PLAN (BRIDGE MOUNTED RAILING/NOISE WALL SHOWN, WALL OR FOOTING MOUNTED RAILING/NOISE WALL SIMILAR) (Reinforcing Steel not shown for clarity)

CROSS REFERENCE:
For Detail "B" and V-Groove Lettering Detail see Sheet 2.
For Section C-C and Detail "A" see Sheet 5.
For Wall mounted Railing/Noise Wall Details see Index Nos. 5219 (T-Shaped), 5221 (L-Shaped) or 5215 (Trench).

ELEVATION OF INSIDE FACE OF RAILING/NOISE WALL (BRIDGE MOUNTED RAILING/NOISE WALL SHOWN, WALL OR FOOTING MOUNTED RAILING/NOISE WALL SIMILAR) (Reinforcing Steel not shown for clarity)

* On Bridges see Superstructure and Approach Slab Sheets for actual dimensions and joint orientation. Open Railing/Noise Wall Joints at Deck Expansion Joint locations shall match the dimensions of the Deck Joint. For treatment of Railing/Noise Walls on skewed bridges see Index No. 420. Deck Joint at Begin Bridge or End Bridge shown, Deck Joint at Pier or Intermediate Bent, Junction Slab or Footing similar.

** 1/2' Intermediate Open Joints shall be constructed plumb and provided at:
(1) Superstructure supports where slab is continuous.
(2) Construction Joints for Junction Slabs and Footings.
CONSTRUCTION REQUIREMENTS: The Traffic Railing/Noise Wall and joints shall be constructed plumb, they shall not be constructed perpendicular to the roadway surface. Slip forming is not permitted.

CONCRETE: For Railing/Noise Wall on bridges see General Notes. For Wall and Footing mounted Railing/Noise Wall, concrete shall be Class I for slightly aggressive environments and Class IV for moderately or extremely aggressive environments.

NAME, DATE AND BRIDGE NUMBER: For Railing/Noise Wall on bridges, the name and bridge number shall be placed on the Traffic Railing so as to be seen on the driver's right side when approaching the bridge. The Date shall be placed on the driver's left side when approaching the bridge. The Name shall be as shown in the General Notes in the Structures Plans. The Data shall be the year the bridge is completed. For widening when the existing railing is removed, use both the existing date and the year of the widening. Black plastic letters and figures in height may be used, as approved by the Engineer, in lieu of the letters and figures formed by 3" V-Grooves. V-Grooves shall be formed by preformed letters and figures.

BARRIER DELINERATORS: Barrier Delinicators shall meet Specification Section 993. Install Barrier Delinicators 2'-4" above the riding surface at the spacing shown in the table below. Barrier Delinicator 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/Noise Wall.

TRAFFIC RAILING/NOISE WALL NOTES

INTERMEDIATE JOINT SEAL NOTES:
1. All Intermediate Open Joints, seal the lower 6" portion of the open joint with Pre-cured Silicone Sealant in accordance with Specification Section 932.
2. Apply sealant prior to any Class V Finish coating and remove all curing compound and loose material from the surface prior to application of bonding agent.
3. The cost of the Pre-cured Silicone Sealant shall be included in the Contract Unit Price for the Traffic Railing.

DETAIL "B" - INTERMEDIATE OPEN JOINT

TRAFFIC RAILING/NOISE WALL QUANTITIES

BILL OF REINFORCING STEEL

<table>
<thead>
<tr>
<th>MARK</th>
<th>SIZE</th>
<th>LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>5</td>
<td>5'-7&quot;</td>
</tr>
<tr>
<td>R</td>
<td>5</td>
<td>7'-9&quot;</td>
</tr>
<tr>
<td>S1</td>
<td>5</td>
<td>As Rod.</td>
</tr>
<tr>
<td>S2</td>
<td>5</td>
<td>7'-3&quot;</td>
</tr>
<tr>
<td>V</td>
<td>5</td>
<td>5'-1&quot;</td>
</tr>
<tr>
<td>V</td>
<td>5</td>
<td>7'-7&quot;</td>
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</table>

REINFORCING STEEL BENDING DIAGRAMS

TRAFFIC RAILING/NOISE WALL DESIGN STANDARDS

ESTIMATED TRAFFIC RAILING/NOISE WALL QUANTITIES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>QUANTITY</th>
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</thead>
<tbody>
<tr>
<td>Concrete (Railing)</td>
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</tr>
<tr>
<td>Concrete (Noise Wall)</td>
<td>CY/LF</td>
<td>0.145</td>
</tr>
<tr>
<td>Reinforcing Steel (Typical)</td>
<td>LB/LF</td>
<td>78.57</td>
</tr>
<tr>
<td>Additional Rem. @ Open Joint</td>
<td>LB</td>
<td>430.24</td>
</tr>
</tbody>
</table>

(The above quantities are based on the bridge mounted typical section, 2% deck cross slope and railing on low side of deck.)
ELEVATION OF RAILING/NOISE WALL REINFORCING STEEL
(INTERMEDIATE OPEN JOINT SHOWN, DECK JOINT SIMILAR)
(Bars 5S1 in Railing not shown for clarity)

ELEVATION OF RAILING/NOISE WALL END TAPER (ADJACENT TO TRAFFIC RAILING SHOWN, GUARDRAIL ATTACHMENT SIMILAR SEE DETAIL "A", SHEET 5)
(Bars 5S1 in Railing not shown for clarity)

NOTES:
* Field Cut Bars 5R & 5S1 to maintain clearance.
** Terminate 3/4" V-groove at construction joint & cast top of railing with End Taper.
*** Bar spacing shown for Bars 5V applies only to bridge mounted Railing/Noise Wall. See Index No. 5212 for spacing of Bars 5V in junction slabs and Index Nos. 5213 (T-Shaped), 5214 (L-Shaped) or 5215 (Trench) for Bars 5V spacing in footings.
SECTION A:A
TYPICAL SECTION THRU TRAFFIC RAILING/NOISE WALL
(Section Thru Bridge Deck Shown, Section Thru
Approach Slab, Junction Slab or Footing Similar)

NOTES:
1. Bottom Bars 5S1 and End Bar 5V are not present in
L-shaped (Index No. 5214) or Trench (Index No. 5215)
Footings. For Bridge Mounted installations, see the
Superstructure Sheets for Deck Steel.

CROSS REFERENCE:
For locations of Section A:A see Sheet 1.
For location of View B-B, see Sheet 5.

TRAFFIC RAILING/NOISE WALL (8'-0")
DETAIL "A" NOTES:
1. Rotate Bars 5P & 5V in Railing End Transition to maintain cover. Begin placing Railing Bars 5P and 5V at the railing end and proceed toward the guardrail (thrie beam) terminal connector to ensure placement of guardrail bolt holes. Pair Bars 5R with Bars 5P as shown. Clearance of Bars 5P, 5R & 5V to guardrail bolt holes shall be checked to prevent cutting of bars if holes are to be drilled. Shift bars locally where conflicts occur.
2. For Guardrail connection details see Design Standards Index No. 400.
3. Omit Railing End Transition if a 32" F-Shape Traffic Railing is used beyond the End Taper. See the Plan Sheets. If Railing End Transition is omitted, space Bars 5P, 5R & 5V at 6" as shown above (Typ.).
4. For L-Shaped (Index No. 5214) and Trench (Index No. 5215) footings, Bars 5V and 5T replace Bars 5V as shown at left. Details and bar spacing shown apply except that it is not necessary to rotate Bars 5V and 5T to maintain cover and there is no field cut End Bar 5V.
5. Bottom Bars 5S1 are not present in L-Shaped or Trench Footings.

PLAN - RAILING END TRANSITION
(Showing Bars 5P, 5R, and Bars 5S1) (Bars 5V, Noise Wall & Reinforcement not shown for Clarity)

PLAN - RAILING END TRANSITION
(Showing Bars 5V and Bars 5S1) (Bars 5P, 5R, Noise Wall & Reinforcement not shown for Clarity)