

ELASTOMERIC BEARING DETAILS

(TYPE I - 44 REQ'D)

ELASTOMER IN ALL BEARINGS SHALL BE 60 DUROMETER HARDNESS.

CORED	SLABS	S REQ	UIRED
	NUMBER	LENGTH	TOTAL LENGTH
40' UNIT			
EXTERIOR C.S.	2	40'-0"	80'-0"
INTERIOR C.S.	9	40'-0"	360'-0"
TOTAL	11		440′-0″
TOTAL	11		440 0
CORED	SLABS	S REQ	
			UIRED
			UIRED
CORED			
CORED 70' UNIT	NUMBER	LENGTH	UIRED TOTAL LENGTH
70' UNIT EXTERIOR C.S.	NUMBER 2	10'-0"	UIRED TOTAL LENGTI 140'-0"

ASSEMBLED BY : A. GODFREY

DRAWN BY: DGE 5/09 CHECKED BY: BCH 6/09

CHECKED BY: G. KOUCHEKI DATE: 12/2017

DATE: 09/2017

GUTTERLINE ASPHALT THICKNESS & PARAPET HEIGHT					
	ASPHALT OVERLAY THICKNESS @ MID-SPAN	PARAPET HEIGHT @ MID-SPAN			
40' UNITS	2"	2'-8"			
70'UNITS	2″	2'-8"			

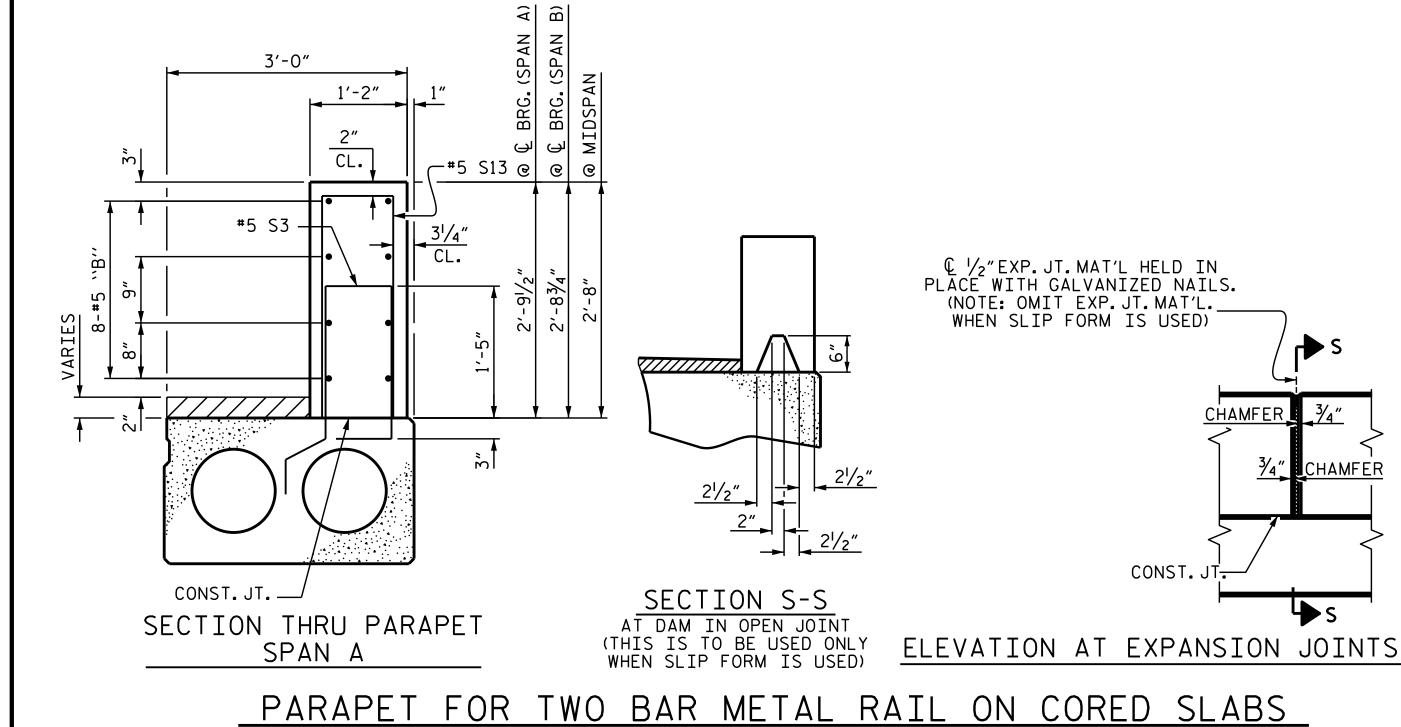
BILL OF MATERIAL FOR ONE

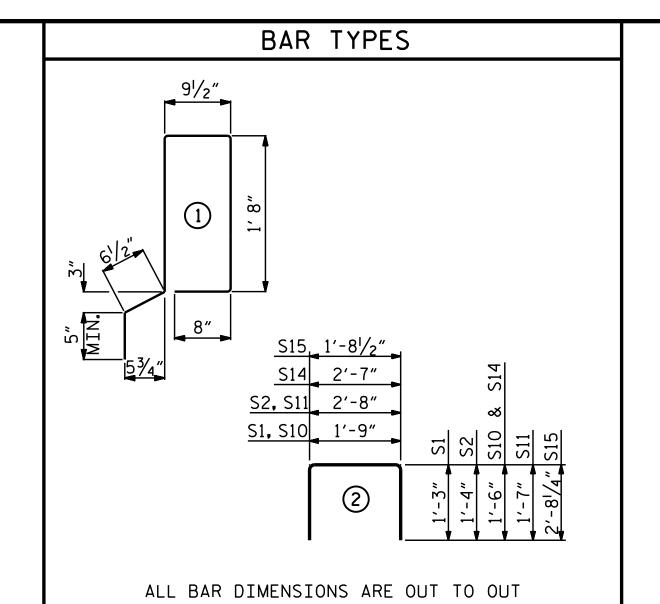
40' CORED SLAB UNIT

EXTERIOR UNIT | INTERIOR UNIT

BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT	LENGTH	WEIGHT	
B4	4	#4	STR	20′-9″	55	20′-9″	55	
S1	8	# 5	2	4'-3"	35	4'-3"	35	
S2	84	#4	2	5′-4″	299	5′-4″	299	
* S3	39	# 5	1	5′-9″	234			
	ORCING S		LBS	5.	389		389	
	Y COATE			_				
	FORCING		LBS		234			
5000 F	P.S.I. CO	NCRETE	CU. YDS) .	5.8		5.8	
0.6".5"		A N I D C	A •		4 7		4 7	
0.6" Ø	L.R. STR	ANDS	No) .	13		13	
		RTII	OF M	ΙΔΤΕRΤΔΙ	L FOR O	NF		
				ED SLA				
			0 001					
				EXTERIO			OR UNIT	
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT	LENGTH	WEIGHT	
B22	6	#4	STR	24'-6"	98	24′-6″	98	
* S3	69	# 5	1	5′-9″	397			
S10	8	#5	2	4′-9"	40	4′-9″	40	
S11	144	#4	2	5′-10″	561	5′-10″	561	
S14	4	#4	2	5′-7"	15	5′-7"	15	
S15	4	#5	2	7′-1″	30	7'-1"	30	
	RCING S		LBS	5.	744		744	
	Y COATE		. 5	-	707			
	FORCING		LBS		397		11.0	
7000 F	P.S.I. CO	NCRETE	CU. YDS) .	11.8		11.8	
0.6" Ø L.R. STRANDS No. 28 28								
11 1. " (X		A A I C			77		~~	

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CONCRETE RELEASE STRENGTH				
UNIT	PSI			
40' UNITS	4000			
70'UNITS	5500			

DEAD LOAD DEFLECTION AN	ND CAMBER
	3'-0" × 1'-9"
40' CORED SLAB UNIT	0.6″Ø L.R. STRAND
CAMBER (SLAB ALONE IN PLACE)	7⁄8″ Å
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD***	¹ ⁄8″ ∮
FINAL CAMBER	3/4″ ♦
DEAD LOAD DEFLECTION AN	ND CAMBER
DEAD LOAD DEFLECTION AN	ND CAMBER 3'-0" × 2'-0"
DEAD LOAD DEFLECTION AND TO' CORED SLAB UNIT	
	3'-0" × 2'-0" 0.6" Ø L.R.
70' CORED SLAB UNIT	3'-0" x 2'-0" 0.6" Ø L.R. STRAND

** 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 $2^{1}/2^{"}\varnothing$ 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.

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.

ALL REINFORCING STEEL IN PARAPET SHALL BE EPOXY COATED.

PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE CORED SLAB UNIT

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 PARAPET AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. A CONTRACTION JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN PARAPET EXPANSION JOINTS. ONLY ONE CONTRACTION JOINT IS REQUIRED AT MIDPOINT OF PARAPET 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.

MAINTAIN A SYMMETRIC TENSION FORCE BETWEEN EACH PAIR OF TRANSVERSE POST TENSIONING STRANDS IN THE DIAPHRAGM.

THE #4 S3 STIRRUPS MAY BE SHIFTED AS NECESSARY TO MAINTAIN 1" CLEAR TO THE GROUTED RECESS.

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'-0" 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.

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			

B-5407 PROJECT NO. _ POLK COUNTY STATION: 13+52.00 -L-

SHEET 5 OF 5

031021 NOINEER 1 Ambur Male

DEPARTMENT OF TRANSPORTATION STANDARD 3'-0'' X 1'-9'' PRESTRESSÉD CONCRETE CORED SLAB UNIT 90° SKEW

STATE OF NORTH CAROLINA

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

— B04B5A4F2FAD484. 3/6/2018

REVISIONS					SHEET NO.	
).	BY:	DATE:	NO.	BY:	DATE:	S-10
			3			TOTAL SHEETS
)			4			24