# Soil and Environmental Consulting Services, Inc.



Wednesday, August 10, 2022

Bruner Land Company c/o Lori Bruner brunerland@hotmail.com

Re: Soil investigation for on-site septic disposal for the lot splits at the corner of Roads 20 and 25, Harmony Township, Morrow County, Ohio

Enclosed you will find the requested detailed soil for the lot splits at the corner of Roads 20 and 25, Harmony Township, Morrow 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.

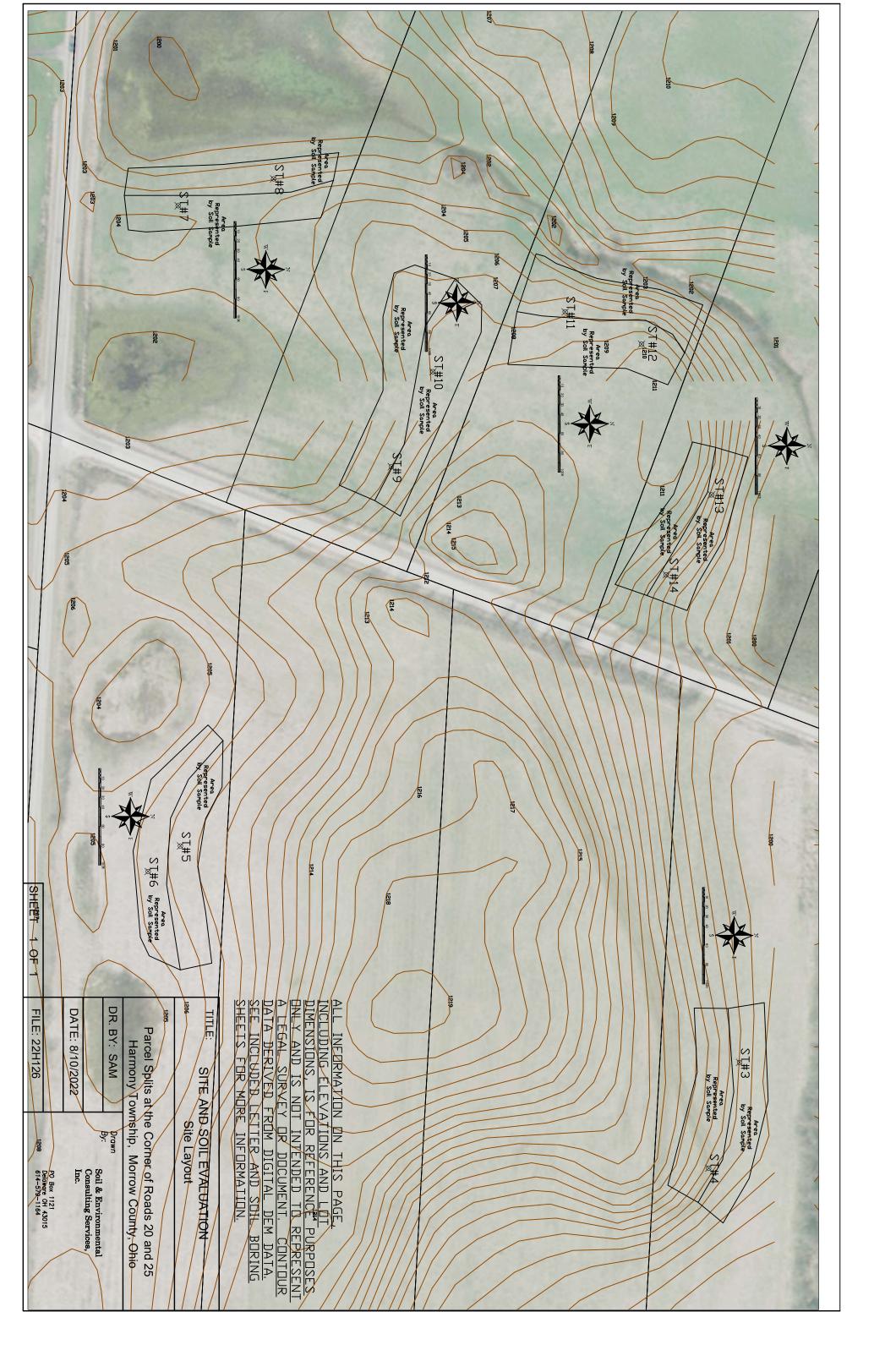
Please protect all areas approved for septic disposal by having the contractor stake and rope off the proposed locations prior to driveway and basement excavation. No soil, building, or waste material should be stored on the proposed absorption areas. Disturbance to the areas may result in compaction 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.

Steven Miller, CPSS







Landforms
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		Horizon Suffixes		Horizon Modifiers			
О	Predominantly organic matter (litter &	a	Highly decomposed organic matter					
	humus)	b	Buried genetic horizon		Numerical Prefixes: Used to denote			
A	Mineral, organic matter (humus)	d	Densic layer (physically root restrictive)		lithologic discontinuities.			
	accumulation, loss of Fe, Al, clay	e	Moderately decomposed organic matter					
Е	Mineral, loss of Si, Fe, Al, clay, organic	g	Strong gley					
	matter	i	Slightly decomposed organic matter		Numerical Suffixes: Used to denote			
В	Subsurface accumulation of clay, Fe, Al, Si,	p	Plow layer or artificial disturbance		subdivisions within a master			
	humus; sesquioxides; loss of CaCo <sub>3</sub> ;	r	Weathered or soft bedrock		horizon.			
	subsurface soil structure	t	Illuvial accumulation of silicate clay					
С		W	Weak color or structure within B					
	Little or no pedogenic alteration,	X	Fragipan characteristics					
	unconsoilidated earthy material, soft bedrock	-	-					
R	Hard bedrock							

	Soil	Texture	
Texture Class Abbreviati	ons	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	СВ
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	1	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 c	lay perc		

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	1					
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.

	County:	Morr	ow	Land	Use / Vegetation:	]	Forbs & Grasse	es				· - · - · - · - · - · - · · · · ·
To	wnship / Sec.:	Harm	ony		Landform:		Till Plain					
Property A	ddress/Location:	Corner of Roa	ads 20 & 25	Posi	tion on Landform:		Backslope				1	
					Percent Slope:		9.0%				11	cacpaes \
Ap	plicant Name:	Bruner Land	Company		Shape of Slope:		Linear/ Linear					Secretary of the second
	Address:			E	Bedrooms or GPD:						1	STEVEN A MILLER
					Date:	Tueso	Tuesday, August 09, 2022				1 6	CERTIFIED PROFESSIONAL SOIL SOIL SCIENTIST
	Phone #:				Evaluator:	Ste	ven Miller, CP	SSc		V	103	0
	Lot #:	_				Soil & Envir	onmental Cons	sulting, Inc.	Signature:	XLP.	H San	28423
	Test Hole #:	1					P.O. Box 1121	<u> </u>		U U	0 - 0	
Latitu	ide/Longitude:					De	laware OH 430	015	Phone#: 1	-614.579.		
	Method:	PitAuge	r X Probe		Job Number: Soil Series:		22H126			soilcor	nsultant@ya	ahoo.com
Soil 1	Profile	Est	imating Soil Satur	ation			Estimati	ng Soil Permea	ability			
		Munsel	ll Color (hue, value,	chroma)								
			Redoximorp	hic 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 to 8	10YR 4/3			sil	20	2	2	m	gr	fr	
Bt1	8 to 11	10YR 5/6		15%10YR 5/3	sicl	35	2	2	m	sbk	fi	
Bt2	11 to 22	10YR 5/4		20%10yR 5/2	sicl	38	2	2	m	sbk	fi	

36

35

5

1

0

sbk

fi

vfi

Limiting Conditions	Depth (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	>60		
Highly Permeable Material	>60		
Bedrock	>60		
Restrictive Layer	25	glacial till	

sicl

cl

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.

30%10YR 5/2

20%10YR 5/2

22 to 25

25+

10YR 5/4

10YR 5/4

BC

Cd

County:	Morrow	Land Use / Vegetation:	Forbs & Grasses	and the second
Township / Sec.:	Harmony	Landform:	Till Plain	
Property Address/Location:	Corner of Roads 20 & 25	Position on Landform:	Backslope	1/80
		Percent Slope:	9.0%	( cacpaes)
Applicant Name:	Bruner Land Company	Shape of Slope:	Linear/ Linear	I have been a first to the second
Address:		Bedrooms or GPD:		STEVENA MILLER
		Date:	Tuesday, August 09, 2022	CERTIFIED PROFESSIONAL
Phone #:		Evaluator:	Steven Miller, CPSSc	1 O Sole Sole Sole Sole Sole Sole Sole Sole
Lot #:	<u>_</u>	Soi	1 & Environmental Consulting, Inc.	Signature: Signature: 3842
Test Hole #:	2		P.O. Box 1121	
Latitude/Longitude:			Delaware OH 43015	Phone#: p-614.579.1164
Method:	PitAuger X Probe	Job Number:	22H126	soilconsultant@yahoo.com
		Soil Series:		

Soil	Soil Profile		imating Soil Satur	ation		Estimating Soil Permeability						
		Munsell Color (hue, value, chroma)				·						
			Redoximorp	ohic 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 to 8	10YR 4/3			sil	20	2	2	m	gr	fr	
Bt1	8 to 18	10YR 5/6		5%10yR 5/3	sicl	32	2	2	m	sbk	fi	
Bt2	18 to 28	10YR 5/4		15%10YR 5/2	sicl	36	2	2	m	sbk	fi	
ВС	28 to 30	10YR 5/4		20%10YR 5/2	sicl	35	2	1	m	sbk	fi	
Cd	30+	10YR 5/4		15%10YR 5/2	cl	32	5	0		m	vfi	
Limiting	Conditions	Depth (in	1)	Description	_			Rema	ırks / Risk Fa	ctors:		
Perched Seasonal		18		thed on glacial till	Surface wa	ter should be di	verted around system. Subsurface ag drainage may be present.				esent.	
Apparent Water		>60	İ					·		· · · · · ·		
Highly Permeable	e Material	>60										
Bedrock		>60										
Restrictive Layer		30		glacial till	1							

County:	Morrow	Land Use / Vegetation:	Forbs & Grasses	and the second
Township / Sec.:	Harmony	Landform:	Till Plain	
Property Address/Location:	Corner of Roads 20 & 25	Position on Landform:	Backslope	
		Percent Slope:	9.0%	(cecpaes)
Applicant Name:	Bruner Land Company	Shape of Slope:	Linear/ Linear	
Address:		Bedrooms or GPD:		STEVEN A MILLER
		Date:	Tuesday, August 09, 2022	CERTIFIED PROFESSIONAL /
Phone #:		Evaluator:	Steven Miller, CPSSc	1 O Sole Soletins
Lot #:	<u>_</u>		Soil & Environmental Consulting, Inc.	Signature: Sp. A Sp. 3842
Test Hole #:	3		P.O. Box 1121	
Latitude/Longitude:			Delaware OH 43015	Phone#: p-614.579.1164
Method:	PitAuger X Probe	Job Number:	22H126	soilconsultant@yahoo.com
		Soil Series:		-

Soil 1	Profile		imating Soil Satur				Estimatir	ng Soil Permea	bility			
		Munsel	l Color (hue, value									
			Redoximorp	ohic 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 to 7	10YR 4/3			sil	20	2	2	m	gr	fr	
Bt1	7 to 15	10YR 5/6			sicl	30	2	2	m	sbk	fi	
Bt2	15 to 22	10YR 5/4		10%10YR 5/2	sicl	35	2	2	m	sbk	fi	
ВС	22 to 25	10YR 5/4		15%!0YR 5/2	sicl	33	2	1	m	sbk	fi	
Cd	25+	10YR 5/4		10%10Yr 5/2	cl	32	5	0		m	vfi	
	Conditions	Depth (ir		Description	Remarks / Risk Factors:							
Perched Seasonal		15	perc	thed on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.							
Apparent Water T		>60										
Highly Permeable	Material	>60										
Bedrock		>60										
Restrictive Layer		25		glacial till	11							

County:	Morrow	Land Use / Vegetation:	Forbs & Grasses	and the second
Township / Sec.:	Harmony	Landform:	Till Plain	
Property Address/Location:	Corner of Roads 20 & 25	Position on Landform:	Backslope	
		Percent Slope:	9.0%	(cecpaes)
Applicant Name:	Bruner Land Company	Shape of Slope:	Linear/ Linear	The state of the s
Address:		Bedrooms or GPD:		STEVEN A MILLER
		Date:	Tuesday, August 09, 2022	CERTIFIED PROFESSIONAL /
Phone #:		Evaluator:	Steven Miller, CPSSc	1 O SOLESIANIS
Lot #:			Soil & Environmental Consulting, Inc.	Signature: Signature: 3842
Test Hole #:	4		P.O. Box 1121	
Latitude/Longitude:			Delaware OH 43015	Phone#: p-614.579.1164
Method:	Pit Auger X Probe	Job Number:	22H126	soilconsultant@yahoo.com
		Soil Series:		

Soil I	Profile		imating Soil Satur				Estimatir	ng Soil Permeal	oility			
		Munse	l Color (hue, value									
			Redoximorp	ohic 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 to 9	10YR 4/3			sil	20	2	2	m	gr	fr	
Bt1	9 to 17	10YR 5/6			sicl	32	2	2	m	sbk	fi	
Bt2	17 to 42	10YR 5/4		15%10YR 5/2	sicl	36	2	2	m	sbk	fi	
ВС	42 to 48	10YR 5/4		20%10YR 5/2	sicl	34	2	1	m	sbk	fi	
Cd	48+	10YR 5/4		15%10YR 5/2	cl	32	5	0		m	vfi	
Limiting (	Conditions	Depth (in	1)	Description	Remarks / Risk Factors:							
Perched Seasonal		17	perc	hed on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.							
Apparent Water T		>60										
Highly Permeable	Material	>60										
Bedrock		>60										
Restrictive Layer		48		glacial till	ıl till							

County:	Morrow	Land Use / Vegetation:	Forbs & Grasses	and the second
Township / Sec.:	Harmony	Landform:	Till Plain	
Property Address/Location:	Corner of Roads 20 & 25	Position on Landform:	Backslope	
		Percent Slope:	2 to 3%	(cacpaes)
Applicant Name:	Bruner Land Company	Shape of Slope:	Linear/ Linear	land the second
Address:		Bedrooms or GPD:		STEVEN A MILLER
		Date:	Tuesday, August 09, 2022	CERTIFIED PROFESSIONAL A
Phone #:		Evaluator:	Steven Miller, CPSSc	1 O SOLESIANIS
Lot #:	<u>_</u>		Soil & Environmental Consulting, Inc.	Signature: 2842
Test Hole #:	5		P.O. Box 1121	with V Joseph
Latitude/Longitude:			Delaware OH 43015	Phone#: p-614.579.1164
Method:	PitAuger X Probe	Job Number:	22H126	soilconsultant@yahoo.com
	_ <del>_</del>	Soil Series:	_	

Soil 1	Profile		imating Soil Satur				Estimatir	ng Soil Permea	bility			
		Munsel	l Color (hue, value									
			Redoximor	ohic 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 to 8	10YR 4/3			sil	20	2	2	m	gr	fr	
Bt1	8 to 22	10YR 5/4		20%10YR 5/2	sicl	34	2	2	m	sbk	fi	
Bt2	22 to 45	10YR 5/4		30%10YR 5/2	sicl	36	2	2	m	sbk	fi	
ВС	45 to 49	10YR 5/4		35%10YR 5/2	sicl	35	2	1	m	sbk	fi	
Cd	49+	10YR 5/4		30%10YR 5/2	cl	32	5	0		m	vfi	
	Conditions	Depth (ir		Description	Remarks / Risk Factors:							
Perched Seasonal		8	pero	ched on glacial till	till Surface water should be diverted around system. Subsurface ag drainage may be present.							
Apparent Water T		>60										
Highly Permeable	Material	>60										
Bedrock		>60										
Restrictive Layer		49		glacial till								

County:	Morrow	Land Use / Vegetation:	Forbs & Grasses	and the second second
Township / Sec.:	Harmony	Landform:	Till Plain	
Property Address/Location:	Corner of Roads 20 & 25	Position on Landform:	Backslope	1/80
		Percent Slope:	2 to 3%	( cacpaes)
Applicant Name:	Bruner Land Company	Shape of Slope:	Linear/ Linear	I have been a first to the second
Address:		Bedrooms or GPD:		STEVENA MILLER
		Date:	Tuesday, August 09, 2022	CERTIFIED PROFESSIONAL
Phone #:		Evaluator:	Steven Miller, CPSSc	1 O SOLESCENIST
Lot #:	<u>_</u>	Soi	1 & Environmental Consulting, Inc.	Signature: Signature: 3842
Test Hole #:	6		P.O. Box 1121	
Latitude/Longitude:			Delaware OH 43015	Phone#: p-614.579.1164
Method:	PitAuger X Probe	Job Number:	22H126	soilconsultant@yahoo.com
	_ <u> </u>	Soil Series:		

Soil I	Profile		imating Soil Satur				Estimatiı	ng Soil Permeal	oility			
		Munse	ll Color (hue, value	, chroma)								
			Redoximorp	hic 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 to 6	10YR 4/3			sil	20	2	2	m	gr	fr	
Btg	6 to 18	10YR 5/2	35%10YR 5/4		sicl	32	2	2	m	sbk	fi	
Bt	18t o 50	10YR 5/3		25%10yR 5/2	sicl	36	2	2	m	sbk	fi	
BC	50 to 55	10YR 5/4		30%10YR 5/2	sicl	34	2	1	m	sbk	fi	
Cd	55+	10YR 5/4		25%10Yr 5/2	cl	32	5	0		m	vfi	
Limiting (	Conditions	Depth (ii	1)	Description	Remarks / Risk Factors:							
Perched Seasonal		6	perc	hed on glacial till	till Surface water should be diverted around system. Subsurface ag drainage may be present.							
Apparent Water T		>60										
Highly Permeable	Material	>60						-				
Bedrock		>60										
Restrictive Layer		55		glacial till	till							

County:	Morrow	Land Use / Vegetation:	Forbs & Grasses	and the second
Township / Sec.:	Harmony	Landform:	Till Plain	
Property Address/Location:	Corner of Roads 20 & 25	Position on Landform:	Backslope	
		Percent Slope:	2 to 3%	(cacpaes)
Applicant Name:	Bruner Land Company	Shape of Slope:	Linear/ Linear	
Address:		Bedrooms or GPD:		STEVEN A MILLER
		Date:	Tuesday, August 09, 2022	CERTIFIED PROFESSIONAL I
Phone #:		Evaluator:	Steven Miller, CPSSc	1 0 0 300 300 300
Lot #:			Soil & Environmental Consulting, Inc.	Signature: 38423
Test Hole #:	7		P.O. Box 1121	
Latitude/Longitude:			Delaware OH 43015	Phone#: p-614.579.1164
Method:	Pit Auger X Probe	Job Number:	22H126	soilconsultant@yahoo.com
		Soil Series:		

Soil 1	Profile		imating Soil Satur ll Color (hue, value				Estimatir	ng Soil Permea	bility			
				ohic 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 to 6	10YR 4/3			sil	20	2	2	m	gr	fr	
Btg1	6 to 24	10YR 5/2	35%10YR 5/4		sicl	35	2	2	m	sbk	fi	
Btg2	24 to 42	10YR 5/2	40%10YR 5/4		sicl	37	2	2	m	sbk	fi	
ВС	42 to 52	10YR 5/4		25%10YR 5/2	sicl	36	2	1	m	sbk	fi	
Cd	52+	10YR 5/4		35%10YR 5/1	cl	34	5	0		m	vfi	
Limiting	Conditions	Depth (in	1)	Description	Т			Rema	rks / Risk Fac	etors:		
erched Seasonal		6	perc	hed on glacial till	Surface water should be diverted around system. Subsurface ag drainage may be present.							
pparent Water T		>60										
ighly Permeable edrock	Material	>60										
estrictive Layer		52		glacial till								

	County:	Morro	w	Land	Use / Vegetation:	I	Forbs & Grasse	es				
Tow	nship / Sec.:	Harmo	ny	_	Landform:		Till Plain				,	1
Property Add	dress/Location:	Corner of Road	ds 20 & 25	Posi	tion on Landform:		Backslope				/	100
					Percent Slope:		2 to 3%				į i	crecpaes \
Appl	licant Name:	Bruner Land	Company	_	Shape of Slope:		Linear/ Linear	r			1 1	
	Address:			- E	Bedrooms or GPD:						1	STEVENA MILLER
				_	Date:	Tueso	lay, August 09	0, 2022			'	CERTIFIED PROFESSIONAL
	Phone #:			_	Evaluator:	Ste	ven Miller, CP	PSSc		1)	1	O SUIT SCHEILIST
	Lot #:	_		_		Soil & Enviro	onmental Cons	sulting, Inc.	Signature:	XO.	A Sa	28429
	Test Hole #:	8		-			P.O. Box 1121	1		wan	77000	
Latitud	e/Longitude:			_		De	laware OH 430	015	Phone#:	p-614.579.1	1164	
	Method:	Pit Auger	X Probe	_	Job Number:		22H126			soilcon	sultant@\	yahoo.com
					Soil Series:							
Soil Pr	rofile	Esti	mating Soil Satu	ration			Estimati	ng Soil Permea	ability			
		Munsell	Color (hue, value	, chroma)								
			Redoximor	ohic Features		Texture			Structure			1
	Denth	Matrix		1		Annroy	Approx %	i		Tyne	l	

Soil	Profile		imating Soil Satur				Estimatiı	ng Soil Permeat	oility			
		Munse	ll Color (hue, value,	hic 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 to 6	10YR 4/3			sil	20	2	2	m	gr	fr	
Btg1	6 to 19	10YR 5/1	25%10YR 5/6		sicl	32	2	2	m	sbk	fi	
Btg2	19t o 46	10YR 5/2	30%10yR 5/4		sicl	35	2	2	m	sbk	fi	
ВС	46 to 56	10YR 5/4		35%10yR 5/1	sicl	32	2	1	m	sbk	fi	
Cd	56+	10YR 5/4		40%10YR 5/1	cl	30	5	0		m	vfi	
Limiting	Conditions	Depth (ii	1)	Description	_			Rema	rks / Risk Fac	tors:		
Perched Seasonal	l Water Table	6		hed on glacial till	Il Surface water should be diverted around system. Subsurface ag drainage may be present.							
Apparent Water		>60										
lighly Permeable	e Material	>60										
Bedrock		>60										
estrictive Layer	•	56		glacial till	till							

County:	Morrow	Land Use / Vegetation:	Forbs & Grasses		and the second second
Township / Sec.:	Harmony	Landform:	Till Plain		
Property Address/Location:	Corner of Roads 20 & 25	Position on Landform:	Backslope		
		Percent Slope:	4 to 5%		( cacpaes
Applicant Name:	Bruner Land Company	Shape of Slope:	Linear/ Linear		
Address:		Bedrooms or GPD:			STEVEN A MILLER
		Date:	Tuesday, August 09, 2022		CERTIFIED PROFESSIONAL
Phone #:		Evaluator:	Steven Miller, CPSSc		1 0 0
Lot #:	<u>_</u>		Soil & Environmental Consulting, Inc.	Signature:	XP. A Sh 28427-
Test Hole #:	9		P.O. Box 1121		with VIVI
Latitude/Longitude:			Delaware OH 43015	Phone#:	p-614.579.1164
Method:	Pit Auger X Probe	Job Number:	22H126		soilconsultant@yahoo.com
		Soil Series:			

Soil 1	Profile		imating Soil Satur				Estimatir	ng Soil Permea	bility			
		Munsel	l Color (hue, value									
			Redoximor	ohic 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 to 6	10YR 4/3			sil	20	2	2	m	gr	fr	
Bt1	6 to 16	10YR 5/3		25%10YR 5/2	sicl	34	2	2	m	sbk	fi	
Bt2	16 to 42	10YR 5/4		30%10YR 5/2	sicl	36	2	2	m	sbk	fi	
ВС	42 to 44	10YR 5/4		40%10YR 5/2	sicl	34	2	1	m	sbk	fi	
Cd	44+	10YR 5/4		35%10YR 5/2	cl	32	5	0		m	vfi	
Limiting	Conditions	Depth (ir	1)	Description					rks / Risk Fac			
	Perched Seasonal Water Table 6 perched on glacial til			ched on glacial till	Surface wa	ter should be di	verted around s	system. Subsurf	ace ag drainag	e may be pro	esent.	
Apparent Water T		>60										
Highly Permeable	Material	>60										
Bedrock		>60										
Restrictive Layer		44		glacial till								

County:	Morrow	Land Use / Vegetation:	Forbs & Grasses	and the second
Township / Sec.:	Harmony	Landform:	Till Plain	
Property Address/Location:	Corner of Roads 20 & 25	Position on Landform:	Backslope	
		Percent Slope:	4 to 5%	(cacpaes)
Applicant Name:	Bruner Land Company	Shape of Slope:	Linear/ Linear	
Address:		Bedrooms or GPD:		STEVEN A MILLER
		Date:	Tuesday, August 09, 2022	CERTIFIED PROFESSIONAL I
Phone #:		Evaluator:	Steven Miller, CPSSc	1 0 0 300 300 300
Lot #:	<u>_</u>		Soil & Environmental Consulting, Inc.	Signature: 38423
Test Hole #:	10		P.O. Box 1121	wan voor
Latitude/Longitude:			Delaware OH 43015	Phone#: p-614.579.1164
Method:	PitAuger X Probe	Job Number:	22H126	soilconsultant@yahoo.com
		Soil Series:		

Soil I	Profile		imating Soil Satur ll Color (hue, value				Estimatin	ng Soil Permea	bility			
				phic 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 to 6	10YR 4/3			sil	20	2	2	m	gr	fr	
Bt1	6 to 20	10YR 5/3		30%10YR 5/2	sicl	32	2	2	m	sbk	fi	
Bt2	20 to 35	10YR 5/4		35%10YR 5/2	sicl	38	2	2	m	sbk	fi	
BC	35 to 40	10YR 5/4		30%10YR 5/2	sicl	36	2	1	m	sbk	fi	
Cd	40+	10YR 5/4		25%10YR 5/2	cl	34	5	0		m	vfi	
Limiting Conditions Depth (in) Description					_			Rema	rks / Risk Fac	etors:		
erched Seasonal		ater Table 6 perched on glacial ti			Surface wa	ter should be di	verted around s	system. Subsurt	ace ag drainag	e may be pro	esent.	
pparent Water T		>60										
ighly Permeable	Material	>60										
Bedrock         >60           Restrictive Layer         40         glacial till												

County:	Morrow	Land Use / Vegetation:	Forbs & Grasses	_	and and an arrange
Township / Sec.:	Harmony	Landform:	Till Plain		
Property Address/Location:	Corner of Roads 20 & 25	Position on Landform:	Backslope	_	
		Percent Slope:	4 to 5%	_	caccacs
Applicant Name:	Bruner Land Company	Shape of Slope:	Linear/ Linear	_	
Address:		Bedrooms or GPD:		_	STEVEN A MILLER
		Date:	Tuesday, August 09, 2022	_	CERTIFIED PROFESSIONAL
Phone #:		Evaluator:	Steven Miller, CPSSc	_	1 0 0
Lot #:	<u>_</u>		Soil & Environmental Consulting, Inc.	Signature:	XD. A San - 28429
Test Hole #:	11		P.O. Box 1121	_	was voor
Latitude/Longitude:			Delaware OH 43015	Phone#:	p-614.579.1164
Method:	Pit Auger X Probe	Job Number:	22H126	- -	soilconsultant@yahoo.com
		Soil Series:	·		

Soil 1	Profile		imating Soil Satur				Estimatin	ig Soil Permea	bility			
		Munse	ll Color (hue, value,									
			Redoximorp	hic 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 to 8	10YR 4/3			sil	20	2	2	m	gr	fr	
Bt1	8 to 22	10YR 5/4			sicl	32	2	2	m	sbk	fi	
Bt2	22 to 35	10YR 5/4		15%10yR 5/2	sicl	36	2	2	m	sbk	fi	
ВС	35 to 38	10YR 5/4		20%10YR 5/2	sicl	35	2	1	m	sbk	fi	
Cd	38+	10YR 5/4		15%10YR 5/2	cl	34	5	0		m	vfi	
Limiting Conditions Depth (in) Description Remarks / Risk Factors:												
Perched Seasonal		Depth (in) Description  22 perched on glacial ti			Surface was	er should be di	verted around s	ystem. Subsuri			esent	
Apparent Water T		>60	pere	nea on glaciai tiii	Sarrace wa	er should be ur	refree around s	Jacon. Buosun	ace us drumus	e may be pro	Journ.	
Highly Permeable		>60										
Bedrock		>60										
Restrictive Layer		38		glacial till								

County:	Morrow	Land Use / Vegetation:	Forbs & Grasses	and the second
Township / Sec.:	Harmony	Landform:	Till Plain	
Property Address/Location:	Corner of Roads 20 & 25	Position on Landform:	Backslope	
	_	Percent Slope:	4 to 5%	( cecpaes
Applicant Name:	Bruner Land Company	Shape of Slope:	Linear/ Linear	land of the state
Address:	_	Bedrooms or GPD:		STEVENA MILLER
	_	Date:	Tuesday, August 09, 2022	CERTIFIED PROFESSIONAL
Phone #:		Evaluator:	Steven Miller, CPSSc	1 O Sole Sole Sole Sole Sole Sole Sole Sole
Lot #:	<u>_</u>		Soil & Environmental Consulting, Inc.	Signature: Signature: 3842
Test Hole #:	12		P.O. Box 1121	With V J J J
Latitude/Longitude:			Delaware OH 43015	Phone#: p-614.579.1164
Method:	Pit Auger X Probe	Job Number:	22H126	soilconsultant@yahoo.com
	<del></del>	Soil Series:		
Soil Profile	Estimating Soil Saturation		Estimating Soil Perme	eability

Soil	Profile		imating Soil Satur				Estimatin	ng Soil Permeal	bility			
		Munsel	ll Color (hue, value,									
			Redoximorp	ohic Features		Texture	_		Structure		1	
Horizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features
Ap	0 to 8	10YR 4/3			sil	20	2	2	m	gr	fr	
Bt1	8 to 20	10YR 5/6			sicl	30	2	2	m	sbk	fi	
Bt2	20 to 35	10YR 5/6			sicl	36	2	2	m	sbk	fi	
ВС	35 to 40	10YR 5/4		5%10YR 5/2	sicl	34	2	1	m	sbk	fi	
Cd	40+	10YR 5/4		2%10YR 5/2	cl	32	5	0		m	vfi	
					_							
	Conditions	Depth (ir		Description					rks / Risk Fac			
	erched Seasonal Water Table 35 perched on glacial till			hed on glacial till	Surface war	ter should be di	verted around s	system. Subsurf	ace ag drainag	e may be pro	esent.	
Apparent Water		>60 >60										
Highly Permeable	e iviateriai											
Bedrock Restrictive Layer		>60 40		glacial till								
Restrictive Layer		giaciai till										

County:	Morrow	Land Use / Vegetation:	Forbs & Grasses	
Township / Sec.:	Harmony	Landform:	Till Plain	
Property Address/Location:	Corner of Roads 20 & 25	Position on Landform:	Backslope	
		Percent Slope:	11.0%	(cecpaes)
Applicant Name:	Bruner Land Company	Shape of Slope:	Linear/ Linear	The same of the sa
Address:		Bedrooms or GPD:		STEVEN A MILLER
		Date:	Tuesday, August 09, 2022	CERTIFIED PROFESSIONAL /
Phone #:		Evaluator:	Steven Miller, CPSSc	1 O SOLESIANIS
Lot #:	<u>_</u>		Soil & Environmental Consulting, Inc.	Signature: Signature: 3842
Test Hole #:	13		P.O. Box 1121	
Latitude/Longitude:			Delaware OH 43015	Phone#: p-614.579.1164
Method:	Pit Auger X Probe	Job Number:	22H126	soilconsultant@yahoo.com
		Soil Series:		

Soil 1	Profile		imating Soil Satur ll Color (hue, value				Estimatir	ng Soil Permea	bility			
				ohic 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 to 6	10YR 4/3			sil	20	2	2	m	gr	fr	
Bt1	6 to 26	10YR 5/6			sicl	32	2	2	m	sbk	fi	
Bt2	26 to 32	10YR 5/6		5%10YR 5/2	sicl	36	2	2	m	sbk	fi	
ВС	32 to 35	10YR 5/4		10%10YR 5/2	sicl	35	2	1	m	sbk	fi	
Cd	35+	10YR 5/4		5%10YR 5/2	cl	32	5	0		m	vfi	
Limiting	Conditions	Depth (ir	Description	т -			Rema	rks / Risk Fac	etors:			
erched Seasonal		26	perc	hed on glacial till	Surface wa	ter should be di	verted around s	system. Subsuri	ace ag drainag	e may be pro	esent.	
pparent Water T		>60										
ighly Permeable edrock	Material	>60			_							
Restrictive Layer 35 glacial till				-								

County:	Morrow	Land Use / Vegetation:	Forbs & Grasses	and the second second
Township / Sec.:	Harmony	Landform:	Till Plain	
Property Address/Location:	Corner of Roads 20 & 25	Position on Landform:	Backslope	
		Percent Slope:	11.0%	( cacpaes)
Applicant Name:	Bruner Land Company	Shape of Slope:	Linear/ Linear	I have been a first to be a fi
Address:		Bedrooms or GPD:		STEVENA MILLER
		Date:	Tuesday, August 09, 2022	CERTIFIED PROFESSIONAL
Phone #:		Evaluator:	Steven Miller, CPSSc	1 0 0
Lot #:	<u>_</u>	Soi	l & Environmental Consulting, Inc.	Signature: Signature: 3842
Test Hole #:	14		P.O. Box 1121	wan voor
Latitude/Longitude:			Delaware OH 43015	Phone#: p-614.579.1164
Method:	PitAuger X Probe	Job Number:	22H126	soilconsultant@yahoo.com
	<del>-</del>	Soil Series:		

Soil	Profile		imating Soil Satur				Estimatir	ng Soil Permeat	oility			
		Munse	ll Color (hue, value,									
			Redoximorp	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 to 7	10YR 4/3			sil	20	2	2	m	gr	fr	
Bt1	7 to 23	10YR 5/6			sicl	34	2	2	m	sbk	fi	
Bt2	23 to 38	10YR 5/6			sicl	36	2	2	m	sbk	fi	
BC	38 to 42	10YR 5/4		5%10YR 5/2	sicl	34	2	1	m	sbk	fi	
Cd	42+	10YR 5/4		2%10YR 5/2	cl	32	5	0		m	vfi	
					_							
	Conditions	Depth (ii		Description					rks / Risk Fac			
	rched Seasonal Water Table 38 perched on glacial till			hed on glacial till	Surface war	ter should be di	verted around s	system. Subsurf	ace ag drainag	ge may be pro	esent.	
Apparent Water		>60										
Highly Permeabl	e iviaterial	>60										
Bedrock		>60			21							
Restrictive Layer	•	42		glacial till								