

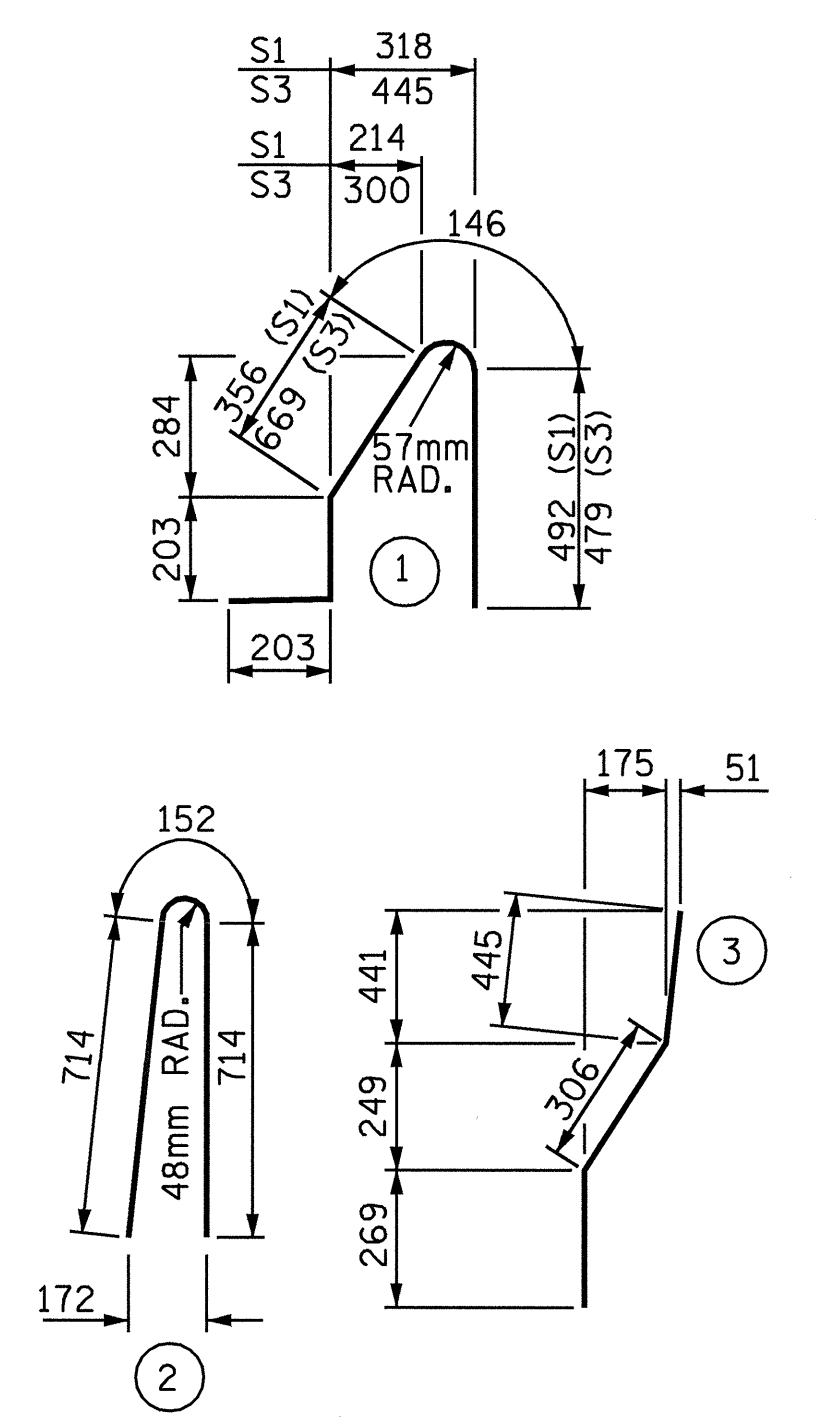
**NOTES**

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 20.7 MPa.

ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

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. 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 6.1m IN LENGTH AND NO JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 3.5m IN LENGTH.

**BAR TYPES**



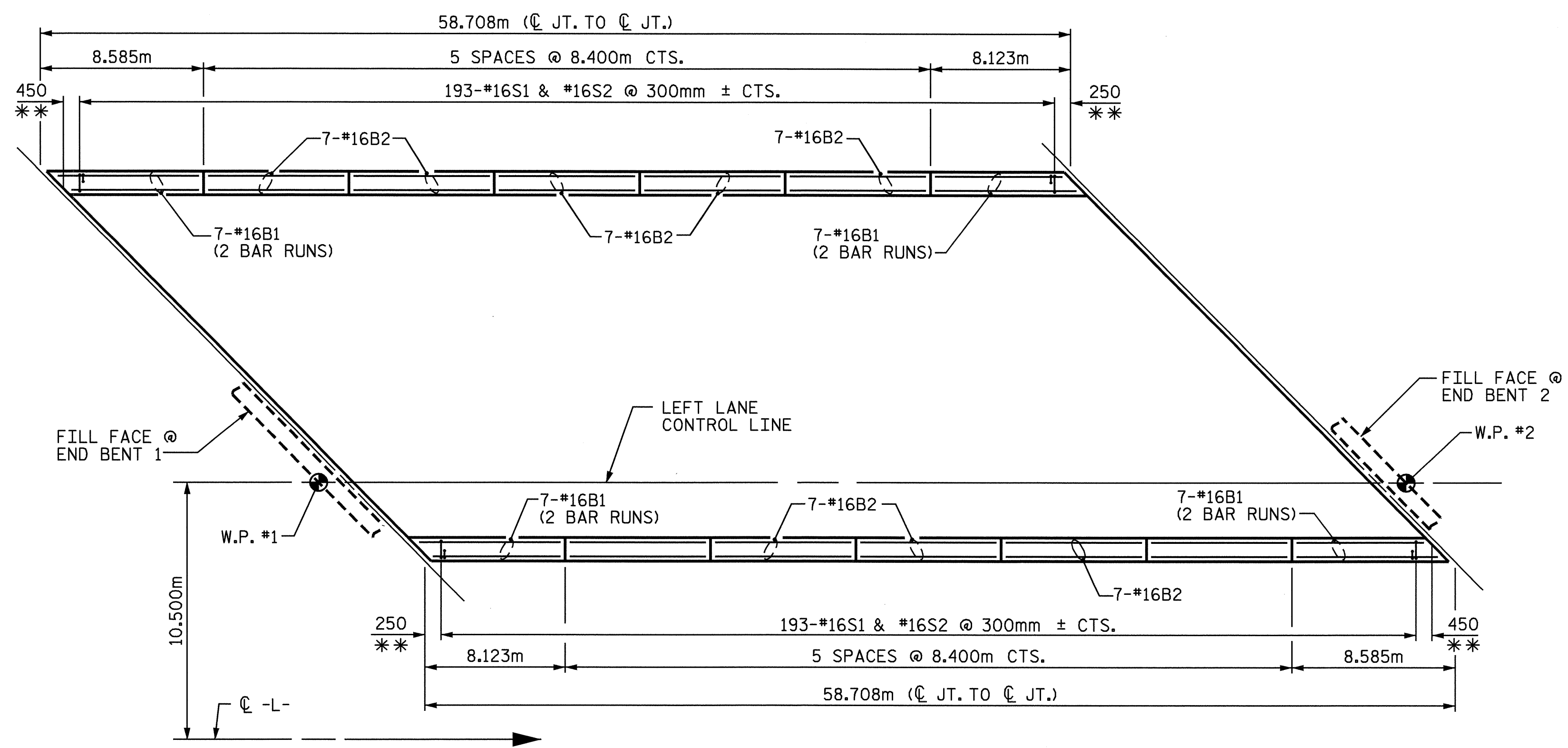
ALL BAR DIMENSIONS ARE OUT TO OUT

**BILL OF MATERIAL**

FOR CONCRETE BARRIER RAIL ONLY

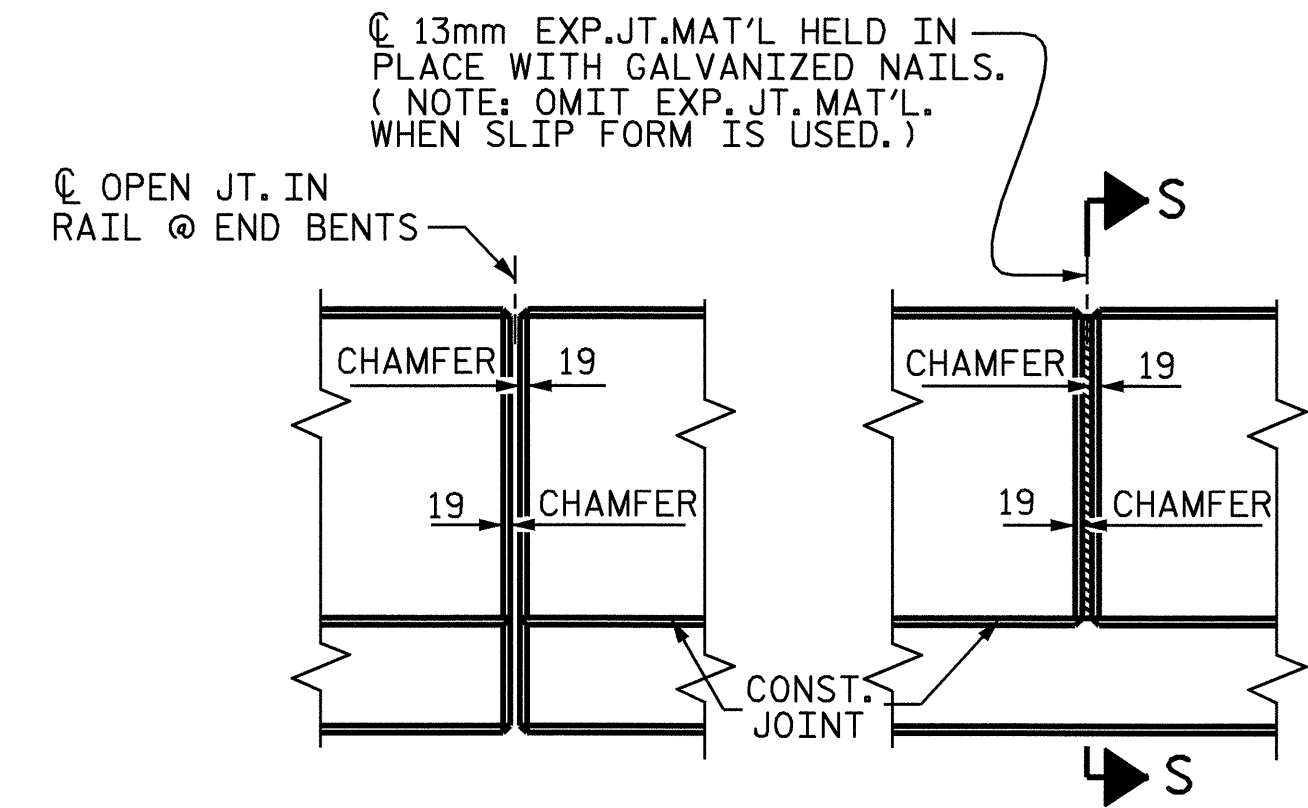
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* B1	56	#16	STR	4760	414
* B2	70	#16	STR	8300	902
* S1	386	#16	1	1400	839
* S2	386	#16	2	1580	947
* S3	4	#16	1	1700	11
* S4	2	#16	3	1020	3
* S5	2	#16	STR	960	3

* EPOXY COATED REINFORCING STEEL	3119 kg
CLASS AA CONCRETE	27.1 CU. METER
CONCRETE BARRIER RAIL	117.416 METERS

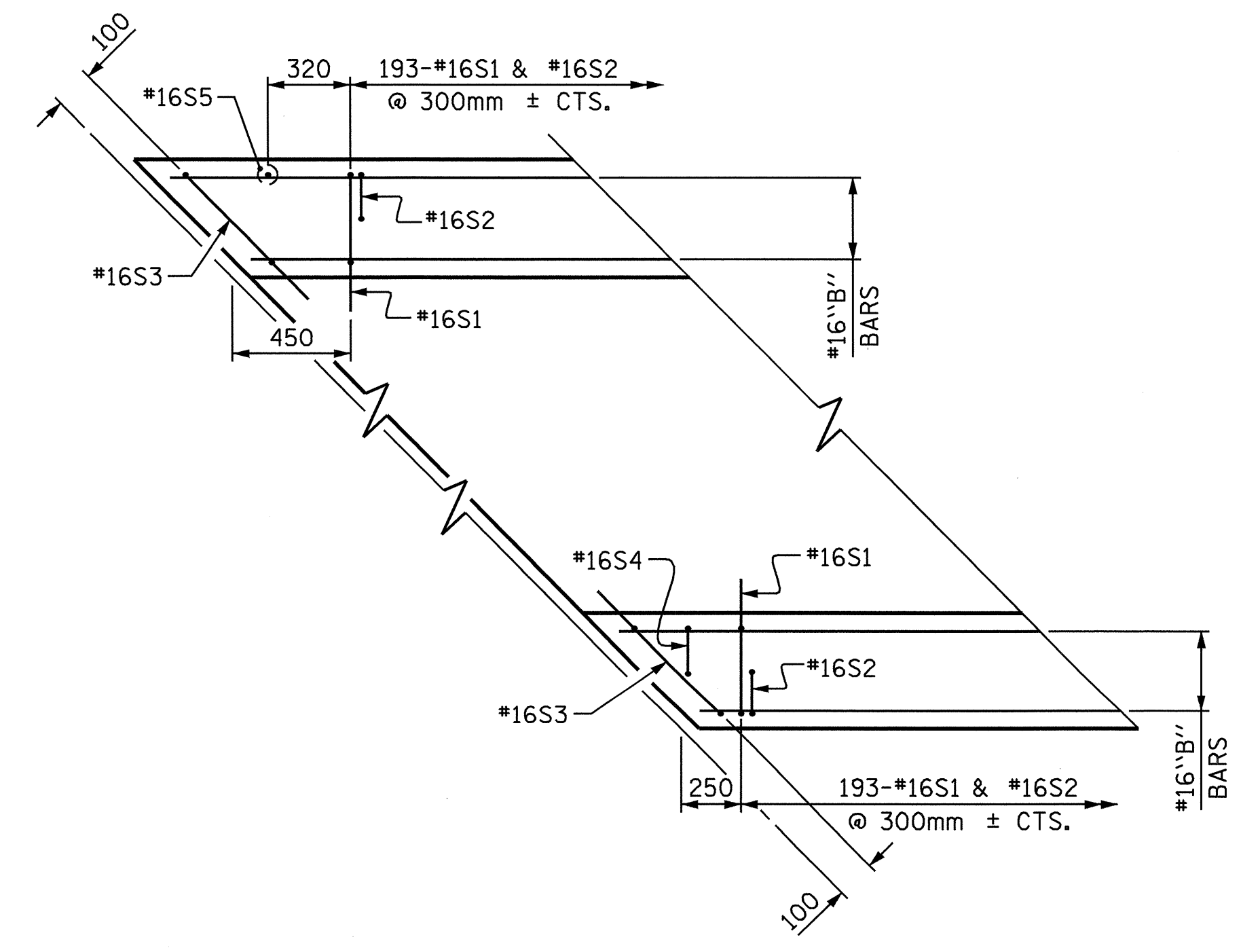


**PLAN OF BARRIER RAIL**

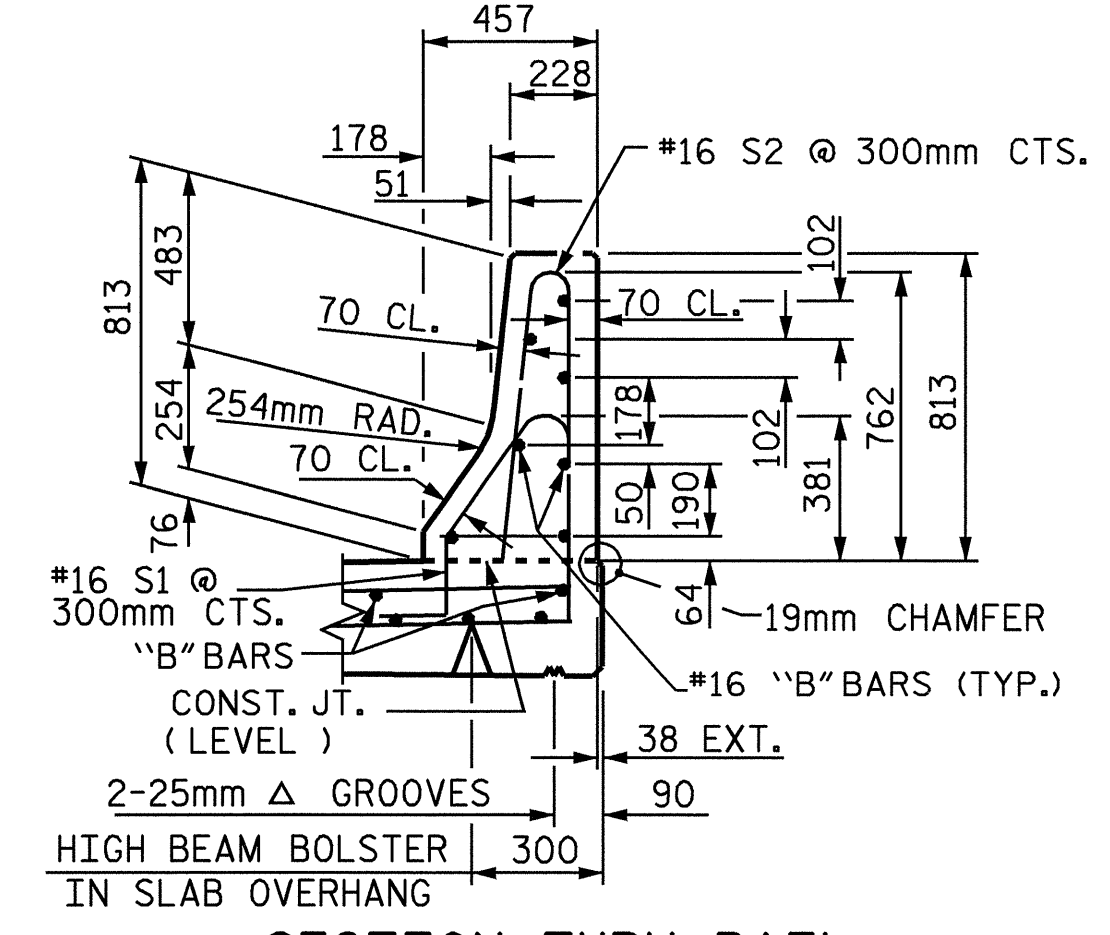
\*\* SEE "END OF RAIL DETAILS" FOR ADDITIONAL REINFORCEMENT



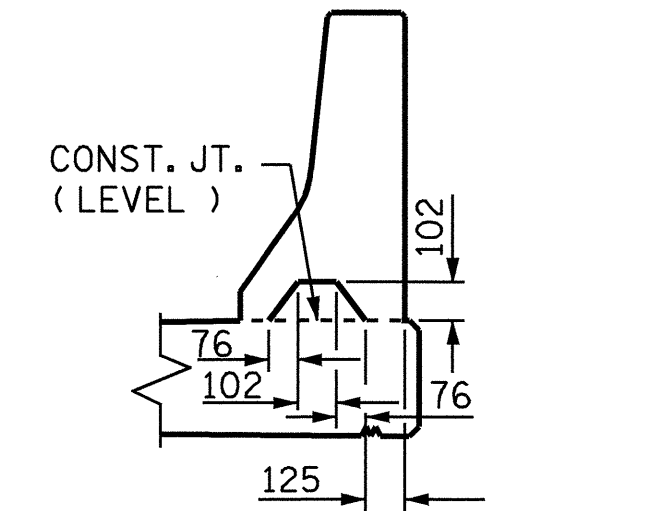
**ELEVATION AT EXPANSION JOINTS BARRIER RAIL DETAILS**



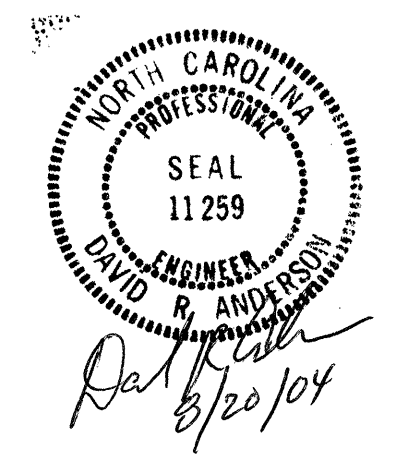
**END OF RAIL DETAILS**



**SECTION THRU RAIL**



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



PROJECT NO. R-513BA  
ROBESON COUNTY  
STATION: 113+73.429 -L-

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

**CONCRETE BARRIER RAIL**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	5-80
1			3			TOTAL SHEETS
2			4			172

ASSEMBLED BY : T.A. WALTER	DATE : 8/24/02
CHECKED BY : B. BARODAWALA	DATE : 4/13/03
DRAWN BY : ARB 5/87	REV. 7/17/98 RWW/LES
CHECKED BY : SJD 9/87	REV. 8/16/99 RWW/LES
	REV. 10/17/00R RWW/LES