# ORIGINATION FORM

Proposed Revisions to a Standard Plans Index

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

**Contact Information:**

Date: October 21, 2021
Originator: Joshua Turley
Phone: (850) 414-4475
Email: joshua.turley@dot.state.fl.us

**Standard Plans:**

Index Number: 550-010
Sheet Number (s): 2 of 4
Index Title: BRIDGE FENCING (VERTICAL)

**Summary of the changes:**

Sheet 2: Changed the shim thickness at the base of the pole to indicate that it varies based on railing type.

**Commentary / Background:**

Contractor comments indicated their was some confusion ordering correct shims based on the existing language.

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

| Yes | No | |
|---|---|---|
| ☐ | ☑ | Other Standard Plans – |
| ☐ | ☑ | FDOT Design Manual – |
| ☐ | ☑ | Basis of Estimates Manual – |
| ☐ | ☑ | Standard Specifications – |
| ☐ | ☑ | Approved Product List – |
| ☐ | ☑ | Construction – |
| ☐ | ☑ | Maintenance – |

**Origination Package Includes:**

(Email or hand deliver package to Rick Jenkins)

| Yes | N/A | |
|---|---|---|
| ☑ | ☐ | Redline Mark-ups |
| ☐ | ☐ | Proposed Standard Plan Instruction (SPI) |
| ☐ | ☐ | Revised 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

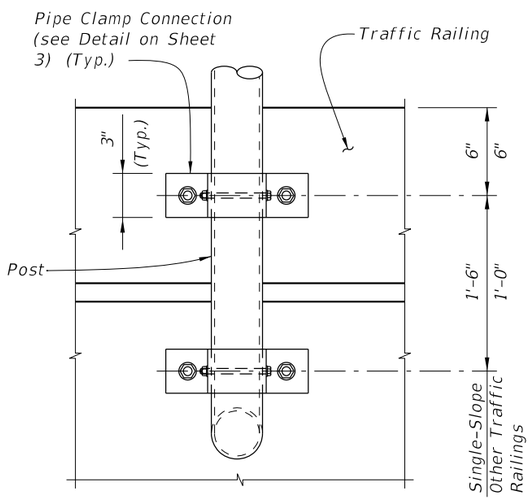
Email to: Rick Jenkins rick.jenkins@dot.state.fl.us and Darren Martin darren.martin@dot.state.fl.us

## TABLE OF CHAIN LINK FENCE COMPONENTS

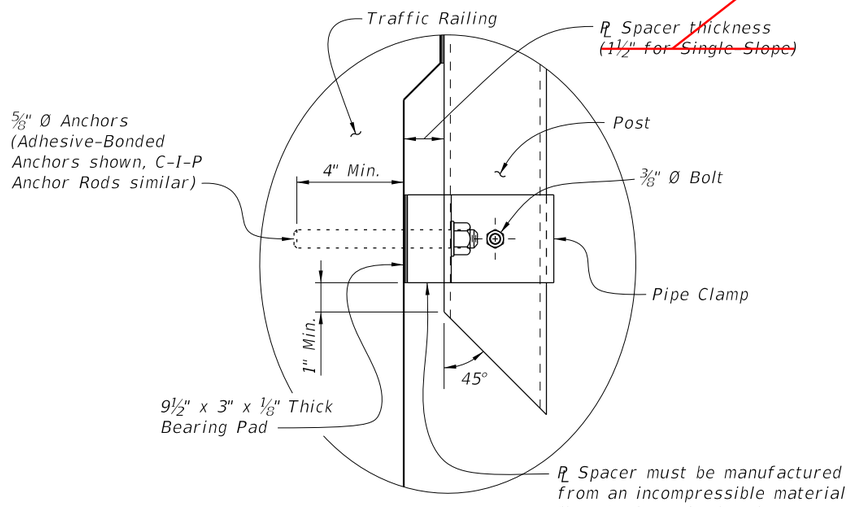
| COMPONENT | | ASTM DESIGNATION | COMPONENT INFORMATION |
|---|---|---|---|
| Traffic Railings and Concrete Parapets | Posts | F1083 | Galvanized Steel Pipe – 3" NPS, Schedule 40 Regular Grade |
| | Chain Link Fabric (2" mesh with twisted top and knuckled bottom selvage) | A392 | Zinc Coated Steel – 9 gage (coated wire diameter), Class 2 Coating |
| | | A491 | Aluminum Coated Steel – 9 gage (coated wire diameter) |
| | | F668 | Polyvinyl Chloride (PVC) Coated Steel – 9 gage Class 2b |
| | Tie Wires | F626 | Zinc Coated Steel Wire – 9 gage |
| | Brace Bands | F626 | 12 Gage (Min. thickness) x ¾" (Min. width) Steel Bands (Beveled or Heavy) |
| | Tension Bars | F626 | 3/16" (Min. thickness) x ¾" (Min. width) x 5'–10" (Min. height) Steel Bars |
| | Tension Bands | F626 | 14 Gage (Min. thickness) x ¾" (Min. width) Steel Bands |
| | Miscellaneous Fence Components | F626 | Zinc Coated Steel ~ (includes post or loop caps, horizontal and brace rail ends, combination rail ends, boulevard clamps and all other miscellaneous fittings & hardware) |
| Concrete Parapets | Horizontal Rails | F1083 | Galvanized Steel Pipe – 2½" NPS, Schedule 40 Regular Grade |
| | Expansion Rails | F1083 | Galvanized Steel Pipe – 2" NPS, Schedule 40 Regular Grade |
| | Bolts | A307 | ¼" Ø x 4¼" Hex Head Bolts for Expansion Rail Connections |
| | Nuts | A563 | Hex Nuts for Expansion Rail Connections |
| | Washers | F436 | Flat Washers for Expansion Rail Connections |
| Traffic Railings | Tension Wire | A824 & A817 | Type II (Zinc Coated Steel Wire) – 7 gage, Class 4 Coating |
| | | | Type I (Aluminum Coated Steel Wire) – 7 gage |
| | Hog Rings | F626 | Zinc Coated Steel Wire – 12 gage |
| | Brace Rails | F1083 | Galvanized Steel Pipe – 1¼" NPS, Schedule 40 Regular Grade |

## TABLE OF POST ATTACHMENT COMPONENTS

| COMPONENT | | ASTM DESIGNATION | COMPONENT INFORMATION |
|---|---|---|---|
| Pipe Clamps | | A36 or A709 Grade 36 | ¼" Steel PL |
| Base Plates | | A36 or A709 Grade 36 | ¾" Steel PL |
| Shim Plates | | A36 or A709 Grade 36 or B209 Alloy 6061–T6 or B221 Alloy 6063–T5 | Plate thicknesses as required; Holes in shim plates will be ¾" Ø |
| Spacers | | – | Plate thickness varies based on traffic railing type (See Detail "A") |
| Pipe Clamp Connection | Adhesive Anchor Rods | F1554 Grade 36 | Fully threaded Headless Anchor Rods ~ ⅝" Ø x 6" (no spacer) or ⅝" Ø x (6" + spacer thickness) |
| | C–I–P Anchor Rods | F1554 Grade 36 | Hex Head Anchor Rods ~ ⅝" Ø x 6" (no spacer) or ⅝" Ø x (6" + spacer thickness) |
| Base Plate Connection | Adhesive Anchor Rods | F1554 Grade 36 | Fully threaded Headless Anchor Rods ~ ⅞" Ø x 14½" |
| | C–I–P Anchor Rods | F1554 Grade 36 | Hex Head Anchor Rods ~ ⅞" Ø x 14½" |
| Bolts | | A307 | ⅜" Ø x 4¾" Hex Head Bolts for Pipe Clamp Connections to Posts |
| Nuts | | A563 | Hex Nuts for Pipe Clamp and Base Plate Connections |
| Washers | | F436 | Flat Washers for Pipe Clamp and Base Plate Connections |
| Bearing Pads (Plain Neoprene) | | – | In accordance with Specification Section 932 for Ancillary Structures |




VIEW A-A




DETAIL "A"

### POST ATTACHMENT NOTES

ANCHOR RODS, NUTS AND WASHERS:
After the nuts have been tightened, distort the Anchor Rod threads to prevent removal of the nuts. Coat distorted threads and exposed trimmed ends of anchors with a galvanizing compound in accordance with Specification Section 562.

COATINGS:
Hot-dip galvanize all Nuts, Washers, Bolts, C–I–P Anchor Rods, Adhesive Anchors and Fence Framework (Posts, Internal Sleeves, Shim Plates, Base Plates, Pipe Clamps and Spacers) in accordance with Specification Section 962. Hot–dip galvanize Fence Framework after fabrication.

ADHESIVE–BONDED ANCHORS AND DOWELS:
Adhesive Bonding Material Systems for Anchors and Dowels will comply with Specification Section 937 and be installed in accordance with Specification Section 416. Cutting of reinforcing steel is permitted for drilled hole installation.

WELDING:
All welding will be in accordance with the American Welding Society Structural Welding Code (Steel) ANSI/AWS D1.1 (current edition). Weld metal will be E60XX or E70XX. Nondestructive testing of welds is not required.

CROSS REFERENCE:
For location of View A–A and Detail "A" see Sheet 1.

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| LAST REVISION | REVISION | DESCRIPTION: | FDOT | FY 2021-22 STANDARD PLANS | BRIDGE FENCING (VERTICAL) | INDEX | SHEET |
|---|---|---|---|---|---|---|---|
| 11/01/17 | | 11/01/22 | | | | 550-010 | 2 of 4 |

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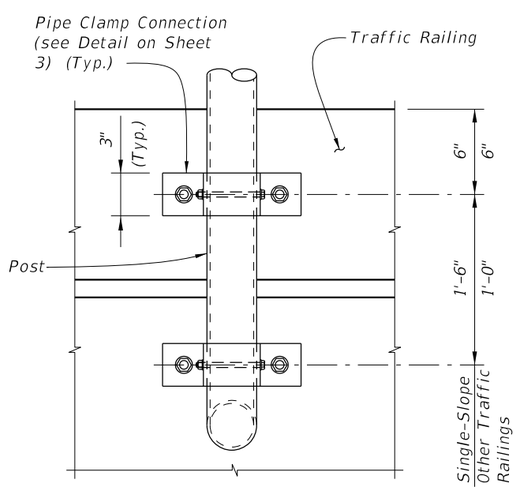
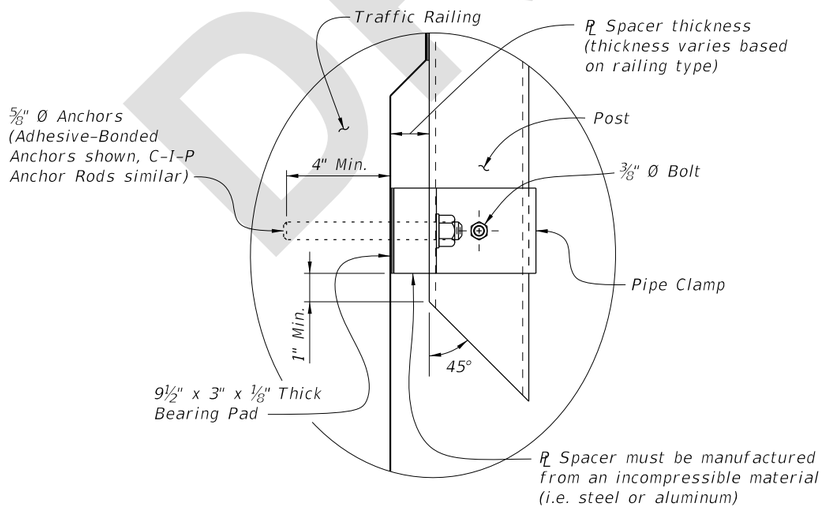



VIEW A-A

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