

REFERENCE: SF-320113

PROJECT: 17BP.4.R.81

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

STRUCTURE
SUBSURFACE INVESTIGATION

COUNTY EDGECOMBE
PROJECT DESCRIPTION BRIDGE NO. 113 ON -L- (SR 1102)
OVER OTTER CREEK

CONTENTS

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2	LEGEND (SOIL & ROCK)
3	SITE PLAN
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STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	SF-320113	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.

- NOTES:
- 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.
 - 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

C.J. CORNETTE
S.N. ZIMARINO
R.E. SMITH
J.M. EDMONDSON

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

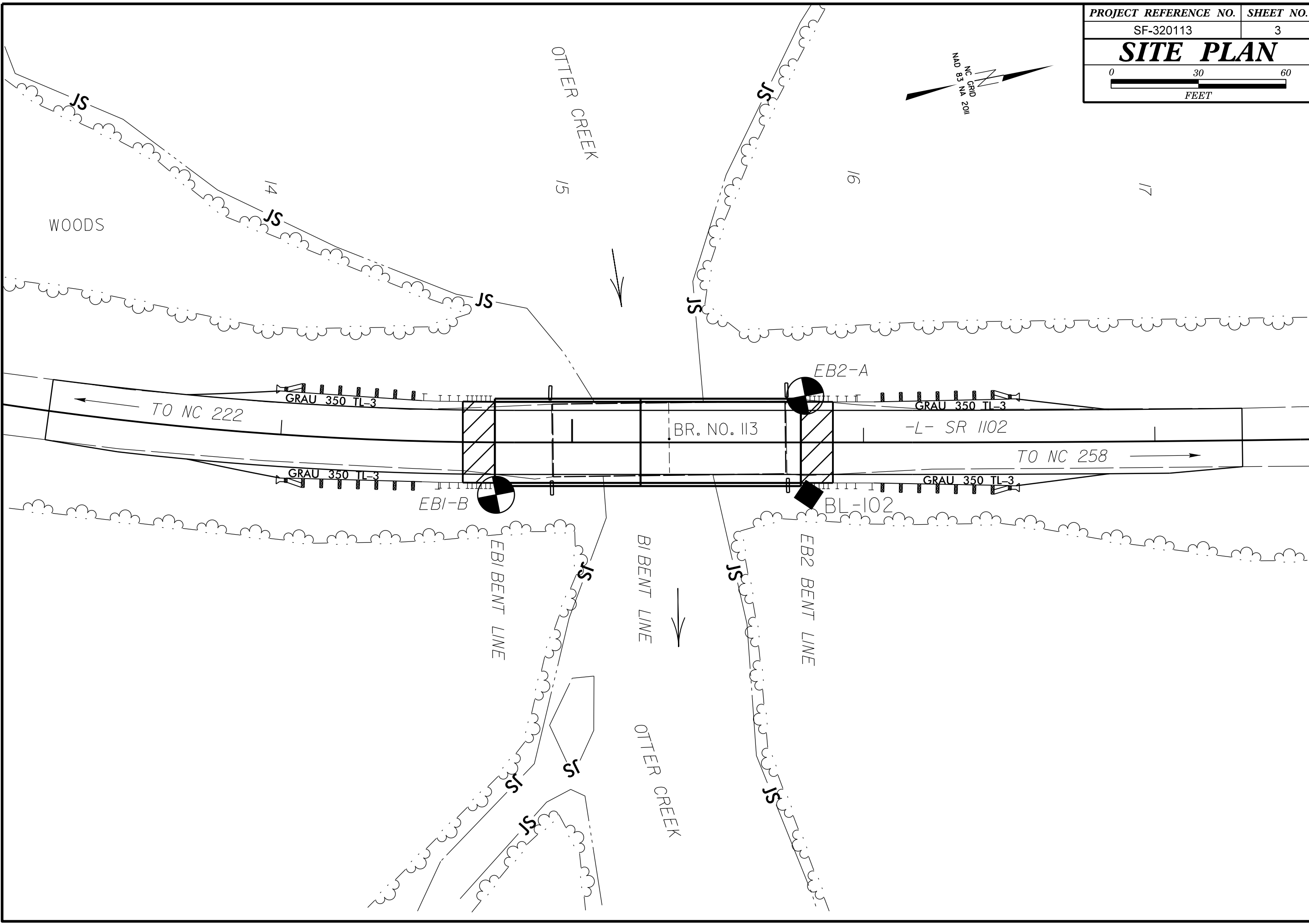
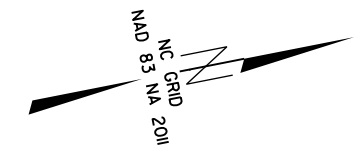


DocuSigned by:
Tyler Bottoms 10/11/2017
48A2D3B08CF446 SIGNATURE DATE

DOCUMENT NOT CONSIDERED FINAL
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

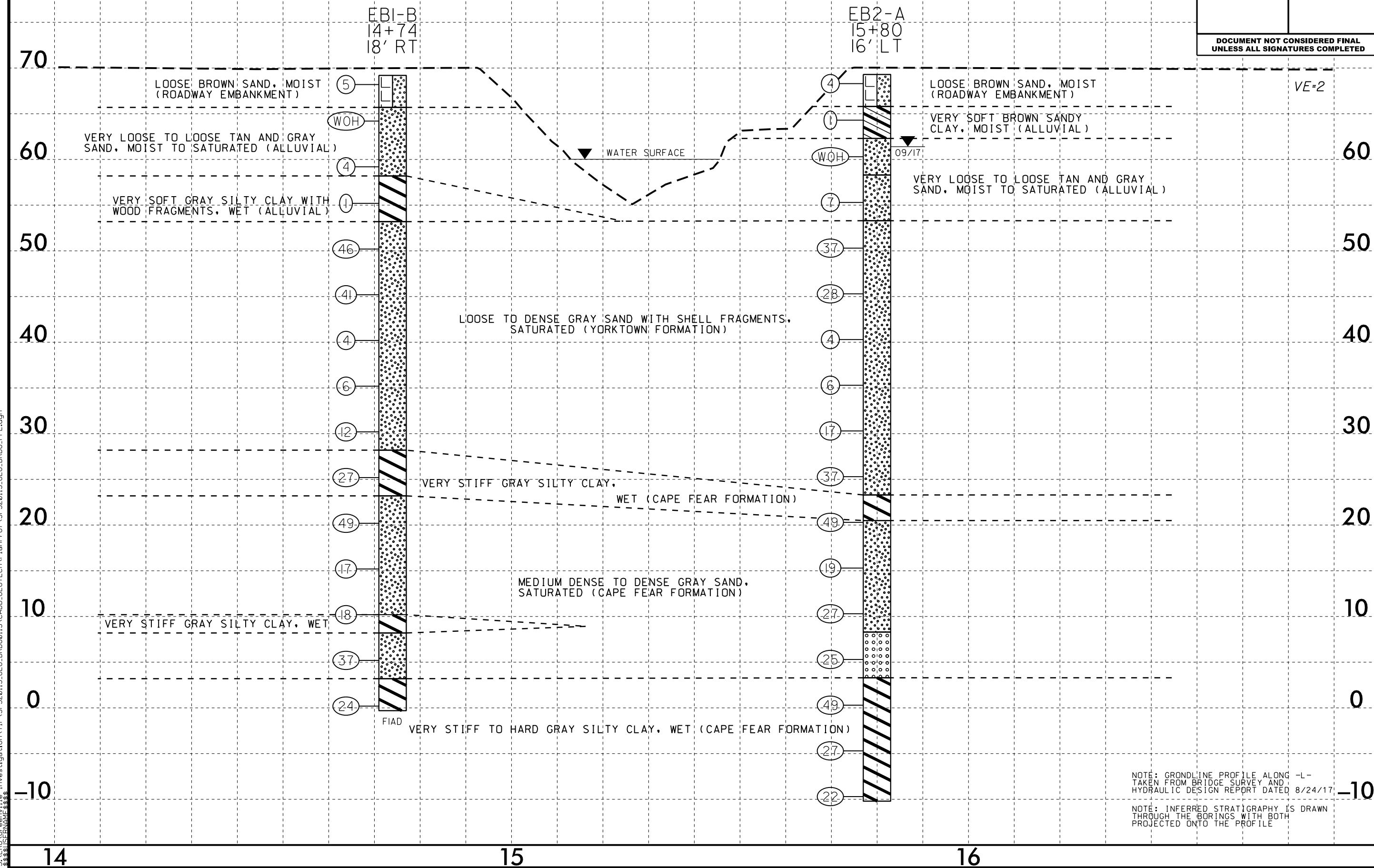
Table with multiple sections: SOIL DESCRIPTION, GRADATION, ROCK DESCRIPTION, TERMS AND DEFINITIONS, SOIL LEGEND AND AASHTO CLASSIFICATION, MINERALOGICAL COMPOSITION, COMPRESSIBILITY, PERCENTAGE OF MATERIAL, GROUND WATER, MISCELLANEOUS SYMBOLS, RECOMMENDATION SYMBOLS, ABBREVIATIONS, SOIL MOISTURE - CORRELATION OF TERMS, PLASTICITY, COLOR, EQUIPMENT USED ON SUBJECT PROJECT, WEATHERING, ROCK HARDNESS, FRACTURE SPACING, BEDDING, INDURATION.



5/14/99

PROJECT REFERENCE NO. SF-32013		SHEET NO. 4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

PROFILE THROUGH BORINGS PROJECTED ALONG -L-



NOTE: GRONDLINE PROFILE ALONG -L- TAKEN FROM BRIDGE SURVEY AND HYDRAULIC DESIGN REPORT DATED 8/24/17

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

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GEOTECHNICAL BORING REPORT

BORE LOG

WBS 17BP.4.R.81	TIP SF-320113	COUNTY EDGECOMBE	GEOLOGIST Cornette, C. J.
SITE DESCRIPTION BRIDGE NUMBER 113 ON -L- (SR 1102) OVER OTTER CREEK			GROUND WTR (ft)
BORING NO. EB1-B	STATION 14+74	OFFSET 18 ft RT	ALIGNMENT -L-
COLLAR ELEV. 69.2 ft	TOTAL DEPTH 69.5 ft	NORTHING 720,583	EASTING 2,404,449
DRILL RIG/HAMMER EFF./DATE RFO0067 CME-550X 85% 07/12/2016		DRILL METHOD Mud Rotary	HAMMER TYPE Automatic
DRILLER Edmondson, J. M.	START DATE 09/21/17	COMP. DATE 09/21/17	SURFACE WATER DEPTH N/A

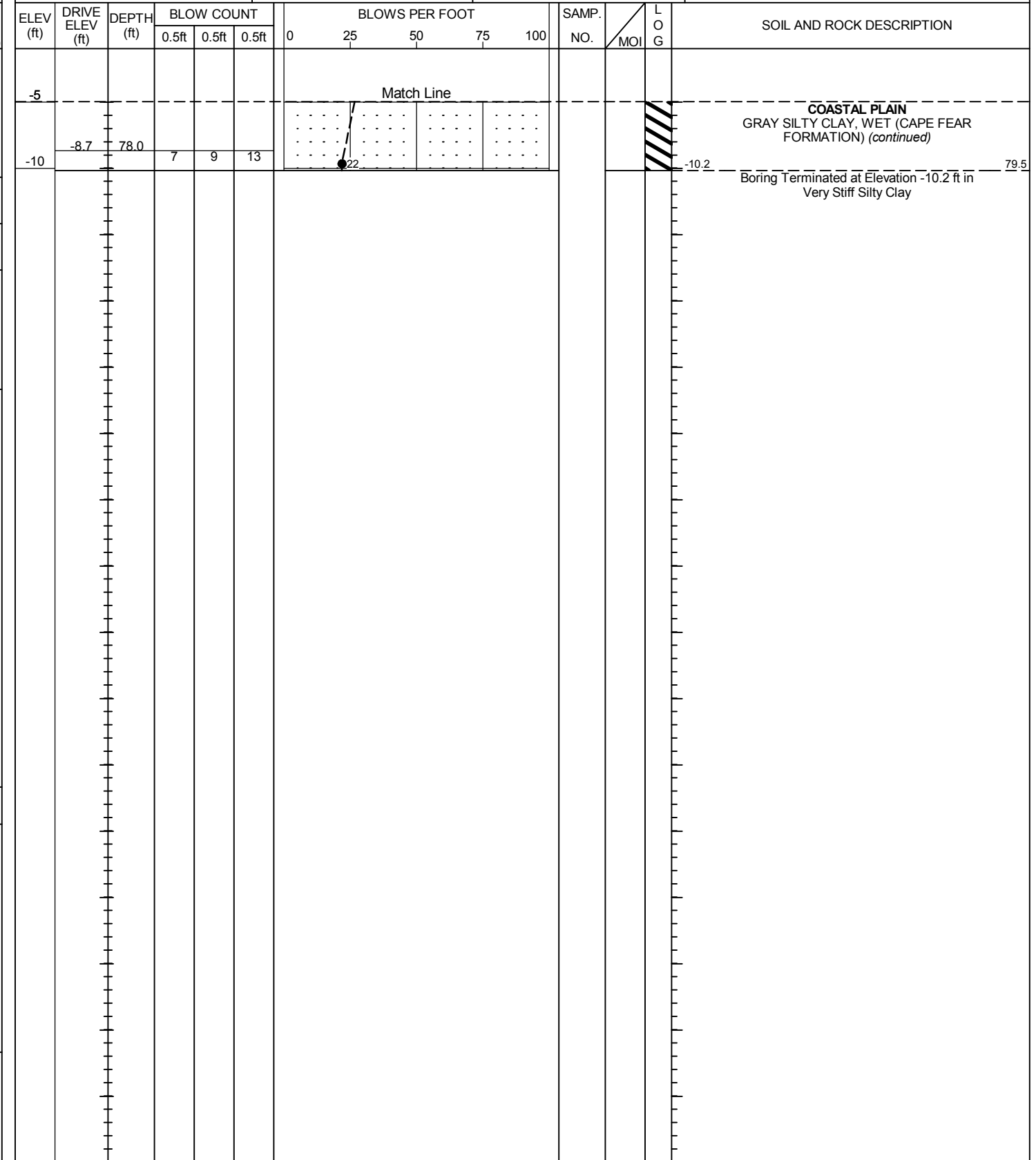
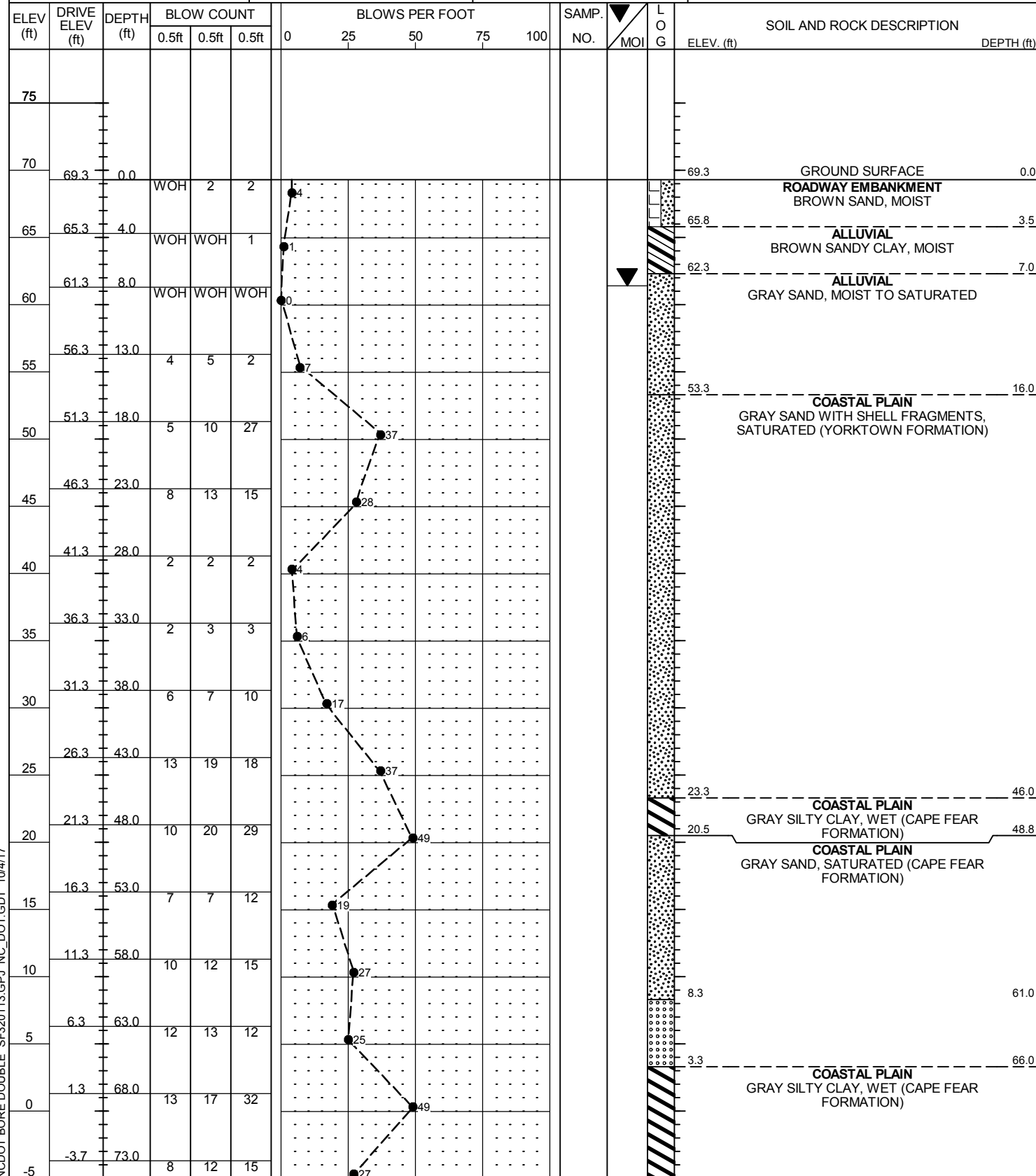
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)
			0.5ft	0.5ft	0.5ft	0	25	50	75	100				
70	69.2	0.0											GROUND SURFACE	0.0
			2	3	2								ROADWAY EMBANKMENT BROWN SAND, MOIST	
65	65.2	4.0	WOH	WOH	WOH								ALLUVIAL TAN SAND, MOIST TO SATURATED	3.5
60	60.2	9.0												
55	56.2	13.0	WOH	WOH	1								ALLUVIAL GRAY SILTY CLAY WITH WOOD FRAGMENTS, WET	11.0
50	51.2	18.0	3	15	31								COASTAL PLAIN GRAY SAND WITH SHELL FRAGMENTS, SATURATED (YORKTOWN FORMATION)	16.0
45	46.2	23.0	13	23	18									
40	41.2	28.0	2	2	2									
35	36.2	33.0	2	3	3									
30	31.2	38.0	4	5	7									
25	26.2	43.0	13	12	15								COASTAL PLAIN GRAY SILTY CLAY, WET (CAPE FEAR FORMATION)	41.0
20	21.2	48.0	17	18	31								COASTAL PLAIN GRAY SAND, SATURATED (CAPE FEAR FORMATION)	46.0
15	16.2	53.0	6	8	9									
10	11.2	58.0	10	7	11									
5	6.2	63.0	13	19	18								COASTAL PLAIN GRAY SILTY CLAY, WET (CAPE FEAR FORMATION)	59.0
													COASTAL PLAIN GRAY SAND, SATURATED (CAPE FEAR FORMATION)	61.0
													COASTAL PLAIN GRAY SAND, SATURATED (CAPE FEAR FORMATION)	66.0
0	1.2	68.0	8	9	15								COASTAL PLAIN GRAY SILTY CLAY, WET (CAPE FEAR FORMATION)	69.5
													Boring Terminated at Elevation -0.3 ft in Very Stiff Silty Clay	

NCDOT BORE DOUBLE SF320113.GPJ NC_DOT.GDT 10/4/17

GEOTECHNICAL BORING REPORT BORE LOG

WBS 17BP.4.R.81		TIP SF-320113		COUNTY EDGECOMBE		GEOLOGIST Zimarino, S. N.	
SITE DESCRIPTION BRIDGE NUMBER 113 ON -L- (SR 1102) OVER OTTER CREEK							GROUND WTR (ft)
BORING NO. EB2-A		STATION 15+80		OFFSET 16 ft LT		ALIGNMENT -L-	
0 HR. N/A		TOTAL DEPTH 79.5 ft		NORTHING 720,693		EASTING 2,404,436	
COLLAR ELEV. 69.3 ft				24 HR. 7.9			
DRILL RIG/HAMMER EFF./DATE RFO0067 CME-550X 85% 07/12/2016				DRILL METHOD Mud Rotary		HAMMER TYPE Automatic	
DRILLER Smith, R. E.		START DATE 09/18/17		COMP. DATE 09/18/17		SURFACE WATER DEPTH N/A	

WBS 17BP.4.R.81		TIP SF-320113		COUNTY EDGECOMBE		GEOLOGIST Zimarino, S. N.	
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DRILLER Smith, R. E.		START DATE 09/18/17		COMP. DATE 09/18/17		SURFACE WATER DEPTH N/A	



NCDOT BORE DOUBLE_SF320113.GPJ_NC_DOT.GDT_10/4/17