

Bars 6D spacing at Railing Joints (Typ. on bridge except as noted for skewed deck joints)

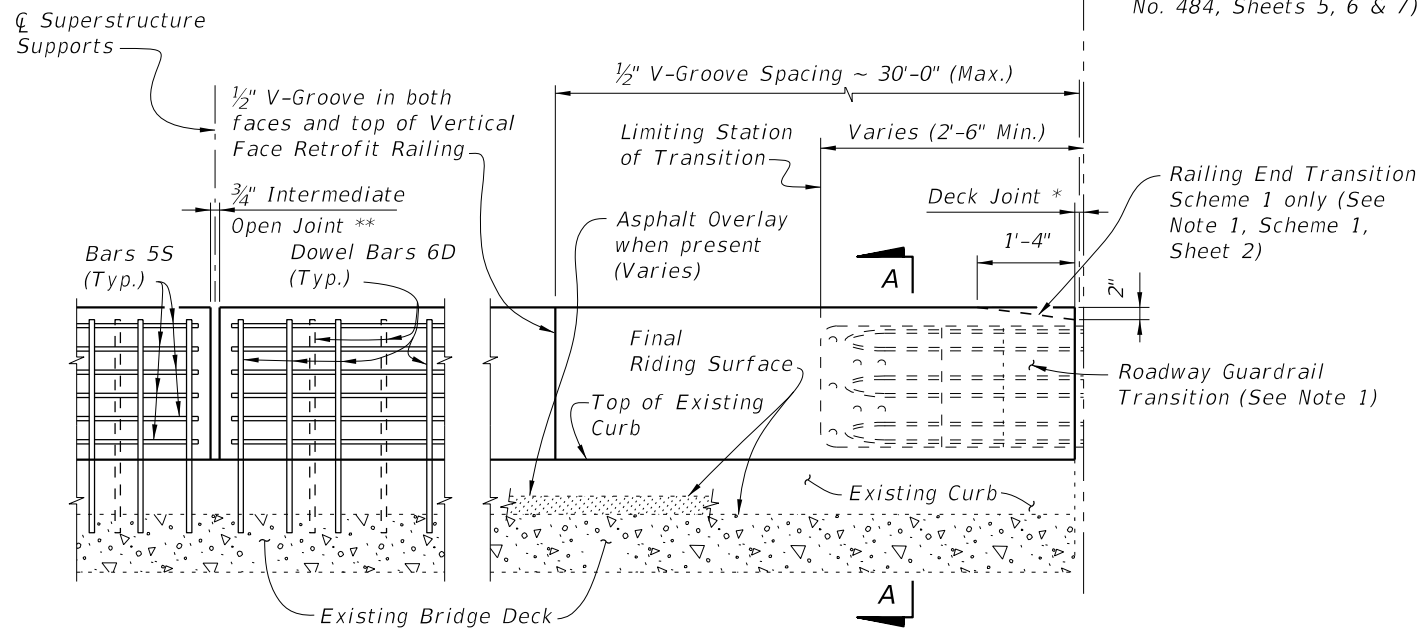
PARTIAL PLAN OF RAILING

Expansion Dowel & Bars 4C not required at end of railing for Scheme 1, except where traffic railing retrofit extends beyond ends of bridge, see Index No. 484

Front Face of Backwall, Begin or End Bridge & Match Line (See Sheet 2 & 3 & Index No. 484, Sheets 5, 6 & 7)

* Non skewed deck joint shown, actual joint dimensions and orientation vary. For treatment at skewed deck joints see Skew Detail, Index No. 480. Provide open Railing Joints at Deck Expansion Joint locations matching the dimension of the Deck Joint.

** Provide 3/4" Intermediate Open Joints at :
 (1) - Superstructure supports where slab is continuous.

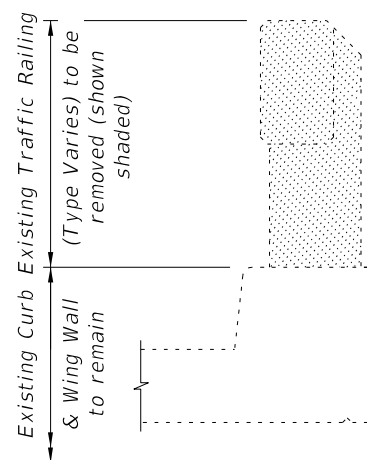


PARTIAL ELEVATION OF INSIDE FACE OF RAILING
 (Expansion Dowel Assemblies & Bars 4C not shown for clarity)

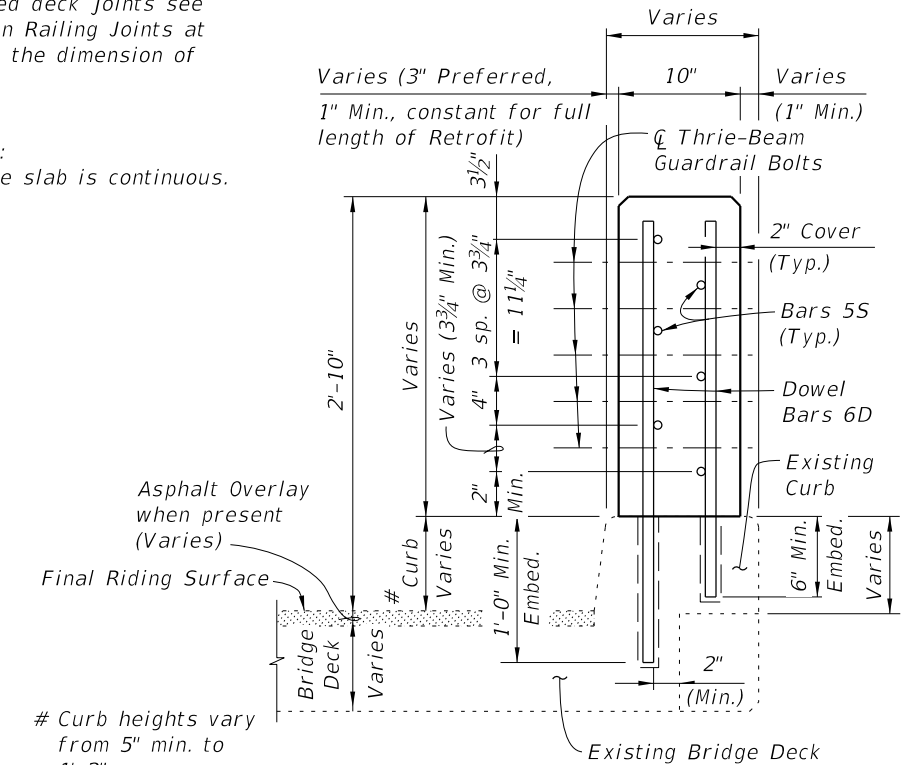
TYPICAL TREATMENT OF RAILING ALONG BRIDGE

NOTES:

1. On approach end provide a Roadway Guardrail Transition, Index No. 402 (as shown) or other site specific treatment. See Roadway Plans for limiting station of Roadway Guardrail Transition or other site specific treatment. If limiting station of Roadway Guardrail Transition is on the bridge, attach Thrie Beam Terminal Connector to railing as shown above. If limiting station of Roadway Guardrail Transition is along the Wing Wall, see Schemes 2 or 3, Index No. 481, Sheet 2 and 3. On skewed bridges, if the skew along the deck joint extends across the width of the railing, the 2'-6" minimum dimension shall apply to both the front and back face of the railing. For treatment of trailing end see Roadway Plans. If vertical face retrofit extends beyond bridge and approach slab ends, see Index No. 484 for treatment and Details.
2. Field cut Bars 5S and Dowel Bars 6D to maintain clearance within Vertical Face Retrofit Railing.
3. Where existing structure has been removed and not encased in new concrete; match adjoining areas and finish flat by grouting or grinding as required. Exposed existing reinforcing steel not encased in new concrete shall be burned off 1" below existing concrete and grouted over.



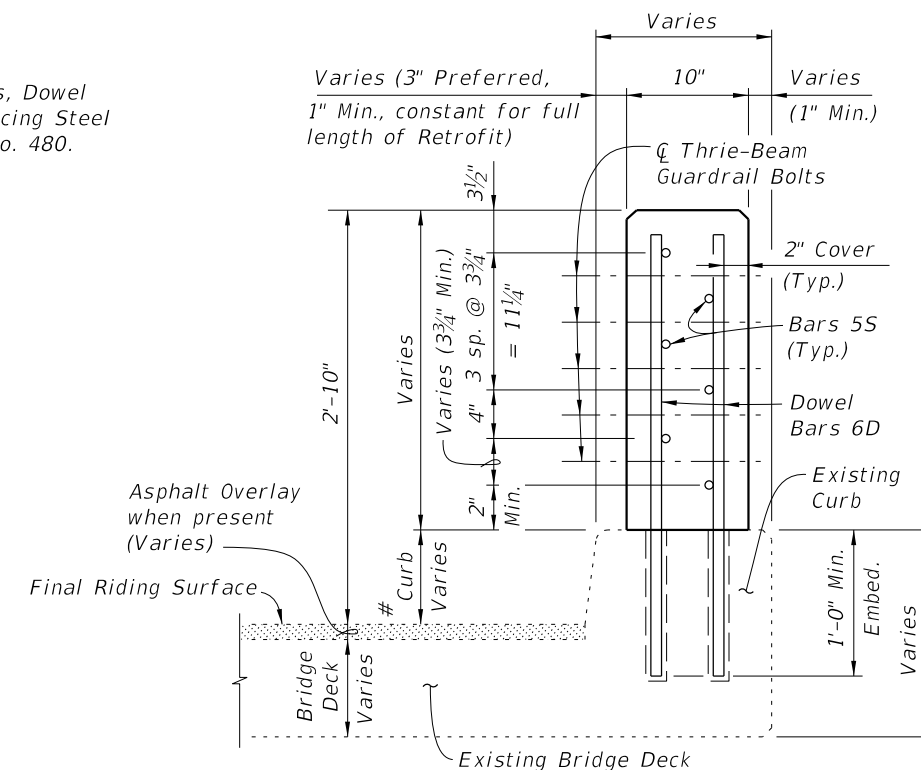
TYPICAL SECTION THRU EXISTING TRAFFIC RAILING SHOWING LIMITS OF REMOVAL
 (BRIDGE DECK SHOWN, WING WALL SIMILAR)



SECTION A-A
TYPICAL SECTION THRU RAILING ON CURB WITH CORBELS

CROSS REFERENCE:

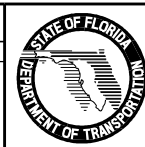
For General Notes, Estimated Quantities, Dowel Detail, Expansion Dowel Detail, Reinforcing Steel Notes & Bending Diagrams see Index No. 480.



SECTION A-A
TYPICAL SECTION THRU RAILING ON FULL DEPTH CURB (BRIDGE SHOWN, WING WALL SIMILAR)

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
07/01/10	GJM	Changed * and ** notes.			



2010 Interim Design Standard

TRAFFIC RAILING - (VERTICAL FACE RETROFIT)
NARROW CURB

Interim Date: 07/01/10
 Sheet No.: 1 of 3
 Index No.: 481