

REFERENCE: U-2525C

PROJECT: 34821

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

STRUCTURE
SUBSURFACE INVESTIGATION

COUNTY GUILFORD
 PROJECT DESCRIPTION GREENSBORO EASTERN LOOP I-85
BYPASS (-L-) FROM US 29 NORTH OF GREENSBORO
TO EAST OF LAWDALE DRIVE
 SITE DESCRIPTION SITE NO. 5 (STRUCTURE NO. 7) BRIDGE
NO. 1246 ON SR 1001 (NORTH CHURCH STREET) (-Y5-)
OVER GREENSBORO EASTERN LOOP I-85 BYPASS (-L-)

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-2525C	1	24

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 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.R. PASTRANA

Trigon Exploration

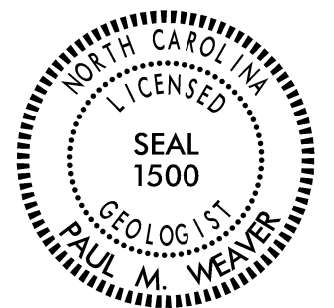
INVESTIGATED BY ESP Associates, P.A.

DRAWN BY T.T. WALKER

CHECKED BY P. WEAVER

SUBMITTED BY ESP Associates, P.A.

DATE OCTOBER 2017



DocuSigned by:

Paul Weaver

10/3/2017

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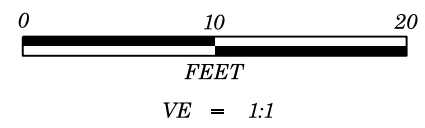
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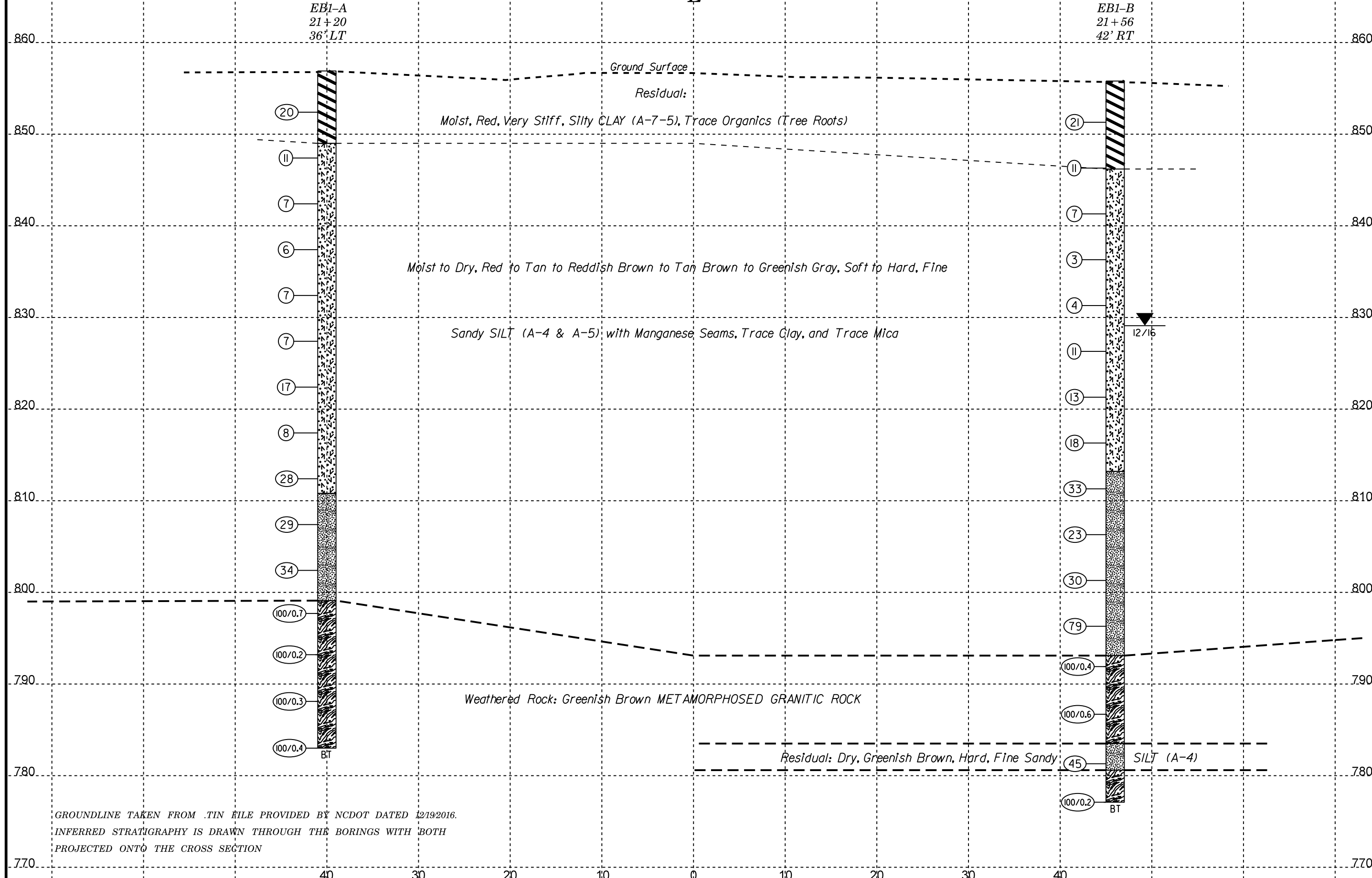
**DOCUMENT NOT CONSIDERED FINAL
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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT
SUBSURFACE INVESTIGATION
SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

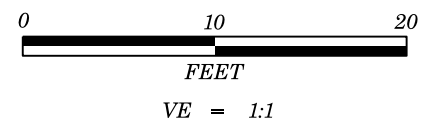
SOIL DESCRIPTION										GRADATION										ROCK DESCRIPTION										TERMS AND DEFINITIONS																																																																																																																																																																																																																			
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 ACCORDING TO THE STANDARD PENETRATION TEST (ASTM D1586). SOIL CLASSIFICATION IS BASED ON THE AASHTO SYSTEM. BASIC DESCRIPTIONS GENERALLY INCLUDE THE FOLLOWING: CONSISTENCY, COLOR, TEXTURE, MOISTURE, AASHTO CLASSIFICATION, AND OTHER PERTINENT FACTORS SUCH AS MINERALOGICAL COMPOSITION, ANGULARITY, STRUCTURE, PLASTICITY, ETC. FOR EXAMPLE, <i>VERY STIFF, GRAY, SILTY CLAY, MOIST WITH INTERBEDDED FINE SAND LAYERS, HIGHLY PLASTIC, A-7-6</i>										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. GAP-GRADED - INDICATES A MIXTURE OF UNIFORM PARTICLE SIZES OF TWO OR MORE SIZES.										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. SPT REFUSAL IS PENETRATION BY A SPLIT SPOON SAMPLER EQUAL TO OR LESS THAN 60 BLOWS PER 60 BLOWS IN NON-COASTAL PLAIN MATERIAL. THE TRANSITION BETWEEN SOIL AND ROCK IS OFTEN REPRESENTED BY A ZONE OF WEATHERED ROCK. ROCK MATERIALS ARE TYPICALLY DIVIDED AS FOLLOWS: WEATHERED ROCK (WR) - NON-COASTAL PLAIN MATERIAL THAT WOULD YIELD SPT N VALUES > 100 BLOWS PER FOOT IF TESTED. CRYSTALLINE ROCK (CR) - FINE TO COARSE GRAIN IGNEOUS AND METAMORPHIC ROCK THAT WOULD YIELD SPT REFUSAL IF TESTED. ROCK TYPE INCLUDES GRANITE, GNEISS, GABBRO, SCHIST, ETC. NON-CRYSTALLINE ROCK (NCR) - FINE TO COARSE GRAIN METAMORPHIC AND NON-COASTAL PLAIN SEDIMENTARY ROCK THAT WOULD YIELD SPT REFUSAL IF TESTED. ROCK TYPE INCLUDES PHYLLITE, SLATE, SANDSTONE, ETC. COASTAL PLAIN SEDIMENTARY ROCK (CPS) - COASTAL PLAIN SEDIMENTS CEMENTED INTO ROCK, BUT MAY NOT YIELD SPT REFUSAL. ROCK TYPE INCLUDES LIMESTONE, SANDSTONE, CEMENTED SHELL BEDS, ETC.										ALLUVIUM (ALLUV.) - SOILS THAT HAVE BEEN TRANSPORTED BY WATER. AQUIFER - A WATER BEARING FORMATION OR STRATA. ARENACEOUS - APPLIED TO ROCKS THAT HAVE BEEN DERIVED FROM SAND OR THAT CONTAIN SAND. 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. ARTESIAN - GROUND WATER THAT IS UNDER SUFFICIENT PRESSURE TO RISE ABOVE THE LEVEL AT WHICH IT IS ENCOUNTERED, BUT WHICH DOES NOT NECESSARILY RISE TO OR ABOVE THE GROUND SURFACE. CALCAREOUS (CALC.) - SOILS THAT CONTAIN APPRECIABLE AMOUNTS OF CALCIUM CARBONATE. COLLUVIUM - ROCK FRAGMENTS MIXED WITH SOIL DEPOSITED BY GRAVITY ON SLOPE OR AT BOTTOM OF SLOPE. 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. DIKE - A TABULAR BODY OF IGNEOUS ROCK THAT CUTS ACROSS THE STRUCTURE OF ADJACENT ROCKS OR CUTS MASSIVE ROCK. DIP - THE ANGLE AT WHICH A STRATUM OR ANY PLANAR FEATURE IS INCLINED FROM THE HORIZONTAL. DIP DIRECTION (DIP AZIMUTH) - THE DIRECTION OR BEARING OF THE HORIZONTAL TRACE OF THE LINE OF DIP, MEASURED CLOCKWISE FROM NORTH. FAULT - A FRACTURE OR FRACTURE ZONE ALONG WHICH THERE HAS BEEN DISPLACEMENT OF THE SIDES RELATIVE TO ONE ANOTHER PARALLEL TO THE FRACTURE. FISSILE - A PROPERTY OF SPLITTING ALONG CLOSELY SPACED PARALLEL PLANES. FLOAT - ROCK FRAGMENTS ON SURFACE NEAR THEIR ORIGINAL POSITION AND DISLODGED FROM PARENT MATERIAL. 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 FIELD. JOINT - FRACTURE IN ROCK ALONG WHICH NO APPRECIABLE MOVEMENT HAS OCCURRED. LEDGE - A SHELF-LIKE RIDGE OR PROJECTION OF ROCK WHOSE THICKNESS IS SMALL COMPARED TO ITS LATERAL EXTENT. LENS - A BODY OF SOIL OR ROCK THAT THINS OUT IN ONE OR MORE DIRECTIONS. MOTTLED (MOT.) - IRREGULARLY MARKED WITH SPOTS OF DIFFERENT COLORS. MOTTLING IN SOILS USUALLY INDICATES POOR AERATION AND LACK OF GOOD DRAINAGE. PERCHED WATER - WATER MAINTAINED ABOVE THE NORMAL GROUND WATER LEVEL BY THE PRESENCE OF AN INTERVENING IMPERVIOUS STRATUM. RESIDUAL (RES.) SOIL - SOIL FORMED IN PLACE BY THE WEATHERING OF ROCK. ROCK QUALITY DESIGNATION (RQD) - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE. SAPROLITE (SAP.) - RESIDUAL SOIL THAT RETAINS THE RELIC STRUCTURE OR FABRIC OF THE PARENT ROCK. 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 THE BEDDING OR SCHISTOSITY OF THE INTRUDED ROCKS. SLICKENSIDE - POLISHED AND STRIATED SURFACE THAT RESULTS FROM FRICTION ALONG A FAULT OR SLIP PLANE. STANDARD PENETRATION TEST (PENETRATION RESISTANCE) (SPT) - NUMBER OF BLOWS IN OR BPF OF A 140 LB. HAMMER FALLING 30 INCHES REQUIRED TO PRODUCE A PENETRATION OF 1 FOOT INTO SOIL WITH A 2 INCH OUTSIDE DIAMETER SPLIT SPOON SAMPLER. SPT REFUSAL IS PENETRATION EQUAL TO OR LESS THAN 60 BLOWS PER 60 BLOWS. STRATA CORE RECOVERY (SREC.) - TOTAL LENGTH OF STRATA MATERIAL RECOVERED DIVIDED BY TOTAL LENGTH OF STRATUM AND EXPRESSED AS A PERCENTAGE. STRATA ROCK QUALITY DESIGNATION (SROQ) - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS WITHIN A STRATUM EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF STRATA AND EXPRESSED AS A PERCENTAGE. TOPSOIL (TS.) - SURFACE SOILS USUALLY CONTAINING ORGANIC MATTER.																																																																																																																																																																																																																			
SOIL LEGEND AND AASHTO CLASSIFICATION <table border="1" style="width: 100%; text-align: center;"> <tr> <th rowspan="2">GENERAL CLASS.</th> <th colspan="6">GRANULAR MATERIALS (< 3% PASSING #200)</th> <th colspan="6">SILT-CLAY MATERIALS (> 3% PASSING #200)</th> <th colspan="2">ORGANIC MATERIALS</th> </tr> <tr> <th>A-1</th><th>A-1-a</th><th>A-1-b</th><th>A-2</th><th>A-2-4</th><th>A-2-5</th><th>A-2-6</th><th>A-2-7</th><th>A-4</th><th>A-5</th><th>A-6</th><th>A-7</th><th>A-1, A-2</th><th>A-3</th><th>A-4, A-5</th><th>A-6, A-7</th> </tr> <tr> <th>GROUP CLASS.</th> <td colspan="2">A-1-a</td><td colspan="2">A-1-b</td><td colspan="2">A-2-4</td><td colspan="2">A-2-5</td><td colspan="2">A-2-6</td><td colspan="2">A-2-7</td><td colspan="2">A-4</td><td colspan="2">A-5</td><td colspan="2">A-6</td><td colspan="2">A-7</td> </tr> <tr> <th>SYMBOL</th> <td colspan="2">[Symbol]</td><td colspan="2">[Symbol]</td><td colspan="2">[Symbol]</td><td colspan="2">[Symbol]</td><td colspan="2">[Symbol]</td><td colspan="2">[Symbol]</td><td colspan="2">[Symbol]</td><td colspan="2">[Symbol]</td><td colspan="2">[Symbol]</td><td colspan="2">[Symbol]</td> </tr> <tr> <th>% PASSING</th> <td colspan="2">50</td><td colspan="2">30</td><td colspan="2">10</td><td colspan="2">5</td><td colspan="2">40</td><td colspan="2">30</td><td colspan="2">20</td><td colspan="2">15</td><td colspan="2">10</td><td colspan="2">5</td> </tr> <tr> <th>MATERIAL PASSING #40</th> <td colspan="2">-</td><td colspan="2">-</td><td colspan="2">40</td><td colspan="2">40</td><td colspan="2">40</td><td colspan="2">40</td><td colspan="2">40</td><td colspan="2">40</td><td colspan="2">40</td><td colspan="2">40</td> </tr> <tr> <th>GROUP INDEX</th> <td colspan="2">0</td><td colspan="2">0</td><td colspan="2">0</td><td colspan="2">0</td><td colspan="2">0</td><td colspan="2">0</td><td colspan="2">0</td><td colspan="2">0</td><td colspan="2">0</td><td colspan="2">0</td> </tr> <tr> <th>USUAL TYPES OF MAJOR MATERIALS</th> <td colspan="2">STONE FRAGS, GRAVEL, AND SAND</td><td colspan="2">FINE SAND</td><td colspan="2">SILTY OR CLAYEY GRAVEL AND SAND</td><td colspan="2">SILTY SOILS</td><td colspan="2">CLAYEY SOILS</td><td colspan="2">SOILS WITH LITTLE OR MODERATE AMOUNTS OF ORGANIC MATTER</td><td colspan="2">HIGHLY ORGANIC SOILS</td><td colspan="2">MUCK, PEAT</td><td colspan="2"></td><td colspan="2"></td> </tr> <tr> <th>GEN. RATING AS SUBGRADE</th> <td colspan="6">EXCELLENT TO GOOD</td><td colspan="6">FAIR TO POOR</td><td colspan="2">FAIR TO POOR</td><td colspan="2">POOR</td><td colspan="2">UNSATURABLE</td><td colspan="2"></td> </tr> </table>										GENERAL CLASS.	GRANULAR MATERIALS (< 3% PASSING #200)						SILT-CLAY MATERIALS (> 3% PASSING #200)						ORGANIC MATERIALS		A-1	A-1-a	A-1-b	A-2	A-2-4	A-2-5	A-2-6	A-2-7	A-4	A-5	A-6	A-7	A-1, A-2	A-3	A-4, A-5	A-6, A-7	GROUP CLASS.	A-1-a		A-1-b		A-2-4		A-2-5		A-2-6		A-2-7		A-4		A-5		A-6		A-7		SYMBOL	[Symbol]		[Symbol]		[Symbol]		[Symbol]		[Symbol]		[Symbol]		[Symbol]		[Symbol]		[Symbol]		[Symbol]		% PASSING	50		30		10		5		40		30		20		15		10		5		MATERIAL PASSING #40	-		-		40		40		40		40		40		40		40		40		GROUP INDEX	0		0		0		0		0		0		0		0		0		0		USUAL TYPES OF MAJOR MATERIALS	STONE FRAGS, GRAVEL, AND SAND		FINE SAND		SILTY OR CLAYEY GRAVEL AND SAND		SILTY SOILS		CLAYEY SOILS		SOILS WITH LITTLE OR MODERATE AMOUNTS OF ORGANIC MATTER		HIGHLY ORGANIC SOILS		MUCK, PEAT						GEN. RATING AS SUBGRADE	EXCELLENT TO GOOD						FAIR TO POOR						FAIR TO POOR		POOR		UNSATURABLE				ANGULARITY OF GRAINS THE ANGULARITY OR ROUNDNESS OF SOIL GRAINS IS DESIGNATED BY THE TERMS: ANGULAR, SUBANGULAR, SUBROUNDED, OR ROUNDED.										WEATHERING FRESH - ROCK FRESH, CRYSTALS BRIGHT, FEW JOINTS MAY SHOW SLIGHT STAINING. ROCK RINGS UNDER HAMMER IF CRYSTALLINE. VERY SLIGHT (V SL.) - ROCK GENERALLY FRESH, JOINTS STAINED, SOME JOINTS MAY SHOW THIN CLAY COATINGS IF OPEN. CRYSTALS ON A BROKEN SPECIMEN FACE SHINE BRIGHTLY. ROCK RINGS UNDER HAMMER BLOWS IF OF A CRYSTALLINE NATURE. SLIGHT (SL.) - ROCK GENERALLY FRESH, JOINTS STAINED AND DISCOLORATION EXTENDS INTO ROCK UP TO 1 INCH. OPEN JOINTS MAY CONTAIN CLAY. IN GRANITOID ROCKS SOME OCCASIONAL FELDSPAR CRYSTALS ARE DULL AND DISCOLORED. CRYSTALLINE ROCKS RING UNDER HAMMER BLOWS. MODERATE (MOD.) - SIGNIFICANT PORTIONS OF ROCK SHOW DISCOLORATION AND WEATHERING EFFECTS. IN 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 WITH FRESH ROCK. MODERATELY SEVERE (MOD. SEV.) - ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. IN GRANITOID ROCKS, ALL FELDSPARS DULL AND DISCOLORED AND A MAJORITY SHOW KAOLINIZATION. ROCK SHOWS SEVERE LOSS OF STRENGTH AND CAN BE EXCAVATED WITH A GEOLOGIST'S PICK. ROCK GIVES "CLUNK" SOUND WHEN STRUCK. <i>IF TESTED, WOULD YIELD SPT REFUSAL</i> SEVERE (SEV.) - ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. ROCK FABRIC CLEAR AND EVIDENT BUT REDUCED IN STRENGTH TO STRONG SOIL. IN GRANITOID ROCKS ALL FELDSPARS ARE KAOLINIZED TO SOME EXTENT. SOME FRAGMENTS OF STRONG ROCK USUALLY REMAIN. <i>IF TESTED, WOULD YIELD SPT N VALUES > 100 BPF</i> VERY SEVERE (V SEV.) - ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. ROCK FABRIC ELEMENTS ARE DISCERNIBLE BUT MASS IS EFFECTIVELY REDUCED TO SOIL STATUS, WITH ONLY FRAGMENTS OF STRONG ROCK REMAINING. SAPROLITE IS AN EXAMPLE OF ROCK WEATHERED TO A DEGREE THAT ONLY MINOR VESTIGES OF ORIGINAL ROCK FABRIC REMAIN. <i>IF TESTED, WOULD YIELD SPT N VALUES < 100 BPF</i> COMPLETE - ROCK REDUCED TO SOIL. ROCK FABRIC NOT DISCERNIBLE, OR DISCERNIBLE ONLY IN SMALL AND SCATTERED CONCENTRATIONS. QUARTZ MAY BE PRESENT AS DIKES OR STRINGERS. SAPROLITE IS ALSO AN EXAMPLE.										PERCENTAGE OF MATERIAL <table border="1" style="width: 100%; text-align: center;"> <tr> <th>ORGANIC MATERIAL</th> <th>GRANULAR SOILS</th> <th>SILT - CLAY SOILS</th> <th>OTHER MATERIAL</th> </tr> <tr> <td>TRACE OF ORGANIC MATTER</td> <td>2 - 3%</td> <td>3 - 5%</td> <td>TRACE</td> </tr> <tr> <td>LITTLE ORGANIC MATTER</td> <td>3 - 5%</td> <td>5 - 12%</td> <td>LITTLE</td> </tr> <tr> <td>MODERATELY ORGANIC</td> <td>5 - 10%</td> <td>12 - 20%</td> <td>SOME</td> </tr> <tr> <td>HIGHLY ORGANIC</td> <td>> 10%</td> <td>> 20%</td> <td>HIGHLY</td> </tr> <tr> <td></td> <td></td> <td></td> <td>35% AND ABOVE</td> </tr> </table>										ORGANIC MATERIAL	GRANULAR SOILS	SILT - CLAY SOILS	OTHER MATERIAL	TRACE OF ORGANIC MATTER	2 - 3%	3 - 5%	TRACE	LITTLE ORGANIC MATTER	3 - 5%	5 - 12%	LITTLE	MODERATELY ORGANIC	5 - 10%	12 - 20%	SOME	HIGHLY ORGANIC	> 10%	> 20%	HIGHLY				35% AND ABOVE
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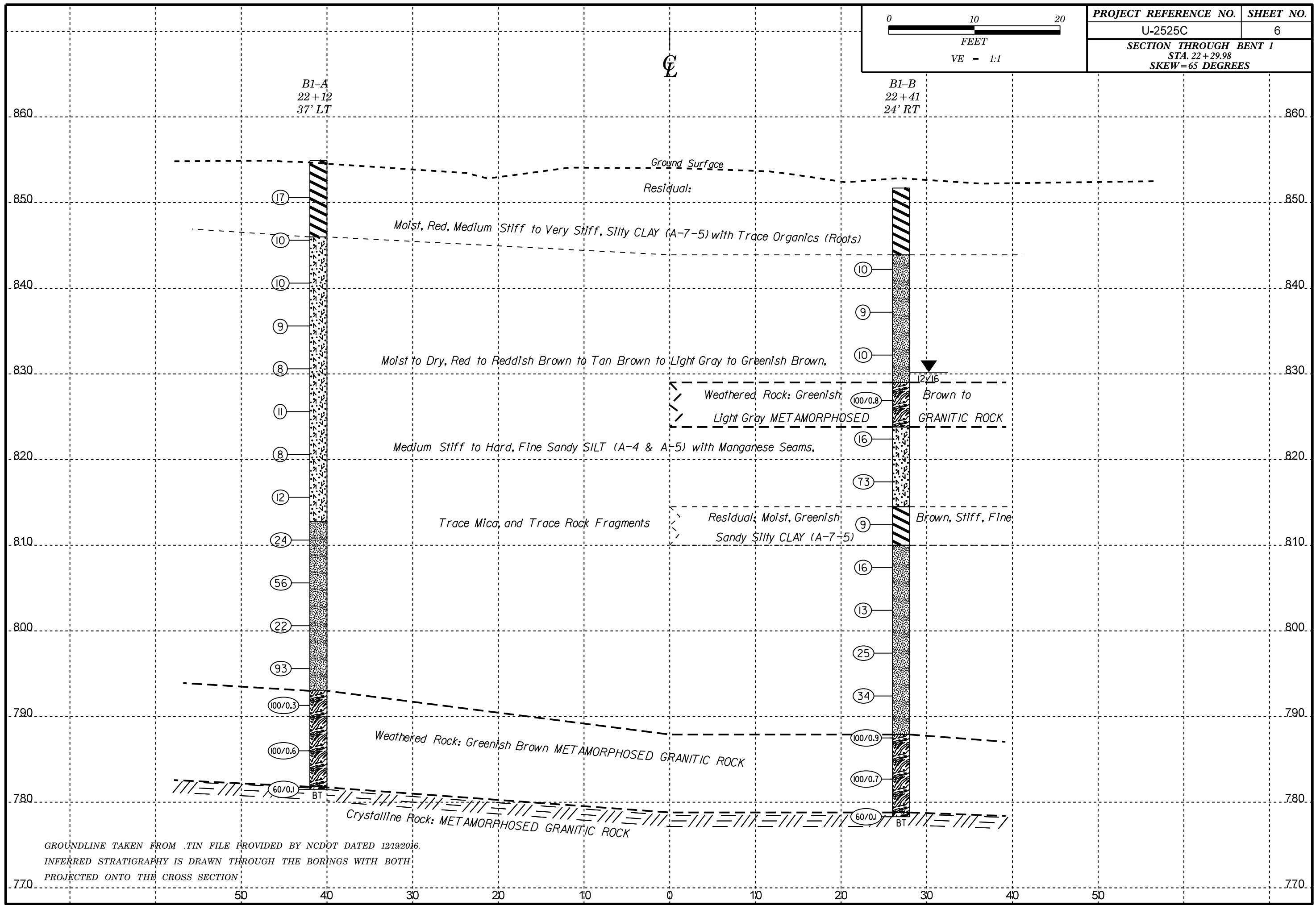
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SECTION THROUGH END BENT 1	
STA. 21+35.73	
SKEW=65 DEGREES	



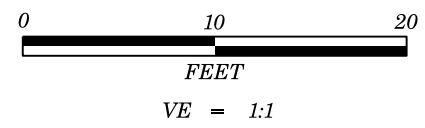
GROUNDLINE TAKEN FROM .TIN FILE PROVIDED BY NCDOT DATED 12/19/2016.
 INFERRED STRATIGRAPHY IS DRAWN THROUGH THE BORINGS WITH BOTH
 PROJECTED ONTO THE CROSS SECTION



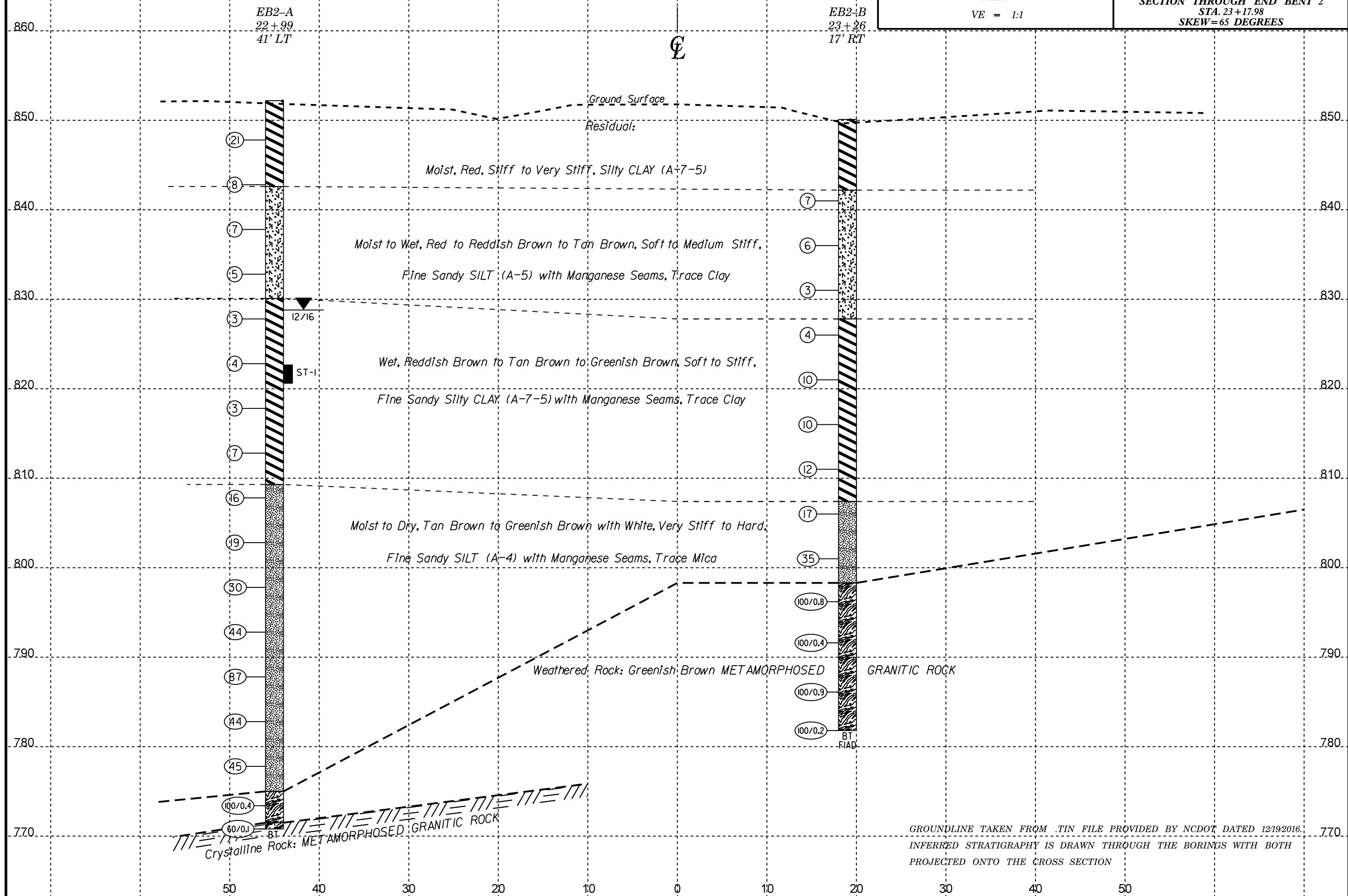
PROJECT REFERENCE NO.	SHEET NO.
U-2525C	6
SECTION THROUGH BENT 1	
STA. 22 + 29.98	
SKEW = 65 DEGREES	



GROUNDLINE TAKEN FROM .TIN FILE PROVIDED BY NCDOT DATED 12/19/2016.
 INFERRED STRATIGRAPHY IS DRAWN THROUGH THE BORINGS WITH BOTH
 PROJECTED ONTO THE CROSS SECTION



PROJECT REFERENCE NO.	SHEET NO.
U-2525C	7
SECTION THROUGH END BENT 2	
STA. 23+17.98	
SKEW=65 DEGREES	



GROUNDLINE TAKEN FROM TIN FILE PROVIDED BY NCDOT DATED 12/19/2016
 INFERRED STRATIGRAPHY IS DRAWN THROUGH THE BORINGS WITH BOTH
 PROJECTED ONTO THE CROSS SECTION

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 34821.1.1		TIP U-2525C		COUNTY GUILFORD		GEOLOGIST Pastrana, C.R.									
SITE DESCRIPTION Site #5 (Structure #7) - Bridge No. 1246 on SR 1001 (N. Church St.) (-Y5-) over I-85 Bypass (-L-)							GROUND WTR (ft)								
BORING NO. EB1-B		STATION 21+56		OFFSET 42 ft RT		ALIGNMENT -Y5-									
COLLAR ELEV. 855.8 ft		TOTAL DEPTH 78.7 ft		NORTHING 870,813		EASTING 1,766,748									
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 77% 02/22/2016			DRILL METHOD Mud Rotary			HAMMER TYPE Automatic									
DRILLER Toothman, R.		START DATE 12/12/16		COMP. DATE 12/13/16		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					
860															
855															
	852.3	3.5	8	9	12										
	847.3	8.5	4	4	7										
	842.3	13.5	2	3	4										
	837.3	18.5	2	1	2										
	832.3	23.5	1	2	2										
	827.3	28.5	1	5	6										
	822.3	33.5	3	6	7										
	817.3	38.5	4	7	11										
	812.3	43.5	16	15	18										
	807.3	48.5	7	9	14										
	802.3	53.5	5	11	19										
	797.3	58.5	18	31	48										
	792.3	63.5	100/0.4												
	787.3	68.5	78	22/0.1											
	782.3	73.5	22	21	24										

WBS 34821.1.1		TIP U-2525C		COUNTY GUILFORD		GEOLOGIST Pastrana, C.R.									
SITE DESCRIPTION Site #5 (Structure #7) - Bridge No. 1246 on SR 1001 (N. Church St.) (-Y5-) over I-85 Bypass (-L-)							GROUND WTR (ft)								
BORING NO. EB1-B		STATION 21+56		OFFSET 42 ft RT		ALIGNMENT -Y5-									
COLLAR ELEV. 855.8 ft		TOTAL DEPTH 78.7 ft		NORTHING 870,813		EASTING 1,766,748									
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 77% 02/22/2016			DRILL METHOD Mud Rotary			HAMMER TYPE Automatic									
DRILLER Toothman, R.		START DATE 12/12/16		COMP. DATE 12/13/16		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					
780															
	777.3	78.5	100/0.2												
	777.1														

NCDOT BORE DOUBLE U2525C_GEO_SITE7_BRIDGE_GINTLOGS.GPJ NC_DOT_GDT 10/2/17

SOILS LABORATORY TESTS RESULTS

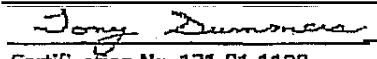
WBS NO.: 34821.1.1

TIP NO.: U-2525C

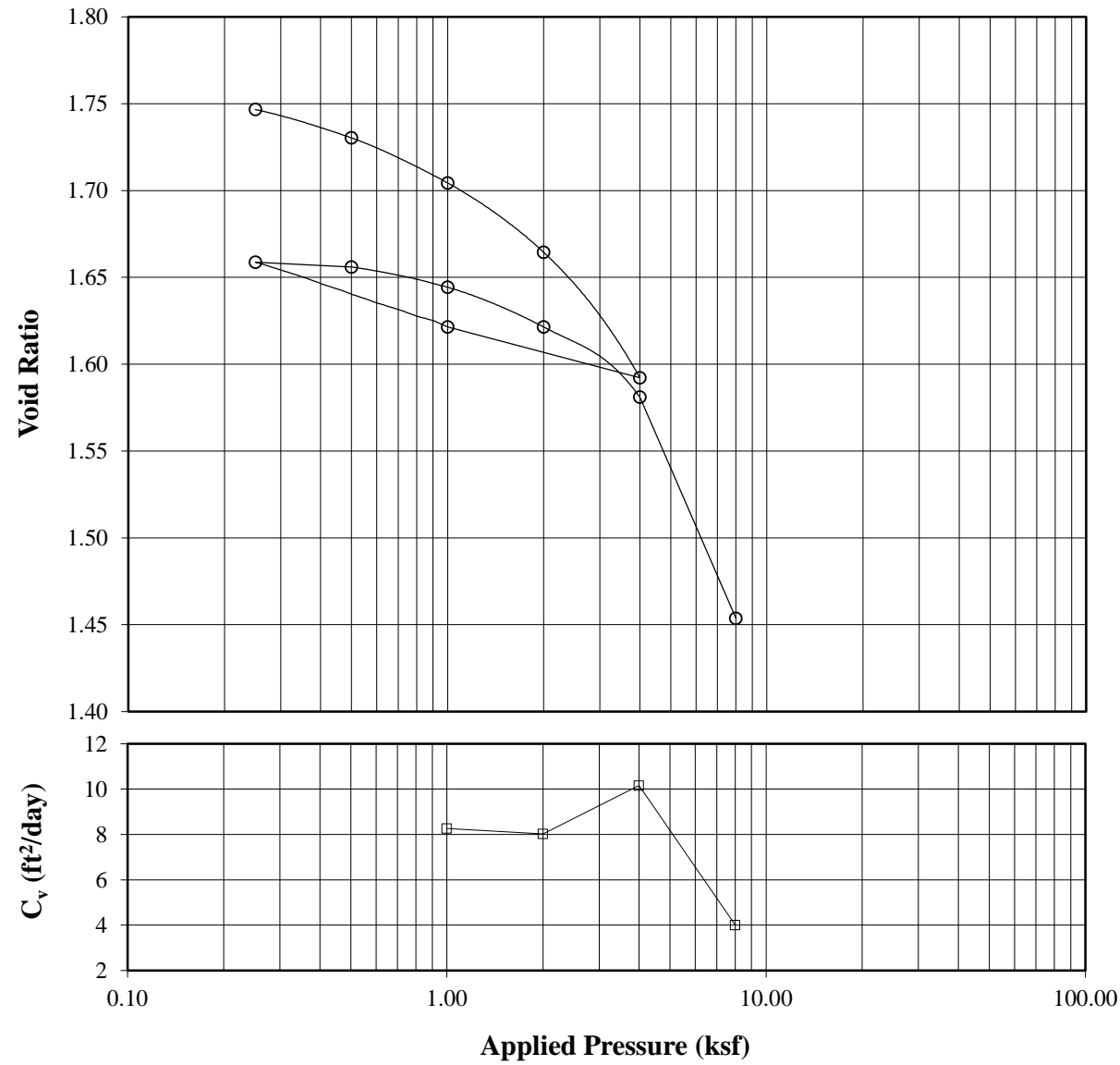
COUNTY: Guilford

SITE DESCRIPTION: Site #5, (Structure #7 - Bridge No. 1246 on SR 1001 (North Church Street) (-Y5-) over Greensboro Eastern Loop, I-85 Bypass (-L-)

SAMPLE NO.	Boring	DEPTH INTERVAL (ft.)	AASHTO CLASS	N	L.L	P.I.	% BY WEIGHT				% PASSING SIEVES			% MOISTURE	% ORGANIC
							CSE. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1	EB1-A	33.5-35.0	A-5 (4)	17	51	7	8	51	35	6	99	96	56	47.2	-
SS-2	EB1-B	33.5-35.0	A-5 (2)	13	45	3	13	43	38	6	98	90	58	50.8	-
SS-3	B1-A	38.3-39.8	A-5 (6)	12	41	8	5	42	47	6	100	99	70	31.2	-
SS-4	B1-B	38.3-39.8	A-7-5 (10)	9	50	11	9	30	49	12	99	94	73	38.9	-
SS-5	EB2-A	33.4-34.9	A-7-5 (24)	3	72	16	2	16	57	25	100	99	90	80.3	-
SS-6	EB2-B	28.1-29.6	A-7-5 (14)	10	58	12	7	23	51	19	99	95	79	60.3	-
ST-1	EB2-A1	29.5-31.6	A-7-5 (23)	N/A	67	17	3	16	54	27	100	98	89	65.5	-


 Certification No. 121-01-1108

Consolidation Test - ASTM D2435
SUMMARY REPORT



	Before	After	Liquid Limits: 67	Test Date: 1/5/2017
Moisture (%):	65.46	63.56	Plastic Limits: 50	
Dry Density (pcf):	61.20	62.20	Plasticity Index (%): 17	
Saturation (%):	100.75	100.36	Specific Gravity: 2.700	Assumed
Void Ratio:	1.7513	1.6990	Sample Type: Undisturbed	
C_c	0.45	-		
C_r	0.051	-		
P_c (ksf)	2.95	-		
Soil Classification:	A-7-5 (Clayey Soils)/ MH (Elastic Silt)			
Project:	U2525C	Depth:	29.5'-31.6'	
Sample Number:	ST-1	Boring Number:	EB2-A1	
Project:	U2525C			
Client:	NCDOT			
Location:	EB-2-A1 (29.5'-31.6")			

Consolidation Test Results
(Sequence 4) Load 2.000 ksf

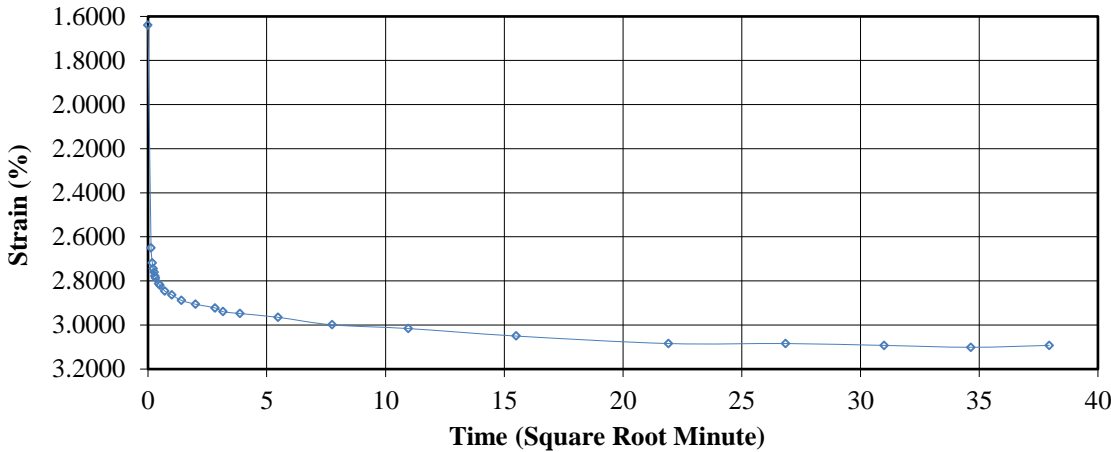
Project: U2525C Project Number: CS34.348
 Location: EB-2-A1 (29.5'-31.6") Test Date: 1/5/2017
 Job Number: 34821 Test Number: -
 Sample Number: ST-1 Soil Classification: A-7-5 (23) (Clayey Soils)
 Boring Number: EB2-A1 Remarks:
 Depth: 29.5'-31.6' Undisturbed
 Sample Type: Undisturbed Undisturbed

Index	Time	Elapsed Time (min)	Square Root of Time (√min)	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.00	0.00	0.3364	0.0164	1.6398	1.7062
1	00:00:01	0.02	0.13	0.3263	0.0265	2.6508	1.6784
2	00:00:02	0.03	0.18	0.3257	0.0272	2.7188	1.6765
3	00:00:03	0.05	0.22	0.3254	0.0274	2.7443	1.6758
4	00:00:04	0.07	0.26	0.3252	0.0276	2.7613	1.6753
5	00:00:05	0.08	0.29	0.3251	0.0278	2.7782	1.6748
6	00:00:06	0.10	0.32	0.3250	0.0279	2.7867	1.6746
7	00:00:12	0.20	0.45	0.3247	0.0281	2.8122	1.6739
8	00:00:15	0.25	0.50	0.3246	0.0282	2.8207	1.6737
9	00:00:30	0.50	0.71	0.3244	0.0285	2.8462	1.6730
10	00:01:00	1.00	1.00	0.3242	0.0286	2.8632	1.6725
11	00:02:00	2.00	1.41	0.3240	0.0289	2.8887	1.6718
12	00:04:00	4.00	2.00	0.3238	0.0291	2.9057	1.6713
13	00:08:00	8.00	2.83	0.3236	0.0292	2.9227	1.6709
14	00:10:00	10.00	3.16	0.3234	0.0294	2.9397	1.6704
15	00:15:00	15.00	3.87	0.3234	0.0295	2.9482	1.6702
16	00:30:01	30.02	5.48	0.3232	0.0297	2.9652	1.6697
17	01:00:03	60.05	7.75	0.3229	0.0300	2.9992	1.6688
18	02:00:06	120.10	10.96	0.3227	0.0302	3.0161	1.6683
19	04:00:13	240.22	15.50	0.3223	0.0305	3.0501	1.6674
20	08:00:26	480.43	21.92	0.3220	0.0308	3.0841	1.6664
21	12:00:39	720.65	26.84	0.3220	0.0308	3.0841	1.6664
22	16:00:53	960.88	31.00	0.3219	0.0309	3.0926	1.6662
23	20:01:06	1201.10	34.66	0.3218	0.0310	3.1011	1.6660
24	23:59:59	1439.98	37.95	0.3219	0.0309	3.0926	1.6662

Tested By: TS

Consolidation Test Results
(Sequence 4) Load 2.000 ksf

Consolidation Graph (Square-root Time)



Consolidation Test Results
(Sequence 5) Load 4.000 ksf

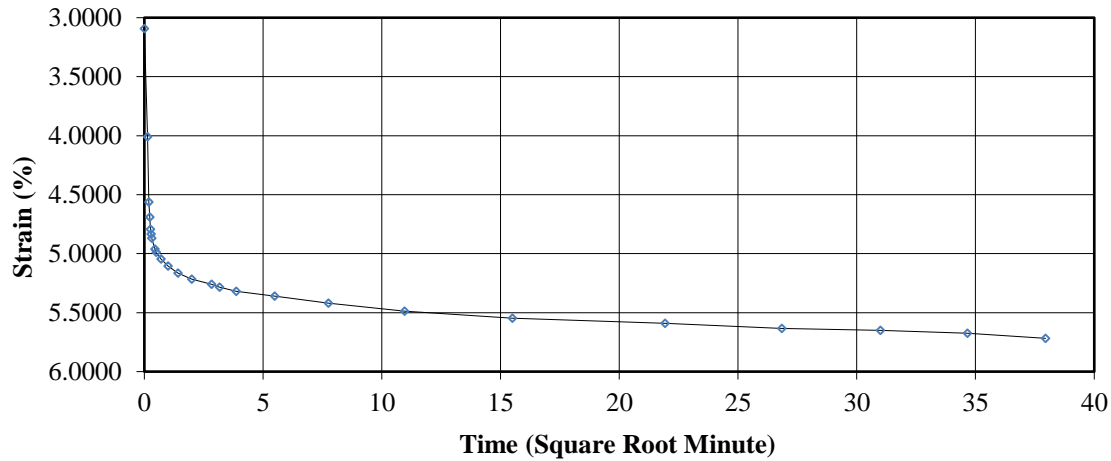
Project: U2525C Project Number: CS34.348
 Location: EB-2-A1 (29.5'-31.6") Test Date: 1/5/2017
 Job Number: 34821 Test Number: -
 Sample Number: ST-1 Soil Classification:
 Boring Number: EB2-A1 A-7-5 (23) (Clayey Soils)
 Depth: 29.5'-31.6' Remarks:
 Sample Type: Undisturbed Undisturbed

Index	Time	Elapsed Time (min)	Square Root of Time \sqrt{t} (min)	Displacement (in)	Settlement (in)	Axial Strain (in)	Void Ratio
0	00:00:00	0.00	0.00	0.3219	0.0309	3.0926	1.6662
1	00:00:01	0.02	0.13	0.3127	0.0401	4.0102	1.6410
2	00:00:02	0.03	0.18	0.3072	0.0456	4.5624	1.6258
3	00:00:03	0.05	0.22	0.3059	0.0469	4.6899	1.6223
4	00:00:04	0.07	0.26	0.3049	0.0479	4.7918	1.6194
5	00:00:05	0.08	0.29	0.3045	0.0483	4.8343	1.6183
6	00:00:06	0.10	0.32	0.3042	0.0487	4.8683	1.6173
7	00:00:12	0.20	0.45	0.3032	0.0496	4.9618	1.6148
8	00:00:15	0.25	0.50	0.3030	0.0499	4.9873	1.6141
9	00:00:30	0.50	0.71	0.3024	0.0505	5.0467	1.6124
10	00:01:00	1.00	1.00	0.3018	0.0511	5.1062	1.6108
11	00:02:00	2.00	1.41	0.3012	0.0517	5.1657	1.6092
12	00:04:00	4.00	2.00	0.3007	0.0522	5.2167	1.6078
13	00:08:00	8.00	2.83	0.3003	0.0526	5.2591	1.6066
14	00:10:00	10.00	3.16	0.3000	0.0528	5.2846	1.6059
15	00:15:00	15.00	3.87	0.2997	0.0532	5.3186	1.6050
16	00:30:01	30.02	5.48	0.2992	0.0536	5.3611	1.6038
17	01:00:03	60.05	7.75	0.2986	0.0542	5.4206	1.6022
18	02:00:06	120.10	10.96	0.2980	0.0549	5.4885	1.6003
19	04:00:13	240.22	15.50	0.2974	0.0555	5.5480	1.5986
20	08:00:26	480.43	21.92	0.2969	0.0559	5.5905	1.5975
21	12:00:39	720.65	26.84	0.2965	0.0563	5.6330	1.5963
22	16:00:53	960.88	31.00	0.2963	0.0565	5.6500	1.5958
23	20:01:06	1201.10	34.66	0.2961	0.0568	5.6754	1.5951
24	23:59:57	1439.95	37.95	0.2957	0.0572	5.7179	1.5940

Tested By: TS

Consolidation Test Results
(Sequence 5) Load 4.000 ksf

Consolidation Graph (Square-root Time)



**Consolidation Test Results
(Sequence 6) Rebound 1.000 ksf**

Project: U2525C Project Number: CS34.348
 Location: EB-2-A1 (29.5'-31.6")
 Job Number 34821
 Test Date: 1/5/2017
 Test Number: -
 Sample Number: ST-1 Soil Classification:
 Boring Number: EB2-A1 A-7-5 (23) (Clayey Soils)
 Depth: 29.5'-31.6' Remarks:
 Sample Type: Undisturbed Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.2957	0.0572	5.7179	1.5940
1	00:00:01	0.3038	0.0490	4.9023	1.6164
2	00:00:02	0.3043	0.0485	4.8513	1.6178
3	00:00:03	0.3045	0.0483	4.8343	1.6183
4	00:00:04	0.3047	0.0482	4.8173	1.6187
5	00:00:05	0.3047	0.0482	4.8173	1.6187
6	00:00:06	0.3048	0.0481	4.8088	1.6190
7	00:00:12	0.3049	0.0479	4.7918	1.6194
8	00:00:15	0.3050	0.0478	4.7833	1.6197
9	00:00:30	0.3052	0.0477	4.7664	1.6201
10	00:01:00	0.3053	0.0476	4.7579	1.6204
11	00:02:00	0.3054	0.0474	4.7409	1.6209
12	00:04:00	0.3056	0.0472	4.7239	1.6213
13	00:08:00	0.3058	0.0471	4.7069	1.6218
14	00:10:00	0.3057	0.0472	4.7154	1.6216
15	00:15:00	0.3058	0.0471	4.7069	1.6218
16	00:30:01	0.3059	0.0469	4.6899	1.6223
17	01:00:03	0.3059	0.0470	4.6984	1.6220
18	02:00:06	0.3061	0.0467	4.6729	1.6227
19	04:00:13	0.3062	0.0466	4.6644	1.6230
20	08:00:26	0.3062	0.0466	4.6644	1.6230
21	12:00:39	0.3063	0.0466	4.6559	1.6232
22	16:00:53	0.3063	0.0466	4.6559	1.6232
23	20:01:06	0.3065	0.0463	4.6304	1.6239
24	23:59:57	0.3063	0.0466	4.6559	1.6232

Tested By: TS

**Consolidation Test Results
(Sequence 7) Rebound 0.250 ksf**

Project: U2525C Project Number: CS34.348
 Location: EB-2-A1 (29.5'-31.6")
 Job Number 34821
 Test Date: 1/5/2017
 Test Number: -
 Sample Number: ST-1 Soil Classification:
 Boring Number: EB2-A1 A-7-5 (23) (Clayey Soils)
 Depth: 29.5'-31.6' Remarks:
 Sample Type: Undisturbed Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3063	0.0466	4.6559	1.6232
1	00:00:01	0.3129	0.0399	3.9932	1.6414
2	00:00:02	0.3139	0.0389	3.8912	1.6442
3	00:00:03	0.3146	0.0382	3.8233	1.6461
4	00:00:04	0.3152	0.0376	3.7638	1.6477
5	00:00:05	0.3155	0.0374	3.7383	1.6484
6	00:00:06	0.3156	0.0372	3.7213	1.6489
7	00:00:12	0.3162	0.0366	3.6619	1.6505
8	00:00:15	0.3163	0.0365	3.6534	1.6508
9	00:00:30	0.3167	0.0361	3.6109	1.6519
10	00:01:00	0.3170	0.0359	3.5854	1.6526
11	00:02:00	0.3173	0.0355	3.5514	1.6536
12	00:04:00	0.3177	0.0352	3.5174	1.6545
13	00:08:01	0.3180	0.0348	3.4834	1.6554
14	00:10:01	0.3181	0.0347	3.4749	1.6557
15	00:15:01	0.3182	0.0347	3.4664	1.6559
16	00:30:02	0.3184	0.0344	3.4410	1.6566
17	01:00:03	0.3187	0.0342	3.4155	1.6573
18	02:00:07	0.3189	0.0339	3.3900	1.6580
19	04:00:13	0.3192	0.0336	3.3645	1.6587
20	08:00:27	0.3195	0.0334	3.3390	1.6594
21	12:00:40	0.3196	0.0332	3.3220	1.6599
22	16:00:53	0.3197	0.0331	3.3135	1.6601
23	56:01:06	0.3198	0.0331	3.3050	1.6604
24	23:59:59	0.3199	0.0330	3.2965	1.6606

Tested By: TS

Consolidation Test Results
(Sequence 8) Load 0.500 ksf

Project: U2525C **Project Number:** CS34.348
Location: EB-2-A1 (29.5'-31.6")
Job Number: 34821 **Test Date:** 1/5/2017
Sample Number: ST-1 **Soil Classification:** A-7-5 (23) (Clayey Soils)
Boring Number: EB2-A1 **Remarks:**
Depth: 29.5'-31.6' **Sample Type:** Undisturbed
Test Number: -

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3199	0.0330	3.2965	1.6606
1	00:00:01	0.3193	0.0336	3.3560	1.6590
2	00:00:02	0.3193	0.0336	3.3560	1.6590
3	00:00:03	0.3193	0.0336	3.3560	1.6590
4	00:00:04	0.3193	0.0336	3.3560	1.6590
5	00:00:05	0.3193	0.0336	3.3560	1.6590
6	00:00:06	0.3193	0.0336	3.3560	1.6590
7	00:00:12	0.3193	0.0336	3.3560	1.6590
8	00:00:15	0.3193	0.0336	3.3560	1.6590
9	00:00:30	0.3193	0.0336	3.3560	1.6590
10	00:01:00	0.3192	0.0336	3.3645	1.6587
11	00:02:01	0.3192	0.0336	3.3645	1.6587
12	00:04:01	0.3192	0.0336	3.3645	1.6587
13	00:08:01	0.3191	0.0337	3.3730	1.6585
14	00:10:01	0.3190	0.0338	3.3815	1.6583
15	00:15:01	0.3190	0.0338	3.3815	1.6583
16	00:30:02	0.3191	0.0337	3.3730	1.6585
17	01:00:04	0.3190	0.0338	3.3815	1.6583
18	02:00:07	0.3190	0.0338	3.3815	1.6583
19	04:00:14	0.3189	0.0339	3.3900	1.6580
20	08:00:27	0.3189	0.0340	3.3985	1.6578
21	12:00:40	0.3189	0.0340	3.3985	1.6578
22	16:00:53	0.3189	0.0340	3.3985	1.6578
23	20:01:07	0.3189	0.0340	3.3985	1.6578
24	23:59:59	0.3189	0.0340	3.3985	1.6578

Tested By: TS

Consolidation Test Results
(Sequence 9) Load 1.000 ksf

Project: U2525C **Project Number:** CS34.348
Location: EB-2-A1 (29.5'-31.6")
Job Number: **Test Date:** 1/5/2017
Sample Number: ST-1 **Soil Classification:** A-7-5 (23) (Clayey Soils)
Boring Number: EB2-A1 **Remarks:**
Depth: 29.5'-31.6' **Sample Type:** Undisturbed
Test Number: -

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3189	0.0340	3.3985	1.6578
1	00:00:01	0.3161	0.0368	3.6788	1.6501
2	00:00:02	0.3159	0.0370	3.6958	1.6496
3	00:00:03	0.3158	0.0370	3.7043	1.6494
4	00:00:04	0.3157	0.0371	3.7128	1.6491
5	00:00:05	0.3157	0.0371	3.7128	1.6491
6	00:00:06	0.3157	0.0371	3.7128	1.6491
7	00:00:12	0.3156	0.0372	3.7213	1.6489
8	00:00:15	0.3155	0.0373	3.7298	1.6487
9	00:00:30	0.3155	0.0373	3.7298	1.6487
10	00:01:00	0.3155	0.0374	3.7383	1.6484
11	00:02:01	0.3155	0.0374	3.7383	1.6484
12	00:04:01	0.3154	0.0375	3.7468	1.6482
13	00:08:01	0.3153	0.0376	3.7553	1.6480
14	00:10:01	0.3152	0.0376	3.7638	1.6477
15	00:15:01	0.3152	0.0376	3.7638	1.6477
16	00:30:02	0.3153	0.0376	3.7553	1.6480
17	01:00:04	0.3151	0.0377	3.7723	1.6475
18	02:00:07	0.3150	0.0378	3.7808	1.6473
19	04:00:14	0.3150	0.0379	3.7893	1.6470
20	08:00:27	0.3148	0.0381	3.8063	1.6466
21	12:00:40	0.3148	0.0381	3.8063	1.6466
22	16:00:53	0.3148	0.0381	3.8063	1.6466
23	20:01:07	0.3147	0.0381	3.8148	1.6463
24	23:59:58	0.3146	0.0382	3.8233	1.6461

Tested By: TS

**Consolidation Test Results
(Sequence 10) Load 2.000 ksf**

Project: U2525C Project Number: CS34.348
 Location: EB-2-A1 (29.5'-31.6")
 Job Number: 34821 Test Date: 1/5/2017
 Test Number: -
 Sample Number: ST-1 Soil Classification:
 Boring Number: EB2-A1 A-7-5 (23) (Clayey Soils)
 Depth: 29.5'-31.6' Remarks:
 Sample Type: Undisturbed Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3146	0.0382	3.8233	1.6461
1	00:00:01	0.3085	0.0444	4.4350	1.6293
2	00:00:02	0.3082	0.0447	4.4690	1.6283
3	00:00:03	0.3080	0.0449	4.4860	1.6279
4	00:00:04	0.3079	0.0449	4.4945	1.6276
5	00:00:05	0.3078	0.0450	4.5030	1.6274
6	00:00:06	0.3078	0.0450	4.5030	1.6274
7	00:00:12	0.3076	0.0452	4.5200	1.6269
8	00:00:15	0.3076	0.0452	4.5200	1.6269
9	00:00:30	0.3076	0.0453	4.5285	1.6267
10	00:01:00	0.3075	0.0454	4.5370	1.6265
11	00:02:00	0.3073	0.0455	4.5539	1.6260
12	00:04:01	0.3072	0.0456	4.5624	1.6258
13	00:08:01	0.3071	0.0457	4.5709	1.6255
14	00:10:01	0.3071	0.0457	4.5709	1.6255
15	00:15:01	0.3071	0.0458	4.5794	1.6253
16	00:30:02	0.3070	0.0459	4.5879	1.6251
17	01:00:04	0.3068	0.0460	4.6049	1.6246
18	02:00:07	0.3066	0.0462	4.6219	1.6241
19	04:00:14	0.3066	0.0462	4.6219	1.6241
20	08:00:27	0.3065	0.0463	4.6304	1.6239
21	12:00:40	0.3065	0.0464	4.6389	1.6237
22	16:00:53	0.3065	0.0463	4.6304	1.6239
23	20:01:07	0.3065	0.0464	4.6389	1.6237
24	23:59:57	0.3063	0.0466	4.6559	1.6232

Tested By: TS

**Consolidation Test Results
(Sequence 11) Load 4.000 ksf**

Project: U2525C Project Number: CS34.348
 Location: EB-2-A1 (29.5'-31.6")
 Job Number: 34821 Test Date: 1/5/2017
 Test Number: -
 Sample Number: ST-1 Soil Classification:
 Boring Number: EB2-A1 A-7-5 (23) (Clayey Soils)
 Depth: 29.5'-31.6' Remarks:
 Sample Type: Undisturbed Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3063	0.0466	4.6559	1.6232
1	00:00:01	0.2981	0.0547	5.4715	1.6007
2	00:00:02	0.2967	0.0562	5.6160	1.5968
3	00:00:03	0.2963	0.0565	5.6500	1.5958
4	00:00:04	0.2962	0.0567	5.6670	1.5954
5	00:00:05	0.2960	0.0568	5.6839	1.5949
6	00:00:06	0.2959	0.0569	5.6924	1.5947
7	00:00:12	0.2956	0.0573	5.7264	1.5937
8	00:00:15	0.2955	0.0573	5.7349	1.5935
9	00:00:30	0.2952	0.0577	5.7689	1.5926
10	00:01:00	0.2950	0.0579	5.7859	1.5921
11	00:02:00	0.2946	0.0582	5.8199	1.5912
12	00:04:01	0.2944	0.0585	5.8454	1.5905
13	00:08:01	0.2941	0.0587	5.8709	1.5898
14	00:10:01	0.2941	0.0588	5.8794	1.5895
15	00:15:01	0.2939	0.0590	5.8963	1.5891
16	00:30:02	0.2936	0.0592	5.9218	1.5884
17	01:00:04	0.2933	0.0596	5.9558	1.5874
18	02:00:07	0.2929	0.0599	5.9898	1.5865
19	04:00:14	0.2926	0.0602	6.0238	1.5856
20	08:00:27	0.2923	0.0606	6.0578	1.5846
21	12:00:40	0.2920	0.0608	6.0833	1.5839
22	16:00:53	0.2919	0.0609	6.0918	1.5837
23	20:01:07	0.2918	0.0611	6.1088	1.5832
24	23:59:57	0.2916	0.0613	6.1257	1.5827

Tested By: TS

SITE PHOTOGRAPHS

State Project No. 34821 – TIP No. U-2525C – Site # 5 (Structure # 7) Bridge No. 1246 on SR 1001 (N. Church Street) (-Y5-) over Greensboro Eastern Loop, I-85 Bypass (-L-) - Guilford County, NC

View Looking Upstation Along -Y5-



View Looking Downstation Along -Y5-



View Looking Upstation Along -L-



View Looking Downstation Along -L-

