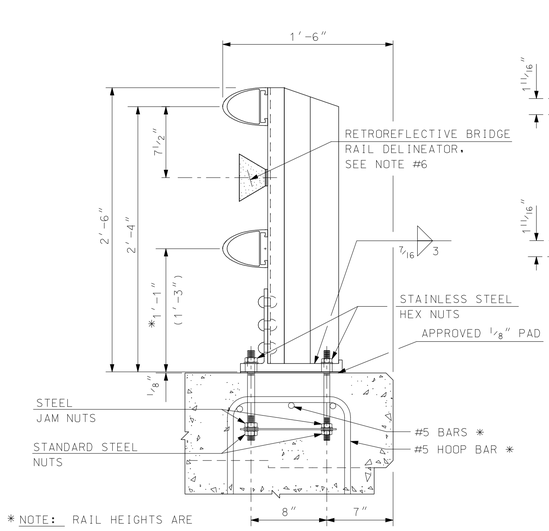
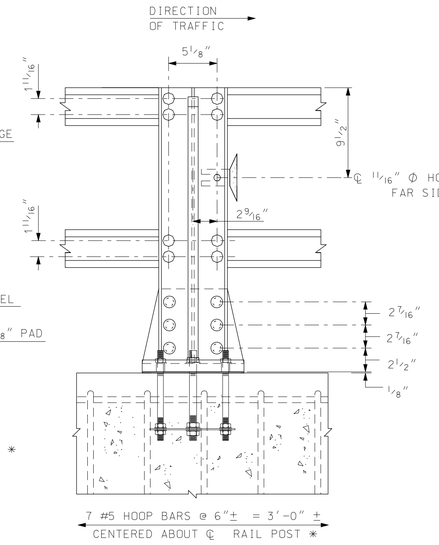


* NOTE: RAIL HEIGHTS ARE GIVEN FOR USE WITH A SIDEWALK. WITH A BRUSH CURB, USE ( ).

SECTION VIEW

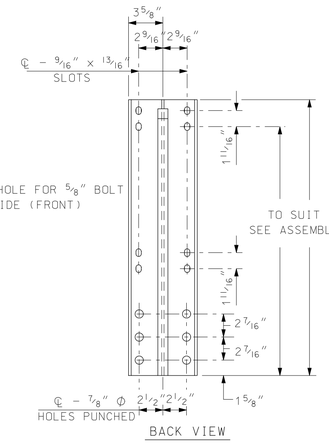


* REINFORCING CAPACITY SHALL MEET OR EXCEED THAT SHOWN

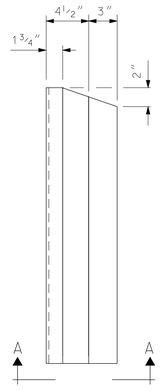
BACK ELEVATION VIEW

POST ASSEMBLY

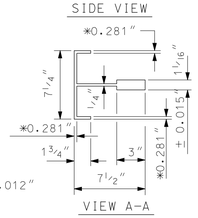
SCALE: 1½″ = 1′-0″



BACK VIEW



SIDE VIEW

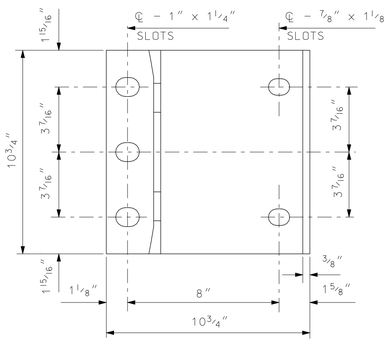


* ± 0.012″

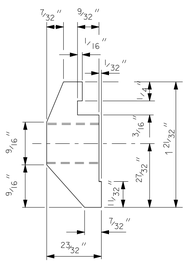
VIEW A-A

POST ASSEMBLY

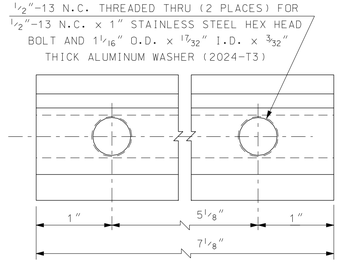
SCALE: 1½″ = 1′-0″



PLAN VIEW



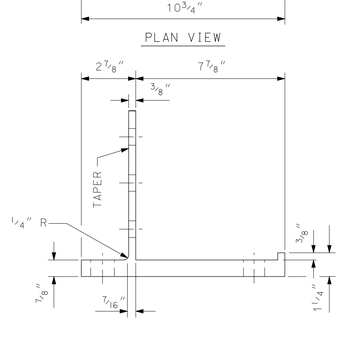
END VIEW



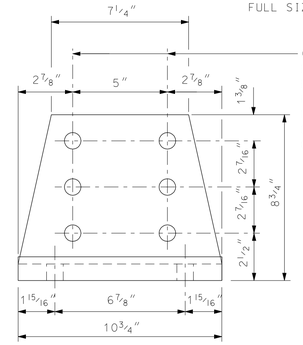
BACK VIEW

RAIL CLAMP BAR

FULL SIZE



END VIEW

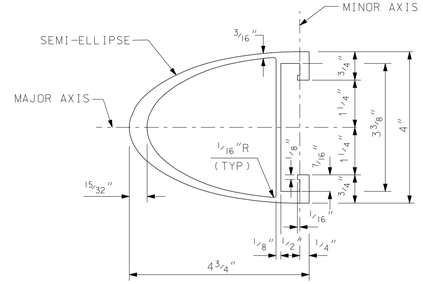


ELEVATION VIEW

℄ – 7/8″ Φ HOLES FOR 7/8″ Φ HIGH BUTTON HEAD RIVETS ASTM B316 OR B221 ALLOY 6061-T6. RIVETS SHALL HAVE MANUFACTURED HIGH BUTTON HEADS MEETING THE DIMENSIONAL REQUIREMENTS OF ANSI B18.4 AND SHALL HAVE DRIVEN CONE POINT HEADS.

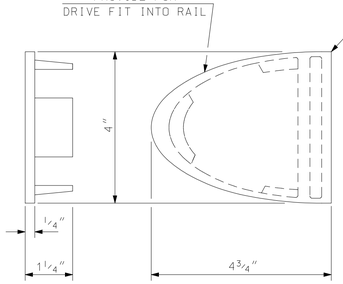
POST BASE DETAILS

SCALE: 3″ = 1′-0″



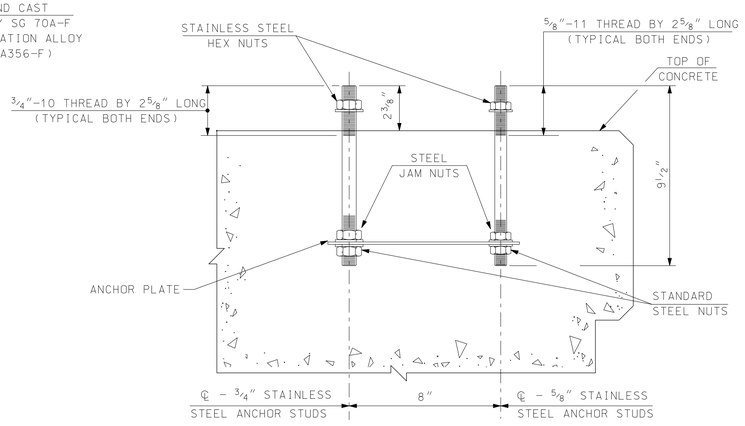
RAIL SECTION

HALF SIZE



RAIL END CAP

HALF SIZE



POST ANCHOR ASSEMBLY

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:

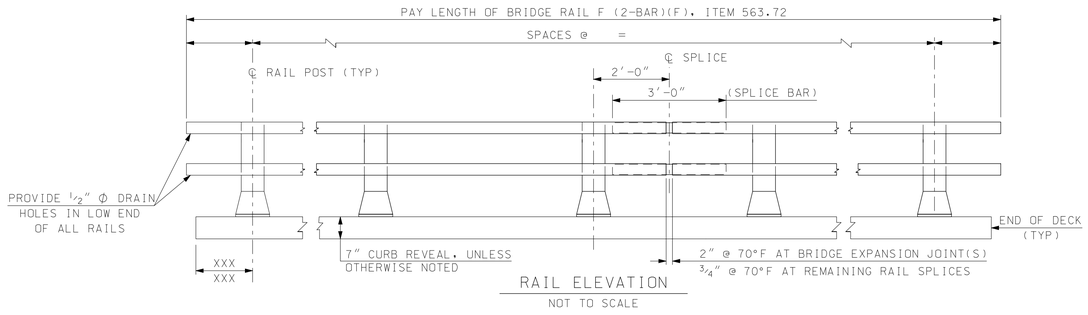
1. ALUMINUM EXTRUSIONS (POSTS, BASES, RAILS, SPLICE BARS, PINS AND CLAMP BARS) SHALL BE ASTM B221, ALLOY 6061-T6 OR ALLOY 6351-T5 (MIN. 10% ELONGATION).
2. STAINLESS STEEL ANCHOR STUDS, HEX HEAD BOLTS AND HEX NUTS (TYPE 302) SHALL BE ASTM A276, TYPE 430 MOD OR TYPE 304 MOD, (100,000 PSI AND 15% ELONGATION).
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.
6. RETROREFLECTIVE DELINEATORS, FIELD DRILLING OF POSTS, STAINLESS STEEL (TYPE 304) BOLTS, NUTS & WASHERS SHALL BE SUBSIDIARY TO ITEM 563.72. SEE STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION (DL-1) FOR ADDITION DETAILS AND SPACING.

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. 13/16″ 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.

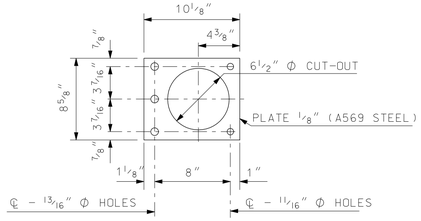
SPLICE BAR DETAILS:

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



RAIL ELEVATION

NOT TO SCALE



ANCHOR PLATE

SCALE: 1½″ = 1′-0″

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN	BRIDGE NO.	STATE PROJECT
LOCATION		

BRIDGE RAIL DETAILS (2-BAR ALUMINUM)

BRIDGE SHEET OF

FILE NUMBER

REVISIONS AFTER PROPOSAL	BY	DATE		BY	DATE
	DESIGNED NHDOT		CHECKED NHDOT		1/90
	DRAWN GMC	2/06	CHECKED PJP		2/06
	QUANTITIES		CHECKED		
	ISSUE DATE		FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
	REV. DATE	10/8/08			

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
English/AL-RAIL	2BAR	AS NOTED