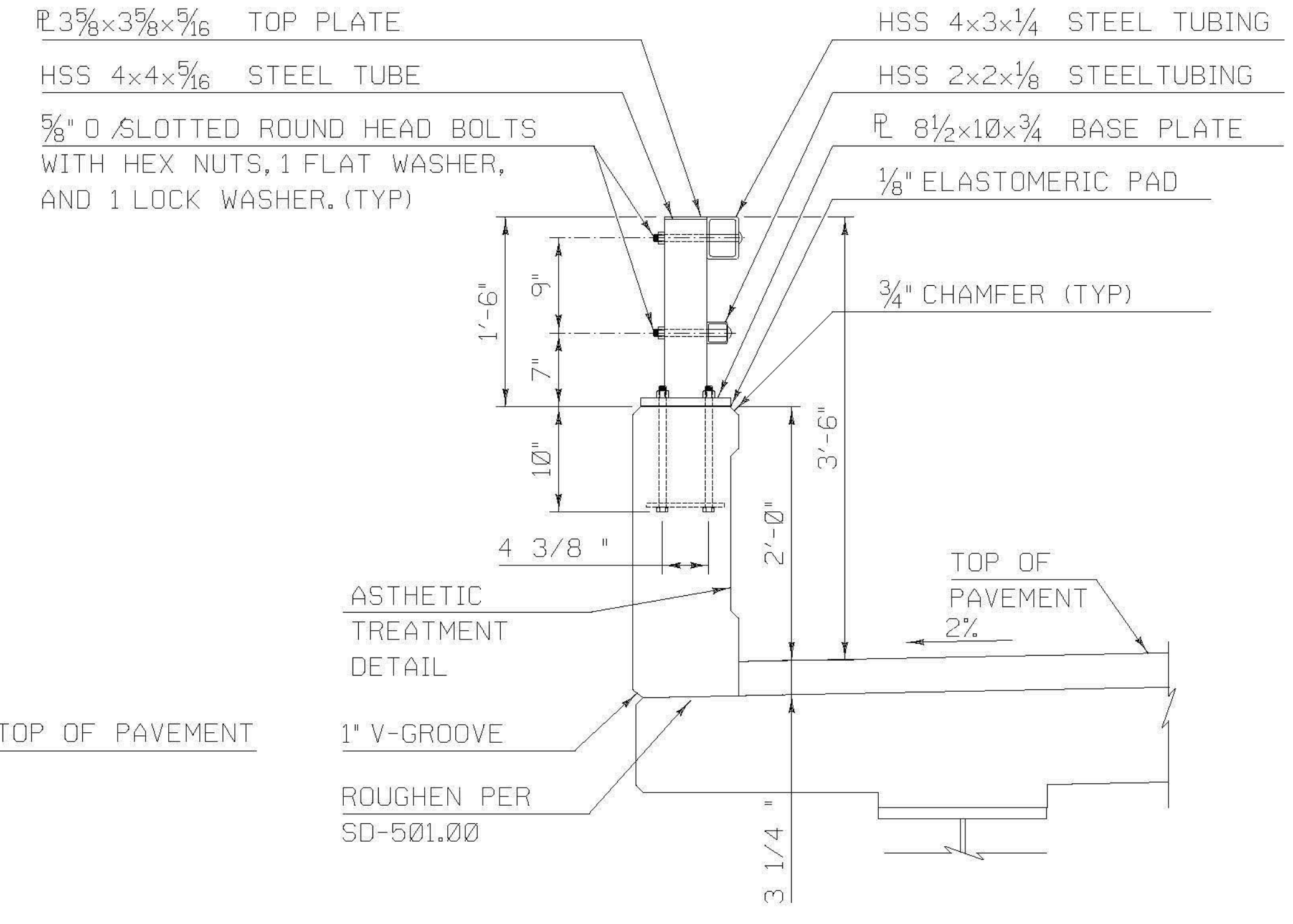


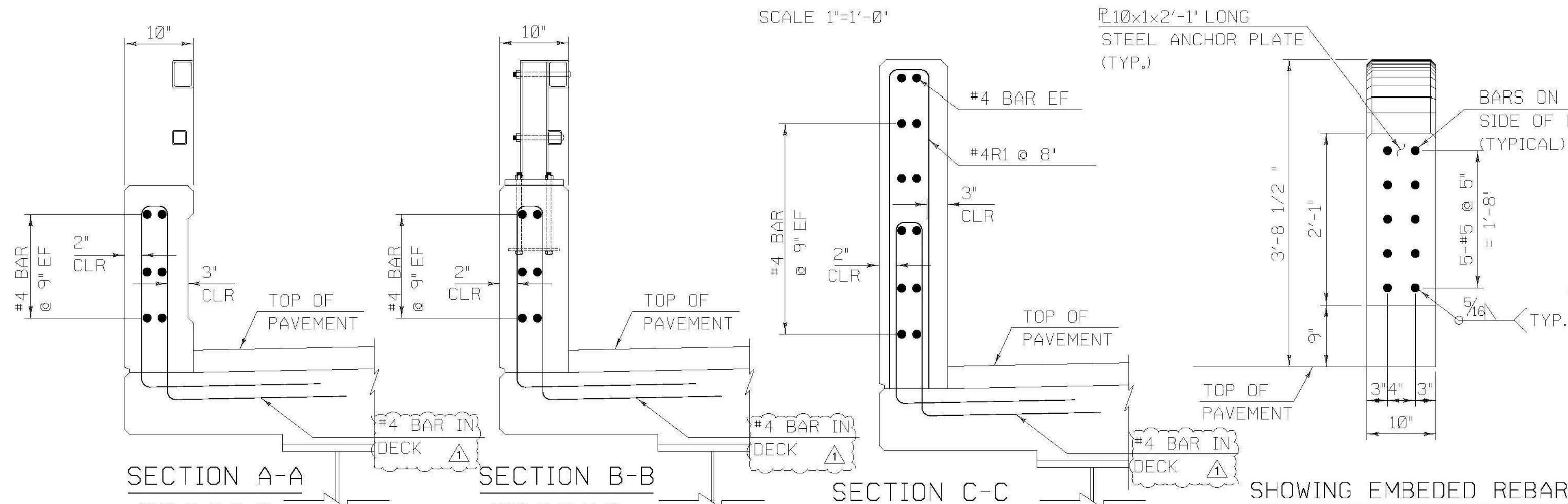
RAILING & END WALL APPROACH

SCALE 1"=1'-0"



RAIL TYPICAL SECTION

SCALE 1"=1'-0"



SECTION A-A

SECTION B-B

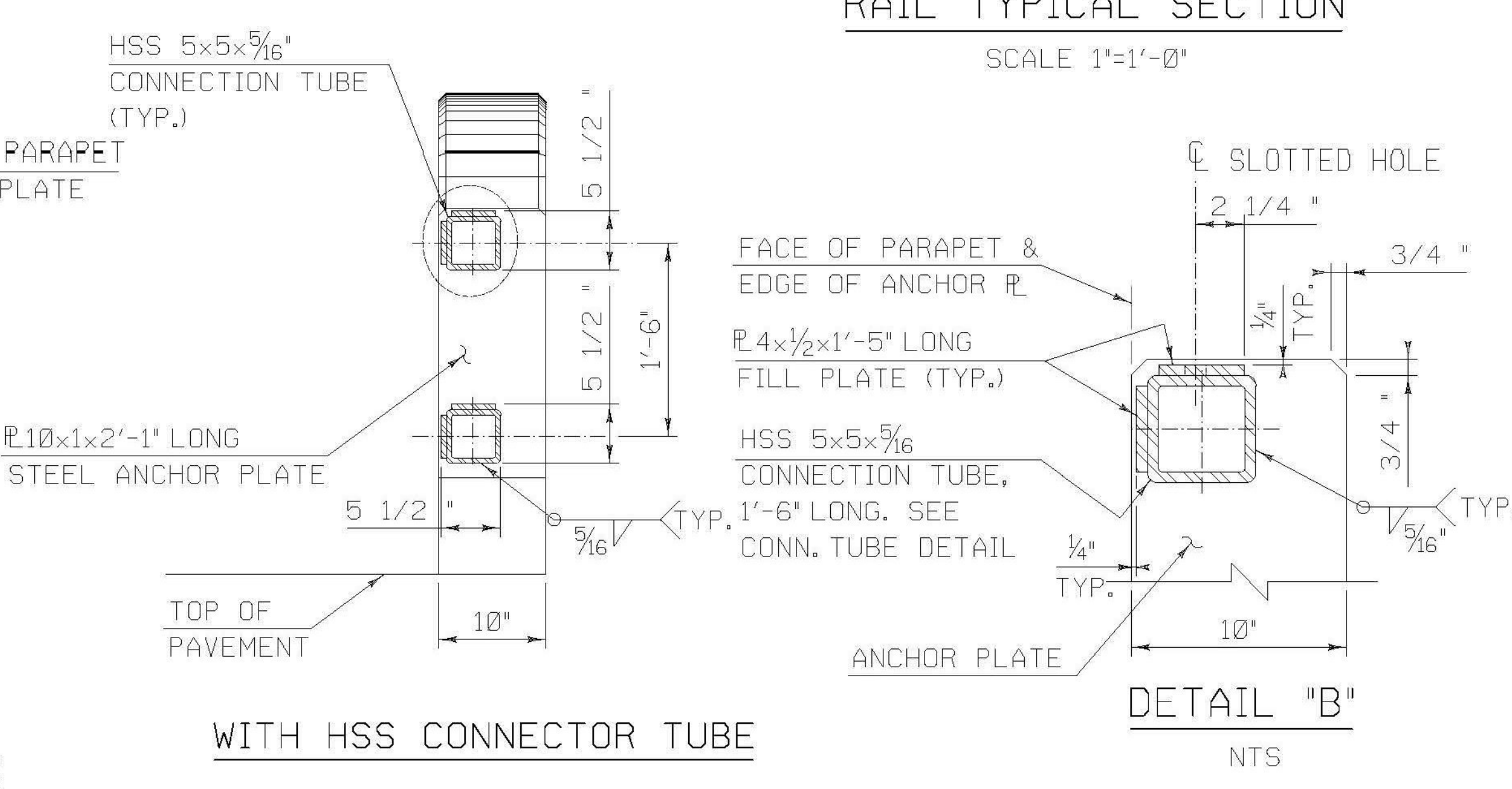
SECTION C-C

SHOWING EMBEDDED REBAR

SCALE 1"=1'-0"

SCALE 1"=1'-0"

SCALE 1"=1'-0"



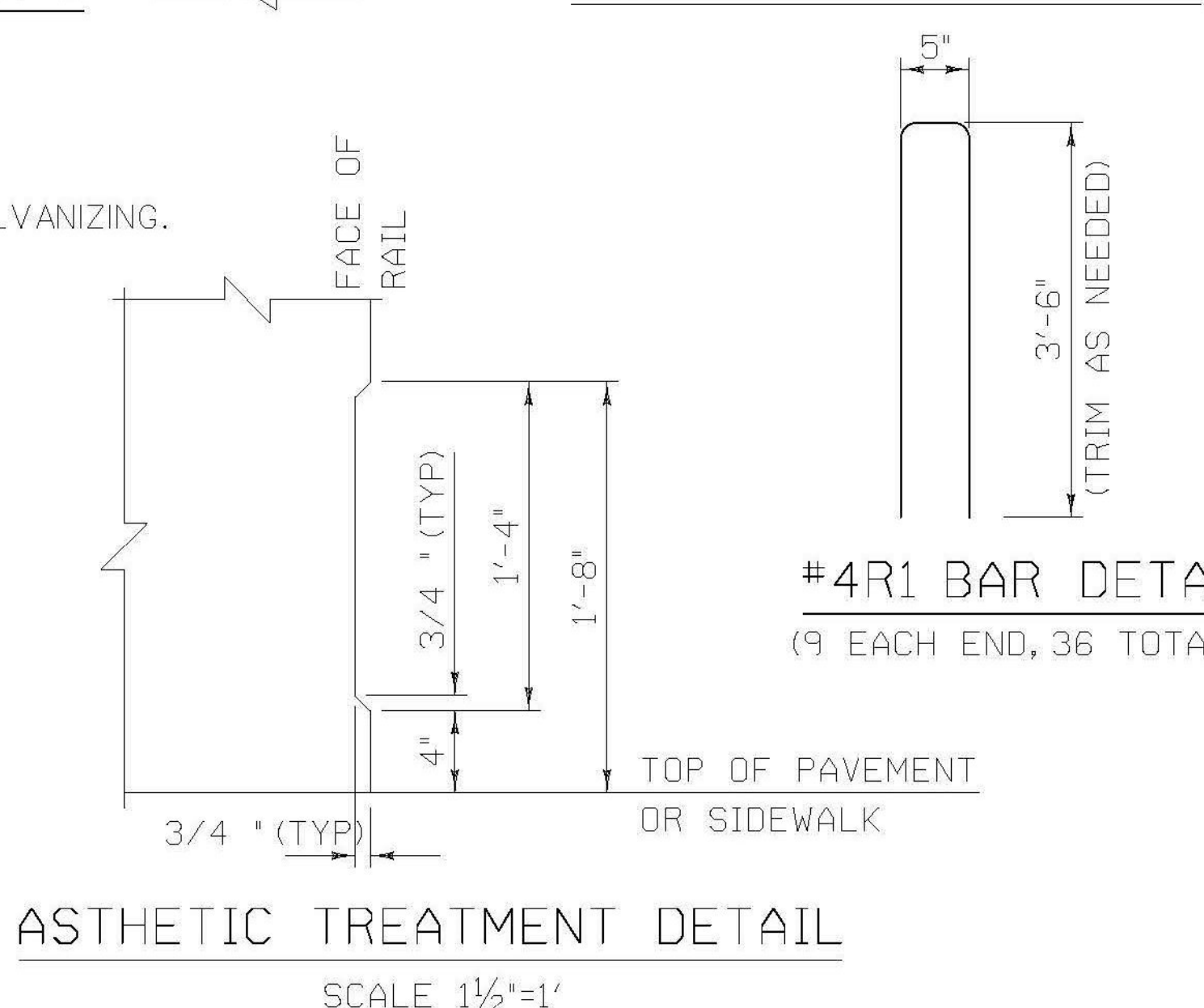
WITH HSS CONNECTOR TUBE

DETAIL "B"

VIEW D-D

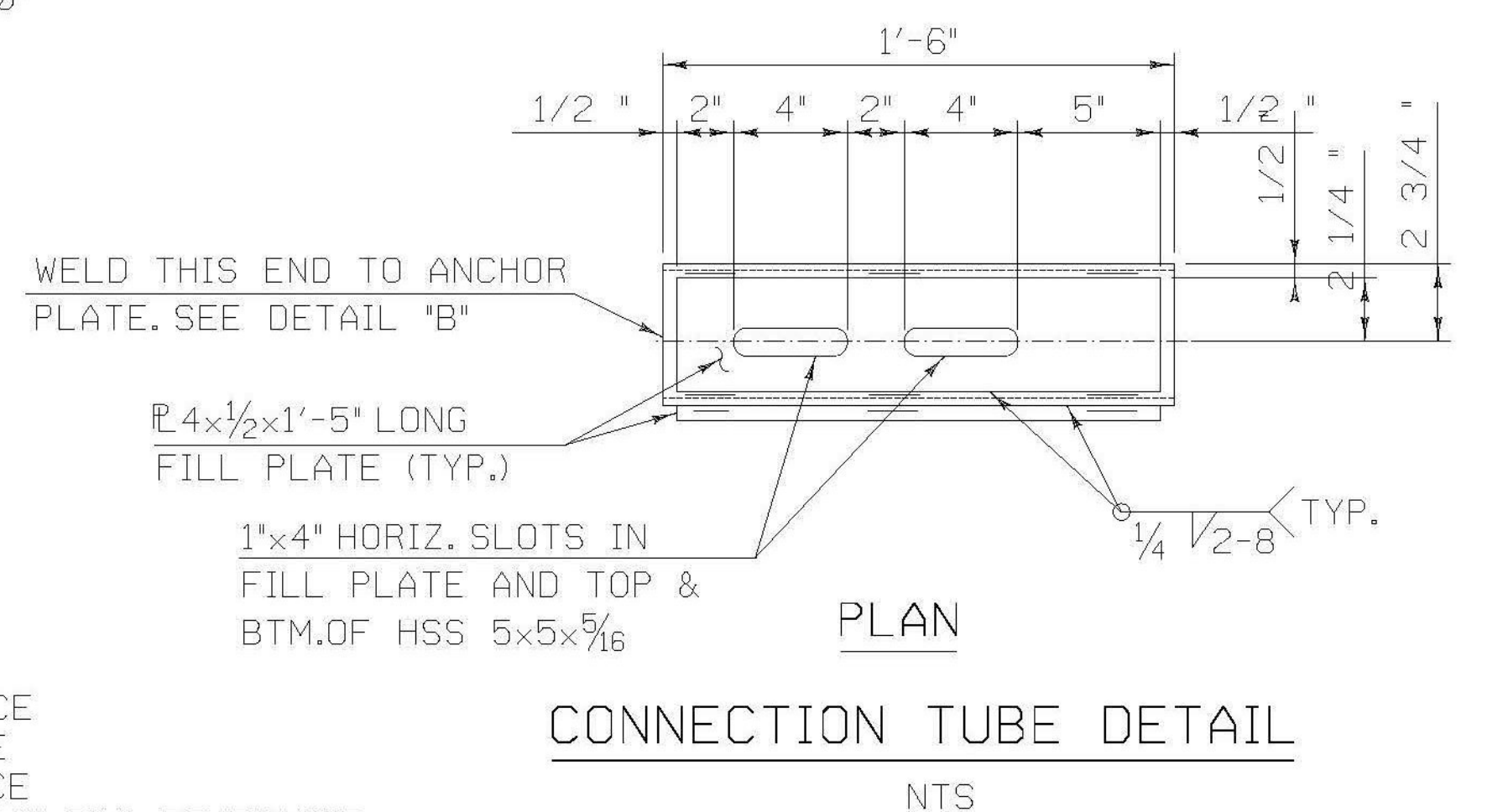
SCALE 1"=1'-0"

- NOTES:
- BRIDGE RAIL SHALL HAVE A RUBBED FINISH IN ACCORDANCE WITH SECTION 501.
  - HOLES AND RECESSES ARE TO BE FORMED OR CORED, PERCUSSION DRILLING IS NOT ALLOWED.
  - ALL STEEL COMPONENTS SHALL BE COATED BLACK IN ACCORDANCE WITH ASTM D7803 FOLLOWING GALVANIZING.
  - ALL REINFORCEMENT SHALL BE LEVEL II.
  - ALL LONGITUDINAL BARS SHALL HAVE A MINIMUM LAP LENGTH OF 2'-1".
  - ALL WORK AND MATERIALS SHALL CONFORM TO SECTION 525.
  - PRIOR TO GALVANIZING THE ASSEMBLED POST, GRIND ALL EDGES TO A MINIMUM RADIUS OF 1/16".
  - ALL POSTS SHALL BE SET NORMAL TO GRADE.
  - SECTIONS OF RAIL TUBE SHALL BE ATTACHED TO A MINIMUM OF TWO BRIDGE POSTS AND PREFERABLY TO AT LEAST 4 POSTS.
  - HOLES IN RAILS FOR TUBE ATTACHMENT MAY BE FIELD-DRILLED. HOLES SHALL BE COATED WITH AN APPROVED ZINC-RICH PAINT PRIOR TO INSTALLATION.
  - BOLTS SHALL BE TORQUED SNUG TIGHT (APPROXIMATELY 100 FT-LB).
  - RAIL TUBES SHALL BE ATTACHED USING 5/8" FULL DIAMETER BODY ASTM A 449 (TYPE 1) ROUND HEAD BOLTS INSERTED THROUGH THE FACE OF THE TUBE.
  - SEE STANDARD DRAWING G-1 FOR DETAILS OF DELINEATORS. A DELINEATOR SHALL BE INSTALLED AT 30 FOOT SPACING OR THE NEAREST POST. WHITE IS TO BE INSTALLED ON THE DRIVER'S RIGHT. PAYMENT FOR DELINEATORS SHALL BE INCIDENTAL TO OTHER ITEMS.
  - SEE "GUARDRAIL APPROACH AND GUARDRAIL LAYOUT DETAILS" SHEET FOR ADDITIONAL EAST APPROACH CONNECTION TUBE DETAILS.



ASTHETIC TREATMENT DETAIL

SCALE 1/2"=1'



CONNECTION TUBE DETAIL

NTS

- NOTE:
- NF = NEAR FACE
  - FF = FAR FACE
  - EF = EACH FACE
  - 2'-2" BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

**CALDERWOOD ENGINEERING, ETC.**  
 STRUCTURAL ENGINEERING • DETAILING SERVICES  
 222 RIVER RD., RICHMOND, ME 04357 PH/FX (207) 737-2007 FAX (207) 737-2008  
 PREPARED FOR: **COLD RIVER BRIDGES, LLC**

VE SUPER. DESIGN  
 ROCKINGHAM VT. BR# 0126 (12)  
 BRIDGE RAILING DETAILS (1 OF 3)

DATE	BY	REVISIONS
2014	ETC	1
		2
		3
		4
		FIELD CHANGES

P.E. NUMBER: \_\_\_\_\_ DATE: \_\_\_\_\_

SHEET NUMBER: **41**

CEE 106-BR-14