DETAIL 1: EXISTING TANGENT TYPICAL W-BEAM GUARDRAIL

SECTION A-A

1. Use on existing W-beam guardrail systems when barrier system meets standard specification 02841 and BA 4 series STD DWGs for W-beam guardrail, unless otherwise specified. Minimum acceptable height for existing W-beam guardrail is 28 inches.

2. Use W-beam guardrail anchor type 1 when engineering judgement determines an impact from the opposing direction is minimal.

3. Refer to STD DWG BA 5C1 for anchor assembly requirements.

4. TANGENT INSTALLATIONS:
   a. Replace anchorage single system or type G end treatments with 12 1/2 ft 1 typical W-beam guardrail flared at 12 1/2:1.
   b. No change is required if approved type H is currently installed.
   c. Existing flared W-beam guardrail installation has type 1 or type H end treatment as per conditions of note 2. If an anchor type 1 or older anchor type is currently installed.
   d. Install cable attachment rail assembly to existing posts.
   1) Replace steel blocks with modified wood blocks if existing W-beam installation has steel posts with steel blocks.
   2) Meet manufacturer's requirements for cable attachment rail, attachment rail range in length from 3 to 3 inches to 26 ft.
   e. Install cable/W-beam anchor assembly.
   1) Existing posts can be left in place when anchor assembly foundations can be installed without removing the posts.
   2) Replace steel blocks with wood blocks if existing W-beam guardrail installation has steel blocks with steel blocks.
   3) Meet manufacturer's requirements for cable attachment rail, attachment rail range in length from 3 to 3 inches to 26 ft.

5. FLARED INSTALLATIONS:
   a. Remove existing anchorage system or end treatment.
   b. Install cable/W-beam anchor assembly.
   c. Install cable attachment rail assembly to the roadway.
   1) Meet manufacturer's requirements for cable attachment rail, attachment rail range in length from 6 ft 3 inches to 26 ft.
   d. Install cable/W-beam flared at 12 1/2:1 and type H end treatment.

6. Install 12 inch dia x 4 inch deep foundation. Meet all other manufacturer's requirements for cast-in-place cable post foundations.

7. Meet manufacturer's requirements for cable height and separation.

8. Be paid as standard pay items.

9. Refer to standard DWG BASB & BAS2 for maximum and minimum offset and slope requirements. See plan set for project offset requirements.

10. Flare rate: equal to or flatter than 30:1 desirable; 20:1 maximum acceptable.