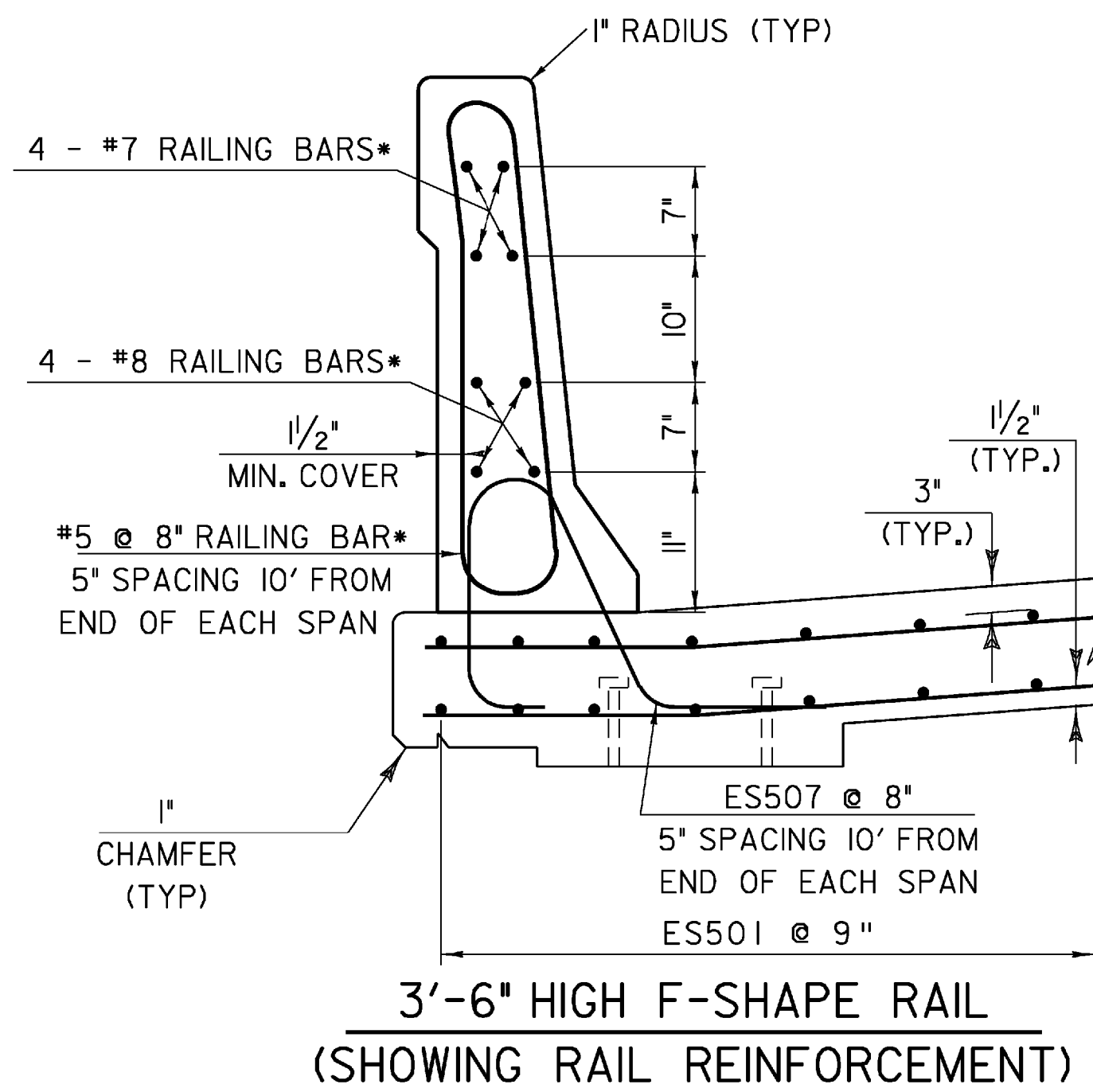
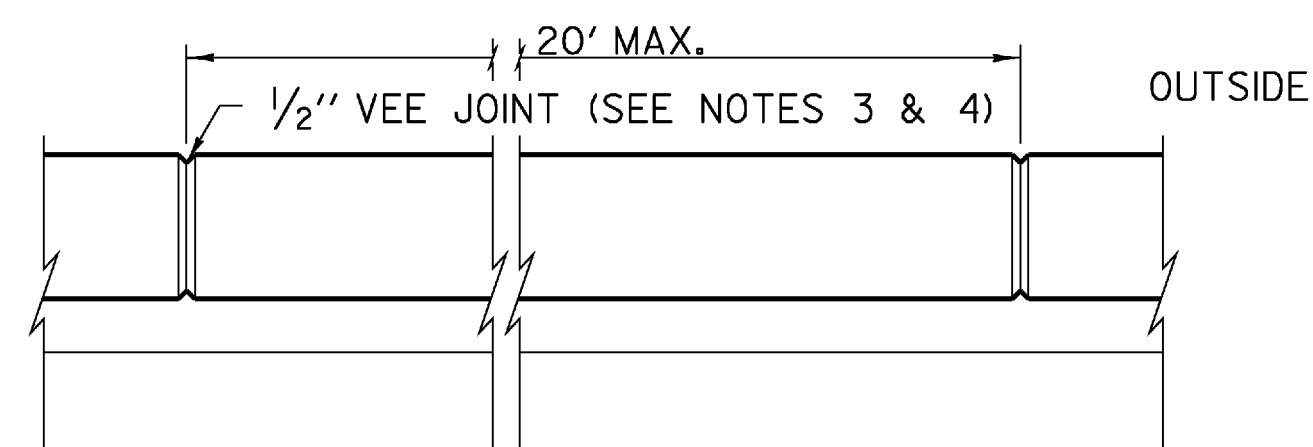


BAR BENDING DETAIL

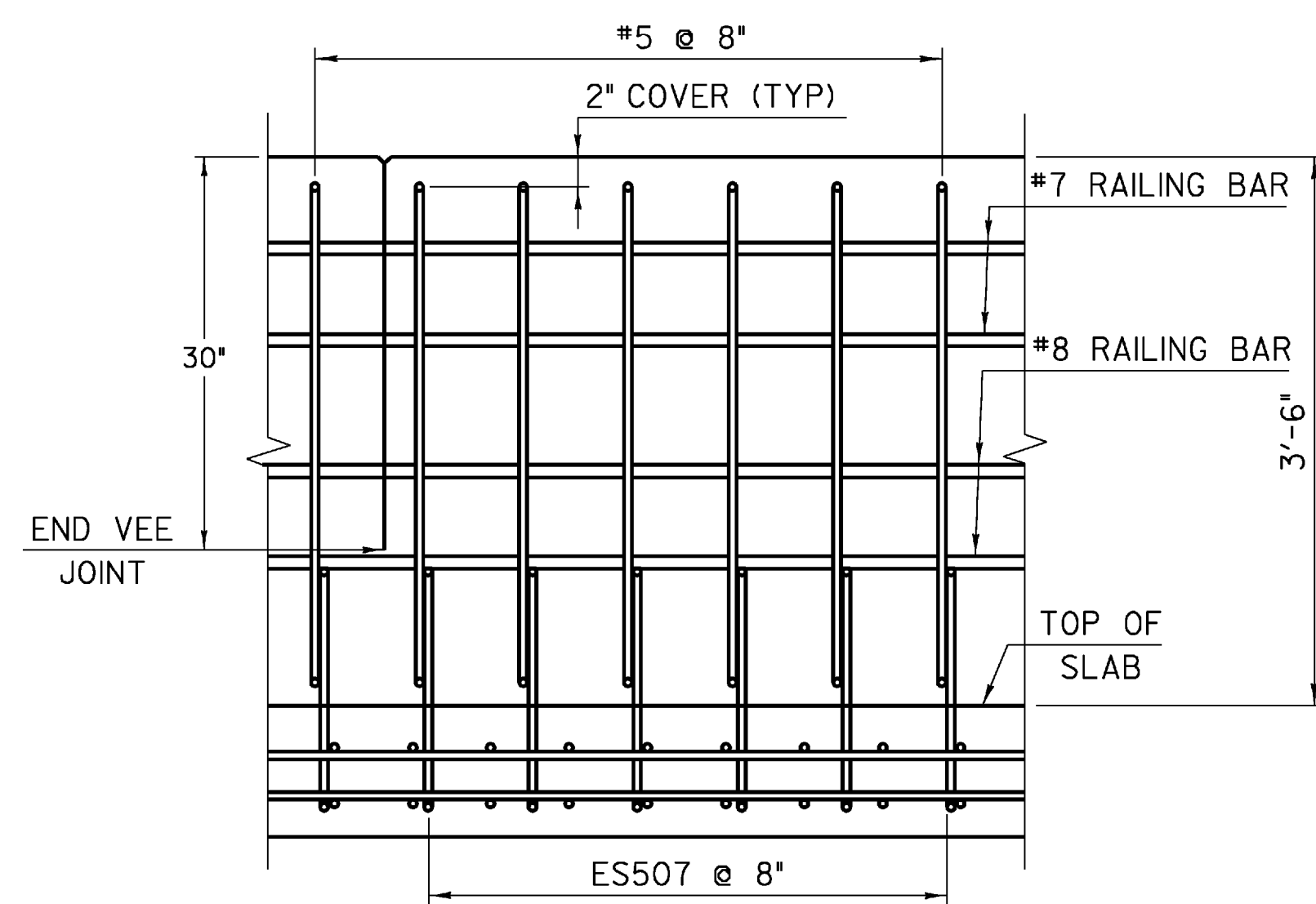


3'-6" HIGH F-SHAPE RAIL (SHOWING RAIL REINFORCEMENT)

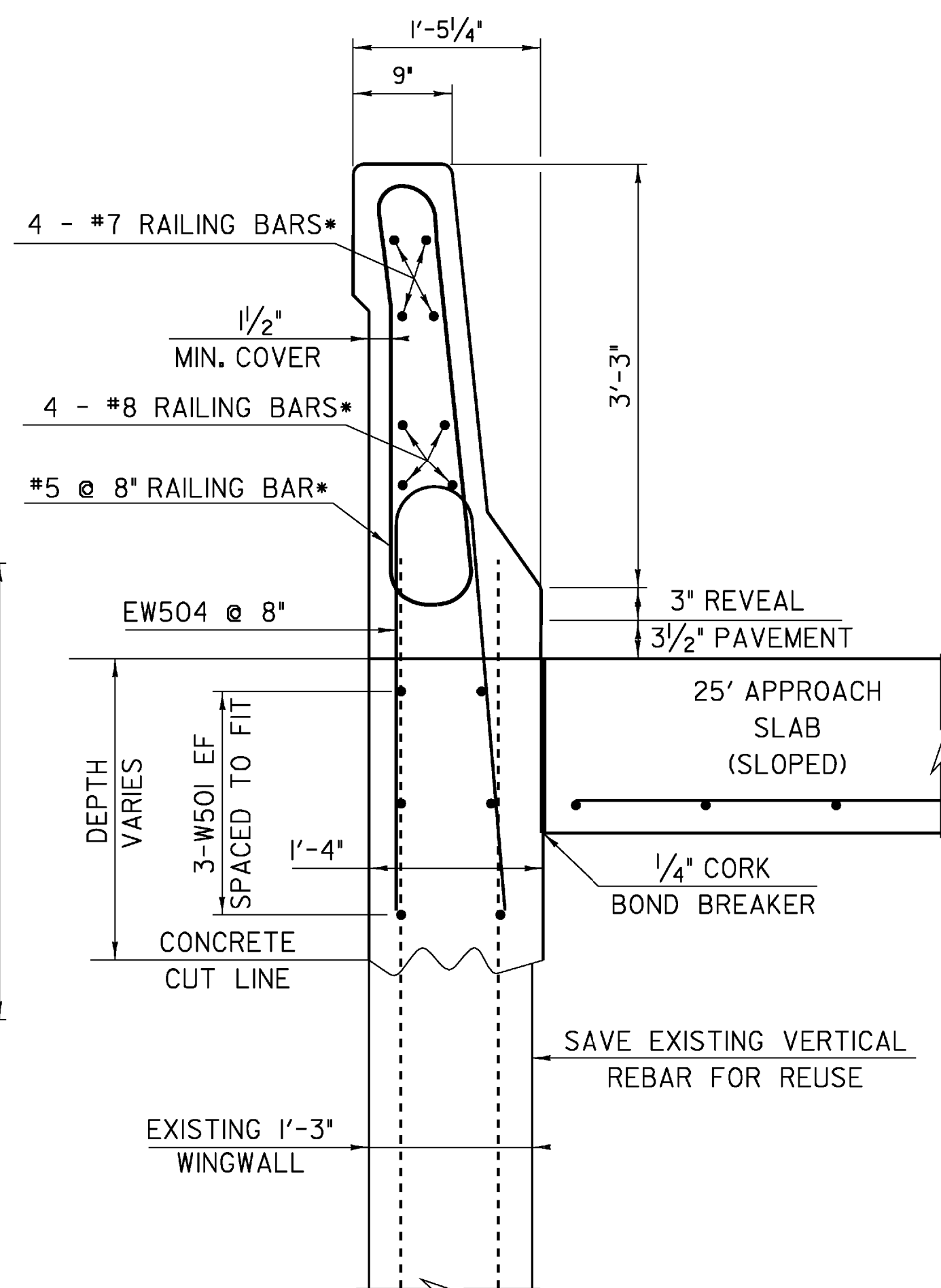
*THE RAILING BARS SHALL BE INCLUDED IN THE UNIT BID PRICE OF 900.640 SPECIAL PROVISION (BRIDGE RAILING, F-SHAPE CONCRETE).



PLAN VIEW OF RAIL



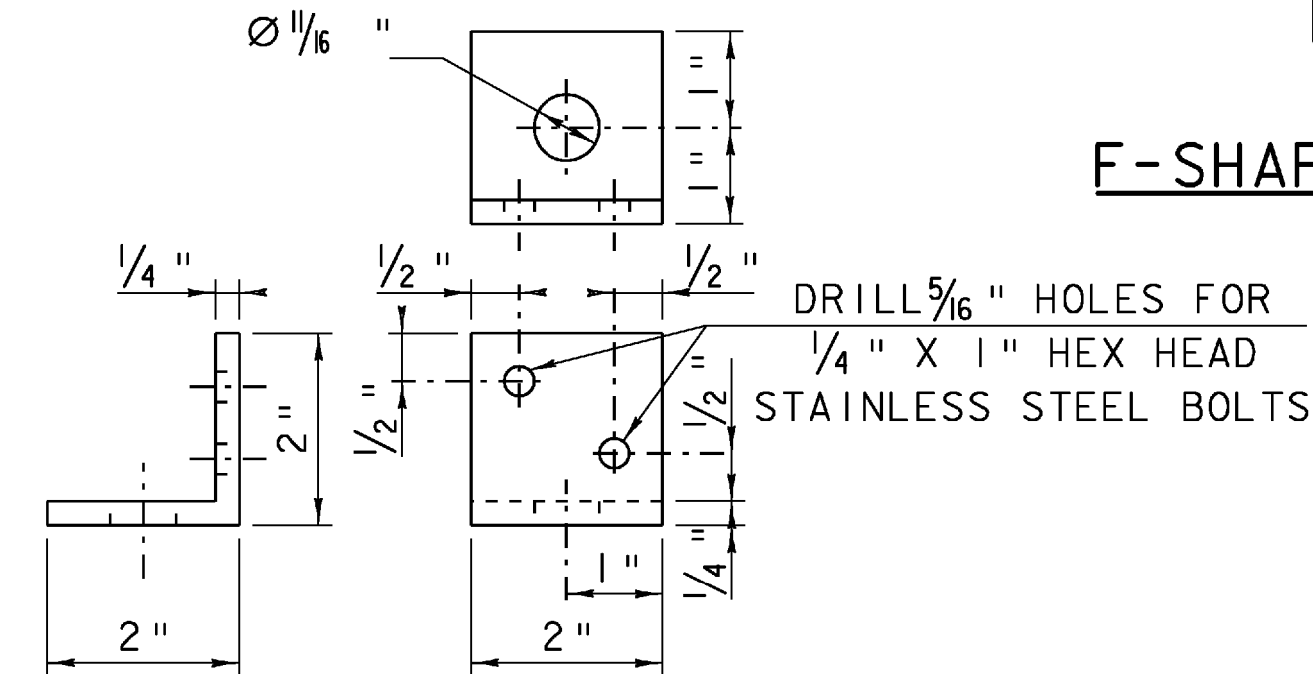
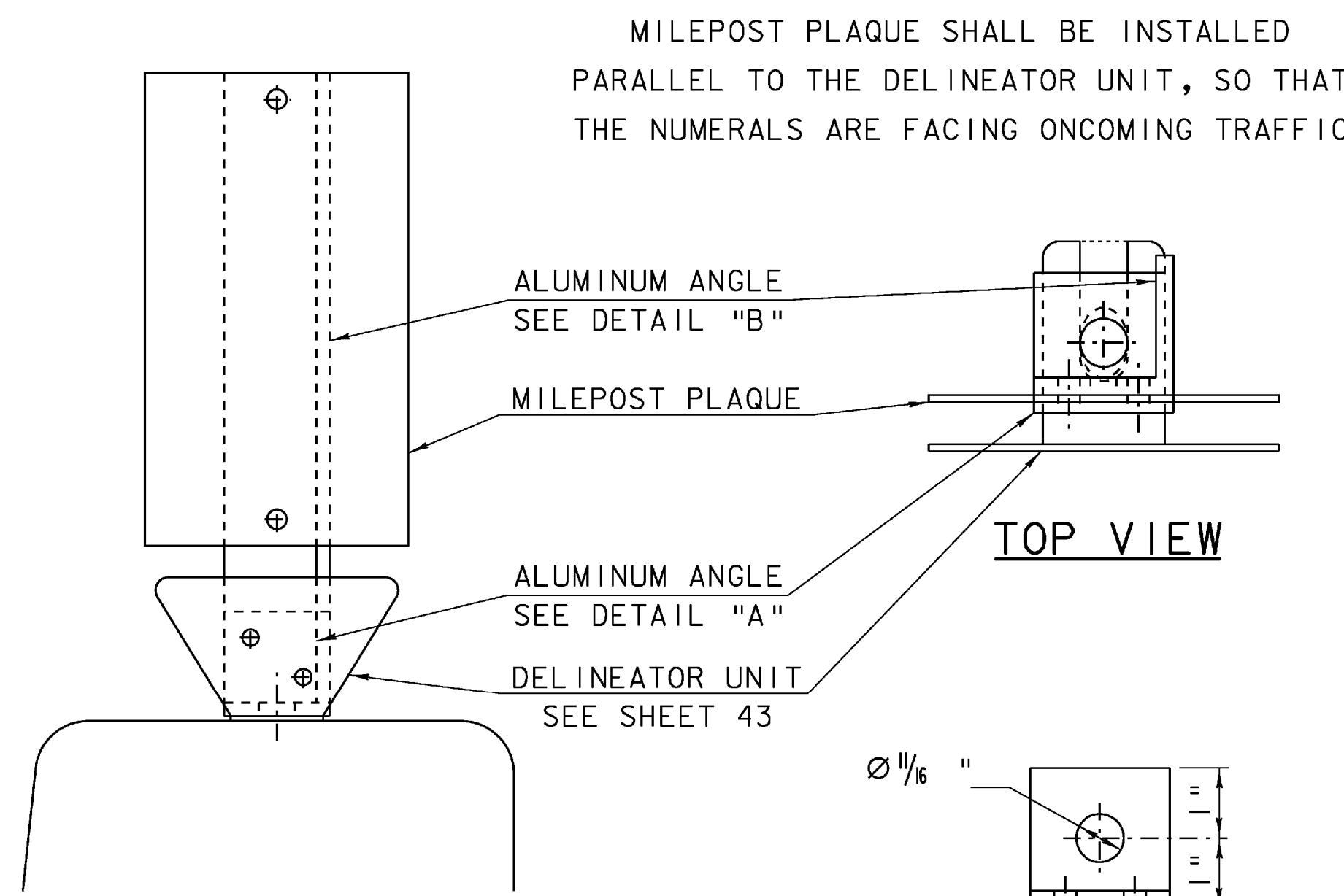
ELEVATION (SHOWING RAIL & DECK REINFORCEMENT)



3'-9 1/2" HIGH F-SHAPE RAIL (@ WINGWALLS)

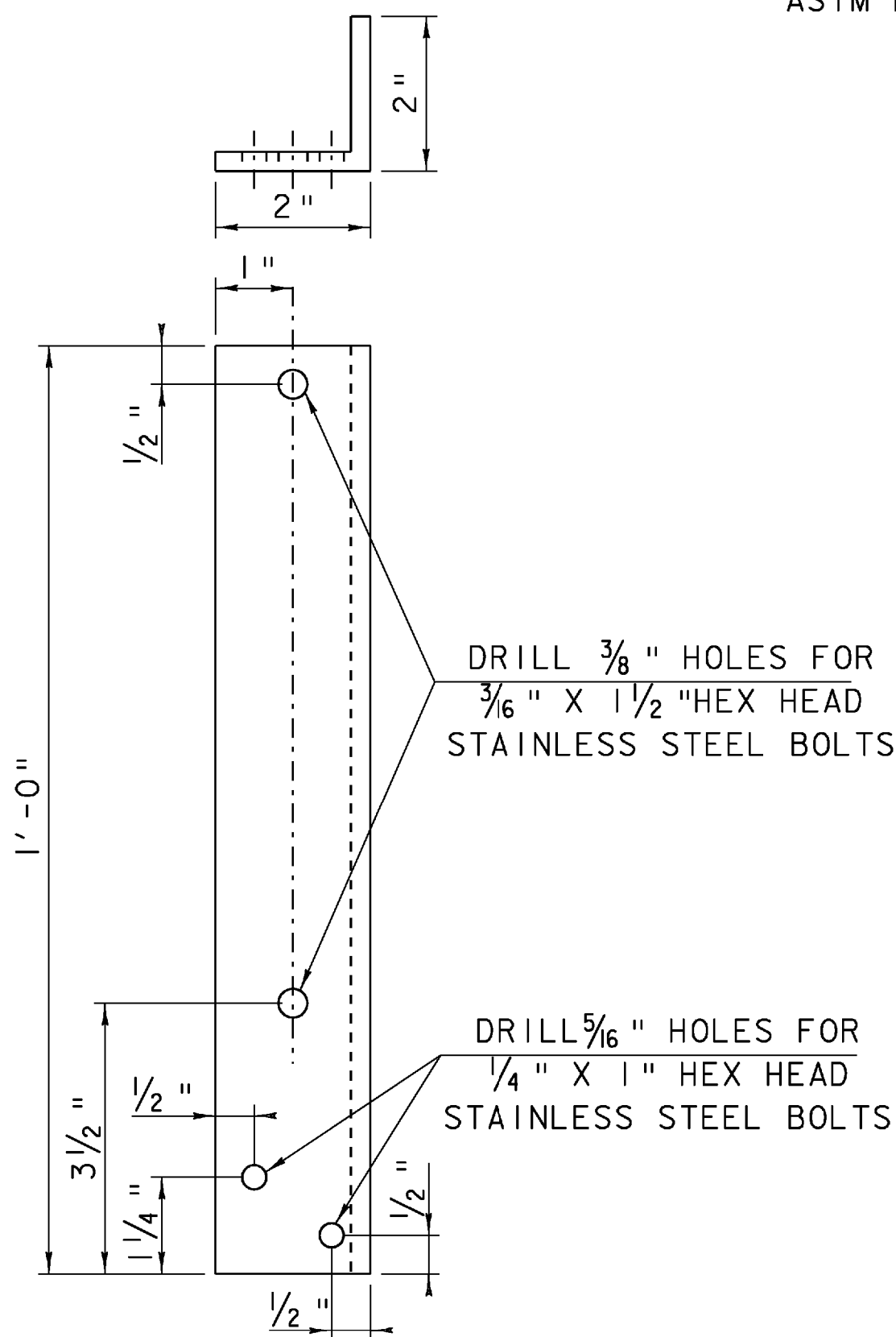
SEE NEW RAIL DETAIL ON SHEET 61 FOR CONCRETE DIMENSIONS

MILEPOST PLAQUE MOUNTED ON RAIL SECTION



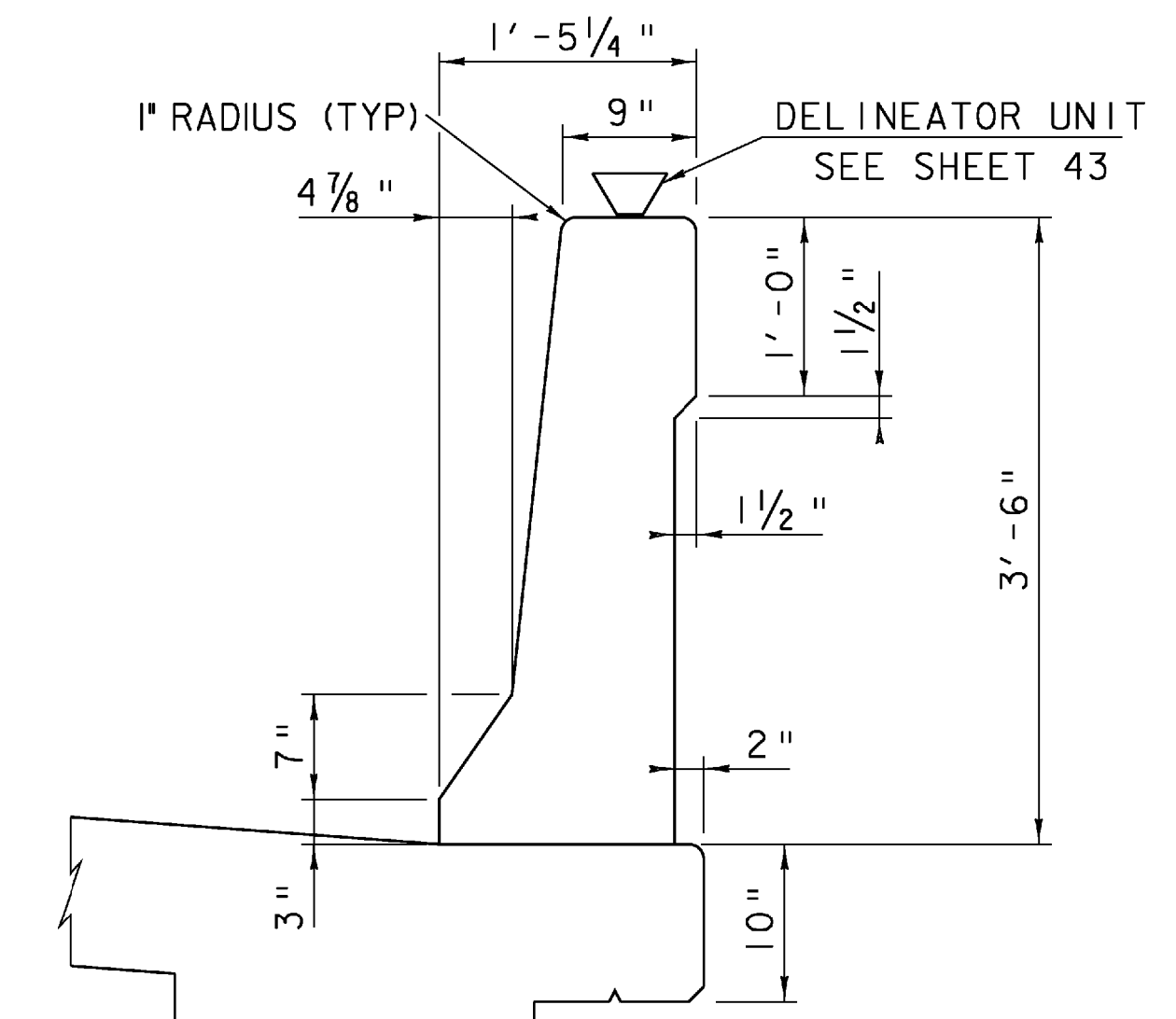
DETAIL "A" ALUMINUM ANGLE

ASTM B-308 ALLOY 6061 T6



DETAIL "B" ALUMINUM ANGLE

ASTM B-308 ALLOY 6061- T6



F-SHAPE RAIL DETAIL ON BRIDGE

MM	NORTHBOUND STATION	SOUTHBOUND STATION
5250	291+70.26	391+43.27
5255	294+41.51	394+06.89

BRIDGE RAIL NOTES:

1. RAIL MEETS TEST LEVEL 5 REQUIREMENTS OF NCHRP REPORT 350.
2. MATERIAL REQUIREMENTS FOR BRIDGE RAIL ONLY:
 - REINFORCING STEEL SHALL BE EPOXY COATED, GRADE 60, CONFORMING TO SUBSECTIONS 713.01 AND 713.07 (b).
 - CONCRETE SHALL BE PER SPECIFICATION 900.640 SPECIAL PROVISION (BRIDGE RAILING, F-SHAPE CONCRETE).
3. 1/2" VEE JOINTS SHALL BE PROVIDED IN EACH FACE OF THE CONCRETE RAIL AT INTERVALS NOT TO EXCEED 20 FEET.
4. THE 1/2" VEE JOINT SHALL END 30" FROM THE TOP OF THE CONCRETE RAIL.
5. THE BAR BENDING DETAILS FOR THE REINFORCING STEEL FOR THE CONCRETE RAIL HAS BEEN SHOWN ON THIS SHEET. THE #7 AND #8 RAILING BARS SHALL BE CONTINUOUS THROUGH THE VEE JOINT FOR THE LENGTH OF EACH BRIDGE SPAN.
6. A CONSTRUCTION JOINT SHALL BE FORMED AT BEGIN/END BRIDGE LOCATIONS.
7. ALL PERMANENTLY EXPOSED CONCRETE SHALL BE TREATED WITH SILANE IN ACCORDANCE WITH SECTION #514.
8. ALUMINUM ANGLES SHALL BE INCIDENTAL TO THE ITEM 900.640 "SPECIAL PROVISION (F-SHAPE CONCRETE RAIL)."

ALL DETAILS NOT TO SCALE

PROJECT: BERLIN	PROJECT NO.: IM 089-1 (20)
DESIGN FILE NAME: 99a270\structures\99a270rail.dgn	PLOT DATE: 05-DEC-2007
IPARM FILE NAME: s99a270raildet.i	DESIGNED BY: G. SPILAK
SQUAD LEADER: C.P. WILLIAMS	CHECKED BY: R.S. YOUNG
BRIDGE RAIL DETAILS	SHEET: 60 OF 104