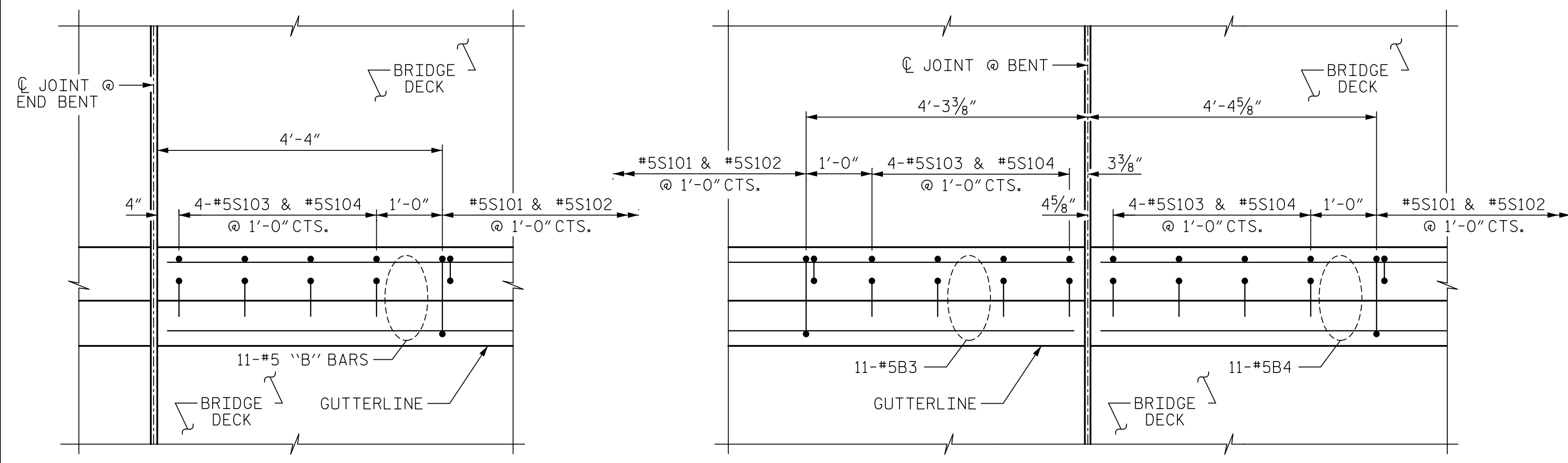


DATE: 2/10/2023
TIME: 10:51:57 AM

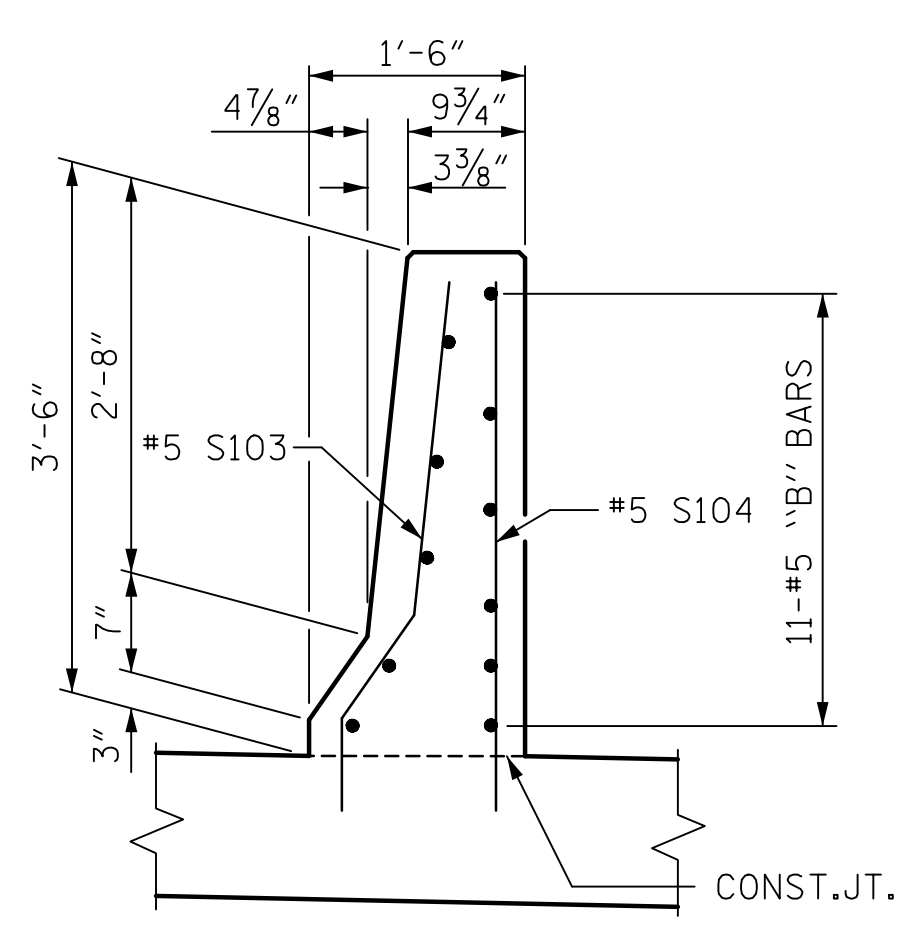
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DRAWN BY: ARB 5/87
CHECKED BY: SJD 9/87



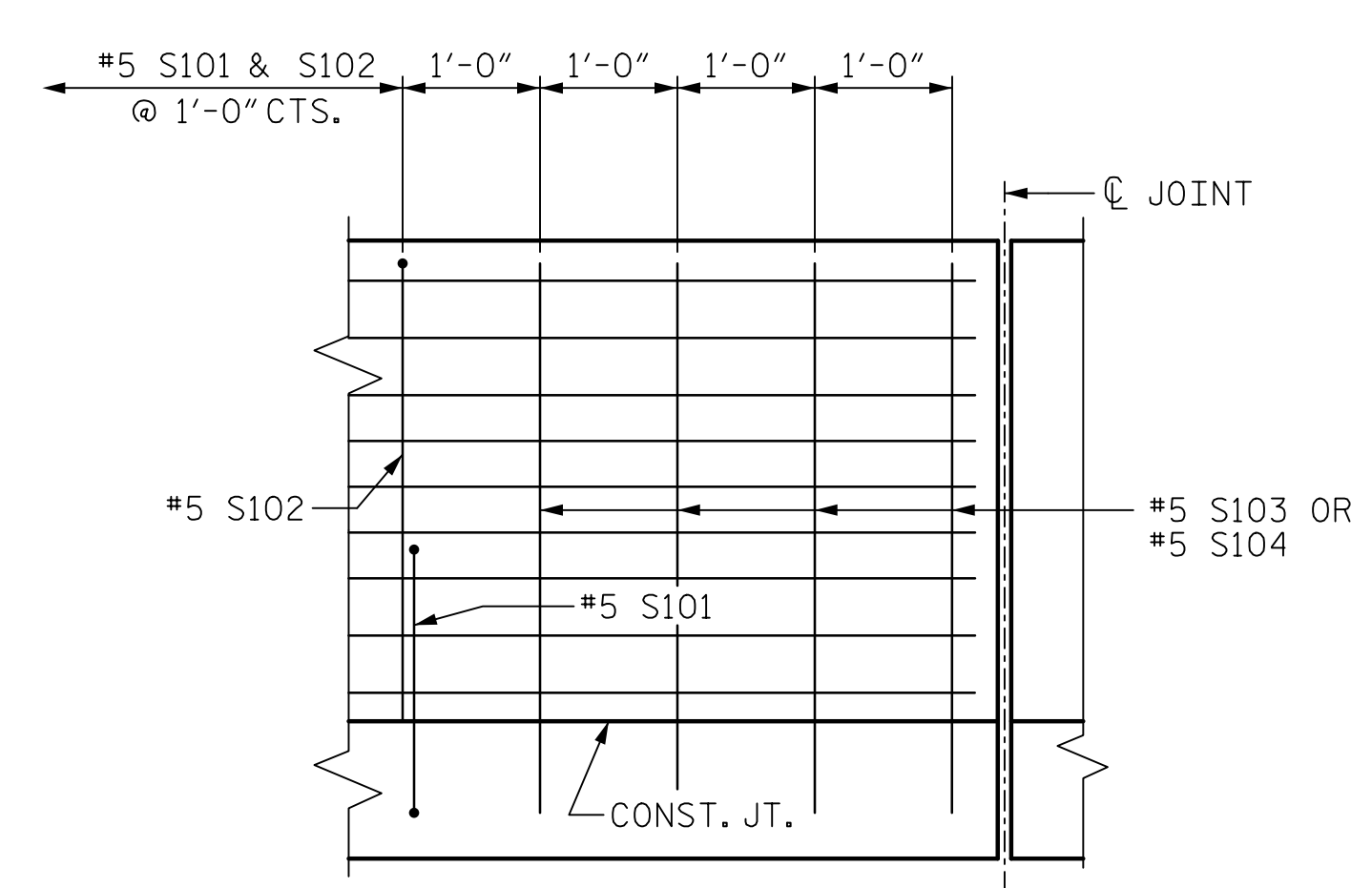
@ END BENT
END BENT 1 SHOWN, END BENT 2 SIMILAR.

@ BENT 2

PLAN OF BARRIER RAIL



END VIEW



SIDE VIEW

END OF RAIL DETAILS @ EXP. JOINT

FOR ADHESIVE ANCHORING AT SAWED JOINTS

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.

WHEN FOAM JOINT SEAL IS REQUIRED, THE JOINT IN THE DECK SHALL BE SAWED PRIOR TO THE CASTING OF BARRIER RAIL.

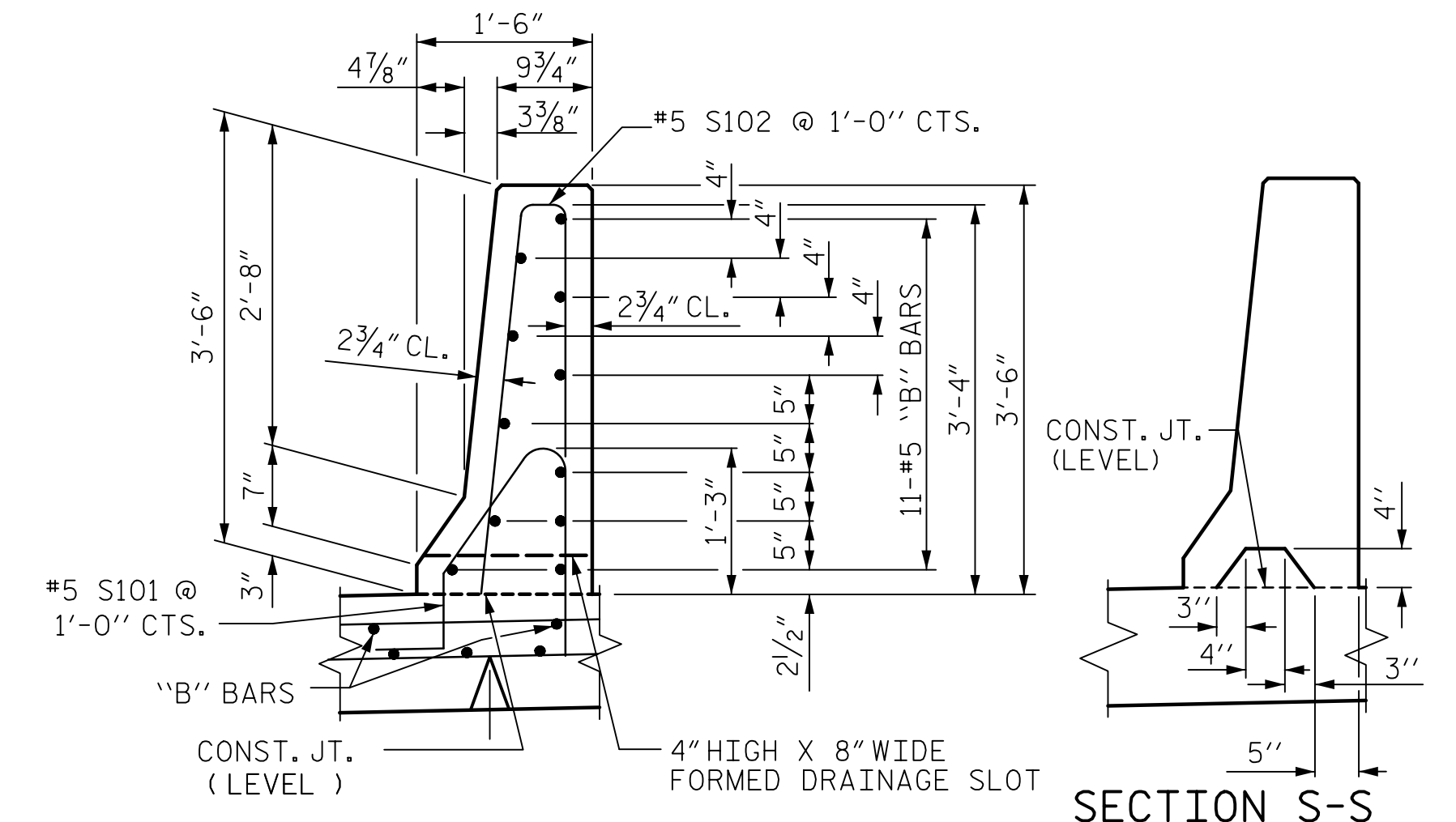
ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

THE #5 S103 AND S104 BARS SHALL BE INSTALLED USING AN ADHESIVE ANCHORING SYSTEM AFTER SAWING THE JOINT. THE YIELD LOAD FOR THE #5 S103 AND S104 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.

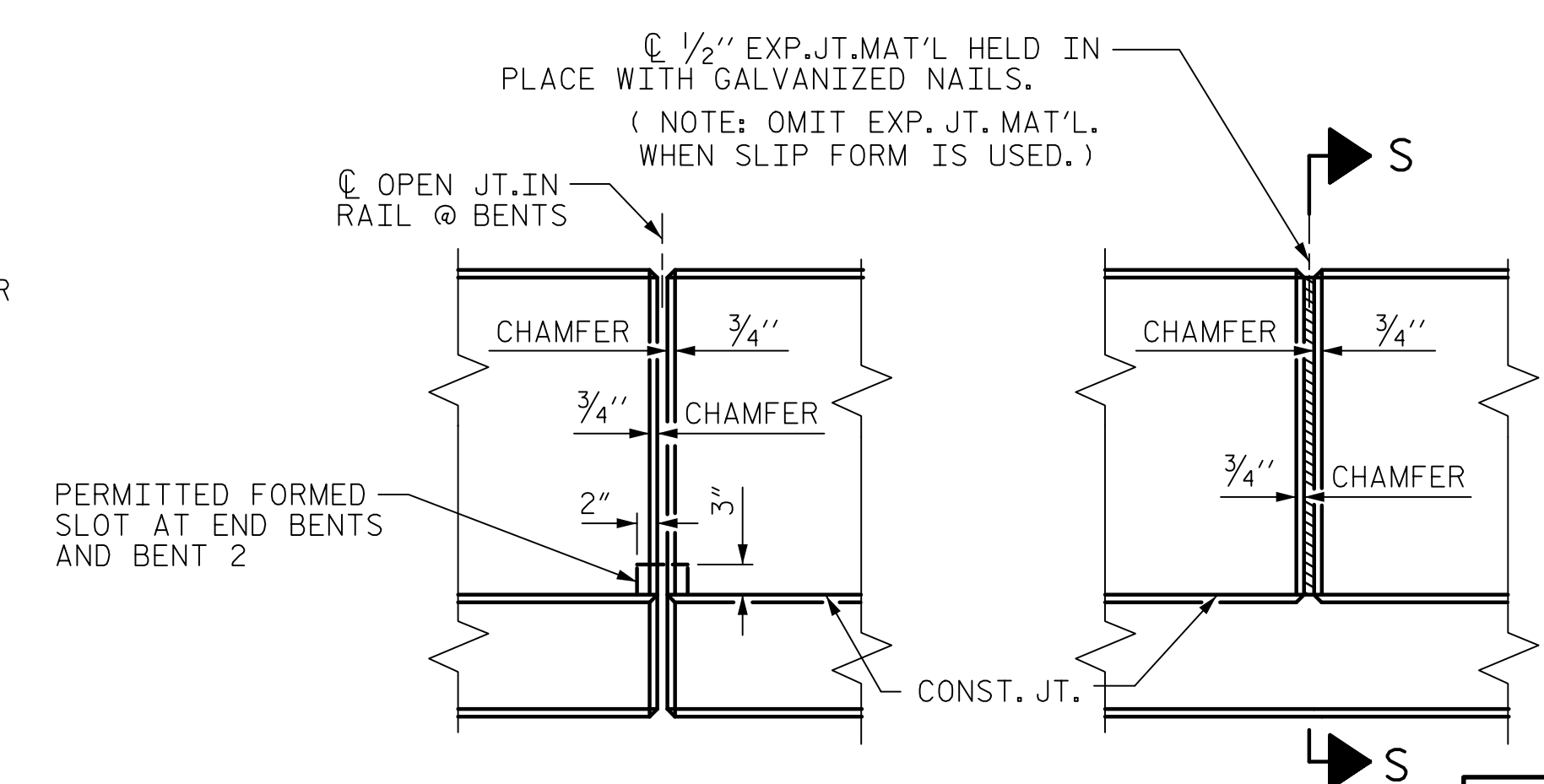
THE 8" WIDE X 4" HIGH FORMED DRAINAGE SLOTS MAY BE SHIFTED SLIGHTLY, AS NECESSARY, TO CLEAR THE "S" BARS IN THE BARRIER.

THE #5S103 & #5S104 BARS SHALL BE INSTALLED USING AN ADHESIVE ANCHORING SYSTEM, AFTER SAWING THE JOINT. THE YIELD LOAD FOR THE #5S103 & #5S104 BARS IS 18.6 KIPS. FIELD TESTING FOR THE ADHESIVE BONDING SYSTEM IS NOT REQUIRED.

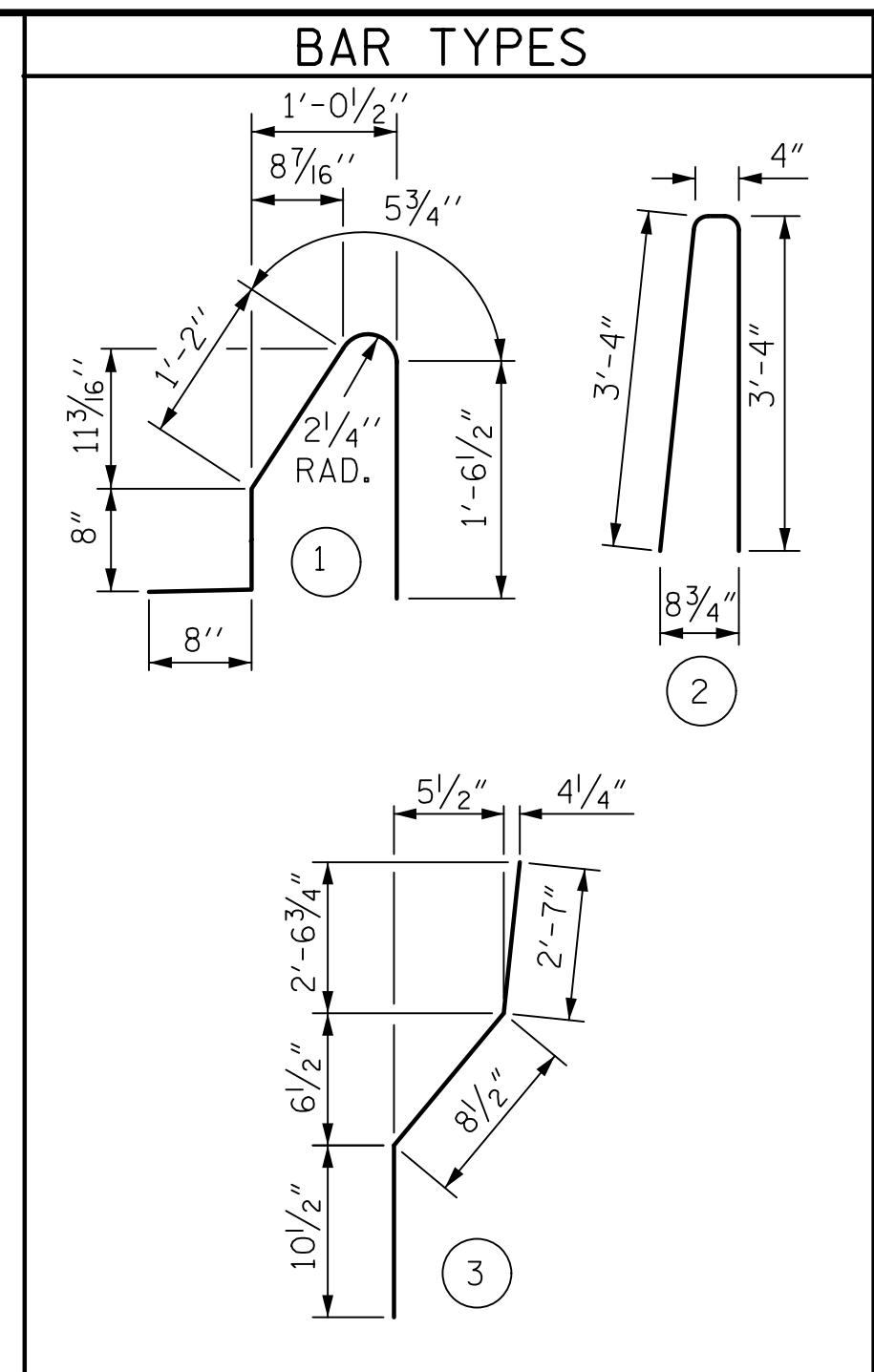


SECTION THRU RAIL

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**



ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL

FOR CONCRETE BARRIER RAIL ONLY					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* B1	11	#5	STR	12'-4"	142
* B2	66	#5	STR	25'-7"	1761
* B3	11	#5	STR	13'-5"	154
* B4	11	#5	STR	18'-11"	217
* B5	44	#5	STR	18'-7"	853
* B6	11	#5	STR	17'-11"	206
*S101	281	#5	1	4'-6"	1325
*S102	281	#5	2	7'-0"	2052
*S103	16	#5	3	4'-2"	70
*S104	16	#5	STR	3'-6"	58

* EPOXY COATED REINFORCING STEEL 6836 LBS.
CLASS AA CONCRETE 40.4 CU. YDS.
** CONCRETE BARRIER RAIL 296.56 LIN. FT.

** DOES NOT INCLUDE APPROACH SLAB. FOR LENGTH OF CONCRETE BARRIER RAIL ON APPROACH SLAB, SEE APPROACH SLAB SHEETS.

PROJECT NO. U-5748
WAKE COUNTY
STATION: 24+88.00 -L-

AECOM
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John C. Morrison
NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 030474
2/10/2023

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
STANDARD					
CONCRETE BARRIER RAIL (SOUTHBOUND LANES)					
REVISIONS				SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
					TOTAL SHEETS 119

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ASSEMBLED BY : D.R. DRUM	DATE : 06/2021
CHECKED BY : J.C. MORRISON	DATE : 06/2021
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