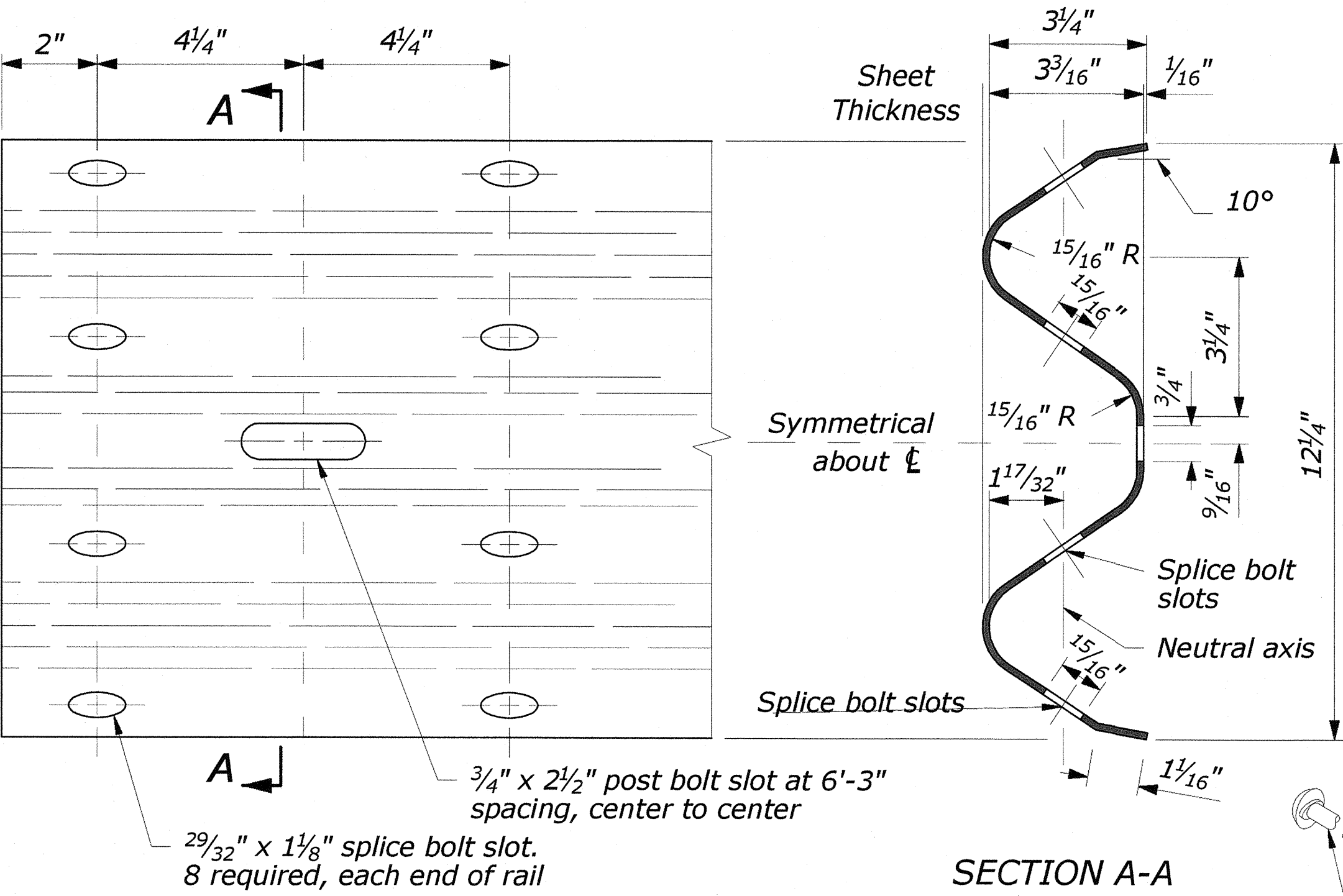


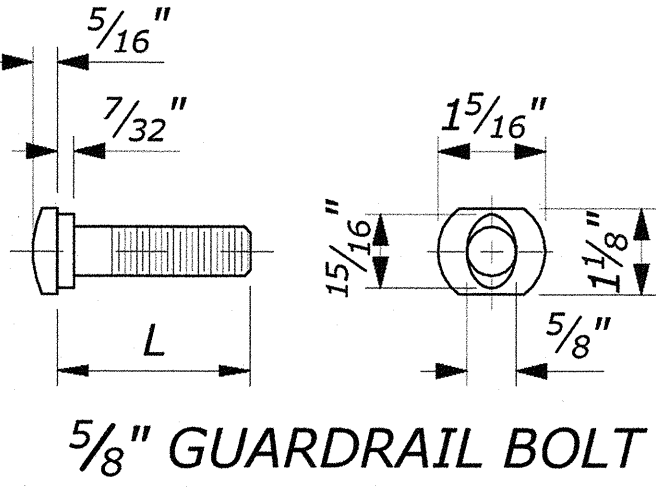
NOTE:

1. When encountering impenetrable material, see Standards 617-13 or 617-24.
2. See Special Contract Requirements when 7'-0" or longer posts are specified.
3. See Special Contract Requirements when the alternative hole arrangement is specified.
4. Install reflector tab between post bolt and rail, every fourth post. Alternate reflector tab shapes are acceptable.
5. Modified block may be wood, plastic, or composite material. Use consistent material throughout the length of guardrail run.
6. 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.



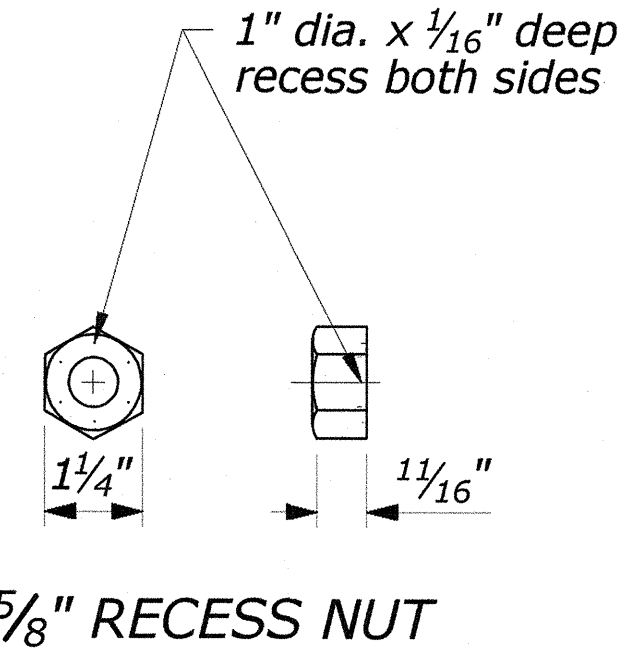
RAIL ELEVATION

W BEAM RAIL

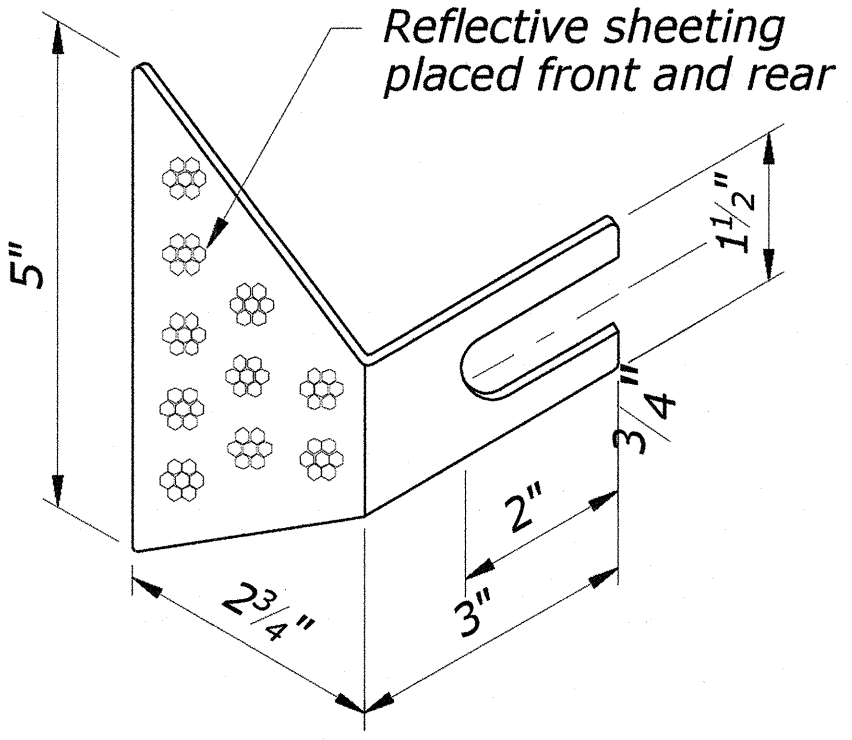


L	Thread Length
1 1/4"	1 1/8" minimum
2"	1 3/4" minimum
10"	4" minimum
18"	4" minimum
25"	4" minimum

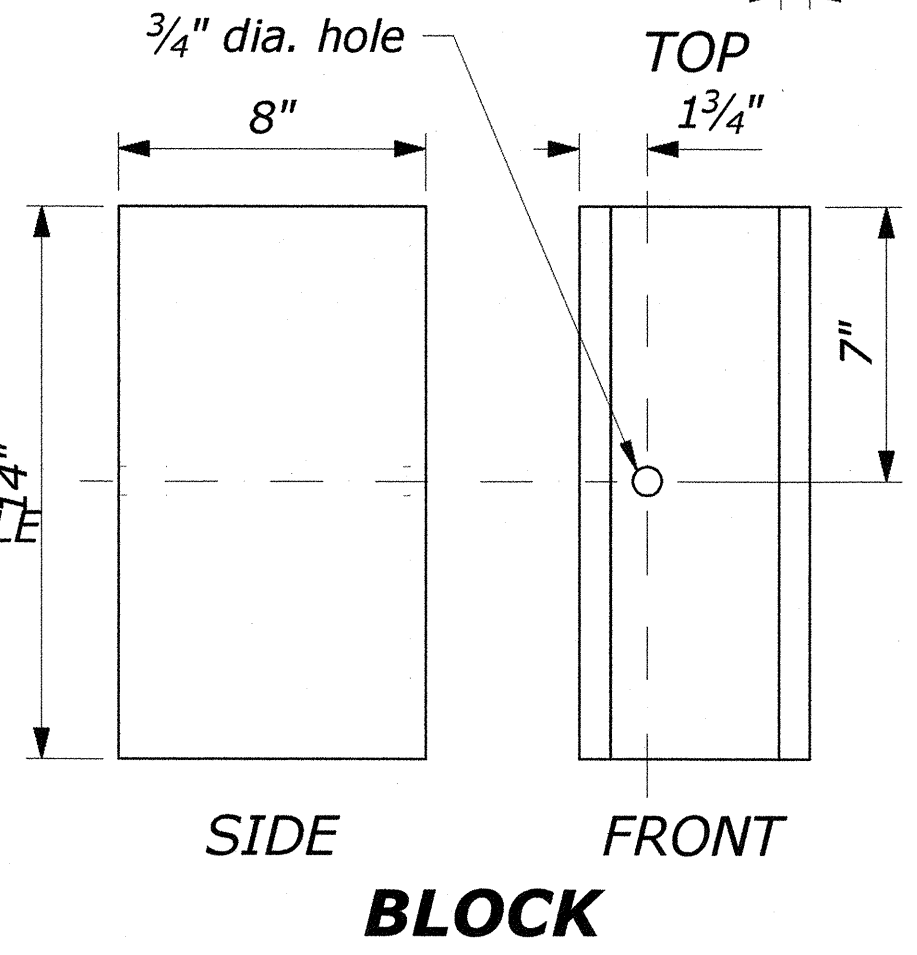
GUARDRAIL BOLT AND RECESS NUT



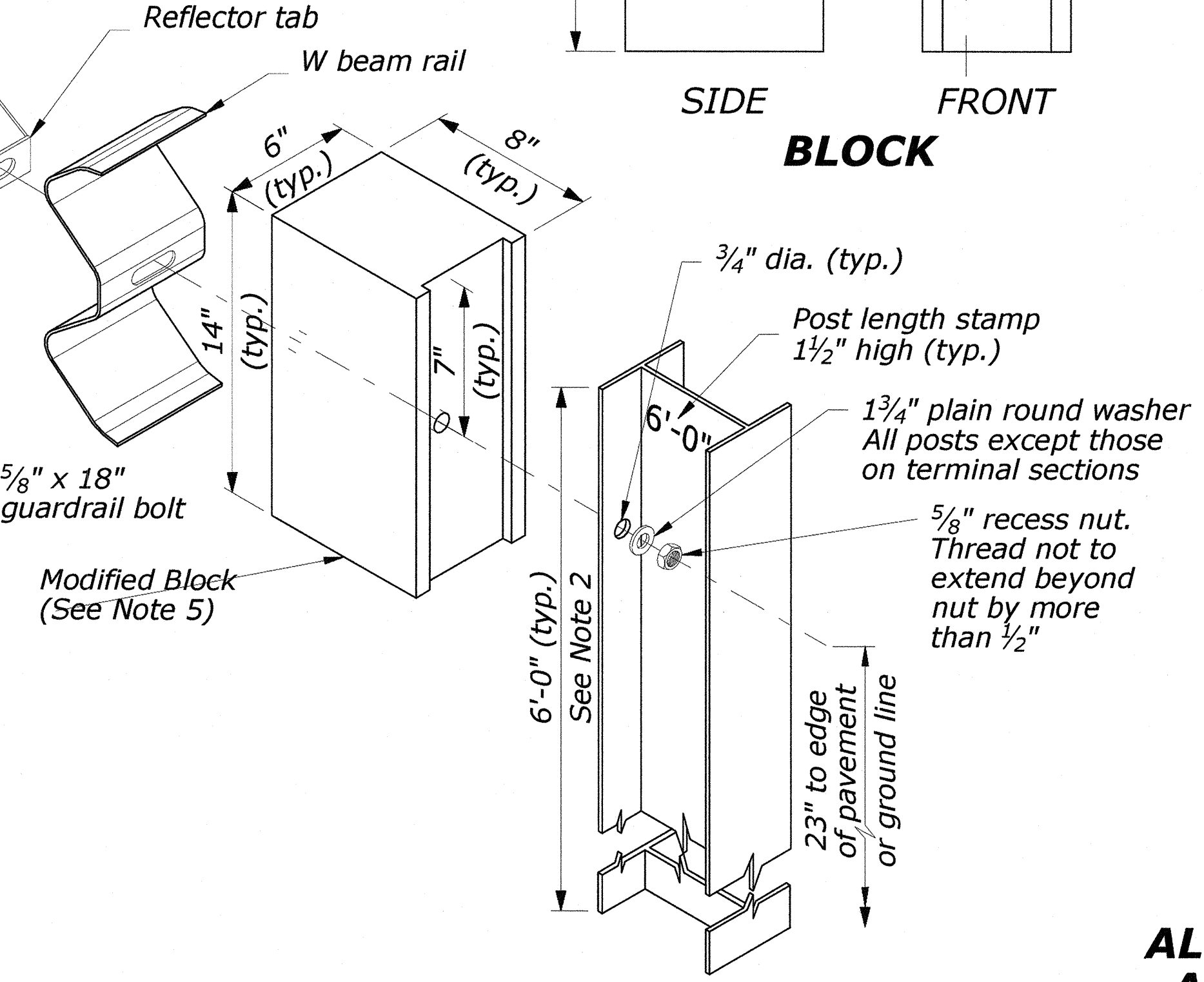
REFLECTOR TAB
(See Note 4)



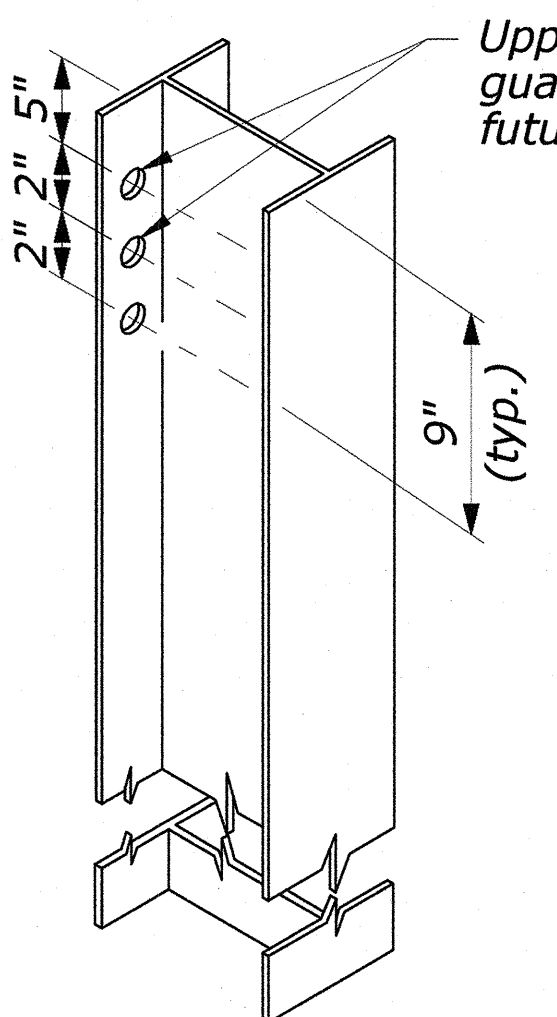
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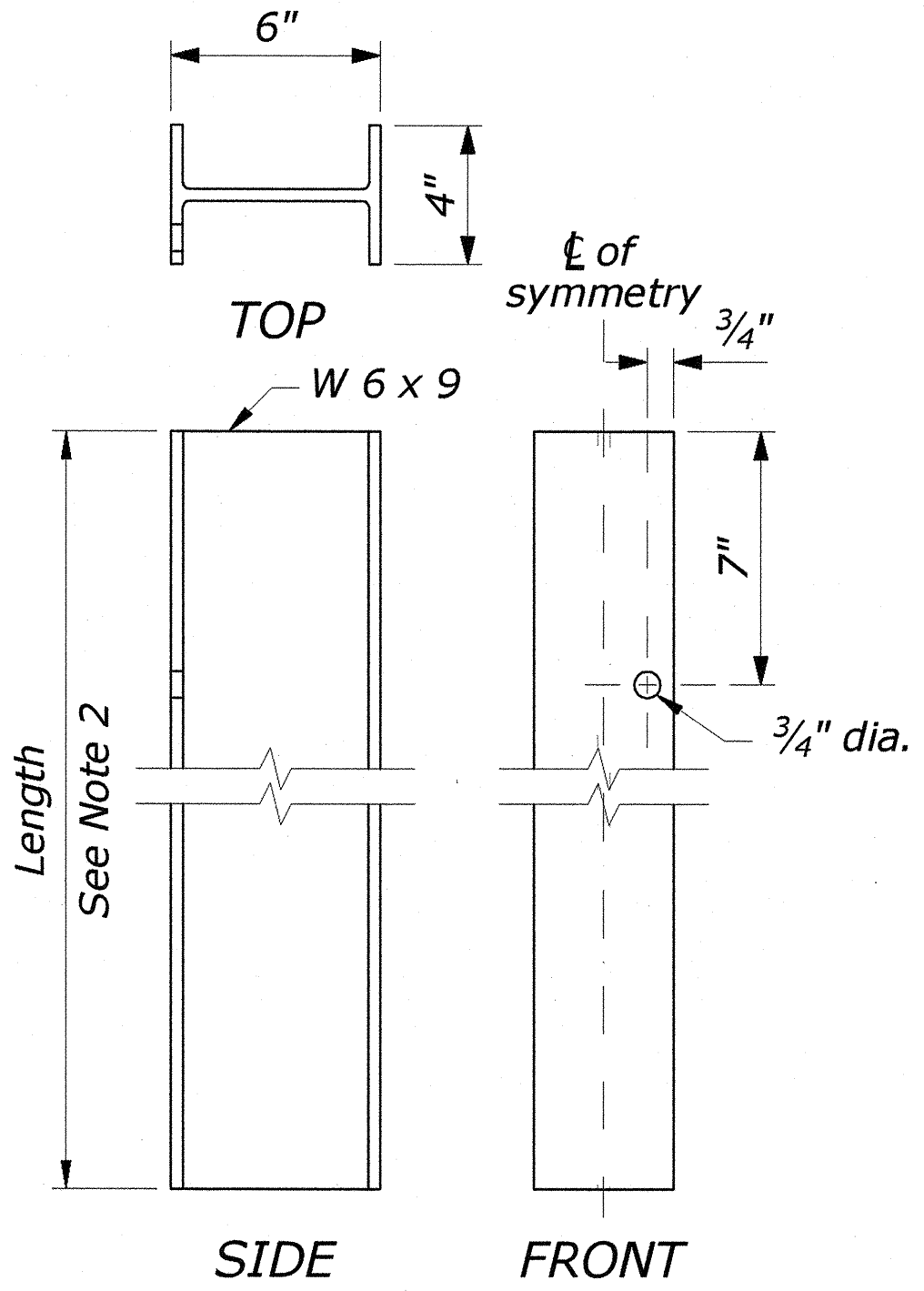
BLOCK



STANDARD HOLE ARRANGEMENT
POST AND BLOCK DETAIL



ALTERNATE HOLE
ARRANGEMENT
POST AND BLOCK
DETAIL



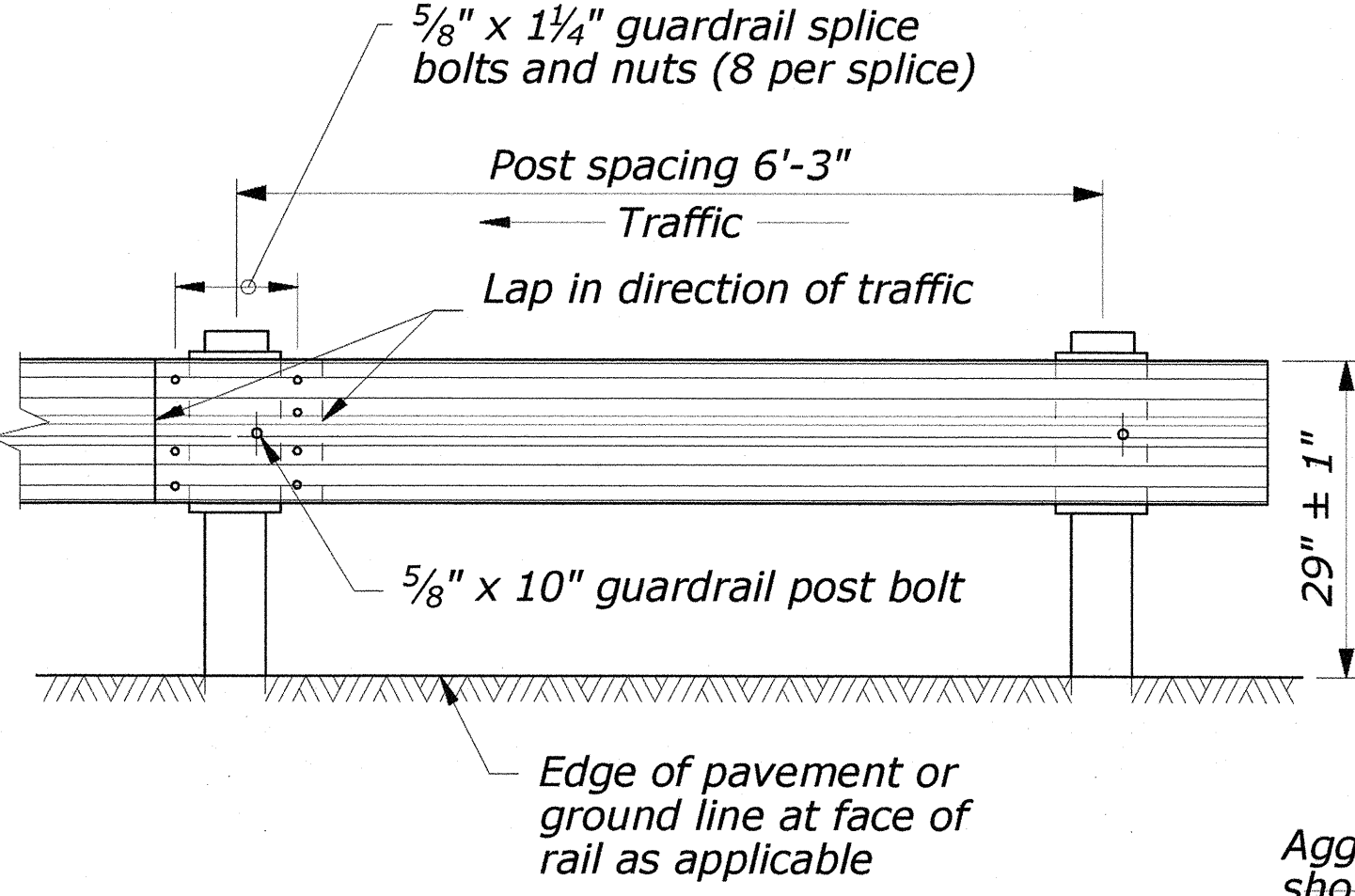
STRUCTURAL SHAPE POST
(STANDARD HOLE ARRANGEMENT)



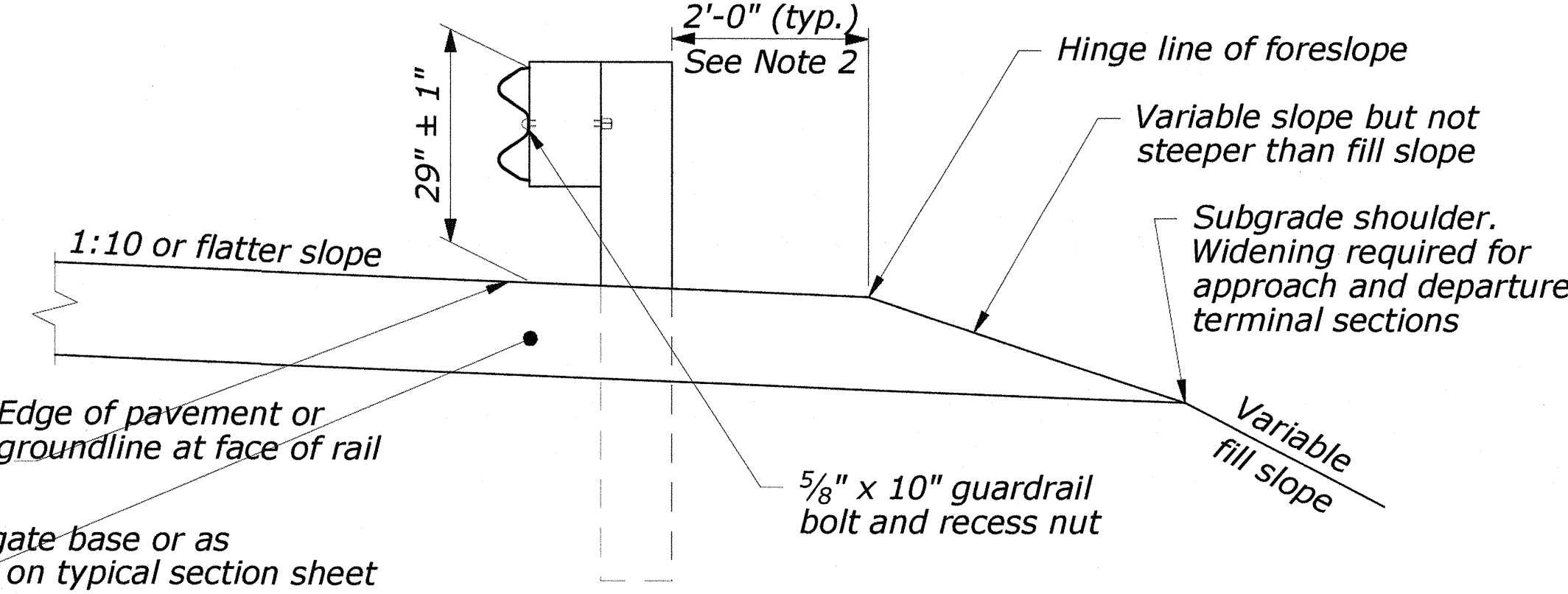
FOR SELECTION ONLY
EXPIRATION DATE 04/30/2018

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U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL LANDS HIGHWAY OFFICE	
U.S. CUSTOMARY STANDARD	
G4 W-BEAM GUARDRAIL STEEL POSTS	
STANDARD APPROVED FOR USE 1/1994	STANDARD
REVISED: 4/1994 6/2005 DRAFT: 10/2013	617-11



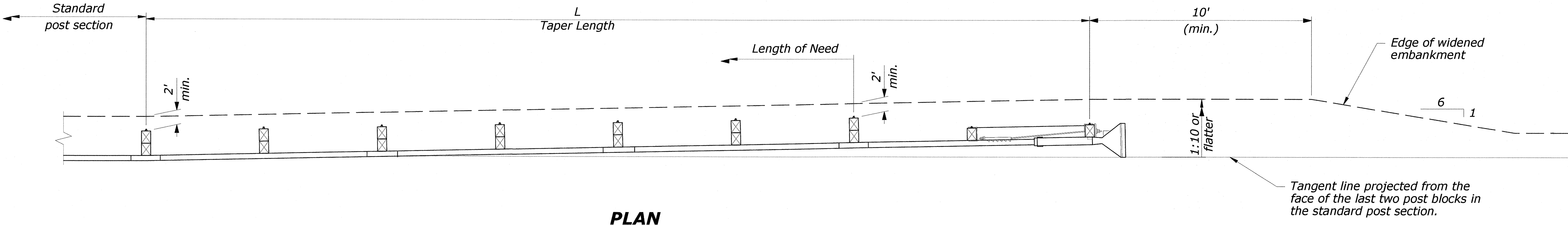
POST SPACING
STANDARD POST SECTION



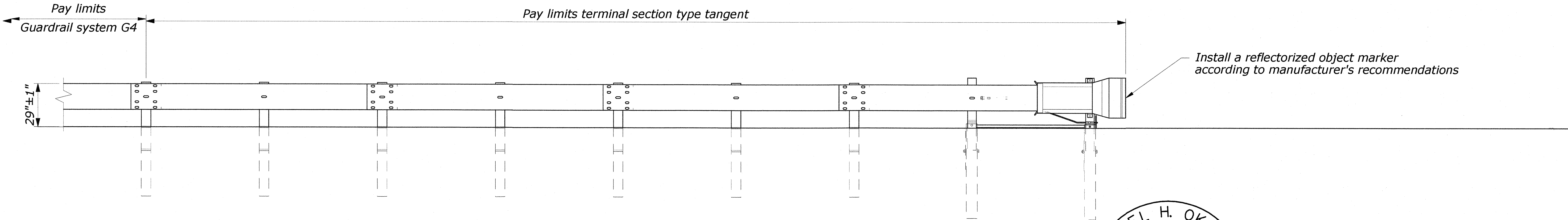
TYPICAL GUARDRAIL CROSS SECTION

NOTE:

- 1. Details shown are to be used as a general guide since manufacturer's details may vary. Install a tangent G4 W-beam guardrail terminal that meets NCHRP-350 or MASH requirements per manufacturer's recommendations. Ensure that terminal meets appropriate test level for the project.
- 2. Install terminal at a 1:25 taper or flatter, to position the end farther away from the edge of the shoulder, or use a taper per manufacturer's recommendations.
- 3. See manufacturer's drawings for other details.

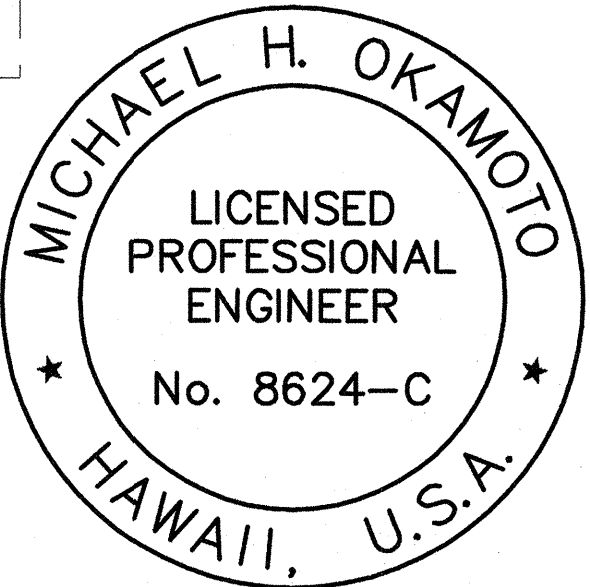


PLAN



ELEVATION

TEST LEVEL	L (ft)
2 (≤ 45 mph)	25
3 (> 45 mph)	37.5



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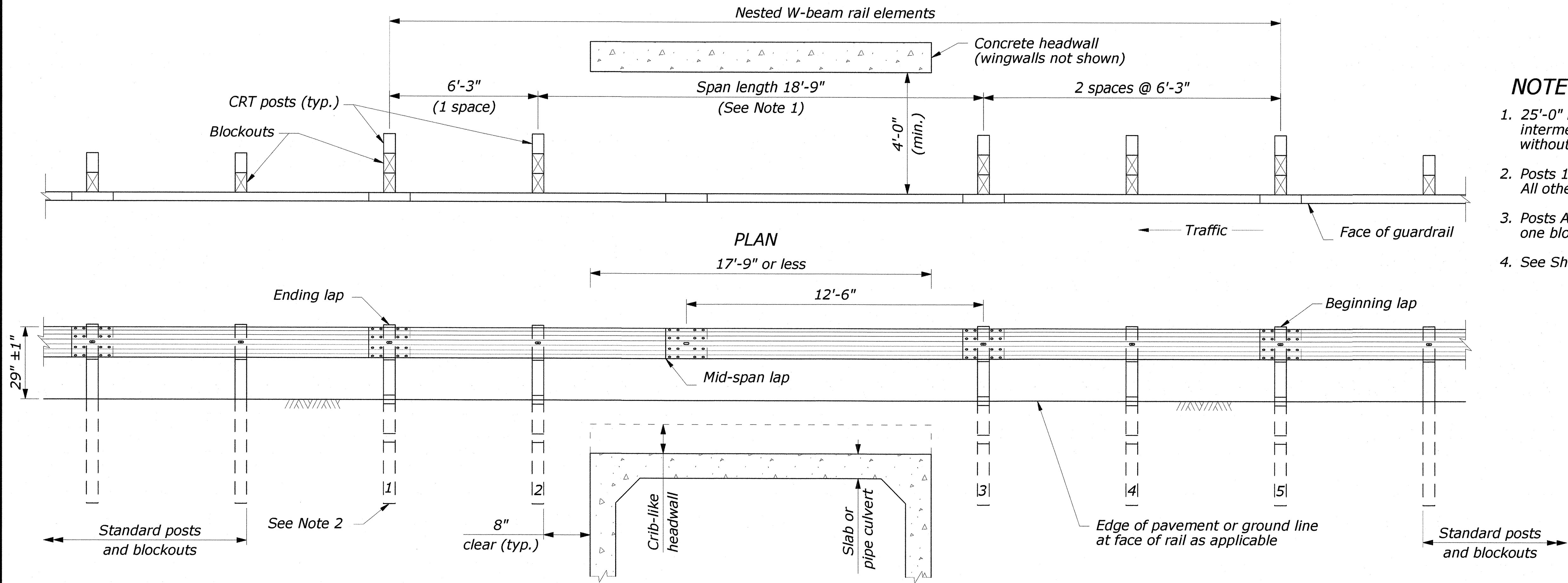
Michael H. Okamoto

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NO SCALE

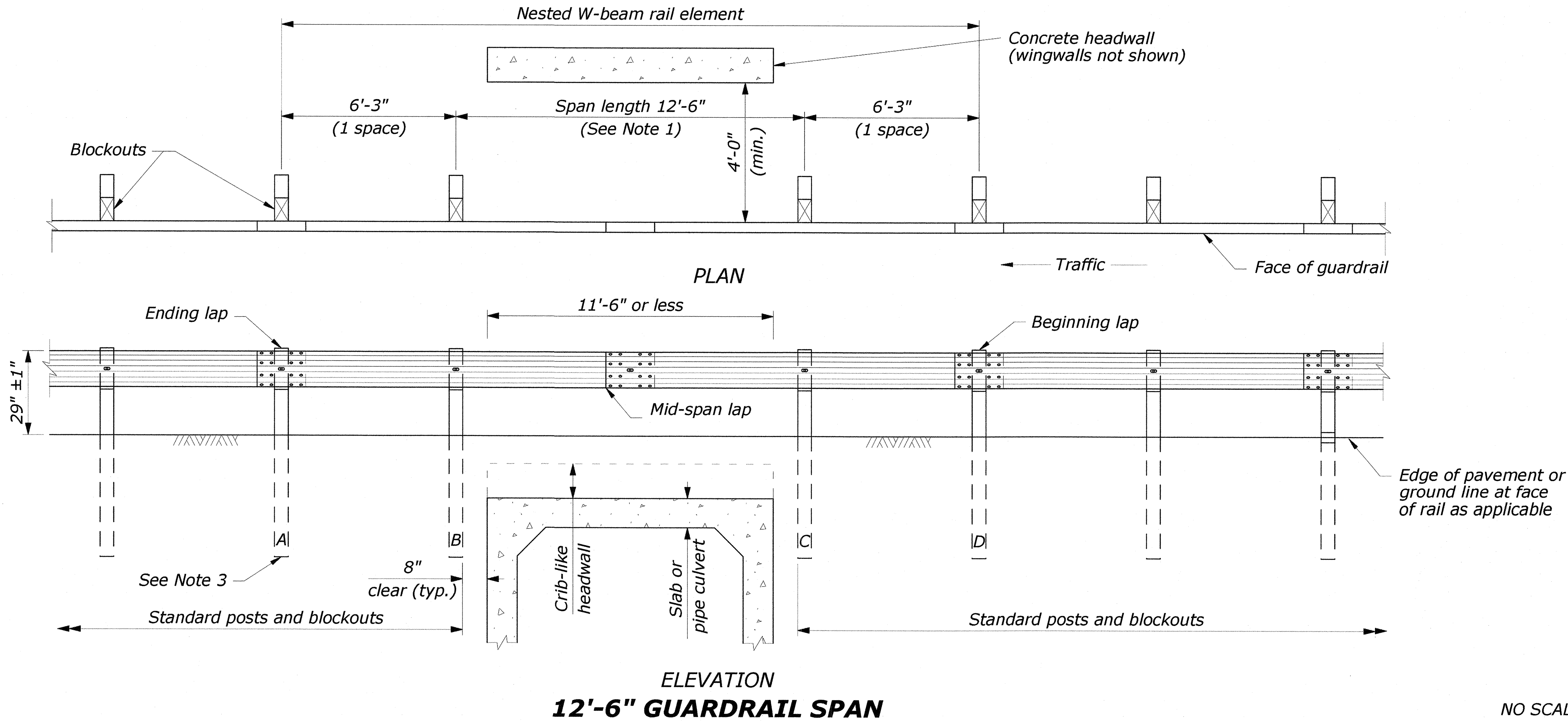
U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL LANDS HIGHWAY OFFICE	
U.S. CUSTOMARY STANDARD	
G4 W-BEAM GUARDRAIL TYPE TANGENT TERMINAL	
	STANDARD 617-20

STATE	PROJECT	SHEET NO.
HI	HI STP H1(1)	T13



NOTE:

1. 25'-0" rail lengths may be used to eliminate the intermediate lap without a post. Do not place a lap without a post unless needed due to gap length.
2. Posts 1 thru 5 are CRT posts with two blockouts. All other posts are wood or steel.
3. Posts A thru D are standard wood posts with one blockout. All other posts are wood or steel.
4. See Sheet 2 of 2 for additional details.



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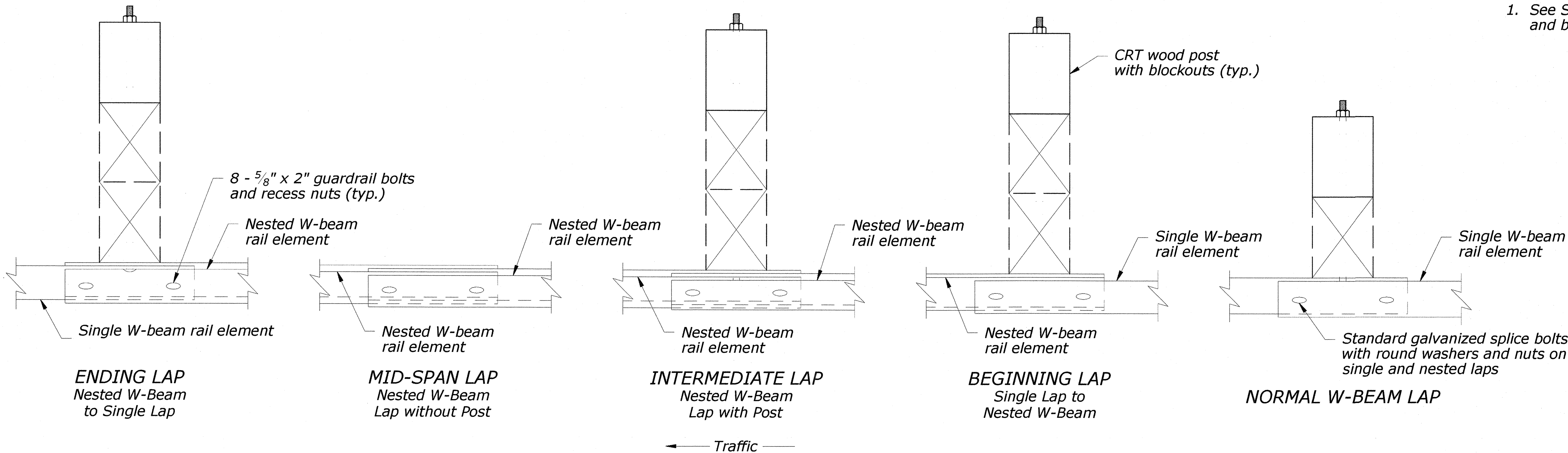
U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL LANDS HIGHWAY OFFICE	
U.S. CUSTOMARY STANDARD G4 W-BEAM GUARDRAIL LONG SPAN SYSTEM, TL-2 Sheet 1 of 2	
STANDARD APPROVED FOR USE 1/1994 REVISED: 4/1994 6/2005 DRAFT: 9/2014	STANDARD 617-24

NO SCALE

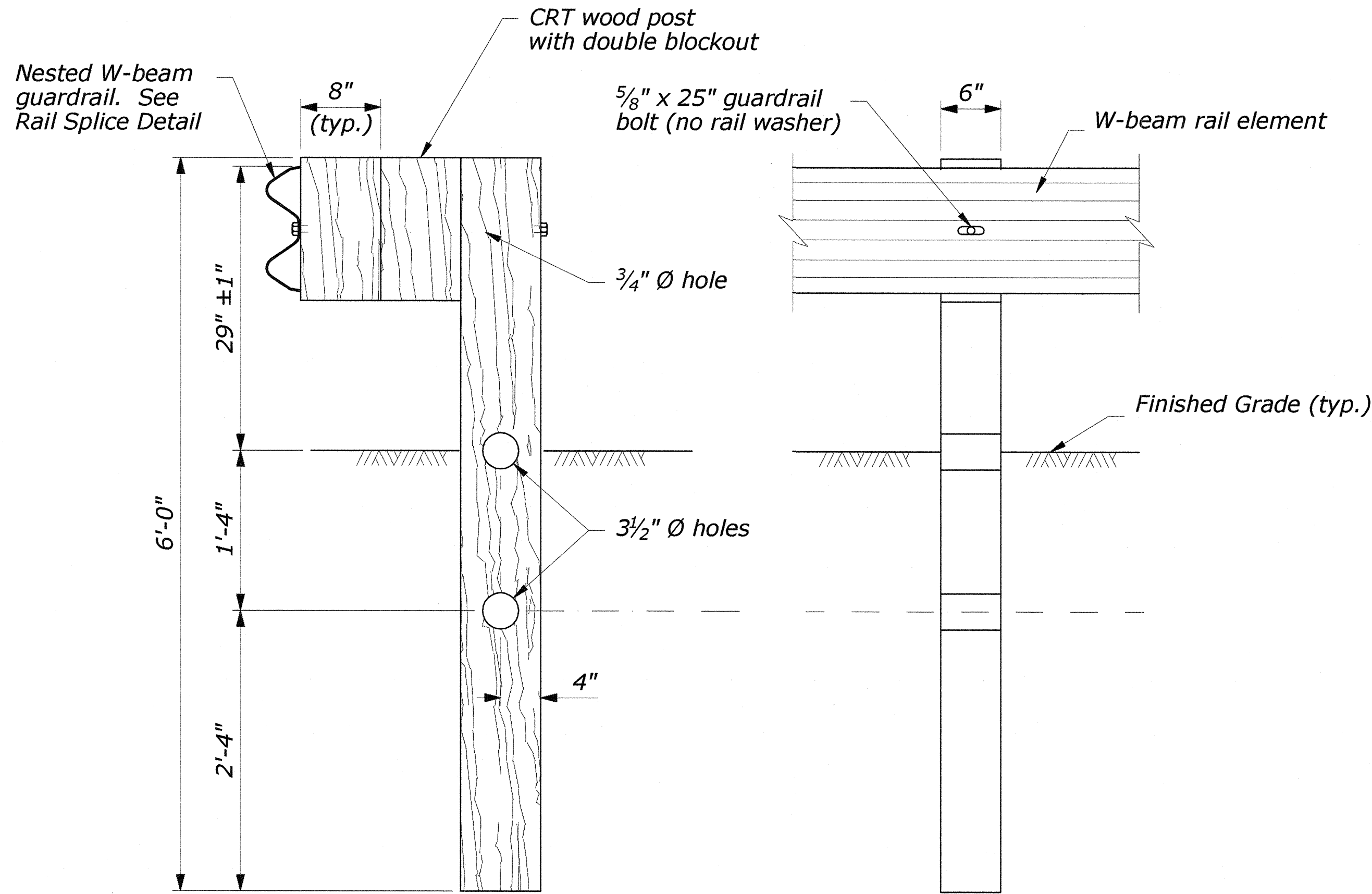
STATE	PROJECT	SHEET NO.
HI	HI STP H1(1)	T14

NOTE:

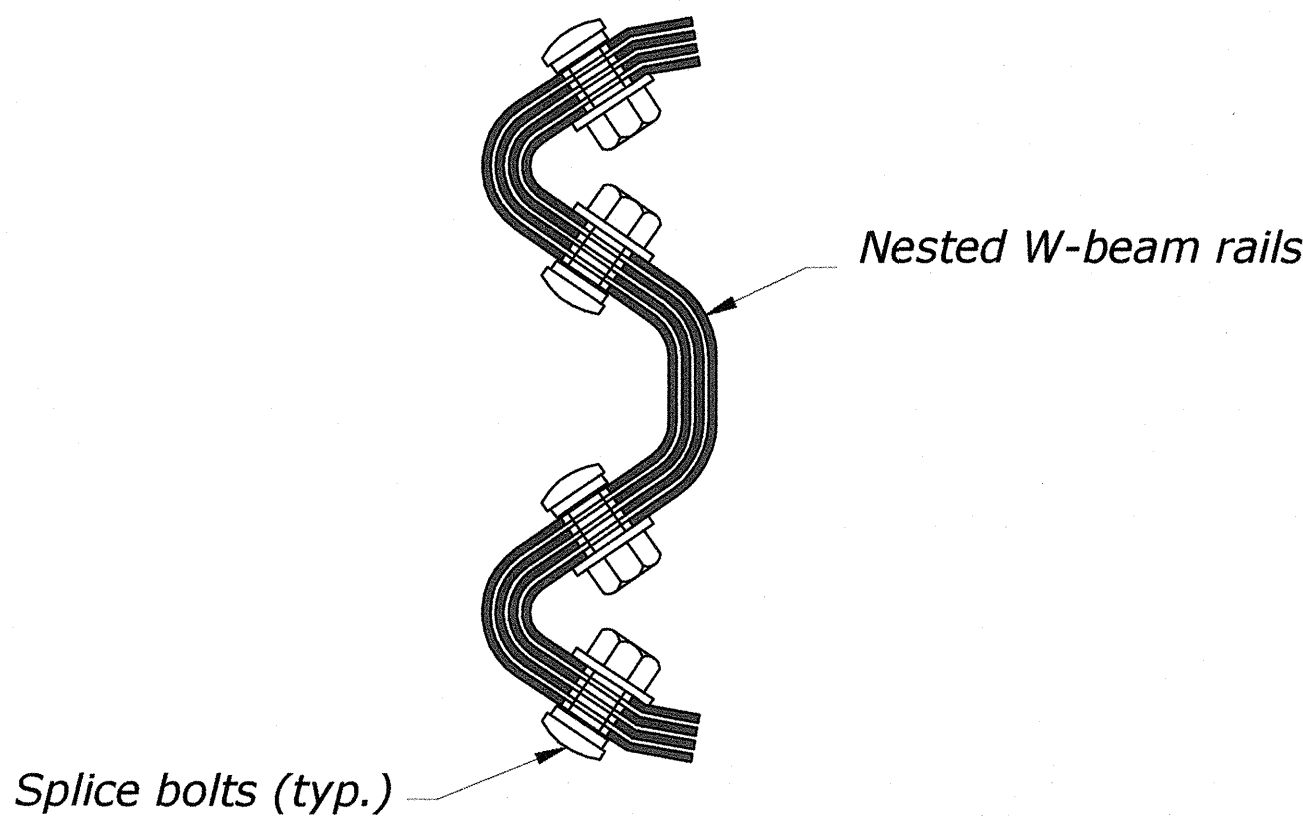
- See Standard 617-10 for standard wood post and blockout details.



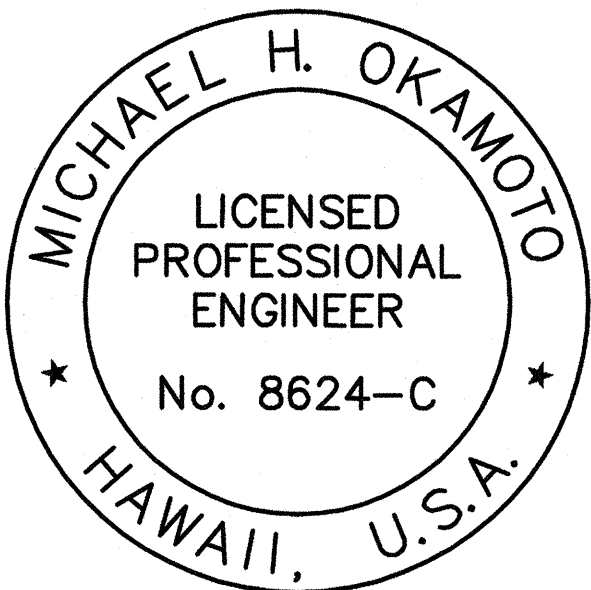
LAPPING DETAILS



CRT POST DETAIL



**RAIL SPlice DETAIL
AT MID-SPAN LAP**



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U.S. CUSTOMARY STANDARD
**G4 W-BEAM GUARDRAIL
LONG SPAN SYSTEM, TL-2**

Sheet 2 of 2

STANDARD APPROVED FOR USE 1/1994

4/1994 6/2005
DRAFT: 9/2014

STANDARD

617-24

NO SCALE