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8

REFERENCE

CONTENTS

SHEET NO. **DESCRIPTION** TITLE SHEET LEGEND (SOIL & ROCK) SITE PLAN PROFILE 5-9 CROSS SECTION(S) 10-13 BORE LOGS LABORATORY TESTING SUMMARY

SITE PHOTOGRAPH

STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION **DIVISION OF HIGHWAYS** GEOTECHNICAL ENGINEERING UNIT

STRUCTURE SUBSURFACE INVESTIGATION

MOORE COUNTY _ PROJECT DESCRIPTION <u>REPLACE BRIDGE 620119 ON</u> SR 1251 (BRINKLEY ROAD) OVER WADS CREEK

STATE PROJECT REFERENCE NO. 15 BP8.R011

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 1919) 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 NDICATED 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 WARRANTE OR GLARANTEE 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 RUSSEK, S. C.

TURNAGE, J. R.

MARPLES, Z. J.

INVESTIGATED BY <u>TERRACON</u> CONSULTANTS

KENNEDY, E. J. DRAWN BY

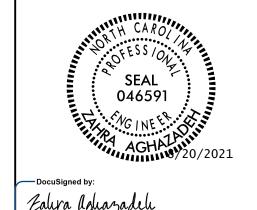
ALEXANDER, M. J. CHECKED BY

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AUGUST 2021 DATE



2401 BRENTWOOD ROAD, SUITE 107 RALEIGH, NORTH CAROLINA 27604 NC REGISTERED ENGINEERING FIRM: F-0869 NC REGISTERED GEOLOGIC FIRM: C-367



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> **DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

DATE

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PROJECT REFERENCE NO.

BP8.RO11

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SHEET NO.

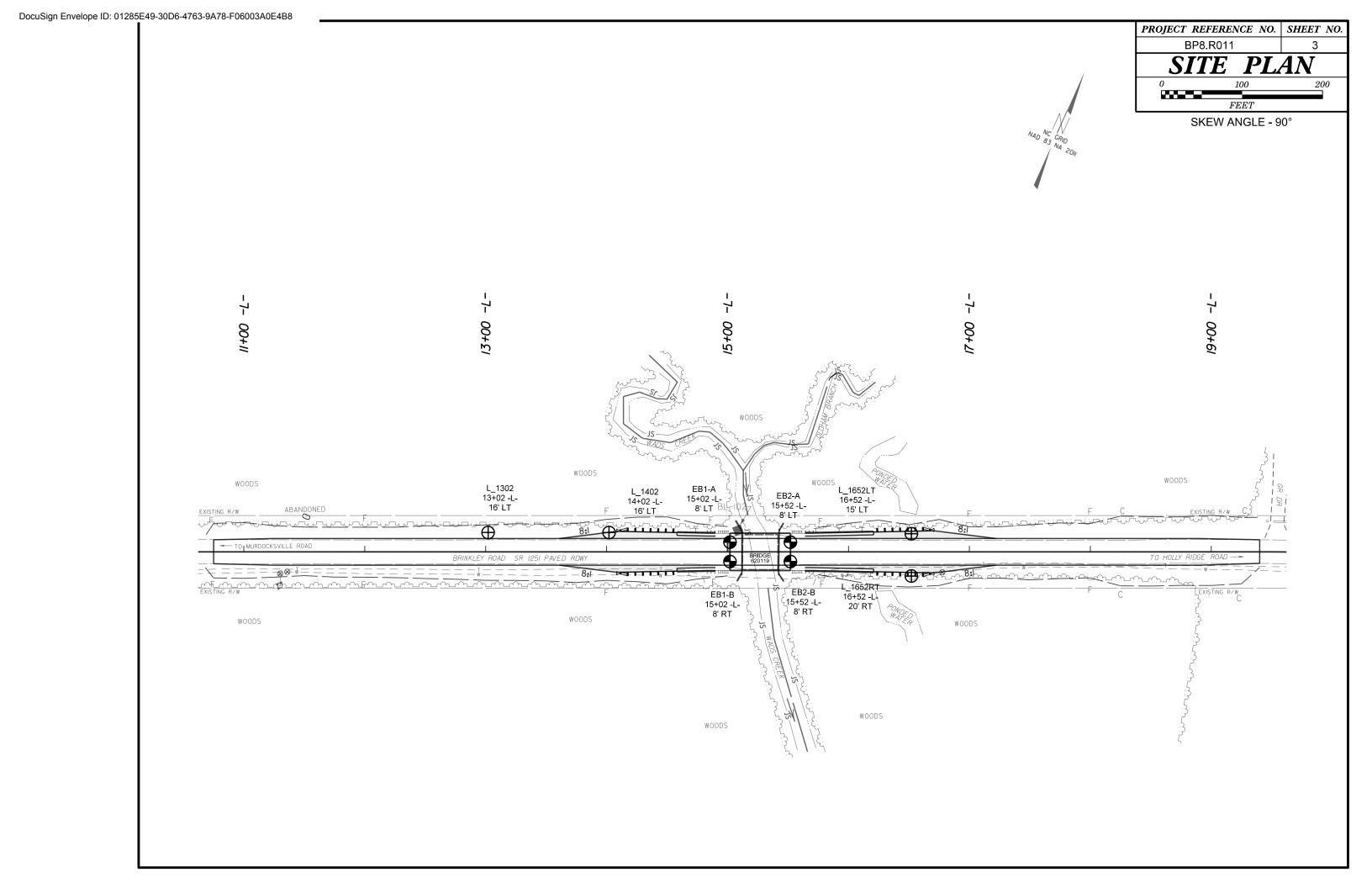
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

GEOTECHNICAL ENGINEERING UNIT

SUBSURFACE INVESTIGATION

SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

SOIL DESCRIPTION	GRADATION	ROCK DESCRIPTION	TERMS AND DEFINITIONS
SOIL IS CONSIDERED UNCONSOLIDATED, SEMI-CONSOLIDATED, OR WEATHERED EARTH MATERIALS THAT CAN BE PENETRATED WITH A CONTINUOUS FLIGHT POWER AUGER AND YIELD LESS THAN 100 BLOWS PER FOOT	WELL GRADED - INDICATES A GOOD REPRESENTATION OF PARTICLE SIZES FROM FINE TO COARSE. UNIFORMLY GRADED - INDICATES THAT SOIL PARTICLES ARE ALL APPROXIMATELY THE SAME SIZE.	HARD ROCK IS NON-COASTAL PLAIN MATERIAL THAT WOULD YIELD SPT REFUSAL IF TESTED. AN INFERRED ROCK LINE INDICATES THE LEVEL AT WHICH NON-COASTAL PLAIN MATERIAL WOULD YIELD SPT REFUSAL.	ALLUVIUM (ALLUV.) - SOILS THAT HAVE BEEN TRANSPORTED BY WATER.
ACCORDING TO THE STANDARD PENETRATION TEST (AASHTO T 206, ASTM D1586), SOIL CLASSIFICATION	GAP-GRADED - INDICATES A MIXTURE OF UNIFORM PARTICLE SIZES OF TWO OR MORE SIZES.	SPT REFUSAL IS PENETRATION BY A SPLIT SPOON SAMPLER EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS IN NON-COASTAL PLAIN MATERIAL, THE TRANSITION BETWEEN SOIL AND ROCK IS OFTEN	AQUIFER - A WATER BEARING FORMATION OR STRATA.
IS BASED ON THE AASHTO SYSTEM. BASIC DESCRIPTIONS GENERALLY INCLUDE THE FOLLOWING: CONSISTENCY, COLOR, TEXTURE, MOISTURE, AASHTO CLASSIFICATION, AND OTHER PERTINENT FACTORS SUCH	ANGULARITY OF GRAINS	REPRESENTED BY A ZONE OF WEATHERED ROCK.	ARENACEOUS - APPLIED TO ROCKS THAT HAVE BEEN DERIVED FROM SAND OR THAT CONTAIN SAND.
AS MINERALOGICAL COMPOSITION, ANGULARITY, STRUCTURE, PLASTICITY, ETC. FOR EXAMPLE, VERY STIFF, GRAY, SILTY CLAY, MOIST WITH INTERBEDDED FINE SAND LAYERS, HIGHLY PLASTIC, A-7-6	THE ANGULARITY OR ROUNDNESS OF SOIL GRAINS IS DESIGNATED BY THE TERMS:	ROCK MATERIALS ARE TYPICALLY DIVIDED AS FOLLOWS:	ARGILLACEOUS - APPLIED TO ALL ROCKS OR SUBSTANCES COMPOSED OF CLAY MINERALS, OR HAVING A NOTABLE PROPORTION OF CLAY IN THEIR COMPOSITION, SUCH AS SHALE, SLATE, ETC.
SOIL LEGEND AND AASHTO CLASSIFICATION	ANGULAR, SUBANGULAR, SUBROUNDED, OR ROUNDED.	WEATHERED VILON NON-COASTAL PLAIN MATERIAL THAT WOULD YIELD SPT N VALUES > ROCK (WR) 100 BLOWS PER FOOT IF TESTED.	ARTESIAN - GROUND WATER THAT IS UNDER SUFFICIENT PRESSURE TO RISE ABOVE THE LEVEL AT
CENERAL GRANULAR MATERIALS SILT-CLAY MATERIALS ORGANIC MATERIALS	MINERALOGICAL COMPOSITION	CRYSTALLINE CRYSTALLINE OF THE TO COARSE GRAIN IGNEOUS AND METAMORPHIC ROCK THAT	WHICH IT IS ENCOUNTERED, BUT WHICH DOES NOT NECESSARILY RISE TO OR ABOVE THE GROUND SURFACE.
CLASS. (≤ 35% PASSING *2000) (> 35% PASSING *2000)	MINERAL NAMES SUCH AS QUARTZ, FELDSPAR, MICA, TALC, KAOLIN, ETC. ARE USED IN DESCRIPTIONS WHEN THEY ARE CONSIDERED OF SIGNIFICANCE.	ROCK (CR) WOOLD YIELD SPI REFUSAL IF TESTED, ROCK TIPE INCLUDES GRANTE, GNEISS, GABBRO, SCHIST, ETC.	CALCAREOUS (CALC.) - SOILS THAT CONTAIN APPRECIABLE AMOUNTS OF CALCIUM CARBONATE.
GROUP A-1 A-3 A-2 A-4 A-5 A-6 A-7 A-1, A-2 A-4, A-5 CLASS. A-1-a A-1-b A-2-4 A-2-5 A-2-6 A-2-7 A-2-6 A-2-7 A-1, A-2 A-4, A-5 A-6 A-7	COMPRESSIBILITY	NON-CRYSTALLINE FINE TO COARSE GRAIN METAMORPHIC AND NON-COASTAL PLAIN SEDIMENTARY ROCK THAT WOULD YEILD SPT REFUSAL IF TESTED.	COLLUVIUM - ROCK FRAGMENTS MIXED WITH SOIL DEPOSITED BY GRAVITY ON SLOPE OR AT BOTTOM
SYMBOL 000000000000000000000000000000000000	SLIGHTLY COMPRESSIBLE LL < 31	ROCK TYPE INCLUDES PHYLLITE, SLATE, SANDSTONE, ETC.	OF SLOPE.
7. PASSING	MODERATELY COMPRESSIBLE LL = 31 - 50 HIGHLY COMPRESSIBLE LL > 50	COASTAL PLAIN SEDIMENTARY ROCK COASTAL PLAIN SEDIMENTS CEMENTED INTO ROCK, BUT MAY NOT YIELD SPI REFUSAL. ROCK TYPE INCLUDES LIMESTONE, SANDSTONE, CEMENTED	CORE RECOVERY (REC.) - TOTAL LENGTH OF ALL MATERIAL RECOVERED IN THE CORE BARREL DIVIDED BY TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE.
#10 50 MX GRANULAR SILI-	PERCENTAGE OF MATERIAL	CP) SHELL BEDS, ETC. WEATHERING	DIKE - A TABULAR BODY OF IGNEOUS ROCK THAT CUTS ACROSS THE STRUCTURE OF ADJACENT
*40 30 MX 50 MX 51 MN PEAT SOILS PEAT ** *200 15 MX 25 MX 10 MX 35 MX 35 MX 35 MX 35 MX 36 MN 36 MN 36 MN 36 MN 36 MN 36 MN	GRANULAR SILT - CLAY ORGANIC MATERIAL SOILS SOILS OTHER MATERIAL	FRESH ROCK FRESH, CRYSTALS BRIGHT, FEW JOINTS MAY SHOW SLIGHT STAINING. ROCK RINGS UNDER	ROCKS OR CUTS MASSIVE ROCK.
MATERIAL	TRACE OF ORGANIC MATTER 2 - 3% 3 - 5% TRACE 1 - 10%	HAMMER IF CRYSTALLINE.	DIP - THE ANGLE AT WHICH A STRATUM OR ANY PLANAR FEATURE IS INCLINED FROM THE HORIZONTAL.
PASSING *40 LL - 40 MX 41 MN 50ILS WITH	LITTLE ORGANIC MATTER 3 - 5% 5 - 12% LITTLE 10 - 20% MODERATELY ORGANIC 5 - 10% 12 - 20% SOME 20 - 35%	VERY SLIGHT ROCK GENERALLY FRESH, JOINTS STAINED, SOME JOINTS MAY SHOW THIN CLAY COATINGS IF OPEN, (V SLI.) CRYSTALS ON A BROKEN SPECIMEN FACE SHINE BRIGHTLY, ROCK RINGS UNDER HAMMER BLOWS IF	DIP DIRECTION (DIP AZIMUTH) - THE DIRECTION OR BEARING OF THE HORIZONTAL TRACE OF THE
PI 6 MX NP 10 MX 10 MX 11 MN 11 MN 10 MX 10 MX 11 MN 11 MN LITLE UR HIGHLY	HIGHLY ORGANIC > 10% > 20% HIGHLY 35% AND ABOVE	OF A CRYSTALLINE NATURE.	LINE OF DIP, MEASURED CLOCKWISE FROM NORTH.
GROUP INDEX 8 8 8 8 4 4 MX 8 MX 12 MX 15 MX NO MX ORGANIC ORGANIC ORGANIC	GROUND WATER	SLIGHT ROCK GENERALLY FRESH, JOINTS STAINED AND DISCOLORATION EXTENDS INTO ROCK UP TO	FAULT - A FRACTURE OR FRACTURE ZONE ALONG WHICH THERE HAS BEEN DISPLACEMENT OF THE SIDES RELATIVE TO ONE ANOTHER PARALLEL TO THE FRACTURE.
USUAL TYPES STONE FRACS. OF MAIDE GRAVEL AND FINE SILTY OR CLAYEY SILTY CLAYEY MATTER	✓ WATER LEVEL IN BORE HOLE IMMEDIATELY AFTER DRILLING	(SLI,) 1 INCH. OPEN JOINTS MAY CONTAIN CLAY. IN GRANITOID ROCKS SOME OCCASIONAL FELDSPAR CRYSTALS ARE DULL AND DISCOLORED. CRYSTALLINE ROCKS RING UNDER HAMMER BLOWS.	FISSILE - A PROPERTY OF SPLITTING ALONG CLOSELY SPACED PARALLEL PLANES.
MATERIALS SAND SAND GRAVEL AND SAND SOILS SOILS	STATIC WATER LEVEL AFTER 24 HOURS	MODERATE SIGNIFICANT PORTIONS OF ROCK SHOW DISCOLORATION AND WEATHERING EFFECTS. IN	FLOAT - ROCK FRAGMENTS ON SURFACE NEAR THEIR ORIGINAL POSITION AND DISLODGED FROM
GEN. RATING EXCELLENT TO GOOD FAIR TO POOR POOR UNSUITABLE	<u> </u>	(MOD.) GRANITOID ROCKS, MOST FELDSPARS ARE DULL AND DISCOLORED, SOME SHOW CLAY. ROCK HAS DULL SOUND UNDER HAMMER BLOWS AND SHOWS SIGNIFICANT LOSS OF STRENGTH AS COMPARED	PARENT MATERIAL.
AS SUBURADE PUUR	SPRING OR SEEP	WITH FRESH ROCK.	FLOOD PLAIN (FP) - LAND BORDERING A STREAM, BUILT OF SEDIMENTS DEPOSITED BY THE STREAM. FORMATION (FM.) - A MAPPABLE GEOLOGIC UNIT THAT CAN BE RECOGNIZED AND TRACED IN THE
PLOF A-7-5 SUBGROUP IS ≤ LL - 30; PLOF A-7-6 SUBGROUP IS > LL - 30 CONSISTENCY OR DENSENESS	MISCELLANEOUS SYMBOLS	MODERATELY ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. IN GRANITOID ROCKS, ALL FELDSPARS DULL SEVERE AND DISCOLORED AND A MAJORITY SHOW KAOLINIZATION. ROCK SHOWS SEVERE LOSS OF STRENGTH	FIELD.
COMPACTNIESS OR RANGE OF STANDARD RANGE OF UNCONFINED	□ 05/205	(MOD. SEV.) AND CAN BE EXCAVATED WITH A GEOLOGIST'S PICK. ROCK GIVES "CLUNK" SOUND WHEN STRUCK.	JOINT - FRACTURE IN ROCK ALONG WHICH NO APPRECIABLE MOVEMENT HAS OCCURRED.
PRIMARY SOIL TYPE COMPACINESS OR CONSISTENCY PENETRATION RESISTENCE COMPRESSIVE STRENGTH (TONS/FT ²)	ROADWAY EMBANKMENT (RE) 25/025 DIP & DIP DIRECTION OF ROCK STRUCTURES	IF TESTED, WOULD YIELD SPT REFUSAL SEVERE ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. ROCK FABRIC CLEAR AND EVIDENT BUT	LEDGE - A SHELF-LIKE RIDGE OR PROJECTION OF ROCK WHOSE THICKNESS IS SMALL COMPARED TO ITS LATERAL EXTENT.
VERY LOOSE (4	SCOTI SYMBOL STORY TEST BODING SLOPE INDICATOR	(SEV.) REDUCED IN STRENGTH TO STRONG SOIL. IN GRANITOID ROCKS ALL FELDSPARS ARE KAOLINIZED	LENS - A BODY OF SOIL OR ROCK THAT THINS OUT IN ONE OR MORE DIRECTIONS.
GENERALLY LOOSE 4 TO 10 GRANULAR MEDIUM DENSE 10 TO 30 N/A	SUIL STMBOL TOWN TEST BURING INSTALLATION	TO SOME EXTENT. SOME FRAGMENTS OF STRONG ROCK USUALLY REMAIN. IF TESTED, WOULD YIELD SPT N VALUES > 100 BPF	MOTTLED (MOT.) - IRREGULARLY MARKED WITH SPOTS OF DIFFERENT COLORS, MOTTLING IN SOILS
MATERIAL DENSE 30 TO 50	ARTIFICIAL FILL (AF) OTHER THAN ROADWAY EMBANKMENT AUGER BORING CONE PENETROMETER	VERY ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. ROCK FABRIC ELEMENTS ARE DISCERNIBLE	USUALLY INDICATES POOR AERATION AND LACK OF GOOD DRAINAGE.
VERT DENSE 2 200		SEVERE BUT MASS IS EFFECTIVELY REDUCED TO SOIL STATUS, WITH ONLY FRAGMENTS OF STRONG ROCK (V SEV.) REMAINING, SAPROLITE IS AN EXAMPLE OF ROCK WEATHERED TO A DEGREE THAT ONLY MINOR	PERCHED WATER - WATER MAINTAINED ABOVE THE NORMAL GROUND WATER LEVEL BY THE PRESENCE OF AN INTERVENING IMPERVIOUS STRATUM.
VERY SOFT < 2 < 0.25 GENERALLY SOFT 2 TO 4 0.25 TO 0.5	- INFERRED SOIL BOUNDARY CORE BORING SOUNDING ROD	VESTIGES OF ORIGINAL ROCK FABRIC REMAIN. <u>IF TESTED, WOULD YIELD SPT N VALUES < 100 BPF</u>	RESIDUAL (RES.) SOIL - SOIL FORMED IN PLACE BY THE WEATHERING OF ROCK.
SILT-CLAY MEDIUM STIFF 4 TO 8 0.5 TO 1.0 MATERIAL STIFF 8 TO 15 1 TO 2	## MONITORING WELL TEST BORING WITH CORE	COMPLETE ROCK REDUCED TO SOIL. ROCK FABRIC NOT DISCERNIBLE, OR DISCERNIBLE ONLY IN SMALL AND	ROCK QUALITY DESIGNATION (ROD) - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF
(COHESIVE) VERY STIFF 15 TO 30 2 TO 4	TTTT ALLUVIAL SOIL BOUNDARY A PIEZOMETER NSTALLATION SPT N-VALUE	SCATTERED CONCENTRATIONS. QUARTZ MAY BE PRESENT AS DIKES OR STRINGERS. SAPROLITE IS ALSO AN EXAMPLE.	ROCK SEGMENTS EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE.
HARD > 30 > 4		ROCK HARDNESS	SAPROLITE (SAP.) - RESIDUAL SOIL THAT RETAINS THE RELIC STRUCTURE OR FABRIC OF THE PARENT
TEXTURE OR GRAIN SIZE	RECOMMENDATION SYMBOLS	VERY HARD CANNOT BE SCRATCHED BY KNIFE OR SHARP PICK, BREAKING OF HAND SPECIMENS REQUIRES	ROCK.
U.S. STD. SIEVE SIZE 4 10 40 60 200 270 OPENING (MM) 4.76 2.00 0.42 0.25 0.075 0.053	UNDERCUT UNCLASSIFIED EXCAVATION - UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE	SEVERAL HARD BLOWS OF THE GEOLOGIST'S PICK. HARD CAN BE SCRATCHED BY KNIFE OR PICK ONLY WITH DIFFICULTY. HARD HAMMER BLOWS REQUIRED	SILL - AN INTRUSIVE BODY OF IGNEOUS ROCK OF APPROXIMATELY UNIFORM THICKNESS AND RELATIVELY THIN COMPARED WITH ITS LATERAL EXTENT, THAT HAS BEEN EMPLACED PARALLEL TO
COARSE FINE	SHALLOW UNCLASSIFIED EXCAVATION - USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL	TO DETACH HAND SPECIMEN.	THE BEDDING OR SCHISTOSITY OF THE INTRUDED ROCKS.
BOULDER	ABBRE VIATIONS	MODERATELY CAN BE SCRATCHED BY KNIFE OR PICK, GOUGES OR GROOVES TO 0.25 INCHES DEEP CAN BE	SLICKENSIDE - POLISHED AND STRIATED SURFACE THAT RESULTS FROM FRICTION ALONG A FAULT OR SLIP PLANE.
GRAIN MM 305 75 2.0 0.25 0.05 0.005	AR - AUGER REFUSAL MED MEDIUM VST - VANE SHEAR TEST	HARD EXCAVATED BY HARD BLOW OF A GEOLOGIST'S PICK. HAND SPECIMENS CAN BE DETACHED BY MODERATE BLOWS.	STANDARD PENETRATION TEST (PENETRATION RESISTANCE) (SPT) - NUMBER OF BLOWS (N OR BPF) OF
SIZE IN. 12 3	BT - BORING TERMINATED MICA MICACEOUS WEA WEATHERED	MEDIUM CAN BE GROOVED OR GOUGED 0.05 INCHES DEEP BY FIRM PRESSURE OF KNIFE OR PICK POINT.	A 140 LB. HAMMER FALLING 30 INCHES REQUIRED TO PRODUCE A PENETRATION OF 1 FOOT INTO SOIL
SOIL MOISTURE - CORRELATION OF TERMS	CL CLAY MOD MODERATELY 7 - UNIT WEIGHT CPT - CONE PENETRATION TEST NP - NON PLASTIC 7 - DRY UNIT WEIGHT	HARD CAN BE EXCAVATED IN SMALL CHIPS TO PEICES 1 INCH MAXIMUM SIZE BY HARD BLOWS OF THE POINT OF A GEOLOGIST'S PICK.	WITH A 2 INCH OUTSIDE DIAMETER SPLIT SPOON SAMPLER, SPT REFUSAL IS PENETRATION EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS.
SOIL MOISTURE SCALE FIELD MOISTURE GUIDE FOR FIELD MOISTURE DESCRIPTION	CSE COARSE ORG ORGANIC	SOFT CAN BE GROVED OR GOUGED READILY BY KNIFE OR PICK, CAN BE EXCAVATED IN FRAGMENTS	STRATA CORE RECOVERY (SREC.) - TOTAL LENGTH OF STRATA MATERIAL RECOVERED DIVIDED BY
(HITERBERG LIMITS) DESCRIPTION	DMT - DILATOMETER TEST PMT - PRESSUREMETER TEST SAMPLE ABBREVIATIONS DPT - DYNAMIC PENETRATION TEST SAP SAPROLITIC S - BULK	FROM CHIPS TO SEVERAL INCHES IN SIZE BY MODERATE BLOWS OF A PICK POINT. SMALL, THIN PIECES CAN BE BROKEN BY FINGER PRESSURE.	TOTAL LENGTH OF STRATUM AND EXPRESSED AS A PERCENTAGE. STRATA ROCK QUALITY DESIGNATION (SRQD) - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL
- SATURATED - USUALLY LIQUID; VERY WET, USUALLY (SAT.) FROM BELOW THE GROUND WATER TABLE	e - VOID RATIO SD SAND, SANDY SS - SPLIT SPOON F - FINE SL SILT, SILTY ST - SHELBY TUBE	VERY CAN BE CARVED WITH KNIFE. CAN BE EXCAVATED READILY WITH POINT OF PICK. PIECES 1 INCH	LENGTH OF ROCK SEGMENTS WITHIN A STRATUM EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY
LL _ LIQUID LIMIT	FOSS FOSSILIFEROUS SLI SLIGHTLY RS - ROCK	SOFT OR MORE IN THICKNESS CAN BE BROKEN BY FINGER PRESSURE. CAN BE SCRATCHED READILY BY FINGERNAIL.	THE TOTAL LENGTH OF STRATA AND EXPRESSED AS A PERCENTAGE. TOPSOIL (TS.) - SURFACE SOILS USUALLY CONTAINING ORGANIC MATTER.
PLASTIC SEMISOLID; REQUIRES DRYING TO	FRAC FRACTURED, FRACTURES TCR - TRICONE REFUSAL RT - RECOMPACTED TRIAXIAL FRAGS FRAGMENTS W - MOISTURE CONTENT CBR - CALIFORNIA BEARING	FRACTURE SPACING BEDDING	
(PI) PL PLASTIC LIMIT	HI HIGHLY V - VERY RATIO	TERM SPACING TERM THICKNESS	BENCH MARK: BMI, RR SPICK IN BASE OF 15" WILLOW TREE, STA. 15+11.45 -L 81.43" RT
- MOIST - (M) SOLID; AT OR NEAR OPTIMUM MOISTURE	EQUIPMENT USED ON SUBJECT PROJECT	VERY WIDE MORE THAN 10 FEET VERY THICKLY BEDDED 4 FEET WIDE 3 TO 10 FEET THICKLY BEDDED 1.5 - 4 FEET	N: 561,028.2403, E: ,1866,673.6940
OM OPTIMUM MOISTURE SL SHRINKAGE LIMIT	DRILL UNITS: ADVANCING TOOLS: HAMMER TYPE:	MODERATELY CLOSE 1 TO 3 FEET THINLY BEDDED 0.16 - 1.5 FEET	NOTES:
- DRY - (D) REQUIRES ADDITIONAL WATER TO	CME-45C CLAY BITS X AUTOMATIC MANUAL	CLOSE 0.16 TO 1 FOOT VERY THINLY BEDDED 0.03 - 0.16 FEET VERY CLOSE LESS THAN 0.16 FEET THICKLY LAMINATED 0.008 - 0.03 FEET	FIAD - FILLED IMMEDIATELY AFTER DRILLING
- DRY - (D) ATTAIN OPTIMUM MOISTURE	CME-55 6° CONTINUOUS FLIGHT AUGER CORE SIZE:	THINLY LAMINATED < 0.008 FEET	THE THE PROPERTY OF THE PROPER
PLASTICITY	X 8* HOLLOW AUGERS	INDURATION	
PLASTICITY INDEX (PI) DRY STRENGTH	CME-550 HARD FACED FINGER BITS	FOR SEDIMENTARY ROCKS, INDURATION IS THE HARDENING OF MATERIAL BY CEMENTING, HEAT, PRESSURE, ETC.	
NON PLASTIC 0-5 VERY LOW SLIGHTLY PLASTIC 6-15 SLIGHT	VANE SHEAR TEST TUNG,-CARBIDE INSERTS HAND TOOLS:	FRIABLE RUBBING WITH FINGER FREES NUMEROUS GRAINS: GENTLE BLOW BY HAMMER DISINTEGRATES SAMPLE.	
MODERATELY PLASTIC 16-25 MEDIUM	CASING W/ ADVANCER POST HOLE DIGGER	MODERATELY INDURATED GRAINS CAN BE SEPARATED FROM SAMPLE WITH STEEL PROBE;	
HIGHLY PLASTIC 26 OR MORE HIGH	PORTABLE HOIST TRICONE STEEL TEETH HAND AUGER	BREAKS EASILY WHEN HIT WITH HAMMER.	
COLOR	X DIEDRICH D-50 TRICONE TUNG,-CARB. SOUNDING ROD	INDURATED GRAINS ARE DIFFICULT TO SEPARATE WITH STEEL PROBE; DIFFICULT TO BREAK WITH HAMMER.	
DESCRIPTIONS MAY INCLUDE COLOR OR COLOR COMBINATIONS (TAN, RED, YELLOW-BROWN, BLUE-GRAY).	CORE BIT VANE SHEAR TEST	SHARP HAMMER RIOWS REQUIRED TO RREAK SAMPLE.	
MODIFIERS SUCH AS LIGHT, DARK, STREAKED, ETC. ARE USED TO DESCRIBE APPEARANCE.		EXTREMELY INDURATED SAMPLE BREAKS ACROSS GRAINS.	DATE: 8-15-14



			BORE LOG			1									
WBS BP8.R011.1		<u> </u>	DUNTY MOORE	GEOLOGIST RUSSEK, S.C.	T	WBS BP8.R0			TIP BP8.R011	COUNTY MOOR			GEOLO	DGIST RUSSEK, S.O	
SITE DESCRIPTION	Bridge 620119	on SR 1251 (Brinkley Road)	over Wads Creek		GROUND WTR (ft)	SITE DESCRIF	TION Brid	lge 620119	on SR 1251 (Brinkley R	<u> </u>					GROUND WTR (ft
BORING NO. EB1-A		STATION 15+02	OFFSET 8 ft LT	ALIGNMENT -L-	0 HR. Caved	BORING NO.	EB1-B		STATION 15+02	OFFSET	8 ft RT		ALIGN	MENT -L-	0 HR. Caved
COLLAR ELEV. 363	.2 ft	TOTAL DEPTH 28.9 ft	NORTHING 560,677	EASTING 1,865,545	24 HR. FIAD	COLLAR ELEV	/. 363.1 ft		TOTAL DEPTH 23.9 f	t NORTHI	NG 560,	662	EASTI	NG 1,865,552	24 HR . FIAD
DRILL RIG/HAMMER EFF.	/DATE TER373	DIEDRICH D-50 95% 02/06/202	1 DRILL METHOD	H.S. Augers HAMN	MER TYPE Automatic	DRILL RIG/HAMN	IER EFF./DAT	TE TER373	DIEDRICH D-50 95% 02/0	5/2021	DRILL	METHO	D H.S. Augers	HA	AMMER TYPE Automatic
DRILLER TURNAGE	•	START DATE 05/24/21	COMP. DATE 05/24/21	SURFACE WATER DEPTH N	J/A	DRILLER TU			START DATE 05/24/2	COMP. D	ATE 05	5/24/21	SURFA	CE WATER DEPTH	N/A
	BLOW COUNT 0.5ft 0.5ft 0.5ft	_	FOOT SAMP. 75 100 NO. MOI	SOIL AND ROCK DES	SCRIPTION DEPTH (ft)	ELEV DRIVE ELEV (ft) (ft)	OEPTH BLO (ft) 0.5ft	OW COUNT		PER FOOT 50 75 10	SAMF NO.	1 /	0 G	SOIL AND ROCK [DESCRIPTION
365						365									
362.2 1.0		<u> </u>		363.2 GROUND SURI	T 15	362.1	1.0			T			363.1	GROUND SU PAVEMI	ENT 1
360	4 3 3	6		0.8 ASPHALT, 0.	NKMENT	360	4	4 3	³			W		0.7' ASPHALT ROADWAY EME	, 0.6' ABC
359.3 3.9	1 1 2		w	LOOSE, TAN, WET, CLA COARSE SAND (A-2-6), T			2	3 1	0			w		LOOSE, TAN, RED, W TO COARSE SAND	(A-2-6), SOME
	WOH 1 1	$ \begin{vmatrix} 1 & \cdots & 1 & \cdots & 1 \\ \bullet & \cdots & \bullet & 1 & \cdots & \bullet \end{vmatrix}$	w	ALLUVIAL SOFT, GRAY, TAN, WET		357.1	6.0 WOF	WOH WO	ਰਜ <mark>ਨ</mark> ਿੱ∵ : : : : : :		.	w	356.8	GRAVI ALLUV I	
355 354.3 8.9	5 17 22	_ 	··· · · · · w	353.8 CLAY (A-6), TRACE (ÓRGANICS 9.4	355 354.3	8.8	10 8			SS-1	1 8%	354.6	MEDIUM DENSE, TA CLAYEY FINE TO COA	IN, GRAY, WET, RSE SAND (A-2-6)
		🖚 ১ .		TRIASSIC RESILO DENSE, TAN, GRAY, WET	T OLANEN FINE	‡			1 • • • • • • • • • • • • • • • •		: -		352.6	FRACE GRAVEL, 0.3' S FROM A DEPTH OF	SILTY CLAY LAYER .— 10
350 349.3 13.9				TO COARSE SAND (A-2-6) FRAGMENT	18	350 349.3	13.8							FEET VERY SOFT, GRAY.	Г <u></u>
+ 10	00/0.3		100/0.3	351.2 DENSE, TAN, GRAY, WEI TO COARSE SAND (A-2-C FRAGMENT WEATHERED F (MAROON, TRIASSIC)	ROCK SILTSTONE)		100/0.	.3		100/0	.3		352.6	COARSE SANDY CL	AY (A-6), TRACE
345						345								TRIASSIC RE	SIDUAL
344.3 T 18.9 I	00/0.2		100/0.2			344.3 1	18.8 100/0.	2		100/0	.2			MEDIUM DENSE, GRAY FINE TO COARSE SAN	ND (A-2-6), TRACE
				2/ 2/ 2/ 2/							:			ROCK FRAG WEATHERE	D ROCK
340 339.3 23.9	00/0.3					340 339.3	23.8	1		60/0	1		339.3	(MAROON, TRIASS	
	00/0.5		100/0.3 T				00/0.	4		00/0	.,			(MAROON, TRIASS	IC SILTSTONE)
335 334.3 28.9				334.3	28.9									Boring Terminated Penetration Test Refusa	al at Elevation 339.2
	60/0.0		60/0.0	Boring Terminated with Penetration Test Refusal at	th Standard									t IN TRIASSIC NON-CF (SILTST)	
				ft ON TRIASSIC NON-C	RYSTALLINE	‡									
				- ROOK (GILTOT)	ONE)	‡									
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COLLAR ELEV. 363.2 ft TOTAL DEPTH 24.1 ft NORTHIND DRILL RIG/HAMMER EFF./DATE TER373 DIEDRICH D-50 95% 02/06/2021 DRILLER TURNAGE, J.R. START DATE 05/24/21 COMP. E	GR GR SET 8 ft LT ALIGNMENT -L- 0 I FHING 560,697 EASTING 1,865,591 24 I	GROUND WTR (ft) D HR. 16.5	WBS BP8.R011.1 SITE DESCRIPTION Brid BORING NO. EB2-B COLLAR ELEV. 363.2 f	dge 620119 on SR 1251 (Brinkley Road) ov STATION 15+52	OFFSET 8 ft RT	GEOLOGIST RUSSEK, S.C. GROUND WTR (fit ALIGNMENT -L- 0 HR. Caver
BORING NO. EB2-A STATION 15+52 OFFSET COLLAR ELEV. 363.2 ft TOTAL DEPTH 24.1 ft NORTHIN DRILL RIG/HAMMER EFF./DATE TER373 DIEDRICH D-50 95% 02/06/2021 DRILLER TURNAGE, J.R. START DATE 05/24/21 COMP. D	SET 8 ft LT ALIGNMENT -L- 0 I THING 560,697 EASTING 1,865,591 24 I	D HR. 16.5	BORING NO. EB2-B	STATION 15+52	OFFSET 8 ft RT	<u> </u>
COLLAR ELEV. 363.2 ft TOTAL DEPTH 24.1 ft NORTHIR DRILL RIG/HAMMER EFF./DATE TER373 DIEDRICH D-50 95% 02/06/2021 DRILLER TURNAGE, J.R. START DATE 05/24/21 COMP. E	THING 560,697 EASTING 1,865,591 24 I	- I H				ALIGNMENT -L- 0 HR. Cave
DRILL RIG/HAMMER EFF./DATE TER373 DIEDRICH D-50 95% 02/06/2021 DRILLER TURNAGE, J.R. START DATE 05/24/21 COMP. D		4 HR. FIAD	COLLAR ELEV . 363.2 f	# I TOTAL DEPTH 24 0 #		
DRILLER TURNAGE, J.R. START DATE 05/24/21 COMP. D	I DDILL METUOD LIC Aa.a.				NORTHING 560,683	EASTING 1,865,597 24 HR. FIAI
				TER373 DIEDRICH D-50 95% 02/06/2021	DRILL METHOD	
	P. DATE 05/24/21 SURFACE WATER DEPTH N/A		DRILLER TURNAGE, J.		COMP. DATE 05/24/21	SURFACE WATER DEPTH N/A
365		DEPTH (ft)	365	ft 0.5ft 0.5ft 0 25 50	75 100 NO. MOI	- 363.2 GROUND SURFACE (C
360 360 359.2 4.0 357.2 6.0 WOH WOH WOH WOH 355 354.2 9.0 WOH 2 4	SS-2 11% 361.2 0.6' ASPHALT, 1.4' ABC ROADWAY EMBANKMEN MEDIUM DENSE, TAN, WET, C FINE TO COARSE SAND (A-2-6 GRAVEL ALLUVIAL VERY SOFT TO SOFT, GRAN WET, FINE TO COARSE SAND (A-6), TRACE ORGANIC TRIASSIC RESIDUAL LOOSE, GRAY, WET, CLAYEY COARSE SAND (A-2-6), TRACE COARSE SAND (A-2-6), TRACE TRAGMENTS HARD, MAROON, GRAY, SATU SILTY CLAY (A-7-6) WEATHERED ROCK (MAROON, TRIASSIC SILTS) WEATHERED ROCK (MAROON) WEATHERED ROCK	E 0.0 BC 2.0 ENT 4.2 -6), TRACE AY, TAN, 9.2 NDY CLAY ICS L TURATED,) TURATED,) STONE) 24.0 OCK 24.0 Experiments of the second	360 359.3 3.9 2 357.2 6.0 5 355 354.3 8.9 4	3 3 66	W W W Sat. Sat.	DAVEMENT

									BOI	RE L	LOG																						
WB	S BP	8.R011.	1		TI	P BP8.R	011	col	JNTY N	MOORE			GEOL	OGIST RUS	SEK, S.C.			WBS BP8	.R011.1			TIP	BP8.R0	11	COUNT	Y MOORE			GEO	LOGIST RUS	SEK, S.C.		
SIT	E DES	CRIPTIC)N Bri	dge 620	0119 on	SR 1251	(Brinkley	/ Road) o	ver Wad	ls Creek	(GROUND	WTR (ft)	SITE DESC	RIPTION	Bridge	e 6201	119 on \$	SR 1251 (E	Brinkley Ro	oad) over \	Wads Creek	(GROUND V	/TR (ft)
во	RING N	IO . L_′	1302		S	ATION	13+02		OF	FSET	16 ft LT		ALIGI	NMENT -L-		0 HR.	Dry	BORING N	O . L_14	02		ST	ATION 14	1+02		OFFSET	16 ft LT		ALIG	NMENT -L-		0 HR.	Dry
СО	LAR I	ELEV.	362.8 f	t	TO	TAL DEF	PTH 7.0) ft	NC	ORTHING	G 560,6	02	EAST	ING 1,865,35	59	24 HR.	FIAD	COLLAR E	LEV . 36	32.5 ft		то	TAL DEPT	H 7.0 ft		NORTHIN	G 560,64	43	EAST	T ING 1,865,45	1	24 HR.	FIAD
DRII	L RIG/H	IAMMER	EFF./DA	TE N/	4						DRILL N	METHOD H	land Auger		HAMI	MER TYPE A	utomatic	DRILL RIG/H	AMMER EF	F./DATE	N/A	•					DRILL M	IETHOD	Hand Auger		HAM	MERTYPE Aut	omatic
DR	LLER	N/A			S	ART DAT	Γ E 06/0	14/21	CC	OMP. DA	ATE 06/	04/21	SURF	ACE WATER I	DEPTH N	N/A		DRILLER				ST	ART DATE	06/04/2	21	COMP. DA	ATE 06/0	04/21	SURF	ACE WATER	DEPTH 1	I/A	
ELE (ft)	DRIV ELE (ft)	VE DEP	TH BL 0.5f	OW CO	OUNT 0.5ft	0	BLOV	VS PER F	75	100		MOI G	ELEV. (ft	SOIL AND	ROCK DES	SCRIPTION	DEPTH (ft)	ELEV DRIV (ft) CFLEV (ft)	E DEPTH	BLO\ 0.5ft	W COU 0.5ft		0 2		PER FOOT	Γ 75 100	SAMP.	MOI	- 0 3	SOIL AND	ROCK DE	SCRIPTION	
365		_													DUND SUR		0.0	365												GRO	OUND SUR	FACE	0.0
BP8.R011_GEO_BRDG620119_MOORE.GPJ_NC_DOT.GDT_7/29/21 BP8.R011_GEO_BRDG620119_MOORE.GPJ_NC_DOT.GDT_7/29/21		+ + + + + + + + + + + + + + + + + + + +						· · · ·			S-1 S-2 S-3	20%	362.8 361.8 361.8 355.8	LOOSE, TAN COARSE SAN TF TRI/ SOFT TO MEI TAN, GRAY, I, MODERATEL FRAGME Boring Termin	VAY EMBAI I, WET, CLA D (A-2-6), T RACE GRAV ASSIC RESI DIUM STIFF WET, SILTY Y PLASTIC, NTS, TRAC ated at Elev	NKMENT AYEY FINE TO TRACE ROOT VEL IDUAL F, WHITE, RE Y CLAY (A-7-6 C, TRACE ROOTS	1.0 OFS,	360									S-4_	22%	- 362.5 - 369.0 - 355.5 	ROADV LOOSE, TAN COARSE SAN TRIA SOFT TO ME RED, WE MODERATELY TRACE Boring Termin	VAY EMBA , WET, CL D (A-2-6), TASSIC RES DIUM STIF F, SILTY C PLASTIC, ROCK FRA ated at Ele	NKMENT AYEY FINE TO TRACE GRAVEL	7.0
BORE DOUBL		‡											- - - - -						‡										-				
ICDOT		‡											<u> </u>						‡										-				

SITE DESCRIPTION Bridge 620119 on SR 1251 (Brinkley Road) over Wads Creek GROUND WTR (ft)			ORE LOG							
DORNO NO. L1932LT STATION 16:52 OFFSET 15.ELT ALXAMENT - 0.4R Dry	WBS BP8.R011.1	TIP BP8.R011 COUNT	Y MOORE	GEOLOGIST RUSSEK, S.C.		WBS BP8.R011.1	TIP BP8.R011 COU	NTY MOORE	GEOLOGIST RUSSEK, S.C.	
COLLAR ELEV. 382 81 TOTAL DEPTH 7.0 ft NORTHING 580,7/2 EASTING 1,855,578 24 HR FIAD	SITE DESCRIPTION Bridge 6201	19 on SR 1251 (Brinkley Road) over	Wads Creek		GROUND WTR (ft)	SITE DESCRIPTION Bridge 6201	119 on SR 1251 (Brinkley Road) ov	er Wads Creek		GROUND WTR (ft)
DRILLER NAN START DATE SIGNAL SET DRILL NET NAN SIGNAL SET DR	BORING NO. L_1652LT	STATION 16+52	OFFSET 15 ft LT	ALIGNMENT -L-	0 HR. Dry	BORING NO. L_1652RT	STATION 16+52	OFFSET 20 ft RT	ALIGNMENT -L-	0 HR. Dry
START DATE 6004/21 SURFACE WATER DEPTH NA	COLLAR ELEV. 362.9 ft	TOTAL DEPTH 7.0 ft	NORTHING 560,744	EASTING 1,865,679	24 HR. FIAD	COLLAR ELEV. 361.1 ft	TOTAL DEPTH 7.0 ft	NORTHING 560,712	EASTING 1,865,693	24 HR. FIAD
ELEY DICK SPETT BLOW COUNT BLOWS PER FOOT SAMP D SOL AND ROCK DESCRIPTION SEPTING SOL AND ROCK DESCRIPTION SO	DRILL RIG/HAMMER EFF./DATE N/A		DRILL METHOD Har	nd Auger HAMN	MER TYPE Automatic	DRILL RIG/HAMMER EFF./DATE N/A	•	DRILL METHOD	Hand Auger HAM	MER TYPE Automatic
100 100	DRILLER N/A	START DATE 06/04/21	COMP. DATE 06/04/21	SURFACE WATER DEPTH N	I/A	DRILLER N/A	START DATE 06/04/21	COMP. DATE 06/04/21	SURFACE WATER DEPTH	J/A
### DECO GROUND SURFACE 8.8 ### DECO GROUND	(ft) (ft) 0.5ft 0.5ft					(ft) (ft) (U) U.Sit U.Sit		/		SCRIPTION
	360		- · · · · ·	ROADWAY EMBAN LOOSE, TAN, MOIST, CL. COARSE SAND (A-2-6), TI TRACE ROO' 357.9 TRIASSIC RESII 355.9 SOFT, TAN, RED-BROW TO COARSE SANDY (MODERATELY PL Boring Terminated at Elevi	NKMENT AYEY FINE TO RACE GRAVEL, TS 5.0 DUAL IN, WET, FINE CLAY (A-6), LASTIC attion 355.9 ft IN	360			ROADWAY EMBA LOOSE, TAN, RED- BI CLAYEY FINE TO COARS: TRACE ROOTS, TRA TRIASSIC RES: VERY SOFT TO SOFT WET, FINE TO COARSE (A-6), MODERATEL Boring Terminated at Elev	NKMENT ROWN, WET, SE SAND (A-2-6), CE GRAVEL DUAL , TAN, GRAY, E SANDY CLAY Y PLASTIC vation 354.1 ft IN

LABORATORY TESTING SUMMARY

PROJECT NUMBER:	BP8.R011.1	TIP:	BP8.R011	COUNTY:	Moore

DESCRIPTION: Bridge 620119 on SR 1251 (Brinkley Road) over Wads Creek

				Depth				% by Weight %					%		0/		
Sample No.	Station	Alignment	Offset (feet)	Interval (feet)	AASHTO Class.	L.L.	P.I.	Coarse Sand	Fine Sand	Silt	Clay	Retained #4 Sieve	#10	#40	#200	% Moisture	% Organic
S-1	L-1302	-L-	16 LT	1.0 - 1.5	A-7-6 (13)	44	23	19.8	17.4	27.8	35.0	1	97	85	64	20.0	
S-2	L-1302	-L-	16 LT	3.0 - 3.5	- ` ′	-	-	-	-	-	-	-	-	-	-	15.3	
S-3	L-1302	-L-	16 LT	6.5 - 7.0	-	-	-	-	-	-	-	-	-	-	-	25.5	
S-4	L-1402	-L-	16 LT	4.0 - 4.5	A-7-6 (16)	45	24	14.4	18.8	31.0	35.8	0	99	91	70	22.3	
SS-1	EB1-B	-L-	8 RT	8.8 - 10.3	A-2-6 (0)	25	11	63.1	16.1	10.4	10.4	41	46	24	10	8.1	
SS-2	EB2-A	-L-	8 LT	1.0 - 2.5	-	-	-	-	-	-	-	-	-	-	-	11.2	
SS-3	EB2-A	-L-	8 LT	4.0 - 5.5	-	-	-	-	-	-	-	-	-	-	-	20.0	
SS-4	EB2-A	-L-	8 LT	6.0 - 7.5	A-6 (5)	31	13	11.1	36.9	28.8	23.2	1	98	93	58	20.2	
SS-5	EB2-B	-L-	8 RT	13.9 - 15.4	A-7-6 (19)	46	24	0.9	1.0	59.9	38.2	0	79	79	78	13.6	
S-5	L-1652 LT	-L-	15 LT	0.5 - 1.0	A-2-6 (0)	29	13	51.1	18.9	18.1	11.9	11	85	58	28	10.4	
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Stephanie H. Huffman

Certified Lab Technician Signature

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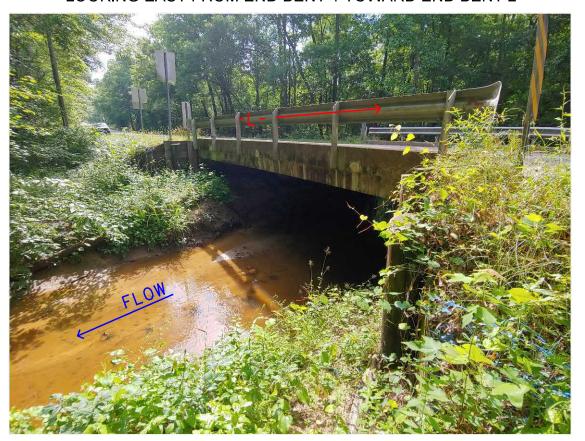
Certification Number

PROJECT REFERENCE NO. SHEET NO.
BP8.R011.1 15

BRIDGE 620119 ON SR 1251 (BRINKLEY ROAD) OVER WADS CREEK



LOOKING EAST FROM END BENT 1 TOWARD END BENT 2



SOUTHEAST OF BRIDGE DOWN STATION TOWARD END BENT 1