

**NOTES**

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

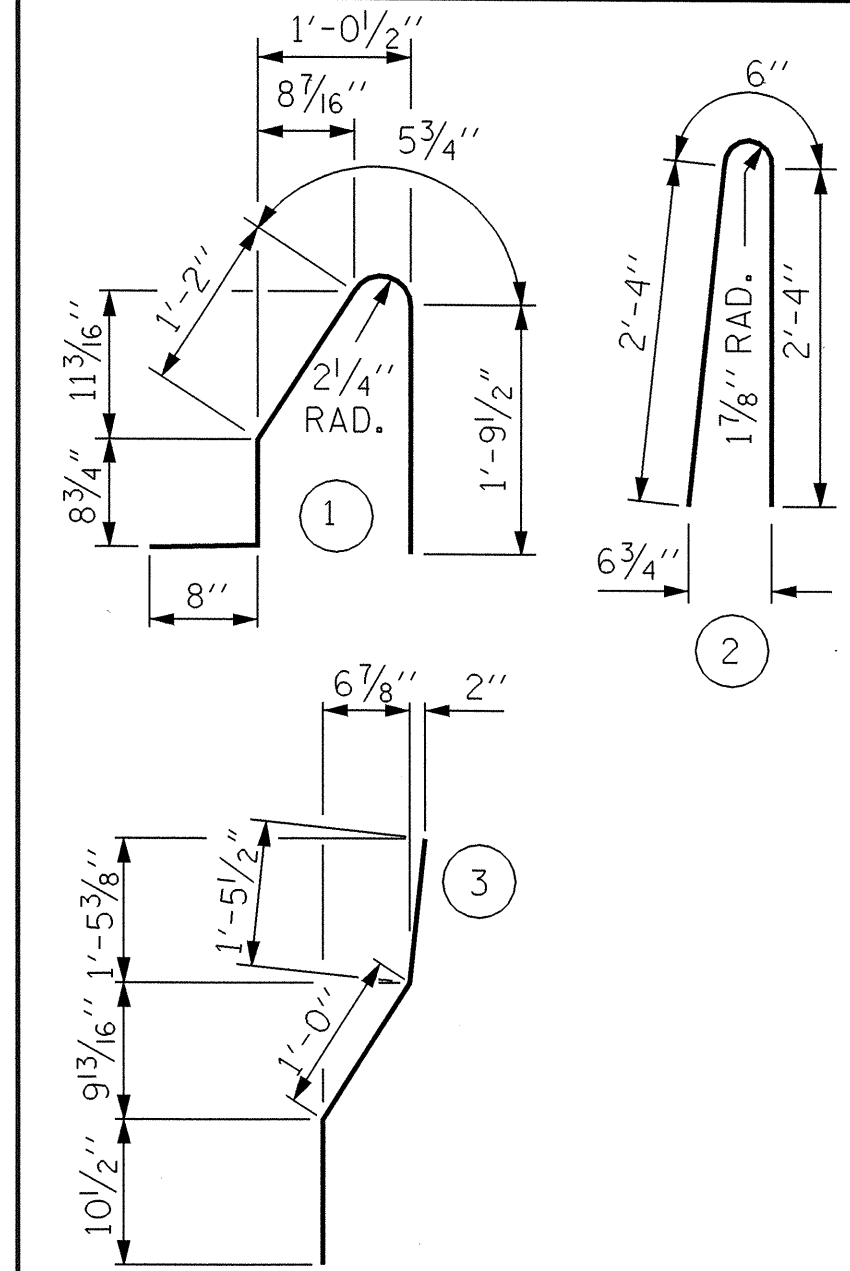
WHEN EVAZOTE JOINT SEAL IS REQUIRED, THE JOINT IN THE DECK SHALL BE SAWED PRIOR TO THE CASTING OF BARRIER RAIL.

ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

THE #5 S3 AND #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 AND #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. 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.

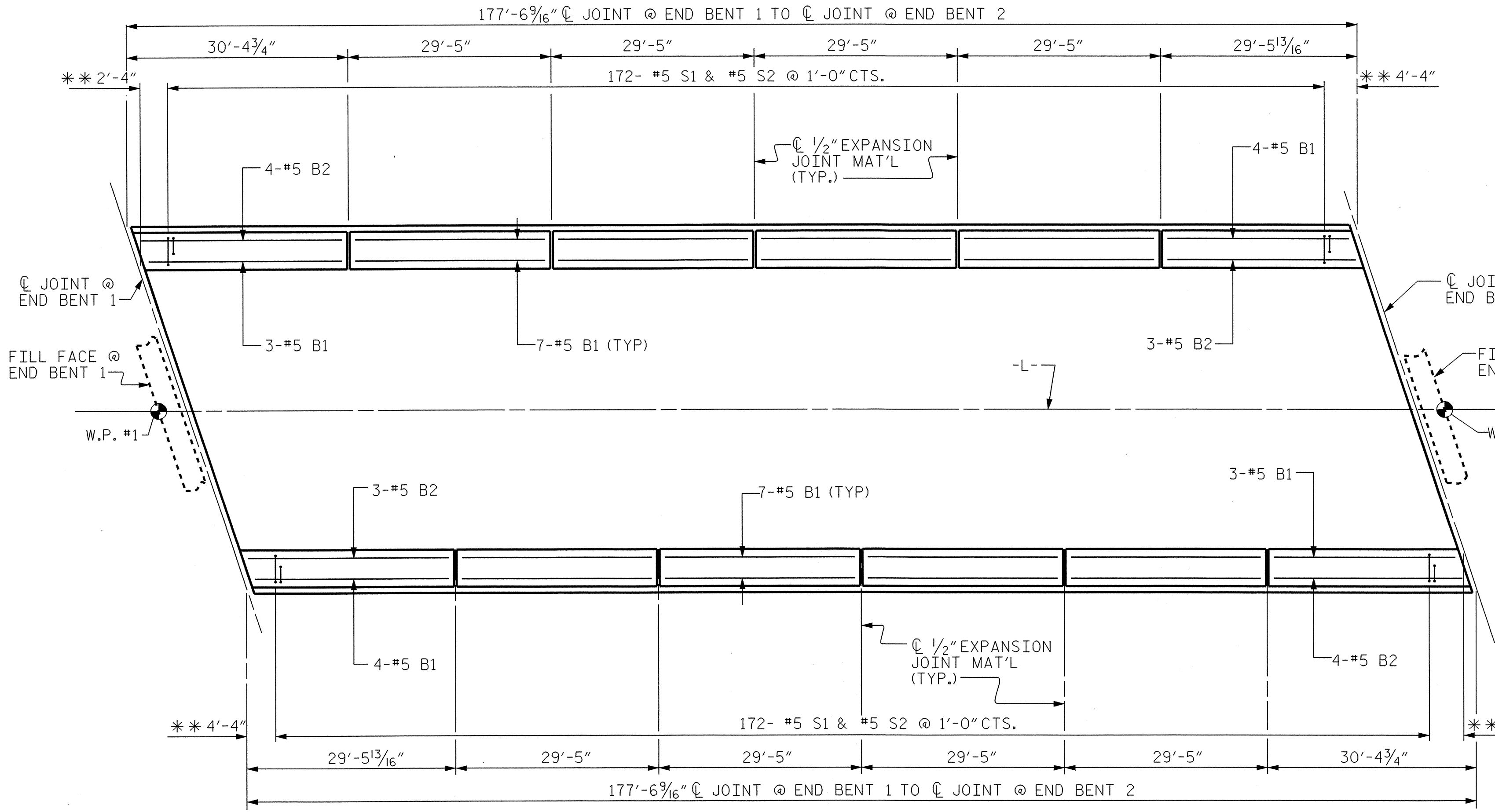
**BAR TYPES**



ALL BAR DIMENSIONS ARE OUT TO OUT

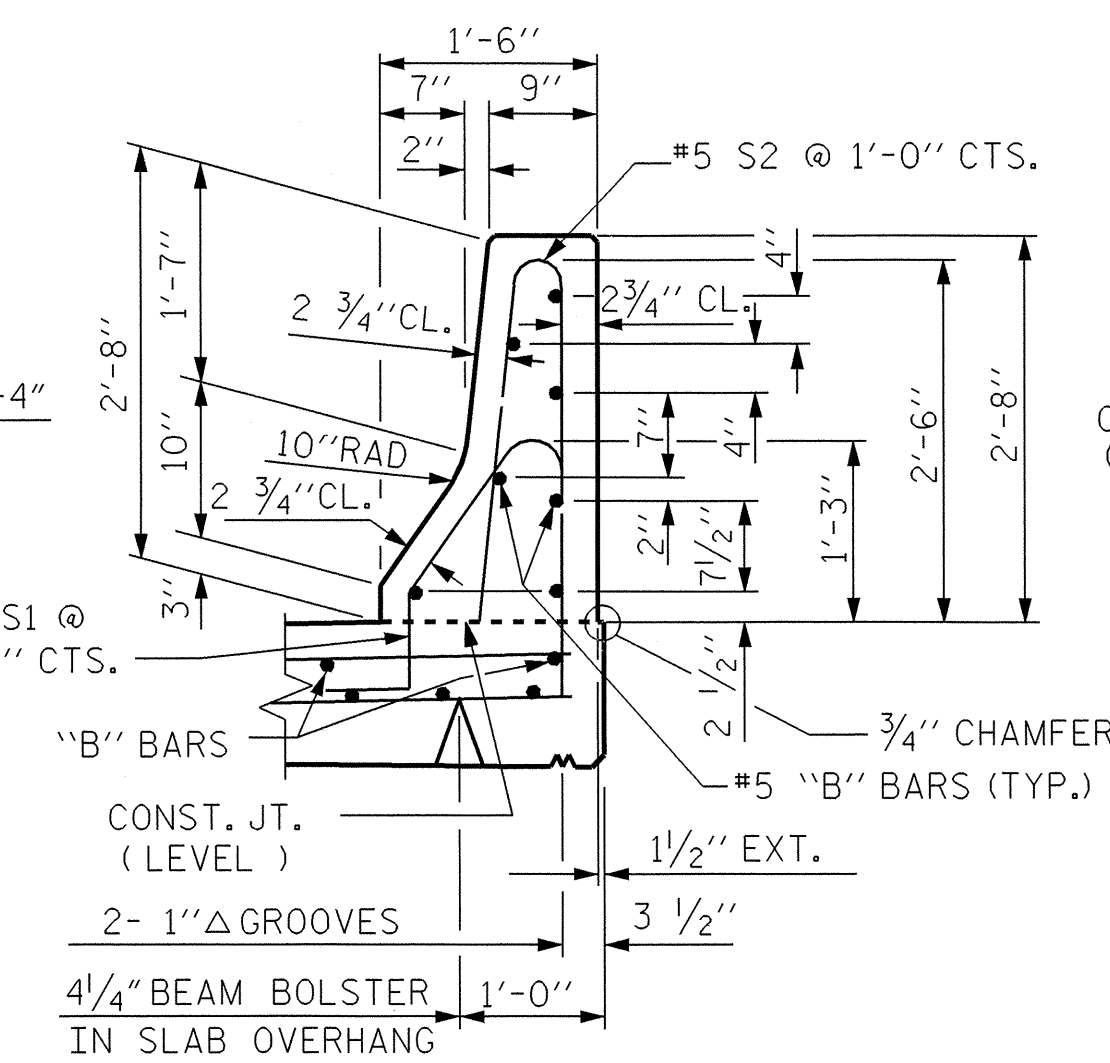
**BILL OF MATERIAL**

FOR CONCRETE BARRIER RAIL ONLY					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* S1	344	#5	1	4'-10"	1,734
* S2	344	#5	2	5'-2"	1,854
* S3	12	#5	3	3'-4"	42
* S4	12	#5	STR	3'-2"	40
* B1	70	#5	STR	28'-11"	2,111
* B2	14	#5	STR	29'-4"	428
* EPOXY COATED REINFORCING STEEL					6,209 LBS.
CLASS AA CONCRETE					35.6 CU. YDS.
CONCRETE BARRIER RAIL					355.09 LIN. FT.

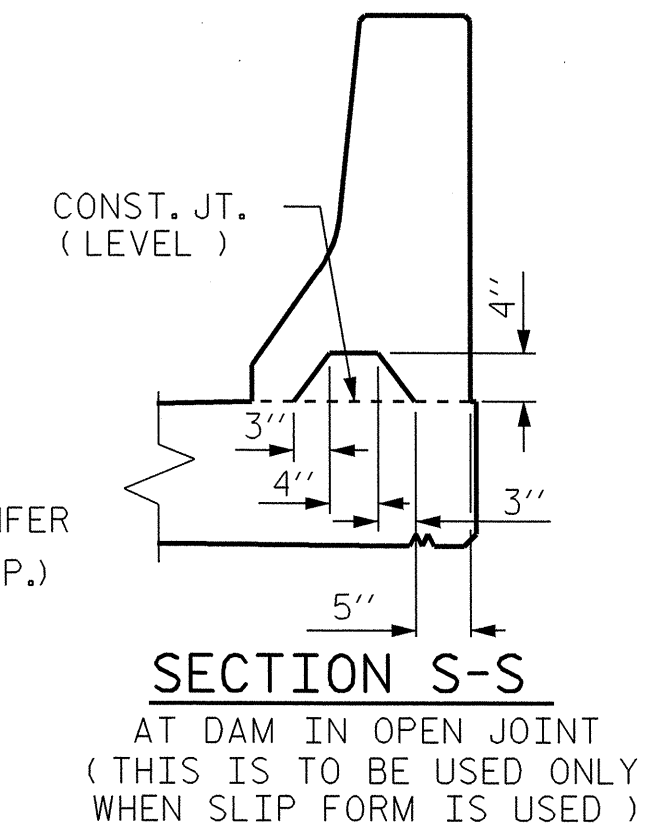


**PLAN OF BARRIER RAIL**

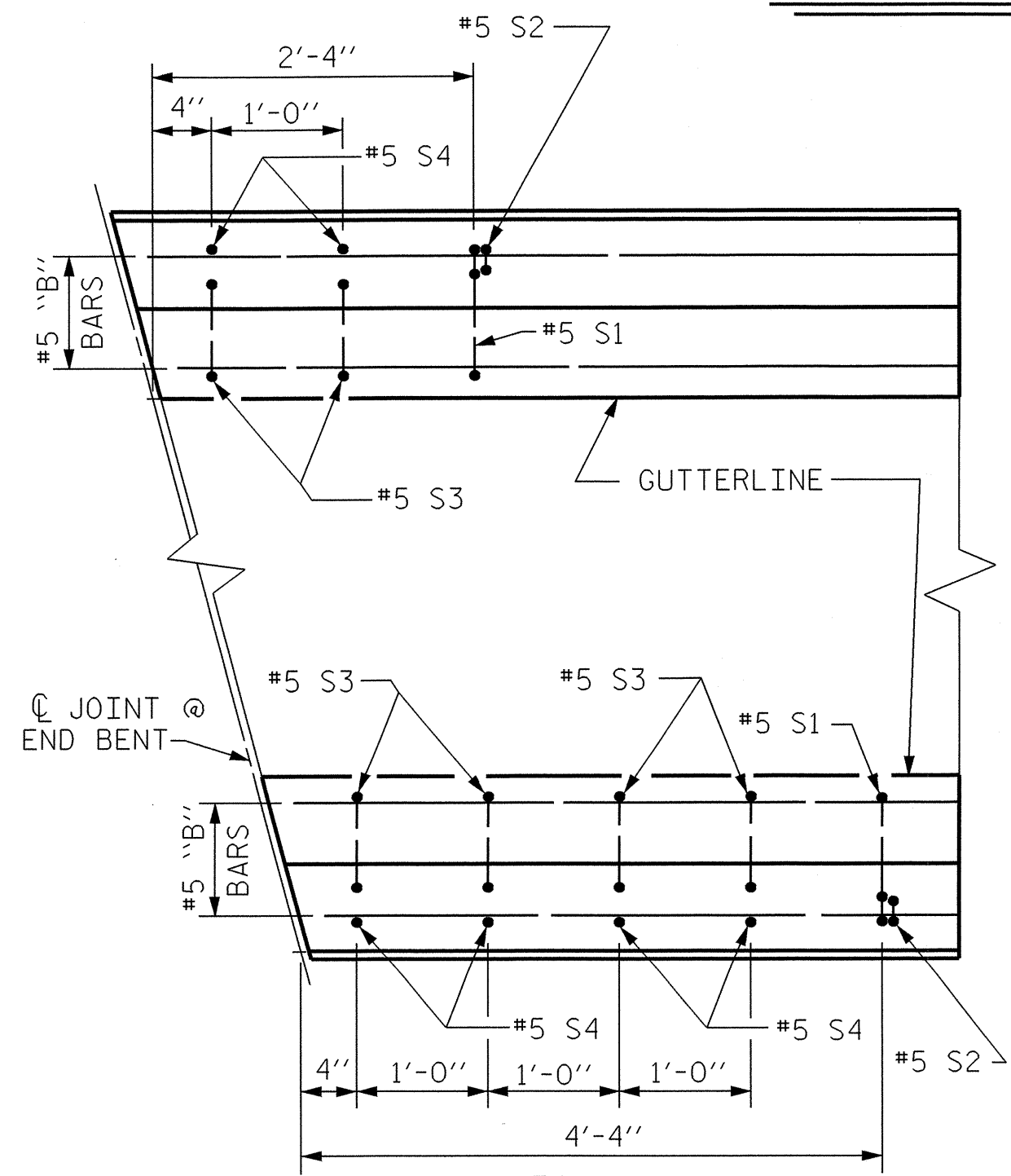
\*\* FOR REINFORCING STEEL AT END OF BARRIER RAIL, SEE "END OF RAIL DETAILS".



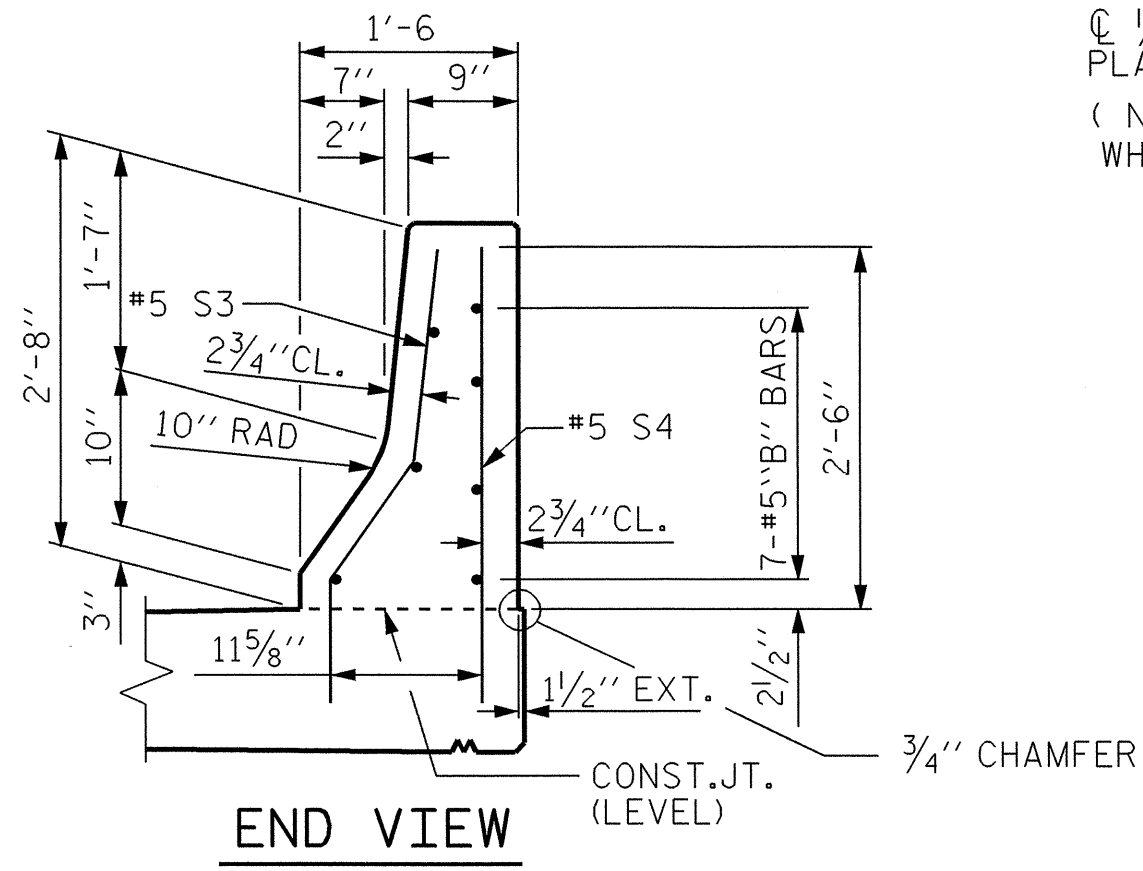
**SECTION THRU RAIL**



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

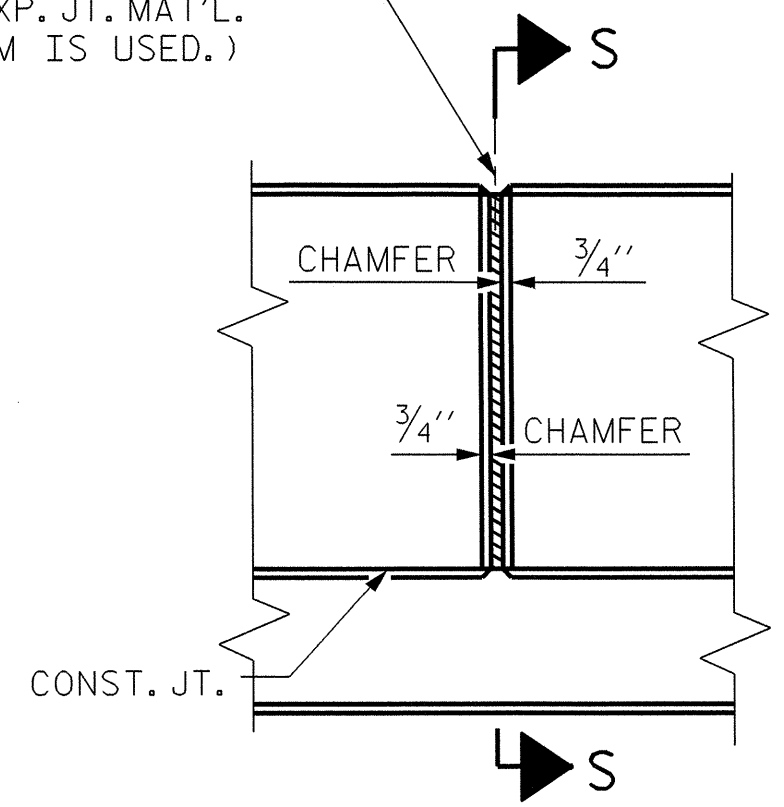


**PLAN**



**END VIEW**

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**  
**BARRIER RAIL DETAILS**

*John Douglas Ralley*  
 5/26/04

PROJECT NO. B-3419  
BURKE COUNTY  
 STATION: 20+15.00 -L-

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

OCTOBER		1987		SHEET NO. S-II	
NO.		REVISIONS		TOTAL SHEETS	
1	BY: ARB	DATE: 8/16/99	NO. 3	BY: RWW	23
2	BY: SJD	DATE: 9/10/00	NO. 4	BY: RWW	

ASSEMBLED BY : A.R.CHESSON DATE : 8-03  
 CHECKED BY : S.H.SOCKWELL DATE : 9-10-03  
 DRAWN BY : ARB 5/87 REV. 8/16/99 RWW/LES  
 CHECKED BY : SJD 9/87 REV. 10/17/00 RWW/LES  
 REV. 5/17/03 RWW/JTE

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