
December 31, 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 # 4, 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

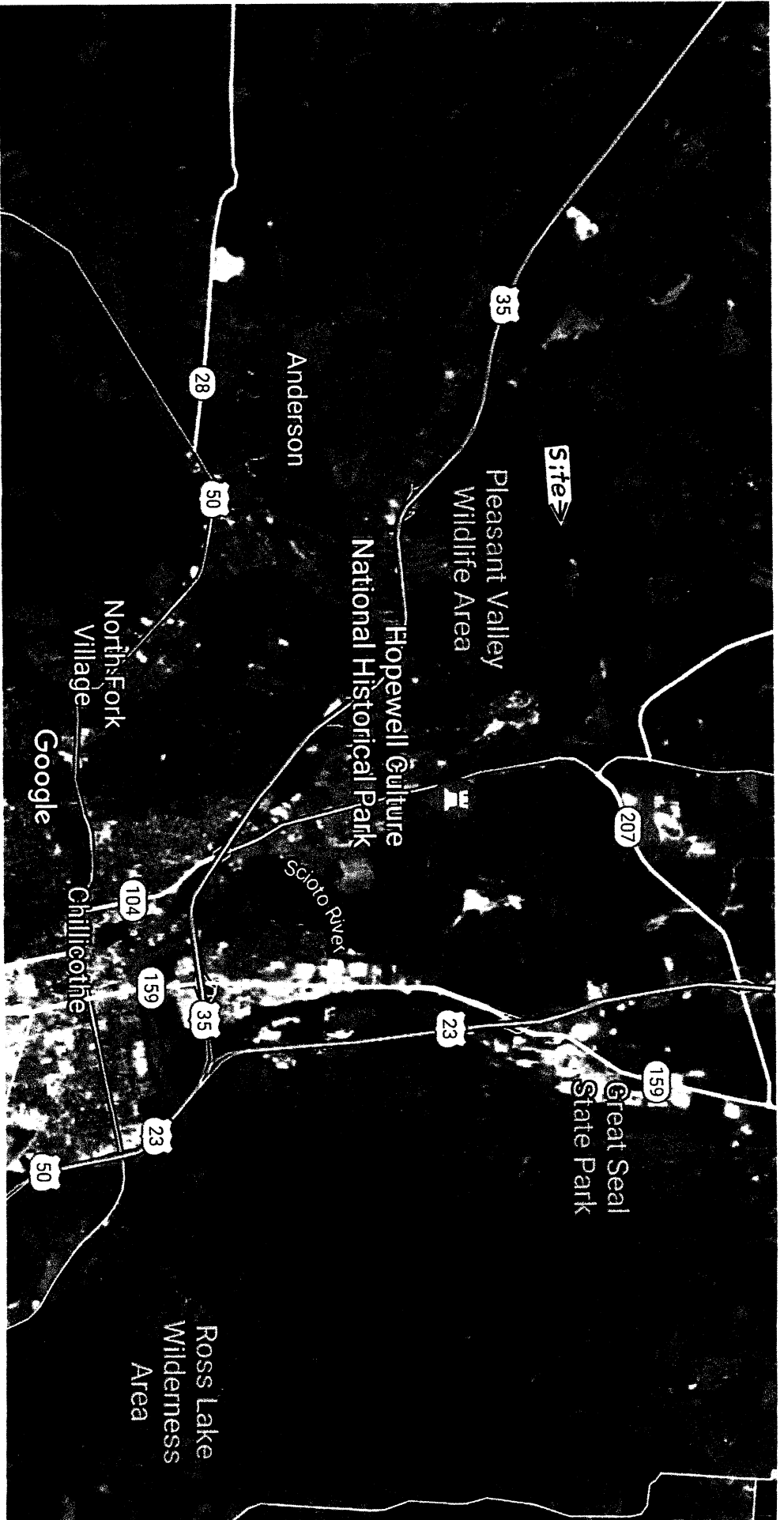
This soil evaluation is for a new STS (sewage treatment system) for a new home (we have located 2 possible new home locations, but make sure waste water can gravity flow to leach field). We used a soils probe and examined the soils as best as possible to find the depth to seasonal high water table, soil textures, percent clay and any compacted or dense layers that would impact the ability of a leach field to work properly. We located this proposed leach field on the most sloping area of this property on the outer edge of the erosional landscape of the till landform. These soils have developed in glacial till parent material, with the only exception being a little local alluvium (younger soil) over lying the till in the area of the #2 soil in the proposed leach field.

The glacial till parent material is the main deposit for which these soils have developed. These soils are all loams and clay loam textured soils with varying percent gravel through the soil profile. The #2 soil is the only soil with some local alluvium deposit (soil sediments carried by water from upslope and redeposited in a swale in the landscape) over lying older glacial till soil deposited soil. We also found some stratified (alluvial) loam soil sediments under lying the glacial till deposit at a depth of 52 inches and I am sure sedimentary siltstone bedrock will be directly under this deposit.

The depth to a seasonal high water table in the #1 soil is 19 inches, #2 soil is 21 inches and the #3 soil is 17 inches. We did not find any totally restricting layers, just increase in clay but still loamy texture. These soils do not have any bedrock to a depth of 60 inches or more. These soils will allow for water flow but will most likely need pretreatment for the STS to meet the Ross County Health Department's standards. I would say these soils are very similar in soil properties and a system would work similar throughout the proposed leach field area. The lower part (#2 soil) of this leach field seems to be a little better for use as an STS leach field area, however water flows down hill so wherever you locate the filter lines may work the same. This proposed filter field area is large and can serve as both the primary and secondary leach field areas.

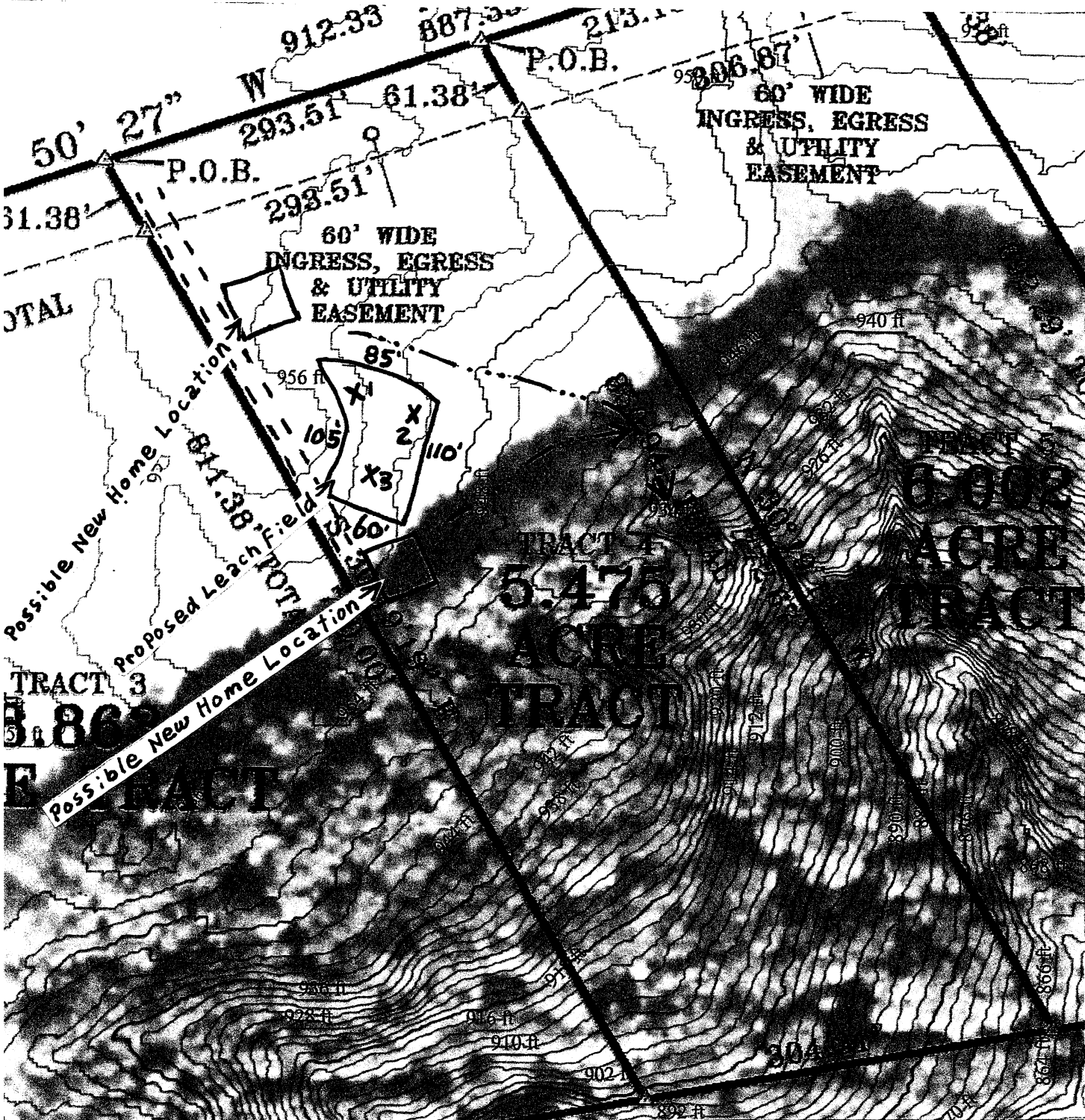
We have shown the location of the proposed STS leach field on the sketch map. We have marked the proposed filter field area with pink wire flags along the boundary and/or on the boundary corners. The soil description sites are marked with orange wire flags and the number of the description is marked 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 #4 Ross County



X1, X2, X3 - Soil Site Descriptions

==== Approximate "Possible" 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 # 4 County: Ross
 Township / Sec: Union
 Property Address/Location: 5, Union Rd. Chillicothe, OH 45601
 Land Use / Vegetation: Crop Field
 Landform: Grass Tilt
 Position on Landform: Side of Landform
 Percent Slope: 5%
 Shape of Slope: Conver
 Applicant Name: COUNTRYME REALTY
 Address: ATT: David L. Henry - Lead Specialist
3451 Cincinnati - Zanesville Rd, 5100
 Phone #: 614-429-8152
 Lot #: 4
 Landform: Side of Landform
 Percent Slope: 5%
 Shape of Slope: Conver
 Appraiser: Charles Cole
 Date: 12-30-20

1 Test Hole # 1
 Latitude/Longitude: N 39° 23.611' W 83° 03.121'
 Method: Pic Auger Probe
 Phone #: 304-372-4809 Home
304-532-4711 cell
 Signature: Charles Cole
 Certification Stamp or Certification #: 24835
 Infiltration Loading Rate: 0.6 gal/day/ft²
 Hydraulic Linear Loading Rate: 4.1

Soil Profile	Depth (Inches)	Matrix Color	Retarding Soil Saturation			Texture	Retarding Soil Permeability			Structure	Consistence	Infiltration Loading Rate	Hydraulic Linear Loading Rate
			Mineral Color (hue, value, chroma)	Redoximorphic Features	Depletions		Classe	Approx. % Clay	Approx. % Fragments				
Ap	0-6	10YR 4/4 +	5/4	-	L	21-23	1-2*	2-1	F	Gr	VFr	0.6	4.1
Bt1	6-10	10YR 6/6	.6/4 .6/3	-	sicL	28-32	1-2*	2-1	Mtc	sbh	Fr	.4	3.0
Bt2	10-19	10YR 5/6	.6/4 + 6/3	-	CL	27-30	2-1*	1-2	M	sbh	Fr	.2	2.7
Bt3	19-27	10YR 5/6	10YR 5/4	10YR 6/2	CL/L	26-29	2-1*	2-1	M	sbh	Fr	.4	3.0
BC1	27-35	10YR 5/6	.6/4	6/2	L/CL	25-28	2-4*	1	M	sbh	Fr	.4	3.8
BC2	35-43	10YR 5/6	.5/4	6/2	L/CL	25-28	5-10*	1	M	sbh	Fr	.4	3.8
C1	43-52	10YR 5/6	5/4	6/2	L/CL	25-28	5-10	-	-	-	Fr	-	-
Lighting Conditions		7.5 YR 6/5		5/4	10YR 7/2	CL	22-31	5-8	-	-	-	-	-
Period Seasonal Water Table		19											
Apparent Water Table													
Eligibly Permeable Material													
Bedrock		none											
Restrictive Layer		none											

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 site and Soil Evaluation for Sewage Treatment and Dispersal

Lot # 4 County: Ross
 Township / Sec: Union
 Property Address / Location: 5, Union Rd, Chillicothe, OH 45601
 Applicant Name: COUNTRY TIME REALTY
 Address: ATT: David Lishner - Lead Specialist
 Phone #: 514-427-8152
 Lot #: 4
 Land Use / Vegetation: Crop Field
 Landform: Glacial Till
 Position on Landform: Side of Landform
 Percent Slope: 7-8%
 Shape of Slope: Conver
 Evaluation: 12-30-20
 CARLES COLE
 Certification Stamp or Certification #: 24835
 Signature: Carles Cole
 Phone #: 304-372-4809 Home
304-532-4711 Cell

Soil Profile	Depth (Inches)	Matrix Color	Estimating Soil Saturation		Class	Texture		Grade	Structure		Consistence	Infiltration Loading Rate gal./day/ft ²	Hydraulic Linear Loading Rate
			Redoximorphic Features	Depletions		Approx. % Clay	Approx. % Fragments		Size	Type (Shape)			
AP	0-9	10YR 4/3	-	-	L	16-19	2*	2-1	F+M	G-T ⁺ sbh	Vfr	.6	4.1
BA	9-13	10YR 5/4 + 6/4	-	-	L/sil	19-22	1-5*	1-2	M	sbh	Fr	.4	3.8
2 Bt1	13-21	10YR 5/4 + 5/6 + 6/3	-	-	CL	27-29	2-4*	2-1	M	sbh	Fr	.4	3.0
2 Bt2	21-28	10YR 5/6	-	10YR 6/2	CL	28-32	2-4*	1-2	M	sbh	Fr	.2	2.7
2 BC1	28-32	10YR 5/6 + 5/4	-	6/2	CL	27-31	4-8	1-2	M	sbh	Fr	.2	2.7
2 BC2	32-44	10YR 5/6 + 5/4	-	6/2	L/CL	25-29	5-10	1	M	sbh	Fr	.4	3.8
2 C1	44-52	7.5YR 6/6 + 5/6	-	10YR 4/6	CL	27-32	4-8	-	-	-	Fr	-	-
3 C2	52-60	7.5YR 6/6	-	7.5YR 6/7	L	25-28	-	-	-	-	Fr	-	-
Jacking Conditions		Depth to (in.)	Descriptive Notes		Remarks / Risk Factors								
Seasonal Water Table		21"											
Annual Water Table		-											
Permeable Material		none to 60"	But a little AT + gravel		Depth of 28 to 32 inches								
Underlying Layer		none											

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

② used 5-9% slope site and Soil Evaluation for Sewage Treatment and Disposal

Lot # 4 County: Ross

Township / Soil: Union
 Property Address/Location: S. Union Rd., Chillicothe, OH 45601

Applicant Name: Country Club Realty
 Address: AT: David Lishenz - Land Specialist
 3451 Cincinnati - Zanesville Rd., S.W. Ohio
 Phone #: 614-427-8152

Land Use / Vegetation: Crop Field
 Landform: Glacial Till
 Position on Landform: Side of Lead Form
 Percent Slope: 7%
 Shape of Slope: Convex
 Evaluation: 12-30-20
 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	Depth (Inches)	Matrix Color	Estimating Soil Saturation		Class	Texture		Structure		Consistence	Infiltration Loading gal/day	Hydraulic Linear Loading Rate
			Moisture Color (hue, value, chroma)	Redoximorphic Features		Approx. % Clay	Approx. % Fragments	Grade	Size			
AP	0-7	10YR 4/3	+ 4/4	-	L	18-22	1-2 +	2-1	F	Gr	1.6	4.1
BA	7-11	10YR 5/4	.5/6 4/4	-	L/CL	25-28	2 +	2-1	M	sbh	.6	4.1
Bt1	11-17	10YR 6/6	+ 6/3	-	CL	30-33	2-3 +	2-1	M	sbh	.4	3.0
Bt2	17-22	10YR 5/6	+ 5/4	10YR 6/2	CL	28-31	2 +	2-1	M	sbh	.4	3.0
BC1	22-33	10YR 5/6	+ 5/4	6/2	CL/sicL	27-30	2-1 +	1-2	M	sbh	.2	2.7
BC2	33-42	10YR 5/6	+ 5/4	6/2	L/CL	25-29	4-8 +	1	M	sbh	.4	3.8
C1	42-49	10YR 5/6	+ 5/4	6/2	L/CL	25-29	5-10 +	-	-	-	-	-
C2	49" stopped by rock not bedrock											
Limiting Conditions		Depth to (in.)		Description		Remarks / Risk Factors						
Periodic Seasonal Water Table		17"										
Apparent Water Table												
Eligible Permeable Material		49"		Auger stopped		but not bedrock just high on rock fragments						
Bedrock		None		Other than increase		in clay %						
Restrictive Layer		None		+ gravel								

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