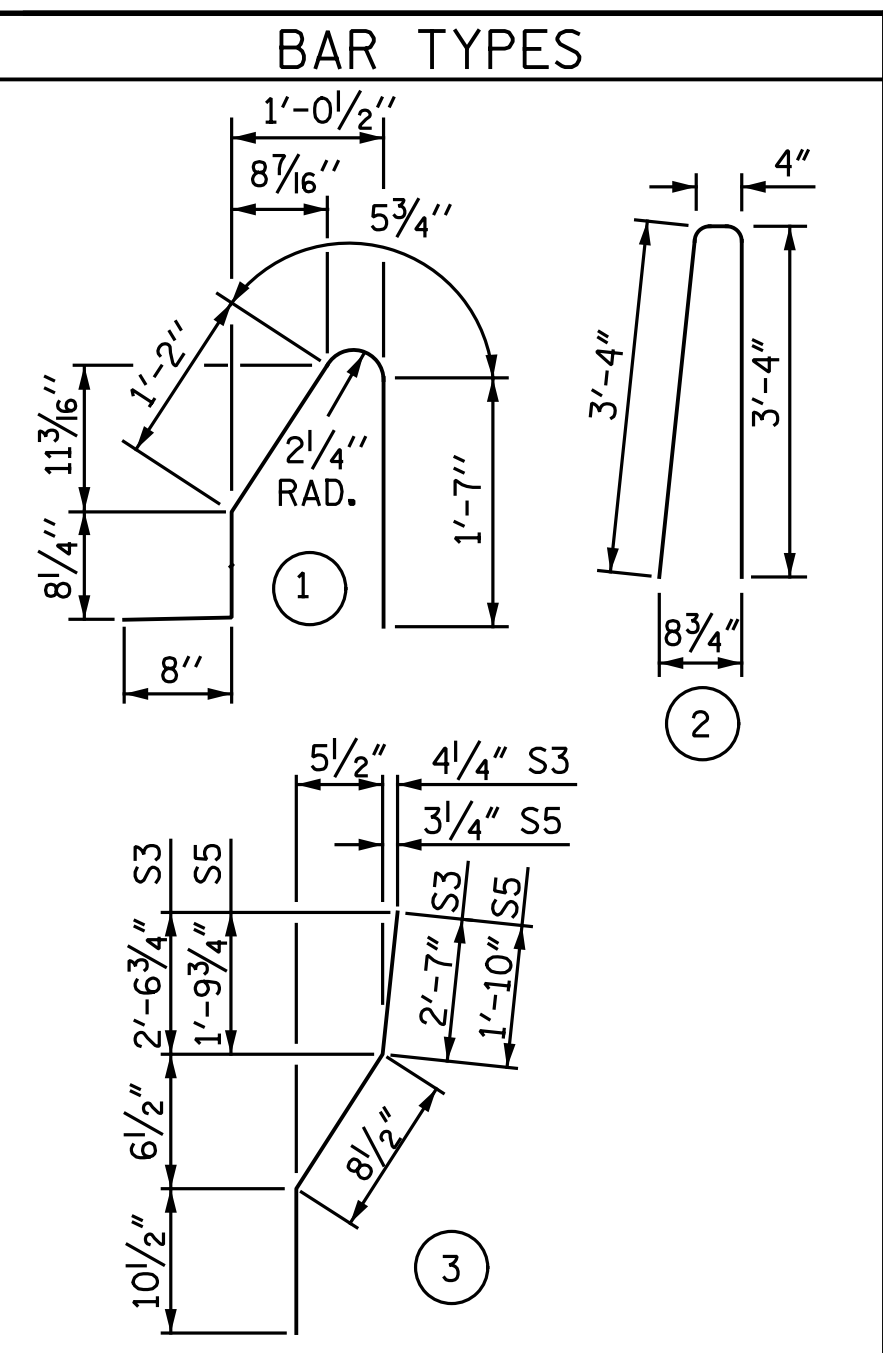


**PLAN OF BARRIER RAIL**  
(RIGHT RAIL SHOWN, LEFT RAIL SIMILAR)

**NOTES:**  
 THE BARRIER RAIL IN A CONTINUOUS UNIT SHALL NOT BE CAST UNTIL ALL SLAB CONCRETE IN THE UNIT HAS BEEN CAST AND HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.  
 WHEN FOAM JOINT SEAL IS REQUIRED, THE JOINT IN THE DECK SHALL BE SAWED PRIOR TO THE CASTING OF BARRIER RAIL.  
 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.

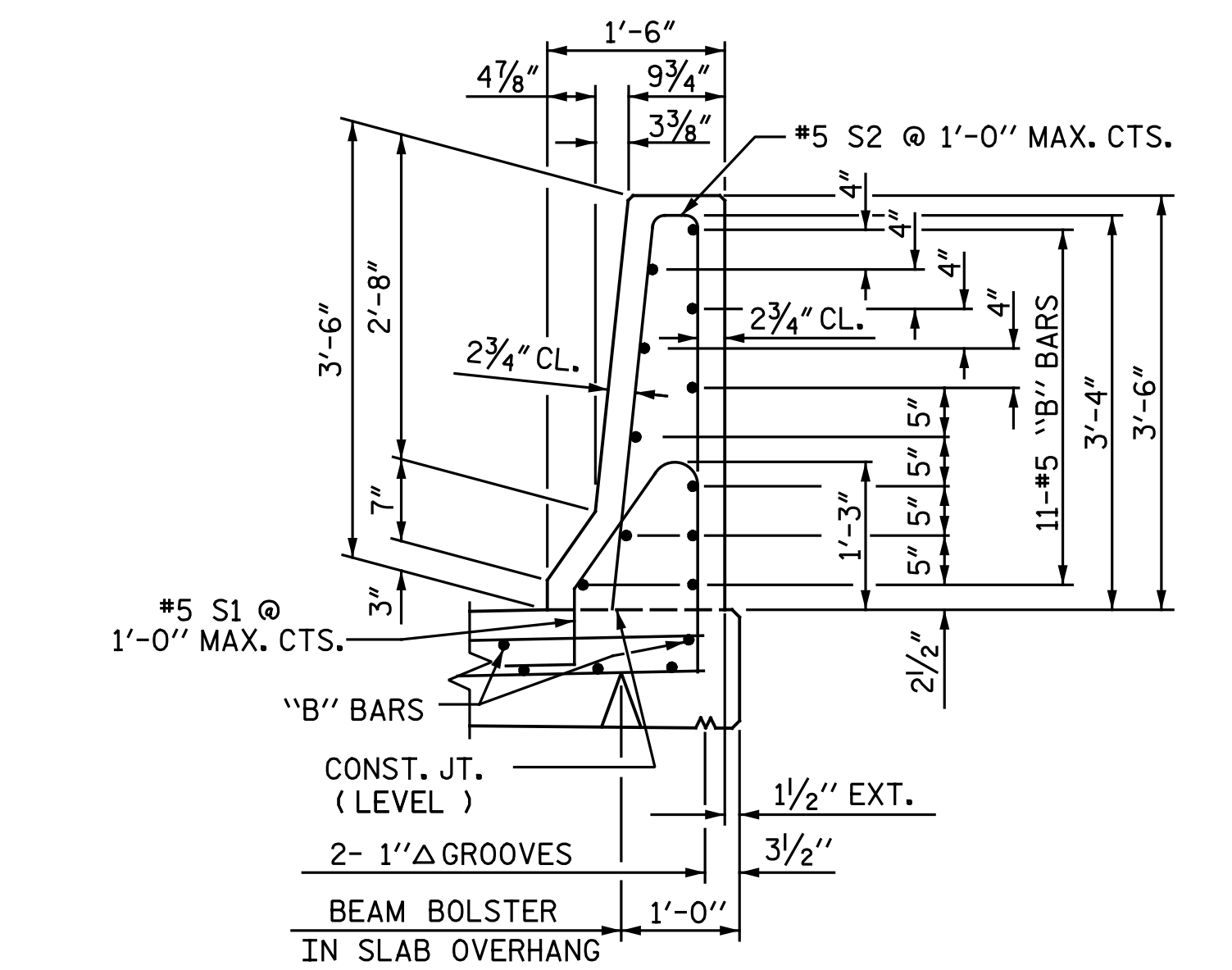


ALL BAR DIMENSIONS ARE OUT TO OUT

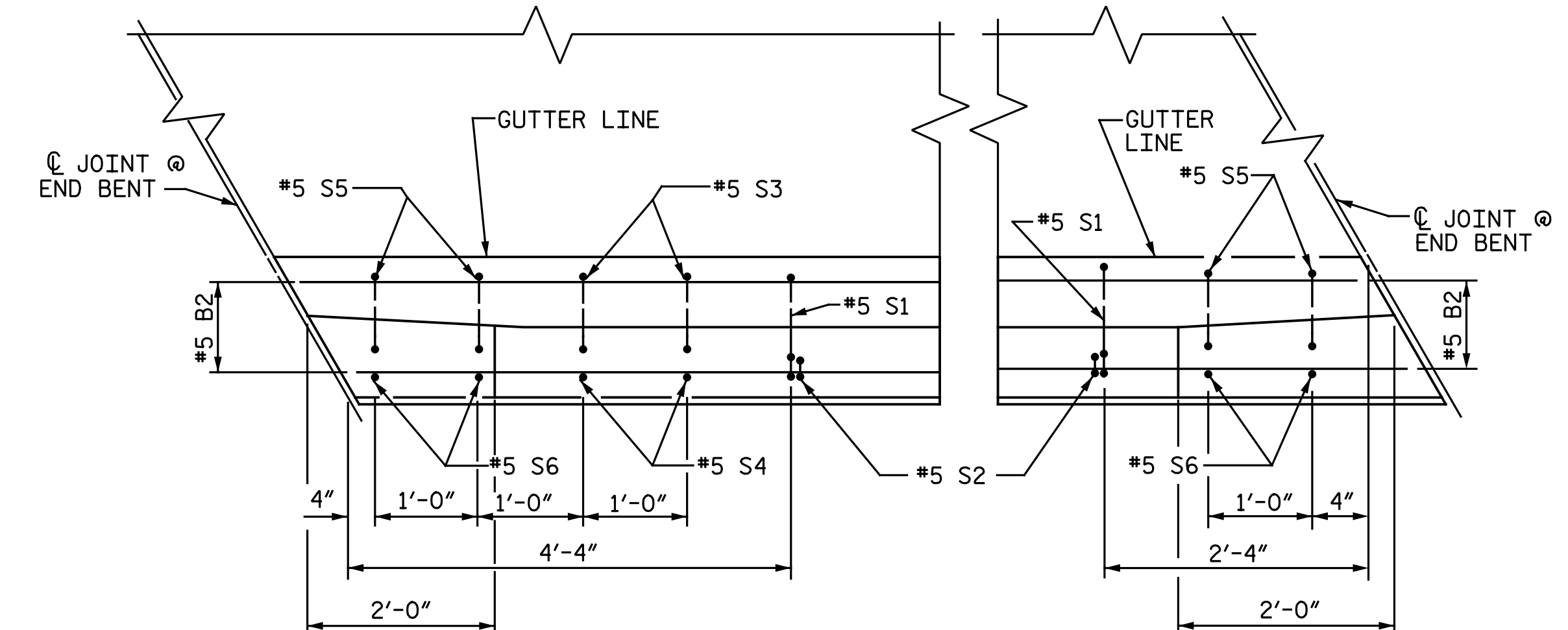
**BILL OF MATERIAL**

FOR CONCRETE BARRIER RAIL ONLY					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
*B1	132	#5	STR.	24' - 1"	3,316
*B2	88	#5	STR.	13' - 9"	1,262
*S1	384	#5	1	4' - 7"	1,836
*S2	384	#5	2	7' - 0"	2,804
*S3	4	#5	3	4' - 2"	17
*S4	4	#5	STR.	4' - 0"	17
*S5	8	#5	3	3' - 5"	29
*S6	8	#5	STR.	3' - 3"	27

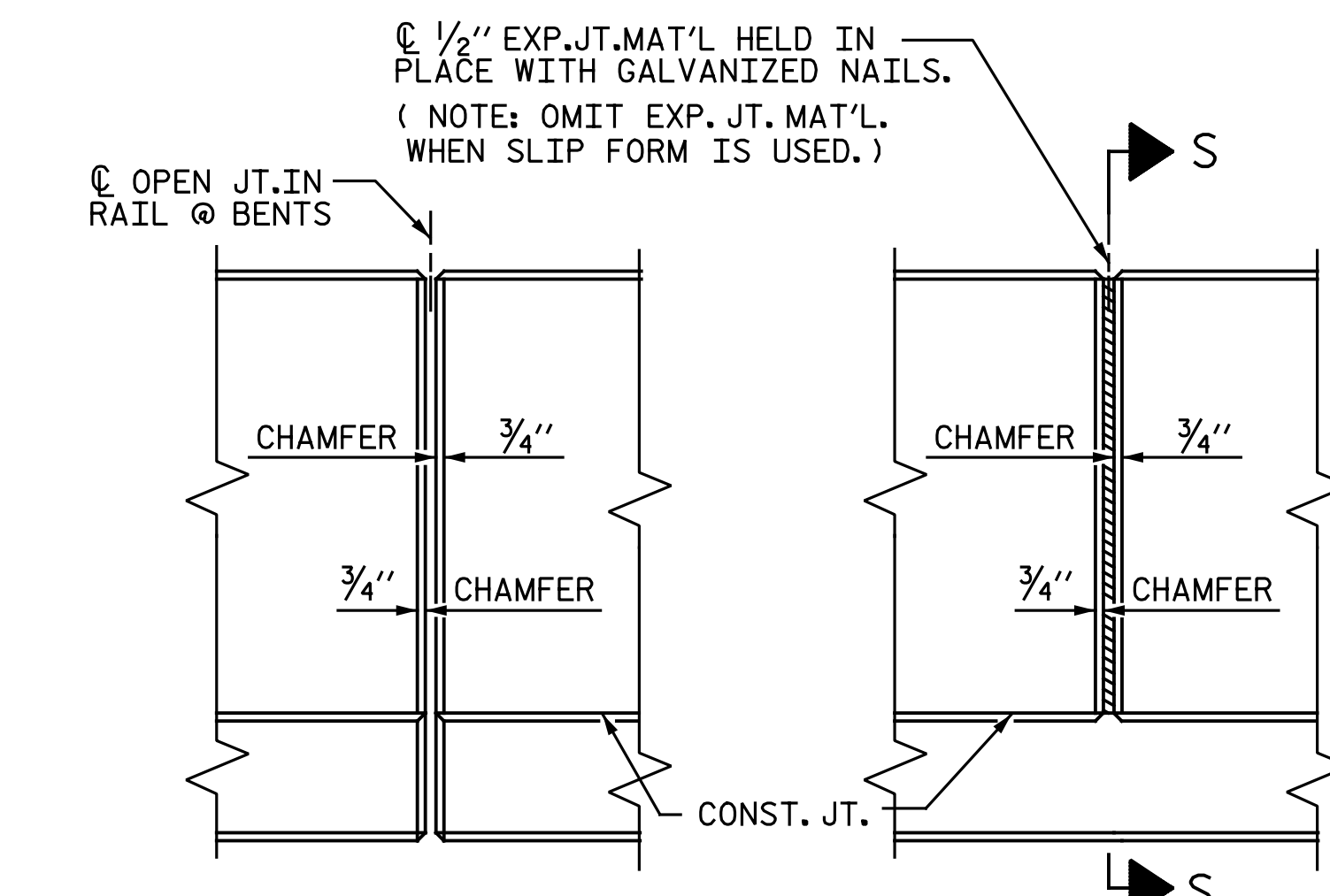
*EPOXY COATED REINFORCING STEEL	LBS.	9,308
CLASS AA CONCRETE	CU. YDS.	53.0
CONCRETE BARRIER RAIL	LIN. FT.	390.12



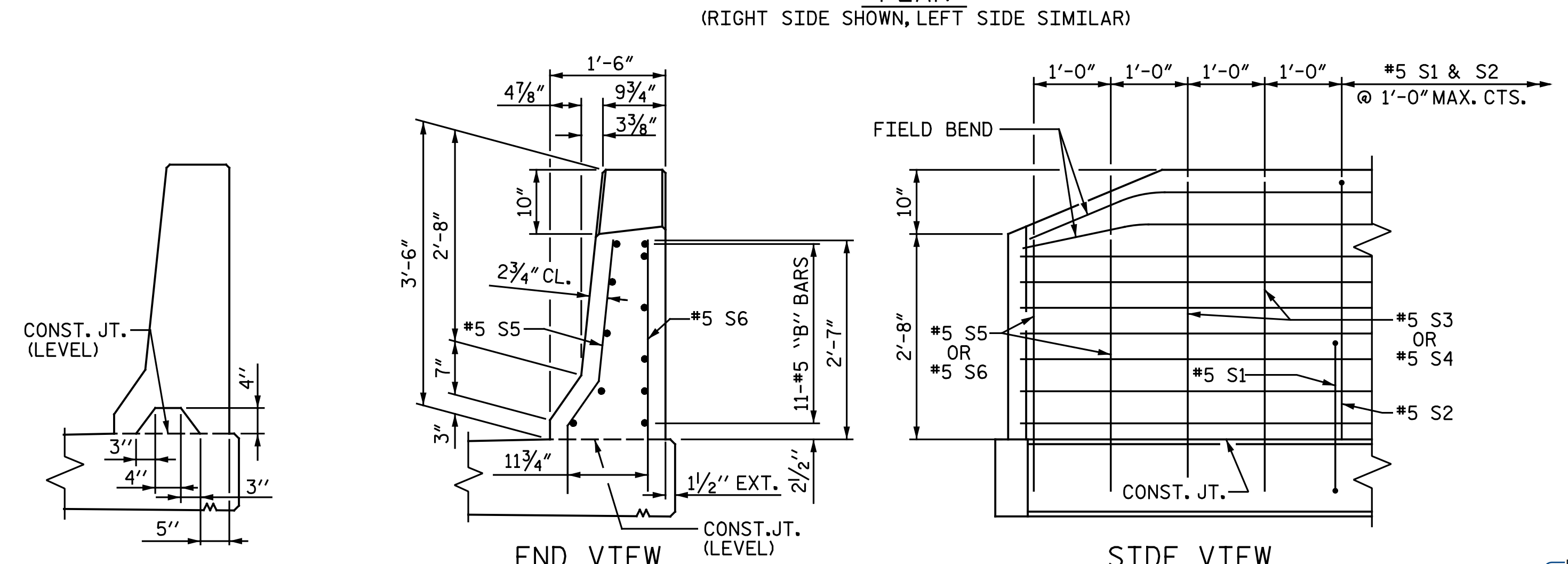
**SECTION THRU RAIL**



**PLAN**  
(RIGHT SIDE SHOWN, LEFT SIDE SIMILAR)



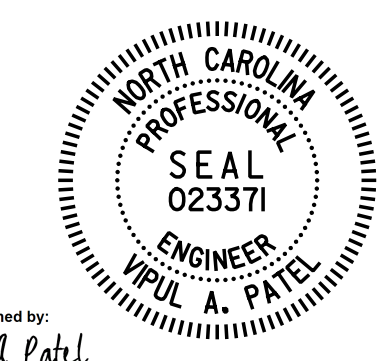
**ELEVATION AT EXPANSION JOINTS**  
**BARRIER RAIL DETAILS**



**END OF RAIL DETAILS**  
FOR ADHESIVE ANCHORING AT SAWED JOINTS

SPLICE LENGTH	
BAR SIZE	EPOXY COATED
#5	3'-5"

PROJECT NO. I-5986B  
JOHNSTON COUNTY  
 STATION: 28+39.21 -Y29-



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

ASSEMBLED BY : N. B. SPEAKS	DATE : 6-27-19
CHECKED BY : V. A. PATEL	DATE : 1-27-20
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

**Michael Baker INTERNATIONAL**  
 Michael Baker Engineering  
 8000 Regency Parkway, Suite 600  
 Cary, North Carolina 27518  
 NC License No. : F-1084

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

SHEET NO.	S2-15
TOTAL SHEETS	28