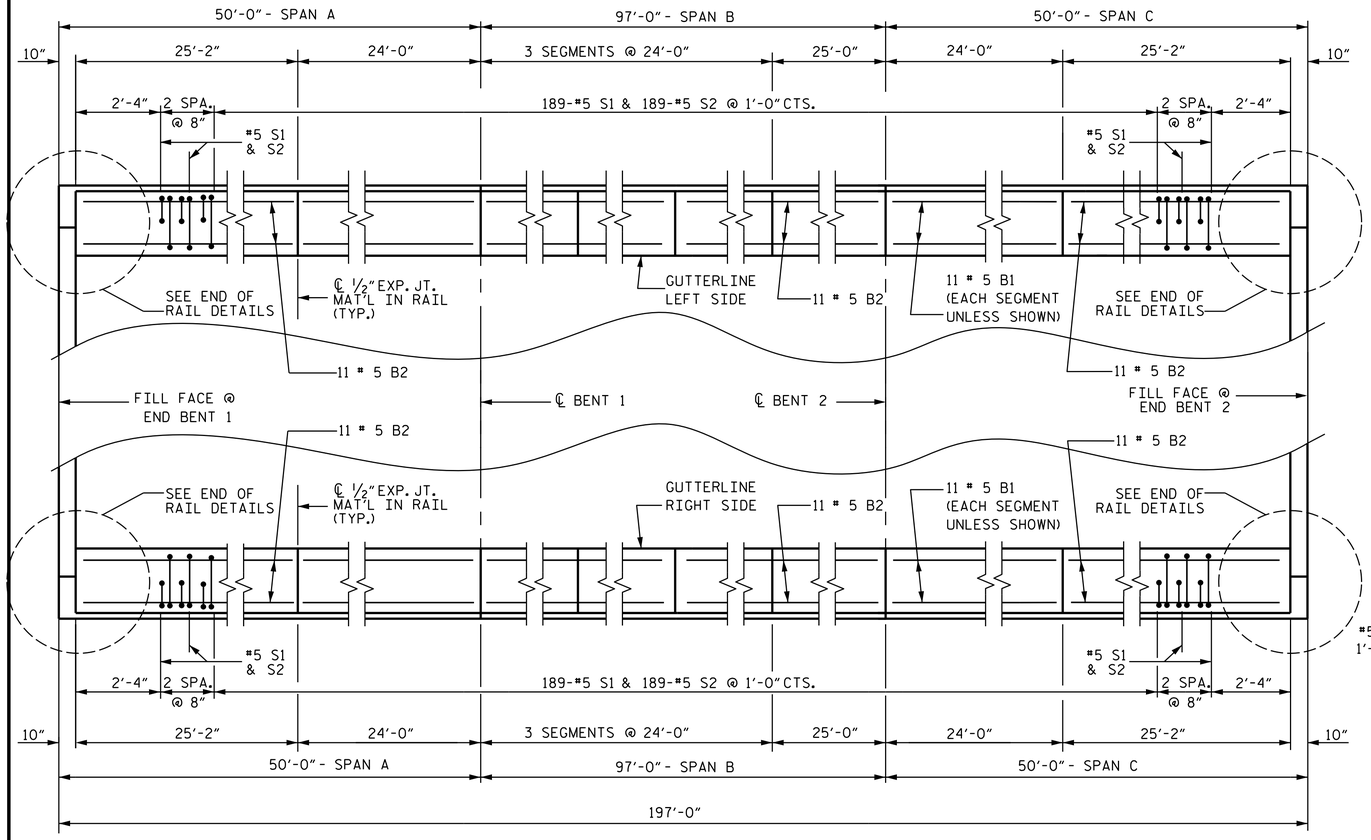
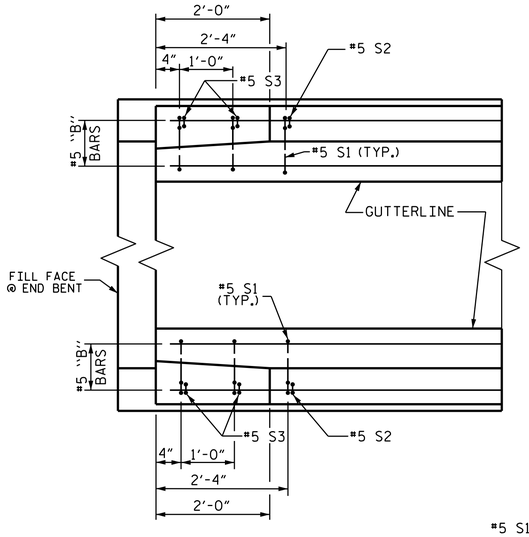
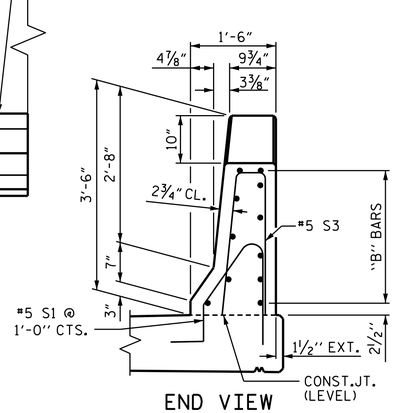


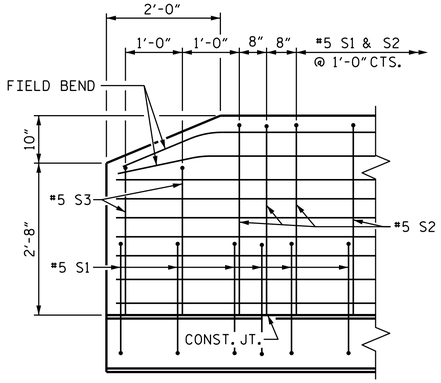
PLAN



PLAN



END VIEW



SIDE VIEW

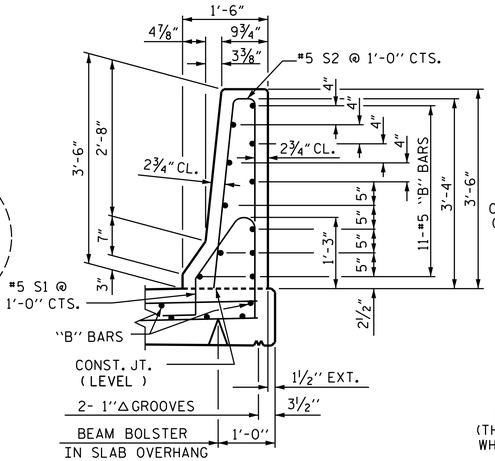
END OF RAIL DETAILS

NOTES

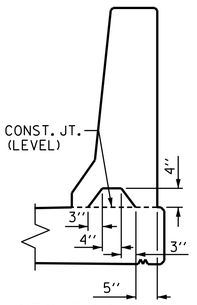
THE BARRIER RAIL IN EACH SPAN SHALL NOT BE CAST UNTIL ALL SLAB CONCRETE IN THAT SPAN HAS BEEN CAST AND HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

GROOVED CONTRACTION JOINTS, ½" 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.

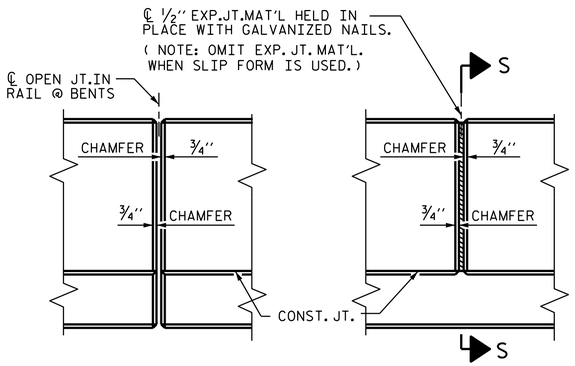


SECTION THRU RAIL



SECTION S-S

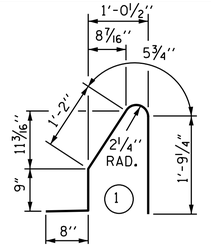
AT DAM IN OPEN JOINT (THIS IS TO BE USED ONLY WHEN SLIP FORM IS USED)

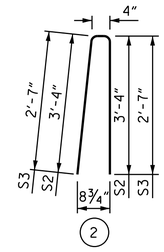


ELEVATION AT EXPANSION JOINTS

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	394	#5	1	4'-10"	1986
* S2	386	#5	2	7'-0"	2818
* S3	8	#5	2	5'-6"	46
* B1	110	#5	STR	23'-8"	2715
* B2	66	#5	STR	24'-8"	1698

* EPOXY COATED REINFORCING STEEL	9263 LBS.
CLASS AA CONCRETE	53.1 CU. YDS.
CONCRETE BARRIER RAIL	390.67 LIN. FT.

PROJECT NO. B-5703

CUMBERLAND/HARNETT COUNTY

STATION: 16+92.70 -L-

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD

CONCRETE BARRIER RAIL

DocuSigned by: DB3C8E45B0ED499...

NORTH CAROLINA PROFESSIONAL SEAL 14114 ENGINEER ROBERT C. LARSON

7/1/2021

KCI JOB NO: 251801945.13

DESIGN ENGINEER OF RECORD: DocuSigned by: DB3C8E45B0ED499...	DATE :	7/1/2021
ASSEMBLED BY : R.C. LARSON	DATE :	09/15/20
CHECKED BY : A.K. ALLANKI	DATE :	10/20/20
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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ENGINEERS ◆ PLANNERS ◆ SCIENTISTS ◆ CONSTRUCTION MANAGERS LICENSE NUMBER: C-0754
KCI Associates of North Carolina, P.A.
4505 Falls of Neuse Road, Suite 400 Raleigh, NC 27609-6270 Phone (919) 783-9214

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-15
1			3			TOTAL SHEETS
2			4			29

STD. NO. CBR1 (SHT 1)