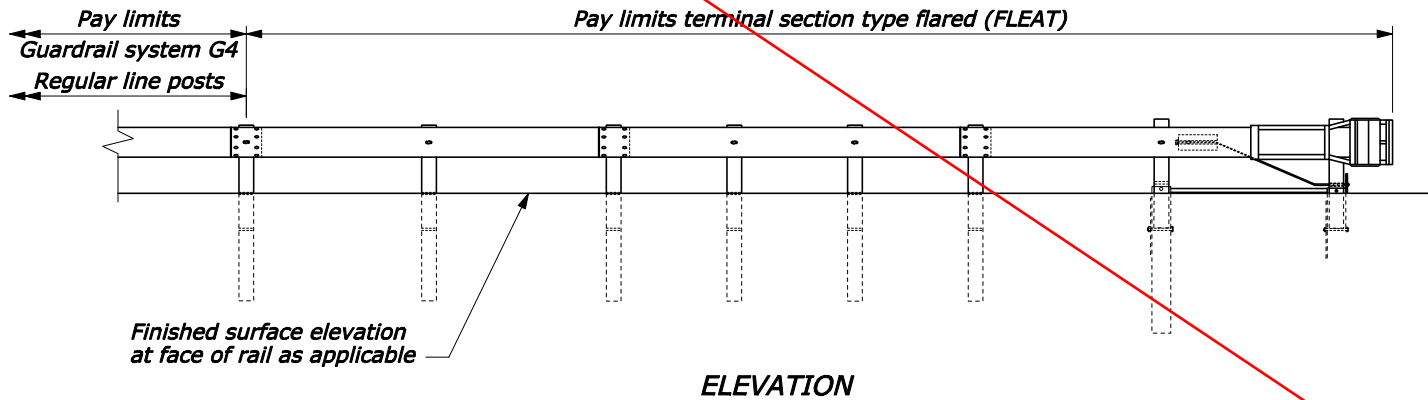
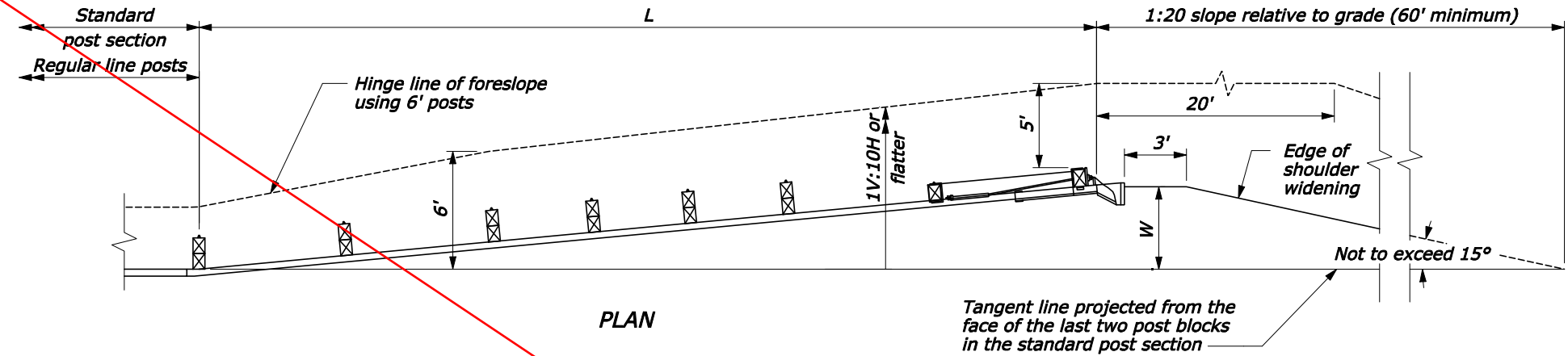


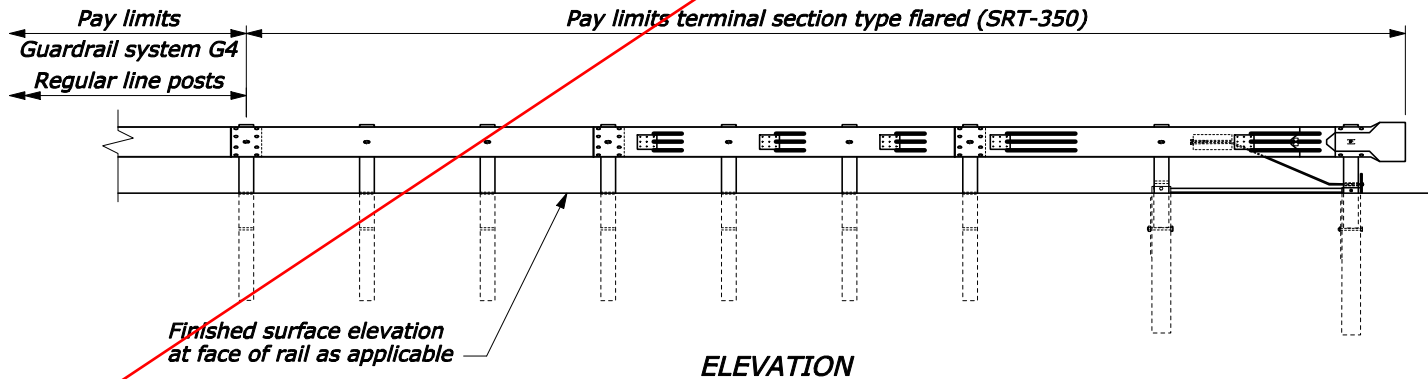
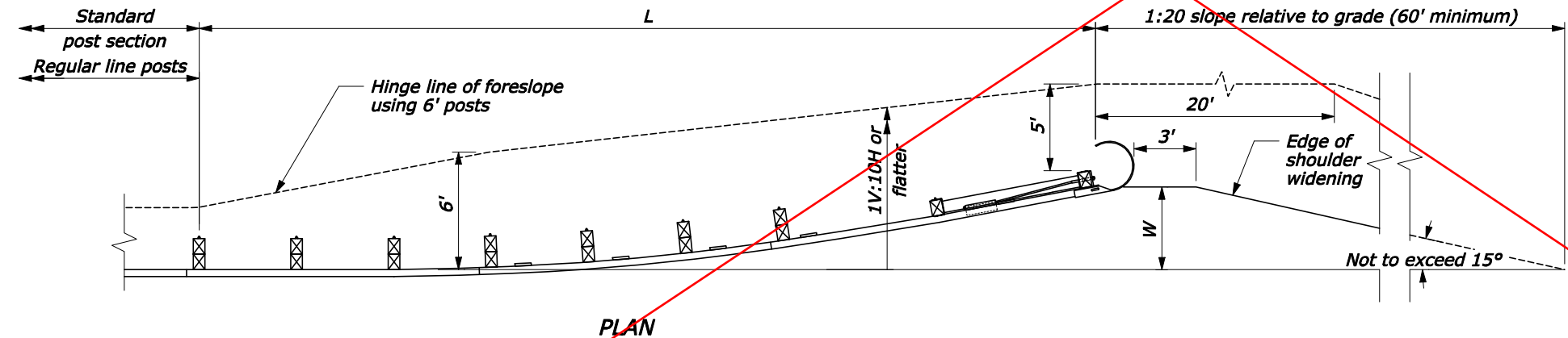
NOTE:

1. Install a flared G4 W-beam guardrail terminal that meets NCHRP-350 requirements per manufacturer's recommendations. Ensure that terminal meets appropriate test level for the project.
2. Where terminal is placed on a curve, and post offsets would result in the rail encroaching onto the shoulder (e.g., the inside of a curve), install the posts so that the face of the rail is at the edge of the shoulder.
3. Pave widened shoulder on both ends of guardrail runs when indicated on the plans.
4. See manufacturer's drawings for other details.



TEST LEVEL	L (ft)	W (ft)
2 (≤ 45 mph)	25.0	1.67-2.67
3 (> 45 mph)	37.5	2.5-4.0

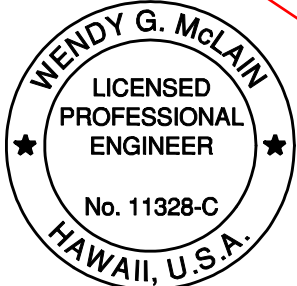
ELEVATION
STRAIGHT FLARED OPTION



TEST LEVEL	L (ft)	W (ft)
3 (> 45 mph)	37.5	3.0 or 4.0

ELEVATION
PARABOLIC FLARED OPTION

Amendment A001
⚠ 3/6/15 Contract negotiation revisions and NPDES compliance



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U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
FEDERAL LANDS HIGHWAY

U.S. CUSTOMARY STANDARD

**G4 W-BEAM GUARDRAIL
TYPE FLARED TERMINAL**

STANDARD APPROVED FOR USE 6/2005

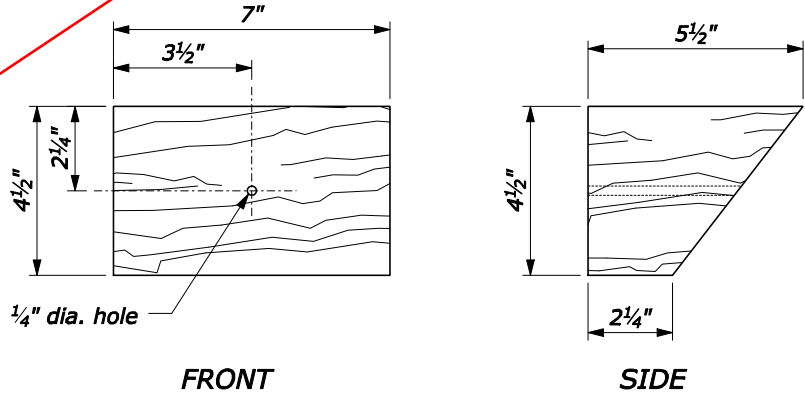
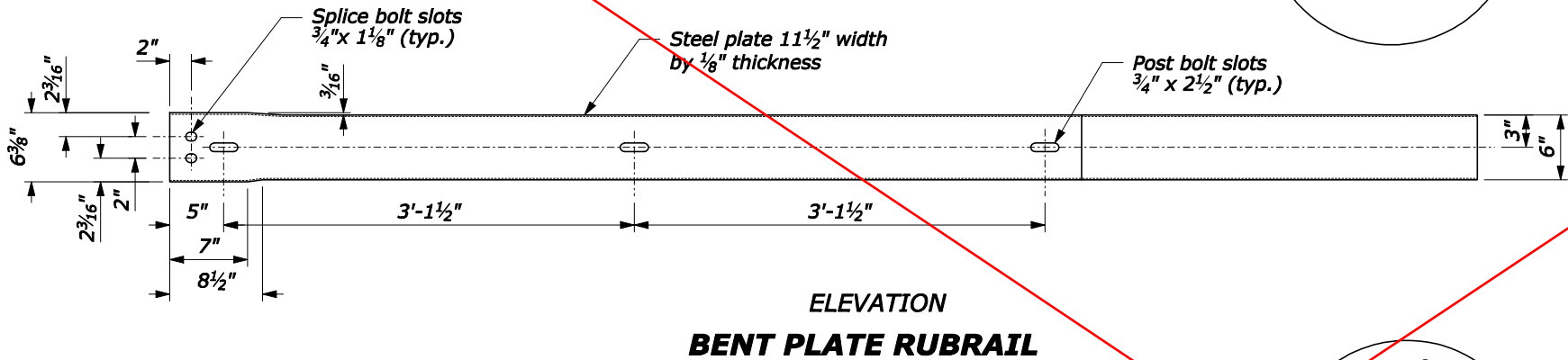
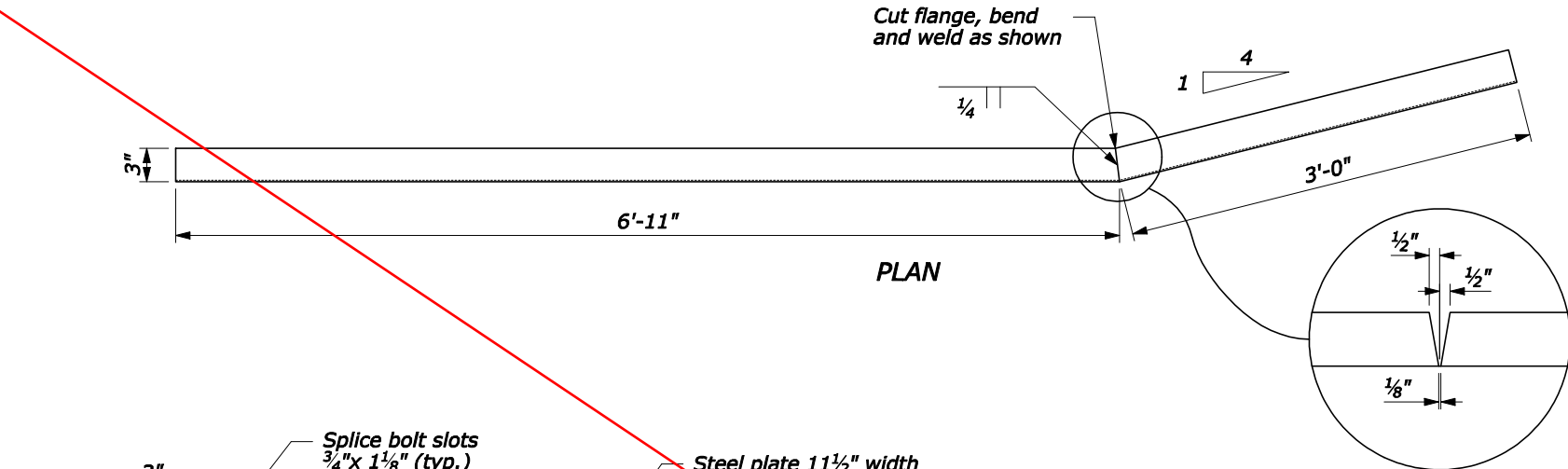
REVISD: 2/2007

STANDARD 617-19

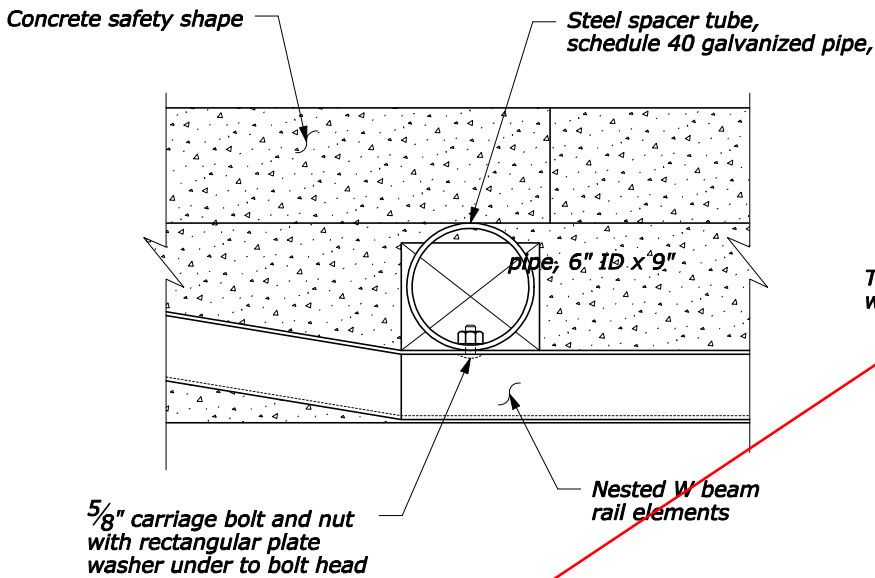
REG	STATE	PROJECT	SHEET NO.	TOTAL SHEETS
	HI	HI A-AD 6(8)	T3	T9

NOTE:

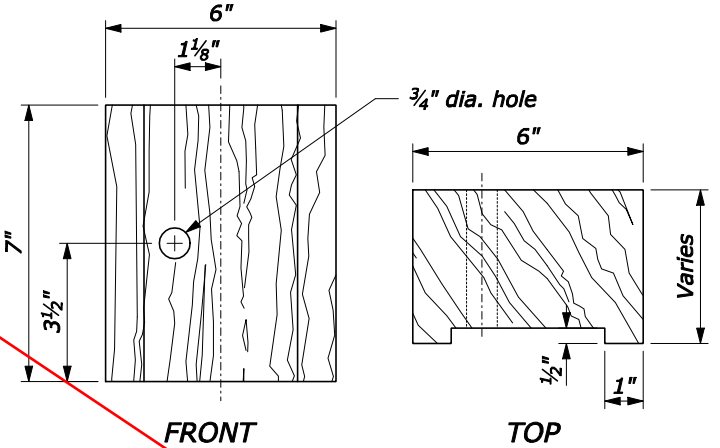
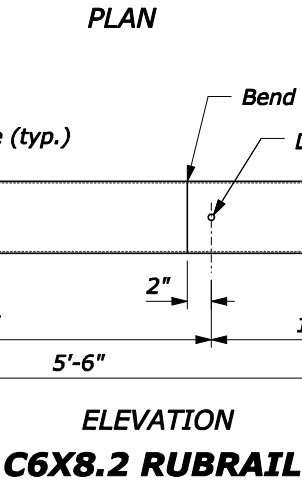
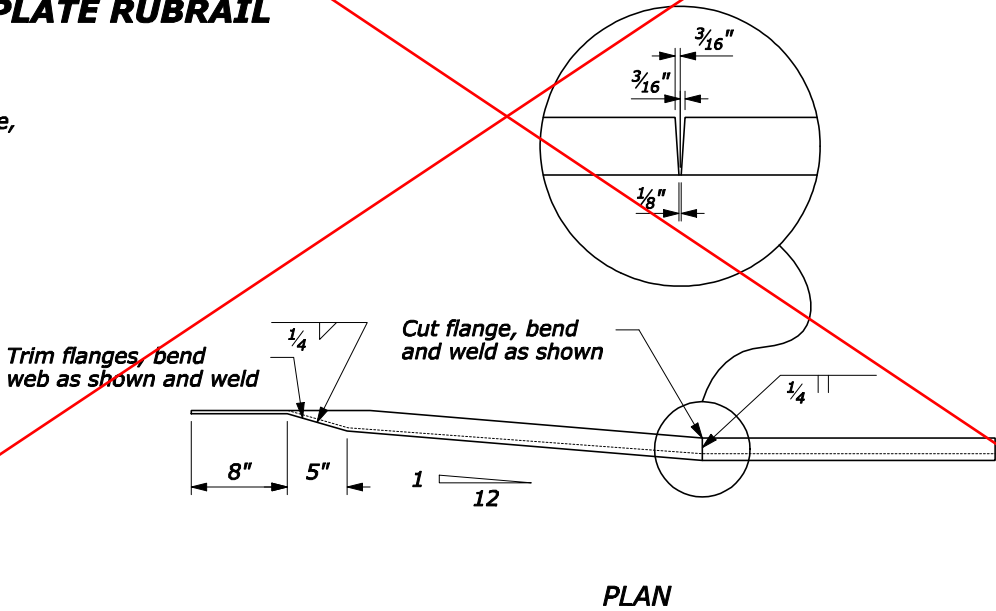
1. Attach rubrail end flush with sloped tow of safety shape. Shop fabricate the C6 x 8.2 rubrail end to be consistent with the slope of safety shape. Both clockwise and counterclockwise fabrications may be required.
2. Dimensional tolerances not shown or implied are intended to be those consistent with the proper functioning of the part, including its appearance, and accepted manufacturing practices.



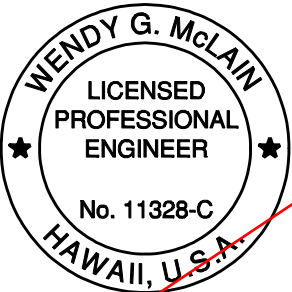
WOOD BLOCKOUT FOR RUBRAIL ON CONCRETE SAFETY SHAPE



STEEL SPACER BLOCK



WOOD BLOCKOUT FOR RUBRAIL ON STEEL POSTS



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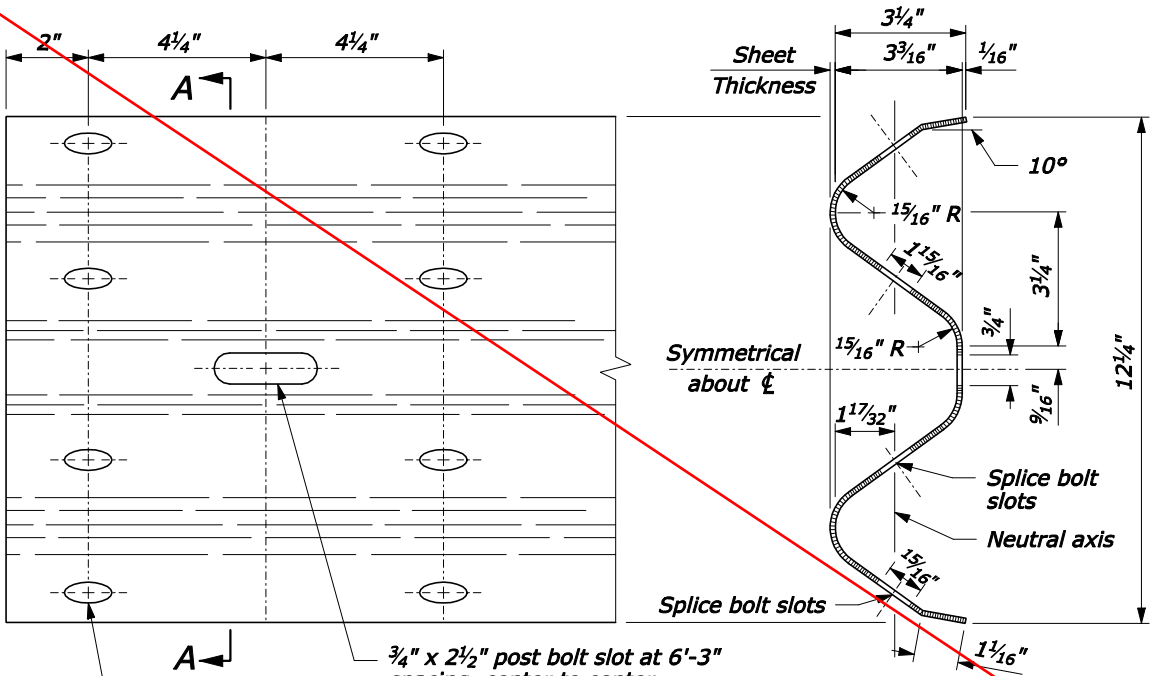
U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL LANDS HIGHWAY	
U.S. CUSTOMARY STANDARD	
G4 BEAM GUARDRAIL CONNECTION TO STRUCTURE SAFETY SHAPE FACE RUBRAIL	
REVISOR: DRAFT: 9/2013	STANDARD 617-29

NO SCALE

STATE	PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD 6(8)	T4	T9

NOTE:

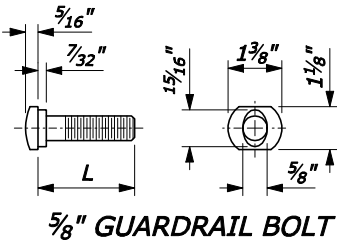
1. Use no more than 3 short guardrail posts in a row.
2. If directed to use alternate hole arrangement, post above ground shall be 33 inches tall.
3. See Special Contract Requirements when 7'-0" or longer posts are specified.
4. Install reflector tab between post bolt and rail, every fourth post. Alternate reflector tab shapes are acceptable.
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.
6. See Special 617-B for steel post and block detail.



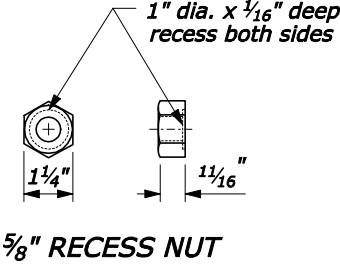
RAIL ELEMENT ELEVATION

SECTION A-A

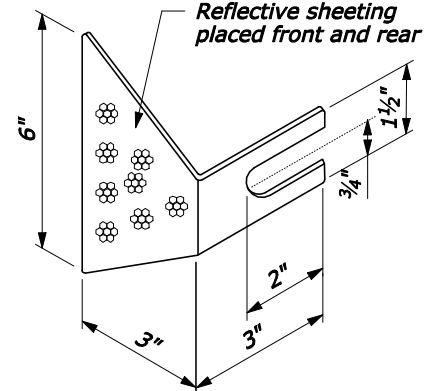
W BEAM RAIL MEMBERS



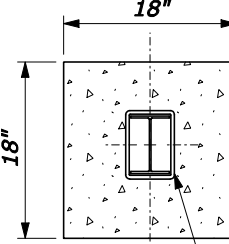
L	Thread Length
1 3/8"	1 1/8" minimum
2"	1 3/4" minimum
10"	4" minimum
18"	4" minimum
25"	4" minimum



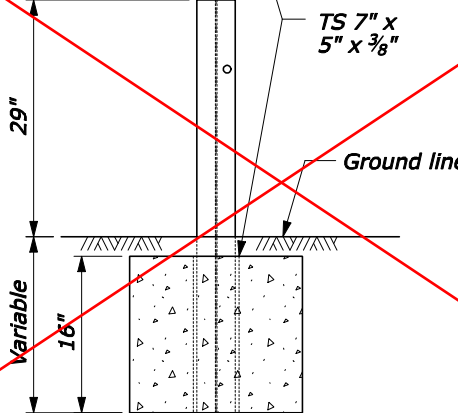
GUARDRAIL BOLT AND RECESS NUT



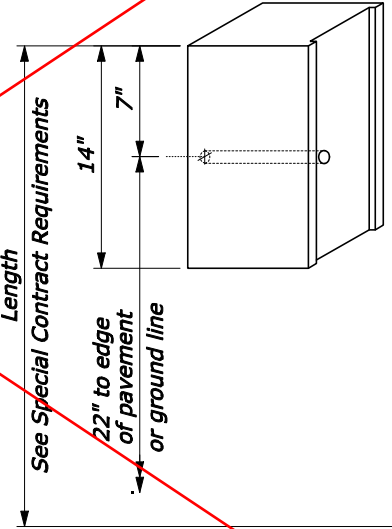
REFLECTOR TAB
(See Note 4)



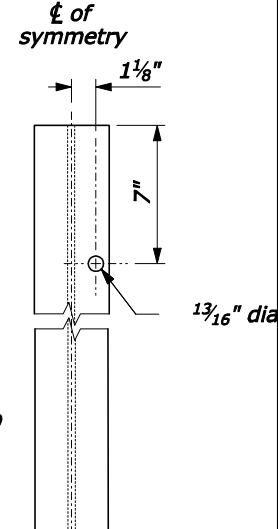
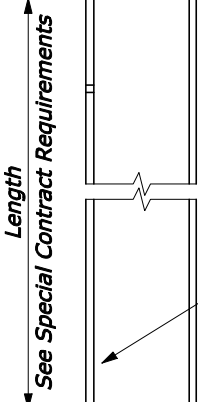
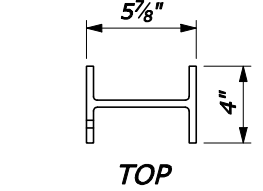
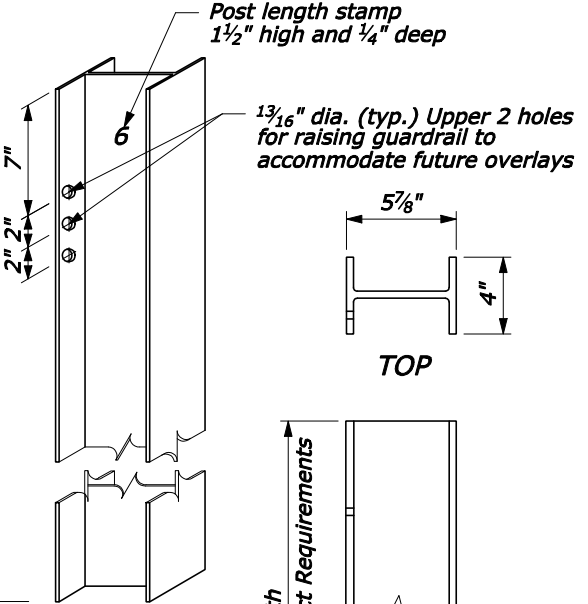
Use 20" diameter round anchor or 18" square anchor. Reduced size acceptable in solid rock.



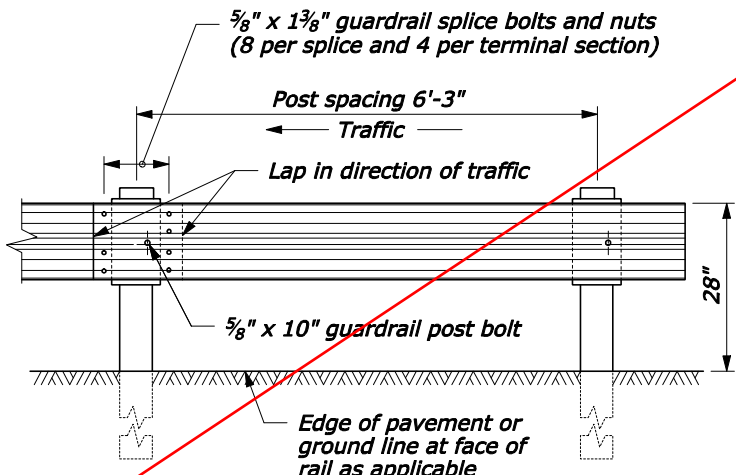
CONCRETE ANCHOR FOR SHORT GUARDRAIL POST
(See Note 1 and 2)



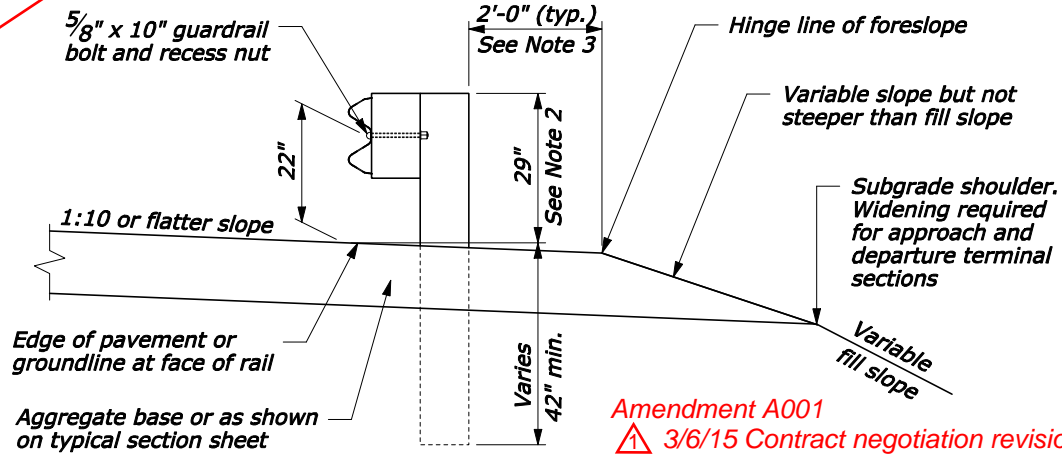
ALTERNATE HOLE ARRANGEMENT POST AND BLOCK DETAIL



STRUCTURAL SHAPE POST

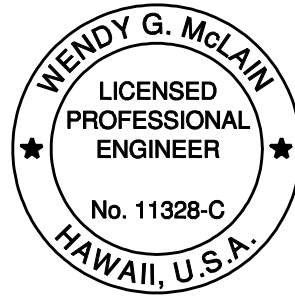


POST SPACING STANDARD POST SECTION



TYPICAL GUARDRAIL CROSS SECTION

Amendment A001
3/6/15 Contract negotiation revisions and NPDES compliance



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CENTRAL FEDERAL LANDS HIGHWAY DIVISION

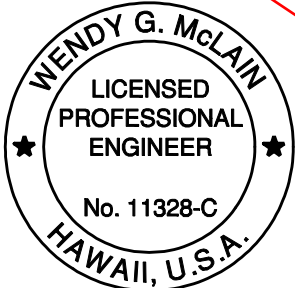
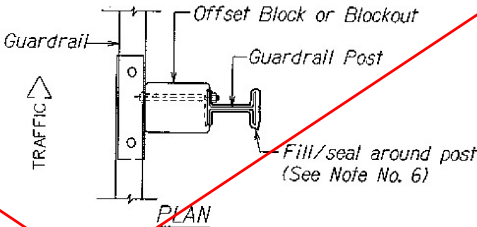
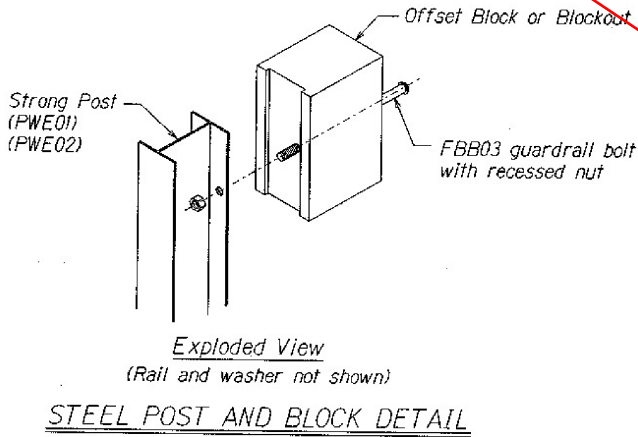
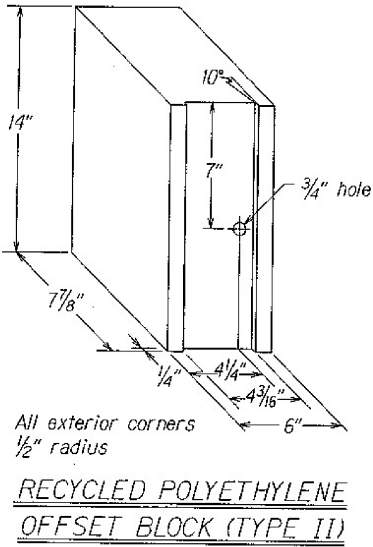
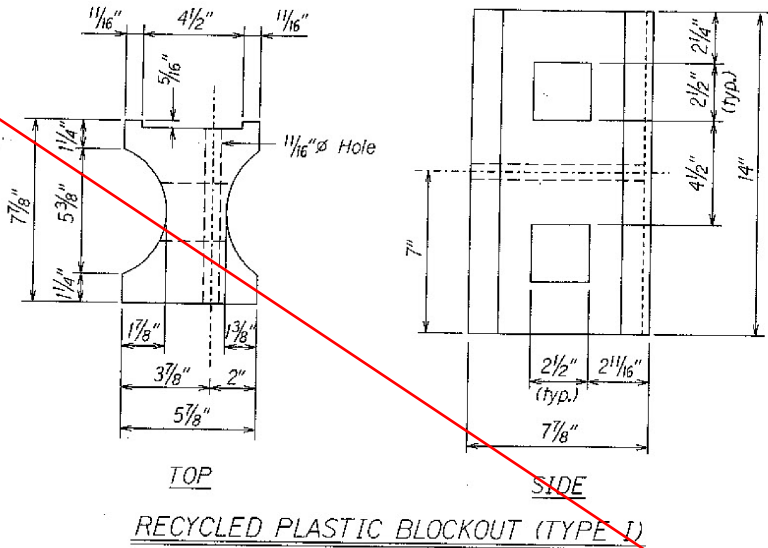
U.S. CUSTOMARY SPECIAL
G4 W-BEAM GUARDRAIL STEEL POSTS

SPECIAL 617-A

STATE	PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD 6(8)	T5	T9

GENERAL NOTES

1. The Recycled Plastic Block or Offset Block shall be approved by the CO.



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U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION CENTRAL FEDERAL LANDS HIGHWAY DIVISION	
U.S. CUSTOMARY SPECIAL	
GUARDRAIL STEEL POST AND BLOCK DETAIL	
SPECIAL 617-B	

Amendment A001
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