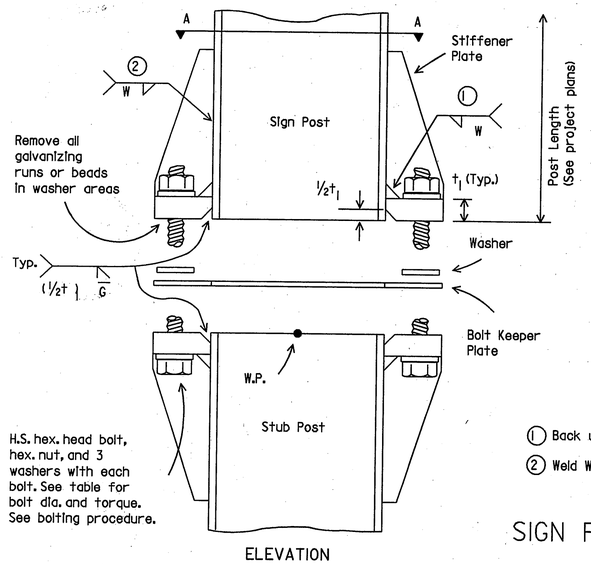


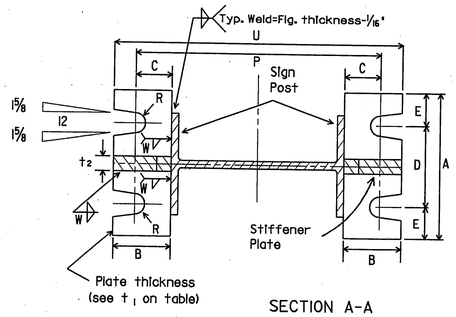
ELEVATION

① Back up weld to be made before installing stiffener plate

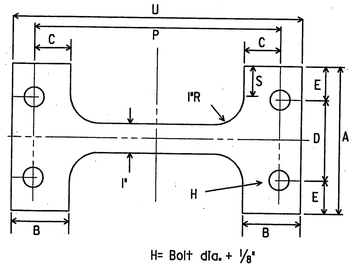
② Weld W may be continued across clips to seal joint

SIGN POST AND STUB POST

(For W Shapes)



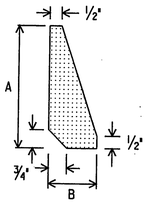
SECTION A-A



H= Bolt dia. + 1/8"

BOLT KEEPER PLATE

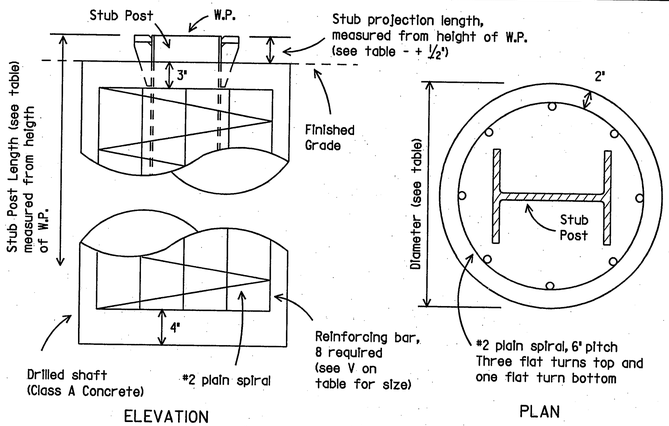
30 Ga galv. sheet steel



STIFFENER PLATE DETAIL

Steel Plate (thickness = t 2)

(See table for dimensions)



ELEVATION

PLAN

FOUNDATION DETAIL

BOLTING PROCEDURE FOR ASSEMBLY OF BASE CONNECTION:

1. Assemble sign post, BOLT KEEPER PLATE and stub post with bolts and three flat washers per bolt as shown.
2. Shim as required to plumb post.
3. Tighten all bolts the maximum possible with a 12 to 15 inch wrench to clean bolt threads and to bed washers and shims.
4. Loosen each bolt in sequence and retighten bolts in a systematic order to the prescribed torque. Do not overtighten.
5. To prevent nut loosening, burr threads of bolt at junction with nut using a center punch.

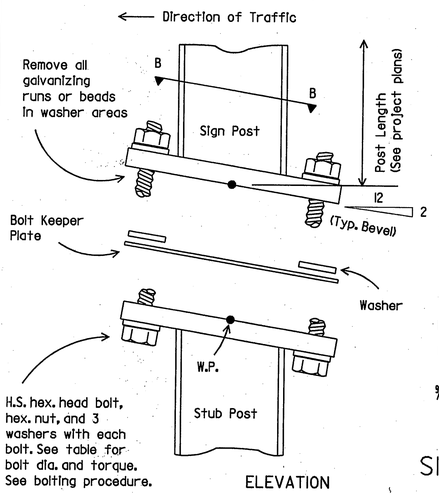
Dimensions / Post Size	Base Connection Data Table: Bolt Size & Torque	A	B	C	D	E	t_1	t_2	W	R
W6X9	5/8"Ø x 2¾"	5"	2"	1¼"	2¾"	1⅛"	¾"	½"	¼"	11/32"
W6X12	440-450 Inch pounds 36-38 foot pounds									
W6X15										
W8X18										
W8X21	¾"Ø x 3½"	6"	2¼"	1⅜"	3½"	1¼"	1"	¾"	5/16"	13/32"
W10X22	740-750 Inch pounds 62-63 foot pounds									
W10X26										
W12X26										
S3X5.7	½"Ø x 2½" 440-450 Inch pounds 36-38 foot pounds	See Detail Below								
S4X7.7										

Perforated Fuse Plate Data Table: F	G	J	K	M	d_1	d_2	t_3	Bolt Dia.	Wt. (ea.) (lbs.)	Bolt length
4¼"	2"	4"	2¼"	1"	9/16"	¾"	¼"	½"	1.01	1½"
5"	2½"	6"	3½"	1½"	11/16"	1¼"	⅜"	⅝"	2.51	2¼"
5"	2½"	5¼"	2¾"	1¼"	11/16"	1 5/16"	⅜"	⅝"	2.26	2¼"
5½"	2½"	5¼"	2¾"	1¼"	13/16"	1"	½"	¾"	3.35	2¼"
6"	3"	5¾"	2¾"	1⅜"	13/16"	1⅛"	½"	¾"	4.03	2¼"
6"	3"	6½"	3½"	1⅝"	13/16"	1 5/16"	½"	¾"	4.47	2¼"
3¾"	1½"	2⅝"	1½"	⅝"	9/16"	⅜"	¼"	½"	0.60	1½"

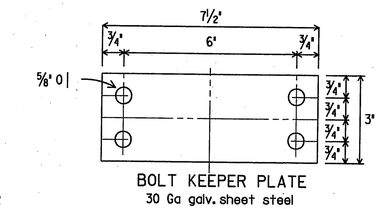
Bolt Keeper Data: P	S	U
8⅜"	1"	9⅞"
8½"		10"
8½"		10"
10⅝"		12⅛"
11"	1½"	12¾"
12⅞"		14⅝"
13⅛"		14⅞"
15"		16¾"
See Detail Below		

Foundation Data: Stub length	Stub projection	Dr. Shaft diameter	Bar V Size
2'-0"	3"	24"	#5
2'-0"	3"		#5
2'-0"	3"		#6
2'-6"	3"		#7
2'-6"	3"		#8
3'-0"	2½"		#9
3'-0"	2½"		#10
3'-0"	2½"		#11
3'-3½"	3½"	12"	Non-reinforced ③

③ Foundation design shall be Type G Mount, see SMD (TY G).

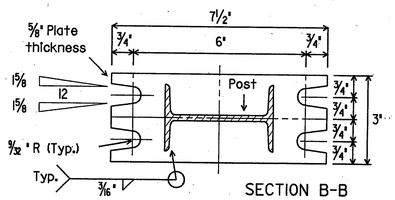


ELEVATION



BOLT KEEPER PLATE

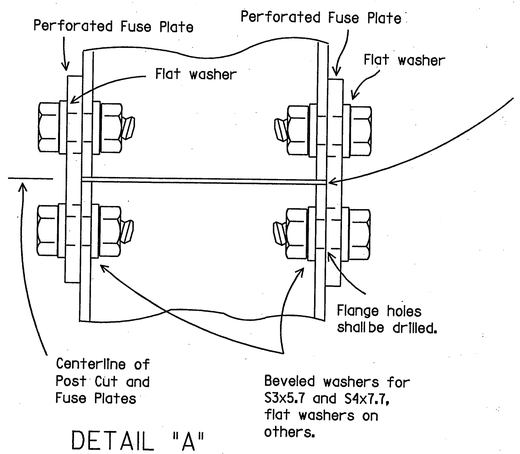
30 Ga galv. sheet steel



SECTION B-B

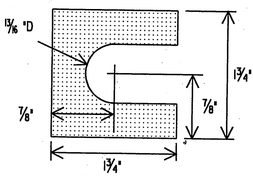
SIGN POST AND STUB POST

(For S4x7.7 and S3x5.7)



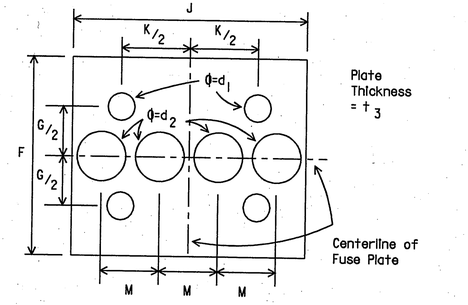
DETAIL "A"

Parts shall be saw cut either before galvanizing and the galvanized cut cleaned of zinc build-up, or saw cut after galvanizing and the cut surface treated with zinc-based solder or zinc-rich paint in accordance with ASTM A780. (Cut surface will not be treated until plate is installed and all bolts fully tightened.)



SHIM DETAIL

Furnish two .012"+ thick and two .032"+ thick shims per post. Shims shall be fabricated from brass shim stock or strip conforming to ASTM B36.



PERFORATED FUSE PLATE DETAIL

Use H.S. hex head bolts, hex head nut and bevel or flat washer (where req'd) under nut. All holes shall be drilled. All plate cuts shall preferably be saw cuts. However; flame cutting will be permitted provided all edges are ground. Metal projecting beyond the plane of the plate face will not be permitted. Steel fuse plates shall conform to the requirements of ASTM A36. ASTM A572 Grade 50 or ASTM A588 may be substituted for A36 at the option of the fabricator. Mill test reports shall be submitted for Fuse Plates. Steel used shall have an ultimate tensile strength not to exceed 80 KSI.

FINAL RECORD DRAWING
Date: 12/25/99

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

SIGN MOUNTING DETAILS- LARGE ROADSIDE SIGNS FOUNDATION & STUB

SMD(2-2)-95

ORIG DRAW DATE: August 1995	DN: LR	CK:	DW: DN	CK:	REG NO.:
REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT		SHEET
		6			48
	COUNTY		CONTROL	SECTION	JOB	HIGHWAY

27B

LEVELS DISPLAYED
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
49 50 51 52 53 54 55 56 57 58 59 60 61 62 63

DATE:
ACC: d58hplg/usr/d580504
FILE:
DN:LR
CK:CW
DW:DN
CK:MT