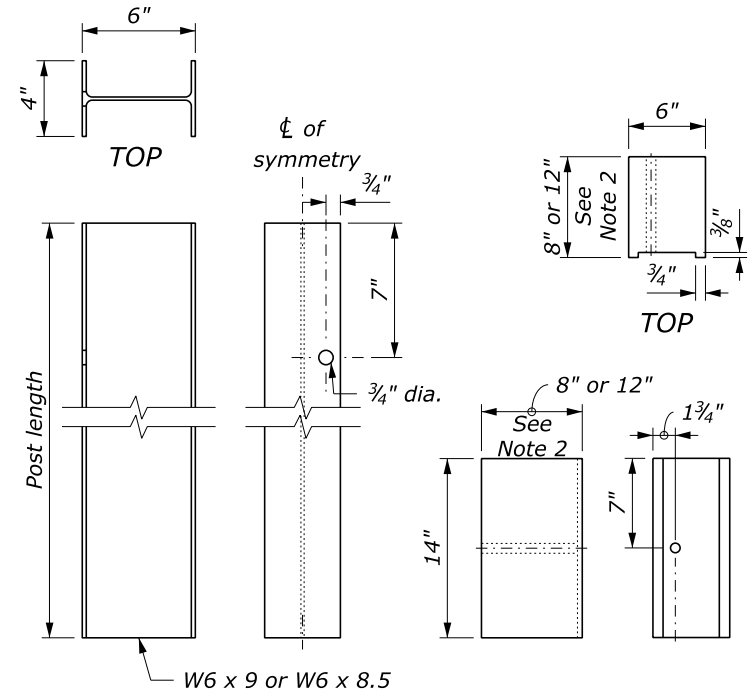
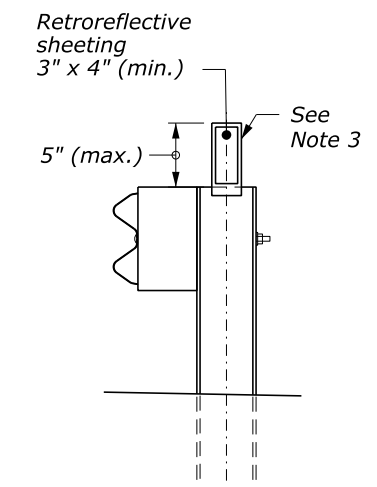


**POST AND BLOCK DETAIL**



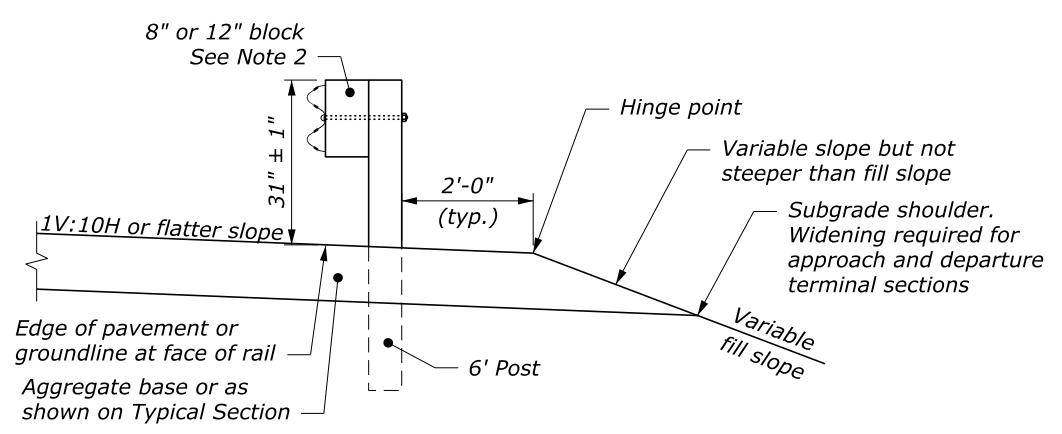
**STRUCTURAL SHAPE POST**



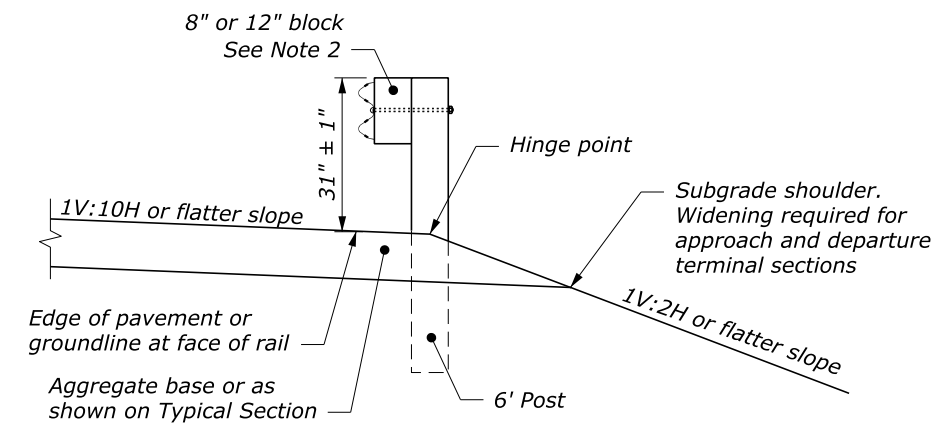
**FLEXIBLE DELINEATOR GUARDRAIL MOUNT**

**NOTE:**

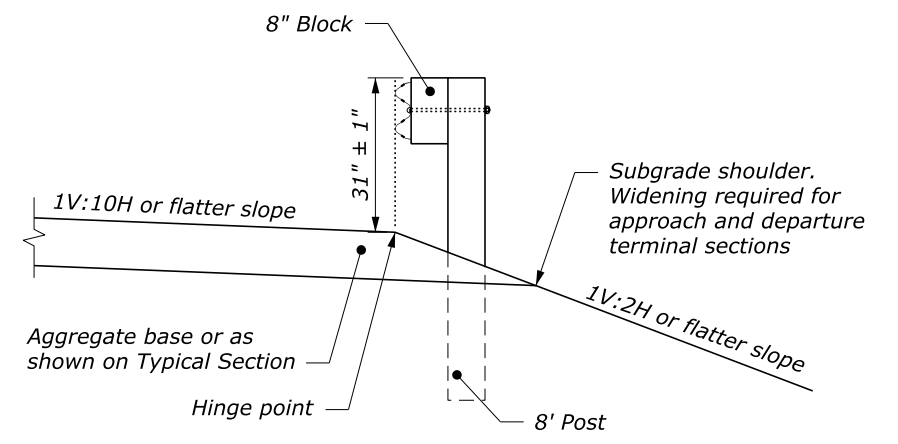
1. When encountering impenetrable material, one post may be omitted in locations where the typical guardrail cross section includes 2-feet (min.) between the back of the guardrail post and the hinge point. For all other locations, see Section 617 and Details C617-13 or C617-37.
2. Size of block shown elsewhere on the plans. Block may be wood, plastic, or composite material. Use consistent material throughout the length of guardrail run.
3. Install a flexible hinged delineator every fourth post. Fasten delineator to the web of the steel post using either an adhesive or mechanical means according to the manufacturer's recommendations. Match the color of the reflective element with the edge line. Other types of delineators may be used as approved by the CO.
4. In erodible or uncompacted soils, increase post length to 8'.
5. Dimensional tolerances not shown or implied are intended to be those consistent with the proper functioning of the part, including its appearance, and accepted manufacturing practices.



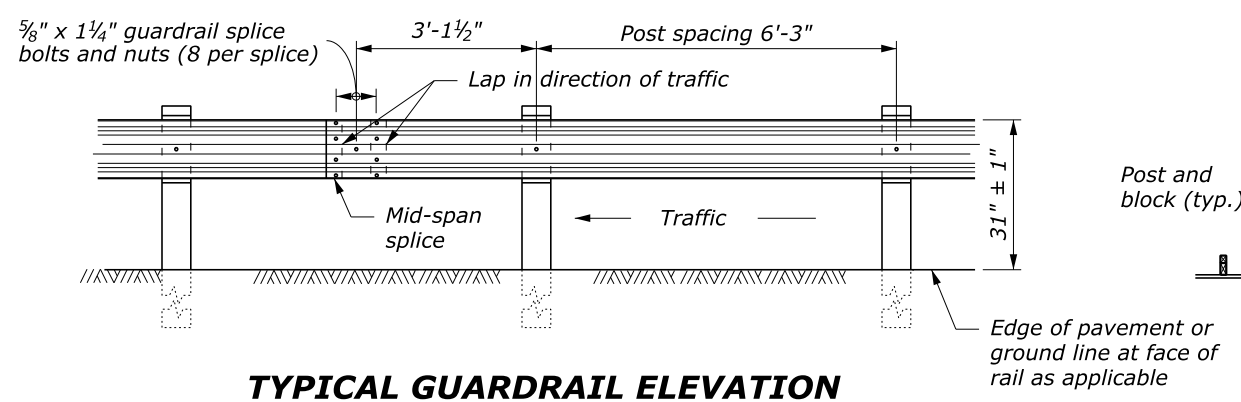
**TYPICAL GUARDRAIL CROSS SECTION 6' POST, 8" OR 12" BLOCK**



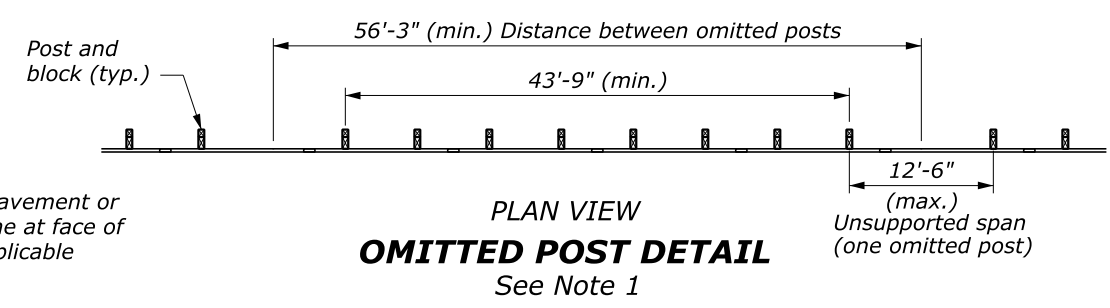
**TYPICAL GUARDRAIL CROSS SECTION 6' POST CENTERED ON HINGE, 8" OR 12" BLOCK**  
See Note 4



**TYPICAL GUARDRAIL CROSS SECTION 8' POST ON SLOPE, 8" BLOCK**



**TYPICAL GUARDRAIL ELEVATION**



**OMITTED POST DETAIL**  
See Note 1

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION CENTRAL FEDERAL LANDS HIGHWAY DIVISION	
U.S. CUSTOMARY DETAIL	
<b>MGS W-BEAM GUARDRAIL STEEL POSTS</b>	
DETAIL APPROVED FOR USE 04/2020	DETAIL
REVISED:	C617-32

\$\$\$DATE\$\$\$  
 \$\$\$TIME\$\$\$  
 \$\$\$DGN\$\$\$  
 \$\$\$USER\$\$\$

**NOTES TO THE DESIGNER**  
Last Updated: April 2020

**MGS W-Beam Guardrail, Steel Posts**

**General Information**

**Appropriate Applications.**

- The Midwest Guardrail System (MGS) is a non-proprietary W-beam guardrail system that meets the current crash testing requirements. MGS is used when W-beam guardrail is selected for barrier installation.

<b>Crash Test Criteria</b>	MASH
<b>Test Level</b>	TL-3
<b>FHWA Eligibility Letter</b>	B-212, B-240, B-261, B-243
<b>TF 13 Designator</b>	SGR20a-b, SGR38a-b, SGR63
<b>Crash Test Report</b>	Multiple MwRSF reports available at <a href="https://mwrsf.unl.edu/mgs.php">https://mwrsf.unl.edu/mgs.php</a>



From TTI Report No. 420020-5

**Limitations**

- The drawing shows the various options for guardrail near slopes. The preferred option is to use 6' post and 12" block with 2' between the back of post and the slope hinge point.

**Layout Guidance.**

- See AASHTO *Roadside Design Guide*
- Use the FLH Barrier Length of Need Calculator available at <https://flh.fhwa.dot.gov/resources/design/tools/Barrier-LON.xlsx>
- See the FLH *Midwest Guardrail System FAQ* document for more information.

**Applicable SCRs**

- Section 563 (if weathering agent applied to galvanized elements)
- Section 617
- Section 710
- Section 725 (if weathering agent applied to galvanized elements)

**Typical Pay Item Used**

- 61701-4500 Guardrail system MGS, type 2, class A steel posts [LNFT] for galvanized steel
- 61701-5100 Guardrail system MGS, type 4, class B steel posts [LNFT] for weathering steel

**Updates**

February 2019

- New Detail drawing

April 2020

- Revised note 3, added note 4, minor CADD edits