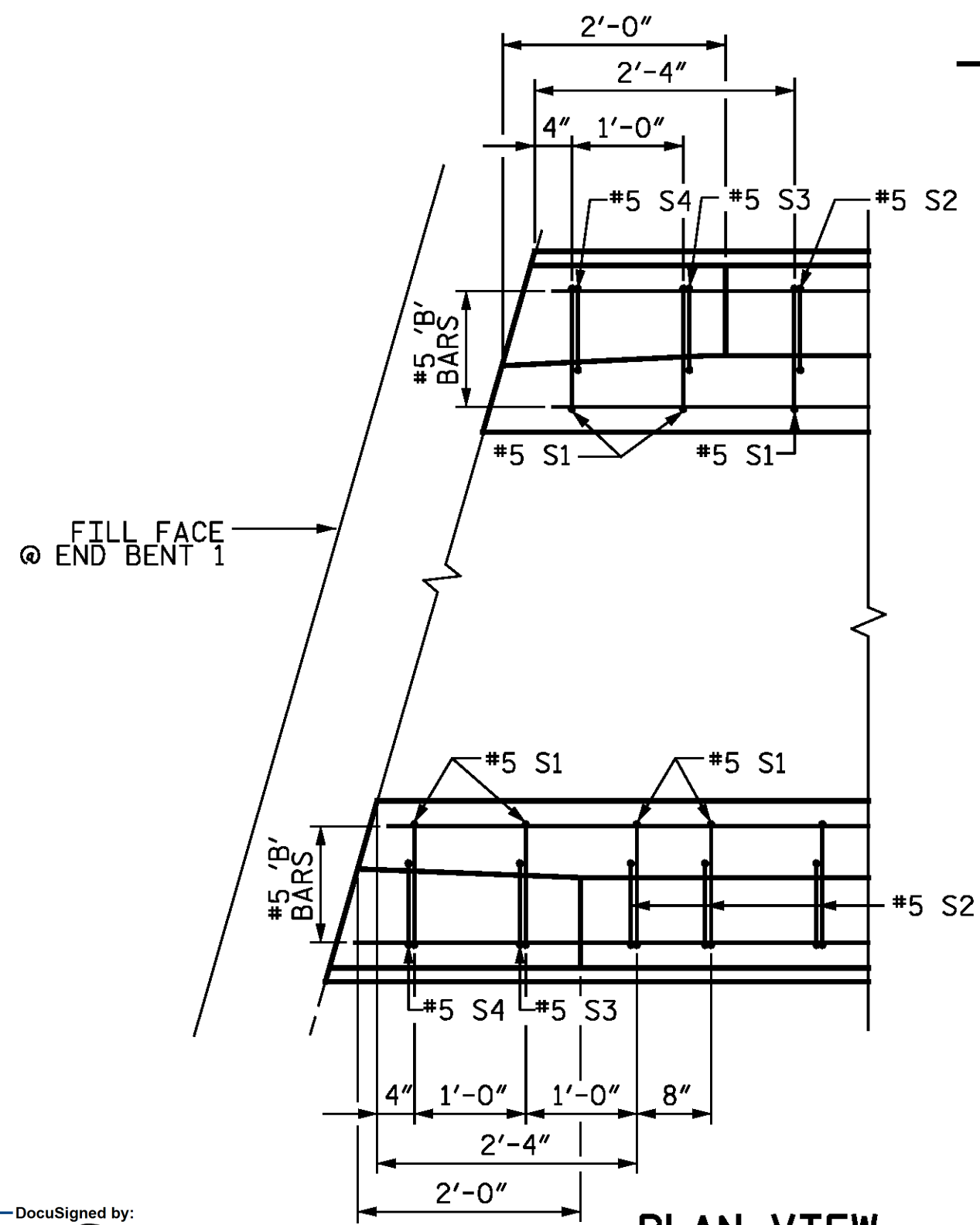
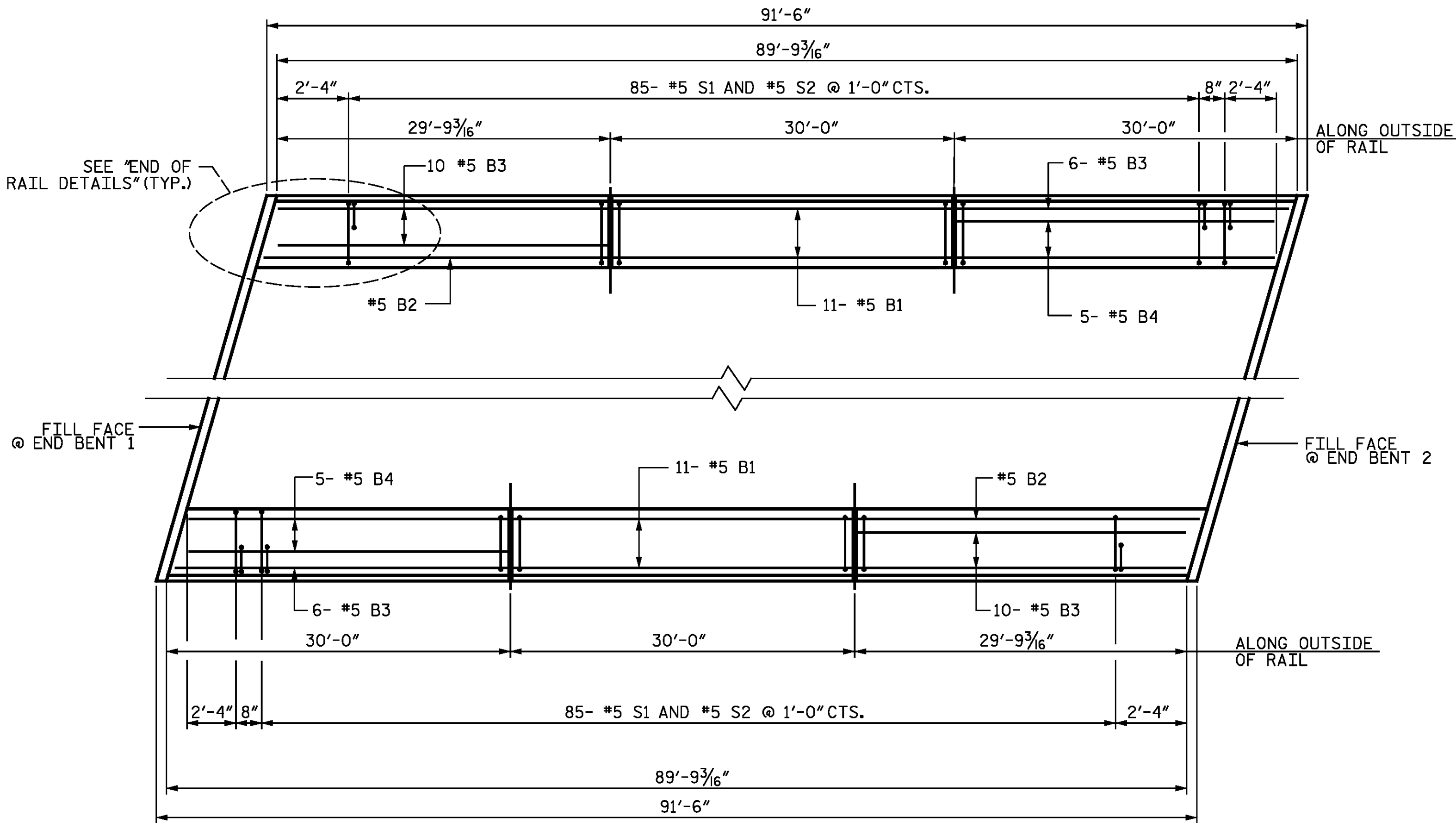
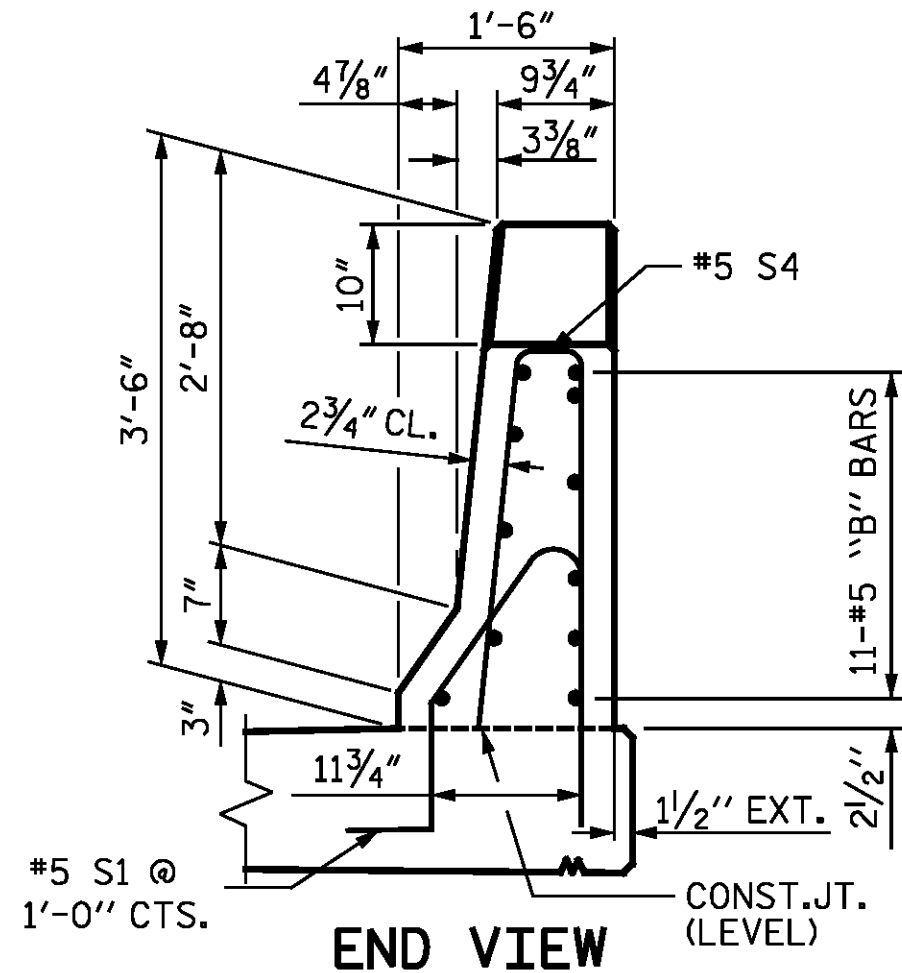
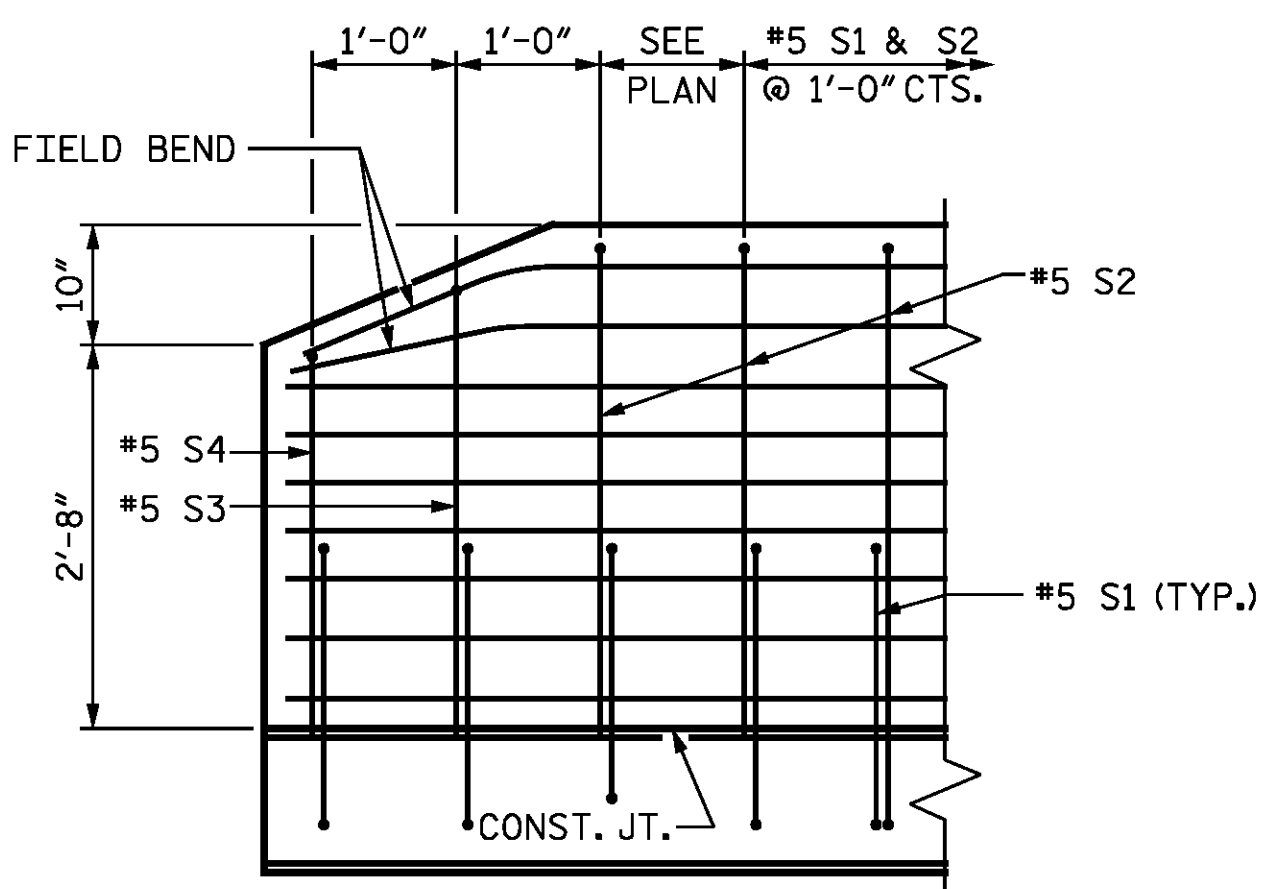




PLAN VIEW



END VIEW



SIDE VIEW

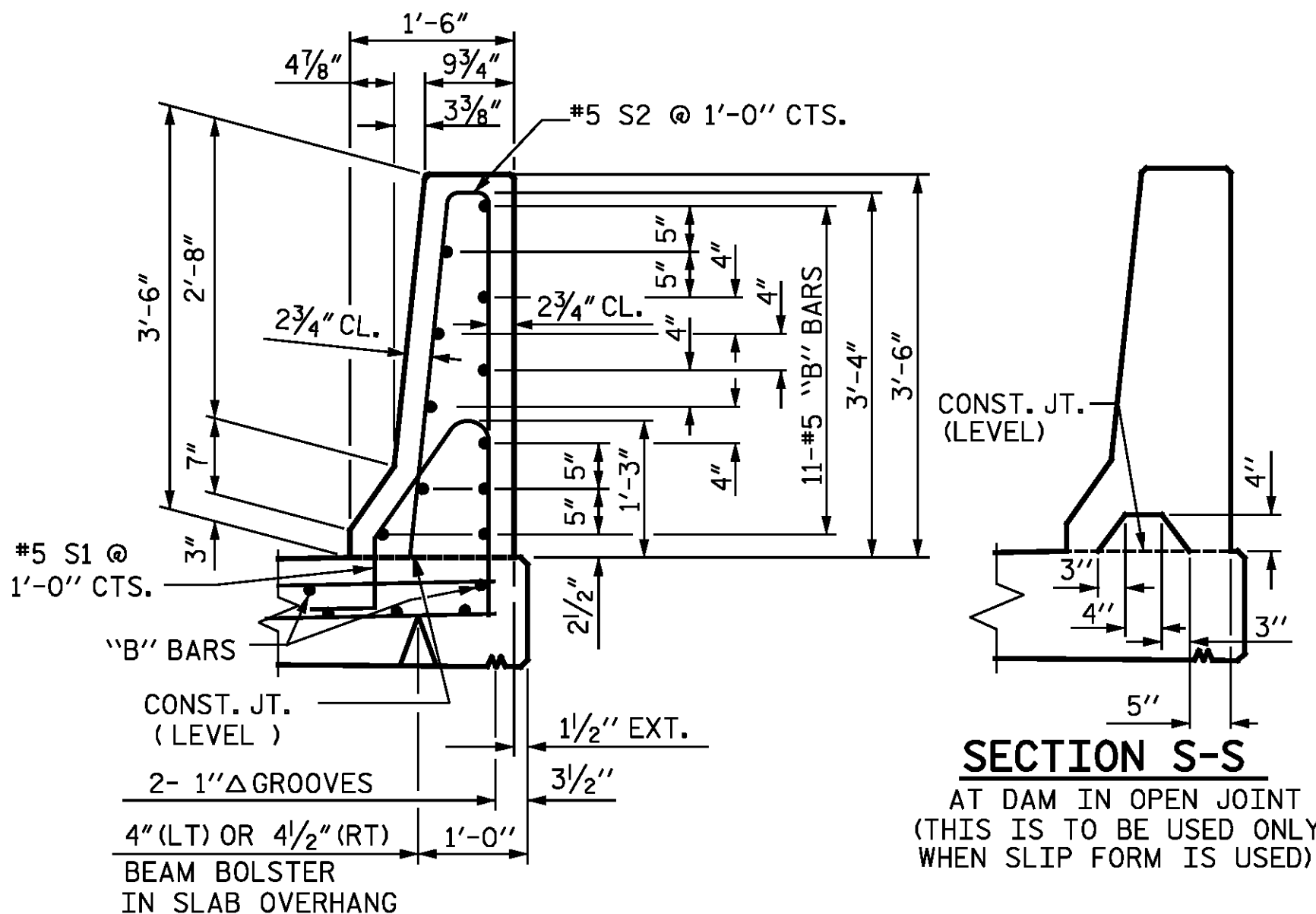
END OF RAIL DETAILS

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.

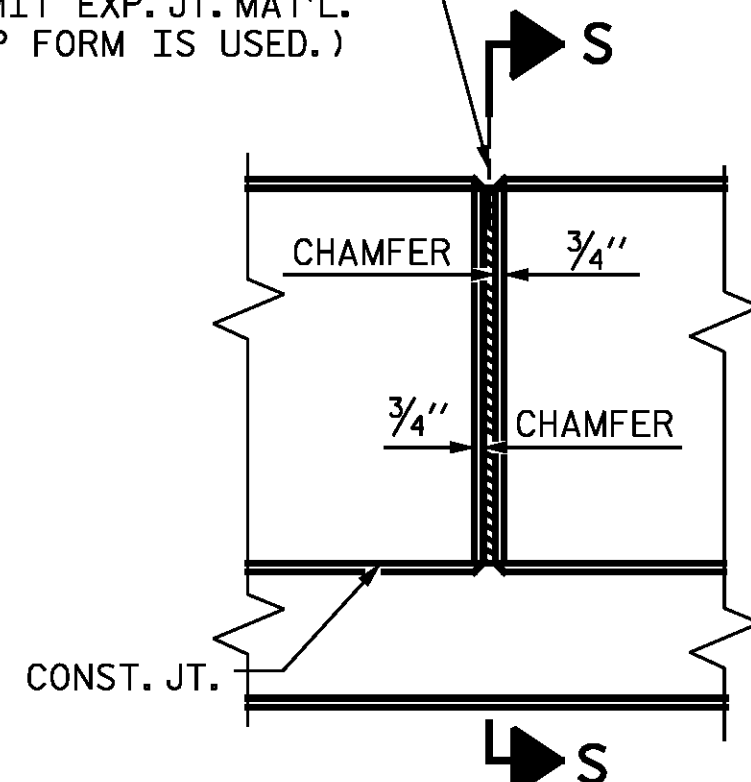


SECTION S-S

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

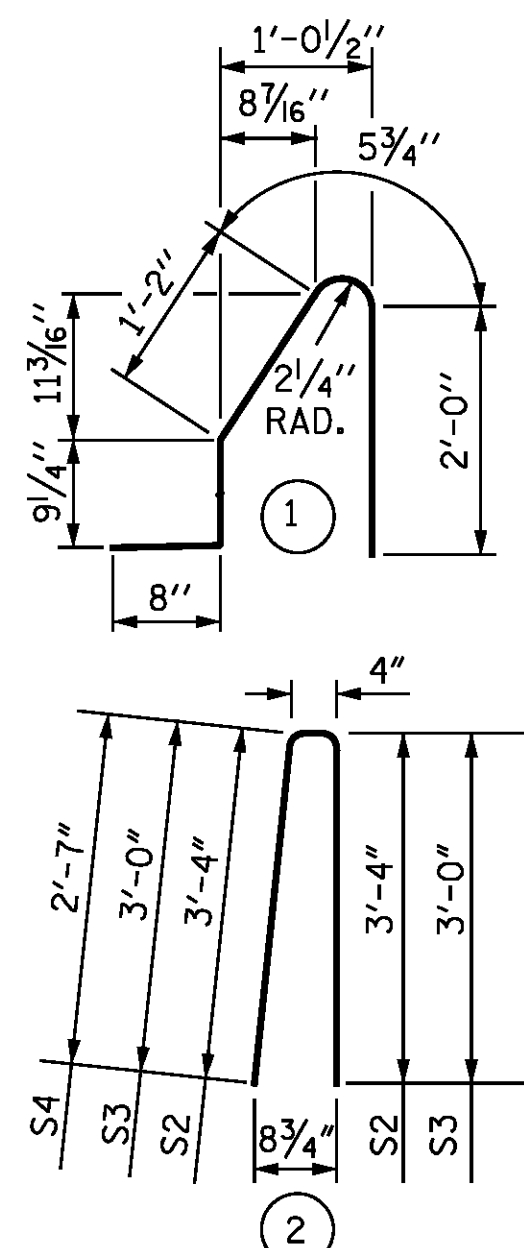
SECTION THRU RAIL

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

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL

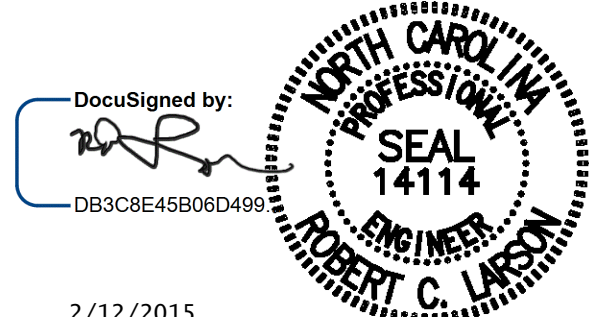
FOR CONCRETE BARRIER RAIL ONLY

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
*S1	180	#5	1	5'-1"	954
*S2	172	#5	2	7'-0"	1256
*S3	4	#5	2	6'-4"	26
*S4	4	#5	2	5'-6"	23
*B1	22	#5	STR.	29'-8"	681
*B2	2	#5	STR.	29'-9"	62
*B3	32	#5	STR.	29'-6"	985
*B4	10	#5	STR.	29'-2"	304
* EPOXY COATED REINFORCING STEEL 4291 LBS.					
CLASS AA CONCRETE 24.3 CU. YDS.					
CONCRETE BARRIER RAIL 179.53 LIN. FT.					

PROJECT NO. R-2514D
JONES COUNTY
STATION: 363+38.90 -L-

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

STD. NO. CBR1 RIGHT LANE STR-#4



2/12/2015

DESIGNED BY: PLANNERS & ENGINEERS, INC. LICENSE NUMBER: C-0784
KCI Associates
of North Carolina, P.A.
SUITE 200, LAUREATE CENTER 1400 SIX FORDS RD. RALEIGH, NC 27609-2000 (919) 783-2004
DWG. REF. NO. 12 OF 23

REVISIONS						SHEET NO. S04-12
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS S04-23
2			4			

DocuSigned by:
DB3C8E45B06D498...

DESIGN ENGINEER OF RECORD: DATE : 2/12/2015

DRAWN BY : E. C. DECOLA DATE : 02/13/14
CHECKED BY : R. C. LARSON DATE : 02/18/14

DRAWN BY : REV. 10/1/11 MAA/GM
CHECKED BY : REV. 7/12 MAA/GM
REV. 10/12 MAA/GM