NOTES:
1. On approach end provide Index 536-002 (as shown) or other site specific treatment, see Roadway Plans. For treatment of trailing end see Roadway Plans.
2. Actual joint dimension and orientation vary. For Intermediate Deck Joints use the Modified Post Spacing at Intermediate Deck Joints Detail, Index 460-470, Sheet 2, as required.
3. Areas where existing structure has been removed shall match adjoining areas and shall be finished flat by grouting or grinding as required. Exposed existing reinforcing steel shall be burned off 1" below existing concrete and grouted over.

PARTIAL PLAN OF RAILING

TYPICAL TREATMENT OF RAILING ALONG BRIDGE
**SECTION A-A**

**TYPICAL SECTION THRU RAILING ON BRIDGE DECK**

- 1'-0" ± ** as required
- 3'-8" ± **
- 4'-1" ± **
- **Offset Block(s) as required**
- **Thrie-Beam Guardrail**
- **Guardrail Post**
- **Guardrail Post Assemblies "A", "B" or "C" (See Roadway Plans)**
- **Existing Curb Overhang**
- **Existing Wing Wall**
- **Existing Bridge Deck**
- **Asphalt Overlay when present (Varies)**
- **Final Riding Surface**
- **Overhang**
- **Control Line**
- **Embed.**
- **Cover.**
- **Nominal**

1"-2" x 10" x 1\(\frac{1}{8}\)" Thick Neoprene Pad

1'-2" x 10" x 1\(\frac{1}{8}\)" Adhesive-Bonded Anchors with Heavy Hex Nuts and Washers set in drilled holes (5\(\frac{1}{2}\)" Max. Depth)

2" Nominal

2" Cover Min.

Existing Curb Overhang

NOTE: All bar dimensions are cut to cut.

**BILL OF REINFORCING STEEL**

<table>
<thead>
<tr>
<th>MARK</th>
<th>SIZE</th>
<th>LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>4'</td>
<td>4'-1&quot;</td>
</tr>
</tbody>
</table>

**BAR BENDING DIAGRAM**

3'-8" DOWEL BAR 4L

NOTE: All bar dimensions are out to out.

**SECTION B-B (SCHEME 2)**

**TYPICAL SECTION THRU RAILING ALONG APPROACH SLAB**

* Shim with washers around Anchor Bolts and Anchors as required to maintain tolerance.

**Offset may vary ± 1" for Adhesive-Bonded Anchors to clear existing curb reinforcing and provide minimum edge clearance. Offset shall be consistent along length of bridge.

CROSS REFERENCES:
- For location of Section A-A see Sheet 1 and 3.
- For location of Section B-B see Sheet 3.
- For application of Dim. A see Post Dimension Table on Index 460-470, Sheet 3.

**TYPICAL SECTION THRU EXISTING TRAFFIC RAILING SHOWING LIMITS OF REMOVAL (BRIDGE DECK SHOWN, WING WALL SIMILAR)**

**DETAIL "A"**

**INDEX 460-474 SHEET 2 of 4**

**FY 2018-19 STANDARD PLANS**

**TRAFFIC RAILING - (THRIE-BEAM RETROFIT) INTERMEDIATE CURB**

**REVISION DESCRIPTION:**

8:07:29 AM 07/01/08 07/01/08 07/01/08
SCHEME 2 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. 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.

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. 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.
Existing Integral Approach Slab Curb
Remove portion of Curb as required for post placement. Area of Curb removal to be finished smooth and even with Approach Slab.

Seal exposed joint with low modulus silicone sealant.

Guardrail Post Assembly
with Offset Block (Typ.)

Intermediate Deck joint (See Note 2, Sheet 1)

Existing Bridge Coping

Existing Curb,

Front Face of Back wall & Begin or End Bridge

Match Front Face of Thrie-Beam Guardrail along Bridge

Varies

(1'-0" ± Min.)

Offset Block(s) as required

1 4

" ±

1 2"

Out of Plumb (Max.) *

Thrie-Beam Guardrail

1 "

1 0 "

1 1 "

Varies

1 '-9" to 2'-0"

1'-2" x 10" x 1 8"

Thick Neoprene Pad

Dim. A

Guardrail Post Assembly "A", "B" or "C" (See Roadway Plans)

Slop e:

Varies

5" Min. Embedment

1'-1" Min. Embedment

2" Cover Min.

Existing Wing Wall

3" Cover Min.

Varies

Overhang

2" Nominal

Existing Approach Slab

Central Line (Projected from Bridge)

Guardrail Post Assembly with Offset Block (Typ.)

Thrie-Beam Guardrail

Final Riding Surface

Asphalt Overlay when present (Varies)

Existing Curb

Front Face of Back wall & Begin or End Bridge

PARTIAL ELEVATION OF INSIDE FACE OF RAILING

SCHEME 3

RAILING END TREATMENT FOR FLARED WING WALLS

SECTION C-C (SCHEME 3)

TYPICAL SECTION THRU RAILING ALONG APPROACH SLAB

SCHEME 3 NOTE:

1. A single \( \frac{3}{8} \)" x 8" Adhesive-Bonded Anchor may be omitted as shown when 2" clear cover cannot be provided (see Section C-C).

CROSS REFERENCE:

For application of Dim. A see Post Dimension Table on Index 460-470, Sheet 3.