SMART
SURVEYING · ENGINEERING · ENVIRONMENTAL
SERVICES

April 22, 2024

Joe Clase, AICP
Plan4 Land LLC
1 South Harrison St., P.O. Box 306
Ashley, Ohio 43003

Mr. Clase:

Please consider this a feasibility report for the property located at 4910 State Route 257, Delaware, Ohio, and Parcel Nos. are 500-320—02-016-000 and 500-320-02-017-000 (Property). Smart Services Inc. conducted a soil evaluation on February 1, 2024, It is our understanding that the project consists of a 41.84-acre parcel and proposed Equestrian and Event Center.

The soil evaluation was to determine if the proposed lots have sufficient areas suitable for primary and secondary soil-based Household Sanitary Treatment Systems (HSTS).

Soils on the Property are in the Glynwood catena, topographic sequence, and consist of deep somewhat poorly drained soils formed in loamy glacial till with expected perched seasonal high-water tables ranging from 8 to 10 inches below the soil surface and a dense till restrictive feature at 50 inches of the soil surface. Both lots have sufficient area for HSTS. The specific HSTS has not been determined but could include spray irrigation, drip, or engineered mound. Copies of this letter, soil profile description, and aerial mapping should be submitted to the Delaware County Health Department (DCHD) for their approval.

If you have questions or need more information, please do not hesitate to contact me at 614.202.821 or electronically at mstrain@smartservices-inc.com.

Sincerely,

Mitchel R Strain

SMART SERVICES, INC.
Mitchel R. Strain, CPSS
Director of Environmental Services

Site and Soil Evaluation for Sewage Treatment and Dispersal

County:	Delaware	Land Use / Vegetation:	Ag/Grass & Forbs		
Township / Sec:	Concord	Landform:	Upland		
Property Address/Location	4910 SR 257 S.	Position on Landform:	Flat		
	Delaware, Ohio 43015	Percent Slope:	1-4		
Applicant Name:	Joe Clase, AICP, Plan 4 Land LLC	Shape of Slope:	Linear		
Address:	1 S. Harrison St., P.O. Box 306				
	Ashley, Ohio 43003	Date:	2/1/24	Certification Stamp or #:	02619
Phone #:	833.752.6452	Evaluator:	Mitchel R. Strain		
Parcel #:	500-320-02-016-000 & 500-320-02-017-00		Smart Services Inc.	Signature:	Mitchel R Strain
Test Hole #:	1		88 W. Church St		
Latitude/Longitude:	N/A		Newark, Ohio	Phone #:	614.202.8621
Method:	X Pit X Auger ___ Probe				

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	0-7	10YR 4/3	None	None	sil	15	0	2	f	gr	vfr	Few Fine Roots
BE	7-8	10 YR 5/4	None	None	sil	20	2	2	m	sbk	fr	Few Fine Roots
Btg	8-30	10 YR 6/2	7.5YR 5/4	None	sicl	35	5	2	m	sbk	fi	
BCt	30-50	10YR 4/4	7.5YR 5/6	10YR 5/2	cl	40	5	1	co	sbk	fi	
Cd	50-60	10YR 4/3	10YR 5/6	10YR 5/2	cl	40	5	0	NA	m	vfi	

Limiting Conditions	Depth to (in.)	Descriptive Notes	Remarks / Risk Factors:
Perched Seasonal Water Table	8	Reduced Matrix	
Apparent Water Table	None		
Highly Permeable Material	None		
Bedrock	>60		
Restrictive Layer	50	Dense Till	

Site and Soil Evaluation for Sewage Treatment and Dispersal

County:	Delaware	Land Use / Vegetation:	Ag/Grass & Forbs
Township / Sec:	Concord	Landform:	Upland
Property Address/Location	4910 SR 257 S.	Position on Landform:	Flat
	Delaware, Ohio 43015	Percent Slope:	1-4
Applicant Name:	Joe Clase, AICP, Plan 4 Land LLC	Shape of Slope:	Linear
Address:	1 S. Harrison St., P.O. Box 306		
	Ashley, Ohio 43003	Date:	2/1/24
Phone #:	833.752.6452	Evaluator:	Mitchel R. Strain
Parcel #:	500-320-02-016-000 & 500-320-02-017-00		Smart Services Inc.
Test Hole #:	2		88 W. Church St
Latitude/Longitude:	N/A		Newark, Ohio
Method:	X Pit X Auger ___ Probe		

Certification Stamp or #: 02619

Signature: Mitchel R Strain

Phone #: 614.202.8621

Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
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Horizon	Depth (inches)	Matrix Color	Redoximorphic Features		Texture			Structure			Consistence	
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BCt	30-50	10YR 4/4	7.5YR 5/6	10YR 5/2	cl	40	5	1	co	sbk	fi	
Cd	50-60	10YR 4/3	10YR 5/6	10YR 5/2	cl	40	5	0	NA	m	fi	

Limiting Conditions	Depth to (in.)	Descriptive Notes	Remarks / Risk Factors:
Perched Seasonal Water Table	10	Reduced Matrix	
Apparent Water Table	None		
Highly Permeable Material	None		
Bedrock	>60		
Restrictive Layer	50	Dense Till	

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

Site and Soil Evaluation for Sewage Treatment and Dispersal

County:	Delaware	Land Use / Vegetation:	Residential/Maintained Grass
Township / Sec:	Concord	Landform:	Upland
Property Address/Location	4910 SR 257 S.	Position on Landform:	Flat
	Delaware, Ohio 43015	Percent Slope:	1-4
Applicant Name:	Joe Clase, AICP, Plan 4 Land LLC	Shape of Slope:	Linear
Address:	1 S. Harrison St., P.O. Box 306		
	Ashley, Ohio 43003	Date:	2/1/24
Phone #:	833.752.6452	Evaluator:	Mitchel R. Strain
Parcel #:	500-320-02-016-000 & 500-320-02-017-00		Smart Services Inc.
Test Hole #:	3		88 W. Church St
Latitude/Longitude:	N/A		Newark, Ohio
Method:	X Pit X Auger ___ Probe		

Certification Stamp or #: 02619

Signature: Mitchel R Strain

Phone #: 614.202.8621

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)		
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Limiting Conditions	Depth to (in.)	Descriptive Notes	Remarks / Risk Factors:
Perched Seasonal Water Table	8	Reduced Matrix	
Apparent Water Table	None		
Highly Permeable Material	None		
Bedrock	>60		
Restrictive Layer	50	Dense Till	

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

Landform
Upland*
Terrace
Flood Plain
Lake Pain
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	
O	Predominantly organic matter (litter & humus)
A	Mineral, organic matter (humus) accumulation, loss of Fe, Al, clay
E	Mineral, loss of Si, Fe, Al, clay, organic matter
B	Subsurface accumulation of clay, Fe, Al, Si, humus, sesquioxides, loss of $CaCO_3$, subsurface soil structure
C	Little or no pedogenic alteration, unconsolidated earthy material, soft bedrock
R	Hard bedrock

Horizon Suffixes	
a	Highly decomposed organic matter
b	Buried genetic horizon
d	Densic layer (physically root restrictive)
e	Moderately decomposed organic matter
g	Strong gley
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

Horizon Modifiers
Numerical Prefixes Used to denote lithologic discontinuities
Numerical Suffixes Used to denote subdivisions within a master horizon

Soil Texture

Texture Class Abbreviations	
Course Sand	cos
Sand	s
Fine Sand	fs
Very Fine Sand	vfs
Loamy Coarse Sand	lcos
Loamy Sand	ls
Loamy Fine Sand	lfs
Loamy Very Fine Sand	lvfs
Coarse Sandy Loam	cosl
Sandy Loam	sl
Fine Sandy Loam	fsl
Very Fine Sandy Loam	vfsl
Loam	l
Silt Loam	sil
Silt	si
Sandy Clay Loam	scl
Clay Loam	cl
Silty Clay Loam	sicl
Sandy Clay	sc
Silty Clay	sic
Clay	c

Textural Class Modifiers	
Gravelly	GR
Fine Gravelly	FGR
Medium Gravelly	MGR
Coarse Gravelly	CGR
Very Gravelly	VGR
Extremely Gravelly	XGR
Cobbly	CB
Very Cobbly	VCB
Extremely Cobbly	XCB
Stony	ST
Very Stony	VST
Extremely Stony	XST
Bouldery	BY
Very Bouldery	VBY
Extremely Bouldery	XBY
Channery	CN
Very Channery	VCN
Extremely Channery	XCN
Flaggy	FL
Very Flaggy	VFL
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		

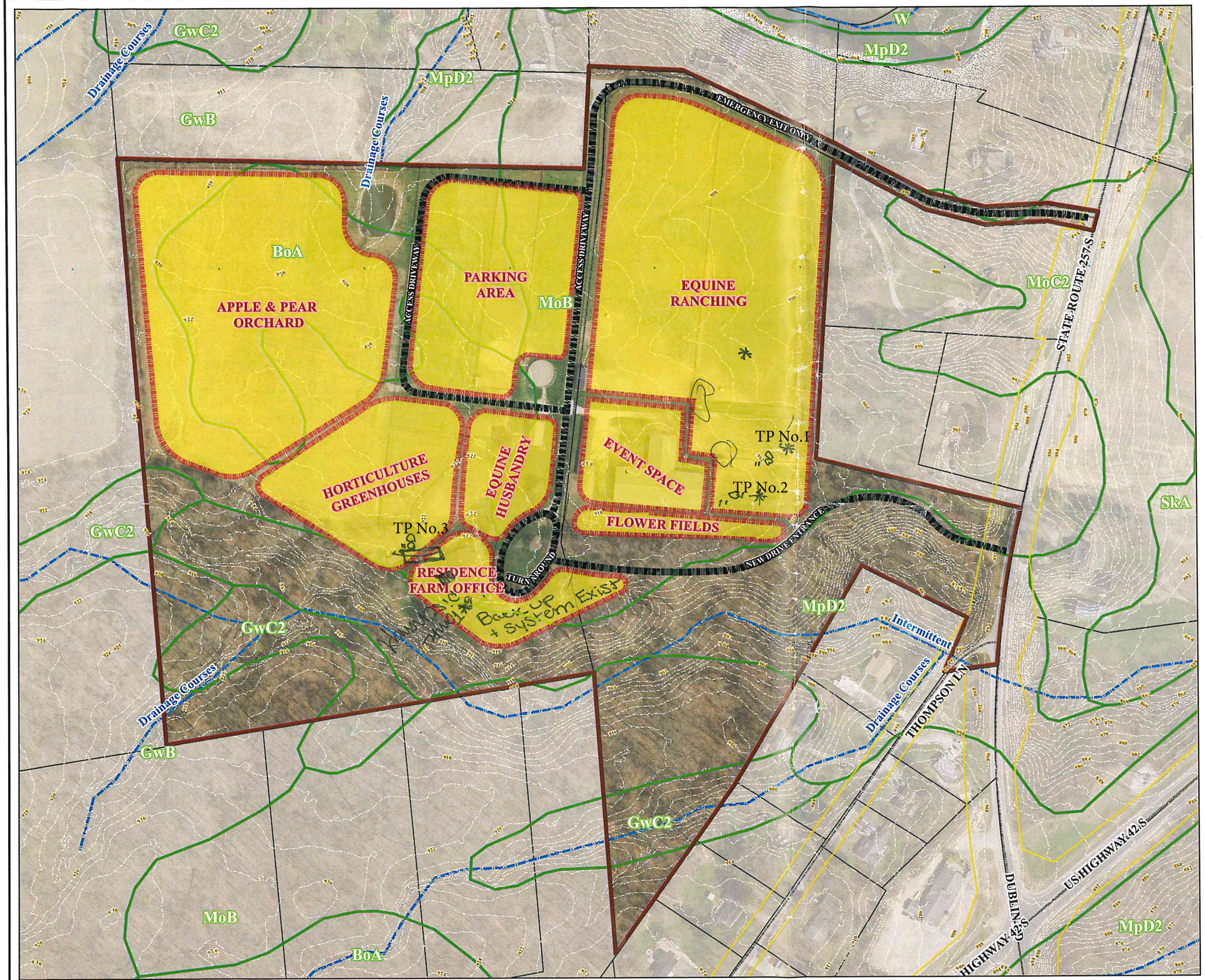
* The sizes Very Thin, Thin, Thick, and Very Thick, are used when describing platy structure only Substitute thin for fine, and thick for coarse when describing platy structure

Moist Consistence

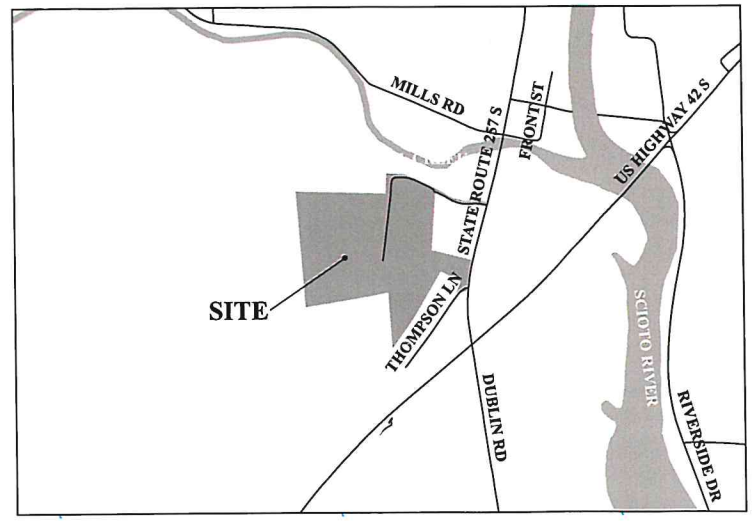
Loose	l
Very Friable	vfr
Friable	fr
Firm	fi
Very Firm	vfi
Extremely Firm	efi

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



SITE PLAN



LOCATION MAP

CONCEPT PLAN

Avasar LLC Property | +/- 41.84 Gross Acres
4910 State Route 257 S., Delaware, Ohio 43015
(Concord Township, Delaware County, State of Ohio)
Parcel Nos. 500-320-02-016-000 and 500-320-02-017-000

Legend

- Site Boundaries
- Concept Plan
- Proposed Access
- Existing Road Right-of-Way
- Soil Types
- 2' Topography
- Drainage Courses
- Road Centerline
- Property Lines

N W E S

Plan4Land WWW.PLAN4LAND.NET

Sheet No. 1

Project Number: 23-0050

Prepared by: JOE CLASE, AICP

Date: 09/11/2023