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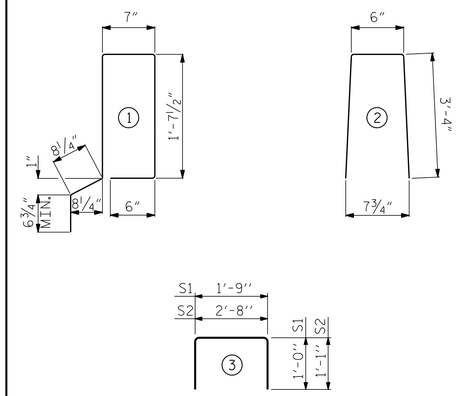
BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL FOR VERTICAL CONCRETE BARRIER RAIL

BAR	BARS PER PAIR OF EXTERIOR UNITS	TOTAL NO.	SIZE	TYPE	LENGTH	WEIGHT
	25' UNIT					
✳ B8	20	20	#5	STR	24'-7"	513
✳ S4	68	68	#5	2	7'-2"	508
✳ EPOXY COATED REINFORCING STEEL				LBS.		1021
CLASS AA CONCRETE				CU.YDS.		6.4
TOTAL VERTICAL CONCRETE BARRIER RAIL				LN. FT.		50.25

BILL OF MATERIAL FOR VERTICAL CONCRETE BARRIER RAIL

BAR	BARS PER PAIR OF EXTERIOR UNITS	TOTAL NO.	SIZE	TYPE	LENGTH	WEIGHT
	35' UNIT					
✳B10	40	40	#5	STR	17'-1"	713
✳ S4	88	88	#5	2	7'-2"	658
✳ EPOXY COATED REINFORCING STEEL				LBS.		1371
CLASS AA CONCRETE				CU.YDS.		9.0
TOTAL VERTICAL CONCRETE BARRIER RAIL				LN. FT.		70.25

CORED SLABS REQUIRED

	NUMBER	LENGTH	TOTAL LENGTH
25' UNIT			
EXTERIOR C.S.	2	25'-0"	50'-0"
INTERIOR C.S.	8	25'-0"	200'-0"
TOTAL	10		250'-0"

CORED SLABS REQUIRED

	NUMBER	LENGTH	TOTAL LENGTH
35' UNIT			
EXTERIOR C.S.	2	35'-0"	70'-0"
INTERIOR C.S.	8	35'-0"	280'-0"
TOTAL	10		350'-0"

DEAD LOAD DEFLECTION AND CAMBER

	3'-0" x 1'-6"
25' CORED SLAB UNIT	0.6" Ø L.R. STRAND
CAMBER (SLAB ALONE IN PLACE)	⅜" ↑
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD✳✳	1/16" ↓
FINAL CAMBER	5/16" ↑

✳✳ INCLUDES FUTURE WEARING SURFACE

DEAD LOAD DEFLECTION AND CAMBER

	3'-0" x 1'-6"
35' CORED SLAB UNIT	0.6" Ø L.R. STRAND
CAMBER (SLAB ALONE IN PLACE)	⅝" ↑
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD✳✳	⅛" ↓
FINAL CAMBER	½" ↑

✳✳ INCLUDES FUTURE WEARING SURFACE

BILL OF MATERIAL FOR ONE 25' CORED SLAB UNIT

				EXTERIOR UNIT		INTERIOR UNIT	
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT	LENGTH	WEIGHT
B1	2	#4	STR	24'-8"	33	24'-8"	33
S1	8	#5	3	3'-9"	31	3'-9"	31
S2	54	#4	3	4'-10"	174	4'-10"	174
✳ S3	34	#5	1	5'-7"	198		
REINFORCING STEEL			LBS.		238		238
✳ EPOXY COATED REINFORCING STEEL			LBS.		198		
5000 P.S.I. CONCRETE			CU. YDS.		3.4		3.4
0.6" Ø L.R. STRANDS			No.		10		10

BILL OF MATERIAL FOR ONE 35' CORED SLAB UNIT

				EXTERIOR UNIT		INTERIOR UNIT	
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT	LENGTH	WEIGHT
B3	4	#4	STR	18'-3"	49	18'-3"	49
S1	8	#5	3	3'-9"	31	3'-9"	31
S2	74	#4	3	4'-10"	239	4'-10"	239
✳ S3	44	#5	1	5'-7"	256		
REINFORCING STEEL			LBS.		319		319
✳ EPOXY COATED REINFORCING STEEL			LBS.		256		
5000 P.S.I. CONCRETE			CU. YDS.		4.6		4.6
0.6" Ø L.R. STRANDS			No.		11		11

GUTTERLINE ASPHALT THICKNESS & RAIL HEIGHT

	ASPHALT OVERLAY THICKNESS	RAIL HEIGHT
	@ MID-SPAN	@ MID-SPAN
25' UNITS	1 15/16"	3'-7 15/16"
35' UNITS	1¾"	3'-7¾"

PROJECT NO. 17BP.1.R.80

NORTHAMPTON COUNTY

STATION: 17+30.50 -L-

SHEET 5 OF 5

ENGINEER OF RECORD
8/20/2018

NORTH CAROLINA PROFESSIONAL SEAL 14091 ENGINEER BUCK CHARLES HUNT

DocuSigned by: Buck Charles Hunt
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WETHERILL ENGINEERING
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LICENSE NO. F-0377

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

3'-0'' X 1'-6'' PRESTRESSED CONCRETE CORED SLAB UNIT 90° SKEW

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-9
1			3			TOTAL SHEETS
2			4			19

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DRAWN BY : J. PENDERGRAFT DATE : 4-18
CHECKED BY : J. DILWORTH DATE : 4-18

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