

REFERENCE: B-5620

PROJECT: 45575

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

STRUCTURE
SUBSURFACE INVESTIGATION

COUNTY BEAUFORT
PROJECT DESCRIPTION BRIDGE NO. 30 ON -L- (NC 33)
OVER CAMPBELL CREEK

CONTENTS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1	TITLE SHEET
2	LEGEND (SOIL & ROCK)
3	SITE PLAN
4	PROFILE
5-6	BORE LOGS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5620	1	6

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.

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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
D.N. ARGENBRIGHT
GET SOLUTIONS, INC

INVESTIGATED BY T.C. BOTTOMS
DRAWN BY T.C. BOTTOMS
CHECKED BY D.N. ARGENBRIGHT
SUBMITTED BY D.N. ARGENBRIGHT
DATE JUNE 2017



DocuSigned by:
Tyler Bottoms 6/8/2017
48A2D3BD08CF4A6
SIGNATURE DATE

**DOCUMENT NOT CONSIDERED FINAL
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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

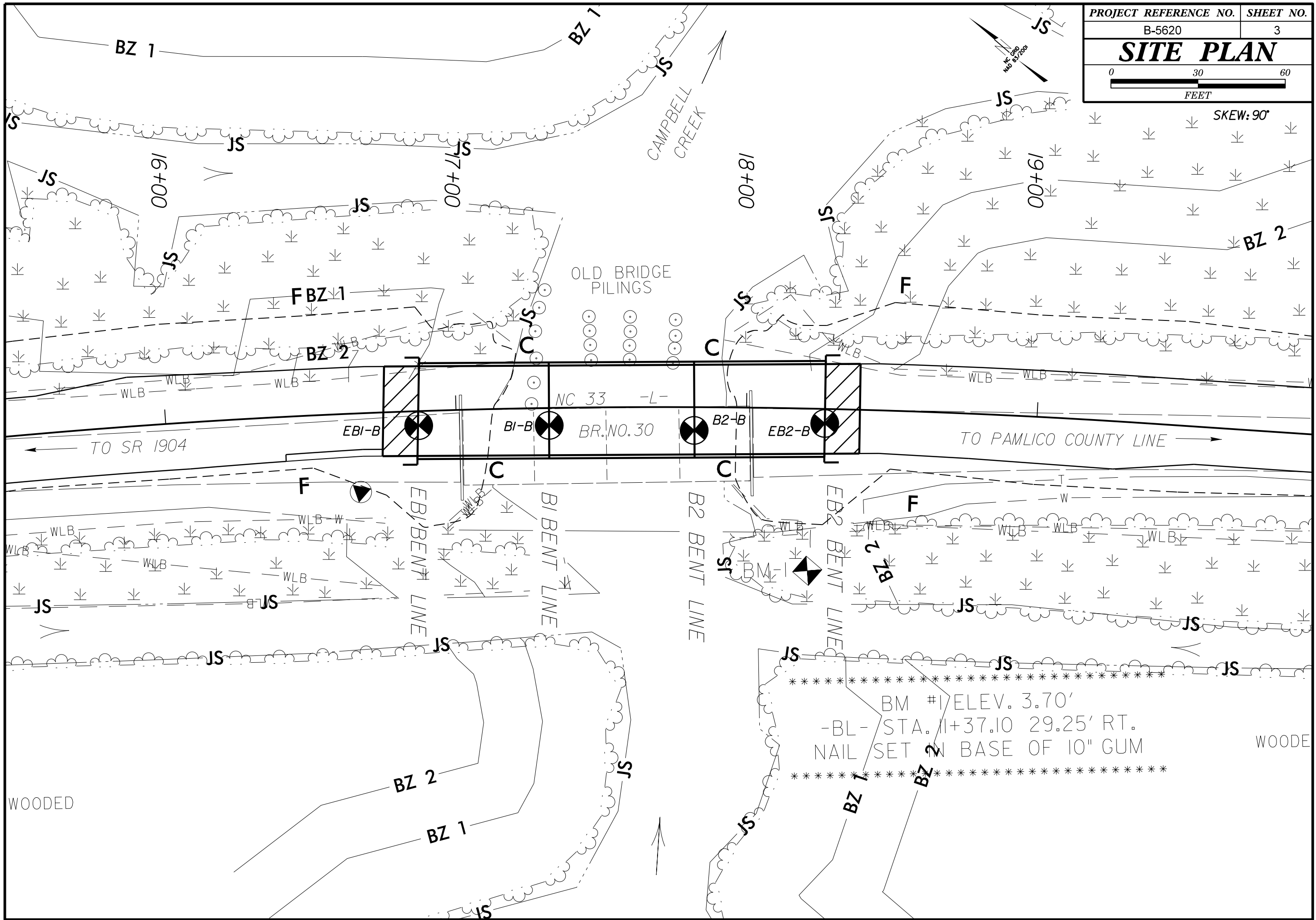
SUBSURFACE INVESTIGATION

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 tables, and symbols for geotechnical engineering.

PROJECT REFERENCE NO.	SHEET NO.
B-5620	3
SITE PLAN	
 FEET	

SKEW: 90°



GEOTECHNICAL BORING REPORT

BORE LOG

WBS 45575.1.1		TIP B-5620		COUNTY BEAUFORT		GEOLOGIST Argenbright, D. N.	
SITE DESCRIPTION BRIDGE NO. 30 ON -L- (NC 33) OVER CAMPBELL CREEK							GROUND WTR (ft)
BORING NO. EB1-B		STATION 16+87		OFFSET 5 ft RT		ALIGNMENT -L-	
COLLAR ELEV. 5.7 ft		TOTAL DEPTH 69.4 ft		NORTHING 567,515		EASTING 2,690,268	
DRILL RIG/HAMMER EFF./DATE GET7255 CME-55 86% 01/25/2017			DRILL METHOD Mud Rotary		HAMMER TYPE Automatic		
DRILLER Contract Driller		START DATE 05/31/17		COMP. DATE 05/31/17		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					
10															
5	4.9	0.8		5	6	7									
0	1.0	4.7		2	2	2									
-5	-2.2	7.9		1	1	1									
-10	-7.2	12.9		38	2	1									
-15	-12.2	17.9		4	7	10									
-20	-17.2	22.9		WOH	WOH	1									
-25	-22.2	27.9		5	14	22									
-30	-27.2	32.9		16	17	21									
-35	-32.2	37.9		16	15	21									
-40	-37.2	42.9		18	20	10									
-45	-42.2	47.9		19	21	26									
-50	-47.2	52.9		9	14	18									
-55	-52.2	57.9		17	21	10									
-60	-57.2	62.9		3	4	4									
	-62.2	67.9		5	3	2									

ELEV. (ft)	DEPTH (ft)	SOIL AND ROCK DESCRIPTION
5.7	0.0	GROUND SURFACE
4.9	0.8	PAVEMENT
		ROADWAY EMBANKMENT GRAY SILTY SAND WITH SHELL FRAGMENTS, MOIST TO SATURATED
-5.3	11.0	ALLUVIAL BROWN MUCK WITH WOOD FRAGMENTS, SATURATED
-7.7	13.4	ALLUVIAL TAN AND GRAY SAND WITH WOOD FRAGMENTS, SATURATED
-15.3	21.0	ALLUVIAL GRAY SILTY CLAY WITH WOOD FRAGMENTS, WET
-20.3	26.0	COASTAL PLAIN GRAY SAND, SATURATED (BEAUFORT FORMATION)
-25.3	31.0	
-45.3	51.0	
-50.3	56.0	
-55.3	61.0	
-60.3	66.0	COASTAL PLAIN GRAY SILT, WET (BEAUFORT FORMATION)
-63.7	69.4	Boring Terminated at Elevation -63.7 ft in Medium Stiff Silt

NCDOT BORE DOUBLE B5620_GEO_BRDG.GPJ NC_DOT.GDT 6/6/17

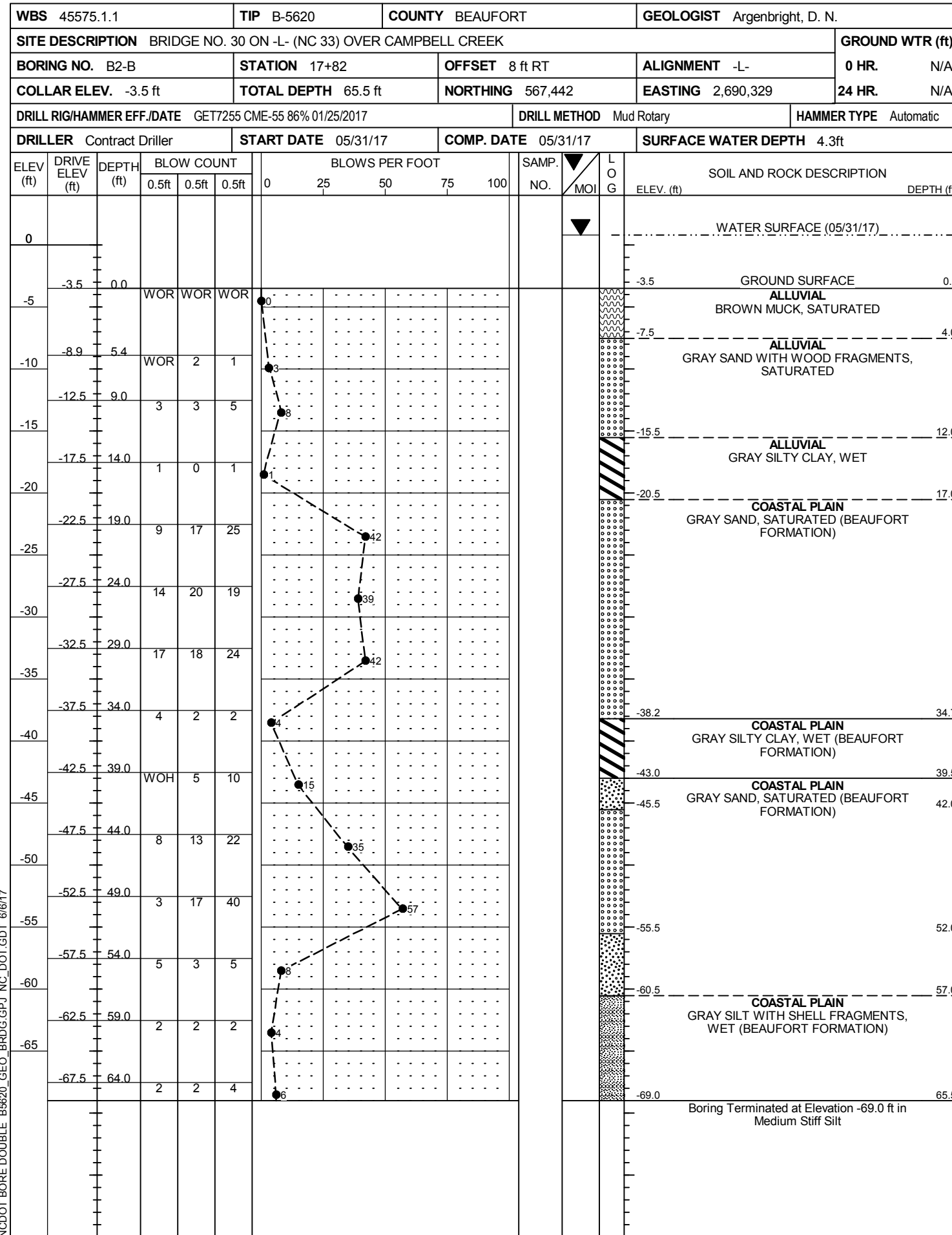
WBS 45575.1.1		TIP B-5620		COUNTY BEAUFORT		GEOLOGIST Argenbright, D. N.	
SITE DESCRIPTION BRIDGE NO. 30 ON -L- (NC 33) OVER CAMPBELL CREEK							GROUND WTR (ft)
BORING NO. B1-B		STATION 17+32		OFFSET 6 ft RT		ALIGNMENT -L-	
COLLAR ELEV. -3.6 ft		TOTAL DEPTH 65.2 ft		NORTHING 567,481		EASTING 2,690,297	
DRILL RIG/HAMMER EFF./DATE GET7255 CME-55 86% 01/25/2017			DRILL METHOD Mud Rotary		HAMMER TYPE Automatic		
DRILLER Contract Driller		START DATE 05/31/17		COMP. DATE 05/31/17		SURFACE WATER DEPTH 4.5ft	

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					
0															
-5	-3.6	0.0		WOR	WOR	WOR									
-10	-9.3	5.7		WOH	2	3									
-15	-12.3	8.7		2	1	2									
-20	-17.3	13.7		WOH	1	2									
-25	-22.3	18.7		10	14	20									
-30	-27.3	23.7		13	17	19									
-35	-32.3	28.7		14	17	20									
-40	-37.3	33.7		1	1	2									
-45	-42.3	38.7		1	6	13									
-50	-47.3	43.7		5	16	23									
-55	-52.3	48.7		18	23	18									
-60	-57.3	53.7		4	4	3									
-65	-62.3	58.7		4	2	2									
	-67.3	63.7		2	2	3									

ELEV. (ft)	DEPTH (ft)	SOIL AND ROCK DESCRIPTION
		WATER SURFACE (05/31/17)
-3.6	0.0	GROUND SURFACE
		ALLUVIAL BROWN MUCK WITH WOOD FRAGMENTS, SATURATED
-10.3	6.7	ALLUVIAL GRAY SAND WITH WOOD FRAGMENTS, SATURATED
-15.6	12.0	ALLUVIAL GRAY SILTY CLAY, WET
-20.6	17.0	COASTAL PLAIN GRAY SAND, SATURATED (BEAUFORT FORMATION)
-35.6	32.0	COASTAL PLAIN GRAY SILTY CLAY, WET (BEAUFORT FORMATION)
-43.3	39.7	COASTAL PLAIN GRAY SAND AND SILTY SAND, SATURATED (BEAUFORT FORMATION)
-44.6	41.0	
-60.6	57.0	COASTAL PLAIN GRAY SILT WITH SHELL FRAGMENTS, WET (BEAUFORT FORMATION)
-68.8	65.2	Boring Terminated at Elevation -68.8 ft in Medium Stiff Silt

GEOTECHNICAL BORING REPORT

BORE LOG



NCDOT BORE DOUBLE B5620_GEO_BRDG.GPJ NC_DOT.GDT 6/6/17

