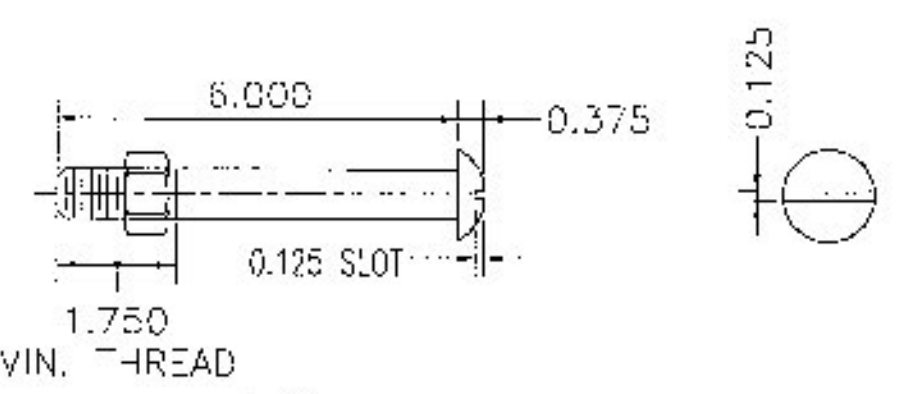
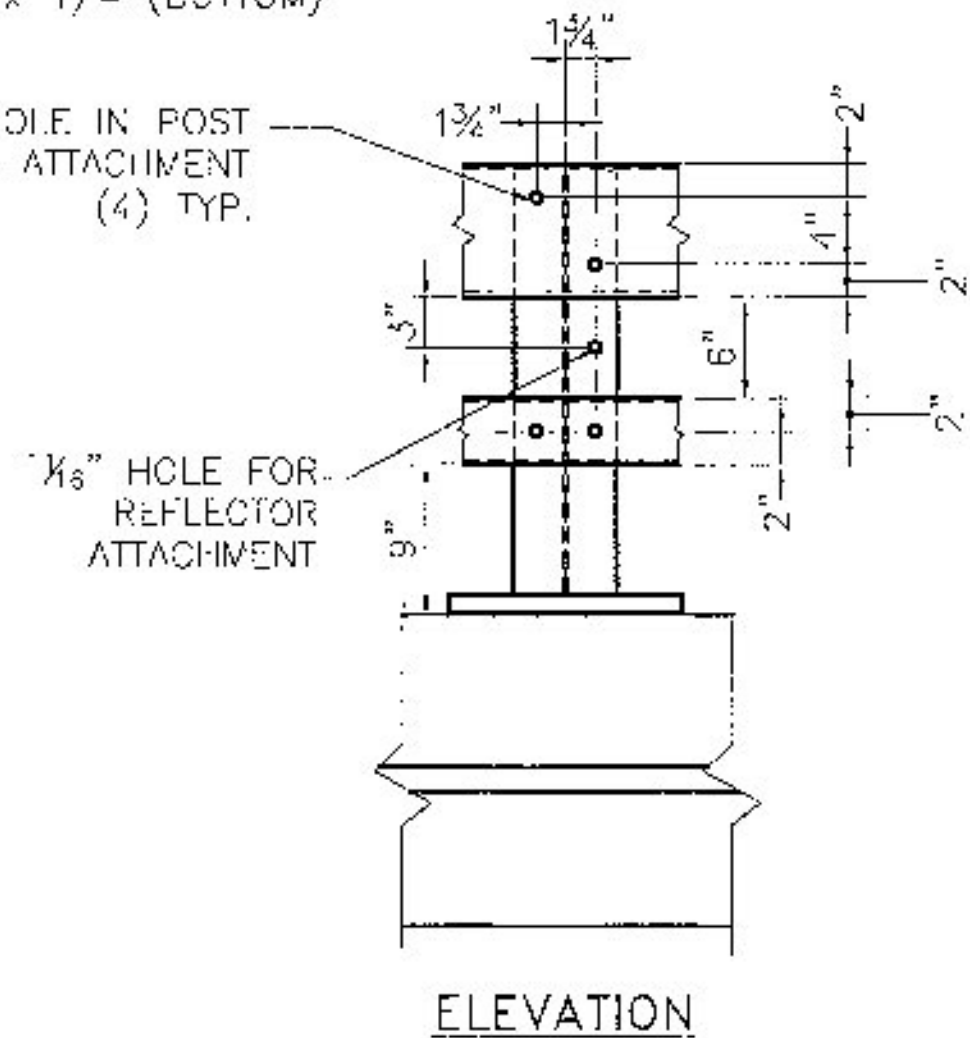
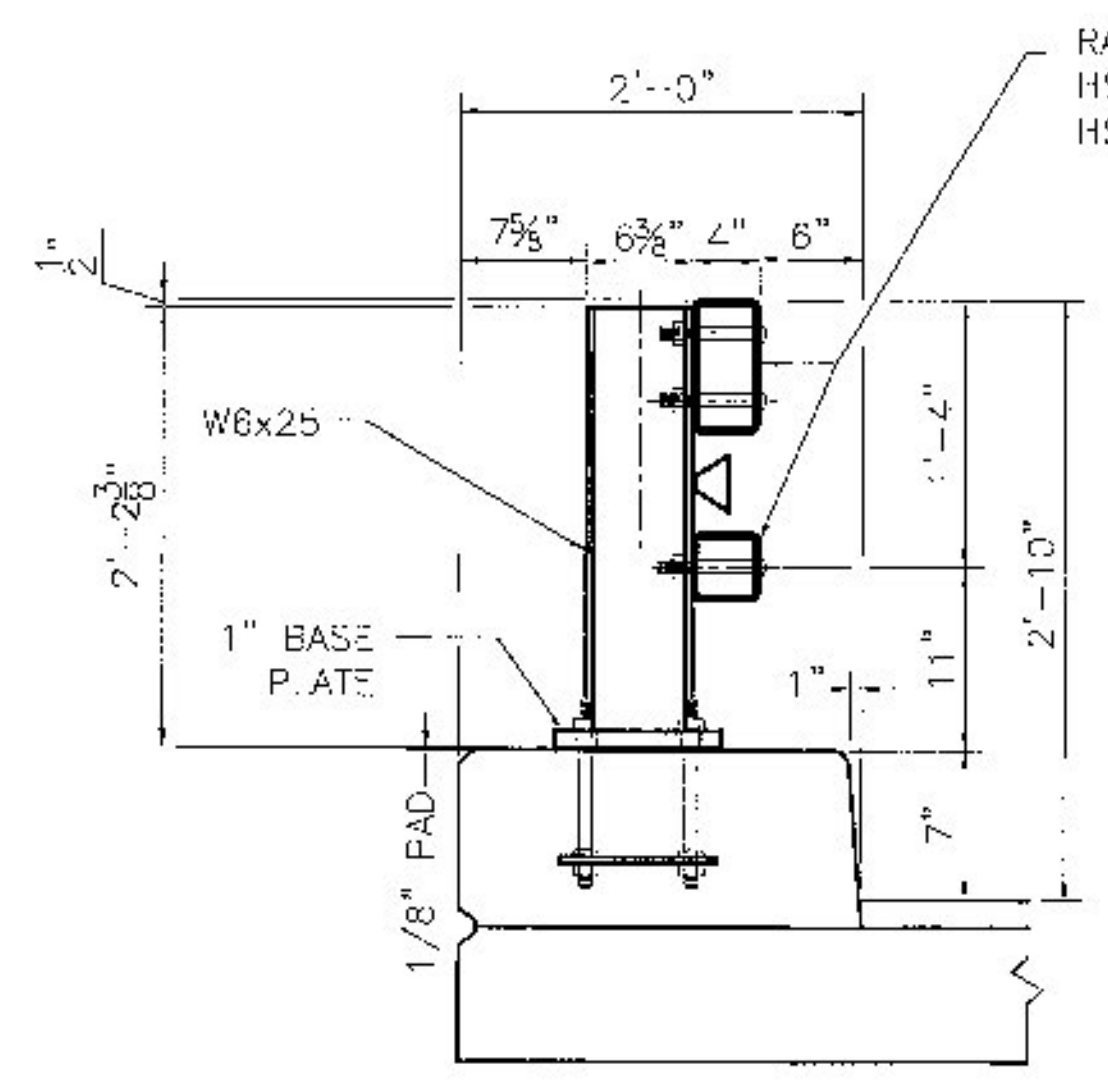


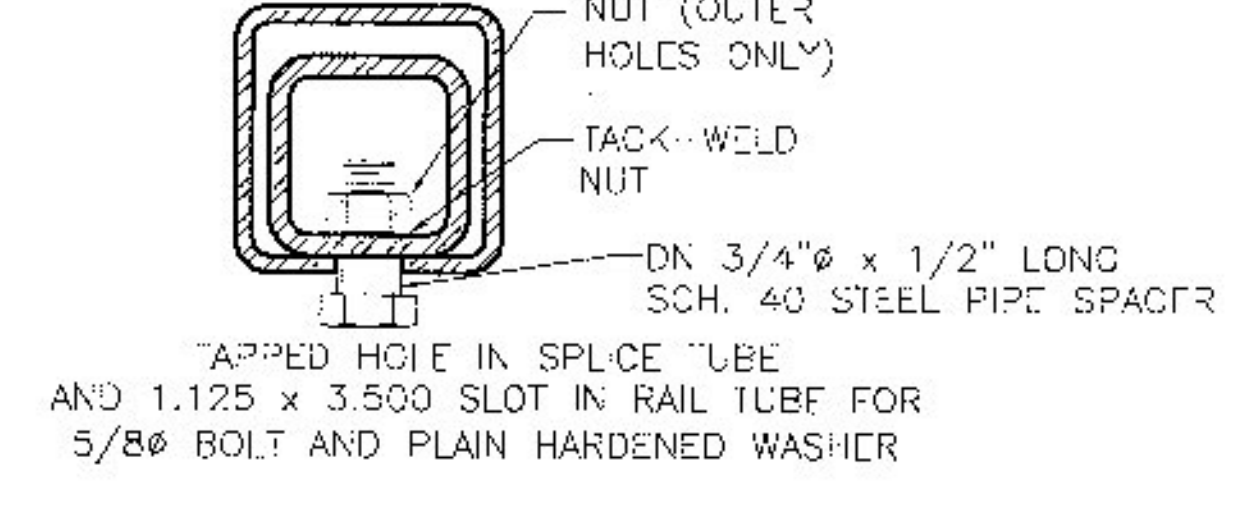
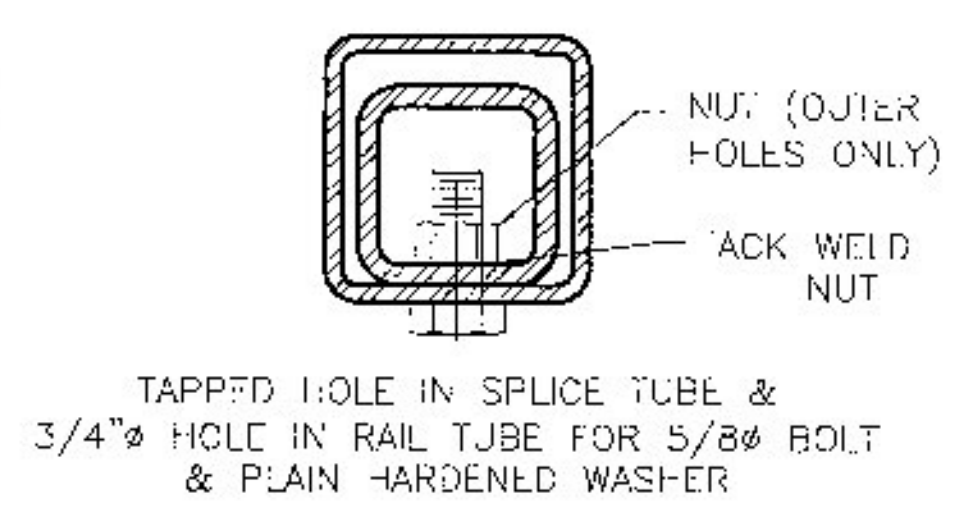
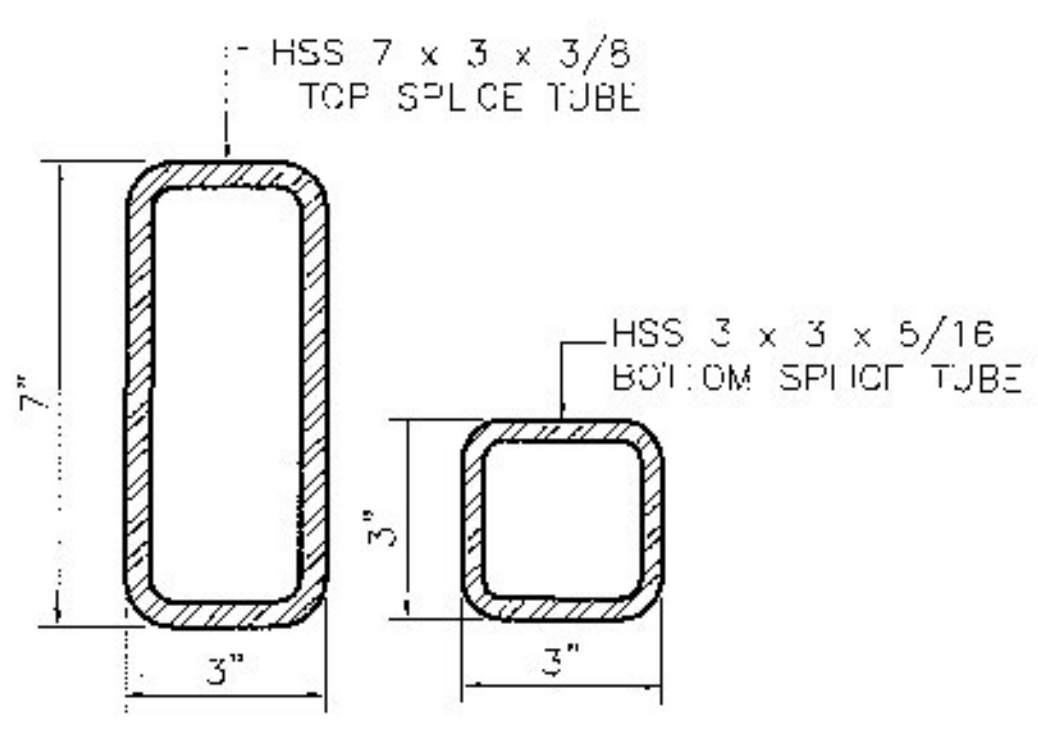
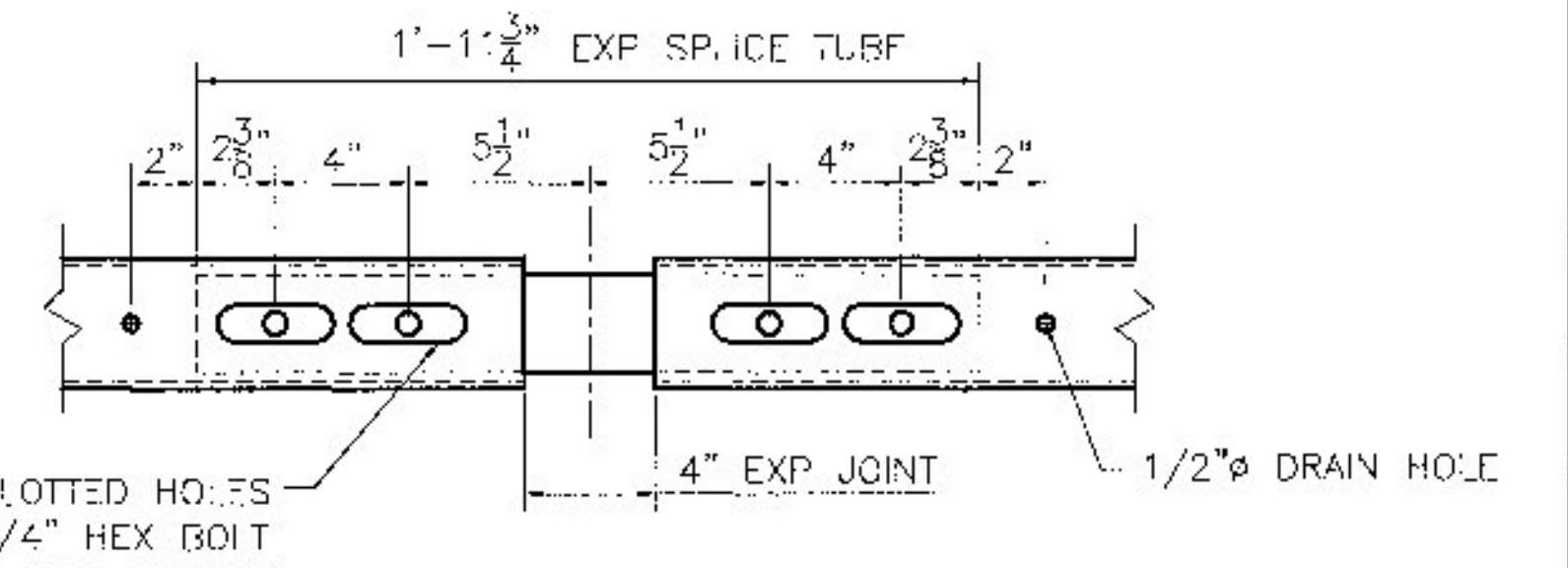
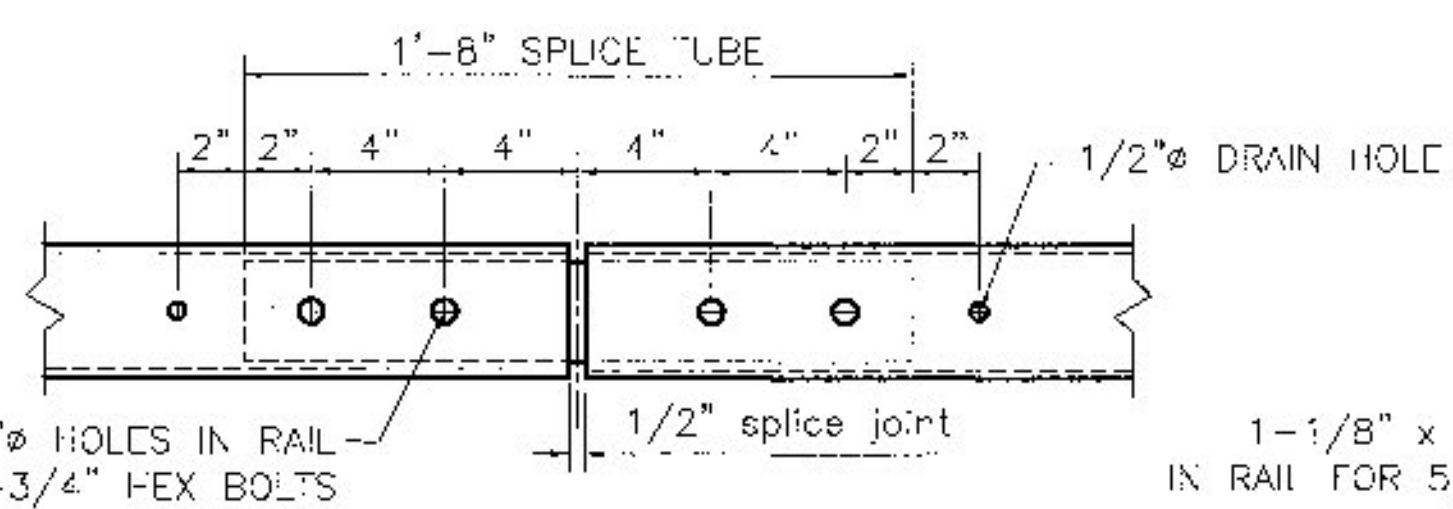
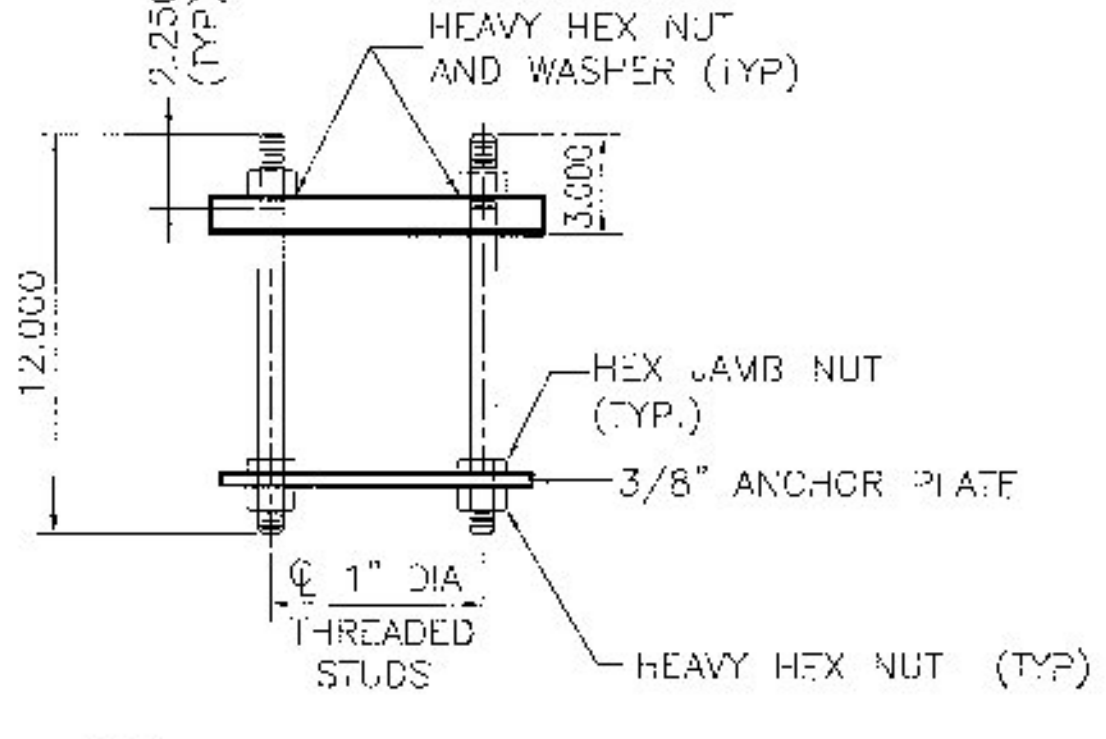
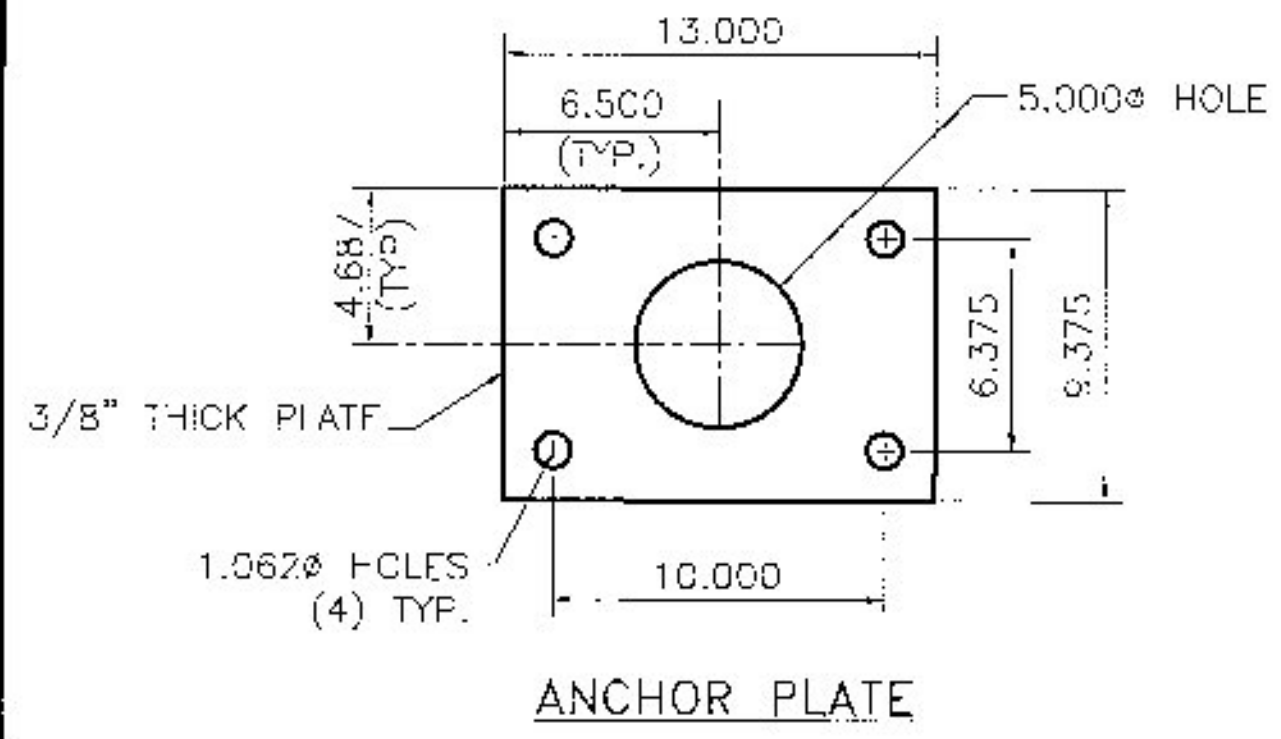
- NOTES:**
1. ALL WORK AND MATERIALS SHALL CONFORM TO SECTION 525.
  2. PRIOR TO GALVANIZING, ALL EXPOSED CUT OR SHEARED EDGES SHALL BE ROUNDED TO A 1/16" RADIUS AND BE FREE OF BURRS.
  3. ALL POSTS SHALL BE SET NORMAL TO GRADE.
  4. SECTIONS OF RAIL TUBE SHALL BE ATTACHED TO A MINIMUM OF TWO (2) RAIL POSTS AND PREFERABLY TO AT LEAST FOUR (4) POSTS.
  5. RAIL TUBE EXPANSION JOINT SHALL BE PROVIDED IN ANY RAIL BAY SPANNING THE END OF AN INTEGRAL ABUTMENT BRIDGE AND AT ALL SLIPERS/STRUCTURAL EXPANSION JOINTS. EXPANSION JOINT WIDTH SHALL BE 4" AT 45° AND WILL BE ADJUSTED IN THE FIELD BY THE ENGINEER FOR OTHER TEMPERATURES.
  6. HOLES IN RAILS FOR RAIL TUBE ATTACHMENT SHALL BE FIELD-DRILLED. HOLES SHALL BE COATED WITH AN APPROVED ZINC-RICH PAINT PRIOR TO INSTALLATION.
  7. RAIL POST ANCHORING NUTS SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL ONE-FIFTH TURN.
  8. RAIL TUBES SHALL BE ATTACHED USING 3/4" FULL DIAMETER BODY ASTM A449 ROUND HEAD BOLTS INSERTED THROUGH THE FACE OF THE TUBE. HOLES IN POSTS SHALL BE 1/16" LARGER THAN THE BOLT SIZE.
  9. ANY BENDING OR CURVING OF RAIL SHALL BE DONE IN A FABRICATION PLANT IN ACCORDANCE WITH SUBMITTED PROCEDURES.
  10. THE MINIMUM DISTANCE FROM A POST TO AN EXPANSION JOINT SHALL BE SUCH TO MAINTAIN MINIMUM EDGE DISTANCE OF 5" FROM ANY ANCHOR STUD TO THE END OF THE SLAB, OR TO THE EXPANSION JOINT RECESS PAIR, IF ONE IS USED.
  11. A DELINEATOR (SEE VDOT STANDARD DRAWING C-1 FOR DETAILS) SHALL BE INSTALLED AT NEAREST POST TO 30 FT SPACING. WHITE IS TO BE INSTALLED ON THE DRIVER'S RIGHT, FOR ONE WAY BRIDGES, YELLOW IS TO BE INSTALLED ON THE DRIVER'S LEFT. PAYMENT SHALL BE INCIDENTAL TO OTHER ITEMS.
  12. THIS RAILING MEETS THE REQUIREMENTS FOR A TL-4 SERVICE LEVEL.



(WITH WASHER AND PREVAILING TORQUE TYPE LOCK NUT)  
(SEE NOTE #8)  
ONLY FULL DIAMETER BODY BOLTS WILL BE ALLOWED.



- MATERIALS**
- RAIL TUBES.....ASTM A500 GRADE B OR ASTM A501
  - RAIL POSTS AND BASE PLATES.....ASTM A709/A709M, GRADE 50
  - ALL OTHER SHAPES AND PLATES.....ASTM A709/A709M, GRADE 50
  - ANCHOR STUDS.....ASTM A449
  - ALL OTHER BOLTS (UNLESS NOTED).....AASHTO M164, TYPE 1
  - NUTS FOR AASHTO M164 BOLTS AND FOR ANCHOR STUDS SHALL COMPLY WITH AASHTO M291 (ASTM A563).
  - WASHERS SHALL COMPLY WITH AASHTO M293 (ASTM F436) SPECIFICATIONS.
  - 1/8" PAD SHALL COMPLY WITH STANDARD SPECIFICATION SUBSECTION 731.01 OR 731.02.
  - RAIL POSTS AND BASE PLATES SHALL BE TESTED FOR IMPACT PROPERTIES IN ACCORDANCE WITH ASTM A370 CHARMPI IMPACT TESTING USING TYPE A SPECIMEN.



Vermont Agency of Transportation

**RECEIVED**

CK'D BY FDB OK'D BY HIS

June 23, 2015

RESUBMIT No Approved

BY Carolyn Carlson DATE 06/23/15

**HIGHWAY SAFETY CORP**

GLASTONBURY, CT  
860-633-9415

ITEM 525.33 BRIDGE RAILING, GALVANIZED 2 RAIL BOX BEAM (S-360A)

BRF 0302 (29)  
TH 3 - BRIDGE NO. 6  
TOWN OF RICHFORD, FRANKLIN COUNTY VT

GENERAL CONTRACTOR

CONTRACTOR LAFAYETTE

DATE 04-27-15

SCALE NONE

SHEET NO. 2 of 3