3 Tees, LLC 1300 Jan Way Kingsport, Tennessee

Horse Creek Quarry

Stream and Wetland Delineation (Addendum)

November 16, 2023 (Addendum March 4, 2024)

PREPARED BY:

STEPHEN E. MAXFIELD, P. E. PROFESSIONAL ENGINEER P.O. BOX 1745 HONAKER, VIRGINIA 24260 PHONE: (276) 979-6963

3 Tees, LLC Proposed Horse Creek Limestone Quarry Horse Creek, Sullivan County, Tennessee Stream and Wetland Delineation Addendum

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HORSE CREEK DELINEATION MAP

Stephen E. Maxfield, P. E. 1745 Roman Ridge Road Honaker, VA 24260

Phone: (276) 979-6963 Email: Coulwood1214@gmail.com

March 3, 2024

Dan Murray
Bonnie Craighead
Dainiel Lawrence
Tina Robinson
Tennessee Department of Environment and Conservation
Mining Section
3711 Middlebrook Pike
Knoxville, TN 37921

Subject: 3 Tees Hydrologic Determination

Ladies and Gentlemen:

As a follow up to your concurrence visit on January 29, 2024, please find attached an addendum to previous Stream and Wetland Delineation Report dated November 16, 2023. This addendum specifically address tract 56.20 lying between Sullivan Gardens Parkway and Horse Creek.

Should you have any additional questions or concerns, please contact me.

Sincerely,

Stephen E. Maxfield, P. E.

INTRODUCTION

This report is an addendum to the previous report compiled for 3 Tees, LLC proposed Horse Creek Limestone Quarry in Sullivan County, at 3725 Sullivan Gardens Parkway, Kingsport, Tennessee, dated November 16, 2023. This report will only evaluate the Preston H. Taylor property identified as tract 56.20. For a complete delineation of the entire boundary proposed, reference is hereby made to the original report.

In the original report and previous field evaluations of the property the grass growing on tract 56.20 was being harvested for hay. Other than the obvious wetlands just northeast of the property, there were no apparent indications of a wetland on this property. However, during the Tennessee Department of Environment and Conservation evaluation of the original report and permit applications, concerns over this property were raised. Therefore, this addendum to the original report was prepared using detail methods in accordance with the U. S. Army Corps of Engineers 1987 Wetland Delineation Manual Eastern Mountains and Piedmont Regional Supplement.

METHODS

Wetlands

Prior to fieldwork, the site was subjected to a preliminary remote assessment using U.S.G.S. resources. These include the Sullivan Gardens, 7.5' Quadrangle topographic map, U.S.G.S. National Wetlands database and mapping, digital orthophotography. Soils were assessed using the USDA Soil Survey.

Remote assessment did not indicate any wetlands on the 52.20 tract.

The wetland field work followed the Routine On-Site Determination methodology for areas equal to or less than 5 acres in size described in the U. S. Army Corps of Engineers Wetlands Delineation Manual (U.S. Army Corps of Engineers Waterways Experiment Station, 1987) and the Eastern Mountains and Piedmont Regional Supplement. Ten (10) sample points were evaluated for vegetation, hydrology, and soils and the data obtained for each point was compiled on the Wetland Determination Data Sheet. The data points were located in the 1983 Tennessee State Plane coordinate system and shown on the delineation map.

Plant species dominance was determined based on the percent aerial or basal coverage within a representative plot utilizing the "50/20" rule. Taxonomy was based on the U.S.G.S. List of Wetland Flora. Indicator status of plant species was taken from the National List of Plant Species That Occur in Wetlands: 1988 Region 3.

Soils profiles were characterized by pulling a soil sample with a 1 inch diameter tubular sampler at a minimum depth of 18 inches (or refusal) and utilizing Munsell Soil Color Charts and standard soil texturing methodology.

Wetland hydrology criteria were assessed by evaluating the geology and hydrologic regimes in the setting, visual observations, and soil samples obtained.

RESULTS

The results indicated presence of dominant FACW vegetation at all sample points. Three of the sample points had standing surface water 4 inches deep. It should be noted that this site investigation following a period of extended heavy rainfall and these areas were about 4 inches in elevation lower than surrounding areas. However, none of the soil samples found the presence of hydric soils. Based upon the absence of hydric soils a negative determination of wetlands was made for this area.

REFERENCES

- Cowardin, Lewis, etal. Classification of Wetlands and Deepwater Habitats of the United States. U. S. Department of the Interior, Washington, D. C.
- Mitsch, William J., Wetlands. 2007 John Wiley and Sons, Inc., Hoboken, New Jersey.
- Munsell Color. 1998. Munsell soil color charts. 1998 revised washable edition. GregtagMacbeth. New Windsor, New York.
- Reed, P.B. 1988. National list of plant species that occur in wetlands: Region III.
- Seelinger, Marc. USACE Wetland Delineation with Regional Supplements. 2006 The Swamp School, Angier, NC.
- U.S. Army Corps of Engineers. 1987. Corps of Engineers wetlands delineation manual. Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.
- U.S. Department of Agriculture, Natural Resource Conservation Service. 2006. Soil survey geographic database for Sullivan County, Tennessee. http://nrcs.usda.gov

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region

OMB Control #: 0710-0024, Exp:11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

See ERDC/EL TR-12-9; the proponent agency is CECW-CO-R

Project/Site: Horse Creek Quarry	City/Coun	ty: Sullivan	Sampling Date: 02/22/24
Applicant/Owner: 3 Tees, LLC		State: TN	Sampling Point: SP-1
Investigator(s): Stephen E. Maxfield, P. E.	Section, Town	ship, Range:	
Landform (hillside, terrace, etc.): Terrace	Local relief (conc	ave, convex, none): None	Slope (%): <1%
Subregion (LRR or MLRA): LRR N, MLRA 1.	28 Lat: 36 deg 28' 34"	Long: 82 deg 34' 47"	Datum: WGS84
Soil Map Unit Name: Steadman silty clay loa		NWI classifica	ation: NA
Are climatic / hydrologic conditions on the site	e typical for this time of year?	Yes X No (If no,	explain in Remarks.)
Are Vegetation X , Soil , or Hydro	,,	re "Normal Circumstances" present	
Are Vegetation, Soil, or Hydro		f needed, explain any answers in R	
SUMMARY OF FINDINGS – Attach			,
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No		No_X
Remarks:			
Sample point is located 60 ft. from Horse Cre	eek. The grass growing on the property	nas been harvested for hay.	
LIVEROL OCY			
HYDROLOGY			
Wetland Hydrology Indicators:		·	s (minimum of two required)
Primary Indicators (minimum of one is requir		Surface Soil Crac	` '
Surface Water (A1)	True Aquatic Plants (B14)		ted Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Pattern	
Saturation (A3)	Oxidized Rhizospheres on Living Re		` '
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Season Wate	
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soil		
Drift Deposits (B3)	Thin Muck Surface (C7)		e on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted or Stress	` '
Iron Deposits (B5)		Geomorphic Pos	
Inundation Visible on Aerial Imagery (B7	()	Shallow Aquitard	I (D3)
Water-Stained Leaves (B9)		Microtopographic	Relief (D4)
Aquatic Fauna (B13)		FAC-Neutral Tes	it (D5)
Field Observations:			
Surface Water Present? Yes	No X Depth (inches):		
Water Table Present? Yes	No X Depth (inches):		
Saturation Present? Yes	No X Depth (inches):	Wetland Hydrology Present?	Yes NoX
(includes capillary fringe)			
Describe Recorded Data (stream gauge, mo Aerial Photos	nitoring well, aerial photos, previous insp	ections), if available:	
Demonstra			
Remarks:			

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-1 Absolute Indicator <u>Tree Stratum</u> (Plot size: ____) % Cover Species? Status **Dominance Test worksheet:** 1. **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) 3. **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 50.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Multiply by: 50% of total cover: _____ 20% of total cover: **OBL** species x 1 = Sapling/Shrub Stratum (Plot size:) **FACW** species x 2 = 0 1. FAC species x3 =0 70 x 4 = 2. FACU species 0 3 UPL species x 5 = 0 (B) 4. Column Totals: 90 (A) 320 5. Prevalence Index = B/A = 6. **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 8. 3 - Prevalence Index is ≤3.0¹ 9. 4 - Morphological Adaptations¹ (Provide supporting =Total Cover data in Remarks or on a separate sheet) 50% of total cover: 20% of total cover: Herb Stratum (Plot size: 3000 sqft) Problematic Hydrophytic Vegetation¹ (Explain) Lysimachia nummularia 20 **FACW** Yes ¹Indicators of hydric soil and wetland hydrology must be Panicum virgatum Yes **FACU** present, unless disturbed or problematic. 3. **Definitions of Four Vegetation Strata:** 4. Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 5. height. 6. 7. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft 8. (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. =Total Cover Woody Vine - All woody vines greater than 3.28 ft in 50% of total cover: 45 20% of total cover: Woody Vine Stratum (Plot size:) 2. 3. **Hydrophytic** =Total Cover Vegetation 50% of total cover: 20% of total cover: Present? No Remarks: (Include photo numbers here or on a separate sheet.)

	cription: (Describe t	o the dep				itor or co	onfirm the abs	sence of in	dicators.)	
Depth	Matrix			x Featur		. 2	- .		5	
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Ken	narks
0-18	7.5YR 3/4	10								
¹ Type: C=C	oncentration, D=Depl	etion RM-	-Reduced Matrix N		ked Sand		21.	ocation: DI	.=Pore Lining, N	M-Matriy
Hydric Soil		elion, ixivi-	-Neduced Matrix, N	/IO-IVIAS	Keu Sanc	i Giailis.	L			atic Hydric Soils ³ :
Histosol			Polyvalue Be	alow Sur	face (SR)	(MI DA	147 148)		Muck (A10) (M	•
	pipedon (A2)		Thin Dark Su						t Prairie Redox	
Black Hi			Loamy Muck						LRA 147, 148)	(110)
	n Sulfide (A4)		Loamy Gleye			ILITA 100	,		nont Floodplair	Soils (F19)
	l Layers (A5)		Depleted Ma						LRA 136, 147)	55 (1 10)
	ick (A10) (LRR N)		Redox Dark					•	Parent Material	(F21)
	d Below Dark Surface	(A11)	Depleted Da						tside MLRA 12	
	ark Surface (A12)	,	Redox Depre		` '				Shallow Dark S	
	lucky Mineral (S1)		Iron-Mangan		-	2) (LRR N	l ,		r (Explain in Re	
Sandy G	sleyed Matrix (S4)		MLRA 136	5)						
Sandy R	edox (S5)		Umbric Surfa	ace (F13	B) (MLRA	122, 136	5)	³ Indicator	s of hydrophytic	c vegetation and
Stripped	Matrix (S6)		Piedmont Flo	oodplain	Soils (F	19) (MLR	A 148)	wetla	nd hydrology m	nust be present,
Dark Su	rface (S7)		Red Parent I	Material	(F21) (M	LRA 127,	147, 148)	unles	s disturbed or p	oroblematic.
Restrictive I	Layer (if observed):									
Type:										
Depth (ir	nches):						Hydric Soil	Present?	Yes	No X
Remarks:										

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Horse Creek Quarry		City/County: Sullivan		Sampling Date:	02/22/24
Applicant/Owner: 3 Tees, LLC			State: 1	—— ΓΝ Sampling Point:	SP-2
Investigator(s): Stephen E. Maxfield, P. E.		Section, Township, Range:			
Landform (hillside, terrace, etc.): Terrace		cal relief (concave, convex,		Slope (%):	<1%
		•	•		-
Subregion (LRR or MLRA): LRR N, MLRA 1		Long. <u>c</u>	32 deg 34' 54"		WGS84
Soil Map Unit Name: Steadman silty clay loa				sification: NA	
Are climatic / hydrologic conditions on the site	e typical for this time of ye	ar? Yes X	No (If	no, explain in Remark	s.)
Are Vegetation X, Soil , or Hydro	logy significantly di	sturbed? Are "Normal C	ircumstances" pre	sent? Yes X	No
Are Vegetation, Soil, or Hydro	logynaturally probl	ematic? (If needed, exp	olain any answers	in Remarks.)	
SUMMARY OF FINDINGS – Attach	site map showing	sampling point locati	ons, transects	, important featu	res, etc.
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled Area			
Hydric Soil Present?	Yes No X	within a Wetland?	Yes	No X	
Wetland Hydrology Present?	Yes No X				
Remarks: Sample point is located 110 ft. from Horse C	Creek. The grass growing	on the property has been ha	arvested for hay.		
HYDROLOGY					
Wetland Hydrology Indicators:			· 	ators (minimum of two r	equired)
Primary Indicators (minimum of one is required)		(D44)	Surface Soil	` ,	(D.0)
Surface Water (A1)	X True Aquatic Plants			getated Concave Surfa	ce (B8)
High Water Table (A2)	Hydrogen Sulfide Od	res on Living Roots (C3)	Drainage Pat		
Saturation (A3) Water Marks (B1)	Presence of Reduce	=	Moss Trim Li	Water Table (C2)	
Sediment Deposits (B2)		on in Tilled Soils (C6)	Crayfish Buri		
Drift Deposits (B3)	Thin Muck Surface (isible on Aerial Imagery	v (C9)
Algal Mat or Crust (B4)	Other (Explain in Re	·		tressed Plants (D1)	,
Iron Deposits (B5)	_		Geomorphic	Position (D2)	
Inundation Visible on Aerial Imagery (B7	7)		Shallow Aqui	itard (D3)	
Water-Stained Leaves (B9)				aphic Relief (D4)	
Aquatic Fauna (B13)			FAC-Neutral	Test (D5)	
Field Observations:					
Surface Water Present? Yes	No X Depth (inch				
Water Table Present? Yes	No X Depth (inch				
Saturation Present? Yes	No X Depth (inch	es): Wetland	Hydrology Preser	nt? Yes	No X
(includes capillary fringe)	mitoring well porial photos	nrovious inspections) if a	(cilchle)		
Describe Recorded Data (stream gauge, mo Aerial Photos	mitoring well, aerial priotos	s, previous inspections), it a	valiable.		
Remarks:					

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-2 Absolute Indicator <u>Tree Stratum</u> (Plot size:) % Cover Species? Status **Dominance Test worksheet:** 1. **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) 3. **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 50.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Multiply by: 50% of total cover: _____ 20% of total cover: ____ **OBL** species x 1 = Sapling/Shrub Stratum (Plot size: ____) **FACW** species x 2 = 0 1. FAC species x3 =60 x 4 = 2. FACU species 240 0 3 UPL species x 5 = 0 (B) 4. Column Totals: 90 (A) 300 Prevalence Index = B/A = 3.33 5. 6. **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 8. 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 9. 4 - Morphological Adaptations¹ (Provide supporting =Total Cover data in Remarks or on a separate sheet) 50% of total cover: 20% of total cover: Herb Stratum (Plot size: 2300 sqft) Problematic Hydrophytic Vegetation¹ (Explain) Lysimachia nummularia 30 **FACW** Yes ¹Indicators of hydric soil and wetland hydrology must be Panicum virgatum **FACU** present, unless disturbed or problematic. 3. **Definitions of Four Vegetation Strata:** 4. Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 5. height. 6. 7. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft 8. (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. =Total Cover Woody Vine - All woody vines greater than 3.28 ft in 50% of total cover: 45 20% of total cover: Woody Vine Stratum (Plot size:) 2. 3. **Hydrophytic** =Total Cover Vegetation 50% of total cover: 20% of total cover: Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

	ription: (Describe t	o the dep				tor or co	onfirm the abs	sence of inc	dicators.)	
Depth	Matrix			x Featur		. 2	- .		_	
(inches)	Color (moist)	%	Color (moist)	<u></u> %	Type ¹	Loc ²	Texture		Ren	narks
0-18	7.5YR 5/4	10								
¹Type: C=Co	oncentration, D=Depl	etion. RM=	Reduced Matrix. N	 IS=Mas	ked Sand	Grains.	² Lo	ocation: PL:	=Pore Lining, N	M=Matrix.
Hydric Soil		2								atic Hydric Soils ³ :
Histosol			Polyvalue Be	elow Sur	face (S8)	(MLRA	147, 148)		Muck (A10) (M	•
	pipedon (A2)		Thin Dark S						Prairie Redox	
Black Hi			Loamy Muck						.RA 147, 148)	` '
	n Sulfide (A4)		Loamy Gley	-					nont Floodplair	n Soils (F19)
Stratified	Layers (A5)		Depleted Ma	trix (F3)				(ML	RA 136, 147)	
2 cm Mu	ck (A10) (LRR N)		Redox Dark	Surface	(F6)			Red F	Parent Material	(F21)
Depleted	l Below Dark Surface	(A11)	Depleted Da	rk Surfa	ce (F7)			(out	tside MLRA 12	27, 147, 148)
Thick Da	rk Surface (A12)		Redox Depre	essions	(F8)			Very S	Shallow Dark S	Surface (F22)
	lucky Mineral (S1)		Iron-Mangar		sses (F12	2) (LRR N	l,	Other	(Explain in Re	emarks)
	leyed Matrix (S4)		MLRA 136	•				2		
	edox (S5)		Umbric Surfa							c vegetation and
	Matrix (S6)		Piedmont Fl		-					nust be present,
	face (S7)		Red Parent	Material	(F21) (M	LRA 127,	147, 148)	unless	s disturbed or p	problematic.
	_ayer (if observed):									
Type:										
Depth (ir	nches):						Hydric Soil	Present?	Yes	NoX
Remarks:										

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Horse Creek Quarry		City/County: Sullivan		Samplin	g Date: 02/2	22/24
Applicant/Owner: 3 Tees, LLC			State:	TN Samplin	a Point: S	SP-3
Investigator(s): Stephen E. Maxfield, P. E.		Section, Township, Range		<u> </u>	<u> </u>	
Landform (hillside, terrace, etc.): Terrace	l c	ocal relief (concave, convex		Slo	pe (%): <	<1%
		•				
Subregion (LRR or MLRA): LRR N, MLRA 1		Long.	82 deg 34' 53"		atum: WG	304
Soil Map Unit Name: Steadman silty clay lo				assification: NA		
Are climatic / hydrologic conditions on the sit			No	(If no, explain in	Remarks.)	
Are Vegetation X, Soil , or Hydro	ologysignificantly di	sturbed? Are "Normal of	Circumstances" p	resent? Ye	es X No	
Are Vegetation, Soil, or Hydro	ologynaturally probl	ematic? (If needed, ex	xplain any answer	rs in Remarks.)		
SUMMARY OF FINDINGS – Attach	site map showing	sampling point locat	ons, transec	ts, important	features,	etc.
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled Area				
Hydric Soil Present?	Yes No X	within a Wetland?	Yes	No_X		
Wetland Hydrology Present?	Yes No X		•		_	
Remarks: Sample point is located 100 ft. from Horse (Creek. The grass growing	on the property has been h	arvested for hay.			
HYDROLOGY						
Wetland Hydrology Indicators:				icators (minimum	ı of two requir	red)
Primary Indicators (minimum of one is requi		(D44)		oil Cracks (B6)	Cumfaaa (D	201
Surface Water (A1) High Water Table (A2)	X True Aquatic Plants Hydrogen Sulfide Od			/egetated Concav Patterns (B10)	ve Suriace (B	38)
Saturation (A3)		res on Living Roots (C3)		Lines (B16)		
Water Marks (B1)	Presence of Reduce			on Water Table (C	22)	
Sediment Deposits (B2)		on in Tilled Soils (C6)		urrows (C8)	<i>,</i> _,	
Drift Deposits (B3)	Thin Muck Surface (Visible on Aerial	Imagery (C9	9)
Algal Mat or Crust (B4)	Other (Explain in Re	•		Stressed Plants		•
Iron Deposits (B5)	_		Geomorph	nic Position (D2)		
Inundation Visible on Aerial Imagery (B	7)		Shallow Ad	quitard (D3)		
Water-Stained Leaves (B9)				graphic Relief (D4	4)	
Aquatic Fauna (B13)			FAC-Neutr	ral Test (D5)		
Field Observations:						
Surface Water Present? Yes	No X Depth (inch					
Water Table Present? Yes	No X Depth (inch					
Saturation Present? Yes	No X Depth (inch	es): Wetland	Hydrology Pres	sent? Ye	sNo	<u>X</u>
(includes capillary fringe) Describe Recorded Data (stream gauge, moderial Photos	onitoring well, aerial photos	s, previous inspections), if a	vailable:			
Remarks:						

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-3 Absolute Indicator <u>Tree Stratum</u> (Plot size:) % Cover Species? Status **Dominance Test worksheet:** 1. **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) 3. **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 50.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Multiply by: 50% of total cover: _____ 20% of total cover: ____ **OBL** species x 1 = Sapling/Shrub Stratum (Plot size: ____) **FACW** species x 2 = 0 1. FAC species x3 =70 x 4 = 2. FACU species 0 3 UPL species x 5 = 0 (B) 4. Column Totals: 90 (A) 320 Prevalence Index = B/A = 3.56 5. 6. **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 8. 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 9. 4 - Morphological Adaptations¹ (Provide supporting =Total Cover data in Remarks or on a separate sheet) 50% of total cover: 20% of total cover: Herb Stratum (Plot size: 2300 sqft) Problematic Hydrophytic Vegetation¹ (Explain) Lysimachia nummularia 20 **FACW** Yes ¹Indicators of hydric soil and wetland hydrology must be Panicum virgatum **FACU** present, unless disturbed or problematic. 3. **Definitions of Four Vegetation Strata:** 4. Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 5. height. 6. 7. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft 8. (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. =Total Cover Woody Vine - All woody vines greater than 3.28 ft in 50% of total cover: 45 20% of total cover: Woody Vine Stratum (Plot size:) 2. 3. **Hydrophytic** =Total Cover Vegetation 50% of total cover: 20% of total cover: Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

	ription: (Describe t	o the dep				tor or co	onfirm the abs	sence of inc	dicators.)	
Depth	Matrix			x Featur		. 2	- .		5	
(inches)	Color (moist)	%	Color (moist)	<u></u> %	Type ¹	Loc ²	Texture		Ren	narks
0-18	7.5YR 4/4	10								
			_							
						·				
¹ Type: C=C	oncentration, D=Deple	otion PM-	-Poducod Matrix N		kod Sano	Grains	21.	ecation: DI	=Pore Lining, I	M-Matrix
Hydric Soil		BUOH, INIVI-	-Neduced Matrix, I	IO-IVIAS	Keu Sanc	Giailis.	L			atic Hydric Soils ³ :
Histosol			Polyvalue Be	olow Sur	face (S8)	(MIRA	147 148)		Muck (A10) (M	-
	oipedon (A2)		Thin Dark St						: Prairie Redox	
Black Hi			Loamy Muck						.RA 147, 148)	(,,,,,,
	n Sulfide (A4)		Loamy Gley	-			,		nont Floodplair	ı Soils (F19)
	Layers (A5)		Depleted Ma						RA 136, 147)	(/
	ck (A10) (LRR N)		Redox Dark					•	Parent Material	(F21)
	l Below Dark Surface	(A11)	Depleted Da						tside MLRA 1	
Thick Da	rk Surface (A12)		Redox Depre	essions	(F8)			Very S	Shallow Dark S	Surface (F22)
Sandy M	lucky Mineral (S1)		Iron-Mangar	ese Ma	sses (F12	2) (LRR N	l ,	Other	(Explain in Re	marks)
Sandy G	leyed Matrix (S4)		MLRA 136	6)						
Sandy R	edox (S5)		Umbric Surfa	ace (F13	B) (MLRA	122, 136)	³ Indicators	s of hydrophytic	c vegetation and
Stripped	Matrix (S6)		Piedmont Fl		-			wetlar	nd hydrology m	nust be present,
Dark Su	face (S7)		Red Parent	Material	(F21) (M	LRA 127,	147, 148)	unless	s disturbed or p	problematic.
Restrictive I	ayer (if observed):									
Type:										
Depth (ir	nches):						Hydric Soil	Present?	Yes	No _X
Remarks:										

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Horse Creek Quarry		City/County: Sullivan		Sampling Date:	02/22/24
Applicant/Owner: 3 Tees, LLC			State: TN	Sampling Point:	SP-4
Investigator(s): Stephen E. Maxfield, P. E.	5	Section, Township, Range:		_	
Landform (hillside, terrace, etc.): Terrace	•	al relief (concave, convex, no	ne): None	Slope (%):	<1%
Subregion (LRR or MLRA): LRR N, MLRA 1	_	•	deg 34' 53"	Datum:	WGS84
Soil Map Unit Name: Steadman silty clay loa		Long. 02 t	NWI classifica		W 0304
Are climatic / hydrologic conditions on the site				explain in Remark	s.)
Are Vegetation X, Soil , or Hydro			umstances" present	? Yes X	No
Are Vegetation, Soil, or Hydro	logy naturally proble	matic? (If needed, expla	in any answers in Re	emarks.)	
SUMMARY OF FINDINGS – Attach	site map showing sa	ampling point location	ıs, transects, im	portant featu	res, etc.
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled Area			
Hydric Soil Present?	Yes No X	within a Wetland?	Yes	No X	
Wetland Hydrology Present?	Yes No X				
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicators	(minimum of two	required)
Primary Indicators (minimum of one is required)	red: check all that apply)	<u> </u>	Surface Soil Crac	•	<u>cquirca</u>
Surface Water (A1)	X True Aquatic Plants (E	314)		ed Concave Surfa	ce (B8)
High Water Table (A2)	Hydrogen Sulfide Odo	· —	Drainage Pattern		,
Saturation (A3)		s on Living Roots (C3)	Moss Trim Lines		
Water Marks (B1)	Presence of Reduced	Iron (C4)	Dry-Season Wate	er Table (C2)	
X Sediment Deposits (B2)	Recent Iron Reduction	n in Tilled Soils (C6)	Crayfish Burrows	(C8)	
Drift Deposits (B3)	Thin Muck Surface (C			on Aerial Imagery	/ (C9)
Algal Mat or Crust (B4)	Other (Explain in Rem	arks)	Stunted or Stress		
Iron Deposits (B5)	n	_	Geomorphic Posi		
Inundation Visible on Aerial Imagery (B7)	_	Shallow Aquitard		
——Water-Stained Leaves (B9) Aquatic Fauna (B13)		_	Microtopographic FAC-Neutral Test	` '	
		_		(D3)	
Field Observations: Surface Water Present? Yes	No X Depth (inches	-1.			
Water Table Present? Yes	No X Depth (inches	· ——			
Saturation Present? Yes	No X Depth (inches		drology Present?	Yes	No X
(includes capillary fringe)					
Describe Recorded Data (stream gauge, mo Aerial Photos	nitoring well, aerial photos,	previous inspections), if avai	lable:		
Remarks:					

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-4 Absolute Indicator <u>Tree Stratum</u> (Plot size:) % Cover Species? Status **Dominance Test worksheet:** 1. **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) 3. **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 50.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Multiply by: 50% of total cover: _____ 20% of total cover: ____ **OBL** species x 1 = Sapling/Shrub Stratum (Plot size: ____) **FACW** species x 2 = 0 1. FAC species x3 =70 x 4 = 2. FACU species 0 3 UPL species x 5 = 0 (B) 4. Column Totals: 90 (A) 320 Prevalence Index = B/A = 3.56 5. 6. **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 8. 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 9. 4 - Morphological Adaptations¹ (Provide supporting =Total Cover data in Remarks or on a separate sheet) 50% of total cover: 20% of total cover: Herb Stratum (Plot size: 2300 sqft) Problematic Hydrophytic Vegetation¹ (Explain) Lysimachia nummularia 20 **FACW** Yes ¹Indicators of hydric soil and wetland hydrology must be Panicum virgatum **FACU** present, unless disturbed or problematic. 3. **Definitions of Four Vegetation Strata:** 4. Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 5. height. 6. 7. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft 8. (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. =Total Cover Woody Vine - All woody vines greater than 3.28 ft in 50% of total cover: 45 20% of total cover: Woody Vine Stratum (Plot size:) 2. 3. **Hydrophytic** =Total Cover Vegetation 50% of total cover: 20% of total cover: Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

	ription: (Describe t	o the dep				tor or co	onfirm the abs	sence of inc	dicators.)	
Depth	Matrix			x Featur		. 2	- .		5	
(inches)	Color (moist)	%	Color (moist)	<u></u> %	Type ¹	Loc ²	Texture		Ren	narks
0-18	7.5YR 4/4	10								
			_							
						·				
¹ Type: C=C	oncentration, D=Deple	otion PM-	-Poducod Matrix N		kod Sano	Grains	21.	ecation: DI	=Pore Lining, I	M-Matrix
Hydric Soil		BUOH, INIVI-	-Neduced Matrix, I	IO-IVIAS	Keu Sanc	Giailis.	L			atic Hydric Soils ³ :
Histosol			Polyvalue Be	olow Sur	face (S8)	(MIRA	147 148)		Muck (A10) (M	-
	oipedon (A2)		Thin Dark St						: Prairie Redox	
Black Hi			Loamy Muck						.RA 147, 148)	(,,,,,,
	n Sulfide (A4)		Loamy Gley	-			,		nont Floodplair	n Soils (F19)
	Layers (A5)		Depleted Ma						RA 136, 147)	(/
	ck (A10) (LRR N)		Redox Dark					•	Parent Material	(F21)
	l Below Dark Surface	(A11)	Depleted Da						tside MLRA 1	
Thick Da	rk Surface (A12)		Redox Depre	essions	(F8)			Very S	Shallow Dark S	Surface (F22)
Sandy M	lucky Mineral (S1)		Iron-Mangar	ese Ma	sses (F12	2) (LRR N	l ,	Other	(Explain in Re	marks)
Sandy G	leyed Matrix (S4)		MLRA 136	6)						
Sandy R	edox (S5)		Umbric Surfa	ace (F13	B) (MLRA	122, 136)	³ Indicators	s of hydrophytic	c vegetation and
Stripped	Matrix (S6)		Piedmont Fl		-			wetlar	nd hydrology m	nust be present,
Dark Su	face (S7)		Red Parent	Material	(F21) (M	LRA 127,	147, 148)	unless	s disturbed or p	problematic.
Restrictive I	ayer (if observed):									
Type:										
Depth (ir	nches):						Hydric Soil	Present?	Yes	No _X
Remarks:										

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Horse Creek Quarry		City/County: Sullivan		Sampling Date:	02/22/24
Applicant/Owner: 3 Tees, LLC			State: T	N Sampling Point:	SP-5
Investigator(s): Stephen E. Maxfield, P. E.		Section, Township, Range:			1
Landform (hillside, terrace, etc.): Terrace		cal relief (concave, convex,		Slope (%):	<1%
		•	•		WGS84
Subregion (LRR or MLRA): LRR N, MLRA 1:		Long. <u>c</u>	2 deg 34' 52"		WG364
Soil Map Unit Name: Steadman silty clay loa				sification: NA	
Are climatic / hydrologic conditions on the site			No (If	no, explain in Remark	s.)
Are Vegetation X, Soil , or Hydrol	ogy significantly di	sturbed? Are "Normal C	ircumstances" pres	sent? Yes X	. No
Are Vegetation, Soil, or Hydrol	ogy naturally probl	ematic? (If needed, exp	olain any answers i	n Remarks.)	
SUMMARY OF FINDINGS – Attach	site map showing s	sampling point location	ons, transects	, important featu	res, etc.
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled Area			
	Yes No X	within a Wetland?	Yes	No_X	
Wetland Hydrology Present?	Yes X No				
Remarks: Sample point is located 120 ft. from Horse C	reek. The grass growing	on the property has been ha	rvested for hay.		
HYDROLOGY					
Wetland Hydrology Indicators:			•	tors (minimum of two r	required)
Primary Indicators (minimum of one is requir		(0.4.4)	Surface Soil	` '	(D.0)
X Surface Water (A1)	X True Aquatic Plants			getated Concave Surfa	ce (B8)
High Water Table (A2)	Hydrogen Sulfide Oc	res on Living Roots (C3)	Drainage Pat		
Saturation (A3) Water Marks (B1)	Presence of Reduce		Moss Trim Li	Water Table (C2)	
Sediment Deposits (B2)		on in Tilled Soils (C6)	Crayfish Burr		
Drift Deposits (B3)	Thin Muck Surface (sible on Aerial Imagery	v (C9)
Algal Mat or Crust (B4)	Other (Explain in Re	·		tressed Plants (D1)	, ()
Iron Deposits (B5)		,	Geomorphic		
Inundation Visible on Aerial Imagery (B7	·)		Shallow Aqui	tard (D3)	
Water-Stained Leaves (B9)			Microtopogra	phic Relief (D4)	
Aquatic Fauna (B13)			FAC-Neutral	Test (D5)	
Field Observations:					
Surface Water Present? Yes X	No Depth (inch	es):4			
Water Table Present? Yes	No X Depth (inch				
Saturation Present? Yes	No X Depth (inch	es): Wetland	Hydrology Presen	t? Yes	No X
(includes capillary fringe)					
Describe Recorded Data (stream gauge, mo Aerial Photos	nitoring well, aerial photos	s, previous inspections), if av	/allable:		
Remarks:					
remarks.					

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-5 Absolute Indicator <u>Tree Stratum</u> (Plot size:) % Cover Species? Status **Dominance Test worksheet:** 1. **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) 3. **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 50.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Multiply by: 50% of total cover: _____ 20% of total cover: ____ **OBL** species x 1 = Sapling/Shrub Stratum (Plot size: ____) **FACW** species x 2 = 0 1. FAC species x3 =70 x 4 = 2. FACU species 0 3 UPL species x 5 = 0 (B) 4. Column Totals: 90 (A) 320 Prevalence Index = B/A = 3.56 5. 6. **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 8. 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 9. 4 - Morphological Adaptations¹ (Provide supporting =Total Cover data in Remarks or on a separate sheet) 50% of total cover: 20% of total cover: Herb Stratum (Plot size: 2300 sqft) Problematic Hydrophytic Vegetation¹ (Explain) Lysimachia nummularia 20 **FACW** Yes ¹Indicators of hydric soil and wetland hydrology must be Panicum virgatum **FACU** present, unless disturbed or problematic. 3. **Definitions of Four Vegetation Strata:** 4. Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 5. height. 6. 7. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft 8. (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. =Total Cover Woody Vine - All woody vines greater than 3.28 ft in 50% of total cover: 45 20% of total cover: Woody Vine Stratum (Plot size:) 2. 3. **Hydrophytic** =Total Cover Vegetation 50% of total cover: 20% of total cover: Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

	ription: (Describe t	o the dept				tor or co	onfirm the abs	sence of in	dicators.)	
Depth	Matrix			x Featur		. 2	- .		_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Ren	narks
0-18	7.5YR 4/4	25								
			_							
1 _T ,			Dadward Matrix N				21		-Dana Linina A	A-BA-tuis
	oncentration, D=Depl	etion, Rivi=	Reduced Matrix, I	/IS=IVIas	ked Sand	Grains.	L		.=Pore Lining, N	
Hydric Soil			Dobarduo Pr	alou Cur	face (CO)	(MI DA	447 440\			atic Hydric Soils ³ :
Histosol			Polyvalue Be						Muck (A10) (M	
	oipedon (A2)		Thin Dark Su						t Prairie Redox	(A10)
Black Hi	n Sulfide (A4)		Loamy Muck			ILKA 130)		L RA 147, 148) nont Floodplain	Soile (E10)
	I Layers (A5)		Depleted Ma						IIOIII FIOOUPIAIII LRA 136, 147)	1 30115 (F 19)
	ck (A10) (LRR N)		Redox Dark					•	Parent Material	(E21)
	Below Dark Surface	(Δ11)	Depleted Da						itside MLRA 12	
	ark Surface (A12)	(Δ11)	Redox Depre		` '				Shallow Dark S	
	lucky Mineral (S1)		Iron-Mangar		-	2) (I RR N	Ì		r (Explain in Re	· ·
	leyed Matrix (S4)		MLRA 136			-) (= : ((-)	.,		(Explain in re	manto)
	edox (S5)		Umbric Surfa	•	3) (MLRA	122, 136	3)	³ Indicator	s of hydrophytic	c vegetation and
	Matrix (S6)		Piedmont Fl							nust be present,
	face (S7)		Red Parent		-				s disturbed or p	
Restrictive I	_ayer (if observed):		<u>—</u>							
Type:	, , , , , , , , , , , , , , , , , , , ,									
Depth (ir	nches):						Hydric Soil	Present?	Yes	No X
Remarks:	<u> </u>									
· tomanto										

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Horse Creek Quarry		City/County: Sullivan		Sampl	ling Date:	02/22/24
Applicant/Owner: 3 Tees, LLC			State:	TN Sampl	ling Point:	SP-6
Investigator(s): Stephen E. Maxfield, P. E.		Section, Township, Range		·		
Landform (hillside, terrace, etc.): Terrace	I o	cal relief (concave, convex		S	Slope (%):	<1%
		•				WGS84
Subregion (LRR or MLRA): LRR N, MLRA 1		Long.	82 deg 34' 52"			VV G 304
Soil Map Unit Name: Steadman silty clay loa				assification: N		
Are climatic / hydrologic conditions on the site	e typical for this time of ye	ar? Yes X	No	(If no, explain i	n Remarks	3.)
Are Vegetation X, Soil , or Hydro	logysignificantly di	sturbed? Are "Normal of	Circumstances" p	resent?	Yes X	No
Are Vegetation, Soil, or Hydro	logynaturally probl	ematic? (If needed, ex	oplain any answe	rs in Remarks.))	
SUMMARY OF FINDINGS – Attach	site map showing	sampling point locat	ions, transec	ts, importar	nt featui	res, etc.
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled Area				
Hydric Soil Present?	Yes No X	within a Wetland?	Yes	No	X	
Wetland Hydrology Present?	Yes No X					
Remarks: Sample point is located 110 ft. from Horse C	Creek. The grass growing	on the property has been h	arvested for hay.			
HYDROLOGY						
Wetland Hydrology Indicators:			-	licators (minimu	ım of two r	equired)
Primary Indicators (minimum of one is require		(D4.4)		oil Cracks (B6)	and Courte	(DO)
Surface Water (A1) High Water Table (A2)	X True Aquatic Plants Hydrogen Sulfide Od			/egetated Conc Patterns (B10)	ave Suria	ce (B8)
Saturation (A3)		res on Living Roots (C3)		Lines (B16)		
Water Marks (B1)	Presence of Reduce	=		on Water Table	(C2)	
Sediment Deposits (B2)		on in Tilled Soils (C6)		Burrows (C8)	(02)	
Drift Deposits (B3)	Thin Muck Surface (Visible on Aeria	al Imagery	/ (C9)
Algal Mat or Crust (B4)	Other (Explain in Re			r Stressed Plant		, ,
Iron Deposits (B5)			Geomorph	nic Position (D2))	
Inundation Visible on Aerial Imagery (B7	7)		Shallow A	quitard (D3)		
Water-Stained Leaves (B9)				graphic Relief ([D4)	
Aquatic Fauna (B13)			FAC-Neut	ral Test (D5)		
Field Observations:						
Surface Water Present? Yes	No X Depth (inch					
Water Table Present? Yes	No X Depth (inch					
Saturation Present? Yes	No X Depth (inch	es): Wetland	Hydrology Pres	ent? Y	Yes	No X
(includes capillary fringe) Describe Recorded Data (stream gauge, mo Aerial Photos	onitoring well, aerial photos	s, previous inspections), if a	available:			
Remarks:						

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-6 Absolute Indicator <u>Tree Stratum</u> (Plot size:) % Cover Species? Status **Dominance Test worksheet:** 1. **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) 3. **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 50.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Multiply by: 50% of total cover: _____ 20% of total cover: ____ **OBL** species x 1 = Sapling/Shrub Stratum (Plot size: ____) **FACW** species x 2 = 0 1. FAC species x3 =70 x 4 = 2. FACU species 0 3 UPL species x 5 = 0 (B) 4. Column Totals: 90 (A) 320 Prevalence Index = B/A = 3.56 5. 6. **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 8. 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 9. 4 - Morphological Adaptations¹ (Provide supporting =Total Cover data in Remarks or on a separate sheet) 50% of total cover: 20% of total cover: Herb Stratum (Plot size: 2300 sqft) Problematic Hydrophytic Vegetation¹ (Explain) Lysimachia nummularia 20 **FACW** Yes ¹Indicators of hydric soil and wetland hydrology must be Panicum virgatum **FACU** present, unless disturbed or problematic. 3. **Definitions of Four Vegetation Strata:** 4. Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 5. height. 6. 7. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft 8. (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. =Total Cover Woody Vine - All woody vines greater than 3.28 ft in 50% of total cover: 45 20% of total cover: Woody Vine Stratum (Plot size:) 2. 3. **Hydrophytic** =Total Cover Vegetation 50% of total cover: 20% of total cover: Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

	ription: (Describe t	o the dep				tor or co	onfirm the abs	sence of inc	dicators.)	
Depth	Matrix			x Featur		. 2	- .		_	
(inches)	Color (moist)	%	Color (moist)	<u></u> %	Type ¹	Loc ²	Texture		Ren	narks
0-18	7.5YR 5/4	10								
¹Type: C=Co	oncentration, D=Depl	etion. RM=	Reduced Matrix. N	 IS=Mas	ked Sand	Grains.	² Lo	ocation: PL:	=Pore Lining, N	M=Matrix.
Hydric Soil		2								atic Hydric Soils ³ :
Histosol			Polyvalue Be	elow Sur	face (S8)	(MLRA	147, 148)		Muck (A10) (M	•
	pipedon (A2)		Thin Dark S						Prairie Redox	
Black Hi			Loamy Muck						.RA 147, 148)	` '
	n Sulfide (A4)		Loamy Gley	-					nont Floodplair	n Soils (F19)
Stratified	Layers (A5)		Depleted Ma	trix (F3)				(ML	RA 136, 147)	
2 cm Mu	ck (A10) (LRR N)		Redox Dark	Surface	(F6)			Red F	Parent Material	(F21)
Depleted	l Below Dark Surface	(A11)	Depleted Da	rk Surfa	ce (F7)			(out	tside MLRA 12	27, 147, 148)
Thick Da	rk Surface (A12)		Redox Depre	essions	(F8)			Very S	Shallow Dark S	Surface (F22)
	lucky Mineral (S1)		Iron-Mangar		sses (F12	2) (LRR N	l,	Other	(Explain in Re	emarks)
	leyed Matrix (S4)		MLRA 136	•				2		
	edox (S5)		Umbric Surfa							c vegetation and
	Matrix (S6)		Piedmont Fl		-					nust be present,
	face (S7)		Red Parent	Material	(F21) (M	LRA 127,	147, 148)	unless	s disturbed or p	problematic.
	_ayer (if observed):									
Type:										
Depth (ir	nches):						Hydric Soil	Present?	Yes	NoX
Remarks:										

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region

OMB Control #: 0710-0024, Exp:11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

See ERDC/EL TR-12-9; the proponent agency is CECW-CO-R

Project/Site: Horse Creek Quarry	City/County: Sullivan	Sampling Date: 02/22/24
Applicant/Owner: 3 Tees, LLC	State: TN S	Sampling Point: SP-7
Investigator(s): Stephen E. Maxfield, P. E.	Section, Township, Range:	
Landform (hillside, terrace, etc.): Terrace	Local relief (concave, convex, none): None	Slope (%): <1%
Subregion (LRR or MLRA): LRR N, MLRA 128 I		Datum: WGS84
Soil Map Unit Name: Steadman silty clay loam	NWI classificatio	
Are climatic / hydrologic conditions on the site typica		plain in Remarks.)
		-
Are Vegetation X, Soil , or Hydrology _		Yes X No
Are Vegetation, Soil, or Hydrology		•
SUMMARY OF FINDINGS – Attach site	map showing sampling point locations, transects, imp	ortant features, etc.
Hydrophytic Vegetation Present? Yes	X No Is the Sampled Area	
Hydric Soil Present? Yes		No X
Wetland Hydrology Present? Yes		
Remarks:	•	
Sample point is located 120 ft. from Horse Creek.	The grass growing on the property has been harvested for hay.	
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indicators (m	ninimum of two required)
Primary Indicators (minimum of one is required; ch		
		Concave Surface (B8)
High Water Table (A2)	lydrogen Sulfide Odor (C1) Drainage Patterns (I	B10)
Saturation (A3)	Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B	16)
Water Marks (B1)	Presence of Reduced Iron (C4) Dry-Season Water 1	Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C	(8)
Drift Deposits (B3) T	hin Muck Surface (C7) Saturation Visible or	n Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Remarks) Stunted or Stressed	l Plants (D1)
Iron Deposits (B5)	Geomorphic Positio	n (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D	3)
Water-Stained Leaves (B9)	Microtopographic Re	elief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D)5)
Field Observations:		
Surface Water Present? Yes X No_	Depth (inches): 4	
Water Table Present? Yes No _		
Saturation Present? Yes No _	X Depth (inches): Wetland Hydrology Present?	Yes No _X_
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring Aerial Photos	g well, aerial photos, previous inspections), if available:	
Actial i fictos		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-7 Absolute Indicator <u>Tree Stratum</u> (Plot size:) % Cover Species? Status **Dominance Test worksheet:** 1. **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) 3. **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 50.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Multiply by: 50% of total cover: _____ 20% of total cover: ____ **OBL** species x 1 = Sapling/Shrub Stratum (Plot size: ____) **FACW** species x 2 = 0 1. FAC species x3 =70 x 4 = 2. FACU species 0 3 UPL species x 5 = 0 (B) 4. Column Totals: 90 (A) 320 Prevalence Index = B/A = 3.56 5. 6. **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 8. 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 9. 4 - Morphological Adaptations¹ (Provide supporting =Total Cover data in Remarks or on a separate sheet) 50% of total cover: 20% of total cover: Herb Stratum (Plot size: 2300 sqft) Problematic Hydrophytic Vegetation¹ (Explain) Lysimachia nummularia 20 **FACW** Yes ¹Indicators of hydric soil and wetland hydrology must be Panicum virgatum **FACU** present, unless disturbed or problematic. 3. **Definitions of Four Vegetation Strata:** 4. Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 5. height. 6. 7. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft 8. (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. =Total Cover Woody Vine - All woody vines greater than 3.28 ft in 50% of total cover: 45 20% of total cover: Woody Vine Stratum (Plot size:) 2. 3. **Hydrophytic** =Total Cover Vegetation 50% of total cover: 20% of total cover: Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

	ription: (Describe t	o the dep				tor or co	onfirm the abs	sence of in	dicators.)		
Depth	Matrix			x Featur		. 2	- .		_		
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Ren	narks	
0-18	7.5YR 4/4	25									
¹ Type: C=C	oncentration, D=Deple	etion RM=	:Reduced Matrix N	 eeM=2N	ked Sand	Grains	21.	ocation: PI	_=Pore Lining, N	M=Matrix	
Hydric Soil		Ction, rtivi	reduced Matrix, is	710-IVIA3	ica Garic	Oranis.				atic Hydric Soils ³ :	
Histosol			Polyvalue Be	elow Sur	face (S8)	(MI RA	147 148)		Muck (A10) (M	-	
	oipedon (A2)		Thin Dark St						t Prairie Redox		
Black Hi			Loamy Muck						LRA 147, 148)	(/ (/ 0)	
	n Sulfide (A4)		Loamy Gley	-			,		mont Floodplain	n Soils (F19)	
	Layers (A5)		Depleted Ma						LRA 136, 147)	,	
	ck (A10) (LRR N)		Redox Dark					•	Parent Material	(F21)	
Depleted	l Below Dark Surface	(A11)	Depleted Da	rk Surfa	ce (F7)		(outside MLRA 127, 147, 148)				
Thick Da	ark Surface (A12)		Redox Depre	essions	(F8)			Very	Shallow Dark S	Surface (F22)	
Sandy M	lucky Mineral (S1)		Iron-Mangar	ese Ma	sses (F12	2) (LRR N	l ,	Othe	r (Explain in Re	emarks)	
Sandy G	leyed Matrix (S4)		MLRA 136	•							
	edox (S5)		Umbric Surfa								
	Matrix (S6)		Piedmont Fl		-				wetland hydrology must be present,		
Dark Su	face (S7)		Red Parent	Material	(F21) (M	LRA 127,	147, 148)	unles	ss disturbed or p	problematic.	
Restrictive I	_ayer (if observed):										
Type:											
Depth (ir	nches):						Hydric Soi	Present?	Yes	No <u>X</u>	
Remarks:											

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9: the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Sampling Date: 02/22/24 Project/Site: Horse Creek Quarry City/County: Sullivan State: TN Sampling Point: Applicant/Owner: 3 Tees, LLC Investigator(s): Stephen E. Maxfield, P. E. Section, Township, Range: Local relief (concave, convex, none): None Slope (%): <1% Landform (hillside, terrace, etc.): Terrace Subregion (LRR or MLRA): <u>LRR N, MLRA 128</u> Lat: <u>36 deg 28' 51"</u> Long: 82 deg 34' 51" Datum: WGS84 Soil Map Unit Name: Steadman silty clay loam NWI classification: NA Are climatic / hydrologic conditions on the site typical for this time of year?

Yes X No (If no, explain in Remarks.) Are Vegetation __X__, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No____ Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes ____ No _ within a Wetland? Yes No X Wetland Hydrology Present? No Remarks: Sample point is located 140 ft. from Horse Creek. The grass growing on the property has been harvested for hay. **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) X True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) High Water Table (A2) Hydrogen Sulfide Odor (C1) Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16) Presence of Reduced Iron (C4) Water Marks (B1) Dry-Season Water Table (C2) Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8) Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9) Other (Explain in Remarks) Algal Mat or Crust (B4) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Shallow Aguitard (D3) Microtopographic Relief (D4) Water-Stained Leaves (B9) Aquatic Fauna (B13) FAC-Neutral Test (D5) **Field Observations:** No X Depth (inches): Surface Water Present? Water Table Present? No X Depth (inches): ___ No X Depth (inches): Wetland Hydrology Present? Saturation Present? Yes No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: **Aerial Photos** Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-8 Absolute Indicator <u>Tree Stratum</u> (Plot size:) % Cover Species? Status **Dominance Test worksheet:** 1. **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) 3. **Total Number of Dominant** Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 50.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Multiply by: 50% of total cover: _____ 20% of total cover: ____ **OBL** species x 1 = Sapling/Shrub Stratum (Plot size: ____) **FACW** species x 2 = 0 1. FAC species x3 =70 x 4 = 2. FACU species 0 3 UPL species x 5 = 0 (B) 4. Column Totals: 90 (A) 320 Prevalence Index = B/A = 3.56 5. 6. **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 8. 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 9. 4 - Morphological Adaptations¹ (Provide supporting =Total Cover data in Remarks or on a separate sheet) 50% of total cover: 20% of total cover: Herb Stratum (Plot size: 2300 sqft) Problematic Hydrophytic Vegetation¹ (Explain) Lysimachia nummularia 20 **FACW** Yes ¹Indicators of hydric soil and wetland hydrology must be Panicum virgatum **FACU** present, unless disturbed or problematic. 3. **Definitions of Four Vegetation Strata:** 4. Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 5. height. 6. 7. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft 8. (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. =Total Cover Woody Vine - All woody vines greater than 3.28 ft in 50% of total cover: 45 20% of total cover: Woody Vine Stratum (Plot size:) 2. 3. **Hydrophytic** =Total Cover Vegetation 50% of total cover: 20% of total cover: Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

	ription: (Describe t	o the dep				tor or co	onfirm the abs	sence of inc	licators.)		
Depth	Matrix			x Featur		. 2	- .		5		
(inches)	Color (moist)	%	Color (moist)	<u></u> %	Type ¹	Loc ²	Texture		Ken	narks	
0-18	7.5YR 5/4	10									
¹Type: C=Co	oncentration, D=Depl	etion. RM=	Reduced Matrix. N	 IS=Mas	ked Sand	Grains.	² Lo	ocation: PL:	=Pore Lining, N	M=Matrix.	
Hydric Soil		2								atic Hydric Soils ³ :	
Histosol			Polyvalue Be	elow Sur	face (S8)	(MLRA	147, 148)		Muck (A10) (M	-	
	pipedon (A2)		Thin Dark S						Prairie Redox		
Black Hi			Loamy Muck						RA 147, 148)	,	
	n Sulfide (A4)		Loamy Gley	-					ont Floodplair	າ Soils (F19)	
Stratified	Layers (A5)		Depleted Ma	trix (F3)				(ML	RA 136, 147)		
2 cm Mu	ck (A10) (LRR N)		Redox Dark	Surface	(F6)			Red F	arent Material	(F21)	
Depleted	l Below Dark Surface	(A11)	Depleted Da	rk Surfa	ce (F7)			(out	side MLRA 12	27, 147, 148)	
Thick Da	rk Surface (A12)		Redox Depre	essions	(F8)			Very S	Shallow Dark S	Surface (F22)	
	lucky Mineral (S1)		Iron-Mangar		sses (F12	2) (LRR N	l,	Other	(Explain in Re	marks)	
	leyed Matrix (S4)		MLRA 136	•				2			
	edox (S5)		Umbric Surfa								
	Matrix (S6)		Piedmont Fl		-					nust be present,	
	face (S7)		Red Parent	Material	(F21) (M	LRA 127,	147, 148)	unless	s disturbed or p	problematic.	
	_ayer (if observed):										
Type:											
Depth (ir	nches):						Hydric Soil	Present?	Yes	No_X	
Remarks:											

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9: the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Sampling Date: 02/22/24 Project/Site: Horse Creek Quarry City/County: Sullivan State: TN Sampling Point: Applicant/Owner: 3 Tees, LLC Investigator(s): Stephen E. Maxfield, P. E. Section, Township, Range: Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): <1% Subregion (LRR or MLRA): <u>LRR N, MLRA 128</u> Lat: <u>36 deg 28' 52"</u> Long: 82 deg 34' 51" Datum: WGS84 Soil Map Unit Name: Steadman silty clay loam NWI classification: NA Are climatic / hydrologic conditions on the site typical for this time of year?

Yes X No (If no, explain in Remarks.) Are Vegetation __X__, Soil _____, or Hydrology _____ significantly disturbed? Yes X No Are "Normal Circumstances" present? Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes No X within a Wetland? Yes No X Wetland Hydrology Present? No Remarks: Sample point is located 140 ft. from Horse Creek near property line. The grass growing on the property has been harvested for hay. **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) X Surface Water (A1) X True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) High Water Table (A2) Hydrogen Sulfide Odor (C1) Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16) Presence of Reduced Iron (C4) Water Marks (B1) Dry-Season Water Table (C2) Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8) Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9) Other (Explain in Remarks) Algal Mat or Crust (B4) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Shallow Aguitard (D3) Microtopographic Relief (D4) Water-Stained Leaves (B9) Aquatic Fauna (B13) FAC-Neutral Test (D5) **Field Observations:** No ____ Depth (inches): __ Surface Water Present? Water Table Present? No X Depth (inches): No X Depth (inches): Wetland Hydrology Present? Saturation Present? Yes No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: **Aerial Photos** Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-9 Absolute Indicator <u>Tree Stratum</u> (Plot size:) % Cover Species? Status **Dominance Test worksheet:** 1. **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) 3. **Total Number of Dominant** Species Across All Strata: (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 0.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Multiply by: 50% of total cover: _____ 20% of total cover: ____ **OBL** species x 1 = Sapling/Shrub Stratum (Plot size: ____) **FACW** species x 2 = 1. FAC species x3 =70 x 4 = 2. FACU species 0 3 UPL species x 5 = 0 (B) 4. Column Totals: 71 (A) 282 Prevalence Index = B/A = 5. 6. **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 8. 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 9. 4 - Morphological Adaptations¹ (Provide supporting =Total Cover data in Remarks or on a separate sheet) 50% of total cover: 20% of total cover: Herb Stratum (Plot size: 2300 sqft) Problematic Hydrophytic Vegetation¹ (Explain) Juncus effusus **FACW** 1 Nο ¹Indicators of hydric soil and wetland hydrology must be 2. Panicum virgatum **FACU** present, unless disturbed or problematic. 3. **Definitions of Four Vegetation Strata:** 4. Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 5. height. 6. 7. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft 8. (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. =Total Cover Woody Vine - All woody vines greater than 3.28 ft in 50% of total cover: 36 20% of total cover: Woody Vine Stratum (Plot size:) 2. 3. **Hydrophytic** =Total Cover Vegetation 50% of total cover: 20% of total cover: Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

	ription: (Describe t	o the dep				tor or co	onfirm the abs	sence of inc	dicators.)		
Depth	Matrix			x Featur		. 2	- .		_		
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Ren	narks	
0-18	2.5YR 4/6	25									
1 _T , C-C			Deduced Metric A				2,		-Dana Linina I		
	oncentration, D=Depl	etion, Rivi=	Reduced Matrix, I	/IS=IVIas	ked Sand	Grains.	L		=Pore Lining, N		
Hydric Soil			Daharaka D	. I C	f (CO)	(MI DA	4.47 .4.40\			atic Hydric Soils ³ :	
Histosol			Polyvalue Be						Muck (A10) (M		
	oipedon (A2)		Thin Dark St						Prairie Redox	(A10)	
Black Hi	n Sulfide (A4)		Loamy Muck			ILKA 130)		. RA 147, 148) nont Floodplair	Soile (E10)	
	I Layers (A5)		Depleted Ma						.RA 136, 147)	1 30115 (F 19)	
	ck (A10) (LRR N)		Redox Dark					•	Parent Material	(E21)	
	Below Dark Surface	(Δ11)	Depleted Da						tside MLRA 12		
	ark Surface (A12)	(Д11)	Redox Depre		` '						
	lucky Mineral (S1)		Iron-Mangar		-) (I RR N		Very Shallow Dark Surface (F22) Other (Explain in Remarks)			
	leyed Matrix (S4)		MLRA 136		5505 (1 12	-) (- IXIX IX	',		(Explain in rec	markoj	
	edox (S5)		Umbric Surfa	•	3) (MLRA	122, 136	3)	3Indicators	s of hydrophytic	c vegetation and	
	Matrix (S6)		Piedmont Fl								
	face (S7)		Red Parent		-				s disturbed or p		
	_ayer (if observed):				. , ,				<u> </u>		
Type:											
Depth (ii	nches):						Hydric Soi	Present?	Yes	No X	
Remarks:	· -										
rtomanto.											

WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9: the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Sampling Date: 02/22/24 Project/Site: Horse Creek Quarry City/County: Sullivan State: TN Sampling Point: SP-10 Applicant/Owner: 3 Tees, LLC Investigator(s): Stephen E. Maxfield, P. E. Section, Township, Range: Local relief (concave, convex, none): None Slope (%): <1% Landform (hillside, terrace, etc.): Terrace Subregion (LRR or MLRA): <u>LRR N, MLRA 128</u> Lat: <u>36 deg 28' 51"</u> Long: 82 deg 34' 52" Datum: WGS84 Soil Map Unit Name: Steadman silty clay loam NWI classification: NA Are climatic / hydrologic conditions on the site typical for this time of year?

Yes X No (If no, explain in Remarks.) Are Vegetation __X__, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____ Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes ____ No _ within a Wetland? Yes No X Wetland Hydrology Present? No Remarks: Sample point is located 185 ft. from Horse Creek near property line. The grass growing on the property has been harvested for hay. **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) X True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) High Water Table (A2) Hydrogen Sulfide Odor (C1) Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16) Presence of Reduced Iron (C4) Water Marks (B1) Dry-Season Water Table (C2) Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8) Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9) Other (Explain in Remarks) Algal Mat or Crust (B4) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Shallow Aguitard (D3) Microtopographic Relief (D4) Water-Stained Leaves (B9) Aquatic Fauna (B13) FAC-Neutral Test (D5) **Field Observations:** No X Depth (inches): Surface Water Present? Water Table Present? No X Depth (inches): ___ No X Depth (inches): Wetland Hydrology Present? Saturation Present? Yes No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: **Aerial Photos** Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: SP-10 Absolute Indicator <u>Tree Stratum</u> (Plot size:) % Cover Species? Status **Dominance Test worksheet:** 1. **Number of Dominant Species** That Are OBL, FACW, or FAC: 2. (A) 3. **Total Number of Dominant** Species Across All Strata: (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 0.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Multiply by: 50% of total cover: _____ 20% of total cover: ____ **OBL** species x 1 = Sapling/Shrub Stratum (Plot size: ____) **FACW** species x 2 = 0 1. FAC species x3 =70 x 4 = 2. FACU species 0 3 UPL species x 5 = 0 (B) 4. Column Totals: 75 (A) 290 Prevalence Index = B/A = 5. 6. **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 8. 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 9. 4 - Morphological Adaptations¹ (Provide supporting =Total Cover data in Remarks or on a separate sheet) 50% of total cover: 20% of total cover: Herb Stratum (Plot size: 2300 sqft) Problematic Hydrophytic Vegetation¹ (Explain) Juncus effusus 5 **FACW** ¹Indicators of hydric soil and wetland hydrology must be 2. Panicum virgatum **FACU** present, unless disturbed or problematic. 3. **Definitions of Four Vegetation Strata:** 4. Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 5. height. 6. 7. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft 8. (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. 75 =Total Cover Woody Vine - All woody vines greater than 3.28 ft in 50% of total cover: 38 20% of total cover: Woody Vine Stratum (Plot size:) 2. 3. **Hydrophytic** =Total Cover Vegetation 50% of total cover: 20% of total cover: Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

	ription: (Describe t	o the dep				tor or co	onfirm the abs	sence of in	dicators.)		
Depth	Matrix			x Featur		. 2	- .		_		
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Ren	narks	
0-18	7.5YR 4/4	25									
¹ Type: C=C	oncentration, D=Deple	etion RM=	:Reduced Matrix N	 eeM=2N	ked Sand	Grains	21.	ocation: PI	_=Pore Lining, N	M=Matrix	
Hydric Soil		Ction, rtivi	reduced Matrix, is	710-IVIA3	ica Garic	Oranis.				atic Hydric Soils ³ :	
Histosol			Polyvalue Be	elow Sur	face (S8)	(MI RA	147 148)		Muck (A10) (M	-	
	oipedon (A2)		Thin Dark St						t Prairie Redox		
Black Hi			Loamy Muck						LRA 147, 148)	(/ (/ 0)	
	n Sulfide (A4)		Loamy Gley	-			,		mont Floodplain	n Soils (F19)	
	Layers (A5)		Depleted Ma						LRA 136, 147)	,	
	ck (A10) (LRR N)		Redox Dark					•	Parent Material	(F21)	
Depleted	l Below Dark Surface	(A11)	Depleted Da	rk Surfa	ce (F7)		(outside MLRA 127, 147, 148)				
Thick Da	ark Surface (A12)		Redox Depre	essions	(F8)			Very	Shallow Dark S	Surface (F22)	
Sandy M	lucky Mineral (S1)		Iron-Mangar	ese Ma	sses (F12	2) (LRR N	l ,	Othe	r (Explain in Re	emarks)	
Sandy G	leyed Matrix (S4)		MLRA 136	•							
	edox (S5)		Umbric Surfa								
	Matrix (S6)		Piedmont Fl		-				wetland hydrology must be present,		
Dark Su	face (S7)		Red Parent	Material	(F21) (M	LRA 127,	147, 148)	unles	ss disturbed or p	problematic.	
Restrictive I	_ayer (if observed):										
Type:											
Depth (ir	nches):						Hydric Soi	Present?	Yes	No <u>X</u>	
Remarks:											





















