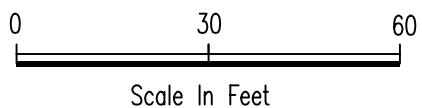
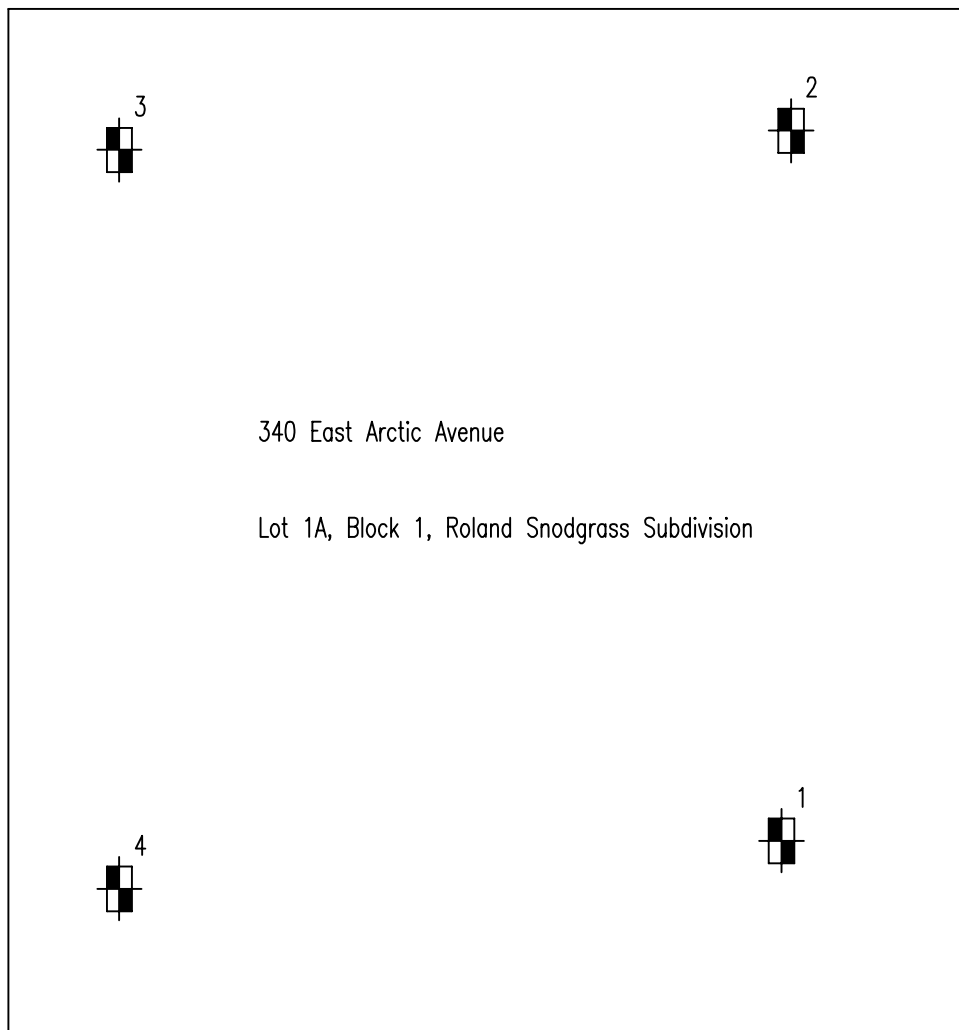


East Arctic Avenue



1
Test Pit Number
and Location

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Site Plan
Gulley Surgery Center
Palmer, Alaska

Plate
1

Job No. 040.051

File No. 040051 p1

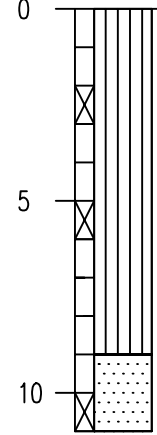
Date August 2022

Minus Number 3/4" Sieve (%)	Minus Number 4 Sieve (%)	Minus Number 200 Sieve (%)	Moisture Content (%)
73	63	2	1.8

Depth (ft.)

Samples

Log of Test Pit 1
 Equipment Backhoe
 Elevation - - Excavated 7-30-22



Brown Silt (ML)
 non-plastic, loose, wet

Gray Gravelly Sand (SP)
 medium dense, moist

percolation check performed at 10 feet
 no flowing groundwater encountered

N 61.60623
 W149.10825

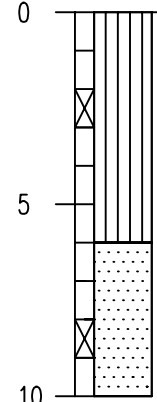
Minus Number 3/4" Sieve (%)	Minus Number 4 Sieve (%)	Minus Number 200 Sieve (%)	Moisture Content (%)
85	80	3	4.8

0

5

10

Log of Test Pit 2
 Equipment Backhoe
 Elevation - - Excavated 7-30-22



Brown Silt (ML)
 non-plastic, loose, wet

Gray Gravelly Sand (SP)
 medium dense, moist

no flowing groundwater encountered

N 61.6064
 W149.10827

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Log of Test Pits 1 and 2
 Gulley Surgery Center
 Palmer, Alaska

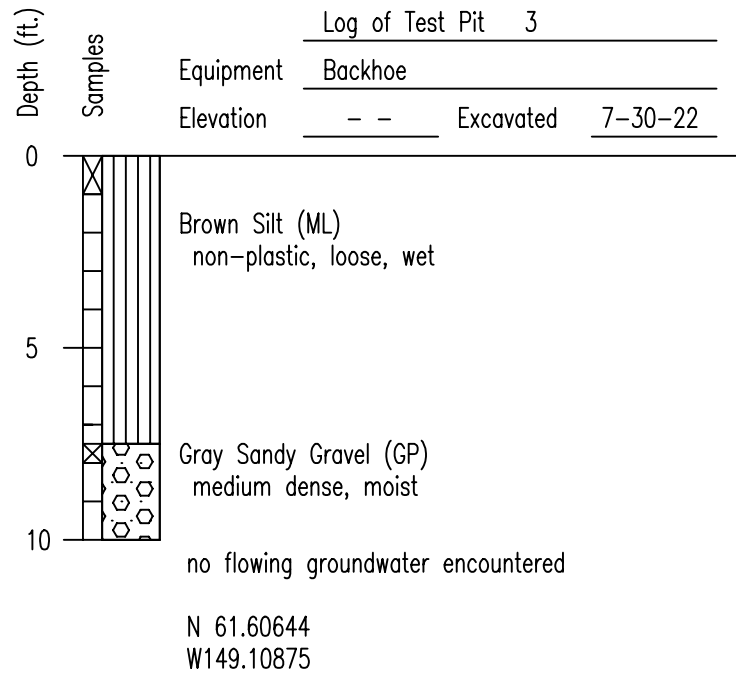
Plate

Job No. 040.051

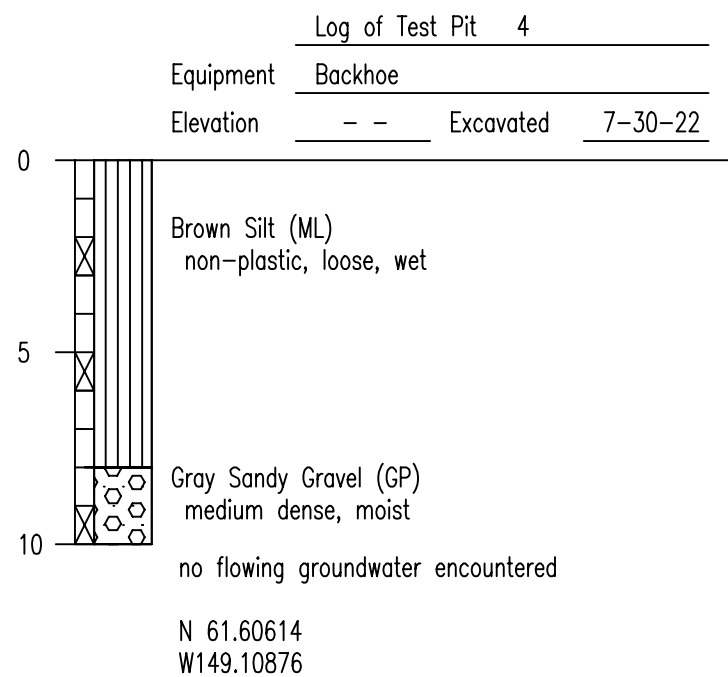
File No. 040051 p2

Date August 2022

Minus Number 3/4" Sieve (%)	Minus Number 4 Sieve (%)	Minus Number 200 Sieve (%)	Moisture Content (%)
			22.8
74	47	5	4.4



Minus Number 3/4" Sieve (%)	Minus Number 4 Sieve (%)	Minus Number 200 Sieve (%)	Moisture Content (%)
			30.7
			20.8
61	36	3	3.7



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Log of Test Pits 3 and 4
Gulley Surgery Center
Palmer, Alaska

Plate
3

Job No. 040.051

File No. 040051 p3

Date August 2022

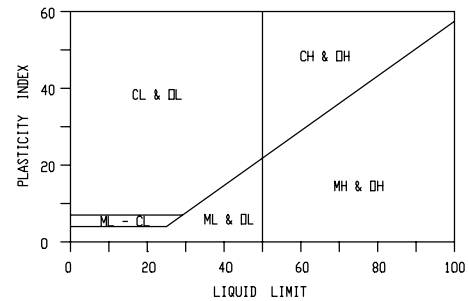
COARSE-GRAINED SOIL
More than half is larger than No. 200 sieve

DIVISION	FINES CONTENT (-#200)	SAND CONTENT	TYPICAL NAME	GRADATION DESIGNATION	SYMBOL
GRAVEL	LESS THAN 5 %	< 15 %	GRAVEL	GP, GW	
		> 15 %	SANDY GRAVEL	GP, GW	
	5 TO 12 %	< 15 %	GRAVEL WITH SILT	GP-GM GW-GM	
		> 15 %	SANDY GRAVEL WITH SILT	GP-GM GW-GM	
		< 15 %	GRAVEL WITH CLAY	GP-GC GW-GC	
		> 15 %	SANDY GRAVEL WITH CLAY	GP-GC GW-GC	
	MORE THAN 12 %	< 15 %	SILTY GRAVEL	GM	
		> 15 %	SILTY SANDY GRAVEL	GM	
		< 15 %	CLAYEY GRAVEL	GC	
		> 15 %	CLAYEY SANDY GRAVEL	GC	
SAND	LESS THAN 5 %	> 85 %	SAND	SP, SW	
		< 85 %	GRAVELLY SAND	SP, SW	
	5 TO 12 %	> 85 %	SAND WITH SILT	SP-SM SW-SM	
		< 85 %	GRAVELLY SAND WITH SILT	SP-SM SW-SM	
		> 85 %	SAND WITH CLAY	SP-SC SW-SC	
		< 85 %	GRAVELLY SAND WITH CLAY	SP-SC SW-SC	
	MORE THAN 12 %	> 85 %	SILTY SAND	SM	
		< 85 %	SILTY GRAVELLY SAND	SM	
		> 85 %	CLAYEY SAND	SC	
		< 85 %	CLAYEY GRAVELLY SAND	SC	

Density of Soil that is Non-Plastic	
Manual SPT Blow Count (N-value) (blows per foot)	Density Description
less than 4	very loose
4 - 10	loose
10 - 30	medium dense
30 - 50	dense
over 50	very dense

Consistency of Soil that is Plastic	
Shear Strength (psf)	Consistency Description
Less than 250	very soft
250 - 500	soft
500 - 1000	medium stiff
1000 - 2000	stiff
2000 - 4000	very stiff
Greater than 4000	hard

PLASTICITY CHART



FINE-GRAINED SOIL
More than half is smaller than No. 200 sieve

	SAND PLUS GRAVEL CONTENT	SAND CONTENT	NON-ORGANIC FINE-GRAINED SOIL (LL-OVEN DRIED/LL-NOT OVEN DRIED > 0.75)				ORGANIC FINE-GRAINED SOIL (LL-OVEN DRIED/LL-NOT OVEN DRIED < 0.75)			
			TYPICAL NAME	PLASTICITY DESIGNATION		SYMBOL	TYPICAL NAME	PLASTICITY DESIGNATION		SYMBOL
				LIQUID LIMIT				LIQUID LIMIT		
				< 50 %	> 50 %	< 50 %	> 50 %			
PT PLOTS BELOW A-LINE	< 30 %	< 15 %	SILT	ML	MH		ORGANIC SILT	OL	OH	
	< 30 %	15 - 29 %	SANDY SILT	ML	MH		SANDY ORGANIC SILT	OL	OH	
	15 - 50 %	< 15 %	GRAVELLY SILT	ML	MH		GRAVELLY ORGANIC SILT	OL	OH	
	30 - 50 %	> 15 %	GRAVELLY SANDY SILT	ML	MH		GRAVELLY SANDY ORGANIC SILT	OL	OH	
	30 - 50 %	> 15 %	SANDY GRAVELLY SILT	ML	MH		SANDY GRAVELLY ORGANIC SILT	OL	OH	
PT PLOTS ABOVE A-LINE	< 30 %	< 15 %	CLAY	CL	CH		ORGANIC CLAY	OL	OH	
	< 30 %	15 - 29 %	SANDY CLAY	CL	CH		SANDY ORGANIC CLAY	OL	OH	
	15 - 50 %	< 15 %	GRAVELLY CLAY	CL	CH		GRAVELLY ORGANIC CLAY	OL	OH	
	30 - 50 %	> 15 %	GRAVELLY SANDY CLAY	CL	CH		GRAVELLY SANDY ORGANIC CLAY	OL	OH	
	30 - 50 %	> 15 %	SANDY GRAVELLY CLAY	CL	CH		SANDY GRAVELLY ORGANIC CLAY	OL	OH	

Source: Modified from American Society for Testing Materials D 2487 and based on the Unified Soil Classification System

Crowther Associates
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Soil Classification System
Gulley Surgery Center
Palmer, Alaska

Plate
4

Job No. 040.051

File No. 040051 p4

Date August 2022