

**PARTIAL PLAN**

- **Existing Installation of 1987 thru 2000 Roadway and Traffic Design Standards Index 401 Scheme 16 Retrofit**
- **Type II End Anchorage, other approved anchorage or continuation of guardrail. See Plans for required treatment.**

**Existing W-Beam Guardrail**

(2 Panels Min.)

6'-3" Post Spacing (Typ.)

First Panel must be a (15'-7") Panel

TRAILING END *

**PARTIAL ELEVATION**

**W-BEAM BRIDGE TRAFFIC RAILING RETROFITS**

- **Install New Guardrail Posts & Offset Blocks if called for in Plans or as required to clear Transition Block**

**Approach Rail Transition**

- 12'-6" Nested W-Beam Guardrail

**Limits of Guardrail (Reset)**

- 6 Sp. @ 3'-6"

**APPROACH END**

- **Do not bolt nested W-Beam to Posts and Offset Blocks at Posts (a), (c) & (e).**
- **Note:**

**PARTIAL PLAN**

- **Existing Installation of 1987 thru 2000 Roadway and Traffic Design Standards Index 401 Scheme 1 or 19 Retrofit**

**Type II End Anchorage, other approved anchorage or continuation of guardrail. See Plans for required treatment.**

**W-Beam Guardrail**

(2 Panels Min.)

6'-3" Post Spacing (Typ.)

First Panel must be a (15'-7") Panel

TRAILING END *

**PARTIAL ELEVATION**

**VERTICAL FACE BRIDGE TRAFFIC RAILING RETROFITS**

- **Install New Guardrail Posts & Offset Blocks if called for in Plans or as required to clear Transition Block**

**Approach Rail Transition**

- 12'-6" Nested W-Beam Guardrail

**Limits of Guardrail (Reset)**

- 6 Sp. @ 3'-6"

**APPROACH END**

- **Note:**

* For use when outside of approach clear zone or horizontal clearance.
PARTIAL PLAN VIEW OF EXISTING BRIDGE WITH PERPENDICULAR OR ANGLED WING WALLS

PARTIAL PLAN VIEW OF EXISTING BRIDGE WITH FLARED WING WALLS AND PARALLEL INTEGRALLY REINFORCED APPROACH SLAB CURBS (APPROACH SLAB WITH DETACHED CURBS OR SIDEWALK SIMILAR)

PARTIAL PLAN VIEW OF EXISTING BRIDGE WITH PARALLEL WING WALLS AND INTEGRALLY REINFORCED APPROACH SLAB CURBS (APPROACH SLAB WITH DETACHED CURBS OR SIDEWALK SIMILAR)

CROSS REFERENCE:
For Transition Block Details, Quantities and reinforcement see Sheet 3.
GUARDRAIL TRANSITIONS FOR EXISTING BRIDGE TRAFFIC RAILING RETROFFTS

PLAN VIEW OF TRANSITION BLOCK
(GUARDRAIL NOT SHOWN FOR CLARITY)

ELEVATION OF TRANSITION BLOCK
(GUARDRAIL AND POSTS NOT SHOWN FOR CLARITY)

ESTIMATED QUANTITIES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>QUANTITY</th>
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<tbody>
<tr>
<td>Concrete Class NS</td>
<td>CY</td>
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<tr>
<td>Reinforcing Steel</td>
<td>LB</td>
<td>61</td>
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<tr>
<td>Guardrail (Reset)</td>
<td>LF</td>
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NOTES:

CONCRETE: Concrete for Transition Blocks shall be Class NS.

REINFORCING STEEL: Reinforcing steel shall be ASTM A615, Grade 60.

ANCHOR RODS: Steel Anchor Rods shall be ASTM A567, ASTM A709 Grade 36 or ASTM A615 Grade 60 hot-dip galvanized in accordance with Specification Section 962.

W BEAM GUARDRAIL: Guardrail components and installation shall be in accordance with Design Standards Index 400.

ADHESIVE-BONDED DOWELS: Adhesive Bonding Material Systems for Dowels shall comply with Specification Section 937 (Type HV) and be installed in accordance with Specification Section 416.

Adhesive Bonded Dowels are shown installed in an existing curb or sidewalk integrally reinforced with Approach Slab, Wingwall or Bridge Deck. For installations in existing detached curbs or sidewalks, install dowels in available sound concrete.

PAYMENT: Payment for Guardrail work will be made under Pay Item Guardrail (Reset) LF.

PAYMENT: Payment for Transition Block will be made under Pay Item Concrete Curb (Special), LF.