PLAN VIEW

ELEVATION VIEW (Profile Along Rail)

NOTES

POSTS & BLOCKOUTS Shall comply with MGS Guardrail (See SCD MGS-2.1)

LENGTH OF NEED Where backslopes along the length of the terminal to the warrants feature are steeper than 2:1, at least 75'-0" of guardrail must be provided on these warranties features before the guardrail crosses the ditch line. The warrants feature is the intersection of the fill/cut slope as shown, but may be at some other point.) Where backslopes are steeper than 2:1, this minimum distance is not applicable.

LENGTH OF NEED Where backslopes along the length of the terminal to the warrants feature are 2:1 or flatter, at least 75'-0" of guardrail must be provided on these warranties features before the guardrail crosses the ditch line. The warrants feature is the intersection of the fill/cut slope as shown, but may be at some other point.) Where backslopes are steeper than 2:1, this minimum distance is not applicable.

PAYMENT: Item 606 - MGS Guardrail, Type 8, shall be paid for: for the length specified in the plans and shall include rails, 8'-0" posts, grouting, excavation, embankment and all other hardware, materials and labor required to construct the guardrail as shown except for the Post Anchor. Payment for Item 606 - Post Anchor (Concrete Post End Anchor) include the extra cost of concrete blocks or steel posts and all other hardware, materials and labor required to construct the End Anchor.

END ANCHORS A Post End Anchor is the preferred and treatment. A Concrete Post End Anchor may be installed in any location that does not permit the installation of posts. Concrete Blocks may be either pre-cast or cast-in-place and shall meet the requirements of CMS 806.02. The guardrail panel in the end anchors shall be pre-drilled and then galvanized per CMS 606.02. The finished ground line over the end anchor should be smooth and consistent with the surrounding topography, i.e. embankment shall not be mounded over the end anchor to achieve the proper amount of cover.

These offsets may be adjusted to provide the appropriate amount of cover over the end anchor. The adjusted offsets shall not result in a taper rate for the given section that is flatter than the taper rate for the adjacent downstream section.

For 10:1 or Flatter foreslopes the rubrail can be omitted. Payment shall be for Item 606 - Guardrail, Type MGS.
**POST END ANCHOR**

1. Drill four \( \frac{3}{8} \)" dia. holes in Post Flange and Plate with \( \frac{3}{8} \)" Hex Bolt, Square Washer and Nut.

**ELEVATION**

*The \( \frac{3}{8} \)" Steel Plate may be welded or bolted to the Post.*

If the Plate is bolted to the Post use four \( \frac{3}{8} " \times \frac{3}{4} " \) long 30° Bars with Hex Nuts. If the Plate is welded to the Post do not drill \( \frac{3}{8} \)" holes in the Plate or the Post Flanges.

**PLATE DETAIL**

\( \frac{1}{2} " \) THICK STEEL PLATE

- Drill four \( \frac{3}{8} \)" dia. holes in Plate.
- Bolted to Post only if Plate is dia. Holes. Drill only if Plate is bolted to Post (see Note).

**WASHER DETAIL**

\( \frac{3}{8} " \) THICK SQUARE WASHER

1. Hole

**CONCRETE BLOCK END ANCHOR**

Posts 1 and 2 are not used in concrete option.

**PLAN**

- Steel Post (Typ.)
- Plate (Typ.)
- Steel Post (Typ.)
- Plate (Typ.)
- Steel Post (Typ.)

**ELEVATION**

Concrete Block End Anchor