

NOTES

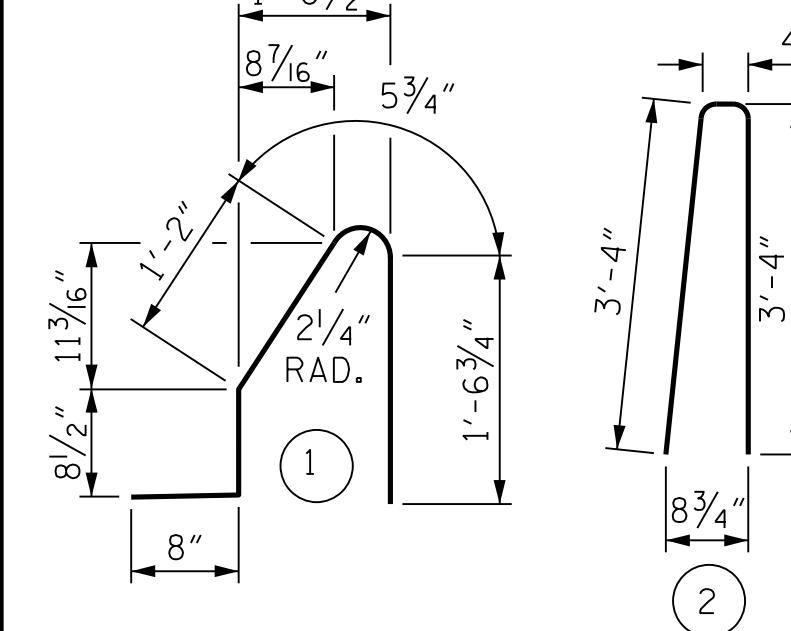
THE BARRIER RAIL IN EACH SPAN SHALL NOT BE CAST UNTIL ALL SLAB CONCRETE IN THAT SPAN HAS BEEN CAST AND HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

GROOVED CONTRACTION JOINTS, 1/2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE BARRIER RAIL AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. THE CONTRACTION JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN BARRIER RAIL EXPANSION JOINTS. ONLY ONE CONTRACTION JOINT IS REQUIRED AT MIDPOINT OF BARRIER RAIL SEGMENTS LESS THAN 20 FEET IN LENGTH AND NO CONTRACTION JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 10 FEET IN LENGTH.

THE #5 S1 AND #5 S2 MAY BE SHIFTED SLIGHTLY IN ORDER TO MAINTAIN A 2" MINIMUM CLEARANCE TO 1/2" EXPANSION JOINT MATERIAL IN BARRIER RAIL.

BAR TYPES



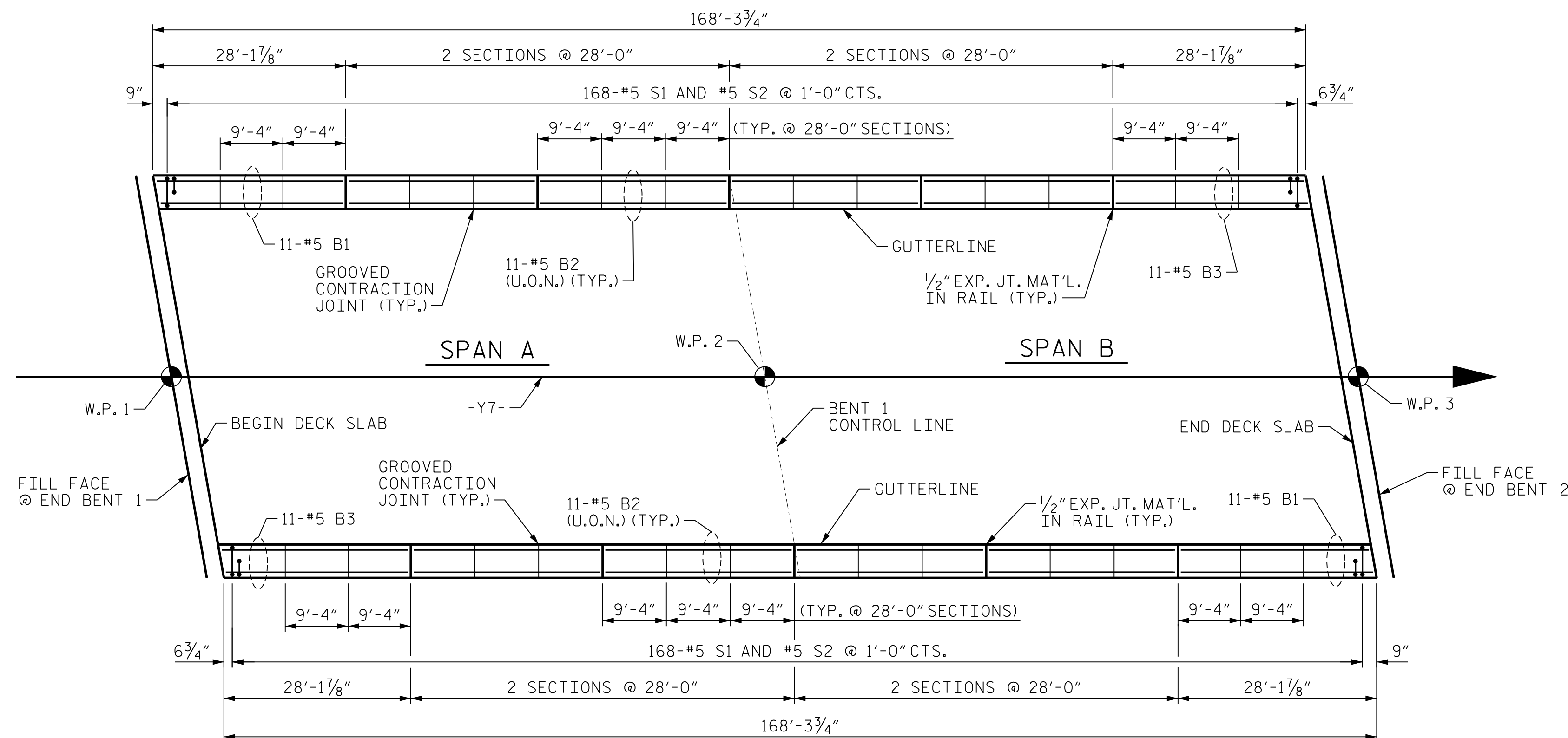
ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL

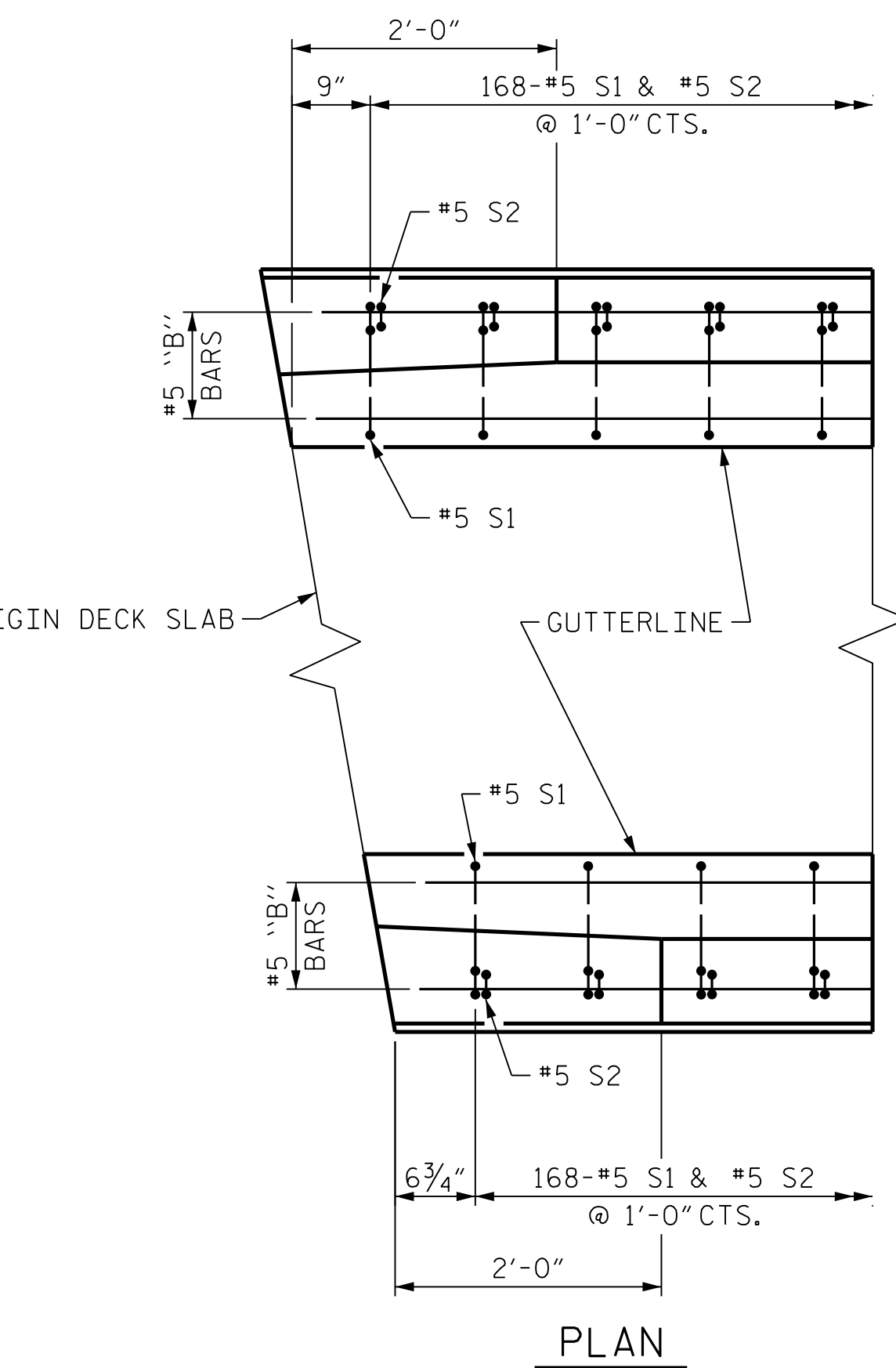
FOR CONCRETE BARRIER RAIL ONLY

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
*B1	22	#5	STR.	27'-6"	631
*B2	88	#5	STR.	27'-7"	2,532
*B3	22	#5	STR.	27'-9"	637
*S1	336	#5	1	4'-7"	1,606
*S2	336	#5	2	7'-0"	2,453

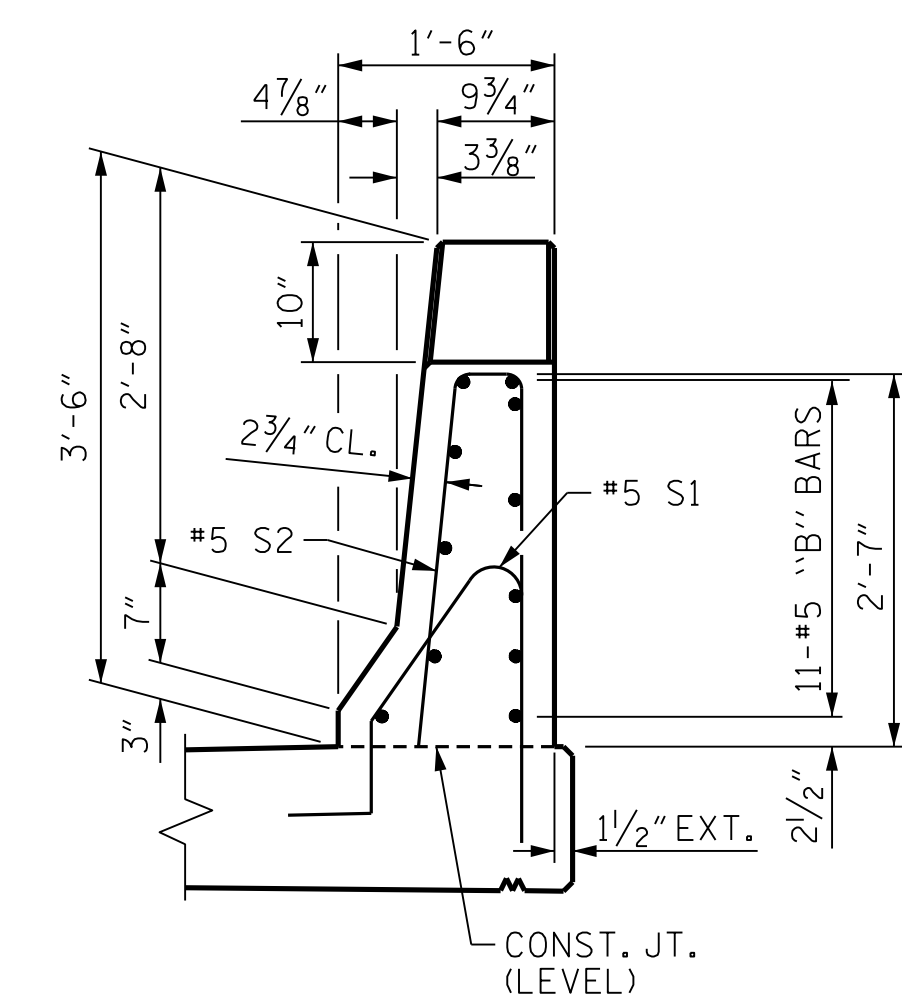
* EPOXY COATED REINFORCING STEEL 7,859 LBS.
CLASS AA CONCRETE 45.8 CU. YDS.
CONCRETE BARRIER RAIL 336.62 LIN. FT.



PLAN OF BARRIER RAIL

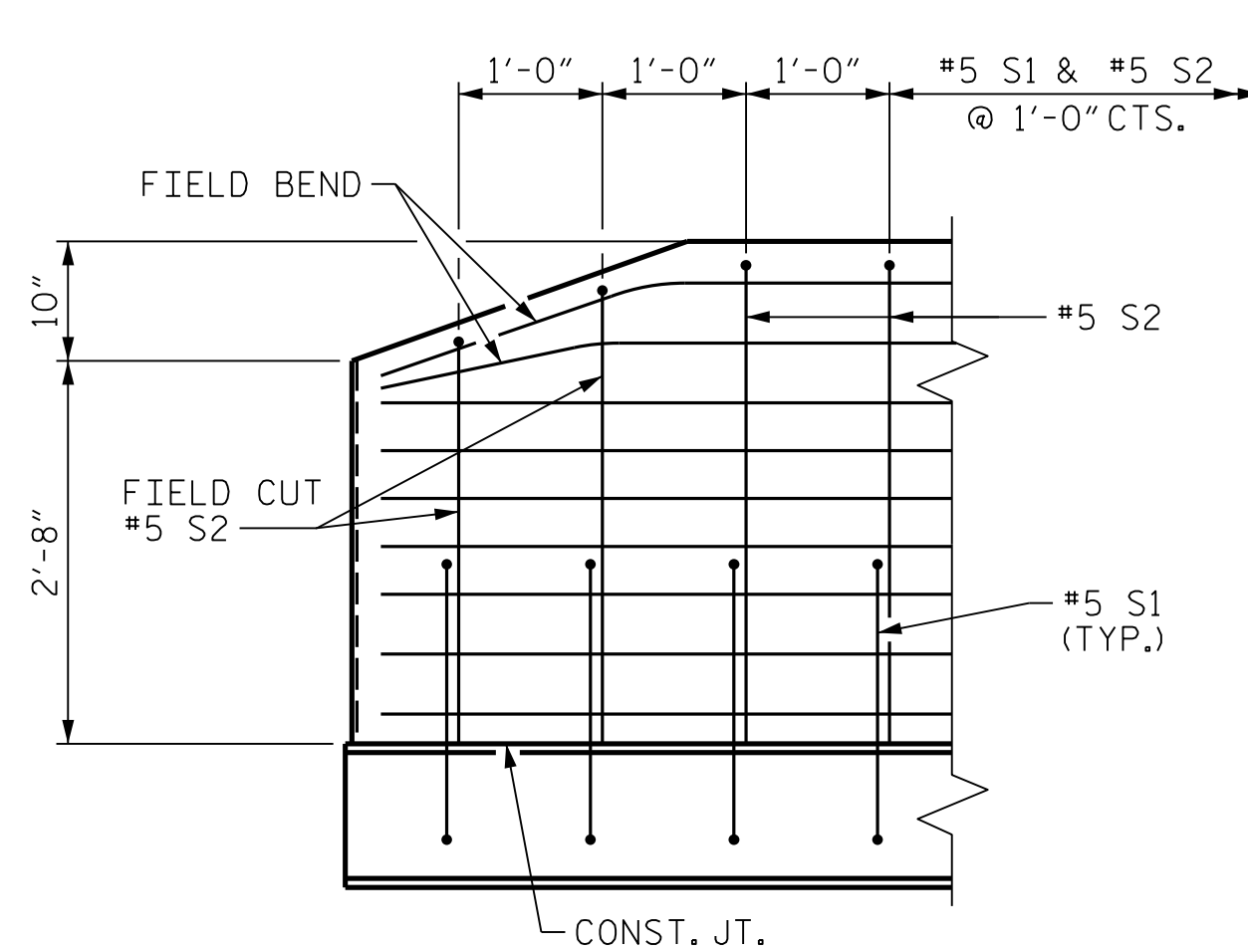


PLAN

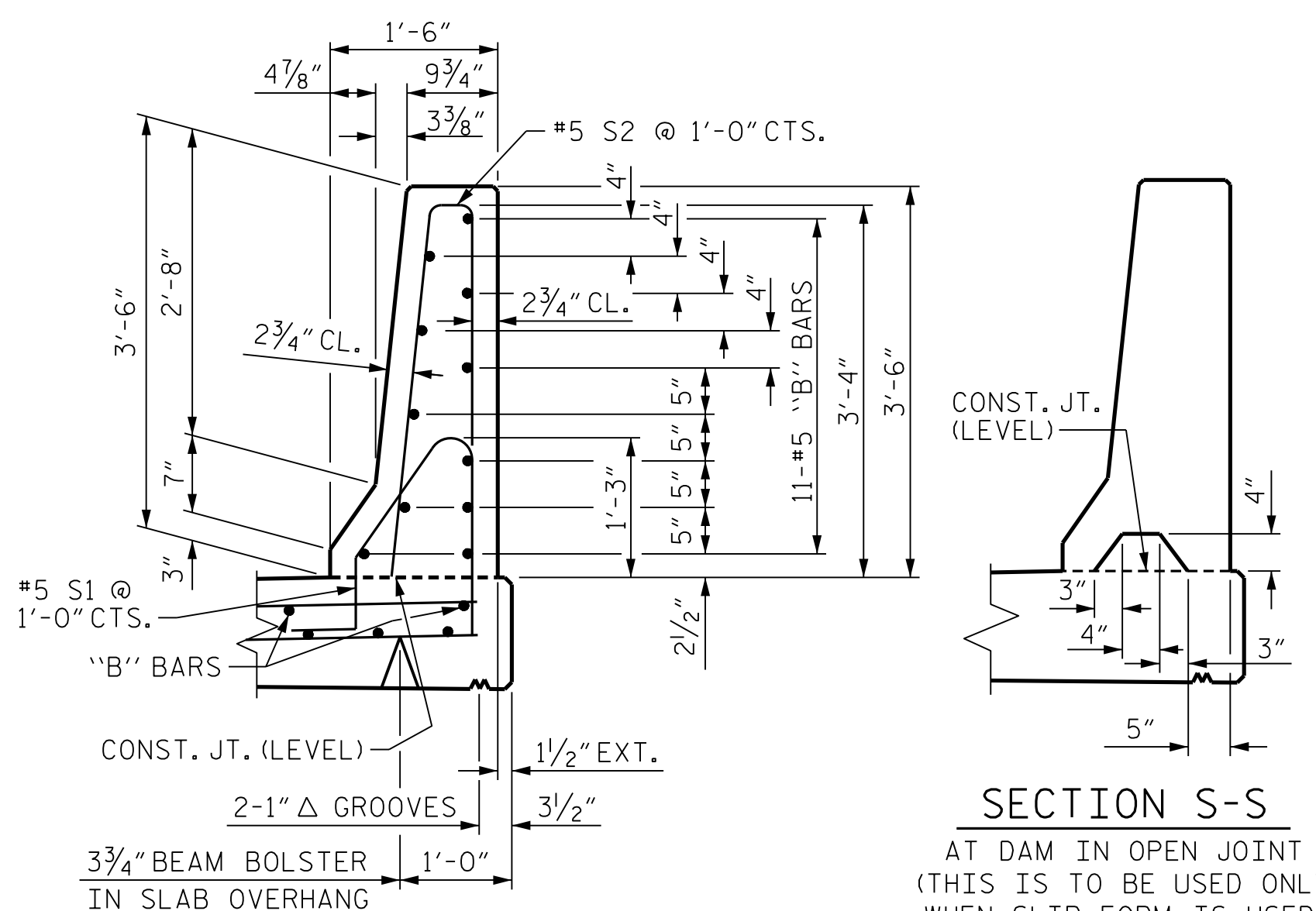


END VIEW

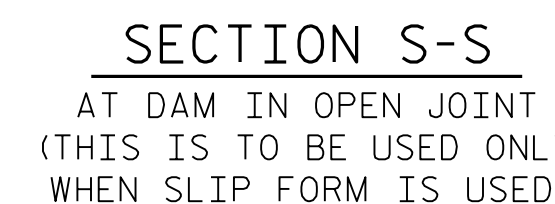
END OF RAIL DETAILS



SIDE VIEW

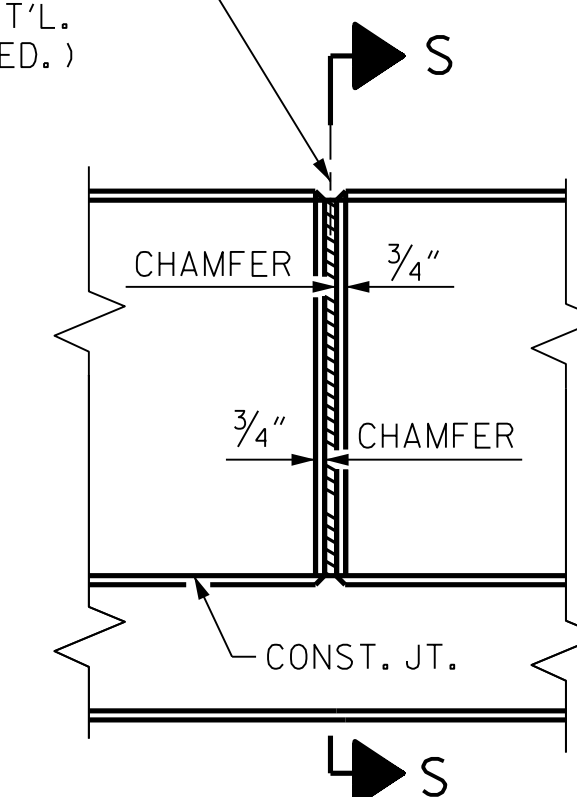


SECTION THRU RAIL

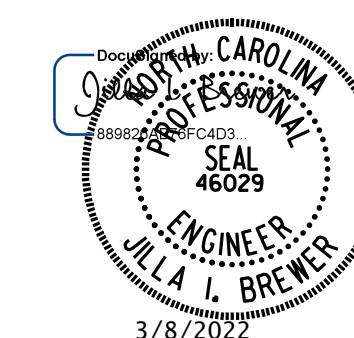


SECTION S-S
AT DAM IN OPEN JOINT
(THIS IS TO BE USED ONLY WHEN SLIP FORM IS USED)

1/2" EXP. JT. MAT'L. HELD IN PLACE WITH GALVANIZED NAILS.
(NOTE: OMIT EXP. JT. MAT'L. WHEN SLIP FORM IS USED.)



ELEVATION AT EXPANSION JOINTS
BARRIER RAIL DETAILS



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

MI ENGINEERING
1011 SCHAUB DRIVE, SUITE 100
RALEIGH, NC 27606
(919) 851-6606
FIRM PE NUMBER : P-0671

PROJECT NO. I-5987B
ROBESON COUNTY
STATION: 29+70.72 -Y7-

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
STANDARD
CONCRETE
BARRIER RAIL

REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	SHEET NO.	
1			3			S10-18	
2			4			TOTAL SHEETS 33	

STD. NO. CBRI (SHT 3)

3/8/2022 10:38:02 AM User: blanning
 File: N:\NC Bridges\20003 I-5987A&B I-5987B\Structures\410-035-I5987B-SMU-BRI-1770167.dgn
 ASSEMBLED BY: D.R. BROWN DATE: 02/2021
 CHECKED BY: J.I. BREWER DATE: 03/2021
 DESIGN ENGINEER OF RECORD: J.I. BREWER DATE: 12/2021
 DRAWN BY: ARB 5/87 REV. 7/12 MAA/GM
 CHECKED BY: SJD 9/87 REV. 6/13 MAA/GM
 REV. 12/17 MAA/THC