CORED SLABS REQUIRED NUMBER LENGTH TOTAL LENGTH 65' UNIT EXTERIOR C.S. 2 | 65'-0" | 130'-0" INTERIOR C.S. 9 | 65'-0" | 585'-0" TOTAL 11 715′-0" DEAD LOAD DEFLECTION AND CAMBER $3'-0'' \times 2$ 0.6" Ø L.R. 65' CORED SLAB UNIT STRAND 1 1/8" CAMBER (SLAB ALONE IN PLACE DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD** FINAL CAMBER ** INCLUDES FUTURE WEARING SURFACE

1106

2436

16.9

SECTION S-S

AT DAM IN OPEN JOINT

(THIS IS TO BE USED ONL'

WHEN SLIP FORM IS USED)

CHAMFE

ELEVATION AT EXPANSION JOINTS

CONST. J

CHAMFER

Ĺ 1/2″EXP.JT.MAT′L HELD IN

PLACE WITH GALVANIZED NAILS.

(NOTE: OMIT EXP. JT. MAT'L.

WHEN SLIP FORM IS USED)

130.25

#5 | STR | 21'-3" |

LBS.

CU.YDS

LN.FT.

RAIL HEIGHT

@ MID-SPAN

3'-8!/8''

— #5 S13

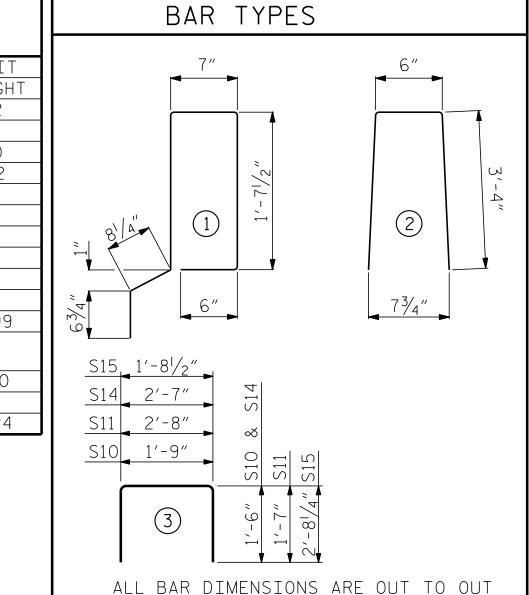
(TYP.)

2³⁄₈" CL.

- #5 S12 SEE "PLAN OF UNIT" FOR SPACING

7′-2″

BILL OF MATERIAL FOR ONE 65' CORED SLAB UNIT EXTERIOR UNIT INTERIOR UNIT BAR NUMBER SIZE TYPE LENGTH | WEIGHT LENGTH | WEIGHT #4 STR 22'-10" B21 6 22'-10" S10 4'-9" 4'-9" 40 #5 40 522 #4 5'-10" 522 5′-10″ 134 ¥S12 | 74 #5 5′-7″ 431 5′-7″ S14 | 4 #4 5'-7" 15 S15 #5 7′-1″ 7'-1" 30 4 30 699 699 REINFORCING STEEL LBS. * EPOXY COATED REINFORCING STEEL 431 6000 P.S.I. CONCRETE CU. YDS. 11.0 11.0 24 24 0.6″∅ L.R. STRANDS No.



5'-0" MAX. SPC. 2′-6″± FOR 2-HOLE STRAPS $\frac{1}{4}$ " × $2\frac{1}{4}$ " GALV. $2\frac{1}{2}$ " 15 GAUGE CONCRETE ANCHORS— -ZINC COATED EPOXIED INTO 2-HOLE STRAP CONCRETE @ 5'-0" MAX. CTS. - (£ 2-HOLE STRAPS $-\mathbb{Q} \ 2\frac{1}{2}$ " \infty PVC PIPE AND CONCRETE (SCHEDULE 80) 1'-0" ANCHORS _ - _ - _ - _ - _ - _ - _ - _ - _ $--2\frac{1}{2}$ " Ø PVC PIPE CAP ENDS OF -(SCHEDULE 80) $2\frac{1}{2}$ " Ø PVC PIPE ELEVATION SECTION

FIBER OPTIC CONDUIT SYSTEM DETAILS

 $2\frac{1}{2}$ " \alpha SCHEDULE 80 PVC PIPE ATTACHED TO THE BACK OF BOTH RAILS FOR FUTURE FIBER OPTIC CABLE. FIBER OPTIC CONDUIT SYSTEM LIN. FT. = 126.00

2'-0" 4-#5 S12 6" 4-#5 S12 _#5 S12 & S13 8 S13 @ | 8 S13 @ 10" FIELD BEND-"B" BARS 6"CTS. 6″CTS. \|FIELD CUT| FIELD CUT-#5 S13 #5 S12-FIELD CUT #5 S13 CONST.JT.—

GRADE 270 STRANDS 0.6" Ø L.R. 0.217 SQUARE INCHES

UNIT

65' UNITS

CONCRETE RELEASE STRENGTH

PSI

4800

1223 Jones Franklin Rd.

Raleigh, N.C. 27606 Bus: 919 851 8077

Fax: 919 851 8107

LICENSE NO. F-0377

ULTIMATE STRENGT 58,600 LBS.PER STRAND APPLIED PRESTRESS 43,950 (LBS.PER STRAND

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETE

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

RECESSES FOR TRANSVERSE STRANDS SHALL BE GROUTED AFTER THE TENSIONING OF THE STRANDS.

PRESTRESSED CONCRETE CORED SLABS.

THE $2\frac{1}{2}$ " \alpha 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 VERTICAL CONCRETE 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.

GROOVED CONTRACTION JOINTS, $\frac{1}{2}$ " 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 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.

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 S11 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'-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.

FOR FIBER OPTIC CONDUIT SYSTEM, SEE SPECIAL PROVISIONS.

BR-0122 PROJECT NO. __ SAMPSON COUNTY

16+08.00 -L-STATION:

SHEET 3 OF 3

ENGINEER OF RECORD 1/15/2020 STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION COFESSION ! STANDARD SEAL 22072 3'-0" X 2'-0" PRESTRESSED CONCRETE ANCINEER WO CORED SLAB UNIT John Arthur Dilworth 138226922B438... ETHERILI

REVISIONS SHEET NO DATE: S-6 DATE: NO. BY: TOTAL SHEETS

CONST. JT. — SECTION THRU RAIL ASSEMBLED BY : J. PENDERGRAFT DATE : 2-19 CHECKED BY: J.DILWORTH DATE: 4-19 DRAWN BY: MAA 6/10 CHECKED BY: MKT 7/10 REV. 5/18 MAA/THO

ASP.

3'-9/2" "GUTTERLINE RAIL HEIGHT

VARIES THICKNE

101/

VERTICAL CONCRETE BARRIER RAIL DETAILS

END VIEW SIDE VIEW END OF RAIL DETAILS

STD. NO. 24PCS3_33_90S