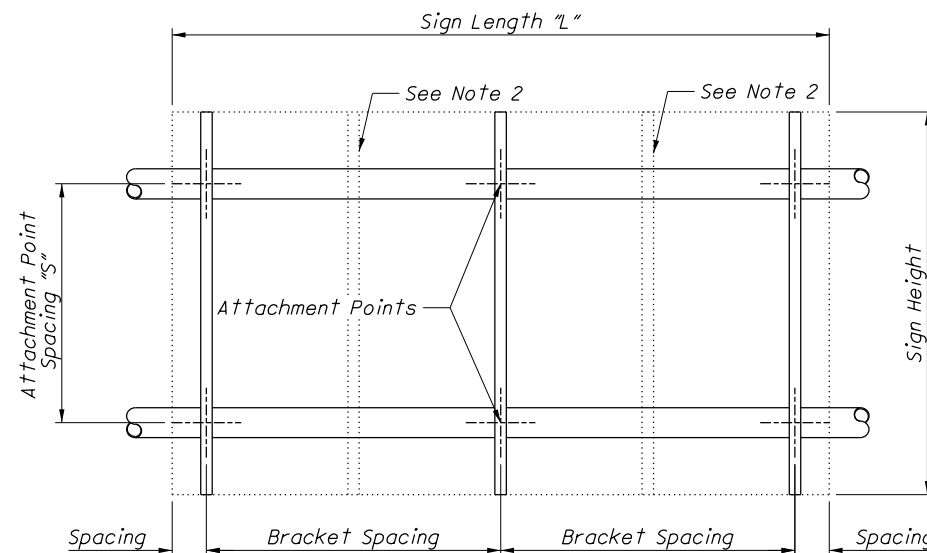


**NOTES:**

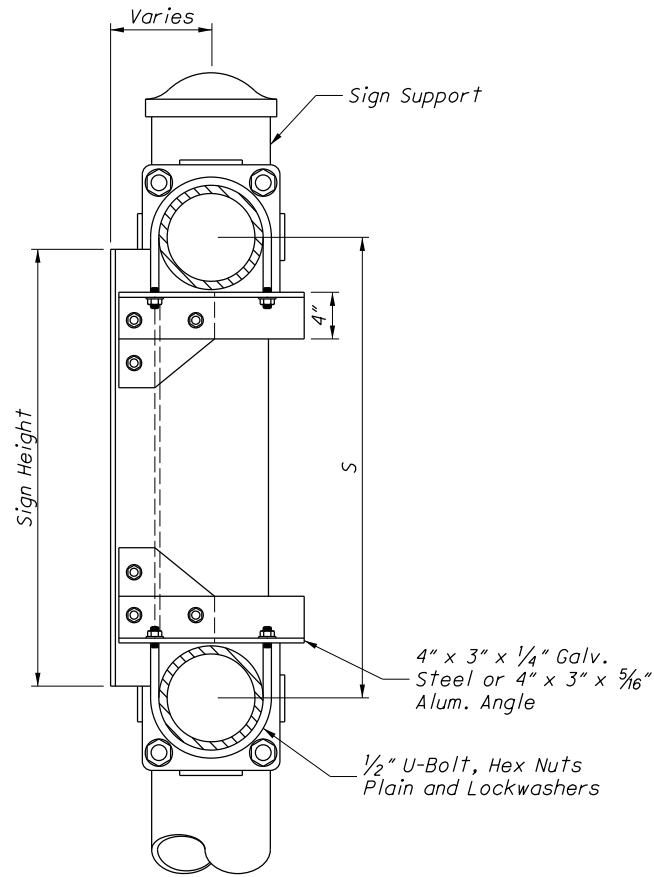
1. Sign brackets shall be a 4" x 3" x 1/4" aluminum zee at 2.85 lb/ft.
2. Provide intermediate sign brackets if the sign extends more than 4' above or below an attachment point.
3. U-bolts, other bolts, nuts and washers shall be stainless steel for use with aluminum chords. When used with galvanized sign structures the U-bolts only may be galvanized steel.  
  
The inside diameter of U-bolts used to attach the sign attachment assembly aluminum zee brackets to the overhead sign support horizontal member shall have a tolerance of +0.5, -0.0" relative to the outside diameter of the overhead sign support horizontal member at the attachment point.
4. The outer flange of the sign attachment assembly aluminum zee brackets may be oriented in either direction. However, at least one zee bracket per each individual sign shall be oriented with the outer flange in the opposite direction of the others.
5. Prevent contact between aluminum and galvanized parts with a minimum 1/16" thick chloroprene gasket or approved equal.
6. Type A shall be for supports where the sign height is less than 1' greater than the attachment point spacing.
7. Type B shall be for back-to-back mounted signs.
8. Detail "C" - fixture support arm mounting for lighted signs complying with Plan Insert Sheet 203121.
9. Attach gusset plates by bolting or welding.

**ATTACHMENT POINT SPACING**

SUPPORT TYPE	DESIGN	S
7.2	1	2'-4"
	2	3'
	3	4'
7.3	1 & 2	3'
	3 & 4	4'
7.4	1	3'
7.5	2 & 3	4'
7.6	4	5'
7.65	6 & 6 Alt.	3'
	8 & 8 Alt.	5'
9.12	Single Arm	
9.24	1 Thru 4	4'
10.48	1 Thru 5	4'
	6 Thru 8	6'
11.08	Single Arm	
12.24	1 Thru 4	4'
	5 Thru 8	6'
12.30	1 - 4 Alt.	4'
	5 - 12 Alt.	6'
15.8	All	3'
15.115	All	5'
16.10	Single Arm	

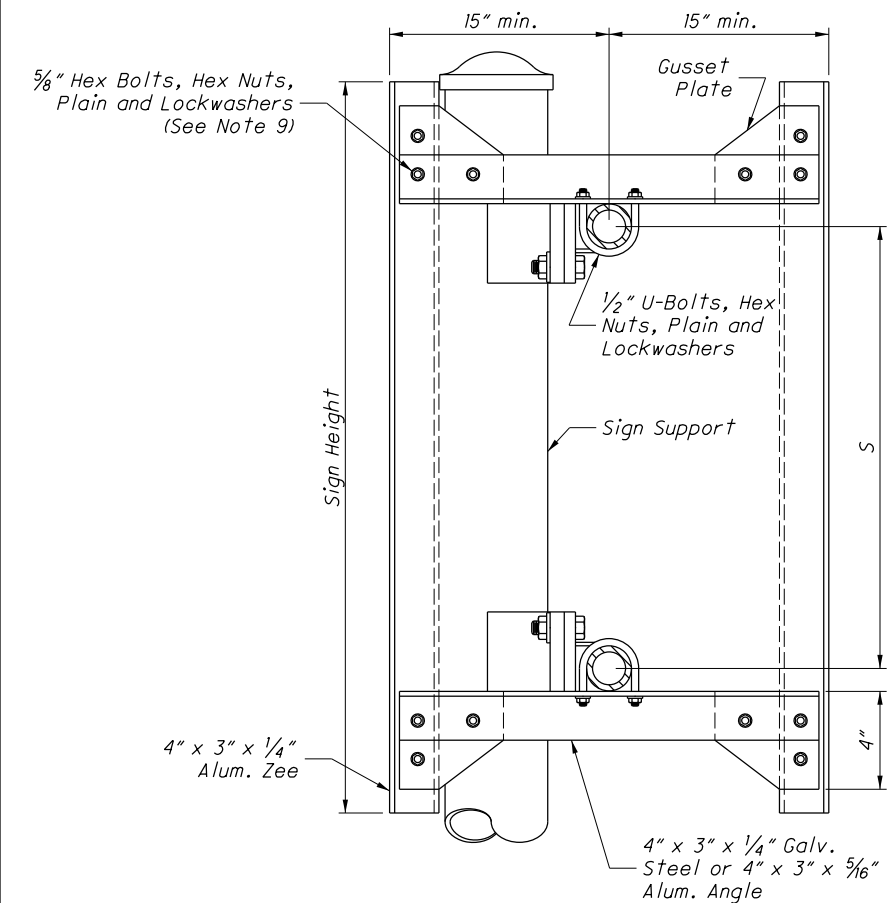


**DETAIL "C"**  
(See Note 8)

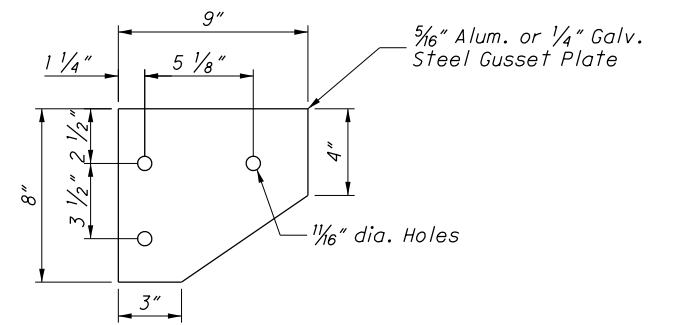


**TYPE A**  
(See Note 6)

L (FEET)	NUMBER OF BRACKETS	BRACKET SPACING (INCHES)								
		6	36	6						
4	2	6	36	6						
5		6	48	6						
6		6	60	6						
7		6	72	6						
8		12	72	12						
9		12	84	12						
10	3	12	96	12						
11		18	96	18						
12		6	66	66	6					
13		6	72	72	6					
14		12	72	72	12					
15		18	72	72	18					
16	4	12	84	84	12					
17		18	84	84	18					
18		12	96	96	12					
19		18	96	96	18					
20		12	72	72	72	12				
21		18	72	72	72	18				
22	5	6	84	84	84	6				
23		12	84	84	84	12				
24		18	84	84	84	18				
25		6	96	96	96	6				
26		12	96	96	96	12				
27		18	96	96	96	18				
28	6	12	78	78	78	78	12			
29		6	84	84	84	84	6			
30		12	84	84	84	84	12			
31		18	84	84	84	84	18			
32		12	90	90	90	90	12			
33		18	90	90	90	90	18			
34	7	12	96	96	96	96	12			
35		18	96	96	96	96	18			
36		6	84	84	84	84	84	6		
37		12	84	84	84	84	84	12		
38		18	84	84	84	84	84	18		
39		9	90	90	90	90	90	9		
40	8	15	90	90	90	90	90	15		
41		6	96	96	96	96	96	6		
42		12	96	96	96	96	96	12		
43		18	96	96	96	96	96	18		
44		12	84	84	84	84	84	84	12	
45		18	84	84	84	84	84	84	18	
46	9	6	90	90	90	90	90	90	6	
47		12	90	90	90	90	90	90	12	
48		18	90	90	90	90	90	90	18	
49		6	96	96	96	96	96	96	6	
50		12	96	96	96	96	96	96	12	
51		18	96	96	96	96	96	96	18	
52	10	18	84	84	84	84	84	84	84	18
53		24	84	84	84	84	84	84	84	24
54		9	90	90	90	90	90	90	90	9
55		15	90	90	90	90	90	90	90	15
56		21	90	90	90	90	90	90	90	21
57		6	96	96	96	96	96	96	96	6
58	11	12	96	96	96	96	96	96	96	12
59		18	96	96	96	96	96	96	96	18



**TYPE B**  
(See Note 7)



**GUSSET PLATE**

THIS DRAWING REPLACES TC-22.20 DATED 10-18-2013.

SD NUMBER  
**TC-22.20**

STANDARD ROADWAY CONSTRUCTION DRAWING  
**SIGN ATTACHMENT ASSEMBLIES**

OFFICE OF  
**ROADWAY  
ENGINEERING**

STATE ENGINEER  
H. Suter

STATE OF OHIO DEPARTMENT OF  
TRANSPORTATION ADMINISTRATOR  
Reynaldo Stargell

REVISION DATE  
01-17-2014