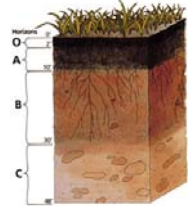


Soil and Environmental
Consulting Services, Inc.



Friday, March 01, 2019

AV Investment LLC
c/o Adam Bdoyan
5700 Sugarwood Dr,
New Albany, OH 43054

Re: Soil investigation for on-site septic disposal for the northwest corner of Harlem Road and Center Village Road, Harlem Township, Delaware County, Ohio.

Enclosed you will find the requested detailed soil descriptions for the northwest corner of Harlem Road and Center Village Road, Harlem Township, Delaware County, Ohio.

The soils of the selected sites were mapped and described on the enclosed sheets for your records. The locations of the soil borings have been located using GPS and the locations have been delineated on the enclosed map. Copies of this letter, soil boring descriptions, sketch, and system drawing should be submitted to local health department. The health department will make the determination if the soil and site area is suitable for onsite sewage treatment. It may also be necessary for the soil borings to be located by a surveyor.

Please protect all areas approved for septic disposal by having the contractor stake and rope off the proposed locations prior to driveway and basement excavation. No soil, building, or waste material should be stored on the proposed absorption areas. Disturbance to the areas may result in compaction and the subsequent failure of the system. Any disturbance to the absorption area voids the results of this analysis.

If you have any questions or want to move forward with the septic design process feel free to contact us.

A handwritten signature in black ink, appearing to read 'Steven Miller'.

Steven Miller, CPSS

ALL INFORMATION ON THIS PAGE, INCLUDING ELEVATIONS AND LOT DIMENSIONS IS FOR REFERENCE PURPOSES ONLY AND IS NOT INTENDED TO REPRESENT A LEGAL SURVEY OR DOCUMENT. CONTOUR DATA DERIVED FROM DIGITAL DEM DATA. SEE INCLUDED LETTER AND SOIL BORING SHEETS FOR MORE INFORMATION.



TITLE: **SITE AND SOIL EVALUATION**
Site Layout

South of 1835 Dixon Road
Jefferson Township, Franklin County, Ohio

DR. BY: SAM

Drawn By:

Soil &

Environmental

Consulting

Services, Inc.

P.O. Box 1121

Deane, OH 43015

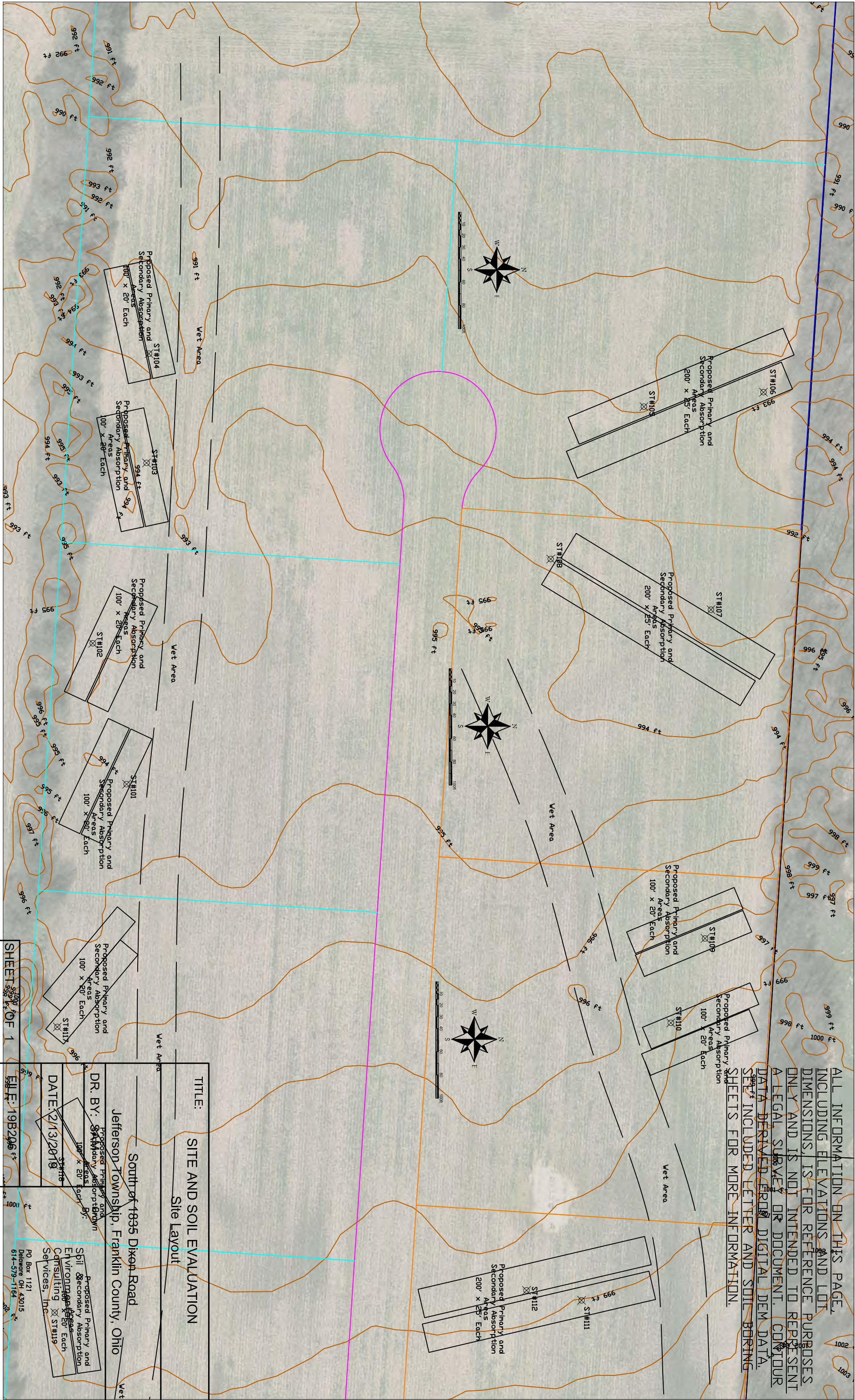
614-579-1164

DATE: 2/13/2019

SHEET 1 OF 1

FILE: 19B206

ALL INFORMATION ON THIS PAGE, INCLUDING ELEVATIONS AND LOT DIMENSIONS, IS FOR REFERENCE PURPOSES ONLY AND IS NOT INTENDED TO REPRESENT A LEGAL SURVEY OR DOCUMENT. CONTOUR DATA DERIVED FROM DIGITAL DEM DATA. SEE INCLUDED LETTER AND SOIL BORING SHEETS FOR MORE INFORMATION.



TITLE: SITE AND SOIL EVALUATION
Site Layout

South of 1835 Dixon Road
Jefferson Township, Franklin County, Ohio

DR. BY: SAHAWY AND ASSOCIATES, INC.

DATE: 2/13/2018

Soil Secondary Absorption
Consulting, Inc.
PO Box 1121
Delaware OH 43015
614-579-1164

SHEET 19B206 OF 1



ALL INFORMATION ON THIS PAGE,
INCLUDING ELEVATIONS AND LOT
DIMENSIONS, IS FOR REFERENCE PURPOSES
ONLY AND IS NOT INTENDED TO REPRESENT
A LEGAL SURVEY OR DOCUMENT. CONTOUR
DATA DERIVED FROM DIGITAL DEM DATA.
SEE INCLUDED ELLER AND SOILS^{10/12/13} REPORT^{10/12/13} FOR
SHEETS FOR MORE INFORMATION.

TITLE: **SITE AND SOIL EVALUATION**
200' x 25' EoN
SITE # ~~24~~ 24
Site Layout

South of 1835 Dixon Road
Jefferson Township, Franklin County, Ohio

BY: SAM

Each

DATE: 2/13/2019

FILE: 19B206

Soil & Environmental Consulting Services, Inc.
1012 E. 101st St.
PO Box 1121
Delaware, OH 43015
614-573-1164



Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 101
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____

Signature: _____

Phone#: p-614.579.1164

soilconsultant@yahoo.com



Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
		Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
Horizon	Depth (inches)			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size		Type (shape)
Ap	0 to 6	10YR 3/5/3			sicl	30	2	2	m	gr	fr	
Btg	6 to 20	10YR 5/2	15%10YR 5/2		sicl	35	2	2	m	sbk	fi	
Bt	20 to 35	10YR 5/3		40%10yR 5/2	sic	40	2	2	m	sbk	fi	
BC	35 to 40	10YR 5/4		35%10YR 5/2	sicl	38	2	1	m	sbk	fi	
Cd	40	10YR 4/4		15%10YR 5/2	cl	35	5	0			vfi	

Limiting Conditions	Depth to (in.)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	6	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>50		
Highly Permeable Material	>50		
Bedrock	>50		
Restrictive Layer	40	glacial till	

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 102
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____

Signature: 
 Phone#: p-614.579.1164
soilconsultant@yahoo.com



Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap1	0 to 6	10YR 4/3			sicl	30	2	2	m	gr	fr	
Ap2	6 to 11	10YR 3/2	15%10YR 5/6	5%10YR 5/2	sicl	35	2	2	m	sbk	fi	
Btg	11 to 43	10YR 5/2		35%10YR 5/2	sic	40	2	2	m	sbk	fi	
BC	43 to 49	10YR 5/4		30%10YR 5/2	sicl	36	2	1	m	sbk	fi	
Cd	49+	10YR 4/4		25%10Yr 5/2	cl	35	5	0			vfi	
Limiting Conditions		Depth to (in.)		Description		Remarks / Risk Factors:						
Perched Seasonal Water Table		6		perched on glacial till		Surface water should be diverted around system. Subsurface ag drainage may be present.						
Apparent Water Table		>50										
Highly Permeable Material		>50										
Bedrock		>50										
Restrictive Layer		49		glacial till								

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 103
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____

Signature: 
 Phone#: p-614.579.1164
soilconsultant@yahoo.com



Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap1	0 to 7	10YR 4/3			sicl	30	2	2	m	gr	fr	
Ap2	7 to 12	10YR 3/2		10%10yR 5/2	sicl	35	2	2	m	sbk	fi	
Btg	12 to 41	10YR 6/1	25%10yR 5/4		sic	40	2	2	m	sbk	fi	
BC	41 to 45	10YR 5/3		35%10YR 5/2	sicl	36	2	1	m	sbk	fi	
Cd	45+	10YR 4/4		25%10Yr 5/2	cl	35	5	0			vfi	

Limiting Conditions			
Limiting Conditions	Depth to (in.)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	7	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>50		
Highly Permeable Material	>50		
Bedrock	>50		
Restrictive Layer	45	glacial till	

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 104
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 8	10YR 4/3			sicl	28	2	2	m	gr	fr	
Bt1	8 to 22	10Yr 5/3		15%10YR 5/2	sicl	35	2	2	m	sbk	fi	
Bt2	22 to 38	10Yr 5/4		20%10YR 5/2	sic	40	2	2	m	sbk	fi	
BC	38 to 42	10YR 5/4		25%10YR 5/2	sicl	36	2	1	m	sbk	fi	
Cd	42+	10YR 4/4		20%10YR 5/2	cl	35	5	0			vfi	
Limiting Conditions		Depth to (in.)		Description		Remarks / Risk Factors:						
Perched Seasonal Water Table		8		perched on glacial till		Surface water should be diverted around system. Subsurface ag drainage may be present.						
Apparent Water Table		>50										
Highly Permeable Material		>50										
Bedrock		>50										
Restrictive Layer		42		glacial till								

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 105
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____


 Signature: 
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 9	10YR 4/3			sicl	28	2	2	m	gr	fr	
Bt1	9 to 19	10YR 5/4		20%10YR 5/2	sicl	35	5	2	m	sbk	fi	
Bt2	19 to 32	10YR 5/4		25%10YR 5/2	sic	40	10	2	m	sbk	fi	
R	32+											

Limiting Conditions			
Limiting Conditions	Depth to (in.)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	9		Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>50		
Highly Permeable Material	>50		
Bedrock	32		
Restrictive Layer	32		

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 106
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 9	10YR 4/3			sicl	28	2	2	m	gr	fr	
Bt1	9 to 20	10YR 5/4		25%10YR 5/2	sicl	35	2	2	m	sbk	fi	
Bt2	20 to 32	10YR 5/4		30%10YR 5/2	sic	40	5	2	m	sbk	fi	
BC	40 to 42	10YR 5/4		25%10YR 5/2	sicl	38	5	1	m	sbk	fi	
Cd	42 to 50	10RY 4/4		15%10YR 5/2	cl	35	10	0		m	vfi	
R	50+											
Limiting Conditions		Depth to (in.)		Description		Remarks / Risk Factors:						
Perched Seasonal Water Table		9		perched on glacial till		Surface water should be diverted around system. Subsurface ag drainage may be present.						
Apparent Water Table		>50										
Highly Permeable Material		>50										
Bedrock		50										
Restrictive Layer		42		glacial till								

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 107
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 9	10YR 4/3			sicl	28	2	2	m	gr	fr	
Bt1	9 to 22	10YR 5/3		15%10YR 5/2	sicl	35	2	2	m	sbk	fi	
Bt2	22 to 40	10YR 5/4		20%10YR 5/2	sic	40	5	2	m	sbk	fi	
BC	40 to 45	10YR 5/4		15%10YR 5/2	sicl	38	5	1	m	sbk	fi	
Cd	45+	10RY 4/4		10%10Yr 5/2	cl	35	10	0		m	vfi	

Limiting Conditions			
Limiting Conditions	Depth to (in.)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	9	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>50		
Highly Permeable Material	>50		
Bedrock	>50		
Restrictive Layer	45	glacial till	

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 108
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____

Signature: 
 Phone#: p-614.579.1164
soilconsultant@yahoo.com



Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 9	10YR 4/3			sicl	30	2	2	m	gr	fr	
Bt1	9 to 17	10YR 5/6		20%10YR 5/2	sicl	35	2	2	m	sbk	fi	
Bt2	17 to 41	10YR 5/4		25%10YR 5/2	sic	40	2	2	m	sbk	fi	
BC	41 to 44	10YR 5/4		15%10YR 5/2	sicl	38	2	1	m	sbk	fi	
Cd	44+	10RY 4/4		10%10Yr 5/2	cl	35	5	0		m	vfi	
Limiting Conditions		Depth to (in.)		Description		Remarks / Risk Factors:						
Perched Seasonal Water Table		9		perched on glacial till		Surface water should be diverted around system. Subsurface ag drainage may be present.						
Apparent Water Table		>50										
Highly Permeable Material		>50										
Bedrock		>50										
Restrictive Layer		44		glacial till								

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 109
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____

Signature: 
 Phone#: p-614.579.1164
soilconsultant@yahoo.com



Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 9	10YR 4/3			sicl	30	2	2	m	gr	fr	
Bt1	9 to 20	10YR 5/6		15%10Yr 5/2	sicl	35	2	2	m	sbk	fi	
Bt2	20 to 32	10YR 5/4		20%10Yr 5/2	sic	40	2	2	m	sbk	fi	
BC	32 to 39	10YR 5/4		10%10Yr 5/2	sicl	38	2	1	m	sbk	fi	
Cd	39+	10YR 4/4		5%10YR 5/2	cl	35	5	0		m	vfi	

Limiting Conditions			
Limiting Conditions	Depth to (in.)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	9	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>50		
Highly Permeable Material	>50		
Bedrock	>50		
Restrictive Layer	39	glacial till	

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 110
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 9	10YR 4/3			sicl	30	2	2	m	gr	fr	
Bt1	9 to 24	10YR 5/4	20%10YR 5/6	20%10YR 5/2	sicl	38	2	2	m	sbk	fi	
Bt2	24 to 35	10YR 5/4		25%10Yr 5/2	sic	40	2	2	m	sbk	fi	
BC	35 to 40	10YR 5/4		15%10YR 5/2	sicl	36	2	1	m	sbk	fi	
Cd	40+	10YR 4/4		10%10YR 6/2	cl	35	5	0		m	vfi	
Limiting Conditions		Depth to (in.)		Description		Remarks / Risk Factors:						
Perched Seasonal Water Table		9		perched on glacial till		Surface water should be diverted around system. Subsurface ag drainage may be present.						
Apparent Water Table		>50										
Highly Permeable Material		>50										
Bedrock		>50										
Restrictive Layer		40		glacial till								

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 111
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 6	10YR 4/3			sicl	32	2	2	m	gr	fr	
Btg	6 to 28	10YR 5/2	30%10YR 5/4		sicl	35	2	2	m	sbk	fi	
Bt	28 to 43	10YR 5/3		35%10Yr 5/2	sic	40	2	2	m	sbk	fi	
BC	43 to 50	10YR 5/4		30%10YR 6/1	sicl	36	2	1	m	sbk	fi	
Cd	50+	10YR 4/4		25%10YR 5/1	cl	35	5	0		m	vfi	

Soil Profile			
Limiting Conditions	Depth to (in.)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	6	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>50		
Highly Permeable Material	>50		
Bedrock	>50		
Restrictive Layer	50	glacial till	

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 112
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 7	10YR 4/3			sicl	32	2	2	m	gr	fr	
Btg	7 to 20	10YR 5/2	25%10YR 5/4		sicl	35	2	2	m	sbk	fi	
Bt	20 to 45	10YR 5/3		30%10YR 5/2	sic	42	2	2	m	sbk	fi	
BC	45 to 50	10YR 5/4		25%10YR 5/2	sicl	38	2	1	m	sbk	fi	
Cd	50+	10YR 4/4		20%10YR 5/2	cl	36	5	0		m	vfi	
Limiting Conditions		Depth to (in.)		Description		Remarks / Risk Factors:						
Perched Seasonal Water Table		7		perched on glacial till		Surface water should be diverted around system. Subsurface ag drainage may be present.						
Apparent Water Table		>50										
Highly Permeable Material		>50										
Bedrock		>50										
Restrictive Layer		50		glacial till								

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 113
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 6	10YR 4/3			sicl	30	2	2	m	gr	fr	
Bt1	6 to 14	10YR 5/6		5%10YR 5/3	sicl	35	2	2	m	sbk	fi	
Bt2	14 to 30	10YR 5/4		15%10Yr 5/2	sic	40	2	2	m	sbk	fi	
BC	30 to 33	10YR 5/4		10%10yR 5/2	sicl	38	5	1	m	sbk	fi	
Cd	33+	10YR 4/4		5%10yr 5/2	cl	35	8	0		m	vfi	
Limiting Conditions		Depth to (in.)		Description		Remarks / Risk Factors:						
Perched Seasonal Water Table		14		perched on glacial till		Surface water should be diverted around system. Subsurface ag drainage may be present.						
Apparent Water Table		>50										
Highly Permeable Material		>50										
Bedrock		>50										
Restrictive Layer		33		glacial till								

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 114
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____

Signature: _____

Phone#: p-614.579.1164

soilconsultant@yahoo.com



Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 7	10YR 4/3			sicl	28	2	2	m	gr	fr	
Bt1	7 to 16	10YR 5/4		30%10YR 5/2	sicl	35	2	2	m	sbk	fi	
Bt2	16 to 38	10YR 5/4		20%10YR 5/2	sic	40	2	2	m	sbk	fi	
BC	38 to 42	10YR 5/4		15%10YR 5/2	sicl	35	2	1	m	sbk	fi	
Cd	42+	10YR 4/4		10%10Y R5/2	cl	33	5	0		m	vfi	
Limiting Conditions		Depth to (in.)		Description		Remarks / Risk Factors:						
Perched Seasonal Water Table		7		perched on glacial till		Surface water should be diverted around system. Subsurface ag drainage may be present.						
Apparent Water Table		>50										
Highly Permeable Material		>50										
Bedrock		>50										
Restrictive Layer		42		glacial till								

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 115
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 11	10YR 4/3			sicl	28	2	2	m	gr	fr	
Bt1	11 to 20	10YR 5/6		25%10Yr 5/2	sicl	36	2	2	m	sbk	fi	
Bt2	20 to 28	10YR 5/4		30%10Yr 5/2	sic	40	2	2	m	sbk	fi	
BC	28 to 32	10YR 5/4		25%10YR 5/2	sicl	36	2	1	m	sbk	fi	
Cd	32	10YR 4/4		20%10YR 5/2	cl	35	5	0		m	vfi	

Limiting Conditions			
Limiting Conditions	Depth to (in.)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	11	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>50		
Highly Permeable Material	>50		
Bedrock	>50		
Restrictive Layer	32	glacial till	

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 116
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 10	10YR 4/3			sicl	30	2	2	m	gr	fr	
Bt1	10 to 24	10YR 5/4		25%10YR 5/2	sicl	32	2	2	m	sbk	fi	
Bt2	24 to 32	10YR 5/4		30%10YR 5/2	sicl	38	2	2	m	sbk	fi	
BC	32 to 35	10YR 5/4		25%10YR 5/2	sicl	36	2	1	m	sbk	fi	
Cd	35+	10YR 4/4		20%10YR 5/2	cl	35	5	0		m	vfi	
Limiting Conditions		Depth to (in.)		Description		Remarks / Risk Factors:						
Perched Seasonal Water Table		10		perched on glacial till		Surface water should be diverted around system. Subsurface ag drainage may be present.						
Apparent Water Table		>50										
Highly Permeable Material		>50										
Bedrock		>50										
Restrictive Layer		35		glacial till								

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 117
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 6	10YR 4/3			sicl	30	2	2	m	gr	fr	
Btg	6 to 19	10YR 5/2	30%10YR 5/4		sicl	35	2	2	m	sbk	fi	
Bt	19 to 42	10YR 5/4		35%10YR 5/2	sic	40	2	2	m	sbk	fi	
BC	42 to 50	10YR 5/4		30%10YR 5/2	sicl	38	2	1	m	sbk	fi	
Cd	50+	10YR 4/4		20%10YR 5/2	cl	35	5	0		m	vfi	

Limiting Conditions			
Limiting Conditions	Depth to (in.)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	6	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>50		
Highly Permeable Material	>50		
Bedrock	>50		
Restrictive Layer	50	glacial till	

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 118
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____

Signature: _____

Phone#: p-614.579.1164

soilconsultant@yahoo.com



Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 6	10YR 4/3			sicl	30	2	2	m	gr	fr	
Btg	6 to 21	10YR 5/2	20%10YR 5/4		sicl	35	2	2	m	sbk	fi	
Bt	21 to 44	10YR 5/3		40%10YR 5/2	sic	40	2	2	m	sbk	fi	
BC	44 to 48	10YR 5/4		30%10YR 5/1	sicl	38	2	1	m	sbk	fi	
Cd	48+	10YR 4/4		20%10YR 6/2	cl	35	5	0		m	vfi	
Limiting Conditions		Depth to (in.)		Description		Remarks / Risk Factors:						
Perched Seasonal Water Table		6		perched on glacial till		Surface water should be diverted around system. Subsurface ag drainage may be present.						
Apparent Water Table		>50										
Highly Permeable Material		>50										
Bedrock		>50										
Restrictive Layer		48		glacial till								

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 119
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____

Signature: 
 Phone#: p-614.579.1164
soilconsultant@yahoo.com



Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 8	10YR 4/3			sicl	32	2	2	m	gr	fr	
Btg	8 to 15	10YR 5/2	30%10YR 5/4		sicl	35	2	2	m	sbk	fi	
Bt	20 to 24	10YR 5/4		35%10YR 5/2	sic	40	2	2	m	sbk	fi	
BC	24 to 28	10YR 5/4		40%10YR 5/2	sicl	38	2	1	m	sbk	fi	
Cd	28+	10YR 4/4		25%10YR 6/2	cl	35	5	0		m	vfi	
Limiting Conditions		Depth to (in.)		Description		Remarks / Risk Factors:						
Perched Seasonal Water Table		8		perched on glacial till		Surface water should be diverted around system. Subsurface ag drainage may be present.						
Apparent Water Table		>50										
Highly Permeable Material		>50										
Bedrock		>50										
Restrictive Layer		28		glacial till								

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 120
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____

Signature: 
 Phone#: p-614.579.1164
soilconsultant@yahoo.com



Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 8	10YR 4/3			sicl	30	2	2	m	gr	fr	
Btg	8 to 20	10YR 5/2	20%10YR 5/4		sicl	35	2	2	m	sbk	fi	
Bt	20 to 35	10YR 5/4		40%10YR 5/2	sic	40	2	2	m	sbk	fi	
BC	35 to 41	10YR 5/4		30%10YR 5/2	sicl	38	2	1	m	sbk	fi	
Cd	41+	10YR 4/4		20%10YR 6/2	cl	35	5	0		m	vfi	
Limiting Conditions		Depth to (in.)		Description		Remarks / Risk Factors:						
Perched Seasonal Water Table		8		perched on glacial till		Surface water should be diverted around system. Subsurface ag drainage may be present.						
Apparent Water Table		>50										
Highly Permeable Material		>50										
Bedrock		>50										
Restrictive Layer		41		glacial till								

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 121
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____

Signature: 
 Phone#: p-614.579.1164
soilconsultant@yahoo.com



Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 9	10YR 4/3			sicl	30	2	2	m	gr	fr	
Bt1	9 to 21	10YR 5/3	30%10Yr 5/4	25%10YR 5/2	sicl	35	2	2	m	sbk	fi	
Bt2	21 to 37	10YR 5/4		20%10yR 5/1	sic	40	2	2	m	sbk	fi	
BC	37 to 40	10YR 5/4		15%10YR 5/1	sicl	38	5	1	m	sbk	fi	
Cd	40+	10YR 4/4		15%10YR 6/1	cl	35	5	0		m	vfi	

Limiting Conditions			
Limiting Conditions	Depth to (in.)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	9	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>50		
Highly Permeable Material	>50		
Bedrock	>50		
Restrictive Layer	40	glacial till	

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 122
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 1 to 2%
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____

Signature: 
 Phone#: p-614.579.1164
soilconsultant@yahoo.com



Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 9	10YR 4/3			sicl	30	2	2	m	gr	fr	
Bt1	9 to 18	10YR 5/ 4		15%10YR 5/2	sicl	35	2	2	m	sbk	fi	
Bt2	18 to 27	10YR 5/4		25%10YR 5/2	sic	40	2	2	m	sbk	fi	
BC	27 to 30	10YR 5/4		10%10yR 5/1	sicl	38	5	1	m	sbk	fi	
Cd	30+	10YR 4/4		10%10yR 5/1	cl	36	5	0		m	vfi	

Limiting Conditions			
Limiting Conditions	Depth to (in.)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	9	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>50		
Highly Permeable Material	>50		
Bedrock	>50		
Restrictive Layer	30	glacial till	

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 123
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 2 to3 %
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____

Signature: 
 Phone#: p-614.579.1164
soilconsultant@yahoo.com



Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 9	10YR 4/3			sicl	30	2	2	m	gr	fr	
Bt1	9 to 16	10YR 5/6		10%10yR 5/2	sicl	35	2	2	m	sbk	fi	
Bt2	16 to 25	10YR 5/4		20%10YR 5/2	sic	40	2	2	m	sbk	fi	
BC	25 to 29	10YR 5/4		15%10YR 5/2	sicl	38	5	1	m	sbk	fi	
Cd	29+	10YR 4/4		10%10Yr 5/2	cl	36	5	0		m	vfi	

Limiting Conditions			
Limiting Conditions	Depth to (in.)	Description	Remarks / Risk Factors:
Perched Seasonal Water Table	9	perched on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.
Apparent Water Table	>50		
Highly Permeable Material	>50		
Bedrock	>50		
Restrictive Layer	29	glacial till	

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Delaware
 Township / Sec.: Harlem
 Property Address/Location: NW Corner of Harlem Road
and Center Village Road
 Applicant Name: AV Investments
 Address: _____
 Phone #: _____
 Lot #: _____
 Test Hole #: 124
 Latitude/Longitude: _____
 Method: ☐ Pit ☐ Auger ☒ Tube

Land Use / Vegetation: Corn Stubble
 Landform: Till over Rock
 Position on Landform: Backslope
 Percent Slope: 2 to3 %
 Shape of Slope: Linear / Linear
 Bedrooms or GPD: 4
 Date: Monday, February 18, 2019
 Evaluator: Steven Miller, CPSSc
Soil & Environmental Consulting, Inc.
P.O. Box 1121
Delaware OH 43015
 Job Number: 19B208
 Soil Series: _____


 Signature: *Steven A. Miller*
 Phone#: p-614.579.1164
soilconsultant@yahoo.com

Soil Profile												
Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
			Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)		
Ap	0 to 9	10YR 4/3			sicl	30	2	2	m	gr	fr	
Bt1	9 to 16	10YR 5/6		15%10YR 5/2	sicl	35	2	2	m	sbk	fi	
Bt2	16 to 26	10YR 5/4		25%10YR 5/2	sic	40	2	2	m	sbk	fi	
BC	26 to 30	10YR 5/4		20%10YR 5/2	sicl	38	5	1	m	sbk	fi	
Cd	30+	10YR 4/4		15%10YR 5/2	cl	36	5	0		m	vfi	
Limiting Conditions		Depth to (in.)		Description		Remarks / Risk Factors:						
Perched Seasonal Water Table		9		perched on glacial till		Surface water should be diverted around system. Subsurface ag drainage may be present.						
Apparent Water Table		>50										
Highly Permeable Material		>50										
Bedrock		>50										
Restrictive Layer		30		glacial till								

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Landforms
Upland*
Terrace
Flood Plain
Lake Plain
Beach Ridge
*Includes glacial till plain and end moraine

Position on Landform
Depression
Flat
Knoll
Crest
Hillslope
Footslope

Shape of Slope
Convex
Concave
Linear
Complex

Horizon Nomenclature				
Master Horizons		Horizon Suffixes		Horizon Modifiers
O	Predominantly organic matter (litter & humus)	a	Highly decomposed organic matter	Numerical Prefixes: Used to denote lithologic discontinuities.
A	Mineral, organic matter (humus) accumulation, loss of Fe, Al, clay	b	Buried genetic horizon	
E	Mineral, loss of Si, Fe, Al, clay, organic matter	d	Densic layer (physically root restrictive)	Numerical Suffixes: Used to denote subdivisions within a master horizon.
B	Subsurface accumulation of clay, Fe, Al, Si, humus; sesquioxides; loss of CaCO ₃ ; subsurface soil structure	e	Moderately decomposed organic matter	
C	Little or no pedogenic alteration, unconsolidated earthy material, soft bedrock	g	Strong gley	
R	Hard bedrock	i	Slightly decomposed organic matter	
		p	Plow layer or artificial disturbance	
		r	Weathered or soft bedrock	
		t	Illuvial accumulation of silicate clay	
		w	Weak color or structure within B	
		x	Fragipan characteristics	

Soil Texture			
Texture Class Abbreviations		Textural Class Modifiers	
Course Sand	cos	Gravelly	GR
Sand	s	Fine Gravelly	FGR
Fine Sand	fs	Medium Gravelly	MGR
Very Fine Sand	vfs	Coarse Gravelly	CGR
Loamy Coarse Sand	lcos	Very Gravelly	VGR
Loamy Sand	ls	Extremely Gravelly	XGR
Loamy Fine Sand	lfs	Cobbly	CB
Loamy Very Fine Sand	lvfs	Very Cobbly	VCB
Coarse Sandy Loam	cosl	Extremely Cobbly	XCB
Sandy Loam	sl	Stony	ST
Fine Sandy Loam	fsl	Very Stony	VST
Very Fine Sandy Loam	vfsl	Extremely Stony	XST
Loam	l	Bouldery	BY
Silt Loam	sil	Very Bouldery	VBY
Silt	si	Extremely Bouldery	XBY
Sandy Clay Loam	scl	Channery	CN
Clay Loam	cl	Very Channery	VCN
Silty Clay Loam	sicl	Extremely Channery	XCN
Sandy Clay	sc	Flaggy	FL
Silty Clay	sic	Very Flaggy	VFL
Clay	c	Extremely Flaggy	XFL
*Estimate approximate clay percentage within 5 percent			

Soil Structure					
Grade		Size		Type (Shape)	
Structureless	0	Very Fine	vf	Granular	gr
Weak	1	Fine	f	Angular Blocky	abk
Moderate	2	Medium	m	Subangular Blocky	sbk
Strong	3	Coarse	co	Platy	pl
		Very Coarse	vc	Prismatic	pr
		Extr. Coarse	ec	Columnar	cpr
		Very Thin*	vn	Single Grain	sg
		Thin*	tn	Massive	m
		Thick*	tk	Cloddy	CDY
		Very Thick*	vk		
* The sizes Very Thin, Thin, Thick, and Very Thick, are used when describing platy structure only. Substitute thin for fine, and thick for coarse when describing platy structure.					

Moist Consistence	
Loose	l
Very Friable	vfr
Friable	fr
Firm	fi
Very Firm	vfi
Extremely Firm	efi

For a more detailed explanation on describing and sampling soils, please refer to the "Field Book for Describing and Sampling Soils" Schoeneberger, P.J., Wysocki, D.A., Benham, E.C., and Broderson, W.D. (editors) 2002. Field book for describing and sampling soils, version 2.0. Natural Resources Conservation Service, USDA, National Soil Survey Center, Lincoln, NE.