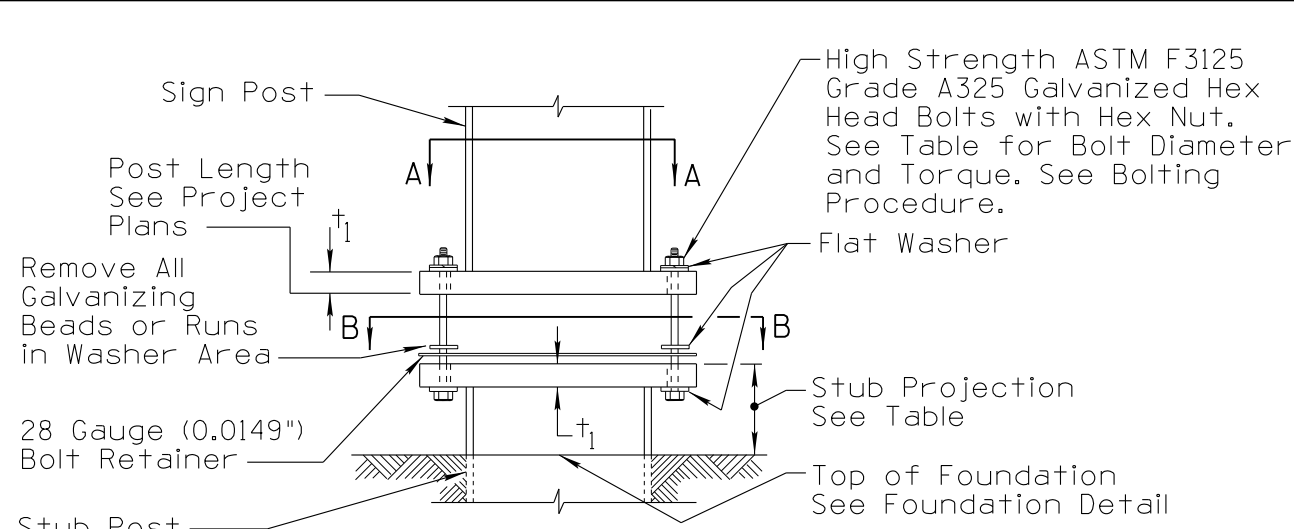
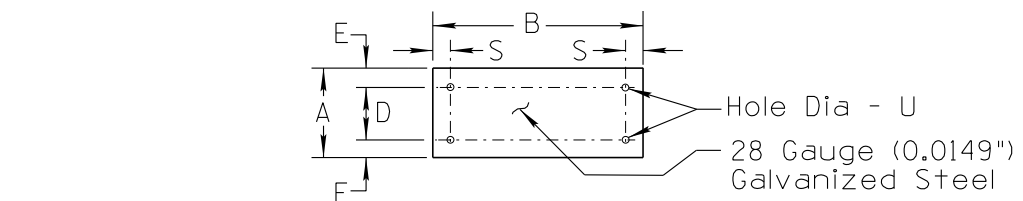


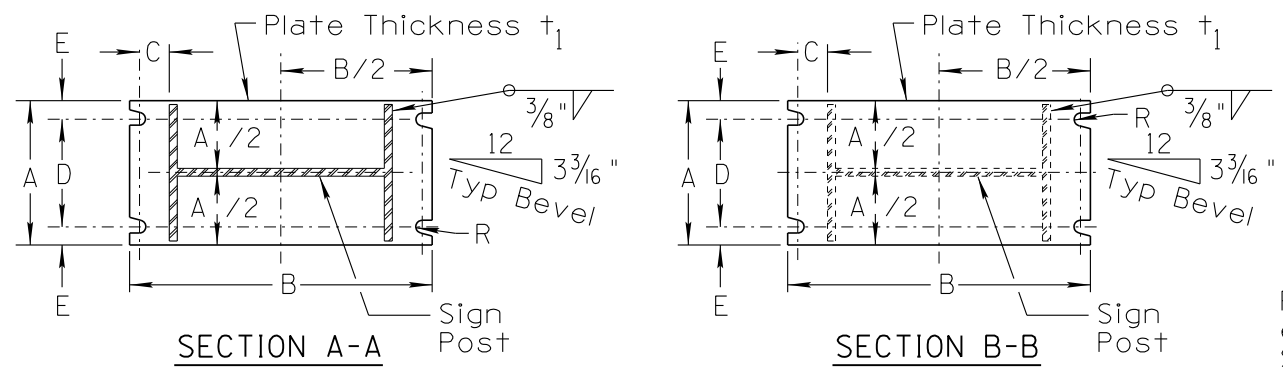
Note to Designer: The information presented in this Standard Drawing has been prepared in accordance with recognized engineering principles and is for general use. It should not be used for specific application without competent professional examination and verification of its suitability and applicability by a licensed professional engineer. Comments within the inner border line shall not be altered.



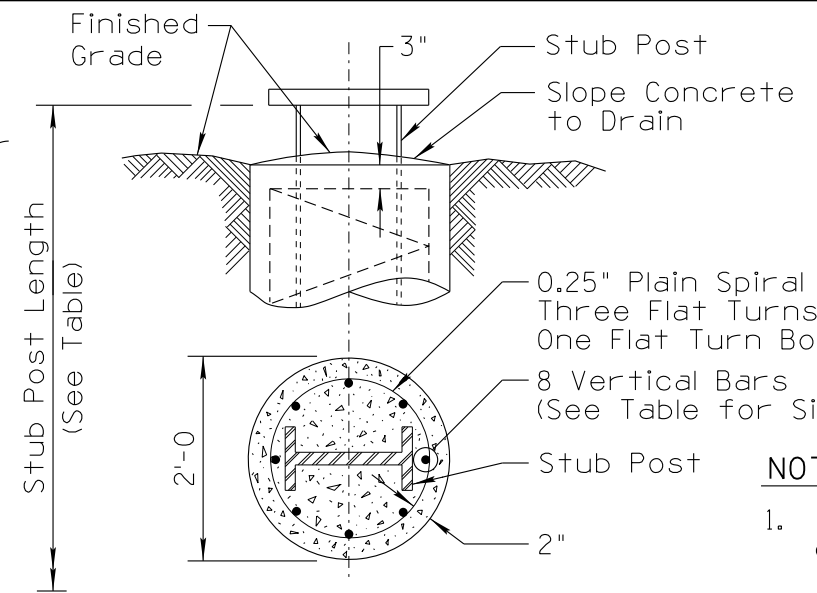
SIGN POST & STUB POST ELEVATION FOR W SHAPES



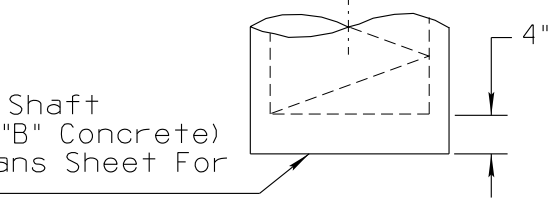
BOLT RETAINER FOR W SHAPE POST



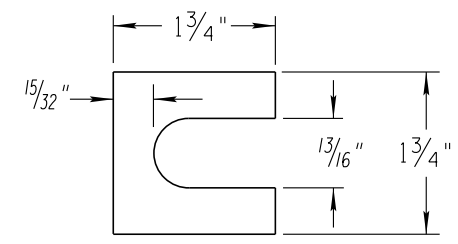
Sections shown are for installations on right shoulder and gore. For installation on left shoulder, plate slot bevels are reversed.



SECTION

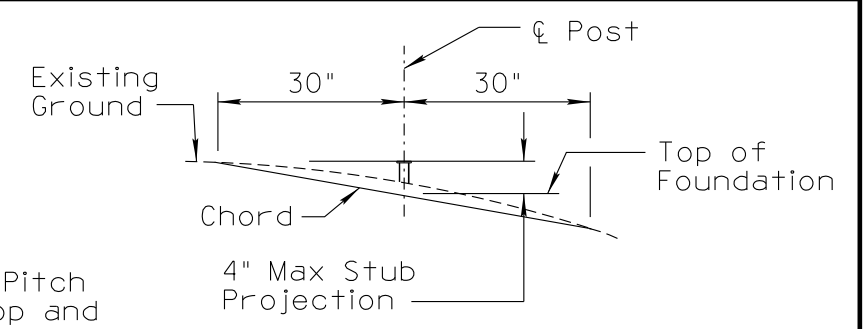


FOUNDATION DETAIL



SHIM DETAIL

Furnish 2 each 0.012"± thick and 2 each 0.032"± thick shims per post. Shims shall be fabricated from brass shim stock or strip conforming to the requirements of ASTM B36. Four shims per bolt maximum.



STUB PROJECTION LIMITS

NOTES:

1. All stub posts shall be galvanized a minimum of 12" down from the base of plate.
2. Where solid rock is encountered, foundation shall be plan depth or extended 2' minimum into the rock.
3. All plates shall be ASTM A572 Grade 50.
4. All plate holes shall be drilled. All plate cuts shall preferably be sawcuts; flame cutting will be permitted, provided all edges are ground smooth.

PROCEDURE FOR BOLTING & ASSEMBLY OF BASE CONNECTION

1. Assemble post to stub with bolts and with one flat washer on each bolt between plates.
2. Shim as required to plumb post (4 shims per bolt maximum).
3. Tighten all bolts the maximum possible with 12" to 15" wrench to bed washers and shims and to clean bolt threads, then loosen each bolt in turn and retighten bolts in a systematic order to the prescribed torque (see table). Tighten the bolts in the base connection to the torque shown. **DO NOT OVERTIGHTEN.**
4. Do not deform threads.

BASE CONNECTION DATA TABLE										
POST SIZE	BOLT SIZE AND TORQUE	DIMENSIONS FOR POST SIZES								
		A	B	C	D	E	R	t ₁	S	U
W6x12	5/8" Dia x 3" Torque = 20 to 29 Foot-Lbs	5 3/4"	10"	1 1/4"	2 3/4"	1 1/2"	1 1/32"	3/4"	3/4"	1 1/16"
W8x18	5/8" Dia x 3" Torque = 30 to 39 Foot-Lbs	5 3/4"	12 1/8"	1 1/4"	2 3/4"	1 1/2"	1 1/32"	3/4"	3/4"	1 1/16"
W10x22	3/4" Dia x 3" Torque = 50 to 59 Foot-Lbs	6 1/2"	14 5/8"	1 3/8"	3 1/2"	1 1/2"	1 3/32"	1"	7/8"	1 3/16"

FOUNDATION DATA				APPROXIMATE QUANTITIES PER LINEAR FT		FOUNDATION DEPTH (SEE NOTE 2 ALSO)	
POST SIZE	STUB LENGTH	STUB PROJECTION	VERTICAL BAR SIZE	CONCRETE CU. YD.	STEEL LBS.	SLOPES ≤ 4:1	SLOPES > 4:1
						TWO, THREE OR FOUR POSTS	
W6x12	2'-0"	3"	#5	0.116	8.9	6'-0"	6'-0"
W8x18	2'-6"	3"	#7	0.116	16.3	7'-0"	7'-6"
W10x22	3'-0"	2 1/2"	#9	0.116	26.5	8'-0"	8'-6"

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ARIZONA DEPARTMENT OF TRANSPORTATION
 INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
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 DETAILS
 DRAWING NO.
S-5
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