

NOTES:

1. Work with Index 11860.
2. Shop Drawings: Not required.
3. Materials:
 - A. Steel Plate: ASTM A36 or ASTM A709 Grade 36
 - B. Steel Pipe (Support Post): ASTM A501 Schedule 40
 - C. Aluminum Pipe: ASTM B210 Alloy 6061-T6
 - D. Galvanized U-Bolts, Nuts and Plate Washer
 - a. U-Bolts: ASTM A449
 - b. Hex Nuts: ASTM A 536 Lock Nuts
 - c. Plate Washer: ASTM A 36 or ASTM A709 Grade 36 or 50
 - E. Galvanized Anchor bolts, Nuts and Washers:
 - a. Anchor Rod: ASTM F1554 Grade 55 fully threaded (for Adhesive Anchors)
 - b. Anchor Bolts: ASTM F1554 Grade 55 Grade A Hex
 - c. Nuts: ASTM A563 Heavy Hex Locking
 - d. Washers: ASTM F436
 - F. Adhesive Anchor Bonding Material: Specification Section 931 Type HV Adhesive.
 - G. Weld Material: E70XX
 - H. Snap-In Post Cap: UV and weather-resistant glass-filled polyester cap

4. Coating:

- A. U-Bolts, Threaded Rods, Nuts and Washers: ASTM F2329
- B. Other Steel: ASTM A123

5. Fabrication:

- A. Weld: Specification Section 460-6.4
- B. Hot dip galvanize after fabrication

6. Construction:

- A. Locate Sign Support a minimum of 5 feet from an open joint or transition (sign stationing may be adjusted to accommodate this requirement).
- B. Base plate must be flush with back of Traffic Railing
- C. Anchors in Traffic Railings:
 - a. Install Adhesive Anchors in accordance with Specification section 416 except perform field test on one anchor per sign support location.
 - b. Use templates and tie anchors as necessary to maintain correct placement of C-I-P Embedded Anchors
 - c. Do not drill into existing conduit
- D. Temporary Signs on Permanent Traffic Railings: Same as Permanent except Field testing of anchors is not required

7. Removal of Temporary Signs on Permanent Traffic Railings:

- A. Cut anchor rods flush with the top of the traffic railing
- B. Coat anchors with Type F-1 epoxy to prevent corrosion
 - a. Extend coating 2 inches beyond edge of cut anchor rods
 - b. Epoxy coating 1/16" thick minimum

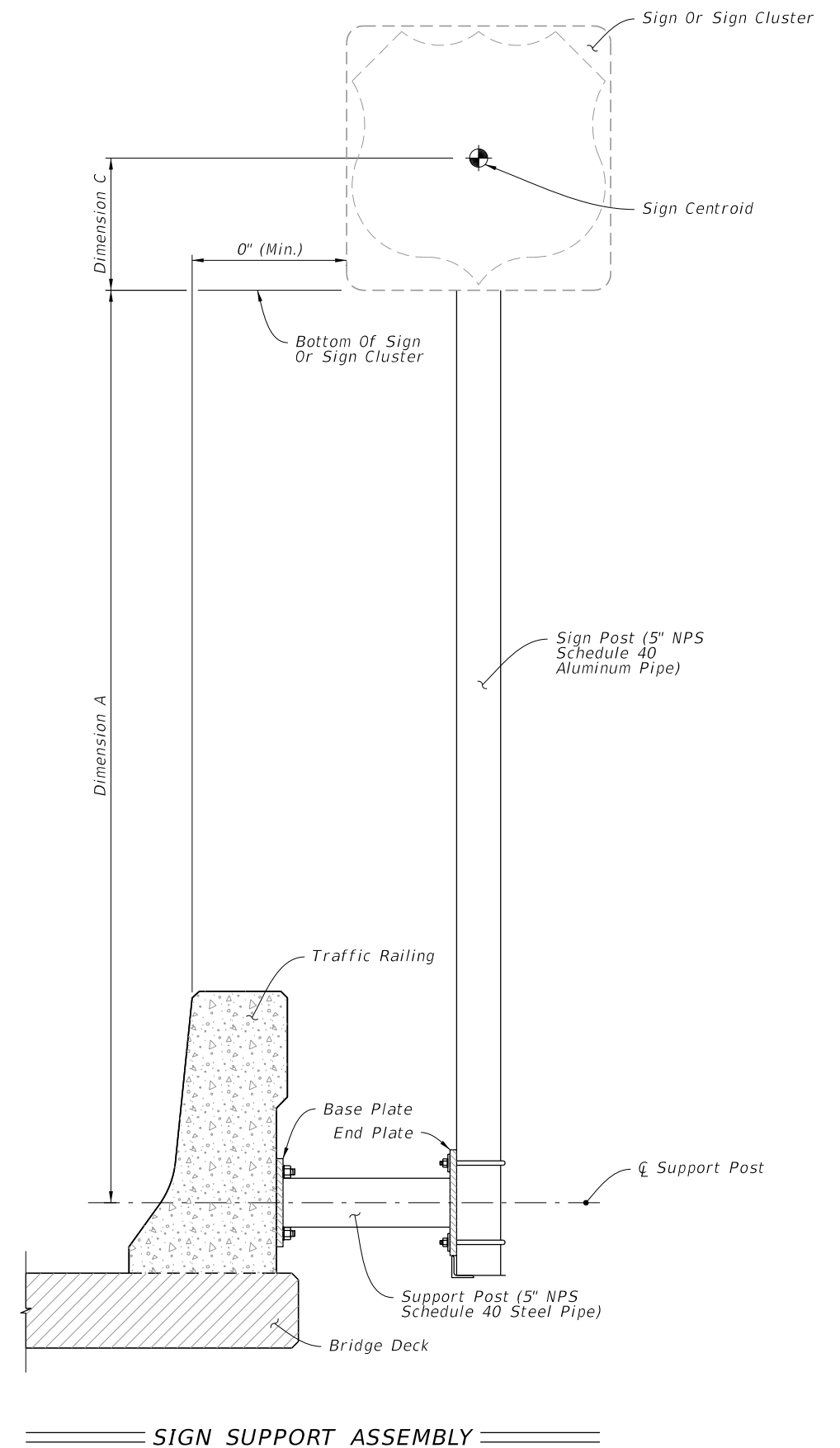
8. Payment:

Include the cost of all materials and labor in the cost of the single post sign assembly.


SIGN LIMITATIONS TABLE	
MAX. SIGN AREA (SF)	MAX. SIGN CENTROID HEIGHT (DIM. A + DIM. C)
25	9'-7"

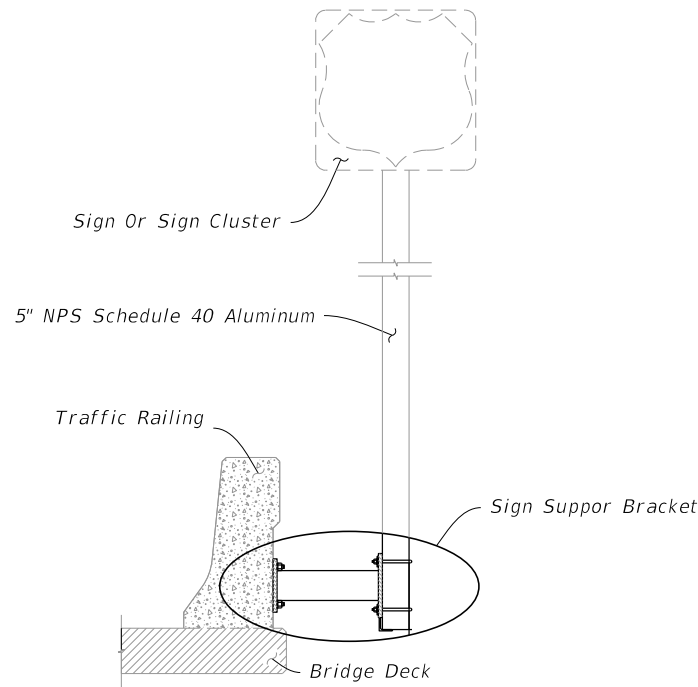
Dimension A = Distance from centerline of the Support Post to the bottom of the sign or sign cluster.

Dimension C = Vertical distance from the bottom of the sign or sign cluster to the Centroid of the sign or sign cluster.

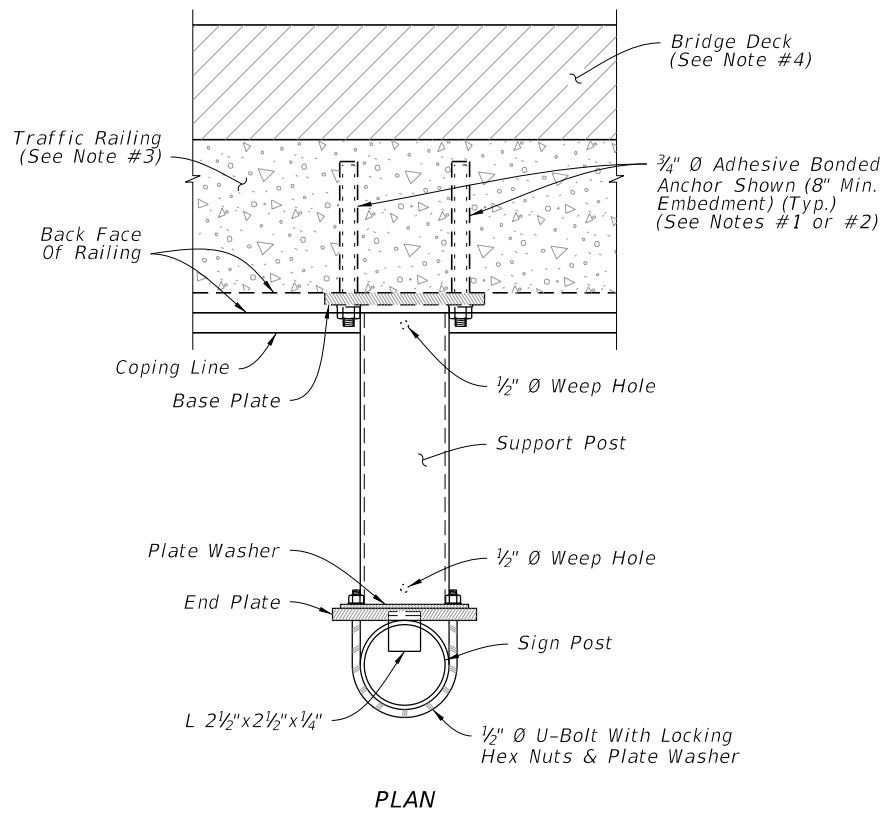


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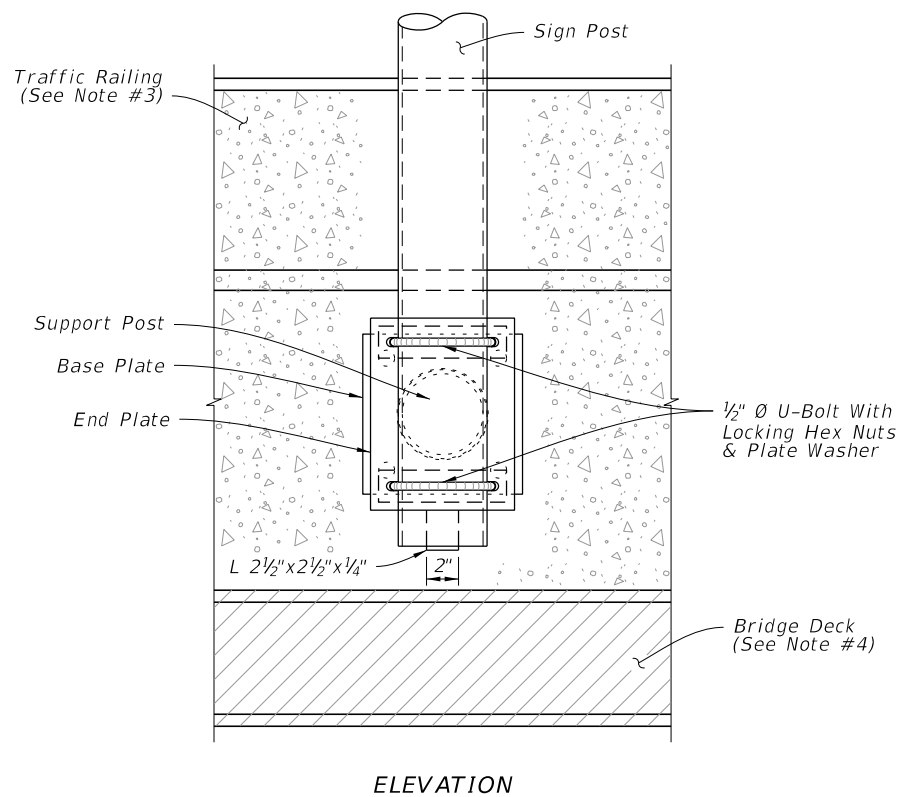
LAST REVISION 11/01/16	REVISION	DESCRIPTION:	 FY 2017-18 DESIGN STANDARDS	SINGLE POST BRIDGE MOUNTED SIGN SUPPORT	INDEX NO. 11870	SHEET NO. 1 of 3
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SIGN SUPPORT ASSEMBLY

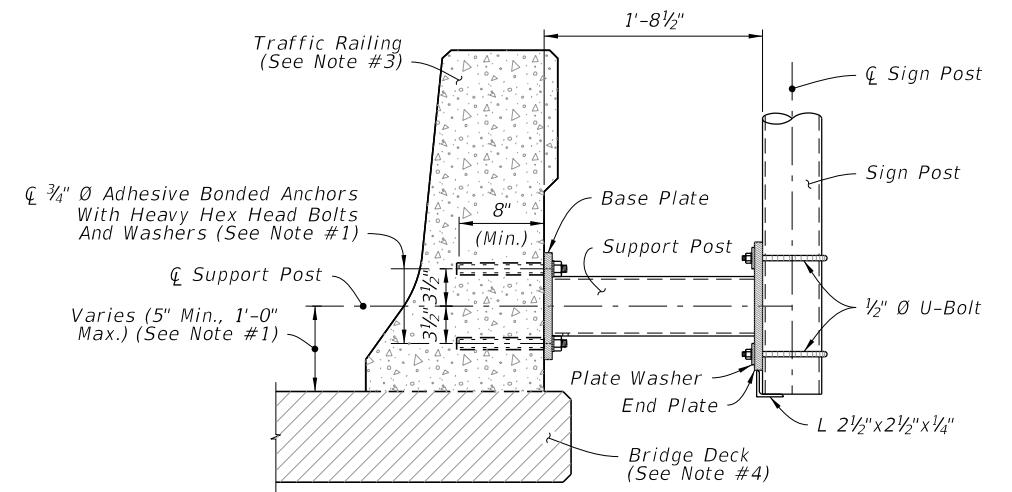


PLAN

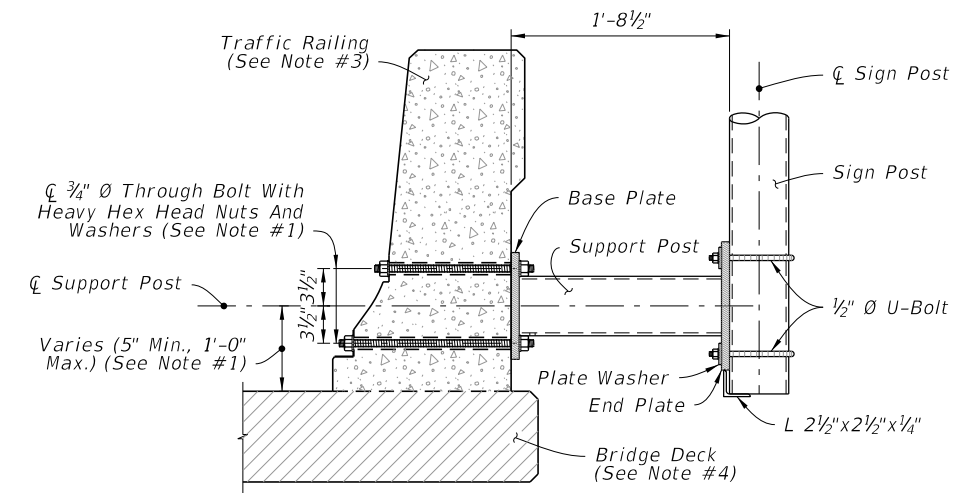


ELEVATION

SIGN SUPPORT BRACKET

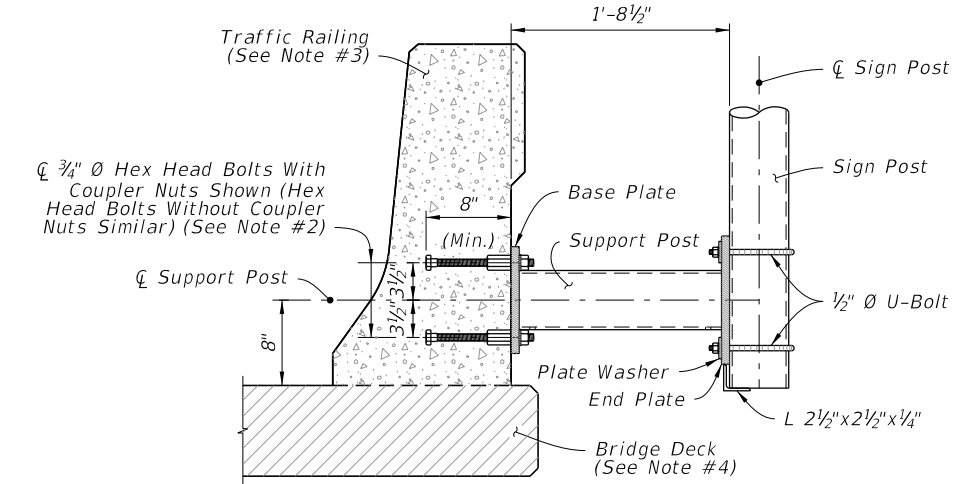


ADHESIVE BOND



THROUGH BOLTING

TYPICAL SECTION - EXISTING RAILING



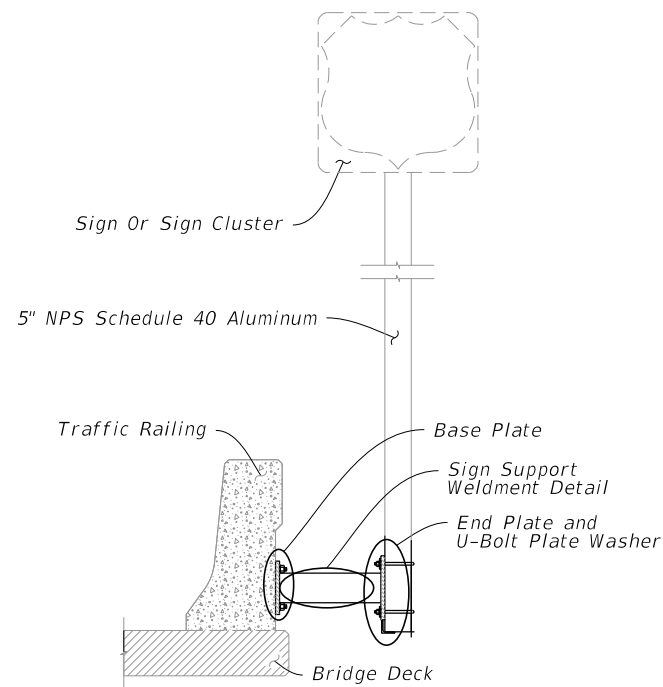
TYPICAL SECTION - NEW CONSTRUCTION

NOTES:

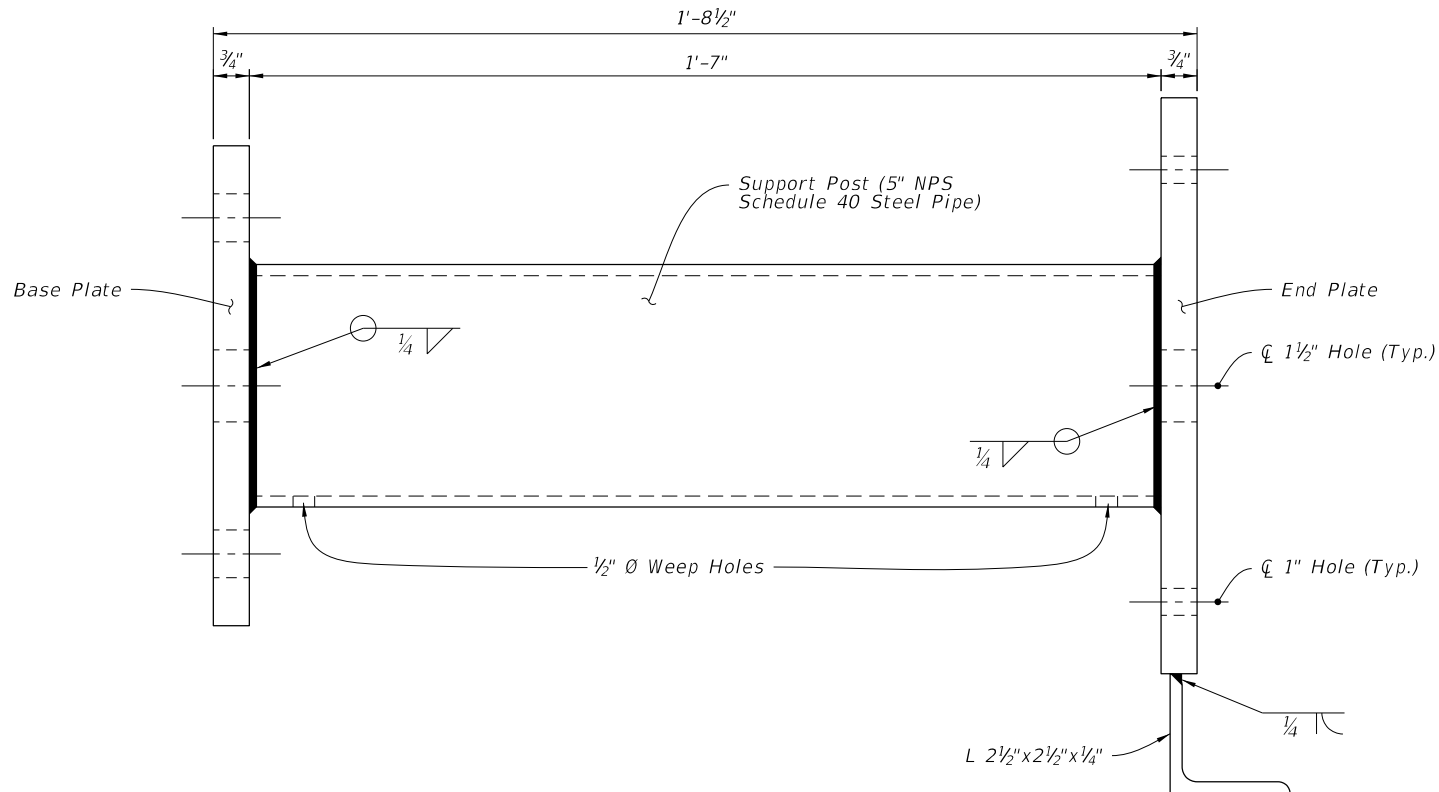
1. Existing Traffic Railings:
 - A. Locate existing conduit prior to drilling and adjust placement of base plate as necessary to avoid damaging existing conduit. Base plate must be flush with back of traffic railing. Maintain a minimum cover 2" from face of traffic railing to tip of Adhesive Anchor.
 - B. For concrete parapets less than 10" thick, through bolt 3/4" Ø Heavy Hex Head Bolts with Nuts and Washers in lieu of Adhesive Bonded Anchors. Bolt heads shall not protrude more than 1 1/2" beyond traffic face of railing.
 - C. For through bolting, cut front face of the traffic railing so that washer is flush with the concrete.
2. New Traffic Railings:
 - A. Optional Couplers are shown for slipforming; keep Anchor Bolt coupler threads free of concrete.
3. 32" F-Shape Traffic Railing shown, other Traffic Railings and Parapets are similar.
4. Bridge Deck shown, Approach Slab and Retaining Wall are similar.

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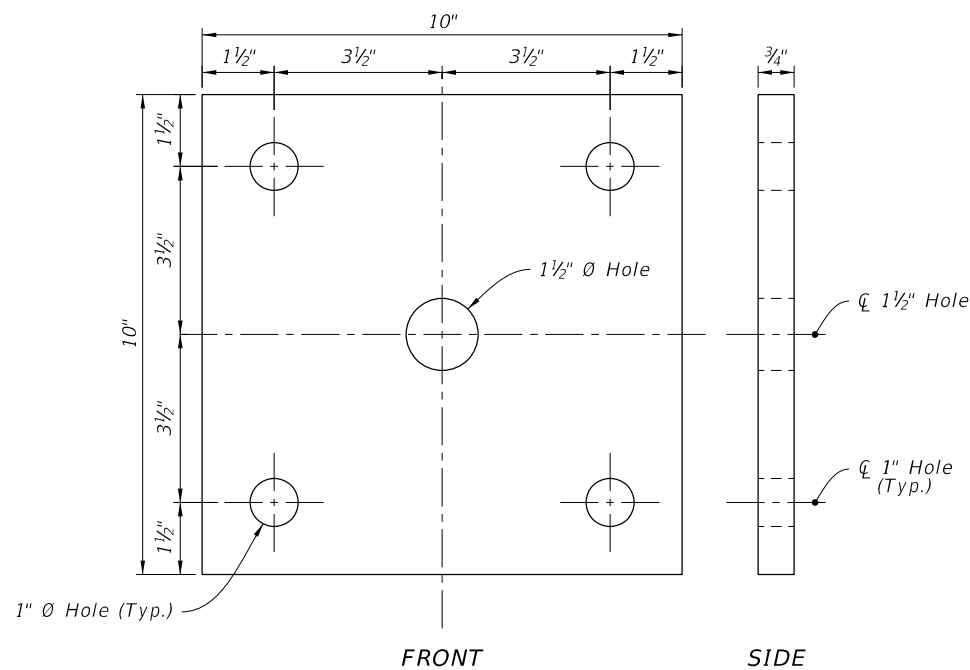
LAST REVISION 11/01/16	REVISION	DESCRIPTION:	FY 2017-18 DESIGN STANDARDS	SINGLE POST BRIDGE MOUNTED SIGN SUPPORT	INDEX NO. 11870	SHEET NO. 2 of 3
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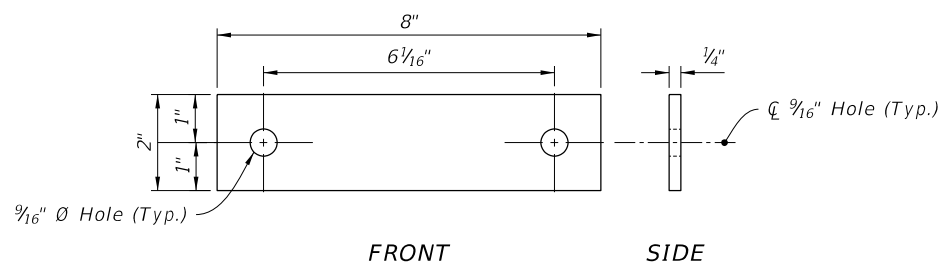
SIGN SUPPORT ASSEMBLY



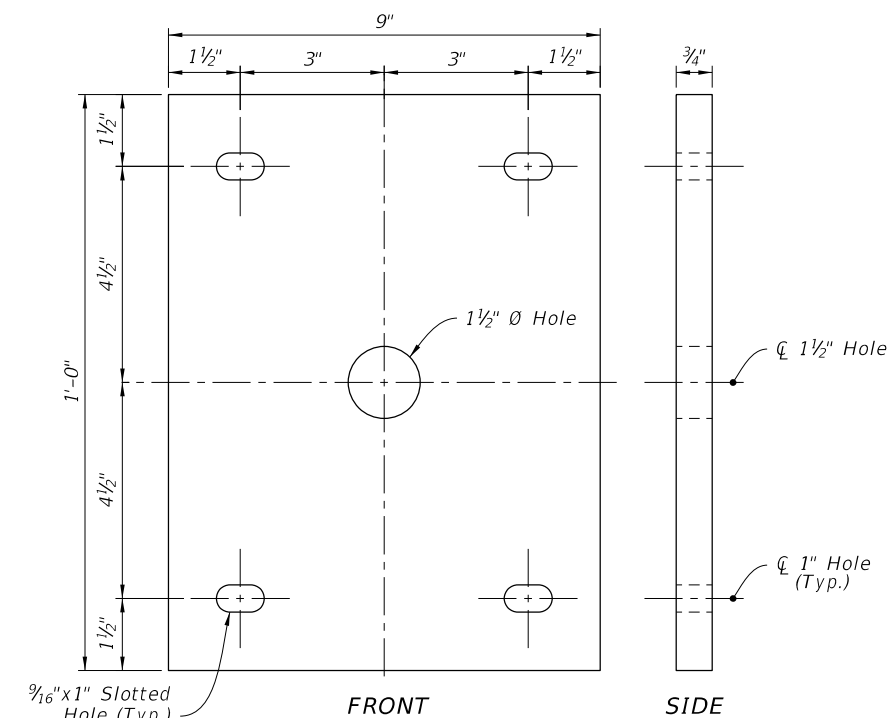
SIGN SUPPORT WELDMENT DETAIL



BASE PLATE



U-BOLT PLATE WASHER



END PLATE

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LAST REVISION
01/01/16

REVISION

DESCRIPTION:



FY 2017-18
DESIGN STANDARDS

SINGLE POST BRIDGE MOUNTED SIGN SUPPORT

INDEX NO.
11870

SHEET NO.
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