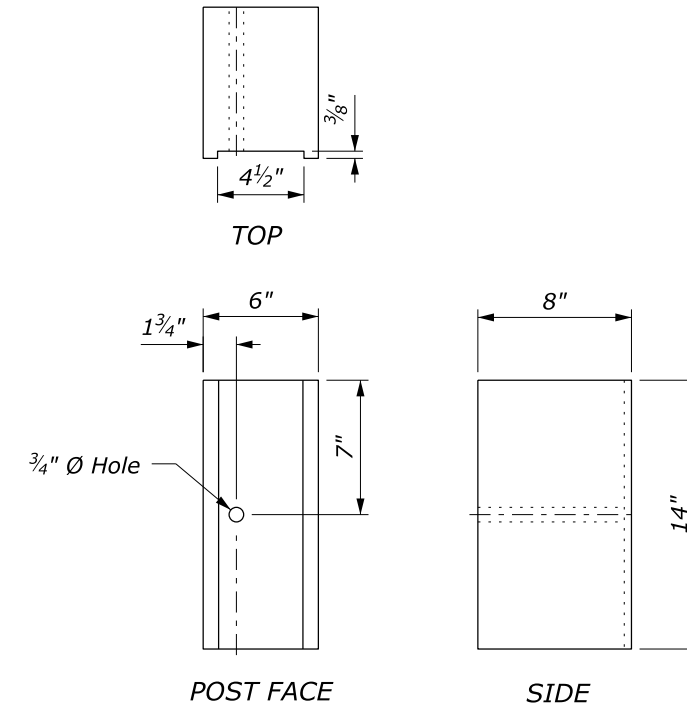
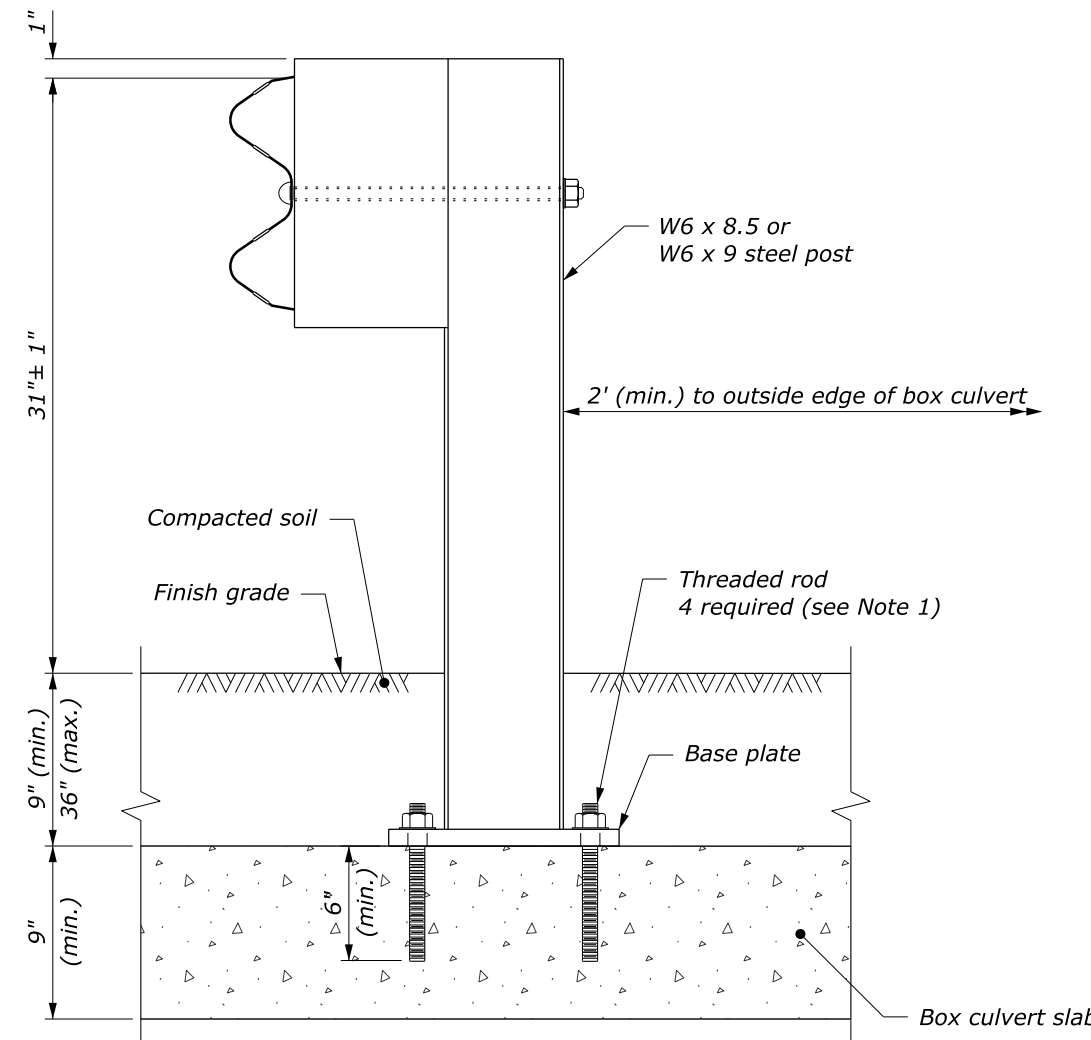
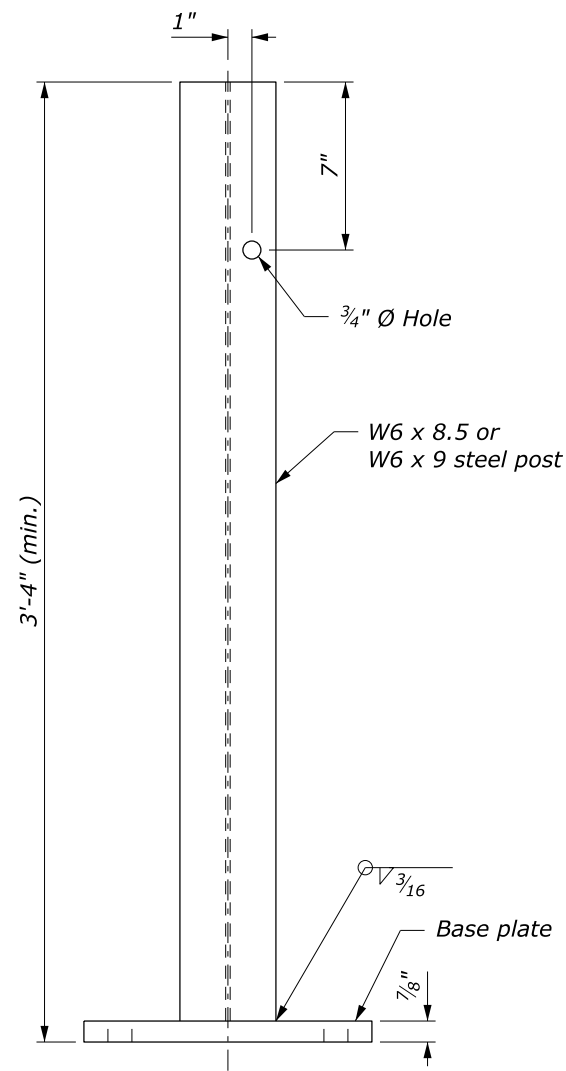


**NOTE:**

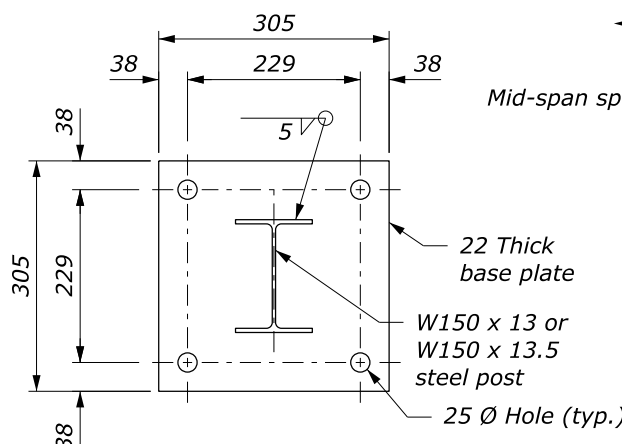
1. Attach guardrail post to box culvert with  $\frac{7}{8}$  inch diameter high-strength threaded rods  $8\frac{1}{2}$  inch in length with resin-bonded anchors. Use carbon steel rods with a minimum strength of 125 ksi and a minimum yield strength of 105 ksi. Rods, nuts, and washers have an electroplated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



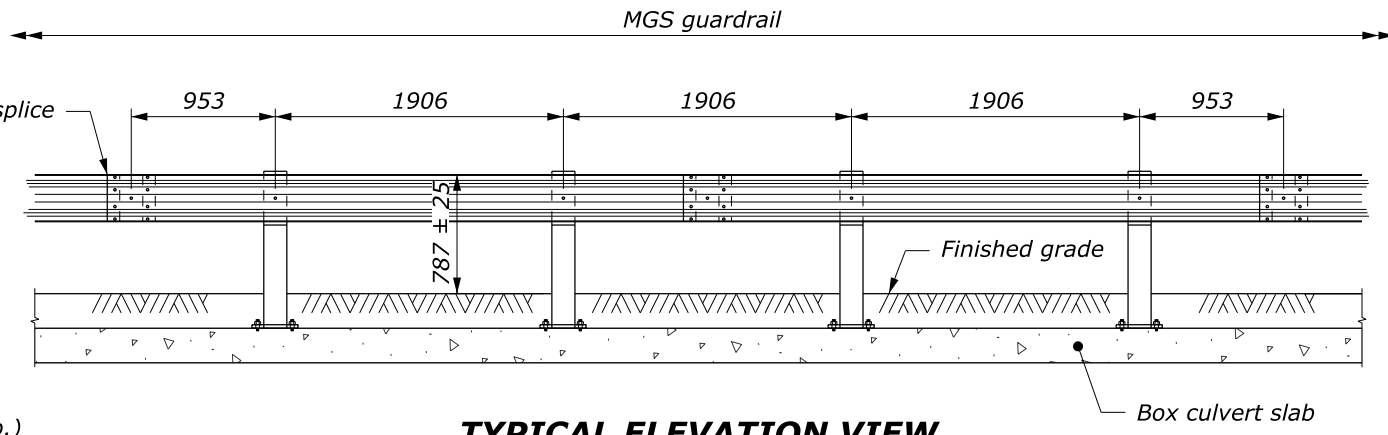
**BLOCKOUT**  
See Note 2

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	FLH STANDARD 617-38
<b>MGS W-BEAM GUARDRAIL STEEL POSTS ATTACHED TO BOX CULVERT</b>	SPECIFICATION FP-24
	APPROVED FOR USE 1/2024



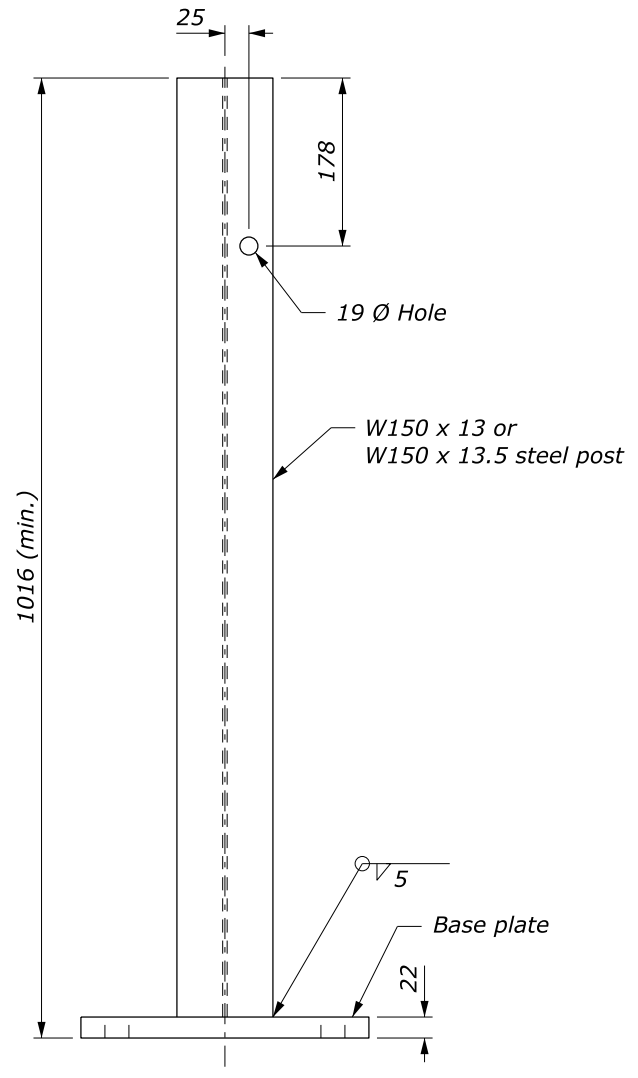
PLAN



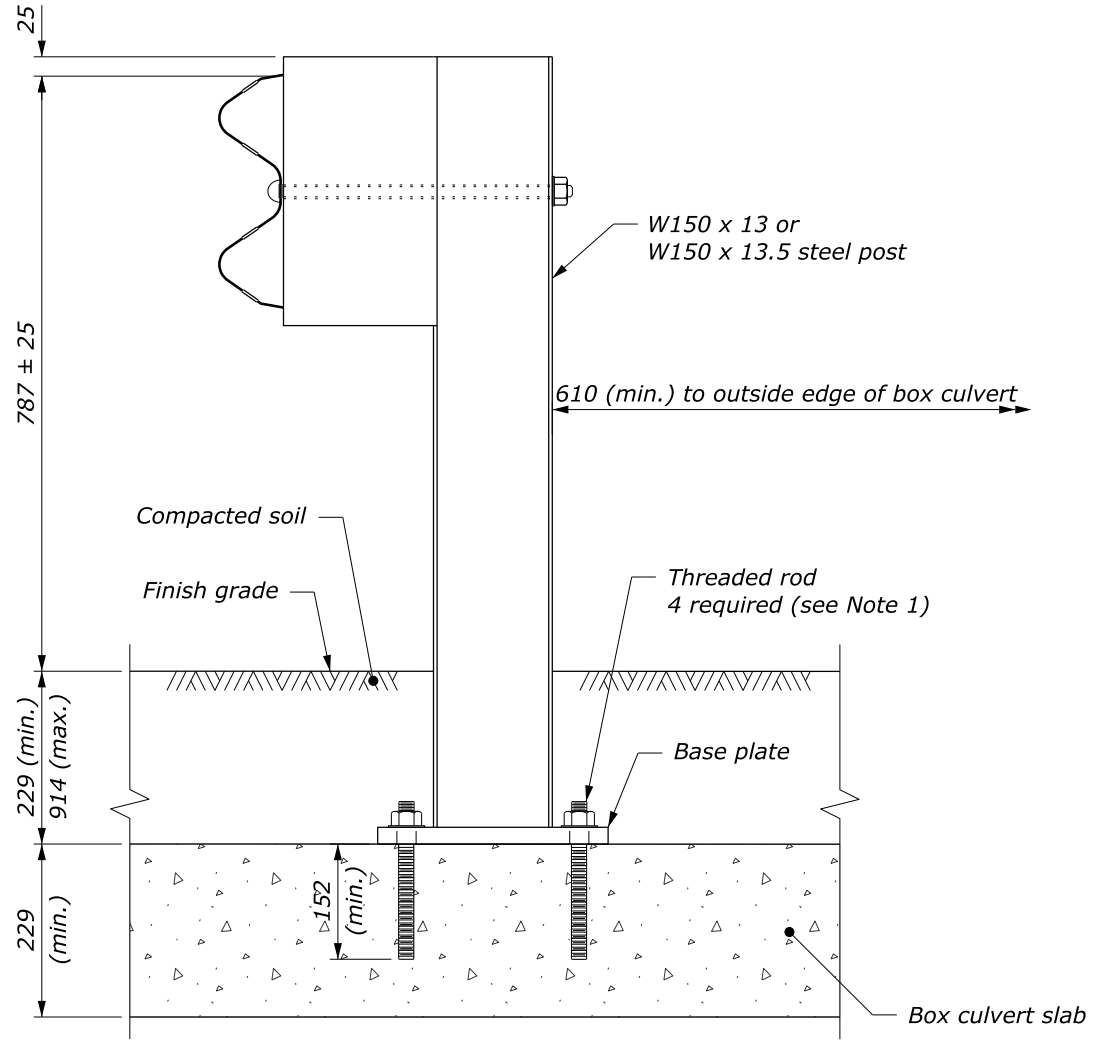
TYPICAL ELEVATION VIEW

**NOTE:**

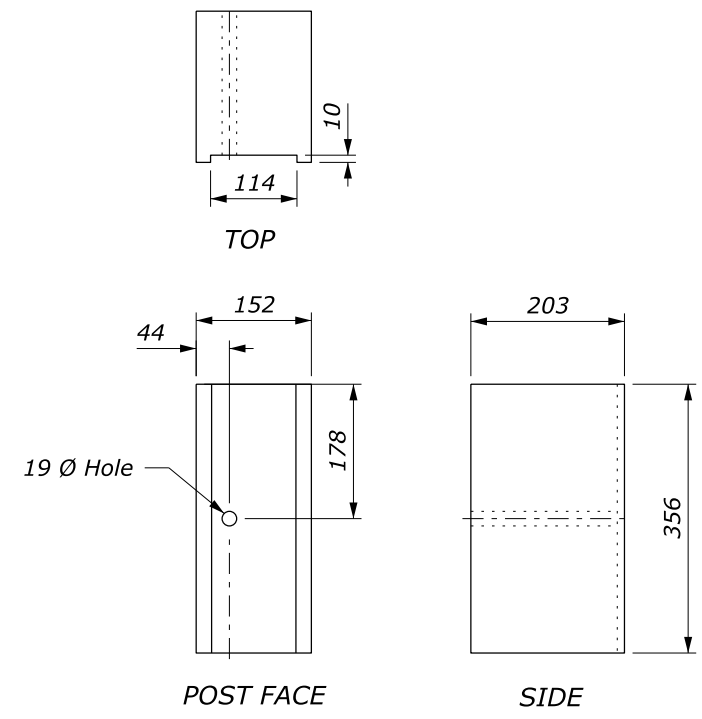
1. Attach guardrail post to box culvert with 22 mm diameter high-strength threaded rods 216 mm in length with resin-bonded anchors. Use carbon steel rods with a minimum strength of 862 MPa and a minimum yield strength of 724 MPa. Rods, nuts, and washers have an electroplated zinc coating.
2. Wood blockouts are shown. Blockouts of an approved alternative may be used.
3. See Standard M617-32 for other details.



ELEVATION  
BOX CULVERT POST



BOX CULVERT MGS GUARDRAIL  
STEEL POST



**BLOCKOUT**  
See Note 2

This drawing contains **Metric** units of measure.  
Dimensions without units are millimeters.

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	FLH STANDARD M617-38
<b>MGS W-BEAM GUARDRAIL STEEL POSTS ATTACHED TO BOX CULVERT</b>	SPECIFICATION FP-24
	APPROVED FOR USE 1/2024

NO SCALE