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, Sheets 2 & 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.

** Provide ½ Intermediate Open Joints at:
- (1) - Superstructure supports where slab is continuous.
- (2) - Superstructure supports where slab is continuous.

** Curb heights vary from 5" Min. to 1'-2" Max.

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

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.

### TYPICAL TREATMENT OF RAILING ALONG BRIDGE

- ½ V-Groove in both faces and top of Traffic Railing
- ⅛ V-Groove Spacing = 30'-0" (Max.)
- ⅛ Intermediate
- 2 equal sp. @ 1'-3" Spacing Max. (Typ. along Bridge)
- 2 equal sp. @ 1'-0" Spacing Max. (Typ. along Bridge)
- Existing Bridge Deck

### TYPICAL SECTION THRU RAILING ON BRIDGE DECK

- Front Face of Backwall, Begin or End Bridge & Match Line
- Final Riding Surface
- Asphalt Overlay when present (Varies)
- V-Groove Spacing ~ 30'-0" (Max.)
- Curb heights vary from 5" Min. to 1'-2" Max.
- 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.

### TYPICAL SECTION THRU RAILING ON WING WALL

- Existing Curb
- Existing Wing Wall
- Class C 1" Min. Embedment
- 2" Cover

### CROSS REFERENCE:
For General Notes, Estimated Quantities, Dowel Details, Expansion Dowel Detail, Reinforcing Steel Notes & Bending Diagram see Index No. 480.
SCHEME 1 NOTES:
1. Provide Transition Block (as shown) or Curb if existing Approach Slab does not have a curb. See Roadway Plans. Shape and height of Transition Block or Curb shall match existing bridge curb. Railing End Transition and Transition Block may be omitted on trailing ends with no opposing traffic.
2. Field bend Dowel Bars 4L within Transition Block as required to maintain 2" top and side clearance and 3" bottom clearance.
3. If a Special Steel Guardrail Post is required for attachment to the top of a sloping Wing Wall, saw cut and remove a wedge shaped portion of the sloping Wing Wall as required to provide a level surface for post installation.

SCHEME 2 NOTES:
1. See Roadway Plans for limiting station of Roadway Guardrail Transition or other site specific treatment. If limiting station of Roadway Guardrail Transition is along the Wing Wall, attach Thrie-Beam Terminal Connector to railing as shown above. If limiting station of Roadway Guardrail Transition is on the bridge, see Sheet 1. 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.
2. Provide Transition Block (as shown) or Curb if existing Approach Slab Curb does not extend beyond end of existing End Bent Wing Wall, see Roadway Plans. Shape and height of Transition Block or Curb shall match existing bridge curb. Railing End Transition and Transition Block may be omitted on trailing ends with no opposing traffic.
3. Field bend Dowel Bars 4L within Transition Block as required to maintain 2" top and side clearance and 3" bottom clearance.
SCHEME 3 NOTE:

1. See Roadway Plans for limiting station of Roadway Guardrail Transition or other site specific treatment. If limiting station of Roadway Guardrail Transition is along the Wing Wall, attach Thrie-Beam Terminal Connector to railing as shown above. If limiting station of Roadway Guardrail Transition is on the bridge, see Sheet 1.