This railing has been structurally evaluated to be equivalent or greater in strength to other single-slope railings which have been crash tested to MASH TL-4 criteria.

**CONCRETE AND REINFORCING STEEL** - See Structures Plans, General Notes.

**GUARDRAIL** - For Guardrail connection details see Design Standards Revision DSR-400-01.

**SUPERELEVATED BRIDGES** - At the option of the Contractor the Traffic Railing on super-elevated bridges may be constructed perpendicular to the roadway surface. The cost of all modifications will be at the Contractor's expense.

**BARRIER DELINEATORS** - Barrier Delineators shall meet Specification Section 993. Install Barrier Delineators on top of the Traffic Railing along the centerline at the spacing shown in the table above. Barrier Delineator color (white or yellow) shall match the color of the near edgeline. The cost of the Barrier Delineators shall be included in the Contract Unit Price for the Traffic Railing.
NOTE:

- Begin placing Railing Bars 5R and 5W on Approach Slab at the railing end and proceed toward Begin or End Bridge to ensure placement of guardrail bolt holes. If required, adjustments to the bar spacing for Bars 5R and 5W shall be made immediately adjacent to Begin or End Bridge. Shift and rotate Bars 5R and 5W as required to maintain cover in Railing End Transition.
- Omit Railing End Transition and Guardrail if Index 410 Concrete Barrier Wall is used beyond the Approach Slab. See Structures Plans, Plan and Elevation Sheet and Roadway Plans. If Railing End Transition is omitted, extend Typical Section to the end of Approach Slab and space Bars 5R and 5W at 1'-0" (Typ.).

THREE-BEAM TERMINAL CONNECTOR & GUARDRAIL BOLTS

FIELD CUT SHIFTS AND BEND TRANSITION

BARS 5W AS SHOWN TO MAINTAIN COVER

(SEE DETAIL "A" FOR BAR SPACINGS)

DETAIL "A"

(Showing Bars 5R and 5S)
PARTIAL PLAN VIEW OF BRIDGE DECK AND APPROACH SLAB WITH MEDIAN TRAFFIC RAILING

NOTES:
1) Median Traffic Railing reinforcement vertical Bars 5W may be shifted up to 1" (Max.) and rotated up to 10 degrees as required to allow proper placement.
2) Transition Stirrup Bars SW shall be used as required at railing ends adjacent to expansion joints to facilitate placement of bars in acute corners. Place Transition Bars SW in a fan pattern to maintain spacing. Rotate bars in 10° (Max.) increments as required.
3) Median Traffic Railing ends at deck expansion joints shall follow the deck joint walls and allow for joint movement. See Structures Plans, Superstructure and Approach Slab Sheets for Details.
4) Interim Open Joint in railing shall be placed perpendicular or radial to the joint of the median railing. See Structures Plans, Superstructure and Approach Slab Sheets for locations.
5) At begin or end approach slab extend slab at the median railing ends 3" (open side) as shown to provide a base for casting of the railing.
6) Work this sheet with Approach Slab Indexes as applicable.
7) Deck Expansion Joint at begin or end bridge shown. Deck Expansion Joints at 5f Pier or Intermediate Bents are similar.
8) Partial Plan Views shown are included as guides only. See Structures Plans, Superstructure and Approach Slab Sheets for skew angles, joint orientation, dimensions and details.
9) If Welded Wire Reinforcement is used in lieu of conventional reinforcement, placement of the WWR vertical elements shall be similar to those shown above. Clipping of horizontal elements is to facilitate placement and shall be minimized where possible. Where clipping is required, supplement horizontal elements by lap splicing deformed bars with an equivalent area of steel.
The above quantities are based on a crowned roadway, with a 2% cross slope.

Reinforcing Steel

Concrete

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