PROJECT DESCRIPTION

THE PROJECT CONSISTS IN PART OF PLACING TWO STRUCTURES FOR THE PROPOSED SR 823 OVER PORTSMOUTH-MINFORD ROAD (SR 139). THE TWO STRUCTURES AS PLANNED, ARE TWO-SPAN STRUCTURES USING MSE WALLS TO HOLD BACK THE ROADWAY EMBANKMENTS AND CONTAIN THE ABUTMENTS.

HISTORIC RECORDS

HISTORIC BORING RECORDS FOR THE AREA WERE REQUESTED FROM THE ODOT OFFICE OF GEOTECHNICAL ENGINEERING AND THE DISTRICT, HOWEVER, NO SUCH RECORDS EXISTED.

GEOLOGY

 \bigcirc

 \bigcirc

THE STRUCTURE SITE IS LOCATED IN THE SHAWNEE-MISSISSIPPIAN PLATEAU OF THE UNGLACIATED PORTION OF THE APPALACHIAN PLATEAU DHYSIOGRAPHIC REGION. THE SHAWNEE-MISSISSIPPIAN PLATEAU IS CHARACTERIZED BY DEVONIAN AGED TO PENNSYLVANIAN AGED ROCKS AND CONTAINS RESIDUAL, COLLUVIAL, GLACIAL, ALLUVIAL, AND LACUSTRINE SOILS. BEDROCK WITHIN THE STRUCTURE AREA IS PRIMARILY SANDSTONE OF THE LOGAN FORMATION OF MISSISSIPPIAN AGE. BEDROCK OF THE PENNSYLVANIAN BREATHITT FORMATION CAN BE FOUND AT THE TOP OF THE SLOPES TO THE WEST OF THE STRUCTURE, ROUGHLY ABOVE ELEVATION 860. NO MINING IS REPORTED IN THE IMMEDIATE VICINITY.

RECONNAISSANCE

SEVERAL SITE RECONNAISSANCE VISITS WERE MADE BETWEEN JULY 2004 AND SEPTEMBER 2006. THE SURROUNDING AREA IS DESCRIBED AS WOODED RURAL RESIDENTIAL. THE AREA OF THE PROPOSED STRUCTURE IS BORDERED ON THE WEST BY A GENTLY SLOPING RESIDENTIAL AREA WITH GRASS AND TREES AND ON THE EAST BY A WOODED AREA SLOPING STEEPLY TO THE WEST.

SUBSURFACE EXPLORATION

THE SUBSURFACE EXPLORATION CONSISTED OF DRILLING THREE FINAL AND FIVE PRELIMINARY STRUCTURAL BORINGS. BORINGS B-10 THROUGH B-12 WERE DRILLED BETWEEN JUNE 20 AND 28, 2006. TR-15 THROUGH TR-19 WERE DRILLED FOR A PREVIOUS DESIGN CONFIGURATION BETWEEN JULY 9, 2004 AND FEBRUARY 23, 2005. THE BORINGS WERE DRILLED WITH ATV AND TRUCK MOUNTED ROTARY DRILL RIGS, USING 3 1/4 -INCH I.D. HOLLOW STEM AUGERS TO ADVANCE THE HOLES THROUGH SOIL. DISTURBED SOIL SAMPLES WERE OBTAINED IN ACCORDANCE WITH THE STANDARD PENETRATION TEST (AASHTO T206) AT 1.5 TO 5.0-FOOT INTERVALS FOR THE FULL DEPTH OF THE SOIL PORTION OF THE BORINGS. WHERE BEDROCK WAS ENCOUNTERED, THE BORINGS WERE ADVANCED AND THE ROCK WAS SAMPLED USING A TYPE NO SERIES CORE BARREL, WATER METHOD.

EXPLORATION FINDINGS

THE TEST BORINGS DISCLOSED BOTH COHESIVE AND GRANULAR SOILS. THE COHESIVE DEPOSITS CONSISTED MAINLY OF MEDIUM STIFF TO VERY STIFF SANDY SILT (A-4A) AND MEDIUM STIFF TO STIFF SILT (A-4B), WHILE THE GRANULAR SOIL DEPOSITS CONSISTED MAINLY OF LOOSE TO MEDIUM DENSE GRAVEL WITH SAND (A-2-4), LOOSE TO VERY DENSE SANDY SILT (A-4A), AND MEDIUM DENSE SILT (A-4B). THE NATIVE SOIL DEPOSITS EXTENDED TO AN APPROXIMATE DEPTH RANGING BETWEEN 4.0 AND 9.2 FEET BELOW THE GROUND SURFACE WHERE BEDROCK WAS ENCOUNTERED.

THE SOIL OVERLIES A GENTLY SLOPING AND UNDULATING BEDROCK SURFACE. THE BEDROCK CONSISTED MAINLY OF MEDIUM HARD TO HARD, SLIGHTLY WEATHERED, SLIGHTLY TO MODERATELY FRACTURED SANDSTONE.

SEEPAGE WAS ENCOUNTERED ONLY IN BORINGS TR-15, TR-16, AND TR-17 BETWEEN APPROXIMATE DEPTHS OF 6.0 AND 7.0 FEET. THERE WERE NO MEASURABLE WATER LEVELS IN THE BORINGS PRIOR TO ROCK CORING. WATER WAS USED DURING ROCK CORING AND MASKED ANY SEEPAGE ZONES THAT MIGHT EXIST IN THE ROCK. MEASURABLE WATER LEVELS WERE PRESENT IN ALL TEST BORINGS EXCEPT BORINGS B-11 AND TR-15 UPON THE COMPLETION OF CORING BETWEEN APPROXIMATE DEPTHS OF 1.6 AND 28.5 FEET.

SPECIFICATIONS

THIS GEOTECHNICAL EXPLORATION WAS PERFORMED IN ACCORDANCE WITH THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, OFFICE OF GEOTECHNICAL ENGINEERING, SPECIFICATIONS FOR GEOTECHNICAL EXPLORATIONS, DATED JULY 2006.

AVAILABLE INFORMATION

ALL AVAILABLE SOIL AND BEDROCK INFORMATION THAT CAN BE CONVENIENTLY SHOWN ON THE SOIL PROFILE SHEETS HAS BEEN SO REPORTED. ADDITIONAL SUBSURFACE EXPLORATIONS MAY HAVE BEEN MADE TO STUDY SOME SPECIAL ASPECT OF THE PROJECT. COPIES OF THIS DATA, IF ANY, MAY BE INSPECTED IN THE DISTRICT DEPUTY DIRECTOR'S OFFICE, THE OFFICE OF GEOTECHNICAL ENGINEERING AT 1600 WEST BROAD STREET OR THE OFFICE OF STRUCTURAL ENGINEERING AT 1980 WEST BROAD STREET.

DESC	LEGEND CRIPTION	ODOT CLASS	CLAS MECH.,	SIFIED ⁄VISUAL
Grave Grave	al with Sand ilt (A-2-4)	A-2-4	-	3
Sandy	/ Silt (A-4a)	A-40	4	12
[++++] [++++] [++++] Silt (A-4b)	A-4b	3	2
		TOTAL	7	17
Sands	stone	VISUAL		
Weath	hered Sandstone	VISUAL		
Tops	oil	VISUAL		
↓ w ▼	BORING LOCATION - PLAN VIEW DRIVE SAMPLE AND/OR CORE BORING PLOTTED TO VERTICAL SCALE ONLY INDICATES FREE WATER ELEVATION INDICATES STATIC WATER ELEVATION INDICATES STATIC WATER ELEVATION (DRILLING WATER USED) FIGURES BESIDE THE BORING IN PROFI INDICATE THE NUMBER OF BLOWS FOR PENETRATION TEST	LOCATION LE STANDARD		
W/X/Y/Z	YENELIKATION TEST W = NUMBER OF BLOWS FOR FIRST X = NUMBER OF BLOWS FOR SECONE Y = NUMBER OF BLOWS FOR THIRD Z = NUMBER OF BLOWS FOR FOURTH	6 INCHES) 6 INCHES 3 INCHES 4 6 INCHES, IF APPLI	CABLE	
50 (n)	INDICATES NUMBER OF BLOWS (50) TO BARREL SAMPLER A DEPTH OF (n) INCH THAN THE NORMAL 6 INCH INCREMENT.	DRIVE A SPLIT- ES OTHER		



 \bigcirc

 \bigcirc

SDATES STIMES





0

 \bigcirc

 \bigcirc

 \bigcirc

								IECKED
							720	CHI
							700	
								139)
							680	ATION D (SR
								ESTIG/ 917) ROA
							660	N INVI -823-0 NFORE
								DATIO 0. SCI JTH-MI
							640	FOUN DGE N TSMOU
~	32.9 	R-15 9' Rt. s <u>oil-2"</u>						TURE BRII
07	4/2/3 2/1/1 (50(2)						620	STRU(3 OVEI
								SR823
							600	
		в	- 10		640		580	
		43.8 Tops	3' Rt. oil-3"					_
	10/	4/5/4 3/3/2 2/2/2 (50(2)		8	620		560	-6.8
								- 8 2 3
		48	36		600		E 40	sci
]	540	3 7
		48	37				488	

フ

	DLZ OHIO INC. * 6121 HUNTLEY ROAD, COLUMBUS, OHIO 432	29 * (614)888-0040	DLZ OHIO INC. * 6121 HUNTLEY RO.
Client: TranSystems, Inc.	Project: SCI-823-0.00	Job No. 0121-3070.03	Client: TranSystems, Inc. Project: SCI-823-0.0
LOG OF: Boring B-10 Location:	: Sta. 486+01.5, 43.8' RT of SR 823 CL Date Drille	ed: 06/28/06	LOG OF: Boring B-11 Location: Sta. 485+19.1, 48.6 ft. LT of SR
Depth Elev. d (ft) (ft) (ft) (ft) (ft) (ft) (ft) (ft)	WATER OBSERVATIONS: Water seepage at:none water level at completion: none (prior to coring) 6.0' (inside hollowstem augers includes drilling water) DESCRIPTION	GRADATION GRADATION GRADATION GRADATION GRADATION STANDARD PENETRATION (N) Natural Moisture Content, % PL LL Blows per foot	Depth Elev. 4 Constraints of the second of t
-0.3 -652.3 -4 -5 -14 -1 -1.5 -1 -1.5	lopsoil - 3" Stiff brown SILT (A-4b), little clay, trace to little fine sand; damp.	0 0 10 74 16	Topsoil - 2" Loose brown SANDY SILT (A-4a), 1
$5 - \frac{3}{2} \frac{3}{17} 2 - \frac{3}{2}$			-4.0-628.7 ⁴ 8 9 15 2 5 - (Decomposed Rock)
$-\frac{2}{2} \frac{2}{2} \frac{13}{13} = \frac{3}{2.0}$	@ 6.0'-7.5', soft, wet.	0 0 11 74 15 0 0 11 74 15	$=$ $\frac{\binom{15}{50/3}}{50/3}$ $\frac{3}{15}$ @ 8.5', auger refusal.
-0.5 -623.1 $50/2$ 6 4 -10	Medium hard to hard gray SANDSTONE. Medium hard to hard gray SANDSTONE; very fine to fine grained, moderately weathered, argillaceous, laminated to thinly bedded, moderately fractured.	—	10 Mealum hard io hard gray SANDS grained, moderately weathered, laminated to thinly bedded, mod @ 8.5' to 10.0', highly tractured
- Core Rec ROD 15 - 120" 116" 87% R-1			- Core Rec ROD 120" 93" 57% R-1 @ 13.5', qu = 10,537 psi.
-19,5-613.1-	@ 16.5', qu = 10,393 psi.		
25			25
			-28.5-604.2 Bottom of Boring

 \bigcirc

 \bigcirc

AD, COLUMBUS, OHIO 43229	э,	₭ (614	88	8-0	040)		_													z		Ð	٦	
0 823 CL Date Drilled:		6/	20/	06						Jo	ьb	No		01;	21-	30	70	0.0	3			DRAW		CHECK		
none ion:not reported	egate	and B	RA(DAT pug	ION		N	s [.] Iat	T A I 'ur	ND	AR M	D oi:	PE st:	:NE ur	TF ə (RA1 Cor	TIC n†r)N en"	(N) %						
Ν	% Aggr	% C. S	% M. S	% F. S	% Silt	% Clay		, 	F Blo 10	γL Ι Ο W Ο	s	се 20	r '	fo	o† 30			L 10		_						
race clay; damp.	0	1		17		82		0)							Nc	n-	ΡI	0	5	с					
-4a); damp.											C	>							30	+				120)		
ONE; very fine to fine argillaceous, erately fractured. to broken.																						RE FOUNDATION INVESTIGATION	7100 000 000 NO 10010	KIUGE NO. SCI-823-0917 Detemonitu-Mineord Boad (S	A DAN AN ALL MINE AN AN AN AN AN AN	
- 28.5'																						RUCTUR	C			
																					-	S.		50872	670UC	
																							SCI-232-6 21			
																						4)	

	DLZ OHIO INC. * 6121 HUNTLEY ROAD, COLUMBUS, OHIO 432	229 * (614)888-0040		DLZ OHIO INC. * 6121 HUNTLEY RO
Client: TranSystems, Inc.	Project:SCI-823-0.00	Job No. 0121-3070.03	Client: TranSystems, Inc.	Project: SCI-823-0.0
LOG OF: Boring B-12 Locatio	n: Sta. 485+04.7, 9.0 ft. RT of SR 823 CL Date Drille	ed:6/20/06	LOG OF: Boring TR-15 Locat	ion: Sta. 486+83.3, 32.9 ft. RT of SR
$\begin{array}{c c} & \begin{array}{c} & \end{array} \\ & \begin{array}{c} & \end{array} \\ & \end{array} \\ & \begin{array}{c} & \end{array} \\ & \end{array} \\ \end{array} \\ \begin{array}{c} & \begin{array}{c} & \end{array} \\ \end{array} \\ \begin{array}{c} & \end{array} \\ \end{array} \\ \begin{array}{c} & \begin{array}{c} & \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} & \end{array} \\ \end{array} \\ \begin{array}{c} & \end{array} \\ \end{array} \\ \begin{array}{c} & \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} & \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} & \end{array} \\ \end{array} \\ \begin{array}{c} & \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} & \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} & \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} & \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} & \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} & \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} & \end{array} \\ \end{array}$	WATER OBSERVATIONS: Water seepage at: none ro- Water level at completion: none (prior to coring) 4.0' (inside hollowstem augers includes drilling water) DESCRIPTION	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Depth Elev. s c c c c c c c c c c c c c c c c c c	observations: water seepage at: etro- ter sf) DESCRIPTIO
	Topsoil - 3" Loose to medium dense brown SANDY SILT (A-4a), trace clay; contains sandstone fragments; damp.	0 0 8 92	-0.92 = 631.1 = = $\frac{4}{2}$ = 1 = 1.	Nopsoil - 2" Stiff to very stiff brown SANDY gravel; moist.
-4.0-628.5 ¹⁰ 7 2 5 - 4 9 2	Loose to medium dense reddish brown GRAVEL WITH SAND AND SILT (A-2-4); contains sandstone fragments; damp.		5 2 40 5 40 5 40 5 40 5 40 5 40 5 40 5 40 5	@ 3.5'-5.0', very soft.
$-\frac{4}{50}$			$-7.0-624.3$ $\frac{3}{20}$ $\frac{3}{20}$ $\frac{3}{13}$ 3	25
			-8.0-623.3	Severely weathered brownish-gro
	Medium hard to hard gray SANDSTONE; very fine to fine grained, moderately weathered, argillaceous, laminated to thinly bedded, moderately fractured.		10	grained, slightly to moderately argillaceous, micaceous, massive fractured.
- Core Rec ROD - 120" 97" 67% R-1 	@ 13.0', qu = 11,829 psi.		- Core Rec ROD - 120" 99" 70%R-1 - 15	@ 8.0′-9.0′, probable core loss.
20 20 20 20 25 25 25 - 2 - - 2 - 2 - 2 - - 2 - - 2 - - - 2 - - - - - - - - - - - - -	@ 24.5′, qu = 9,709 psi.			Bottom of Boring
	Bottom of Boring - 28.5'			

 \bigcirc

 \bigcirc

0

AD, COLUMBUS, OHIO 43229	} ,	* (614)88	8-0()4()		-		_					_					-	z		2	3	1
823 CL Date Drilled	7,	/9/	200)4			_	_		ال	υD	N	ο.	(J 12	: -	30	1).(13		DRAW		CHECK	2	
:6.0′ ion:None N SILT (A-4a), †race	% Aggregate	% C. Sand	W. Sand	% F. Sand	% Silt	% Clay		S 101 B1	F F Ow 10			RC Io er) P ist		1 1 1 3(N nt	(N) %					
y SILTSTONE fragments. ONE; very fine to fine weathered, ly bedded, slightly							C													6+			STRUCTURE FOUNDATION INVESTIGATION	BRIDGE NO. SCI-823-0917	SR823 OVER DORTSMOLITH-MINEORD ROAD (SR 139)	
																							5	→ → SCI-823-6.81		

	DLZ OHIO INC. * 6121 HUNTLEY ROAD, COLUMBUS, OHIO 4	3229 * (614)888-0040		DLZ OHIO INC. * 6121 HUNTLEY RC
Client: TranSystems, Inc.	Project: SCI-823-0.00	Job No. 0121-3070.03	Client: TranSystems, Inc.	Project: SCI-823-0.0
LOG OF: Boring TR-16 Location	n: Sta. 486+12.4, 32.3 ft. LT of SR 823 CL Date Dri	lled: 7/9/04	LOG OF: Boring TR-17 Locatio	on: Sta. 485+26.9, 24.3 ft. RT of SR
Depth Elev. (ft) (ft) (ft) (ft) (ft) (ft) (ft) (ft)	WATER OBSERVATIONS: Water seepage at:6.0' ro- Water level at completion:6.5' or DESCRIPTION	GRADATION GRADATION GRADATION GRADATION GRADATION STANDARD PENETRATION (N) Natural Moisture Content, % PL foot - O Blows per foot - O 20 30 40	Depth Elev. 5 6 6 6 6 6 1.7 6 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7	WATER OBSERVATIONS: Water seepage a tro- er f) f) DESCRIPTI
-0.22 -0.1	Topsoil - 2" Medium stiff brown SANDY SILT (A-4a); moist.		-0.4 - 631.3 - 6810 - 18 - 1	Topsoil - 5″ Medium dense brown SILT (A-4b) sand, †race clay; damp.
5 1 15 2 0.75		$\Phi_{1}^{(1)}$	-3.0 -628.4 -5.5 -626.2 -626.2 -7.5 $-$	Loose brown GRAVEL WITH SAND
	@ 6.0' to 7.4', contains rock fragments.	50-(6.3 625.4 -7.0 624.7 50/5 11 3B -7	Very dense brown SANDY SILT (A Severely weathered gray SAND Medium hard brown and gray SAI moderately weathered, slightly
	Medium hard to hard gray SANDSTONE; very fine to fin grained, slightly weathered, micaceous, argillaceous massively bedded, slightly fractured.	ne		fractured. @ 7.3'-7.4', very soft, highly @ 8.5', irregular fracture. @ 8.7', gray.
Lorel Rec ROD _R -1 120" 118" 85%	@ 17.0' contains few araillaceous laminations		15	@ 16.0', 1" soft, weathered zon
-18.5 - 613.4	Bottom of Boring - 18.5'		20-	weathered, slightly micaceous,
			25	@ 22.8'-23.0', very soft, highly seam. @ 23.0'-23.2', siltstone seam.
			-27.0-604.7	Bottom of Borin

 \bigcirc

 \bigcirc

) 823 CL Dote Drilled:	; ,	/23	/20)05	J - U	040	,		J	эb	N	э.		012	21-	30	70	.0	3		DRAWN	CHECKED		
 bate Drilled: 6.3'-7.0' ide hollowstem augers, ide hollowstem augers, s drilling water) N N 1ittle fine to coarse ND SILT (A-2-4); damp. 	% Aggregate	23 C. Sand	/200 RAL 2009	% F. Sand	% Silt	% Clay	N	a1 B			AR loi	st f	PE ur	ENE	:TF Co -((11C en' L	νΝ t,	(Z %			Ċ		
4a); wet. ONE. ISTONE; fine grained, micaceous, slightly athered.																		5 C			N INVESTIGATION	-823-0917	INFORD ROAD (SR 139)	
weathered siltstone																					RUCTURE FOUNDATIO	BRIDGE NO. SCI	VER PORTSMOUTH-M	
																					ST		SR823 C	
																						SCI-823-6.81		
																					6	<u>T</u>	7)	

Cliente TrapSystems Inc	Designation of the set		Climat:	Trees		Inc		Due in the sol of a
Client: Iransystems, Inc.	Project: SUI-823-0.00	JOD NO. 0121-3070.03	ClienT:	Irans	ystems	, Inc.		Project: SUI-823-0.00
Depth Elev. s A B C C C C C C C C C C C C C C C C C C	MATER WATER OBSERVATIONS: Water level at completion: Pr 0 0 0 0 0 0 0 0 0 0 0 0 0	Ied: 8/1//04 GRADATION OF DEUS STANDARD PENETRATION (N) Natural Moisture Content, % OF DEUS Image: Standard Moisture Content, %	Depth (ft)	Elev.	ecovery (in)	Samp No.	Hand Hand Penetro meter % (tsf)	WATER OBSERVATIONS: Water level at complet 16.3' (inclue) DESCRIPTIO
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Topsoil - 12" Medium stiff brown SILT (A-4b), little clay, little fine to coarse sand, little gravel; contains roots; dry to damp. Loose brown SANDY SILT (A-4a), little clay, trace to little gravel; damp. Hard gray SANDSTONE; very fine to fine grained, slightly weathered, argillaceous, micaceous, slightly to moderately fractured. @ 7.3'-7.6', broken. @ 7.3'-7.8',8.0',8.6'-8.8', brown, rust-stained fractures. @ 7.3'-7.8', vertical fracture.	20 20 30 40 13 7 9 58 13 0 0 3 40 45 12 0 Ndr-Plips+1c 11 20 28 31 10 0 Ndr-Plips+1c 11 20 28 31 10 0 Ndr-Plips+1c	0 	633.0 7 632.0 3 4 4 624.3 55 C 3	m 2 7 7 7 9 18 7 7 9 18 7 7 9 18 7 7 9 18 7 7 7 8 7 8 7 8 7 7 8 7 7 7 8 7 8 7 7 7 8 7 7 8 7 7 7 8 7 7 7 8 7 7 7 8 7 7 7 8 7 7 7 7 7 8 7 7 7 7 7 8 7 7 7 8 7 7 7 7 7 8 7 7 7 8 7 7 7 7 7 7 7 7 7 7 7 7 7	1 2 3 4 57% R	-1	Topsoil - 12" Medium dense brown SANDY SILT (trace clay; contains sandstone f grained, slightly to moderately argillaceous, micaceous, massive fractured, @ 9.2'-9.4', decomposed. @ 8.8'-9.0', brown. @ 13.1'-13.3', vertical fracture.
15 - Core Rec ROD 72" 71" 94% R-2 -260.3 - 611.0	Bottom of Boring - 20.3'		15 	C 10	ore Rec 108"	: ROD 70%	-2	@ 13.9'-14.0', vertical fracture. @ 15.5', unfractured to slightly @ 14.7'-15.5', broken zone @ 15.4'-15.5', clay filled fracture Bottom of Boring

 \bigcirc

 \bigcirc

AD, COLUMBUS, OHIO 43229) *	€ (614)888	3-0	04	0		_		. 1	oh		JO		C	12	1-	30	070	2	03			NM		KFN	}	
823 CL Date Drilled	8/	16/	04		†0		8,	/1	77	′0	4	JL			•	Ū			JU						DRA		CHEC	2	
: None ion: udes drilling water) N	: Aggregate	: C. Sand	N. Sand	F. Sand	silt	: Clay	- \	S NC	5T. 1†1	۸۹ ur	ID al	AF N Pt P	≀D 1o erj	P is f	EN tu	NE Ire D	TR e (а Со	∏(n† -	DN ei LL	1 (n† -	N)	%		-		-		
A-4a), trace gravel, ragments; damp. ONE; very fine to fine weathered, ly bedded, slightly fractured. c. - 20.2'																					U7	-0-	*			SIRUCIURE FOUNDATION INVESTIGATION	BRIDGE NO. SCI-823-0917	SD833 OVED DODTEMOLITH-MINEODD DOAD (SD 130)	ONOZO VYEN FONIOMOUN MINFOND NVAD (ON 108)
																										7	∏ SCI-823-6.81	7	_