

COL. SIZE	2x½	2x½	2x½	2½x½	2½x½	2½x½	3x½	3x½	3x½	*	COL. SIZE	2x½	2x½	2x½	2½x½	2½x½	2½x½	3x½	3x½	3x½	*	ALUMINUM
FOUNDATION	0x2-0	0x2-0	0x2-0	0x2-3	0x2-3	0x2-3	0x2-6	0x2-6	0x2-6	*	FOUNDATION	0x2-0	0x2-0	0x2-0	0x2-3	0x2-3	0x2-3	0x2-6	0x2-6	0x2-6	*	ROUND POST
COL. SIZE	2.5 #/FT	2.5 #/FT	3.0 #/FT	4.0 #/FT	4.0 #/FT	N/A	N/A	N/A	N/A	*	COL. SIZE	2.5 #/FT	2.5 #/FT	3.0 #/FT	4.0 #/FT	4.0 #/FT	N/A	N/A	N/A	N/A	*	STEEL FLANGED
FOUNDATION	0x3-0	0x3-0	0x3-0	0x3-0	0x3-0	N/A	N/A	N/A	N/A	*	FOUNDATION	0x3-0	0x3-0	0x3-0	0x3-0	0x3-0	N/A	N/A	N/A	N/A	*	CHANNEL POST
COL. SIZE	W=1½	W=1½	W=1½	W=2	W=2½	W=2½	W=2½	W=2½	N/A	*	COL. SIZE	W=1½	W=1½	W=1½	W=2	W=2½	W=2½	W=2½	W=2½	N/A	*	STEEL SQUARE
FOUNDATION	0x3-0	0x3-0	0x3-0	0x3-0	0x3-0	0x3-0	0x3-0	0x3-0	N/A	*	FOUNDATION	0x3-0	0x3-0	0x3-0	0x3-0	0x3-0	0x3-0	0x3-0	0x3-0	N/A	*	TUBE POST
Sign Identification Number	HEIGHT (FT)										Sign Identification Number	HEIGHT (FT)										
(+) to	(+) to	(+) to	(+) to	(+) to	(+) to	(+) to	(+) to	(+) to	(+) to	(+) to	(+) to	(+) to	(+) to	(+) to	(+) to	(+) to	(+) to	(+) to	(+) to	(+) to	(+) to	(+) to
1	To 8	8 - 10	10 - 13	13 - 14							47	To 6	6 - 7	7 - 9	9 - 11	11 - 12	12 - 13	13 - 14				
2	To 6	6 - 7	7 - 8	8 - 12	12 - 13	13 - 14					48	To 7	7 - 8	8 - 11	11 - 12	12 - 13	13 - 14					
3	To 6	6 - 7	7 - 9	9 - 11	11 - 12	12 - 13					49	To 6	6 - 7	7 - 10	10 - 11	11 - 12	12 - 14					
4											50											
5											51	To 6	6 - 7	7 - 9	9 - 11	11 - 12	12 - 14					
6					To 6	6 - 8	8 - 9				52	To 6	6 - 9	9 - 10	10 - 12	12 - 13						
7											53	To 6	6 - 8	8 - 10	10 - 11	11 - 13						
8	To 8	8 - 9	9 - 10	10 - 13	13 - 14						54	To 8	8 - 9	9 - 11	11 - 12							
9	To 7	7 - 8	8 - 11	11 - 12	12 - 13	13 - 14					55	To 8	8 - 9	9 - 10	10 - 12							
10				To 8	8 - 9	9 - 10	10 - 12				56											
11					To 6	6 - 7	7 - 9				57	To 7	7 - 9	9 - 10								
12											58	To 6	6 - 7	7 - 9	9 - 11							
13					To 8	8 - 9	9 - 11	11 - 12			59	To 6	6 - 7	7 - 9	9 - 10							
14				To 6	6 - 7	7 - 8	8 - 10	10 - 11			60	To 6	6 - 7	7 - 8	8 - 10							
15				To 6	6 - 7	7 - 8	8 - 10				61	To 6	6 - 8									
16					To 6	6 - 7	7 - 9				62	To 6	6 - 7	7 - 8								
17											63	To 6	6 - 7	7 - 9								
18											64											
19											65	To 6	6 - 8									
20											66											
21							To 6				67	To 6	6 - 7									
22											68									To 7		
23											69	To 7										
24											70	To 6										
25				To 6	6 - 7	7 - 9	9 - 11				71											
26				To 6	6 - 8	8 - 9					72											
27					To 6	6 - 7	7 - 9				73	To 6										
28					To 6	6 - 7	7 - 9				74											
29							To 7	7 - 8			75											
30								To 6	6 - 8		76											
31									To 6		77											
32										To 6	78											
33							To 6	6 - 7			79											
34									To 6		80											
35										To 7	81											
36											82											
37											83											
38											84											
39											85											
40											86											
41											87											
42											88											
43											89											
44	To 9	9 - 10	10 - 13	13 - 14							90											
45	To 6	6 - 7	7 - 9	9 - 11	11 - 12	12 - 13	13 - 14				91											
46	To 6	6 - 7	7 - 9	9 - 11	11 - 12	12 - 13	13 - 14															

\* Aluminum Round Post dimensions are given in inches. The size is shown as outside diameter times wall thickness.

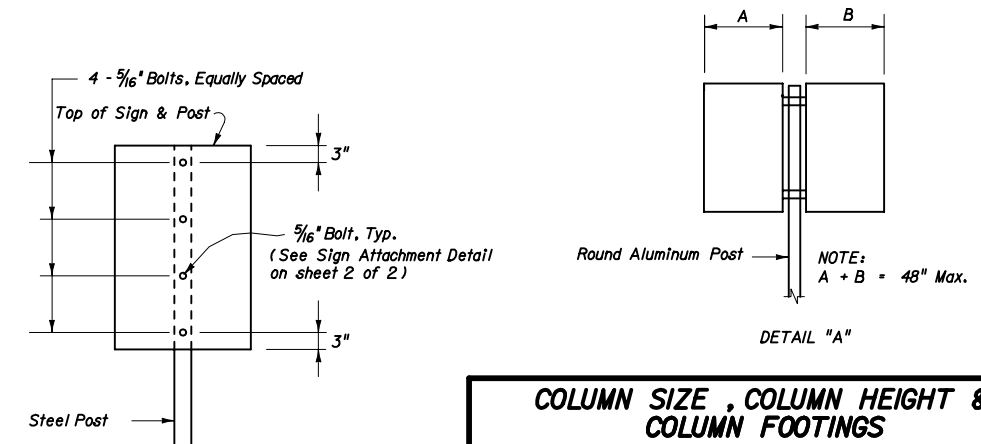
Steel Flanged Channel Post sizes are given in lb/ft. Section definitions and properties are shown on Sheet 2 of 2. (See QPL for approved posts).

Steel Square Tube Post dimensions for "W" are given in inches. The "W" dimension is defined on Section F-F. (See QPL for approved posts).

Foundation dimensions shown are given in feet & inches. The dimension shown is the minimum embedment of the driven post.

**NOTES**

- This Standard Index 11865 provides designs for driven single post sign installations for implementation at all locations within the State of Florida. The designs adhere to the following criteria:
  - Mounting Height = 14' Maximum
  - Sign(s) Area = 25 sq. ft. Maximum
  - Sign(s) Width: Single = 36" Maximum  
Dual = 48" Maximum (See Detail "A")
  - The contractor shall set the posts in preformed holes to the specified depth with suitable backfill tamped in compacted layers not exceeding 6", or filled with flowable fill or bagged concrete. The cost of the flowable fill or bagged concrete shall be included in the cost of the sign. At the contractor's option, steel posts may be driven.
- Designs exceeding above criteria or requiring concrete footings are included on Index 11861 thru 11864.
- Specifications for Aluminum materials, Sign Panel Details, etc. are shown on standard Index 11860. Additional information and details are shown on Index 11861 thru 11864. Therefore, work this Standard Index 11865 with Standard Indices 11860 to 11864.
- Sign Bracket requirements for round aluminum post are shown on Index 11860 (80 mph WIND ZONE). If Flanged Channels or Square Tubes are used, substitute two 5/16" bolts for each Bracket. See Detail "B" and sign Attachment Details.
- All posts shall be installed Plumb.
- Steel for Flanged Channel Posts shall conform with ASTM A499 Grade 60, or ASTM A576 Grade 1080.
- Steel for fabrication of square Tubes shall conform with ASTM A653 or ASTM A570. HOWEVER, STEEL FROM THE FABRICATED SQUARE TUBES MUST MEET A CERTIFIED MINIMUM YIELD STRENGTH OF 55 ksi.
- Steel Flanged Channel Posts with a 4 lb/ft are non-frangible and shall be installed with approved breakaway (frangible) bases. See Detail "C". The base and the sign posts shall be same size and type and the splice shall be 6" long and fastened with two bolts, 4" apart. The bolts shall be wrench-tightened sufficiently to clamp splice assembly tightly together. Bolts shall conform with ASTM A 354 Grade DH or SAE J995 Grade 8. Washers and spacers shall conform with ASTM A307 or A36.
- Steel Flanged Channel Posts with masses of 2.5 lb/ft and 3 lb/ft, all Aluminum Round Posts and all Steel Square Tubes included in this standard are frangible and do not require breakaway (frangible) bases. However, the contractor may mount frangible posts on approved breakaway bases.
- Bolts, Nuts and washers not included in note 8 above, shall conform with ASTM A307.
- Steel Posts shall be selected from the Department's book of Qualified Product List (QPL).
- All steel posts, and hardware shall be galvanized in accordance with ASTM A123 or A153, or AASHTO M181 Grade 2.
- Shop Drawings: If the contractor proposes to utilize sign panel connections and/or breakaway devices not shown in this standard or in the above referenced standards, the Contractor shall submit shop drawings for approval.
- All dimensions are in inches, unless otherwise noted.



DETAIL "B" (See Note No. 4)  
SIGN MOUNTING USING CHANNELS OR SQUARE TUBES

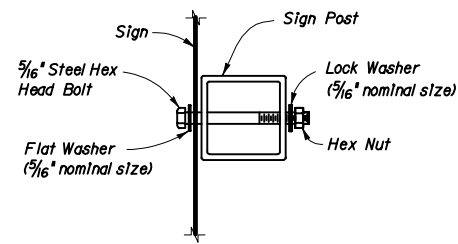
**COLUMN SIZE , COLUMN HEIGHT & COLUMN FOOTINGS**

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

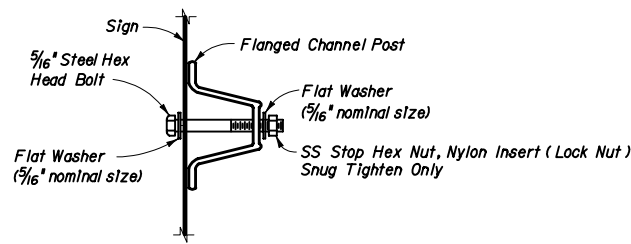
**SINGLE COLUMN GROUND SIGNS**

Designed By	JMD	4-94	Approved/By	W. J. [Signature]	
Drawn By	SJM	4-94	Revision	Sheet No.	Index No.
Checked By	AJG	4-94	04	1 of 2	11865

**HEIGHT = 14' MAX.  
(ALL WIND ZONES)**



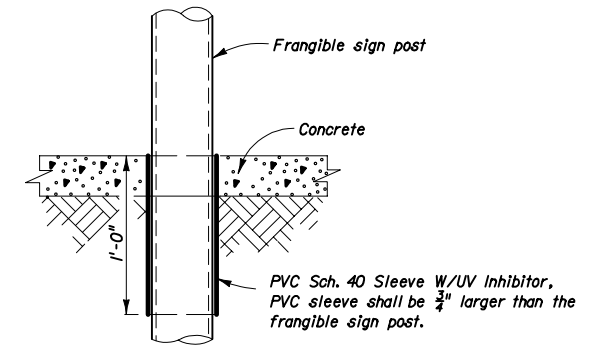
**SIGN ATTACHMENT DETAIL**



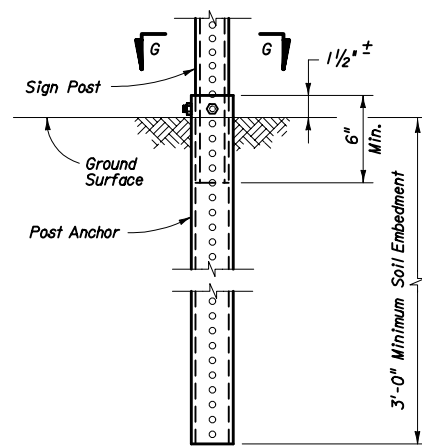
**SIGN ATTACHMENT DETAIL**

APPROVED STEEL FLANGED CHANNEL POSTS					
lb/ft*	Type	A (in)	B (in)	C (in)	Sx (in <sup>3</sup> )
2.50	F	1.562	3.125	1.250	.310
2.50	M	1.500	3.063	1.281	.313
3.00	F	1.750	3.500	1.625	.430
3.00	M	1.875	3.500	1.313	.447
4.00	F	1.750	3.500	1.671	.560
4.00	M	1.938	3.500	1.313	.625

\* ± 4%

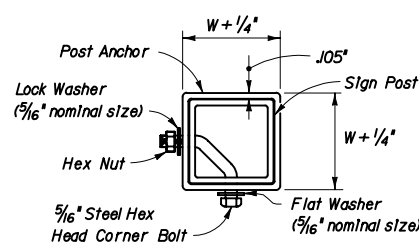


**SIGN POST IN CONCRETE**  
(CROSSOVERS, MEDIANS, & SIDEWALKS)

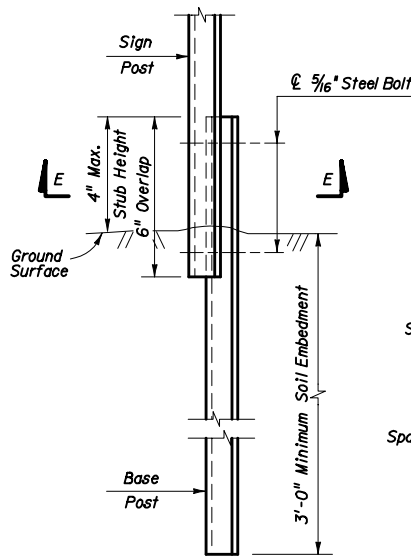


**ELEVATION**

Showing Mounting Using Optional Anchor Tube

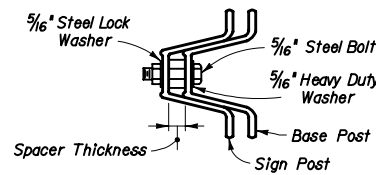


**SECTION G-G**



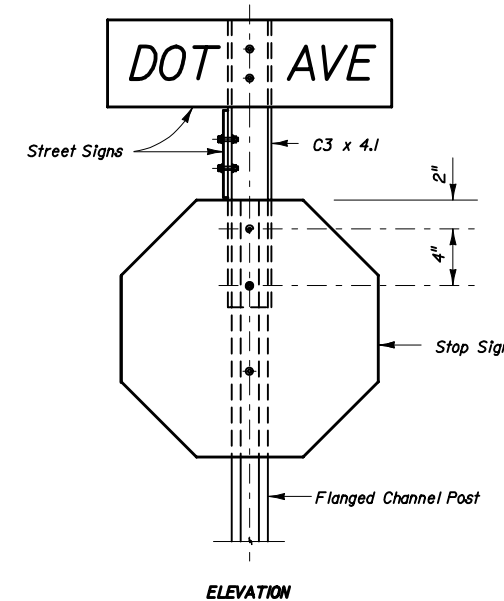
**DETAIL "C"**

(Approved Frangible Installation)



**SECTION E-E**

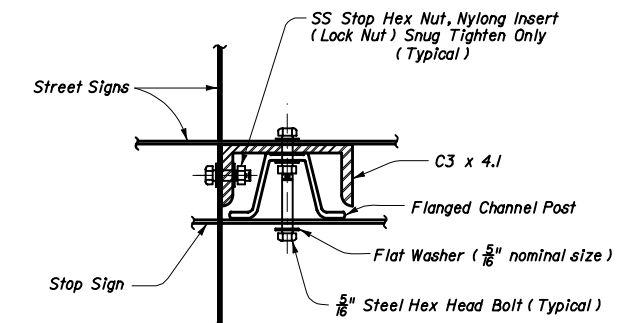
Spacer Thickness shall be as follows:  
2.5 lb/ft Type M posts shall use 5/16" spacer.  
Other posts shall use 3/8" spacer (or two 5/16").



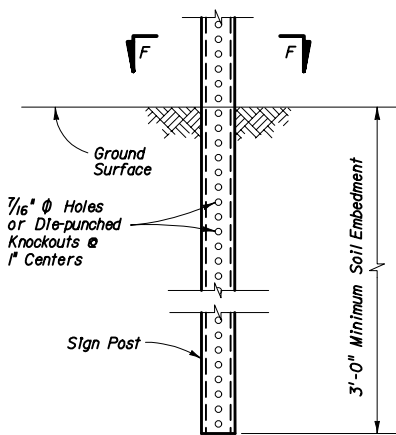
**ELEVATION**

**PERPENDICULAR SIGN ATTACHMENT DETAIL**

NOTE: All dimensions are in inches, unless otherwise noted.



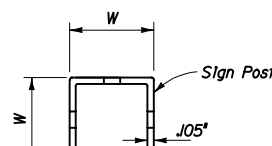
**TOP VIEW**



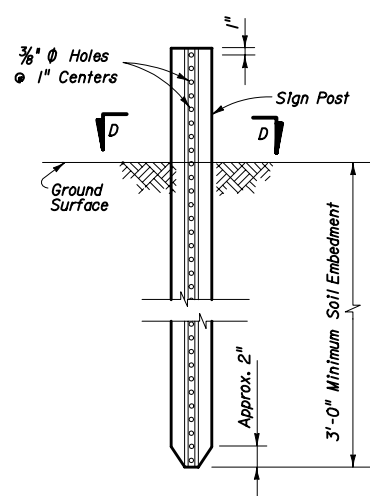
**ELEVATION**

Showing Mounting Without Anchor Tube

**STEEL SQUARE TUBE POST DETAILS**

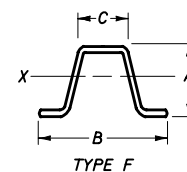


**SECTION F-F**

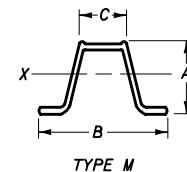


**ELEVATION**

**STEEL FLANGED CHANNEL POST DETAILS**



**TYPE F**



**TYPE M**

**SECTION D-D**

**COLUMN SIZE, COLUMN HEIGHT & COLUMN FOOTINGS**

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

**SINGLE COLUMN GROUND SIGNS**

Names	Dates	Approved By				
Designed By	JMD/TJB	6/99	 State Structures Design Engineer			
Drawn By	JP	6/99			Revision	Sheet No.
Checked By	TJB	6/99			04	2 of 2
		Index No.		11865		

**HEIGHT = 14' MAX.**  
**(ALL WIND ZONES)**