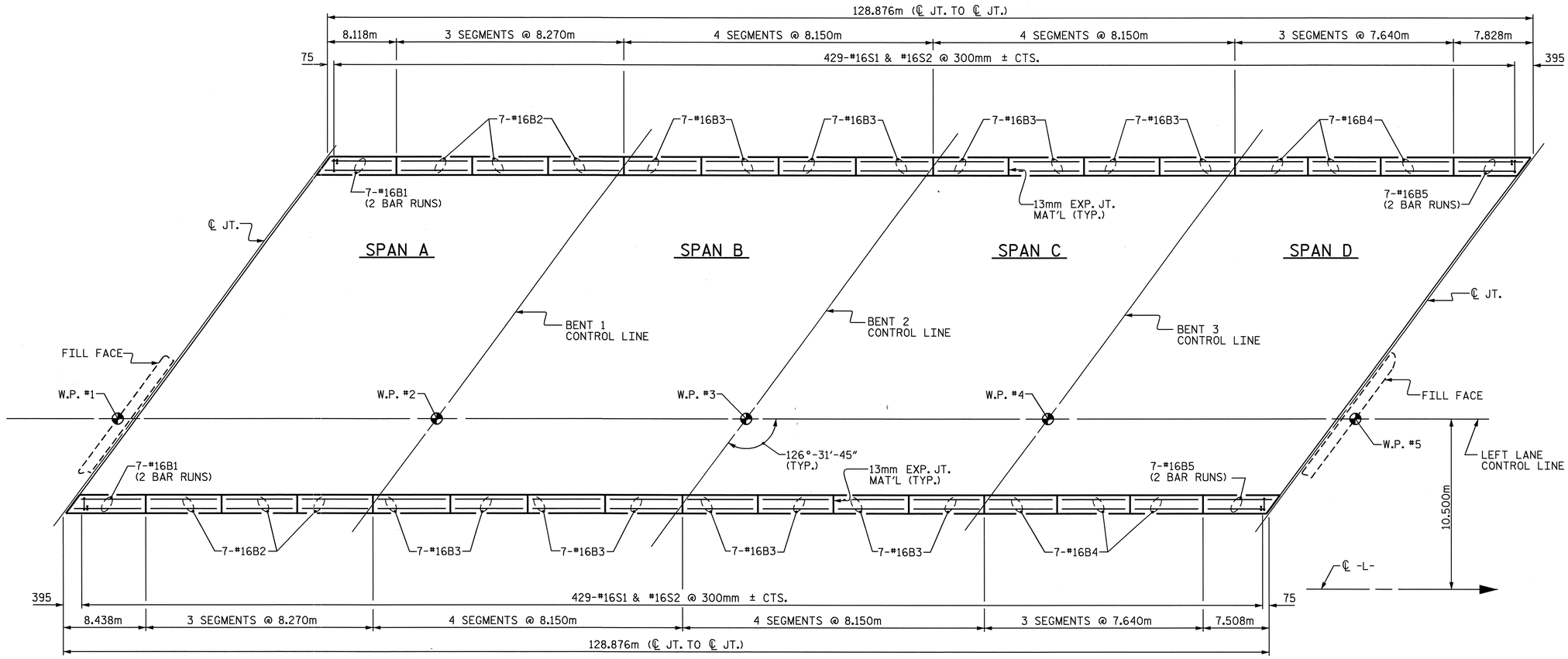
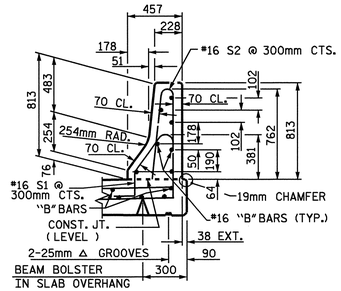
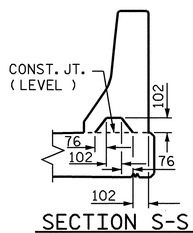
W:\SquadM\r05i3c\str3\twalter\r5i3c03br.dgn
twalter



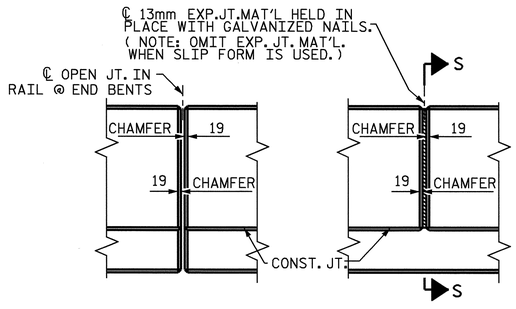
PLAN OF BARRIER RAIL



SECTION THRU RAIL



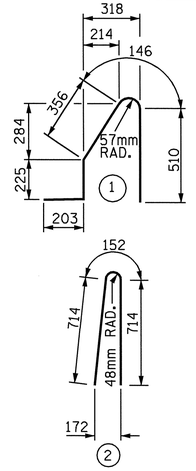
SECTION S-S
AT DAM IN OPEN JOINT
(THIS IS TO BE USED ONLY
WHEN SLIP FORM IS USED)



ELEVATION AT EXPANSION JOINTS

BARRIER RAIL DETAILS

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL

FOR CONCRETE BARRIER RAIL ONLY

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* B1	28	#16	STR	4580	199
* B2	42	#16	STR	8160	532
* B3	112	#16	STR	8040	1398
* B4	42	#16	STR	7540	491
* B5	28	#16	STR	4280	186
* S1	858	#16	1	1440	1918
* S2	858	#16	2	1580	2104

* EPOXY COATED REINFORCING STEEL 6828 kg

CLASS AA CONCRETE 64.6 CU. METER

CONCRETE BARRIER RAIL 257.752 METERS

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 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 6.100m IN LENGTH AND NO JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 3.500m IN LENGTH.

THE #16S1 & #16S2 BARS MAY BE SHIFTED SLIGHTLY, AS NECESSARY, TO CLEAR EXPANSION JOINT ASSEMBLIES AND COVER PLATE ANCHOR ASSEMBLIES.

PROJECT NO. R-513C
ROBESON COUNTY
STATION: 277+68.339 -L-

NORTH CAROLINA PROFESSIONAL SEAL 11259 ENGINEER DAVID R ANDERSON
3/22/04

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE

CONCRETE BARRIER RAIL (LEFT LANE)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-148
1			3			TOTAL SHEETS
2			4			312

DRAWN BY : T.A. WALTER DATE : 9/19/00
CHECKED BY : N.Q. TRAN DATE : 10/14/02