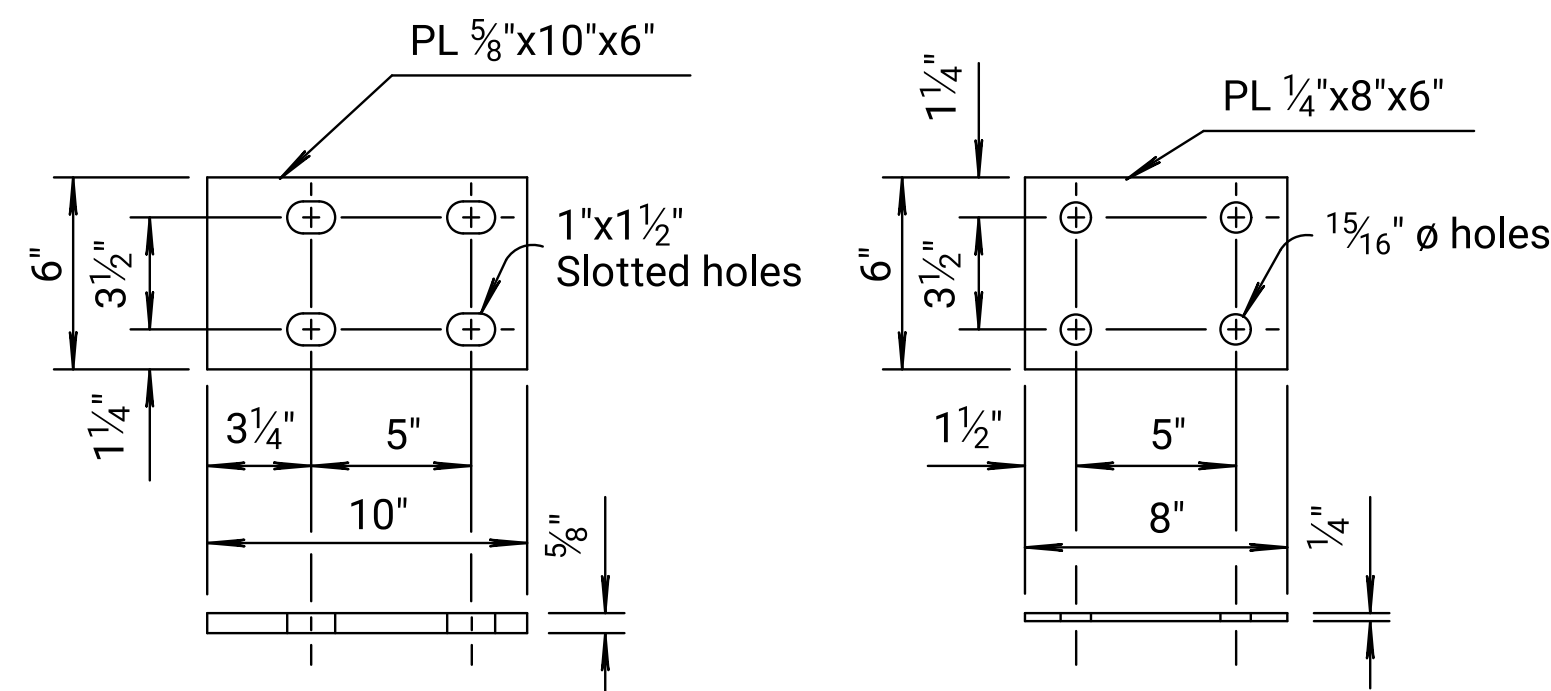
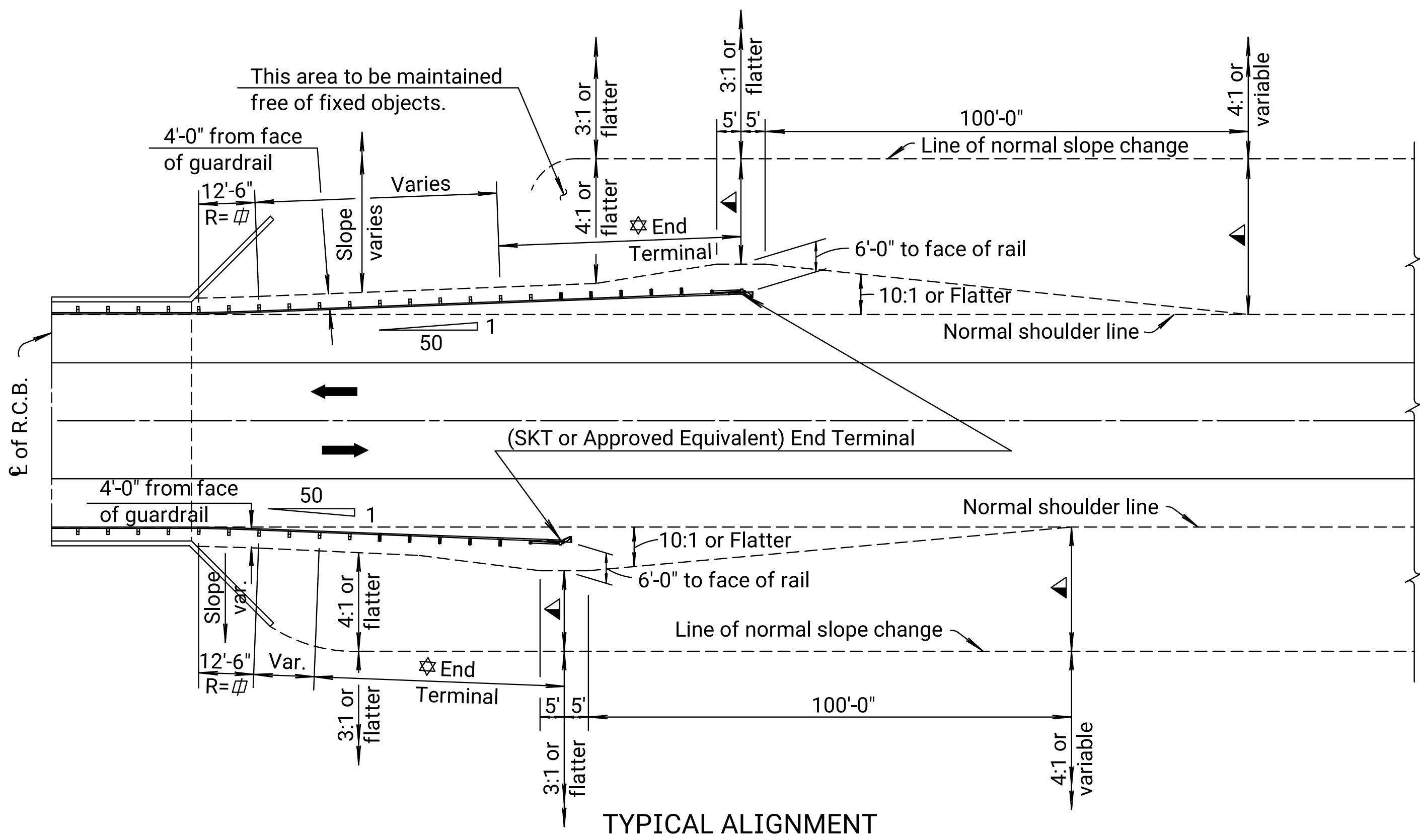


Note to Designer: Determine Guardrail length of need in accordance with the Roadside Design Guide.
L₁ length of need calculation on the typical alignment shown is measured to the P.I. of the 12'-6" curve.
Under certain conditions, the designer may elect to reduce the length of flare to include only the end terminal. Use this Standard Drawing when the parallel guardrail design is selected.

Plotted by : Kylee.Sims@ks.gov 1-AUG-2022 18:40
File : rd617.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS		0	0	



DETAIL OF BASE PLATE
DETAIL OF STEEL PLATE
PLATE DETAILS FOR ATTACHMENT ASSEMBLY

- ⌀ Radius = 625.08'
- ▲ Normal project side slope. See typical sections.
- ☆ See KDOT's 'Guardrail Auxiliary Details' Standard Drawing.

GENERAL NOTES

Guardrail posts attached to the top of a concrete culvert are steel posts only. Use wood or steel posts for the remaining posts except where a specific material is required for features shown on other standard drawings such as end terminals or guardrail at intersecting roadways.

Drill or form holes in culvert top slab as approved by the Engineer. When holes are drilled be careful to avoid excess breakage of the concrete around the hole.

See Standard Drawings RD611 for guardrail post and blockout details.

Use Standard W-Beam guardrail throughout.

Guardrail contractor will furnish and install the attachment assembly to the culvert. The installation and attachment assembly are subsidiary to the bid item "Steel Plate Guardrail".

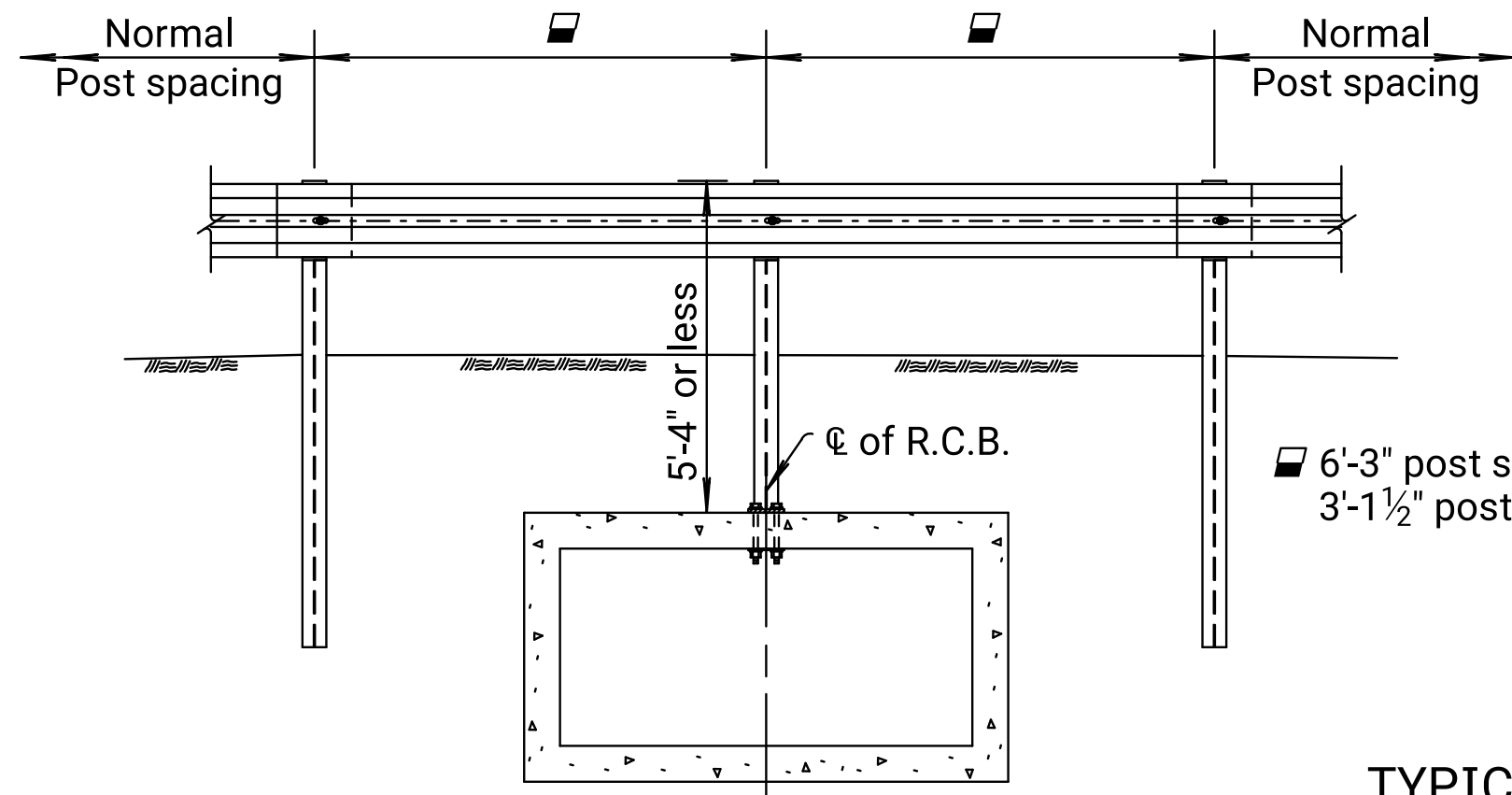
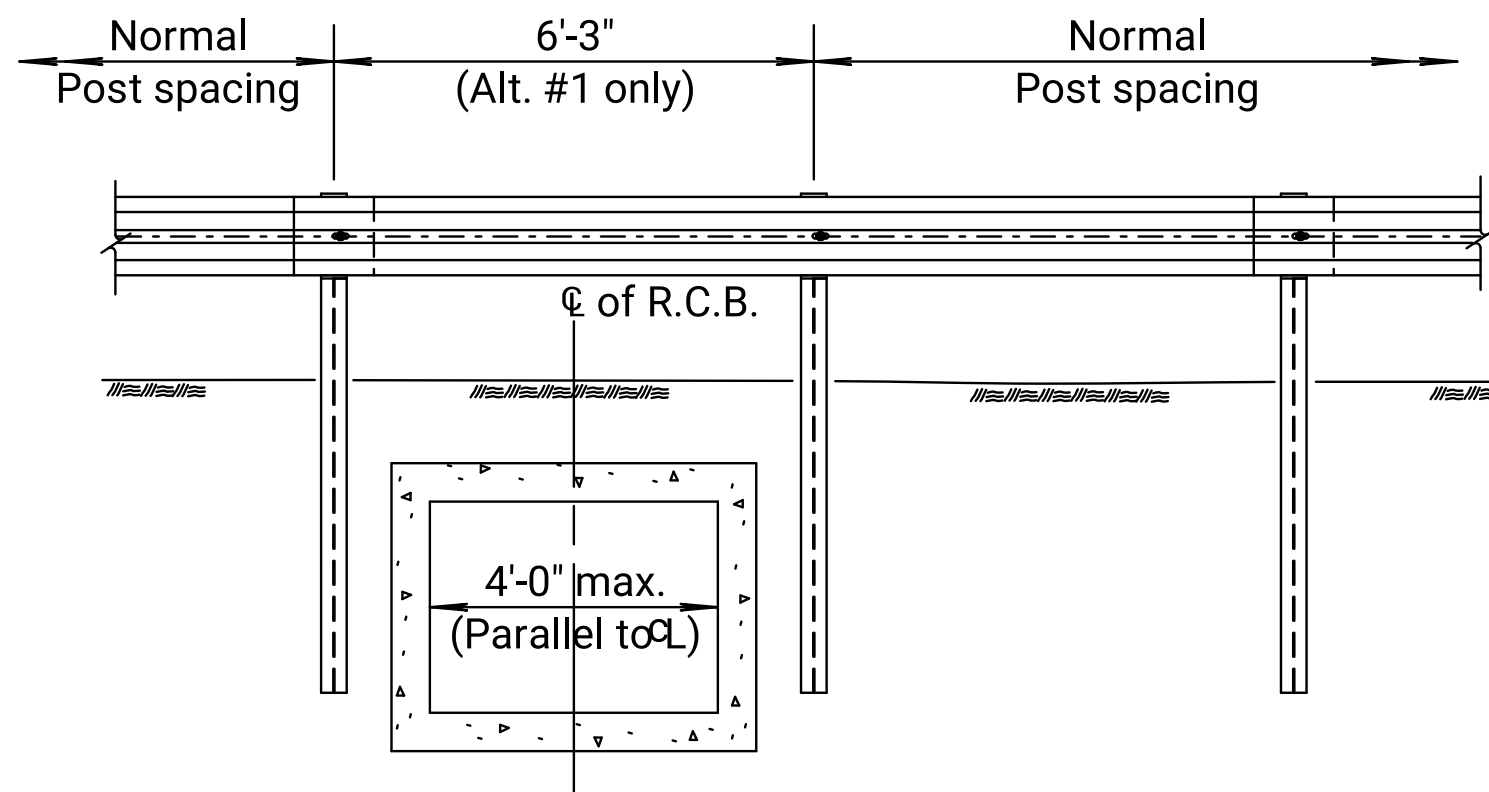
Fabricate posts and steel plates from steel meeting the requirements of the standard specifications.

Galvanize all steel parts after fabrication, see standard specifications.

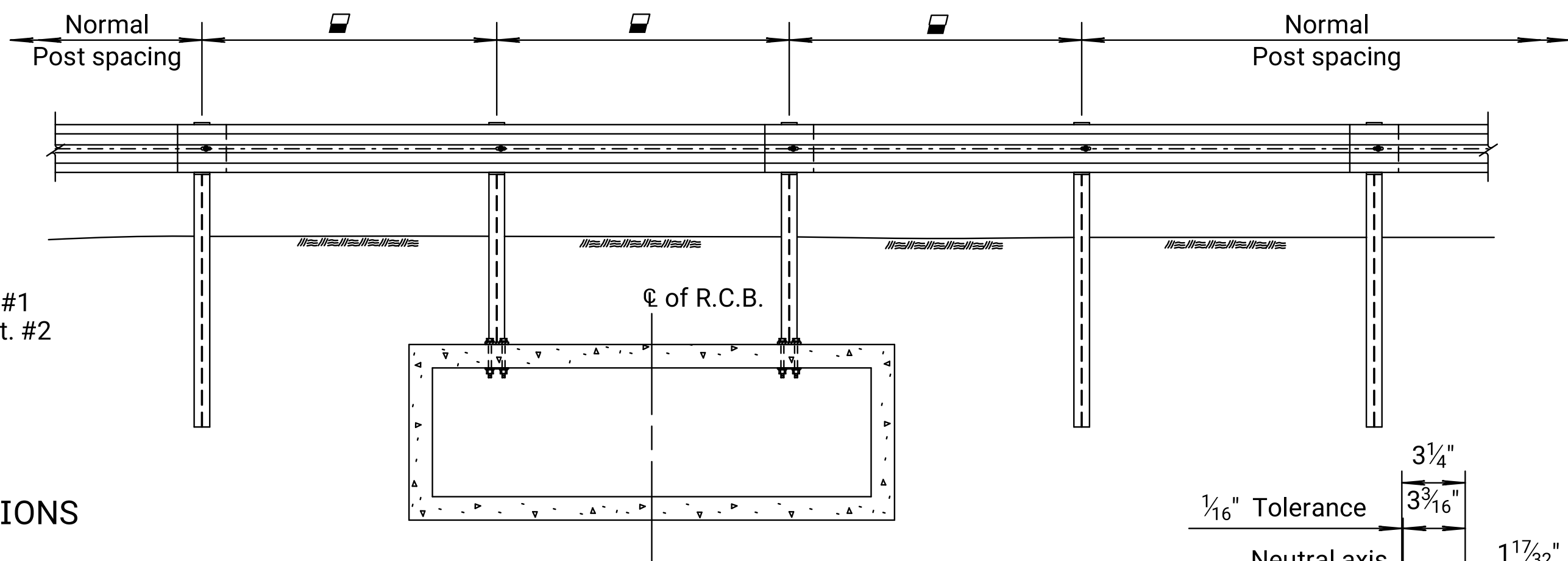
All references to culverts on this sheet refer to reinforced concrete boxes.

Shop weld guardrail post connection to base plate, see standard specifications.

Locate guardrail post to concrete culvert connections symmetrical about center line of the culvert.



6'-3" post spacing for Alt. #1
3'-1 1/2" post spacing for Alt. #2

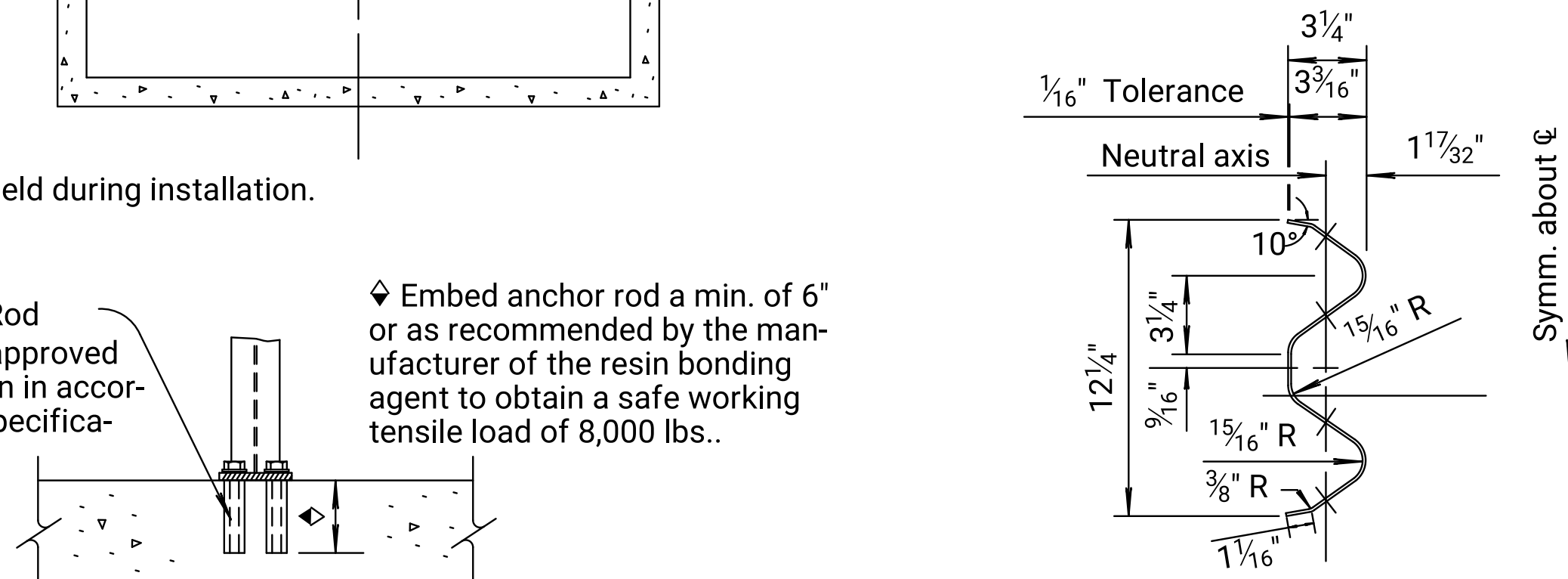


TYPICAL ELEVATIONS

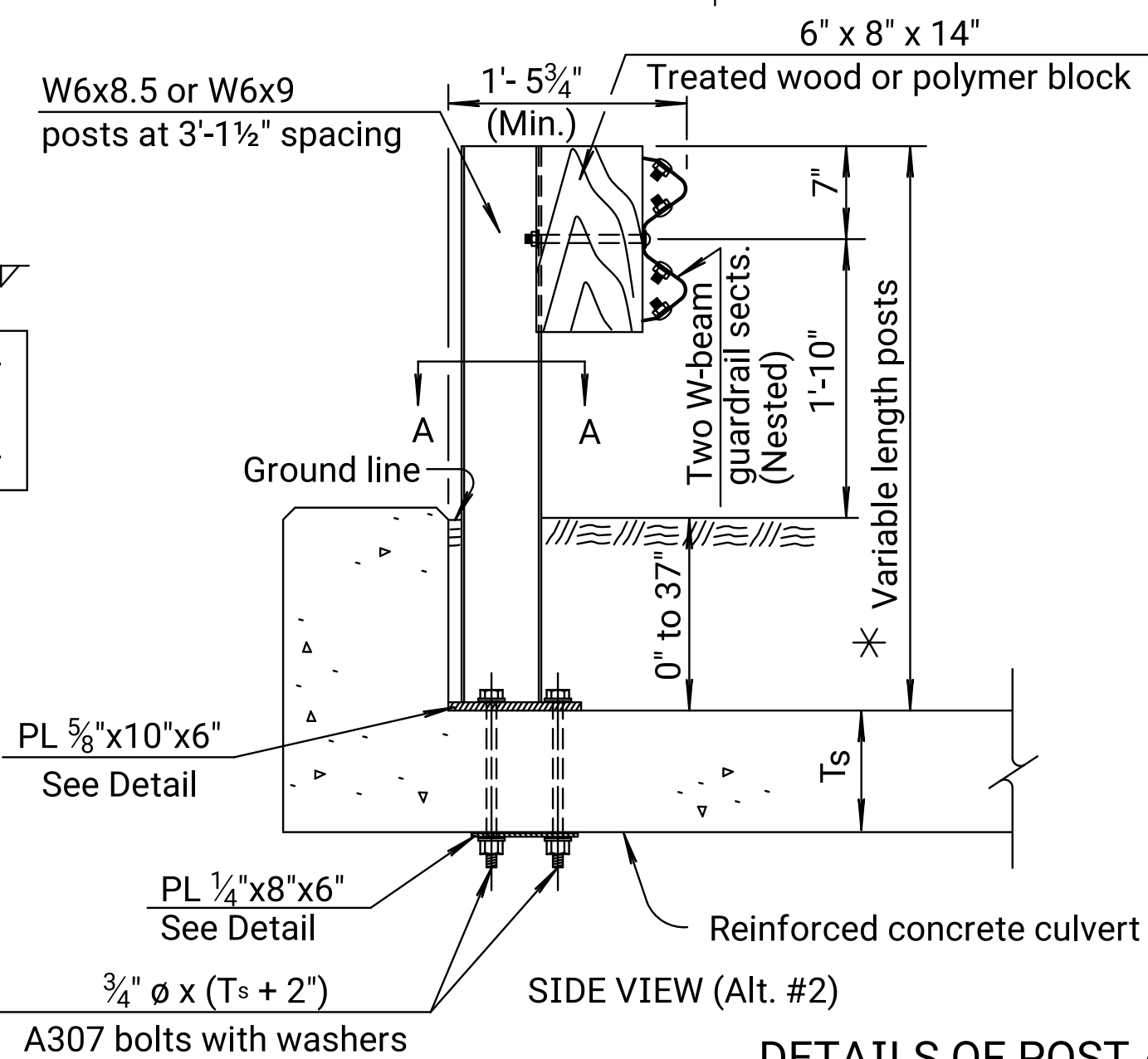
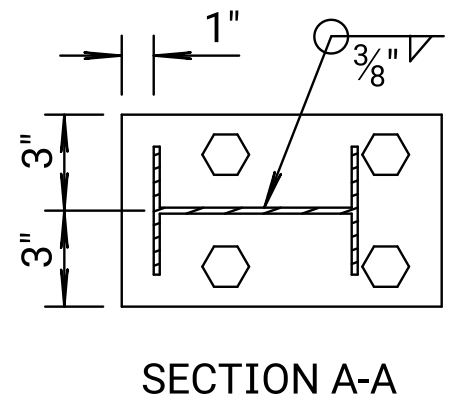
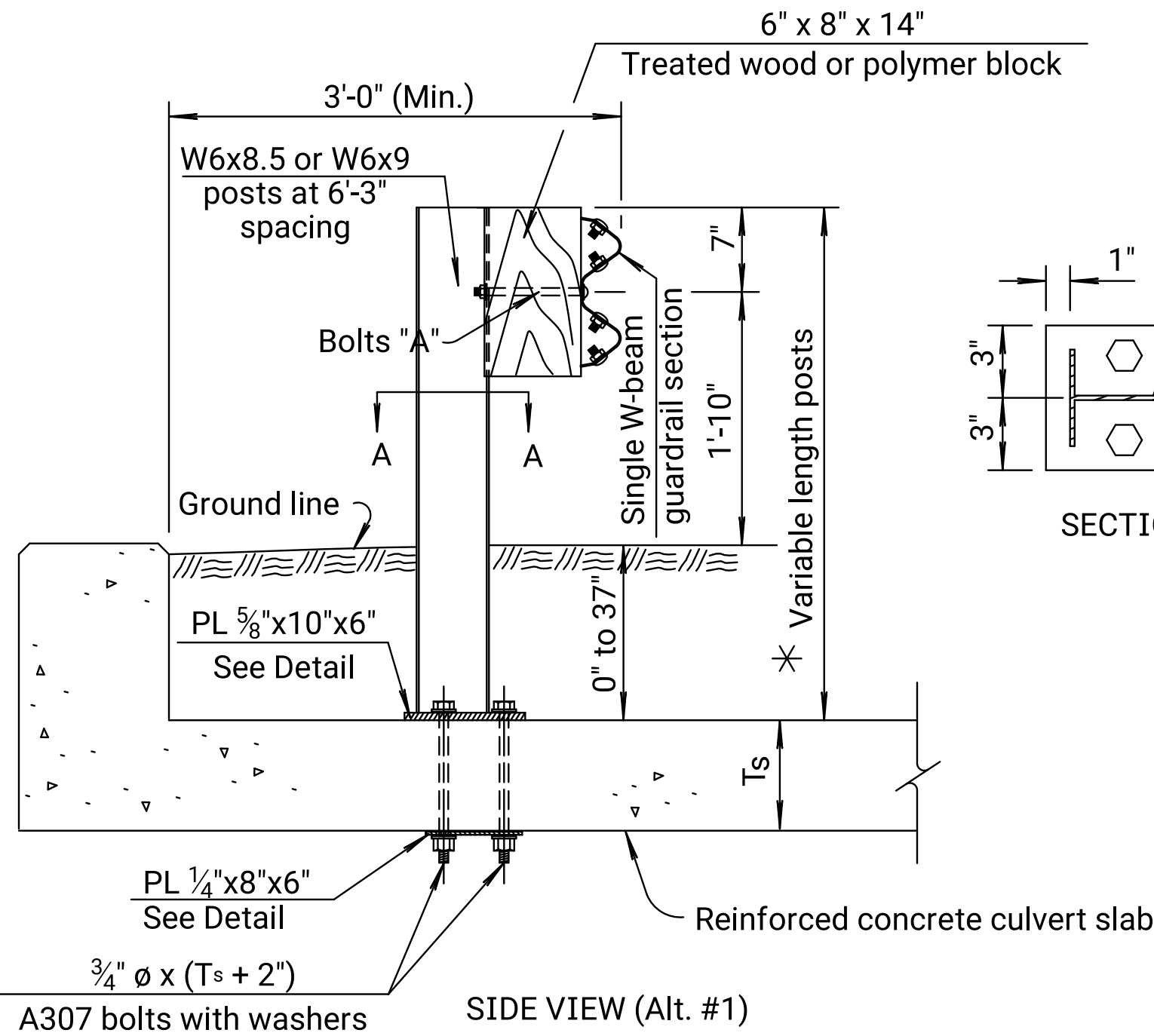
* Post length is determined by the Engineer in the field during installation.

3/4" ⌀ A36 Threaded Rod to be grouted with an approved epoxy or polyester resin in accordance with standard specifications.

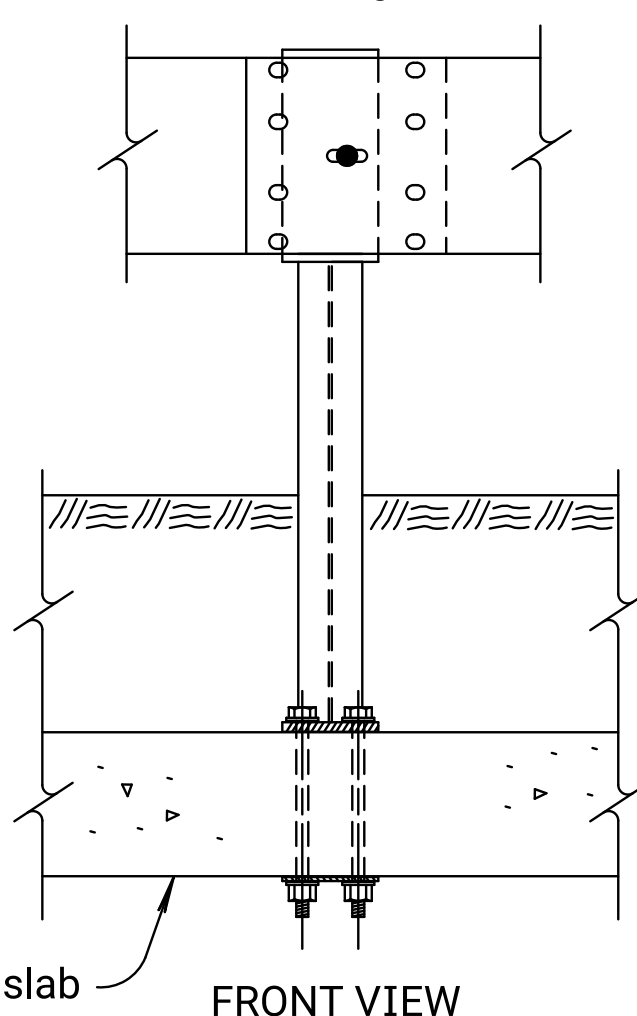
Embed anchor rod a min. of 6" or as recommended by the manufacturer of the resin bonding agent to obtain a safe working tensile load of 8,000 lbs..



TYPICAL W-BEAM RAIL



DETAILS OF POST ATTACHMENT



ALTERNATE POST ATTACHMENT
(This attachment to be used only when bolting through the top slab is not practical.)

14	05-05-17	Removed X-LITE	A.L.R.	S.W.K.
13	12-14-10	Rev. Notes (28" Rail Height)	S.W.K.	J.O.B.
12	02-02-04	Add. Polymer Blockout (End Term. Cpt.)	S.W.K.	J.O.B.
NO.	DATE	REVISIONS	BY	APPD
KANSAS DEPARTMENT OF TRANSPORTATION				
ALIGNMENT (PARALLEL) & DETAILS FOR GUARDRAIL PROTECTION ON LOW FILL CULVERTS				
RD617				
FHWA APPROVAL		10-12-17	APPD.	Scott W. King
DESIGNED	DETAIL	QUANTITIES	TRACED	
DESIGN CK.	DETAIL CK.	QUAN. CK.	TRACE CK.	