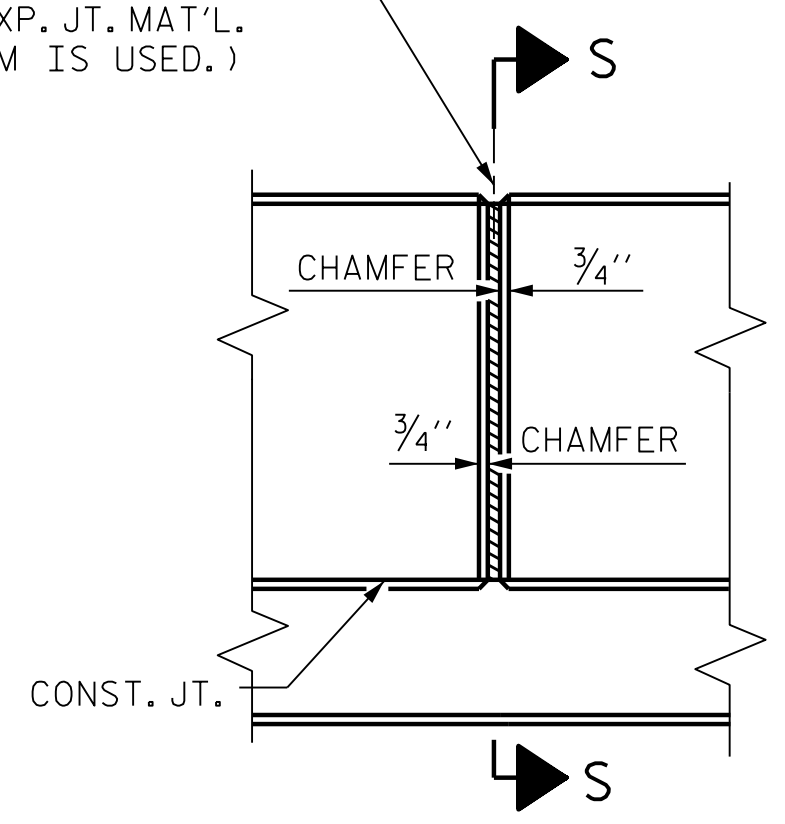
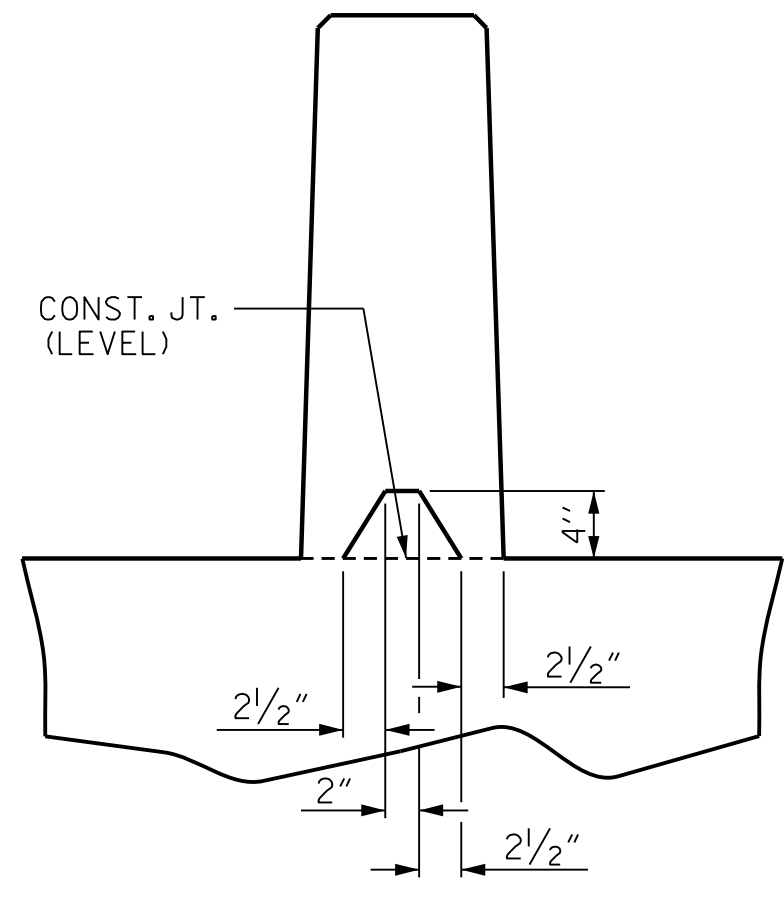


① 1/2" EXP. JT. MAT'L HELD IN PLACE WITH GALVANIZED NAILS.
(NOTE: OMIT EXP. JT. MAT'L. WHEN SLIP FORM IS USED.)



ELEVATION AT EXPANSION JOINTS



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

BARRIER RAIL DETAILS

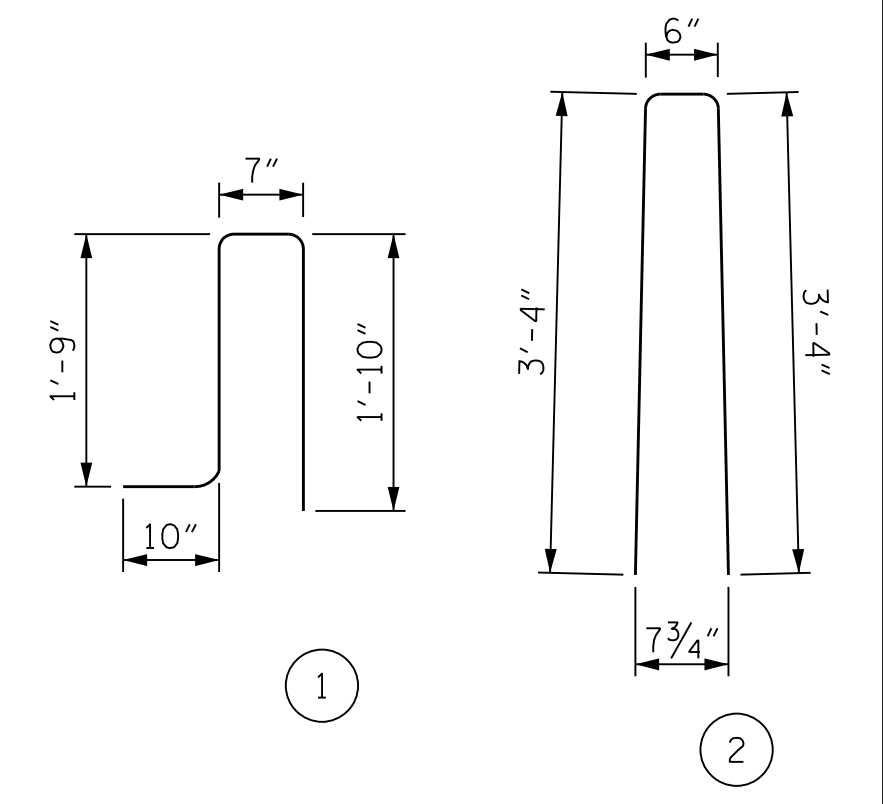
NOTES

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.

BAR TYPES



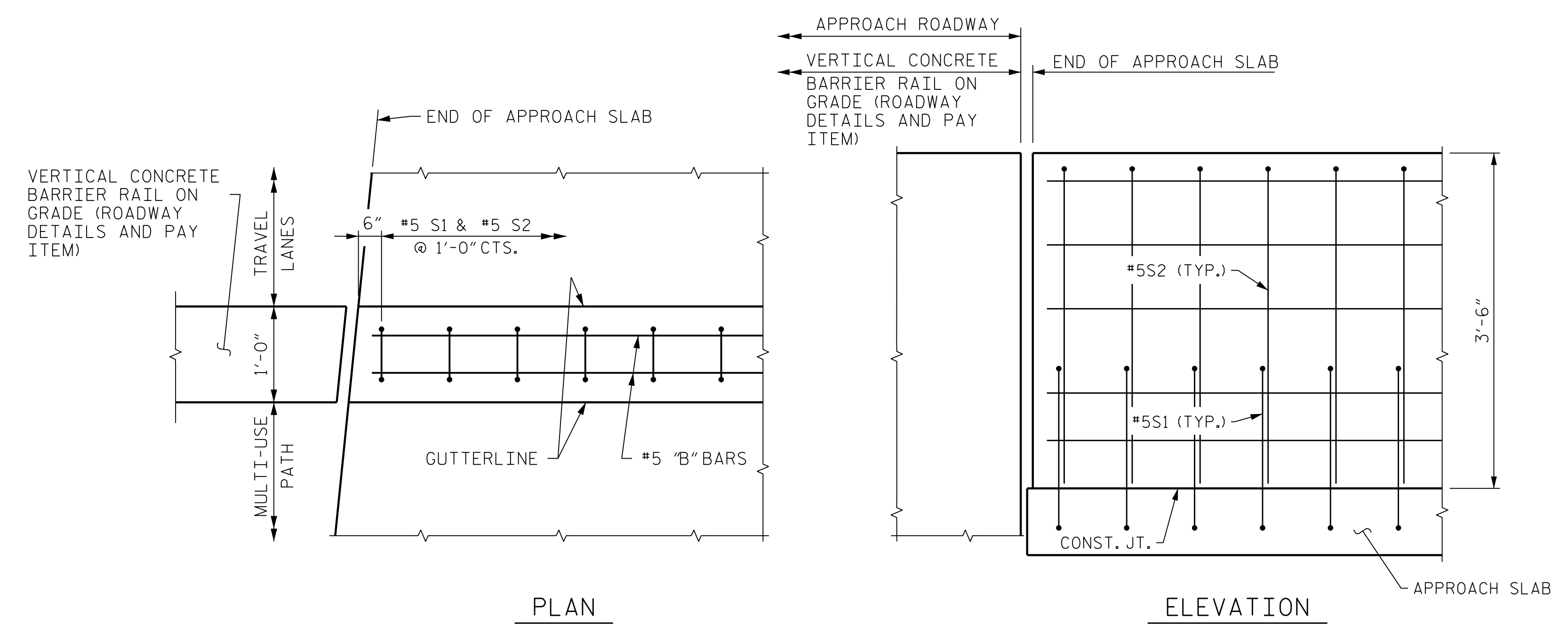
ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL

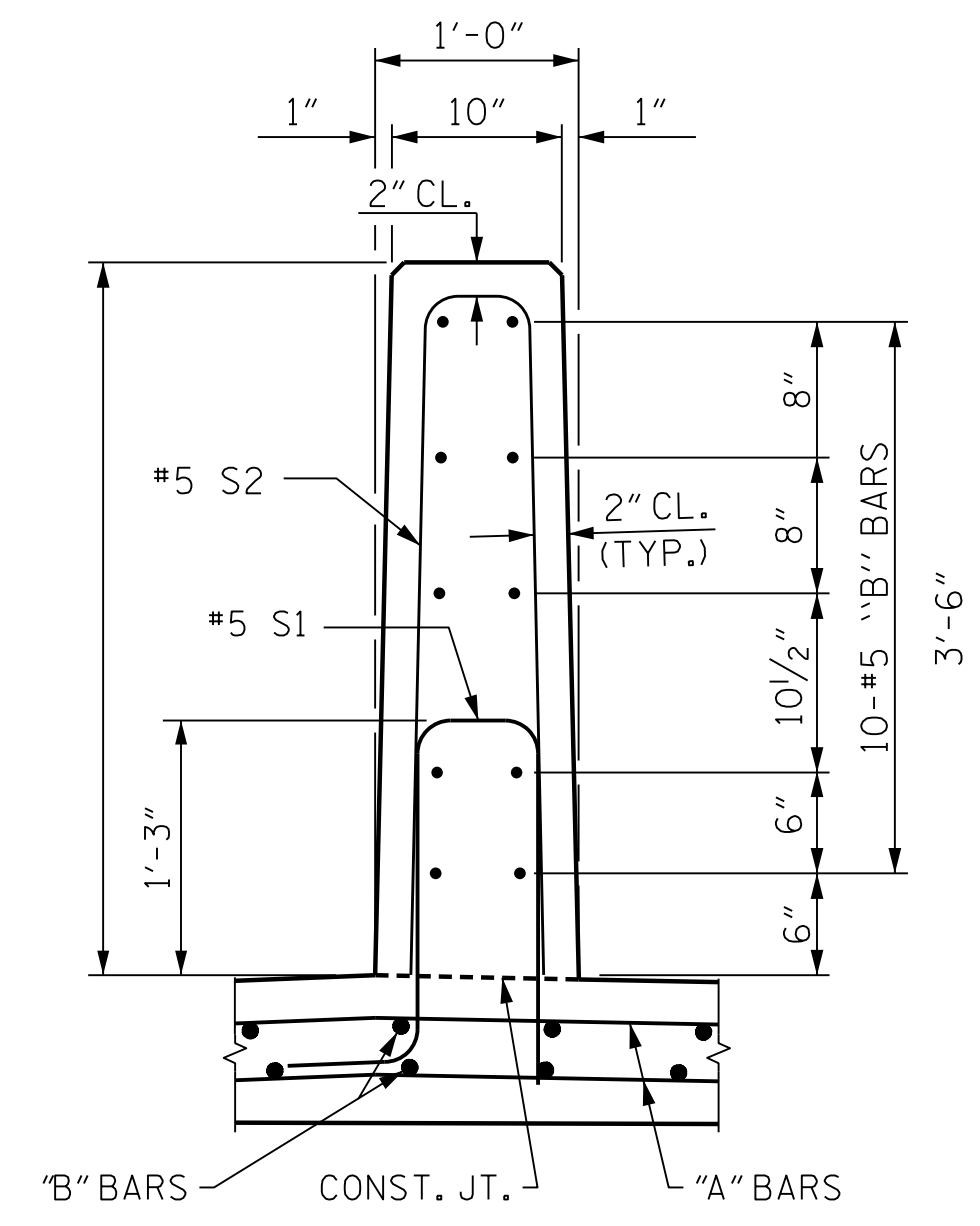
FOR VERTICAL CONCRETE BARRIER RAIL ONLY

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
*B1	10	#5	STR	19'-7"	204
*B2	70	#5	STR	25'-7"	1868
*B3	30	#5	STR	24'-7"	769
*S1	279	#5	1	5'-0"	1455
*S2	279	#5	2	7'-2"	2085

* EPOXY COATED REINFORCING STEEL	6,381	LBS.
CLASS AA CONCRETE	32.94	CU. YDS.
VERTICAL CONCRETE BARRIER RAIL	277.14	LIN. FT.



PLAN
ELEVATION
END OF RAIL DETAILS



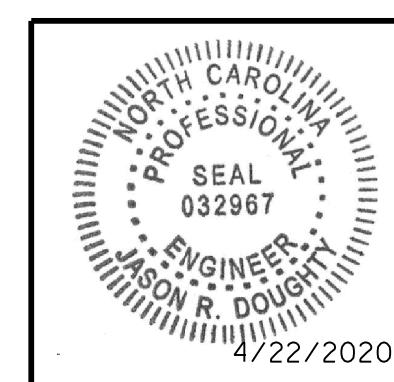
SECTION THRU RAIL

PROJECT NO. R-2233BB
RUTHERFORD COUNTY
STATION: 26+65.52 -Y3-

4/22/2020 404_053_R2233BB_SML_BR2_800663.dgn

DESIGNED BY: C. CORMAN DATE: JULY 2019
DRAWN BY: K. WHITE DATE: JULY 2019
CHECKED BY: B. LOFLIN DATE: AUG 2019
DESIGN ENGINEER OF RECORD: J. DOUGHTY DATE: NOV 2019

DRAWN BY: MAA 5/10 REV. 6/13 MAA/GM
CHECKED BY: GM 5/10 REV. 12/17 MAA/THC
REV. 5/18 MAA/THC



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

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			45
2			4			

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED