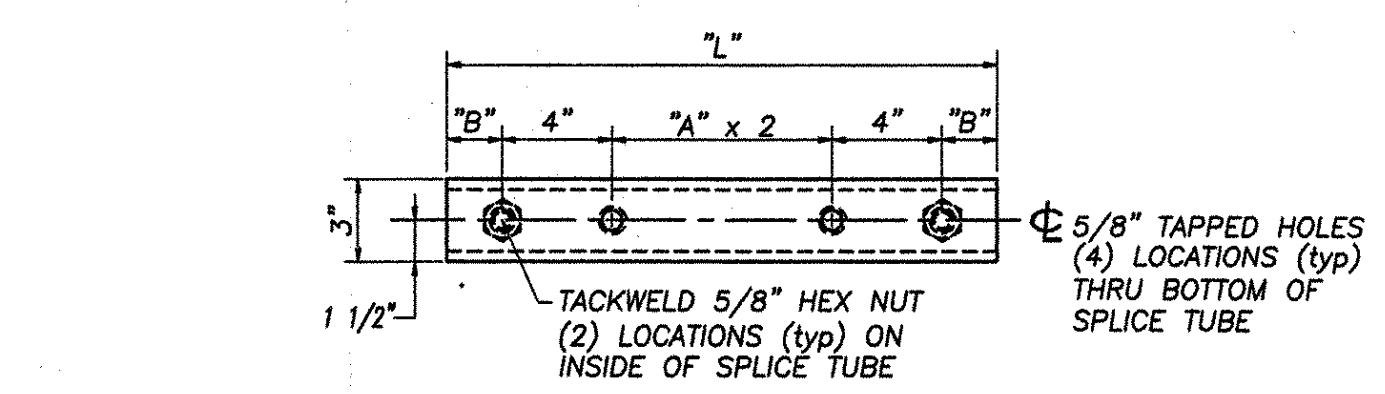
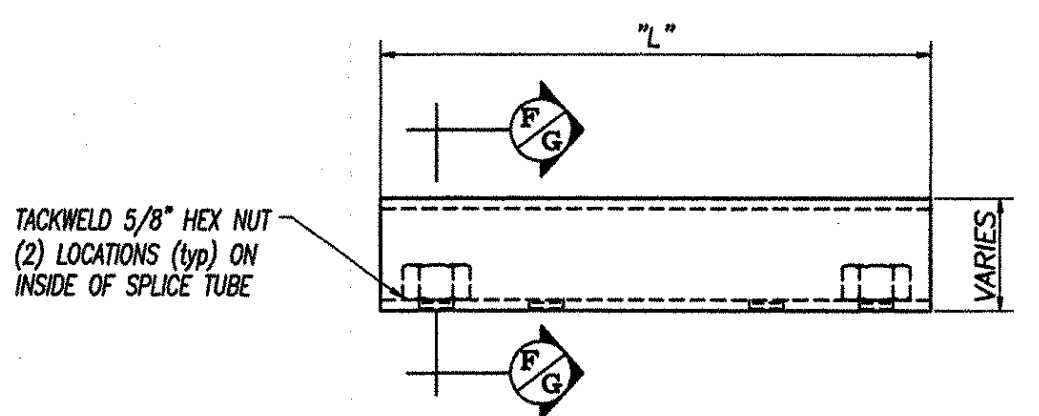


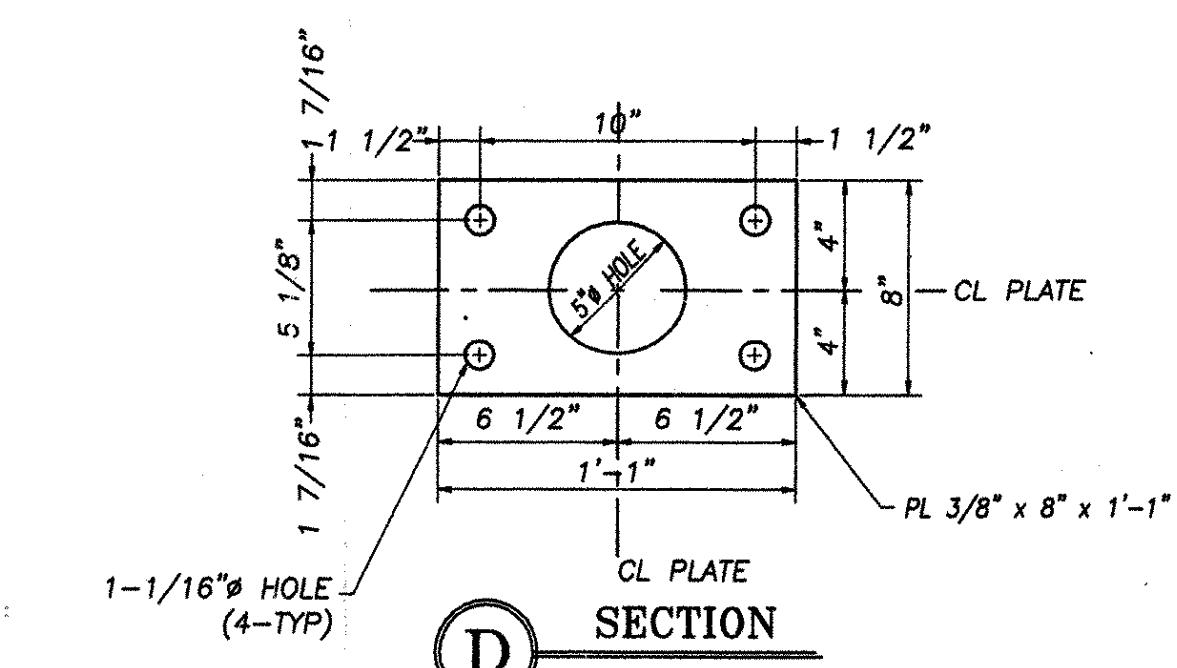
B SECTION



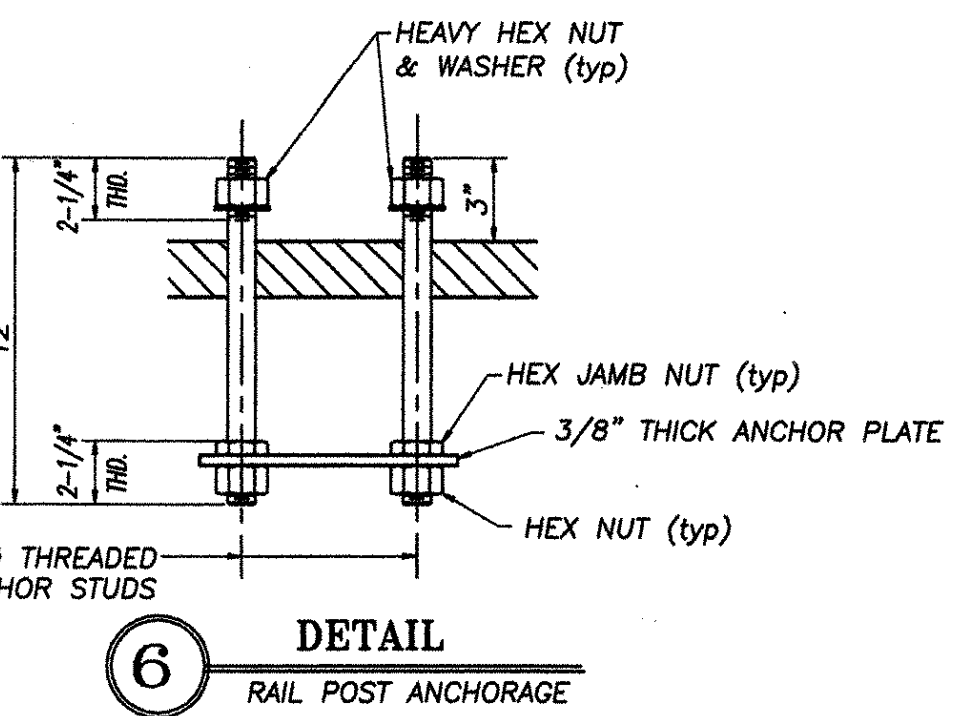
3 DETAIL
SPLICE TUBE - BOTTOM VIEW
(SEE CHART FOR DIMENSIONS)



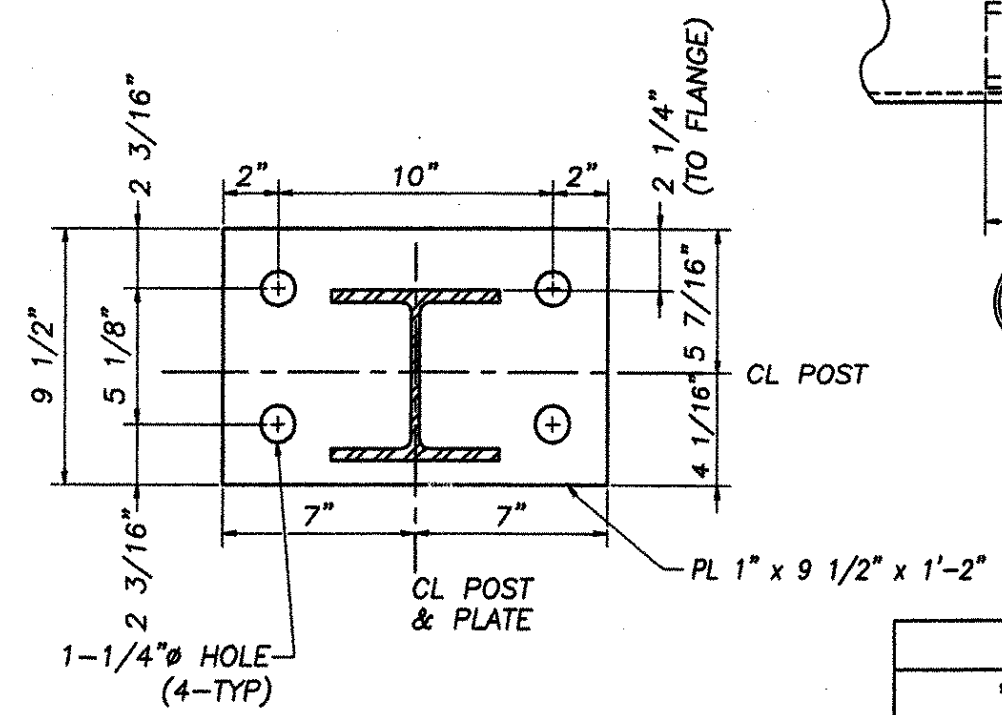
H VIEW
SPLICE TUBE ELEVATION



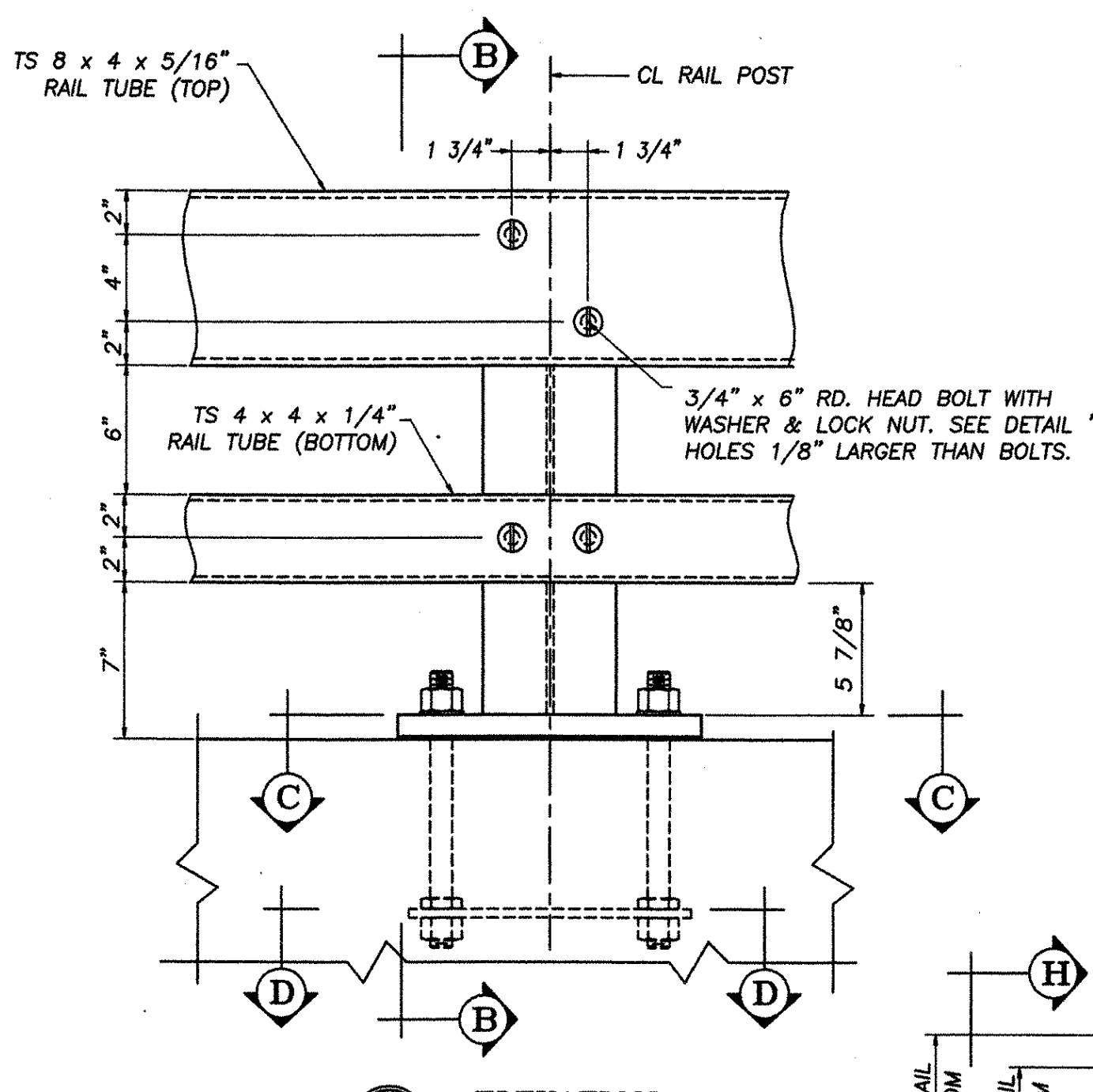
D SECTION
ANCHOR PLATE



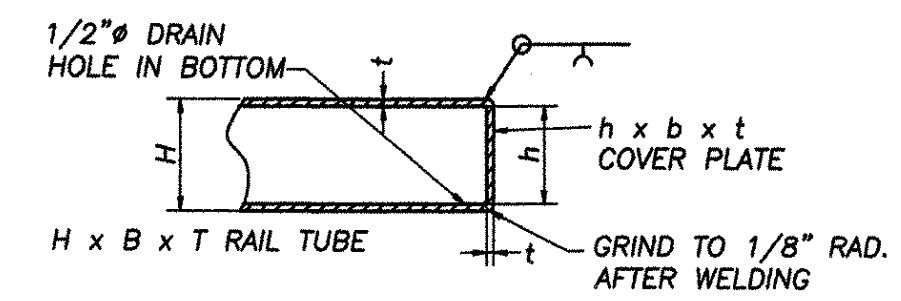
6 DETAIL
RAIL POST ANCHORAGE



C SECTION
RAIL POST & BASE PLATE
SEE DETAIL "F" FOR POST-BASE WELD

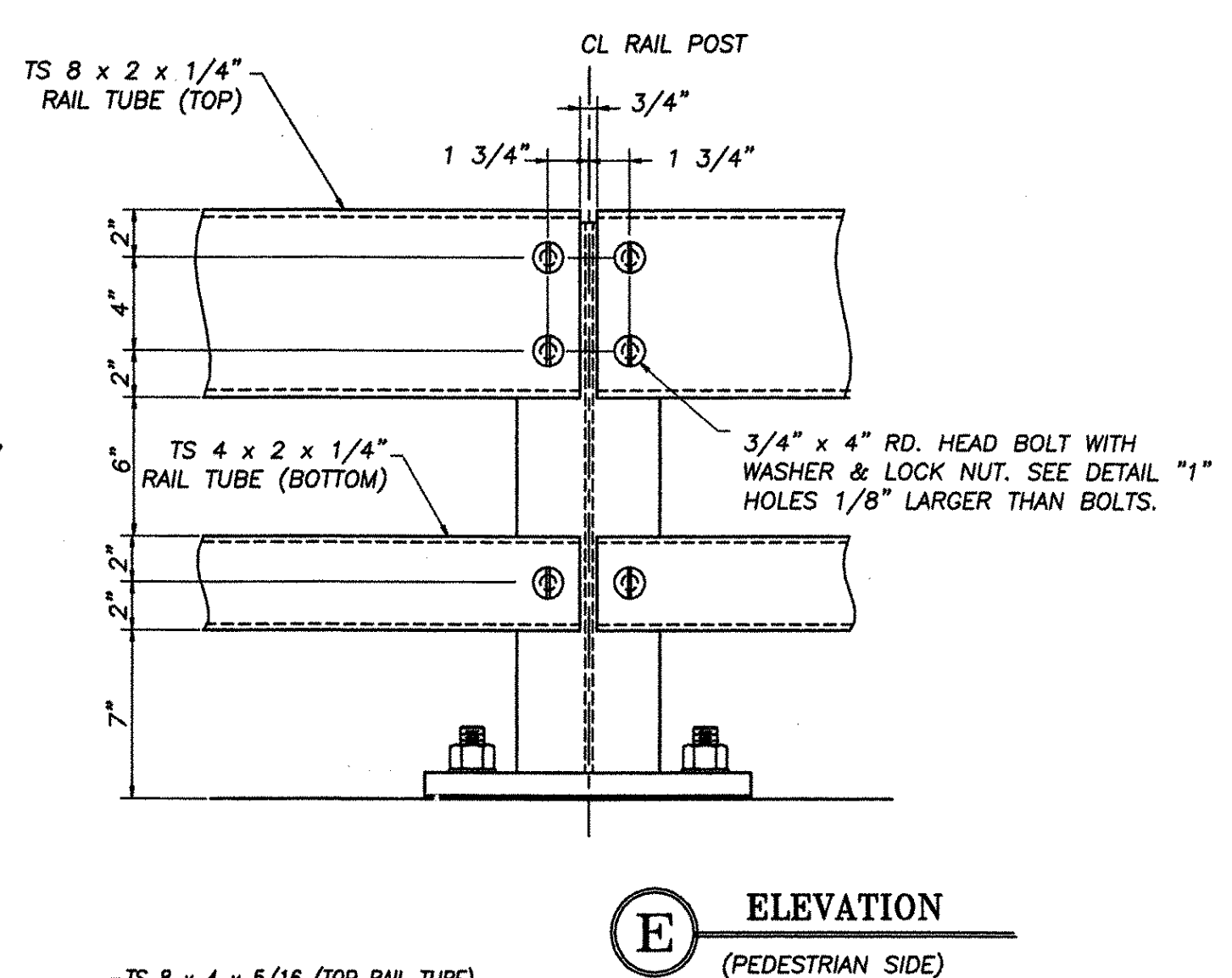


A ELEVATION
(TRAFFIC SIDE)

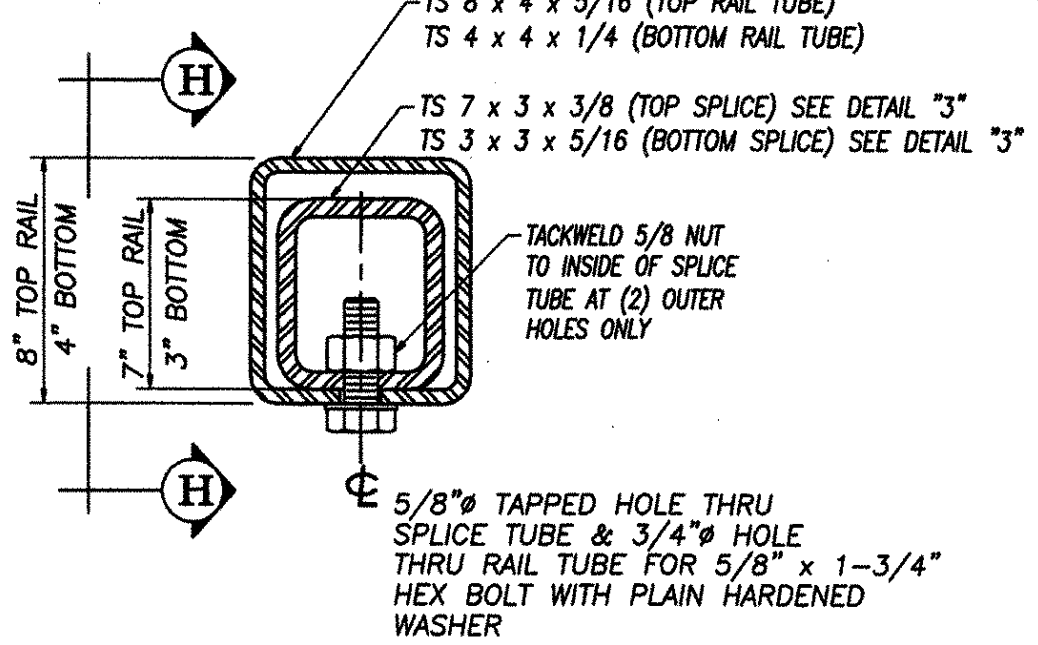


END COVER PLATE DETAIL

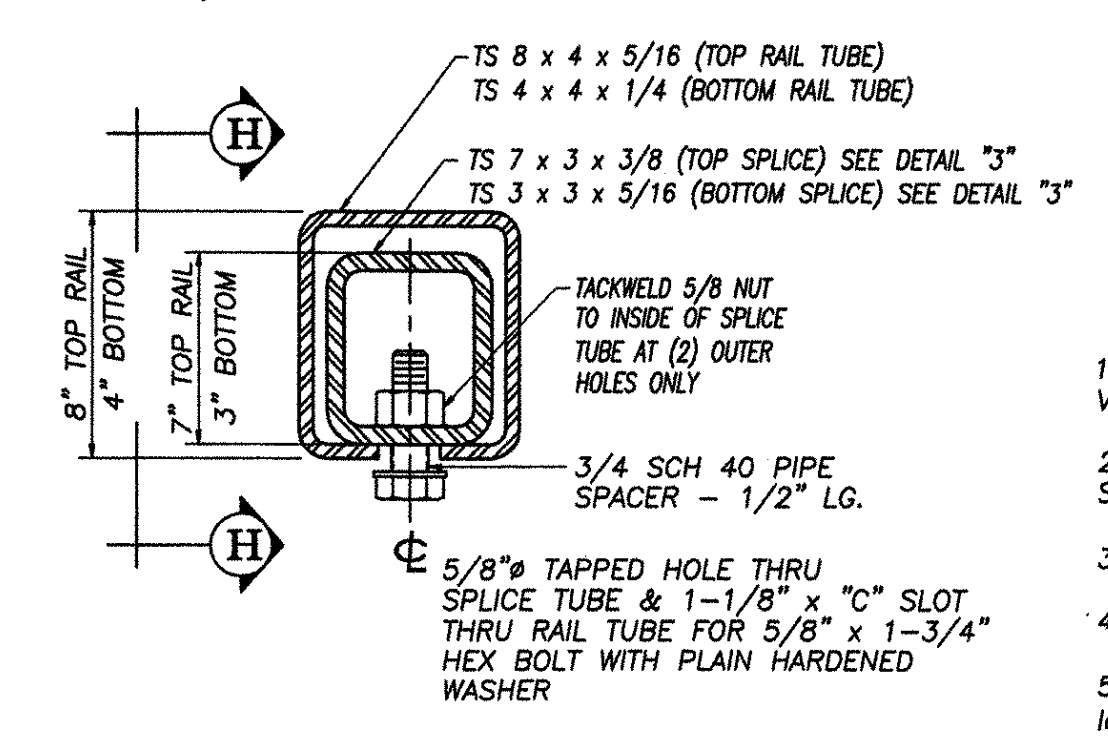
| RAIL TUBE | COVER PLATE |
|----------------|------------------------|
| 8" x 2" x 1/4" | 7 5/8" x 1 5/8" x 1/4" |
| 4" x 2" x 1/4" | 3 5/8" x 1 5/8" x 1/4" |



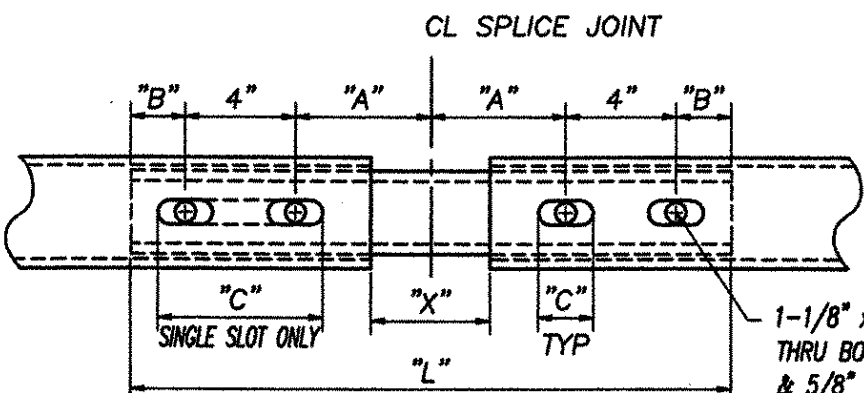
E ELEVATION
(PEDESTRIAN SIDE)



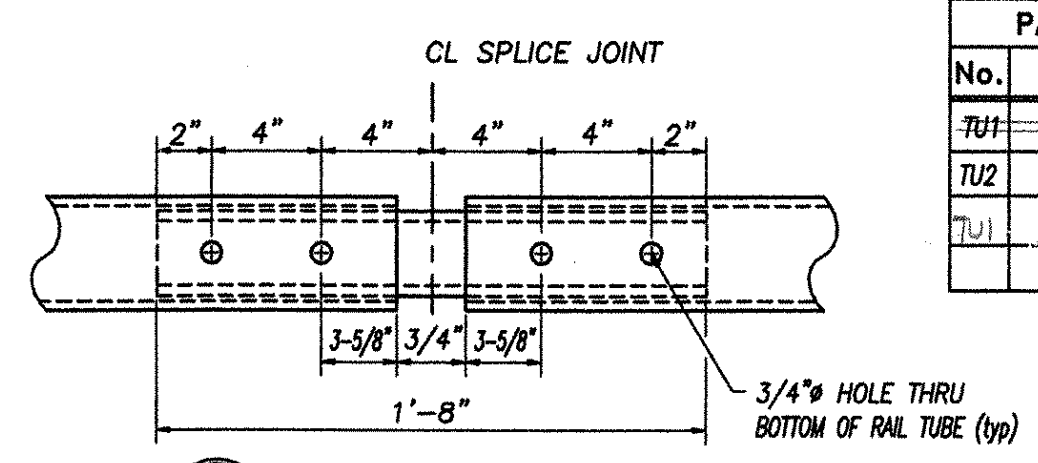
F SECTION
THRU FIXED SPLICE JOINT



G SECTION
THRU EXPANSION SPLICE JOINT

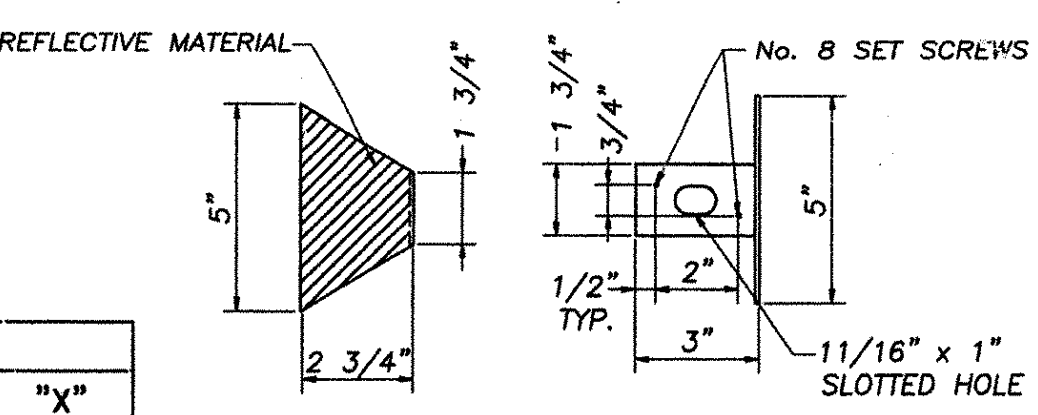


5 DETAIL
EXPANSION JOINT - BOTTOM VIEW
HARDWARE NOT SHOWN FOR CLARITY



4 DETAIL
SPLICE JOINT - BOTTOM VIEW
HARDWARE NOT SHOWN FOR CLARITY

| No. | RISE | CURVED LENGTH | STRAIGHT LENGTH |
|-----|--------|---------------|-----------------|
| TU1 | 3-1/8" | 12'-4" | 4'-11 11/16" |
| TU2 | 5 1/8" | 15'-6 3/16" | 6'-11 13/16" |
| TU1 | 2 7/8" | 11'-7" | 4'-11 11/16" |



DELINEATION DEVICE
PROVIDED BY OTHERS
SEE NOTE 13

| "T" | "A" | "B" | "C" | "L" | "X" |
|--------|-----|-----|--------|-----|--------|
| SPLICE | 4" | 2" | -- | 20" | 3/4" |
| ≤ 4" | 4" | 2" | 2-1/2" | 20" | 2-1/2" |

"T" = TOTAL REQUIRED MOVEMENT * = SINGLE SLOT

| No. | Remarks | Date |
|-----|-------------------|----------|
| 0 | Initial Submittal | 10/16/01 |
| | Second Submittal | 3/18/02 |
| | Third Submittal | 4/17/02 |

| Mk. | Qty. | Description |
|-----|------|---|
| | 50 | W6 x 25 POST W/BASE PLATE (2'-0 3/8" OAH) |
| | 14 | TS 8 x 4 x 5/16" (23'-9" OAL) TRAFFIC RAIL |
| | 14 | TS 4 x 4 x 1/4" (23'-9" OAL) TRAFFIC RAIL |
| | 1 | TS 8 x 4 x 5/16" (22'-8 7/8" OAL) TRAFFIC RAIL |
| | 1 | TS 4 x 4 x 1/4" (22'-8 7/8" OAL) TRAFFIC RAIL |
| TU2 | 1 | TS 8 x 4 x 5/16" (22'-6" OAL) TRAFFIC RAIL W/PARTIAL SHOP CURVE |
| TU2 | 1 | TS 4 x 4 x 1/4" (22'-6" OAL) TRAFFIC RAIL W/PARTIAL SHOP CURVE |
| | 1 | TS 8 x 4 x 5/16" (17'-1 1/8" OAL) TRAFFIC RAIL |
| | 1 | TS 4 x 4 x 1/4" (17'-1 1/8" OAL) TRAFFIC RAIL |
| | 14 | TS 8 x 2 x 1/4" (23'-9" OAL) PEDESTRIAN RAIL |
| | 14 | TS 4 x 2 x 1/4" (23'-9" OAL) PEDESTRIAN RAIL |
| TU1 | 1 | TS 8 x 2 x 1/4" (17'-3 11/16" OAL) PEDESTRIAN RAIL W/PARTIAL SHOP CURVE |
| TU1 | 1 | TS 4 x 2 x 1/4" (17'-3 11/16" OAL) PEDESTRIAN RAIL W/PARTIAL SHOP CURVE |
| | 1 | TS 8 x 2 x 1/4" (17'-1 13/16" OAL) PEDESTRIAN RAIL |
| | 1 | TS 4 x 2 x 1/4" (17'-1 13/16" OAL) PEDESTRIAN RAIL |
| | 1 | TS 8 x 2 x 1/4" (9'-3 1/4" OAL) PEDESTRIAN RAIL |
| | 1 | TS 4 x 2 x 1/4" (9'-3 1/4" OAL) PEDESTRIAN RAIL |
| | 1 | TS 8 x 2 x 1/4" (9'-3" OAL) PEDESTRIAN RAIL |
| | 1 | TS 4 x 2 x 1/4" (9'-3" OAL) PEDESTRIAN RAIL |
| | 50 | ANCHOR PLATE (3/8" x 8" x 1'-1") |
| | 16 | TS 7 x 3 x 3/8" (20" LG.) SPLICE TUBE |
| | 16 | TS 3 x 3 x 5/16" (20" LG.) SPLICE TUBE |
| | 4 | COVER PLATE (1/4" x 1 5/8" x 7 5/8") |
| | 4 | COVER PLATE (1/4" x 1 5/8" x 3 5/8") |
| | 200 | 1" x 12" LG. THREADED ANCHOR STUD W/HEAVY HEX NUT & WASHER |
| | 200 | 1" JAMB NUT |
| | 200 | 1" HEX NUT |
| | 200 | 3/4" x 6" LG. M164 ROUND HEAD BOLT W/WASHER & LOCKNUT |
| | 300 | 3/4" x 4" LG. M164 ROUND HEAD BOLT W/WASHER & LOCKNUT |
| | 128 | 5/8" x 1 3/4" LG. HEX BOLT W/PLAIN WASHER |
| | 50 | 1/8" THICK NEOPRENE PAD |

NETC 2 RAIL NOTES

- All work and materials shall conform to the provisions of Section 525 - Railings of the Vermont Standard Specifications for Construction.
- Tubing & posts shall meet the requirements of Section 732 - Railing materials of the Standard Specifications for Construction.
- All exposed cut or sheared edges shall be ground to a 1/16" radius & be free of burrs.
- Rail posts shall be set normal to grade.
- Sections of rail bar shall be attached to a minimum of two (2) posts and preferably to at least four (4) posts.
- Rail bar expansion joints shall be provided in any rail bay spanning a superstructure expansion joint. Expansion joint width shall be "X" at 45° F and will be adjusted in the field by the engineer.
- All parts shall be galvanized after fabrication in accordance with subsection 506.15, as modified by the special provisions.
- Rail posts anchoring nuts shall be tightened to a snug-tight fit and given an additional 1/8 turn.
- Rail bars shall be attached using 3/4" full diameter body head bolts AASHTO M164 (Type-I) inserted through the face of the bar. Holes in post shall be 1/16" larger than the bolt size.
- Holes in rails for attachment to posts will be field-drilled. Holes shall be coated with an approved zinc-rich paint prior to erection.
- Radiused rails (if required) will be shop-curved. No field-bending of rail tubes.
- The drop-weight tear test in section 732 shall not apply to the structure tubing on this standard.
- Delineation devices shall be set approximately every 30 ft. or to closest post.

MATERIALS

Rail bars.....ASTM A500 GR B or ASTM A501
 Rail posts.....ASTM A709/A709M, GR 50
 All other shapes & plates.....ASTM A709/A709M GR 36
 Anchor studs.....ASTM A449
 All other bolts [unless noted].....AASHTO M164, TYPE I

Nuts for AASHTO m164 bolts shall comply with AASHTO M291. Nuts for anchor studs shall comply with ASTM A563.

Washers shall comply with AASHTO M293 (ASTM F436) specification.

1/8" pad shall comply with standard specification subsection 731.01 or 731.02 of Vermont Standard Specifications.

Set screws for delineation devices shall conform to ASTM specifications F880 condition CW, alloy type 304.

RECEIVED
 OK'D BY WMS OK'D BY RST
 APR 23 2002
 RESUBMITTED BY CPW APPROVED BY At mba DATE 4/30/02

HIGHWAY SAFETY CORP.
 GLASTONBURY, CT

ITEM 525.33 - BRIDGE RAIL - NETC 2 RAIL
 PROJECT No. AC BRZ 1444(22)
 TOWN OF ROYALTON
 TH1 OVER THE WHITE RIVER
 (BRIDGE No. 3) WINDSOR COUNTY

DRAWN J. Ruiz
 CHECKED Paul
 DATE 10/15/01
 SCALE N.T.S.
 HSC REFERENCE NO. 1240
 SIZE D REVISION 0
 SHEET NO. 2 of 2

GENERAL CONTRACTOR
 SUB CONTRACTOR F.R. LAFAYETTE, INC.