

PLAN OF BARRIER RAIL

NOTES

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 20.7 MPa.

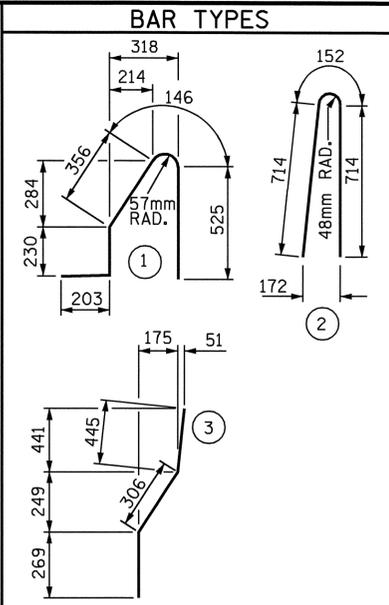
WHEN COMPRESSION JOINT SEAL OR EVAZOTE JOINT SEAL IS REQUIRED, THE JOINT IN THE DECK SHALL BE SAWED PRIOR TO THE CASTING OF BARRIER RAIL.

ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

THE #16 S3 AND #16 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 #16 S3 AND #16 S4 BARS IS 82.7 kN. FIELD TESTING FOR THE ADHESIVE BONDING SYSTEM IS NOT REQUIRED.

VERTICAL GROOVED CONTRACTION JOINTS, 12mm 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 6.1m IN LENGTH AND NO CONTRACTION JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 3.5m IN LENGTH.

*16 S1 & *16 S2 MAY BE SHIFTED AS NECESSARY TO MAINTAIN 50mm COVER @ 13mm EXPANSION JOINT IN RAIL.



ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL

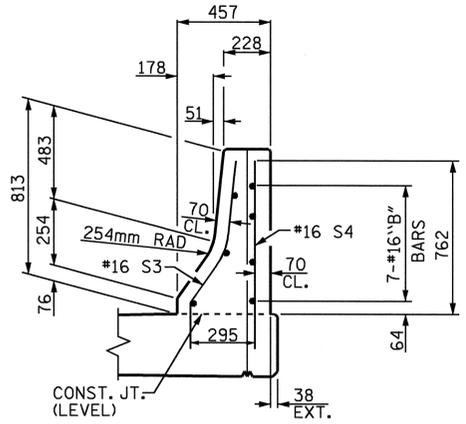
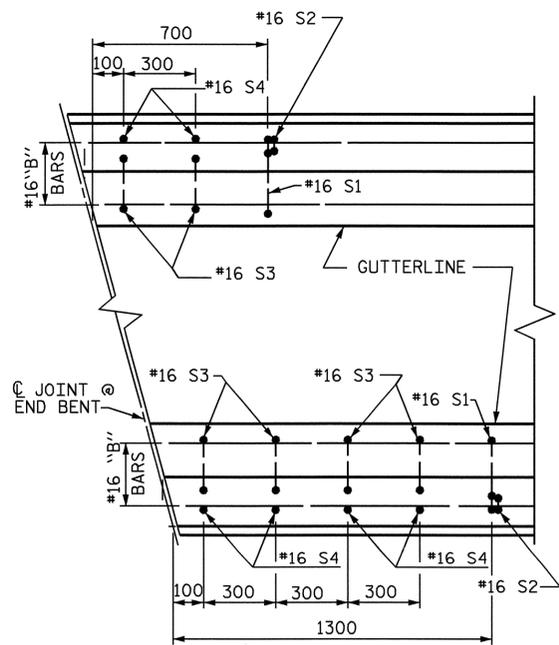
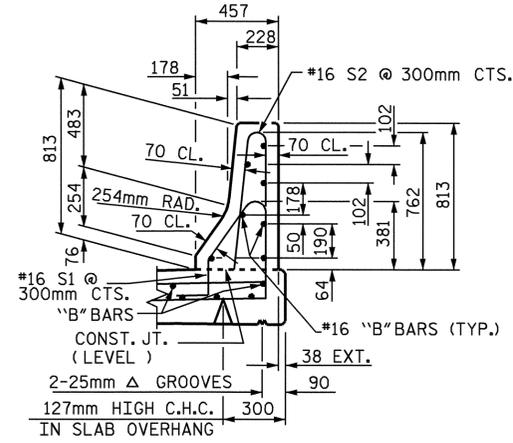
FOR CONCRETE BARRIER RAIL ONLY

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* B1	98	#16	STR	7820	1190
* B2	56	#16	STR	2420	210
* S1	410	#16	1	1460	929
* S2	410	#16	2	1580	1005
* S3	12	#16	3	1020	19
* S4	12	#16	STR	960	18

* EPOXY COATED REINFORCING STEEL 3371 kg

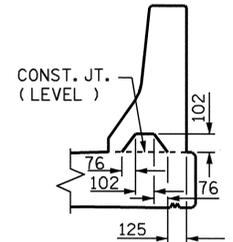
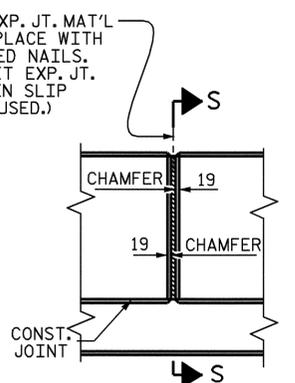
CLASS AA CONCRETE 31.8 CU. METER

CONCRETE BARRIER RAIL 126.674 METERS



END OF RAIL DETAILS

FOR ADHESIVE ANCHORING AT SAWED JOINTS



BARRIER RAIL DETAILS

PROJECT NO. R-2206C
 LINCOLN-CATAWBA COUNTY
 STATION: 216+60.508-L-

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



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

TOTAL SHEETS 374

ASSEMBLED BY : M.D.PISO	DATE : 8/03
CHECKED BY : M.M.PARSONS	DATE : 8/03
DRAWN BY : ARB 5/87	REV. 8/16/99 RWW/LES
CHECKED BY : SJD 9/87	REV. 10/17/00 RWW/LES
	REV. 5/7/03 RWW/JTE