**SCHEME 2 - CONCRETE CURB DETAILS**

**SCHEME 3 - SIDE-MOUNTED SUPPORT BRACKET DETAILS**

**ALTERNATE REINFORCING (WELDED WIRE REINF.) DETAILS**

NOTE: Place wire panels to minimize the end overhang. End Overhangs greater than 4" are not permitted.

**WELDED WIRE REINFORCEMENT (WWR)**

**SCROLL DETAIL**

(Between WWR Sections)

**PRIOR TO CONCRETE CURB**

**INTERMEDIATE JOINT SEAL NOTE:**

At Intermediate Open Joints, seal the lower 6" portion of the open joint with Pre-cured Silicone Sealant (4" wide). 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.

**PREVIOUSLY FALLING**

**NOTE:** Place wire panels to minimize the end overhang. End Overhangs greater than 4" are not permitted.

**SPICE DETAIL**

(During WWR Sections)

**CONVENTIONAL REINFORCING STEEL BENDING DIAGRAMS**

**BILL OF REINFORCING STEEL**

**MARK**

<table>
<thead>
<tr>
<th>P</th>
<th>1/16&quot; Ø Hole for Anchor Bolt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bolt &amp; Post</td>
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<tr>
<td>2</td>
<td>Ø 1/4&quot; x 3&quot; Long Slotted Hole</td>
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**PLAN VIEW**

**FRAME & STIFFENER**

**STEEL BENDING DIAGRAMS**

**DETAIL "A" - SECTION AT INTERMEDIATE OPEN JOINT**

**INTERMEDIATE JOINT SEAL NOTE:**

At Intermediate Open Joints, seal the lower 6" portion of the open joint with Pre-cured Silicone Sealant (4" wide). 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.

**SCHEME 2 - CONCRETE CURB DETAILS**

**SCHEME 3 - SIDE-MOUNTED SUPPORT BRACKET DETAILS**

**ESTIMATED CONCRETE CURB QUANTITIES (SCHEME 2)**

<table>
<thead>
<tr>
<th>ITEM</th>
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<th>QUANTITY</th>
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<td>Concrete</td>
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<tr>
<td>Reinforcing Steel</td>
<td>LB/LF</td>
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</table>

**SCHEME 1 - BOTTLE GUARD DETAIL**

**TYPICAL SECTION THROUGH BOTTOM RAIL**

(Post Not Shown for Clarity)

**SCHEME 1 - BOTTLE GUARD DETAIL**

**TYPICAL SECTION THROUGH BOTTOM RAIL**

(Post Not Shown for Clarity)

**SCHEME 3 - BOTTLE GUARD DETAIL**

**CROSS REFERENCE:**

See Sheet 3 for Bridge Railing Notes.
**BRIDGE PEDESTRIAN/BICYCLE RAILING (STEEL)**

**DETAIL "B" EXPANSION JOINT (FIELD SLEEVE SIMILAR)**

**REVISIONS**

**DATE**

**DESCRIPTION**

**01/01/11**

**CREATOR**

**DRAWING**

**SIZE**

**REFERENCE**

**INDEX NO.**

**NOTE:**

**APPICABILITY NOTE:** Railing is limited to use on bridges with an expansion joint thermal movements not exceeding 5'. Scheme 3 is limited to bridge retrofit applications where additional sidewalk width is required.

**RAILING DETAILS:** For Railing fabrication and installation details and notes see Index No. 852, except that railing shall be fabricated and installed normal to the Profile Grade longitudinally and vertical transversely, unless otherwise shown in the contract plans.

**BOTTLE-GUARD (Schemes 1 & 3):** L-Shape shall be in accordance with ASTM A36.

**CONCRETE CURB (Scheme 2):** Construct concrete curb vertical with the top surface finished level transversely. Concrete class shall be the same as the bridge deck.

**SIDE MOUNTED SUPPORT BRACKET (Scheme 3):** L-Shape and stiffener plate shall be in accordance with ASTM A36. Welding shall be in accordance with the American Society of Structural Welding Code (Steel) AWS/D1.1 (current edition). Weld metal shall be E60XX or E70XX. Nondestructive testing of welds is not required. The bracket shall be hot dip galvanized after fabrication in accordance with Section 962 of the Specifications.

**PAYMENT:** Railing shall be paid per linear foot (Item No. 515-2-abb) for the steel railing and include the cost of support brackets (Scheme 3). Concrete and reinforcing steel quantities for the concrete curb (Scheme 2), will be included in the bridge deck plan quantity pay items. Payment will be plan quantity measured as the length along the center line of the top rail, and includes rails, posts, pickets, rail splice assembly, base plates, bottle-guards, anchor bolts, nuts, washers, resilient or neoprene pads and all incidental materials and labor required to complete installation of the railing.