

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

BILL OF MATERIAL FOR ONE CORED SLAB IN SPAN A

BAR	SIZE	TYPE	INTERIOR			EXTERIOR				
			NO	LENGTH	WEIGHT	NO	LENGTH	WEIGHT		
B1	4	STR	4	22'-8"	61	4	22'-8"	61		
S1	4	3	8	4'-3"	23	8	4'-3"	23		
S2	4	3	86	5'-4"	306	86	5'-4"	306		
*S3	5	1				45	5'-5"	254		
REINFORCING STEEL LB.					390	390				
*EPOXY COATED REINF. STEEL LB.						254				
5000 PSI CONCRETE CU. YDS.					6.0	6.0				
1/2" Ø L.R. STRANDS NO.					18	18				

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

BAR	SIZE	TYPE	INTERIOR			EXTERIOR				
			NO	LENGTH	WEIGHT	NO	LENGTH	WEIGHT		
B2	4	STR	4	25'-8"	69	4	25'-8"	69		
S1	4	3	8	4'-3"	23	8	4'-3"	23		
S2	4	3	98	5'-4"	349	98	5'-4"	349		
*S3	5	1				51	5'-5"	288		
REINFORCING STEEL LB.					441	441				
*EPOXY COATED REINF. STEEL LB.						288				
5000 PSI CONCRETE CU. YDS.					6.8	6.8				
1/2" Ø L.R. STRANDS NO.					23	23				

BILL OF MATERIAL FOR ONE CORED SLAB IN SPAN D

BAR	SIZE	TYPE	INTERIOR			EXTERIOR				
			NO	LENGTH	WEIGHT	NO	LENGTH	WEIGHT		
B3	4	STR	4	17'-8"	47	4	17'-8"	47		
S1	4	3	8	4'-3"	23	8	4'-3"	23		
S2	4	3	66	5'-4"	235	66	5'-4"	235		
*S3	5	1				35	5'-5"	198		
REINFORCING STEEL LB.					305	305				
*EPOXY COATED REINF. STEEL LB.						198				
5000 PSI CONCRETE CU. YDS.					4.6	4.6				
1/2" Ø L.R. STRANDS NO.					12	12				

DEAD LOAD DEFLECTION AND CAMBER (SPAN A)

CAMBER (SLAB ALONE IN PLACE)	↑	1.370
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD**	↓	0.202
FINAL CAMBER	↑	1 1/8"

** INCLUDES FUTURE WEARING SURFACE

DEAD LOAD DEFLECTION AND CAMBER (SPANS B & C)

CAMBER (SLAB ALONE IN PLACE)	↑	2.090
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD**	↓	0.344
FINAL CAMBER	↑	1 3/4"

** INCLUDES FUTURE WEARING SURFACE

DEAD LOAD DEFLECTION AND CAMBER (SPAN D)

CAMBER (SLAB ALONE IN PLACE)	↑	0.543
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD**	↓	0.070
FINAL CAMBER	↑	1/2"

** INCLUDES FUTURE WEARING SURFACE

CORED SLABS REQUIRED (SPAN A)

UNIT TYPE	NUMBER	LENGTH	TOTAL LENGTH
INTERIOR	10	43'-9 3/4"	438'-1 1/2"
EXTERIOR	2	43'-9 3/4"	87'-7 1/2"
TOTAL	12	43'-9 3/4"	525'-9"

CORED SLABS REQUIRED (SPANS B & C)

UNIT TYPE	NUMBER	LENGTH	TOTAL LENGTH
INTERIOR	20	49'-10 1/2"	997'-6"
EXTERIOR	4	49'-10 1/2"	199'-6"
TOTAL NUMBER	24	49'-10 1/2"	1197'-0"

CORED SLABS REQUIRED (SPAN D)

UNIT TYPE	NUMBER	LENGTH	TOTAL LENGTH
INTERIOR	10	33'-9 3/4"	338'-1 1/2"
EXTERIOR	2	33'-9 3/4"	67'-7 1/2"
TOTAL NUMBER	12	33'-9 3/4"	405'-9"

BARRIER RAIL BILL OF MATERIAL

SPAN A						SPANS B & C						SPAN D					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
*B4	28	5	STR	21'-7"	630	*B5	56	5	STR	24'-7"	1436	*B6	28	5	STR	16'-7"	484
*S4	90	5	2	5'-8"	532	*S4	102	5	2	5'-8"	602	*S4	70	5	2	5'-8"	414
*EPOXY COATED REINF. STEEL LB. = 1162						*EPOXY COATED REINF. STEEL LB. = 2038						*EPOXY COATED REINF. STEEL LB. = 898					
CLASS AA CONCRETE CU. YDS. = 10.0						CLASS AA CONCRETE CU. YDS. = 22.8						CLASS AA CONCRETE CU. YDS. = 7.7					
*TOTAL EPOXY COATED REINF. STEEL LB = 4098																	
TOTAL CLASS AA CONCRETE CU. YDS. = 40.5																	
TOTAL CONCRETE BARRIER RAIL (FT) = 355.8																	

PROJECT NO. B-4139
HARNETT COUNTY
 STATION: 17+68.00 -L-

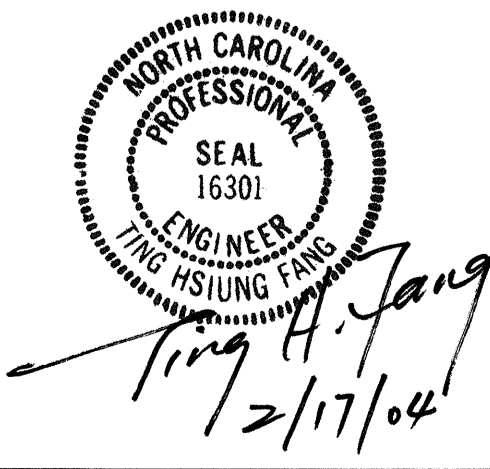
SHEET 7 OF 7

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

3'-0" X 1'-9"
 PRESTRESSED
 CONCRETE CORED
 SLAB UNIT

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

S-10
TOTAL SHEETS
22



ASSEMBLED BY : S. M. RASHIDI DATE : 4/14/03
 CHECKED BY : N. TRAN DATE : 10/31/03
 DRAWN BY : WJH 4/89 REV. 8/16/99 RWW/LES
 CHECKED BY : FCJ 5/89 REV. 10/17/00 RWW/LES
 REV. 7/10/01R RWW/LES