

ELASTOMERIC BEARING DETAILS

ELASTOMER IN ALL BEARINGS SHALL BE 60 DUROMETER HARDNESS.

B22 6

S10 | 8

* S12 | 71

S14 | 4

S15 | 4

* EPOXY COATED

180

152

REINFORCING STEEL

0.6" Ø L.R. STRANDS

REINFORCING STEEL

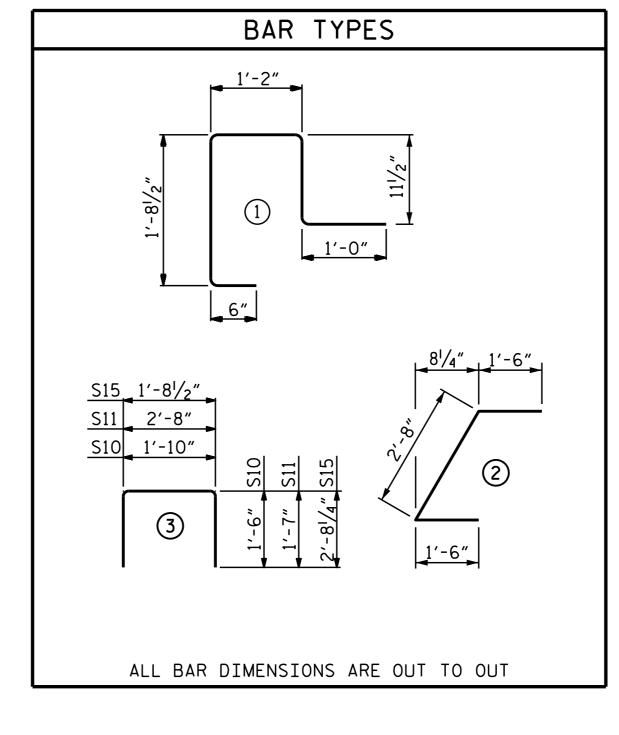
7000 P.S.I. CONCRETE CU. YDS.

FOR CURB QUANTITIES, SEE SHEET S-14.

GRADE 270 STRANDS			
	0.6″Ø L.R.		
AREA (SQUARE INCHES)	0.217		
ULTIMATE STRENGTH (LBS.PER STRAND)	58,600		
APPLIED PRESTRESS (LBS.PER STRAND)	43,950		

CONCRETE RELEA	ASE STRENGTH
UNIT	PSI
70' UNITS	5500

CORED SLABS REQUIRED				
SPAN B	NUMBER	LENGTH	TOTAL LENGTH	
70' UNIT				
EXTERIOR C.S.	2	70'-0"	140'-0"	
INTERIOR C.S.	10	70'-0"	700'-0"	
TOTAL	12		840'-0"	



GUTTERLINE ASPHALT THICKNESS				
32'-10"CLEAR ROADWAY	ASPHALT OVER	LAY THICKNESS		
SUPERED SECTION	@ MID-SPAN	@ BEARING		
70' UNITS	13/4"	31/2"		

DEAD LOAD DEFLECTION AN	ND CAMBER
	3'-0" × 2'-0"
70'CORED SLAB UNIT	0.6″Ø L.R. STRAND
CAMBER (SLAB ALONE IN PLACE)	2 ³ / ₁₆ "
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD***	1/2" †
FINAL CAMBER	1"/16" 🛉

** INCLUDES FUTURE WEARING SURFACE

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 $2^{1}\!\!/_{2}$ $^{\prime\prime}$ $^{\prime\prime}$ DOWEL HOLES AT FIXED ENDS OF SLAB SECTIONS SHALL BE FILLED WITH NON-SHRINK GROUT.

THE BACKER RODS SHALL CONFORM TO THE REQUIREMENTS OF TYPE M

BOND BREAKER. SEE SECTION 1028 OF THE STANDARD SPECIFICATIONS.

WHEN CORED SLABS ARE CAST, AN INTERNAL HOLD-DOWN SYSTEM SHALL BE EMPLOYED TO PREVENT VOIDS FROM RISING OR MOVING SIDEWAYS. AT LEAST SIX 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.

ALL REINFORCING STEEL IN THE CURB 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.

GROOVED CONTRACTION JOINTS, 1/2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE CURB AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. A CONTRACTION JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN CURB EXPANSION JOINTS. ONLY ONE CONTRACTION JOINT IS REQUIRED AT MIDPOINT OF CURB SEGMENTS LESS THAN 20 FEET IN LENGTH AND NO CONTRACTION JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 10 FEET IN LENGTH.

FLAME CUTTING OF THE TRANSVERSE POST-TENSIONING STRAND IS NOT ALLOWED.

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 THE REQUIRED STRENGTH SHOWN IN THE "CONCRETE RELEASE STRENGTH" TABLE.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

THE PERMITTED THREADED INSERTS ARE DETAILED AS AN OPTION FOR THE CONTRACTOR TO ATTACH FALSEWORK AND FORMWORK DURING CONSTRUCTION.

THE PERMITTED THREADED INSERTS IN THE EXTERIOR UNITS SHALL BE SIZED BY THE CONTRACTOR, SPACED AT 4'-O"CENTERS AND GALVANIZED IN ACCORDANCE WITH SECTION 1076 OF THE STANDARD SPECIFICATIONS. STAINLESS STEEL THREADED INSERTS MAY BE USED AS AN ALTERNATE.

THE PERMITTED THREADED INSERTS SHALL BE GROUTED BY THE CONTRACTOR IMMEDIATELY FOLLOWING REMOVAL OF THE FALSEWORK.

THE COST OF THE PERMITTED THREADED INSERTS SHALL BE INCLUDED IN THE PRICE BID FOR THE PRECAST UNITS.

Docusigned by:

9/3/201:

PROJECT NO. B-4959

GUILFORD COUNTY

STATION: 14+70.50 -L-

SHEET 6 OF 6

DEPARTMENT OF TRANSPORTATION

STANDARD

3'-0" X 2'-0"

PRESTRESSED CONCRETE

CORED SLAB UNIT

SPAN B

REVISIONS					SHEET N	
10.	BY:	DATE:	NO.	BY:	DATE:	S-11
1			3			TOTAL SHEETS
2			4			25

ASSEMBLED BY: E.I.OMILE DATE:03-17-15 CHECKED BY: T.H.FANG DATE:4/24/15

BILL OF MATERIAL FOR ONE

70' CORED SLAB UNIT

BAR NUMBER SIZE | TYPE | LENGTH | WEIGHT | LENGTH | WEIGHT

24'-6"

4′-10″

5′-10″

5′-4″

5′-8″

7′-1″

STR

No.

#4

#5

#4

#4

#4

#4

#5

EXTERIOR UNIT | INTERIOR UNIT

24'-6"

4'-10"

5′-10″

5′-8"

7′-1″

98

40

592

15

30

775

12.0

28

98

40

701

253

30

13.7

28