ALTERNATE REINFORCING (WELDED WIRE REINF.) DETAILS

NOTE: Place wire panels to minimize the end overhang. End Overhangs greater than 48" are not permitted.

BILL OF REINFORCING STEEL

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CONVENTIONAL REINFORCING STEEL BENDING DIAGRAMS

BILL OF REINFORCING STEEL

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PLATE WASHER DETAIL

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 in accordance with Specification Section 932. 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.

CONCRETE CURB DETAILS

SCHEME 2 - CONCRETE CURB DETAILS

SCHEME 1 - BOTTLE GUARD DETAIL

SCHEME 3 - SIDE-MOUNTED SUPPORT BRACKET DETAILS

TYPICAL SECTION THROUGH BOTTOM RAIL
(Post Not Shown for Clarity)

TYPICAL SECTION THROUGH BOTTOM RAIL
(Post Not Shown for Clarity)

CROSS REFERENCE:
See Sheet 3 for Bridge Railing Notes.
**BRIDGE RAILING NOTES**:

APPLICABILITY 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. 862, except that railing shall be fabricated and installed normal to the Profile Grade longitudinally and vertically (transversely), unless otherwise shown in the Contract Plans.

**BOTTLE-GUARD (Schemes 1 & 3):** L-Shape shall be in accordance with ASTM B209, Alloy 6063-T5 or 6061-T6.

**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 B209, Alloy 6063-T5. Bottle-guard shall be in accordance with ASTM B209, Alloy 6063-T5.

**PAYMENT:** Railing shall be paid per linear foot (Item No. 515-2-abb) for the aluminum railing and include the cost of support brackets (Scheme 3). Concrete and reinforcing steel quantities for the concrete curbs (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.

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**EMBERLY**

**DESCRIPTION:**

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

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**SQUARE RAILS - INTERMEDIATE OR BOTTOM RAIL**

1. **Top Rail or Handrail**
   - 2.50 OD x 0.125 Wall for top rail (Typ.)
   - Aluminum Sleeve: 1.50 OD x 0.125 Wall for intermediate or bottom rail (Typ.)

2. **Intermediate or Bottom Rail Section**
   - 1.50 OD x 0.125 Wall for intermediate or bottom rail (Typ.)

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**ROUND RAILS - TOP RAIL OR HANDRAIL**

1. **Top Rail or Handrail**
   - 1.50 OD x 0.125 Wall for top rail (Typ.)

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**Set Screws**

* Embedded length may be 4" for plug welded connection.
* Increase handrail sleeve embedment to 8" for Expansion Joint openings greater than 2'.
* Expansion Joint opening shall match the clear opening in the deck joint but not greater than 3'.

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**INDEX NO. 861**

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**SHEET NO. 3 of 3**