

BAR TYPES		BILL OF MATERIAL				
FOR CONCRETE BARRIER RAIL ONLY						
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	
* B1	28	#5	STR	12'-0"	350	
* B2	70	#5	STR	23'-0"	1679	
* B3	28	#5	STR	12'-6"	365	
* S1	302	#5	1	4'-6"	1417	
* S2	302	#5	2	5'-2"	1627	
* S3	12	#5	3	3'-4"	42	
* S4	12	#5	STR	3'-2"	40	
* EPOXY COATED REINFORCING STEEL					5,520	LBS.
CLASS AA CONCRETE					31.5	CU. YDS.
CONCRETE BARRIER RAIL					315.11	LN. FT.

NOTES

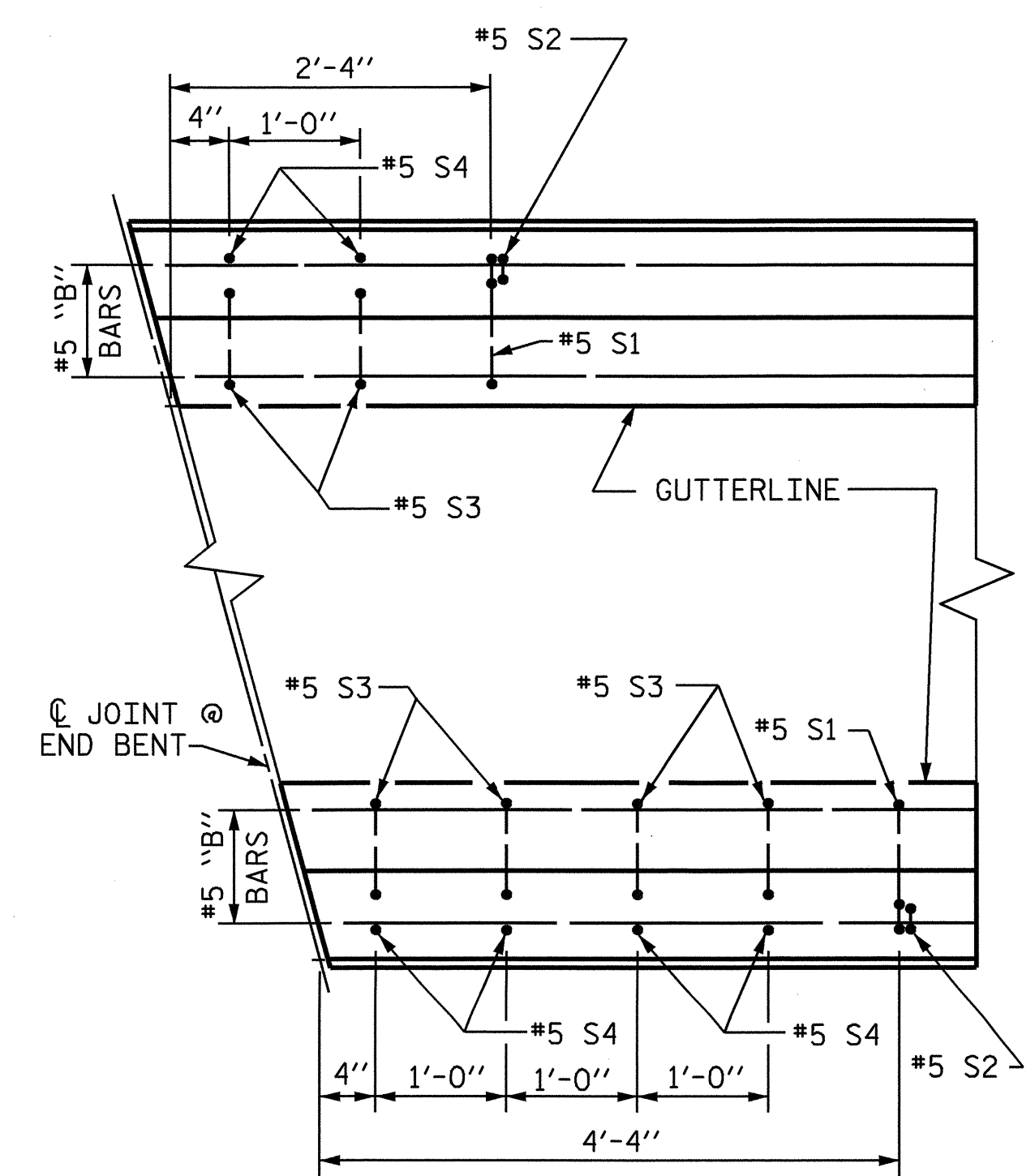
THE BARRIER RAIL IN A CONTINUOUS UNIT SHALL NOT BE CAST UNTIL ALL SLAB CONCRETE IN THAT SPAN HAS BEEN CAST AND HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

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.

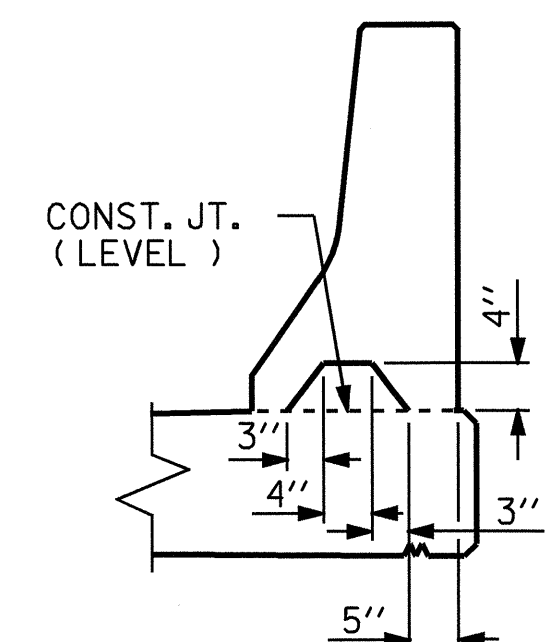
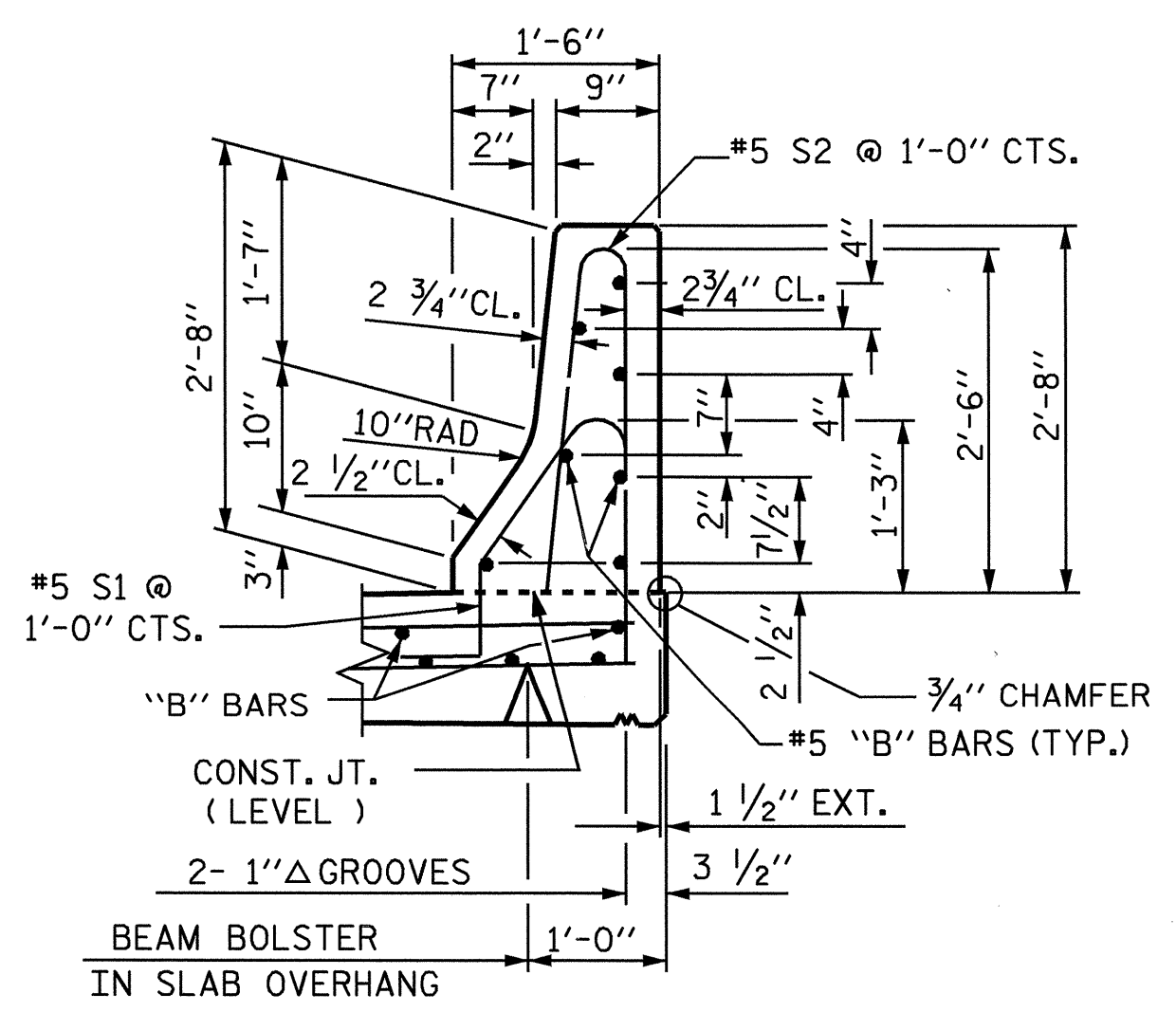
THE #5 S3 THRU #5 S4 BARS SHALL BE INSTALLED, USING AN ADHESIVE ANCHORING SYSTEM, AFTER SAWING THE JOINT. FOR ADHESIVELY ANCHORED ANCHOR BOLTS OR DOWELS, SEE SPECIAL PROVISIONS. THE YIELD LOAD FOR THE #5 S3 THRU #5 S4 BARS IS 18.6 KIPS. FIELD TESTING FOR THE ADHESIVE BONDING SYSTEM IS NOT REQUIRED.

VERTICAL 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. A JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN BARRIER RAIL EXPANSION JOINTS. ONLY ONE JOINT IS REQUIRED AT MIDPOINT OF BARRIER RAIL SEGMENTS LESS THAN 20 FEET IN LENGTH AND NO JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 10 FEET IN LENGTH.



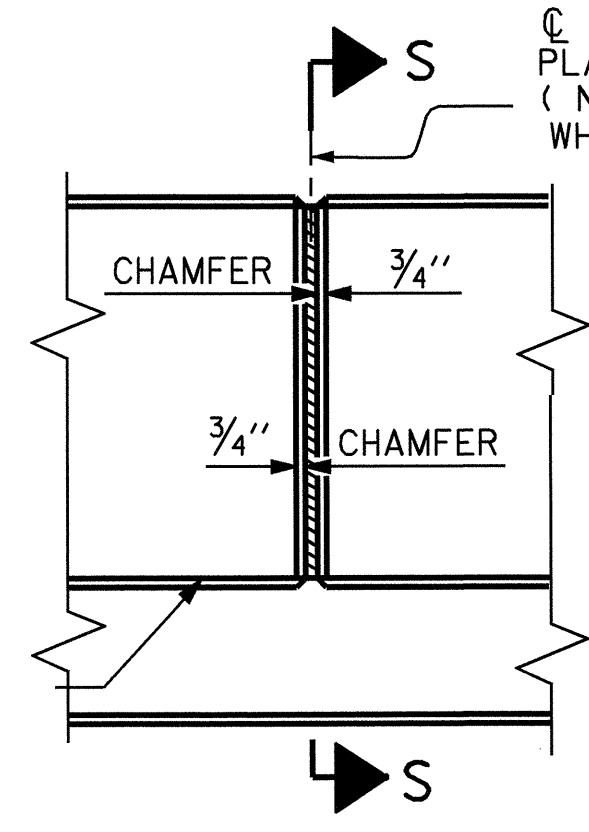
PLAN OF BARRIER RAIL

* SEE BARRIER RAIL END OF RAIL DETAIL FOR ADDITIONAL REINFORCING STEEL IN BARRIER RAIL.



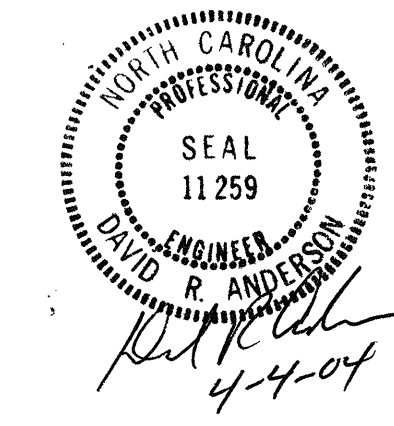
SECTION S-S

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



ELEVATION AT EXPANSION JOINTS

BARRIER RAIL DETAILS



PROJECT NO. B-3649
 GUILFORD COUNTY
 STATION: 17+39.20 -L-

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
STANDARD CONCRETE BARRIER RAIL					
OCTOBER 1987					
REVISIONS					TOTAL SHEETS
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
					32

ASSEMBLED BY : N. Q. TRAN	DATE : 4-17-03
CHECKED BY : T. A. WALTER	DATE : 9-30-03
DRAWN BY : ARB 5/87	REV. 6/16/95 EEM/RGW
CHECKED BY : SJD 9/87	REV. 7/17/98 RWW/LES
	REV. 8/16/99 RWW/LES

BARRIER RAIL END OF RAIL DETAILS