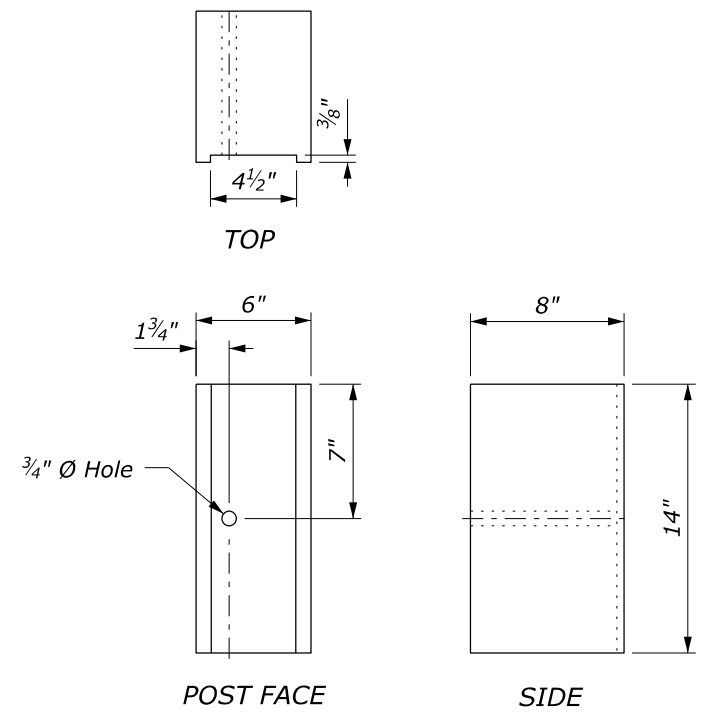
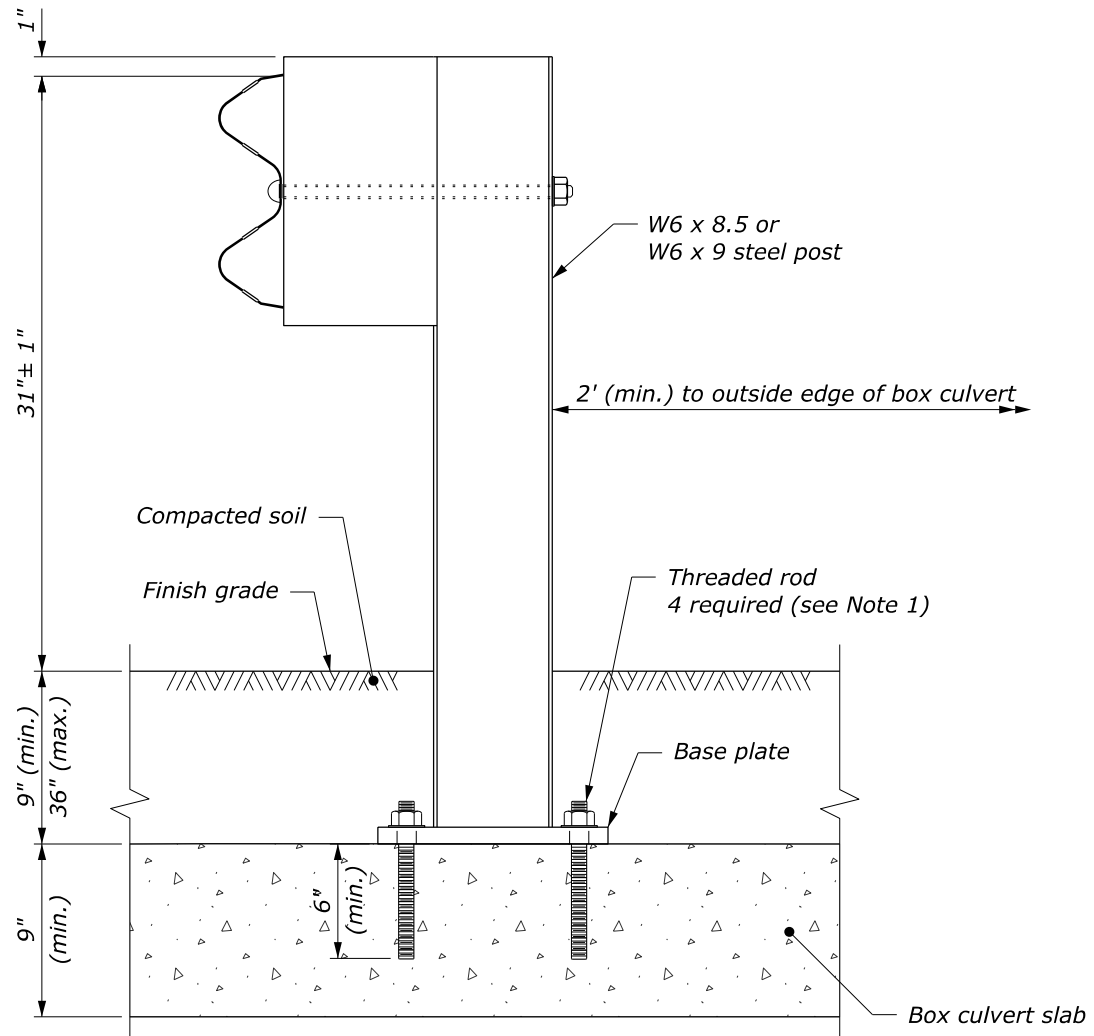
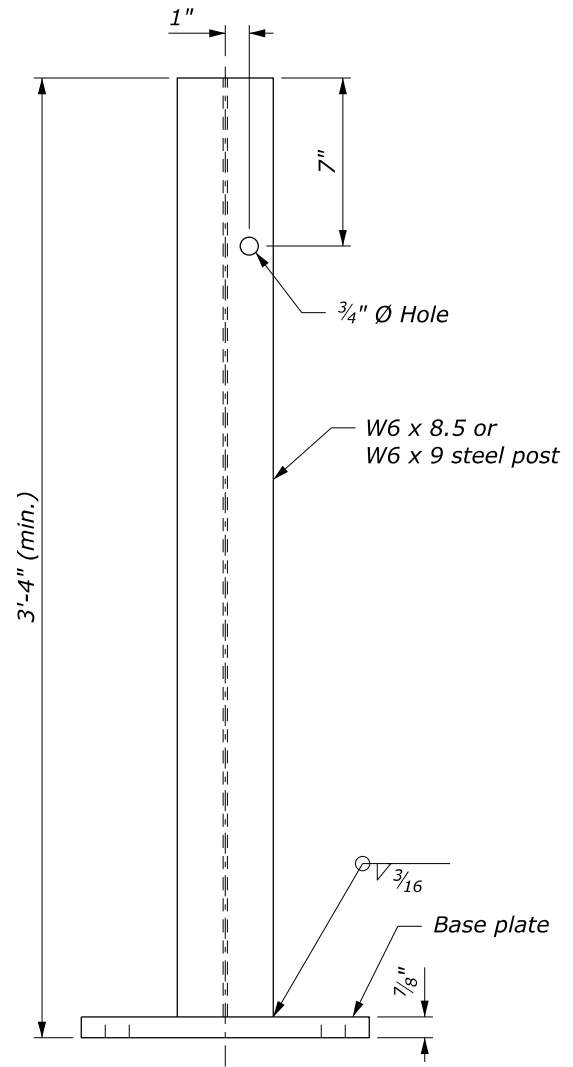


NOTE:

1. Attach guardrail post to box culvert with $\frac{7}{8}$ -inch diameter high-strength threaded rods $8\frac{1}{2}$ -inch in length with resin-bonded anchors. Use carbon steel rods with a minimum strength of 125 ksi and a minimum yield strength of 105 ksi. Rods, nuts, and washers have an electroplated zinc coating.
2. Wood blocks are shown. Blocks of an approved alternative may be used.
3. See Standard 617-32 for other details.



BLOCK
See Note 2

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION OFFICE OF FEDERAL LANDS HIGHWAY	
FLH STANDARD MGS W-BEAM GUARDRAIL STEEL POSTS ATTACHED TO BOX CULVERT	
STANDARD APPROVED FOR USE 7/2022 REVISED:	STANDARD 617-38

10 August 2022 2:47 PM c:\pwwork\0419223\Std617-38.dgn [Std 617-38]

Designer Notes: FLH Standard Drawing 617-38
Last Updated: June 2022

MGS W-Beam Guardrail Steel Posts Attached to Box Culvert

General Information

Appropriate Applications.

- This drawing is used with box culverts with shallow fill.

<i>Crash Test Criteria</i>	MASH
<i>Test Level</i>	TL-3
<i>FHWA Eligibility Letter</i>	B-241
<i>TF 13 Designator</i>	SBW09c
<i>Crash Test Report</i>	TTI Report No. 405160-23-2

Limitations. Embankment over culvert ranges from 9" (min.) to 3' (max.).

Layout Guidance.

- See the FLH *Midwest Guardrail System FAQ* document for more information.

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

Note: Use the same pay item as roadside rail.

Updates

February 2019

- New Detail drawing

June 2022

- Converted from CFL Detail to FLH Standard