

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 JOINT SEALER MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF TYPE B 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 SIDWAYS. 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 PARAPET AND END POSTS SHALL BE EPOXY COATED.

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

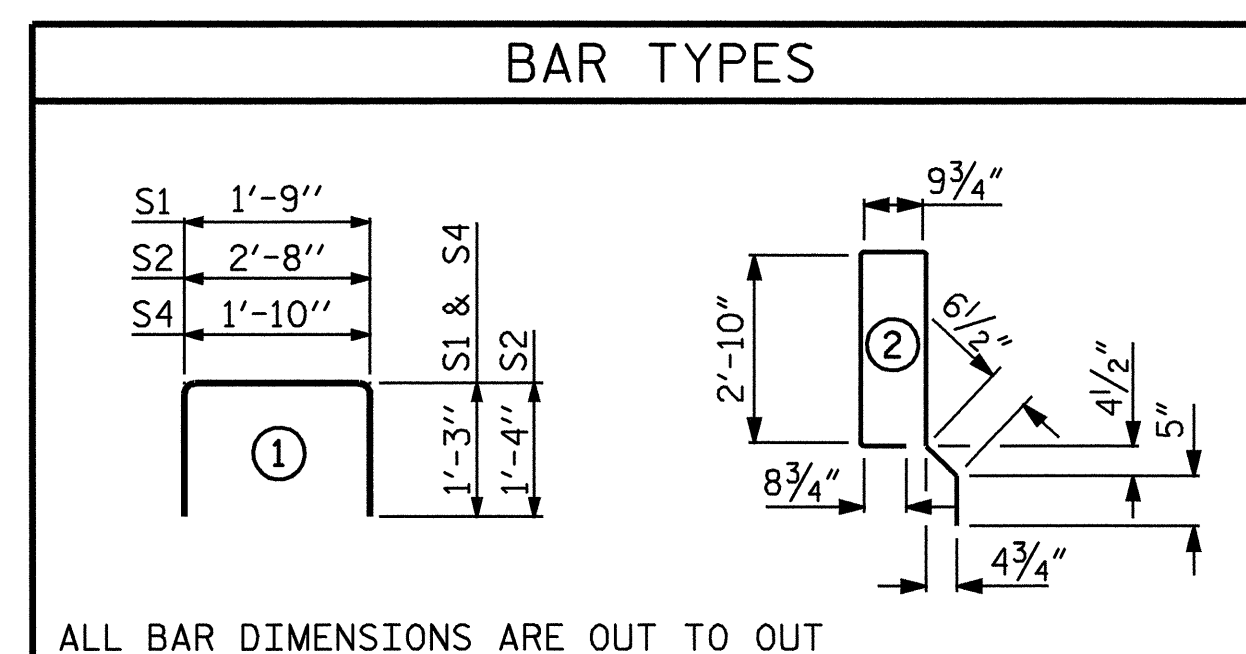
APPLY EPOXY PROTECTIVE COATING TO CORED SLAB UNIT ENDS. FOR EPOXY PROTECTIVE COATING, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC BEARINGS, SEE SPECIAL PROVISIONS.

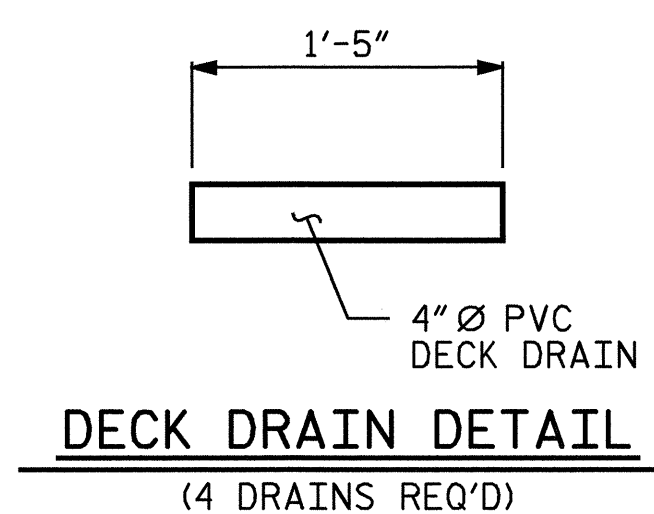
FOR PRESTRESSED CONCRETE MEMBERS, SEE SPECIAL PROVISIONS.

PRESTRESSED CONCRETE CORED SLAB UNITS SHALL CONTAIN CALCIUM NITRITE CORROSION INHIBITOR. FOR CALCIUM NITRITE CORROSION INHIBITOR, SEE SPECIAL PROVISIONS.

BILL OF MATERIAL FOR ONE CORED SLAB SECTION													
SPAN "A", "B", OR "C"													
				STAGE 1					STAGE 2				
				TYPE I UNIT		TYPE II UNIT		TYPE III UNIT		TYPE IV UNIT		TYPE V UNIT	
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT
B1	4	#4	STR	24'-0"	64	24'-0"	64	24'-0"	64	24'-0"	64	24'-0"	64
S1	8	#5	1	4'-3"	35	4'-3"	35	---	---	4'-3"	35	4'-3"	35
S2	90	#4	1	5'-4"	321	---	---	---	---	---	---	5'-4"	321
S2	72	#4	1	---	---	5'-4"	257	5'-4"	257	5'-4"	257	---	---
*S3	47	#5	2	8'-2"	400	---	---	---	---	---	---	8'-2"	400
S4	8	#5	1	---	---	---	---	4'-4"	36	---	---	---	---
REINFORCING STEEL				LBS.	420	356	357	356	420				
*EPOXY COATED REINFORCING STEEL				LBS.	400	---	---	---	400				
5,000 P.S.I. CONCRETE				CU. YDS.	6.5	6.5	7.8	6.5	6.5				
1/2" Ø L.R. STRANDS				No.	19	19	22	19	19				



ALL BAR DIMENSIONS ARE OUT TO OUT

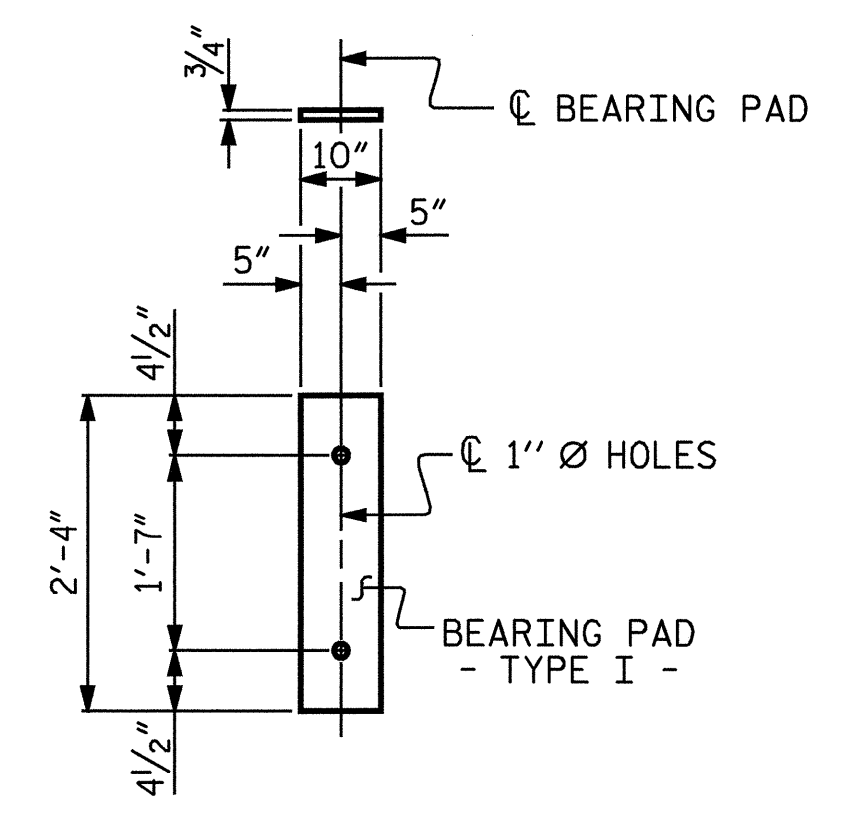


DEAD LOAD DEFLECTION AND CAMBER					
	STAGE 1			STAGE 2	
	TYPE I	TYPE II	TYPE III	TYPE IV	TYPE V
CAMBER (SLAB ALONE IN PLACE)	1 1/16" ↑	1 1/16" ↑	1 1/16" ↑	1 1/16" ↑	1 1/16" ↑
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD **	1/4" ↓	1/4" ↓	1/4" ↓	3/16" ↓	3/16" ↓
FINAL CAMBER	1 5/16" ↑	1 5/16" ↑	1 5/16" ↑	1 3/8" ↑	1 3/8" ↑

** INCLUDES FUTURE WEARING SURFACE

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

CORED SLABS REQUIRED				
SPAN "A", "B", & "C"	NUMBER	LENGTH	TOTAL LENGTH	
STAGE 1	TYPE I	3	45'-10 1/2"	137'-7 1/2"
	TYPE II	12	45'-10 1/2"	550'-6"
	TYPE III	3	45'-10 1/2"	137'-7 1/2"
	STAGE 1 TOTAL	18		825'-9"
STAGE 2	TYPE IV	24	45'-10 1/2"	1101'-0"
	TYPE V	3	45'-10 1/2"	137'-7 1/2"
	STAGE 2 TOTAL	27		1238'-7 1/2"
TOTAL	45		2064.38 L.F.	



FIXED END (TYPE I - 90 REQ'D)
ELASTOMERIC BEARING DETAILS

PROJECT NO. B-3349
HYDE COUNTY
STATION: 15+69.00 -L-

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

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

OCTOBER 1981

REVISIONS						TOTAL SHEETS
NO.	BY:	DATE:	NO.	BY:	DATE:	S-20
1			3			44
2			4			



ASSEMBLED BY : P.C. BREWER DATE : 10/7/03
CHECKED BY : M. BRITT DATE : 11/5/03
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