

REFERENCE: I-5986B

PROJECT: 47532

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

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5986B	1	15

CONTENTS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1	TITLE SHEET
2	LEGEND (SOIL & ROCK)
3 - 4	SITE PLAN & PROFILES
5 - 15	BORE LOG(S)

**STRUCTURE**  
**SUBSURFACE INVESTIGATION**

COUNTY CUMBERLAND, HARNETT AND JOHNSTON  
PROJECT DESCRIPTION I-95 FROM NORTH OF SR 1002  
(LONG BRANCH ROAD) (EXIT 71) TO I-40 (EXIT 81)

SITE DESCRIPTION BRIDGE 66 WALLS -  
76.50' RT OF -L- STA 969+40  
76.42' LT OF -L- STA 970+77

**INVENTORY**

**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

- J. MARLOWE
- P. GUNNELL
- E. BLONESHINE
- M. HAYES
- T. WHITE
- K. HARDEE

INVESTIGATED BY S&ME, INC.  
 DRAWN BY C. CHANDLER  
 CHECKED BY K. HILL  
 SUBMITTED BY S. MITCHELL  
 DATE APRIL 2020



9751 SOUTHERN PINE BLVD  
CHARLOTTE, NC 28273  
(704) 523-4726



DocuSigned by:  
Stacie Mitchell 4/29/2020  
 BBC641B64F19458 SIGNATURE DATE

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

SUBSURFACE INVESTIGATION

SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

Table containing 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, ROCK HARDNESS, FRACTURE SPACING, BEDDING, INDURATION, and ELEVATION: FEET.

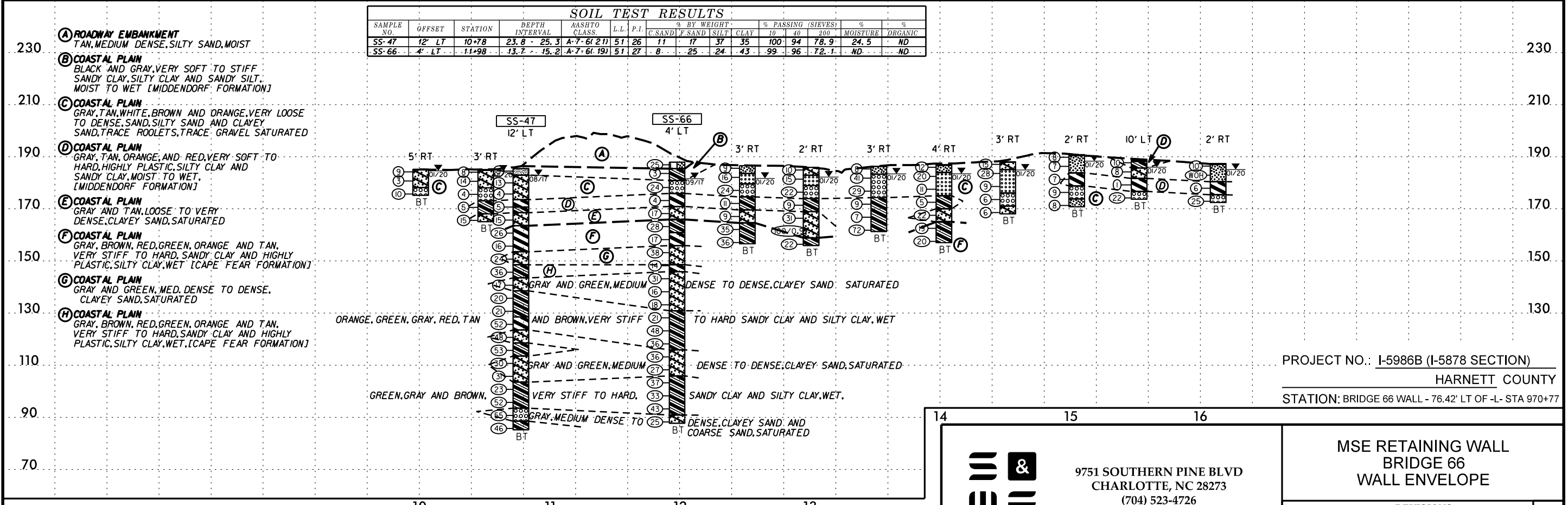
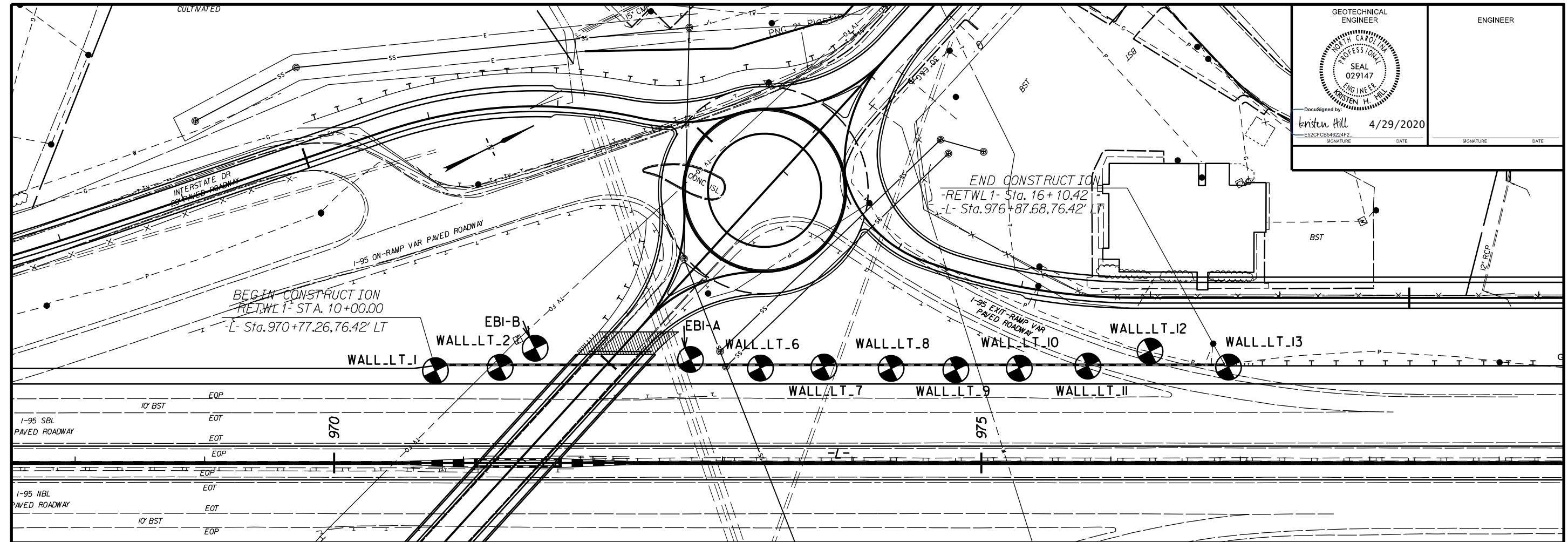
GEOTECHNICAL ENGINEER

ENGINEER

PROFESSIONAL SEAL  
029147  
ENGINEER  
KRISTEN H. HILL

DocuSigned by  
Kristen Hill  
4/29/2020

SIGNATURE DATE SIGNATURE DATE



PROJECT NO.: I-5986B (I-5878 SECTION)  
HARNETT COUNTY  
STATION: BRIDGE 66 WALL - 76.42' LT OF -L- STA 970+77

9751 SOUTHERN PINE BLVD  
CHARLOTTE, NC 28273  
(704) 523-4726

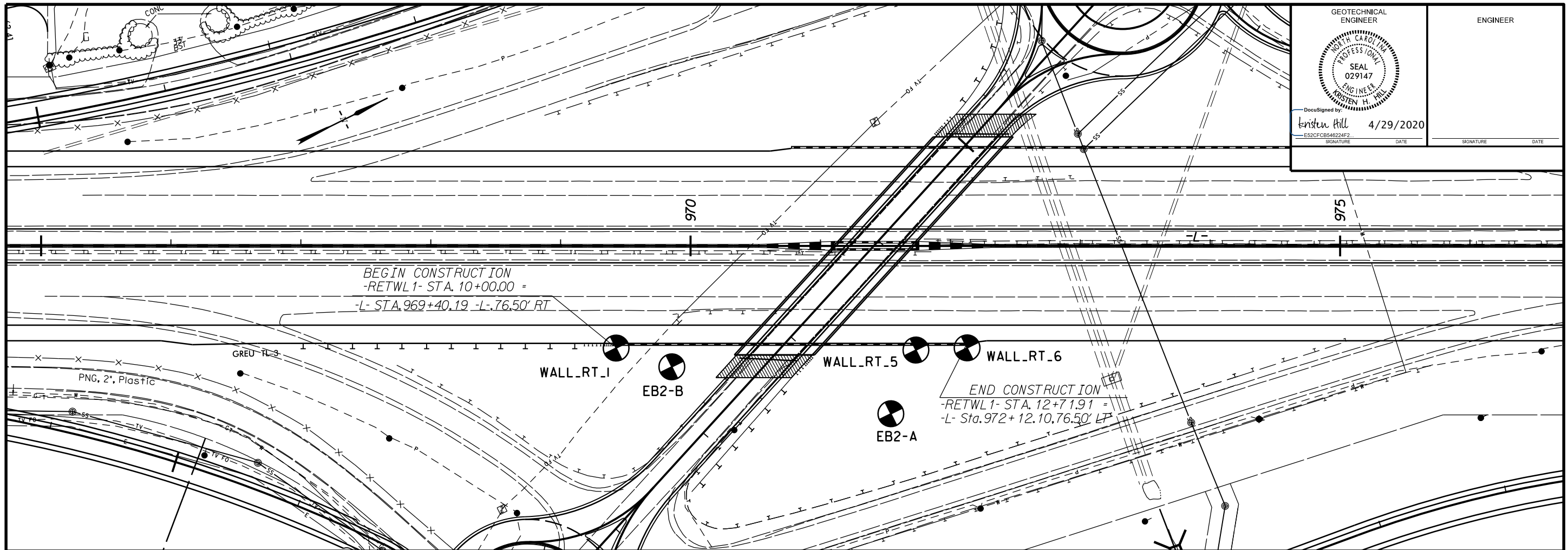
**MSE RETAINING WALL  
BRIDGE 66  
WALL ENVELOPE**

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	
1			3			3
2			4			

PREPARED BY: KHH      DATE: 4/17/20  
REVIEWED BY: SEM      DATE: 4/17/20

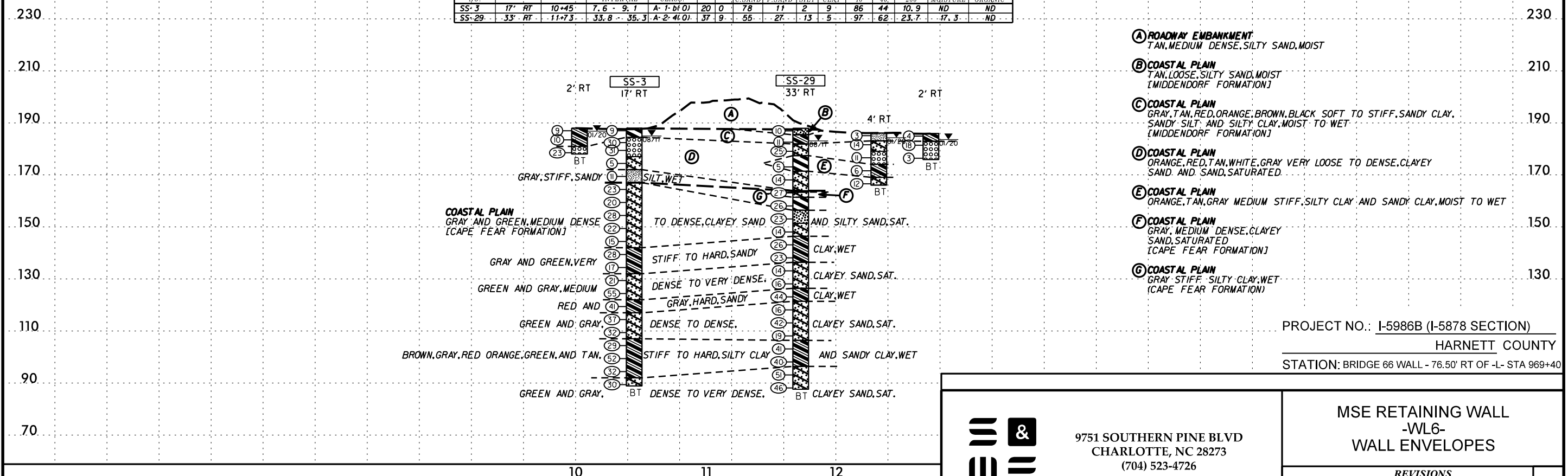


GEOTECHNICAL ENGINEER  
 SEAL 029147  
 ENGINEER  
 KRISTEN H. HILL  
 DocuSigned by: Kristen Hill  
 4/29/2020  
 E52CF08548224F2  
 ENGINEER  
 SIGNATURE  
 DATE



**SOIL TEST RESULTS**

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-3	17' RT	10+45	7.6 - 9.1	A-1-b(0)	20	0	78	11	2	9	86	44	10.9	ND	
SS-29	33' RT	11+73	33.8 - 35.3	A-2-4(0)	37	9	55	27	13	5	97	62	23.7	17.3	



PROJECT NO.: I-5986B (I-5878 SECTION)  
 HARNETT COUNTY  
 STATION: BRIDGE 66 WALL - 76.50' RT OF -L- STA 969+40

9751 SOUTHERN PINE BLVD  
 CHARLOTTE, NC 28273  
 (704) 523-4726

**MSE RETAINING WALL  
 -WL6-  
 WALL ENVELOPES**

REVISIONS						SHEET NO. 4
NO.	BY	DATE	NO.	BY	DATE	
1			3			4
2			4			

PREPARED BY: KHH DATE: 03/27/20  
 REVIEWED BY: SEM DATE: 03/27/20

# GEOTECHNICAL BORING REPORT

## BORE LOG

WBS 47532		TIP I-5878		COUNTY HARNETT		GEOLOGIST P. Gunnell									
SITE DESCRIPTION BRIDGE NO. 66 WALL - 76.42' LT OF -L- STA 970+77							GROUND WTR (ft)								
BORING NO. WALL_LT_1		STATION 10+01		OFFSET 5 ft RT		ALIGNMENT N/A									
COLLAR ELEV. 185.2 ft		TOTAL DEPTH 10.0 ft		NORTHING 561,296		EASTING 2,117,995									
DRILL RIG/HAMMER EFF./DATE SME6573 CME-550X 89% 05/03/2019			DRILL METHOD Mud Rotary		HAMMER TYPE Automatic										
DRILLER J. Marlowe		START DATE 01/24/20		COMP. DATE 01/24/20		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					
190															
185	185.2	0.0	3	4	5									185.2	0.0
	181.7	3.5	2	1	2										
180	176.7	8.5	9	7	3									178.2	7.0
														175.2	10.0
Boring Terminated at Elevation 175.2 ft IN LOOSE SAND (COASTAL PLAIN)															

WBS 47532		TIP I-5878		COUNTY HARNETT		GEOLOGIST P. Gunnell									
SITE DESCRIPTION BRIDGE NO. 66 WALL - 76.42' LT OF -L- STA 970+77							GROUND WTR (ft)								
BORING NO. WALL_LT_2		STATION 10+51		OFFSET 3 ft RT		ALIGNMENT N/A									
COLLAR ELEV. 185.1 ft		TOTAL DEPTH 20.0 ft		NORTHING 561,342		EASTING 2,118,015									
DRILL RIG/HAMMER EFF./DATE SME6573 CME-550X 89% 05/03/2019			DRILL METHOD Mud Rotary		HAMMER TYPE Automatic										
DRILLER J. Marlowe		START DATE 01/24/20		COMP. DATE 01/24/20		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					
190															
185	185.1	0.0	3	4	4									185.1	0.0
	181.6	3.5	5	8	6										
180	176.6	8.5	4	3	1									178.1	7.0
175	171.6	13.5	3	2	3									173.1	12.0
170	166.6	18.5	5	6	9									168.1	17.0
														165.1	20.0
Boring Terminated at Elevation 165.1 ft IN MEDIUM DENSE CLAYEY SAND (COASTAL PLAIN)															

NCDOT BORE DOUBLE WALL 66 BORING LOGS.GPJ NC\_DOT.GDT 4/17/20

# GEOTECHNICAL BORING REPORT

## BORE LOG

WBS 47532		TIP I-5878		COUNTY HARNETT		GEOLOGIST Blonshine, E.G.										
SITE DESCRIPTION BRIDGE NO. 66 WALL - 76.42' LT OF -L- STA 970+77							GROUND WTR (ft)									
BORING NO. EB1-B		STATION 10+78		OFFSET 12 ft LT		ALIGNMENT N/A										
COLLAR ELEV. 185.5 ft		TOTAL DEPTH 100.3 ft		NORTHING 561,373		EASTING 2,118,014										
DRILL RIGHAMMER EFF./DATE SME9563 CME-550X 88% 08/10/2017			DRILL METHOD Mud Rotary			HAMMER TYPE Automatic										
DRILLER White, T.J.		START DATE 08/30/17		COMP. DATE 08/30/17		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						
190																
185	185.5	0.0	4	5	4									185.5	GROUND SURFACE	0.0
180	181.0	4.5	4	5	8									183.0	COASTAL PLAIN BLACK AND GRAY, SANDY SILT WITH TRACE ORGANICS (MIDDENDORF FORMATION) GRAY, CLAYEY SAND	2.5
175	176.7	8.8	6	2	2									173.5		12.0
170	171.7	13.8	2	2	3									170.7	GRAY AND TAN, SILTY CLAY AND SANDY CLAY	14.8
165	166.7	18.8	5	7	8									168.5	GRAY, CLAYEY SAND	17.0
160	161.7	23.8	8	10	16									163.5	COASTAL PLAIN GRAY, HIGHLY PLASTIC, SILTY CLAY (CAPE FEAR FORMATION)	22.0
155	156.7	28.8	5	6	10									153.5	GRAY AND GREEN, CLAYEY SAND	32.0
150	151.7	33.8	8	11	13									148.5	GRAY, SANDY CLAY	37.0
145	146.7	38.8	12	17	19									143.5	GRAY, CLAYEY SAND	42.0
140	141.7	43.8	6	7	10									138.5	GRAY AND RED, SANDY CLAY AND SILTY CLAY	47.0
135	136.7	48.8	6	8	12									128.5		57.0
130	131.7	53.8	5	8	13									123.5	GRAY, CLAYEY SAND	62.0
125	126.7	58.8	15	22	30									118.5	GRAY, SANDY CLAY	67.0
120	121.7	63.8	13	21	27									113.5	GRAY, CLAYEY SAND	72.0
115	116.7	68.8	17	25	28											
110	111.7	73.8	13	13	17											

WBS 47532		TIP I-5878		COUNTY HARNETT		GEOLOGIST Blonshine, E.G.										
SITE DESCRIPTION BRIDGE NO. 66 WALL - 76.42' LT OF -L- STA 970+77							GROUND WTR (ft)									
BORING NO. EB1-B		STATION 10+78		OFFSET 12 ft LT		ALIGNMENT N/A										
COLLAR ELEV. 185.5 ft		TOTAL DEPTH 100.3 ft		NORTHING 561,373		EASTING 2,118,014										
DRILL RIGHAMMER EFF./DATE SME9563 CME-550X 88% 08/10/2017			DRILL METHOD Mud Rotary			HAMMER TYPE Automatic										
DRILLER White, T.J.		START DATE 08/30/17		COMP. DATE 08/30/17		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						
110																
105	106.7	78.8	15	15	16									103.5	GRAY, CLAYEY SAND (continued)	82.0
100	101.7	83.8	9	11	12									103.5	GREEN AND GRAY, SANDY CLAY	82.0
95	96.7	88.8	20	24	28									93.5	GRAY, COARSE SAND	92.0
90	91.7	93.8	23	27	28									88.5	GRAY AND GREEN, SANDY CLAY	97.0
	86.7	98.8	17	21	25									85.2	Boring Terminated at Elevation 85.2 ft IN HARD SANDY CLAY (COASTAL PLAIN)	100.3

NCDOT BORE DOUBLE WALL 66 BORING LOGS.GPJ NC\_DOT.GDT 4/17/20

# GEOTECHNICAL BORING REPORT

## BORE LOG

WBS 47532		TIP I-5878		COUNTY HARNETT		GEOLOGIST Blonshine, E.G.										
SITE DESCRIPTION BRIDGE NO. 66 WALL - 76.42' LT OF -L- STA 970+77							GROUND WTR (ft)									
BORING NO. EB1-A	STATION 11+98	OFFSET 4 ft LT	ALIGNMENT N/A	0 HR. N/A												
COLLAR ELEV. 187.9 ft	TOTAL DEPTH 100.2 ft	NORTHING 561,476	EASTING 2,118,075	24 HR. 6.3												
DRILL RIG/HAMMER EFF./DATE SVE9563 CME-550X 88% 08/10/2017			DRILL METHOD Mud Rotary		HAMMER TYPE Automatic											
DRILLER White, T.J.		START DATE 08/31/17	COMP. DATE 08/31/17	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						
190																
	187.9	0.0	5	10	15									187.9	GROUND SURFACE	0.0
	185	3.3	2	2	1									185.4	ROADWAY EMBANKMENT TAN, SILTY SAND	2.5
	180	8.7	9	12	12									180.9	COASTAL PLAIN BLACK, SANDY CLAY (MIDDENDORF FORMATION)	7.0
	175	13.7	1	2	2									175.9	GRAY, COARSE SAND	12.0
	170	18.7	4	5	12									170.9	TAN, HIGHLY PLASTIC, SILTY CLAY	17.0
	165	23.7	7	11	17									165.9	TAN, CLAYEY SAND	22.0
	160	28.7	5	8	9									160.9	COASTAL PLAIN GRAY, SANDY CLAY AND SILTY CLAY (CAPE FEAR FORMATION)	27.0
	155	33.7	13	18	20									155.9	GRAY, CLAYEY SAND	32.0
	150	38.7	4	6	8									148.6	GRAY, SILTY CLAY	39.3
	145	43.7	9	14	17									145.9	GRAY, CLAYEY SAND	42.0
	140	48.7	5	7	9									139.9	GRAY, SANDY CLAY	57.0
	135	53.7	7	8	10									130.9	GRAY, SANDY CLAY	57.0
	130	58.7	8	9	12									129.2	GRAY, SANDY CLAY	57.0
	125	63.7	15	23	25									122.2	GRAY, SANDY CLAY	57.0
	120	68.7	8	15	21									119.2	GRAY, SANDY CLAY	57.0
	115	73.7	10	18	18									115.9	GRAY, CLAYEY SAND	72.0
110														87.7	GRAY, CLAYEY SAND	100.2

WBS 47532		TIP I-5878		COUNTY HARNETT		GEOLOGIST Blonshine, E.G.										
SITE DESCRIPTION BRIDGE NO. 66 WALL - 76.42' LT OF -L- STA 970+77							GROUND WTR (ft)									
BORING NO. EB1-A	STATION 11+98	OFFSET 4 ft LT	ALIGNMENT N/A	0 HR. N/A												
COLLAR ELEV. 187.9 ft	TOTAL DEPTH 100.2 ft	NORTHING 561,476	EASTING 2,118,075	24 HR. 6.3												
DRILL RIG/HAMMER EFF./DATE SVE9563 CME-550X 88% 08/10/2017			DRILL METHOD Mud Rotary		HAMMER TYPE Automatic											
DRILLER White, T.J.		START DATE 08/31/17	COMP. DATE 08/31/17	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						
110																
	109.2	78.7	12	13	14									105.9	Match Line GRAY, CLAYEY SAND (continued)	82.0
	105	83.7	12	14	23									105.9	GRAY AND GREEN, SANDY CLAY	82.0
	100	88.7	11	13	20									99.2		
	95	93.7	13	18	25									94.2		
	90	98.7	12	13	12									89.2		
														87.7	Boring Terminated at Elevation 87.7 ft IN MED. DENSE CLAYEY SAND (COASTAL PLAIN)	100.2

NCDOT BORE DOUBLE WALL 66 BORING LOGS.GPJ NC\_DOT.GDT 4/17/20

# GEOTECHNICAL BORING REPORT

## BORE LOG

WBS 47532		TIP I-5878		COUNTY HARNETT		GEOLOGIST P. Gunnell									
SITE DESCRIPTION BRIDGE NO. 66 WALL - 76.42' LT OF -L- STA 970+77							GROUND WTR (ft)								
BORING NO. WALL_LT_6		STATION 12+52		OFFSET 3 ft RT		ALIGNMENT N/A									
COLLAR ELEV. 186.6 ft		TOTAL DEPTH 30.0 ft		NORTHING 561,522		EASTING 2,118,105									
DRILL RIGHAMMER EFF./DATE SME6573 CME-550X 89% 05/03/2019				DRILL METHOD Mud Rotary		HAMMER TYPE Automatic									
DRILLER J. Marlowe		START DATE 01/24/20		COMP. DATE 01/24/20		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					
190															
185	186.6	0.0	3	5	4								M	186.6 GROUND SURFACE 0.0	
	183.1	3.5	10	9	7								W	183.6 COASTAL PLAIN LOOSE, TAN AND ORANGE, SILTY FINE TO COARSE SAND (A-2-4) [MIDDENDORF FORMATION]	3.0
180													W	179.6 MEDIUM DENSE, TAN AND BROWN, FINE TO COARSE SAND (A-3)	7.0
	178.1	8.5	11	13	11								W	179.6 MEDIUM DENSE, ORANGE AND TAN, FINE TO COARSE SAND (A-1-A), TRACE GRAVEL	7.0
175													W	174.6 STIFF, ORANGE AND TAN, SANDY CLAY (A-6)	12.0
	173.1	13.5	3	5	6								W	174.6 STIFF, ORANGE AND TAN, SANDY CLAY (A-6)	12.0
170													W	169.6 LOOSE, GRAY, CLAYEY FINE TO COARSE SAND (A-2-6)	17.0
	168.1	18.5	3	4	5								W	169.6 LOOSE, GRAY, CLAYEY FINE TO COARSE SAND (A-2-6)	17.0
165													W	164.6 HARD, BROWN, SANDY CLAY (A-6)	22.0
	163.1	23.5	10	15	20								W	164.6 HARD, BROWN, SANDY CLAY (A-6)	22.0
160													W	156.6 Boring Terminated at Elevation 156.6 ft IN HARD SANDY CLAY (COASTAL PLAIN)	30.0
	158.1	28.5	5	11	25								W	156.6 Boring Terminated at Elevation 156.6 ft IN HARD SANDY CLAY (COASTAL PLAIN)	30.0

WBS 47532		TIP I-5878		COUNTY HARNETT		GEOLOGIST P. Gunnell									
SITE DESCRIPTION BRIDGE NO. 66 WALL - 76.42' LT OF -L- STA 970+77							GROUND WTR (ft)								
BORING NO. WALL_LT_7		STATION 13+01		OFFSET 2 ft RT		ALIGNMENT N/A									
COLLAR ELEV. 185.9 ft		TOTAL DEPTH 30.0 ft		NORTHING 561,566		EASTING 2,118,126									
DRILL RIGHAMMER EFF./DATE SME6573 CME-550X 89% 05/03/2019				DRILL METHOD Mud Rotary		HAMMER TYPE Automatic									
DRILLER J. Marlowe		START DATE 01/24/20		COMP. DATE 01/24/20		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					
190															
185	185.9	0.0	2	5	5								W	185.9 GROUND SURFACE 0.0	
	182.4	3.5	6	7	8								W	182.9 COASTAL PLAIN LOOSE, TAN, CLAYEY FINE TO COARSE SAND (A-2-6) [MIDDENDORF FORMATION]	3.0
180													W	178.9 MEDIUM DENSE, TAN AND WHITE, FINE SAND (A-3)	7.0
	177.4	8.5	12	14	8								W	178.9 MEDIUM DENSE, ORANGE AND TAN, FINE TO COARSE SAND (A-1-A), TRACE GRAVEL	7.0
175													W	173.9 STIFF, ORANGE, TAN AND GRAY, SANDY CLAY (A-6)	12.0
	172.4	13.5	3	4	5								W	173.9 STIFF, ORANGE, TAN AND GRAY, SANDY CLAY (A-6)	12.0
170													W	168.9 DENSE TO VERY DENSE, GRAY, CLAYEY FINE TO COARSE SAND (A-2-6)	17.0
	167.4	18.5	15	16	15								W	168.9 DENSE TO VERY DENSE, GRAY, CLAYEY FINE TO COARSE SAND (A-2-6)	17.0
165													W	158.9 VERY STIFF, BROWN, SANDY CLAY (A-6)	27.0
	162.4	23.5	28	72/0.4									W	158.9 VERY STIFF, BROWN, SANDY CLAY (A-6)	27.0
160													W	155.9 Boring Terminated at Elevation 155.9 ft IN VERY STIFF SANDY CLAY (COASTAL PLAIN)	30.0
	157.4	28.5	6	10	12								W	155.9 Boring Terminated at Elevation 155.9 ft IN VERY STIFF SANDY CLAY (COASTAL PLAIN)	30.0

NCDOT BORE DOUBLE WALL 66 BORING LOGS.GPJ NC\_DOT.GDT 4/17/20



# GEOTECHNICAL BORING REPORT

## BORE LOG

WBS 47532		TIP I-5878		COUNTY HARNETT		GEOLOGIST P. Gunnell										
SITE DESCRIPTION BRIDGE NO. 66 WALL - 76.42' LT OF -L- STA 970+77							GROUND WTR (ft)									
BORING NO. WALL_LT_8		STATION 13+53		OFFSET 3 ft RT		ALIGNMENT N/A										
COLLAR ELEV. 186.3 ft		TOTAL DEPTH 25.0 ft		NORTHING 561,612		EASTING 2,118,150										
DRILL RIGHAMMER EFF./DATE SME6573 CME-550X 89% 05/03/2019			DRILL METHOD Mud Rotary		HAMMER TYPE Automatic											
DRILLER J. Marlowe		START DATE 01/23/20		COMP. DATE 01/23/20		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						
190																
185	186.3	0.0	2	2	6								W	186.3	GROUND SURFACE	0.0
180	182.8	3.5	21	21	20								W	183.3	COASTAL PLAIN LOOSE, TAN AND GRAY, SILTY FINE SAND (A-2-4), TRACE ROOTLETS [MIDDENDORF FORMATION] DENSE, ORANGE, GRAY AND TAN, FINE TO COARSE SAND (A-1-A), TRACE GRAVEL	3.0
175	177.8	8.5	3	10	19								W			
170	172.8	13.5	3	4	5								W	174.3	MEDIUM STIFF TO HARD, ORANGE, TAN, AND GRAY, SANDY CLAY (A-6)	12.0
165	167.8	18.5	4	3	4								W			
	162.8	23.5	14	30	42								W	161.3	Boring Terminated at Elevation 161.3 ft IN HARD SANDY CLAY (COASTAL PLAIN)	25.0

WBS 47532		TIP I-5878		COUNTY HARNETT		GEOLOGIST P. Gunnell										
SITE DESCRIPTION BRIDGE NO. 66 WALL - 76.42' LT OF -L- STA 970+77							GROUND WTR (ft)									
BORING NO. WALL_LT_9		STATION 14+03		OFFSET 4 ft RT		ALIGNMENT N/A										
COLLAR ELEV. 187.0 ft		TOTAL DEPTH 30.0 ft		NORTHING 561,656		EASTING 2,118,173										
DRILL RIGHAMMER EFF./DATE SME6573 CME-550X 89% 05/03/2019			DRILL METHOD Mud Rotary		HAMMER TYPE Automatic											
DRILLER J. Marlowe		START DATE 01/23/20		COMP. DATE 01/23/20		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						
190																
185	187.0	0.0	3	5	7								M	187.0	GROUND SURFACE	0.0
180	183.5	3.5	9	9	11								W	184.0	COASTAL PLAIN MEDIUM DENSE, TAN, SILTY FINE TO COARSE SAND (A-2-4) [MIDDENDORF FORMATION] MEDIUM DENSE, TAN AND ORANGE, FINE TO COARSE SAND (A-3)	3.0
175	178.5	8.5	4	6	5								W			
170	173.5	13.5	2	2	3								W	175.0	MEDIUM STIFF, ORANGE AND TAN, SANDY CLAY (A-6)	12.0
165	168.5	18.5	11	11	11								M	170.0	MEDIUM DENSE, GRAY AND TAN, CLAYEY FINE TO COARSE SAND (A-2-6)	17.0
160	163.5	23.5	16	11	8								W	165.0	COASTAL PLAIN VERY STIFF, GRAY AND BROWN, SANDY CLAY (A-6) [CAPE FEAR FORMATION]	22.0
	158.5	28.5	7	8	12								W	157.0	Boring Terminated at Elevation 157.0 ft IN VERY STIFF SANDY CLAY (COASTAL PLAIN)	30.0

NCDOT BORE DOUBLE WALL 66 BORING LOGS.GPJ NC\_DOT.GDT 4/17/20

# GEOTECHNICAL BORING REPORT

## BORE LOG

WBS 47532		TIP I-5878		COUNTY HARNETT		GEOLOGIST P. Gunnell									
SITE DESCRIPTION BRIDGE NO. 66 WALL - 76.42' LT OF -L- STA 970+77							GROUND WTR (ft)								
BORING NO. WALL_LT_10		STATION 14+52		OFFSET 3 ft RT		ALIGNMENT N/A									
COLLAR ELEV. 188.1 ft		TOTAL DEPTH 20.0 ft		NORTHING 561,701		EASTING 2,118,194									
DRILL RIGHAMMER EFF./DATE SME6573 CME-550X 89% 05/03/2019			DRILL METHOD Mud Rotary			HAMMER TYPE Automatic									
DRILLER J. Marlowe		START DATE 01/23/20		COMP. DATE 01/23/20		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					
190	188.1	0.0	3	4	11									188.1 GROUND SURFACE 0.0	
185	184.6	3.5	13	15	13									185.1 COASTAL PLAIN MEDIUM DENSE, ORANGE AND TAN, CLAYEY FINE SAND (A-2-6) [MIDDENDORF FORMATION] 3.0	
180	179.6	8.5	1	5	4									180.0 MEDIUM DENSE TO LOOSE, TAN AND ORANGE, FINE TO COARSE SAND (A-3)	
175	174.6	13.5	14	4	2									176.1 LOOSE, TAN, GRAY AND WHITE, FINE TO COARSE SAND (A-1-A), TRACE GRAVEL 12.0	
170	169.6	18.5	2	2	4									171.1 LOOSE, ORANGE AND TAN, CLAYEY FINE SAND (A-2-6) 17.0	
														168.1 Boring Terminated at Elevation 168.1 ft IN LOOSE CLAYEY SAND (COASTAL PLAIN) 20.0	

WBS 47532		TIP I-5878		COUNTY HARNETT		GEOLOGIST P. Gunnell									
SITE DESCRIPTION BRIDGE NO. 66 WALL - 76.42' LT OF -L- STA 970+77							GROUND WTR (ft)								
BORING NO. WALL_LT_11		STATION 15+05		OFFSET 2 ft RT		ALIGNMENT N/A									
COLLAR ELEV. 190.8 ft		TOTAL DEPTH 20.0 ft		NORTHING 561,749		EASTING 2,118,216									
DRILL RIGHAMMER EFF./DATE SME6573 CME-550X 89% 05/03/2019			DRILL METHOD Mud Rotary			HAMMER TYPE Automatic									
DRILLER J. Marlowe		START DATE 01/23/20		COMP. DATE 01/23/20		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					
195															
190	190.8	0.0	2	2	6									190.8 GROUND SURFACE 0.0	
185	187.3	3.5	8	4	3									185.0 COASTAL PLAIN LOOSE, TAN AND ORANGE, SILTY FINE SAND (A-2-4) [MIDDENDORF FORMATION] 3.0	
180	182.3	8.5	1	4	3									183.8 MEDIUM STIFF, RED AND ORANGE, SILTY CLAY (A-7-5) 7.0	
175	177.3	13.5	11	8	1									178.8 LOOSE, TAN AND ORANGE, FINE TO COARSE SAND (A-1-A), TRACE GRAVEL 12.0	
	172.3	18.5	2	4	4									173.8 LOOSE, ORANGE AND TAN, SILTY FINE TO COARSE SAND (A-2-4) 17.0	
														170.8 Boring Terminated at Elevation 170.8 ft IN LOOSE SILTY SAND (COASTAL PLAIN) 20.0	

NCDOT BORE DOUBLE WALL 66 BORING LOGS.GPJ NC\_DOT.GDT 4/17/20

# GEOTECHNICAL BORING REPORT

## BORE LOG

WBS 47532		TIP I-5878		COUNTY HARNETT		GEOLOGIST P. Gunnell										
SITE DESCRIPTION BRIDGE NO. 66 WALL - 76.42' LT OF -L- STA 970+77							GROUND WTR (ft)									
BORING NO. WALL_LT_12		STATION 15+53		OFFSET 10 ft LT		ALIGNMENT N/A										
COLLAR ELEV. 188.7 ft		TOTAL DEPTH 15.0 ft		NORTHING 561,797		EASTING 2,118,227										
DRILL RIG/HAMMER EFF./DATE SME6573 CME-550X 89% 05/03/2019			DRILL METHOD Mud Rotary		HAMMER TYPE Automatic											
DRILLER J. Marlowe		START DATE 01/23/20		COMP. DATE 01/23/20		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						
190	188.7	0.0	2	4	6									188.7	GROUND SURFACE	0.0
185	185.2	3.5	5	4	4									185.7	COASTAL PLAIN STIFF, TAN AND ORANGE, SANDY CLAY (A-6)	3.0
180	180.2	8.5	WOH	WOH	1									181.7	[MIDDENDORF FORMATION] LOOSE, TAN, CLAYEY FINE TO COARSE SAND (A-2-6)	7.0
175	175.2	13.5												176.7	VERY SOFT, TAN, RED, AND ORANGE, SILTY CLAY (A-7-5)	12.0
														173.7	MEDIUM DENSE, ORANGE, FINE TO COARSE SAND (A-1-A), TRACE GRAVEL	15.0
															Boring Terminated at Elevation 173.7 ft IN MEDIUM DENSE SAND (COASTAL PLAIN)	

WBS 47532		TIP I-5878		COUNTY HARNETT		GEOLOGIST P. Gunnell										
SITE DESCRIPTION BRIDGE NO. 66 WALL - 76.42' LT OF -L- STA 970+77							GROUND WTR (ft)									
BORING NO. WALL_LT_13		STATION 16+14		OFFSET 2 ft RT		ALIGNMENT N/A										
COLLAR ELEV. 187.4 ft		TOTAL DEPTH 15.0 ft		NORTHING 561,846		EASTING 2,118,265										
DRILL RIG/HAMMER EFF./DATE SME6573 CME-550X 89% 05/03/2019			DRILL METHOD Mud Rotary		HAMMER TYPE Automatic											
DRILLER J. Marlowe		START DATE 01/23/20		COMP. DATE 01/23/20		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						
190	187.4	0.0	2	5	5									187.4	GROUND SURFACE	0.0
185	183.9	3.5	WOH	WOH	WOH									185.7	COASTAL PLAIN LOOSE TO VERY LOOSE, TAN AND ORANGE, SILTY FINE SAND (A-2-4)	3.0
180	178.9	8.5												181.7	[MIDDENDORF FORMATION]	7.0
175	173.9	13.5												176.7	MEDIUM STIFF, ORANGE AND RED, SILTY CLAY (A-7-5)	12.0
														173.7	MEDIUM DENSE, ORANGE, WHITE AND GRAY, FINE TO COARSE SAND (A-1-A), TRACE GRAVEL	15.0
															Boring Terminated at Elevation 172.4 ft IN MEDIUM DENSE SAND (COASTAL PLAIN)	

NCDOT BORE DOUBLE WALL 66 BORING LOGS.GPJ NC\_DOT.GDT 4/17/20

# GEOTECHNICAL BORING REPORT

## BORE LOG

WBS 47532		TIP I-5878		COUNTY HARNETT		GEOLOGIST P. Gunnell										
SITE DESCRIPTION BRIDGE NO. 66 WALL - 76.5' RT OF -L- STA 969+40							GROUND WTR (ft)									
BORING NO. WALL_RT_1		STATION 10+03		OFFSET 2 ft RT		ALIGNMENT N/A										
COLLAR ELEV. 188.0 ft		TOTAL DEPTH 10.0 ft		NORTHING 561,108		EASTING 2,118,069										
DRILL RIGHAMMER EFF./DATE SME6573 CME-550X 89% 05/03/2019		DRILL METHOD Mud Rotary		HAMMER TYPE Automatic												
DRILLER J. Marlowe		START DATE 01/22/20		COMP. DATE 01/22/20		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						
190	188.0	0.0	2	4	5									188.0	0.0	GROUND SURFACE
185	184.5	3.5	3	4	6								M	181.0	7.0	COASTAL PLAIN STIFF, TAN ORANGE, RED AND GRAY, SANDY CLAY (A-6), TRACE ROOTLETS [MIDDENDORF FORMATION]
180	179.5	8.5	9	9	14								W	178.0	10.0	MEDIUM DENSE, ORANGE, TAN AND WHITE FINE TO COARSE SAND (A-1-A), LITTLE GRAVEL
																Boring Terminated at Elevation 178.0 ft IN MEDIUM DENSE SAND (COASTAL PLAIN)

WBS 47532		TIP I-5878		COUNTY HARNETT		GEOLOGIST P. Gunnell										
SITE DESCRIPTION BRIDGE NO. 66 WALL - 76.5' RT OF -L- STA 969+40							GROUND WTR (ft)									
BORING NO. WALL_RT_5		STATION 12+33		OFFSET 4 ft RT		ALIGNMENT N/A										
COLLAR ELEV. 186.1 ft		TOTAL DEPTH 20.0 ft		NORTHING 561,314		EASTING 2,118,173										
DRILL RIGHAMMER EFF./DATE SME6573 CME-550X 89% 05/03/2019		DRILL METHOD Mud Rotary		HAMMER TYPE Automatic												
DRILLER J. Marlowe		START DATE 01/22/20		COMP. DATE 01/22/20		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						
190	186.1	0.0	2	2	1									186.1	0.0	GROUND SURFACE
185	182.6	3.5	2	6	8								W	183.1	3.0	COASTAL PLAIN SOFT, BLACK, SANDY SILT (A-4), TRACE ROOTLETS [MIDDENDORF FORMATION]
180	177.6	8.5	3	4	7								W	179.1	7.0	MEDIUM DENSE, TAN AND ORANGE, CLAYEY FINE TO COARSE SAND (A-2-6), TRACE GRAVEL
175	172.6	13.5	2	3	3								W	174.1	12.0	MEDIUM DENSE, ORANGE, FINE TO COARSE SAND (A-1-A), TRACE GRAVEL
170	167.6	18.5	5	6	6								W	169.1	17.0	MEDIUM STIFF, ORANGE AND TAN, SANDY CLAY (A-6)
														166.1	20.0	MEDIUM DENSE, GRAY, CLAYEY FINE TO COARSE SAND (A-2-6)
																Boring Terminated at Elevation 166.1 ft IN MEDIUM DENSE CLAYEY SAND (COASTAL PLAIN)

NCDOT BORE DOUBLE WALL 66 BORING LOGS.GPJ NC\_DOT.GDT 4/17/20



# GEOTECHNICAL BORING REPORT

## BORE LOG

WBS 47532		TIP I-5878		COUNTY HARNETT		GEOLOGIST Blonshine, E.G.								
SITE DESCRIPTION BRIDGE NO. 66 WALL - 76.5' RT OF -L- STA 969+40							GROUND WTR (ft)							
BORING NO. EB2-A		STATION 11+73		OFFSET 33 ft RT		ALIGNMENT N/A								
COLLAR ELEV. 187.9 ft		TOTAL DEPTH 100.3 ft		NORTHING 561,247		EASTING 2,118,172								
DRILL RIGHAMMER EFF./DATE SME9563 CME-550X 88% 08/10/2017			DRILL METHOD Mud Rotary			HAMMER TYPE Automatic								
DRILLER White, T.J.		START DATE 08/29/17		COMP. DATE 08/29/17		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				
190	187.9	0.0	4	6	4							M	GROUND SURFACE	0.0
185	183.6	4.3	3	4	7								COASTAL PLAIN TAN, SILTY SAND (MIDDENDORF FORMATION) GRAY AND TAN, SANDY CLAY	2.5
180	180.1	7.8	6	14	11							Sat.	TAN, CLAYEY SAND	6.0
175	174.1	13.8	2	2	3							W	GRAY AND TAN, SILTY CLAY	10.5
170	169.1	18.8	4	6	8							Sat.	GRAY, CLAYEY SAND	16.5
165	164.1	23.8	8	13	14							Sat.	COASTAL PLAIN GRAY SILTY CLAY (CAPE FEAR FORMATION) GRAY, CLAYEY SAND GRAY, SILTY CLAY	24.0 24.5 26.5
160	159.1	28.8	7	10	16							W	GRAY, SILTY SAND	31.5
155	154.1	33.8	6	10	13							SS-29 17%	GRAY, CLAYEY SAND	36.5
150	149.1	38.8	6	6	8							Sat.	GRAY, SANDY CLAY	41.5
145	144.1	43.8	9	11	15							W	GRAY AND GREEN, CLAYEY SAND	51.5
140	139.1	48.8	7	10	13							W	GRAY AND RED, SANDY CLAY	61.5
135	134.1	53.8	5	6	8							Sat.	GRAY AND GREEN, CLAYEY SAND	66.5
130	129.1	58.8	5	7	9							Sat.		
125	124.1	63.8	15	20	24							W		
120	119.1	68.8	8	8	8							Sat.		
115	114.1	73.8	17	16	26							Sat.		
110														

NCDOT BORE DOUBLE WALL 66 BORING LOGS.GPJ NC\_DOT.GDT 4/17/20

WBS 47532		TIP I-5878		COUNTY HARNETT		GEOLOGIST Blonshine, E.G.								
SITE DESCRIPTION BRIDGE NO. 66 WALL - 76.5' RT OF -L- STA 969+40							GROUND WTR (ft)							
BORING NO. EB2-A		STATION 11+73		OFFSET 33 ft RT		ALIGNMENT N/A								
COLLAR ELEV. 187.9 ft		TOTAL DEPTH 100.3 ft		NORTHING 561,247		EASTING 2,118,172								
DRILL RIGHAMMER EFF./DATE SME9563 CME-550X 88% 08/10/2017			DRILL METHOD Mud Rotary			HAMMER TYPE Automatic								
DRILLER White, T.J.		START DATE 08/29/17		COMP. DATE 08/29/17		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				
110	109.1	78.8	9	9	10								Match Line	
105	104.1	83.8	14	20	21							Sat.	GRAY AND GREEN, CLAYEY SAND (continued)	81.5
100	99.1	88.8	15	17	23							W	BROWN, GRAY AND GREEN, SANDY CLAY	
95	94.1	93.8	17	21	30							W		
90	89.1	98.8	19	23	23							Sat.	GRAY AND GREEN, CLAYEY SAND	91.5
												Sat.	Boring Terminated at Elevation 87.6 ft IN DENSE CLAYEY SAND (COASTAL PLAIN)	100.3



# GEOTECHNICAL BORING REPORT

## BORE LOG

WBS 47532		TIP I-5878		COUNTY HARNETT		GEOLOGIST P. Gunnell									
SITE DESCRIPTION BRIDGE NO. 66 WALL - 76.5' RT OF -L- STA 969+40							GROUND WTR (ft)								
BORING NO. WALL_RT_6		STATION 12+73		OFFSET 2 ft RT		ALIGNMENT N/A									
COLLAR ELEV. 185.9 ft		TOTAL DEPTH 10.0 ft		NORTHING 561,350		EASTING 2,118,189									
DRILL RIG/HAMMER EFF./DATE SME6573 CME-550X 89% 05/03/2019				DRILL METHOD Mud Rotary		HAMMER TYPE Automatic									
DRILLER J. Marlowe		START DATE 01/22/20		COMP. DATE 01/22/20		SURFACE WATER DEPTH N/A									
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)	
190															
185	185.9	0.0	3	2	2									185.9	0.0
180	182.4	3.5	2	9	9									182.9	3.0
	177.4	8.5	3	1	2									175.9	10.0

NCDOT BORE DOUBLE WALL 66 BORING LOGS.GPJ NC\_DOT.GDT 4/17/20