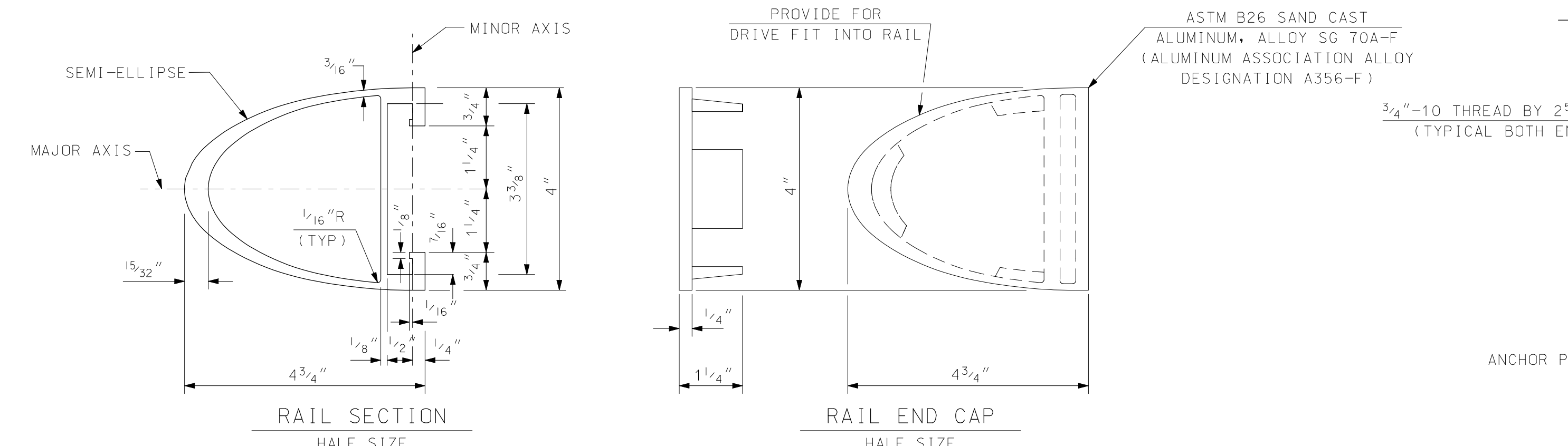
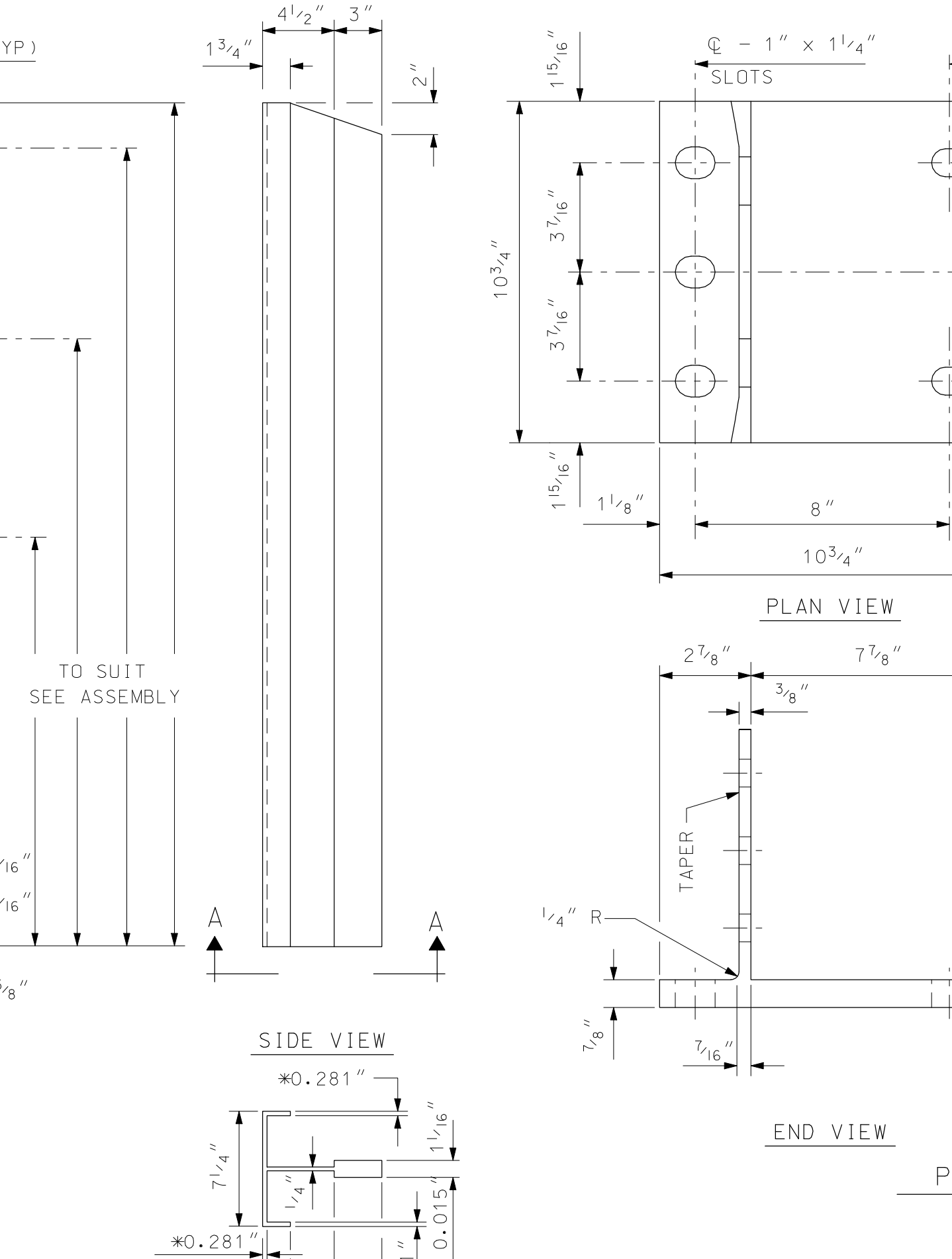
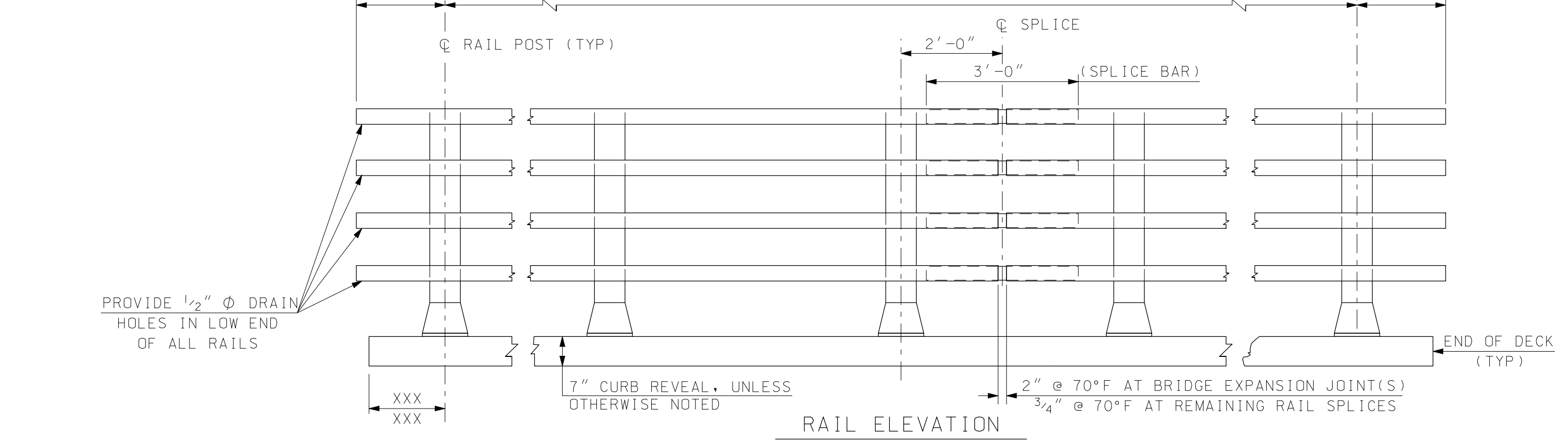


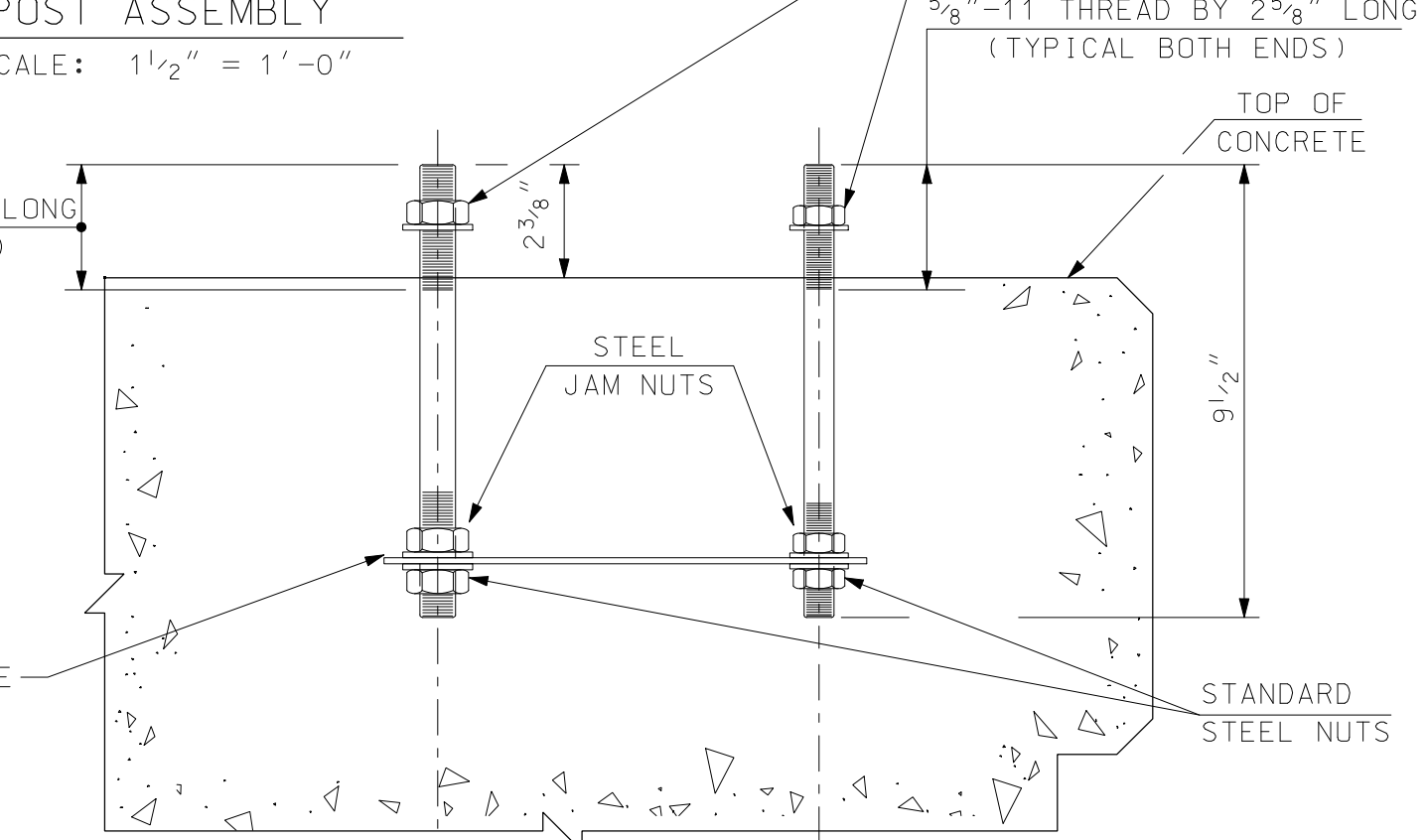
**POST ASSEMBLY**  
SCALE: 1 1/2" = 1'-0"



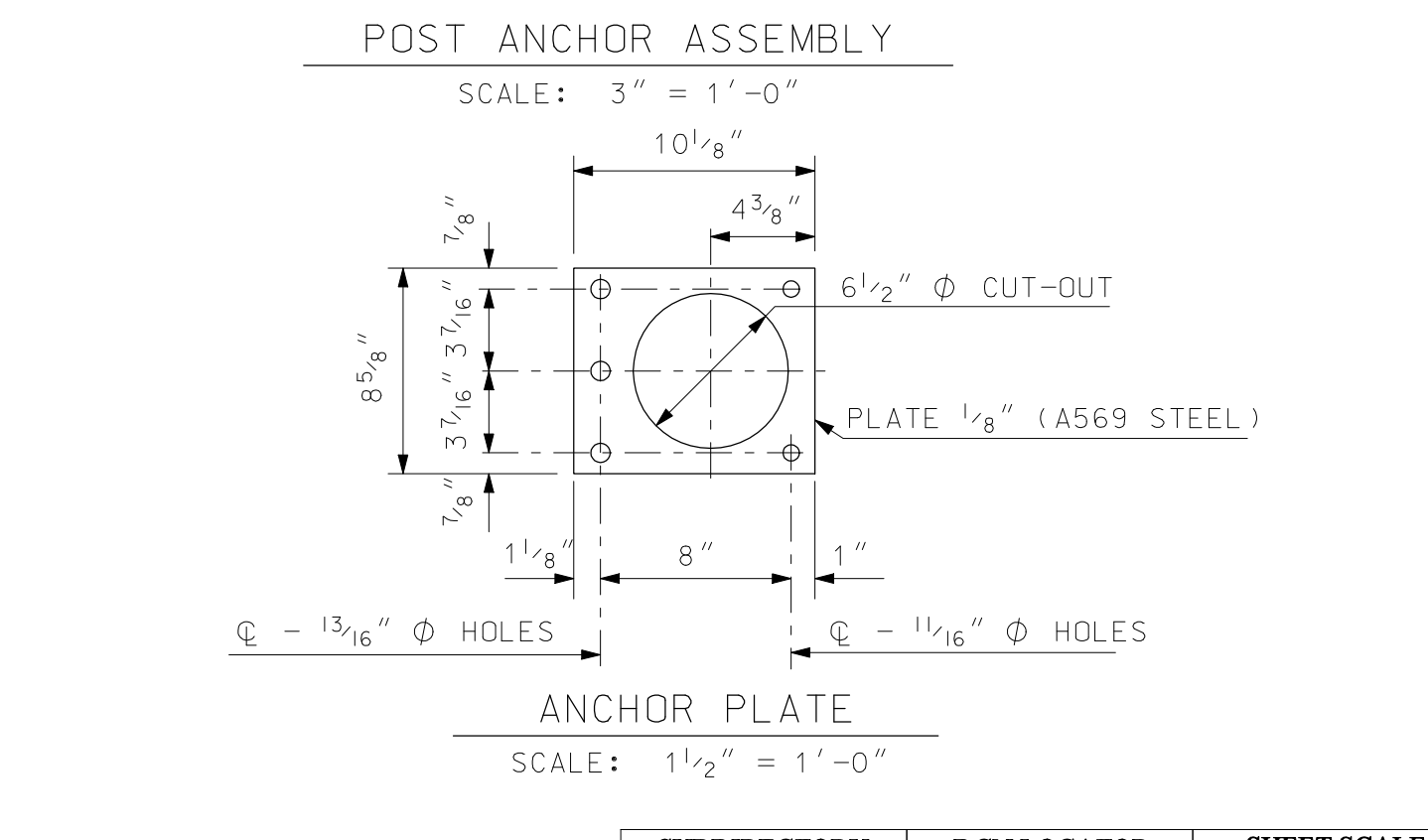
**RAIL ELEVATION**  
NOT TO SCALE



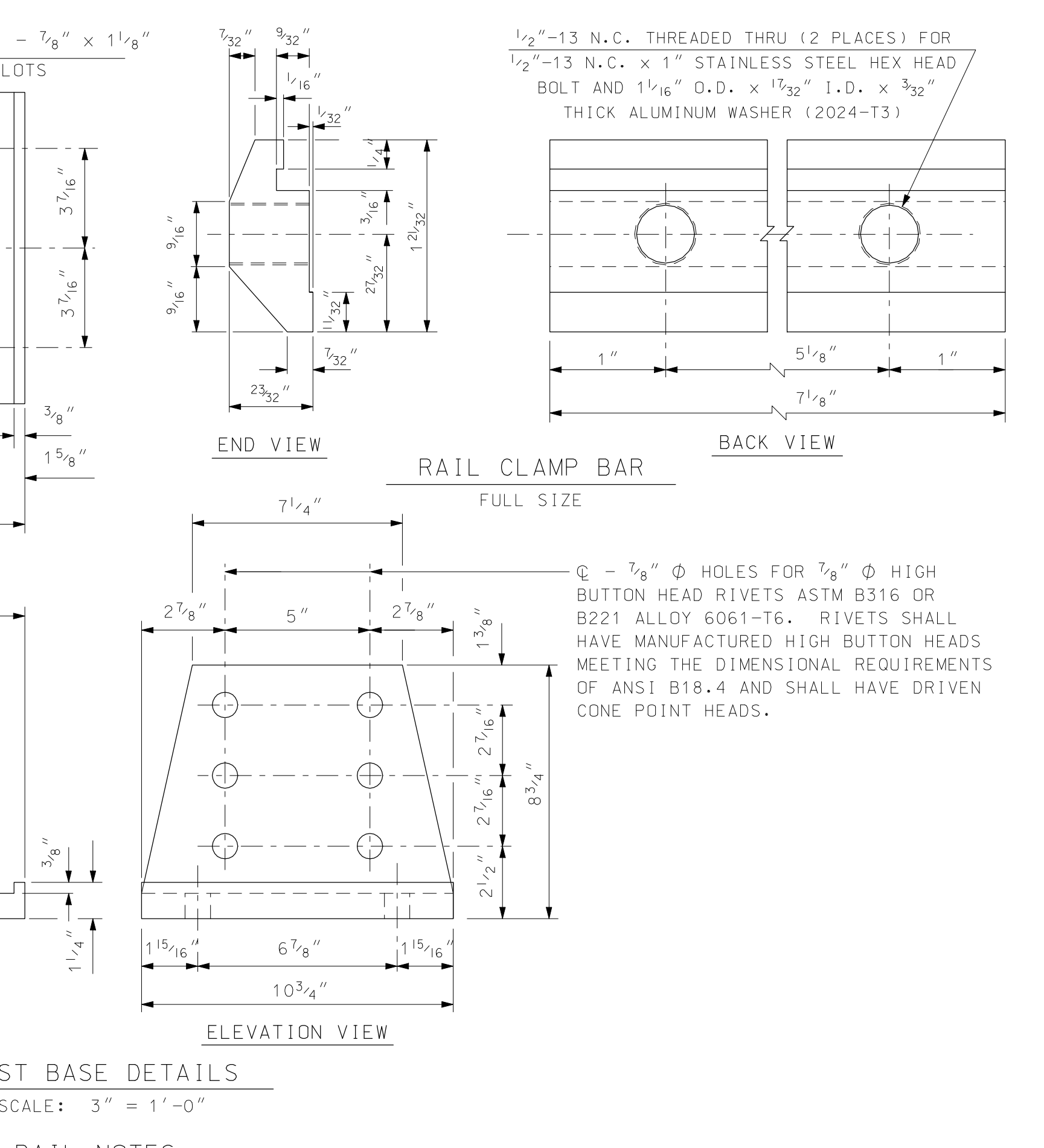
**POST ASSEMBLY**  
SCALE: 1 1/2" = 1'-0"



**POST ANCHOR ASSEMBLY**  
SCALE: 3" = 1'-0"



**ANCHOR PLATE**  
SCALE: 1 1/2" = 1'-0"



**RAIL CLAMP BAR FULL SIZE**  
SCALE: 3" = 1'-0"

**POST BASE DETAILS**  
SCALE: 3" = 1'-0"

**RAIL NOTES:**

1. POSTS SHALL BE NORMAL TO FINISHED GRADE.
2. THREADS FOR ANCHOR BOLTS MAY BE ROLLED OR CUT. IF CUT THREADS ARE USED, BOLT DIAMETER SHALL NOT BE LESS THAN NOMINAL DIAMETER. IF ROLLED THREADS ARE USED, BOLT DIAMETER SHALL NOT BE LESS THAN ROOT DIAMETER OF THREADS.
3. JOINTS IN RAIL LENGTH SHALL BE SPLICED AS DETAILED.
4. ENDS OF TUBE SECTIONS SHALL BE SAWED OR MILLED.
5. CUT ENDS SHALL BE TRUE AND SMOOTH.
6. EACH RAIL SECTION SHALL BE ATTACHED TO A MINIMUM OF THREE (3) POSTS.
7. GRIND ALL EDGES SMOOTH.

**MATERIAL:**

1. ALUMINUM EXTRUSIONS (POSTS, BASES, RAILS, SPLICE BARS, PINS AND CLAMP BARS) SHALL BE ASTM B221, ALLOY 6061-T6 OR ALLOY 6351-T5 (MIN. 10% ELONGATION).
2. STAINLESS STEEL ANCHOR STUDS, HEX HEAD BOLTS AND HEX NUTS (TYPE 302) SHALL BE ASTM A276, TYPE 430 MOD OR TYPE 304 MOD, (100,000 PSI AND 15% ELONGATION).
3. STEEL EMBEDDED JAM AND HEX NUTS SHALL BE ASTM A563 GRADE A OR BETTER.
4. ALUMINUM WASHERS SHALL BE ASTM B209, ALLOY 2024-T3 ALCLAD.
5. PREFORMED ELASTOMERIC BEARING PAD SHALL MEET REQUIREMENTS OF AASHTO M251.

**ANCHOR ASSEMBLY NOTES:**

1. 3/4" AND 5/8" AMERICAN STANDARD FINISHED HEXAGON STEEL NUTS ON BOTTOM OF ANCHOR ASSEMBLY, 3/4" AND 5/8" AMERICAN STANDARD FINISHED HEXAGON STEEL JAM NUTS ON TOP OF ANCHOR PLATE.
2. 3/4" AND 5/8" STAINLESS STEEL HEXAGON NUTS ON TOP ENDS OF BOLTS WITH CLASS 2B THREADS. 1 3/16" I.D., 2" O.D., 1/8" THICK ALUMINUM WASHERS UNDER NUTS ON TOP. ALL NUTS SHALL COMPLY WITH AMERICAN HEXAGON ANSI SPEC. B18.2. STAINLESS STEEL HEXAGON NUTS SHALL HAVE FULL THREADS.

**SPLICE BAR DETAILS:**

1. SEE STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION (BR-R3) FOR DETAILS AND NOTES.

**BALUSTER DETAILS:**

1. SEE STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION (BR-R4) FOR DETAILS AND NOTES.

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN		BRIDGE NO.			STATE PROJECT				
LOCATION									
BRIDGE RAIL DETAILS (4-BAR ALUMINUM)									
REVISIONS AFTER PROPOSAL		BY		DATE		BY		DATE	
		DESIGNED	NHDOT	CHECKED	NHDOT	1/90			
		DRAWN	GMC	CHECKED	PPP	2/06			
		QUANTITIES		CHECKED					
		ISSUE DATE		FEDERAL PROJECT NO.			SHEET NO.	TOTAL SHEETS	
		REV. DATE	10/8/08						

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
English/4BAR	4BAR	AS NOTED