December 26, 2020

Dave Liskany (Countrytyme Land Specialist, Ltd)
3451 Cincinnati-Zanesville Rd, SW
Lancaster, OH 43130

Dear Mr. Liskany:

We would like to thank you for requesting our assistance to identify the specific soil properties on your property **(Track # 1, Pleasant Valley Woods - Union Road),** Chillicothe, in Ross County, Ohio.

Enclosed are the following:

1. Location map
2. Aerial Photo Sketch Map of Site
3. Soil Site Descriptions for the different Soil Areas
4. Soil and Site Evaluation and discussion, for the proposed waste water disposal

The information in this report is basic soils information as found on-site. This does not mean that this site is suitable for an STS, that is up to the Ross County Health Department. If I can be of further assistance, in helping to interpret, clarify or add additional information from my notes, please let me know at 304-372-4809 home or 304-532-4711 cell.

Thanks,

Carlos Cole
Soil Scientist

Cc: Logan Calhoun, R. S., Director of Environmental Health

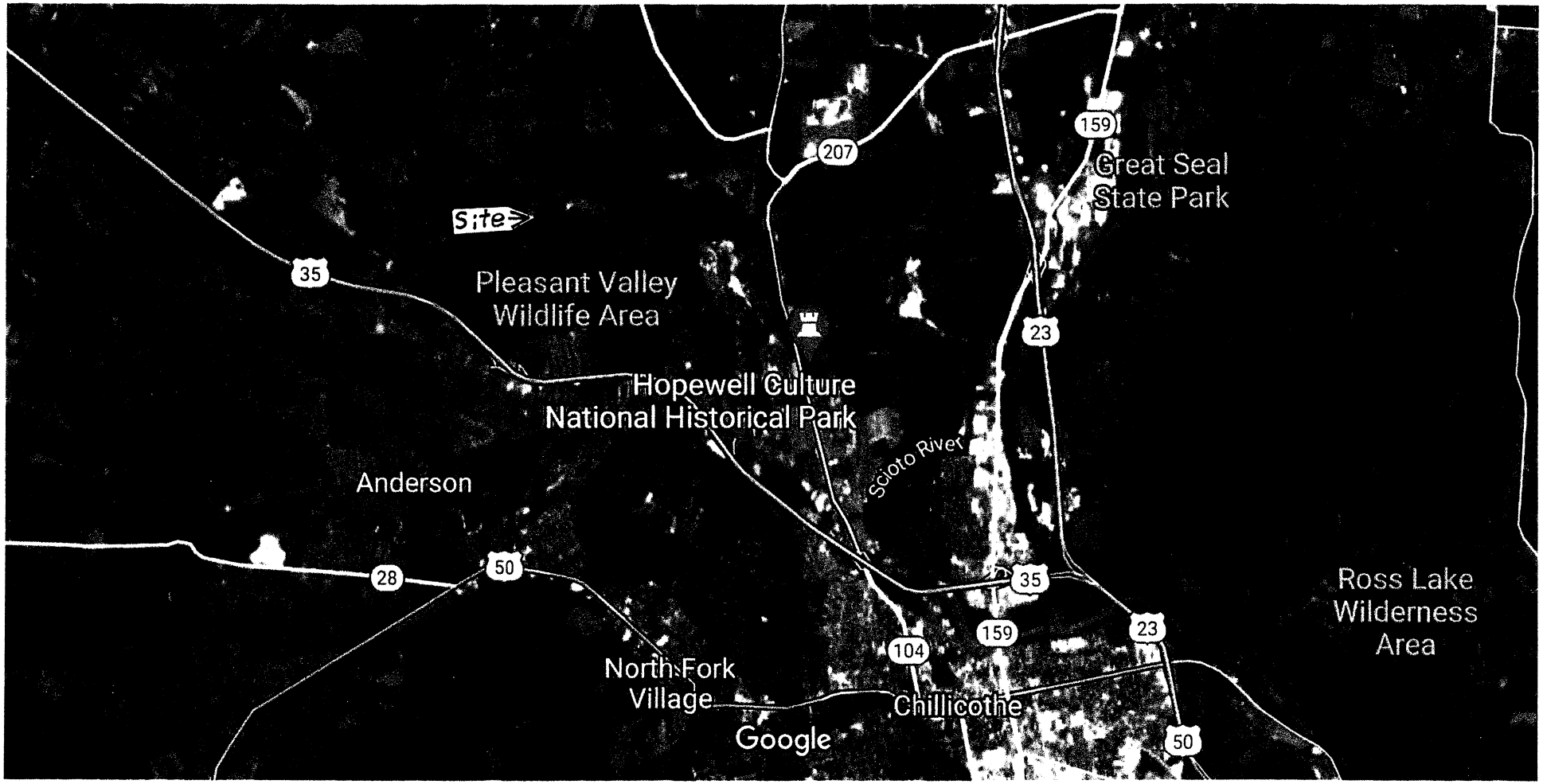
Soil and Site Evaluation Discussion

This soil evaluation is for a new STS (sewage treatment system) for a new home (example that may change) on your property. We probed these soils as best as possible to the find the depth to seasonal high water table, more clayey soil textures and any compacted or dense layers that would impact the ability of a leach field to work properly. We located and proposed this leach field on the most sloping area on the property on the outer edge of a slight point like landform. These are limey soils that allow for a little better drainage when comparted to more acid clayey soils. Typically these soils in the proposed leach field were a little more loamy in the middle and lower part of the leach field. We tried to select the better location for a leach field, however it's very difficult to find and area that is totally suitable for a septic leach field, when considering the Ross County Health Department criteria. If you find the best location for the leach field, provide for adequate surface drainage away from the leach field and pretreat waste water (aeration) is usually the only type system you can use for the STS in these glacial till soil areas.

This proposed filter field area is large and can serve as both the primary and secondary leach field areas. These soils are basically consistent in basic soil properties, as indicated by the soil site descriptions. We excavated soil pits to approximately 30 inches and then auger to 60 inches, if the auger is not stopped by rock fragments. These soils (soil site #2) seem to be a little more loamy and better drained on the steeper slope on more of the end of the landform/point. The soils (#1 soil and #3 soil) on the outer edge of the proposed leach field are not as well drained as the soil (#2 soil) in the center of the leach field. This is a result of more loamy soil and more free water flow on the end of the point, with a little steeper slope.

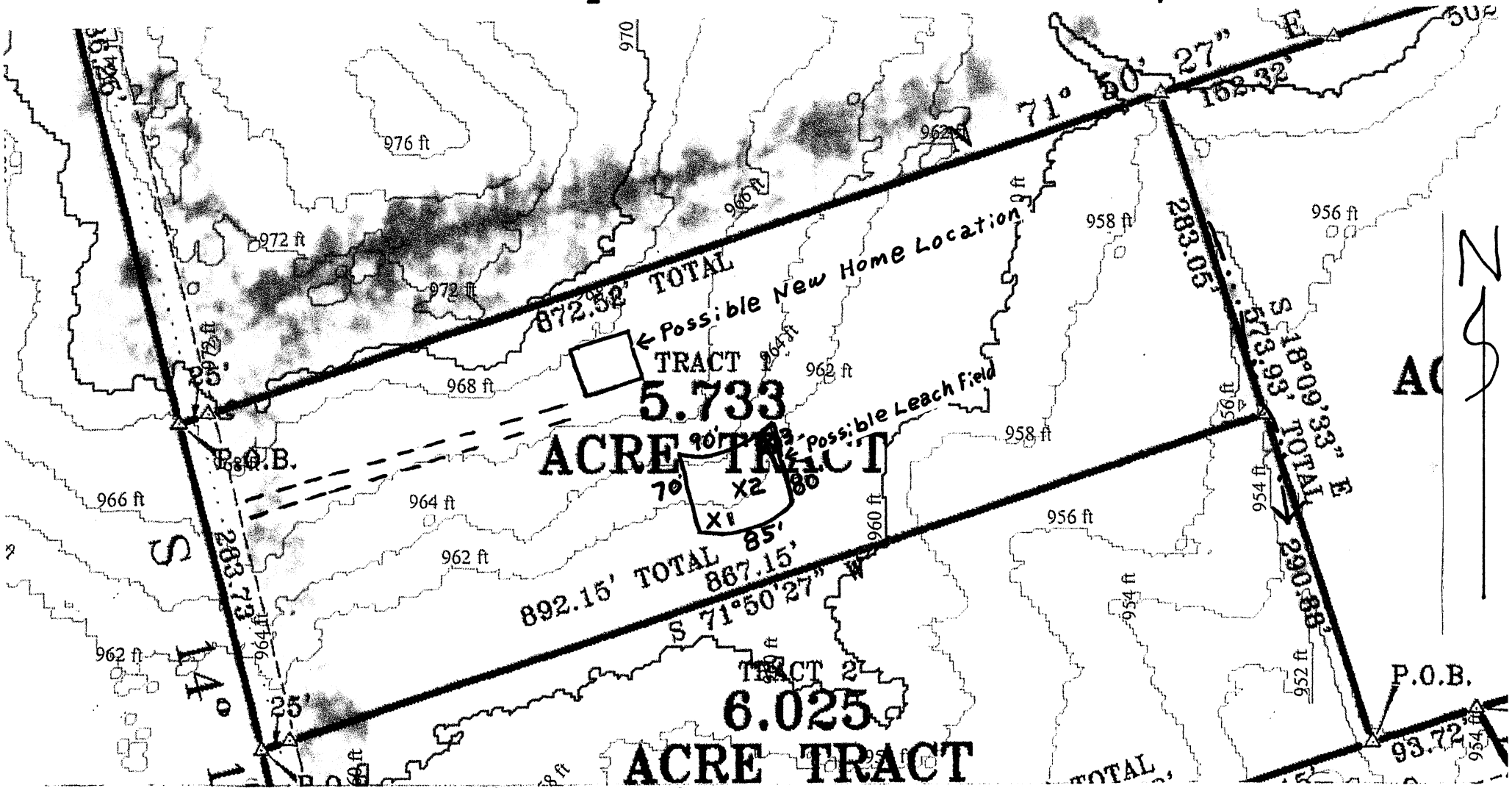
We have shown the location of the proposed STS leach field on the sketch map. We have marked the proposed filter field area with pink wire flags along the boundary and/or on the boundary corners. The soil description sites are marked with orange wire flags and the number of the description is marked on the flag. The approximate dominion, of the proposed filter field area, is marked on the sketch map. The proposed leach field area is just an indication of the area that can be used, the installer or the health department will determine where the filter lines will be located. The filter field lines would need to be located level on the contour around the slope. These soil descriptions were taken at random to show the soil properties at different areas within the proposed filter field area and the sketch map is not to scale. The proposed leach field can be extended around the slope if needed. We gave a house site location (example that may change with new owner) on the sketch map to give you a possible reference point, for this report.

Location Map



Sketch Map for Countrytyme Property

Pleasant Valley Woods-Track #1 Ross County



X_1, X_2, X_3 - Soil Site Descriptions

= = = = = Approximate Driveway location

←···— Swale in landscape for Surface Drainage

These are all Approximate Locations (not to Scale)

(2) we used the 12-24 Depth For H. Linear Loading Rate used 5-9 % slope

Site and Soil Evaluation for Sewage Treatment and Dispersal

Lot #1

County: Ross
Township / Sec.: Union
Property Address/Location: S. Union Rd. Chillicothie, OH 45601
Applicant Name: Countrytyme Realty
Address: Att: Dave Lisheny - Land specialist 3451 Cincinnati-Zanesville Rd., SW
Phone #: 614-429-8152
Lot #: #1
#1 Test Hole #: 1
Latitude/Longitude: N39°23.698', W83°03.172'
Method: ✓ Pit ✓ Auger ___ Probe

Land Use / Vegetation: crop Field
Landform: Glacial Till
Position on Landform: Point - outer Edge
Percent Slope: 5%
Shape of Slope: convex
Date: 12-22-20
Evaluator: Carlos Cole

Certification Stamp or Certification #: 24835
Signature: Carlos Cole
Phone#: 304-372-4809 Home
304-532-4711 cell

Dug to 30" + Augered Remainder

Soil Profile		Estimating Soil Saturation Munsell Color (hue, value, chroma)			Estimating Soil Permeability							Infiltration Loading Rate gal/day/ft²	Hydraul Linear Loading Rate (2)
			Redoximorphic Features		Texture			Structure					
Horizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features	
Ap	0-8	10YR 4/3	+5/3 —	—	L/siL	15-17	2-5+	2-1	m-sbk f&m Gr	sbk Gr	Fr-vfr	.6	4.1
BA	8-13	10YR 6/4	—	—	L	18-21	2-5+	2-1	m	sbk	Fr	.6	4.1
Bt1	13-19	10YR 6/3	+5/6 —	—	L	24-27	2-5+	2-1	m	sbk	fr	.6	4.1
Bt2	19-29	10YR 6/2	+5/6	10YR 6/2	CL/L	27-30	2-5+	2-1	m	sbk	fr	.4	3.0
BC	29-38	10YR 6/6 +	5/6	10YR 7/2 + 6/2	CL	29-32	2-5+	1-2	m	sbk	Fr	.2	2.7
C1	38-45	10YR 5/6	+ 6/3	10YR 7/2 · 6/2	CL/L	27-30	2+	—	—	—	fr	wet	
C2	45-60	10YR 5/6	+6/3	10YR 7/2 · 6/2	L/CL	26-28	5-10+	—	—	—	Fr	Dry	

Limiting Conditions	Depth to (in.)	Descriptive Notes	Remarks / Risk Factors:
Perched Seasonal Water Table	19		
Apparent Water Table	—		
Highly Permeable Material	—		
Bedrock	None	to 60"	
Restrictive Layer	None	to 60"	

*Gravel mostly Rounded

Note: The evaluation should include a complete site plan or site drawing.

(2) we used the 12-24 Depth For H. Linear Loading Rate used 5-9 % slope

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Property Address/Location: S. Union Rd. Chillicothie, OH 45601
Applicant Name: Countrytyme Realty
Address: Att: Dave Lisheny - Land specialist 3451 Cincinnati-Zanesville Rd., SW
Phone #: 614-429-8152
Lot #: 1
#2 Test Hole #: 2
Latitude/Longitude: N39° 23.704', W83° 03.172'
Method: ✓ Pit ✓ Auger ___ Probe

Land Use / Vegetation: Crop Field
Landform: Glacial Till
Position on Landform: Point - outer Edge
Percent Slope: 5 %
Shape of Slope: Convex
Date: 12-22-26
Evaluator: Carlos Cole

Certification Stamp or Certification #: 24835
Signature: Carlos Cole
Phone#: 304-372-4809 Home
304-532-4711 cell

Dug to 30" + Augered Remainder

Soil Profile		Estimating Soil Saturation: Munsell Color (hue, value, chroma)			Estimating Soil Permeability							Infiltration Loading Rate gal/day/sq ft	Hydraulic Linear Loading Rate (2)
			Redoximorphic Features		Texture			Structure					
Horizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features	
Ap1	0-5	10YR 4/4	+5/4	—	L	16-19	2+	2-1	m	sbk+	f-Gr→Fr-v	fr .6	4.1
Ap2	5-9	10YR 4/4+	5/6	-	L	18-21	0-2+	2-1	m	sbk	Fr	.6	4.1
Bt1	9-16	10YR 5/6	coats of 10YR 5/4	-	CL/L	26-31	2+	2-1	m	sbk	Fr	.4	3.0
Bt2	16-24	10YR 5/6	coats of 10YR 6/3	-	CL/L	26-29	2+	2-1	m	sbk	Fr	.4	3.0
Bt3	24-30	10YR 5/6		10YR 7/2	L	25-28	2+	1-2	m	sbk	fr	.4	3.8
Bt4	30-34	10YR 6/6+	5/6	10YR 6/2	CL	27-30	2+	1-2	m	sbk	fr	.2	2.7
BC	34-41	10YR 5/6		10YR 6/2	L	25-27	2-5+	1	m	sbk	Fr	.4	3.8
C	41-52	10YR 5/6 · 5/4 · 6/8		10YR 7/1	L/CL	24-30	3-5+	—	—	—	Fr	—	—

Limiting Conditions	Depth to (in.)	Descriptive Notes	Remarks / Risk Factors:
Perched Seasonal Water Table	24"		
Apparent Water Table			
Highly Permeable Material			
Bedrock	52"	Hit Rock - But not Bedrock	
Restrictive Layer	none	to 52" + gravel	

Note : The evaluation should include a complete site plan or site drawing.

(2) we used the 12-24 Depth For H. Linear Loading Rate
used 5-9 % slope

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Phone #: 614-429-8152
Lot #: 1
#3 Test Hole #: 3
Latitude/Longitude: N39° 23.711', W83° 03.170'
Method: ✓ Pit ✓ Auger ___ Probe

Land Use / Vegetation: crop Field
Landform: Glacial Till
Position on Landform: side of Point
Percent Slope: 4-5%
Shape of Slope: convet
Date: 12-22-20
Evaluator: Carlos Cole

Certification Stamp or Certification #: 24835
Signature: Carlos Cole
Phone#: 304-372-4809 Home
304-532-4711 cell

Dug to 30" + Augered Remainder

Soil Profile		Estimating Soil Saturation: Munsell Color (hue, value, chroma)			Estimating Soil Permeability							Infiltration Rate Loading gal/day/sq ft	Hydraulic Linear Loading Rate (2)
			Redoximorphic Features		Texture			Structure					
Horizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features	
Ap	0-6	10YR 4/4	—	—	L	16-19	2+	2	F+m	Gr	vfr	.6	4.1
BA	6-11	7.5YR 5/4	—	—	L	20-23	2+	2-1	m	sbk	fr	.6	4.1
Bt1	11-17	7.5YR 5/4	10YR 6/4	+6/3	CL	27-30	2+	2	m	sbk	fr	.4	3.0
Bt2	17-23	10YR 5/4		10YR 7/2 6/2	CL	27-30	2+	2-1	m	sbk	fr	.4	3.0
BC1	23-31	10YR 5/4	+5/6	10YR 6/2	CL/L	26-29	2+	1-2	m	sbk	fr	.2	2.7
BC2	31-37	10YR 5/4	+5/6	10YR 6/2	CL	28	2+	1	m	sbk	fr	.2	2.7
C1	37-42	10YR 5/4	+5/6	10YR 6/2	L	25-28	5+	—	—	—	Fr-Fi	—	—
C2	42-51	10YR 5/4	5/6	10YR 6/2	L	27-29	5-8+	—	—		Fr		

Limiting Conditions	Depth to (in.)	Descriptive Notes	Remarks / Risk Factors:
Perched Seasonal Water Table	17		
Apparent Water Table	—		
Highly Permeable Material	—		
Bedrock	none	to 51" Hit Large	Rock could not Auger Deeper Than 51"
Restrictive Layer	none	to 51"	some At 37-42"

* gravel

Note: The evaluation should include a complete site plan or site drawing.