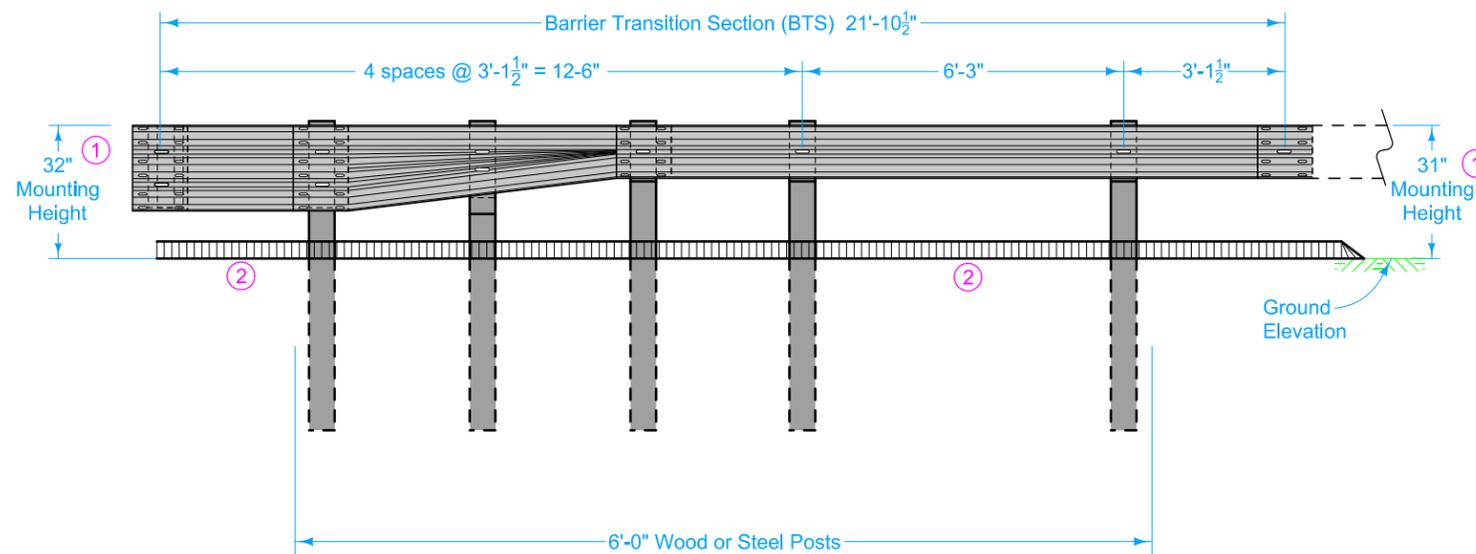
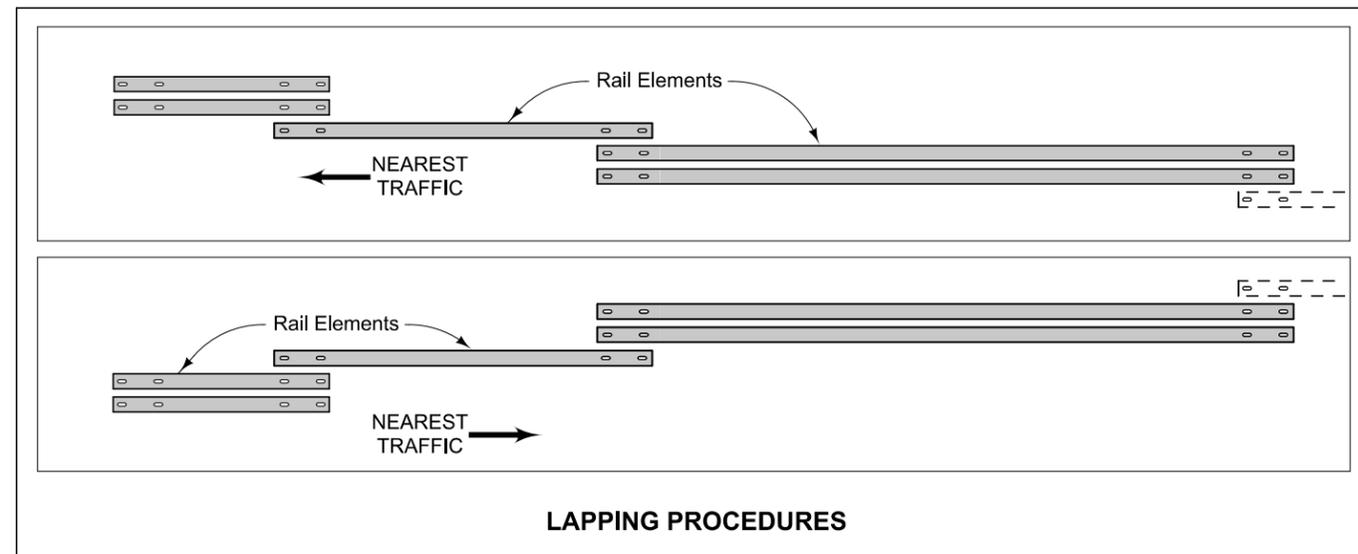


PLAN



ELEVATION



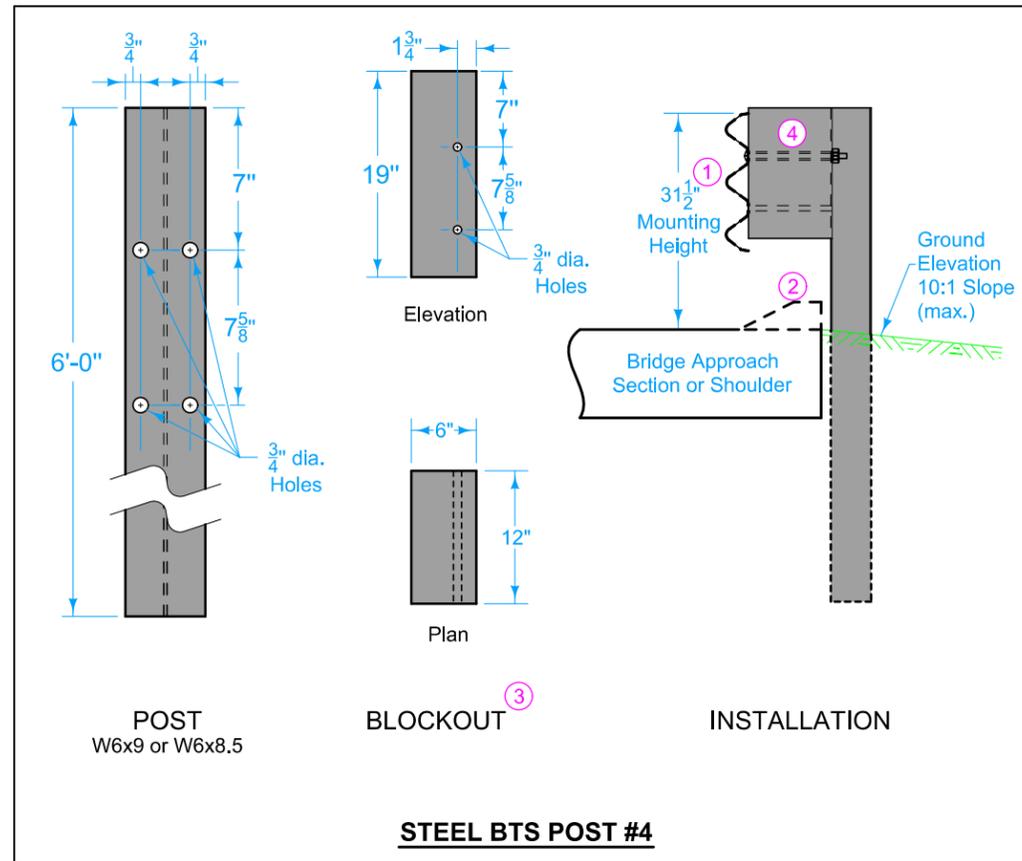
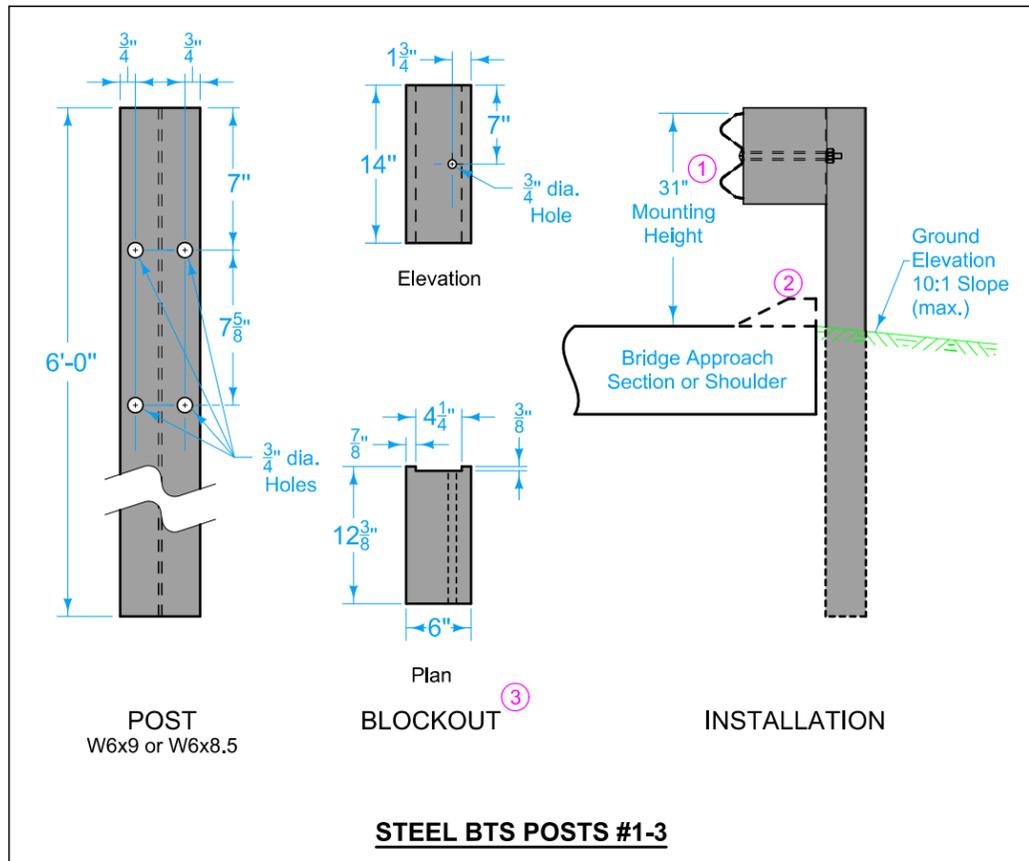
At Bridge End Drains, cut Scour Protection (Transition Mat and Turf Reinforcement Mat) or remove rock as required to place post(s) such that Bridge End Drains abut post(s).

- ① Guardrail mounting height at barrier connection is 32 inches. Transition guardrail mounting height down to 31 inches at BTS Post #3.
- ② Possible 4 inch sloped curb. See project plans.

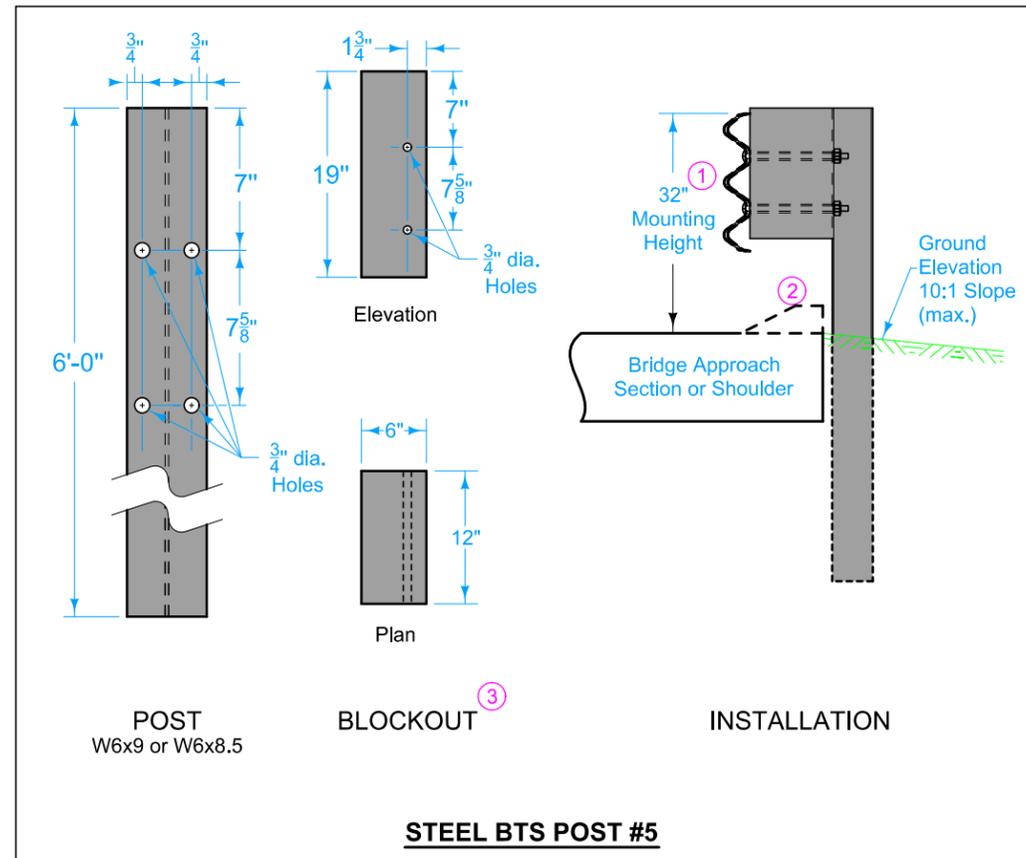
Possible Contract Item:
Steel Beam Guardrail Barrier Transition Section, BA-221

- Materials included in the Contract Item:
- Steel Post Option:
- (5) W6x9 x 6'-0" posts
 - (2) 6" x 12" x 19" blockouts
 - (3) 6" x 12" x 14" blockouts
- Wood Post Option:
- (5) 6" x 8" x 6'-0" posts
 - (2) 6" x 12" x 19" blockouts
 - (3) 6" x 12" x 14" blockouts
- (1) Asymmetrical Transition Section
 - (2) 3'-1½" Thrie-Beam rail sections
 - (2) 12'-6" W-Beam rail sections
- Approved bolts, nuts, and washers
Refer to BA-200 for guardrail components

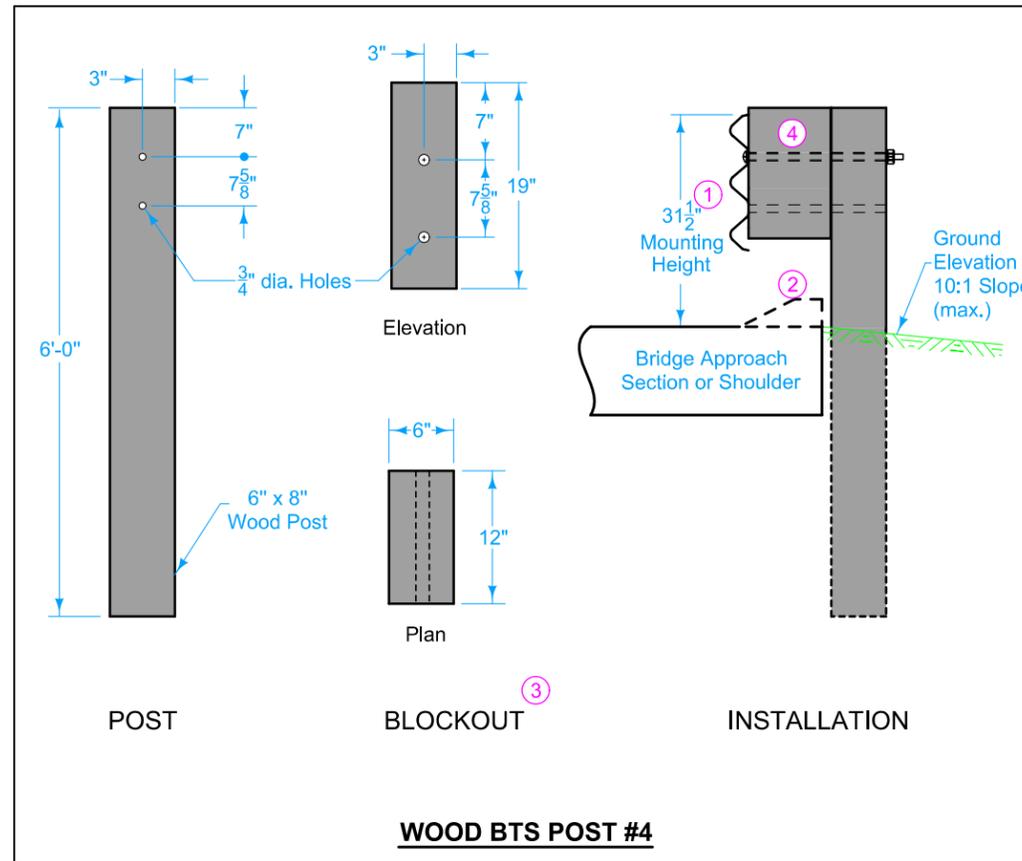
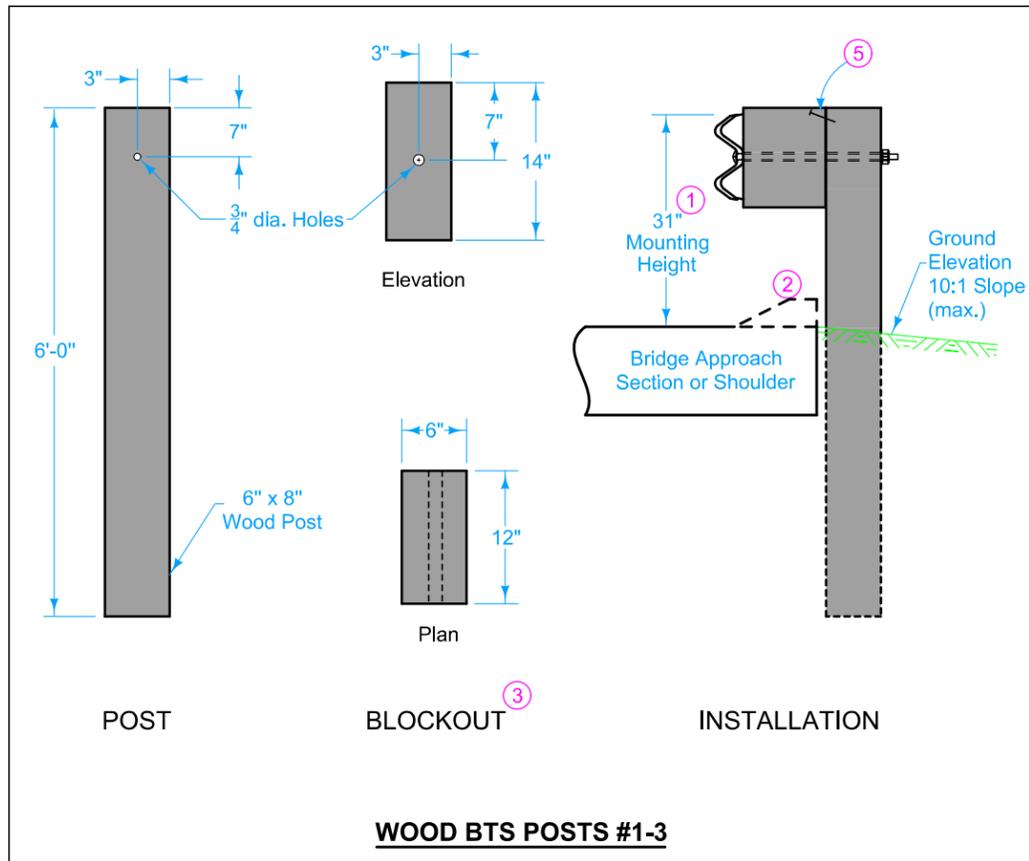
	REVISION	
	2	4-19-22
STANDARD ROAD PLAN		BA-221
REVISIONS: Revised materials note.		SHEET 1 of 3
 APPROVED BY DESIGN METHODS ENGINEER		
STEEL BEAM GUARDRAIL BARRIER TRANSITION SECTION (MASH TL-2)		



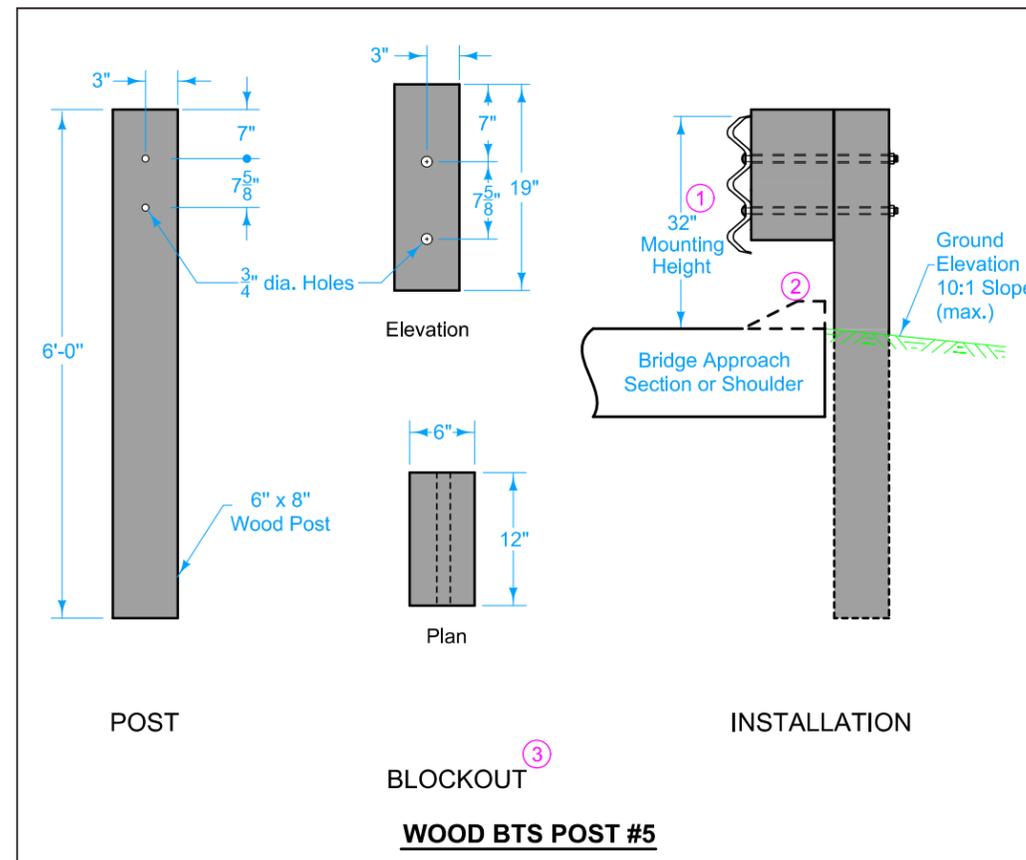
- ① Guardrail mounting height at barrier connection is 32 inches. Transition guardrail mounting height down to 31 inches at BTS Post #3.
- ② Possible 4 inch sloped curb. See project plans.
- ③ Wood or composite only. Steel blockouts will not be allowed.
- ④ Place bolt in top hole only.



	REVISION	
	2	4-19-22
STANDARD ROAD PLAN		BA-221
		SHEET 2 of 3
REVISIONS: Revised materials note.		
APPROVED BY DESIGN METHODS ENGINEER		
STEEL BEAM GUARDRAIL BARRIER TRANSITION SECTION (MASH TL-2)		



- ① Guardrail mounting height at barrier connection is 32 inches. Transition guardrail mounting height down to 31 inches at BTS Post #3.
- ② Possible 4 inch sloped curb. See project plans.
- ③ Wood or composite only. Steel blockouts will not be allowed.
- ④ Place bolt in top hole only.
- ⑤ 16d nail to prevent blockout rotation.



IOWA DOT	REVISION	
	2	4-19-22
STANDARD ROAD PLAN		BA-221
REVISIONS: Revised materials note.		SHEET 3 of 3
 APPROVED BY DESIGN METHODS ENGINEER		
STEEL BEAM GUARDRAIL BARRIER TRANSITION SECTION (MASH TL-2)		