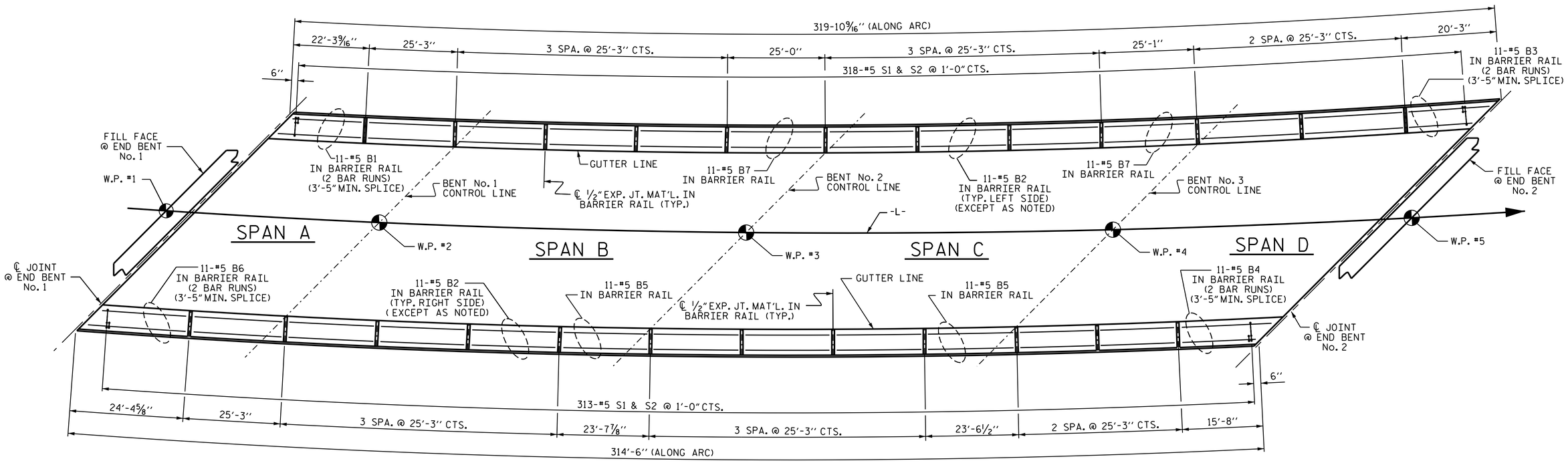


PLAN OF CONCRETE BARRIER RAIL

BARRIER RAIL DIMENSIONS ARE TAKEN ALONG OUTSIDE FACE OF BARRIER RAIL.

NOTES

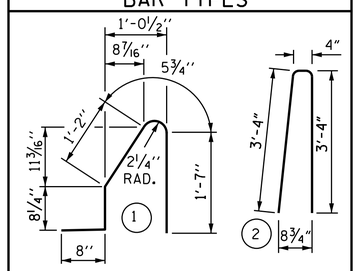
THE BARRIER RAIL IN A CONTINUOUS UNIT SHALL NOT BE CAST UNTIL ALL SLAB CONCRETE IN THAT UNIT HAS BEEN CAST AND HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

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.

QUANTITIES FOR BARRIER RAIL ON APPROACH SLAB ARE INCLUDED ON BRIDGE APPROACH SLAB SHEETS.

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL

FOR CONCRETE BARRIER RAIL ONLY

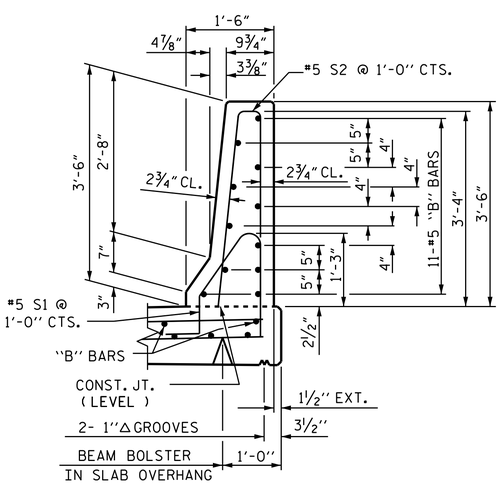
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* S1	631	#5	1	4'-7"	3,016
* S2	631	#5	2	7'-0"	4,607
* B1	22	#5	STR	13'-2"	302
* B2	198	#5	STR	24'-10"	5,128
* B3	22	#5	STR	11'-5"	262
* B4	22	#5	STR	9'-11"	228
* B5	22	#5	STR	23'-1"	530
* B6	22	#5	STR	13'-7"	312
* B7	22	#5	STR	24'-7"	564
* EPOXY COATED REINFORCING STEEL					14,949 LBS.
CLASS AA CONCRETE					86.3 CU. YDS.
▲ CONCRETE BARRIER RAIL					634.38 LIN. FT.

▲ DOES NOT INCLUDE BARRIER RAIL ON APPROACH SLABS.

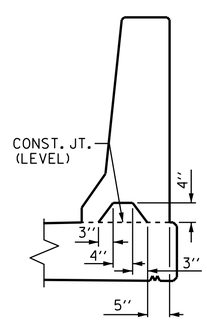
PROJECT NO. B-3673

McDOWELL COUNTY

STATION: 29+38.00 -L-

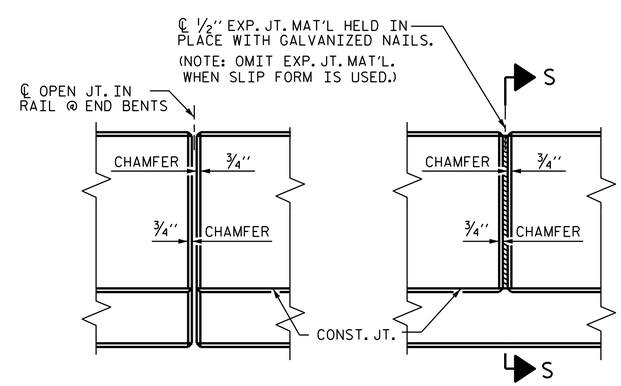


SECTION THRU RAIL



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

NORTH CAROLINA PROFESSIONAL SEAL 17230 ENGINEER WAEL S. ARAFAT

DocuSigned by: Wael Arafat 4139C12A32AB406...

2/24/2015

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD

CONCRETE BARRIER RAIL

REVISIONS							SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:		S-22
1			3				TOTAL SHEETS
2			4				43

ASSEMBLED BY : V.X. NGUYEN	DATE : 9-23-14		
CHECKED BY : D. HODGE	DATE : 12-14		
DRAWN BY : ARB 5/87	REV. 10/1/11	MAA/GM	
CHECKED BY : SJD 9/87	REV. 7/12	MAA/GM	DESIGN ENGINEER OF RECORD: J.P. McCARTHA DATE : 1-15
	REV. 6/13	MAA/GM	

23-FEB-2015 17:46
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STD. NO. CBR1 (SHT 2)