# RECEIVED

JAN 0 5 2018

# Petersburg Borough, Alaska Application to Lease or Purchase Real Property (\$100.00 non-refundable filing fee required) Pa VISA 1-5-18

Form must be completed in its entirety to be considered

Date of Application: JAN 4, 2018	Lease or Purchase Request? (circle appropriate choice)
Parcel ID # of Subject Property:	Proposed term of lease: 5 REIVE (total years)
WRANGELL NARROWS SECHTS95R79ECRM LAT 56.7806 N LONG 132.9730 W	TUDICTE A
Legal Description of Property ATS 258 SURVEY ATS 207 /695	Current Zoning of Property
Applicant Name: TSLAND VENTURES LLC	
Applicant Mailing Address: P.O. Box 966	
PETERSIBURG, AL 992	833
1. If the complete parcel described above is not being requisize of the parcel to be acquired in square feet	
2. Attach a map showing the location of the land requeste with the land requested clearly marked with bolded borders or high	
3. Narrative on use of property: Explain proposed use of la and end. Include any planned new construction or renovation, in or renovation will be completed and type of materials to be used. proposed improvements. Explain the value of the proposal to the information you feel should be considered. (attached additional sheet Proposer use is for Temporary Boht	cluding time-frame when construction Provide the estimated dollar value of the economy of the city and any other if necessary)
ATTACHED FOR DETAKLS.	7074MJr., 320
4. Name and address of all adjacent land owners or le applicable: (attach additional sheet if necessary)	ssees, including upland owner(s) if
PETERIBURG BORGUGH FOR ALL.	

5.	Are th	ere any existing permits or leases covering	ig any part of the land	applied for?
		Yes	Lease	Permit)
		ibe the type of permit or lease, if applicattee or lessee:		
6.		local, state or federal permits are		proposed use? (list all)
7.	If app	licant is a corporation, provide the follow	ing information:	•
	A.	Name, address and place of incorporation	•	J. AR
	В.	Is the corporation qualified to do busine		esNo
	C.	Name and address of resident agent:	JOHN MURLAS ETERSBURG, A	1 K 99833
NOT	СЕ ТО	APPLICANT(s):		
estim: adver	ated costising a	ill be required to deposit with the B sts of: a title report, survey, legal fees, and other costs incidental to the proce ne Borough Clerk of the amount of de	postage, recording fessing of this applica	ees, public noticing and tion. Applicant will be
16.12	and 16 ements	ify that I have received and reviewed .16 (as they may pertain to my partice. I further certify I am authorized	cular application) an	d understand the Code
			Applicant/A	In Mayar pplicant's Representative
Subsci	ribed an	d sworn to before me this	_day of <u>Januar</u>	<u>4</u> , 20 <u>18</u> :
		d sworn to before me this	Sto	Notary Public
		Public in and for the State of Alaska. M		
		STATE OF ALA OFFICIAL SEA Stacy Luhi NOTARY PUBL My Commission Expi	IC IC	2/12

<u>DESCRIPTION</u> Island Ventures LLC proposes to install, at its expense, including USACE permit(s), a temporary boat ramp using personal property crushed rock, adjacent to and north of the present spit at the Scow Bay Turnaround, approximately 250 feet south of the present ramp. Applicant assumes there will be non monetary cooperation from property owner Petersburg Borough to obtain the USACE permit(s). Surface dimensions would be 24 feet width by 170 feet length. Overall width including shoulder would average 32 feet (34 feet at top, 30 feet at bottom). Construction native ground up would be geotech cloth, 2 to 8 feet pit run crushed rock, compacted 3 inch minus rock on surface, barrier rock on south shoulder as needed. The ramp would be "temporary" in the sense the area would be completely buried by the Petersburg Borough when and if the Borough moves forward with planned expansion of the Scow Bay Turnaround facility, or for any other public purpose. When and if the lease is terminated the personal property crushed rock would be removed by lessee Island Ventures LLC, unless mutually agreed otherwise by lessor Petersburg Borough and lessee Island Ventures LLC.

<u>PURPOSE</u> The purpose of the ramp is to improve the ability to launch and haul boats when there are prevailing southerly winds and waves. The existing jetty provides excellent protection from those conditions.

<u>COST/BENEFIT</u>, <u>SAFETY</u>, <u>MAINTENANCE</u> Although the temporary life span of the proposed ramp may be short (estimated at 2 to 10 years depending on grant funds for the total Scow Bay project), cost/benefit is still worthwhile. Increased safety offered by the proposed ramp would reduce liability for the Petersburg Borough. The ramp would be maintained by Island Ventures LLC.

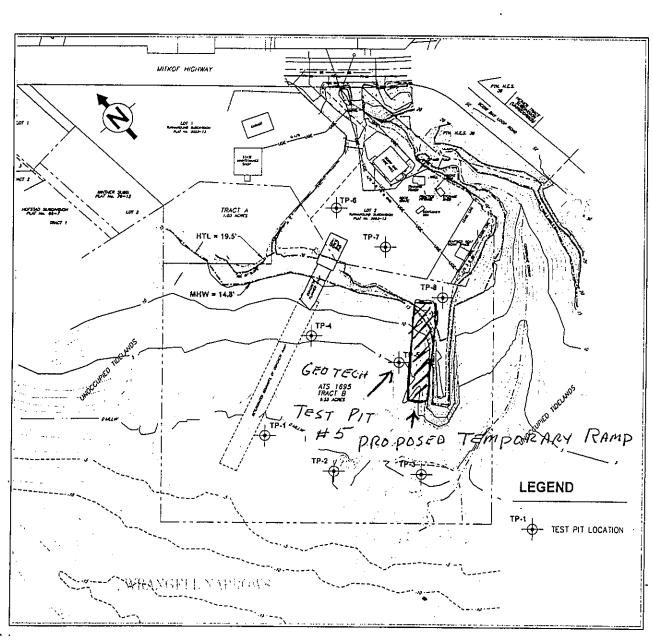
<u>SCHEDULE</u> USACE permit is estimated to take 3 to 6 months, if granted. Lease requirements would begin once the USACE permit(s) is issued. If not issued, the project would be cancelled. Construction is estimated to be completed within 6 months after the USACE permit is issued, excluding winter months December through March, or any other periods disallowed by government agencies for habitat or environmental reasons. Actual construction time is estimated 3 days.

**BENEFIT TO COMMUNITY** Boat launching ramps are vital to all communities in SE Alaska. On a per capita basis, Petersburg has less than the average number of ramps in its main population area. The present Scow Bay ramp receives much use, both commercial and pleasure. An additional ramp that allows safe use in prevailing southerly winds would be beneficial to the community. General private use of the ramp would be allowed on an individual permission

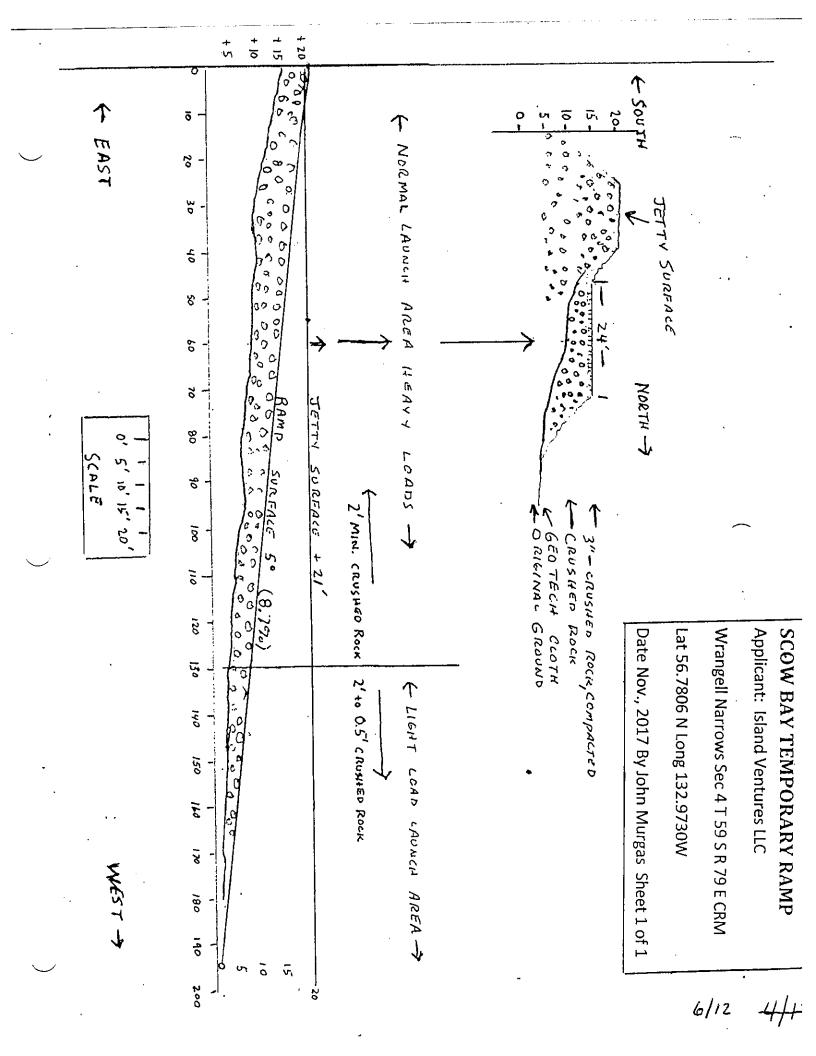
basis with supervision by Island Ventures LLC when staff is available. The proposed ramp would help keep commercial vessel services in Petersburg instead of going to other communities.

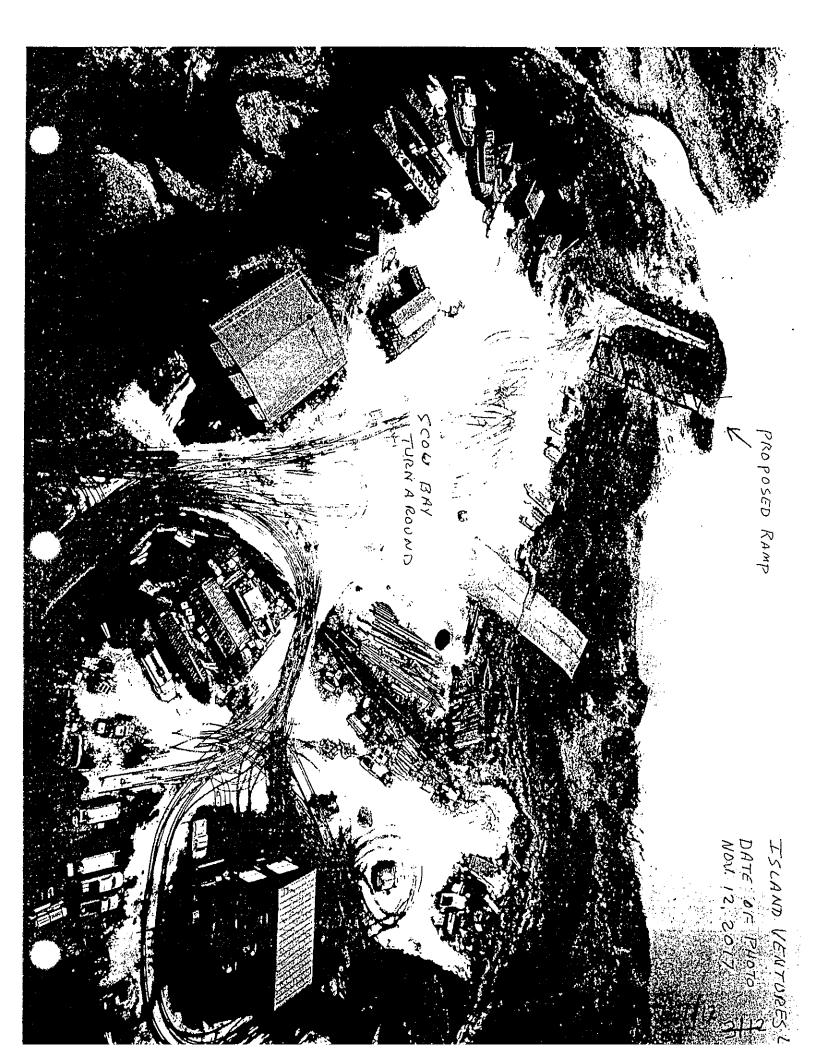
**FAVORABLE RAMP SLOPE** Ramp slope of 5 degrees is the maximum slope for a large vessel hydraulic trailer without potential vessel sliding. It is minimally adequate for most recreational vessels. The present Scow Bay ramp slope is 5 degrees only on the upper concrete portion, then tapers (banana shaped) to 4 and 3 degrees, so is useable for recreational boats only at its upper portion. The proposed ramp is designed to provide a more constant slope, which will allow a larger launch tide window for recreational vessels.

OTHER Geotechnical data is favorable. See attached test pit data. The adjacent spit, installed in the 1960's, has not settled. Tidal current, at all stages of tide, is zero. Wave erosion of beach rock and sands, and littoral drift erosion, are close to zero. Maintenance of surface 3 inch minus compacted rock is expected to be minimal. There would be no loss of traction nor compromise of surface competency of the rock ramp vs. a concrete ramp. Island Ventures LLC has been operating on the rock portion of the present ramp with minimal maintenance since 2007.



PURPOSE:	ESTICATION.	EXISTING CONDITIONS	SCOW BAY BOAT HAULOUT
1231 F11 11441	LSTIGNTION	SCALE IN FEET 0 100 200	
	:	20 50 ALE	APPLICANT: CITY AND BOROUGH PETERSBURG, ALASKA FILE NO.: WATERWAY: WRANGELL NARROWS
DATUM:	HTL = 19.5° MHW = 14.8°		PROPOSED ACTIVITY: TEST PIT INVESTIGATION SEC. 4 T. 59 S R. 79 E M COPPER RIVER MERIDIAN LAT.: 56.7806' N LONG.: 132.9730' W DATE: MARCH 2017
MLLW = 0.0'	MLLW = 0.0°	PND PROJECT NO. 162046.01	SHEET 1 of 1





# SOILS CLASSIFICATION, CONSISTENCY AND SYMBOLS

### CLASSIFICATION

Identification and classification of the soil is accomplished in general accordance with the ASTM version of the Unified Soil Classification System (USCS) as presented in ASTM Standard D2487. The standard is a qualitative method of classifying soil into the following major divisions (1) coarse grained, (2) fine grained, and (3) highly organic soils. Classification is performed on the soils passing the 75 mm (3 inch) sieve and if possible the amount of oversize material (> 75 mm particles) is noted on the soil logs. This is not always possible for drilled test holes because the oversize particles are typically too large to be captured in the sampling equipment. Oversize materials greater than 300 mm (12 inches) are termed boulders, while materials between 75 mm and 300 mm are termed cobbles. Coarse grained soils are those having 50% or more of the non-oversize soil retained on the No. 200 sieve (0.075 mm); if a greater percentage of the coarse grains is retained on the No. 4 (4.76 mm) sieve the coarse grained soil is classified as gravel, otherwise it is classified as sand. Fine grained soils are those having more than 50% of the non-oversize material passing the No. 200 sieve; these may be classified as silt or clay depending their Atterberg liquid and plastic limits or observations of field consistency. Refer to the most recent version of ASTM D2487 for a complete discussion of the classification method.

## SOIL CONSISTENCY - CRITERIA

Soil consistency as defined below and determined by normal field and laboratory methods applies only to non-frozen material. For these materials, the influence of such factors as soil structure, i.e. Fissure systems, shinkage cracks, slickensides, etc., must be taken into consideration in making any correlation with the consistency values listed below. In permafrost zones, the consistency and strength of frozen soils may vary significantly and unexplainably with ice content, thermal regime and soil type.

## Standard Penetration Test (Blows/ft) Relative to Density/Consistency

N60	Density	Relative Density	N60	Consistency	Undrained Shear Strength psf
0-4	Very Loose	0-151/0	< 2	Very Soft	< 250
4-10	Loose	15-35%	2 - 4	Soft	250 - 500
10-30	Medium	35-65%	4 - 8	Medium	500 - 1000
30-50	Dense	65-85%	8 - 15	Stiff	1000 - 2000
> 50	Very Dense	>85%	15 - 30	Very Stiff	2000 - 4000
			> 30	Hard	> 4000

Ref: Terzaghi, Peck, and Mesri Soil Mechanics in Engineering Practice, 3rd Edition, pg 60-63

ASTM D1586 Standard Test Method for Penetration Test and Split-Barrel Sampling of Soils

ASTM D2487 Standard Practice for Classification of Soils for Engineering Purposes (USCS)

## SAMPLER TYPE SYMBOLS

Α	Auger Sample	Hs	1.4" Split Spoon w/ Air Hammer	Ss	1.4" Split Spoon w/ 140# Hammer
Bs	Bulk (grab) Sample	РЬ	Pitcher Barrel	St	
Cs	Core Barrel w/ Single Tube	SI	2.5" Split Spoon w/ 140# Hammer	Sx	· •
Cd	Core Barrel w/ Double Tube	Sm	2.5" Split Spoon w/ 300# Hammer	Sz	
Ct	Core Barrel w/ Triple Tube	Sh	2.5" Split Spoon w/ 340# Hammer	Ts	
HI	2.5" Split Spoon w/ Air Hammer	Sp	2.5" Split Spoon, Pushed	Tr	n Modified 2.5 O.D. Shelby Tube

Note: Split Spoon size refers to sampler inside diameter.

PND	Designed: PND Drawn: PND Checked: PND	STANDARD BO LOG DET	<del></del>
ENGINEERS, INC.	Project No.: 162046,01 Date: March 2017	BOREHOLE LOGS	FIGURE A 1 of 3

			SOIL/ROCK DESCRIPTION			5	SAMI	PLES	GRAPH COMMENTS	
Depth (Feet)	0:0   Water Table	GRAPHIC SYMBOL	Soil Name, Color, Moisture Condition, Relative Density, Soil Structure, Mineralogy, Other Information Rock Name, Description	Number	Type	Location	Recovery (%) (RQD)	Penetration Blows per 6/Inch (per Foot)* or {Rack Quality}	2 4 6 8 Additional Information	Elevation (Fcet)
-	<u>▼</u>	000000	0' - 0.30' A.C. PAVEMENT  POORLY-GRADED GRAVEL W/ SILT AND SAND (GP-GM) Gray, Moist, Dense, Subangular	1	Ss		30	20-20-25 (45)	Begin drilling 10/24/03 8:00 a.m.  1.5' to 2' - Hard, loud drilling (Cobbles/Boulder encountered)	- 24.43 — — — — — — — — — — — — — — — — — — —
-			SLATY ARGILLITE grayish black, fine grained, thin bedded, medium hard, BX-U, steeply dipping	2	Ct		56 (50)	{Poor}	drillhole blockage	
1	2	3	4	5	6	7	8	9	10 11	12

### **COLUMN DESCRIPTIONS**

1 Depth Depth (in feet) below the ground	
I I Debui Debui Debui un tech betow the Pround	surface.

- 2 Water Level Groundwater level recorded while drilling. Depths and times are recorded in comments column.
- 3 Graphic Log Graphic depiction of materials encountered.
- Soil/ Rock
  Description
  Descrip
- 5 Sample Number Sample identification number.
- 6 Sample Type of soil or rock sample collected at depth interval depicted; symbols explained on Fig. B-1.
- 7 Sample Location Location of soil or rock sample taken.
- 8 Sample Recovery Soil: Percentage of sample recovered. Rock: Percentage of sample recovered and RQD value.
- Sample Blows or Rock Quality

  Soil: Number of blows to advance driven sampler each 6-inch interval using sampler type specified with a 30-inch drop. Blows per foot given in parentheses. Rock: Rock quality as defined from RQD value.
- Graphs Graphic log depicting blow counts per foot with a specified split spoon, Pocket Penetration and Vane Shear tests depicted where taken on fine grained soils.
- [1] Comments Or Observations on drilling/sampling by driller or PND field personnel.
- [12] Elevation (in feet) with respect to Mean Lower Low Water (MLEW) or other datum where specified.

## GENERAL NOTES

- 1. Field descriptions may have been modified to reflect laboratory test results.
- Descriptions on these boring logs apply only at the specific locations at the time the borings were drilled. They are not warranted to be representative of subsurface conditions at other locations or times.
- Split spoon blow counts shown are uncorrected raw data. Various hammer sizes and split spoon sizes were used and have not been
  corrected to a Standard Penetration Test (SPT). Blow counts may vary substantially between SPT and these methods.

P N D	Designed: PND Drawn: PND Checked: PND	STANDARD BOREHOLE LOG DETAILS	
ENGINEERS, INC.	Project No.: 162046.01 Date: March 2017	BOREHOLE LOGS FIGURE A 2 of 3	

M	ANC .	SYMI	BOLS	TYPICAL	
1417	AJOR DIVISIO		GRAPH	LETTER	DESCRIPTIONS
	GRAVEL AND	CLEAN GRAVELS		GW	Well-graded gravels, gravel sand mixtures, little or no fines
COARSE GRAINED	GRAVELLY SOILS	(LITTLE OR NO FINES)		GP	Poorly graded gravels, gravel-sand mixtures, little or no lines
SOILS	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO.	GRAVELS WITH FINES		GM	Silty gravels, gravel-sand-silt mixtures
	4 SIEVE (4.75mm)	(APPRECIABLE AMOUNT OF HINES)		GC	Clayey gravels, gravel-sand-clay mixtures
	SAND AND	CLEAN SANDS		SW	Well-graded sands, gravely sands, little or no fines
MORE THAN 50%	SANDY SOILS	(LIFTLE OK NO FINES)		SP	Poorly graded sands, gravelly sands, little or no fines
RETAINED ON NO. 200 SIEVE (0.075mm)	MORE THAN 50% OF COARSE FRACTION PASSING NO. 4	SANDS WITH FINES		SM	Silty sands, sand-silt mixtures
	SIEVE (4.75mm)	(APPRECIABLE AMOUNT OF FINES)		SC	clayey sands, sand-clay mixtures
51115	5.V.75			ML	Inorganic sifts and very fine sands, rock flour, sifty or clayey fine sands or clayey sifts with slight plasticity
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN SO		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
				OL	Organic silts and organic silty clays of low plasticity
	CU TC			МН	inorganic silts, micaceous or diatomiceous fine sandy or silty soils, elastic silts
MORE THAN 50% PASSING NO. 200 SIEVE (0.075mm)	SILTS AND CLAYS	LIQUID UMIT GREATER IHAN SO		СН	Inorganic clays of high plasticity, fat clays
				ОН	Organic clays of medium to high plasticity, organic silts
HIG	HLY ORGANIC SC	DILS	r 2r 2r 2r 2r 5	РΤ	Peat and other highly organic soils

NOTE: Multiple symbols are used to indicate borderline or dual soil classifications as per ASTM 2488

 Distinct contact between soil strata or geologic units

---- Approximate location of soil strata change within a geologic soil unit

## Laboratory / Field Tests List of Abbreviations

Stratigraphic Contact

.%F	Percent Fines	ΗА	Hydrometer Analysis	PP	Pocket Penetrometer
AL	Atterberg Limits	LMA	Limited Mechanical Analysis	SA	Sieve Analysis
CP	Laboratory Compaction test	MC	Moisture Content	TV	Torvane
CO	Consolidation test	MD	Moisture content and Dry density	ΤX	Triaxial Shear
DP	Depth "Peat" Probe	OC	Organic Content	UC	Unconfined Compression
DS	Direct Shear	PM	Permeability or Hydraulic Conductivity	VS	Vane Shear

PND	Designed: PND Drawn: PND Thecked: PND	STANDARD BOREHOLE LOG DETAILS					
ENGINEERS, INC.	Project No.: 162046,01 Date: March 2017	BOREHOLE LOGS	FIGURE A 3 of 3				

		SOIL DESCRIPTION			SA	MF	LES		G	RA	PH	Ī		COMMENTS	
able able		Soil Name, Color, Moisture			_	%	Penetration Blows per	■ BLOW COUNT ■ 20 40 60 80			80		Casing Depth, Drilling Rate,	۲.	
Depth (feet) Water Table	Graphic Symbol	Content, Relative Density, Soil Structure, Mineralogy, Other Information	Number	ջ.	Location	Recovery (RQD %)	6/Inch (per foot)		<del> </del>		3	4		Fluid Loss, Drill Pressure, Tests, Instrumentation.	Elevation (feet)
	Syı	Other Information	Z	Type	ڲؚٳ	% £	or {Rock Quality}	•	VAN 0.2 (	SHEA 1,4 (	AR ( ),6	(121) (121)	<b>A</b>	Additional Information	(fee
0.0 _		SAND WITH SILT AND GRAVEL (SM)							,		:			Begin Excavation: 3/30/17; Time: 2:05pm	<del></del> 22.0-
		gray and brown, medium dense; imported fill	: 5	Bs					;		•	:		Excavator Model PC 200-6 with 1.5 CY bucket	
-		•						! ! .						Will 1.5 C F Bucket	
- 2.5		SILTY GRAVEL WITH SAND AND COBBLES (GM)	<del>-</del>	1	-								-		10.5
		bluish gray, dense to very dense; glacial till						1			. :				19.5
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	ı	Checked: SC Project No.: 16		<b>0</b> 1	L		TEST						5:	FIGURE 7	

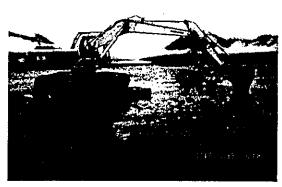


Photo 1: Begin excavation at TP1.



Photo 3: Greenish gray colored silty sand sits adjacent mound of bluish gray till clumps to the right at TP1.



Photo 5: Excavating through surface horizon of silty sand at TP2.



Photo 2: Excavating into glacial till at TP1.



Photo 4: Excavator en route over tide flats to TP2.



Photo 6: Upper silty sand horizon readily sloughs while lower wall within glacial till holds firm at TP2.





ENGINEERS, INC.