**Midwest Guardrail System**

Connection with Twin Steel Tube Bridge Railing (SCD TST-1-99), Parapet width) into Bearing (length to be determined in SCD SBR-1-13, BR-1-13) or Concrete Plate A (See Sheet 2 of 2 for Detail) with standard field in accordance with transition ‡" dia. ASTM For one-sided guardrail washers and hex nuts.

**NOTES**

- For additional rail details, see SCD MGS-1.1.
- For barrier guardrail details see SCD MGS-2.1.

**APPLICATION**

Use Type 1 MGS Bridge Terminal Assembly to connect guardrail runs to bridges having deflectors.

**THRIE BEAM TRANSITION:** Asymmetrical W-beam to Thrie beam transition panel shall be used to reach the available bolt hole locations.

**THREE BEAM TRANSITION**

Asymmetrical W-beam to Thrie beam transition panel shall be 10 gauge.

**POSTS**

Use standard steel or 6"x6"x3" wood posts per SCD MGS-1.1 for Posts No. 1-6. Posts may be set in drilled holes or driven to grade. Posts No. 4C or 4D steel or 6"x6"" wood.

Use the same post material throughout the length of the transition unless otherwise specified in the plans or required. This Engineer shall mark posts shown in this drawing. Wood posts shall be fabricated and pressure-treated for installation during the early summer season. After assembly, all bolt holes will be drilled and tapped. When connecting to concrete barrier or parapet, but shall not extend past Post No. 6. Curb is not required when connecting to TST Bridge Rail.

**CURB:**

Type 4A, 4B, or 4C Curb per SCD BP-5.1 is required under the transition unless otherwise specified in the plans or required. This Engineer shall be included as incidental to the cost of the BTA.

**PAYMENT:**

Item 606 - MGS Bridge Terminal Assembly, Type 1, Barrier Design, Each, or Item 606 - MGS Bridge Terminal Assembly, Type 1, Barrier Design, Each, includes the cost of all components. Component shall be included as incidental to the cost of the BTA.

**FLARED GUARDRAIL:**

The MGS guardrail should be tangential to the transition unless otherwise specified in the plans or required. When attaching this BTA to preexisting walls/parapets, extend and taper the thrie beam on the trailing side over to the concrete barrier over a length of 6'-3". This additional labor and material is included in the total transition design cost/quantity for the BTA.

**FLARED GUARDRAIL:**

The MGS guardrail should be tangential to the transition unless otherwise specified in the plans or required. When attaching this BTA to preexisting walls/parapets, extend and taper the thrie beam on the trailing side over to the concrete barrier over a length of 6'-3". This additional labor and material is included in the total transition design cost/quantity for the BTA.

Curb is paid separately under Item 609 - Curb, Type 4__, in feet.

**SHEET 2 OF 2**

CERTIFICATION as per Item 712.01. Group VIII, Type 1 with Proof Load 712.01, or Anchors as per FF-S325.

**General:**

For additional rail details, see SCD MGS-1.1.
SECTION A-A

SECTION B-B

SECTION C-C

SECTION D-D

SECTION E-E

SECTION F-F

SECTION G-G

BEARING PLATE A

BEARING PLATE B

AASHTO/AGC/ARTBA
Standardized Hardware
Code part 40099

SECTION H-H

SECTION J-J

THREE BEAM TO PREEXISTING WALLS/PARAPETS

CONNECTION DETAILS TO CONNECT
THREE BEAM TO PREEXISTING WALLS/PARAPETS

CONNECTION DETAILS TO CONNECT
WITH TWIN STEEL TUBE BRIDGE RAILING
(SEE SCD TST-1-99)