ORIGINATION FORM

Proposed Revisions to a Standard Plans Index

(Please provide all information — Incomplete forms will be returned)

Contact Information:

Date: May 12, 2022

Originator: Rick Jenkins

Phone: (850) 414-4355

Email: Rick.Jenkins@dot.state.fl.us

Standard Plans:

Index Number: 700-012

Sheet Number (s): All of 3

Index Title: Single Post Bridge Mounted Sign Support

Summary of the changes:

All Sheets: Renamed Index "Single Post Sign Support Barrier Side-Mounted".

Sheet 1: Updated Notes to General Notes; Added New Note 1 - "Meet the requirements of Specification 700".; Deleted Note 3; Moved Note 4 to Specification 962; Deleted Note 5; Renumbered Notes; Added New Notes from Sheet 2, Note 6 - "Bridge deck shown, approach slabs, junction slabs, and miscellaneous structures are similar." and Note 7 - "Traffic railings are shown. Concrete barriers and parapets are similar."; Updated the General Note references in the SIGN SUPPORT ASSEMBLY detail.

Sheet 2: Moved Notes 3 and 4 to the General Notes on Sheet 1; Updated General Note references.

Sheet 3: Updated the General Note references in the SIGN SUPPORT ASSEMBLY detail.

Commentary / Background:

The 700 Index Series is being edited to remove material information and other information that is located in the Standard Specifications. Revisions are being made to Specification Sections 700, 962 and 965 in conjunction with these changes.

Other Affected Offices / Documents: **(Provide name of person contacted)**

Yes	No	
☑	☐	Other Standard Plans –
☐	☑	FDOT Design Manual – Dewayne Carver
☑	☐	Basis of Estimates Manual – Ryan Gray
☑	☐	Standard Specifications – Daniel Strickland
☐	☑	Approved Product List – Missy Hollis
☐	☑	Construction – Jason Russell
☐	☑	Maintenance – Deanna Hutchison

Origination Package Includes: (Submit package to Rick Jenkins)

Yes	N/A	
☑	☐	Redline Mark-ups
☐	☐	Revised or Proposed Standard Plan Instruction (SPI)
☐	☐	Other Support Documents

Implementation:

- ☐ Design Bulletin (Interim)
- ☐ DCE Memo
- ☐ Program Mgmt. Bulletin
- ☑ FY-Standard Plans (Next Release)

Contact the Roadway Design Office for assistance in completing this form

Email to: Rick Jenkins rick.jenkins@dot.state.fl.us and Darren Martin darren.martin@dot.state.fl.us

UPDATED: GENERAL NOTES:

NOTES:

1. Work with Index 700-010.

ADDED NEW NOTE 1: Meet the requirements of Specification 700.

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 B429 Alloy 6061-T6
D. Galvanized U-Bolts, Nuts and Plate Washer
   a. U-Bolts: ASTM A449
   b. Hex Nuts: ASTM A 563 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 931 Type HV Adhesive.
G. Weld Material: E70XX
H. Snap-In Post Cap: UV and weather-resistant glass-filled polyester cap

DELETED

4. Coating:

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

5. Fabrication:

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

4. 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 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

5. 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.

DELETED

6. ADDED NEW NOTE 6 AND 7 FROM SHEET 2:
6. Bridge deck shown. Approach slabs, junction slabs, and miscellaneous structures are similar.

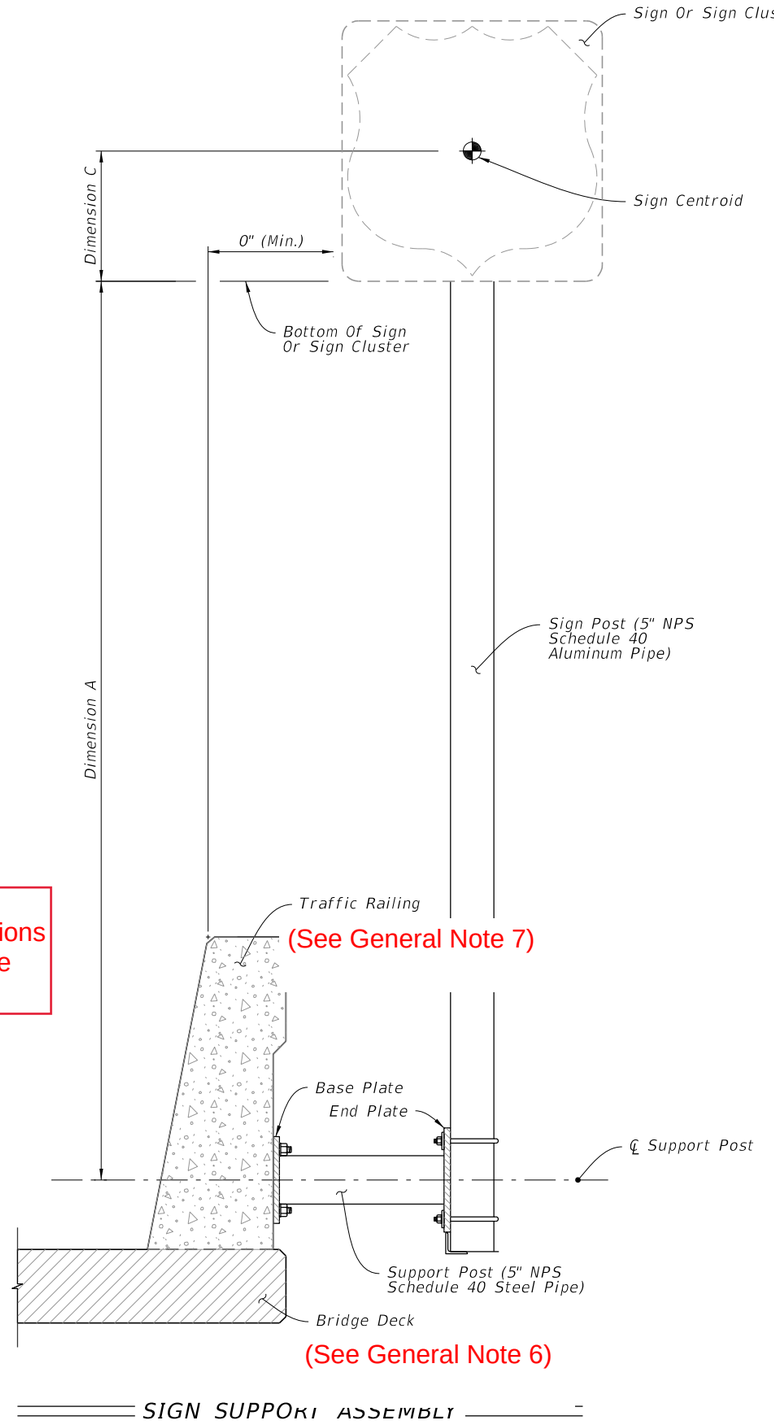
7. 7. Traffic railings are shown. Concrete barriers and parapets are similar.

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.

GENERAL COMMENT: Material and fabrication information was deleted. Information is either already covered in Standard Specifications OR will be added to Section 700, 962 or 965 in conjunction with these revisions.



SIGN SUPPORT ASSEMBLY

CHANGED TITLE:
Single Post Sign Support Barrier Side-Mounted

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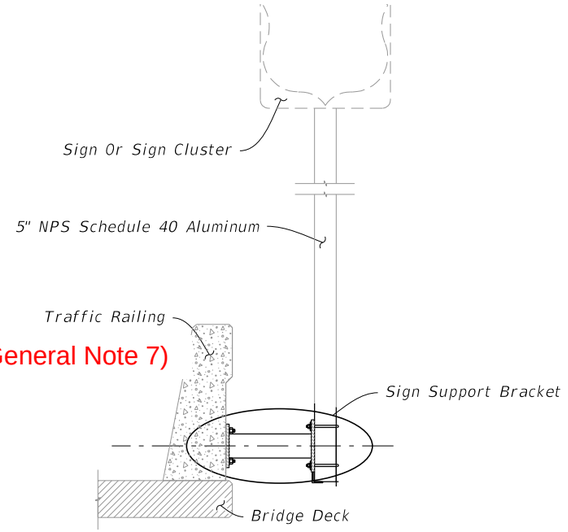
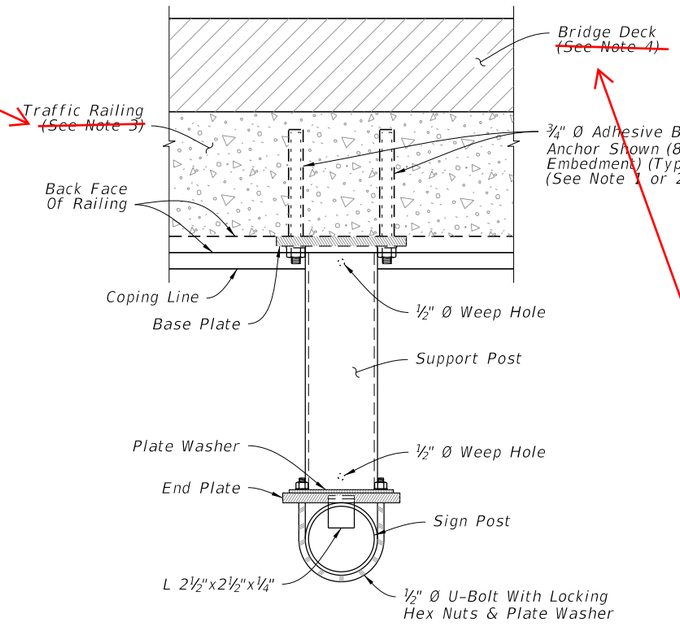
11/01/22

LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2022-23 STANDARD PLANS	SINGLE POST BRIDGE MOUNTED SIGN SUPPORT	INDEX	SHEET
~~11/01/18~~						700-012	1 of 3

(See General Note 7)

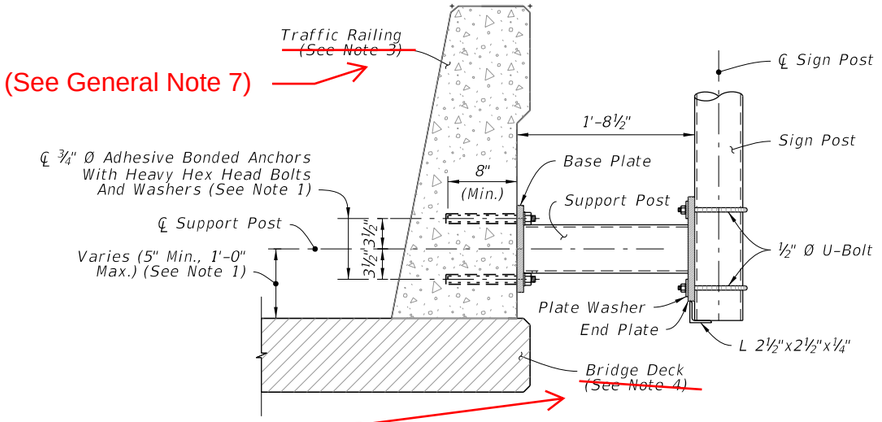


(See General Note 6)



PLAN

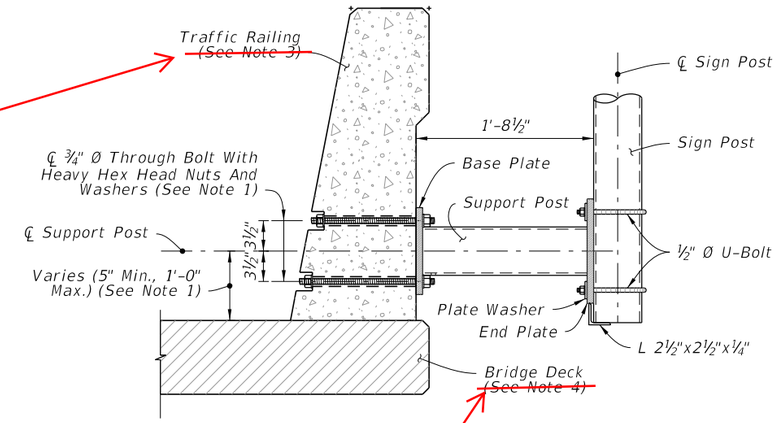
(See General Note 7)



(See General Note 6)

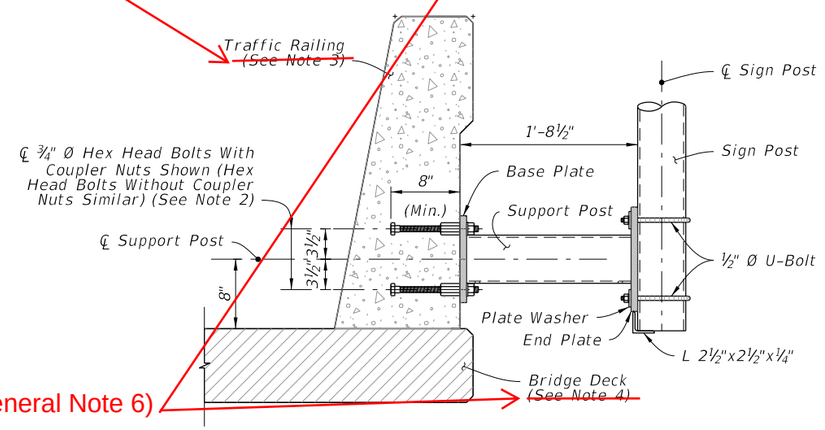
ADHESIVE BOND

(See General Note 7)



THROUGH BOLTING

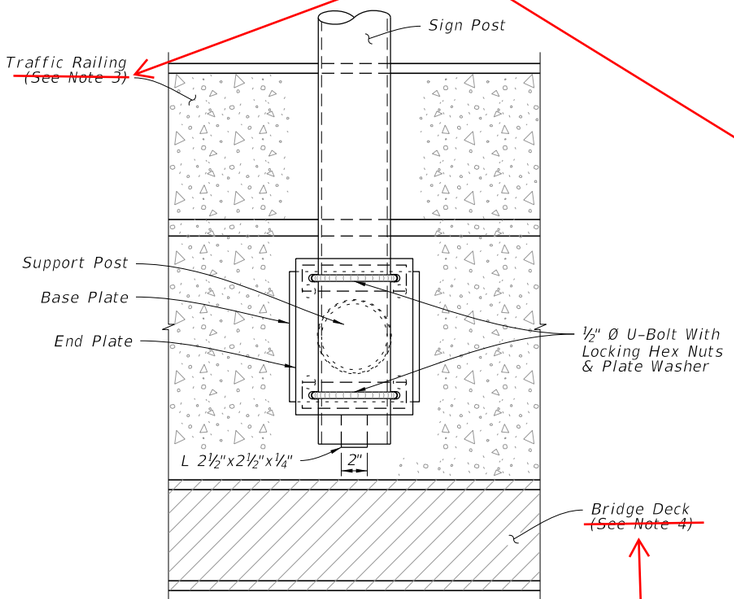
TYPICAL SECTION - EXISTING RAILING



(See General Note 6)

TYPICAL SECTION - NEW CONSTRUCTION

(See General Note 7)



ELEVATION

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 ¾" Ø Heavy Hex Head Bolts with Nuts and Washers in lieu of Adhesive Bonded Anchors. Bolt heads shall not protrude more than 1½" beyond traffic face of railing.

   C. For through bolting, countersink the nut and washer so that the bolt and nut does not extend beyond the face of the traffic railing. Do not exceed a countersink depth and diameter of 2½".

2. New Traffic Railings:

   A. Optional Couplers are shown for slipforming; keep Anchor Bolt coupler threads free of concrete.

~~3. 36" Single-Slope Traffic Railing shown, other Traffic Railings and Parapets are similar.~~

~~4. Bridge Deck shown, Approach Slab and Retaining Wall are similar.~~

MOVED TO GENERAL NOTES

(See General Note 6)

CHANGED TITLE:
Single Post Sign Support Barrier Side-Mounted

11/01/22

9/22/2021 1:44:19 PM

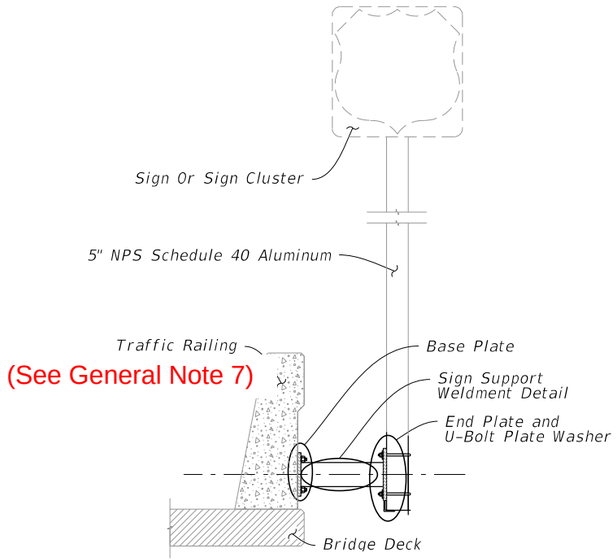
LAST REVISION	REVISION	DESCRIPTION:
~~11/01/17~~		

FDOT FY 2022-23 STANDARD PLANS

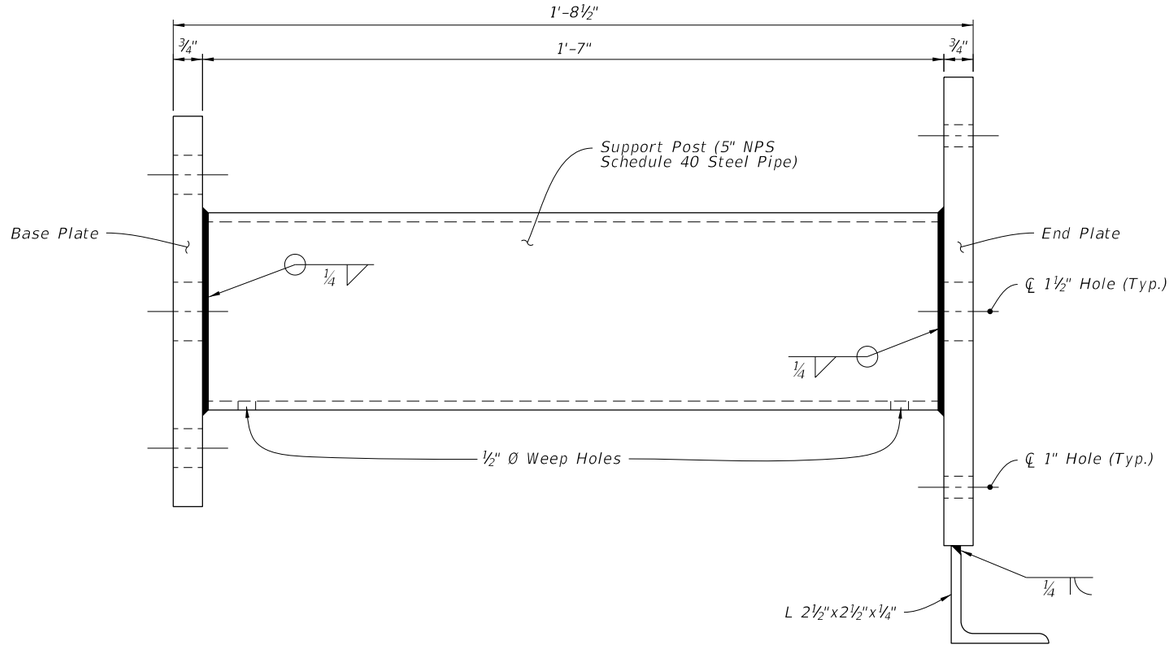
~~SINGLE POST BRIDGE MOUNTED SIGN SUPPORT~~

INDEX 700-012

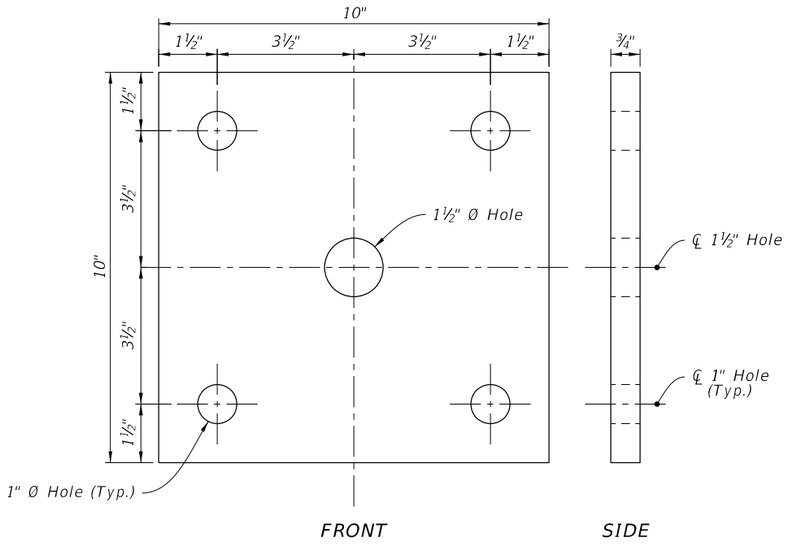
SHEET 2 of 3



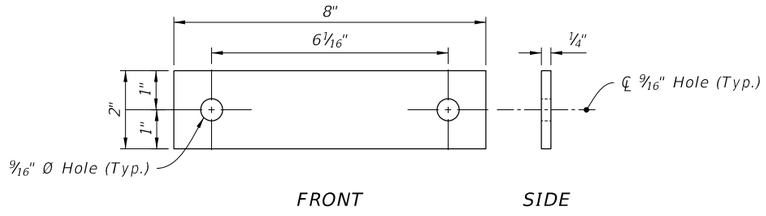
SIGN SUPPORT ASSEMBLY



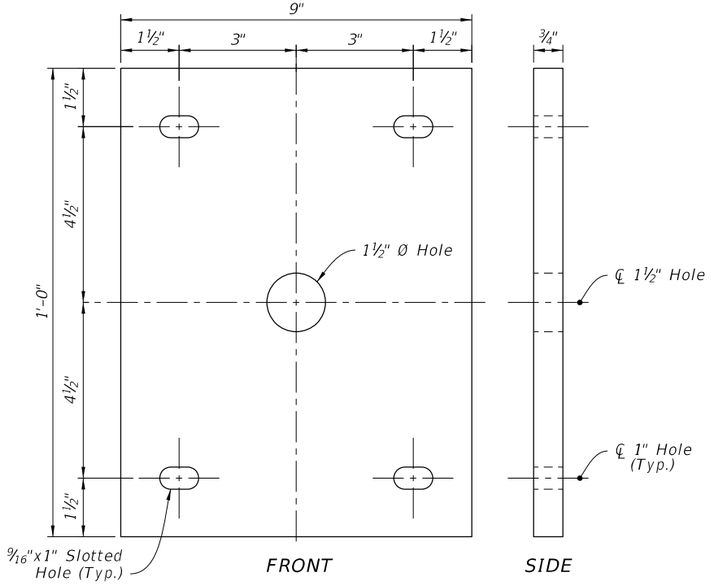
SIGN SUPPORT WELDMENT DETAIL



BASE PLATE



U-BOLT PLATE WASHER



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CHANGED TITLE:
Single Post Sign Support Barrier Side-Mounted

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LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
~~11/01/17~~ 11/01/22			FDOT FY 2022-23 STANDARD PLANS	~~SINGLE POST BRIDGE MOUNTED SIGN SUPPORT~~	700-012	3 of 3

GENERAL NOTES:

1. Meet the requirements of Specification 700.

2. Work with Index 700-010.

3. Shop Drawings: Not required.

4. 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:
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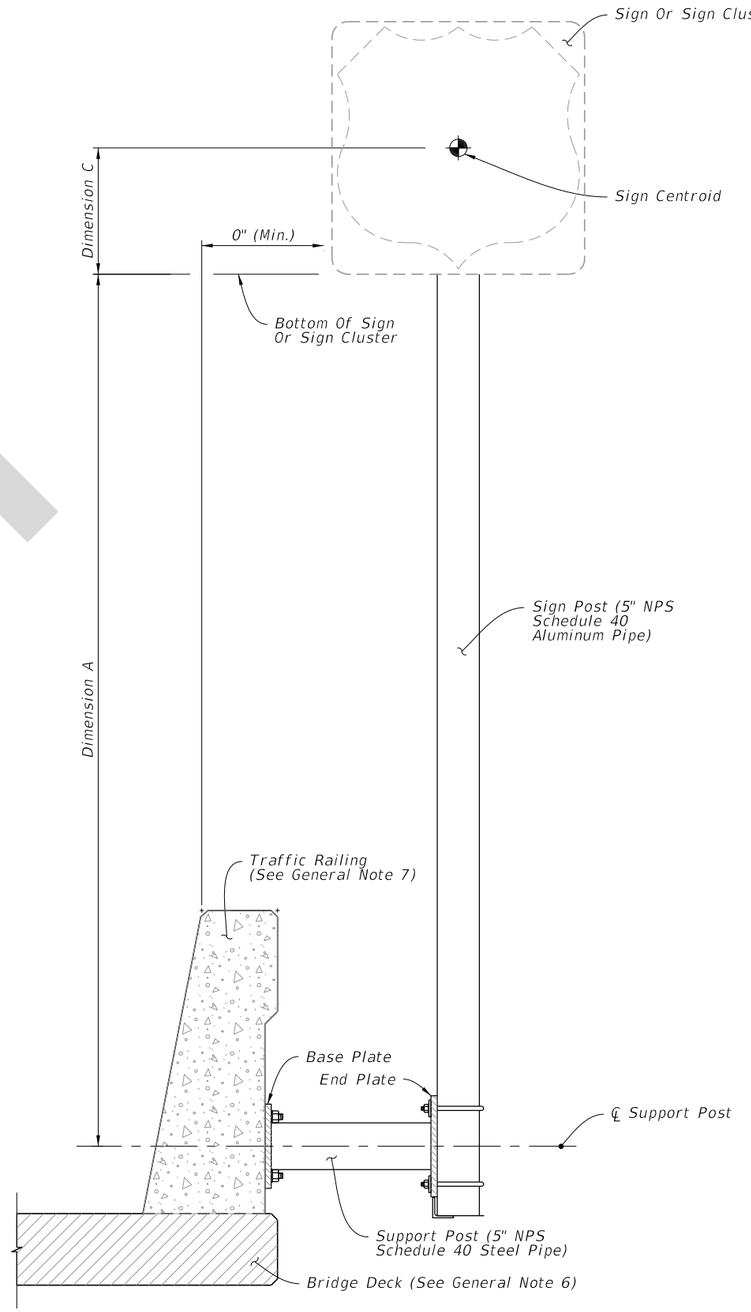

SIGN SUPPORT ASSEMBLY

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INTERNAL REVIEW

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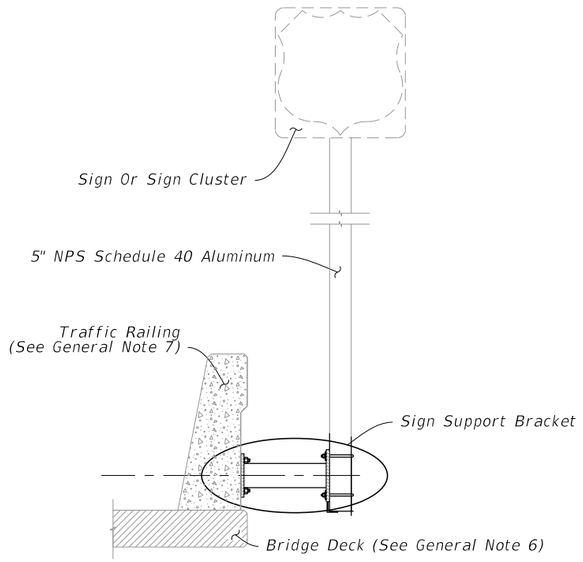
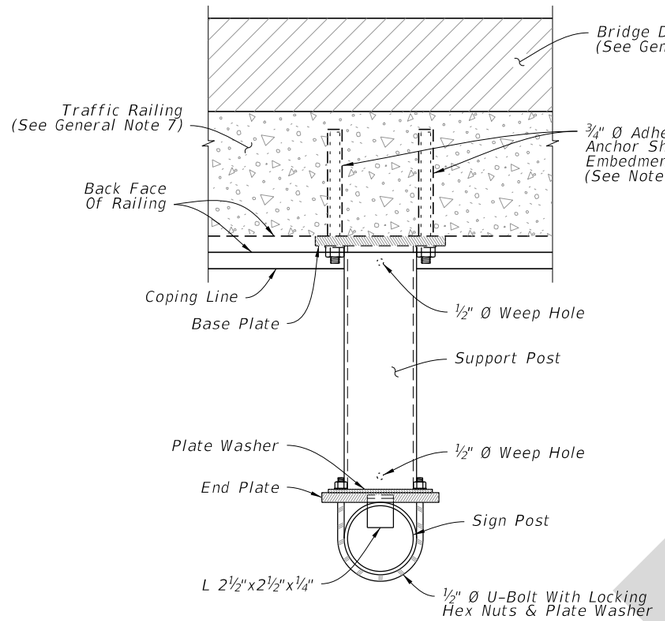
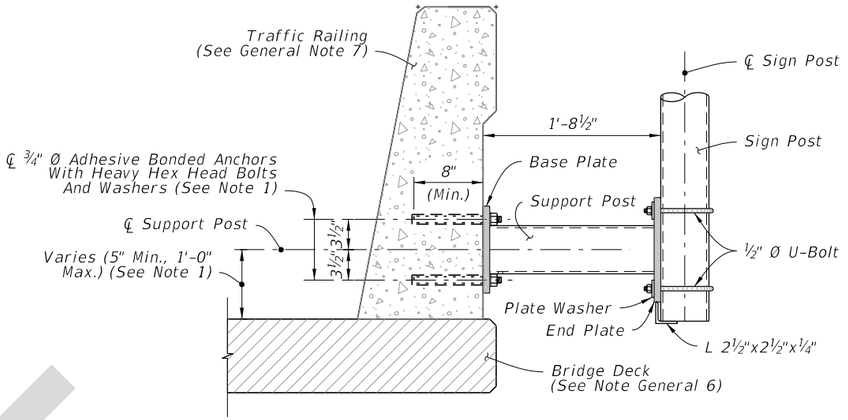
LAST REVISION	REVISION	DESCRIPTION:				
11/01/22			FDOT FY 2023-24 STANDARD PLANS	SINGLE POST SIGN SUPPORT BARRIER SIDE-MOUNTED	INDEX 700-012	SHEET 1 of 3



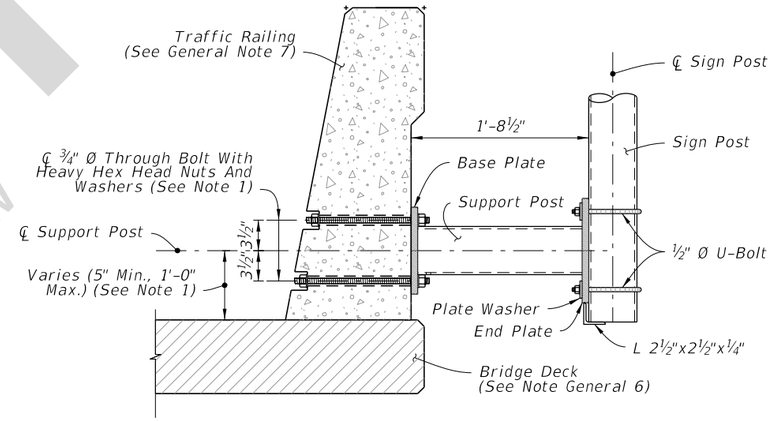
SIGN SUPPORT ASSEMBLY



PLAN

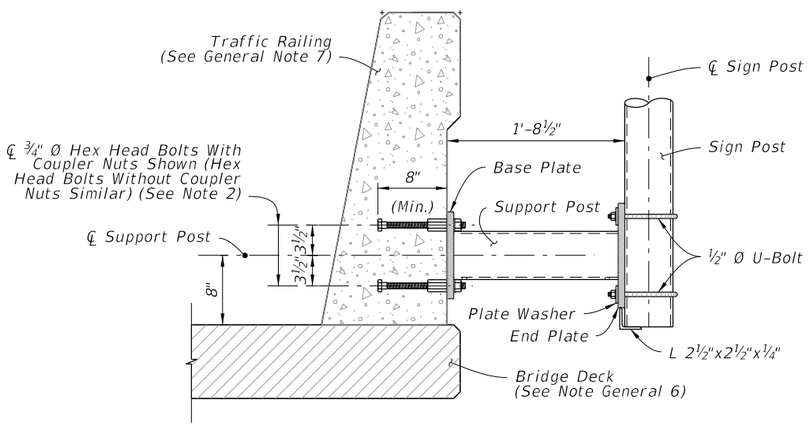


ADHESIVE BOND

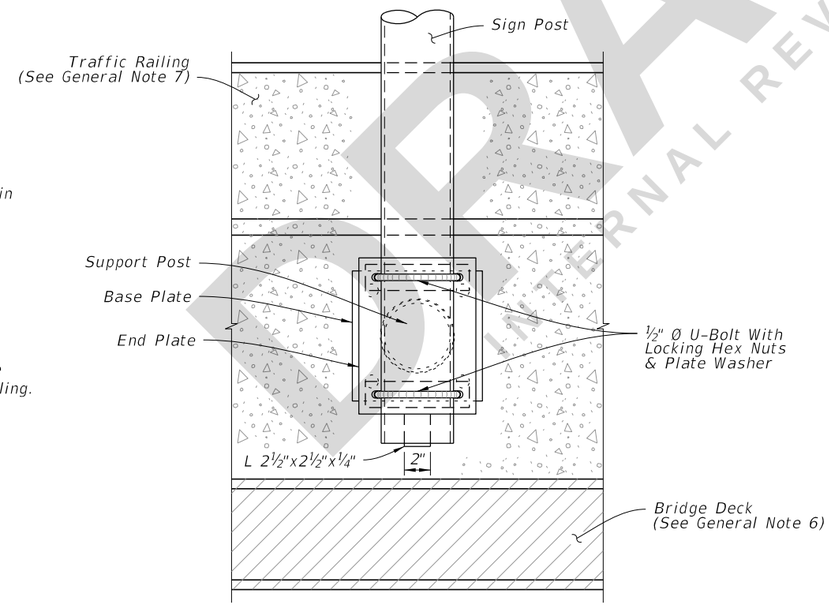


THROUGH BOLTING

TYPICAL SECTION - EXISTING RAILING



TYPICAL SECTION - NEW CONSTRUCTION



ELEVATION

SIGN SUPPORT BRACKET

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.

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2. New Traffic Railings:

   A. Optional Couplers are shown for slipforming; keep Anchor Bolt coupler threads free of concrete.

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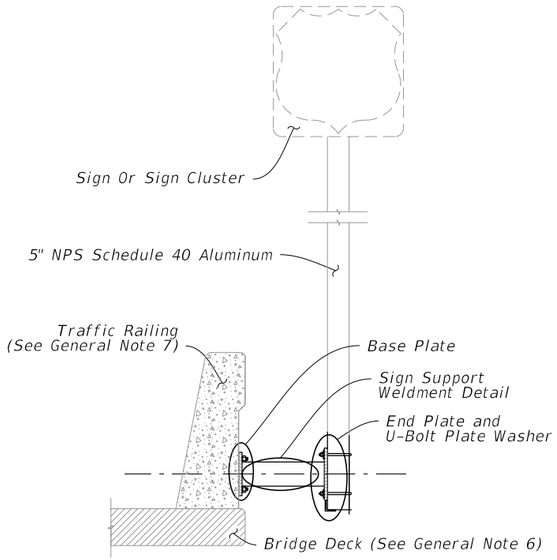
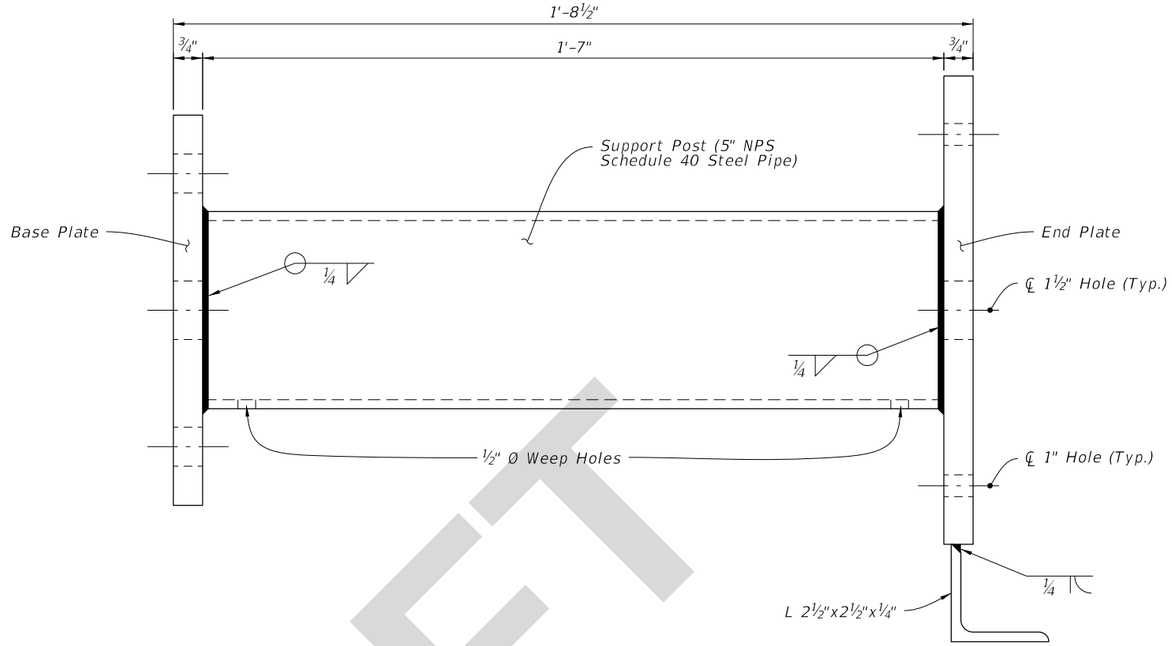
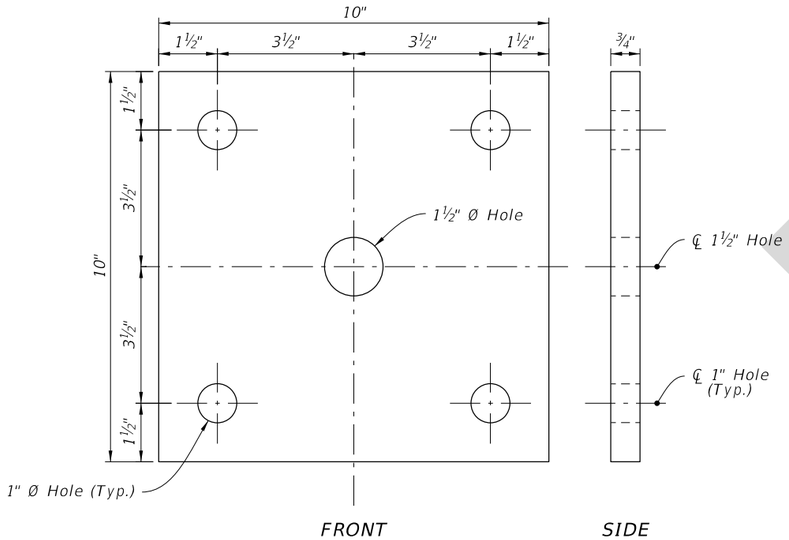
INTERNAL REVIEW



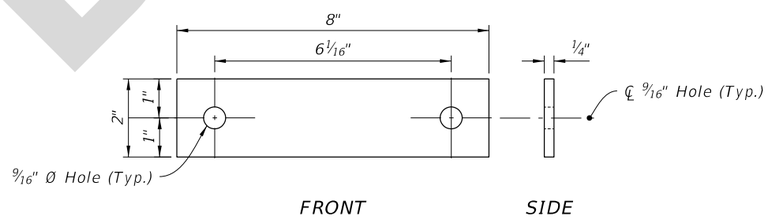
SIGN SUPPORT ASSEMBLY



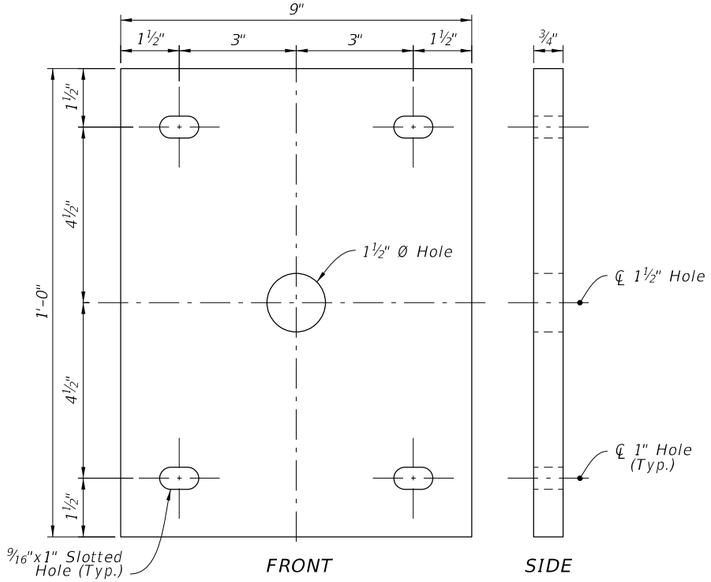
SIGN SUPPORT WELDMENT DETAIL



BASE PLATE



U-BOLT PLATE WASHER



END PLATE

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INTERNAL REVIEW

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LAST REVISION	REVISION	DESCRIPTION:				
11/01/22			FDOT FY 2023-24 STANDARD PLANS	SINGLE POST SIGN SUPPORT BARRIER SIDE-MOUNTED	INDEX 700-012	SHEET 3 of 3