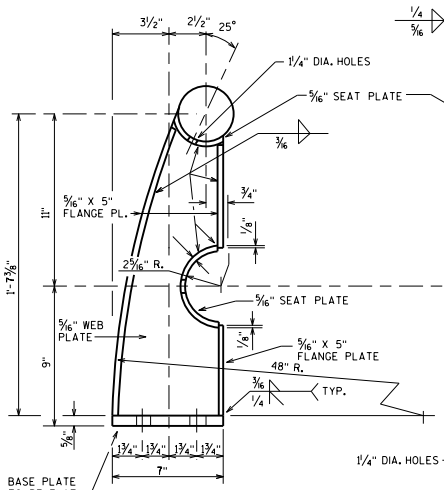
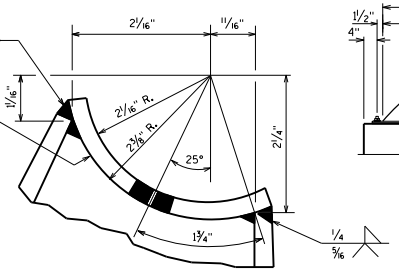
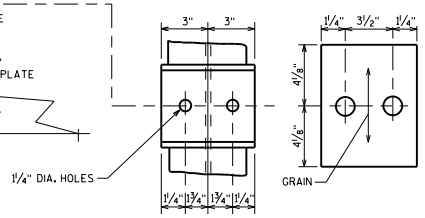


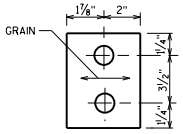
STEEL POST DETAILS



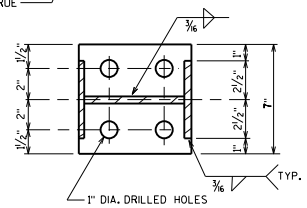
TOP RAIL SEAT PLATE



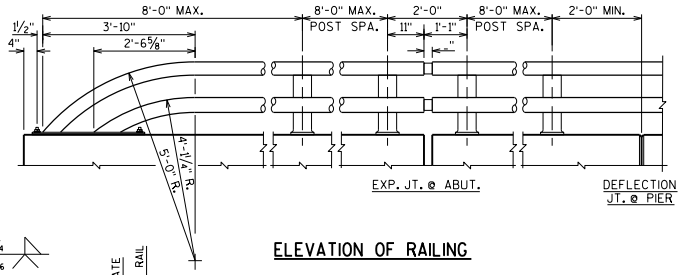
LAYOUT OF BOTTOM RAIL SEAT PL.



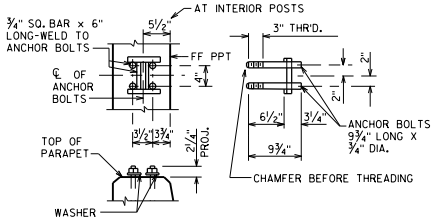
LAYOUT OF TOP RAIL SEAT PL.



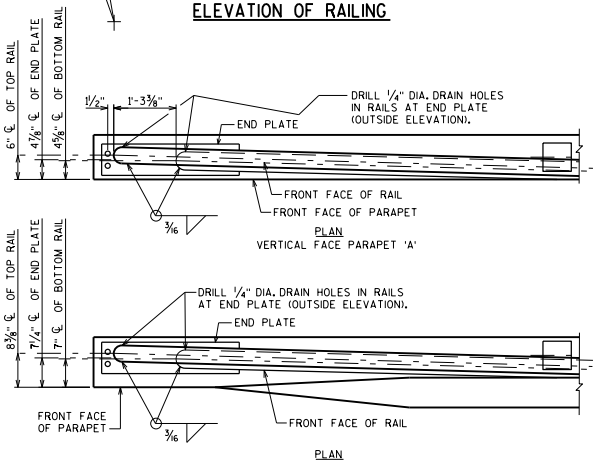
STEEL POST DETAILS



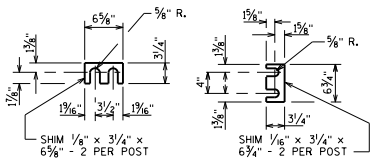
ELEVATION OF RAILING



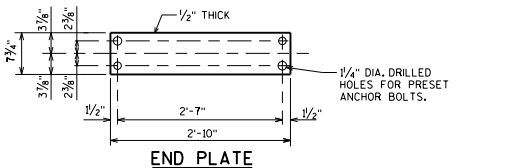
ANCHOR BOLTS AT POSTS



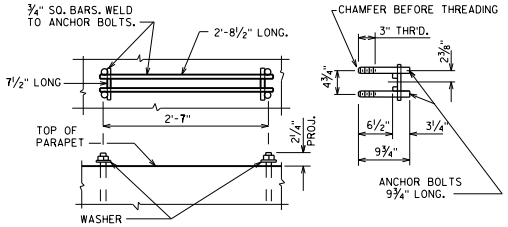
DETAIL OF RAIL BEND AT ABUTMENTS



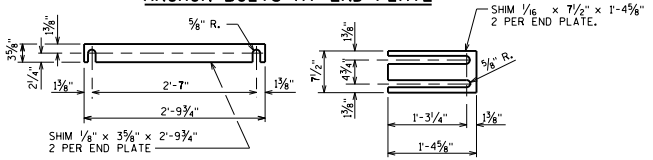
POST SHIM DETAILS



END PLATE



ANCHOR BOLTS AT END PLATE



END PLATE SHIM DETAILS

NOTES

BID ITEM SHALL BE "RAILING TUBULAR TYPE H" WHICH INCLUDES ALL ITEMS SHOWN.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM A307. IF A307 IS USED ELECTRO-GALVANIZE NUTS, WASHERS & TOP 3½" OF ANCHOR BOLTS.

CLOSURE ENDS ON STEEL RAILING SHALL BE ¼" PLATE. WELD AND GRIND SMOOTH.

RAILINGS SHALL BE FABRICATED IN 2 AND 3 PANEL LENGTHS.

RAILING POSTS SHALL BE SET NORMAL TO GRADE LINE.

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG CENTERLINE OF THE POST BASE.

SHIMS SHALL BE USED UNDER POSTS AND END PLATES WHERE REQ'D. FOR ALIGNMENT.

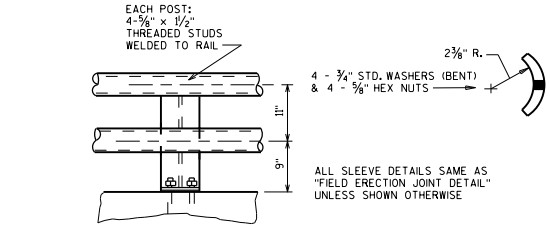
FILL ALL EXPOSED OPENINGS BETWEEN SHIMS AND POST ANCHOR BOLT HOLES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

RAILS, POSTS & SHIMS SHALL BE MADE FROM MATERIALS CONFORMING TO ASTM DESIGNATION A709, GRADE 36.

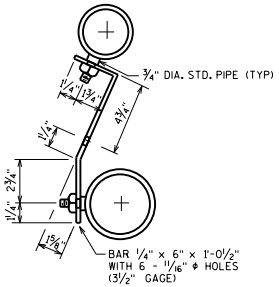
ALL MATERIALS, EXCEPT ANCHORAGES, SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL SHALL BE GIVEN A NO. 6 BLAST CLEANING BY SSPC SPECIFICATIONS.

RAILS SHALL BE BUILT STRAIGHT AND SPRUNG INTO PLACE FOR STRUCTURES CURVED UP TO 3°. FOR STRUCTURES CURVED GREATER THAN 3°, RAILS SHALL BE CURVED TO FIT.

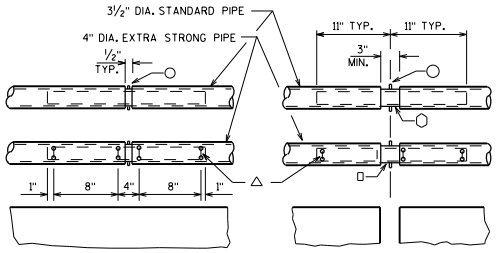
RAILING WEIGHT = 30 LB/FT



RAIL TO POST CONN.



SHIPPING BAR
END SECTION ONLY



FIELD ERECTION JOINT DETAIL

DETAIL AT RAIL OPENING

LEGEND

- ○ 5⁄16" × ⅜" WELDED STUDS
- ⬡ 3" DIA. STD. PIPE × 1'-10" LONG
- □ 3" DIA. EXTRA STRONG PIPE × 1'-10" LONG
- △ ½" DIA. WELD BEADS AT 1/3 PTS. ON PIPE 11" CIRCUMF. GRIND BEADS SO THAT SLEEVE FITS FREELY IN THE I.D. OF 4" DIA. EXTRA STRONG PIPE.

TUBULAR RAILING TYPE 'H' (STEEL)

BUREAU OF STRUCTURES

APPROVED: Bill Oliva

DATE: 7-19

STANDARD 30.05