

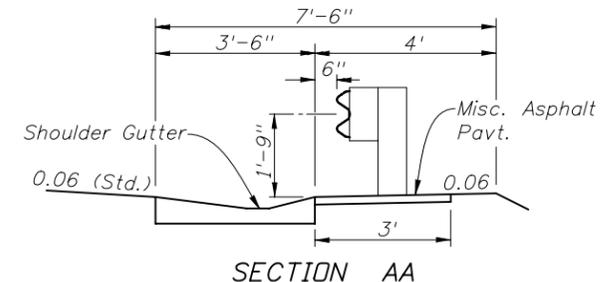
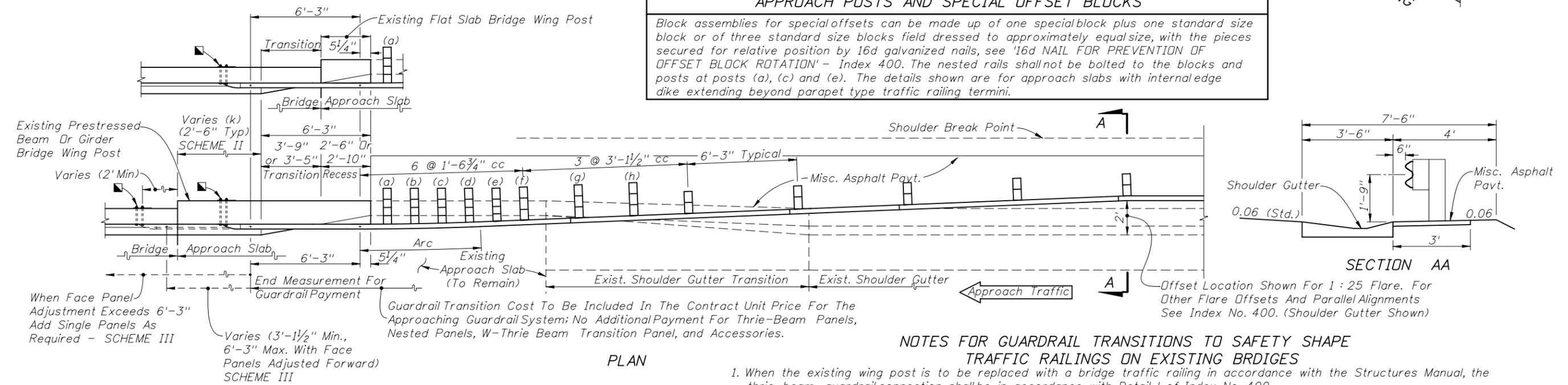
Use Of Scheme I Shall Be Determined In Accordance With The Structures Manual  
**GUARDRAIL TRANSITION TO EXISTING FLAT SLAB BRIDGES**

Use Of Schemes II And III Shall Be Determined In Accordance With The Structures Manual  
**GUARDRAIL TRANSITIONS TO EXISTING PRESTRESSED BEAM OR GIRDER BRIDGES**

\* Splice Locations: Thrie-Beam - 12 Guardrail Splice Bolts And Recessed Nuts  
 W-Beam - 8 Guardrail Splice Bolts And Recessed Nuts

**APPROACH POSTS AND SPECIAL OFFSET BLOCKS**

Block assemblies for special offsets can be made up of one special block plus one standard size block or of three standard size blocks field dressed to approximately equal size, with the pieces secured for relative position by 16d galvanized nails, see '16d NAIL FOR PREVENTION OF OFFSET BLOCK ROTATION' - Index 400. The nested rails shall not be bolted to the blocks and posts at posts (a), (c) and (e). The details shown are for approach slabs with internal edge dike extending beyond parapet type traffic railing termini.



When Face Panel Adjustment Exceeds 6'-3" Add Single Panels As Required - SCHEME III

Varies (3'-1 1/2" Min., 6'-3" Max. With Face Panels Adjusted Forward) SCHEME III

Guardrail Transition Cost To Be Included In The Contract Unit Price For The Approaching Guardrail System; No Additional Payment For Thrie-Beam Panels, Nested Panels, W-Thrie Beam Transition Panel, and Accessories.

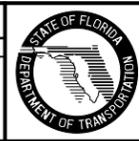
**PLAN**

- NOTES FOR GUARDRAIL TRANSITIONS TO SAFETY SHAPE TRAFFIC RAILINGS ON EXISTING BRIDGES**
- When the existing wing post is to be replaced with a bridge traffic railing in accordance with the Structures Manual, the thrie-beam guardrail connection shall be in accordance with Detail J of Index No. 400.
  - When the guardrail attachment overlays the Bridge Number, Bridge Name or Date on the traffic railing, provide an aluminum sign panel with the obscured information. Attach the sign panel to the face of the traffic railing adjacent to the Thrie-Beam Terminal Connector with 1/4"Ø x 1" long concrete screws or expansion anchors at each corner, as approved by the Engineer. The sign panel shall be a minimum 1/16" thick and meet the requirements of Specification Section 700 with a white background and 3" tall black letters and sized appropriately to contain the information required. The cost of the sign panel shall be included in the cost of the Guardrail Bridge Anchorage Assembly.
  - When retrofitting thrie-beam guardrail to existing wing posts or existing bridge safety shape traffic railing, attachment construction to be paid for under the contract unit price for Guardrail Bridge Anchorage Assembly, EA., and shall be full compensation for bolt hole construction, terminal connector, terminal connector plate(s) and bolts, nuts and washers.

■ 21"x12"x5/8" Thrie-Beam Terminal Connector Plate (Back-Up Plate), And 7/8" Ø x 18" Long [15" Long With 3 1/2" Min. Thread Length For Bridge Safety Shape Railing] HS Hex Bolts And Nuts (5 Req'd.) With 2 1/4" OD Plain Round Washers Under Heads And Nuts. [When Attaching Guardrail To Existing Wing Posts Or Bridge Rails, Care Should Be Exercised To Avoid Damaging Conduits And Their Utilities That May Be Routed Through Wing Posts Or Bridge Rails. When Conduits And Their Utilities Are Encountered, At Least Five 7/8" HS Hex Bolts Shall Be Installed In Any Of The Seven Holes Provided In The Thrie-Beam Terminal Connector.]

**GUARDRAIL APPROACH TRANSITIONS AND CONNECTIONS FOR EXISTING FLAT SLAB, PRESTRESSED BEAM AND GIRDER BRIDGES WITH SAFETY SHAPE TRAFFIC RAILING EXTENDING LESS THAN FULL APPROACH SLAB LENGTH**

REVISIONS			
DATE	BY	DESCRIPTION	
07/01/09	MTP	Added: Note for Bridge Name Plates and renumbered as Note 2. Changed: Renumbered Note 2 as Note 3.	



2010 Interim Design Standard

**GUARDRAIL TRANSITIONS AND CONNECTIONS FOR EXISTING BRIDGES**

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