

**PLAN OF 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	66	#5	STR	23'-6"	1618
*B2	44	#5	STR	13'-6"	620
*B3	66	#5	STR	29'-2"	2008
*B4	44	#5	STR	16'-1"	738
*S1	426	#5	1	4'-2"	1851
*S2	426	#5	2	7'-0"	3110

\* EPOXY COATED REINFORCING STEEL 9945 LBS.  
CLASS AA CONCRETE 58.0 CU. YDS.  
CONCRETE BARRIER RAIL 427.81 LIN. FT.

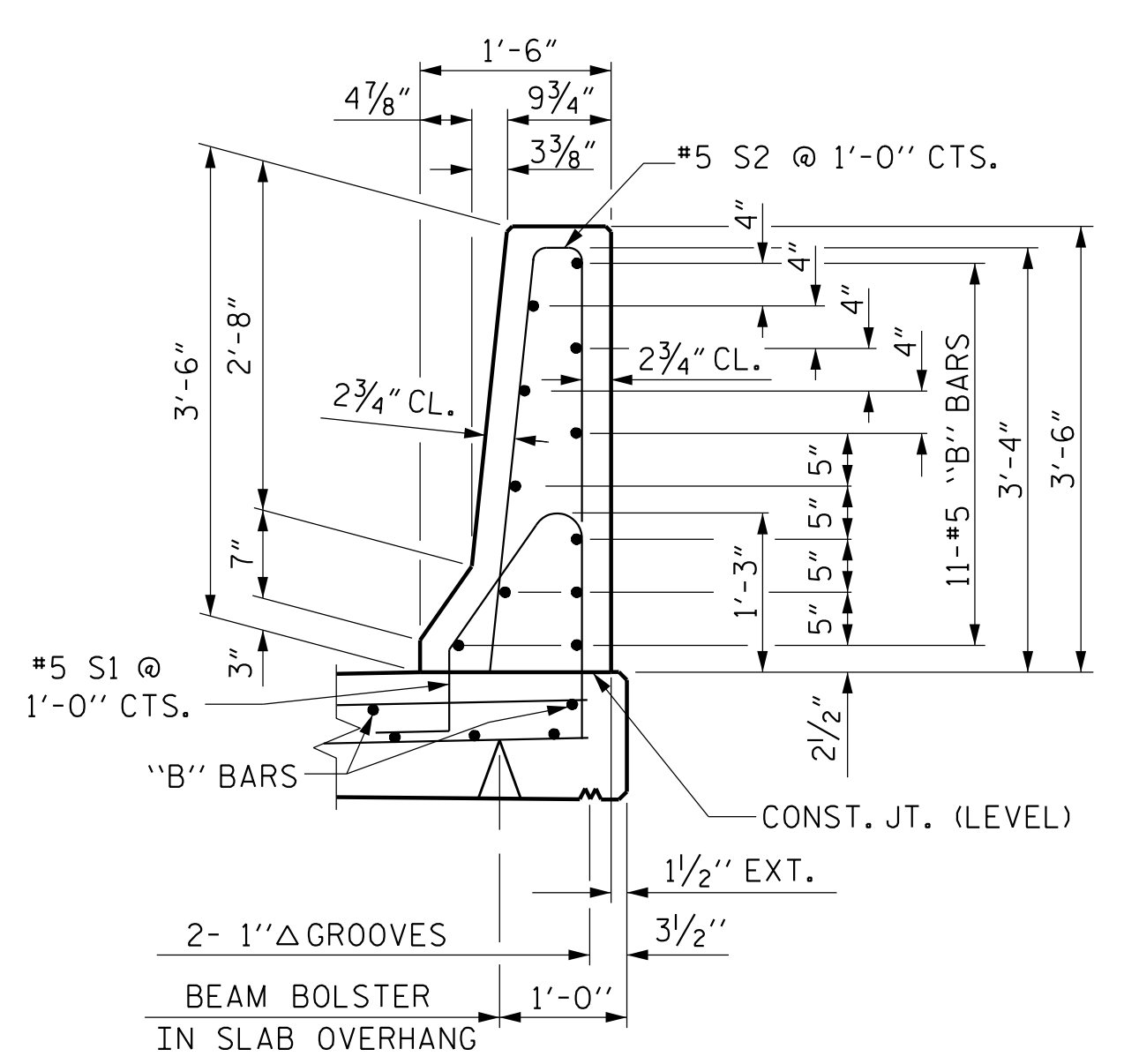
**NOTES**

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.

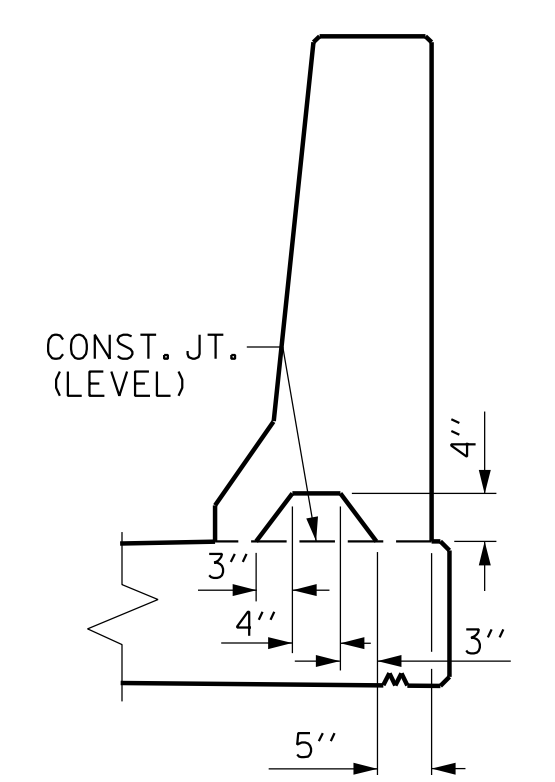
ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

THE #5 S3, S4, S5 AND S6 BARS SHALL BE INSTALLED, USING AN ADHESIVE ANCHORING SYSTEM, AFTER SAWING THE JOINT. THE YIELD LOAD FOR THE #5 S3, S4, S5 AND S6 BARS IS 18.6 KIPS. FIELD TESTING FOR THE ADHESIVE BONDING SYSTEM IS NOT REQUIRED.

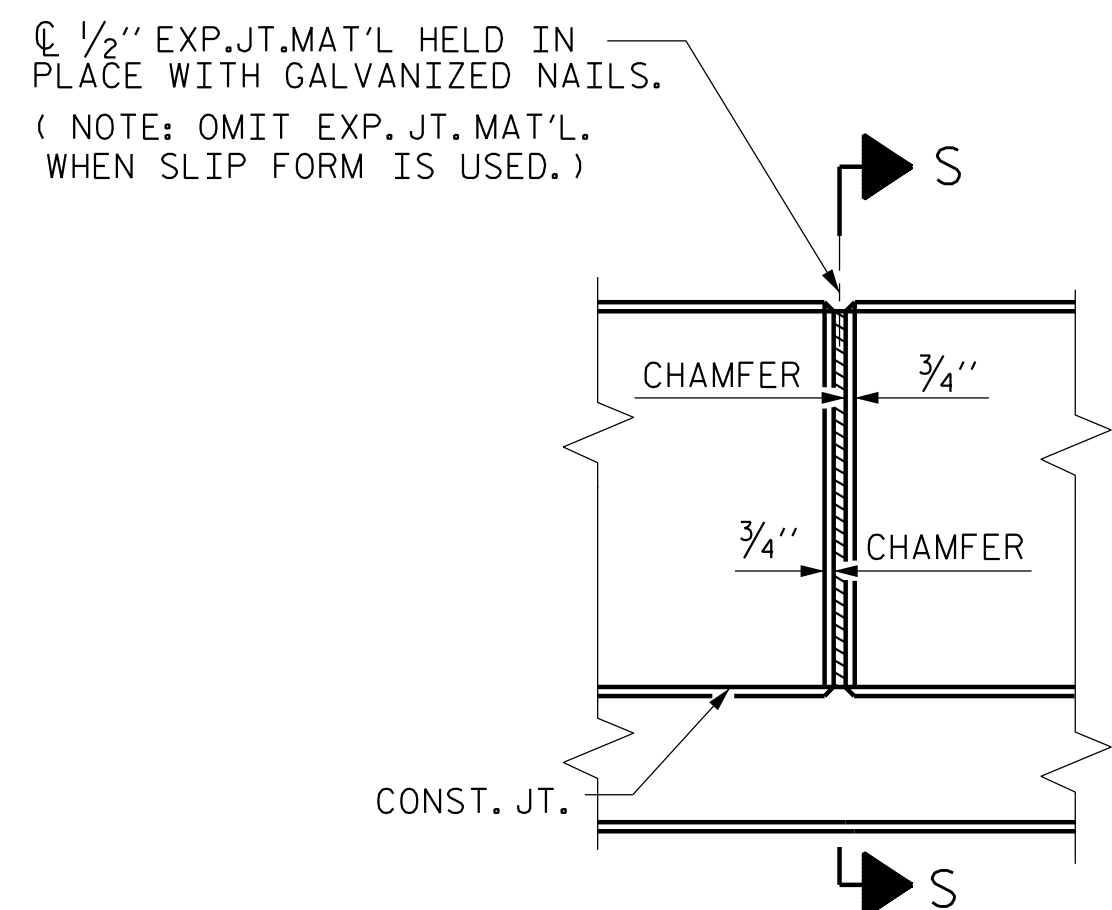
GROOVED CONTRACTION JOINTS, 1/2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE BARRIER RAIL AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. THE CONTRACTION JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN BARRIER RAIL EXPANSION JOINTS. ONLY ONE CONTRACTION JOINT IS 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 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**

PROJECT NO. I-5987B  
ROBESON COUNTY  
STATION: 617+12.20 -L- POT

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

REVISIONS

NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

SHEET NO. S6-27  
TOTAL SHEETS 53

PLANS PREPARED BY:

**NV5**

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THIS STANDARD DRAWING REVIEWED & ADOPTED FOR USE AT THE REFERENCED LOCATION BY THE UNDERSIGNED:

4/22/2022

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

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ASSEMBLED BY : W. B. ALLEN DATE : 8/21  
CHECKED BY : M. D. METZGER DATE : 12/21

DRAWN BY : <u>ARB</u> 5/87	REV. 7/12	MAA/GM
CHECKED BY : <u>SJD</u> 9/87	REV. 6/13	MAA/GM
	REV. 12/17	MAA/THC