NOTE: SEE SHEET 1A FOR PLAN SHEET LAYOUT AT TIME OF INVESTIGATION

CONTENTS

STATION Wall 2 -L- 54+90 - 56+75

PLAN XSECT PROFILE 3 5-9

STATE OF NORTH CAROLINA

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

STRUCTURE SUBSURFACE INVESTIGATION

PROJ. REF	ERENCE N	10. :	39999.1.1	1		F.A	.PR	OJ. SPT-107 (10	<u>)) </u>
	Jackson								
PROJECT	DESCRIPT	ION _	NC 10	7 FROM	EAST	OF	SR	1002	
				IC 281					
			Wall 2	20 Rt. –I	L = 54 + 9	00 to	<i>56</i> +	75	
			IN	VENT	ORY				

		NOTED TO THE PROPERTY OF THE	I NO.	SHEETS				
N.C.	R-4753 1							
STATI	E PROJ. NO.	F. A. PROJ. NO.	DESCRIP	TION				
39	999.1.1	STP 107(10)	P.E.					
			R/W &	UTIL.				

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, COTECHNICAL ENGINEERING UNIT AT 1991 970-6850. NEITHER THE SUBSURFACE PLANS AND REPORTS, NOR THE FIELD BORING LOGS, ROCK CORES, OR SOIL TEST DATA ARE 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 BORNIOS OR BETWEEN SAMPLED STRATA WITHIN THE BORCHOLE, THE LABORATORY SAMPLE DATA AND THE IN STILL WIN-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 THES 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 MICLUDING TELEGRAPH OF THE NUMBER OF THE OWNER OWNER. 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 OF THE TOTAL DESIGN INFORMATION ON THIS PROJECT. THE DEPARTMENT DOES NOT WARRANT OR GUARANTEE THE SUFFICIENCY OR ACCURACY OF THE INVESTICATION 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 INVESTICATIONS AS HE DEEMS NECESSARY TO SATISFY HIMSELF AS TO CONDITIONS. TO BE ENCOUNTERED ON THIS PROJECT. THE CONTRACTOR SHALL HAVE NO CLAIM FOR ADDITIONAL COMPENSATION OR FOR AN EXTENSION OF TIME FOR ANY REASON RESULTING FROM THE ACTUAL CONDITIONS.

M. Morgan
BY PQ Lockany
JC Kuhne
JC Kuhne
9–21–2016

PERSONNEL F&H drill crew R. DeLost



PQ Lockamy DRAWN BY:

9999.

3

NOTE - THE INFORMATION CONTAINED HEREIN IS NOT IMPLIED OR GUARANTEED BY THE N. C. DEPARTMENT OF TRANSPORTATION AS BEING ACCURATE NOR IT IS CONSIDERED TO BE PART OF THE PLANS, SPECIFICATIONS, OR CONTRACT FOR THE PROJECT.

NOTE - 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.

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

GEOTECHNICAL ENGINEERING UNIT

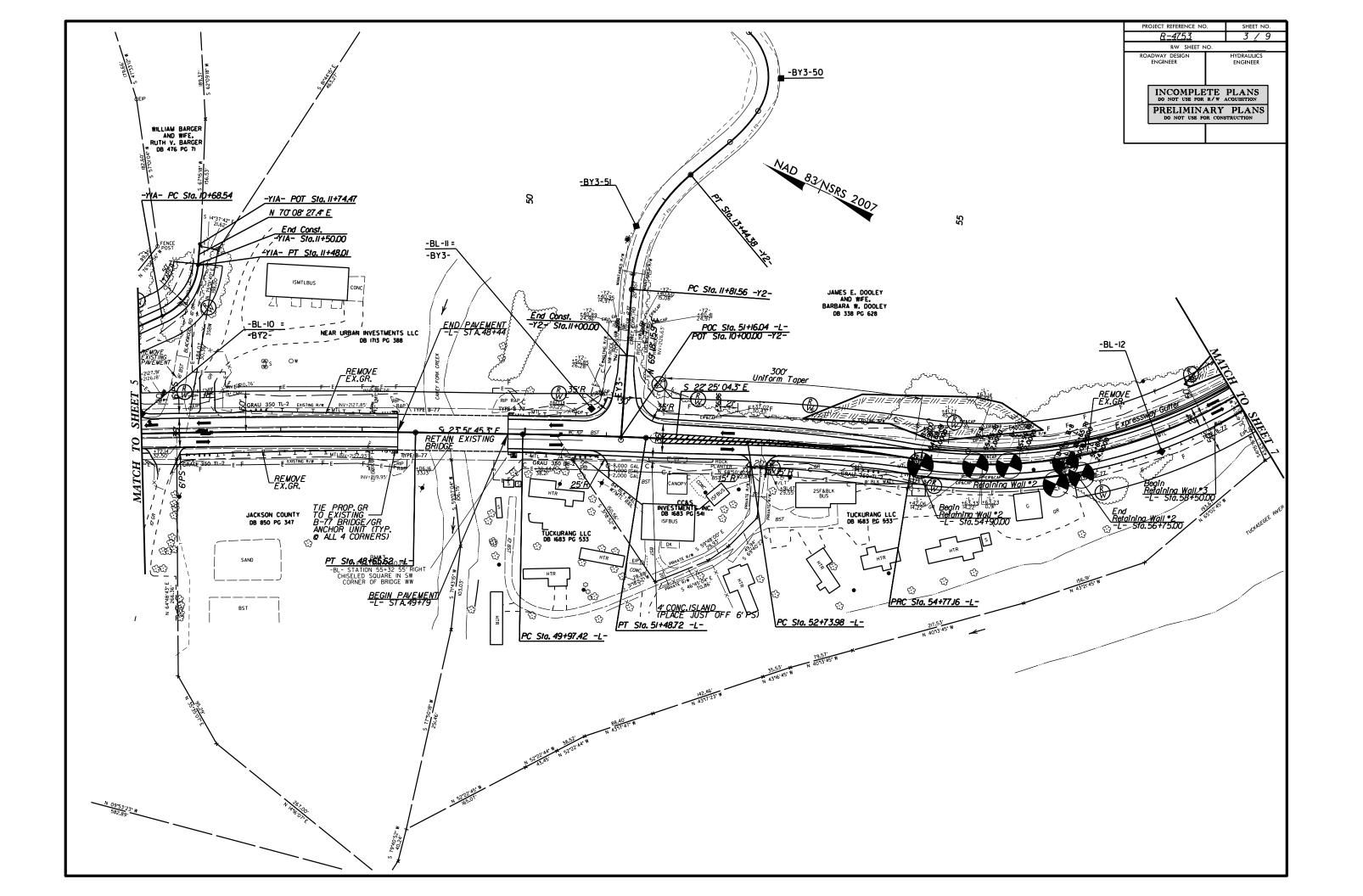
SUBSURFACE INVESTIGATION

				SOIL AND RO	CK LEGEND, TERM	S, SYMBOL	S, AND ABBREV	'IATIONS		
	SOIL DESCRIPTION			GRADATION				DESCRIPTION		TERMS AND DEFINITIONS
THAT CAN BE PENETRATED WITH A CONT 100 BLOWS PER FOOT ACCORDING TO ST CLASSIFICATION IS BASED ON THE AASH	SOLIDATED, SEMI-CONSOLIDATED, OR WEATH TINUOUS FLIGHT POWER AUGER, AND YIELD 'ANDARD PENETRATION TEST (AASHTO 120M' ITO SYSTEM, BASIC DESCRIPTIONS GENERA ', AASHTO CLASSIFICATION, AND OTHER PER	LESS THAN 6,ASTM D-1586), SOIL ALLY SHALL INCLUDE:	UNIFORM - INDICATES THAT SOIL POORLY GRADED)	PARTICLE SIZES I PARTICLES ARE ALL APPROXIMATELY THE RE OF UNIFORM PARTICLES OF TWO OR ANGULARITY OF GRAINS	E SAME SIZE. (ALSO	ROCK LINE INDIC SPT REFUSAL IS IN NON-COASTAL OF WEATHERED F	CATES THE LEVEL AT WHICH NON PENETRATION BY A SPLIT SPOO PLAIN MATERIAL, THE TRANSIT ROCK.	HAT IF TESTED, WOULD YIELD SPT REFI N-COASTAL PLAIN MATERIAL WOULD YIE ON SAMPLER EQUAL TO OR LESS THAN TION BETWEEN SOIL AND ROCK IS OFTE	LD SPT REFUSAL. 0.1 FOOT PER 60 BLOWS.	ARENALEOUS - APPLIED TO ROCKS THAT HAVE BEEN DERIVED FROM SAND OR THAT CONTAIN SAND.
AS MINERALOGICAL COMPOSITION, ANGULA	ARITY, STRUCTURE, PLASTICITY, ETC. EXAMP	LE:	THE ANGULARITY OR ROUNDNESS (SUBANGULAR, SUBROUNDED, OR ROU	OF SOIL GRAINS IS DESIGNATED BY THE	TERMS: ANGULAR,	WEATHERED	S ARE TYPICALLY DIVIDED AS FOI	PLAIN MATERIAL THAT WOULD YIELD S	EDT N VALUES > 100	ARGILLACEOUS - APPLIED TO ALL ROCKS OR SUBSTANCES COMPOSED OF CLAY MINERALS, OR HAVING A NOTABLE PROPORTION OF CLAY IN THEIR COMPOSITION, AS SHALE, SLATE, ETC.
	LAY, MOIST WITH INTERBEDDED FINE SAND LAYERS, HIGHLY P. D AND AASHTO CLASSIFIC			NDED. INERALOGICAL COMPOSITIO	NN .	ROCK (WR)	BLOWS PER FO	OOT IF TESTED.		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
GENERAL GRANULAR MATERIA		ORGANIC MATERIALS	MINERAL NAMES SUCH AS QUARTZ,	FELDSPAR, MICA, TALC, KAOLIN, ETC. ARE		CRYSTALLINE ROCK (CR)	WOULD YIELD !	RSE GRAIN IGNEOUS AND METAMORPHIC SPT REFUSAL IF TESTED, ROCK TYPE		GROUND SURFACE.
CLASS. (≤ 35% PASSING #2	200) (> 35% PASSING *200) A-2 A-4 A-5 A-6 A-7		WHENEVER THEY ARE CONSIDERED	COMPRESSIBILITY		NON-CRYSTALLINE		SE GRAIN METAMORPHIC AND NON-COAS		CALCAREOUS (CALC.) - SOILS THAT CONTAIN APPRECIABLE AMOUNTS OF CALCIUM CARBONATE. COLLUVIUM - ROCK FRAGMENTS MIXED WITH SOIL DEPOSITED BY GRAVITY ON SLOPE OR AT BOTTOM
0.1001	2-5 A-2-6 A-2-7 A-7-6	A-1, A-2 A-4, A-5 A-3 A-6, A-7	SLIGHTLY COMPRESSIBLE	LIQUID LIMIT	LESS THAN 31	ROCK (NCR)	INCLUDES PHYL	ROCK THAT WOULD YEILD SPT REFUSAL LLITE, SLATE, SANDSTONE, ETC.		OF SLOPE.
SYMBOL 000000000000000000000000000000000000			MODERATELY COMPRESSI HIGHLY COMPRESSIBLE		EQUAL TO 31-50 GREATER THAN 50	COASTAL PLAIN SEDIMENTARY ROCK	SPT REFUSAL.	N SEDIMENTS CEMENTED INTO ROCK, BU ROCK TYPE INCLUDES LIMESTONE, SAN		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.
% PASSING # 10 50 MX		GRANULAR SILT- MUCK,	CR	PERCENTAGE OF MATERIA NULAR SILT - CLAY	lL .	(СР)	SHELL BEDS, E	EATHERING		DIKE - A TABULAR BODY OF IGNEOUS ROCK THAT CUTS ACROSS THE STRUCTURE OF ADJACENT
# 40 30 MX 50 MX 51 MN	MX 35 MX 35 MX 36 MN 36 MN 36 MN 36 MN	SOILS CLAY SOILS PEAT	TRACE OF ORGANIC MATTER 2	SOILS SOILS - 3% 3 - 5% TR	OTHER MATERIAL ACE 1 - 10%		K FRESH, CRYSTALS BRIGHT, FEW MER IF CRYSTALLINE.	JOINTS MAY SHOW SLIGHT STAINING. F	ROCK RINGS UNDER	ROCKS OR CUTS MASSIVE ROCK. DIP - THE ANGLE AT WHICH A STRATUM OR ANY PLANAR FEATURE IS INCLINED FROM THE HORIZONTAL.
	MN 40 MX 41 MN 40 MX 41 MN 40 MX 11 MN 11 MN 10 MX 10 MX 11 MN 11 MN	I HIGHLY	MODERATELY ORGANIC 5	- 10% 12 - 20% SO	TTLE 10 - 20% ME 20 - 35% GHLY 35% AND ABOVE	(V SLI.) CRYS		AINED, SOME JOINTS MAY SHOW THIN CL FACE SHINE BRIGHTLY. ROCK RINGS UND		DIP DIRECTION (DIP AZIMUTH) - THE DIRECTION OR BEARING OF THE HORIZONTAL TRACE OF THE LINE OF DIP, MEASURED CLOCKWISE FROM NORTH.
GROUP INDEX Ø Ø Ø USUAL TYPES STONE FRAGS. FINE SILTY	4 MX 8 MX 12 MX 16 MX No MX OR CLAYEY SILTY CLAYEY	MODERATE ORGANIC SOILS ORGANIC	VATER LEVEL	GROUND WATER IN BORE HOLE IMMEDIATELY AFTER	DRILLING	SLIGHT ROCK (SLI.) 1 INC	C GENERALLY FRESH, JOINTS STA CH. OPEN JOINTS MAY CONTAIN C	NINED AND DISCOLORATION EXTENDS IN CLAY. IN GRANITOID ROCKS SOME OCCA	SIONAL FELDSPAR	FAULT - A FRACTURE OR FRACTURE ZONE ALONG WHICH THERE HAS BEEN DISPLACEMENT OF THE SIDES RELATIVE TO ONE ANOTHER PARALLEL TO THE FRACTURE.
MATERIALS SANU	L AND SAND SOILS SOILS	MATTER		R LEVEL AFTER <u>24</u> HOURS				ED. CRYSTALLINE ROCKS RING UNDER H DW DISCOLORATION AND WEATHERING EF		FISSILE - A PROPERTY OF SPLITTING ALONG CLOSELY SPACED PARALLEL PLANES. FLOAT - ROCK FRAGMENTS ON SURFACE NEAR THEIR ORIGINAL POSITION AND DISLODGED FROM
GEN. RATING AS A EXCELLENT TO GO SUBGRADE	OOD FAIR TO POOR	FAIR TO POOR UNSUITABLE		ER, SATURATED ZONE, OR WATER BEAR	ING STRATA	DULL	SOUND UNDER HAMMER BLOWS A	ARE DULL AND DISCOLORED, SOME SHOWN AND SHOWS SIGNIFICANT LOSS OF STRI		PARENT MATERIAL. FLOOD PLAIN (FP) - LAND BORDERING A STREAM, BUILT OF SEDIMENTS DEPOSITED BY
	≤ LL - 30; PI OF A-7-6 SUBGR	OUP IS > LL - 30	SPRING OR SI	EEP			FRESH ROCK. ROCK EXCEPT QUARTZ DISCOLORE	ED OR STAINED. IN GRANITOID ROCKS,	ALL FELDSPARS DULL	THE STREAM.
	SISTENCY OR DENSENESS RANGE OF STANDARD	RANGE OF UNCONFINED		MISCELLANEOUS SYMBOLS	1			HOW KAOLINIZATION. ROCK SHOWS SEVE DLOGIST'S PICK. ROCK GIVES "CLUNK" SO		FORMATION (FM.) - A MAPPABLE GEOLOGIC UNIT THAT CAN BE RECOGNIZED AND TRACED IN THE FIELD.
PRIMARY SOIL TYPE COMPACTN CONSIS	NESS OR PENETRATION PESISTENCE	COMPRESSIVE STRENGTH (TONS/FT ²)	ROADWAY EMBANKMEN WITH SOIL DESCRIPTI		NG TEST BORING W/ CORE		ESTED, WOULD YIELD SPT REFUSA	<u>AL</u> RED OR STAINED.ROCK FABRIC CLEAR A	AND EVIDENT BUT DEBUCED	JOINT - FRACTURE IN ROCK ALONG WHICH NO APPRECIABLE MOVEMENT HAS OCCURRED.
GENERALLY VERY LO GRANULAR LOOSE			SOIL SYMBOL	AUGER BORING	SPT N-VALUE	(SEV.) IN S		RANITOID ROCKS ALL FELDSPARS ARE		LEDGE - A SHELF-LIKE RIDGE OR PROJECTION OF ROCK WHOSE THICKNESS IS SMALL COMPARED TO ITS LATERAL EXTENT.
MATERIAL MEDIUM (NON-COHESIVE) DENSE	DENSE 10 TO 30	N/A	ARTIFICIAL FILL (AF) THAN ROADWAY EMBAI		REF SPT REFUSAL	<u>IF 1</u>	TESTED, YIELDS SPT N VALUES >		TO ADE DISCEDNIDI E DUT	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
VERY DE			INFERRED SOIL BOUND	MW	ILL	(V SEV.) THE	MASS IS EFFECTIVELY REDUCED	TO SOIL STATUS, WITH ONLY FRAGMEN	ITS OF STRONG ROCK	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
GENERALLY SOFT	2 TO 4	<0.25 0.25 TO 0.50	THEME INFERRED ROCK LINE	△ PIEZOMETER				LE OF ROCK WEATHERED TO A DEGREE ABRIC REMAIN. <i>IF TESTED, YIELDS SP</i>		INTERVENING IMPERVIOUS STRATUM.
SILT-CLAY MEDIUM MATERIAL STIFF (COHESIVE) VERY ST	8 TO 15	0.5 TO 1.0 1 TO 2	TTTTT ALLUVIAL SOIL BOUN		OR			C NOT DISCERNIBLE, OR DISCERNIBLE (Z MAY BE PRESENT AS DIKES OR STRIM		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
(COHESIVE) VERY ST HARD		2 TO 4 >4	25/025 DIP & DIP DIRECTION			ALSO	AN EXAMPLE.	K HARDNESS		ROCK SEGMENTS EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE.
TE	EXTURE OR GRAIN SIZE		ROCK STRUCTURES	CONE PENETRON	METER TEST	VERY HARD CAN		OR SHARP PICK, BREAKING OF HAND SPE	ECIMENS REQUIRES	SAPROLITE (SAP.) - RESIDUAL SOIL THAT RETAINS THE RELIC STRUCTURE OR FABRIC OF THE
U.S. STD. SIEVE SIZE OPENING (MM)	4 10 40 60 200 4.76 2.00 0.42 0.25 0.07			SOUNDING ROD			ERAL HARD BLOWS OF THE GEOL	_OGIST'S PICK. ICK ONLY WITH DIFFICULTY. HARD HAM	IMER BLOWS REQUIRED	PARENT ROCK. SILL - AN INTRUSIVE BODY OF IGNEOUS ROCK OF APPROXIMATELY UNIFORM THICKNESS AND
	RAVEL COARSE FINE		AR - AUGER REFUSAL	ABBREVIATIONS MED MEDIUM	VST - VANE SHEAR TEST	то	DETACH HAND SPECIMEN.			RELATIVELY THIN COMPARED WITH ITS LATERAL EXTENT, THAT HAS BEEN EMPLACED PARALLEL TO THE BEDDING OR SCHISTOSITY OF THE INTRUDED ROCKS.
(BLDR.) (COB.) (GRAIN MM 305 75	(GR.) (CSE. SD.) (F SE		BT - BORING TERMINATED CL CLAY CPT - CONE PENETRATION TES	MICA MICACEOUS MOD MODERATELY NP - NON PLASTIC	WEA WEATHERED	HARD EXC		YICK. GOUGES OR GROOVES TO 0.25 INC EOLOGIST'S PICK. HAND SPECIMENS CAM		SLICKENSIDE - POLISHED AND STRIATED SURFACE THAT RESULTS FROM FRICTION ALONG A FAULT OR SLIP PLANE.
SIZE IN. 12 3	THE CORRELATION OF	TEDMO	CSE COARSE DMT - DILATOMETER TEST	ORG ORGANIC PMT - PRESSUREMETER TEST	SAMPLE ABBREVIATIONS			INCHES DEEP BY FIRM PRESSURE OF K S TO PEICES 1 INCH MAXIMUM SIZE BY		STANDARD PENETRATION TEST (PENETRATION RESISTANCE) (SPT) - NUMBER OF BLOWS (N OR BPF) OF A 140 LB. HAMMER FALLING 30 INCHES REQUIRED TO PRODUCE A PENETRATION OF 1 FOOT INTO SOIL WITH
SOIL MOISTURE SCALE	FIELD MOISTURE GUIDE FOR	FIELD MOISTURE DESCRIPTION	DPT - DYNAMIC PENETRATION : e - VOID RATIO		S - BULK SS - SPLIT SPOON		NT OF A GEOLOGIST'S PICK.	Y BY KNIFE OR PICK. CAN BE EXCAVA	TED IN ERACMENTS	A 2 INCH OUTSIDE DIAMETER SPLIT SPOON SAMPLER. SPT REFUSAL IS PENETRATION EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS.
(ATTERBERG LIMITS)	DESCRIPTION		F - FINE FOSS FOSSILIFEROUS	SL SILT, SILTY SLI SLIGHTLY	ST - SHELBY TUBE RS - ROCK	FRO		N SIZE BY MODERATE BLOWS OF A PIC		STRATA CORE RECOVERY (SREC.) - TOTAL LENGTH OF STRATA MATERIAL RECOVERED DIVIDED BY TOTAL LENGTH OF STRATUM AND EXPRESSED AS A PERCENTAGE.
LL_ LIQUID LIMIT _		DW THE GROUND WATER TABLE	FRAC FRACTURED, FRACTURES FRAGS FRAGMENTS	w - MOISTURE CONTENT	RT - RECOMPACTED TRIAXIAL CBR - CALIFORNIA BEARING	SOFT OR	MORE IN THICKNESS CAN BE BRO	BE EXCAVATED READILY WITH POINT OF OKEN BY FINGER PRESSURE. CAN BE SO		STRATA ROCK QUALITY DESIGNATION (SROD) - 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.
PLASTIC RANGE <		REQUIRES DRYING TO TIMUM MOISTURE	HI HIGHLY	v - very 1ENT USED ON SUBJECT F	RATIO PROJECT		GERNAIL. TURE SPACING	BEDDIN		TOPSOIL (TS.) - SURFACE SOILS USUALLY CONTAINING ORGANIC MATTER.
(PI) PL PLASTIC LIMIT	HITHIN O	THOS HOLD TORE	DRILL UNITS:	ADVANCING TOOLS:	HAMMER TYPE:	TERM	SPACING	TERM	THICKNESS > 4 FEET	BENCH MARK: _
OM _ OPTIMUM MOISTURE	- MOIST - (M) SOLID; AT	OR NEAR OPTIMUM MOISTURE		_ CLAY BITS	AUTOMATIC MANUAL	VERY WIDE WIDE	MORE THAN 10 FEET 3 TO 10 FEET	VERY THICKLY BEDDED THICKLY BEDDED	1.5 - 4 FEET	ELEVATION: _ FT.
SL _ SHRINKAGE LIMIT _	REQUIRES	ADDITIONAL WATER TO	[=] MOBILE B- =	6' CONTINUOUS FLIGHT AUGER	CORE SIZE:	MODERATELY CL CLOSE	LOSE 1 TO 3 FEET 0.16 TO 1 FEET	THINLY BEDDED VERY THINLY BEDDED	0.16 - 1.5 FEET 0.03 - 0.16 FEET	NOTES:
		TIMUM MOISTURE		X 8'HOLLOW AUGERS	B	VERY CLOSE	LESS THAN 0.16 FEET	THINLY LAMINATED	0.008 - 0.03 FEET < 0.008 FEET	-
	PLASTICITY		X CME-45C	HARD FACED FINGER BITS	N	EUB SEUIMENTADA E		IDURATION ENING OF THE MATERIAL BY CEMENTIN	C HEAT PRESCUPE ETC	-
NONPLASTIC	PLASTICITY INDEX (PI) 0-5	DRY STRENGTH VERY LOW	CME-55Ø	TUNGCARBIDE INSERTS	H		0.1007	ENING OF THE MATERIAL BY CEMENTING NG WITH FINGER FREES NUMEROUS GRA		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
LOW PLASTICITY MED. PLASTICITY	6-15 16-25	SLIGHT MEDIUM		CASING W/ ADVANCER	HAND TOOLS:	FRIABLE	GENTLE	E BLOW BY HAMMER DISINTEGRATES SA	AMPLE.	Exposed
HIGH PLASTICITY	26 OR MORE	НІСН	PORTABLE HOIST	TRICONE STEEL TEETH	_ POST HOLE DIGGER	MODERATI		S CAN BE SEPARATED FROM SAMPLE WI S EASILY WHEN HIT WITH HAMMER.	ITH STEEL PROBE;	Crystalline Rock
	COLOR		🗆	TRICONE * TUNGCARB CORE BIT	_ HAND AUGER _ SOUNDING ROD	INDURATE		S ARE DIFFICULT TO SEPARATE WITH S	STEEL PROBE;	
	OR COLOR COMBINATIONS (TAN, RED, Y , STREAKED, ETC. ARE USED TO DESCR				VANE SHEAR TEST	FYTREME		CULT TO BREAK WITH HAMMER. HAMMER BLOWS REQUIRED TO BREAK	SAMPLE:	
333.7.0						EXTREME		E BREAKS ACROSS GRAINS.		

PROJECT REFERENCE NO. 3.9999.I.I

SHEET NO.

2/9



		1			1 1	1 1	0	25 PROJ. REFERENCE N	
		 						39999.1.1	4/9
						; ;	 		- i i
) 							
						<u> </u>			
						ļ	 		
		1 1							
						¦ ¦	<u> </u>		
			+ 41411410 1414	,, 4					
		i	TAINING WAL		Z ENVELUI	7E			
	<u>\$ta. 5</u>	55+50	0.00 -L-	Sta. !	56+00.00 +L-				
2150	EL =	2,13	0.00 -L- 7.15'	20 O		0.00			2150
	Sta 55+00.00	}∹ <i>F</i> ≺. <i>F</i>		ر برون	EL = 2.13	39.63°	; -;;;;;		
	<u>Sta. 55+00.00</u> EL = 2,136.07' 20.00' Rt.	<u> </u>			[20.00' Rt.	Sta			
	20.00 Rt.				·	/EL	= 2,140.03		
2140	<u>Sta. 54+90.00 -L-</u> EL = 2,135.85′ ₅₄₊₈ 20.00′ Rt. 7 R-		55+55 55+9	96		<i>20.</i> 0	00' Rt.		2140
2140	EL = 2,135,851 54+	38/	2/R†2-R	‡	56+65 56+8) 			Z140
		+])	6 KT 24 N	Fnd	Wall #2		
	Begin Wall #2	Ф			2	Sta. 5	56+75.00 +L=	· 	 -
	Sta. 54+90.00 -L+				\mathcal{O}	EL =	2,/35.90′		0700
2130	Begin Wall #2 Sta. 54+90.00 -L+ EL = 2,133.24' 20.00' Rt.	[37 2 0	20.00	J' RT.		2130
		(A)				FI =	212910		
			26 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	©	6	20.00	2,129.10')' Rt.		
	9-1								
2120		1	(00/0.3 B) \(8 - \)		(E) (B)				2120
					(00/0.2	÷	iiiiiiii		
		 	3-	Ø					
		 !		 			 		-
2110		 							2110
2110						<u> </u>			2110
						<u> </u>	{}		
			ii		& black-green, cl	ayey	silty sand and silty sand w/mica and roo	k trags.	
	Ø	Weat	thered rock (Gneis	s)					
	(C)	embo	onkment: red,red	brown	n, black & tan fir	ie san	ndy clay		
	0	sapr	olite: tan, green-bl	ack &	gray, silty fine	sand	w/rock frags.		
	Ø	1	olite: green, tan, w		The state of the s				
		;	ınkment: brown, tan	i	· -	; !			
						+	 		
	, , , , , , , , , , , , , , , , , , ,	55	5	6	5	7			

