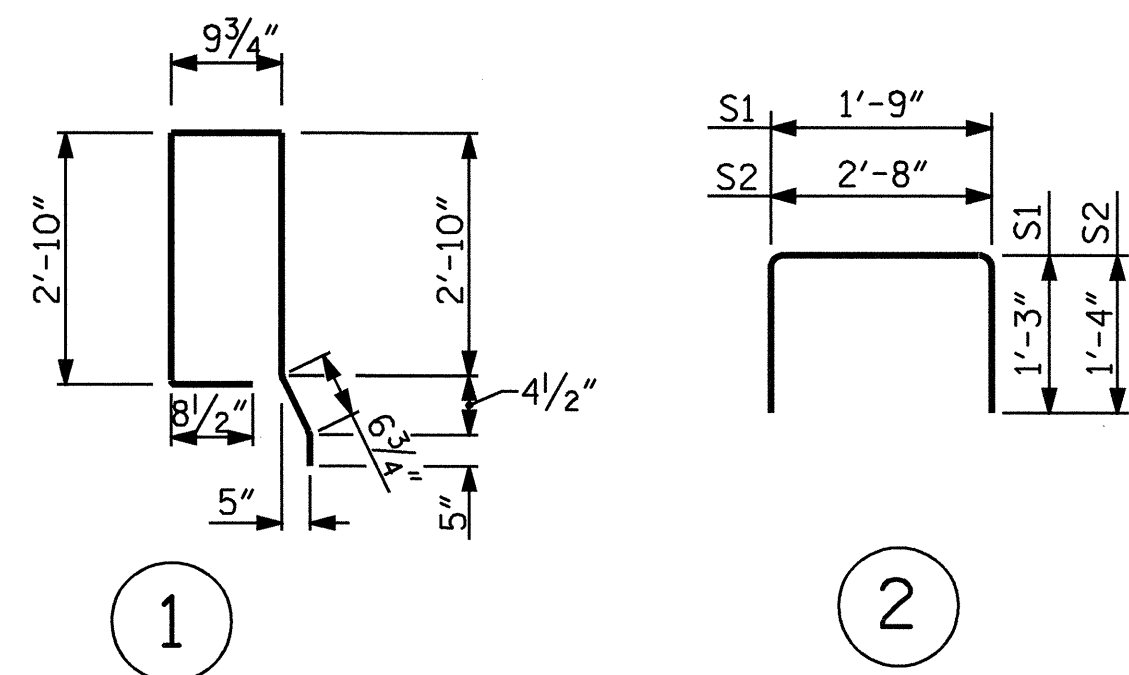


BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL FOR ONE CORED SLAB SECTION

SPAN A AND C				EXTERIOR UNIT		INTERIOR UNIT	
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT	LENGTH	WEIGHT
B1	2	# 4	STR	21'-5"	29	21'-5"	29
S1	8	# 4	2	4'-3"	23	4'-3"	23
S2	42	# 4	2	5'-4"	150	5'-4"	150
* S3	23	# 5	1	8'-2"	196		
REINFORCING STEEL					202 LBS.		202 LBS.
* EPOXY COATED REINFORCING STEEL					196 LBS.		
5,000 P.S.I. CONCRETE					3.1 C. Y.		3.1 C. Y.
1/2" Ø L.R. STRANDS				No.	7		7

BILL OF MATERIAL FOR ONE CORED SLAB SECTION

SPAN B				EXTERIOR UNIT		INTERIOR UNIT	
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT	LENGTH	WEIGHT
B2	4	# 4	STR	27'-8"	74	27'-8"	74
S1	8	# 4	2	4'-3"	23	4'-3"	23
S2	106	# 4	2	5'-4"	378	5'-4"	378
* S3	55	# 5	1	8'-2"	468		
REINFORCING STEEL					475 LBS.		475 LBS.
* EPOXY COATED REINFORCING STEEL					468 LBS.		
5,000 P.S.I. CONCRETE					7.5 C. Y.		7.5 C. Y.
1/2" Ø L.R. STRANDS				No.	24		24

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.

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 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.

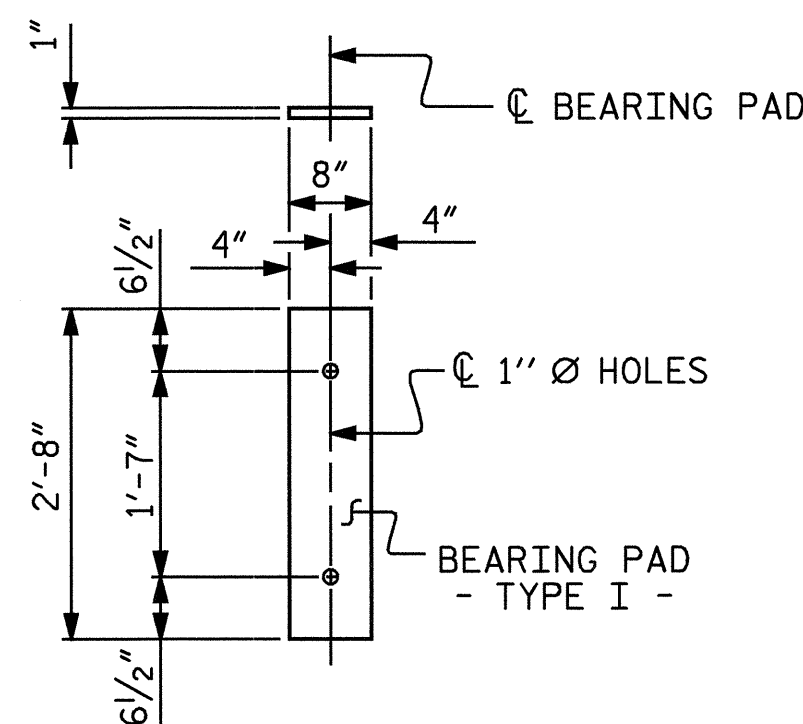
PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE CORED SLAB UNIT ENDS.

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.

FOR PRESTRESSED CONCRETE MEMBERS, SEE SPECIAL PROVISIONS.



FIXED END
(TYPE I - 66 REQUIRED)

ELASTOMERIC BEARING DETAILS

DEAD LOAD DEFLECTION AND CAMBER

	SPAN A & C		SPAN B	
	3'-0" x 1'-9"		3'-0" x 1'-9"	
	1/2" Ø L.R. STRAND		1/2" Ø L.R. STRAND	
CAMBER (SLAB ALONE IN PLACE)	1/16" ↑		2 1/2" ↑	
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD **	0" ↓		9/16" ↓	
FINAL CAMBER	1/16" ↑		1 5/16" ↑	

** INCLUDES FUTURE WEARING SURFACE

CORED SLABS REQUIRED

UNIT TYPE	NUMBER PER SPAN	LENGTH			TOTAL LENGTH
		SPAN A	SPAN B	SPAN C	
INTERIOR	9	21'-9 3/4"	53'-10 1/2"	21'-9 3/4"	877'-6"
EXTERIOR	2	21'-9 3/4"	53'-10 1/2"	21'-9 3/4"	195'-0"
TOTAL NUMBER	11	239'-11 1/4"	592'-7 1/2"	239'-11 1/4"	1072'-6"

SPLICE CHART

BAR	SIZE	LENGTH
B2	#4	1'-9"

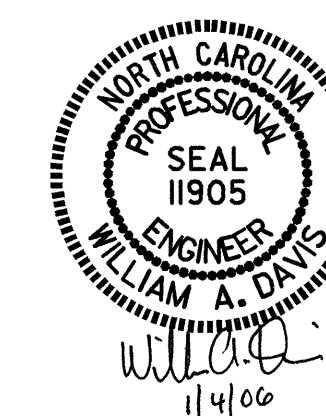
GRADE 270 STRANDS

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

PROJECT NO. B-4152
HOKE COUNTY
STATION: 14+70.00 -L-

SHEET 4 OF 4

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		

TOTAL SHEETS 26

ASSEMBLED BY : J.G. KHARVA DATE : 08/03/05
CHECKED BY : W.A. DAVIS DATE : 08/11/05
DRAWN BY : WJH 4/89 REV. 10/17/00 RWW/LES
CHECKED BY : FCJ 5/89 REV. 7/10/01 RWW/LES
REV. 5/17/03RRR RWW/JTE