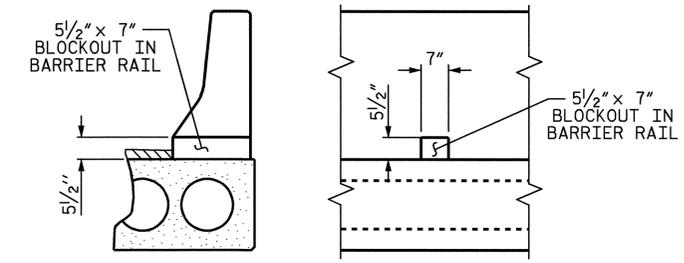
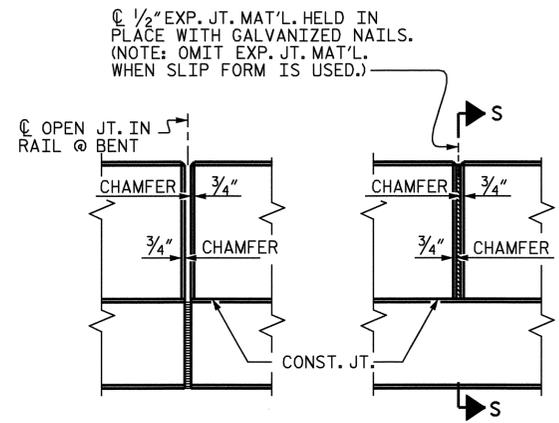


DEAD LOAD DEFLECTION AND CAMBER		
	SPAN A & D	SPAN B & C
CAMBER (SLAB ALONE IN PLACE)	1/2" Ø L.R. STRAND 13/16" ↑	1/2" Ø L.R. STRAND 2/16" ↑
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD**	1/8" ↓	5/16" ↓
FINAL CAMBER	11/16" ↑	13/4" ↑

\*\* INCLUDES FUTURE WEARING SURFACE

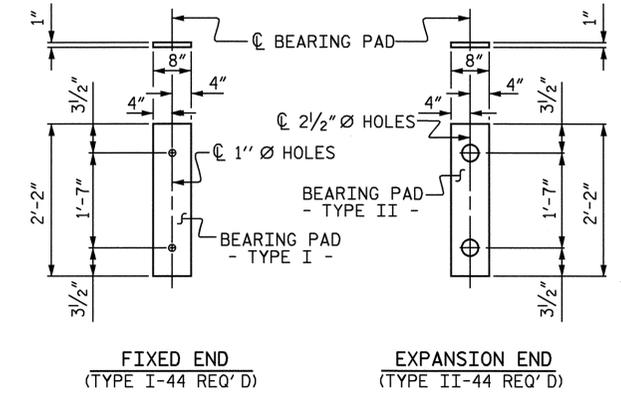
CORED SLABS REQUIRED				
		NUMBER	LENGTH	TOTAL LENGTH
SPAN A & D	EXTERIOR C.S.	4	38'-9 3/4"	155'-3"
	INTERIOR C.S.	18	38'-9 3/4"	698'-7 1/2"
SPAN B & C	EXTERIOR C.S.	4	49'-10 1/2"	199'-6"
	INTERIOR C.S.	18	49'-10 1/2"	897'-9"
		44		1951.13'

GRADE 270 STRANDS	
	1/2" Ø L.R.
AREA ( SQUARE INCHES )	0.153
ULTIMATE STRENGTH ( LBS. PER STRAND )	41,300
APPLIED PRESTRESS ( LBS. PER STRAND )	30,980



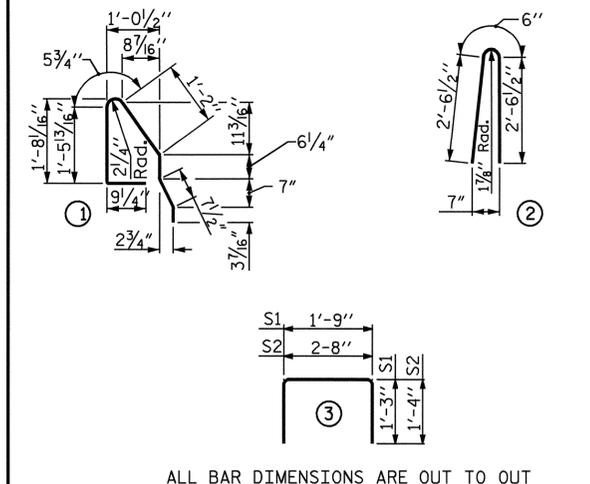
ELEVATION AT EXPANSION JOINTS  
BARRIER RAIL DETAILS

BLOCKOUT DETAIL FOR DRAINAGE  
(15 BLOCKOUTS REQUIRED)  
(BLOCKOUTS TO BE CENTERED BETWEEN "S" BARS IN BARRIER RAIL)



ELASTOMERIC BEARING DETAILS  
(60 DUROMETER HARDNESS)

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL FOR ONE CORED SLAB SECTION  
SPAN A & D

BAR	NUMBER	SIZE	TYPE	EXTERIOR UNIT		INTERIOR UNIT	
				LENGTH	WEIGHT	LENGTH	WEIGHT
B1	4	# 4	STR	20'-6"	55	20'-6"	55
S1	8	# 5	3	4'-3"	35	4'-3"	35
S2	76	# 4	3	5'-4"	271		
S2	60	# 4	3			5'-4"	214
* S3	40	# 5	1	5'-4"	223		
REINFORCING STEEL				LBS. 361		304	
* EPOXY COATED REINFORCING STEEL				LBS. 223			
5,000 P.S.I. CONCRETE				CU. YDS. 5.4		5.4	
1/2" Ø L.R. STRANDS				No.	14	14	

BILL OF MATERIAL FOR ONE CORED SLAB SECTION  
SPAN B & C

BAR	NUMBER	SIZE	TYPE	EXTERIOR UNIT		INTERIOR UNIT	
				LENGTH	WEIGHT	LENGTH	WEIGHT
B2	4	# 4	STR	26'-0"	69	26'-0"	69
S1	8	# 5	3	4'-3"	35	4'-3"	35
S2	98	# 4	3	5'-4"	349		
S2	78	# 4	3			5'-4"	278
* S3	51	# 5	1	5'-4"	284		
REINFORCING STEEL				LBS. 453		382	
* EPOXY COATED REINFORCING STEEL				LBS. 284			
5,000 P.S.I. CONCRETE				CU. YDS. 7.0		7.0	
1/2" Ø L.R. STRANDS				No.	23	23	

BILL OF MATERIAL FOR CONCRETE BARRIER RAIL

BAR	BARS PER SPAN				TOTAL NO.	SIZE	TYPE	LENGTH	WEIGHT
	SPAN A	SPAN B	SPAN C	SPAN D					
* B3	28			28	56	#5	STR	19'-0"	1110
* B4		28	28		56	#5	STR	24'-7"	1436
* S4	80	102	102	80	364	#5	2	5'-7"	2120
* EPOXY COATED REINFORCING STEEL						LBS.		4666	
CLASS AA CONCRETE						CU. YDS.		39.7	
TOTAL LIN. FT. OF CONCRETE BARRIER RAIL								355.75	

NOTES

ALL PRESTRESSING STRANDS SHALL BE 7-WIRE LOW RELAXATION GRADE 270 STRANDS AND SHALL CONFORM TO AASHTO M203 EXCEPT FOR SAMPLING REQUIREMENTS WHICH SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ALL REINFORCING STEEL CAST WITH THE CORED SLAB SECTIONS SHALL BE GRADE 60 AND SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PRESTRESSED CONCRETE CORED SLABS.

RECESSES FOR TRANSVERSE STRANDS SHALL BE GROUTED AFTER THE TENSIONING OF THE STRANDS.

THE 2 1/2" Ø DOWEL HOLES AT FIXED ENDS OF SLAB SECTIONS SHALL BE FILLED WITH GROUT. THE 2 1/2" Ø DOWEL HOLES AT EXPANSION ENDS OF SLAB SECTIONS SHALL BE FILLED WITH JOINT SEALER MATERIAL TO 1/2" ABOVE THE TOP OF DOWELS AND THEN FILLED WITH GROUT.

THE JOINT SEALER MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF TYPE SL LOW MODULUS SILICONE SEALANT. THE 2" Ø BACKER ROD SHALL CONFORM TO THE REQUIREMENTS OF TYPE M BOND BREAKER. SEE SECTION 1028 OF THE STANDARD SPECIFICATIONS.

WHEN CORED SLABS ARE CAST, A POSITIVE HOLD-DOWN SYSTEM SHALL BE EMPLOYED TO PREVENT VOIDS FROM RISING OR MOVING SIDEWAYS. THIS SYSTEM SHALL BE DESIGNED TO BE LEFT IN PLACE UNTIL THE CONCRETE HAS REACHED RELEASE STRENGTH, AT LEAST THREE WEEKS PRIOR TO CASTING CORED SLABS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND COMMENT, DETAILED DRAWINGS OF THE PROPOSED HOLD-DOWN SYSTEM. IN ADDITION TO STRUCTURAL DETAILS, LOCATION AND SPACING OF THE HOLD-DOWNS SHALL BE INDICATED.

THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE CORED SLAB UNIT SHALL BE DONE WHEN THE CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 4000 PSI.

ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED. PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE CORED SLAB UNIT ENDS. APPLY EPOXY PROTECTIVE COATING TO CORED SLAB UNIT ENDS. FOR EPOXY PROTECTIVE COATING, SEE SPECIAL PROVISIONS.

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. A VERTICAL 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.

FOR ELASTOMERIC BEARINGS, SEE SPECIAL PROVISIONS. ALL ELASTOMERIC BEARING PADS SHALL BE 60 DUROMETER HARDNESS. FOR PRESTRESSED CONCRETE MEMBERS, SEE SPECIAL PROVISIONS.

PROJECT NO. B-4270  
SAMPSON COUNTY  
STATION: 14+60.00 -L-

SHEET 6 OF 6

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
STANDARD  
3'-0" X 1'-9"  
PRESTRESSED  
CONCRETE CORED  
SLAB UNIT



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

S-9  
TOTAL SHEETS  
23

ASSEMBLED BY: R. G. EMERSON DATE: 8/03  
CHECKED BY: S. B. WILLIAMS DATE: 11/03  
DRAWN BY: WJH 4/89 REV. 10/17/00 RWW/LES  
CHECKED BY: FCJ 5/89 REV. 7/10/01 RWW/LES  
REV. 5/7/03 RWW/JTE