

REFERENCE: SF-320096

PROJECT: BP4.R023

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	SF-320096	1	7

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SHEET NO.	DESCRIPTION
1	TITLE SHEET
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STRUCTURE
SUBSURFACE INVESTIGATION

COUNTY EDGECOMBE

PROJECT DESCRIPTION BRIDGE NO. 96 ON -L-
(SR 1112) OVER BYNUM MILL RUN AT
STA. 12+57

SITE DESCRIPTION REPLACE BRIDGE WITH CULVERT

CAUTION NOTICE

THE SUBSURFACE INFORMATION AND THE SUBSURFACE INVESTIGATION ON WHICH IT IS BASED WERE MADE FOR THE PURPOSE OF STUDY, PLANNING AND DESIGN, AND NOT FOR CONSTRUCTION OR PAY PURPOSES. THE VARIOUS FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA AVAILABLE MAY BE REVIEWED OR INSPECTED IN RALEIGH BY CONTACTING THE N. C. DEPARTMENT OF TRANSPORTATION, GEOTECHNICAL ENGINEERING UNIT AT (919) 707-6850. THE SUBSURFACE PLANS AND REPORTS, FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA ARE NOT PART OF THE CONTRACT.

GENERAL SOIL AND ROCK STRATA DESCRIPTIONS AND INDICATED BOUNDARIES ARE BASED ON A GEOTECHNICAL INTERPRETATION OF ALL AVAILABLE SUBSURFACE DATA AND MAY NOT NECESSARILY REFLECT THE ACTUAL SUBSURFACE CONDITIONS BETWEEN BORINGS OR BETWEEN SAMPLED STRATA WITHIN THE BOREHOLE. THE LABORATORY SAMPLE DATA AND THE IN SITU (IN-PLACE) TEST DATA CAN BE RELIED ON ONLY TO THE DEGREE OF RELIABILITY INHERENT IN THE STANDARD TEST METHOD. THE OBSERVED WATER LEVELS OR SOIL MOISTURE CONDITIONS INDICATED IN THE SUBSURFACE INVESTIGATIONS ARE AS RECORDED AT THE TIME OF THE INVESTIGATION. THESE WATER LEVELS OR SOIL MOISTURE CONDITIONS MAY VARY CONSIDERABLY WITH TIME ACCORDING TO CLIMATIC CONDITIONS INCLUDING TEMPERATURES, PRECIPITATION AND WIND, AS WELL AS OTHER NON-CLIMATIC FACTORS.

THE BIDDER OR CONTRACTOR IS CAUTIONED THAT DETAILS SHOWN ON THE SUBSURFACE PLANS ARE PRELIMINARY ONLY AND IN MANY CASES THE FINAL DESIGN DETAILS ARE DIFFERENT. FOR BIDDING AND CONSTRUCTION PURPOSES, REFER TO THE CONSTRUCTION PLANS AND DOCUMENTS FOR FINAL DESIGN INFORMATION ON THIS PROJECT. THE DEPARTMENT DOES NOT WARRANT OR GUARANTEE THE SUFFICIENCY OR ACCURACY OF THE INVESTIGATION MADE, NOR THE INTERPRETATIONS MADE, OR OPINION OF THE DEPARTMENT AS TO THE TYPE OF MATERIALS AND CONDITIONS TO BE ENCOUNTERED. THE BIDDER OR CONTRACTOR IS CAUTIONED TO MAKE SUCH INDEPENDENT SUBSURFACE INVESTIGATIONS AS HE DEEMS NECESSARY TO SATISFY HIMSELF AS TO CONDITIONS TO BE ENCOUNTERED ON THE PROJECT. THE CONTRACTOR SHALL HAVE NO CLAIM FOR ADDITIONAL COMPENSATION OR FOR AN EXTENSION OF TIME FOR ANY REASON RESULTING FROM THE ACTUAL CONDITIONS ENCOUNTERED AT THE SITE DIFFERING FROM THOSE INDICATED IN THE SUBSURFACE INFORMATION.

- NOTES:
1. THE INFORMATION CONTAINED HEREIN IS NOT IMPLIED OR GUARANTEED BY THE N. C. DEPARTMENT OF TRANSPORTATION AS ACCURATE NOR IS IT CONSIDERED PART OF THE PLANS, SPECIFICATIONS OR CONTRACT FOR THE PROJECT.
 2. BY HAVING REQUESTED THIS INFORMATION, THE CONTRACTOR SPECIFICALLY WAIVES ANY CLAIMS FOR INCREASED COMPENSATION OR EXTENSION OF TIME BASED ON DIFFERENCES BETWEEN THE CONDITIONS INDICATED HEREIN AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

PERSONNEL

S.N. ZIMARINO

T.W. MILLER

R.E. SMITH

C.M. WALKER

INVESTIGATED BY T.C. BOTTOMS

DRAWN BY S.N. ZIMARINO

CHECKED BY D.N. ARGENBRIGHT

SUBMITTED BY D.N. ARGENBRIGHT

DATE SEPTEMBER, 2022



DocuSigned by:
Tyler C. Bottoms 10/12/2022

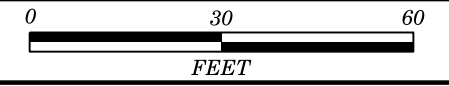
48A2D3BD08CE446 SIGNATURE DATE

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UNLESS ALL SIGNATURES COMPLETED

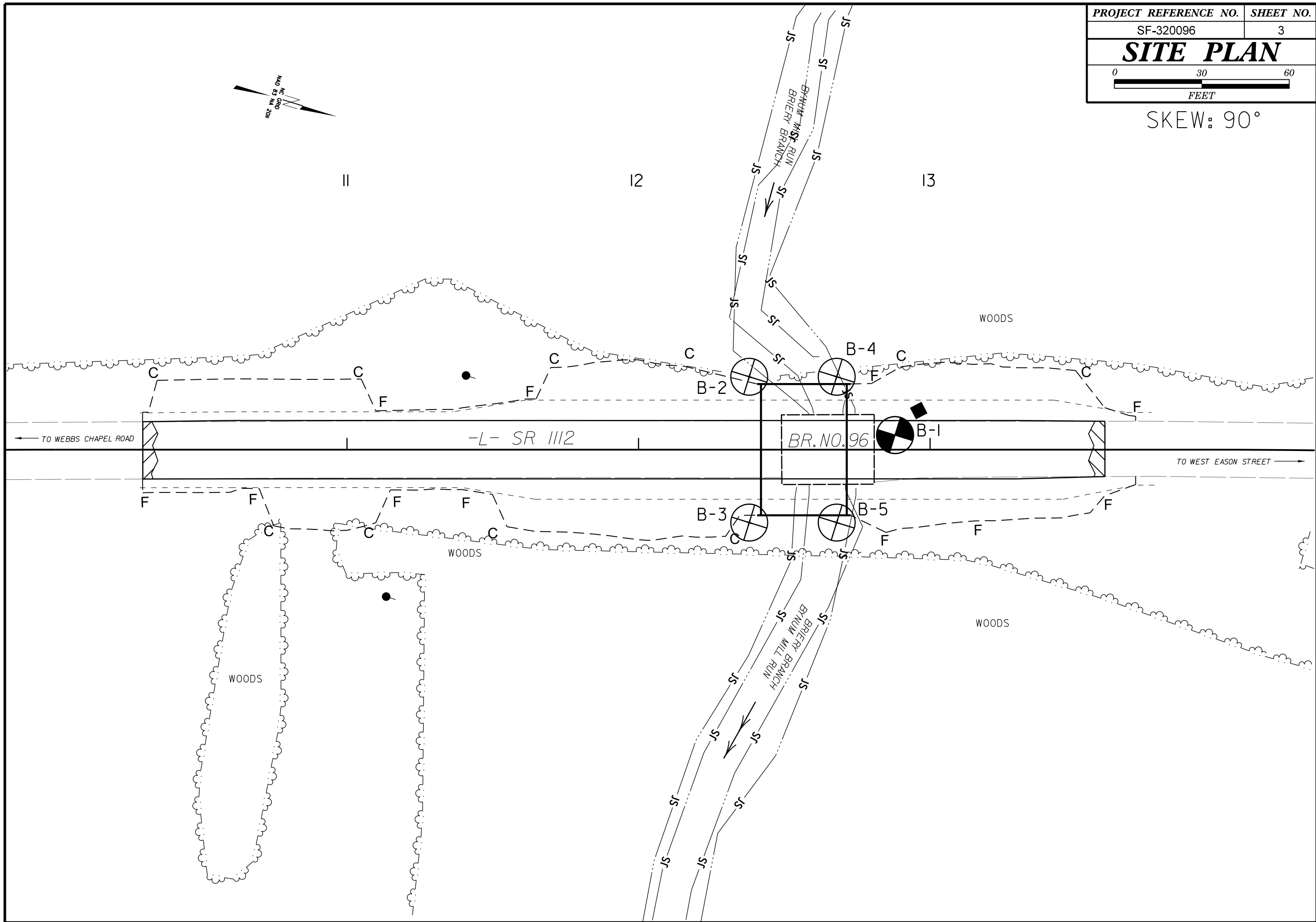
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT
SUBSURFACE INVESTIGATION
SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

Table with 4 main columns: SOIL DESCRIPTION, GRADATION, ROCK DESCRIPTION, and TERMS AND DEFINITIONS. It contains detailed technical specifications, classification charts, and symbols for soil and rock analysis.

SITE PLAN



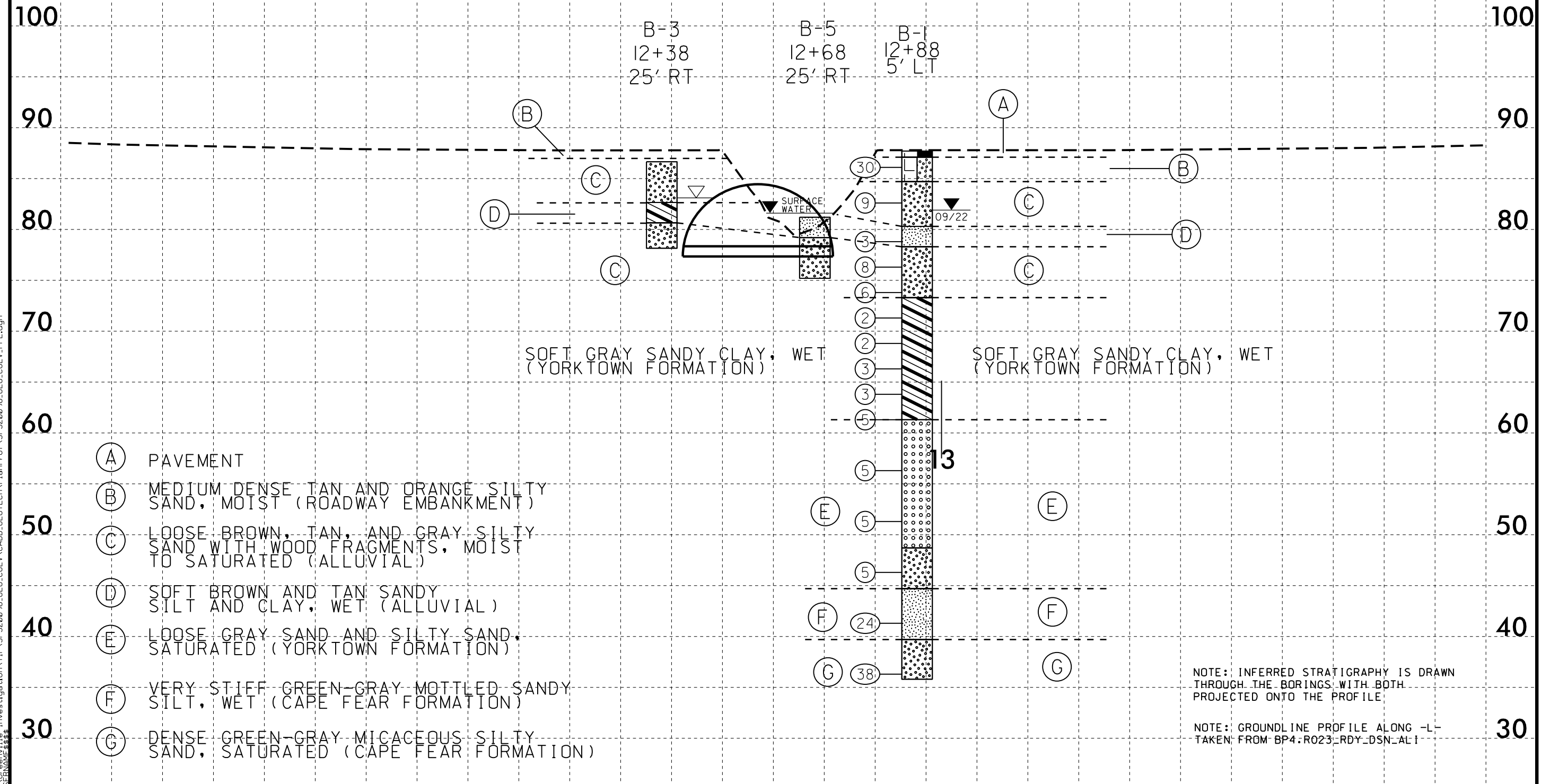
SKEW: 90°



PROFILE THROUGH BORINGS PROJECTED ON -L-

V.E. = 2.0

22-SEP-2022 16:17 S:\ERU\Greenville\Investigation\TIP\SF320096.GEO\CULV\CADD_GEO\CULV\PlanProf\SF320096.GEO\CULV_PFL.dgn



NOTE: INFERRED STRATIGRAPHY IS DRAWN THROUGH THE BORINGS WITH BOTH PROJECTED ONTO THE PROFILE

NOTE: GROUNDLINE PROFILE ALONG -L- TAKEN FROM BP4.R023.RDY_DSN_ALI

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GEOTECHNICAL BORING REPORT BORE LOG

WBS BP4.R023.1		TIP SF-320096		COUNTY EDGECOMBE		GEOLOGIST Zimarino, S. N.									
SITE DESCRIPTION CULVERT NO. 96 ON -L- (SR 1112) OVER BYNUMS MILL RUN							GROUND WTR (ft)								
BORING NO. B-3		STATION 12+38		OFFSET 25 ft RT		ALIGNMENT -L-									
COLLAR ELEV. 86.7 ft		TOTAL DEPTH 8.5 ft		NORTHING 727,533		EASTING 2,392,934									
DRILL RIGHAMMER EFF./DATE N/A			DRILL METHOD Hand Auger			HAMMER TYPE N/A									
DRILLER Walker, C. M.		START DATE 09/19/22		COMP. DATE 09/19/22		SURFACE WATER DEPTH N/A									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
90															
														86.7	GROUND SURFACE 0.0
85															
														82.7	ALLUVIAL LOOSE TAN SILTY SAND, MOIST TO SATURATED 4.0
														80.7	SOFT GRAY SANDY CLAY, WET 6.0
80														80.7	LOOSE GRAY SILTY SAND, SATURATED 6.0
														78.2	Boring Terminated at Elevation 78.2 ft IN LOOSE SILTY SAND 8.5

WBS BP4.R023.1		TIP SF-320096		COUNTY EDGECOMBE		GEOLOGIST Zimarino, S. N.									
SITE DESCRIPTION CULVERT NO. 96 ON -L- (SR 1112) OVER BYNUMS MILL RUN							GROUND WTR (ft)								
BORING NO. B-4		STATION 12+68		OFFSET 25 ft LT		ALIGNMENT -L-									
COLLAR ELEV. 81.3 ft		TOTAL DEPTH 6.0 ft		NORTHING 727,546		EASTING 2,392,878									
DRILL RIGHAMMER EFF./DATE N/A			DRILL METHOD Hand Auger			HAMMER TYPE N/A									
DRILLER Walker, C. M.		START DATE 09/19/22		COMP. DATE 09/19/22		SURFACE WATER DEPTH 0.1ft									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
85															
														81.3	WATER SURFACE (09/19/22) 0.0
80														79.3	ALLUVIAL SOFT BROWN AND TAN SANDY SILT, WET 2.0
														75.3	LOOSE GRAY SILTY SAND, SATURATED 6.0
														75.3	Boring Terminated at Elevation 75.3 ft IN LOOSE SILTY SAND 6.0

NCDOT BORE DOUBLE_SF320096_GEO_CULV.GPJ_NC_DOT.GDT_9/22/22

GEOTECHNICAL BORING REPORT

BORE LOG

WBS BP4.R023.1		TIP SF-320096		COUNTY EDGECOMBE		GEOLOGIST Zimarino, S. N.									
SITE DESCRIPTION CULVERT NO. 96 ON -L- (SR 1112) OVER BYNUMS MILL RUN							GROUND WTR (ft)								
BORING NO. B-5		STATION 12+68		OFFSET 25 ft RT		ALIGNMENT -L-									
COLLAR ELEV. 81.2 ft		TOTAL DEPTH 6.0 ft		NORTHING 727,561		EASTING 2,392,925									
DRILL RIGHAMMER EFF./DATE NA				DRILL METHOD Hand Auger		HAMMER TYPE N/A									
DRILLER Walker, C. M.		START DATE 09/19/22		COMP. DATE 09/19/22		SURFACE WATER DEPTH 0.4ft									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION		
			0.5ft	0.5ft	0.5ft	0	25	50	75	100			ELEV. (ft)	DEPTH (ft)	
85															
														81.2	WATER SURFACE (09/19/22) 0.0
80														79.2	ALLUVIAL SOFT TAN SANDY SILT, WET LOOSE GRAY SILTY SAND, SATURATED 2.0
														75.2	Boring Terminated at Elevation 75.2 ft IN LOOSE SILTY SAND 6.0

NCDOT BORE DOUBLE SF320096_GEO_CULV.GPJ_NC_DOT.GDT 9/22/22