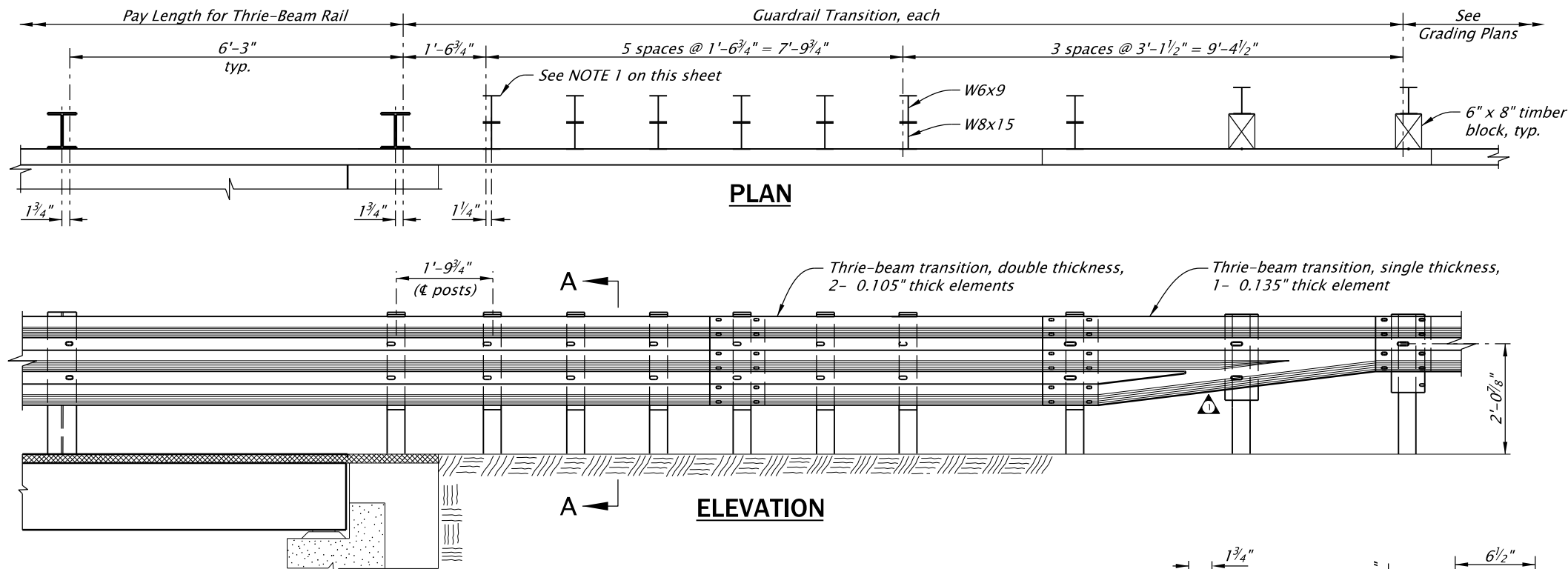




NOTE 1
Transition posts may be steel W6x9 or timber 8"x 8".
All posts to be of same material.
See drawing BR203 for Thrie-Beam blockouts.

GENERAL NOTES
Provide steel posts and plates conforming to AASHTO Specification M183 (ASTM A36), unless noted otherwise.

Provide anchor bolts conforming to ASTM A325 (AASHTO M164).

Provide guardrail hardware as shown on Std. Dwgs. RD405 and RD410.

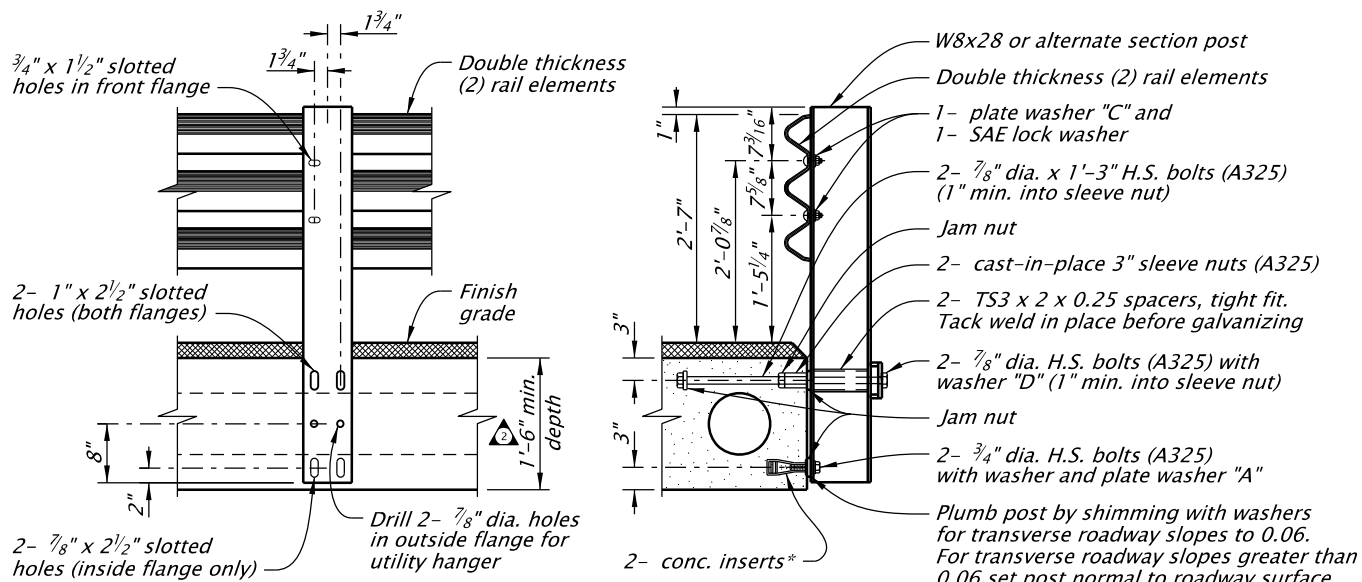
Hot dip galvanize all structural steel and hardware after fabrication.

Fabricate railing to the horizontal and vertical alignment of the structure. Install posts normal to grade. When wearing surface thickness varies due to beam camber and/or superelevation, vary rail post lengths to provide uniform rail height.

Tap nuts and inserts 0.0021 ^{+0.01}/_{-0.00} oversize after galvanizing in accordance with ASTM A563.

Tighten upper high strength post bolts 1/6 turn past snug tight condition. Tighten lower high strength post bolts 1/3 turn past snug tight condition.

Do not use this rail for 12" thick slab.



BACK ELEVATION

SIDE ELEVATION

POST DETAILS: SIDE MOUNT

NOTE
Field ream bolt holes in double thickness rail at splice locations. Repair damaged coating according to Specifications.

* **CONCRETE INSERTS**

Hot-dip galvanized expanded coil concrete inserts with closed-back ferrule threaded to receive 3/4" dia., Grade 36 (ASTM A307).

Minimum insert length= 4 1/2"
Minimum safe working load in tension= 4000 lbs.

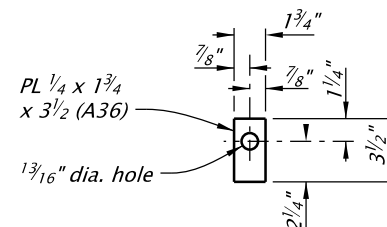


PLATE WASHER "A"

Position washer to completely cover slotted hole.

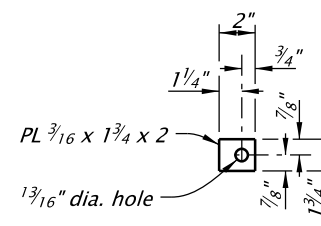


PLATE WASHER "C"

Position washer to completely cover slotted hole.

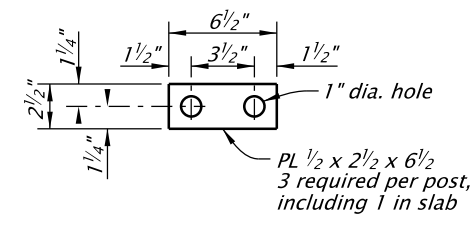
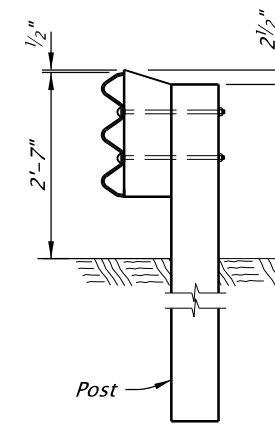
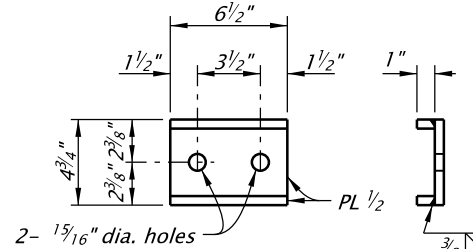


PLATE WASHER "B"



Accompanied by drawings BR203, RD405, RD410, RD480.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

THRIE-BEAM RAIL AND TRANSITION

2024

DATE	REVISION	DESCRIPTION
01-2025	Thrie-beam transition revised; CAD standards updates	
01-2026	Dimension correction on "Post Details: Side Mount"	
CALC. BOOK NO.	N/A	SDR DATE
		13-JAN-2026

BR233

Effective Date: June 1, 2026 – November 30, 2026