APPENDIX B – Wetland Delineation Report and Approved Jurisdictional Determinations



September 25, 2020

U.S. Army Corps of Engineers Kansas City District: Regulatory Office 601 E. 12th Street, Room 402 Kansas City, MO 64106

Re: Request for Approved Jurisdictional Determination Missouri 150 and Botts Road Project Kansas City, Jackson County, Missouri

Dear Regulator:

Platform Ventures retained Olsson to conduct a wetland delineation and stream assessment for the Missouri 150 and Botts Road Project (Project). The proposed Project is located on the north side of Highway 150 and north and west of Colorado Avenue in Kansas City, Jackson County, Missouri. The project center is located at 38.862639 degrees latitude and -94.536703 degrees longitude. Olsson has completed the wetland delineation and stream assessment and is now requesting an Approved Jurisdictional Determination (AJD) for the Project area. A signed AJD request form is attached to this letter.

Olsson conducted a wetland delineation and stream assessment of the Project area in August 2020 and documented nine palustrine emergent wetlands, three intermittent streams, and 15 ephemeral streams. Olsson's report, with associated data forms, figures, and photos, is included as an attachment to this letter. One of the identified streams (Tributary 5), was documented flowing south to north in the Project area and was not depicted by any desktop resources (topographic map, NWI, or NHD). Photos of the stream are provided in the photolog appendix of the attached report. At the time of the field visit, Tributary 5 contained flowing water without recent rainfall. However, the channel was relatively narrow, lacked significant incision, and contained an ordinary high water mark width more consistent with an ephemeral stream. Olsson reviewed surrounding land uses near the Project and determined that flow supplied to Tributary 5 is likely provided by discharge from a detention pond located on the south side of Missouri 150; groundwater does not appear to be a contributor to flow in this stream. Based on the source of flow, Olsson determined that Tributary 5 is an ephemeral stream. However, because of the borderline nature of the stream, Olsson is requesting concurrence from the USACE.

Please contact me if you have any questions about this submittal. I can be reached at 913.748.2575, or by email at aball@olsson.com.

Sincerely,

Aaron Ball

Olsson Senior Scientist

Enclosure

U.S. ARMY CORPS OF ENGINEERS REQUEST FOR CORPS JURISDICTIONAL DETERMINATION Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, CORPS USE ONLY: Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for DATE RECEIVED: 33 CFR Parts 320-332. Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website. Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an AJD cannot be PROJECT NO .: 2.REQUESTOR CONTACT INFORMATION: 1. PROPERTY LOCATION: Street Address: Northwest of MO 150 and Colorado Ave Typed or Printed Name: Aaron Ball City/Township/Parish: Kansas City Company Name: Olsson County: Jackson State: MO Street Address: 7301 W. 133rd St., Suite 200 Acreage of Parcel/Review Area for JD: 146 City: Overland Park State: KS ZIP: 66213 Section: 26 Township: 47N Range: 33W Phone Number: (913) 748-2575 Latitude: 38.862639 E-mail: aball@olsson.com Longitude: -94.536703 (For linear projects, please include the center point of the proposed alignment.) MAP: Please attach a survey/plat map and vicinity map identifying location and review area for the JD. REASON FOR REQUEST (check as many as applicable): I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all aquatic resources. I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all jurisdictional aquatic resources under Corps authority. I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps, and the JD would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process. I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps: this request is accompanied by my permit application and the JD is to be used in the permitting process. I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district Section 10 list and/or is subject to the ebb and flow of the tide. A Corps JD is required in order to obtain my local/state authorization. I intend to contest jurisdiction over a particular aquatic resource and request the Corps confirm that jurisdiction does/does not exist over the aquatic resource on the parcel. ☐ I believe that the site may be comprised entirely of dry land. Other: 5. TYPE OF DETERMINATION BEING REQUESTED: 6. OWNERSHIP DETAILS: ☐ I am requesting an approved JD. I currently own this property. ☐ I am requesting a preliminary JD. I plan to purchase this property. I am an agent/consultant acting on behalf of the I am requesting a "no permit required" letter as I believe my proposed activity is not regulated. requestor. I am unclear as to which JD I would like to request Other (please explain:)

By signing below, you are indicating that you have the authority, or are acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant Corps personnel right of entry to legally access the site if needed to perform the JD. Your signature shall be an affirmation that you possess the requisite property rights to request a JD on the subject property.

and require additional information to inform my

Signature:

Date: 9/25/2020

WETLAND DELINEATION AND STREAM ASSESSMENT REPORT

MISSOURI 150 AND BOTTS ROAD PROPERTY

Prepared for:

Platform Ventures LLC

September 25, 2020

Olsson Project No: 020-2417



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1. INTRODUCTION

Platform Venture (PV) retained Olsson to conduct a wetland delineation and stream assessment of the proposed infrastructure (Project) north of Missouri Route 150 and west of U.S. Route 71 / Interstate 49 in Kansas City, Jackson County, Missouri (Appendix A, Figure 1). The center of the Project area is located at 38.862639 degrees north latitude and -94.536703 degrees longitude. The Project is located in Section 26, of Township 47 North, Range 33 West (Appendix A, Figure 2).

The Project area contains approximately 146 acres of land. The land types within the Project area include existing right-of-way (ROW), developed land, row crop agriculture, and natural areas. The existing ROW areas were dominated by native and nonnative grasses and forbs including Indian grass (*Sorghastrum nutans*), sideoats grama (*Bouteloua curtipendula*), switchgrass (*Panicum virgatum*), tall fescue (*Schedonorus arundinaceus*), smooth brome (*Bromus inermis*), sunflowers (*Helianthus* spp.), clover (*Trifolium* sp.), goldenrod (*Solidago* spp.), and foxtails (various species). Wooded areas were dominated by deciduous trees and shrubs including common hackberry (*Celtis occidentalis*), American elm (*Ulmus americana*), black walnut (*Juglans nigra*), silver maple (*Acer saccharinum*), bush honeysuckle (*Lonicera maackii*), and coralberry (*Symphoricarpos orbiculatus*).

2. METHODS

2.1. Desktop Wetland and Stream Review

Olsson conducted a desktop review using publicly available data sources to identify locations in the Project area that were likely to contain wetlands or require stream assessments. The desktop review was followed by an on-site investigation by Olsson biologists. Resources used during the desktop review included the following:

- U.S. Geological Survey (USGS): 1:24,000 Topographic Map, 1991 Belton Missouri Quadrangles
- U.S. Fish and Wildlife Service (USFWS): National Wetlands Inventory (NWI) Map
- Natural Resources Conservation Service (NRCS): Web Soil Survey, Jackson County Soils Survey Map
- Environmental Systems Research Institute (ESRI): Aerial Imagery
- Google Earth: Historical Aerial Photographs
- USGS: National Hydrography Dataset (NHD; USGS 2019)

The desktop review identified sites that warranted field surveys to document the presence or absence of wetlands and streams. Sample sites identified for review in the field are not

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necessarily wetlands; however, they are areas where wetland or stream indicators may be present. The field coverage was not limited or restricted by the desktop review.

2.2. Wetland Delineation

The wetland delineation was conducted per methodology outlined by the *Corps of Engineers Wetland Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region, Version 2.0* (USACE 2010).

Wetland delineations were performed for all sites that were composed of hydric vegetation, hydric soils, and wetland hydrology. The boundaries of these three indicators were determined and sufficient data was collected to aid the U.S. Army Corps of Engineers (USACE) in making a preliminary jurisdictional determination. Data required for each collection point at a sample site included the following:

- Midwest Region Version 2.0 worksheet
- GPS points (in and out) and wetland boundary shapefile
- Primary and secondary indicators of hydrology
- Vegetation indicators based on the 2016 National Wetland Plant List (Lichvar et al. 2016)
- Soil description based on a soil sample

All wetland data points are denoted with a "w" in figures (Appendix A) and datasheets (Appendix B). The point where all three indicators exist is considered an *in point*. The wetland boundary exists where one or more of the three indicators is no longer present. A data collection point was collected outside the wetland boundary and identified as an *out point*, to document conditions outside the wetland. Geographic information system (GIS) data for a sample site included a polygon of the wetland boundary and GPS points for the in points and out points. Photographs were taken for each wetland to document conditions at the time of the survey and are included within each wetland datasheet.

2.3. Stream Assessment

Stream assessments were conducted to collect data to aid the USACE in making a preliminary jurisdictional determination of the stream reach. The assessments that were conducted were consistent with the Missouri Stream Mitigation Method (MSMM) for compensatory mitigation. Guidance for the stream assessments is contained in the *U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook* (USACE 2007) and the *State of Missouri Stream Mitigation Method* (USACE 2013).

Once a potential stream reach was located during the field survey, field teams collected assessment data using the stream assessment data form. All stream points are denoted with a

"t" in figures (Appendix A) and datasheets (Appendix C). These data forms assess the following aspects of the stream:

- Stream type: perennial, intermittent, or ephemeral
- Stream classification: traditional navigable water (TNW), relatively permanent waters (RPW), or non-relatively permanent waters (Non-RPW)
- Ordinary high-water mark (OHWM) characteristics
- Stream bottom composition
- Description of stream bank
- Natural, artificial, or manipulated stream characteristics
- Stream condition and stability
- · Water characteristics: clear, discolored, flowing, or standing
- Riparian buffer vegetation and characteristics

Photos and GPS points were taken to document stream conditions at the time of the survey.

3. SUMMARY OF FINDINGS

Ms. Caroline Skidmore and Mr. Mark Sowers assisted Mr. Jack Finley of Olsson when he collected data from August 25 through 28 and September 2, 2020. Mr. Sowers and Mr. Finley have received formal training in wetland delineation. Weather data for the Project area was summarized from the National Oceanic and Atmospheric Administration (NOAA) Record of Climatological Observations at the Overland Park, Kansas (Station number US1KSJ00053). No precipitation fell within the 10 days preceding the August visits. Within the three days preceding September 1, 2.33 inches of precipitation were recorded.

3.1. Desktop Wetland and Stream Review

U.S. Geological Survey Topographic Map

The USGS topographic map (Appendix A, Figure 2), indicates that relief within the Project area is variable and hilly. Elevations range from approximately 1,040 feet at mean sea level (AMSL) at the southcentral property border to approximately 940 feet AMSL in the thalweg of an intermittent drainage that flows from west to east in the northern half of the Project area. The topographic map also depicts numerous smaller drainages that generally flow from the north and from the south into this intermittent drainage. No ponds or wetlands are depicted in the topographic map.

Environmental Systems Research Institute (ESRI) Aerial Map

The aerial map (Appendix A, Figure 3) indicates that the Project area is a mixture of row crop agriculture, scattered woodlands, and riparian corridors. The areas surrounding the Project area are composed of commercial facilities to the west, south, and east; single-family residences to the north; and apartment complexes on the eastern side. The streams depicted in the topographic map correspond to wooded corridors in the aerial map.

National Wetlands Inventory and National Hydrography Dataset Map

The NHD (USGS 2019) within the Project area (Appendix A, Figure 4) indicates the presence of several unnamed intermittent stream segments (5,091 linear feet; [LF]). No perennial or ephemeral stream segments were specified by the NHD and no wetlands were indicated by the NWI (2019) within the Project area.

Jackson County Soil Survey

Soil units with a soil matrix composed of greater than 60 percent of hydric inclusions are considered predominantly hydric. The existence of predominantly hydric soils indicates the potential for an area that can support wetlands. According to the soil survey for Jackson County (Appendix A, Figure 5), no soils exceeded 60 percent hydric inclusions. Soils mapped within the project area are as follow:

- 10000 Arisburg silt loam; 1 to 5 percent slopes; 3 percent hydric inclusions
- 30080 Greenton silty clay loam; 5 to 9 percent slopes; 10 percent hydric inclusions
- 36083 Kennebec silt loam; 1 to 4 percent slopes; occasionally flooded; 3 percent hydric inclusions

According to the Jackson County soils list, the Project area is composed of predominately non-hydric soils.

3.2. Wetland Delineation Results

The wetland delineation identified nine palustrine emergent (PEM) wetlands totaling 0.79 acre within the Project area (Appendix A, Figure 6). Based on the new Navigable Waters Protection Rule (NWPR) published in the Federal Register on June 22, 2020, none of these wetlands are considered jurisdictional features because they are adjacent to or abut ephemeral streams. Streams documented within the Project area are discussed in detail in Section 3.3, below. Table 1, below, summarizes the wetland features documented in the Project area. Detailed descriptions of each feature follow Table 1, and wetland data forms are provided in Appendix B.

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Table 1. Wetland Delineation Summary.

Wetland ID	Data Point	Classification ¹	Jurisdictional ²	Size (acres)
Wetland 1	w1	PEM	No	0.05
Wetland 2	w2	PEM	No	0.02
Wetland 3	w3	PEM	No	0.07
Wetland 4	w4	PEM	No	0.31
Wetland 5	w5	PEM	No	0.15
Wetland 6	w6	PEM	No	0.11
Wetland 7	w7	PEM	No	0.02
Wetland 8	w8	PEM	No	0.03
Wetland 9	w9	PEM	No	0.03
			TOTAL ACRES	<u>0.79</u>
			JURISDICTIONAL ACRES	0.00

¹PEM = Palustrine emergent wetland

Of the nine delineated PEM wetlands, four wetlands (Wetlands 4-7) were documented in low-lying areas of an agricultural field that was unplanted at the time of the wetland delineation. These low-lying areas were likely created as the result of runoff from the surrounding areas. Wetlands 4-7 were dominated by sedges (*Carex* spp.), broadleaf cattail (*Typha latifolia*), and rough barnyard grass (*Echinochloa muricata*). All four wetlands contained hydric soil indicators and wetland hydrology indicators.

One delineated wetland (Wetland 8) was documented in a transitional area between an agricultural field (unplanted at the time of the delineation) and an adjacent wooded corridor. Wetland 8 was dominated by broadleaf cattail and contained wetland soil and hydrology indicators.

Remaining delineated wetlands (Wetlands 1, 2, 3, and 9) were all documented in non-agricultural portions of the Project area. In general, these wetlands were dominated by bearded beggarticks (*Bidens aristosa*), dotted smartweed (*Persicaria punctatum*), and sedges (*Carex* spp.). The wetlands contained wetland soil and hydrology indicators.

²Jurisdiction determined based on the June 22, 2020, Navigable Water Protection Rule (NWPR)

3.3. Stream Assessment Results

The stream assessment identified a total of 18 stream reaches totaling 12,237 LF within the Project area (Appendix A, Figure 6). Fifteen ephemeral streams totaling 5,069 LF and three intermittent streams totaling 7,168 LF were documented. No perennial streams were present. Under the new NWPR, only intermittent and perennial streams are considered jurisdictional features.

Of the 18 delineated streams, only the three intermittent streams (Tributary 1, 8, and 9) were indicated by desktop resources. All 15 ephemeral streams ultimately flow into Tributary 1 before exiting the Project area on the eastern side. Tributary 1 is an unnamed intermittent stream that flows into the Little Blue River and ultimately into the Missouri River; the Missouri River is designated as a TNW. Stream assessment data forms are provided in Appendix C, and Table 2 below details each stream reach. Supplemental stream photos are provided in the Photolog in Appendix E.

Table 2. Stream Assessment Summary.

Feature ID	Data Points	Stream Type	Stream Length within Project Area (linear feet)	Jurisdictional*
Tributary 1	t1	Intermittent	5,238	Yes
Tributary 2	t2	Ephemeral	188	No
Tributary 3	t3	Ephemeral	106	No
Tributary 4	t4	Ephemeral	298	No
Tributary 5	t5	Ephemeral	1,405	No
Tributary 6	t6	Ephemeral	120	No
Tributary 7	t7	Ephemeral	185	No
Tributary 8	t8	Intermittent	715	Yes
Tributary 9	t9	Intermittent	1,215	Yes
Tributary 10	t10	Ephemeral	86	No
Tributary 11	t11	Ephemeral	107	No
Tributary 12	t12	Ephemeral	220	No
Tributary 13	t13	Ephemeral	54	No
Tributary 14	t14	Ephemeral	910	No
Tributary 15	t15	Ephemeral	238	No
Tributary16	t16	Ephemeral	69	No
Tributary 17	t17	Ephemeral	590	No
Tributary 18	t18	Ephemeral	493	No
		TOTAL LENGTH	12,237	
		JURISDICTIONAL LENGTH	<u>7,168</u>	

^{*} Jurisdiction determined based on the June 22, 2020, Navigable Water Protection Rule (NWPR)

3.4. Upland Areas

Two non-wetland points were taken during the field delineation to document upland conditions within the Project area (Appendix A, Figure 6). One non-wetland point (Non-Wetland 1) was taken in an upland wooded corridor and a second non-wetland point (Non-Wetland 2) was taken in an upland agricultural field. Non-Wetland 1 was dominated by American elm, honey locust, and bush honeysuckle. Non-Wetland 2 was dominated by giant ragweed (*Ambrosia trifida*),

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rough barnyard grass, and Johnson grass (*Sorghum halepense*). Conditions documented at these two non-wetland points are representative of upland areas found throughout the Project area. Non-wetland data forms are provided in Appendix D.

4. CONCLUSIONS

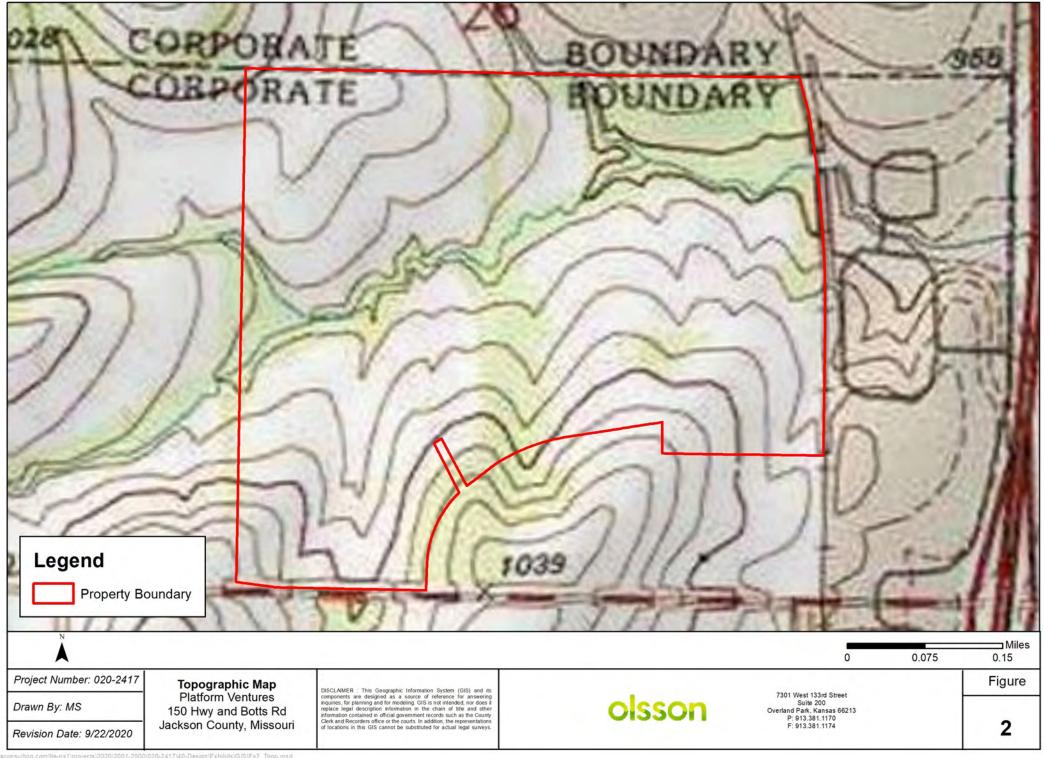
The wetland delineation and stream assessment evaluated the 146-acre Project area that included row crop agriculture, riparian corridors, and scattered wood lots. The field study identified nine palustrine emergent wetlands, 15 ephemeral streams, and three intermittent streams within the Project Area. The nine emergent wetlands and 15 ephemeral streams are likely non-jurisdictional features based on the Navigable Water Protection Rule. The three intermittent streams (totaling 7,168 LF) are considered jurisdictional under the new Navigable Water Protection Rule because of their downstream connection to the Missouri River. Impacts to any of these jurisdictional features will require coordination with the USACE under Section 404 of the Clean Water Act.

5. REFERENCES

- ESRI (Environmental Systems Research Institute). 2020. Imagery provide by Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.
- Google Earth Pro. 2020. Version 7.3.3.7786.
- Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X.
- NOAA (National Oceanic and Atmospheric Administration). 2020. Record of Climatological Observations at the Overland Park, Kansas (Station number US1KSJO0053). https://www.ncdc.noaa.gov/cdo-web/search. Accessed September21, 2020.
- Natural Resources Conservation Service. 2019. Web Soil Survey, Jackson County Soils Data.
- USACE (U.S. Army Corps of Engineers). January 1987. Corps of Engineers Wetlands Delineation Manual, Wetlands Research Program Technical Report.
- USACE. May 2007. Jurisdictional Determination Form Instructional Guidebook.
- USACE. August 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0), Wetlands Regulatory Assistance Program.
- USACE. April 2013. The State of Missouri Stream Mitigation Method.
- USFWS (U.S. Fish and Wildlife Service). 2019. National Wetlands Inventory, Surface Waters and Wetlands.
- USGS (U.S. Geological Survey). 2019. National Hydrography Dataset.

APPENDIX A Figures







Project Number: 020-2417

Drawn By: MS

Revision Date: 9/22/2020

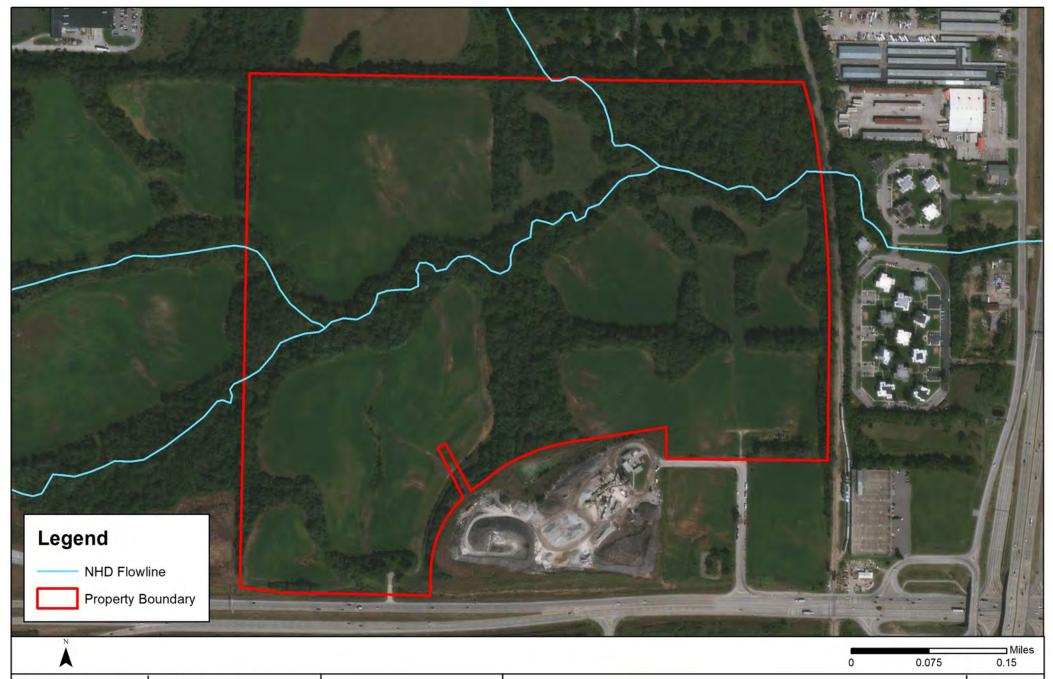
Aerial Map
Platform Ventures
150 Hwy and Botts Rd
Jackson County, Missouri

DISCLAIMER: This Geographic Information System (GIS) and its components are designed as a source of reference for answering inquiries, for planning and for modeling. GIS is not intended, not does it replace legal description information in the chain of site and other information contained in official government records such as the County Clerk and Recorders office or the courts, in addition, the representations of locations in this GIS cannot be substituted for actual legal surveys.

olsson

7301 West 133rd Street Suite 200 Overland Park, Kansas 66213 P: 913.381.1170 F: 913.381.1174 Figure

3



Project Number: 020-2417

Drawn By: MS

Revision Date: 9/23/2020

NHD and NWI Map Platform Ventures 150 Hwy and Botts Rd Jackson County, Missouri

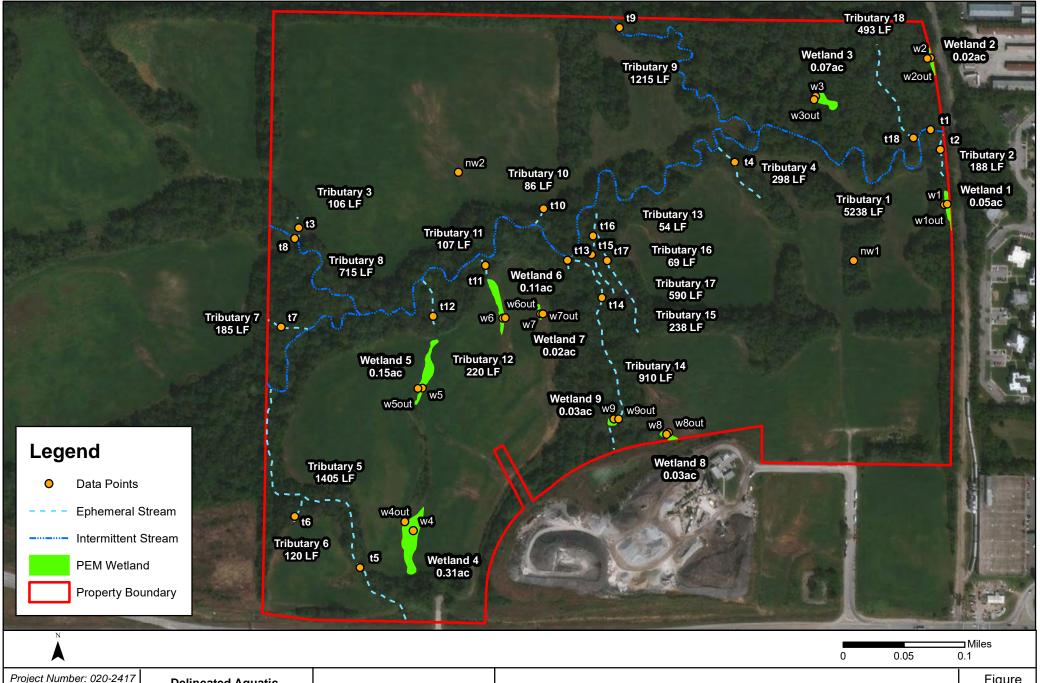
DISCLAIMER: This Geographic Information System (GIS) and its components are designed as a source of reference for answering inquiries, for planning and for modeling. CIS is not intended, not odoes a replace legal description information in the chain of title and other information contained in official government records such as the County Clerk and Recorders office or the courts, in addition, the representations of locations in this GIS cannot be substituted for actual legal surveys.

olsson

7301 West 133rd Street Suite 200 Overland Park, Kansas 66213 P: 913.381.1170 F: 913.381.1174 Figure

4





Revision Date: 9/25/2020

Drawn By: MS

Delineated Aquatic Features Map Platform Ventures 150 Hwy and Botts Rd

Jackson County, Missouri

DISCLAIMER: This Geographic Information System (GIS) and its components are designed as a source of reference for answering inquiries, for planning and for modeling. GIS is not intended, nor does it replace legal description information in the chain of title and other information contained in official government records such as the County Clerk and Recorders office or the courts. In addition, the representations of locations in this GIS cannot be substituted for actual legal surveys.

olsson

7301 West 133rd Street Suite 200 Overland Park, Kansas 66213 P: 913.381.1170 F: 913.381.1174

Figure

6

APPENDIX B

Wetland Data Forms: Midwest Region

Wetland Determination Data Form - Midwest Region

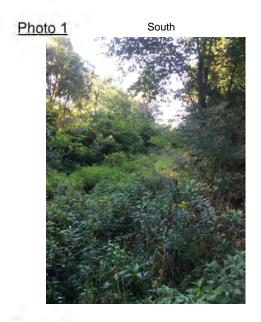
Project/Site: Highway 150/Colorado Ave.		City/County: Grandvi			te: 8/25/2020
Applicant/Owner: Platform Ventures			State: MO	Sampling Poi	
Investigator(s): Jack Finley					S26 T47N R33W
		ocal relief (concave,	convex, none): Co		1171100
Slope (%): 0-2% Lat: 38.863243		ong:94.53108	ANAII	Datum:	UTM83
Soil Map Unit Name: Snead-Rock outcrop				classification:	PEM
Are climatic / hydrologic conditions on the s	이 없이 얼마나 나는 아이를 되었다.			, explain in Rema	
Are Vegetation, Soil, or Hydro			Normal Circumstan		
	ology naturally prob		eded, explain any a		
SUMMARY OF FINDINGS - Attac	h site map showing	sampling point	locations, tran	nsects, impor	tant features, etc.
	es No No				
Hydric Soil Present? Y	es X No	Is the Samp	led Area		
Wetland Hydrology Present? Y	es X No	within a Wet	lland?	Yes X	No
Remarks:		-			
VEGETATION - Use scientific na	mes of plants.				
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Tree Stratum (Plot size: 30 ft)	% Cover Species'	The second secon	umber of Dominant e OBL, FACW, or F		1 (A)
2		^	e OBL, I ACVV, OI I	AG.	(A)
3.	\sim		otal Number of Dom	inant	
4.			pecies Across All St		1 (B)
5.					
Sapling/Shrub Stratum Plot size: 15 f	0 = Total Co	1.5	ercent of Dominant nat Are OBL, FACW		100% (A/E
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3.	. — —		BL species		
5.	· — —		ACW species		x 1 = 20 x 2 = 160
J	0 = Total Co		AC species		x3 = 0
Herb Stratum (Plot size: 5 ft)	0 10.0.00		ACU species	10	x 4 = 40
Persicaria punctata	20		PL species		x 5 = 0
2. Bidens aristosa	70 X		olumn Totals:	110	(A) 220 (B)
3. Schedonorus arundinaceus	10	FACU	Prevalen	ce Index = B/A =	2.00
4. Elymus virginicus	10	FACW	Hydrophytic Veg	atation Indicator	
5.				etation indicator	
6.				e Test is >50%	vegetation
7.			Δ	e Index is ≤3.01	
8.			Δ		(Provide supporting
9.				irks or on a separ	
10.			Problematic I	Hydrophytic Vege	tation ¹ (Explain)
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Woody Vine Stratum (Plot size: 30 ft					hydrology must be
t ₋		-	present, unless dis	turbed or problem	iauc.
2		0	Hydrophytic Vegetation	W.S. N.	No
	= Total (Cover	Present?	Yes X	No
Remarks: (Include photo numbers here or	on a separate sheet.)				
The state of the state of the state of	separate site (i)				

US Army Corps of Engineers Midwest Region - Version 2.0

ofile Descri Depth	ption: (Describe to Matrix	2000		Redox Feat				********
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4	10yr3-2	95	2.5yr2.5-4	5	C	M	Silty Clay	
4-8	10yr3-1	90	2.5yr2.5-4	10	C	M	Silty Clay	
8-15	10yr3-1	75	2.5yr2.5-4	15	C	M	Silty Clay	
				=		=		
	=	=		=	=	=		
ype: C=Con	ncentration, D=Deple	etion, RM=	Reduced Matrix, M	IS=Masked	Sand Grai	ins.	² Location: PL=F	Pore Lining, M=Matrix
Hydric Soil	Indicators:						Indicators fo	r Problematic Hydric Soils ³ ;
Histosol	(A1)			Sandy Gley	yed Matrix ((S4)	Coast P	rairie Redox (A16)
Histic Ep	oipedon (A2)		=	Sandy Red	lox (S5)		Dark Su	rface (S7)
Black His	stic (A3)		- 7	Stripped M	atrix (S6)		Iron-Ma	nganese Masses (F12)
Hydroge	en Sulfide (A4)		_		cky Mineral	(F1)	Very Sh	allow Dark Surface (TF12)
	d Layers (A5)		-		yed Matrix			Explain in Remarks)
_	ick (A10)			Depleted M				
	d Below Dark Surface	ce (A11)			k Surface (I	F6)		
1746 10	ark Surface (A12)	26.11			ark Surface		3Indicators	of hydrophytic vegetation and
	Mucky Mineral (S1)		_	Table 1 to 1 to 1 to 1	ressions (F			id hydrology must be present.
	icky Peat or Peat (S	:2/	_	HOUGH DCP	100010110 (1	0)	unless	disturbed or problematic.
		-					r	
Type: Depth (inchemarks:	nyer (if observed):						Hydric Soil Prese	nt? Yes No
Type: Depth (inch	- 7						Hydric Soil Prese	nt? Yes No
Type: Depth (inch	nes):						Hydric Soil Prese	nt? Yes No
Type:	nes):						Hydric Soil Prese	nt? Yes No
Type:	GY	f one is rec	quired; check all th	at apply)				
Type: Depth (inchemarks: YDROLOGetland Hydr Primary Inc	GY rology Indicators:	f one is rec	quired; check all th Water-Stai		s (B9)		Secondary In	
Type: Depth (inchemarks: YDROLOG etland Hydr Primary Ind Surface	GY ology Indicators: dicators (minimum o	f one is rec	_ Water-Stai	ned Leaves	s (B9)		Secondary In Surface So	dicators (minimum of two require
Type: Depth (inchemarks: YDROLOG etland Hydr Primary Ind Surface	GY rology Indicators: dicators (minimum o Water (A1) ater Table (A2)	f one is red		ned Leaves una (B13)	1 No. 24		Secondary In Surface So Drainage F	dicators (minimum of two require oil Cracks (B6) Patterns (B10)
Type: Depth (inchemarks: YDROLOG etland Hydr Primary Inc Surface High Wa Saturatio	GY rology Indicators: dicators (minimum o Water (A1) ater Table (A2) on (A3)	f one is red	Water-Stai Aquatic Fa	ned Leaves una (B13) ic Plants (E	314)		Secondary In Surface So X Drainage F Dry-Seaso	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2)
Type: Depth (inchemarks: YDROLOG etland Hydr Primary Ind Surface High Wat Saturatio Water M	GY rology Indicators: dicators (minimum o Water (A1) ater Table (A2)	f one is red	— Water-Stai — Aquatic Fa — True Aquat — Hydrogen	ned Leaves una (B13) ic Plants (E Sulfide Odd	314) or (C1)	Roots (C	Secondary In Surface So X Drainage F Dry-Seaso Crayfish B	dicators (minimum of two require bil Cracks (B6) Patterns (B10) in Water Table (C2) urrows (C8)
Type: Depth (inch emarks: YDROLOG etland Hydr Primary Ind Surface High Wa Saturatic Water M Sedimer	GY rology Indicators: dicators (minimum of Water (A1) after Table (A2) on (A3) larks (B1) and Deposits (B2)	f one is rec	Water-Stai Aquatic Fa _ True Aqua	ned Leaves una (B13) ic Plants (E Sulfide Odo hizosphere	314) or (C1) es on Living	Roots (C	Secondary In Surface So X Drainage F Dry-Seaso Crayfish B Saturation	dicators (minimum of two require bil Cracks (B6) Patterns (B10) in Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9)
Type: Depth (inchemarks: YDROLOG etland Hydr Primary Inc Surface High Wa Saturatic Water M Sedimer Drift Dep	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3)	f one is red	— Water-Stai — Aquatic Fa — True Aquat — Hydrogen S — Oxidized R — Presence o	ned Leaves una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced	314) or (C1) es on Living Iron (C4)		Secondary In Surface So X Drainage F Dry-Seaso Crayfish B Saturation Stunted or	dicators (minimum of two require oil Cracks (B6) Patterns (B10) In Water Table (C2) In Water Table (C3) In Water Table (C4) In
Type: Depth (inchemarks: YDROLOG etland Hydr Primary Ind Surface High Wa Saturatio Water M Sedimer Drift Dep	rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	f one is red	— Water-Stai — Aquatic Fa — True Aquat — Hydrogen S — Oxidized R — Presence of Recent Iron	ned Leaves una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced n Reduction	314) or (C1) es on Living Iron (C4) o in Tilled S		Secondary In Surface So X Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph	dicators (minimum of two require oil Cracks (B6) Patterns (B10) In Water Table (C2)
Type: Depth (inch emarks: YDROLOG etland Hydr Primary Inc Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep	GY rology Indicators: dicators (minimum of the two parts) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		— Water-Stai — Aquatic Fa — True Aquat — Hydrogen S — Oxidized R — Presence of — Recent Iron — Thin Muck	ned Leaves una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced n Reduction Surface (C	314) or (C1) es on Living Iron (C4) or in Tilled S		Secondary In Surface So X Drainage F Dry-Seaso Crayfish B Saturation Stunted or	dicators (minimum of two require oil Cracks (B6) Patterns (B10) In Water Table (C2) In Water Table (C2) In Water Table (C3) In Water Table (C4) In Water Table (C5)
Type: Depth (inch emarks: YDROLOG etland Hydr Primary Inc Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio	rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	Imagery (E	Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck Gauge or V	ned Leaves una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced of Reduction Surface (C Vell Data (I	314) or (C1) es on Living Iron (C4) or in Tilled S 7)		Secondary In Surface So X Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph	dicators (minimum of two require oil Cracks (B6) Patterns (B10) In Water Table (C2)
Type: Depth (inch emarks: YDROLOG etland Hydr Primary Ind Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely	GY rology Indicators: dicators (minimum of water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial of Vegetated Concav	Imagery (E	Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck Gauge or V	ned Leaves una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced of Reduction Surface (C Vell Data (I	314) or (C1) es on Living Iron (C4) or in Tilled S 7)		Secondary In Surface So X Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph	dicators (minimum of two require oil Cracks (B6) Patterns (B10) In Water Table (C2) In Water Table (C2) In Water Table (C3) In Water Table (C4) In Water Table (C5)
Type: Depth (inchemarks: YDROLOG etland Hydr Primary Inc Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Inundatio Sparsely	GY rology Indicators: dicators (minimum of Water (A1)) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial of Vegetated Concaverations:	Imagery (B e Surface	Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck Gauge or V (B8) Other (Exp	ned Leaves una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced n Reduction Surface (C Vell Data (I lain in Rem	or (C1) or (C1) os on Living Iron (C4) on in Tilled S 7) D9) narks)		Secondary In Surface So X Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph	dicators (minimum of two require oil Cracks (B6) Patterns (B10) In Water Table (C2)
Type: Depth (inchemarks: YDROLOG etland Hydr Primary Ind Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely eld Observa	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial of Vegetated Concaverations: Present? Yes	Imagery (E e Surface	Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck Gauge or V (B8) Other (Exp	ned Leaves una (B13) ic Plants (E Gulfide Odc hizosphere of Reduced n Reduction Surface (C Vell Data (I lain in Rem	and the second s		Secondary In Surface So X Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph	dicators (minimum of two require oil Cracks (B6) Patterns (B10) In Water Table (C2) In Water Table (C2) In Water Table (C3) In Water Table (C4) In Water Table (C5) In
Type: Depth (inchemarks: YDROLOG etland Hydr Primary Inc Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Inundatio Sparsely	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial of Vegetated Concave ations: Present? Yes resent? Yes	Imagery (E e Surface	Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck 37) Gauge or V (B8) Other (Exp	ned Leaves una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced n Reduction Surface (C Vell Data (I lain in Rem	and the second s	ioils (C6)	Secondary In Surface So X Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph	dicators (minimum of two require oil Cracks (B6) Patterns (B10) In Water Table (C2) In
Type: Depth (inch emarks: YDROLOG etland Hydr Primary Ind Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely eld Observa	GY cology Indicators: dicators (minimum of water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) on Visible on Aerial of Vegetated Concave ations: Present? Yes sent? Yes	Imagery (E e Surface	Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck 37) Gauge or V (B8) Other (Exp	ned Leaves una (B13) ic Plants (E Sulfide Odo hizosphere of Reduction Surface (C Vell Data (I lain in Rem pth (inches	and the second s	ioils (C6)	Secondary In Surface So X Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph X FAC-Neutr	dicators (minimum of two require oil Cracks (B6) Patterns (B10) In Water Table (C2) In
Type: Depth (inch emarks: YDROLOG etland Hydr Primary Inc Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely eld Observa	GY cology Indicators: dicators (minimum of water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) on Visible on Aerial of Vegetated Concave ations: Present? Yes sent? Yes	Imagery (Fe Surface	Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck 37) Gauge or V (B8) Other (Exp	ned Leaves una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced n Reduction Surface (C Vell Data (I lain in Rem pth (inches pth (inches	sin (C1) sin on Living liron (C4) in in Tilled Sin (C4) sin (C4)	wetlan	Secondary In Surface So X Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph X FAC-Neutr	dicators (minimum of two required oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oil Position (D2) ral Test (D5)
Type: Depth (inch emarks: YDROLOG etland Hydr Primary Inc Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely eld Observa	GY cology Indicators: dicators (minimum of water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) on Visible on Aerial of Vegetated Concaverations: Present? Yes sent? Yes lary fringe)	Imagery (Fe Surface	Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck 37) Gauge or V (B8) Other (Exp	ned Leaves una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced n Reduction Surface (C Vell Data (I lain in Rem pth (inches pth (inches	sin (C1) sin on Living liron (C4) in in Tilled Sin (C4) sin (C4)	wetlan	Secondary In Surface So X Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph X FAC-Neutr	dicators (minimum of two required oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oil Position (D2) ral Test (D5)



Wetland Wetland 1		Sample Point v	V1	<u>Longitude</u>	Latitude
Cowardin Classification:				-94.53108	38.863243
Size:					
Landform: Depression					
Tree Stratum:					
Sapling/Shrub:					
Herb Stratum: Persicaria pur	nctata Bidens aristo	sa Schedonorus aru	ndinaceus		
Vine Stratum:					
Hydric Soil Indicators: Rec	lox Dark Surface (F6)			
Hydrology Indicators Geo	morphic Position (D2	2)			
Significant Nexus: No	Adjacent:	Abuts:	Stream Name:		
Jurisdictional Status and C	Comments:				









Wetland Determination Data Form - Midwest Region

Project/Site: Highway 150/Colorado Ave.			Gla	ndview (Jackson) State:		Date: 8/25/ Point: W10		
Applicant/Owner: Platform Ventures								
nvestigator(s): Jack Finley		f. in and	POR V		Township, Ran	ge: <u>S26 T4</u>	7N R33W	
andform (hillslope, terrace, etc.): Hillslo	оре			ave, convex, none):		UTN	100	_
Slope (%): 0-2% Lat: 38.863320				2	Datum:		1183	_
Soil Map Unit Name: Snead-Rock outcrop					VI classification:			
re climatic / hydrologic conditions on the si			_					
re Vegetation, Soil, or Hydrol						_	_ No _	
Are Vegetation, Soil, or Hydrol	ogynati	urally problema	tic? (If needed, explain an				
SUMMARY OF FINDINGS - Attach	site map s	showing sar	npling po	oint locations, tr	ansects, imp	ortant fe	atures,	etc
Hydrophytic Vegetation Present? Ye	s N	o_X_	-					
Hydric Soil Present? Ye	s N	o_X_	Is the Sa	ampled Area				
Vetland Hydrology Present? Ye	s N	0 X	and the second second second	Wetland?	Yes	No	X	
Remarks:								
emarks.								
VEGETATION - Use scientific nar	non of nlan	to.						
VEGETATION - Ose scientific flat		Dominant	la disata s	Dominance Test w	orksheet.			
Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Species?	Indicator	Number of Domina				
1. Juglans nigra	50	×	FACU	Are OBL, FACW, o		1		(A
2. Ulmus americana	10		FACW	1		-		
3. Gleditsia triacanthos	40	×	FACU	Total Number of Do	minant			
4.				Species Across All	Strata:	7		(B
5.								
		Total Cover		Percent of Dominar	nt Species			
Sapling/Shrub Stratum Plot size: 15 ft)			That Are OBL, FAC	W, or FAC:	14%		(A/
, Celtis occidentalis	70	×	FAC			Y		
2.				Prevalence Index		100	500	
3.				Total % (iply by:	3
4				OBL species	0	x 1 =	0	_
5				FACW species	10	x 2 =		_
Hoth Stratum (Blot size:	=	Total Cover		FAC species	70	x 3 =	210	_
Herb Stratum (Plot size: 5 ft) 1. Ageratina altissima	40	×	E4011	FACU species UPL species	170	x 4 =	680	-
2. Elymus canadensis	30	$\frac{}{\times}$	FACU	Column Totals:	20	x 5 =	100	- / D
Symphoricarpos occidentalis	20	$\frac{}{\times}$	FACU	The Art of	ence Index = B/	(A)	1010	_(B)
J 			UPL	Prevai	ence index = b//	4 = 3.74		-
4	$\overline{}$			Hydrophytic Ve	egetation Indica	ators:		
5				1 - Rapid T	est for Hydrophy	ytic Vegetati	on	
6	·—			2 - Domina	nce Test is >50°	1/6		
·				3 - Prevale	nce Index is ≤3.	01		
8					logical Adaptation			ng
9	3				narks or on a se			
0				Problemati	c Hydrophytic V	egetation' (E	Explain)	
Mandy Vine Stratum (Blot size	90	= Total Cover		100000000000000000000000000000000000000	NO CHICAGO			
Woody Vine Stratum (Plot size: 30 ft		V	E40::	Indicators of hyd present, unless of			gy must b	e
1. Parthenocissus quinquefolia	10		FACU	Hydrophytic	naturbed of prot	acmauc.		
2	40	- Total Course		Vegetation	Vaa	No	~	
	10	= Total Cover		Present?	Yes			
Remarks: (Include photo numbers here or r	on a separate s	sheet.)						
Remarks: (Include photo numbers here or o	on a separate s	sheet.)						

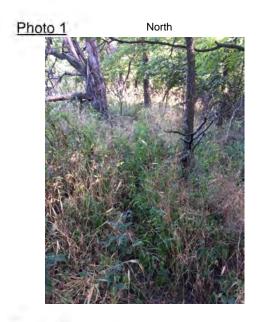
US Army Corps of Engineers

Sampling Point: W1out

ofile Descrip	ption: (Describe t Matrix		h needed to do	Redox Fea			ine absence of in	aloutors./
(inches)	Color (moist)	%	Color (mois		Type ¹	Loc ²	Texture	Remarks
0-16	10yr2-1	100					Loam	
0-10	10912-1	100	-				Loam	
$\overline{}$		$\overline{}$				-		-
		_	-		/			
			-					
_		$\overline{}$	-		_			e
	-	$\overline{}$	_		$\overline{}$	_		-
/pe: C=Cond	centration, D=Dep	letion, RM=	-Reduced Matri	x, MS=Masked	Sand Grai	ins.	² Location; PL=	Pore Lining, M=Matrix
Hydric Soil	Indicators:						Indicators f	or Problematic Hydric Soils ³ ;
Histosol				Sandy Gle	yed Matrix ((54)		Prairie Redox (A16)
_	pipedon (A2)			Sandy Red	The second second	(04)		urface (S7)
Black His								anganese Masses (F12)
_				_ Stripped M	The set with the set	(East)		1. 7. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
	n Sulfide (A4)				cky Mineral			hallow Dark Surface (TF12)
_	Layers (A5)				yed Matrix	(12)	Other (Explain in Remarks)
_2 cm Mu		78.440		_ Depleted N	200	Fol		
	Below Dark Surfa	ce (A11)			k Surface (I		2,	No. Total and the second
	ark Surface (A12)				ark Surface			s of hydrophytic vegetation and and hydrology must be present,
	lucky Mineral (S1)			Redox Dep	ressions (F	-8)		is disturbed or problematic.
5 cm Mud	cky Peat or Peat (S3)					arii o	o dictarged of proportions.
Type:	ies).		_				Hydric Soil Press	ent? Yes No V
	es):						Hydric Soil Prese	ent? YesNo_X
Type: Depth (inch							Hydric Soil Prese	ent? YesNo_X
Type: Depth (inchi							Hydric Soil Prese	ent? YesNoX
Type: Depth (inche) marks: YDROLOG etland Hydro	GY	of one is re	quired; check a	II that apply)				ndicators (minimum of two require
Type: Depth (inching in arks: YDROLOG etland Hydro Primary Indi	GY ology Indicators:	of one is re		Il that apply) Stained Leaves	s (B9)		Secondary I	
Type: Depth (inches marks: YDROLOG etland Hydro Primary Indi Surface V	GY ology Indicators: licators (minimum	of one is re	Water-S	The second secon	s (B9)		Secondary li	ndicators (minimum of two require
Type: Depth (inches marks: YDROLOG etland Hydro Primary Indi Surface V	GY ology Indicators: licators (minimum of Water (A1) ter Table (A2)	of one is re	Water-S	Stained Leaves			Secondary II Surface S Drainage	ndicators (minimum of two require
Type: Depth (inching in arks: PROLOCE Etland Hydro Primary Indi Surface V High Wat Saturatio	GY ology Indicators: licators (minimum of Water (A1) ter Table (A2) on (A3)	of one is re	Water-S Aquatio True Ad	Stained Leaves Fauna (B13) quatic Plants (B	314)		Secondary II Surface S Drainage Dry-Seas	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2)
Type: Depth (inching in arks: PDROLOGETIAND Hydron Surface Notes in a section of the section of	GY ology Indicators: licators (minimum of the Mater (A1) ter Table (A2) on (A3) arks (B1)	of one is re	Water-S Aquatio True Ad Hydrog	Stained Leaves Fauna (B13) quatic Plants (B en Sulfide Odd	314) or (C1)	Roots (C	Secondary II Surface S Drainage Dry-Seas Crayfish B	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8)
Type: Depth (inchiomarks: YDROLOG etland Hydro Primary Indi Surface V High Wat Saturatio Water Ma Sedimen	ology Indicators: licators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2)	of one is re	Water-S Aquatio True Ac Hydrog Oxidize	Stained Leaves Fauna (B13) quatic Plants (Been Sulfide Odo d Rhizosphere	314) or (C1) es on Living	Roots (C	Secondary II Surface S Drainage Dry-Seas Crayfish E	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9)
Type: Depth (inching in arks: YDROLOG etland Hydro Primary Indi Surface N High Wat Saturatio Water Ma Sedimen Drift Dep	ology Indicators: licators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3)	of one is re	Water-S Aquatio True Ac Hydrog Oxidize	Stained Leaves Fauna (B13) quatic Plants (B en Sulfide Odo d Rhizosphere ce of Reduced	314) or (C1) es on Living Iron (C4)		Secondary II Surface S Drainage Dry-Seas Crayfish B Saturation Stunted o	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) in Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Type: Depth (inching in arks: PROLOCE Etland Hydro Primary Indi Surface North High Water May Saturatio Water May Sedimen Drift Depth Algal Mater May Depth (inching in a part of the part of	ology Indicators: licators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4)	of one is re	Water-S Aquatio True Ad Hydrog Oxidize Present	Stained Leaves Fauna (B13) quatic Plants (Been Sulfide Odo d Rhizosphere ce of Reduced Iron Reduction	314) or (C1) es on Living Iron (C4) on in Tilled S		Secondary II Surface S Drainage Dry-Seas Crayfish E Saturation Stunted o	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Type: Depth (inching a line) Depth (inching a	GY ology Indicators: licators (minimum of the minimum of the mini		Water-S Aquatio True Ac Hydrog Oxidize Present Recent	Stained Leaves Fauna (B13) quatic Plants (Bauna (B13) quatic Plants (Bauna (B13) quatic Plants (Bauna (B13) quatic Plants (B13	314) or (C1) es on Living Iron (C4) or in Tilled S		Secondary II Surface S Drainage Dry-Seas Crayfish E Saturation Stunted o	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) in Visible on Aerial Imagery (C9)
Type: Depth (inching a line) Depth (inching a	ology Indicators: licators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4)	I Imagery (I	Water-S Aquatio True Ac Hydrog Oxidize Present Recent Thin Mo	Stained Leaves Fauna (B13) quatic Plants (Ben Sulfide Odd d Rhizosphere ce of Reduced Iron Reduction uck Surface (Cor Well Data (B	314) or (C1) es on Living Iron (C4) or in Tilled S 7)		Secondary II Surface S Drainage Dry-Seas Crayfish E Saturation Stunted o	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1)
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Wetland		Sample Point v	V1out	Longitude	Latitude
Cowardin Classification:		the form of		-94.531192	38.863320
Size:					
Landform: Hillslope					
Tree Stratum: Juglans nigra	Ulmus americana	Gleditsia triacanthos			
Sapling/Shrub: Celtis occiden	talis				
Herb Stratum: Ageratina altiss	sima Elymus canad	lensis Symphoricarp	os occidentalis		
Vine Stratum: Parthenocissus	s quinquefolia				
Hydric Soil Indicators:					
Hydrology Indicators:					
Significant Nexus: No	Adjacent:	Abuts:	Stream Name:		
Jurisdictional Status and C	omments:				









Wetland Determination Data Form - Midwest Region

Project/Site: Highway 150/Colorado Ave.	City	/County: Grar	ndview (Jackson)		ate: 8/25/2020	
Applicant/Owner: Platform Ventures			State: MO	Sampling Po		
Investigator(s): Jack Finley	- 15	1 - 12 - 4 - 5 - 5			S26 T47N R33W	
			ive, convex, none): Co		UTM83	_
Slope (%): 2-5% Lat: 38.864864		-94.531193		Datum:		_
Soil Map Unit Name: Sampsel silty clay lo		0. 1/			PEM	
Are climatic / hydrologic conditions on the		-		, explain in Rem		
Are Vegetation, Soil, or Hydro						
	ology naturally problem		If needed, explain any a			
SUMMARY OF FINDINGS - Attac		impling po	oint locations, tran	isects, impo	rtant teatures, e	etc.
	es No No	4 4 5				
	es X No		mpled Area		242	
Wetland Hydrology Present? Y	/es No	within a	Wetland?	Yes X	No	
Remarks:		-4				
VEGETATION - Use scientific na	ames of plants.					
Tree Stratum (Plot size: 30 ft	Absolute Dominant % Cover Species?	Indicator Status	Dominance Test wor	7787ET		
1 (Flot size. 30 ft	% Cover Species :	Status	Number of Dominant : Are OBL, FACW, or F		1	(A)
2.			7.10 000,771,071,071	,		V. V
3.			Total Number of Dom	inant		
4.			Species Across All St	rata:		(B)
5.						
Sapling/Shrub Stratum Plot size: 15	= Total Cover		Percent of Dominant S That Are OBL, FACW		100%	(A/B
15			Prevalence Index wo	rkeheet:		_
3			Total % Co		Multiply by:	
4.	· — —	_	OBL species	10	x 1 = 10	61
5.		-	FACW species	80	x 2 = 160	
	0 = Total Cover		FAC species	0	x 3 = 0	
Herb Stratum (Plot size: 5 ft)	-		FACU species	0	x 4 = 0	a i
1. Bidens aristosa	70 X	FACW	UPL species	0	x 5 = 0	
2. Persicaria punctata	10	OBL	Column Totals:	90	20.0	(B)
3. Solidago gigantea	10	FACW	Prevalen	ce Index = B/A =	1.89	
4	. — . — .		Hydrophytic Veg	etation Indicato	ors:	
5.			1 - Rapid Tes	at for Hydrophytic	Vegetation	
6.	·— ·— ·		X 2 - Dominanc	e Test is >50%		
7				e Index is ≤3.01		
8			4 - Morpholog		s1 (Provide supporting	g
9				rks or on a sepa	rate sheet) etation ¹ (Explain)	
10	90 = Total Cover		- Problematic P	iyaropnytic vege	atation (Explain)	
Woody Vine Stratum (Plot size: 30 ft	90 = Total Gover		¹ Indicators of hydric present, unless dis		nd hydrology must be matic.	F
2.			Hydrophytic			
	0 = Total Cove	er	Vegetation Present?	Yes	No	
Remarks: (Include photo numbers here or	on a separate sheet.)					

US Army Corps of Engineers Midwest Region - Version 2.0

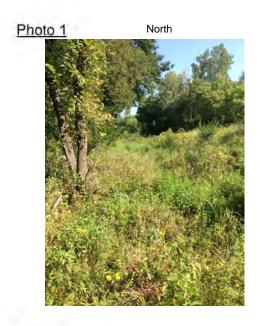
Sampling Point: W2

Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4	10yr 3/1	100					Clay	
4-8	10yr 4/1	85	10yr 4/6	15			Clay	
				_				
	1	-				_	2000000	Strate Sinate
		letion, RM=	Reduced Matrix, M	S=Masked	Sand Grai	ins.		Pore Lining, M=Matrix or Problematic Hydric Soils ³ :
	Indicators:			0	an immed	(D4)		
_ Histosol			_		yed Matrix ((S4)		Prairie Redox (A16)
	ipedon (A2)		_	Sandy Rec				urface (S7)
Black His			_	Stripped M	200 07 8 - 20	200		inganese Masses (F12)
	n Sulfide (A4)			The state of the state of	cky Mineral			nallow Dark Surface (TF12)
	Layers (A5)				yed Matrix	(F2)	_Other (I	Explain in Remarks)
2 cm Mu	The state of the s	rianu		Depleted N		210		
Annahi ana	Below Dark Surfa	ice (A11)			k Surface (I		9	AL BOX COLORS
	rk Surface (A12)		_		ark Surface			of hydrophytic vegetation and hydrology must be present.
1	ucky Mineral (S1)	93.	_	Redox Dep	ressions (F	-8)		s disturbed or problematic.
_ 5 cm Mud	cky Peat or Peat (S3)						
	yer (if observed):							
Type:								
77.00.07	-41							in it. No.
Depth (inchemarks:	es):						Hydric Soil Prese	nt? Yes No
Depth (inchi							Hydric Soil Prese	nt? Yes <u>No</u> No
Depth (inches marks:							Hydric Soil Prese	nt? Yes No
Depth (inchinarks: /DROLOGetland Hydro	GY ology Indicators:		quired; check all tha	at apply)				nt? Yes No
Depth (inchinarks: /DROLOCetland Hydro	GY ology Indicators:		quired; check all tha Water-Stain		s (B9)		Secondary In	
Depth (inchinarks: /DROLOGetland Hydro Primary India	GY ology Indicators: icators (minimum Water (A1)		Water-Stair	ned Leaves	s (B9)		Secondary In	edicators (minimum of two require
Depth (inchinarks: /DROLOG etland Hydro Primary Indi Surface \(\) High Wat	ology Indicators: icators (minimum Water (A1) ter Table (A2)		Water-Stair Aquatic Far	ned Leaves una (B13)			Secondary In Surface So X Drainage I	odicators (minimum of two require oil Cracks (B6) Patterns (B10)
Depth (inchinarks: /DROLOC etland Hydro Primary Indi Surface N High Wat Saturatio	ology Indicators: icators (minimum Water (A1) ter Table (A2) on (A3)		Water-Stair Aquatic Far True Aquat	ned Leaves una (B13) ic Plants (B	314)		Secondary In Surface So X Drainage I Dry-Seaso	ndicators (minimum of two require bil Cracks (B6) Patterns (B10) on Water Table (C2)
Depth (inchimarks: /DROLOC etland Hydro Primary Indi Surface \(\) High Wat Saturatio Water Ma	ology Indicators: icators (minimum Water (A1) ter Table (A2) on (A3) arks (B1)		— Water-Stair — Aquatic Far — True Aquat — Hydrogen S	ned Leaves una (B13) ic Plants (B Sulfide Odd	314) or (C1)	Roots (C	Secondary In Surface So X Drainage I Dry-Seaso Crayfish B	edicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) surrows (C8)
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US Army Corps of Engineers Midwest Region - Version 2.0



Wetland Wetland 2		Sample Point w	/2	Longitude	Latitude
Cowardin Classification	1: PEM	- Charle Company		-94.531193	38.864864
Size:					
Landform: Depression					
Tree Stratum:					
Sapling/Shrub:					
Herb Stratum: Bidens ari	stosa Persicaria pun	ctata Solidago gigantea			
Vine Stratum:					
Hydric Soil Indicators:	Redox Dark Surface (F6)			
Hydrology Indicators:	Drainage Patterns (B	10)			
Significant Nexus: No	Adjacent:	Abuts:	Stream Name	1	
Jurisdictional Status an	d Comments:				









Wetland Determination Data Form - Midwest Region

pplicant/Owner: Platform Ventures				State: MO		Point: W2ou		
nvestigator(s): Jack Finley					ownship, Rang	e: S26 T47	'N R33W	/
andform (hillslope, terrace, etc.): Hillslo	ре	Localr	elief (conca	ave, convex, none): Co	onvex			
lope (%): 2-5% Lat: 38.864865		Long:	-94.53128		Datum:	UTM	83	
oil Map Unit Name: Sampsel silty clay loar	m, 2 to 5 percent	slopes		NWI	classification:	UPL		
re climatic / hydrologic conditions on the sit	e typical for this t	ime of year?	Yes	No (If no	, explain in Rei	marks)		
re Vegetation , Soil , or Hydrold	ogy signific	antly disturb	ed?	Are "Normal Circumstan	ces" present?	Yes X	No	
re Vegetation , Soil , or Hydrold		ly problemat		If needed, explain any a				
UMMARY OF FINDINGS - Attach							atures.	eto
ydrophytic Vegetation Present? Yes		X	1 31		, - , - , - , - , - , - , - , - , - , -	-) -(-)		
ydric Soil Present? Yes			Hasts					
			the second secon	mpled Area	44	Ma		
/etland Hydrology Present? Yes	No	<u>X_</u>	within a	Wetland?	Yes	No _	<u> </u>	
emarks:			4					
EGETATION - Use scientific nam	nes of plants.							
Trans Charles (Diet siere		Dominant	Indicator	Dominance Test wo				
Tree Stratum (Plot size: 30 ft) Gleditsia triacanthos	% Cover :	Species?	Status	Number of Dominant Are OBL, FACW, or F	Carlotte Control of the Control of t	4		(
Juglans nigra	60	×	FACU	Are OBL, FACVY, OF F	AC.			1
Celtis occidentalis	10		FAC	Total Number of Dom	inant			
Cents occidentalis	-10		1710	Species Across All St		5		(
				oposios ragoss r in o	, u.u.	1-	_	1.
-	100 = Te	otal Cover	_	Percent of Dominant	Cooring			
Sapling/Shrub Stratum Plot size: 15 ft	100			That Are OBL, FACW		20%		(A
Cornus drummondii	70	×	FAC	marrie obej i nom	, 0, 1110.	2070	_	1,
Lonicera maackii	10		NI	Prevalence Index we	orksheet:			
				Total % Co	ver of:	Multip	ply by:	
				OBL species	0	x 1 =	0	
				FACW species	0	x 2 =	0	_
	80 = To	tal Cover		FAC species	80	x 3 =	240	
Herb Stratum (Plot size: 5 ft)				FACU species	140	x 4 =	560	_
Symphoricarpos orbiculatus	40	×	FACU	UPL species	0	x 5 =	0	
Elymus canadensis	10	×	FACU	Column Totals:	220	(A)	800	(
				Prevalen	ce Index = B/A	= 3.64		3
					200			_
				Hydrophytic Veg				
					at for Hydrophy		on	
				Comment of the second of the s	e Test is >50%			
			_		e Index is ≤3.0			
					gical Adaptation irks or on a sep			ng
-	· 		_		Hydrophytic Ve			
		otal Cover		- Problematic	nydrophytic ve	getation (E	хріаніј	
Noody Vine Stratum (Plot size: 30 ft	50 = 10	nai ouvei		¹ Indicators of hydri	e eail and wall-	and budsale	nu parent l	ho
to size 30 It				present, unless dis			gy must i	be
2				Hydrophytic				
	0 =	Total Cover	_	Vegetation	Yes	No	×	
-								
		WELLER, THE LAND		Present?				

US Army Corps of Engineers

Sampling Point: W2out

ofile Descri	iption: (Describe to Matrix	the dept	n needed to do	Redox Fea			ine absence of it	idioator 5.7
(inches)	Color (moist)	%	Color (mois		Type ¹	Loc ²	Texture	Remarks
0-16	10yr2-1	_	-				Silt	
24-3								
		=						
ype: C=Cor	ncentration, D=Depl	etion, RM=	Reduced Matrix	k, MS=Masked	Sand Grai	ins.	² Location; PL=	Pore Lining, M=Matrix
Hydric Soi	I Indicators:						Indicators	for Problematic Hydric Soils ³ :
Histosol	(A1)			Sandy Gle	yed Matrix ((S4)	Coast	Prairie Redox (A16)
Histic E	pipedon (A2)			Sandy Red	the second second	13.00		Surface (S7)
	istic (A3)			Stripped M				anganese Masses (F12)
_	en Sulfide (A4)				cky Mineral	(F1)		Shallow Dark Surface (TF12)
_	d Layers (A5)				yed Matrix			(Explain in Remarks)
_	uck (A10)			Depleted N		1. 40	_ 0	V
	d Below Dark Surfa	ce (A11)			k Surface (I	F6)		
The state of the s	ark Surface (A12)	and feet all			ark Surface		3Indicator	rs of hydrophytic vegetation and
_	Mucky Mineral (S1)				ressions (F			and hydrology must be present.
		201		— nedox bet	nessions (r	0)		ss disturbed or problematic.
_ 5 CIT IVIL	ucky Peat or Peat (S	53)						
Type:	nes):						Hydric Soil Pres	ent? YesNo_X
Type: Depth (inchemarks:							Hydric Soil Pres	ent? Yes No _X
Type: Depth (inchemarks:	GY						Hydric Soil Pres	ent? YesNo_X
Type:	GY rology Indicators:						J. m. m.	
Type: Depth (inchemarks: YDROLO etland Hydri Primary Inc	GY rology Indicators: dicators (minimum c	of one is rea		The second second second			Secondary	ndicators (minimum of two require
Type: Depth (inchemarks: YDROLO etland Hydri Primary Inc Surface	GY rology Indicators: dicators (minimum o Water (A1)	of one is rea	Water-S	Stained Leaves	s (B9)		Secondary Surface S	Indicators (minimum of two require
Type: Depth (inchemarks: YDROLO etland Hydr Primary Inc Surface High Wa	GY rology Indicators: dicators (minimum o Water (A1) ater Table (A2)	of one is rea	Water-S Aquatic	Stained Leaves Fauna (B13)			Secondary Surface S Drainage	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10)
Type: Depth (inchemarks: YDROLO etland Hydri Primary Inc Surface High Wa	GY rology Indicators: dicators (minimum o Water (A1) ater Table (A2) on (A3)	one is re	Water-S Aquatic True Ac	Stained Leaves Fauna (B13) Juatic Plants (B	314)		Secondary Surface S Drainage Dry-Seas	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2)
Type: Depth (inchemarks: YDROLO etland Hydre Primary Inc Surface High Wa Saturation Water M	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1)	of one is rea	Water-S Aquatic True Ac Hydrogo	Stained Leaves Fauna (B13) Juatic Plants (B en Sulfide Odd	314) or (C1)		Secondary Surface S Drainage Dry-Seas Crayfish	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8)
Type: Depth (inchemarks: YDROLO etland Hydr Primary Inc Surface High Wa Saturatic Water M Sedimen	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2)	of one is rea	Water-S Aquatic True Ac Hydrogo	Stained Leaves Fauna (B13) Juatic Plants (B en Sulfide Odo d Rhizosphere	314) or (C1) es on Living	Roots (C	Secondary Surface S Drainage Dry-Seas Crayfish Saturatio	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9)
Type: Depth (inchemarks: YDROLO etland Hydr Primary Inc Surface High Wa Saturatic Water M Sedimen	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1)	of one is rea	Water-S Aquatic True Ac Hydrogo	Stained Leaves Fauna (B13) Juatic Plants (B en Sulfide Odd	314) or (C1) es on Living	Roots (C	Secondary Surface S Drainage Dry-Seas Crayfish Saturatio	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8)
Type: Depth (inchemarks: YDROLO etland Hydric Primary Inc Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	one is re	Water-S Aquatic True Ac Hydroge Oxidize Presence Recent	Stained Leaves Fauna (B13) Juatic Plants (Ben Sulfide Odo d Rhizosphere de of Reduced Iron Reduction	B14) or (C1) es on Living Iron (C4) on in Tilled S		Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Type: Depth (inchemarks: YDROLO etland Hydre Primary Inc Surface High Wa Saturation Water Mater	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		Water-S Aquatic True Ac Hydrogo Oxidize Presenc Recent Thin Mu	Stained Leaves Fauna (B13) quatic Plants (B en Sulfide Odd d Rhizosphere ce of Reduced lron Reduction ick Surface (C	B14) or (C1) es on Living Iron (C4) or in Tilled S		Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Type: Depth (inchemarks: YDROLO etland Hydre Primary Inc Surface High Wa Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Inundati	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial	Imagery (f	Water-S Aquatic True Ac Hydrogo Oxidize Presenc Recent Thin Mu	Stained Leaves Fauna (B13) quatic Plants (Ben Sulfide Odd d Rhizosphere de of Reduced lron Reduction lick Surface (Cor Well Data (B	B14) or (C1) es on Living Iron (C4) on in Tilled S 7)		Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Type: Depth (inchemarks: YDROLO etland Hydre Primary Inc Surface High Wa Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Inundati	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	Imagery (f	Water-S Aquatic True Ac Hydrogo Oxidize Presenc Recent Thin Mu	Stained Leaves Fauna (B13) quatic Plants (Ben Sulfide Odd d Rhizosphere de of Reduced lron Reduction lick Surface (Cor Well Data (B	B14) or (C1) es on Living Iron (C4) on in Tilled S 7)		Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Type: Depth (inchemarks: YDROLO etland Hydre Primary Inc Surface High Wa Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Inundati	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concav	Imagery (f	Water-S Aquatic True Ac Hydrogo Oxidize Presenc Recent Thin Mu	Stained Leaves Fauna (B13) quatic Plants (Ben Sulfide Odd d Rhizosphere de of Reduced Iron Reduction lick Surface (Cor Well Data (I	B14) or (C1) es on Living Iron (C4) in in Tilled S 7) D9) narks)		Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) or Stressed Plants (D1)
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Type: Depth (inchemarks: YDROLO etland Hydre Primary Inc Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundati Sparsely eld Observa	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) fon Visible on Aerial by Vegetated Concave ations: r Present? Ye Present? Ye	Imagery (live Surface	Water-S Aquatic True Ac Hydrogo Oxidize Presenc Recent Thin Mu 37) Gauge (B8) Other (B	Stained Leaves Fauna (B13) quatic Plants (B en Sulfide Odo d Rhizosphere ce of Reduced Iron Reduction lok Surface (C or Well Data (I explain in Rem Depth (inches	B14) or (C1) es on Living Iron (C4) in in Tilled S 7) D9) harks)	ioils (C6)	Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of Geomorp FAC-Neu	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) or Stressed Plants (D1) whic Position (D2) stral Test (D5)
Type: Depth (inchemarks: YDROLO etland Hydre Primary Inc Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundati Sparsely eld Observa	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) fon Visible on Aerial by Vegetated Concave ations: r Present? Ye present? Ye present? Ye present? Ye	Imagery (live Surface	Water-S Aquatic True Ac Hydrogo Oxidize Presenc Recent Thin Mu 37) Gauge ((B8) Other (6)	Stained Leaves Fauna (B13) quatic Plants (Ben Sulfide Odd d Rhizosphere ce of Reduced Iron Reduction lick Surface (Cor Well Data (I Explain in Rem Depth (inches	B14) or (C1) es on Living Iron (C4) in in Tilled S 7) D9) harks)	ioils (C6)	Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) or Stressed Plants (D1) whic Position (D2) stral Test (D5)
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Longitude Latitude Sample Point W2out Wetland _ Cowardin Classification: -94.531284 38.864865 Size: Landform: Hillslope Tree Stratum: Gleditsia triacanthos Juglans nigra Celtis occidentalis Sapling/Shrub: Cornus drummondii Lonicera maackii Herb Stratum: Symphoricarpos orbiculatus Elymus canadensis Vine Stratum: Hydric Soil Indicators: Hydrology Indicators: Significant Nexus: ____ Adjacent: ____ Abuts: ____ Stream Name: Jurisdictional Status and Comments:









Wetland Determination Data Form - Midwest Region

Project/Site: Highway 150/Colorado Ave. Applicant/Owner: Platform Ventures		- 011,700	Gran	ndview (Jackson) State: MO		Date: 8/25 Point: W3	5/2020	
nvestigator(s): Jack Finley					ownship, Ran		17NI D22V	۸/
	ession	Localre	lief (conca	ve, convex, none): Co		320 12	+/ IN IN 33V	V
Slope (%): Lat: 38.864610	ession	_	-94.532944	and the second of the second o	Datum:	UT	M83	
Soil Map Unit Name: Kennebec silt loam, 1	to 4 percent slopes				classification:			
Are climatic / hydrologic conditions on the s					, explain in Re	I LIVI		
Are Vegetation , Soil , or Hydrol				re "Normal Circumstan			No	
	ogy naturally							_
Are Vegetation , Soil , or Hydrol SUMMARY OF FINDINGS - Attacl				f needed, explain any a			naturos	oto
Hydrophytic Vegetation Present?		nng sam	pinig po	int locations, trai	isecis, iiii	Jortant I	catures	, etc.
		-	HACK S					
Hydric Soil Present? Ye		_	the second secon	mpled Area	41	AL.		
Vetland Hydrology Present? Ye	s X No	_	within a	Wetland?	Yes X	No _	_	
Remarks:								
VEGETATION - Use scientific nar	nes of plants.							
Ton Chesture (Diet sine			ndicator	Dominance Test wo				
Tree Stratum (Plot size: 30 ft)	% Cover Sp	ecies?	Status	Number of Dominant Are OBL, FACW, or F				7.83
2.				Are OBL, FACVY, OF	AU.	2		(A)
3.			_	Total Number of Dom	inant			
4			_	Species Across All St		2		(B)
5		-	_	() () () () () () () () () ()		1-		(0)
T	0 = Tota	al Cover	_	Percent of Dominant	Coories			
Sapling/Shrub Stratum Plot size: 15 ft				That Are OBL, FACW		100	1%	(A/B
1.				mar mo obej i nom	, 0, 1110.		-	1100
2			_	Prevalence Index we	orksheet:			
3.				Total % Co	ver of:	Mu	Itiply by:	
4.	-			OBL species	20	x 1 =	20	
5.			_	FACW species	0	x 2 =	0	_
-	0 = Tota	al Cover		FAC species	80	x 3 =	240	
Herb Stratum (Plot size: 5 ft)				FACU species	0	x 4 =	0	
1. Persicaria punctata	20	×	OBL	UPL species	0	x 5 =	0	
2. Carex sp.	70	×	FAC	Column Totals:	100	(A)	260	(B)
3. Rubus sp.	10		FAC	Prevalen	ice Index = B/	A = 2.60		
4.								
5.				Hydrophytic Veg				
6.					st for Hydroph		tion	
7.					ce Test is >50°			
8.					e Index is ≤3.		va samenae	
9.			_		gical Adaptation			ting
	· -		_		Hydrophytic V			
0	100 = Tota	al Cover		- Troblematic	iyolopilyuc vi	ogetation (-Apiditi)	
Woody Vine Stratum (Plot size: 30 ft	100 - 100	. 00761		¹ Indicators of hydri	ic soil and wat	land hydrol	ony muet	he
1				present, unless dis			ogy must	ne.
2.			_	Hydrophytic	A STATE OF THE STA	7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7		
7	0 = T	otal Cover	_	Vegetation	Yes	× No	,	
	2-0-2-1	-101 00101		Present?			\leftarrow	
Remarks: (Include photo numbers here or a	on a separate sheet.)						
Remarks: (Include photo numbers here or Sedge and blackberry could not be identified			on in a wet	land with an obligate p	lant, it is likely	that their w	vetland	

US Army Corps of Engineers Midwest Region - Version 2.0

Sampling Point: W3

Depth	Matrix			1100 200 1010 7 7	tures			
(inches)	Color (moist)	_%_	Color (moist)	_ %	Type ¹	Loc ²	Texture	Remarks
1-16	10yr 2/1	95	2.5yr 3/4	5	<u>C</u>	M	Silt	
		=			=			
					_	_		V-
		_		_		_		Q=
					-			
				_				A
pe: C=Cond	centration, D=Deple	tion, RM=	Reduced Matrix, N	//S=Masked	Sand Grai	ns.	² Location: PL	=Pore Lining, M=Matrix
Hydric Soil	Indicators:						Indicators	for Problematic Hydric Soils ³ :
Histosol	(A1)			Sandy Gle	yed Matrix ((S4)	Coas	t Prairie Redox (A16)
Histic Ep	ipedon (A2)			Sandy Red	dox (S5)		Dark	Surface (S7)
Black His	30 83 350		- 197	Stripped M				Manganese Masses (F12)
-	n Sulfide (A4)				cky Mineral	(F1)		Shallow Dark Surface (TF12)
	Layers (A5)		-	the state of the state of	yed Matrix			(Explain in Remarks)
2 cm Mu			_	Depleted N		(1.2)		(Explain in Homans)
- TANK A 1 TO	Below Dark Surfac	0 (411)	=		k Surface (I	E6)		
The second second	rk Surface (A12)	e (Att)	X		ark Surface (I		3 Indiana	ors of hydrophytic vegetation and
			_	the state of the state of				land hydrology must be present.
1	ucky Mineral (S1)		-	Hedox Det	pressions (F	-8)		ess disturbed or problematic.
_ 5 cm Mud	cky Peat or Peat (S	3)						
strictive La	yer (if observed):					1		
Type:							and the same of th	
Type: Depth (inchimarks:	es):						Hydric Soil Pre	sent? Yes No
Depth (inch							Hydric Soil Pre	sent? Yes No
Depth (inches marks:	GY						Hydric Soil Pre	sent? Yes _XNo
Depth (inchinarks: DROLOG	GY plogy Indicators:	one is re	puired: check all th	nat apply)				
Depth (inchinarks: /DROLOC tland Hydro Primary Indi	GY ology Indicators: icators (minimum of	one is rec			c (R9)		Secondary	Indicators (minimum of two require
Depth (inchinarks: /DROLOG etland Hydro Primary Indi	GY plogy Indicators: icators (minimum of Water (A1)	one is rec	_ Water-Stai	ined Leaves	s (B9)		Secondary Surface	Indicators (minimum of two require
Depth (inchinarks: DROLOC Itland Hydro Primary Indi Surface V High Wat	GY blogy Indicators: icators (minimum of Water (A1) ter Table (A2)	one is rec	Water-Stai	ined Leave auna (B13)			Secondary Surface Drainag	Indicators (minimum of two require Soil Cracks (B6) e Patterns (B10)
Depth (inchimarks: /DROLOC tfand Hydro Primary Indi Surface \(\) High Wat Saturatio	GY blogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3)	one is rec	Water-Stai Aquatic Fa True Aqua	ined Leave auna (B13) itic Plants (f	314)		Secondary Surface Drainag Dry-Sea	Indicators (minimum of two require Soil Cracks (B6) e Patterns (B10) son Water Table (C2)
Depth (inchimarks: /DROLOC etland Hydro Primary Indi Surface I High Wat Saturatio Water Ma	Diogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1)	one is rec	— Water-Stai — Aquatic Fa — True Aqua — Hydrogen	ined Leave auna (B13) itic Plants (f Sulfide Odd	B14) or (C1)		Secondary Surface Drainag Dry-Sea Crayfish	Indicators (minimum of two require Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8)
Depth (inchimarks: /DROLOC etland Hydro Primary Indi Surface N High Wat Saturatio Water Ma Sedimen	Diogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2)	one is rec	— Water-Stai — Aquatic Fa True Aqua — Hydrogen — Oxidized F	ined Leaves auna (B13) tic Plants (I Sulfide Odo Rhizosphere	314) or (C1) es on Living	Roots (C	Secondary Surface Drainag Dry-Sea Crayfish Saturation	Indicators (minimum of two require Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9)
Depth (inchimarks: /DROLOC tfand Hydro Primary Indi Surface N High Wat Saturatio Water Ma Sedimen Drift Dep	Diogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3)	one is rec	— Water-Stai — Aquatic Fa True Aqua — Hydrogen — Oxidized F	ined Leave auna (B13) itic Plants (f Sulfide Odd	314) or (C1) es on Living	Roots (C	Secondary Surface Drainag Dry-Sea Crayfish Saturation	Indicators (minimum of two require Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8)
Depth (inchimarks: /DROLOC tland Hydro Primary Indi Surface \(\) High Wat Saturatio Water Material Sediment Drift Depton	Diogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4)	one is rec	— Water-Stai — Aquatic Fa — True Aqua — Hydrogen — Oxidized F — Presence of Recent Iro	ined Leaves auna (B13) tic Plants (f Sulfide Odo Rhizosphere of Reduced in Reduction	B14) or (C1) es on Living I Iron (C4) n in Tilled S		Secondary Surface Drainag Dry-Sea Crayfish Saturati Stunted	Indicators (minimum of two require Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) phic Position (D2)
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Depth (inchimarks: PROLOC Itland Hydro Primary Indi Surface V High Wat Saturatio Water Ma Sedimen Drift Depo Algal Mad Iron Depo Inundatio Sparsely Id Observation Presidudes capilla scribe Recon	cly clogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial (Vegetated Concave tions: Present? Yes esent? Yes ary fringe)	magery (B	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence of Recent Iro Thin Muck 37) Gauge or N (B8) Other (Exp	ined Leaves auna (B13) tic Plants (I Sulfide Odo Rhizosphere of Reduced on Reduction Surface (C Well Data (I blain in Ren epth (inches epth (inches	B14) or (C1) es on Living I fron (C4) in in Tilled S in in Tilled S in arks)	wetlan	Secondary Surface Drainag Dry-Sea Crayfish Saturati Stunted X Geomor X FAC-Ne	Indicators (minimum of two require Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) phic Position (D2) utral Test (D5)
Depth (inchimarks: DROLOC Stand Hydro Primary Indi Surface V High Wat Saturatio Water Ma Sedimen Drift Depo Algal Mat Iron Depo Inundatio Sparsely Id Observat face Water ster Table Privaration Presidudes capilli	cly clogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial (Vegetated Concave tions: Present? Yes esent? Yes ary fringe)	magery (B	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence of Recent Iro Thin Muck 37) Gauge or N (B8) Other (Exp	ined Leaves auna (B13) tic Plants (I Sulfide Odo Rhizosphere of Reduced on Reduction Surface (C Well Data (I blain in Ren epth (inches epth (inches	B14) or (C1) es on Living I fron (C4) in in Tilled S in in Tilled S in arks)	wetlan	Secondary Surface Drainag Dry-Sea Crayfish Saturati Stunted X Geomor X FAC-Ne	Indicators (minimum of two require Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) phic Position (D2) utral Test (D5)

US Army Corps of Engineers Midwest Region - Version 2.0



Wetland Wetland 3		Sample Point v	V3	Longitude	Latitude
Cowardin Classification	I: PEM		-94.532944	38.864610	
Size:					
Landform: Depression					
Tree Stratum:					
Sapling/Shrub:					
Herb Stratum: Persicaria	punctata Carex sp. R	ubus sp.			
Vine Stratum:					
Hydric Soil Indicators:	Redox Dark Surface (F6	5)			
Hydrology Indicators:	FAC-Neutral Test (D5)				
Significant Nexus: No	Adjacent:	Abuts:	Stream Name:		
<u>Jurisdictional Status an</u> W3 is not adjacent to a jurisd					









tate: MO Sampling Point: W3out Section, Township, Range: S26 T47N R33W x, none): Convex Datum: UTM83 NWI classification: UPL (If no, explain in Remarks)
Datum: UTM83 NWI classification: UPL
Datum: UTM83 NWI classification: UPL
OI E
al Circumstances" present? Yes X No
explain any answers in Remarks.)
tions, transects, important features, e
Yes No X
,
nce Test worksheet:
of Dominant Species That
, FACW, or FAC:1
mber of Dominant
Across All Strata: 5
C2. (W. 1/2-04)
of Dominant Species OBL, FACW, or FAC: 20%
OBL, FACW, OF FAC.
nce Index worksheet:
Total % Cover of: Multiply by:
ocies 0 x 1 = 0
pecies 0 x 2 = 0
cies 50 x 3 = 150
pecies 150 x 4 = 600
o x 5 = 0
Totals: 200 (A) 750
Prevalence Index = B/A = 3.75
ophytic Vegetation Indicators:
1 - Rapid Test for Hydrophytic Vegetation
2 - Dominance Test is >50%
3 - Prevalence Index is ≤3.01
4 - Morphological Adaptations1 (Provide supporting
data in Remarks or on a separate sheet)
Problematic Hydrophytic Vegetation ¹ (Explain)
ators of hydric soil and wetland hydrology must be
nt, unless disturbed or problematic.
phytic
tation Yes No X
ent?
nt, opl

US Army Corps of Engineers

Sampling Point: W3out

ofile Description: (Desc	ribe to the dep Matrix		Redox Feat		COMMIN	the absence of inc	ilicators.)
Depth (inches) Color (mo		Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-16 10yr 2/1	100		-			Loam	
<u> 10y1 2/1</u>		\ 	-			Loam	
	_		_		-		
A - 3						5	
/pe: C=Concentration, D	=Depletion, RN	M=Reduced Matrix, M	S=Masked	Sand Grai	ins.	² Location; PL=f	Pore Lining, M=Matrix
Hydric Soil Indicators:						Indicators fo	or Problematic Hydric Soils ³ ;
Histosol (A1)		13	Sandy Gley	ed Matrix	(S4)	Coast F	rairie Redox (A16)
Histic Epipedon (A2)			Sandy Red				urface (S7)
Black Histic (A3)			Stripped Ma				nganese Masses (F12)
Hydrogen Sulfide (A4	1		oamy Muc	The set with the second	(F1)		nallow Dark Surface (TF12)
Stratified Layers (A5)			Loamy Gley	7.			Explain in Remarks)
2 cm Muck (A10)			Depleted M		W. 70	(- 24 - 2010 COOLEU STUCTM
Depleted Below Dark	Surface (A11)		Redox Dark		F6)		
Thick Dark Surface (A		_	Depleted D			3Indicators	of hydrophytic vegetation and
Sandy Mucky Mineral	-	_	Redox Dep				nd hydrology must be present.
5 cm Mucky Peat or F		_	ledox Deb	169910119 (1	O)		s disturbed or problematic.
strictive Layer (if obser	ved):						
Type:							
- CA						the of the Sect Server	100 200
Depth (inches):						Hydric Soil Prese	nt? YesNo_X
Depth (inches):						Hydric Soil Prese	nt? YesNo_X
Depth (inches): marks: YDROLOGY	tors:					Hydric Soil Prese	nt? YesNoX
Depth (inches): marks: YDROLOGY etland Hydrology Indica		required: check all tha	at apply)				
Depth (inches): marks: YDROLOGY etland Hydrology Indica Primary Indicators (minir				(B9)		Secondary In	dicators (minimum of two require
Depth (inches): marks: YDROLOGY etland Hydrology Indica Primary Indicators (mining Surface Water (A1)	num of one is a	Water-Stair	ned Leaves	(B9)		Secondary In	idicators (minimum of two require
Depth (inches): marks: /DROLOGY etland Hydrology Indica Primary Indicators (mining Surface Water (A1) High Water Table (A2)	num of one is a	Water-Stair Aquatic Fau	ned Leaves una (B13)			Secondary In Surface So Drainage I	dicators (minimum of two require oil Cracks (B6) Patterns (B10)
Depth (inches): marks: YDROLOGY etland Hydrology Indica Primary Indicators (mining Surface Water (A1) High Water Table (A2) Saturation (A3)	num of one is a	Water-Stair Aquatic Fau True Aquat	ned Leaves una (B13) ic Plants (B	314)		Secondary In Surface So Drainage I Dry-Seaso	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2)
Depth (inches): marks: /DROLOGY etland Hydrology Indica Primary Indicators (mining Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	num of one is a	Water-Stair Aquatic Fau True Aquat Hydrogen S	ned Leaves una (B13) ic Plants (B Sulfide Odo	(C1)	A Poots (C	Secondary In Surface So Drainage I Dry-Seaso Crayfish B	odicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) currows (C8)
Depth (inches): marks: YDROLOGY etland Hydrology Indica Primary Indicators (mining Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B	num of one is a	Water-Stair Aquatic Fat True Aquat Hydrogen S Oxidized Ri	ned Leaves una (B13) ic Plants (B Sulfide Odo nizosphere	s14) r (C1) s on Living	Roots (C	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation	odicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9)
Depth (inches): marks: YDROLOGY etland Hydrology Indicators (mining Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3)	num of one is a	Water-Stair Aquatic Fau True Aquat Hydrogen S Oxidized Ri Presence o	ned Leaves una (B13) ic Plants (B Sulfide Odo nizospheres f Reduced	(14) r (C1) s on Living Iron (C4)		Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	edicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1)
Depth (inches): marks: PROLOGY etland Hydrology Indicators (mining Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4)	num of one is a	Water-Stair Aquatic Fau True Aquat Hydrogen S Oxidized Ri Presence o Recent Iron	ned Leaves una (B13) ic Plants (B Sulfide Odo nizospheres f Reduced Reduction	814) r (C1) s on Living Iron (C4) i in Tilled S		Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	edicators (minimum of two required poil Cracks (B6) Patterns (B10) on Water Table (C2) eurrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1)
Depth (inches): marks: PROLOGY etland Hydrology Indica Primary Indicators (mining Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	num of one is a) 2)	Water-Stair Aquatic Fat True Aquat Hydrogen S Oxidized Ri Presence o Recent Iron	ned Leaves una (B13) ic Plants (B Gulfide Odo nizospheres f Reduced Reduction Surface (C7	(14) r (C1) s on Living Iron (C4) i in Tilled S		Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	edicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1)
Depth (inches): marks: PROLOGY etland Hydrology Indicators (mining Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4)	num of one is a) 2) Aerial Imagery	Water-Stair Aquatic Fat True Aquat Hydrogen S Oxidized Ri Presence o Recent Iron Thin Muck S (B7) Gauge or V	ned Leaves una (B13) ic Plants (B Sulfide Odo nizospheres f Reduced Reduction Surface (C7 Vell Data (D	s14) r (C1) s on Living lron (C4) i in Tilled S 7)		Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	edicators (minimum of two required poil Cracks (B6) Patterns (B10) on Water Table (C2) eurrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1)
Depth (inches): marks: YDROLOGY etland Hydrology Indica Primary Indicators (mining Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on	num of one is a) 2) Aerial Imagery	Water-Stair Aquatic Fat True Aquat Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S (B7) Gauge or V	ned Leaves una (B13) ic Plants (B Sulfide Odo nizospheres f Reduced Reduction Surface (C7 Vell Data (D	s14) r (C1) s on Living lron (C4) i in Tilled S 7)		Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	edicators (minimum of two required poil Cracks (B6) Patterns (B10) on Water Table (C2) eurrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1)
Depth (inches): marks: //DROLOGY etland Hydrology Indica Primary Indicators (mining Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Sparsely Vegetated C	num of one is a) 2) Aerial Imagery	Water-Stair Aquatic Fat Aquatic Fat True Aquat Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S (B7) Gauge or W e (B8) Other (Expl	ned Leaves una (B13) ic Plants (B Sulfide Odor nizospheres f Reduced Reduction Surface (C7 Vell Data (D ain in Rem	s14) r (C1) s on Living lron (C4) in Tilled S 7) 09) arks)		Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	edicators (minimum of two required poil Cracks (B6) Patterns (B10) on Water Table (C2) eurrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1)
Depth (inches): marks: Proposition (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Sparsely Vegetated Celd Observations:	num of one is i 2) Aerial Imagery concave Surface	Water-Stair Aquatic Fat True Aquat Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S (B7) Gauge or W e (B8) Other (Expl	ned Leaves una (B13) ic Plants (B Sulfide Odo nizospheres f Reduced Reduction Surface (C7 Vell Data (D	s14) r (C1) s on Living lron (C4) in Tilled S 7) 09) arks)		Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	edicators (minimum of two require poil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1)
Depth (inches): marks: PROLOGY etland Hydrology Indicators (mining Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Sparsely Vegetated Celd Observations: rface Water Present?	num of one is a 2) Aerial Imagery concave Surface Yes	Water-Stair Aquatic Fat True Aquat Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S (B7) Gauge or W e (B8) Other (Expl	ned Leaves una (B13) ic Plants (B Sulfide Odo nizospheres if Reduced Reduction Surface (C) Vell Data (D ain in Rem.	s14) r (C1) s on Living lron (C4) in Tilled S 7) 09) arks)	Soils (C6)	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	edicators (minimum of two required poil Cracks (B6) Patterns (B10) on Water Table (C2) currows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) coil Position (D2) ral Test (D5)
Depth (inches): marks: //DROLOGY etland Hydrology Indica Primary Indicators (mining Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Sparsely Vegetated Coeld Observations: rface Water Present?	num of one is a) Aerial Imagery concave Surface Yes Yes	Water-Stair Aquatic Fat True Aquat Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S (B7) Gauge or W e (B8) Other (Expl	ned Leaves una (B13) ic Plants (B Gulfide Odo nizosphere: f Reduced Reduction Surface (C7 Jell Data (D ain in Remoth (inches)	s14) r (C1) s on Living lron (C4) in Tilled S 7) 09) arks)	Soils (C6)	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or Geomorph FAC-Neut	edicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) currows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oil Position (D2) ral Test (D5)
Depth (inches): marks: PROLOGY etland Hydrology Indica Primary Indicators (mining Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Sparsely Vegetated Coeld Observations: rface Water Present? eter Table Present? turation Present?	num of one is i) Aerial Imagery concave Surface Yes Yes Yes	Water-Stair Aquatic Fat True Aquat Hydrogen S Oxidized Ri Presence o Recent Iron Thin Muck S (B7) Gauge or V e (B8) Other (Expl	ned Leaves una (B13) ic Plants (B Sulfide Odo nizosphere f Reduced Reduction Surface (C7 Vell Data (C ain in Remoth (inches oth (inches oth (inches	s14) r (C1) s on Living lron (C4) in Tilled S 7) op) arks)	Wetlan	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or Geomorph FAC-Neut	edicators (minimum of two requires oil Cracks (B6) Patterns (B10) on Water Table (C2) eurrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) nic Position (D2) ral Test (D5)
Primary Indicators (mining Surface Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Sparsely Vegetated Collected Water Table Present? Saturation Present? Sparsely Vegetated Collected Capillary fringe) Scribe Recorded Data (sterile Collected Capillary fringe)	num of one is i) Aerial Imagery concave Surface Yes Yes Yes	Water-Stair Aquatic Fat True Aquat Hydrogen S Oxidized Ri Presence o Recent Iron Thin Muck S (B7) Gauge or V e (B8) Other (Expl	ned Leaves una (B13) ic Plants (B Sulfide Odo nizosphere f Reduced Reduction Surface (C7 Vell Data (C ain in Remoth (inches oth (inches oth (inches	s14) r (C1) s on Living lron (C4) in Tilled S 7) op) arks)	Wetlan	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or Geomorph FAC-Neut	edicators (minimum of two requires oil Cracks (B6) Patterns (B10) on Water Table (C2) currows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oil Position (D2) ral Test (D5)
Depth (inches): marks: PROLOGY etland Hydrology Indica Primary Indicators (mining Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Sparsely Vegetated Co eld Observations: rface Water Present? ater Table Present? cludes capillary fringe)	num of one is i) Aerial Imagery concave Surface Yes Yes Yes	Water-Stair Aquatic Fat True Aquat Hydrogen S Oxidized Ri Presence o Recent Iron Thin Muck S (B7) Gauge or V e (B8) Other (Expl	ned Leaves una (B13) ic Plants (B Sulfide Odo nizosphere f Reduced Reduction Surface (C7 Vell Data (C ain in Remoth (inches oth (inches oth (inches	s14) r (C1) s on Living lron (C4) in Tilled S 7) op) arks)	Wetlan	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or Geomorph FAC-Neut	edicators (minimum of two requires oil Cracks (B6) Patterns (B10) on Water Table (C2) eurrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) nic Position (D2) ral Test (D5)



Wetland	8	Sample Point W	3out	Longitude	Latitude
Cowardin Classification: UI	PL		-94.533059	38.864576	
Size:					
Landform: Hillslope			_		
Tree Stratum: Juglans nigra					
Sapling/Shrub: Cornus drumm	ondii Lonicera mack	ii			
Herb Stratum: Symphoricarpos	s orbiculatus Rosa s	 p. Ageratina altissi 	ma		
Vine Stratum:					
Hydric Soil Indicators:					
Hydrology Indicators:					
Significant Nexus: No	Adjacent:	Abuts:	Stream Name: _		
Jurisdictional Status and Co	mments:				
Photo 1			Photo 2		

e: 8/27/2020 nt: W4
S26 T47N R33W
020 1 111110011
UTM83
PEM
rks)
X No
ks.)
tant features, etc
No
2 (A
2 (E
100% (A
10070
Multiply by:
x 1 = 90
x 2 = 0
x 3 = 30
x 4 =0
x 5 =0
(A) <u>120</u> (E
1.20
s:
Vegetation
-
(Provide supporting ate sheet)
ation ¹ (Explain)
ener (enpeny
hydrology must be
atic.
No

US Army Corps of Engineers

Sampling Point: W4

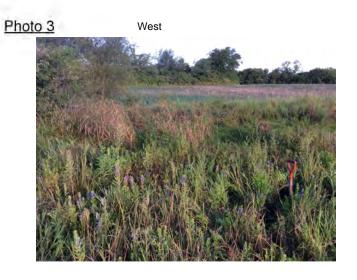
Depth	Matrix			Redox Fea		7 - 5	4000	400000000000000000000000000000000000000
(inches)	Color (moist)	%_	Color (moist)	%_	Type ¹	_Loc ²	Texture	Remarks
0-16	2.5y 2.5/1	95	5yr 3/4	5	<u>C</u>	M	Clay	
_	-					_	-	
_	_	=		-	-	_	-	
-	_		-		_	$\overline{}$		
		-	-				_ (
$\overline{}$	—	$\overline{}$	-		$\overline{}$	_		
ne: C-Con	centration, D=Dep	letion RM-	-Reduced Matrix	MS-Macker	Sand Grain	ne	21 ocation: PI –I	Pore Lining, M=Matrix
A - 300 - 300 - 300	Indicators:	oction, ruy	-i icabeca iviatrix,	WO-Washee	oand Gran	110.		or Problematic Hydric Soils ³ :
Histosol				Sandy Gle	yed Matrix ((\$4)		rairie Redox (A16)
	pipedon (A2)		-	Sandy Red	The second second	(04)		orface (S7)
Black His			-	Stripped M			_	nganese Masses (F12)
_	n Sulfide (A4)				cky Mineral	/C1V		nallow Dark Surface (TF12)
	Layers (A5)		-		yed Matrix (Explain in Remarks)
2 cm Mu			-	Depleted N		(1-2)	_ Officer (i	-xpiairi ir nemarks)
	Below Dark Surfa	on (Att)	-	Redox Dar		Ee\		
all and the second	ark Surface (A12)	ice (ATT)	2	_	ark Surface		3 Indicators	of hydrophytic vegetation and
	lucky Mineral (S1)		-		ressions (F			nd hydrology must be present.
	cky Peat or Peat	63/	-	- Heddx Det	ressions (r	0)		disturbed or problematic.
		- 57						
strictive La	yer (if observed)					- 11		
Typo								
Type: Depth (inch	ies):		_				Hvdric Soil Prese	nt? Yes X No
Type: Depth (inch marks:	es):						Hydric Soil Prese	nt? Yes No
Depth (inch marks:							Hydric Soil Prese	nt? Yes <u> </u>
Depth (inch marks:	gy						Hydric Soil Prese	nt? Yes X No
Depth (inch marks: 'DROLOG			quired; check all	that apply)				
Depth (inch marks: /DROLOG tland Hydro Primary Ind	GY ology Indicators:			that apply)	s (B9)		Secondary In	
Depth (inch marks: DROLOG tland Hydro Primary Ind Surface)	GY ology Indicators: licators (minimum Water (A1)		_ Water-St	ained Leaves	s (B9)		Secondary In	dicators (minimum of two require
Depth (inch marks: /DROLOG tland Hydro Primary Ind Surface V High Wa	GY ology Indicators: licators (minimum Water (A1) ter Table (A2)		Water-St	ained Leaves auna (B13)	S SE ON		Secondary In Surface So Drainage I	dicators (minimum of two require oil Cracks (B6) Patterns (B10)
Depth (inch marks: /DROLOG tland Hydro Primary Ind Surface V High Wa Saturatio	GY ology Indicators: licators (minimum Water (A1) ter Table (A2) on (A3)		Water-St Aquatic F True Aqu	ained Leaves Fauna (B13) Jatic Plants (B	314)		Secondary In Surface So Drainage I Dry-Seaso	dicators (minimum of two require bil Cracks (B6) Patterns (B10) on Water Table (C2)
Depth (inch marks: DROLOG stand Hydro Primary Ind Surface V High Wa Saturatio Water M:	ology Indicators: licators (minimum Water (A1) ter Table (A2) on (A3) arks (B1)		Water-St Aquatic F True Aqu Hydroger	ained Leaves Fauna (B13) uatic Plants (F n Sulfide Odd	314) or (C1)		Secondary In Surface So Drainage I Dry-Seaso Crayfish B	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8)
Depth (inch marks: 'DROLOG tland Hydre Primary Ind Surface ' High Wa Saturatio Water Market	ology Indicators: licators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2)		— Water-St — Aquatic F — True Aqu — Hydroger — Oxidized	ained Leaves Fauna (B13) Jatic Plants (fin Sulfide Odo Rhízosphere	314) or (C1) es on Living		Secondary In Surface Se Drainage I Dry-Sease Crayfish B Saturation	dicators (minimum of two require bil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9)
Depth (inch marks: /DROLOG tland Hydro Primary Ind Surface V High Wa Saturatio Water Mi Sedimen Drift Dep	ology Indicators: licators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2)		— Water-St — Aquatic F — True Aqu — Hydrogei — Oxidized — Presence	ained Leaves Fauna (B13) Jatic Plants (B n Sulfide Odo Rhizosphere e of Reduced	314) or (C1) es on Living Iron (C4)	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	dicators (minimum of two required bil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1)
Depth (inch marks: /DROLOG tland Hydro Primary Ind Surface N High Wa Saturatio Water M Sedimen Drift Dep Algal Ma	ology Indicators: licators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4)		— Water-St — Aquatic F — True Aqu — Hydrogei — Oxidized — Presence — Recent Ii	ained Leaves Fauna (B13) Jatic Plants (Fin Sulfide Odd Rhizosphere Je of Reduced Ton Reduction	314) or (C1) es on Living Iron (C4) on in Tilled So	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oic Position (D2)
Depth (inch marks: DROLOG tland Hydre Primary Ind Surface V High Wa Saturatio Water Mi Sedimen Drift Dep Algal Ma Iron Dep	ology Indicators: licators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4)	of one is re	— Water-St — Aquatic F — True Aqu — Hydroger — Oxidized — Presence — Recent Ir	ained Leaves Fauna (B13) uatic Plants (Fin Sulfide Odd Rhizosphere e of Reduced ron Reduction ck Surface (C	B14) or (C1) es on Living Iron (C4) or in Tilled Se	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oic Position (D2)
Depth (inch marks: DROLOG tland Hydre Primary Ind Surface I High Wa Saturatio Water Mi Sedimen Drift Dep Algal Ma Iron Dep	ology Indicators: licators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4)	of one is re	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc	ained Leaves Fauna (B13) Jatic Plants (Fin Sulfide Odd Rhizosphere Je of Reduced Ton Reduction	B14) or (C1) es on Living Iron (C4) on in Tilled So 7)	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oic Position (D2)
Depth (inch marks: DROLOG tland Hydre Primary Ind Surface I High Wa Saturatio Water Mi Sedimen Drift Dep Algal Ma Iron Dep	ology Indicators: licators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aeria	of one is re	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc	ained Leaves Fauna (B13) Datic Plants (B In Sulfide Odd Rhizosphere of Reduced ron Reduction ok Surface (C Ir Well Data (I	B14) or (C1) es on Living Iron (C4) on in Tilled So 7)	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oic Position (D2)
Depth (inch marks: /DROLOG tland Hydre Primary Ind Surface I High Wa Saturatio Water Mi Sedimen Drift Dep Algal Ma Iron Dep Inundatic Sparsely	GY ology Indicators: licators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aeria r Vegetated Conca	of one is re	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc B7) Gauge o (B8) Other (E:	ained Leaves Fauna (B13) Datic Plants (B In Sulfide Odd Rhizosphere of Reduced ron Reduction ok Surface (C Ir Well Data (I	B14) or (C1) es on Living Iron (C4) on in Tilled So (7) (D9) narks)	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oic Position (D2)
Depth (inch marks: /DROLOG tland Hydre Primary Ind Surface V High Wa Saturatio Water Mark Sedimen Drift Dep Algal Ma Iron Depe Inundatic Sparsely Id Observa	ology Indicators: licators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aeria vegetated Conca	I Imagery (ve Surface	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc B7) Gauge o (B8) Other (E:	ained Leaves Fauna (B13) Jatic Plants (B n Sulfide Odd Rhizosphere e of Reduced ron Reduction ck Surface (C r Well Data (I xplain in Rem	B14) or (C1) es on Living Iron (C4) in Tilled Se 7) D9) narks)	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oic Position (D2)
Depth (inch marks: /DROLOG tland Hydre Primary Ind Surface M High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Inundatio Sparsely Id Observa	ology Indicators: licators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) on Visible on Aeria r Vegetated Conca	I Imagery (ve Surface	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc B7) Gauge o (B8) Other (E: No X I	ained Leaves Fauna (B13) Jatic Plants (B n Sulfide Odd Rhizosphere e of Reduced ron Reduction ck Surface (C r Well Data (I xplain in Rem	B14) or (C1) es on Living Iron (C4) in in Tilled Sc 7) D9) harks)	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oil Position (D2) ral Test (D5)
Depth (inch marks: /DROLOG tiand Hydre Primary Ind Surface V High Wa Saturatio Water Mi Sedimen Drift Dep Algal Ma Iron Dep Inundatic Sparsely Id Observa riace Water Iter Table Pr	ology Indicators: licators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) on Visible on Aeria vegetated Conca ations: Present? Yesent? Yesent? Yesent?	I Imagery (ve Surface	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc B7) Gauge o (B8) Other (E: No X I	rained Leaves Fauna (B13) uatic Plants (Fauna (B15) uatic Plants (Fauna (B15) Rhizosphere of Reduced ron Reduction ck Surface (Cor Well Data (Inches) Depth (inches)	B14) or (C1) es on Living Iron (C4) in in Tilled Sc 7) D9) harks)	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or X Geomorph X FAC-Neut	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oic Position (D2) ral Test (D5)
Depth (inch marks: DROLOG tland Hydre Primary Ind Surface V High Wa Saturatio Water Mi Sedimen Drift Dep Algal Ma Iron Dep Inundatic Sparsely Id Observa rface Water tler Table Pr uration Pres	ology Indicators: licators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) on Visible on Aeria vegetated Conca ations: Present? Yesent? Yesent? Yesent?	I Imagery (ve Surface	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc B7) Gauge o (B8) Other (Extended to the continuous of the contin	ained Leaves Fauna (B13) Datic Plants (B In Sulfide Odd Rhizosphere of Reduced ron Reduction ok Surface (C Ir Well Data (I Ixplain in Rem Depth (inches Depth (inches	B14) or (C1) es on Living Iron (C4) in in Tilled Sc 7) D9) narks)	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or X Geomorph X FAC-Neutr	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oil Position (D2) ral Test (D5)
Depth (inch marks: //DROLOG tland Hydre Primary Ind Surface \(\) High Water Mark Sediment Drift Dep Algal Mater Iron Dept Inundation Sparsely Id Observation Presidudes capill scribe Reco	ology Indicators: licators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) on Visible on Aeria vegetated Conca tions: Present? yesent? yesent? yesent? yesent?	I Imagery (ve Surface	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc B7) Gauge o (B8) Other (Extended to the continuous of the contin	ained Leaves Fauna (B13) Datic Plants (B In Sulfide Odd Rhizosphere of Reduced ron Reduction ok Surface (C Ir Well Data (I Ixplain in Rem Depth (inches Depth (inches	B14) or (C1) es on Living Iron (C4) in in Tilled Sc 7) D9) narks)	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or X Geomorph X FAC-Neutr	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oic Position (D2) ral Test (D5)
Depth (inch marks: DROLOG tland Hydre Primary Ind Surface V High Wa Saturatio Water Mi Sedimen Drift Dep Algal Ma Iron Dep Inundatic Sparsely Id Observa rface Water tler Table Pr uration Pres	ology Indicators: licators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) on Visible on Aeria vegetated Conca tions: Present? yesent? yesent? yesent? yesent?	I Imagery (ve Surface	Water-St Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc B7) Gauge o (B8) Other (Extended to the continuous of the contin	ained Leaves Fauna (B13) Datic Plants (B In Sulfide Odd Rhizosphere of Reduced ron Reduction ok Surface (C Ir Well Data (I Ixplain in Rem Depth (inches Depth (inches	B14) or (C1) es on Living Iron (C4) in in Tilled Sc 7) D9) narks)	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or X Geomorph X FAC-Neutr	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oic Position (D2) ral Test (D5)



Longitude Latitude Sample Point W4 Wetland Wetland 4 Cowardin Classification: PEM -94.539440 38.859663 Size: Landform: Drainageway Tree Stratum: Sapling/Shrub: Herb Stratum: Echinochloa muricata Stachys tenuifolia Cyperus sp. Vine Stratum: Hydric Soil Indicators: Redox Dark Surface (F6) Hydrology Indicators FAC-Neutral Test (D5) Significant Nexus: No Adjacent: ____ Abuts: Stream Name: Jurisdictional Status and Comments:









Project/Site: Highway 150/Colorado Ave.		City/C	ounty: Gra	ndview (Jackson)	Sampling I	Date: 8/27/	2020	
Applicant/Owner: Platform Ventures				State: MO	Sampling F			
Investigator(s): Jack Finley					, Township, Rang	e: S26 T4	7N R33W	/
Landform (hillslope, terrace, etc.): Hillslo	оре	Localr	elief (conca	ave, convex, none):	Convex			
Slope (%): 2-5% Lat: 38.859908			-94.53935		Datum:	UTN	183	
Soil Map Unit Name: Sampsel silty clay loa					VI classification:	UPL		
Are climatic / hydrologic conditions on the si			_					
Are Vegetation, Soil, or Hydrole				Are "Normal Circumst	ances" present?	Yes X	No	
Are Vegetation, Soil, or Hydrole				If needed, explain an				
SUMMARY OF FINDINGS - Attach	site map s	howing san	npling po	oint locations, tr	ansects, imp	ortant fe	atures,	etc.
Hydrophytic Vegetation Present? Ye	s No	<u>X</u>						
Hydric Soil Present? Ye	s No	<u>X</u>	Is the Sa	impled Area				
Wetland Hydrology Present? Ye	s No	_X_	within a	Wetland?	Yes	No _	\times	
Remarks:		_	4					
VEGETATION - Use scientific nan				In T				
Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator	Dominance Test v Number of Domina				
1.		Sexual -		Are OBL, FACW, o	A COLOR DESCRIPTION SERVICES	0		(A)
2.								
3.				Total Number of Do				
4				Species Across All	Strata:	1		(B)
5.		Total Cover						
Sapling/Shrub Stratum Plot size: 15 ft		Total Cover		Percent of Domina That Are OBL, FAC		000%	%	(A/B
L_				Prevalence Index	warkabaati	4		
2				The state of the s	Cover of:	Mide	iply by:	
4				OBL species	0	x 1 =		-
5	$\overline{}$		_	FACW species	0	x 2 =	0	-
	0 =	Total Cover	_	FAC species	-0	x 3 =	0	
Herb Stratum (Plot size: 5 ft)				FACU species	100	x 4 =	400	_
1. Bromus inermis	100	X	FACU	UPL species	0	x 5 =	0	
2				Column Totals:	100	(A)	400	(B)
3.				Preval	ence Index = B/A	= 4.00		
4				Hydrophytic V	egetation Indica	tors:		_
5.				and the second second second	est for Hydrophy		on	
6					nce Test is >50%			
7			_	3 - Prevale	nce Index is ≤3.0	1		
8			_		logical Adaptation			ing
9	0.5				marks or on a sep			
10.	100	Total Course		_ Problemati	c Hydrophytic Ve	getation (E	explain)	
Woody Vine Stratum (Plot size: 30 ft	100 =	Total Cover		Indicators of his	dric soil and wetla	and hudrala	our munt l	he
1					disturbed or probl		gy must i	ne
V _e				Hydrophytic				
2.			_	Vegetation	1025	No	\/	
2	0	= Total Cover		Present?	Yes	IVO	X	

Sampling Point: W4out

	iption: (Describe to Matrix	the depth		ent the in		confirm	the absence of indi	cators.)
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-16	10yr2-2	100					Tomato	Tioma(ne
0-10	10912-2	100		_	=	-		
	$\overline{}$	_				-	-	
	-	-		_		-		
					_	-		
		$\overline{}$					-	
	_	$\overline{}$		_	$\overline{}$	_		
vpe: C=Cor	ncentration, D=Depl	etion. RM=F	Reduced Matrix, M	S=Masked	Sand Grai	ins.	² Location: PL=Po	ore Lining, M=Matrix
A	I Indicators:	2,14,0,1,1,1,1	, esses that the					Problematic Hydric Soils ³ :
Histosol			9	Sandy Glev	ed Matrix	(S4)		airie Redox (A16)
	pipedon (A2)			Sandy Red		(0.1)	Dark Sur	
-	istic (A3)		_	Stripped Ma			(ganese Masses (F12)
-	en Sulfide (A4)					VEAV		llow Dark Surface (TF12)
	d Layers (A5)			The state of the s	ky Mineral			plain in Remarks)
_					ed Matrix	(1.5)	_ Other (E)	plan in nemarks)
	uck (A10)	00 / 144		epleted M		Ee\		
100000000000000000000000000000000000000	d Below Dark Surfac	ce (ATT)	_		Surface (31	of the order of the other control of the other of
-	ark Surface (A12)		_		ark Surface			of hydrophytic vegetation and I hydrology must be present,
	Mucky Mineral (S1)			ledox Dep	ressions (F	-8)		disturbed or problematic.
_ 5 cm Mi	ucky Peat or Peat (S	53)						
	ayer (if observed):							
Type:	(X							in v. No X
Depth (incl	ies).						Hydric Soil Presen	t? Yes No X
YDROLO	GV							
	rology Indicators:							
Control Carlo Control	dicators (minimum o	of one is rea	uired; check all tha	t apply)			Secondary Ind	icators (minimum of two require
1 30 1 1 2 1 1 1 1 1 1	Water (A1)	C-1 3 AE 3E 3	Water-Stain		(B9)			Cracks (B6)
	ater Table (A2)		Aquatic Fau		/e-2\		✓ Drainage Pa	
Saturati			True Aquati	A CONTRACTOR OF THE PARTY OF TH	(AF		_	Water Table (C2)
_			Hydrogen S					
	Marks (B1)					D+- 10	_ Crayfish Bu	
The second second	nt Deposits (B2)		- Oxidized Rh			HOOIS (C		Visible on Aerial Imagery (C9)
	posits (B3)		Presence of					Stressed Plants (D1)
_	at or Crust (B4)		_ Recent Iron			ioils (C6)		Position (D2)
_	posits (B5)	rest at the	Thin Muck 8				FAC-Neutra	Test (D5)
	on Visible on Aerial y Vegetated Concav			Carlotte and the same of the s				
eld Observa	ations:							
rface Water	Present? Yes	S	No X Dep	th (inches)			
ater Table F	Present? Yes	s	V 1 1	oth (inches				
turation Pre	sent? Yes	s		th (inches		Wetlan	d Hydrology Preser	it? Yes No X
aludas sani	llary fringe)					-		
ciodes capi			at the second of the second of the	shotoe pro	winue inen	ections!	if available:	
	orded Data (stream	gauge, mon	itoring well, aerial i	Jilotos, pre	evious irisp	ections),	N 71 C.	
escribe Reco		gauge, mor	itoring well, aerial	onotos, pre	svious irisp	ections),	, E1444-073	
escribe Reco		gauge, mor	itoring well, aerial (onotos, pre	svious irisp	ections),	, Dieses A	
escribe Reco		gauge, mor	itoring well, aerial p	onotos, pre	svious insp	ections),	× 21599943	
		gauge, mor	itoring well, aerial p	motos, pre	evious irisp	(GCIIO113),	2 21200000	



Wetland	Sa	mple Point v	V4out	L	ongitude	Latitude
Cowardin Classification:		- Campage		-:	94.539358	38.859908
Size:						
Landform: Hillslope						
Tree Stratum:						
Sapling/Shrub:						
Herb Stratum: Bromus inermis						
Vine Stratum:						
Hydric Soil Indicators:						
Hydrology Indicators:						
Significant Nexus: No Adja	cent:	Abuts:	Stream Na	me:		
Jurisdictional Status and Comme	ents:					









Project/Site: Highway 150/Colorado Av	e. City	/County: Gran	ndview (Jackson)		ate: 8/27/2020	
Applicant/Owner: Platform Ventures			State: MO	Sampling Po		
Investigator(s): Jack Finley					S26 T47N R33V	N
			ve, convex, none): Cor		**********	
Slope (%): 2-5% Lat: 38.861360		-94.539188		Datum:	UTM83	
Soil Map Unit Name: Sampsel silty clay				lassification:	PEM	
Are climatic / hydrologic conditions on th		-		explain in Rema		
Are Vegetation, Soil, or Hyd			are "Normal Circumstance	es" present? Ye	es X No	
Are Vegetation, Soil, or Hyd			If needed, explain any ar			
SUMMARY OF FINDINGS - Atta	ach site map showing sa	ampling po	int locations, tran	sects, impo	rtant features	, etc.
Hydrophytic Vegetation Present?	Yes X No					
Hydric Soil Present?	Yes X No	Is the Sa	mpled Area			
Wetland Hydrology Present?	Yes X No	within a	Wetland?	Yes X	No	
Remarks:						
VEGETATION - Use scientific r	names of plants.					
Tran Stratum (Diet niver	Absolute Dominant	Indicator	Dominance Test work			
Tree Stratum (Plot size: 30 ft) % Cover Species?	Status	Number of Dominant S Are OBL, FACW, or FA		2	(A)
2.			Ald ODE, FACTI, OF TA			1/-1/
3.			Total Number of Domin	nant		
4.			Species Across All Stra	ata:	2	(B)
5.						
Sapling/Shrub Stratum Plot size: 1	= Total Cover 5 ft)		Percent of Dominant S That Are OBL, FACW,		100%	(A/B
2.			Prevalence Index wo	rksheet:		
3.			Total % Cov		Multiply by:	
4.			OBL species	70	x 1 = 70	
5.			FACW species	60	x 2 = 120	_
Carrier and the second	0 = Total Cover		FAC species	0	x 3 = 0	
Herb Stratum (Plot size: 5 ft) =		FACU species	0	x 4 = 0	
1. Typha latifolia	60 X	OBL	UPL species	0	x 5 = 0	
2. Carex vulpinoidea		FACW	Column Totals:	130	(A) 190	(B)
Persicaria punctata	10	OBL	Prevalence	ce Index = B/A =	1.46	
4. Solidago gigantea		FACW	Hydrophytic Vege	tation Indicato	rs:	
5.			1 - Rapid Test	for Hydrophytic	Vegetation	
6.			X 2 - Dominance	e Test is >50%		
7			X 3 - Prevalence	e Index is ≤3.01		
8	-,				(Provide suppor	ting
9				ks or on a sepa	rate sneet) etation ¹ (Explain)	
10	130 = Total Cover		- Problematic H	ydrophytic vege	etation (Explain)	
Woody Vine Stratum (Plot size: 30			¹ Indicators of hydric			be
1			present, unless dist	urbed or probler	natic.	
2	0 = Total Cov	er	Vegetation Present?	Yes _X	No	
Remarks: (Include photo numbers here	or on a senarale sheet \		1 rosontr			
Total Service Prints Homora Hele	o. a. a soparate street,					

Sampling Point: W5

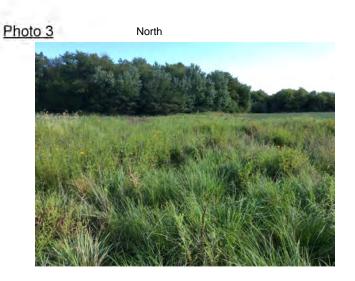
0-4	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
	10yr 3/1	98	5yr 3/4	2			Clay	
4-8	10yr 3-1	95	5yr 3/4	5			Clay	
		=		\equiv				
pe: C=Cond	centration, D=Depl	etion, RM=	Reduced Matrix, N	/IS=Maske	d Sand Grai	ns.	² Location; PL=	Pore Lining, M=Matrix
Hydric Soil	Indicators:						Indicators f	or Problematic Hydric Soils ³ :
Histosol (A1)			Sandy Gle	yed Matrix ((S4)	Coast	Prairie Redox (A16)
Histic Epi	pedon (A2)		=	Sandy Red	dox (S5)		Dark S	urface (S7)
Black His	tic (A3)		- 19	Stripped M	fatrix (S6)		Iron-Ma	anganese Masses (F12)
Hydroger	Sulfide (A4)			Loamy Mu	cky Mineral	(F1)	Very S	hallow Dark Surface (TF12)
Stratified	Layers (A5)		-	Loamy Gle	eyed Matrix	(F2)	Other (Explain in Remarks)
2 cm Muc	ck (A10)			Depleted N	Matrix (F3)		_	
Depleted	Below Dark Surfa	ce (A11)	$\bar{\times}$	Redox Da	k Surface (F	F6)		
Thick Dar	k Surface (A12)				Dark Surface			s of hydrophytic vegetation and
Sandy Mi	ucky Mineral (S1)		100	Redox De	oressions (F	8)		nd hydrology must be present.
5 cm Muc	ky Peat or Peat (S	63)					unies	s disturbed or problematic.
strictive Lay	er (if observed):							
+								
Type:							1. 7. 7. 7. 1. 1. 1.	
Depth (inche	es):						Hydric Soil Prese	ent? Yes No
Depth (inche							Hydric Soil Prese	ent? Yes No
Depth (inches marks:							Hydric Soil Prese	ent? Yes No
Depth (inches marks:	aY ology Indicators:	of one is rea	quired; check all th	at apply)				ent? Yes No
Depth (inches marks: YDROLOG etland Hydro Primary Indi	aY ology Indicators:	of one is rec	quired; check all th Water-Stai		s (B9)		Secondary (
Depth (inches marks: YDROLOG etland Hydro Primary Indi Surface V	SY ology Indicators: cators (minimum c	of one is red		ned Leave	s (B9)		Secondary (ndicators (minimum of two require
Depth (inches marks: YDROLOG etland Hydro Primary Indi Surface V	ology Indicators: cators (minimum o Vater (A1) er Table (A2)	of one is red	_ Water-Stai	ned Leave una (B13)			Secondary II Surface S X Drainage	ndicators (minimum of two require
Primary India Surface V High Wate	ology Indicators: cators (minimum o Vater (A1) er Table (A2) n (A3)	of one is red	Water-Stai	ned Leave una (B13) tic Plants (B14)		Secondary II Surface S X Drainage Dry-Seas	ndicators (minimum of two require toil Cracks (B6) Patterns (B10)
Primary Indi Surface V High Wate Saturation Water Ma	ology Indicators: cators (minimum o Vater (A1) er Table (A2) n (A3)	of one is red	— Water-Stai — Aquatic Fa — True Aqua — Hydrogen	ned Leave una (B13) tic Plants (Sulfide Od	B14)	Roots (C	Secondary II Surface S X Drainage Dry-Seas Crayfish B	ndicators (minimum of two require soil Cracks (B6) Patterns (B10) on Water Table (C2)
Primary Indi Surface V High Wate Saturation Water Ma	cators (minimum of Vater (A1) er Table (A2) in (A3) tricks (B1)	of one is red	— Water-Stai — Aquatic Fa — True Aqua — Hydrogen	ned Leave una (B13) tic Plants (Sulfide Ode thizosphere	B14) or (C1) es on Living	Roots (C	Secondary II Surface S X Drainage Dry-Seas Crayfish E 3) Saturation	ndicators (minimum of two require foil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8)
Primary India Surface V High Wate Saturation Water Ma Sediment Drift Depo	cators (minimum of Vater (A1) er Table (A2) in (A3) tricks (B1)	of one is rea	— Water-Stai — Aquatic Fa — True Aqua — Hydrogen — Oxidized F — Presence o	ned Leave una (B13) tic Plants (Sulfide Ode thizosphere of Reduced	B14) or (C1) es on Living		Secondary II Surface S X Drainage Dry-Seas Crayfish B Saturation Stunted o	ndicators (minimum of two require foil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8)
Primary India Surface V High Wate Saturation Water Ma Sediment Drift Depo	cators (minimum of Vater (A1) er Table (A2) in (A3) arks (B1) Deposits (B2) posits (B3) or Crust (B4)	of one is red	— Water-Stai — Aquatic Fa — True Aqua — Hydrogen — Oxidized F — Presence o	ned Leave una (B13) tic Plants (Sulfide Ode thizosphere of Reduced n Reductio	B14) or (C1) es on Living I Iron (C4) n in Tilled S		Secondary II Surface S X Drainage Dry-Seas Crayfish B Saturation Stunted o	ndicators (minimum of two require foil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) in Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Primary Indi Surface V High Wate Saturation Water Ma Sediment Drift Depo	cators (minimum of Vater (A1) er Table (A2) in (A3) arks (B1) Deposits (B2) posits (B3) or Crust (B4)		— Water-Stai — Aquatic Fa True Aqua — Hydrogen — Oxidized F — Presence of — Recent Iron — Thin Muck	ned Leave una (B13) tic Plants (Sulfide Ode thizosphere of Reduced n Reductio Surface (C	B14) or (C1) es on Living I Iron (C4) on in Tilled Se		Secondary II Surface S X Drainage Dry-Seas Crayfish B Saturation Stunted o	ndicators (minimum of two require foil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Primary Indi Surface V High Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio	cators (minimum of Vater (A1) er Table (A2) in (A3) arks (B1) in Deposits (B2) posits (B3) or Crust (B4) posits (B5)	Imagery (E	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence of Recent Iro Thin Muck Gauge or N	ned Leave una (B13) tic Plants (i Sulfide Ode thizosphere of Reduced n Reductio Surface (C Vell Data (B14) or (C1) es on Living I Iron (C4) on in Tilled Sc (7)		Secondary II Surface S X Drainage Dry-Seas Crayfish B Saturation Stunted o	ndicators (minimum of two require foil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Primary Indi Surface V High Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio Sparsely	cators (minimum of Vater (A1) er Table (A2) in (A3) arks (B1) in Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial Vegetated Concavitions:	Imagery (B ve Surface	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence of Recent Iro Thin Muck 37) Gauge or \((B8)\) Other (Exp	ned Leave una (B13) tic Plants (i Sulfide Ode thizosphere of Reduced in Reductio Surface (C Vell Data (B14) or (C1) es on Living I Iron (C4) on in Tilled Sc (7)		Secondary II Surface S X Drainage Dry-Seas Crayfish B Saturation Stunted o	ndicators (minimum of two require foil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Primary India Surface V High Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely	cators (minimum of Vater (A1) er Table (A2) in (A3) arks (B1) in Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial Vegetated Concavitions: Present? Ye	Imagery (E ve Surface	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence of Recent Iro Thin Muck Gauge or N (B8) Other (Exp	ned Leave una (B13) tic Plants (i Sulfide Odi thizosphere of Reduced in Reductio Surface (C Well Data (i Plain in Ren	B14) or (C1) es on Living I Iron (C4) in in Tilled Si (7) D9) inarks)		Secondary II Surface S X Drainage Dry-Seas Crayfish B Saturation Stunted o	ndicators (minimum of two require foil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Primary India Surface V High Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely eld Observat rface Water If	cators (minimum of Vater (A1) er Table (A2) in (A3) arks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial Vegetated Concavitions: Present? Yesent? Yesent?	Imagery (E ve Surface s	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence of Recent Iron Thin Muck 37) Gauge or N (B8) Other (Exp	ned Leave una (B13) tic Plants (Sulfide Ode thizosphere of Reduced in Reduction Surface (C Well Data (Idain in Ren	B14) or (C1) es on Living I Iron (C4) in in Tilled Si (7) D9) narks)	oils (C6)	Secondary (Surface S X Drainage Dry-Seas Crayfish B Saturation Stunted o Geomorp X FAC-Neu	ndicators (minimum of two require foil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) in Visible on Aerial Imagery (C9) in Stressed Plants (D1) thic Position (D2) tral Test (D5)
Primary India Surface V High Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely eld Observat rface Water Ra ater Table Pre- turation Pres	cators (minimum of Vater (A1) er Table (A2) in (A3) arks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial Vegetated Concavitions: Present? Ye ent? Ye	Imagery (E ve Surface s	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence of Recent Iron Thin Muck 37) Gauge or N (B8) Other (Exp	ned Leave una (B13) tic Plants (i Sulfide Odi thizosphere of Reduced in Reductio Surface (C Well Data (i Plain in Ren	B14) or (C1) es on Living I Iron (C4) in in Tilled Si (7) D9) narks)	oils (C6)	Secondary II Surface S X Drainage Dry-Seas Crayfish B Saturation Stunted o	ndicators (minimum of two require foil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) in Visible on Aerial Imagery (C9) in Stressed Plants (D1) thic Position (D2) tral Test (D5)
Primary Indi Surface V High Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely Eld Observat rface Water Fater Table Pre cludes capilla	cators (minimum of Vater (A1) er Table (A2) in (A3) arks (B1) in Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial Vegetated Concavitions: Present? Yellower yel	Imagery (Five Surface	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence of Recent Iro Thin Muck 37) Gauge or N (B8) Other (Exp	ned Leave una (B13) tic Plants (i Sulfide Ode thizosphere of Reduction Reduction Surface (C Vell Data (i plain in Ren epth (inchese epth (inchese epth (inchese	B14) or (C1) es on Living I Iron (C4) n in Tilled Si (7) D9) narks)	oils (C6)	Secondary II Surface S X Drainage Dry-Seas Crayfish B Saturation Stunted o Geomorp X FAC-Neu	ndicators (minimum of two require foil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) in Visible on Aerial Imagery (C9) in Stressed Plants (D1) thic Position (D2) tral Test (D5)
Primary Indi Surface V High Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely Eld Observat rface Water Fater Table Pre cludes capilla	cators (minimum of Vater (A1) er Table (A2) in (A3) arks (B1) in Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial Vegetated Concavitions: Present? Yeelent? Yeelent? Yeelent? Yeelent?	Imagery (Five Surface	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence of Recent Iron Thin Muck 37) Gauge or N (B8) Other (Exp	ned Leave una (B13) tic Plants (i Sulfide Ode thizosphere of Reduction Reduction Surface (C Vell Data (i plain in Ren epth (inchese epth (inchese epth (inchese	B14) or (C1) es on Living I Iron (C4) n in Tilled Si (7) D9) narks)	oils (C6)	Secondary II Surface S X Drainage Dry-Seas Crayfish B Saturation Stunted o Geomorp X FAC-Neu	ndicators (minimum of two require foil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) in Visible on Aerial Imagery (C9) in Stressed Plants (D1) thic Position (D2) tral Test (D5)



Wetland Wetland 5		Sample Point v	V5	Longitude	Latitude
Cowardin Classification:	PEM	the description		-94.539188	38.861360
Size:					
Landform: Drainageway					
Tree Stratum:					
Sapling/Shrub:					
Herb Stratum: Typha latifol	ia Carex vulpinoidea	Persicaria punctata			
Vine Stratum:					
Hydric Soil Indicators: Re	edox Dark Surface (F6)				
Hydrology Indicators: Di	rainage Patterns (B10)				
Significant Nexus: No	Adjacent:	Abuts:	Stream Name	:	
<u>Jurisdictional Status and</u> Not adjacent to a jurisdictional					









Project/Site: Highway 150/Colorado Ave.	W 7 A A	City/C	ounty: Gra	ndview (Jackson)	Sampling I	Date: 8/27/	/2020	
Applicant/Owner: Platform Ventures				State: MO	Sampling F			
Investigator(s): Jack Finley					Township, Rang	e: S26 T4	7N R33W	/
	pe-ag. field	Localr	elief (conca	ave, convex, none):	Vone			
Slope (%): 2-5% Lat: 38.861357			-94.53929		Datum:	UTN	M83	
Soil Map Unit Name: Sampsel silty clay loan	n, 5 to 9 percer	nt slopes		NV	VI classification:	UPL		
Are climatic / hydrologic conditions on the site	e typical for this	time of year?	Yes	(If i	no, explain in Rei	marks)		
Are Vegetation, Soil, or Hydrolo				Are "Normal Circumsta	ances" present?	Yes X	No	
Are Vegetation, Soil, or Hydrolo				If needed, explain any				
SUMMARY OF FINDINGS - Attach	site map sl	nowing san	npling po	oint locations, tra	ansects, imp	ortant fe	atures,	etc.
Hydrophytic Vegetation Present? Yes	No	X						
Hydric Soil Present? Yes	No	X	Is the Sa	impled Area				
Wetland Hydrology Present? Yes	No No	X	and the second second	Wetland?	Yes	No _	X	
Remarks:			4					
VEGETATION - Use scientific nam				Income Tour	and the base			
Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test w Number of Dominar				
1.		-		Are OBL, FACW, or	AND THE RESERVE OF THE PROPERTY OF THE PROPERT	0		(A)
2.						-		9.0
3.				Total Number of Do	ominant			
4				Species Across All	Strata:	2		(B)
5.		T						
Sapling/Shrub Stratum Plot size: 15 ft		Total Cover		Percent of Dominar That Are OBL, FAC		0009	%	(A/B
2				Prevalence Index	worksheet:			
3.				Total % 0		Mult	tiply by:	
4.				OBL species	0	x 1 =	0	7
5.				FACW species	0	x 2 =	0	_
	0 =	Total Cover		FAC species	0	x 3 =	0	2
Herb Stratum (Plot size: 5 ft)				FACU species	10	x 4 =	40	
1. Glycine max	20		NI	UPL species	0	x 5 =	0	
2. Amaranthus retroflexus	10	×	FACU	Column Totals:	10	(A)	40	_ (B)
3.				Prevale	ence Index = B/A	= 4.00		_
4				Hydrophytic Ve	egetation Indica	tors:		
5.			_	1 - Rapid T	est for Hydrophyl	tic Vegetati	ion	
6	-			2 - Domina	nce Test is >50%			
8.			_		nce Index is ≤3.0			
9.					logical Adaptation			ing
(I)	·				narks or on a sep c Hydrophytic Ve			
10.	30 =	Total Cover		_ riddieman	c riyotophytic ve	getation (t	LAPIGITY	
Woody Vine Stratum (Plot size: 30 ft		, oral cover		1Indicators of hyd	dric soil and wetla	and hydrolo	oav must	be
t.	-				disturbed or probl		37	0.7.3
				Hydrophytic				
2.				Vegetation	1.00	61-	\ /	
2.	0	= Total Cover		Present?	Yes	No.	_X_	

Sampling Point: W5out

Hydric Soil Indicators: Histocal (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox (A16) Histic Epipedon (A2) Slitipped Matrix (S6) Dark Surface (A7) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Stratffied Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F6) Thick Dark Surface (A12) Sandy Mucky Mineral (F1) Thick Dark Surface (A12) Depleted Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Som Mucky Minera	O-4	(inches) Color (moist) %		5 45 45 4 5 4 5 4 5 4 5 5 5 5 5 5 5 5 5
### April 1 Silt ### April 2 Sandy Redox (\$5) ### Black Histic (A3) Siltipped Matrix (\$6) ### Dark Surface (\$7) ### Black Histic (A3) Siltipped Matrix (\$6) ### April 2 Coast Prairie Redox (A16) ### Dark Surface (\$7) ### April 2 Coast Prairie Redox (A16) ### Dark Surface (\$7) ### April 2 Coast Prairie Redox (A16) ### Depleted Below Dark Surface (\$7) ### Depleted Below Dark Surface (A11) ### Depleted Below Dark Surface (A11) ### Depleted Below Dark Surface (A11) ### Depleted Dark Surface (F6) ### Depleted Dark Surface (F7) ### April 2 Coast Prairie Redox (A16) ### Depleted Below Dark Surface (A11) ### Depleted Below Dark Surface (A11) ### Depleted Dark Surface (F6) ### Depleted Below Dark Surface (A12) ### Depleted Dark Surface (F7) ### April 2 Coast Prairie Redox (A16) ### Depleted Below Dark Surface (A11) ### Depleted Below Dark Surface (A11) ### Depleted Dark Surface (F6) ### Depleted Dark Surface (F7) ### Present (A12) ### Depleted Dark Surface (F7) ### Present (A12) ### Surface Water (A1) ### Water Table (A2) ### April 2 Aquatic Fauna (B13) ### Surface Water (A1) ### April 2 Aquatic Fauna (B13) ### April 2 Aquatic Fauna (B13) ### Dark Surface Soil Cracks (B6) ### Dark Surface Soil Cracks	### April 1 Silt ### April 2 99 5 5 1 1 Silt ### April 2 99 5 5 5 1 ### April 2 5 5 5 5 ### April 2 5 ### April 2		Color (moist) % Type Loc	Texture Remarks
rpe: C=Concentration. D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Place Soil Indicators: Histosoil (A1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Black Histic (A3) Simped Matrix (S4) Sandy Redox (S5) Dark Surface (A12) Inon-Manganese Masses (F12) Other (Explain in Remarks) Indicators for Problematic Hydric Soils*: Indicators fo	rpe: C=Concentration. D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hold	0-4 10yr 2/2 100		Silt
Hydric Soil Indicators: Histocal (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox (A16) Histic Epipedon (A2) Sliripped Matrix (S6) Dark Surface (A7) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (A12) Depleted Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Fedox Depressions (F8) ### Hydric Soil Present? Yes No Acatalation Remarks Indicators of Problematic Hydric Soils*: Coast Prairie Redox (A16) Dark Surface (A12) Coast Prairie Redox (A16) Coast Prairie Redox (A16) Dark Surface (A12) Other (Explain in Remarks) ### Hydric Soil Present (F2) ### Hydric Soil Present? Yes No Acatalation (A3) True Aquatic Plants (B14) Depting (Inches) Drainage Patterns (B10) Drainage Patterns (B10	Hydric Soil Indicators: Histocal (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox (A16) Histic Epipedon (A2) Slitipped Matrix (S6) Dark Surface (A7) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Stratified Layers (A5) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (A12) Depleted Dark Surface (A12) Serm Mucky Mineral (S1) Thick Dark Surface (A12) Depleted Dark Surface (A13) Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Serm Mucky Mineral (S1) Serm Mucky Mineral (S1) Serm Mucky Mineral (S1) Surface (F8) ### Hydric Soil Present? Yes No Accordance (A16) Pedox Dark Surface (F7) Surface (F8) ### Hydric Soil Present? Yes No Wettand Hydrology Indicators: Primary Indicators (minimum of one is required; check all finat apply) Surface Water (A1) Hydrology Indicators (minimum of one is required; check all finat apply) Surface Water (A1) Hydrology Indicators (minimum of one is required; check all finat apply) Surface Water (A1) Hydrology Indicators (minimum of one is required; check all finat apply) Surface Water (A1) Hydrology Indicators (minimum of one is required; check all finat apply) Surface Water (A1) ### Hydric Soil Present? Yes No Surface (F7) Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Saturation (A3) True Aquatic Plants (B14) Drainage Patterns (B10) Surface Soil Cracks (B6) Drainage Patterns (B10) Surface (B7) Secondary Indicators (minimum of two require (B7) Surface (B	4-16 10yr 2/2 99	5yr 4/41	Silt
Hydric Soil Indicators: Histoscol (A1) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Coast Prairie Redox (A16) Dark Surface (A7) Glack Histic (A3) Stripped Matrix (S6) Glack Histic (A3) Stripped Matrix (S6) Glack Histic (A3) Stripped Matrix (S6) Dark Surface (A16) Loamy Mucky Mineral (F1) Stratified Layers (A5) Qepteted Below Dark Surface (A11) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Fledox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F6) Stratified Layers (A5) Sandy Mucky Mineral (S1) Fledox Dark Surface (F6) Flow Coast Surface (A12) Sandy Mucky Mineral (S1) Sem Mucky Peat or Peat (S3) Strictive Layer (if observed): Type: Deplit (inches): Water Stained Leaves (B9) Hydric Soil Present? Yes No Aquatic Fauna (B13) Saturation (A3) True Aquatic Plants (B14) Hydrogen Sulfide Codor (C1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C5) Tinn Muck Surface (B7) Flow Coast (B6) Drainage Patterns (B10) Saturation (S1) Fresence of Reduced Iron (C4) Sulface Water (A1) Recent Iron Reduction in Tilled Soils (C5) Tinn Muck Surface (A12) Solution (C4) Fligh Water Table (A2) Adjal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C5) Tinn Muck Surface (A12) Flow Coast (B6) Drainage Patterns (B10) Saturation (S16) Flow Coast (B6) Thin Muck Surface (A12) Flow Coast (B6) Fligh Water (B7) Flow Coast (B7) Flow	Hydric Soil Indicators: Histoscol (A1) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Coast Prairie Redox (A16) Dark Surface (A7) Glack Histic (A3) Stripped Matrix (S6) Glack Histic (A3) Stripped Matrix (S6) Glack Histic (A3) Stripped Matrix (S6) Dark Surface (A16) Loamy Mucky Mineral (F1) Stratified Layers (A5) Qepteted Below Dark Surface (A11) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Fledox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F6) Stratified Layers (A5) Sandy Mucky Mineral (S1) Fledox Dark Surface (F6) Flow Coast Surface (A12) Sandy Mucky Mineral (S1) Sem Mucky Peat or Peat (S3) Strictive Layer (if observed): Type: Deplit (inches): Water Stained Leaves (B9) Hydric Soil Present? Yes No Aquatic Fauna (B13) Saturation (A3) True Aquatic Plants (B14) Hydrogen Sulfide Codor (C1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C5) Tinn Muck Surface (B7) Flow Coast (B6) Drainage Patterns (B10) Saturation (S1) Fresence of Reduced Iron (C4) Sulface Water (A1) Recent Iron Reduction in Tilled Soils (C5) Tinn Muck Surface (A12) Solution (C4) Fligh Water Table (A2) Adjal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C5) Tinn Muck Surface (A12) Flow Coast (B6) Drainage Patterns (B10) Saturation (S16) Flow Coast (B6) Thin Muck Surface (A12) Flow Coast (B6) Fligh Water (B7) Flow Coast (B7) Flow			
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Wetland	Sample Point W5out		Longitude	Latitude
Cowardin Classification: UPL	- 0.46000.0		-94.539293	38.861357
Size:				
Landform: Hillslope-ag. field				
Tree Stratum:				
Sapling/Shrub:				
Herb Stratum: Glycine max Amara	anthus retroflexus			
Vine Stratum:				
Hydric Soil Indicators:				
Hydrology Indicators:				
Significant Nexus: No Adj	acent: Abuts:	Stream Name:		
Jurisdictional Status and Comm	nents:			
Bear a		District		
Photo 1		Photo 2		

Project/Site: Highway 150/Colorado Av	ve. City	//County: Grand	dview (Jackson)	Sampling D	ate: 08/28/2020	
Applicant/Owner: Platform Ventures	3		State: MO	Sampling Po		
Investigator(s): Jack Finley					S26 T47N R33W	
			e, convex, none): Co		102/102	
Slope (%): 2-5% Lat: 38.86215		-94.53792		Datum:	UTM83	
Soil Map Unit Name: Sampsel silty clay				classification:	PEM	
Are climatic / hydrologic conditions on the	ne site typical for this time of yea	ir? Yes	No (If no,	, explain in Rem	arks)	
Are Vegetation, Soil, or Hy	drology significantly distu	irbed? Ar	e "Normal Circumstand	ces" present? Y	es X No _	
Are Vegetation, Soil, or Hy			needed, explain any a			
SUMMARY OF FINDINGS - Att	ach site map showing sa	ampling poi	nt locations, tran	sects, impo	rtant features,	etc.
Hydrophytic Vegetation Present?	Yes _X No					
Hydric Soil Present?	Yes X No	Is the San	pled Area			
Wetland Hydrology Present?	Yes X No	within a W		Yes X	No	
Remarks:						
VEGETATION - Use scientific	names of plants.					
T	Absolute Dominant	Indicator	Dominance Test wor			
Tree Stratum (Plot size: 30 ft) % Cover Species?	Status	Number of Dominant S Are OBL, FACW, or F		1	(A)
2.			Ale ODE, I ACVI, UIT	AO.		(4)
3.	\neg	-	Total Number of Domi	inant		
4.			Species Across All Str		1	(B)
5.						
Sapling/Shrub Stratum Plot size:	= Total Cover		Percent of Dominant S That Are OBL, FACW		100%	(A/B
1.			Prevalence Index wo	rksheet:		_
3.			Total % Cov		Multiply by:	
4.		_	OBL species	100	x 1 = 100	
5.		===3	FACW species	0	x 2 = 0	
	0 = Total Cover		FAC species	0	x 3 = 0	
Herb Stratum (Plot size: 5 ft	1		FACU species	0	x 4 = 0	_
1. Typha latifolia	100 X	OBL	UPL species	0	x 5 = 0	
2			Column Totals:	100	(A) 100	_(B)
3.			Prevalence	ce Index = B/A =	1.00	_
4			Hydrophytic Vege	etation Indicate	ors:	
5.			X 1 - Rapid Tes	t for Hydrophytic	C Vegetation	
6.		·——		e Test is >50%		
7		-	X 3 - Prevalence	e Index is ≤3.01		
8		-	4 - Morpholog		s1 (Provide supporting	19
9				rks or on a sepa		
10	Transferred		- Problematic P	lydrophytic Veg	etation ¹ (Explain)	
Woody Vine Stratum (Plot size: 30	ft = Total Cover	V	¹ Indicators of hydric present, unless dist		nd hydrology must be	e
1		-	Hydrophytic	urbed of proble	mauo.	
	= Total Cov	/er	Vegetation Present?	YesX	No	
Remarks: (Include photo numbers here	or on a separate sheet.)					

Depth	Matrix			Redox Feat			the absence of i	2000
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4	10yr 4/2	95	10yr 5/6	5		М	Clay	-
4-8	10yr 3/2	95	10yr 5/6	5	C	M	Clay	
								<i>E</i>
	=	=		=				
3								
								4
		=						A
ype: C=Conc	centration, D=Deple	etion, RM=	Reduced Matrix, N	MS=Masked	Sand Grai	ins.	² Location; PL	=Pore Lining, M=Matrix
Hydric Soil I	Indicators:						Indicators	for Problematic Hydric Soils ³ ;
Histosol (A	A1)			Sandy Gley	yed Matrix	(S4)	Coast	Prairie Redox (A16)
Histic Epi	pedon (A2)		=	Sandy Red	lox (S5)		Dark S	Surface (S7)
Black Hist			- '4	Stripped M			Iron-N	Manganese Masses (F12)
	Sulfide (A4)		_	Loamy Mus	The set with the set	(F1)		Shallow Dark Surface (TF12)
	Layers (A5)		-	Loamy Gle	Tall and the			(Explain in Remarks)
2 cm Muc			\overline{v}	Depleted M		. 70		No. 16 THE PROPERTY OF THE PARTY OF
	Below Dark Surface	e (A11)	X	Redox Dar		F6)		
	k Surface (A12)	26.11	W-	Depleted D			3Indicato	rs of hydrophytic vegetation and
— "	ucky Mineral (S1)		_	The Control of the Control	ressions (F			and hydrology must be present.
	ky Peat or Peat (S	2)	-	, industrate	100010110 (1	O)	unle	ss disturbed or problematic.
	my r dat or r dat (o							
Depth (inche	es); 						Hydric Soil Pres	sent? Yes No
emarks:							Hydric Soil Pres	sent? Yes No
marks:	iY						Hydric Soil Pres	sent? Yes No
YDROLOG etland Hydro	iY ology Indicators:			OF 252				
YDROLOG etland Hydro Primary India	iY ology Indicators: cators (minimum o	f one is re					Secondary	Indicators (minimum of two require
YDROLOG etland Hydro	iY ology Indicators: cators (minimum o	f one is rea		nat apply) ined Leaves	s (B9)		Secondary	
YDROLOG etland Hydro Primary Indic Surface W High Wate	ology Indicators: cators (minimum o Vater (A1) er Table (A2)	f one is red		ined Leaves	s (B9)		Secondary Surface	Indicators (minimum of two require
YDROLOG etland Hydro Primary Indic Surface W High Wate	ology Indicators: cators (minimum o Vater (A1) er Table (A2)	f one is red	Water-StateAquatic Fater True Aquatic	ined Leaves auna (B13) itic Plants (E	314)		Secondary Surface	Indicators (minimum of two require Soil Cracks (B6)
YDROLOG etland Hydro Primary India Surface W High Wate X Saturation Water Ma	cators (minimum o Vater (A1) er Table (A2) n (A3) urks (B1)	f one is re	Water-Stai Aquatic Fa True Aqua Hydrogen	ined Leaves auna (B13) atic Plants (E Sulfide Odo	314) or (C1)		Secondary Surface X Drainage Dry-Sea: Crayfish	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8)
YDROLOG etland Hydro Primary Indic Surface W High Wate X Saturation Water Ma Sediment	logy Indicators: cators (minimum o Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2)	f one is rea	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F	ined Leaves auna (B13) ttic Plants (B Sulfide Odd Rhizosphere	314) or (C1) os on Living	Roots (C	Secondary Surface X Drainage Dry-Sea: Crayfish	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) son Water Table (C2)
YDROLOG etland Hydro Primary India Surface W High Wate X Saturation Water Ma	logy Indicators: cators (minimum o Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2)	f one is red	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F	ined Leaves auna (B13) atic Plants (E Sulfide Odo	314) or (C1) os on Living	Roots (C	Secondary Surface X Drainage Dry-Sea: Crayfish Saturation	Indicators (minimum of two requires Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8)
YDROLOG etland Hydro Primary Indic Surface W High Wate X Saturation Water Ma Sediment Drift Depo	cators (minimum o Vater (A1) er Table (A2) er (A3) erks (B1) Deposits (B2) or Crust (B4)	f one is re	Water-Stal Aquatic Fa True Aqua Hydrogen Oxidized F Presence	ined Leaves auna (B13) atic Plants (E Sulfide Odo Rhizosphere of Reduced in Reduction	314) or (C1) os on Living Iron (C4) o in Tilled S		Secondary Surface X Drainage Dry-Sea: Crayfish Saturatic Stunted Geomory	Indicators (minimum of two requires Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2)
YDROLOG etland Hydro Primary India Surface W High Wate X Saturation Water Ma Sediment Drift Depo	cators (minimum o Vater (A1) er Table (A2) er (A3) erks (B1) Deposits (B2) or Crust (B4)	f one is rec	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck	ined Leaves auna (B13) tic Plants (E Sulfide Odo Rhizosphere of Reduced in Reduction Surface (C	314) or (C1) os on Living Iron (C4) or in Tilled S		Secondary Surface X Drainage Dry-Sea: Crayfish Saturatic Stunted Geomory	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1)
YDROLOG etland Hydro Primary India Surface W High Wate X Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation	logy Indicators: cators (minimum of Vater (A1) er Table (A2) er (A3) erks (B1) Deposits (B2) ersits (B3) er Crust (B4) ersits (B5) er Visible on Aerial	Imagery (I	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or 1	ined Leaves auna (B13) tic Plants (E Sulfide Odo Rhizosphere of Reduced in Reduction Surface (C Well Data (I	314) or (C1) os on Living Iron (C4) on in Tilled S 7)		Secondary Surface X Drainage Dry-Sea: Crayfish Saturatic Stunted Geomory	Indicators (minimum of two requires Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2)
YDROLOG etland Hydro Primary India Surface W High Wate X Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation	cators (minimum o Vater (A1) er Table (A2) in (A3) urks (B1) Deposits (B2) posits (B3) or Crust (B4)	Imagery (I	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or 1	ined Leaves auna (B13) tic Plants (E Sulfide Odo Rhizosphere of Reduced in Reduction Surface (C Well Data (I	314) or (C1) os on Living Iron (C4) on in Tilled S 7)		Secondary Surface X Drainage Dry-Sea: Crayfish Saturatic Stunted Geomory	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) On Visible on Aerial Imagery (C9) Or Stressed Plants (D1) Ohic Position (D2)
YDROLOG etland Hydro Primary India Surface W High Wate X Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation	cators (minimum o Vater (A1) er Table (A2) in (A3) urks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial Vegetated Concav	Imagery (I	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck Gauge or 1	ined Leaves auna (B13) tic Plants (E Sulfide Odo Rhizosphere of Reduced in Reduction Surface (C Well Data (I	314) or (C1) os on Living Iron (C4) on in Tilled S 7)		Secondary Surface X Drainage Dry-Sea: Crayfish Saturatic Stunted Geomory	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) On Visible on Aerial Imagery (C9) Or Stressed Plants (D1) Ohic Position (D2)
YDROLOG etland Hydro Primary India Surface W High Water X Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely	cators (minimum of Vater (A1) er Table (A2) er (A3) er (A3) er (B1) Deposits (B2) er (B3) er Crust (B4) er (B5) er Visible on Aerial Vegetated Concav	Imagery (I e Surface	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 37) Gauge or (B8) Other (Exp	ined Leaves auna (B13) tic Plants (E Sulfide Odo Rhizosphere of Reduced in Reduction Surface (C Well Data (I	314) or (C1) os on Living Iron (C4) on in Tilled S 7) D9) parks)		Secondary Surface X Drainage Dry-Sea: Crayfish Saturatic Stunted Geomory	Indicators (minimum of two requires Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2)
YDROLOG etland Hydro Primary Indic Surface W High Water X Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely	cators (minimum of Vater (A1) er Table (A2) er (A3) er (A3) er (B1) Deposits (B2) er (B3) er Crust (B4) er (B5) er Visible on Aerial Vegetated Concav ions: Present? Yes	Imagery (le e Surface	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 37) Gauge or (B8) Other (Exp	ined Leaves auna (B13) tic Plants (E Sulfide Odo Rhizosphere of Reduced on Reduction Surface (C Well Data (I blain in Rem	and) or (C1) or (C1) or (C1) or Living Iron (C4) or in Tilled S 7) D9) earks)		Secondary Surface X Drainage Dry-Sea: Crayfish Saturatic Stunted Geomory	Indicators (minimum of two requires Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2)
YDROLOG etland Hydro Primary Indic Surface W High Water X Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely eld Observation	cators (minimum of Vater (A1) er Table (A2) er (A3) erks (B1) Deposits (B2) erits (B3) er Crust (B4) erits (B5) er Visible on Aerial Vegetated Concav ions: Present? Yes	Imagery (I e Surface	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 37) Gauge or (B8) Other (Exp	ined Leaves auna (B13) tic Plants (E Sulfide Odo Rhizosphere of Reduced on Reduction Surface (C Well Data (I plain in Rem	sin (C1) so on Living Iron (C4) in in Tilled S 7) D9) harks)	Soils (C6)	Secondary Surface X Drainage Dry-Sea: Crayfish Saturatic Stunted Geomory	Indicators (minimum of two required Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2) utral Test (D5)
Primary India Surface W High Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely Political Observation Frace Water Fater Table Prescuedes capilla	logy Indicators: cators (minimum of Vater (A1) er Table (A2) in (A3) urks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial Vegetated Concav lions: Present? Yes ent? Yes ary fringe)	Imagery (le Surface	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 37) Gauge or 1 (B8) Other (Exp	ined Leaves auna (B13) tic Plants (E Sulfide Odo Rhizosphere of Reduced in Reduction Surface (C Well Data (I blain in Rem epth (inches epth (inches	and and an articles are sense and are sense ar	Wetlan	Secondary Surface X Drainage Dry-Sea: Crayfish Saturatio Stunted Geomory X FAC-Net	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) On Visible on Aerial Imagery (C9) Or Stressed Plants (D1) Ohic Position (D2) Utral Test (D5)
Primary India Surface W High Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely Political Observation Frace Water Fater Table Prescuedes capilla	ology Indicators: cators (minimum of Vater (A1) er Table (A2) in (A3) urks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial Vegetated Concav ions: Present? Yes ent? Yes ent? Yes	Imagery (le Surface	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 37) Gauge or 1 (B8) Other (Exp	ined Leaves auna (B13) tic Plants (E Sulfide Odo Rhizosphere of Reduced in Reduction Surface (C Well Data (I blain in Rem epth (inches epth (inches	and and an articles are sense and are sense ar	Wetlan	Secondary Surface X Drainage Dry-Sea: Crayfish Saturatio Stunted Geomory X FAC-Net	Indicators (minimum of two required Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2) utral Test (D5)
Primary India Surface W High Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely Political Observation Frace Water Fater Table Prescuedes capilla	logy Indicators: cators (minimum of Vater (A1) er Table (A2) in (A3) urks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) in Visible on Aerial Vegetated Concav lions: Present? Yes ent? Yes ary fringe)	Imagery (le Surface	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence Recent Iro Thin Muck 37) Gauge or 1 (B8) Other (Exp	ined Leaves auna (B13) tic Plants (E Sulfide Odo Rhizosphere of Reduced in Reduction Surface (C Well Data (I blain in Rem epth (inches epth (inches	and and an articles are sense and are sense ar	Wetlan	Secondary Surface X Drainage Dry-Sea: Crayfish Saturatio Stunted Geomory X FAC-Net	Indicators (minimum of two required Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2) utral Test (D5)



Wetland Wetland 6	Sampl	e Point w6		Longitude	Latitude
Cowardin Classification: PEM	- Consider	20000		-94.53792	38.86215
Size:					
Landform: Drainageway					
Tree Stratum:					
Sapling/Shrub:					
Herb Stratum: Typha latifolia					
Vine Stratum:					
Hydric Soil Indicators: Depleted N	latrix (F3)				
Hydrology Indicators Saturation	(A3)				
Significant Nexus: No Adj	acent: Ab	uts:	Stream Name:		
Jurisdictional Status and Comm Not adjacent to a jurisdictional stream.	ents:				

Photo 1



Photo 2



Project/Site: Highway 150/Colorado Ave)	City/C	ounty: Gra	ndview (Jackson)		Date: 08/28		
Applicant/Owner: Platform Ventures				State: MO	Sampling F			
Investigator(s): Jack Finley					Township, Rang	e: S26 T4	7N R33W	/
	Islope	Local r	elief (conca	ave, convex, none):	Convex			
Slope (%): 2-5% Lat: 38.862151			-94.53788		Datum:	UTN	M83	
Soil Map Unit Name: Sampsel silty clay I					VI classification:	UPL		
Are climatic / hydrologic conditions on the			_					
Are Vegetation, Soil, or Hyd				Are "Normal Circumsta	ances" present?	Yes X	No	
Are Vegetation, Soil, or Hyd				If needed, explain any				
SUMMARY OF FINDINGS - Atta	ch site map	showing san	npling po	oint locations, tra	ansects, imp	ortant fe	atures,	etc.
		No X						
Hydric Soil Present?	Yes X N	No	Is the Sa	impled Area				
Wetland Hydrology Present?	Yes N	No X	within a	Wetland?	Yes	No _	\times	
Remarks:			4					
To The Thomas								
VEGETATION - Use scientific n	ames of plan	nts.						
TEGET PRINCES CONTINUES	Absolute	Dominant	Indicator	Dominance Test w	vorksheet:			
Tree Stratum (Plot size: 30 ft) % Cover	Species?	Status	Number of Dominar	nt Species That			
1.				Are OBL, FACW, or	r FAC:	0		(A)
2.								
3.	-	-		Total Number of Do		2		(70)
5.			_	Species Across All	oiraia.	2		(B)
5.		= Total Cover	_	December 1 December 1				
Sapling/Shrub Stratum Plot size: 15				Percent of Dominar That Are OBL, FAC		000%	6	(A/B
1.	o it			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			_	1,02
2.				Prevalence Index	worksheet:			
3.				Total % 0	Cover of:	Mult	iply by:	371
4.		·		OBL species	0	x 1 =	0	3
5.				FACW species	0	x 2 =	0	
U. b. out the Control of the Control	0	= Total Cover		FAC species	0	x 3 =	0	
Herb Stratum (Plot size: 5 ft)	V		FACU species	40	x 4 =	160	-
Glycine max Ambrosia artemisiifolia		<u>×</u> -	NI	UPL species Column Totals:	0	x 5 =	0	- (0)
3. Ambrosia artemisiiolia			FACU		ence Index = B/A	(A)	160	_(B)
4.				rievale	ence maex = b/A	4.00		_
5.	-,			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	egetation Indica			
6.			_		est for Hydrophy		on	
7.	-	(nce Test is >50%			
8.					nce Index is ≤3.0			4
9.	7	=			logical Adaptation narks or on a sep			ing
0.	-				c Hydrophytic Ve			
7)	60	= Total Cover				3	a de la constante	
Woody Vine Stratum (Plot size: 30 ft				¹ Indicators of hyd	dric soil and wetla	and hydrolo	gy must b	be
t.				present, unless of			F-17-19-	
lai .				Hydrophytic				
2.		The second secon		Vegetation	N.A.	No	\/	
2.	0	= Total Cover		Present?	Yes	140		

Sampling Point: w6out

Depth	Matrix			Redox Fea		- 6		
(inches)	Color (moist)	_%_	Color (moist)	- %	Type	Loc ²	Texture	Remarks
0-4	10yr 2/2	100		_	_	_	Silt Loam	
4-8	10yr 3/2	96	5yr 3/2	_5	<u>C</u>	M		
			-			-		
		_	-					
							2	
			-					
=			-					
pe: C=Cor	centration, D=Depl	etion, RM=	Reduced Matrix, I	MS=Masked	d Sand Grai	ns.	² Location: PL=F	Pore Lining, M=Matrix
Hydric Soi	Indicators:						Indicators fo	r Problematic Hydric Soils ³ :
Histosol	(A1)			Sandy Gle	yed Matrix ((S4)	Coast P	rairie Redox (A16)
Histic E	oipedon (A2)		=	Sandy Red	dox (S5)		Dark Su	rface (S7)
Black Hi	stic (A3)		- 17	Stripped M	latrix (S6)		Iron-Ma	nganese Masses (F12)
_	en Sulfide (A4)		-		cky Mineral	(F1)		allow Dark Surface (TF12)
	d Layers (A5)		-	Freely, my A. Freely,	yed Matrix			Explain in Remarks)
_	ick (A10)		_	Depleted N		4. 40		- A CONTROL TO SERVER
	d Below Dark Surfa	ce (A11)		Control of the Control of the Control	k Surface (I	F6)		
-	ark Surface (A12)	22 6.11.17	X		Dark Surface		3Indicators	of hydrophytic vegetation and
_	Mucky Mineral (S1)		-	a many many from	oressions (F			d hydrology must be present.
	icky Peat or Peat (S	22)	-	Hedox Del	dessions (I	0)		disturbed or problematic.
_ 5 0117 Mile	icky i eat of i eat (c	,,,						The second second
	yer (if observed):							
Type:								
							the contract of the	Control Control
Depth (inchemarks:	ed deeper excavation	n.	====				Hydric Soil Prese	nt? Yes No
Depth (inchemarks: ock preclude	ed deeper excavatio	n.					Hydric Soil Prese	nt? YesNo
Depth (inchemarks: ock preclude	ed deeper excavatio	n.					Hydric Soil Prese	nt? Yes No
Depth (incleanance) emarks: ock preclude YDROLO etland Hydr	ed deeper excavation	ā	wiked check all th	nat annivi				
Depth (incleanance) Property DROLO Primary Inc	GY ology Indicators:	ā			c (P0)		Secondary In	dicators (minimum of two require
Depth (incleading process) YDROLO etland Hydr Primary Inc.	GY rology Indicators: dicators (minimum o	ā	Water-Sta	ined Leave	s (B9)		Secondary In Surface Sc	dicators (minimum of two require
Primary Inc Surface High Wa	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2)	ā	Water-Sta	ined Leave auna (B13)			Secondary In Surface So Drainage F	dicators (minimum of two require oil Cracks (B6) Patterns (B10)
Primary Inc Surface High Wa Saturatio	GY cology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3)	ā	Water-Sta Aquatic Fa True Aqua	ined Leave auna (B13) atic Plants (I	B14)		Secondary In Surface So Drainage F Dry-Seaso	dicators (minimum of two require bil Cracks (B6) Patterns (B10) n Water Table (C2)
Primary Inc Surface High Water Mater	ed deeper excavation GY rology Indicators: dicators (minimum of water (A1) ater Table (A2) on (A3) larks (B1)	ā	Water-Sta Aquatic Fa True Aqua Hydrogen	ined Leave auna (B13) atic Plants (I Sulfide Odd	B14) or (C1)		Secondary In Surface So Drainage F Dry-Seaso Crayfish B	dicators (minimum of two require oil Cracks (B6) Patterns (B10) n Water Table (C2) urrows (C8)
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Wetland		Sample Point v	v6out	Longitude	Latitude
Cowardin Classification:	UPL	Charle Company		-94.537882	38.862151
Size:					
Landform: Hillslope					
Tree Stratum:					
Sapling/Shrub:					
Herb Stratum: Glycine max	Ambrosia artemisii	folia			
Vine Stratum:					
Hydric Soil Indicators: Rec	dox Dark Surface (F	[6]			
Hydrology Indicators:					
Significant Nexus: No	_ Adjacent:	Abuts:	Stream Name		
Jurisdictional Status and	Commente:				

Photo 1



Photo 2



Project/Site: Highway 150/Colorado	Ave.	City/County: Gran			e: 08/28/2020
Applicant/Owner: Platform Ventu	ures		State: MO	Sampling Poir	
Investigator(s):Jack Finley				ownship, Range:	S26 T47N R33W
Landform (hillslope, terrace, etc.):	Depression		ive, convex, none): Co		750755
Slope (%): 2-5% Lat: 38.862		Long:94.537346		Datum:	UTM83
Soil Map Unit Name: Sampsel silty				The Market of the Control of the Con	PEM
Are climatic / hydrologic conditions o				, explain in Remai	
Are Vegetation, Soil, or					
Are Vegetation, Soil, or			If needed, explain any a		
SUMMARY OF FINDINGS - A		ng sampling po	oint locations, tran	isects, import	ant features, etc
Hydrophytic Vegetation Present?	Yes No	= -			
Hydric Soil Present?	Yes X No		mpled Area	Art.	S.A.
Wetland Hydrology Present?	Yes No No	within a	Wetland?	Yes X	No
Remarks:		-			
VEGETATION - Use scientif	ic names of plants.				
Tree Stretum (Plot size:		inant Indicator	Dominance Test wor		
Tree Stratum (Plot size: 30 ft) % Cover Spec	cies? Status	Number of Dominant Are OBL, FACW, or F		2 (A
2.			7.00 000,77,07,07	,	
3.			Total Number of Dom	inant	
4.			Species Across All St	rata:	2 (B
5.					
Sapling/Shrub Stratum Plot size	= Total	Cover	Percent of Dominant S That Are OBL, FACW		100% (A/
2		_	Prevalence Index wo	orksheet:	
3.			Total % Co		Multiply by:
4.			OBL species		x 1 = 70
5.			FACW species	0	x 2 = 0
The second second	0 = Total	Cover	FAC species	0	x 3 = 0
Herb Stratum (Plot size: 5 ft	_)		FACU species		x 4 = 0
1. Typha angustifolia			UPL species		x 5 =0
2. Scirpus atrovirens	20X	OBL_	Column Totals:		A) <u>70</u> (B
3.			Prevalen	ce Index = B/A =	1.00
4			Hydrophytic Veg	etation Indicator	s:
6.			X 1 - Rapid Tes	st for Hydrophytic	Vegetation
7.				e Test is >50%	
8.				e Index is ≤3.01	
9.				gical Adaptations\ irks or on a separa	(Provide supporting
10.				Hydrophytic Veget	
-	70 = Total	Cover		,, e, ep. 9, e . e ge.	and Carletony
Woody Vine Stratum (Plot size:			¹ Indicators of hydri	c soil and wetland	hydrology must be
t.			present, unless dis		
2.			Hydrophytic		
	0 = Tol	tal Cover	Vegetation Present?	Yes X	No
Pomorka: /Include abeta aumbara b	ore or on a separate about t		Frescitt		
Remarks: (Include photo numbers h	ere or on a separate sneet.)				

Depth	Matrix			Redox Fea				
(inches)	Color (moist)	%	Color (moist)	_ %	Type ¹	Loc ²	Texture	Remarks
0-16	10yr 2/1	_95	2.5yr 3/6	_ 5	<u>C</u>	<u>M</u>	Silty Clay	
						_		
		_		3 (-	
			-					
	$\overline{}$	$\overline{}$	-	-	_			
_	_	$\overline{}$	-		_	_	· · · · · ·	
me: C=Cond	centration, D=Depl	etion RM-	Reduced Matrix	MS-Masker		ne	21 ocation: PI –F	Pore Lining, M=Matrix
Hydric Soil		elion, rivi=	neduced Matrix,	IVIO=IVIdSNE	J Sand Gran	115.		r Problematic Hydric Soils ³ :
Histosol (Sandy Gle	yed Matrix ((S4)		rairie Redox (A16)
_	ipedon (A2)		-	Sandy Red		(04)		rface (S7)
Black His			-	Stripped M				nganese Masses (F12)
	n Sulfide (A4)				cky Mineral	/E1V		allow Dark Surface (TF12)
	Layers (A5)		-		yed Matrix			Explain in Remarks)
2 cm Muc			~	Coarry Cite Depleted N		11	Silier (L	
	Below Dark Surfa	ce (A11)	2		k Surface (I	F6)		
100000000000000000000000000000000000000	rk Surface (A12)	26.111			Dark Surface		3Indicators	of hydrophytic vegetation and
	ucky Mineral (S1)		_		oressions (F		wetlan	d hydrology must be present.
	cky Peat or Peat (S	63)	-		,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-/	unless	disturbed or problematic.
strictive Lay	yer (if observed):					- 1		
Type:								
Type: Depth (inche emarks:	es):						Hydric Soil Prese	nt? Yes No
Depth (inche							Hydric Soil Prese	nt? Yes No
Depth (inche emarks:								
Depth (inchest) emarks: YDROLOG etland Hydro	GY	of one is rec						nt? Yes No
Primary Indi	GY ology Indicators: icators (minimum o	of one is rea		that apply) ained Leaves	s (B9)		Secondary In	
Primary Indi	GY blogy Indicators: icators (minimum c	of one is rec	Water-St		s (B9)		Secondary In Surface So Drainage F	dicators (minimum of two require
Primary Indi Surface V High Wat Saturation	Diogy Indicators: icators (minimum o Water (A1) ter Table (A2) n (A3)	of one is red	— Water-St — Aquatic F — True Aqu	ained Leave Fauna (B13) latic Plants (F	B14)		Secondary In Surface So Drainage F	dicators (minimum of two require
Primary Indi Surface V High Wat Saturation Water Ma	Diogy Indicators: icators (minimum of Water (A1) ter Table (A2) n (A3) arks (B1)	of one is rec	— Water-St. — Aquatic F — True Aqu — Hydroger	ained Leave Fauna (B13) latic Plants (I n Sulfide Odd	B14) or (C1)		Secondary In Surface So Drainage F Dry-Seaso Crayfish B	dicators (minimum of two require pil Cracks (B6) Patterns (B10) n Water Table (C2) urrows (C8)
Primary Indi Surface V High Wat Saturation Water Ma	Dlogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2)	of one is red	Water-St. Aquatic F True Aqu Hydroger Oxidized	ained Leaver Fauna (B13) latic Plants (I n Sulfide Odd Rhizosphere	B14) or (C1) es on Living		Secondary In Surface So Drainage F Dry-Seaso Crayfish B	dicators (minimum of two require bil Cracks (B6) Patterns (B10) In Water Table (C2) Jurrows (C8) Visible on Aerial Imagery (C9)
Primary Indi Surface V High Wat Saturation Water Ma Sediment Drift Depor	Diogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3)	of one is red	Water-St. Aquatic F True Aqu Hydroger Oxidized	ained Leave Fauna (B13) latic Plants (I n Sulfide Odd	B14) or (C1) es on Living		Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or	dicators (minimum of two require bil Cracks (B6) Patterns (B10) In Water Table (C2) Jurrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1)
Primary Indi Surface V High Wat Saturation Water Ma Sediment Drift Depo	Diogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4)	of one is rec	Water-St. Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir	ained Leaves Fauna (B13) latic Plants (fin Sulfide Odo Rhizosphere of Reduced on Reduction	B14) or (C1) es on Living I Iron (C4) n in Tilled S	Roots (C3	Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or	dicators (minimum of two require oil Cracks (B6) Patterns (B10) In Water Table (C2) Furrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) Ic Position (D2)
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Primary Indi Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely	Dlogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aerial Vegetated Concavitions: Present? Ye	Imagery (Free Surface	Water-St. Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 37) Gauge or (B8) Other (Ex	ained Leaves Fauna (B13) latic Plants (I n Sulfide Odd Rhizosphere e of Reduced ron Reduction ck Surface (C r Well Data (I ckplain in Ren	B14) or (C1) es on Living I Iron (C4) n in Tilled S 7) D9) narks)	Roots (C3	Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or	dicators (minimum of two require oil Cracks (B6) Patterns (B10) In Water Table (C2) Furrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) Ic Position (D2)
Primary Indi Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely eld Observat arface Water If	cology Indicators: icators (minimum of Water (A1) iter Table (A2) in (A3) iter Table (A2) in (A3) it Deposits (B2) it or Crust (B4) it or Crus	Imagery (Bree Surface	Water-St. Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 37) Gauge or (B8) Other (Ex	ained Leaves Fauna (B13) latic Plants (Fin Sulfide Odd Rhizosphere e of Reduced fron Reduction ick Surface (Cin Well Data (Fin Sulfain in Rem Depth (inches	B14) or (C1) es on Living I Iron (C4) n in Tilled S 7) D9) narks)	Roots (C3	Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or X Geomorph X FAC-Neutr	dicators (minimum of two require oil Cracks (B6) Patterns (B10) In Water Table (C2) Patterns (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) Ic Position (D2) In Test (D5)
Primary Indi Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Sparsely eld Observat arface Water Italian President	Dlogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) osits (B3) it or Crust (B4) osits (B5) in Visible on Aerial Vegetated Concavitions: Present? yesent? yesent? Yesent?	Imagery (Bree Surface	Water-St. Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc 37) Gauge or (B8) Other (Ex	ained Leaves Fauna (B13) latic Plants (I n Sulfide Odd Rhizosphere e of Reduced ron Reduction ck Surface (C r Well Data (I ckplain in Ren	B14) or (C1) es on Living I Iron (C4) n in Tilled S 7) D9) narks)	Roots (C3	Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or	dicators (minimum of two require bil Cracks (B6) Patterns (B10) In Water Table (C2) Purrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) Ic Position (D2) al Test (D5)
Primary Indi Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio Sparsely eld Observat atter Table Prescludes capilla	Dlogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) osits (B3) it or Crust (B4) osits (B5) in Visible on Aerial Vegetated Concavitions: Present? yesent? yesent? Yesent?	Imagery (Figure Surface	Water-St. Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc 37) Gauge or (B8) Other (Ex	ained Leaves Fauna (B13) latic Plants (I n Sulfide Odd Rhizosphere e of Reduced ron Reduction ok Surface (C r Well Data (I xplain in Ren Depth (inches Depth (inches	B14) or (C1) es on Living I Iron (C4) in in Tilled S i7) D9) harks)	Roots (C3	Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or X Geomorph X FAC-Neutr	dicators (minimum of two require oil Cracks (B6) Patterns (B10) In Water Table (C2) Patterns (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) Ic Position (D2) In Test (D5)
Primary Indi Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio Sparsely eld Observat atter Table Prescludes capilla	Dlogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aerial Vegetated Concavitions: Present? esent? ye ary fringe)	Imagery (Figure Surface	Water-St. Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc 37) Gauge or (B8) Other (Ex	ained Leaves Fauna (B13) latic Plants (I n Sulfide Odd Rhizosphere e of Reduced ron Reduction ok Surface (C r Well Data (I xplain in Ren Depth (inches Depth (inches	B14) or (C1) es on Living I Iron (C4) in in Tilled S i7) D9) harks)	Roots (C3	Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or X Geomorph X FAC-Neutr	dicators (minimum of two require oil Cracks (B6) Patterns (B10) In Water Table (C2) Patterns (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) Ic Position (D2) In Test (D5)



Wetland Wetland 7		Sample Point v	v7	Longitude	Latitude
Cowardin Classification	1: PEM	- Constitution of the Cons		-94.537346	38.862175
Size:					
Landform: Depression					
Tree Stratum:					
Sapling/Shrub:					
Herb Stratum: Typha and	gustifolia Scirpus atrovir	ens			
Vine Stratum:					
Hydric Soil Indicators:	Redox Dark Surface (F6)			
Hydrology Indicators:	Geomorphic Position (D	2)			
Significant Nexus: No	Adjacent:	Abuts:	Stream Name:		
Jurisdictional Status ar Wetland is not located adjace		am.			

Photo 1



Photo 2



Project/Site: Highway 150/Colorado		City/County: Gran	ndview (Jackson)		e: <u>08/28/2020</u>
Applicant/Owner: Platform Ventu	res		State: MO	Sampling Poin	
Investigator(s): Jack Finley		Land orthography		ownship, Range:	S26 T47N R33W
Landform (hillslope, terrace, etc.):	Hillslope		ve, convex, none): No		UTM83
Slope (%): 2-5% Lat: 38.8621		Long:94.537309		Datum:classification:	
Soil Map Unit Name: Sampsel silty of				_	UPL
Are climatic / hydrologic conditions or				, explain in Remai	
Are Vegetation, Soil, or			Are "Normal Circumstan		
	Hydrology naturally p		If needed, explain any a		
SUMMARY OF FINDINGS - A	ttach site map show	ing sampling po	oint locations, tran	isects, import	ant features, et
Hydrophytic Vegetation Present?	Yes No No	= 1			
Hydric Soil Present?	Yes No X	Is the Sa	mpled Area		
Wetland Hydrology Present?	Yes No X		Wetland?	Yes	No X
Remarks:					
VEGETATION - Use scientifi	c names of plants.				
12021111011 000 001011111		inant Indicator	Dominance Test wo	rksheet:	
Tree Stratum (Plot size: 30 ft		cies? Status	Number of Dominant	Species That	
1.			Are OBL, FACW, or F	AC:	1 (
2.					
3			Total Number of Dom		
4			Species Across All St	rata:	2 (
5.		040-4	A CONTRACTOR OF VI		
Sapling/Shrub Stratum Plot size	= Total	Cover	Percent of Dominant That Are OBL, FACW		50%
<u> </u>			Prevalence Index wo	arkeheet:	
3			Total % Co		Multiply by:
4			OBL species		
5.			FACW species		x 1 = 0 x 2 = 0
J	0 = Total	Cover	FAC species		x 3 = 210
Herb Stratum (Plot size: 5 ft)	50101	FACU species		x 4 = 0
1. Iva annua		< FAC	UPL species		x 5 = 0
2. Vicea sp.	30 ×		Column Totals:	70 ((A) 210 (
3.			A A C C A C C C C C C C C C C C C C C C	ce Index = B/A =	
4.				AND DOWN	
5.			Hydrophytic Veg		
6.				it for Hydrophytic \	√egetation
7.			Comment of the contract of the	e Test is >50%	
8.				e Index is ≤3.01	
) /					(Provide supporting
9.				irks or on a separa Hydrophytic Veget	
10	100 = Total	Cover	- Froblematic F	iyorophytic veget	andi (Explain)
Woody Vine Stratum (Plot size:		Ouver	¹ Indicators of hydri- present, unless dis		hydrology must be
2.			Hydrophytic		
	0 = To	tal Cover	Vegetation Present?	Yes X	No
Remarks: (Include photo numbers he	ere or on a separate sheet.)				

Sampling Point: w7out

ofile Description: (I	Matrix	0.0 10 0.0	needed to di	Redox Fea			the absence of the	and a control of
Depth (inches) Colo	or (moist)	%	Color (mois		Type ¹	Loc ²	Texture	Remarks
(inches)	i (moist)		- COIOI (ITIOIS	50 70	Турс	Loc	Texture	nemans
		$\overline{}$	-		$\overline{}$	-		
	_		-			-	· 	
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\rightarrow		_	-		$\overline{}$	_		
/pe: C=Concentration	on D-Donlo	tion PM-	Roduced Matr	iv MS-Masker		ine	21 postion: DI	-Pore Lining, M=Matrix
Hydric Soil Indicat		ligii, mivi=	neduced Mail	ix, ivio=iviasket	Sand Gra	ms.		or Problematic Hydric Soils ³ ;
Histosol (A1)				Sandy Gle	und Matrix	(84)		Prairie Redox (A16)
Histic Epipedon	/A21			Sandy Red	The second second	(34)	_	Surface (S7)
Black Histic (A3)				_ Stripped M	28 47 9 - 30	72.00		anganese Masses (F12)
Hydrogen Sulfide				_ Loamy Mu	7.			hallow Dark Surface (TF12)
Stratified Layers					yed Matrix	(F2)	_ Other	(Explain in Remarks)
2 cm Muck (A10				_ Depleted N		210		
Depleted Below	4.00	e (A11)			k Surface (7 - 6		The Property Street
Thick Dark Surfa					ark Surfac			s of hydrophytic vegetation and
Sandy Mucky Mi	ineral (S1)			_ Redox Dep	ressions (F	-8)		and hydrology must be present, as disturbed or problematic.
5 cm Mucky Pea	at or Peat (S3	3)					uriio	as distarbed or problematic.
Type: Depth (inches):							Hydric Soil Pres	ent? Yes No X
	sturbed) to e	xcavate.					Hydric Soil Pres	ent? YesNo_X
Depth (inches):	sturbed) to e	xcavate.					Hydric Soil Pres	ent? YesNo_X
Depth (inches): marks: oil was too rocky (die		xcavate.					Hydric Soil Pres	ent? YesNo_X
Depth (inches): marks: oil was too rocky (die	ndicators:		uired; check a	ull that apply)			A. A. A.	ndicators (minimum of two require
Depth (inches): marks: oil was too rocky (dis	ndicators: (minimum of			ull that apply) Stained Leaves	s (B9)		Secondary I	
Depth (inches): marks: oil was too rocky (die /DROLOGY etland Hydrology In Primary Indicators	ndicators: (minimum of A1)		Water-		s (B9)		Secondary I	ndicators (minimum of two require
Depth (inches): marks: oil was too rocky (displayed) /DROLOGY etland Hydrology Inches Primary Indicators Surface Water (/	ndicators: (minimum of A1)		_ Water-	Stained Leaves			Secondary I Surface S Drainage	ndicators (minimum of two require
Depth (inches): marks: oil was too rocky (displayed) /DROLOGY etland Hydrology In Primary Indicators (Surface Water (High Water Table	ndicators: (minimum of A1) e (A2)		Water- Aquatio True A	Stained Leaves Fauna (B13)	314)		Secondary I Surface S Drainage Dry-Seas	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10)
Depth (inches): marks: bil was too rocky (displayed) /DROLOGY etland Hydrology In Primary Indicators (Surface Water (High Water Table Saturation (A3)	ndicators: (minimum of A1) e (A2)		Water- Aquatio True A Hydrog	Stained Leaves c Fauna (B13) quatic Plants (I	314) or (C1)	Roots (C	Secondary I Surface S Drainage Dry-Seas Crayfish	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2)
Depth (inches): marks: oil was too rocky (discounting to the content of the conte	ndicators: (minimum of A1) e (A2) 1) sits (B2)		Water- Aquation True A Hydrog Oxidize	Stained Leave Fauna (B13) quatic Plants (f gen Sulfide Odd	314) or (C1) es on Living	Roots (C	Secondary I Surface S Drainage Dry-Seas Crayfish I	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8)
Depth (inches): marks: oil was too rocky (discount of the content	ndicators: (minimum of A1) e (A2) 1) sits (B2)		Water- Aquatic True A Hydrog Oxidize	Stained Leaves c Fauna (B13) quatic Plants (F gen Sulfide Odd ed Rhizosphere ice of Reduced	314) or (C1) es on Living Iron (C4)		Secondary I Surface S Drainage Dry-Seas Crayfish I Saturation	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1)
pepth (inches): marks: oil was too rocky (dispersion of the content of the conten	ndicators: (minimum of A1) e (A2) 1) sits (B2) 3) st (B4)		Water- Aquatic True A Hydrog Oxidize Preser Recent	Stained Leaves Fauna (B13) quatic Plants (I gen Sulfide Odo ed Rhizosphere ace of Reduced t Iron Reduction	314) or (C1) es on Living Iron (C4) n in Tilled S		Secondary I Surface S Drainage Dry-Seas Crayfish I Saturatio Stunted of	ndicators (minimum of two requires oil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1)
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Depth (inches): marks: bil was too rocky (displayed) /DROLOGY etland Hydrology In Primary Indicators (High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B) Algal Mat or Crus	ndicators: (minimum of A1) e (A2) I) sits (B2) (3) st (B4) 5)	one is rec	Water- Aquation True A Hydrog Oxidize Present Recent Thin M Gauge	Stained Leaves Fauna (B13) quatic Plants (I gen Sulfide Odo ed Rhizosphere ace of Reduced t Iron Reduction	314) or (C1) es on Living Iron (C4) on in Tilled S 7)		Secondary I Surface S Drainage Dry-Seas Crayfish I Saturatio Stunted of	ndicators (minimum of two requires oil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Depth (inches): marks: oil was too rocky (dispersion of the content of the conten	ndicators: (minimum of A1) e (A2) I) sits (B2) (3) st (B4) 5)	one is rec	Water- Aquation True A Hydrog Oxidize Present Recent Thin M Gauge	Stained Leaves c Fauna (B13) quatic Plants (I gen Sulfide Odd ed Rhizosphere ace of Reduced t Iron Reduction uck Surface (C or Well Data (I	314) or (C1) es on Living Iron (C4) on in Tilled S 7)		Secondary I Surface S Drainage Dry-Seas Crayfish I Saturatio Stunted of	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Primary Indicators Surface Water (A) Water Marks (B1 Sediment Deposits (B) Algal Mat or Cruston Deposits (B) Inundation Visibl Sparsely Vegeta	ndicators: (minimum of A1) e (A2) I) sits (B2) (3) st (B4) 5) le on Aerial II	one is rec	Water- Aquation True A Hydrog Oxidize Present Recent Thin M Gauge	Stained Leaves c Fauna (B13) quatic Plants (I gen Sulfide Odd ed Rhizosphere ace of Reduced t Iron Reduction uck Surface (C or Well Data (I	314) or (C1) os on Living Iron (C4) on in Tilled S 7) D9) narks)		Secondary I Surface S Drainage Dry-Seas Crayfish I Saturatio Stunted of	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Pepth (inches): Pemarks: oil was too rocky (dispersion of the period of	ndicators: (minimum of A1) e (A2) I) sits (B2) (3) st (B4) 5) le on Aerial II	one is rec	Water- Aquatio True A Hydrog Oxidize Preser Recent Thin M (37) Gauge (B8) Other (Stained Leaves c Fauna (B13) quatic Plants (I gen Sulfide Odd ed Rhizosphere ace of Reduced t Iron Reduction uck Surface (C or Well Data (I Explain in Rem	314) or (C1) os on Living Iron (C4) on in Tilled S 7) D9) narks)		Secondary I Surface S Drainage Dry-Seas Crayfish I Saturatio Stunted of	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Primary Indicators Surface Water (A) Water Marks (B1) Sediment Deposits (B) Algal Mat or Crustron Deposits (B) Inundation Visible Sparsely Vegeta	ndicators: (minimum of A1) e (A2) 1) sits (B2) 3) st (B4) 5) le on Aerial li tted Concave	one is rec	Water- Aquatio True A Hydrog Oxidize Preser Recent Thin M (37) Gauge (88) Other (Stained Leaves c Fauna (B13) quatic Plants (I gen Sulfide Odd ed Rhizosphere ice of Reduced t Iron Reduction uck Surface (C or Well Data (I Explain in Ren Depth (inches	sin (C1) so on Living fron (C4) in in Tilled S 7) D9) harks)	Soils (C6)	Secondary I Surface S Drainage Dry-Seas Crayfish I Saturatio Stunted of	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) in Visible on Aerial Imagery (C9) or Stressed Plants (D1) whic Position (D2) tral Test (D5)
Primary Indicators (Baturation (A3) Water Marks (B1) Sediment Deposits (B2) Algal Mat or Crustron Deposits (B3) Inundation Visible Sparsely Vegeta ald Observations: rface Water Present?	ndicators: (minimum of A1) e (A2) 1) sits (B2) 3) st (B4) 5) le on Aerial II ited Concave t? Yes Yes Yes	one is rec	Water- Aquatic True A Hydrog Oxidize Preser Recent Thin M (7) Gauge (88) Other (Stained Leaves c Fauna (B13) quatic Plants (figen Sulfide Odd ed Rhizosphere ace of Reduced t Iron Reduction uck Surface (Coor Well Data (I Explain in Ren Depth (inches	sin (C1) so on Living fron (C4) in in Tilled S 7) D9) harks)	Soils (C6)	Secondary I Surface S Drainage Dry-Seas Crayfish I Saturation Stunted of Geomorp FAC-Neu	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) in Visible on Aerial Imagery (C9) or Stressed Plants (D1) whic Position (D2) tral Test (D5)
Depth (inches): marks: oil was too rocky (disense) PTROLOGY etland Hydrology In Primary Indicators (Surface Water (A) Saturation (A3) Water Marks (B1) Sediment Deposits (B1) Algal Mat or Crustion Deposits (B2) Iron Deposits (B3) Inundation Visible Sparsely Vegeta eld Observations: rface Water Present? turation Present?	ndicators: (minimum of A1) e (A2) 1) sits (B2) (3) st (B4) 5) le on Aerial II sted Concave t? Yes Yes Yes Yes Jes	one is rec	Water- Aquatic True A Hydrog Oxidize Presen Recent Thin M (7) Gauge (88) Other (Stained Leaves E Fauna (B13) quatic Plants (I gen Sulfide Odd ed Rhizosphere ace of Reduced I Iron Reduction uck Surface (C or Well Data (I Explain in Ren Depth (inches Depth (inches	sin and a sin an	Wetlan	Secondary I Surface S Drainage Dry-Seas Crayfish I Saturation Stunted of Geomorp FAC-Neu	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) in Visible on Aerial Imagery (C9) or Stressed Plants (D1) whic Position (D2) tral Test (D5)
Primarks: oil was too rocky (disensely Proposits (Baland Hydrology In Primary Indicators (Baland Hydrology In Primary Indicators (Baland Hydrology In High Water Table Saturation (A3) Water Marks (B1 Sediment Deposits (Baland Mat or Cruillon Deposits (Baland Mat or	ndicators: (minimum of A1) e (A2) 1) sits (B2) (3) st (B4) 5) le on Aerial II sted Concave t? Yes Yes Yes Yes Jes	one is rec	Water- Aquatic True A Hydrog Oxidize Presen Recent Thin M (7) Gauge (88) Other (Stained Leaves E Fauna (B13) quatic Plants (I gen Sulfide Odd ed Rhizosphere ace of Reduced I Iron Reduction uck Surface (C or Well Data (I Explain in Ren Depth (inches Depth (inches	sin and a sin an	Wetlan	Secondary I Surface S Drainage Dry-Seas Crayfish I Saturation Stunted of Geomorp FAC-Neu	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) in Visible on Aerial Imagery (C9) or Stressed Plants (D1) whic Position (D2) tral Test (D5)
Depth (inches): marks: oil was too rocky (diservance) Primary Indicators (Surface Water (AS)) Water Marks (B1) Sediment Deposits (B1) Algal Mat or Cruston Deposits (B2) Iron Deposits (B3) Inundation Visible Sparsely Vegeta Prince Water Present (AS) Algal Construction (B3) Sparsely Vegeta Provided Construction (B3)	ndicators: (minimum of A1) e (A2) 1) sits (B2) (3) st (B4) 5) le on Aerial II sted Concave t? Yes Yes Yes Yes Jes	one is rec	Water- Aquatic True A Hydrog Oxidize Presen Recent Thin M (7) Gauge (88) Other (Stained Leaves E Fauna (B13) quatic Plants (I gen Sulfide Odd ed Rhizosphere ace of Reduced I Iron Reduction uck Surface (C or Well Data (I Explain in Ren Depth (inches Depth (inches	sin and a sin an	Wetlan	Secondary I Surface S Drainage Dry-Seas Crayfish I Saturation Stunted of Geomorp FAC-Neu	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) in Visible on Aerial Imagery (C9) or Stressed Plants (D1) whic Position (D2) tral Test (D5)



Wetland	Sample Point w7c	out	Longitude	Latitude
Cowardin Classification: UPL	- 0.4600000		-94.537309	38.862175
Size:				
Landform: Hillslope				
Tree Stratum:				
Sapling/Shrub:				
Herb Stratum: Iva annua Vicea sp.		2		
Vine Stratum:				
Hydric Soil Indicators:				
Hydrology Indicators:				
Significant Nexus: No Adjac	cent: Abuts:	Stream Name:		
Jurisdictional Status and Comme	nte:			

Photo 1



Photo 2



Project/Site: Highway 150/Colorado Ave.	City	/County: Gran	dview (Jackson)		oate: 09/02/202	20
Applicant/Owner: Platform Ventures			State: MO	Sampling P		
nvestigator(s): Jack Finley	tana	d salled Year house		ownship, Range	S26 T47N F	R33W
	The second second		ve, convex, none): Cor	ncave Datum:	UTM83	
Slope (%): 2-5% Lat: 38.860672		-94.535516		classification:		
Soil Map Unit Name: Sampsel silty clay loar		-2 V \			PEM	
Are climatic / hydrologic conditions on the sit				explain in Ren		66
Are Vegetation, Soil, or Hydrolo			re "Normal Circumstand			NO
	gy naturally problem		f needed, explain any a			
SUMMARY OF FINDINGS - Attach		ampling po	int locations, tran	sects, impo	ortant leatu	res, etc.
Hydrophytic Vegetation Present? Yes		4 / 5				
Hydric Soil Present? Yes			mpled Area		A4.	
Wetland Hydrology Present? Yes	S_X_ No	within a V	Vetland?	Yes X	No	4
Remarks:						
VEGETATION - Use scientific nam	nes of plants.					
	Absolute Dominant	Indicator	Dominance Test wor	ksheet:		
Tree Stratum (Plot size: 30 ft)	% Cover Species?	Status	Number of Dominant S	CONTRACTOR		361
1.			Are OBL, FACW, or F	AC:		(A)
3.	$\overline{}$		Total Number of Domi	nont		
4.			Species Across All Str		1	(B)
5.					1	
	0 = Total Cover	-	Percent of Dominant S	Species		
Sapling/Shrub Stratum Plot size: 15 ft)		That Are OBL, FACW,		100%	(A/E
t						= 200
2.			Prevalence Index wo			
3.			Total % Cov		Multiply	by:
4	-		OBL species	100		00
5			FACW species		x 2 = 0	_
Herb Stratum (Plot size: 5 ft)	= Total Cover		FAC species FACU species	0	$\begin{array}{ccc} x & 3 & = & 0 \\ x & 4 & = & 0 \end{array}$	_
1. Typha latifolia	85 X	OBL	UPL species	0	x5 = 0	-
2. Scirpus atrovirens	5	OBL	Column Totals:	100		00 (B)
3. Lobelia siphilitica	10	OBL	A V C C C C C C C C C C C C C C C C C C	ce Index = B/A	The state of the s	
4.					· ·	
5.			Hydrophytic Vege			
6.	$\overline{}$			for Hydrophyti		
7.				e Test is >50%		
8.				e Index is ≤3.0¹ lical Adaptation		porting
9.				rks or on a sepa		porting
0.				lydrophytic Veg		ain)
	100 = Total Cover		1 G Later March			
Woody Vine Stratum (Plot size: 30 ft			¹ Indicators of hydric			nust be
t.			present, unless dist	turbed or proble	ematic.	
			Hydrophytic Vegetation	100		
2.					AIA.	
2	0 = Total Cov	er	Present?	Yes	No_	

Sampling Point: w8

Depth	Matr	12-01			- 1.	7 9	4.5	
(inches)	Color (moist)	%	Color (moist)	_ %	Type ¹	Loc2	Texture	Remarks
0-5	10yr 3/2	95	5yr 4/6	_ 5	<u>C</u>	M	Clay	
					_	_		
				-	_			
		-	-		_			
$\overline{}$		=	-	=				
	-		-	-	$\overline{}$			
T. 57 13		(-			VEN -130 -15
A		oletion, RM	=Reduced Matrix,	MS=Masked	d Sand Grain	ns.		Pore Lining, M=Matrix
Hydric Soil	Indicators:							or Problematic Hydric Soils ³ :
_ Histosol					yed Matrix ((S4)		Prairie Redox (A16)
_ Histic Ep	pipedon (A2)		_	Sandy Red	dox (S5)			urface (S7)
_ Black His	stic (A3)			Stripped M	latrix (S6)		Iron-Ma	inganese Masses (F12)
Hydroge	n Sulfide (A4)		100	Loamy Mu	cky Mineral	(F1)		nallow Dark Surface (TF12)
Stratified	Layers (A5)			Loamy Gle	eyed Matrix ((F2)	_ Other (Explain in Remarks)
	ick (A10)			Depleted N				
	d Below Dark Sur	ace (A11)	>	Redox Dar				
	ark Surface (A12)				Dark Surface			s of hydrophytic vegetation and
	lucky Mineral (S1		_	Redox Dep	oressions (F	8)		nd hydrology must be present, s disturbed or problematic.
5 cm Mu	icky Peat or Peat	(S3)					arii o	o dictar a con precion name.
etrictive I a	yer (if observed							
Strictive La	yel (III observed	•						
Type:	iyer (ii observed							
							Hydric Soil Prese	ent? Yes X No
Type: Depth (inch marks:	nes):						Hydric Soil Prese	ent? Yes No
Type: Depth (inch marks:	GY						Hydric Soil Prese	ent? Yes No
Type: Depth (inch marks: YDROLOG etland Hydr	GY ology Indicators		equired; check all t	hat apply)				
Type: Depth (inch marks: YDROLOG etland Hydr Primary Ind	GY ology Indicators			hat apply) ained Leaves	s (B9)		Secondary Ir	
Type: Depth (inch marks: YDROLOG etland Hydr Primary Inc Surface	GY ology Indicators dicators (minimun Water (A1)		Water-Sta	ained Leaves	s (B9)		Secondary Ir Surface S	ndicators (minimum of two require
Type: Depth (inch marks: YDROLOG etland Hydr Primary Inc Surface High Wa	GY cology Indicators dicators (minimun Water (A1) tter Table (A2)		Water-Sta	ained Leaves auna (B13)			Secondary IrSurface SDrainage	ndicators (minimum of two require oil Cracks (B6) Patterns (B10)
Type: Depth (inch marks: YDROLOG etland Hydr Primary Inc Surface High Wa Saturatio	GY cology Indicators dicators (minimun Water (A1) tter Table (A2)		— Water-Sta — Aquatic F — True Aqu	ained Leaves	B14)		Secondary Ir Surface S X Drainage Dry-Seaso	ndicators (minimum of two require
Type: Depth (inch marks: YDROLOG etland Hydr Primary Inc Surface High Wa Saturatio Water M	GY ology Indicators dicators (minimum Water (A1) tter Table (A2) on (A3)		Water-Sta Aquatic F True Aqu Hydroger	ained Leaves auna (B13) atic Plants (B	B14) or (C1)		Secondary Ir Surface S Drainage Dry-Seaso Crayfish B	ndicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2)
Type: Depth (inch marks: YDROLOG etland Hydr Primary Ind Surface High Wa Saturatic Water M Sedimer	GY ology Indicators dicators (minimum Water (A1) ater Table (A2) on (A3) larks (B1)		— Water-Sta — Aquatic F — True Aqu — Hydroger — Oxidized	ained Leaves auna (B13) atic Plants (B n Sulfide Odd	B14) or (C1) es on Living		Secondary Ir Surface S X Drainage Dry-Seaso Crayfish B Saturation	ndicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) durrows (C8)
Type: Depth (inch marks: TDROLOG Etland Hydr Primary Inc Surface High Wa Saturatic Water M Sedimer Drift Dep	GY ology Indicators dicators (minimum Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2)		— Water-Sta — Aquatic F — True Aqu — Hydroger — Oxidized — Presence	ained Leaves auna (B13) atic Plants (B n Sulfide Odo Rhizosphere	B14) or (C1) es on Living I Iron (C4)	Roots (C3	Secondary Ir Surface S Drainage Dry-Seaso Crayfish B Saturation Stunted or	ndicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8)
Type: Depth (inch marks: YDROLOG etland Hydr Primary Ind Surface High Wa Saturatio Water M Sedimer Drift Dep	GY ology Indicators dicators (minimum Water (A1) tter Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3)		— Water-Standard Mater-Standard Material Mate	ained Leaves auna (B13) atic Plants (B Sulfide Odo Rhizosphere of Reduced	B14) or (C1) es on Living I Iron (C4) n in Tilled So	Roots (C3	Secondary Ir Surface S Drainage Dry-Seaso Crayfish B Saturation Stunted or	ndicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) I Visible on Aerial Imagery (C9) I Stressed Plants (D1)
Type: Depth (inch marks: YDROLOG etland Hydr Primary Inc Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep	GY ology Indicators dicators (minimum Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4)	: of one is re	— Water-Sta — Aquatic F — True Aqu — Hydroger — Oxidized — Presence — Recent Ir — Thin Muc	ained Leaves rauna (B13) atic Plants (B n Sulfide Odo Rhizosphere of Reduced on Reduction	B14) or (C1) es on Living I Iron (C4) on in Tilled So	Roots (C3	Secondary Ir Surface S Drainage Dry-Seaso Crayfish B Saturation Stunted or	ndicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) I Visible on Aerial Imagery (C9) I Stressed Plants (D1)
Type: Depth (inch marks: YDROLOG etland Hydr Primary Ind Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio	GY ology Indicators dicators (minimum Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	of one is re	— Water-Sta — Aquatic F — True Aqu — Hydroger — Oxidized — Presence — Recent In — Thin Muc B7) — Gauge or	ained Leaves fauna (B13) atic Plants (B n Sulfide Odd Rhizosphere of Reduced on Reduction k Surface (C	B14) or (C1) es on Living I Iron (C4) in in Tilled Sc (7)	Roots (C3	Secondary Ir Surface S Drainage Dry-Seaso Crayfish B Saturation Stunted or	ndicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) Surrows (C8) I Visible on Aerial Imagery (C9) I Stressed Plants (D1)
Type: Depth (inch marks: YDROLOG etland Hydr Primary Ind Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio	GY ology Indicators dicators (minimum Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) osits (B3) at or Crust (B4) osits (B5) on Visible on Aer	of one is re	— Water-Sta — Aquatic F — True Aqu — Hydroger — Oxidized — Presence — Recent In — Thin Muc B7) — Gauge or	ained Leaves fauna (B13) atic Plants (B n Sulfide Odd Rhizosphere of Reduced on Reduction k Surface (C Well Data (I	B14) or (C1) es on Living I Iron (C4) in in Tilled Sc (7)	Roots (C3	Secondary Ir Surface S Drainage Dry-Seaso Crayfish B Saturation Stunted or	ndicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) Surrows (C8) I Visible on Aerial Imagery (C9) I Stressed Plants (D1)
Type: Depth (inch marks: YDROLOG etland Hydr Primary Ind Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely	GY ology Indicators dicators (minimum Water (A1) tter Table (A2) on (A3) larks (B1) nt Deposits (B2) osits (B3) at or Crust (B4) osits (B5) on Visible on Aer of Vegetated Conductions:	of one is re	Water-Standard Water-Standard Water-Standard Procedured Presence Recent In Thin Muc B7) Gauge or (B8) Other (Ex	ained Leaves fauna (B13) atic Plants (B n Sulfide Odd Rhizosphere of Reduced on Reduction k Surface (C Well Data (I	B14) or (C1) es on Living I Iron (C4) on in Tilled Se (7) D9) narks)	Roots (C3	Secondary Ir Surface S Drainage Dry-Seaso Crayfish B Saturation Stunted or	ndicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) I Visible on Aerial Imagery (C9) I Stressed Plants (D1)
Type: Depth (inch marks: YDROLOG etland Hydr Primary Inc Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely	GY ology Indicators dicators (minimun Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) on Visible on Aer or Vegetated Conductions: Present?	of one is re	Water-Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc B7) Gauge or (B8) Other (Ex	ained Leaves fauna (B13) atic Plants (B n Sulfide Odd Rhizosphere of Reduced on Reduction k Surface (C Well Data (I splain in Rem Depth (inches	B14) or (C1) es on Living I Iron (C4) in in Tilled Sc (7) D9) harks)	Roots (C3	Secondary Ir Surface S X Drainage Dry-Sease Crayfish B Saturation Stunted or Geomorph X FAC-Neut	ndicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) durrows (C8) I Visible on Aerial Imagery (C9) Te Stressed Plants (D1) nic Position (D2) ral Test (D5)
Type: Depth (inch marks: YDROLOG etland Hydr Primary Ind Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely eld Observa rface Water ater Table Pi turation Pre-	GY ology Indicators dicators (minimun Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aer of Vegetated Conditions: Present?	of one is re	Water-Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc B7) Gauge or (B8) Other (Ex	ained Leaves fauna (B13) atic Plants (B Sulfide Odo Rhizosphere of Reduced on Reduction k Surface (C Well Data (I splain in Rem	B14) or (C1) es on Living I Iron (C4) in in Tilled Sc (7) D9) harks)	Roots (C3	Secondary Ir Surface S Drainage Dry-Seaso Crayfish B Saturation Stunted or	ndicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) durrows (C8) I Visible on Aerial Imagery (C9) Te Stressed Plants (D1) nic Position (D2) ral Test (D5)
Type: Depth (inch marks: YDROLOG etland Hydr Primary Inc Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely eld Observa rface Water ater Table Produdes capille	GY ology Indicators dicators (minimum Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) on Visible on Aer of Vegetated Conditions: Present? sent? lary fringe)	of one is real Imagery (ave Surface	Water-Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc B7) Gauge or (B8) Other (Ex No X D No X D No X D	ained Leaves fauna (B13) atic Plants (B n Sulfide Odd Rhizosphere of Reduced on Reduction k Surface (C Well Data (I cplain in Rem Depth (inches Depth (inches	B14) or (C1) es on Living I Iron (C4) in in Tilled Sc i7) D9) harks)	Roots (C3)	Secondary in Surface S X Drainage Dry-Sease Crayfish B Saturation Stunted or Geomorph X FAC-Neut	ndicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) durrows (C8) I Visible on Aerial Imagery (C9) Te Stressed Plants (D1) nic Position (D2) ral Test (D5)
Type: Depth (inch marks: YDROLOG etland Hydr Primary Inc Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely eld Observa rface Water ater Table Produdes capille	GY ology Indicators dicators (minimum Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) on Visible on Aer of Vegetated Conditions: Present? sent? lary fringe)	of one is real Imagery (ave Surface	Water-Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc B7) Gauge or (B8) Other (Ex	ained Leaves fauna (B13) atic Plants (B n Sulfide Odd Rhizosphere of Reduced on Reduction k Surface (C Well Data (I cplain in Rem Depth (inches Depth (inches	B14) or (C1) es on Living I Iron (C4) in in Tilled Sc i7) D9) harks)	Roots (C3)	Secondary in Surface S X Drainage Dry-Sease Crayfish B Saturation Stunted or Geomorph X FAC-Neut	ndicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) durrows (C8) I Visible on Aerial Imagery (C9) Te Stressed Plants (D1) nic Position (D2) ral Test (D5)
Type: Depth (inch marks: YDROLOG etland Hydr Primary Inc Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely eld Observa rface Water ater Table Produdes capille	GY ology Indicators dicators (minimum Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) on Visible on Aer of Vegetated Conditions: Present? sent? lary fringe)	of one is real Imagery (ave Surface	Water-Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc B7) Gauge or (B8) Other (Ex No X D No X D No X D	ained Leaves fauna (B13) atic Plants (B n Sulfide Odd Rhizosphere of Reduced on Reduction k Surface (C Well Data (I cplain in Rem Depth (inches Depth (inches	B14) or (C1) es on Living I Iron (C4) in in Tilled Sc i7) D9) harks)	Roots (C3)	Secondary in Surface S X Drainage Dry-Sease Crayfish B Saturation Stunted or Geomorph X FAC-Neut	ndicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) durrows (C8) I Visible on Aerial Imagery (C9) Testressed Plants (D1) nic Position (D2) ral Test (D5)



Wetland Wetland 8		Sample Point w	/8	Longitude	Latitude
Cowardin Classification: _F	PEM	the state of the s		-94.535516	38.860672
Size:					
Landform: Drainageway					
Tree Stratum:					
Sapling/Shrub:					
Herb Stratum: Typha latifolia	Scirpus atrovirens	Lobelia siphilitica			
Vine Stratum:					
Hydric Soil Indicators: Red	ox Dark Surface (F6)			
Hydrology Indicators: Drain	nage Patterns (B10)				
Significant Nexus: No	Adjacent:	Abuts:	Stream Name:		
<u>Jurisdictional Status and C</u> Wetland is not adjacent to a jurisd					

Photo 1



Photo 2



Project/Site: Highway 150/Colorado	Ave.	City/C	ounty: Grand	dview (Jackson)		Date: 09/02		
Applicant/Owner: Platform Ventu	res			State: MO	Sampling F			
Investigator(s): Jack Finley					Township, Rang	e: S26 T4	7N R33W	/
Landform (hillslope, terrace, etc.):	Hillslope	Local r	elief (concav	e, convex, none): o	Convex			
Slope (%): 2-5% Lat: 38.8606			38.860692		Datum:	UTN	183	
Soil Map Unit Name: Sampsel silty c					/I classification:	UPL		
Are climatic / hydrologic conditions or	the site typical f	or this time of year?	Yes _X	No(If r	no, explain in Re	marks)		
Are Vegetation, Soil, or l				e "Normal Circumsta	ances" present?	Yes X	No	
Are Vegetation, Soil, or l				needed, explain any				
SUMMARY OF FINDINGS - A	ttach site ma	ap showing san	npling poi	nt locations, tra	ansects, imp	ortant fe	atures,	etc.
Hydrophytic Vegetation Present?	Yes	No X						
Hydric Soil Present?	Yes	No X	Is the Sam	pled Area				
Wetland Hydrology Present?	Yes	No X	within a W	etland?	Yes	No _	\times	
Remarks:			1					
VECETATION Line eciontifi	o nomeo of n	lanta						
VEGETATION - Use scientifi	C names of p		Indicator	Dominance Test w	orksheet:			
Tree Stratum (Plot size: 30 ft) % Cove		Status	Number of Dominar	nt Species That			
1.	30,		===	Are OBL, FACW, or	FAC:	0		(A)
2								
3.		-/	_	Total Number of Do Species Across All		2		/D\
5.			_	Species Across Air	oliaia.			(B)
		= Total Cover	_	Percent of Dominan	at Species			
Sapling/Shrub Stratum Plot size:		_		That Are OBL, FAC		0009	%	(A/B
t _i	_10 K				777072	-		
2.				Prevalence Index	worksheet:	- 1.		
3.				Total % C	Cover of:	Mult	iply by:	3
4.				OBL species	0	x 1 =	0	
5				FACW species	0	x 2 =	0	_
Hash Stratum (Diet size)	0	= Total Cover		FAC species FACU species	0	x 3 =	0	_
Herb Stratum (Plot size: 5 ft 1. Medicago lupulina		×		UPL species	100	x 4 = x 5 =	400	-
Heliopsis helianthoides	20	$-\frac{\sim}{\times}$	_	Column Totals:	100	(A)	400	(B)
3.			17.00		ence Index = B/A	0.16	-100	_,,,,
4.	_		_		2000	-		_
5.				and the second of the second of the second	egetation Indica			
6.					est for Hydrophy	100	on	
7.					nce Test is >50%			
8.					nce Index is ≤3.0 ogical Adaptation		a support	lina
9.		7			narks or on a sep			ing
10.					Hydrophytic Ve			
J	100	= Total Cover	0	15				
Woody Vine Stratum (Plot size:	30 ft			¹ Indicators of hyd			gy must l	be
t		ارست ان		present, unless of	listurbed or probl	ematic.		
2				Hydrophytic		- 20		
	0	= Total Cover		Vegetation Present?	Yes	No.	_X_	
Remarks: (Include photo numbers he	70 01 00 0 00 00 00 00 00 00 00 00 00 00	ata shoot)		1 Togother				
nemarks. (include prioto numbers ne	ere or on a separa	ate sneet.)						

Sampling Point: w8out

	ption: (Describe to Matrix	the depth		ent the in		confirm	the absence of in	dicators.)
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-16	10yr 4/4	100					Clay	Tiomano
0-10	10y1 4/4	_100		_	=		Clay	
	_	$\overline{}$		$\overline{}$	_	-		
		$\overline{}$						
7								
			=					
ype: C=Cor	centration, D=Depl	etion, RM=F	Reduced Matrix, MS	S=Masked	Sand Grai	ins.	² Location; PL=	Pore Lining, M=Matrix
Hydric Soi	I Indicators:						Indicators for	or Problematic Hydric Soils ³ :
Histosol	(A1)		S	Sandy Gley	ed Matrix	(S4)	Coast F	Prairie Redox (A16)
_	pipedon (A2)			Sandy Red		120		urface (S7)
	stic (A3)		_	Stripped Ma	200			anganese Masses (F12)
_	n Sulfide (A4)				ky Mineral	(F1)		hallow Dark Surface (TF12)
_	Layers (A5)			The state of the s	ed Matrix			Explain in Remarks)
_	ick (A10)			Depleted M		1/		
	d Below Dark Surface	re (A11)		the Control of the Control	Surface (F6)		
The state of the s	ark Surface (A12)	or (min)			ark Surface		3Indicator	s of hydrophytic vegetation and
_	fucky Mineral (S1)		_		ressions (F			nd hydrology must be present,
	icky Peat or Peat (S	201	_	ledox Deb	ressions (r	0)		s disturbed or problematic.
	yer (if observed):							
emarks: sturbed soil	profile.							ent? YesNo_X
YDROLO	GY							
etland Hydr	ology Indicators:							
Primary Inc	dicators (minimum o	f one is req	uired; check all tha	t apply)			Secondary Ir	ndicators (minimum of two require
Surface	Water (A1)		Water-Stain	ed Leaves	(B9)		Surface S	oil Cracks (B6)
High Wa	iter Table (A2)		Aquatic Fau	na (B13)			Drainage	Patterns (B10)
Saturation	on (A3)		True Aquation	c Plants (B	14)		Dry-Seaso	on Water Table (C2)
Water M	arks (B1)		Hydrogen S	ulfide Odo	r (C1)		Crayfish E	Burrows (C8)
Sedimer	nt Deposits (B2)		Oxidized Rh	izosphere	s on Living	Roots (C	Saturation	Visible on Aerial Imagery (C9)
Drift Dep	oosits (B3)		Presence of	Reduced	Iron (C4)		Stunted o	r Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Iron	Reduction	in Tilled S	ioils (C6)	Geomorpl	nic Position (D2)
Iron Dep	oosits (B5)		Thin Muck S	Surface (C	7)		FAC-Neut	ral Test (D5)
Inundati	on Visible on Aerial	Imagery (B	7) Gauge or W	ell Data (C	9)			
Sparsely	Vegetated Concav	re Surface (I	B8) Other (Expla	ain in Rem	arks)			
eld Observa	itions:							
rface Water	Present? Yes	S	No 😾 Dep	th (inches)			
ater Table P				th (inches				
turation Pre				th (inches		Wetlar	d Hydrology Pres	ent? Yes No X
cludes capil							4.75	
escribe Reco	orded Data (stream	gauge, mon	itoring well, aerial p	ohotos, pre	evious insp	ections),	if available:	
Austria								
emarks:								



Wetland		Sample Point w	8out	Longitude	Latitude
Cowardin Classification: UPL		the state of the s		38.860692	38.860692
Size:					
Landform: Hillslope					
Tree Stratum:					
Sapling/Shrub:					
Herb Stratum: Medicago lupulina	Heliopsis helia	nthoides			
Vine Stratum:					
Hydric Soil Indicators:					
Hydrology Indicators:					
Significant Nexus: No	Adjacent:	Abuts:	Stream Name		
Jurisdictional Status and Con	omente.				

Photo 1



Photo 2



Project/Site: Highway 150/Colorado A	ve.	City/County: Gran	ndview (Jackson)	Sampling Dat	te: 09/02/2020
Applicant/Owner: Platform Venture	\$S		State: MO	Sampling Poil	
Investigator(s): Jack Finley					S26 T47N R33W
	Hillslope	Local relief (conca	ve, convex, none): Con	ncave	
Slope (%): 2-5% Lat: 38.86088		Long:94.536303		Datum:	UTM83
Soil Map Unit Name: Sampsel silty cla				classification:	PEM
Are climatic / hydrologic conditions on t	he site typical for this time of	of year? Yes	No (If no,	, explain in Rema	rks)
Are Vegetation, Soil, or H	ydrologysignificantly	disturbed? A	re "Normal Circumstant	ces" present? Ye	s X No
Are Vegetation, Soil, or H			If needed, explain any a		
SUMMARY OF FINDINGS - At	tach site map showir	ng sampling po	int locations, tran	sects, impor	tant features, etc.
Hydrophytic Vegetation Present?	Yes X No				
Hydric Soil Present?	Yes X No	_ Is the Sa	mpled Area		
Wetland Hydrology Present?	Yes X No	within a	Wetland?	Yes X	No
Remarks:					
VEGETATION (II.)					
VEGETATION - Use scientific		The second	Dominance Test wor	rkehoot:	
Tree Stratum (Plot size: 30 ft	Absolute Domin) % Cover Specie		Number of Dominant		
1.			Are OBL, FACW, or F		1 (A)
2.					
3.			Total Number of Domi		
4		_,	Species Across All Str	rata:	1 (B)
5.			A COUNTY OF THE PARTY		
Sapling/Shrub Stratum Plot size:	= Total C	Sover	Percent of Dominant S That Are OBL, FACW		100% (A/E
			Prevalence Index wo	rksheet:	
3.			Total % Cov		Multiply by:
4.			OBL species		x 1 = 90
5.		= = =	FACW species	10	x 2 = 20
Carlo and a control	0 = Total C	Cover	FAC species	0	x 3 = 0
Herb Stratum (Plot size: 5 ft			FACU species	0	x 4 = 0
Persicaria punctata	80 X	OBL	UPL species		x 5 = 0
2. Carex frankii	10	OBL	Column Totals:		(A) <u>110</u> (B)
3. Bidens aristosa	10	FACW	Prevalence	ce Index = B/A =	1.10
4			Hydrophytic Vege	etation Indicator	s:
5.			X 1 - Rapid Tes	t for Hydrophytic	Vegetation
6.	_ >			e Test is >50%	
7			X 3 - Prevalence	e Index is ≤3.01	
8			4 - Morpholog		(Provide supporting
9				rks or on a separa	
10.	100 = Total C	Source	_ Problematic F	Hydrophytic Vege	ation (Explain)
Woody Vine Stratum (Plot size: 30		Jovei	¹ Indicators of hydric present, unless dist		d hydrology must be
2.			Hydrophytic	Programme	77.7
*	0 = Tota	al Cover	Vegetation Present?	Yes X	No
Remarks: (Include photo numbers here	e or on a separate sheet.)				

Sampling Point: w9

Depth	Matrix	5.0			- 1			
(inches)	Color (moist)	_%_	Color (moist)) _%_	Type ¹	Loc ²	Texture	Remarks
0-12	10yr 2/2	_95	5yr 3/4	5	<u>C</u>	<u>M</u>	Loam_	
		_			_	_		
		-	-		_			
		$\overline{}$	-		$\overline{}$	-		
$\overline{}$	$\overline{}$	_	-	-,	_	-	 (
		_	-		_	$\overline{}$		
5 C S	100000000000000000000000000000000000000			1.0			2. c. 3. c. 2. d. 4.	String Allered
	centration, D=Depl	etion, RM=	Reduced Matrix	, MS=Masked	d Sand Grain	ns.		Pore Lining, M=Matrix
	Indicators:			and the same	-31-C-31	Each.		or Problematic Hydric Soils ³ ;
_ Histosol			-		yed Matrix ((S4)		rairie Redox (A16)
	pipedon (A2)		-	_ Sandy Red			_	urface (S7)
_ Black His				Stripped M	28 64 84-30			nganese Masses (F12)
_	n Sulfide (A4)				cky Mineral			nallow Dark Surface (TF12)
_	Layers (A5)		2		yed Matrix	(F2)	Other (I	Explain in Remarks)
2 cm Mu		- 42.00		_ Depleted N				
and the second	Below Dark Surfa	ce (A11)	=	X Redox Dar			2	A. T. C. C
	ark Surface (A12)				ark Surface			of hydrophytic vegetation and hydrology must be present.
	lucky Mineral (S1)			Redox Dep	oressions (F	-8)		s disturbed or problematic.
5 cm Mu	cky Peat or Peat (5	63)						CONTRACTOR OF THE CONTRACTOR O
strictive La	yer (if observed):					1		
20.100.10 ===	yer (ii observed).							
Type:	iyer (ii observed).							
							Hydric Soil Prese	nt? Yes No
Type:	nes):						Hydric Soil Prese	nt? Yes No
Type: Depth (inch marks:	nes):						Hydric Soil Prese	nt? Yes <u> </u>
Type: Depth (inch marks: /DROLOGetland Hydro	gy	f one is re	quired; check all	that apply)				
Type: Depth (inch marks: /DROLOGetland Hydro Primary Ind	GY ology Indicators:	f one is re		that apply) tained Leaves	s (B9)		Secondary In	
Type: Depth (inch marks: /DROLOG etland Hydre Primary Ind Surface)	GY ology Indicators: dicators (minimum o	f one is re	_ Water-S	tained Leaves	s (B9)		Secondary In	dicators (minimum of two require
Type: Depth (inch marks: /DROLOG etland Hydre Primary Ind Surface High Wa	GY ology Indicators: dicators (minimum of Water (A1) oter Table (A2)	f one is re	Water-S Aquatic	tained Leaves Fauna (B13)			Secondary In Surface So Drainage I	dicators (minimum of two require oil Cracks (B6)
Type: Depth (inch marks: TDROLOG etland Hydro Primary Ind Surface High Wa X Saturatio	GY ology Indicators: dicators (minimum of Water (A1) other Table (A2)	f one is re	Water-S Aquatic True Aqu	tained Leaves	314)		Secondary In Surface So Drainage I Dry-Seaso	dicators (minimum of two require
Type: Depth (inch marks: PROLOG Etland Hydre Primary Ind Surface High Wa X Saturation Water M	GY ology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3)	f one is re	Water-S Aquatic True Aqu Hydroge	tained Leaves Fauna (B13) uatic Plants (B	B14) or (C1)		Secondary In Surface So Drainage I Dry-Seaso Crayfish B	edicators (minimum of two requires bil Cracks (B6) Patterns (B10) on Water Table (C2)
Type: Depth (inch marks: TDROLOG etland Hydre Primary Ind Surface High Wa X Saturatio Water M Sedimen	GY ology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) arks (B1)	f one is re	— Water-S — Aquatic — True Aquatic — Hydroge — Oxidized	tained Leaves Fauna (B13) uatic Plants (B en Sulfide Odd	314) or (C1) es on Living		Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation	odicators (minimum of two require poil Cracks (B6) Patterns (B10) on Water Table (C2) ourrows (C8)
Type: Depth (inch marks: TDROLOG Primary Ind Surface High Wa X Saturatio Water M Sedimen Drift Dep	ology Indicators: dicators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3)	f one is re	— Water-S — Aquatic — True Aqu — Hydroge — Oxidized — Presence	tained Leaves Fauna (B13) uatic Plants (B n Sulfide Odd d Rhizosphere	B14) or (C1) es on Living Iron (C4)	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	odicators (minimum of two required bil Cracks (B6) Patterns (B10) on Water Table (C2) ourrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1)
Type: Depth (inch marks: TDROLOG etland Hydre Primary Ind Surface V High Wa X Saturatio Water M Sedimen Drift Dep Algal Ma	GY ology Indicators: dicators (minimum of the Table (A2) on (A3) arks (B1) on Deposits (B2)	f one is re	— Water-S — Aquatic — True Aquatic — Hydroge — Oxidized — Presenc — Recent I	tained Leaves Fauna (B13) uatic Plants (B en Sulfide Odo d Rhizosphere e of Reduced	B14) or (C1) es on Living I Iron (C4) n in Tilled Se	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	edicators (minimum of two required bil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) onic Position (D2)
Type: Depth (inch marks: TOROLOG Primary Ind Surface High Wa X Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep	ology Indicators: dicators (minimum of Water (A1) dier Table (A2) on (A3) arks (B1) at Deposits (B2) cosits (B3) at or Crust (B4)		Water-S Aquatic True Aquatic Hydroge Oxidized Presenc Recent I Thin Mu	tained Leaves Fauna (B13) uatic Plants (Ban Sulfide Odo d Rhizosphere e of Reduced fron Reduction	B14) or (C1) es on Living I fron (C4) on in Tilled Se	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	edicators (minimum of two required bil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) onic Position (D2)
Type: Depth (inch marks: PROLOG etland Hydre Primary Ind Surface High Wa X Saturation Water M Sedimen Drift Dep Algal Ma Iron Dep Inundation	ology Indicators: dicators (minimum of the Table (A2) on (A3) carks (B1) on the Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5)	Imagery (I	Water-S Aquatic True Aqu Hydroge Oxidized Presenc Recent I Thin Mul	tained Leaves Fauna (B13) uatic Plants (B n Sulfide Odd Rhizosphere e of Reduced Iron Reduction ck Surface (C	B14) or (C1) es on Living I fron (C4) on in Tilled So (7) (D9)	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	edicators (minimum of two required bil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) onic Position (D2)
Type: Depth (inch marks: PROLOG etland Hydre Primary Ind Surface High Wa X Saturation Water M Sedimen Drift Dep Algal Ma Iron Dep Inundation	ology Indicators: dicators (minimum of Water (A1) arter Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial	Imagery (I	Water-S Aquatic True Aqu Hydroge Oxidized Presenc Recent I Thin Mul	tained Leaves Fauna (B13) uatic Plants (Ben Sulfide Odo d Rhizosphere e of Reduced fron Reduction ck Surface (Cor Well Data (I	B14) or (C1) es on Living I fron (C4) on in Tilled So (7) (D9)	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	edicators (minimum of two required bil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) onic Position (D2)
Type: Depth (inch marks: PROLOG Etland Hydre Primary Ind Surface High Wa X Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Inundatio Sparsely	GY ology Indicators: dicators (minimum of water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial of Vegetated Concav	Imagery (l e Surface	Water-S Aquatic True Aqu Hydroge Oxidized Presenc Recent I Thin Mu B7) Gauge o (B8) Other (E	tained Leaves Fauna (B13) uatic Plants (Ben Sulfide Odo d Rhizosphere e of Reduced fron Reduction ck Surface (Cor Well Data (I	B14) or (C1) es on Living I fron (C4) in in Tilled Si 7) D9) narks)	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	edicators (minimum of two required bil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) onic Position (D2)
Type: Depth (inch marks: TDROLOG Primary Ind Surface High Wa X Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Inundatio Sparsely	GY ology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial of Vegetated Concavitions: Present? Ye	Imagery (lee Surface	Water-S Aquatic True Aqu Hydroge Oxidized Presenc Recent I Thin Mu B7) Gauge of (B8) Other (E	tained Leaves Fauna (B13) uatic Plants (Ben Sulfide Odo d Rhizosphere e of Reduced fron Reduction ck Surface (Cor Well Data (I explain in Rem	B14) or (C1) es on Living I Iron (C4) in in Tilled Si (7) D9) narks)	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	edicators (minimum of two required bil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) onic Position (D2)
Type: Depth (inch marks: TOROLOG Primary Ind Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Inundatic Sparsely eld Observa rface Water ater Table Prituration Pres	ology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial of Vegetated Concavitions: Present? Yesent? Yesent? Yesent?	Imagery (I	Water-S Aquatic True Aquatic True Aquatic Hydroge Oxidized Presenc Recent I Thin Mul B7) Gauge of (B8) Other (E	tained Leaves Fauna (B13) uatic Plants (B en Sulfide Odc d Rhizosphere e of Reduced fron Reduction ck Surface (C or Well Data (I explain in Rem	B14) or (C1) es on Living I Iron (C4) in in Tilled Si	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or	dicators (minimum of two require bil Cracks (B6) Patterns (B10) on Water Table (C2) currows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oic Position (D2) ral Test (D5)
Type: Depth (inch marks: PROLOG Etland Hydre Primary Ind Surface High Wa X Saturation Water Marcon Sediment Drift Depton Algal Marcon Iron Depton Inundation Sparsely Eld Observation Prescludes capill	ology Indicators: dicators (minimum of Water (A1) arks (B1) arks (B1) at or Crust (B4) posits (B5) an Visible on Aerial of Vegetated Concavitions: Present? Yesent? Yesent? Yesent? Yesent?	Imagery (I	Water-S Aquatic True Aqi Hydroge Oxidized Presend Recent I Thin Mul B7) Gauge of (B8) Other (E	tained Leaves Fauna (B13) uatic Plants (Ben Sulfide Odd d Rhizosphere e of Reduced fron Reduction ck Surface (Cor Well Data (Ben) Explain in Rem Depth (inches) Depth (inches)	B14) or (C1) es on Living I fron (C4) in in Tilled Si 7) D9) harks)	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or X Geomorph X FAC-Neutr	dicators (minimum of two require bil Cracks (B6) Patterns (B10) on Water Table (C2) currows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oic Position (D2) ral Test (D5)
Type: Depth (inch marks: PROLOG Etland Hydre Primary Ind Surface High Wa X Saturation Water Marcon Sediment Drift Depton Algal Marcon Iron Depton Inundation Sparsely Eld Observation Prescludes capill	ology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial of Vegetated Concavitions: Present? Yesent? Yesent? Yesent?	Imagery (I	Water-S Aquatic True Aqi Hydroge Oxidized Presend Recent I Thin Mul B7) Gauge of (B8) Other (E	tained Leaves Fauna (B13) uatic Plants (Ben Sulfide Odd d Rhizosphere e of Reduced fron Reduction ck Surface (Cor Well Data (Ben) Explain in Rem Depth (inches) Depth (inches)	B14) or (C1) es on Living I fron (C4) in in Tilled Si 7) D9) harks)	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or X Geomorph X FAC-Neutr	dicators (minimum of two require bil Cracks (B6) Patterns (B10) on Water Table (C2) currows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oic Position (D2) ral Test (D5)
Type: Depth (inch marks: PROLOG Etland Hydre Primary Ind Surface High Wa X Saturatio Water Mark Sedimen Drift Dep Algal Mark Iron Dep Inundatio Sparsely Eld Observa rface Water ater Table Prituration Prescueses capill	ology Indicators: dicators (minimum of Water (A1) arks (B1) arks (B1) at or Crust (B4) posits (B5) an Visible on Aerial of Vegetated Concavitions: Present? Yesent? Yesent? Yesent? Yesent?	Imagery (I	Water-S Aquatic True Aqi Hydroge Oxidized Presend Recent I Thin Mul B7) Gauge of (B8) Other (E	tained Leaves Fauna (B13) uatic Plants (Ben Sulfide Odd d Rhizosphere e of Reduced fron Reduction ck Surface (Cor Well Data (Ben) Explain in Rem Depth (inches) Depth (inches)	B14) or (C1) es on Living I fron (C4) in in Tilled Si 7) D9) harks)	Roots (C3	Secondary In Surface So Drainage I Dry-Seaso Crayfish B Saturation Stunted or X Geomorph X FAC-Neutr	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oil Position (D2) ral Test (D5)



Wetland Wetland 9		Sample Point ws		Longitude	Latitude
Cowardin Classification:	PEM	the state of the		-94.536307	38.860885
Size:					
Landform: Hillslope					
Tree Stratum:					
Sapling/Shrub:					
Herb Stratum: Persicaria pur	nctata Carex frankii	Bidens aristosa			
Vine Stratum:					
Hydric Soil Indicators: Rec	lox Dark Surface (F6)			
Hydrology Indicators Sate	uration (A3)				
Significant Nexus: No	Adjacent:	Abuts:	Stream Nam	ne:	
Jurisdictional Status and C					
Connected to ephemeral stream	which is not jurisdict	ional under the NWPR.			

Photo 1



Photo 2



Photo 3 Photo 4

Wetland Determination Data Form - Midwest Region

Project/Site: Highway 150/Colorado Ave.		_ City/Ci	ounty: Gran	ndview (Jackson)	Sampling D			
Applicant/Owner: Platform Ventures				State: MO	Sampling P			
nvestigator(s):Jack Finley					ownship, Range	S26 T47	7N R33W	
andform (hillslope, terrace, etc.): Hillslop	e	The second second		ve, convex, none): Co		7544		
Slope (%): 2-5% Lat: 38.860882			-94.536234		Datum:	UTN	183	
Soil Map Unit Name: Sampsel silty clay loam.			WK TV		classification:	UPL		
Are climatic / hydrologic conditions on the site					, explain in Rer			
Are Vegetation, Soil, or Hydrolog	- A			re "Normal Circumstar			No_	
	y naturally			If needed, explain any			200	
SUMMARY OF FINDINGS - Attach			pling po	oint locations, trai	nsects, impo	ortant fe	atures,	etc.
Hydrophytic Vegetation Present? Yes								
Hydric Soil Present? Yes	No		the second second second	mpled Area		5.8		
Wetland Hydrology Present? Yes	No	<u> </u>	within a	Wetland?	Yes	No _	<u>X_</u>	
Remarks:			4					
VEGETATION - Use scientific name	e of plants							
PEGETATION - Ose scientific flame		ominant	Indicator	Dominance Test wo	rksheet:			
Tree Stratum (Plot size: 30 ft)		ominant pecies?	Status	Number of Dominant				
1. Ulmus americana	30	×	FACW	Are OBL, FACW, or F	AC:	11		(A)
2. Crataegus sp.		×						
3. Gleditsia triacanthos	30	<u>×</u>	FACU	Total Number of Dom		_		
4				Species Across All S	rata:	5	_	(B)
5.		al Cover		45.007.52.00.0	<u> </u>			
Sapling/Shrub Stratum Plot size: 15 ft	90 = Tot	ai Covei		Percent of Dominant That Are OBL, FACW		20%		(A/E
Lonicera maackii	80	×	NI	mar Are ODE, FACT	, or 1 Ac.	2070	_	(PUL
2.				Prevalence Index w	orksheet:			_
3.				Total % Co		Mult	iply by:	
4.				OBL species	0	x 1 =	0	Ξ.
5.				FACW species	30	x 2 =	60	
	80 = Tot	al Cover		FAC species	0	x 3 =	0	2
Herb Stratum (Plot size: 5 ft)				FACU species	60	x 4 =	240	
Ageratina altissima	30	<u>×</u>	FACU	UPL species	0	x 5 =	0	
2				Column Totals:	90	(A)	300	_ (B)
3.				Prevaler	ice Index = B/A	= 3.33		_
4				Hydrophytic Veg	etation Indicat	ors:		
5				1 - Rapid Tes	st for Hydrophyt	ic Vegetati	on	
6				2 - Dominano	ce Test is >50%			
			_	3 - Prevalenc	e Index is ≤3.0			
8.			_		gical Adaptation			ng
9.					irks or on a sep			
0		al Causes	_	_ Problematic	Hydrophytic Ve	getation' (E	explain)	
Woody Vine Stratum (Plot size: 30 ft	30 = Tot	al Cover		¹ Indicators of hydr	c soil and watte	and hydrolo	ow must b	20
1.				present, unless dis			gy must t	N.C.
W-				Hydrophytic				
2.			_	Vegetation	132.5	614		
2.	0 =	Total Cover		Present?	Yes	No	_X_	

US Army Corps of Engineers Midwest Region - Version 2.0

Sampling Point: w9out

ofile Descrip Depth	Matrix			Redox Feat	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc2	Texture	Remarks
0-4	10yr 2/2	100					Loam	
4-16	10yr 3/2	98	5yr 3/4	2	С	М	Loam	
	$\overline{}$	_			$\overline{}$	-		
				=	=			
_				_		_	_	-
ype: C=Con	centration, D=Deple	etion, RM=	Reduced Matrix, M	 IS=Masked	Sand Grai	ns.	² Location; PL=	=Pore Lining, M=Matrix
Hydric Soil	Indicators:						Indicators t	or Problematic Hydric Soils ³ :
Histosol	(A1)			Sandy Gley	ed Matrix ((S4)	Coast	Prairie Redox (A16)
_	pipedon (A2)		_	Sandy Red				Surface (S7)
Black His			_	Stripped Ma				anganese Masses (F12)
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1)								Shallow Dark Surface (TF12)
_	Layers (A5)			Loamy Gle	7.			(Explain in Remarks)
2 cm Mu				Depleted M				,,
	Below Dark Surfac	e (A11)		Redox Darl		F6)		
The state of the s	ark Surface (A12)	34.14	_	Depleted D			3Indicator	rs of hydrophytic vegetation and
	lucky Mineral (S1)		_	Redox Dep			wetla	and hydrology must be present.
	cky Peat or Peat (S	3)	_				unles	ss disturbed or problematic.
	and the state of							
strictive La	ver (if observed):							
	yer (if observed):							
Type: Depth (inchemarks:							Hydric Soil Pres	ent? YesNo_X
Type: Depth (inch emarks:	es):						Hydric Soil Pres	ent? YesNo_X
Type: Depth (inchemarks:	gy						Hydric Soil Pres	ent? YesNo_X
Type: Depth (inchemarks: YDROLOGetland Hydro	GY ology Indicators:	f one is rec	nuired: check all th	at apply)				
Type: Depth (inchemarks: YDROLOG etland Hydro Primary Ind	GY ology Indicators: licators (minimum o	f one is rec			s (B9)		Secondary	ndicators (minimum of two require
Type: Depth (inch emarks: YDROLOG etland Hydre Primary Ind Surface)	GY ology Indicators: licators (minimum of Water (A1)	f one is rec	Water-Stai	ned Leaves	s (B9)		Secondary Surface S	Indicators (minimum of two require
Type: Depth (inch emarks: YDROLOG etland Hydro Primary Ind Surface 1 High Wa	GY ology Indicators: licators (minimum of Water (A1) ter Table (A2)	f one is rec	Water-Stail Aquatic Fa	ned Leaves una (B13)			Secondary Surface S Drainage	indicators (minimum of two require Soil Cracks (B6) Patterns (B10)
Type: Depth (inch emarks: YDROLOG etland Hydro Primary Ind Surface V High Wa Saturatio	GY ology Indicators: licators (minimum of Water (A1) ter Table (A2) on (A3)	f one is rec	Water-Stail Aquatic Fa True Aquat	ned Leaves una (B13) tic Plants (E	314)		Secondary Surface S Drainage Dry-Seas	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2)
Type: Depth (inch emarks: YDROLOG etland Hydro Primary Ind Surface N High Wa Saturatio Water M	GY ology Indicators: licators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1)	f one is rec	— Water-Stail — Aquatic Fa — True Aquat — Hydrogen S	ned Leaves una (B13) tic Plants (E Sulfide Odo	314) or (C1)	Boots (C	Secondary Surface S Drainage Dry-Seas Crayfish	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8)
Type: Depth (inch emarks: YDROLOG etland Hydro Primary Ind Surface V High Wa Saturatio Water M: Sedimen	GY ology Indicators: licators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2)	f one is rec	Water-Stail Aquatic Fa True Aquat Hydrogen S Oxidized R	ned Leaves una (B13) tic Plants (E Sulfide Odo thizosphere	314) r (C1) s on Living	Roots (C	Secondary Surface S Drainage Dry-Seas Crayfish S3) Saturatio	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9)
Type: Depth (inch emarks: YDROLOG etland Hydro Primary Ind Surface V High Wa Saturatio Water Mark Sedimen Drift Dep	ology Indicators: licators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3)	f one is rec	— Water-Stail — Aquatic Fa — True Aquat — Hydrogen S — Oxidized R — Presence of	ned Leaves una (B13) tic Plants (E Sulfide Odo hizosphere of Reduced	314) r (C1) s on Living Iron (C4)		Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Type: Depth (inch emarks: YDROLOG etland Hydro Primary Ind Surface V High Wa Saturatio Water M: Sedimen Drift Dep Algal Ma	ology Indicators: licators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) cosits (B3) at or Crust (B4)	f one is rec	Water-Stail Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of	ned Leaves una (B13) tic Plants (E Sulfide Odo thizosphere of Reduced n Reduction	314) or (C1) s on Living Iron (C4) o in Tilled S		Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) Or Stressed Plants (D1) Shic Position (D2)
Type: Depth (inch emarks: YDROLOG etland Hydro Primary Ind Surface N High Wa Saturatio Water M: Sedimen Drift Dep Algal Ma Iron Dep	ology Indicators: licators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		— Water-Stail — Aquatic Fa — True Aquat — Hydrogen S — Oxidized R — Presence c — Recent Iron — Thin Muck	ned Leaves una (B13) tic Plants (E Sulfide Odo hizosphere of Reduced n Reduction Surface (C	314) or (C1) s on Living Iron (C4) or in Tilled S 7)		Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Type: Depth (inch emarks: YDROLOG etland Hydre Primary Ind Surface I High Wa Saturatio Water Mater Ma	ology Indicators: licators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) cosits (B3) at or Crust (B4)	Imagery (E	— Water-Stail — Aquatic Fa — True Aquat — Hydrogen S — Oxidized R — Presence of Recent Iron — Thin Muck 87) — Gauge or V	ned Leaves una (B13) tic Plants (E Sulfide Odo thizosphere of Reduced of Reduction Surface (C Vell Data (I	314) or (C1) s on Living lron (C4) or in Tilled S 7)		Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) Or Stressed Plants (D1) Shic Position (D2)
Type: Depth (inch emarks: YDROLOG etland Hydre Primary Ind Surface I High Wa Saturatio Water Mater Ma	ology Indicators: licators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial of Vegetated Concav	Imagery (E	— Water-Stail — Aquatic Fa — True Aquat — Hydrogen S — Oxidized R — Presence of Recent Iron — Thin Muck 87) — Gauge or V	ned Leaves una (B13) tic Plants (E Sulfide Odo thizosphere of Reduced of Reduction Surface (C Vell Data (I	314) or (C1) s on Living lron (C4) or in Tilled S 7)		Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) Or Stressed Plants (D1) Shic Position (D2)
Type: Depth (inch emarks: YDROLOG etland Hydro Primary Ind Surface N High Wa Saturatio Water Mi Sedimen Drift Dep Algal Ma Iron Dep Inundatio Sparsely	ology Indicators: licators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial of Vegetated Concav	Imagery (E e Surface	Water-Stail Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck Gauge or V (B8) Other (Exp	ned Leaves una (B13) tic Plants (E Sulfide Odo thizosphere of Reduced of Reduction Surface (C Vell Data (I	s 14) or (C1) or (C1) or Living Iron (C4) or in Tilled S (7) (29) or arks)		Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicators (minimum of two required Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) Or Stressed Plants (D1) Shic Position (D2)
Type: Depth (inch emarks: YDROLOG etland Hydro Primary Ind Surface V High Wa Saturatio Water Mi Sedimen Drift Dep Algal Ma Iron Dep Inundatio Sparsely	ology Indicators: licators (minimum or Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial of Vegetated Concave tions: Present? Yes	Imagery (E e Surface	Water-Stail Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck Gauge or V (B8) Other (Exp	ned Leaves una (B13) tic Plants (E Sulfide Odo thizosphere of Reduced in Reduction Surface (C Well Data (D lain in Rem	s 14) or (C1) s on Living Iron (C4) n in Tilled S 7) D9) narks)		Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicators (minimum of two requires Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) Or Stressed Plants (D1) Shic Position (D2)
Type: Depth (inch emarks: YDROLOG etland Hydro Primary Ind Surface V High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Inundatio Sparsely eld Observa	ology Indicators: licators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial of Vegetated Concav attons: Present? Yes resent? Yes	Imagery (E e Surface	Water-Stail Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck (B8) Other (Exp	ned Leaves una (B13) tic Plants (E Sulfide Odo thizosphere of Reduced in Reduction Surface (C Well Data (E lain in Rem	s 14) or (C1) os on Living Iron (C4) on in Tilled S 7) os) arks)	oils (C6)	Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) or Stressed Plants (D1) whic Position (D2) Intral Test (D5)
Type: Depth (inch emarks: YDROLOG etland Hydre Primary Ind Surface Mater Depth Mater Mater Depth Mater Mater Table Proturation Prescued Scapill	ology Indicators: licators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial vegetated Concav tions: Present? Yes sent? Yes ary fringe)	Imagery (E e Surface	Water-Stail Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck (B8) Other (Exp	ned Leaves una (B13) tic Plants (E Sulfide Odo thizosphere of Reduced on Reduction Surface (C' Vell Data (E lain in Rem tepth (inches tepth (inches	s 14) or (C1) s on Living lron (C4) on in Tilled S 7) D9) arks)	wettar	Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of Geomorp FAC-Neu	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) or Stressed Plants (D1) whic Position (D2) Intral Test (D5)
Type: Depth (inch emarks: YDROLOG etland Hydre Primary Ind Surface Mater Depth Mater Mater Depth Mater Mater Table Proturation Prescued Scapill	ology Indicators: licators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial of Vegetated Concav stions: Present? Yes sent? Yes	Imagery (E e Surface	Water-Stail Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck (B8) Other (Exp	ned Leaves una (B13) tic Plants (E Sulfide Odo thizosphere of Reduced on Reduction Surface (C' Vell Data (E lain in Rem tepth (inches tepth (inches	s 14) or (C1) s on Living lron (C4) on in Tilled S 7) D9) arks)	wettar	Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of Geomorp FAC-Neu	Indicators (minimum of two requires Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) Or Stressed Plants (D1) Indic Position (D2) Intral Test (D5)
Type: Depth (inch emarks: YDROLOG etland Hydre Primary Ind Surface Mater Depth Mater Mater Depth Mater Mater Table Proturation Prescued Scapill	ology Indicators: licators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial vegetated Concav tions: Present? Yes sent? Yes ary fringe)	Imagery (E e Surface	Water-Stail Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck (B8) Other (Exp	ned Leaves una (B13) tic Plants (E Sulfide Odo thizosphere of Reduced on Reduction Surface (C' Vell Data (E lain in Rem tepth (inches tepth (inches	s 14) or (C1) s on Living lron (C4) on in Tilled S 7) D9) arks)	wettar	Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of Geomorp FAC-Neu	Indicators (minimum of two required Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) or Stressed Plants (D1) whice Position (D2) Intral Test (D5)

US Army Corps of Engineers Midwest Region - Version 2.0



Wetland		Sample Point	w9out	Longitude	Latitude
Cowardin Classification:		· Davidano de		-94.536234	38.860882
Size:					
Landform: Hillslope					
Tree Stratum: Ulmus americ	ana Crataegus sr	o. Gleditsia triacanthos			
Sapling/Shrub: Lonicera ma	ackii				
Herb Stratum: Ageratina alti	ssima				
Vine Stratum:					
Hydric Soil Indicators:					
Hydrology Indicators:					
Significant Nexus: No	_ Adjacent: _	Abuts:	Stream Name		
Jurisdictional Status and	Commente:				

Photo 1



Photo 2



Photo 3 Photo 4

APPENDIX C Stream Assessment Data Forms



Date: 8/25/202	20]1	nvestigator(s):			38.864139 -94.531278
Feature ID:	Tributary	y 1			Stream Bottom Composition:
Unique Site ID:	T1				Ssilt □concrete □sand □muck
Project name:	Highway	150/Colorado	Ave.		
Project #:	020-241	7			bedrock
County, State:	Jackson,	Missouri			Riparian Type: Surface Flow:
Stream Classifica	ation:	□TNW	⊠ RPW	□Non-RPW	☑ Forested ☑ Discrete
Side Slopes:	1:1 🔲	2:1	□3:1	4:1 or >	Herbaceous Confined Ag. Field Discrete and Confined
Hydrology:			☐ Standing	None	Overland Sheet Flow
Water Color/Qu	ality:	Clear	Discolored	Oily film	Stream Characteristics: Natural Artificial Manipulated
Stream Has:		⊠Bed/Bank	⊠онwм:		Explain Artificial/Manipulated:
Tributary Geome	etry:	Relatively :	Straight	Meandering	
OHWM width:	20	Top of ba of bank v	nk to top vidth:	30	Stream Type: Perennial Intermittent Ephemeral Draws/Gullies/Erosional Pattern
OHWM height:	1ft	Top of Ba height:	nk	8	Stream Type Rational: Current flow and well developed channel.
Riparian Buffer V	Vidth:	N/E side: S/W side:		Ft.	
Buffer (adjacent	bank) veget		1	11.	
Walnut, hackberi	y, bush ho	oneysuckle			
					Significant Nexus: Yes No Explain; Flows into the Little Blue River which eventually flows in the Missouri River, a traditional navigable river.
OHWM has: Clear, natural shelving veg. matted de leaf litter distu	own or abso	scour schang	e in plant comi	munity	Stream Condition/Stability: excessive erosion
Biological Functio	n and Comr	nents:			

Upstream Photo:







Date: 8/25/20	20]	nvestigator(s):	-		38.863899 -94	.531144		
Feature ID:	Tributary	y 2			Stream Bottom Composition:			
Unique Site ID:	T2				Ssilt □concrete □muck			
Project name:		150/Colorado	Ave.		gravel other:			
Project #:	020-2417	7			bedrock			
County, State:	Jackson,	Missouri			Riparian Type:	Surface Flow:		
Stream Classific	ation:	□ TNW	RPW	⊠Non-RPW	Forested	⊠Discrete □Confined		
Side Slopes:	1:1	2:1	⊠3:1	☐4:1 or >	Herbaceous Ag. Field	Discrete and Confined		
Hydrology:		Flowing	☐ Standing	None None		Overland Sheet Flow		
Water Color/Qu	ality:	Clear	Discolored	Oily film	Stream Characteristics: Natural	Artificial Manipulated		
Stream Has:		⊠Bed/Bank	⊠онwм:		Explain Artificial/Manipulated:			
Tributary Geom	etry:	Relatively	Straight	Meandering				
OHWM width:	OHWM width: 3ft Top of bank to top 3ft of bank width:			3ft	Stream Type: Perennial Intermittent XEpher	neral Draws/Gullies/Erosional Pattern		
OHWM height:	6in	Top of Ba height:	enk	4ft	Stream Type Rational: No flow, little channel development.	_		
Riparian Buffer \	Width:	N/E side S/W side	400	Ft.				
Buffer (adjacent	bank) veget		•					
Black walnut, ha	ckberry, do	ogwood, bush	honeysuckle					
					Significant Nexus: Yes No Explain: Ephemeral streams are not jurisdiction	nal under the NWPR.		
OHWM has: Clear, natural shelving weg. matted d leaf litter distributions clear c	own or absi urbed	ent Scour	ge in plant comi	nunity	☐bank collapse	exposed tree roots Steep side slopes vegetated banks stable stream channel incised stream channel		
PIOIORICAI FURICUO	in and Comi	HEIRS.						









Date: 08/21/2	020];	ivestigator(s):			38.863457 -94.	541015		
Feature ID:	Tributary	/ 3			Stream Bottom Composition:			
Unique Site ID:	Т3				Ssilt □concrete □sand □muck			
Project name:	Highway	150/Colorado	Ave.			cover, type):		
Project #:	020-2417	7			bedrock			
County, State:	Jackson,	Missouri			Riparian Type:	Surface Flow:		
Stream Classific	ation:	□TNW	RPW	⊠Non-RPW	Forested	Discrete		
Side Slopes:	1:1	2:1	□3:1	4:1 or >	Herbaceous Ag. Field	☐ Confined ☐ Confined		
Hydrology:		Flowing	Standing	None None		Overland Sheet Flow		
Water Color/Qu	ality:	Clear	Discolored	Oily film	Stream Characteristics: Natural	Artificial Manipulated		
Stream Has:		⊠Bed/Bank	⊠онwм:		Explain Artificial/Manipulated:			
Tributary Geom	etry:	Relatively	Straight	Meandering				
OHWM width:	OHWM width: 3ft Top of bank to top 15 ft of bank width:				Stream Type: Perennial Intermittent Ephemeral Draws/Gullies/Erosional Pattern			
OHWM height:	6in	Top of Ba height:	enk	8ft	Stream Type Rational: Dry channel, no apparent development that would indicate groundwater			
Riparian Buffer \	Width:	N/E side		Ft.	connection.	•		
Buffer (adjacent	bank) veget			rı.				
Honeysuckle, do	, ,		ry					
					Significant Nexus: Yes No Explain: Ephemeral streams are not jurisdiction:	al under the NWPR.		
OHWM has: clear, natural shelving veg. matted d leaf litter disto	own or abse urbed	ent scour	ge in plant com	munity	bank collapse	exposed tree roots Steep side slopes Vegetated banks stable stream channel incised stream channel		
Biological Functio	n and Comr	nents:						







Date: 08/28/2020	Investigator(s)			38.863864 -94.	534279
Feature ID: Tributal Unique Site ID: t4 Project name: Highway Project #: 020-241	y 150/Colorado	o Ave.		Stream Bottom Composition: Ssilt Concrete Sand Muck Gravel Other: Cobble Vegetation (%)	cover, type):
County, State: Jackson	n, Missouri			Riparian Type:	Surface Flow:
Stream Classification:	□TNW	RPW	⊠Non-RPW	Forested	Discrete
Side Slopes: 1:1	⊠ 2:1	3:1	☐4:1 or >	Herbaceous Ag. Field	☐ Confined ☐ Discrete and Confined
Hydrology:	Flowing	Standing	None None		Overland Sheet Flow
Water Color/Quality:	Clear	Discolored	Oily film	Stream Characteristics: Natural	Artificial Manipulated
Stream Has:	⊠Bed/Bank	⊠онwм:		Explain Artificial/Manipulated:	
Tributary Geometry:	Relatively	Straight	Meandering		
OHWM width: 1.5 ft.	Top of b of bank	ank to top width:	8 ft.	Stream Type: Perennial Intermittent Ephen	neral Draws/Gullies/Erosional Pattern
OHWM height: 0.5 ft.	Top of B height:	ank	4 ft.		development and no likely groundwater
Riparian Buffer Width:	N/E side	50	Ft. Ft.	connection	
Buffer (adjacent bank) vege bush honeysuckle	etation:			Significant Nexus: Yes No Explain: Ephemeral streams are not jurisdiction	al under the NWPR.
OHWM has: Clear, natural line on bank				bank collapse cut-off channels riffles/runs	exposed tree roots steep side slopes vegetated banks stable stream channel incised stream channel
Biological Function and Com	ments:				
Upstream Photo:				Downstream Photo:	



Date: 8/27/2020 Investigator(s):		38.859239 -94.540207	ASSOCIATES		
Feature ID: Tributary 5 Unique Site ID: T5 Project name: Highway 150/Colorado Ave. Project #: 020-2417		Stream Bottom Composition: Silt Concrete Sand Muck Gravel Other: Cobble Vegetation (% cover, type): Bedrock			
County, State: Jackson, Missouri		Riparian Type: Surface Flow:			
Stream Classification: TNW RPW	■Non-RPW	Forested Discrete			
	4:1 or >	Herbaceous Confined Ag. Field Discrete and Confined Overland Sheet			
Hydrology:	None	D Cloverlaing Street	riow		
Water Color/Quality: Clear Discolored	Oily film		anipulated		
Stream Has: Bed/Bank OHWM:		Explain Artificial/Manipulated:			
Tributary Geometry: Relatively Straight	Meandering				
OHWM width: 1ft Top of bank to top 3ft of bank width:	t	Stream Type: Perennial Intermittent Ephemeral Draws/Gulli	ies/Erosional Pattern		
OHWM height: 6in Top of Bank height: 2ft	t	Stream Type Rational: Very little flow, un-apparent groundwater connection.			
Riparian Buffer Width: N/E side: 30 Ft S/W side: 20 Ft					
Buffer (adjacent bank) vegetation:	<u>`</u>	-			
Honeysuckle, black willow, red cedar					
		Significant Nexus: Yes No Explain: Ephemeral streams are not jurisdictional under the NWPR.			
OHWM has: Clear, natural line on bank	unity	Stream Condition/Stability: excessive erosion			

Upstream Photo: South



Downstream Photo: North





Date: 8/27/202	0 I n	vestigator(s):			38.	859913 -94.5	541233	
Feature ID:	Tributary	6			Stream Bottom Compo	osition:		
Unique Site ID:	T6				⊠silt □sand	concrete muck		
Project name:	Highway	150/Colorado	Ave.		☐ ☐ gravel ☐ other: ☐ cobble ☐ vegetation (% cover, type):			
Project #:	020-2417	,			bedrock			
County, State:	Jackson,	Missouri			Riparian Type:		Surface Flow:	
Stream Classificat	tion:	□TNW	RPW	⊠Non-RPW	Forested		Discrete	
Side Slopes:	1:1	⊠ 2:1	3:1	4:1 or >	Herbaceous Ag. Field		☐Confined ☐Discrete and Confined	
Hydrology:		Flowing	Standing	None None			Overland Sheet Flow	
Water Color/Qua	lity:	Clear	Discolored	Oily film	Stream Characteristics		Artificial Manipulated	
Stream Has:		⊠Bed/Bank	⊠онwм:		Explain Artificial/Mani	ipulated:		
Tributary Geomet	try:	⊠ Relatively	Straight	Meandering				
OHWM width:	1ft	Top of bank v	nk to top vidth:	10ft	Stream Type:	ittent X Ephem	eral Draws/Gullies/Erosional Pattern	
OHWM height:	IWM height: 6in Top of Bank 10ft height:				Stream Type Rational: no flowing water or app	parent connection	n to groundwater.	
Riparian Buffer W	idth:	N/E side	30	Ft.			-	
		S/W side:	30	Ft.				
Buffer (adjacent b								
Red cedar,honeys	suckie, r <u>i</u> oi	ney Locust, p	III Oak					
					Significant Nexus: Yes No Explain: Ephemeral streams are not jurisdictional under the NWPR.			
					Ephemeral streams are	e not jurisdictiona	il under the NWPR.	
OHWM has:					Stream Condition/Stability	<i>y</i> :		
Clear, natural lin	ne on bank		k line		excessive erosion	<u> </u>	exposed tree roots	
shelving veg. matted do	wn or abse	scour			bank collapse Cut-off channels	F	steep side slopes vegetated banks	
☐ leaf litter distur		□chang □other	e in plant com	munity	riffles/runs		stable stream channel	
		∟Jouner	•		pools		incised stream channel	
Biological Function	and Comm	nents:						
Upstream Photo): 				Downstream	n Photo:		
		70		The sale				





Date: 8/27/202	20 In	vestigator(s):	-		38.862167	-94.	541314	ASSOCIATES
Feature ID: Unique Site ID: Project name: Project #:	Tributary T7 Highway 020-2417	150/Colorado	Ave.		Stream Bottom Composition: Silt Concre Sand Muck Gravel Other: Cobble Vegeta	:	cover, type):	
County, State:	Jackson,	Missouri			Riparian Type:		Surface Flow	∀ :
Stream Classifica	ition:	□TNW	RPW	Mon-RPW	Forested		Discrete	
Side Slopes:	1:1	2:1	3:1	4:1 or >	Herbaceous Ag. Field		Confined Discrete	and Confined
Hydrology:		Flowing	Standing	None		_		Sileet Flow
Water Color/Qua	elity:	Clear	Discolored	Oily film		atural	Artificial	Manipulated
Stream Has: Bed/Bank OHWM:					Explain Artificial/Manipulated:			
Tributary Geome	try:	Relatively	Straight	Meandering				
OHWM width:	3ft	Top of bank v	nk to top vidth:	10 ft	Stream Type:	Z Ephem	eral	vs/Gullies/Erosional Pattern
OHWM height:	6in	Top of Ba height:	nk	4ft	Stream Type Rational: No flow and no apparent connection to groundwater.			
Riparian Buffer W	/idth:	N/E side		Ft.				
Buffer (adjacent l	oank) veget			11.				
Hackberry, honey	/suckle _							
					Significant Nexus: Yes Explain: Ephemeral streams are not juris	₫ No sdictiona	al under the N	IWPR.
OHWM has: clear, natural shelving veg. matted do leaf litter distu	own or abse	ent Scour	e in plant com	munity	Stream Condition/Stability: excessive erosion bank collapse cut-off channels riffles/runs pools		exposed tree steep side sld vegetated ba stable strean incised strea	opes inks in channe!

biological runction and Comments:

Upstream Photo:





Date: 8/27/2020		vestigator(s):			38.862391 -94.	540285		
Feature ID:	Tributary				Stream Bottom Composition:			
Unique Site ID:	T8				Ssilt ☐concrete☐sand ☐muck			
Project name:	Highway	150/Colorado	Ave.		☐gravel ☐other: ☐cobble ☐vegetation (% cover, type):			
Project #:	020-2417				bedrock			
County, State:	Jackson,	Missouri			Riparian Type:	Surface Flow:		
Stream Classificat	ion:	□TNW	RPW	⊠Non-RPW		Discrete		
Side Slopes:	1:1	2 :1	3:1	4:1 or >	Herbaceous Ag. Field	☐Confined ☐Discrete and Confined		
Hydrology:			Standing	None		Overland Sheet Flow		
Water Color/Qual	lity:	Clear	Discolored	Oily film	Stream Characteristics: Natural	Artificial Manipulated		
Stream Has:		⊠Bed/Bank	⊠онwм:		Explain Artificial/Manipulated:			
Tributary Geomet	ry:	Relatively	Straight	Meandering				
OHWM width:	5ft	Top of ba of bank v	nk to top vidth:	12ft	Stream Type: Perennial Intermittent Ephem	neral Draws/Gullies/Erosional Pattern		
OHWM height:	1ft	Top of Ba height:	nk	5ft	Stream Type Rational: Flowing water and an apparent groundwater connection since rainfall had not			
Riparian Buffer Wi	idth:	N/E side:		Ft.	fallen in the previous 10 days.			
		S/W side:	100	Ft.				
Buffer (adjacent ba	, .	ation:						
Silver maple, hone	eysuckie <u></u>				Significant Nexus: Yes No Explain: It eventually flows into the Little Blue Ri traditional navigable stream.	iver which flows in the Missouri River, a		
OHWM has: clear, natural lings shelving veg. matted don leaf litter distur	wn or abse bed	nt scour	e in plant com	munity	Stream Condition/Stability: excessive erosion bank collapse cut-off channels riffles/runs	exposed tree roots steep side slopes vegetated banks stable stream channel incised stream channel		







Date: 08/28/20)20 In	ivestigator(s):			38.865535 -94.53593
Feature ID: Unique Site ID: Project name: Project #:	Tributary t9 Highway 020-2417	150/Colorado	Ave.		Stream Bottom Composition: Silt
County, State:	Jackson,	Missouri			Riparian Type: Surface Flow:
Stream Classifica	ition:	□TNW	RPW	⊠Non-RPW	
Side Slopes:	1:1	⊠ 2:1	□3:1	☐4:1 or >	Herbaceous Confined Ag. Field Discrete and Confined
Hydrology:		Flowing	Standing	None	Overland Sheet Flow
Water Color/Qua	ality:	Clear	Discolored	Oily film	Stream Characteristics: Natural Artificial Manipulated
Stream Has:		⊠Bed/Bank	⊠онwм:		Explain Artificial/Manipulated:
Tributary Geome	etry:	Relatively	Straight	Meandering	
OHWM width:	8 ft	Top of bank v	nk to top vidth:	20 ft.	Stream Type: Perennial Intermittent Ephemeral Draws/Gullies/Erosional Pattern
OHWM height:	1 ft.	Top of Ba height:	nk	8 ft.	Stream Type Rational: Flowing stream after a period of dry weather, well developed channel.
Riparian Buffer V	Vidth:	N/E side S/W side		Ft. Ft.	
Buffer (adjacent l	bank) veget	ation:			
bush honeysuckl	e, redbu <u>d</u> .				Significant Nexus: Yes No Explain: It eventually flows into the Little Blue River which flows in the Missouri River, a traditional navigable stream.
OHWM has: clear, natural shelving veg. matted do leaf litter distu	own or abse	ent scour	e in plant com	munity	Stream Condition/Stability: excessive erosion







Date: 08/28/2	020]	nvestigator(s):			38.803420 -94.537224		
Feature ID:	Tributary	y 10			Stream Bottom Composition:		
Unique Site ID:	T10				Ssilt □concrete □sand □muck		
Project name:	Highway	150/Colorado	Ave.		gravel Gother: Gobble vegetation (% cover, type):		
Project #:	020-241	7					
County, State: Jackson, Missouri					Riparian Type: Surface Flow:		
Stream Classific	ation:	□TNW	RPW	⊠Non-RPW	▼ Forested ☑Discrete		
Side Slopes:	1:1	2 :1	□3:1	☐4:1 or >	Herbaceous Confined		
Hydrology:		Flowing	☐ Standing	None None	Overland Sheet Flow		
Water Color/Qu	iality:	Clear	Discolored	Oily film	Stream Characteristics: Natural Artificial Manipulated		
Stream Has:		⊠Bed/Bank ⊠OHWM:			Explain Artificial/Manipulated:		
Tributary Geometry: Kelatively Straight Meandering			Straight	Meandering			
OHWM width: 1.5 ft. Top of bank to top of bank width:		•	15ft.	Stream Type:			
OHWM height:	M height: 0.5 ft. Top of Ban height:		ank 5 ft.		Stream Type Rational: No flow and a channel that shows less development and no likely groundwater	ter	
Riparian Buffer \	Riparian Buffer Width:		N/E side: 100 F		connection.		
Buffer (adjacent	bank) veget						
dogwood, bush l	honeysuc <u>k</u> l	le					
					Significant Nexus: Yes No Explain: Ephemeral streams are not jurisdictional under the NWPR.		
OHWM has: Clear, natural line on bank wrack line shelving scour wrack line wrack li				munity	Stream Condition/Stability: excessive erosion		
Biological Function	in and comi	nents:					

Upstream Photo:







Date: 08/28/2	2020]	ivestigator(s):	-		38.862787 -94.537224	
Feature ID:	Tributary	/ 11			Stream Bottom Composition:	
Unique Site ID:	t11				Ssilt □concrete □sand □muck	
Project name:	Highway	150/Colorado	Ave.		gravel gother: Cobble vegetation (% cover, type):	
Project #:	020-2417	7			bedrock	
County, State:	Jackson,	Missouri			Riparian Type: Surface Flow:	
Stream Classific	ation:	□TNW	RPW	⊠Non-RPW	☐ Forested ☐ Discrete	
Side Slopes:	1:1	⊠ 2:1	□3:1	4:1 or >	☐ Herbaceous ☐ Ag. Field ☐ Discrete and Confined ☐ Confined ☐ Discrete and Confined ☐ Confined	
Hydrology:		Flowing	Standing	None None	Overland Sheet Flow	
Water Color/Qu	ıality:	Clear	Discolored	Oily film	Stream Characteristics: Natural Artificial Manipulated	
Stream Has:		⊠Bed/Bank	⊠онwм:		Explain Artificial/Manipulated:	
Tributary Geom	etry:	Relatively	Straight	Meandering		
OHWM width: 1.0 ft. Top of bank to top of bank width: 5 ft.			•	5 ft.	Stream Type: Perennial Intermittent Ephemeral Draws/Gullies/Erosional Pattern	
OHWM height:	0.5 ft.	Top of Ba height:	enk	4 ft.	Stream Type Rational: No flow and a channel that shows less development and no likely groundwater	
Riparian Buffer	Width:	N/E side		Ft.	connection.	
Buffer (adjacent	bank) veget					
Ragweed	_					
					Significant Nexus: Yes No Explain: Ephemeral streams are not jurisdictional under the NWPR.	
OHWM has: Clear, natural line on bank					Stream Condition/Stability: excessive erosion	
PIVIORICAL FUNCTION	AL ALIG COME	HEHRS.				







Date: 08/28/2	020]	nvestigator(s):			38.862213 -94	.538978	
Feature ID:	Tributar	y 12			Stream Bottom Composition:		
Unique Site ID:	t12				Ssilt □concrete □sand □muck		
Project name:	Highway	150/Colorado	Ave.		☐ gravel ☐ other: ☐ cobble ☐ vegetation (%	cover type):	
Project #:	020-241	7			bedrock		
County, State: Jackson, Missouri					Riparian Type:	Surface Flow:	
Stream Classific	ation:	□TNW	RPW	⊠Non-RPW	Forested	Discrete	
Side Slopes:	1:1	2 :1	□3:1	☐4:1 or >	Herbaceous Ag. Field	Confined Discrete and Confined	
Hydrology:		Flowing	Standing	None None		Overland Sheet Flow	
Water Color/Qu	ıality:	Clear	Discolored	Oily film	Stream Characteristics: XNatural	Artificial Manipulated	
Stream Has:		⊠Bed/Bank ⊠OHWM:			Explain Artificial/Manipulated:		
Tributary Geometry: Relatively Straight Meandering			Meandering				
OHWM width: 2 ft. Top of bank to top 6 ft. of bank width:		Stream Type:					
OHWM height:	0.5 ft Top of Bank height:		nk 5 ft.		Stream Type Rational: No flow and a channel that shows less development and no likely groundwater		
Riparian Buffer	Width:	•		Ft.	connection.		
Buffer (adjacent	bank) veget		•	rı.			
American elm, b	ush honey	suckle					
					Significant Nexus: Yes No Explain: Ephemeral streams are not jurisdiction	al under the NWPR.	
OHWM has: Clear, natural shelving veg. matted d	lown or abso urbed	ent Scour	ge in plant comi	nunity	bank collapse	exposed tree roots Steep side slopes Vegetated banks stable stream channel	
Biological Function	and comi	nents:					

Upstream Photo:







Date: 08/28/2020	Investigator(s)			38.862801 -94.	536896	
Unique Site ID: t13 Project name: Hig	outary 13 hway 150/Colorado	o Ave.		Stream Bottom Composition: Ssilt Concrete Sand Muck Gravel Other: Cobble Vegetation (%)	cover, type):	
County, State: Jac	kson, Missouri			Riparian Type:	Surface Flow:	
Stream Classification:	Штмм	RPW	⊠Non-RPW	☐ Forested	Discrete	
Side Slopes: 1:1	2:1	⊠3:1	4:1 or >	Herbaceous Ag. Field	☐ Confined ☐ Confined	
Hydrology:	Flowing	Standing	None None		Overland Sheet Flow	
Water Color/Quality:	Clear	Discolored	Oily film	Stream Characteristics: Natural	Artificial Manipulated	
Stream Has:	⊠Bed/Bank	⊠ онwм:		Explain Artificial/Manipulated:		
Tributary Geometry:	Relatively	Straight	Meandering			
OHWM width: 3 ft	Top of bank to	ank to top width:	5ft.	Stream Type: Perennial Intermittent Ephen	neral Draws/Gullies/Erosional Pattern	
OHWM height: 1 ft. Top of Bank 8 ft. height:			8 ft.	Stream Type Rational: No flow and a channel that shows less development and no likely groundwater		
Riparian Buffer Width:	N/E side S/W side	50	Ft. Ft.	connection.		
Buffer (adjacent bank)	vegetation: -			Significant Nexus: Yes No Explain: Ephemeral streams are not jurisdiction	al under the NWPR	
OHWM has: clear, natural line of shelving weg. matted down of leaf litter disturbed	scour scour scour scour	ge in plant comi	nunity	bank collapse cut-off channels riffles/runs	exposed tree roots steep side slopes vegetated banks stable stream channel incised stream channel	
Biological Function and	Comments:					
Upstream Photo:				Downstream Photo:		



Date: 09/02/2020 1	Investigator(s):	38.862334 -94.536396	
Feature ID: Tributa	ry 14	Stream Bottom Composition:	
Unique Site ID: T14		⊠silt □concrete □sand □muck	
Project name: Highway	y 150/Colorado Ave.	gravel other:	
Project #: 020-241	7	bedrock	
County, State: Jackson	, Missouri	Riparian Type: Surface Flow:	
Stream Classification:	□TNW □RPW ☑Non-RPW		
Side Slopes: 1;1	□2:1 □3:1 □4:1 or >	Herbaceous Confined Ag. Field Discrete and Confined	
Hydrology:	Flowing Standing None	Overland Sheet Flow	
Water Color/Quality:	Clear Discolored Oily film	Stream Characteristics: Natural Artificial Manipulated	
Stream Has:	⊠Bed/Bank ⊠OHWM:	Explain Artificial/Manipulated:	
Tributary Geometry:	Relatively Straight Meanderin	ng .	
OHWM width: 3 ft.	Top of bank to top 4 ft. of bank width:	Stream Type: Perennial Intermittent Ephemeral Draws/Gullies/Erosional Pattern	
OHWM height: 0.5 ft.	Top of Bank 1 ft. height:	Stream Type Rational: A trickle of water from rainfall within the previous 3 days suggests that this is	
Riparian Buffer Width:	N/E side: >50 Ft.	ephemeral.	
Buffer (adjacent bank) vege	Syff Size:	_	
Bush honeysuckle			
		Significant Nexus: Yes No Explain: Ephemeral streams are not jurisdictional under the NWPR.	
OHWM has: clear, natural line on bar shelving veg. matted down or abs leaf litter disturbed Biological Function and Com	sent scour stands on plant community other:	Stream Condition/Stability: excessive erosion	







Date: 09/02/20	020]	nvestigator(s):			38.862849 -94.8	030020
Feature ID:	Tributary	y 15			Stream Bottom Composition: Silt Concrete	
Unique Site ID:	t15				sand muck gravel other: cobble vegetation (% cover, type):	
Project name:	Highway	150/Colorado	Ave.			
Project #:	020-241	7			bedrock	
County, State:	Jackson,	Missouri			Riparian Type:	Surface Flow:
Stream Classifica	ation:	□TNW	RPW	⊠Non-RPW	Forested	Discrete
Side Slopes:	1:1	2:1	⊠3:1	☐4:1 or >	Herbaceous Ag. Field	☐Confined☐Discrete and Confined
Hydrology:		Flowing	Standing	None None		Overland Sheet Flow
Water Color/Qu	ality:	Clear	Discolored	Oily film	Stream Characteristics: Natural	Artificial Manipulated
Stream Has:		⊠Bed/Bank	⊠ онwм:		Explain Artificial/Manipulated:	
Tributary Geome	etry:	Relatively	Straight	Meandering		
OHWM width:	1.5 ft.	Top of bank v	ank to top vidth:	3 ft.	Stream Type: Perennial Intermittent XEphem	eral Draws/Gullies/Erosional Pattern
OHWM height:	0.5	Top of Ba	ank	5 ft.	Stream Type Rational: No flow and a channel that shows less development and no likely groundwater	
Riparian Buffer V	Width:	N/E side S/W side		Ft.	connection.	
Buffer (adjacent	bank) veget		•	1 61		
elm, hackberry, b	oush hone	ysuckle				
					Significant Nexus: Yes No Explain: Ephemeral streams are not jurisdictional	al under the NWPR.
OHWM has: Sclear, natural line on bank wrack line shelving scour					☐bank collapse ☐	exposed tree roots steep side slopes
veg. matted de leaf litter distu		ant =	ge in plant comi	munity	cut-off channels riffles/runs	vegetated banks stable stream channel incised stream channel
Biological Functio	n and Comr	ments:			-	

Upstream Photo:







Date: 09/02/2020 In	vestigator(s):		38.863074 -94.536486		
Feature ID: Tributary Unique Site ID: t6 Project name: Highway Project #: 020-2417	150/Colorado Ave.		Stream Bottom Composition: Silt		
County, State: Highway Stream Classification:	150/Colorado Ave.	⊠Non-RPW	Riparian Type: Surface Flow: ☑ Forested □ Discrete		
Side Slopes: 1:1 Hydrology:		☐4:1 or > ☑ None	Herbaceous Ag. Field Overland Sheet Flow		
Water Color/Quality: Stream Has:	□Clear □Discolored □Bed/Bank □OHWM:	Oily film	Stream Characteristics: Natural Artificial Manipulated Explain Artificial/Manipulated:		
Tributary Geometry:	Relatively Straight	Meandering			
OHWM width: 2.5 ft.	of bank width:		Stream Type: Perennial Intermittent Ephemeral Draws/Gullies/Erosional Pattern		
OHWM height: 0.5 ft. Riparian Buffer Width:	neight:		Stream Type Rational: No flow and a channel that shows less development and no likely groundwater connection.		
Buffer (adjacent bank) veget Hackberry, bush honeysuch	ation:				
			Significant Nexus: Yes No Explain: Ephemeral streams are not jurisdictional under the NWPR.		
OHWM has: Clear, natural line on bank shelving veg. matted down or abset leaf litter disturbed Biological Function and Comm	scour stands and scour	munity	Stream Condition/Stability: excessive erosion		







Date: 09/02/2020 Investigator(s):	38.862772 -94.536295
Feature ID: Tributary 17 Unique Site ID: t17 Project name: Highway 150/Colorado Ave. Project #: 020-2417	Stream Bottom Composition: Ssilt
County, State: Jackson, Missouri	Riparian Type: Surface Flow:
Stream Classification:	
Side Slopes: 1:1	Ag. Field
Hydrology:	Overlaid Street Flow
Water Color/Quality:	
Stream Has: Bed/Bank OHWM:	Explain Artificial/Manipulated:
Tributary Geometry: Relatively Straight Mean	dering
OHWM width: 2. ft Top of bank to top 15 ft of bank width:	Stream Type: Perennial Intermittent Ephemeral Draws/Gullies/Erosional Pattern
OHWM height: 0.5 ft Top of Bank height: 4ft.	Stream Type Rational: No flow and a channel that shows less development and no likely groundwater
Riparian Buffer Width: N/E side: >50 Ft. S/W side: >50 Ft.	connection.
Buffer (adjacent bank) vegetation:	
hackberry bush honeysuckle	
	Significant Nexus: Yes No Explain: Ephemeral streams are not jurisdictional under the NWPR.
OHWM has: Clear, natural line on bank	Stream Condition/Stability: excessive erosion







Date: 8/25/202	20 1	nvestigator(s):	-		38.864051 -94	.531544
Feature ID:	Tributar	y 18			Stream Bottom Composition:	
Unique Site ID:	T18				Ssilt □concrete □muck	
Project name:	Highway	150/Colorado	Ave.		gravel other:	cover, type):
Project #:	020-241	7			bedrock	
County, State:	County, State: Jackson, Missouri				Riparian Type:	Surface Flow:
Stream Classific	ation:	□TNW	RPW	⊠Non-RPW	Forested	Discrete
Side Slopes:	1:1	2 :1	□3:1	☐4:1 or >	Herbaceous Ag. Field	Confined Discrete and Confined
Hydrology:		Flowing	Standing	None None		Overland Sheet Flow
Water Color/Qu	ality:	Clear	Discolored	Oily film	Stream Characteristics: XNatural	Artificial Manipulated
Stream Has:		⊠Bed/Bank	⊠онwм:		Explain Artificial/Manipulated:	
Tributary Geom	etry:	Relatively	Straight	Meandering		
OHWM width: 1ft Top of ba		ank to top 6ft width:		Stream Type: Perennial Intermittent X Ephen	neral Draws/Gullies/Erosional Pattern	
OHWM height:	HWM height: 6in Top of Bar height:		ank 3ft		Stream Type Rational: No flow	_
Riparian Buffer V	Vidth:	N/E side S/W side	400	Ft.		
Buffer (adjacent	bank) veget			г.		
Black walnut, ha			suckle, rye			
					Significant Nexus: Yes No Explain: Ephemeral streams are not jurisdiction	al under the NWPR.
OHWM has: Clear, natural shelving veg. matted d leaf litter distu	own or abso	ent Scour	ge in plant comi	munity	bank collapse cut-off channels	exposed tree roots steep side slopes vegetated banks stable stream channel incised stream channel
Biological Functio	n and comi	nents:				

Upstream Photo:





APPENDIX D Supplemental Data Forms

Site Identification: nw1

Vegetation: American elm, honey Locust, coralberry, honeysuckle, snakeroot

Soils: 10yr2/1 (0-16") no redox

Hydrology: Non-wetland upland

Latitude: 38.862647 Longitude: -94.532537

Comments:

Photo #1 East



Photo #3 West



Photo #2 South



Photo #4 North



Site Identification: nw2

Vegetation: Ragweed, barnyard grass, aster sp.

Soils: 10yr 2/2, no redox

Hydrology: drainage pattern

Latitude: 38.863798 Longitude: -94.538526

Comments: Did not meet all three criteria for a wetland.





Photo #2 South



Photo #3 East



Photo #4 West



APPENDIX E **Photolog**





1

Photo Dir.

Ν

Description: Entrance point of Tributary 5 into the Project area. Tributary 5 enters the Project area through a CMP that extends underneath MO 150.



Photo No.

2

Photo Dir.

Ν

Description: Photo showing the OHWM and bed and bank of Tributary 5.





3

Photo Dir.

S

Description: Tributary 5 showing OHWM and bed and bank.



Photo No.

4

Photo Dir.

Ν

Description: Tributary 5, showing the view upstream of the same location as Photo 3.





5

Photo Dir.

Ν

Description: Tributary 5, showing an area of standing water.



Photo No.

6

Photo Dir.

S

Description: Tributary 5, showing a downstream view of the same location as Photo 5





7

Photo Dir.

Ν

Description: Tributary 5, showing the stream's bed and bank.



Photo No.

8

Photo Dir.

Ν

Description: Tributary 5, showing OHWM and bed and bank.





9

Photo Dir.

 SW

Description: View of Tributary 5 from an adjacent hilltop.



Photo No.

10

Photo Dir.

Ν

Description: Tributary 5 showing OHWM and bed and bank.



October 14, 2020

U.S. Army Corps of Engineers Kansas City District: Regulatory Office 601 E. 12th Street, Room 402 Kansas City, MO 64106

Re: Request for Approved Jurisdictional Determination

Missouri 150 and Botts Road Project (Promontory 150 LLC)

Kansas City, Jackson County, Missouri

Dear Regulator:

Promontory 150 LLC (Promontory) retained Olsson to conduct a wetland delineation and stream assessment for the Promontory property of the 150 and Botts Road Project (Project). The proposed Project is located on the north side of Highway 150 and east of Botts Road in Kansas City, Jackson County, Missouri. The project center is located at 38.862589 degrees latitude and -94.543681 degrees longitude. Olsson has completed the wetland delineation and stream assessment and is now requesting an Approved Jurisdictional Determination (AJD) for the Project area. A signed AJD request form is attached to this letter.

Olsson conducted a wetland delineation and stream assessment of the Project area in August and September of 2020 and documented six palustrine emergent wetlands, one palustrine forested/ scrubshrub wetland, two intermittent streams, and six ephemeral streams. Olsson's report, with associated data forms, figures, and photos, is included as an attachment to this letter. One of the identified streams (Tributary 6), was documented flowing from north to south in the Project area and was not depicted by any desktop resources (topographic map, NWI, or NHD). Photos of the stream are provided in the photolog appendix of the attached report. At the time of the field visits, Tributary 6 contained flowing water without recent rainfall. However, the channel was relatively narrow, lacked significant incision, and contained an ordinary high-water mark width more consistent with an ephemeral stream. Olsson reviewed surrounding land uses near the Project and determined that flow supplied to Tributary 6 is likely provided by discharge from a stormwater detention pond on a commercial property located directly north of the Project area. Groundwater does not appear to be a contributor to flow within this stream. Based on the source of flow, Olsson determined that Tributary 6 is an ephemeral stream. However, because of the borderline nature of the stream, Olsson is requesting concurrence from the USACE.

Please contact me if you have any questions about this submittal. I can be reached at 913.748.2575, or by email at aball@olsson.com.

Sincerely,

Aaron Ball

Olsson Senior Scientist

Enclosure

U.S. ARMY CORPS OF ENGINEERS REQUEST FOR CORPS JURISDICTIONAL DETERMINATION Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, CORPS USE ONLY: Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for DATE RECEIVED: 33 CFR Parts 320-332. Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website. Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an AJD cannot be PROJECT NO .: 2.REQUESTOR CONTACT INFORMATION: 1. PROPERTY LOCATION: Street Address: Northeast of MO 150 and Botts Drive Typed or Printed Name: Aaron Ball City/Township/Parish: Kansas City Company Name: Olsson County: Jackson State: MO Street Address: 7301 W. 133rd St., Suite 200 Acreage of Parcel/Review Area for JD: 73 City: Overland Park State: KS ZIP: 66213 Section: 26 Township: 47N Range: 33W Phone Number: (913) 748-2575 Latitude: 38.862589 E-mail: aball@olsson.com Longitude: -94.543681 (For linear projects, please include the center point of the proposed alignment.) MAP: Please attach a survey/plat map and vicinity map identifying location and review area for the JD. REASON FOR REQUEST (check as many as applicable): I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all aquatic resources. I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all jurisdictional aquatic resources under Corps authority. I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps, and the JD would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process. I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps; this request is accompanied by my permit application and the JD is to be used in the permitting process. I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district Section 10 list and/or is subject to the ebb and flow of the tide. A Corps JD is required in order to obtain my local/state authorization. I intend to contest jurisdiction over a particular aquatic resource and request the Corps confirm that jurisdiction does/does not exist over the aquatic resource on the parcel. ☐ I believe that the site may be comprised entirely of dry land. Other: 5. TYPE OF DETERMINATION BEING REQUESTED: 6. OWNERSHIP DETAILS: ☐ I am requesting an approved JD. I currently own this property. ☐ I am requesting a preliminary JD. I plan to purchase this property. I am requesting a "no permit required" letter as I I am an agent/consultant acting on behalf of the

By signing below, you are indicating that you have the authority, or are acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant Corps personnel right of entry to legally access the site if needed to perform the JD. Your signature shall be an affirmation that you possess the requisite property rights to request a JD on the subject property.

requestor.

Other (please explain:)

Signature: Date: 10/14/2020

believe my proposed activity is not regulated.

and require additional information to inform my

I am unclear as to which JD I would like to request

WETLAND DELINEATION AND STREAM ASSESSMENT REPORT

MISSOURI 150 AND BOTTS ROAD PROPERTY

Prepared for:

Promontory 150 LLC

October 2020

Olsson Project No: 019-1871



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APPENDICES

Appendix A Figures

Appendix B Wetland Data Forms: Midwest Region

Appendix C Stream Assessment Data Forms

C11-1513 and D11-1513 ii

1. INTRODUCTION

Promontory 150 LLC (Promontory) retained Olsson to conduct a wetland delineation and stream assessment of the proposed infrastructure (Project) located on 73 acres on the northeast corner of Botts Road and Missouri Route 150 in Kansas City, Jackson County, Missouri (Appendix A, Figure 1). The latitude and longitude of the center of the Project is 38.862589 degrees north and -94.543681 degrees west, respectively. The Project is located in Section 26 of Township 47 North, Range 33 West (Appendix A, Figure 2).

The land types within the Project area include existing right-of-way (ROW), developed land, row crop agriculture, and undeveloped natural areas. The existing ROW areas were dominated by native and nonnative grasses and forbs including Indian grass (*Sorghastrum nutans*), sideoats grama (*Bouteloua curtipendula*), switchgrass (*Panicum virgatum*), tall fescue (*Schedonorus arundinaceus*), smooth brome (*Bromus inermis*), sunflowers (*Helianthus* spp.), clover (*Trifolium* sp.), goldenrod (*Solidago* spp.), and foxtails (various species). Wooded areas were dominated by deciduous trees and shrubs including common hackberry (*Celtis occidentalis*), American elm (*Ulmus americana*), black walnut (*Juglans nigra*), silver maple (*Acer saccharinum*), bush honeysuckle (*Lonicera maackii*), and coralberry (*Symphoricarpos orbiculatus*).

2. METHODS

2.1. Desktop Wetland and Stream Review

Olsson conducted a desktop review using publicly available data sources to identify locations in the Project area that were likely to contain wetlands or require stream assessments. The desktop review was followed by an on-site investigation by Olsson biologists. Resources used during the desktop review included the following:

- U.S. Geological Survey (USGS): 1:24,000 Topographic Map, 1991 Belton Missouri Quadrangles (USGS 1991)
- U.S. Fish and Wildlife Service (USFWS): National Wetlands Inventory (NWI) Map, Belton Missouri Quadrangle (USFWS 2019)
- Natural Resources Conservation Service (NRCS): Web Soil Survey, Jackson County Soils Survey Map
- Environmental Systems Research Institute (ESRI): Aerial Imagery (ESRI 2020)
- Google Earth: Historical Aerial Photographs (Google 2020)
- USGS: National Hydrography Dataset (NHD; USGS 2019)

The desktop review identified sites that warranted field surveys to document the presence or absence of wetlands and streams. Sample sites identified for review in the field are not necessarily wetlands; however, they are areas where wetland or stream indicators may be present. The field coverage was not limited or restricted by the desktop review.

2.2. Wetland Delineation

The wetland delineation was conducted per methodology outlined by the *Corps of Engineers Wetland Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region, Version 2.0* (USACE 2010).

Wetland delineations were performed for all sites that were composed of hydric vegetation, hydric soils, and wetland hydrology. The boundaries of these three indicators were determined and sufficient data was collected to aid the U.S. Army Corps of Engineers (USACE) in making a preliminary jurisdictional determination. Data required for each collection point at a sample site included the following:

- Midwest Region Version 2.0 worksheet
- GPS points (in and out) and wetland boundary shapefile
- Primary and secondary indicators of hydrology
- Vegetation indicators based on the 2016 National Wetland Plant List (Lichvar et al. 2016)
- Soil description based on a soil sample

All wetland data points are denoted with a "w" in Figure 6A and 6B (Appendix A) and in the wetland datasheets (Appendix B). The point where all three indicators exist is considered an *in point*. The wetland boundary exists where one or more of the three indicators is no longer present. A data collection point was collected outside the wetland boundary and identified as an *out point*, to document conditions outside the wetland. Geographic information system (GIS) data for a sample site included a polygon of the wetland boundary and GPS points for the in points and out points. Photographs were taken for each wetland to document conditions at the time of the survey and are included within each wetland datasheet.

2.3. Stream Assessment

Stream assessments were conducted to collect data to aid the USACE in making a preliminary jurisdictional determination of the stream reach. The assessments that were conducted were consistent with the Missouri Stream Mitigation Method (MSMM) for compensatory mitigation. Guidance for the stream assessments is contained in the *U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook* (USACE 2007) and the *State of Missouri Stream Mitigation Method* (USACE 2013).

Once a potential stream reach was located during the field survey, field teams collected assessment data using the stream assessment data form. All stream points are denoted with a "t" in figures 6A and 6B (Appendix A) and datasheets (Appendix C). These data forms assess the following aspects of the stream:

- Stream type: perennial, intermittent, or ephemeral
- Stream classification: traditional navigable water (TNW), relatively permanent waters (RPW), or non-relatively permanent waters (Non-RPW)
- Ordinary high-water mark (OHWM) characteristics
- Stream bottom composition
- Description of stream bank
- Natural, artificial, or manipulated stream characteristics
- Stream condition and stability
- Water characteristics: clear, discolored, flowing, or standing
- Riparian buffer vegetation and characteristics

Photos within the Stream Datasheets (Appendix C) and GPS points were taken to document stream conditions at the time of the survey.

3. SUMMARY OF FINDINGS

Mr. Jack Finley of Olsson collected data August 26 and 28, and September 2 and 26, 2020. Mr. Finley has received formal training in wetland delineations. Weather data for the Project area was summarized from the National Oceanic and Atmospheric Administration (NOAA) Record of Climatological Observations at the Overland Park, Kansas (Station number US1KSJ00053; NOAA 2020). No precipitation fell within the 10 days preceding the August visits, 2.27 inches fell in the 10 days prior to the September 2 visit, and no precipitation fell within the 10 days preceding the September 26 visit.

3.1. Desktop Wetland and Stream Review

U.S. Geological Survey Topographic Map

The USGS topographic map (Appendix A, Figure 2), indicates that relief within the Project area is hilly. Elevations range from approximately 970 feet above mean sea level (AMSL) in the thalweg of the two intermittent drainages that flow from west to east to 1,030 feet AMSL in the northwest corner of the Project area. The topographic map also suggests the presence of two smaller drainages that generally flow from the north and from the south into the intermittent

drainages. No open water features were indicated within the Project area by the topographic map.

Environmental Systems Research Institute Aerial Map

The aerial map (Appendix A, Figure 3) indicates that the Project area is a mixture of row crop agriculture, scattered woodlands, and riparian corridors. The areas surrounding the Project area are composed of commercial facilities to the north, south, and west, and agriculture or undeveloped land to the east. The two streams depicted in the topographic map correspond to woodled corridors in the aerial map.

National Wetlands Inventory and National Hydrography Dataset Map

The NHD (USGS 2019) indicates the presence of two unnamed intermittent stream segments (3,013 linear feet; [LF]) within the Project area (Appendix A, Figure 4). These streams correspond to the intermittent streams depicted in the topographic map. No perennial or ephemeral stream segments were specified by the NHD and no wetlands were indicated by the NWI (USFWS 2019) within the Project area.

Jackson County Soil Survey

Soil units with a soil matrix composed of greater than 60 percent of hydric inclusions are considered predominantly hydric.

The existence of predominantly hydric soils indicates the potential for an area that can support wetlands. According to the soil survey for Jackson County Missouri (NRCS 2020a; Appendix A, Figure 5), soils mapped within the Project area are as follows:

- 10117 Sampsel silty clay loam, 5 to 9 percent slopes
- 10120 Sharpsburg silt loam, 2 to 5 percent slopes
- 10122 Sharpsburg silt loam, 5 to 9 percent slopes, eroded
- 30080 Greenton silty clay loam; 5 to 9 percent slopes; 10 percent hydric inclusions
- 36083 Kennebec silt loam; 1 to 4 percent slopes; occasionally flooded; 3 percent hydric inclusions

According to the Jackson County soils list, the Project area is composed of predominately non-hydric soils

3.2. Wetland Delineation Results

The wetland delineation identified six palustrine emergent (PEM) wetlands, totaling 0.22 acre, and one palustrine scrub-shrub (PSS) wetland, totaling 0.04 acre, within the Project area. Based on the new Navigable Waters Protection Rule (NWPR) published in the Federal Register June 22, 2020 (EPA, 2020), three of the PEM wetlands (0.06 acre) are considered jurisdictional features because they are adjacent or abut an intermittent stream that ultimately flows to a TNW(the Missouri River). The three remaining PEM wetlands and the one PSS wetland

documented within the Project area are nonjurisdictional features under the NWPR. Delineated wetlands are depicted in figures 6A and 6B of Appendix A and data forms documenting these features are provided in Appendix B. Table 1 summarizes the wetland features documented in the Project area. Detailed descriptions of each feature follow Table 1.

Wetland ID	Data Point	Wetland Type ¹	Jurisdictional ²	Size (acres)
Wetland 1	w1	PEM	Yes	< 0.01
Wetland 2	w2	PEM	Yes	0.02
Wetland 3	w3	PEM	Yes	0.04
Wetland 4	w4	PEM	No	0.11
Wetland 5	w5	PEM	No	0.02
Wetland 6	w6	PFO/PSS	No	0.04
Wetland 7	w7	PEM	No	0.03
			TOTAL ACRES	<u>0.26</u>
1054 0 4			JURISDICTIONAL ACRES	<u>0.16</u>

Table 1. Wetland Delineation Summary.

Jurisdictional PEM Wetlands (0.06 acre). Wetlands 1, 2, and 3 were documented as jurisdictional PEM wetlands because of their connections to an intermittent stream that is considered jurisdictional according to the NWPR. All three wetlands were dominated by bearded beggarticks (*Bidens aristosa*), broadleaf cattail (*Typha latifolia*), rough cocklebur (*Xanthium strumarium*), and sedges (*Carex* spp.). These wetlands meet the requirements of wetland soils and hydrology indicators.

Nonjurisdictional Emergent Wetlands (0.20 acre). Wetlands 4, 5, and 7 were documented as nonjurisdictional PEM wetlands according to the NWPR. All three wetlands lack a connection to a jurisdictional stream as defined by the NWPR. These three wetlands were dominated by rice cutgrass (*Leersia oryzoides*), bearded beggarticks, rough barnyard grass (*Echinochloa muricata*), and green ash (*Fraxinus pennsylvanica*). These wetlands meet the requirements of wetland soils and hydrology indicators.

Nonjurisdictional Forested/Scrub-shrub Wetlands (0.04 acre). Wetland 6 was documented as a nonjurisdictional PFO/PSS wetland because it receives hydrology from an ephemeral stream lacks a connection to a jurisdictional stream. This wetland was dominated by American

¹ PEM = Palustrine emergent wetland, PFO/PSS = Palustrine forested/Palustrine scrub-shrub

² Jurisdiction based on the June 22, 2020, Navigable Water Protection Rule (NWPR)

elm, ash-leaf maple (*Acer negundo*), and green ash. This wetland meets the requirements of wetland soils and hydrology indicators.

3.3. Stream Assessment Results

The stream assessment identified a total of eight stream reaches totaling 4,930 LF within the Project area. Six nonjurisdictional ephemeral streams totaling 1,751 LF and two jurisdictional intermittent streams totaling 3,179 LF were documented in the Project area. The two intermittent streams were also indicated by NHD data and topographic maps. No perennial streams were present. Under the new NWPR, only intermittent and perennial streams are considered jurisdictional.

All documented ephemeral streams generally flow from the north or south into the intermittent streams, which flow from west to east before coalescing outside the Project area. These unnamed intermittent streams eventually flow into the Little Blue River and ultimately into the Missouri River, a TNW. Stream assessment data forms are provided in Appendix C, and Table 2 below details each stream reach.

Feature ID	Data Points	Stream Type	Stream Length within Project area (linear feet)	Jurisdictional*
Tributary 1	t1	Intermittent	1,775	Yes
Tributary 2	t2	Ephemeral	192	No
Tributary 3	t3	Ephemeral	155	No
Tributary 4	t4	Ephemeral	149	No
Tributary 5	t5	Ephemeral	62	No
Tributary 6	t6	Ephemeral	1,141	No
Tributary 7	t7	Ephemeral	52	No
Tributary 8	t8	Intermittent	1,404	Yes
		TOTAL LENGTH	<u>4,930</u>	
		JURISDICTIONAL LENGTH	<u>3,179</u>	

^{*} Jurisdiction based on the June 22, 2020, Navigable Water Protection Rule (NWPR)

4. CONCLUSIONS

The wetland delineation and stream assessment evaluated the 73-acre Project area which included the existing right-of-way (ROW), developed land, row crop agriculture, and undeveloped natural areas. The field study identified six PEM wetlands, one PSS wetland, six ephemeral streams, and two intermittent streams within the Project Area. Of the identified features, 0.06 acre of PEM wetlands and 3,179 LF of intermittent stream are likely considered jurisdictional under the new Navigable Water Protection Rule because of their downstream connection to the Missouri River. Impacts to any of the jurisdictional features will require coordination with the USACE under Section 404 of the Clean Water Act.

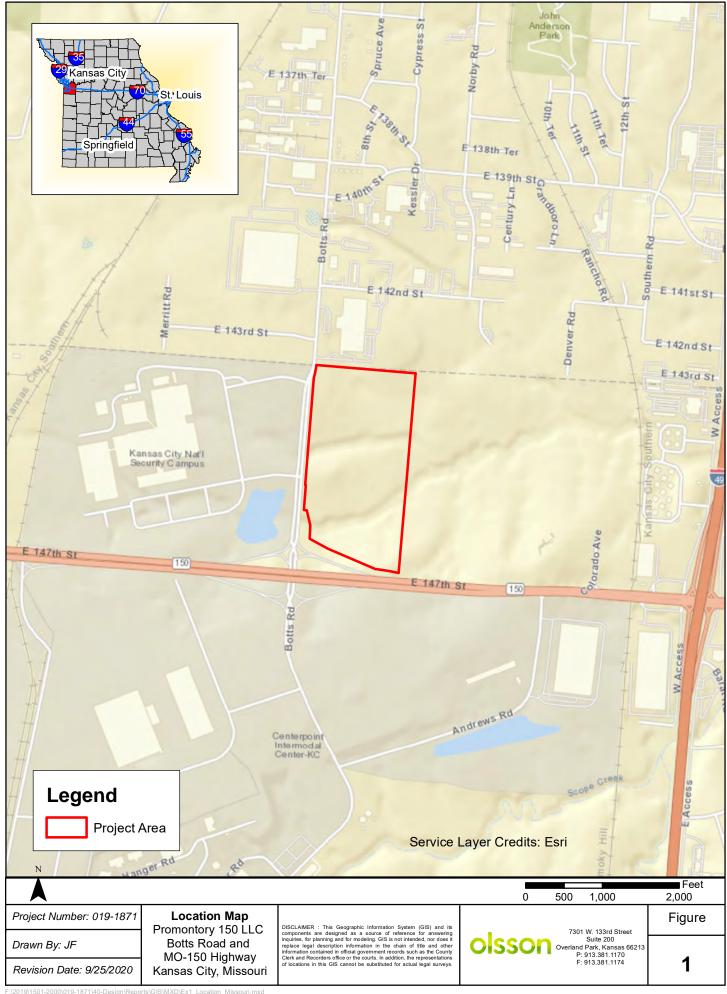
5. REFERENCES

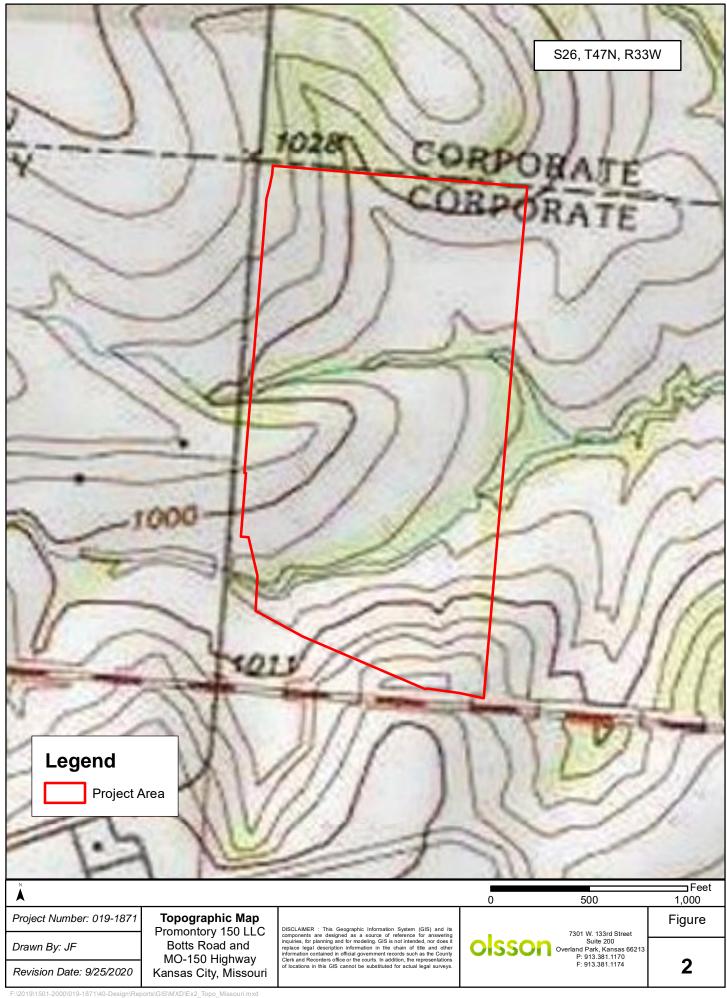
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- USGS 2019. National Hydrography Dataset.

APPENDIX A

Figures

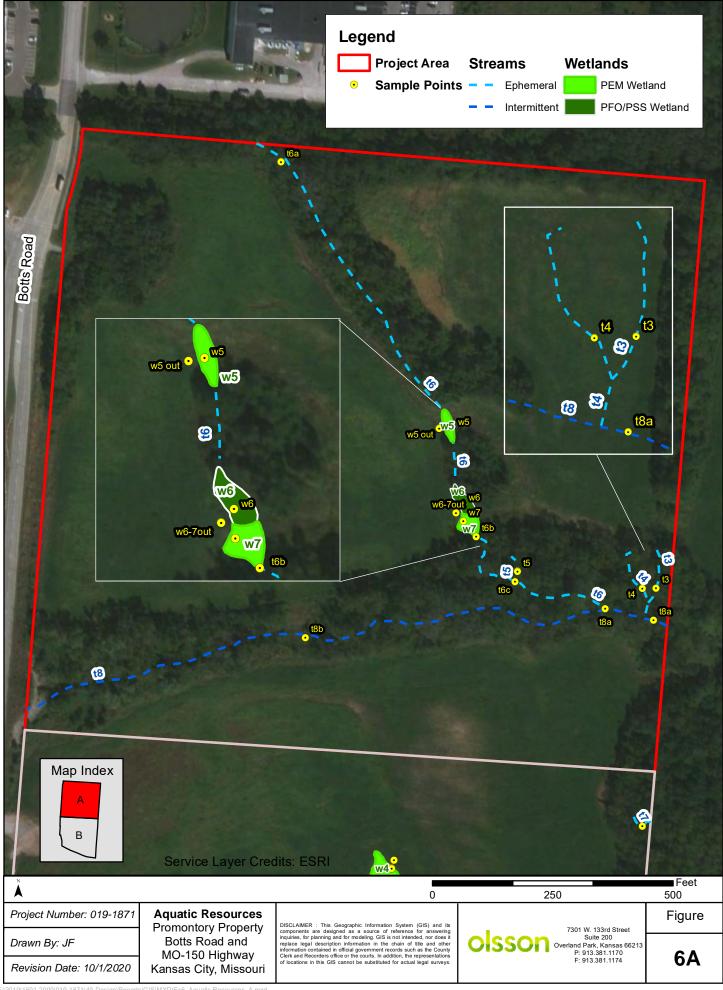














APPENDIX B

Wetland Data Forms: Midwest Region

Project/Site: HWY 150 and Botts Road	City/C	County: Grandy	iew (Jackson Co.)		ate: 08/26/2020	
Applicant/Owner: Promontory 150 LLC			State: MO	Sampling Po		
Investigator(s): Jack Finley					S26 T47N R33\	W
			convex, none): Co	and the second	*******	
Slope (%): 2-5% Lat: 38.860278		-94.545930	1000	Datum:	UTM83	
Soil Map Unit Name: Kennebec silt loam, 1				classification:	PEM	
Are climatic / hydrologic conditions on the s	ite typical for this time of year?	Yes X	No (If no	, explain in Rem	narks)	
Are Vegetation, Soil, or Hydro	ogysignificantly disturb	ped? Are	"Normal Circumstan	ces" present? Y	es X No	
	logy naturally problema		eeded, explain any a			
SUMMARY OF FINDINGS - Attack	n site map showing sar	npling poin	t locations, tran	sects, impo	rtant features	, etc.
Hydrophytic Vegetation Present? Ye	es X No					
Hydric Soil Present? Ye	es X No	Is the Samp	led Area			
Wetland Hydrology Present? Ye	es X No	within a We	tland?	Yes X	No	
Remarks:		T				
VEGETATION - Use scientific na	mes of plants.					
	Absolute Dominant	Indicator D	ominance Test wo	rksheet:		
Tree Stratum (Plot size: 30 ft)	% Cover Species?		umber of Dominant	Control of the Contro		
1.		^A	re OBL, FACW, or F	AC:	2	(A)
2.			and Manager of Pro-	YOU'S		
4.	· 		otal Number of Dom pecies Across All St		2	(B)
5.			pooled 1 (0/000 / III O	dia	_	. (0)
Sapling/Shrub Stratum Plot size: 15 ft		T	ercent of Dominant hat Are OBL, FACW		100%	(A/B)
1, Typha latifolia	80 X	OBL	revalence Index wo	- Washington		
Bidens frondosa 3.	X	FACW_P	Total % Co		Multiply by:	
3. 4			BL species	80		_
5.			ACW species	20	x 1 = 80 x 2 = 40	_
•	100 = Total Cover		AC species	0	x3 = 0	
Herb Stratum (Plot size: 5 ft)			ACU species	0	x 4 = 0	_
t _k		U	PL species	0	x 5 = 0	
2.		c	olumn Totals:	100	(A) 120	(B)
3.			Prevalen	ce Index = B/A =	1.20	391
4.			Hydrophytic Veg	etation Indicate	ors:	
5.				t for Hydrophytic		
6.	à			e Test is >50%		
7			Δ	e Index is ≤3.01		
8.			Δ.		s¹ (Provide suppor	rting
9.				rks or on a sepa		
10.			_ Problematic H	Hydrophytic Veg	etation ¹ (Explain)	
West 165 August 1	0 = Total Cover					
Woody Vine Stratum (Plot size: 30 ft)		¹ Indicators of hydri- present, unless dis			be
t-			Hydrophytic	turbed or proble	mauc.	
2	0 = Total Cover	r	Vegetation Present?	Yes X	No	
Remarks: (Include photo numbers here or	on a congrete sheet t		1 TOSCIII I			
Terriaines, (muidue prioto numbers nere or	a, a separate sitest.)					

US Army Corps of Engineers Midwest Region - Version 2.0

Depth	iption: (Describe to Matrix	1000 70		Redox Fea				211.17.17
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-10	Gley 5/2	20	-			-	Clay	
0 10	10YR 3/2	70	5YR 3/4	10		M	Olay	
	-10111072					-		
					/		_	-
				_				
		$\overline{}$	-					
		$\overline{}$		_				
ype: C=Co	ncentration, D=Depl	etion, RM=	Reduced Matrix, N	MS=Masked	d Sand Grai	ins.	² Location: PL:	=Pore Lining, M=Matrix
Hydric So	il Indicators:						Indicators	for Problematic Hydric Soils ³ :
Histoso	(A1)			Sandy Gle	yed Matrix	(S4)	Coast	Prairie Redox (A16)
_	pipedon (A2)		=	Sandy Red	The second second	15.0		Surface (S7)
	istic (A3)		- 1 	Stripped M	Carl and			anganese Masses (F12)
_	en Sulfide (A4)		_		cky Mineral	/E1\		Shallow Dark Surface (TF12)
_	d Layers (A5)		-	The second second	eyed Matrix			(Explain in Remarks)
_	uck (A10)		_	Depleted N		11	_ One	(Espain in Hemains)
_	d Below Dark Surface	(LIA) as	7.		k Surface (F6\		
	ark Surface (A12)	e (MII)	X		Dark Surface		3 Indiant	rs of hydrophytic vegetation and
_			_	Table of the Contract				and hydrology must be present.
	Mucky Mineral (S1)			Hedox Dep	oressions (F	-8)		ss disturbed or problematic.
_ 5 cm M	ucky Peat or Peat (S	53)						
Type: Depth (inc	hes): s could not be excar	vated below	w 10" due to rock.				Hydric Soil Pres	ent? Yes No
Type: Depth (inc emarks: sturbed soil	hes); s could not be exca	vated belov	w 10" due to rock.				Hydric Soil Pres	ent? Yes No
Type:	hes): s could not be excar	/ated belov	w 10" due to rock.				Hydric Soil Pres	ent? Yes <u>X</u> No
Type: Depth (incommarks: sturbed soil YDROLO etland Hyd	s could not be excar							
Type: Depth (incomarks: sturbed soil YDROLO etland Hyd Primary In	s could not be excar GY rology Indicators: dicators (minimum of		quired; check all th				Secondary	Indicators (minimum of two require
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Type: Depth (incomarks: sturbed soil YDROLO etland Hyd Primary In Surface High W: Saturati Water M	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1)		quired; check all th Water-Stai Aquatic Fa True Aqua	ned Leave una (B13)	B14)		Secondary Surface S X Drainage Dry-Seas	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10)
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Type: Depth (incomarks: sturbed soil YDROLO etland Hyd Primary In Surface High Water Manager	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3)		quired; check all the Water-Stain Aquatic Far True Aquar Hydrogen Oxidized F	ned Leaves una (B13) tic Plants (I Sulfide Odo thizosphere of Reduced in Reduction	B14) or (C1) es on Living I Iron (C4) n in Tilled S		Secondary Surface S X Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Type: Depth (incomarks: sturbed soil YDROLO etland Hyd Primary In Surface High Water Mark Sedime Drift De Algal Mark Iron Dep	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial	f one is re	quired; check all the Water-Stail Aquatic Fate True Aquatic Fate Hydrogen Oxidized Fate Presence of Recent Iron Thin Muck B7) Gauge or N	ned Leaves una (B13) tic Plants (I Sulfide Odd thizosphere of Reduced in Reduction Surface (C Well Data (I	B14) or (C1) es on Living I Iron (C4) n in Tilled S 57)		Secondary Surface S X Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) Or Stressed Plants (D1) Shic Position (D2)
Type: Depth (incomarks: sturbed soil YDROLO etland Hyd Primary In Surface High Water Mark Sedime Drift De Algal Mark Iron Dep	rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	f one is re	quired; check all the Water-Stail Aquatic Fate True Aquatic Fate Hydrogen Oxidized Fate Presence of Recent Iron Thin Muck B7) Gauge or N	ned Leaves una (B13) tic Plants (I Sulfide Odd thizosphere of Reduced in Reduction Surface (C Well Data (I	B14) or (C1) es on Living I Iron (C4) n in Tilled S 57)		Secondary Surface S X Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) Or Stressed Plants (D1) Shic Position (D2)
Type: Depth (incomarks: sturbed soil YDROLO etland Hyd Primary In Surface High Water Mark Sedime Drift De Algal Mark Iron Dep	rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concav	f one is re	quired; check all the Water-Stail Aquatic Fate True Aquatic Fate Hydrogen Oxidized Fate Presence of Recent Iron Thin Muck B7) Gauge or N	ned Leaves una (B13) tic Plants (I Sulfide Odd thizosphere of Reduced in Reduction Surface (C Well Data (I	B14) or (C1) es on Living I Iron (C4) n in Tilled S 57)		Secondary Surface S X Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) Or Stressed Plants (D1) Shic Position (D2)
Type: Depth (incomarks: sturbed soil YDROLO etland Hyd Primary In Surface High W: Saturati Water N Sedime Drift De Algal M Iron De Inundat Sparsel	rology Indicators: dicators (minimum of Water (A1) atter Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concav	f one is real	quired; check all the Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence of Recent Iro Thin Muck B7) Gauge or N (B8) Other (Exp	ned Leaves una (B13) tic Plants (I Sulfide Odd thizosphere of Reduced in Reduction Surface (C Well Data (I	B14) or (C1) es on Living I Iron (C4) n in Tilled S (7) D9) narks)		Secondary Surface S X Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) Or Stressed Plants (D1) Shic Position (D2)
Type: Depth (incomarks: sturbed soil YDROLO etland Hyd Primary In Surface High Wi Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavations: r Present?	Imagery (I	quired; check all the Water-Stain Aquatic Far True Aquatic Far Hydrogen Oxidized For Presence of Recent Iron Thin Muck Gary Other (Exp. No. De	ned Leaves una (B13) tic Plants (I Sulfide Odd thizosphere of Reduced in Reduction Surface (C Well Data (I	B14) or (C1) es on Living I Iron (C4) n in Tilled S 7) D9) narks)		Secondary Surface S X Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) Or Stressed Plants (D1) Shic Position (D2)
Type: Depth (incomarks: sturbed soil YDROLO etland Hyd Primary In Surface High Wi Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel eld Observ	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concavations: r Present? Yes	Imagery (Ire Surface	quired; check all th Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence of Recent Iro Thin Muck B7) Gauge or N (B8) Other (Exp	ned Leaves iuna (B13) tic Plants (I Sulfide Odd Rhizosphere of Reduced in Reduction Surface (C Well Data (I Delain in Rem	B14) or (C1) es on Living I Iron (C4) n in Tilled S 7) D9) narks)	ioils (C6)	Secondary Surface S X Drainage Dry-Seas Crayfish Saturatio Stunted of	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) Or Stressed Plants (D1) Shic Position (D2) Itral Test (D5)
Type: Depth (incomarks: sturbed soil YDROLO etland Hyd Primary In Surface High W: Saturati Water N Sedime Drift De Algal M Iron De Inundat Sparsel eld Observ urface Wate atter Table F	ror Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concav ations: r Present? resent?	Imagery (I	quired; check all the Water-Stain Aquatic Far True Aquatic Far Device Presence of Recent Iron Thin Muck Gay Gauge or No Device No Device No Device Presence of Recent Iron Thin Muck Gauge or No Device No Dev	ned Leaves una (B13) tic Plants (I Sulfide Odd thizosphere of Reduced on Reduction Surface (C Well Data (I plain in Ren epth (inches epth (inches	B14) or (C1) es on Living I Iron (C4) in in Tilled S i7) D9) harks)	Wetlan	Secondary Surface S X Drainage Dry-Seas Crayfish Saturatio Stunted of Geomore X FAC-Neu	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) Or Stressed Plants (D1) Shic Position (D2) Itral Test (D5)
Type: Depth (incomarks: sturbed soil YDROLO etland Hyd Primary In Surface High W: Saturati Water N Sedime Drift De Algal M Iron De Inundat Sparsel eld Observ urface Wate atter Table F	rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concav ations: r Present? Yes esent? Yes	Imagery (I	quired; check all the Water-Stain Aquatic Far True Aquatic Far Device Presence of Recent Iron Thin Muck Gay Gauge or No Device No Device No Device Presence of Recent Iron Thin Muck Gauge or No Device No Dev	ned Leaves una (B13) tic Plants (I Sulfide Odd thizosphere of Reduced on Reduction Surface (C Well Data (I plain in Ren epth (inches epth (inches	B14) or (C1) es on Living I Iron (C4) in in Tilled S i7) D9) harks)	Wetlan	Secondary Surface S X Drainage Dry-Seas Crayfish Saturatio Stunted of Geomore X FAC-Neu	Indicators (minimum of two requires Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) Or Stressed Plants (D1) Shic Position (D2) Itral Test (D5)
Type: Depth (inc. Primarks: sturbed soil Primary In Surface High Water Manager Manage	ror Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concav ations: r Present? resent?	Imagery (I	quired; check all the Water-Stain Aquatic Far True Aquatic Far Device Presence of Recent Iron Thin Muck Gay Gauge or No Device No Device No Device Presence of Recent Iron Thin Muck Gauge or No Device No Dev	ned Leaves una (B13) tic Plants (I Sulfide Odd thizosphere of Reduced on Reduction Surface (C Well Data (I plain in Ren epth (inches epth (inches	B14) or (C1) es on Living I Iron (C4) in in Tilled S i7) D9) harks)	Wetlan	Secondary Surface S X Drainage Dry-Seas Crayfish Saturatio Stunted of Geomore X FAC-Neu	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) Or Stressed Plants (D1) Shic Position (D2) Itral Test (D5)
Type: Depth (incomarks: sturbed soil YDROLO etland Hyd Primary In Surface High W: Saturati Water N Sedime Drift De Algal M Iron De Inundat Sparsel eld Observ urface Wate atter Table F	ror Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concav ations: r Present? resent?	Imagery (I	quired; check all the Water-Stain Aquatic Far True Aquatic Far Device Presence of Recent Iron Thin Muck Gay Gauge or No Device No Device No Device Presence of Recent Iron Thin Muck Gauge or No Device No Dev	ned Leaves una (B13) tic Plants (I Sulfide Odd thizosphere of Reduced on Reduction Surface (C Well Data (I plain in Ren epth (inches epth (inches	B14) or (C1) es on Living I Iron (C4) in in Tilled S i7) D9) harks)	Wetlan	Secondary Surface S X Drainage Dry-Seas Crayfish Saturatio Stunted of Geomore X FAC-Neu	Indicators (minimum of two require Soil Cracks (B6) Patterns (B10) Son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) Or Stressed Plants (D1) Shic Position (D2) Itral Test (D5)



Wetland Wetland 1	Sample Point w	/1	Longitude	Latitude
Cowardin Classification:	Control of Control of Control		-94.545930	38.860278
Size:				
Landform: Drainageway				
Tree Stratum:				
Sapling/Shrub: Typha latifolia Bidens frondosa				
Herb Stratum:				
Vine Stratum:				
Hydric Soil Indicators: Redox Dark Surface (F6)			
Hydrology Indicators Drainage Patterns (B10)	FAC-Neutra	al Test (D5)		
Significant Nexus: Yes Adjacent:	Abuts:	Stream Name:		
<u>Jurisdictional Status and Comments</u> : Drains into the adjacent t1, an intermittent stream.				

Photo 1



Photo 2



Photo 3



Photo 4



Project/Site: HWY 150 and Botts Road		City/C	ounty: Gra	indview (Jackson Co.)	Sampling I			
Applicant/Owner: Promontory 150 LLC				State: MO	Sampling F			
nvestigator(s): Jack Finley					Township, Rang	e: S26 T4	47N R33W	
andform (hillslope, terrace, etc.): Hillsl	ope			ave, convex, none): C		754		
Slope (%): 10-15% Lat: 38.860365			-94.54590		Datum:		M83	
Soil Map Unit Name: Kennebec silt loam, 1					I classification:	UPL		
Are climatic / hydrologic conditions on the si			_		io, explain in Rei		- 0	
Are Vegetation, Soil, or Hydrol						_	No _	
Are Vegetation, Soil, or Hydrol				If needed, explain any		and the second of		1.7
SUMMARY OF FINDINGS - Attack			npling po	oint locations, tra	insects, imp	ortant fe	eatures,	etc.
		× X						
Hydric Soil Present? Ye	es No	×_X_	Is the Sa	ampled Area				
Wetland Hydrology Present? Ye	es No	X_	within a	Wetland?	Yes	No _	X	
Remarks:			1					
13111311131								
VEGETATION - Use scientific nar	mes of plan	ts.						
	Absolute	Dominant	Indicator	Dominance Test w	orksheet:			
Tree Stratum (Plot size: 30 ft)	% Cover	Species?	Status	Number of Dominan	Company of the control of the contro			
1	. —			Are OBL, FACW, or	FAC:	0		(A)
2								
4	·			Total Number of Do Species Across All S		1		(B
5.			_	openies / toross / iii t	Jiraia.	1 <u> </u>	_	(0)
-	0 =	Total Cover		Percent of Dominan	t Species			
Sapling/Shrub Stratum Plot size: 15 ft)			That Are OBL, FAC		000	1%	(A/E
L -						-		
2.				Prevalence Index v	vorksheet:	- 1		
3.				Total % C	over of:	Mul	Itiply by:	3
4				OBL species	0	x 1 =	0	
5				FACW species	0	x 2 =	0	_
Herb Stratum (Plot size: 5 ft)	=	Total Cover		FAC species FACU species	0	x 3 = x 4 =	0	_
1. Sorghum halepense	100	×	FACU	UPL species	<u>110</u> 0	x 5 =	440	-
Ambrosia artemisiifolia	10		FACU	Column Totals:	110	(A)	440	(B)
3. Rubus sp.	· — —		17.00	The state of the s	ence Index = B/A	2.16	110	
4.					22.00	-		_
5.	• ——			Hydrophytic Ve	Edministration of the Company			
6.					est for Hydrophyl		tion	
7.					nce Test is >50%			
8.					ice Index is ≤3.0 ogical Adaptation		la supporti	ina
9.					arks or on a sep			ing
0.					Hydrophytic Ve			
	110 =	Total Cover	5	75				
Woody Vine Stratum (Plot size: 30 ft				¹ Indicators of hyd			ogy must l	be
				present, unless d	isturbed or probl	ematic.		
1.				Hydrophytic				
t			_	Vonatation	100000000000000000000000000000000000000			
t. 2.		= Total Cover		Vegetation Present?	Yes	No.	,_X	

US Army Corps of Engineers Midwest Region - Version 2.0



Feature ID: Unique Site ID:	Tributary	⁷ 6b			Stream Bottom Composition:
Project name: Project #:	HWY 150	and Botts Ro	oad		sand muck gravel other: Scobble vegetation (% cover, type): bedrock
County, State:	Jackson	Co., Missouri			Riparian Type: Surface Flow:
Stream Classifica	ition:	□TNW	□RPW	⊠Non-RPW	☑ Forested ☐ Discrete
Side Slopes:	1:1	2 :1	□3:1	☐4:1 or >	☐ Herbaceous ☐ Confined ☐ Discrete and Confined
Hydrology:			☐ Standing	☐ None	Overland Sheet Flow
Water Color/Qua	elity:	Clear	Discolored	Oily film	Stream Characteristics: Natural Artificial Manipulated
Stream Has:		⊠Bed/Bank	⊠онwм:		Explain Artificial/Manipulated:
Tributary Geome	try:	⊠ Relatively	Straight	Meandering	
OHWM width:	4'	Top of ba of bank v	nk to top vidth:	25'	Stream Type: Perennial Intermittent Ephemeral Draws/Gullies/Erosional Pattern
OHWM height:	0.75	Top of Ba height:	nk	15'	Stream Type Rational: Flowing water, well developed channel with a likely groundwater connection.
Riparian Buffer V	/idth:	N/E side: S/W side:	45	Ft. Ft.	
Buffer (adjacent l	oank) veget	ation:			
black willow, silve	er maple,_b	oush honeysud	ckle.		
					Significant Nexus: Yes No Explain: It eventually flows into the Little Blue River which flows in the Missouri River, a traditional navigable stream.
OHWM has:	own or abse	ent scour	e in plant comi	nunity	Stream Condition/Stability: excessive erosion



Downstream Photo: View east



Sampling Point: w1out

	on: (Describe to Matrix	the depth		nent the in		confirm	the absence of in	ndicators.)
Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
THIOLOGY	Coldi (molat)				-1700		TOMBIG	Tionand
· · · · ·	_	$\overline{}$		_	$\overline{}$	$\overline{}$		
	_			_		_		
-		-		_	_	-		
·		$\overline{}$			$\overline{}$	-		
		$\overline{}$		$\overline{}$		-		
		_			_	-	-	-
-		_		_	-	_		(
Type: C=Conce	ntration, D=Depl	etion, RM=F	Reduced Matrix, M	S=Masked	Sand Grai	ins.		=Pore Lining, M=Matrix
Hydric Soil In	dicators:						Indicators	for Problematic Hydric Soils ³ :
Histosol (A	1)			Sandy Gle	yed Matrix	(S4)	Coast	Prairie Redox (A16)
Histic Epipe	edon (A2)		= ;	Sandy Red	fox (S5)		Dark S	Surface (S7)
Black Histic	(A3)		7	Stripped M	atrix (S6)		Iron-N	langanese Masses (F12)
Hydrogen S	The second second		_		cky Mineral	(F1)		Shallow Dark Surface (TF12)
Stratified La	and the second second			The Paris of	yed Matrix			(Explain in Remarks)
2 cm Muck	2 11 11 11 11 11			Depleted N		V V.		A CONTRACTOR OF THE PROPERTY O
The second second second	elow Dark Surface	ce (A11)			k Surface (F6)		
The state of the s	Surface (A12)	4 6 11 11	_		ark Surface		3Indicato	rs of hydrophytic vegetation and
The state of the state of	ky Mineral (S1)		_		ressions (F			and hydrology must be present.
	y Peat or Peat (S	2)	-	ledox Det	169910119 (1	0)		ss disturbed or problematic.
_ 5 cm Mdck	y real or real (S	13)						
Restrictive Laye	r (if observed):							
Type:							202255	
Depth (inches):						Hydric Soil Pres	sent? Yes No X
Remarks:								
HYDROLOGY	,							
Wetland Hydrolo								
		fone is rea	uired; check all tha	at annivi			Secondary	Indicators (minimum of two required
Surface Wa	the state of the s	Turie is req	Water-Stair		· /P0\			The Control of the Co
					s (B9)			Soil Cracks (B6)
_ High Water			Aquatic Fau	The second second	- 1			Patterns (B10)
Saturation			True Aquati					son Water Table (C2)
_ Water Mark			Hydrogen S					Burrows (C8)
Sediment D	Deposits (B2)		_ Oxidized RI	hizosphere	s on Living	Roots (C	C3) _ Saturation	n Visible on Aerial Imagery (C9)
_ Drift Depos	its (B3)		Presence o	f Reduced	Iron (C4)		Stunted	or Stressed Plants (D1)
Algal Mat o	r Crust (B4)		Recent Iron	Reduction	n in Tilled S	ioils (C6)	Geomor	phic Position (D2)
Iron Deposi	its (B5)		Thin Muck	Surface (C	7)		FAC-Net	utral Test (D5)
Inundation	Visible on Aerial	Imagery (B	7) Gauge or W	Vell Data (I	D9)			
_ Sparsely Ve	egetated Concav	e Surface (B8) Other (Expl	ain in Rem	narks)			
Field Observation	ns:							
Surface Water Pr	esent? Yes	S	No De	oth (inches	s)(s)			
Water Table Pres	ent? Yes		No Der	pth (inches	s)			
Saturation Preser	nt? Yes	3	No De	oth (inches	s)	Wetlar	nd Hydrology Pre	sent? Yes No X
(includes capillary		· ='à	25-146-					
Describe Recorde	ed Data (stream	gauge, mon	itoring well, aerial	photos, pr	evious insp	ections),	if available:	
Domorles								
Remarks:								



Wetland		Sample Point	w1out	Longitude	Latitude
Cowardin Classification: UP	L	the formula		-94.545903	38.860365
Size:					
Landform: Hillslope					
Tree Stratum:					
Sapling/Shrub:					
Herb Stratum: Sorghum halepe	nse Ambrosia a	rtemisiifolia Rubus s	0.		
Vine Stratum:					
Hydric Soil Indicators:					
Hydrology Indicators:					
Significant Nexus:	Adjacent:	Abuts:	Stream Name);	
Jurisdictional Status and Co.	mmonte:				

Photo 1



Photo 2



Photo 3



Photo 4



Project/Site: HWY 150 and Botts Road Applicant/Owner: Promontory 150 LLC	City/	County: Grandview	State: MO	Sampling F	Date: 08/26/20	20
Investigator(s): Jack Finley				ownship, Rang		233W
10 10 10 10 10 10 10 10 10 10 10 10 10 1	ngeway Local	relief (concave, con			320 147111	13377
Slope (%): 2-5% Lat: 38.860022		-94.545863	CC	Datum:	UTM83	F
Soil Map Unit Name: 10117 Sampsel silty			NWI	classification:	PEM	
Are climatic / hydrologic conditions on the situ				o, explain in Rer		
						N/a
	gysignificantly distur			nces" present?		NO
Are Vegetation, Soil, or Hydrolo				answers in Rem		2.2.2.2
SUMMARY OF FINDINGS - Attach		mpling point lo	cations, trai	nsects, imp	ortant reatu	res, etc
Hydrophytic Vegetation Present? Yes	No					
Hydric Soil Present? Yes	No	Is the Sampled	Area			
Wetland Hydrology Present? Yes	X No	within a Wetland	1?	Yes X	No	
Remarks:		4				
VEGETATION - Use scientific nam		Domi	nance Test wo	rkchoot:		
Tree Stratum (Plot size: 30 ft)	Absolute Dominant % Cover Species?	marcator	er of Dominant			
1.			BL, FACW, or f	The Court of the C	1	(A)
2.					-	
3.		Total	Number of Dom	ninant		
4.		Speci	es Across All St	trata:	1	(B)
5.						
Sapling/Shrub Stratum Plot size: 15 ft	= Total Cover		nt of Dominant Are OBL, FACW		100%	(A/E
<u></u>		Prove	lence Index w	orkeheet:		
2.			Total % Co		Multiply	by:
4		OBL s	pecies	110	1.4	
5.	-	J 5- 94	/ species	0	x 2 = 0	10
-	0 = Total Cover		pecies	0	x3 = 0	_
Herb Stratum (Plot size: 5 ft)			species	0	x 4 = 0	_
1. Typha latifolia	100 ×		pecies	0	x 5 = 0	-
2. Scirpus atrovirens	10		n Totals:	110	- 545	10 (B)
3.	==			nce Index = B/A		
4.				10000		
5.	-	— Ну		etation Indica		
6.		<u>×</u>		st for Hydrophyl	1	
7.		x		ce Test is >50%		
8.		x		e Index is ≤3.0		
9.	===			gical Adaptation arks or on a sep		pporting
				arks or on a sep Hydrophytic Ve		ain\
0	110 = Total Cover		1 TOOIEITIAUC I	iyoropriyac ve	gotation (Expl	unij
Woody Vine Stratum (Plot size: 30 ft				ic soil and wetla		must be
2.			drophytic	Lanced of proof	ernaut.	
	0 = Total Cove		getation	Yes	No	
		Pre	sent?			-
Remarks: (Include photo numbers here or or	a separate sheet.)					

US Army Corps of Engineers

Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	2.5Y 2.5/1	100					Loam	
6-12	2.5Y 5/1	90	7.5YR 4/6	10		M	Clay	
26 - 3								
pe: C=Cor	ncentration, D=Depl	etion, RM=	Reduced Matrix, N	1S=Masked	d Sand Grai	ns.	² Location: PL=	Pore Lining, M=Matrix
Hydric Soi	il Indicators:						Indicators for	or Problematic Hydric Soils ³ ;
Histosol	(A1)			Sandy Gle	yed Matrix ((S4)	Coast F	Prairie Redox (A16)
Histic E	pipedon (A2)		=	Sandy Red	dox (S5)		Dark Si	urface (S7)
Black H	istic (A3)		- 7	Stripped N	latrix (S6)		Iron-Ma	inganese Masses (F12)
Hydroge	en Sulfide (A4)			Loamy Mu	cky Mineral	(F1)	Very SI	nallow Dark Surface (TF12)
Stratifie	d Layers (A5)			Loamy Gle	yed Matrix	(F2)		Explain in Remarks)
2 cm Mi	uck (A10)		$\overline{\times}$	Depleted N	Natrix (F3)			
	d Below Dark Surfa	ce (A11)			k Surface (I	F6)		
-	ark Surface (A12)	3.4	_		Dark Surface		3Indicators	s of hydrophytic vegetation and
Sandy N	Mucky Mineral (S1)		(C)	Redox Dep	oressions (F	8)		nd hydrology must be present,
	ucky Peat or Peat (S	53)	_				unles	s disturbed or problematic.
strictive La	ayer (if observed):							
20,120,12	7 (
Type:							and the second second	
Type: Depth (incl marks:	hes);						Hydric Soil Prese	ent? Yes No
Depth (incl marks:							Hydric Soil Prese	ent? Yes No
Depth (incl marks:	GY						Hydric Soil Prese	ent? Yes X No
Depth (incl marks: YDROLO		of one is rec	quired; check all th	at apply)				ent? Yes No
Depth (incl marks: YDROLO etland Hyde Primary Inc	GY rology Indicators:	of one is rec	quired; check all th		s (B9)		Secondary Ir	
Depth (incl marks: /DROLO etland Hyde Primary Inc	GY rology Indicators: dicators (minimum o Water (A1)	of one is rec	_ Water-Stai	ned Leave	s (B9)		Secondary Ir Surface S	ndicators (minimum of two require
Depth (incl marks: YDROLO etland Hydr Primary Inc Surface High Wa	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2)	of one is red	Water-Stai Aquatic Fa	ned Leave una (B13)			Secondary Ir Surface S X Drainage	ndicators (minimum of two require oil Cracks (B6) Patterns (B10)
Depth (incl marks: /DROLO etland Hyde Primary Inc Surface High Wa X Saturati	GY rology Indicators: dicators (minimum o Water (A1) ater Table (A2) on (A3)	of one is red	Water-Stai Aquatic Fa True Aqua	ned Leave una (B13) tic Plants (I	B14)		Secondary Ir Surface S X Drainage Dry-Seaso	ndicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2)
Depth (incl marks: /DROLO etland Hydr Primary Inc Surface High Water Mater Mater Mater Mater Market	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1)	of one is red	— Water-Stai — Aquatic Fa — True Aquat — Hydrogen	ned Leave una (B13) tic Plants (I Sulfide Odd	B14) or (C1)	Boots (C	Secondary Ir Surface S X Drainage Dry-Sease Crayfish B	ndicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) Jurrows (C8)
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Primary Inc. Surface High Wa X Saturati Water M Sedime Drift De	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3)	of one is red	— Water-Stai — Aquatic Fa — True Aquat — Hydrogen S — Oxidized R — Presence o	ned Leaver una (B13) tic Plants (I Sulfide Odo thizosphere of Reduced	B14) or (C1) es on Living I Iron (C4)		Secondary Ir Surface S X Drainage Dry-Sease Crayfish B Saturation Stunted or	ndicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) I Visible on Aerial Imagery (C9) Stressed Plants (D1)
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Depth (inclemarks: //DROLO etland Hyde Primary Inc Surface High Wa X Saturati Water M Sedime Drift Depended Might	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial by Vegetated Concavations: r Present? Ye Present? Ye	Imagery (E ve Surface s	Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck Gauge or V (B8) Other (Exp	ned Leaver una (B13) tic Plants (I Sulfide Odd thizosphere of Reduced in Reduction Surface (C Well Data (I Idain in Ren	B14) or (C1) es on Living I Iron (C4) n in Tilled S 7) D9) narks)	oils (C6)	Secondary Ir Surface S X Drainage Dry-Sease Crayfish E Saturation Stunted or	ndicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) nic Position (D2) ral Test (D5)
Depth (inclemarks: /DROLO etland Hydr Primary Inc Surface High Water M Sedime Drift De Algal Ma Iron Dep Inundati Sparsel eld Observatirace Water atter Table F turation Pre	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial by Vegetated Concar ations: r Present? Ye Present? Ye	Imagery (E ve Surface s	Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck Gauge or V (B8) Other (Exp	ned Leaver una (B13) tic Plants (I Sulfide Odo hizosphere of Reduced n Reduction Surface (C Well Data (I lain in Ren	B14) or (C1) es on Living I Iron (C4) n in Tilled S 7) D9) narks)	oils (C6)	Secondary Ir Surface S X Drainage Dry-Sease Crayfish B Saturation Stunted or Geomorph X FAC-Neut	ndicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) surrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) nic Position (D2) ral Test (D5)
Depth (inclemarks: //DROLO etland Hyde Primary Inc Surface High Wa X Saturati Water M Sedime Drift De Algal Ma Iron Dep Inundati Sparsel eld Observation Precludes capi	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial by Vegetated Concavations: r Present? Present? Ye present? Ye present? Ye present? Ye present? Ye present?	Imagery (Five Surface	Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck 37) Gauge or V (B8) Other (Exp	ned Leaver una (B13) tic Plants (I Sulfide Odd thizosphere of Reduction Reduction Surface (C Vell Data (I lain in Ren	B14) or (C1) es on Living I Iron (C4) in in Tilled S i7) D9) harks) s)s	wetlan	Secondary Ir Surface S X Drainage Dry-Seasc Crayfish E Saturation Stunted or Geomorph X FAC-Neut	ndicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) surrows (C8) I Visible on Aerial Imagery (C9) Testressed Plants (D1) nic Position (D2) ral Test (D5)
Depth (inclemarks: //DROLO etland Hyde Primary Inc Surface High Wa X Saturati Water M Sedime Drift De Algal Ma Iron Dep Inundati Sparsel eld Observation Precludes capi	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial y Vegetated Concav ations: r Present? Ye present Ye	Imagery (Five Surface	Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck 37) Gauge or V (B8) Other (Exp	ned Leaver una (B13) tic Plants (I Sulfide Odd thizosphere of Reduction Reduction Surface (C Vell Data (I lain in Ren	B14) or (C1) es on Living I Iron (C4) in in Tilled S i7) D9) harks) s)s	wetlan	Secondary Ir Surface S X Drainage Dry-Seasc Crayfish E Saturation Stunted or Geomorph X FAC-Neut	ndicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) surrows (C8) I Visible on Aerial Imagery (C9) Testressed Plants (D1) nic Position (D2) ral Test (D5)

US Army Corps of Engineers Midwest Region - Version 2.0



Wetland Wetland 2	Sample Point w	v2	Longitude	Latitude
Cowardin Classification:	the famous as		-94.545863	38.860022
Size:				
Landform: Drainageway				
Tree Stratum:				
Sapling/Shrub:				
Herb Stratum: Typha latifolia Scirpus atrovirens	1			
Vine Stratum:				
Hydric Soil Indicators: Depleted Matrix (F3)				
Hydrology Indicators Saturation (A3)	Drainage Pa	atterns (B10)		
Significant Nexus: Yes Adjacent:	Abuts:	Stream Name:		
<u>Jurisdictional Status and Comments</u> : Drains into the adjacent t1, an intermittent stream.				

Photo 1



Photo 2



Photo 3 Photo 4

Project/Site: HWY 150 and Botts Road Applicant/Owner: Promontory 150 LL	С		Gra	ndview (Jackson Co.) State: MO	Sampling F	Date: <u>08/20</u> Point: w201		
nvestigator(s): Jack Finley					ownship, Rang			,
The second secon	llslope	Local re	elief (conca	ive, convex, none): Co		020 14	714 110011	
Slope (%): 5-10% Lat: 38.860038	поторс		-94.54595		Datum:	UTN	A83	
Soil Map Unit Name: 10117 Sampsel	silty clay loam, 5 to				classification:	UPL		
Are climatic / hydrologic conditions on the				No (If no	, explain in Rei			
	lrology signif			Are "Normal Circumstan			No	
	- T - T - T - T - T - T - T - T - T - T	ally problemati		If needed, explain any a				
SUMMARY OF FINDINGS - Atta							atures.	etc
		X				e ji apalit e i u e	ecessis o	07.0.7
	Yes No	X		andre At Young				
빚기원이라 남아 생생이라고 있는 때	Yes No			mpled Area Wetland?	Yes	No	Y	
Totalia Hydrology Trosont.			With the Control of t	Trouble.	100	- 88		
Remarks:								
								_
VEGETATION - Use scientific n	ames of plants	S			Contractor Contractor			
Tree Stratum (Plot size: 30 ft	Absolute) % Cover	Dominant Species?	Indicator Status	Dominance Test wo				
Tree Stratum (Plot size: 30 ft	76 COVE	Species:	Status	Number of Dominant Are OBL, FACW, or F		0		(A)
2.				7.10 002, 7.710, 13, 9.71				1. 1
3.				Total Number of Dom	inant			
4.				Species Across All St	rata:	3		(B)
5.								
		Total Cover		Percent of Dominant				
Sapling/Shrub Stratum Plot size: 15	5 ft)			That Are OBL, FACW	, or FAC:	0009	%	(A/E
t ₂				Provide to to do one	SECTION AND			
2.			_	Prevalence Index wo		Made	inly but	
3			_	OBL species	0	x 1 =	iply by:	-
5.	-, ,		_	FACW species	0	x 2 =	0	-
J	0 =	Total Cover	_	FAC species	0	x 3 =	0	
Herb Stratum (Plot size: 5 ft)	707		FACU species	70	x 4 =	280	_
Bouteloua curtipendula	40	×	UPL	UPL species	40	x 5 =	200	
2. Sorghastrum nutans	10		FACU	Column Totals:	110	(A)	480	(B)
3. Sorghum halepense	30	×	FACU	Prevalen	ce Index = B/A	= 4.36		36
Symphoricarpos orbiculatus	30	×	FACU	Hydrophytic Veg	etation Indica	ore.		
5.				4 Temps No. 1 (1) 1 (1)	t for Hydrophyl		on	
6.	-8				e Test is >50%	100		
7				The state of the s	e Index is ≤3.0			
8			_	4 - Morpholog	gical Adaptation	s' (Provide		ing
9					rks or on a sep			
0		-		Problematic I	Hydrophytic Ve	getation' (E	Explain)	
Woody Vine Stratum (Plot size: 30 f		Total Cover		1 (Capana)	26.200.000	and the first		Gra-
Woody Vine Stratum (Plot size: 30 f				¹ Indicators of hydri present, unless dis			gy must b	эе
2.			_	Hydrophytic	and or proof	e.riado.		
7		= Total Cover	_	Vegetation	Yes	No	×	
	— 	, 20101		Present?			$\stackrel{\sim}{-}$	
Remarks: (Include photo numbers here		2000						
hemarks. (include photo numbers here t	or on a separate sh	eet.)						
nemarks. (include prioto numbers here t	or on a separate sh	eet.)						

US Army Corps of Engineers

Sampling Point: w2out

(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc2	Texture	Remarks
0-8	2.5Y 2/1	100					Clay	
8-12	2.5Y 3/1	70	2.5 YR 4/6	5		М	Clay	
	2.5Y 5/1	25						
70.00								
	_	=						
/pe: C=Con	centration, D=Dep	letion, RM=	Reduced Matrix, M	 IS=Masked	Sand Grai	ins.	² Location: PL=f	Pore Lining, M=Matrix
Hydric Soi	I Indicators:		200 miles 1 apr 4 a com			4	Indicators fo	or Problematic Hydric Soils ³ :
Histosol	(A1)			Sandy Gle	yed Matrix	(S4)	Coast P	rairie Redox (A16)
	pipedon (A2)		_	Sandy Red		1-17		orface (S7)
	stic (A3)		_	Stripped M				nganese Masses (F12)
	n Sulfide (A4)		_		cky Mineral	/E4V		nallow Dark Surface (TF12)
_	Layers (A5)		_	The state of the state of	yed Matrix		C	Explain in Remarks)
_	ick (A10)					(1-2)	_ Office (i	Explain in tremains,
		no /Att\	_	Depleted N		EeV		
The state of the s	d Below Dark Surfa	ce (ATT)	_		k Surface (31	of budga abutia (constation and
	ark Surface (A12)		_	Table 1 to 1 to 1 to 1	Dark Surface			of hydrophytic vegetation and hydrology must be present,
	lucky Mineral (S1)		_	неаох пер	oressions (F	-8)		disturbed or problematic.
_ 5 cm Mu	icky Peat or Peat (53)						
	yer (if observed):							
Type:								
77.00.27	· Inni						Muduia Cail Duana	was No. No. No.
Depth (inch marks: sturbed soil.							Hydric Soil Prese	nt? YesNo_X
Depth (inch marks: sturbed soil.							Hydric Soil Prese	nt? YesNo_X
Depth (inch marks: sturbed soil.							Hydric Soil Prese	nt? YesNo_X
Depth (inch marks: sturbed soil.	GY		quired; check all th	at apply)				
Depth (inch marks: sturbed soil. /DROLOG etland Hydr Primary Inc	GY ology Indicators:		quired; check all th Water-Stai		s (B9)		Secondary In	
Depth (inch marks: sturbed soil. YDROLOG etland Hydr Primary Inc Surface	GY ology Indicators: dicators (minimum of Water (A1)		_ Water-Stai	ned Leaves	s (B9)		Secondary In Surface So	dicators (minimum of two require
Depth (inch marks: sturbed soil. YDROLOG etland Hydr Primary Inc Surface High Wa	GY ology Indicators: dicators (minimum of Water (A1) ater Table (A2)		Water-Stai Aquatic Fa	ned Leaves una (B13)			Secondary In Surface So Drainage F	dicators (minimum of two require bil Cracks (B6) Patterns (B10)
Depth (inch marks: sturbed soil. /DROLOG etland Hydr Primary Inc Surface High Wa Saturatio	GY ology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3)		Water-Stai Aquatic Fa True Aqua	ned Leaves una (B13) tic Plants (B	314)		Secondary In Surface So Drainage F Dry-Seaso	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2)
Depth (inch marks: sturbed soil. YDROLOG etland Hydr Primary Inc Surface High Wa Saturation	GY cology Indicators: dicators (minimum of the cology) Water (A1) ater Table (A2) on (A3) larks (B1)		Water-Stai Aquatic Fa True Aqua _ Hydrogen S	ned Leaves una (B13) tic Plants (B Sulfide Odd	B14) or (C1)	Roots (C	Secondary In Surface So Drainage F Dry-Seaso Crayfish B	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8)
Primary Inc. Surface High Water M Sedimer	GY cology Indicators: dicators (minimum of the Water (A1) atter Table (A2) on (A3) larks (B1) att Deposits (B2)		Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R	ned Leaves una (B13) tic Plants (E Sulfide Odo thizosphere	314) or (C1) es on Living	Roots (C	Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation	dicators (minimum of two require bil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9)
Primary Inc Surface High Water M Sedimer Drift Dep	GY ology Indicators: dicators (minimum of the content of the cont		— Water-Stai — Aquatic Fa — True Aquat — Hydrogen S — Oxidized R — Presence o	ned Leaves una (B13) tic Plants (E Sulfide Odo hizosphere of Reduced	B14) or (C1) es on Living I Iron (C4)		Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1)
Depth (inch marks: sturbed soil. /DROLOG etland Hydr Primary Inc Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma	GY ology Indicators: dicators (minimum of the continum of the		— Water-Stai — Aquatic Fa — True Aquat — Hydrogen S — Oxidized R — Presence of Recent Iron	ned Leaves una (B13) tic Plants (B Sulfide Odo thizosphere of Reduced n Reduction	B14) or (C1) es on Living I Iron (C4) n in Tilled S		Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oic Position (D2)
Depth (inch marks: sturbed soil. YDROLOG etland Hydr Primary Inc Surface High Wa Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep	GY cology Indicators: dicators (minimum of the Mater (A1) atter Table (A2) on (A3) larks (B1) att Deposits (B2) cosits (B3) att or Crust (B4) cosits (B5)	of one is rec	— Water-Stai — Aquatic Fa — True Aquat — Hydrogen S — Oxidized R — Presence of — Recent Iron — Thin Muck	ned Leaves una (B13) tic Plants (B Sulfide Odo hizosphere of Reduced n Reduction Surface (C	B14) or (C1) es on Living I fron (C4) on in Tilled S		Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph	dicators (minimum of two require bil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1)
Primary Inc. Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep Inundation	GY ology Indicators: dicators (minimum of the continum of the	of one is rec	Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck Gauge or V	ned Leaves una (B13) tic Plants (B Sulfide Odd chizosphere of Reduced n Reduction Surface (C Vell Data (I	B14) or (C1) es on Living Iron (C4) in in Tilled S (7)		Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oic Position (D2)
Depth (inch marks: sturbed soil. YDROLOG etland Hydr Primary Inc Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely	GY ology Indicators: dicators (minimum of the property of the	of one is rec	Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck Gauge or V	ned Leaves una (B13) tic Plants (B Sulfide Odd chizosphere of Reduced n Reduction Surface (C Vell Data (I	B14) or (C1) es on Living Iron (C4) in in Tilled S (7)		Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oic Position (D2)
Primary Inc. Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely	GY ology Indicators: dicators (minimum of the Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aeria of Vegetated Conca	of one is rec I Imagery (E ve Surface	Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck S7) Gauge or V (B8) Other (Exp	ned Leaves una (B13) tic Plants (B Sulfide Odo chizosphere of Reduced in Reduction Surface (C Well Data (I lain in Rem	B14) or (C1) es on Living I Iron (C4) in in Tilled S i7) D9) narks)		Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oic Position (D2)
Depth (inch marks: sturbed soil. /DROLOG etland Hydr Primary Inc Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely	GY ology Indicators: dicators (minimum of water (A1) ater Table (A2) on (A3) darks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aeria of Vegetated Conca	I Imagery (Eve Surface	Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck Gauge or V (B8) Other (Exp	ned Leaves una (B13) tic Plants (B Sulfide Odc chizosphere of Reduced in Reduction Surface (C Well Data (I lain in Rem	B14) or (C1) es on Living I Iron (C4) in in Tilled S i7) D9) narks)		Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oic Position (D2)
Primary Inc. Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely	ology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) darks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aeria of Vegetated Conca	I Imagery (Eve Surface	Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck (B8) Other (Exp	ned Leaves una (B13) tic Plants (B Sulfide Odc thizosphere of Reduced in Reduction Surface (C Well Data (I lain in Rem	B14) or (C1) es on Living I Iron (C4) in in Tilled S i7) D9) harks)	soils (C6)	Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oic Position (D2) ral Test (D5)
Depth (inch marks: sturbed soil. YDROLOG etland Hydr Primary Inc Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely eld Observa rface Water ater Table P turation Pre	GY ology Indicators: dicators (minimum of water (A1) ater Table (A2) on (A3) larks (B1) on Deposits (B2) osits (B3) at or Crust (B4) osits (B5) on Visible on Aeria of Vegetated Conca ations: Present? Yesent? Yesent? Yesent?	I Imagery (Eve Surface	Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck (B8) Other (Exp	ned Leaves una (B13) tic Plants (B Sulfide Odc chizosphere of Reduced in Reduction Surface (C Well Data (I lain in Rem	B14) or (C1) es on Living I Iron (C4) in in Tilled S i7) D9) harks)	soils (C6)	Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph FAC-Neutr	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oic Position (D2) ral Test (D5)
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Primary Inc. Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep Inundation Sparsely Eld Observa riace Water Table P turation Pre cludes capill scribe Reco	GY ology Indicators: dicators (minimum of water (A1) ater Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aeria of Vegetated Conca ations: Present? Yesent?	I Imagery (Eve Surface	Water-Stai Aquatic Fa True Aquat Hydrogen S Oxidized R Presence of Recent Iron Thin Muck 37) Gauge or V (B8) Other (Exp	ned Leaves una (B13) tic Plants (B Sulfide Odd chizosphere of Reduced on Reduction Surface (C Vell Data (I dain in Rem epth (inches epth (inches	B14) or (C1) es on Living I fron (C4) in in Tilled S in (C4) in arks)	wetlan	Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph FAC-Neutr	dicators (minimum of two require oil Cracks (B6) Patterns (B10) on Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) oic Position (D2) ral Test (D5)
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Wetland	Sample Po	oint w2out	Longitude	Latitude
Cowardin Classification: UPL	- Conferre		-94.545955	38.860038
Size:				
Landform: Hillslope				
Tree Stratum:				
Sapling/Shrub:				
Herb Stratum: Bouteloua curtipend	ula Sorghastrum nutans So	orghum halepense		
Vine Stratum:				
Hydric Soil Indicators:				
Hydrology Indicators:				
Significant Nexus: Ad	jacent: Abuts:	Stream N	ame:	
Jurisdictional Status and Comp	nonte:			

Photo 1



Photo 2



Photo 3





Project/Site: HWY 150 and Botts Roa	d	City/County: Gran	ndview (Jackson Co.)		te: 08/26/2020
Applicant/Owner: Promontory 150	LLC		State: MO	Sampling Poil	
Investigator(s): Jack Finley					S26 T47N R33W
		Local relief (conca	ve, convex, none): Co	ncave	
Slope (%): 2-5% Lat: 38.86016		Long;94.545609		Datum:	UTM83
Soil Map Unit Name: 36083 Kennel	pec silt loam, 1 to 4 percent s	slopes, occasionally	y floode NWI	classification:	PEM
Are climatic / hydrologic conditions on	the site typical for this time o	f year? Yes	No(If no	, explain in Rema	irks)
Are Vegetation, Soil, or H	ydrologysignificantly	disturbed? A	re "Normal Circumstan	ces" present? Ye	s X No
Are Vegetation, Soil, or H	lydrology naturally pro	oblematic? (I	f needed, explain any a	answers in Remar	rks.)
SUMMARY OF FINDINGS - At	tach site map showin	g sampling po	int locations, tran	sects, impor	tant features, etc.
Hydrophytic Vegetation Present?	Yes X No				
Hydric Soil Present?	Yes X No	Is the Sa	mpled Area		
Wetland Hydrology Present?	Yes X No		Wetland?	Yes X	No
Remarks:					
VEGETATION - Use scientific			16	returns.	
Tree Stratum (Plot size: 30 ft	Absolute Domina) % Cover Specie		Dominance Test wor		
Tree Stratum (Plot size: 30 ft	J Species Species	Oldius .	Number of Dominant : Are OBL, FACW, or F		1 (A)
2.				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3.7
3.			Total Number of Dom	inant	
4.			Species Across All St	rata:	1 (B)
5.					
Sapling/Shrub Stratum Plot size:	= Total C	over	Percent of Dominant S That Are OBL, FACW		100% (A/E
2.			Prevalence Index wo	orksheet:	
3			Total % Co		Multiply by:
4.			OBL species		x 1 = 100
5.		= ==	FACW species		x 2 = 0
	0 = Total C	over	FAC species		x 3 = 0
Herb Stratum (Plot size: 5 ft)		FACU species	0	x 4 = 0
1. Typha latifolia	100 X	OBL	UPL species	0	x 5 = 0
2.			Column Totals:		(A) <u>100</u> (B)
3.			Prevalen	ce Index = B/A =	1.00
4.			Hydrophytic Veg	etation Indicator	rs:
5			4 Temp 242 Cop 152	at for Hydrophytic	
6.				e Test is >50%	, egg and a
7				e Index is ≤3.0¹	
8.				Company of the second s	(Provide supporting
9			data in Rema	irks or on a separa	ate sheet)
10.			Problematic F	Hydrophytic Vege	tation1 (Explain)
esa e a lue e an est	= Total C	over			
Woody Vine Stratum (Plot size: 30	O ft)				d hydrology must be
<u></u>			present, unless dis	turbed or problem	natic.
2		Cover	Hydrophytic Vegetation	V \/	No
	= Tota	l Cover	Present?	Yes X	_ ~
Remarks: (Include photo numbers her	e or on a separate sheet.)				
And the second s	And the form of the state of th				

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Depth	Matrix			Redox Feat	ures			
(inches)	Color (moist)	%	Color (moist)	_%_	Type ¹	Loc2	Texture	Remarks
				_	_	-		
				-		_		-
				_	-			-
-				_	_			-
				_	_			-
$\overline{}$				_	$\overline{}$		$\overline{}$	-
vpe: C=Con	centration, D=Deple	tion. RM=Rec	duced Matrix. M	S=Masked	Sand Grai	ns.	² Location: PL=	Pore Lining, M=Matrix
	Indicators:	2 200 40120 (22)	229/2012/01/01/01	E GIMONE				or Problematic Hydric Soils ³ :
Histosol				Sandy Glev	ed Matrix (S4)		Prairie Redox (A16)
_	pipedon (A2)		_	Sandy Red				urface (S7)
Black Hi			_	Stripped Ma	200			anganese Masses (F12)
	n Sulfide (A4)				ky Mineral	(F1)		hallow Dark Surface (TF12)
	Layers (A5)			The state of the s	yed Matrix			(Explain in Remarks)
_	ick (A10)			Depleted M				y-1,
_	Below Dark Surface	e (A11)		the Control of the Control	k Surface (I	F6)		
	ark Surface (A12)	7.5	_		ark Surface		3Indicator	s of hydrophytic vegetation and
	lucky Mineral (S1)		_		ressions (F		wetla	and hydrology must be present,
	icky Peat or Peat (S	3)	_		,		unles	s disturbed or problematic.
		· ·						
	yer (if observed):					- 11		
Type: Depth (inch	real.						Hydric Soil Pres	ent? Yes Y No
200 May 200							Committee of the control	
YDROLO	GY ology Indicators:							
	licators (minimum of	one is require	ed; check all the	at apply)			Secondary I	ndicators (minimum of two required
X Surface	completelization for the second state of the second		Water-Stair	of the late of the	(B9)			Soil Cracks (B6)
_	ter Table (A2)		Aquatic Fa		45.00			Patterns (B10)
X Saturation			True Aquat		314)			on Water Table (C2)
	arks (B1)		Hydrogen S					Burrows (C8)
	nt Deposits (B2)		Oxidized R			Roots (C3		n Visible on Aerial Imagery (C9)
The second second	oosits (B3)		Presence of	2 1 2 2 2 2 3		2.2.10		r Stressed Plants (D1)
	it or Crust (B4)		Recent Iron			oils (C6)	_	hic Position (D2)
_	iosits (B5)		Thin Muck			303.003		tral Test (D5)
Inundation	on Visible on Aerial I	magery (B7)	Gauge or V	Vell Data (D	09)		_	
Sparsely	Vegetated Concave	Surface (B8	Other (Exp	lain in Rem	arks)			
eld Observa	tions:							
urface Water	Present? Yes	X No) De	pth (inches) 1			
ater Table P	resent? Yes	X No	De	pth (inches) 0			
aturation Pre		X No	De	pth (inches) 0	Wetland	d Hydrology Pres	ent? Yes X No
ncludes capil								
escribe Reco	rded Data (stream g	auge, monito	ring well, aerial	photos, pre	evious insp	ections), if	available:	
emarks:								

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)



Wetland Wetland 3	Sample Point w3		Longitude	Latitude
Cowardin Classification: PEM	the family of		-94.545609	38.860167
Size:				
Landform: Drainageway				
Tree Stratum:				
Sapling/Shrub:				
Herb Stratum: Typha latifolia				
Vine Stratum:				
Hydric Soil Indicators: inundated				
Hydrology Indicators Surface Water (A1)	Drainage Patt	erns (B10)		
Significant Nexus: Yes Adjacent:	Abuts:	Stream Name:		
<u>Jurisdictional Status and Comments</u> : Drains into the adjacent t1, an intermittent stream.				

Photo 1



Photo 2



Photo 3



Photo 4



ad	City/Ci	ounty: Gran	ndview (Jackson Co.)				
LLC							
	1000				e: S26 T47	7N R33W	
					1174	100	
						183	
						- 20-	
The second secon						_ No _	
						5.03	1.0
	-	ipling po	int locations, trai	nsects, imp	ortant te	atures,	etc.
- 1		4 4 5					
					3.5		
Yes No	<u>X</u>	within a \	Wetland?	Yes	No _	<u> </u>	
		4					
names of plan	e						
		Indicator	Dominance Test wo	rksheet:			
) % Cover	Species?	Status	The state of the s	THE RESERVE OF THE PROPERTY OF THE PARTY OF			
30,000			Are OBL, FACW, or F	FAC:	0		(A)
		_			2		VD)
	\longrightarrow	_	Species Across Air Si	iraia.			(B)
	Total Cover	_	Persont of Dominant	Cassias			
					000%	6	(A/E
1011			1032/01/3/03/04/04/0	10070073	-	_	
			Prevalence Index we	orksheet:			
			Total % Co	ver of:	Multi	ply by:	2
			OBL species	0	x 1 =	0	
				0	x 2 =	0	_
	Total Cover				1 107 6 2 19	0	_
/	¥	FACIL	The state of the s				-
							(B)
		OI L	The state of the s		2.16	300	
							_
			4 Temps Transfer 15 To				
						on	
						aumosti	ina
							ing
= =				A CONTRACTOR OF THE PARTY OF TH			
90 =	Total Cover		-				
30 ft						gy must b	oe
				sturbed or probl	ematic.		
					.5.7		
0	= Total Cover		Present?	Yes	No.	<u>X</u>	
			Trooding				
re or on a constale a	neet \						
re or on a separate s	neet.)						
re or on a separate s	neet.)						
	Hillslope 75 Pebec silt loam, 1 to 4 p the site typical for thi Hydrology sign Hydrology natu ttach site map s Yes No Yes No Yes No Yes No Yes No 15 ft	Hillslope Local r To Long: Sebec silt loam, 1 to 4 percent slopes, the site typical for this time of year? Hydrology significantly disturbly disturbly disturbly disturbly maturally problemate ttach site map showing sand and yes No X Yes No X Yes No X Yes No X Total Cover 15 ft	Hillslope Total Cover Hillslope	State: Section, T	State: Sampling F Section. Township, Rang Section. Township, Rang Hillislope Local relief (concave, convex, none): Convex Datum: Convex Convex Convex Datum: Convex Convex	State: Sampling Point: W3ou Section, Township, Range: S26 T4:	State: Sampling Point: w3out

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Sampling Point: w3out

ofile Description: (Describe to the	e depth needed to d	locument the in Redox Fea		confirm	the absence of inc	licators.)
Depth Matrix (inches) Color (moist)	% Color (moi		Type ¹	Loc ²	Texture	Remarks
(mones)	70 Odioi (inioi		-1700		TOMBIG	Tiernang
		\neg $-$	$\overline{}$	-	97	
				_	· ·	
			-	-		
			_	_		
					-	
			$\overline{}$	_		_
As ye al Alexandra ye is				_		WATEL STORAGE
ype: C=Concentration, D=Depletion	on, RM=Reduced Mate	rix, MS=Masked	Sand Grain	ns.		Pore Lining, M=Matrix
Hydric Soil Indicators:						r Problematic Hydric Soils ³ :
Histosol (A1)		I - Company of the state of the	yed Matrix ((S4)	_ Coast P	rairie Redox (A16)
Histic Epipedon (A2)		_ Sandy Red	lox (S5)		_ Dark Su	ırface (S7)
Black Histic (A3)		Stripped M	latrix (S6)		Iron-Ma	nganese Masses (F12)
Hydrogen Sulfide (A4)		Loamy Mu	cky Mineral	(F1)	Very Sh	allow Dark Surface (TF12)
Stratified Layers (A5)		Loamy Gle	yed Matrix	(F2)	Other (E	Explain in Remarks)
2 cm Muck (A10)		Depleted N	Matrix (F3)		-	
Depleted Below Dark Surface ((A11)	Redox Dar	k Surface (F	F6)		
Thick Dark Surface (A12)		Depleted D	ark Surface	e (F7)	3Indicators	of hydrophytic vegetation and
Sandy Mucky Mineral (S1)			ressions (F			nd hydrology must be present.
5 cm Mucky Peat or Peat (S3)		-			unless	disturbed or problematic.
estrictive Layer (if observed):						
Type:					0.76 23 5 4	OZ DE MES SA
Type: Depth (inches): emarks: sturbed soil could not be excavated	d due to rock.				Hydric Soil Prese	nt? YesNo_X
Depth (inches): emarks: sturbed soil could not be excavated	d due to rock.				Hydric Soil Prese	nt? YesNo_X
Depth (inches): emarks: sturbed soil could not be excavated	d due to rock.				Hydric Soil Prese	nt? YesNoX
Depth (inches): emarks: sturbed soil could not be excavated YDROLOGY etland Hydrology Indicators:		all that apply)				
Depth (inches): emarks: sturbed soil could not be excavated YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of or	ne is required; check a		>/00\		Secondary In	dicators (minimum of two require
Primary Indicators (minimum of or Surface Water (A1)	ne is required; check :Water	-Stained Leaves	s (B9)		Secondary InSurface So	dicators (minimum of two require bil Cracks (B6)
Depth (inches): emarks: sturbed soil could not be excavated YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2)	ne is required; check a Water Aquati	-Stained Leaves ic Fauna (B13)	N: W		Secondary In Surface So Drainage F	dicators (minimum of two require bil Cracks (B6) Patterns (B10)
Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3)	ne is required; check a Water Aquati True A	-Stained Leaves ic Fauna (B13) Aquatic Plants (B	314)		Secondary In Surface So Drainage F Dry-Seaso	dicators (minimum of two require bil Cracks (B6) Patterns (B10) in Water Table (C2)
Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	ne is required; check a — Water — Aquati — True A — Hydro	-Stained Leaves ic Fauna (B13) Aquatic Plants (F gen Sulfide Odd	314) or (C1)		Secondary In Surface So Drainage F Dry-Seaso Crayfish B	dicators (minimum of two require bil Cracks (B6) Patterns (B10) in Water Table (C2) urrows (C8)
Primary Indicators (Minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	ne is required; check a — Water — Aquati — True A — Hydro — Oxidiz	-Stained Leaves ic Fauna (B13) Aquatic Plants (fi gen Sulfide Odd red Rhizosphere	314) or (C1) es on Living	Roots (C	Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation	dicators (minimum of two require bil Cracks (B6) Patterns (B10) in Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9)
Primary Indicators (Main Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	ne is required; check a Water Aquati True A Hydrog Oxidiz Presen	-Stained Leaves ic Fauna (B13) Aquatic Plants (B gen Sulfide Odo ed Rhizosphere nce of Reduced	314) or (C1) es on Living Iron (C4)		Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or	dicators (minimum of two require oil Cracks (B6) Patterns (B10) In Water Table (C2) In Water Table (C2) In Water Table (C3) In Water Table (C4) In Water Table (C5) In Water Table (C1) In Water Table (C1)
Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	ne is required; check a — Water — Aquati — True A — Hydro — Oxidiz — Presei — Recen	-Stained Leavestic Fauna (B13) Aquatic Plants (Figen Sulfide Oddered Rhizosphere of Reduced It Iron Reduction	314) or (C1) es on Living Iron (C4) n in Tilled Se		Secondary In Surface So Drainage F Dry-Seaso Crayfish B Saturation Stunted or Geomorph	dicators (minimum of two require oil Cracks (B6) Patterns (B10) In Water Table (C2) In Water Table (C2) In Water Table (C3) In Water Table (C4) In Water Table (C5) In
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Wetland		Sample Point w	3out	Longitude	Latitude
Cowardin Classification:		my family as		-94.545678	38.860075
Size:					
Landform: Hillslope					
Tree Stratum:					
Sapling/Shrub:					
Herb Stratum: Solidago altissima	Daucus carota	Trifolium sp.			
Vine Stratum:					
Hydric Soil Indicators:					
Hydrology Indicators:					
Significant Nexus: Ad	jacent:	Abuts:	Stream Name	e:	
lurisdictional Status and Comp	anto:				

Photo 1







Photo 3



Photo 4



Project/Site: HWY 150 and Botts Road	City/C	County: Grandview (Jackson Co.)	Sampling Date: 08/26/2020
Applicant/Owner: Promontory 150 L	LC	State: MO	Sampling Point: w4
Investigator(s): Jack Finley			Township, Range: S26 T47N R33W
		relief (concave, convex, none): Co	
Slope (%): 0-2% Lat: 38.861975		-94.543380	Datum: UTM83
Soil Map Unit Name: 30080 Greenton		9900	classification: PEM
Are climatic / hydrologic conditions on the	e site typical for this time of year?	Yes No (If no	o, explain in Remarks)
Are Vegetation, Soil, or Hyd			nces" present? Yes No
the same of the sa	drologynaturally problema		
SUMMARY OF FINDINGS - Atta	ach site map showing sar	mpling point locations, tra	nsects, important features, etc.
Hydrophytic Vegetation Present?	Yes No No		
Hydric Soil Present?	Yes X No	Is the Sampled Area	
Wetland Hydrology Present?	Yes X No	within a Wetland?	Yes No
Remarks:			
VEGETATION - Use scientific i	names of plants		
VEGETATION OSC SCIENTING	Absolute Dominant	Indicator Dominance Test wo	orksheet:
Tree Stratum (Plot size: 30 ft) % Cover Species?	Status Number of Dominant	Species That
f.		Are OBL, FACW, or	FAC: 1 (A)
2.			
3.		Total Number of Don	
5.		Species Across All S	trata: 1 (B)
J	0 = Total Cover	Persont of Demissent	Panaina
Sapling/Shrub Stratum Plot size: 1		Percent of Dominant That Are OBL, FACV	
<u> </u>		Prevalence Index w	aukaha ati
2:		Total % Co	
3	- ·	OBL species	
5.		FACW species	$\frac{0}{100}$ $x = 0$ $x = 0$ $x = 0$
•	0 = Total Cover	FAC species	0 x3 = 0
Herb Stratum (Plot size: 5 ft) —	FACU species	0 x 4 = 0
Cyperus esculentus	100 X	FACW UPL species	0 x 5 = 0
2.		Column Totals:	(A)(B)
3.		Prevaler	nce Index = B/A = 2.00
4		Hydrophytic Vec	getation Indicators:
5.			st for Hydrophytic Vegetation
6			ce Test is >50%
7			ce Index is ≤3.01
8		4 - Morpholo	gical Adaptations¹ (Provide supporting
9			arks or on a separate sheet)
10		Problematic	Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size: 30	ft 100 = Total Cover	1Indicators of hydr	ric soil and wetland hydrology must be
t.			sturbed or problematic.
2.		Hydrophytic	
	0 = Total Cover	Vegetation Present?	Yes No
Remarks: (Include photo numbers here	or on a separate sheet.)	1	

(inches)	Color (moist	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4	10YR 2/1	100					Silty Clay Loam	
4-8	Gley 1 4/10G	40	5YR 4/6	10			Silty Clay Loam	
	Gley 6/10Y	50						
2-3								
/pe: C=Cor	centration, D=D	epletion, RI	M=Reduced Matrix,	MS=Masked	d Sand Grai	ins.	² Location; PL=Pore	Lining, M=Matrix
Hydric Soi	Indicators:						Indicators for Pr	roblematic Hydric Soils ³ :
Histosol	(A1)			Sandy Gle	yed Matrix	(S4)	Coast Prairi	ie Redox (A16)
Histic Ep	pipedon (A2)		=	Sandy Red	dox (S5)		Dark Surfac	pe (S7)
Black Hi	stic (A3)		- 1	Stripped M	latrix (S6)		Iron-Manga	nese Masses (F12)
Hydroge	n Sulfide (A4)			Loamy Mu	cky Mineral	(F1)	Very Shallo	w Dark Surface (TF12)
_	Layers (A5)		-		yed Matrix		(C	ain in Remarks)
	ick (A10)		_	Depleted N				200000-002000
	Below Dark Su	face (A11)	7	Redox Da		F6)		
100000000000000000000000000000000000000	ark Surface (A12				Dark Surface		3Indicators of h	nydrophytic vegetation and
	lucky Mineral (S		-		oressions (F		wetland h	ydrology must be present.
	icky Peat or Pea		_		, see ene y	-/	unless dis	turbed or problematic.
strictive La	yer (if observe	n:						
Type:		1						
Depth (inch		onstruction	in previous years.				Hydric Soil Present?	Yes No
Depth (inch marks: ils have bee	en disturbed by o	onstruction	in previous years.				Hydric Soil Present?	Yes No
Depth (inch marks: ils have bee	en disturbed by o		in previous years.				Hydric Soil Present?	Yes _X No
Depth (inch marks: iils have been YDROLOGETIAND HYDROLOGETIAND HYDROLOG	en disturbed by o	s:	in previous years.	hat apply)				Yes No
Depth (inch marks: ills have been VDROLOGE etland Hydr Primary Inc	en disturbed by o	s:	required; check all t	hat apply) ained Leave	s (B9)			ators (minimum of two require
Depth (inch marks: ills have been TDROLOGET and Hydr Primary Inco	GY ology Indicator dicators (minimul Water (A1)	s:	required; check all t	ained Leave	s (B9)		Secondary Indica	ators (minimum of two require racks (B6)
Depth (inch marks: ills have been /DROLO etland Hydr Primary Inc Surface High Wa	GY rology Indicator dicators (minimul Water (A1)	s:	required; check all t Water-Sta Aquatic F	ained Leave auna (B13)			Secondary Indica Surface Soil C Drainage Patte	ators (minimum of two require racks (B6) erns (B10)
Depth (inch marks: ills have been VDROLOGE etland Hydr Primary Inc Surface High Wa Saturatio	GY ology Indicator dicators (minimum Water (A1) ater Table (A2) on (A3)	s:	required; check all t Water-Sta Aquatic F True Aqu	ained Leave auna (B13) atic Plants (B14)		Secondary Indica Surface Soil C Drainage Patte Dry-Season W	ators (minimum of two require racks (B6) erns (B10) later Table (C2)
Depth (inch marks: ills have been trand Hydr Primary Inc Surface High Wa Saturation	GY cology Indicator dicators (minimul Water (A1) ater Table (A2) on (A3) larks (B1)	s:	required; check all t Water-Sta Aquatic F True Aqu Hydroger	ained Leave auna (B13) atic Plants (I Sulfide Odd	B14) or (C1)	Roots (C	Secondary Indica Surface Soil C Drainage Patte Dry-Season W Crayfish Burro	ators (minimum of two require racks (B6) erns (B10) /ater Table (C2) ws (C8)
Depth (inch marks: ills have been trand Hydr Primary Inc Surface High Wa Saturation Water M	GY cology Indicator dicators (minimul Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2)	s:	required; check all t Water-Sta Aquatic F True Aqu Hydroger Oxidized	ained Leave auna (B13) atic Plants (I Sulfide Odd Rhizosphere	B14) or (C1) es on Living	Roots (C	Secondary Indica Surface Soil C Drainage Patte Dry-Season W Crayfish Burro Saturation Visi	ators (minimum of two require racks (B6) erns (B10) later Table (C2) ws (C8) bble on Aerial Imagery (C9)
Depth (inch marks: ills have been primary Inc Surface High Water M Sedimer Drift Dep	en disturbed by of cology Indicators (minimum Water (A1) atter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3)	s:	required; check all t Water-Sta Aquatic F True Aqu Hydroger Oxidized Presence	ained Leave auna (B13) atic Plants (I Sulfide Odo Rhizosphere of Reduced	B14) or (C1) es on Living I Iron (C4)		Secondary Indica Surface Soil C Drainage Patte Dry-Season W Crayfish Burro Saturation Visi	ators (minimum of two require racks (B6) erns (B10) fater Table (C2) ws (C8) ble on Aerial Imagery (C9) essed Plants (D1)
Depth (inch marks: ills have been primary Inc Surface High Water M Sedimer Drift Dep Algal Ma	en disturbed by or cology Indicators (minimum Water (A1) eter Table (A2) on (A3) earks (B1) ent Deposits (B2) cosits (B3) et or Crust (B4)	s:	required; check all t Water-Sta Aquatic F True Aqu Hydroger Oxidized Presence Recent In	ained Leave auna (B13) atic Plants (I Sulfide Odo Rhizosphere of Reduced on Reductio	B14) or (C1) es on Living I Iron (C4) n in Tilled S		Secondary Indica Surface Soil C Drainage Patte Dry-Season W Crayfish Burro Saturation Visi Stunted or Stre	ators (minimum of two require racks (B6) erns (B10) fater Table (C2) ws (C8) lible on Aerial Imagery (C9) essed Plants (D1) osition (D2)
Depth (inch marks: ills have been trand Hydr Primary Inc Surface High Wa Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep	en disturbed by of cology Indicators (minimum Water (A1) atter Table (A2) on (A3) larks (B1) on Deposits (B2) cosits (B3) attor Crust (B4) cosits (B5)	s: n of one is	required; check all t — Water-St; — Aquatic F — True Aqu — Hydroger — Oxidized — Presence — Recent In — Thin Muc	ained Leave auna (B13) atic Plants (I Sulfide Ode Rhizosphere of Reduced on Reduction & Surface (C	B14) or (C1) es on Living I Iron (C4) n in Tilled S		Secondary Indica Surface Soil C Drainage Patte Dry-Season W Crayfish Burro Saturation Visi	ators (minimum of two require racks (B6) erns (B10) fater Table (C2) ws (C8) lible on Aerial Imagery (C9) essed Plants (D1) osition (D2)
Depth (inch marks: ills have been trand Hydr Primary Inc Surface High Wa Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Inundation	en disturbed by or cology Indicators (minimum Water (A1) eter Table (A2) on (A3) earks (B1) ent Deposits (B2) cosits (B3) et or Crust (B4)	s: n of one is	required; check all to Water-State Aquatic Formula Aquatic Formula Aquatic Proper Oxidized Presence Recent In Thin Muc	ained Leave auna (B13) atic Plants (I Sulfide Odo Rhizosphere of Reduced on Reductio	B14) or (C1) es on Living I Iron (C4) in in Tilled S 57)		Secondary Indica Surface Soil C Drainage Patte Dry-Season W Crayfish Burro Saturation Visi Stunted or Stre	ators (minimum of two require racks (B6) erns (B10) fater Table (C2) ws (C8) lible on Aerial Imagery (C9) essed Plants (D1) osition (D2)
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Wetland Wetland 4	Si	ample Point v	v4	Longitude	Latitude
Cowardin Classification	n: PEM	and department		-94.543380	38.861975
Size:					
Landform: Depression					
Tree Stratum:					
Sapling/Shrub:					
Herb Stratum: Cyperus	esculentus				
Vine Stratum:					
Hydric Soil Indicators:	Redox Dark Surface (F6)				
Hydrology Indicators:	Geomorphic Position (D2)	FAC-Neutra	al Test (D5)		
Significant Nexus: No	Adjacent:	Abuts:	Stream Nam	ne:	
Jurisdictional Status at Wetland is located in the mi	nd Comments: ddle of a soybean field and is	without connection	on to a stream.		

Photo 1



Photo 2



Photo 3



Photo 4



Project/Site: HWY 150 and Botts Road		City/C	ounty: Gra	ndview (Jackson Co.)	Sampling I	Date: 08/2	6/2020	
Applicant/Owner: Promontory 150 L	LC			State: MO	Sampling F			
nvestigator(s):					Township, Rang	e: S26 T4	7N R33W	
	lillslope	Localr	elief (conca	ive, convex, none):	Convex			
Slope (%): 0-2% Lat: 38.862023			-94.54336		Datum:	UTI	M83	
Soil Map Unit Name: 30080 Greento					VI classification:	N/A		
Are climatic / hydrologic conditions on the	ne site typical for th	nis time of year?	Yes	(If	no, explain in Rei	marks)		
Are Vegetation, Soil, or Hy				Are "Normal Circumsta	ances" present?	Yes X	No	
	drologynat			If needed, explain an				
SUMMARY OF FINDINGS - Att	ach site map	showing san	pling po	oint locations, tra	ansects, imp	ortant fe	eatures,	etc.
Hydrophytic Vegetation Present?	Yes N	o_X_						
Hydric Soil Present?	Yes N	0_X_	Is the Sa	mpled Area				
Wetland Hydrology Present?	Yes N	o_X_	within a	Wetland?	Yes	No	\times	
Remarks:			4					
VEGETATION - Use scientific	names of plan	ts. Dominant	Indicator	Dominance Test w	vorksheet:			
Tree Stratum (Plot size: 30 ft) % Cover	Species?	Status	Number of Dominar				
1				Are OBL, FACW, o	r FAC:	0		(A)
2								
3.		-		Total Number of Do		4		200
4			_	Species Across All	Strata:	1		(B)
Sapling/Shrub Stratum Plot size:		Total Cover	0	Percent of Dominar That Are OBL, FAC		000	%	(A/B
6						Y		
2				Prevalence Index		14.4	Bath Boo	
3.				Total % (_		tiply by:	-
5.			_	OBL species FACW species	0	x 1 = x 2 =	0	_
5		Total Cover		FAC species	0	x 3 =	0	-
Herb Stratum (Plot size: 5 ft	1 -0	- Total Dover		FACU species	0	x 4 =	0	-
Glycine max	40	×		UPL species	0	x 5 =	0	7
2.				Column Totals:	0	(A)	0	(B)
3.				Prevale	ence Index = B/A	=		391
4.				Hydronhytic V	egetation Indica	ore:		
5.				4 Temp No. 1	est for Hydrophyl		ion	
6.					nce Test is >50%		1011	
7.					nce Index is ≤3.0			
8.					logical Adaptation		e supporti	ing
9.					narks or on a sep			
10.				_ Problematic	c Hydrophytic Ve	getation1 (Explain)	
Woody Vine Stratum (Plot size: 30		= Total Cover			dric soil and wetla		ogy must l	oe .
2.	_			Hydrophytic	- Piool			
	0	= Total Cover		Vegetation Present?	Yes	No	<u>_X</u>	
Remarks: (Include photo numbers here Sample plot is located in a soybean fie	And the second s	sheet.)						

Sampling Point: w4out

Depth	Matrix	6.7	- A		- 1	7 9	4.7		7. West
(inches)	Color (moist)	_%_	Color (moist)	_ %	Type ¹	Loc ²	Texture	Ren	narks
0-4	10YR 2/1 100	_100		_	_		Silty Clay Loam		
4-8	Gley 1 4/10GY	40	5YR 4/6	40			Silty Clay Loam		
_	Gley 6/10Y	_50			-				
		$\overline{}$	-						
		$\overline{}$	-	_					
	-	$\overline{}$	-	_	-	_			
pe: C=Co	ncentration, D=Depl	etion RM=	Reduced Matrix M	MS=Masker	Sand Grains		² Location; PL=Po	re Lining M=N	latrix
	il Indicators:	onen, ruiz-	ricobood mann, i	iio-iiiabiio	a carra cirani	-	Indicators for		
Histoso				Sandy Gle	yed Matrix (S	4)		irie Redox (A1	
	pipedon (A2)		-	Sandy Red	The second second second	2)	Dark Surf		9/
	istic (A3)		-	Stripped M				anese Masses	:/F12\
_	en Sulfide (A4)		-		cky Mineral (I	E1V		low Dark Surfa	
_	d Layers (A5)		1	the state of the state of the state of	eyed Matrix (F			plain in Remar	
_	uck (A10)		_	Depleted N		-//		- ar i comai	
_	d Below Dark Surface	ce (A11)	-	Control Control and the	k Surface (F6	3)			
The state of the s	ark Surface (A12)	Section 1	-		Dark Surface		3Indicators o	f hydrophytic v	egetation and
	Mucky Mineral (S1)		_	a make make the same	pressions (F8			hydrology mus	
	ucky Peat or Peat (S	(3)	_	THOUGH BU	0100010110 (1 0	,	unless o	isturbed or pro	blematic.
strictive L	ayer (if observed):					- 1			
Strictive L	ayer (ii observed).								
Type:									
Type:	hes): urbed by former cons	struction.				ŀ	Hydric Soil Present	? Yes	No X
Depth (incomarks: ils are distu	urbed by former cons	struction.				ŀ	Hydric Soil Present	? Yes	No_X
Depth (incomarks: ils are distu	urbed by former cons	struction.				ŀ	lydric Soil Present	? Yes	No_X
Depth (incomarks: ils are disturbed) DROLO tland Hyd	urbed by former cons		quired; check all th	nat apply)		ŀ			
Depth (incomarks: ils are disturbed) DROLO tland Hyd Primary In	GY rology Indicators:			nat apply) ined Leave	s (B9)	-		cators (minimu	
Depth (incomarks: ils are disturbed of the command	GY rology Indicators: dicators (minimum of Water (A1)		Water-Sta	ined Leave	s (B9)	ŀ	Secondary Indi	cators (minimu Cracks (B6)	
Depth (incomarks: ils are disturbed by the commany in Surface High Wares	GY rology Indicators: dicators (minimum o Water (A1) ater Table (A2)		Water-Sta	ined Leave auna (B13)		ŀ	Secondary IndiSurface SoilDrainage Pa	cators (minimu Cracks (B6) tterns (B10)	m of two require
Depth (incomarks: ils are disturble dist	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3)		Water-Sta Aquatic Fa True Aqua	ined Leave auna (B13) atic Plants (I	B14)		Secondary IndiSurface SoilDrainage Pa	cators (minimu Cracks (B6) tterns (B10) Water Table (C	m of two require
Depth (incomarks: ils are disturbed of the command	GY rology Indicators: dicators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1)		Water-Sta Aquatic Fa True Aqua Hydrogen	ined Leave auna (B13) atic Plants (I Sulfide Odd	B14) or (C1)		Secondary Indi Surface Soil Drainage Pa Dry-Season Crayfish Bur	cators (minimu Cracks (B6) tterns (B10) Water Table (C	m of two require
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Wetland		Sample Point	v4out	Longitude	Latitude
Cowardin Classification:	UPL	. Amelonia		-94.543364	38.862023
Size:					
Landform: Hillslope					
Tree Stratum:					
Sapling/Shrub:					
Herb Stratum: Glycine max	x				
Vine Stratum:					
Hydric Soil Indicators: R	edox Dark Surface (F6)			
Hydrology Indicators:					
Significant Nexus:	Adjacent:	Abuts:	Stream Name	:	
Jurisdictional Status and	Commente:				









Photo 3



Photo 4



Project/Site: HWY 150 and Botts Roa	ad C	ity/County: Grandview (Jackson Co.)	Sampling Date: 08/26/2020
Applicant/Owner: Promontory 150) LLC	State: MO	Sampling Point: w5
Investigator(s): Jack Finley			Township, Range: S26 T47N R33W
Landform (hillslope, terrace, etc.):		ocal relief (concave, convex, none): c	
Slope (%): 0-2% Lat: 38.86450		ng:94.543027	Datum: UTM83
Soil Map Unit Name: 30080 Green		ii diapad	I classification: PEM
Are climatic / hydrologic conditions on	the site typical for this time of ye	sar? YesNo(If no	o, explain in Remarks)
Are Vegetation, Soil, or I	Hydrology significantly dis	turbed? Are "Normal Circumsta	nces" present? Yes X No
the same of the sa	Hydrology naturally proble		그녀가 가는 가득하게 되는 사람이 되었다면 하는 것이 되는 사람들이 모든 모든 모든 사람이다.
SUMMARY OF FINDINGS - A	ttach site map showing	sampling point locations, tra	nsects, important features, etc.
Hydrophytic Vegetation Present?	Yes X No		
Hydric Soil Present?	Yes X No	Is the Sampled Area	
Wetland Hydrology Present?	Yes X No	within a Wetland?	Yes X No
Remarks:			
VEGETATION - Use scientific		15	Value of
Tree Stratum (Plot size: 30 ft	Absolute Dominant) % Cover Species?	Indicator Status Number of Dominant	
Tree Stratum (Plot size: 30 ft	- Je Gover Gpecies.	Are OBL, FACW, or	
2.			3.7
3.		Total Number of Don	minant
4		Species Across All S	Strata: 1 (B)
5.			
Sapling/Shrub Stratum Plot size:	= Total Cove	Percent of Dominant That Are OBL, FACV	
2		Prevalence Index w	vorksheet:
3.		Total % Co	
4.		OBL species	100 x 1 = 100
5.		FACW species	0 x 2 = 0
Control of the second	0 = Total Cove	er FAC species	0 x 3 = 0
Herb Stratum (Plot size: 5 ft		FACU species	0 x 4 = 0
Leersia oryzoides	100 X	OBL UPL species	0 x 5 = 0
2		Column Totals:	(A)(B)
3.		Prevalei	nce Index = B/A = 1.00
4		- Hydrophytic Ve	getation Indicators:
6.		Y 1 - Rapid Te	est for Hydrophytic Vegetation
7	 }	Z - Dominan	ce Test is >50%
8.			ce Index is ≤3.01
9.			ogical Adaptations¹ (Provide supporting arks or on a separate sheet)
10.			Hydrophytic Vegetation ¹ (Explain)
	100 = Total Cove		Tryotophyto regetation (Explain)
Woody Vine Stratum (Plot size: 3		The second secon	ric soil and wetland hydrology must be
t.			sturbed or problematic.
2.		Hydrophytic	
	0 = Total Co	over Vegetation Present?	Yes X No
Domorka: //netude photo purchase to	wa ne na n namarata aleast l	Fiesentr	
Remarks: (Include photo numbers he	re or on a separate sheet.)		

Profile Description: (Describe to the o		ent the inc		confirm	the absence of inc	dicators.)
Depth Matrix (inches) Color (moist) %	_	%	Type ¹	Loc ²	Texture	Remarks
(money Cold (moley /			-1700		TONIDIO	ricinana
		_	$\overline{}$	_	· ·	
		_			· -	
		_	-	-		
		_		_		
				-	-	
		_	$\overline{}$	_		
				_	4.0 3000 Zo	Wheel Pinash
ype: C=Concentration, D=Depletion,	RM=Reduced Matrix, MS	S=Masked	Sand Grain	ns.		Pore Lining, M=Matrix
Hydric Soil Indicators:	1.02	S S V S V S V S	312000	200		or Problematic Hydric Soils ³ ;
Histosol (A1)		andy Gley		S4)		Prairie Redox (A16)
Histic Epipedon (A2)	_s	andy Redo	x (S5)			urface (S7)
Black Histic (A3)		Stripped Ma	State of the State		·	inganese Masses (F12)
Hydrogen Sulfide (A4)		oamy Mucl				nallow Dark Surface (TF12)
Stratified Layers (A5)		oamy Gley		(F2)	Other (I	Explain in Remarks)
2 cm Muck (A10)		epleted Ma				
Depleted Below Dark Surface (A1		Redox Dark		- 6		
Thick Dark Surface (A12)		epleted Da	ark Surface	e (F7)		s of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	E F	Redox Depr	essions (F	8)		nd hydrology must be present,
5 cm Mucky Peat or Peat (S3)					unies	s disturbed or problematic.
estrictive Layer (if observed):						
Type:						
Depth (inches):					Hydric Soil Prese	ent? Yes X No
IYDROLOGY						
/etland Hydrology Indicators:						
Primary Indicators (minimum of one i	s required; check all tha	t apply)			Secondary In	ndicators (minimum of two require
➤ Surface Water (A1)	Water-Stain		(B9)			oil Cracks (B6)
			(50)			
★ High Water Table (A2) Seturation (A2)	_ Aquatic Fau		445			Patterns (B10)
X Saturation (A3) Material (B4)	_ True Aquation					on Water Table (C2)
_ Water Marks (B1)	_ Hydrogen S		A	D		Jurrows (C8)
Sediment Deposits (B2)	_ Oxidized Rh	1		Hoots (C		Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of					Stressed Plants (D1)
Algal Mat or Crust (B4)	_ Recent Iron			oils (C6)		nic Position (D2)
Iron Deposits (B5)	Thin Muck S				X FAC-Neut	ral Test (D5)
Inundation Visible on Aerial Image		and the same of the				
Sparsely Vegetated Concave Surf	ace (B8) _ Other (Expla	ain in Rema	arks)			
eld Observations:						
urface Water Present? Yes		th (inches)				
/ater Table Present? Yes		th (inches)				TALLS No.
aturation Present? Yes	No Dep	th (inches)	0	Wetlan	d Hydrology Prese	ent? Yes No
ncludes capillary fringe)					# Total (# Vinc	
escribe Recorded Data (stream gauge	monitoring well, aerial p	photos, pre	vious inspe	ections),	f available:	
emarks:						
201-12-00-2-0-0-0-0-0-0-0-0-0-0-0-0-0-0-						



Wetland Wetland 5	Sample Point w5	Longitude	Latitude
Cowardin Classification: PEM		-94.543027	38.864501
Size:		<u> </u>	
Landform: Drainageway		-	
Tree Stratum:			
Sapling/Shrub:			
Herb Stratum: Leersia oryzoides			
Vine Stratum:			
Hydric Soil Indicators: Assumed hyd	ric		
Hydrology Indicators Surface Water	r (A1) Saturation (A3)		
Significant Nexus: No Adjac	ent: Abuts: Stream	Name:	
Jurisdictional Status and Common	ito:		

<u>Jurisdictional Status and Comments</u>: Hydrology supplied by t6, an ephemeral drainage which is not jurisdictional under the NWPR.





Photo 2



Photo 3 Photo 4

Project/Site: HWY 150 and Botts Roa	ad	City/Cou	unty: Gran	dview (Jackson Co		Date: 09/02/2	2020
Applicant/Owner: Promontory 150) LLC			State: MO		oint: w5out	
Investigator(s): Jack Finley					, Township, Rang	e: S26 T47N	N R33W
Landform (hillslope, terrace, etc.):	Drainageway	-		e, convex, none):	A second second	75.5177	-
Slope (%): 0-2% Lat: 38.86449			94.543088		Datum:	UTM8	33
Soil Map Unit Name: 30080 Green					WI classification:	PEM	
Are climatic / hydrologic conditions on	the site typical for this tir	ne of year?	Yes _X	No(If	no, explain in Rer	narks)	
Are Vegetation, Soil, or H	Hydrologysignification	intly disturbed	d? Ar	e "Normal Circums	tances" present?	Yes X	No
the same of the sa	Hydrology naturally			needed, explain ar			
SUMMARY OF FINDINGS - A	ttach site map sho	wing samp	oling poi	nt locations, to	ransects, impo	ortant feat	tures, etc.
Hydrophytic Vegetation Present?	Yes No	<u> </u>					
Hydric Soil Present?	Yes No	<u> </u>	Is the San	pled Area			
Wetland Hydrology Present?	Yes No		within a W		Yes	No _>	<u> </u>
Remarks:		4					
VEGETATION - Use scientific	c names of plants.						
Too State (District			ndicator	Dominance Test			
Tree Stratum (Plot size: 30 ft) % Cover S	pecies?	Status	Number of Domina Are OBL, FACW, of	The second secon	0	(A)
2.				Ale ODE, I ACVE,	arrao.		
3.			\rightarrow	Total Number of D	ominant		
4.				Species Across Al		1	(B)
5.						-	
Sapling/Shrub Stratum Plot size:		tal Cover		Percent of Domina That Are OBL, FA		000%	(A/I
2:				Prevalence Index	worksheet:		
3					Cover of:	Multip	ly by:
4.				OBL species	0	x 1 =	0
5.				FACW species	0	x 2 =	0
	0 = Tot	tal Cover		FAC species	0	x 3 =	0
Herb Stratum (Plot size: 5 ft			11.0	FACU species	100	x 4 =	400
Sorghum halepense	100	XF	FACU_	UPL species	0	x 5 =	0
2				Column Totals:	100	(A)	400 (B)
3.				Preva	lence Index = B/A	= 4.00	
4				Hydrophytic V	egetation Indicat	ors:	
5				and the same of th	Test for Hydrophyt		1
6.					ance Test is >50%		
7				Contract of the Contract of th	ence Index is ≤3.0		
8				4 - Morpho	ological Adaptation	s¹ (Provide s	
9.					marks or on a sep	The second secon	
10.				Problemat	ic Hydrophytic Ve	getation1 (Ex	plain)
West Will Golden German		tal Cover	200	Act to the second			
Woody Vine Stratum (Plot size: 3	30 ft)				dric soil and wetla disturbed or proble		y must be
1.			_	Hydrophytic	disturbed of probl	emade.	
2	0 =	Total Cover		Vegetation Present?	Yes	No_	X
Remarks: (Include photo numbers he	ro or on a constale above	é.\		1 resent			
riemans. (mudus prioto numbers ne	ic or on a separate sitee	<i>9</i>)					

Sampling Point: w5out

ofile Description: ((Describe to Matrix	the depth	needed to d	Redox Fea			the absence of	
Depth (inches) Cole	or (moist)	%	Color (mois		Type ¹	Loc ²	Texture	Remarks
0-16 10YF		100	- Contraction				loam	
<u> </u>	(2/1	100					Ioaiii	<u> </u>
			-		-			* (a
					=			
								. V-
pe: C=Concentrati	ion, D=Deple	tion, RM=f	Reduced Matr	rix, MS=Masked	d Sand Grai	ins.	² Location; Pl	L=Pore Lining, M=Matrix
Hydric Soil Indica	itors:						Indicators	for Problematic Hydric Soils ³ ;
Histosol (A1)				Sandy Gle	yed Matrix	(S4)	Coas	t Prairie Redox (A16)
Histic Epipedon	(A2)			Sandy Red	The second second		_	Surface (S7)
Black Histic (A3				Stripped M				Manganese Masses (F12)
Hydrogen Sulfid	Company and the second				cky Mineral	(F1)		Shallow Dark Surface (TF12)
Stratified Layers					yed Matrix			r (Explain in Remarks)
2 cm Muck (A10				Depleted N		. 10		
Depleted Below		e (A11)			k Surface (F6)		
Thick Dark Surfa	ace (A12)				ark Surfac		3Indicat	ors of hydrophytic vegetation and
Sandy Mucky M	lineral (S1)			Redox De	oressions (F	F8)		land hydrology must be present,
5 cm Mucky Pea	at or Peat (S	3)					unl	ess disturbed or problematic.
strictive Layer (if of Type: Depth (inches):							Hydric Soil Pre	sent? YesNoX
Type:							Hydric Soil Pre	sent? YesNoX
Type:							Hydric Soil Pre	sent? YesNo _X
Type: Depth (inches): marks:	Indicators:						Hydric Soil Pre	sent? YesNo_X
Type: Depth (inches): marks: /DROLOGY etland Hydrology I Primary Indicators	(minimum of	one is req					Secondary	Indicators (minimum of two require
Type: Depth (inches): marks: /DROLOGY etland Hydrology I	(minimum of	one is req		all that apply) -Stained Leave	s (B9)		Secondary	
Type: Depth (inches): marks: /DROLOGY etland Hydrology I	(minimum of (A1)	one is req	Water-		s (B9)		Secondary Surface	Indicators (minimum of two require
Type: Depth (inches): marks: /DROLOGY etland Hydrology I Primary Indicators Surface Water ((minimum of (A1)	one is req	Water-	Stained Leave	. V W		Secondary Surface Drainag	Indicators (minimum of two require Soil Cracks (B6)
Type: Depth (inches): marks: /DROLOGY etland Hydrology I Primary Indicators Surface Water (High Water Tab Saturation (A3) Water Marks (B	(minimum of (A1) ble (A2)	one is req	Water- Aquatio True A Hydrog	-Stained Leave c Fauna (B13) quatic Plants (I gen Sulfide Odo	B14) or (C1)		Secondary Surface Drainag Dry-Sea	/ Indicators (minimum of two require Soil Cracks (B6) de Patterns (B10) deson Water Table (C2) de Burrows (C8)
Type: Depth (inches): marks: /DROLOGY etland Hydrology I Primary Indicators Surface Water (High Water Tab Saturation (A3) Water Marks (B Sediment Depos	(minimum of (A1) ole (A2) (1) sits (B2)	one is req	Water- Aquation True A Hydrog Oxidize	-Stained Leave c Fauna (B13) quatic Plants (I gen Sulfide Ode ed Rhizosphere	B14) or (C1) es on Living	Roots (C	Secondary Surface Drainag Dry-Sea Crayfish Saturati	r Indicators (minimum of two require Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2) gen Burrows (C8) on Visible on Aerial Imagery (C9)
Type: Depth (inches): marks: /DROLOGY etland Hydrology II Primary Indicators Surface Water (High Water Tab Saturation (A3) Water Marks (B Sediment Deposits (E	(minimum of (A1) ole (A2) (1) sits (B2) 33)	one is req	— Water- Aquation True A Hydrog Oxidize Preser	Stained Leave c Fauna (B13) equatic Plants (I gen Sulfide Odd ed Rhizosphere nce of Reduced	B14) or (C1) es on Living Iron (C4)		Secondary Surface Drainag Dry-Sea Crayfish Saturati	Indicators (minimum of two require Soil Cracks (B6) Re Patterns (B10) Reson Water Table (C2) Re Burrows (C8) Ron Visible on Aerial Imagery (C9) Ron Stressed Plants (D1)
Type: Depth (inches): marks: /DROLOGY etland Hydrology II Primary Indicators Surface Water (High Water Tab Saturation (A3) Water Marks (B Sediment Deposits (E Algal Mat or Cru	(minimum of (A1) ole (A2) (1) sits (B2) 33) ust (B4)	one is req	Water- Aquation True A Hydrog Oxidize Preser Recen	Stained Leave c Fauna (B13) Aquatic Plants (I gen Sulfide Odd ed Rhizosphere nce of Reduced It Iron Reductio	B14) or (C1) es on Living I Iron (C4) n in Tilled S		Secondary Surface Drainag Dry-Sea Crayfisl Stunted Geomo	Indicators (minimum of two require Soil Cracks (B6) Re Patterns (B10) Reson Water Table (C2) Reson Water Table (C2) Reson Visible on Aerial Imagery (C9) Reson Visible on Aerial Imagery (C9) Reson Stressed Plants (D1) Rephic Position (D2)
Type: Depth (inches): marks: /DROLOGY etland Hydrology I Primary Indicators Surface Water (High Water Tab Saturation (A3) Water Marks (B Sediment Deposits (E Algal Mat or Cru Iron Deposits (B	(minimum of (A1) ble (A2) (1) sits (B2) (33) ust (B4)		Water- Aquation True A Hydrog Oxidize Preser Recent Thin M	Stained Leave c Fauna (B13) equatic Plants (I gen Sulfide Odd ed Rhizosphere nce of Reduced It Iron Reduction	B14) or (C1) es on Living I fron (C4) n in Tilled S		Secondary Surface Drainag Dry-Sea Crayfisl Stunted Geomo	Indicators (minimum of two requires Soil Cracks (B6) Re Patterns (B10) Reson Water Table (C2) Re Burrows (C8) Re Visible on Aerial Imagery (C9) Re or Stressed Plants (D1)
Type: Depth (inches): marks: /DROLOGY etland Hydrology II Primary Indicators Surface Water (High Water Tab Saturation (A3) Water Marks (B Sediment Deposits (E Algal Mat or Cru	(minimum of (A1) ble (A2) (1) sits (B2) 33) ust (B4) 35) ble on Aerial I	lmagery (B	Water- Aquation True A Hydrog Oxidize Preser Recent Thin M 7) Gauge	Stained Leave c Fauna (B13) Aquatic Plants (I gen Sulfide Odd ed Rhizosphere nce of Reduced It Iron Reductio	B14) or (C1) es on Living I Iron (C4) in in Tilled S (7) (D9)		Secondary Surface Drainag Dry-Sea Crayfisl Stunted Geomo	Indicators (minimum of two requires Soil Cracks (B6) Be Patterns (B10) Bason Water Table (C2) Burrows (C8) Burrows (C8) Bor Visible on Aerial Imagery (C9) Bor Stressed Plants (D1) Borphic Position (D2)
Type: Depth (inches): marks: /DROLOGY etland Hydrology I Primary Indicators Surface Water (High Water Tab Saturation (A3) Water Marks (B Sediment Deposits (E Algal Mat or Cru Iron Deposits (E Inundation Visib	(minimum of (A1) ble (A2) (1) sits (B2) 33) ust (B4) 35) ble on Aerial I	lmagery (B	Water- Aquation True A Hydrog Oxidize Preser Recent Thin M 7) Gauge	Stained Leave c Fauna (B13) quatic Plants (I gen Sulfide Ode ed Rhizosphere nce of Reduced it Iron Reductio fluck Surface (C	B14) or (C1) es on Living I Iron (C4) in in Tilled S (7) (D9)		Secondary Surface Drainag Dry-Sea Crayfisl Stunted Geomo	Indicators (minimum of two require Soil Cracks (B6) Re Patterns (B10) Reson Water Table (C2) Reson Water Table (C2) Reson Visible on Aerial Imagery (C9) Reson Visible on Aerial Imagery (C9) Reson Stressed Plants (D1) Rephic Position (D2)
Type: Depth (inches): marks: /DROLOGY etland Hydrology I Primary Indicators Surface Water (High Water Tab Saturation (A3) Water Marks (B Sediment Deposits (E Algal Mat or Cru Iron Deposits (B Inundation Visib Sparsely Vegeta	(minimum of (A1) ble (A2) (1) sits (B2) 33) ust (B4) 35) ble on Aerial I ated Concave	lmagery (B e Surface (Water- Aquation True A Hydrog Oxidize Preser Recent Thin M 7) Gauge	Stained Leave c Fauna (B13) quatic Plants (I gen Sulfide Ode ed Rhizosphere nce of Reduced it Iron Reductio fluck Surface (C	B14) or (C1) es on Living I fron (C4) in in Tilled S i7) D9) narks)		Secondary Surface Drainag Dry-Sea Crayfisl Stunted Geomo	Indicators (minimum of two require Soil Cracks (B6) Re Patterns (B10) Reson Water Table (C2) Reson Water Table (C2) Reson Visible on Aerial Imagery (C9) Reson Visible on Aerial Imagery (C9) Reson Stressed Plants (D1) Rephic Position (D2)
Type: Depth (inches): marks: /DROLOGY etland Hydrology II Primary Indicators Surface Water (High Water Tab Saturation (A3) Water Marks (B Sediment Deposits (E Algal Mat or Cru Iron Deposits (E Inundation Visib Sparsely Vegeta	(minimum of (A1)) (A1) (A1) (A1) (A1) (A1) (A1) (A2) (A2) (A3) (A3) (A3) (A3) (A3) (A4) (A4) (A4) (A4) (A4) (A4) (A4) (A4	lmagery (B e Surface (Water- Aquatic True A Hydrog Oxidize Preser Recen Thin M 7) Gauge B8) Other	Stained Leave c Fauna (B13) quatic Plants (I gen Sulfide Ode ed Rhizosphere nce of Reduced t Iron Reduction fuck Surface (Ce or Well Data ((Explain in Ren Depth (inches	B14) or (C1) es on Living I Iron (C4) n in Tilled S 7) D9) narks)	Soils (C6)	Secondary Surface Drainag Dry-Sea Crayfisl Stunted Geomo FAC-Ne	Indicators (minimum of two require Soil Cracks (B6) Re Patterns (B10) Reson Water Table (C2) Reson Water Table (C2) Reson Visible on Aerial Imagery (C9) Ror Stressed Plants (D1) Rephic Position (D2) Reutral Test (D5)
Type: Depth (inches): marks: /DROLOGY etland Hydrology It Primary Indicators Surface Water (High Water Tab Saturation (A3) Water Marks (B Sediment Deposits (B Algal Mat or Cru Iron Deposits (B Inundation Visib Sparsely Vegeta etla Observations: rface Water Present ster Table Present? turation Present?	(minimum of A1) (A1) (A1) (A1) (A1) (A1) (A2) (A2) (A3) (A3) (A3) (A4) (A3) (A4) (A3) (A4) (A4) (A4) (A5) (A4) (A5) (A6) (A6) (A7) (Imagery (B e Surface (Water- Aquatic True A Hydrog Oxidize Preser Recen Thin M 7) Gauge B8) Other	Stained Leave c Fauna (B13) quatic Plants (I gen Sulfide Ode ed Rhizosphere nce of Reduced t Iron Reductio fluck Surface (C e or Well Data ((Explain in Ren Depth (inches	B14) or (C1) es on Living I Iron (C4) n in Tilled S 7) D9) narks)	Soils (C6)	Secondary Surface Drainag Dry-Sea Crayfisl Stunted Geomo	Indicators (minimum of two require Soil Cracks (B6) Re Patterns (B10) Reson Water Table (C2) Re Burrows (C8) Ron Visible on Aerial Imagery (C9) Ror Stressed Plants (D1) Rephic Position (D2) Reutral Test (D5)
Type: Depth (inches): marks: /DROLOGY etland Hydrology I Primary Indicators Surface Water (High Water Tab Saturation (A3) Water Marks (B Sediment Deposits (B Algal Mat or Cru Iron Deposits (B Inundation Visib Sparsely Vegeta etla Observations: rface Water Present ster Table Present? cludes capillary fring	(minimum of A1) (A1) (A1) (A2) (A2) (A3) (A3) (A3) (A4) (A3) (A4) (A3) (A4) (A4) (A5) (A4) (A5) (A6) (A7) (Imagery (B e Surface (Water- Aquatic True A Hydrog Oxidize Preser Recen Thin M 7) Gauge B8) Other (Stained Leave c Fauna (B13) quatic Plants (I gen Sulfide Ode ed Rhizosphere nce of Reduced it Iron Reductio fluck Surface (C e or Well Data ((Explain in Ren Depth (inches Depth (inches	B14) or (C1) es on Living I fron (C4) in in Tilled S 7) D9) harks)	Soils (C6)	Secondary Surface Drainage Dry-Sea Crayfisl Stunted Geomo FAC-Ne	Indicators (minimum of two require Soil Cracks (B6) Re Patterns (B10) Reson Water Table (C2) Reson Water Table (C2) Reson Visible on Aerial Imagery (C9) Ror Stressed Plants (D1) Rephic Position (D2) Reutral Test (D5)
Type: Depth (inches): marks: /DROLOGY etland Hydrology It Primary Indicators Surface Water (High Water Tab Saturation (A3) Water Marks (B Sediment Deposits (B Algal Mat or Cru Iron Deposits (B Inundation Visib Sparsely Vegeta etla Observations: rface Water Present ster Table Present? turation Present?	(minimum of A1) (A1) (A1) (A2) (A2) (A3) (A3) (A3) (A4) (A3) (A4) (A3) (A4) (A4) (A5) (A4) (A5) (A6) (A7) (Imagery (B e Surface (Water- Aquatic True A Hydrog Oxidize Preser Recen Thin M 7) Gauge B8) Other (Stained Leave c Fauna (B13) quatic Plants (I gen Sulfide Ode ed Rhizosphere nce of Reduced it Iron Reductio fluck Surface (C e or Well Data ((Explain in Ren Depth (inches Depth (inches	B14) or (C1) es on Living I fron (C4) in in Tilled S 7) D9) harks)	Soils (C6)	Secondary Surface Drainage Dry-Sea Crayfisl Stunted Geomo FAC-Ne	Indicators (minimum of two requires Soil Cracks (B6) Re Patterns (B10) Reson Water Table (C2) Reson Water Table (C2) Reson Visible on Aerial Imagery (C9) Ror Stressed Plants (D1) Rephic Position (D2) Reutral Test (D5)
Type: Depth (inches): marks: /DROLOGY etland Hydrology It Primary Indicators Surface Water (High Water Tab Saturation (A3) Water Marks (B Sediment Deposits (B Algal Mat or Cru Iron Deposits (B Inundation Visib Sparsely Vegeta etla Observations: rface Water Present atter Table Present? cludes capillary fring scribe Recorded Da	(minimum of A1) (A1) (A1) (A2) (A2) (A3) (A3) (A3) (A4) (A3) (A4) (A3) (A4) (A4) (A5) (A4) (A5) (A6) (A7) (Imagery (B e Surface (Water- Aquatic True A Hydrog Oxidize Preser Recen Thin M 7) Gauge B8) Other (Stained Leave c Fauna (B13) quatic Plants (I gen Sulfide Ode ed Rhizosphere nce of Reduced it Iron Reductio fluck Surface (C e or Well Data ((Explain in Ren Depth (inches Depth (inches	B14) or (C1) es on Living I fron (C4) in in Tilled S 7) D9) harks)	Soils (C6)	Secondary Surface Drainage Dry-Sea Crayfisl Stunted Geomo FAC-Ne	Indicators (minimum of two requires Soil Cracks (B6) Be Patterns (B10) Bason Water Table (C2) Bason Water Table (C2) Borows (C8) Borows (C8) Bor Visible on Aerial Imagery (C9) Bor Stressed Plants (D1) Borphic Position (D2) Butral Test (D5)
Type: Depth (inches): marks: /DROLOGY etland Hydrology I Primary Indicators Surface Water (High Water Tab Saturation (A3) Water Marks (B Sediment Deposits (B Algal Mat or Cru Iron Deposits (B Inundation Visib Sparsely Vegeta etla Observations: rface Water Present ster Table Present? cludes capillary fring	(minimum of A1) (A1) (A1) (A2) (A2) (A3) (A3) (A3) (A4) (A3) (A4) (A3) (A4) (A4) (A5) (A4) (A5) (A6) (A7) (Imagery (B e Surface (Water- Aquatic True A Hydrog Oxidize Preser Recen Thin M 7) Gauge B8) Other (Stained Leave c Fauna (B13) quatic Plants (I gen Sulfide Ode ed Rhizosphere nce of Reduced it Iron Reductio fluck Surface (C e or Well Data ((Explain in Ren Depth (inches Depth (inches	B14) or (C1) es on Living I fron (C4) in in Tilled S 7) D9) harks)	Soils (C6)	Secondary Surface Drainage Dry-Sea Crayfisl Stunted Geomo FAC-Ne	Indicators (minimum of two requires Soil Cracks (B6) Re Patterns (B10) Reson Water Table (C2) Reson Water Table (C2) Reson Visible on Aerial Imagery (C9) Ror Stressed Plants (D1) Rephic Position (D2) Reutral Test (D5)



Wetland		Sample Point	w5out	Longitude	Latitude
Cowardin Classification:				-94.543088	38.864492
Size:					
Landform: Drainageway					
Tree Stratum:					
Sapling/Shrub:					
Herb Stratum: Sorghum ha	alepense				
Vine Stratum:					
Hydric Soil Indicators:					
Hydrology Indicators:					
Significant Nexus:	Adjacent: _	Abuts:	Stream Name	:	
Jurisdictional Status and	Comments:				

Photo 1



Photo 2



Photo 3 Photo 4

son Co.) e: MO	Sampling Sampling I	Date: 09/0)2/2020	
	ownship, Rang	_	47N D22M	
none): Con		320 12	+/IN K33W	
	ncave Datum:	117	M83	
	classification:			
		1101	188	
	explain in Re		- 2	
	ces" present?		No.	
	nswers in Rer			
ons, trans	sects, imp	ortant fo	eatures,	etc
	Yes X	No		
	277			
e Test work	ksheet:			
Dominant S	Species That			
ACW, or FA	AC:	6		(A
er of Domir	nant			
cross All Stra	ata:	7		(B)
Dominant S				
BL, FACW,	or FAC:	86%	6	(A/
		Y .		
e Index wo				
Total % Cov	er of:	Mu	Itiply by:	-
es	20	x 1 =	20	
cies	130	x 2 =	260	
es	20	x 3 =	60	
cies	40	x 4 =	160	
es	0	x 5 =	0	
tals:	210	(A)	500	(B)
Prevalenc	ce Index = B/A	A = 2.38		30
hytic Voca	etation Indica	atore:		
	for Hydrophy		tion	
			HOIT	
	e Test is >50%			
	e Index is ≤3.0		J	dee
	ical Adaptatio			ing
	lydrophytic Ve			
	, s. sprigate ve	- Jesuson 1	piditi)	
irs of hydria	soil and wetl	land hydrol	nav muet	he
	turbed or prob		ogj must	20
hytic	ALCO AND MERCED			
ion	Vec	Y No	5	
?	103	_	-	
	?	103	103	103

Profile Description: (Describe to the o		ent the inc		confirm	the absence of inc	dicators.)
Depth Matrix (inches) Color (moist) %		%	Type ¹	Loc ²	Texture	Remarks
The cold (Holot)	- Color (moloty		-1700		TONIDIO	Tiomana
		_	$\overline{}$	_		
		_		-	· ·	-
		_	-	-		
		_		_		
			_		-	
	-,	_	$\overline{}$	_		
	-0.5 r 1 - 1 - 1			_	2 - 13 - 17	SECULIE POLICE
ype: C=Concentration, D=Depletion,	RM=Reduced Matrix, MS	S=Masked	Sand Grain	ns.		Pore Lining, M=Matrix
Hydric Soil Indicators:	1.7.		at a sale	Call Car		or Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Gleye		S4)		Prairie Redox (A16)
Histic Epipedon (A2)	_s	Sandy Redo	x (S5)			urface (S7)
Black Histic (A3)	s	Stripped Ma	trix (S6)		Iron-Ma	inganese Masses (F12)
Hydrogen Sulfide (A4)	<u></u> 1	oamy Mucl	ky Mineral	(F1)	Very Sh	nallow Dark Surface (TF12)
Stratified Layers (A5)		oamy Gley		(F2)	Other (Explain in Remarks)
2 cm Muck (A10)		epleted Ma	atrix (F3)			
Depleted Below Dark Surface (A1	1) F	Redox Dark	Surface (F	- 6)		
Thick Dark Surface (A12)		epleted Da	irk Surface	(F7)		of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	F	Redox Depr	essions (F	8)		nd hydrology must be present.
5 cm Mucky Peat or Peat (S3)	_				unles	s disturbed or problematic.
estrictive Layer (if observed):					ľ	
Type:					-	
Depth (inches):					Hydric Soil Prese	nt? Yes X No
Dopur (menes).					riyana son riese	
IYDROLOGY						
etland Hydrology Indicators:						
Primary Indicators (minimum of one i	s required; check all tha	t apply)			Secondary Ir	dicators (minimum of two require
✓ Surface Water (A1)	Water-Stain	and the same	(B9)			oil Cracks (B6)
			(55)			
High Water Table (A2)	Aquatic Fau		16.			Patterns (B10)
★ Saturation (A3) Market Market (B4)	_ True Aquation					on Water Table (C2)
_ Water Marks (B1)	Hydrogen S					urrows (C8)
Sediment Deposits (B2)	_Oxidized Rh			Roots (C		Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of			40 mar 20		Stressed Plants (D1)
Algal Mat or Crust (B4)	_ Recent Iron			oils (C6)		nic Position (D2)
Iron Deposits (B5)	Thin Muck S				X FAC-Neut	ral Test (D5)
Inundation Visible on Aerial Image						
Sparsely Vegetated Concave Surf	ace (B8) _ Other (Expla	ain in Rema	irks)			
eld Observations:						
urface Water Present? Yes		th (inches)	1			
/ater Table Present? Yes		oth (inches)				A a. h.
aturation Present? Yes	No Dep	oth (inches)	0	Wetlan	d Hydrology Prese	ent? Yes X No
ncludes capillary fringe)						
escribe Recorded Data (stream gauge	, monitoring well, aerial i	ohotos, pre	vious inspe	ections),	f available:	
emarks:						
201-120-2						



Wetland Wetland 6		Sample Point w6		Longitude	Latitude
Cowardin Classification	n: PFO/PSS		-94.542905	38.864052	
Size:					
Landform: Drainagewa	ay				
Tree Stratum: Fraxinus	pennsylvanica Ulmus am	ericana Acer negundo			
Sapling/Shrub: Fraxinus	s pennsylvanica Morus ru	bra			
Herb Stratum: Persicari	a punctata Solidago giga	ntea			
Vine Stratum:					
Hydric Soil Indicators:	Assumed hydricinundat	ed			
Hydrology Indicators:	Surface Water (A1)	Saturation (A3)			
Significant Nexus: No	Adjacent:	Abuts:	Stream Name:		
Jurisdictional Status a	nd Comments:				

<u>Jurisdictional Status and Comments</u>: Hydrology supplied by t6, an ephemeral drainage which is not jurisdictional under the NWPR.

Photo 1



Photo 2



Photo 3 Photo 4

Applicant/Owner: Promontory 150 LLC Investigator(s): Jack Finley			State: MO	Campling			
Investigator(s): Jack Finley					oint: w6-7		
The state of the s				Township, Rang	e: S26 T47	7N R33W	,
Landform (hillslope, terrace, etc.): Hillslope	Local	relief (conca	ve, convex, none): N	lone			
Slope (%): 0-2% Lat: 38.864011	Long;	-94.542954		Datum:	UTN	183	
Soil Map Unit Name: 36083 Kennebec silt loar	m, 1 to 4 percent slopes	, occasionally	y floode NW	I classification:	UPL		
Are climatic / hydrologic conditions on the site typ	ical for this time of year'	? Yes _	No (If n	io, explain in Rer	narks)		
Are Vegetation, Soil, or Hydrology			re "Normal Circumsta	inces" present?	Yes X	No	
Are Vegetation, Soil, or Hydrology			If needed, explain any				
SUMMARY OF FINDINGS - Attach site	map showing sai	mpling po	int locations, tra	insects, imp	ortant fe	atures,	etc.
Hydrophytic Vegetation Present? Yes	No X						
Hydric Soil Present? Yes	No X	Is the Sa	mpled Area				
Wetland Hydrology Present? Yes	No X	the second second second	Wetland?	Yes	No _	<u>X_</u>	
Remarks:		4					
VEGETATION - Use scientific names	of plants.						
	bsolute Dominant	Indicator	Dominance Test w	orksheet:			
	Cover Species?	Status	Number of Dominan	Company of the control of the contro			
1			Are OBL, FACW, or	FAC:	0		(A)
2			6 Taran (17 Taran 17				
4			Total Number of Dor Species Across All S		2		(B)
5.			Species Across Air c	Jilaia.		_	(0)
Sapling/Shrub Stratum Plot size: 15 ft	0 = Total Cover		Percent of Dominan That Are OBL, FAC		000%	6	(A/B
L			Prevalence Index w	unulunkant.			
2.			Total % C		Mudei	iply by:	
		_	OBL species	0	x 1 =		-
5.			FACW species		x 2 =	0	_
-	0 = Total Cover		FAC species	0	x 3 =	0	5
Herb Stratum (Plot size: 5 ft)			FACU species	50	x 4 =	200	7
1. Sorghum halepense	50 X	FACU	UPL species	0	x 5 =	0	3
2. Glycine max	50 X	NI	Column Totals:	50	(A)	200	(B)
3.			Prevale	ence Index = B/A	= 4.00		
4			Hydrophytic Ve	getation Indicat	ors:		
5			1 Territory 2 (2017) 1 (2017)	est for Hydrophyt		on	
6			2 - Dominar	ice Test is >50%			
7			3 - Prevalen	ice Index is ≤3.0	1		
8				ogical Adaptation			ng
9				arks or on a sep			
10	Total Course		_ Problematic	Hydrophytic Ve	getation (E	explain)	
Woody Vine Stratum (Plot size: 30 ft	100 = Total Cover		¹ Indicators of hyd			gy must b	oe .
<u></u>			Present, unless d	isturbed of probl	ematic.		
2	0 = Total Cove	r	Vegetation Present?	Yes	No	_X_	

Sampling Point: w6-7out

Depth (inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-16	10YR 2/2	100					Loam	
_		=		-	_	_		
		_	-			-		-
		_	-		_	_		-
		_	-					-
/pe: C=Con	centration, D=Depl	etion, RM=	Reduced Matrix	, MS=Masked	d Sand Grain	ns.	² Location; PL=	Pore Lining, M=Matrix
Hydric Soil	Indicators:						Indicators t	or Problematic Hydric Soils ³ :
Histosol	(A1)			Sandy Gle	yed Matrix ((S4)	Coast	Prairie Redox (A16)
Histic Ep	ipedon (A2)			Sandy Red			Dark S	Surface (S7)
Black His	stic (A3)		- 3	Stripped M	latrix (S6)		Iron-M	anganese Masses (F12)
Hydrogei	n Sulfide (A4)			Loamy Mu	cky Mineral	(F1)	Very S	hallow Dark Surface (TF12)
Stratified	Layers (A5)			Loamy Gle	yed Matrix	(F2)	Other	(Explain in Remarks)
2 cm Mu	ck (A10)			Depleted N	Natrix (F3)			
1000	Below Dark Surfa	ce (A11)			k Surface (F			
	rk Surface (A12)			 — make make the make 	Dark Surface			rs of hydrophytic vegetation and
	ucky Mineral (S1)			Redox Dep	oressions (F	8)		and hydrology must be present, as disturbed or problematic.
_ 5 cm Mu	cky Peat or Peat (5	63)					unie	s signature of proportionality.
strictive La	yer (if observed):							
-								
Type:							620 23 32	Andre Sale
Depth (inch	es):						Hydric Soil Pres	ent? YesNoX
Depth (inch							Hydric Soil Pres	ent? YesNoX
Depth (inchemarks:							Hydric Soil Pres	ent? YesNo_X
Depth (inchemarks: YDROLOG etland Hydro Primary Ind	GY ology Indicators: icators (minimum c	of one is re					Secondary	ndicators (minimum of two requi
Depth (inchemarks: YDROLOG etland Hydro Primary Ind	GY ology Indicators:	of one is re	_ Water-S	tained Leaves	s (B9)		Secondary Surface S	ndicators (minimum of two requi
Depth (inchemarks: YDROLOG etland Hydro Primary Ind Surface N	GY ology Indicators: icators (minimum c	of one is re	_ Water-S		s (B9)		Secondary Surface S	ndicators (minimum of two requi
Primary Ind Surface V High Wat Saturatio	GY plogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3)	of one is re	Water-Si Aquatic True Aqu	tained Leave Fauna (B13) uatic Plants (I	B14)		Secondary Surface S Drainage Dry-Seas	ndicators (minimum of two requi Soil Cracks (B6) Patterns (B10) on Water Table (C2)
Primary Ind Surface N High Wat Saturatio Water Ma	GY blogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1)	of one is re	Water-Si Aquatic True Aqu Hydroge	tained Leave Fauna (B13) uatic Plants (I n Sulfide Odd	B14) or (C1)		Secondary Surface S Drainage Dry-Seas Crayfish	ndicators (minimum of two requi Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8)
Primary Ind Surface V High Wat Saturatio Water Ma	Diogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2)	of one is re	— Water-Si — Aquatic — True Aqu — Hydroge — Oxidized	lained Leaver Fauna (B13) uatic Plants (I n Sulfide Odd I Rhizosphere	B14) or (C1) es on Living	Roots (C	Secondary Surface S Drainage Dry-Seas Crayfish Saturatio	ndicators (minimum of two requi Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9)
Primary Ind Surface V High Wat Saturatio Water Ma Sedimen Drift Dep	Diogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3)	of one is re	— Water-Si — Aquatic — True Aqu — Hydroge — Oxidized — Presence	tained Leaver Fauna (B13) Jatic Plants (F In Sulfide Odo I Rhizosphere e of Reduced	B14) or (C1) es on Living I Iron (C4)		Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	ndicators (minimum of two requi Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Primary Ind Surface N High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma	Diogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4)	of one is re	— Water-Si — Aquatic — True Aqu — Hydroge — Oxidized — Presence — Recent I	tained Leaver Fauna (B13) uatic Plants (f n Sulfide Odd Rhizosphere e of Reduced ron Reduction	B14) or (C1) es on Living I Iron (C4) n in Tilled S		Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	ndicators (minimum of two requi Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Primary Ind Surface N High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dep	Diogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5)		— Water-Si — Aquatic — True Aqu — Hydroge — Oxidized — Presence — Recent I — Thin Muc	tained Leaves Fauna (B13) Datic Plants (I In Sulfide Odd I Rhizosphere e of Reduced ron Reduction ck Surface (C	B14) or (C1) es on Living I Iron (C4) n in Tilled Si		Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	ndicators (minimum of two requi Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Primary Ind Surface V High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depo	Diogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4)	Imagery (I	Water-Si Aquatic True Aqu Hydroge Oxidized Presence Recent I Thin Muc	tained Leaver Fauna (B13) uatic Plants (f n Sulfide Odd Rhizosphere e of Reduced ron Reduction	B14) or (C1) es on Living I Iron (C4) in in Tilled Sc 77)		Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	ndicators (minimum of two requi Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Primary Ind Surface V High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depo	Dlogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Vegetated Concar	Imagery (I	Water-Si Aquatic True Aqu Hydroge Oxidized Presence Recent I Thin Muc	lained Leaves Fauna (B13) Datic Plants (I In Sulfide Odd I Rhizosphere e of Reduced fron Reduction ck Surface (Cor Well Data (I	B14) or (C1) es on Living I Iron (C4) in in Tilled Sc 77)		Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	ndicators (minimum of two requi Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Primary Ind Surface N High Wat Saturatio Water Ma Sedimen Drift Dep Algal Mat Iron Depi Inundatio Sparsely	Dlogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Vegetated Concar	Imagery (I	Water-Si Aquatic True Aqu Hydroge Oxidized Presence Recent I Thin Muc B7) Gauge o (B8) Other (E	lained Leaves Fauna (B13) Datic Plants (I In Sulfide Odd I Rhizosphere e of Reduced fron Reduction ck Surface (Cor Well Data (I	B14) or (C1) es on Living I Iron (C4) in in Tilled Si 7) D9) narks)		Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	ndicators (minimum of two requi Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Primary Ind Surface V High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depi Inundatio Sparsely	Diogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aerial Vegetated Concavitions: Present? Ye	Imagery (l ve Surface	Water-Si Aquatic True Aqu Hydroge Oxidized Presence Recent I Thin Muc B7) Gauge of (B8) Other (E	lained Leaves Fauna (B13) Juatic Plants (I In Sulfide Odd I Rhizosphere e of Reduced ron Reduction ck Surface (C Ir Well Data (I Ixplain in Rem	B14) or (C1) es on Living I Iron (C4) in in Tilled Si 7) D9) narks)		Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	ndicators (minimum of two requi Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Primary Ind Surface N High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depo Inundatio Sparsely eld Observa rface Water atter Table Pr turation Pres	Diogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Vegetated Concar tions: Present? Yesent? Yesent? Yesent?	Imagery (l ve Surface s	Water-Si Aquatic True Aqu Hydroge Oxidized Presence Recent I Thin Muc B7) Gauge of (B8) Other (E	lained Leaves Fauna (B13) Juatic Plants (I In Sulfide Odd I Rhizosphere e of Reduced ron Reduction ck Surface (C Ir Well Data (I Ixplain in Ren Depth (inches	B14) or (C1) es on Living I Iron (C4) n in Tilled Si (7) D9) narks)	oils (C6)	Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of	ndicators (minimum of two requison Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) or Stressed Plants (D1) whice Position (D2) Itral Test (D5)
Primary Ind Surface V High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depi Inundatio Sparsely eld Observa rface Water ater Table Pr turation Pres	Dlogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Vegetated Concav tions: Present? Yesent? Yesent? Yesert? Yesert?	Imagery (l	Water-Si Aquatic True Aqu Hydroge Oxidized Presence Recent I Thin Muc B7) Gauge o (B8) Other (E	lained Leaves Fauna (B13) Juatic Plants (I In Sulfide Odd I Rhizosphere e of Reduced fron Reduction ok Surface (Co Ir Well Data (I Ixplain in Ren Depth (inches Depth (inches Depth (inches	B14) or (C1) es on Living I Iron (C4) in in Tilled Si 7) D9) harks)	oils (C6)	Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of Geomorp FAC-Neu	ndicators (minimum of two requi Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1) hic Position (D2) tral Test (D5)
Primary Ind Surface V High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depi Inundatio Sparsely eld Observa rface Water ater Table Pr turation Pres	Diogy Indicators: icators (minimum of Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Vegetated Concar tions: Present? Yesent? Yesent? Yesent?	Imagery (l	Water-Si Aquatic True Aqu Hydroge Oxidized Presence Recent I Thin Muc B7) Gauge o (B8) Other (E	lained Leaves Fauna (B13) Juatic Plants (I In Sulfide Odd I Rhizosphere e of Reduced fron Reduction ok Surface (Co Ir Well Data (I Ixplain in Ren Depth (inches Depth (inches Depth (inches	B14) or (C1) es on Living I Iron (C4) in in Tilled Si 7) D9) harks)	oils (C6)	Secondary Surface S Drainage Dry-Seas Crayfish Saturatio Stunted of Geomorp FAC-Neu	ndicators (minimum of two requi Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1) hic Position (D2) tral Test (D5)
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Wetland		Sample Point w	6-7out	Longitude	Latitude
Cowardin Classification:		. markmone -		-94.542954	38.864011
Size:					
Landform: Hillslope					
Tree Stratum:			-		
Sapling/Shrub:					
Herb Stratum: Sorghum hal	epense Glycine m	ax			
Vine Stratum:					
Hydric Soil Indicators:					
Hydrology Indicators:					
Significant Nexus:	Adjacent:	Abuts:	Stream Name		
Jurisdictional Status and	Commente:				

Photo 1



Photo 2



Photo 3 Photo 4

Project/Site: HWY 150 and Botts Ro	ad	City/County: Gra	andview (Jackson Co.)	Sampling Date	
Applicant/Owner: Promontory 15) LLC		State: MO	Sampling Point	
Investigator(s): Jack Finley				ownship, Range:	S26 T47N R33W
Landform (hillslope, terrace, etc.):	Depression		ave, convex, none): Cor		10000
Slope (%): 0-2% Lat: 38.8639		Long;94.54289	75	Datum:	UTM83
Soil Map Unit Name: 36083 Kenne			iy iloode	The Park of the Pa	N/A
Are climatic / hydrologic conditions or				explain in Remark	
Are Vegetation, Soil, or			Are "Normal Circumstand		
the same of the sa	Hydrologynaturally		(If needed, explain any a		
SUMMARY OF FINDINGS - A		ving sampling p	oint locations, tran	sects, import	ant features, etc.
Hydrophytic Vegetation Present?	Yes X No	= 1			
Hydric Soil Present?	Yes X No	Is the Sa	ampled Area		
Wetland Hydrology Present?	Yes X No	within a	Wetland?	Yes X	No
Remarks:		- 4			
VEGETATION - Use scientifi	c names of plants.				
Tree Stratum (Plot size: 30 ft		minant Indicator ecies? Status	Dominance Test wor		
Tree Stratum (Plot size: 30 ft	76 Cover Spi	Bules : Status	Number of Dominant S Are OBL, FACW, or F	CONTRACTOR STATE OF THE STATE O	2 (A)
2.			7.00 000,77.70,77.70	_	
3.			Total Number of Domi	nant	
4.			Species Across All Str	ata:	2 (B)
5.					
Sapling/Shrub Stratum Plot size:		al Cover	Percent of Dominant S That Are OBL, FACW,		100% (A/B
£				The second	
2.			Prevalence Index wo		
3			Total % Cov		Multiply by:
4			OBL species		(1 = 80
5		al Cover	FACW species FAC species		$\begin{array}{ccc} 3 = & \underline{} & \underline$
Herb Stratum (Plot size: 5 ft	0 = 1018	ii Cover	FACU species		(3 = 0 (4 = 0
1. Echinochloa muricata	40	X OBL	UPL species		5 = 0
2. Fraxinus pennsylvanica	20	FACW	Column Totals:		A) 140 (B)
3. Persicaria punctata	40	X OBL	Prevalence	ce Index = B/A =	
4. Bidens aristosa	10	FACW		AND DESCRIPTIONS	
5.			Hydrophytic Vege	for Hydrophytic V	
6.				e Test is >50%	egetation
7.			Δ	e Index is ≤3.01	
8.					(Provide supporting
9.				ks or on a separa	
10.			Problematic H	lydrophytic Vegeta	ation1 (Explain)
Walter State of the Control of the C		al Cover			
Woody Vine Stratum (Plot size:	30 ft)		¹ Indicators of hydric present, unless dist		
1.				urbed or problems	4UC.
2.		otal Cover	Hydrophytic Vegetation	Yes X	No
	<u> </u>	olai Ogvei	Present?	162	- "
Remarks: (Include photo numbers he	ere or on a separate sheet.)			
	10-10-11-11-11-11-11-11-11-11-11-11-11-1				

rofile Description: (Describe to the o		ent the indica	tor or confirm	the absence of in	dicators.)
Depth Matrix (inches) Color (moist) %			/pe¹ Loc²	Texture	Remarks
(mones) Cold (molet)				TOMBIG	Tiomano
		— –		-	_
		— —			
					-
					-
					-
					-
	40.00		120	# 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	and the statements
ype: C=Concentration, D=Depletion,	RM=Reduced Matrix, MS	=Masked San	d Grains.		Pore Lining, M=Matrix
Hydric Soil Indicators:	1.00	TANK SALE	and the same		or Problematic Hydric Soils ³ :
Histosol (A1)		andy Gleyed M	and the second second		Prairie Redox (A16)
Histic Epipedon (A2)	_ S	andy Redox (S	55)		urface (S7)
Black Histic (A3)	S	ripped Matrix	(S6)	Iron-Ma	anganese Masses (F12)
Hydrogen Sulfide (A4)	Lo	amy Mucky M	lineral (F1)	Very S	hallow Dark Surface (TF12)
Stratified Layers (A5)	Lc	amy Gleyed N	Matrix (F2)	Other (Explain in Remarks)
2 cm Muck (A10)	D	epleted Matrix	(F3)		
Depleted Below Dark Surface (A1	1) R	edox Dark Sur	face (F6)		
Thick Dark Surface (A12)	_ D	epleted Dark S	Surface (F7)		s of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	B	edox Depressi	ons (F8)		nd hydrology must be present.
5 cm Mucky Peat or Peat (S3)	_			unles	s disturbed or problematic.
estrictive Layer (if observed):				T	
satisfied Layer (ii observed).					
Type:					
Type:				Hydric Soil Press	ent? Ves V No
Type: Depth (inches): emarks: oils inundated; assumed hydric.				Hydric Soil Prese	ent? Yes No
Depth (inches): emarks: pils inundated; assumed hydric.				Hydric Soil Prese	ent? Yes No
Depth (inches): emarks: oils inundated; assumed hydric. YDROLOGY				Hydric Soil Prese	ent? Yes No
Depth (inches): emarks: pils inundated; assumed hydric. YDROLOGY etland Hydrology Indicators:	is required: check all that	apply)			
Depth (inches): emarks: oils inundated; assumed hydric. YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of one)				Secondary (ndicators (minimum of two require
Depth (inches): emarks: oils inundated; assumed hydric. YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of one i	Water-Staine	d Leaves (B9)		Secondary II	ndicators (minimum of two require
Depth (inches): emarks: pils inundated; assumed hydric. YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of one inches) Surface Water (A1) High Water Table (A2)	Water-Staine Aquatic Faur	d Leaves (B9) na (B13)		Secondary II Surface S Drainage	ndicators (minimum of two require soil Cracks (B6) Patterns (B10)
Depth (inches): emarks: bils inundated; assumed hydric. YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of one in the inches) X Surface Water (A1) High Water Table (A2) X Saturation (A3)	Water-Staine Aquatic Faur True Aquatic	d Leaves (B9) na (B13) Plants (B14)		Secondary II Surface S Drainage Dry-Seas	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2)
Depth (inches): emarks: oils inundated; assumed hydric. YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of one i X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1)	— Water-Staine — Aquatic Faur — True Aquatic — Hydrogen Su	d Leaves (B9) a (B13) Plants (B14) Ifide Odor (C1)	Secondary II Surface S Drainage Dry-Seas Crayfish B	ndicators (minimum of two requires soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8)
Depth (inches): emarks: oils inundated; assumed hydric. YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of one i X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	— Water-Staine — Aquatic Faur True Aquatic — Hydrogen Su Oxidized Rhi	nd Leaves (B9) na (B13) Plants (B14) Iffide Odor (C1 zospheres on) Living Roots (Secondary (I Surface S Drainage Dry-Seas Crayfish E	ndicators (minimum of two require foil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8)
Depth (inches): emarks: bils inundated; assumed hydric. YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of one in the inches in the in	Water-Staine Aquatic Faur True Aquatic Hydrogen Su Oxidized Rhi Presence of	d Leaves (B9) a (B13) Plants (B14) Iffide Odor (C1 zospheres on Reduced Iron) Living Roots ((C4)	Secondary II Surface S Drainage Dry-Seas Crayfish B C3) Saturation Stunted o	ndicators (minimum of two requires coil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Depth (inches): emarks: bils inundated; assumed hydric. YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of one in the inches in the in	Water-Staine Aquatic Faur True Aquatic Hydrogen Su Oxidized Rhi Presence of Recent Iron I	d Leaves (B9) a (B13) Plants (B14) Iffide Odor (C1 zospheres on Reduced Iron Reduction in T) Living Roots ((C4)	Secondary II Surface S Drainage Dry-Seas Crayfish E Saturation Stunted o	ndicators (minimum of two requires foil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) hic Position (D2)
Depth (inches): emarks: oils inundated; assumed hydric. YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of one i X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Water-Staine Aquatic Faur True Aquatic Hydrogen Su Oxidized Rhi Presence of Recent Iron I	d Leaves (B9) a (B13) Plants (B14) Iffide Odor (C1 zospheres on Reduced Iron Reduction in Ti) Living Roots ((C4)	Secondary II Surface S Drainage Dry-Seas Crayfish E Saturation Stunted o	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Depth (inches): emarks: oils inundated; assumed hydric. YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of one i X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Image	Water-Staine Aquatic Faur True Aquatic Hydrogen Su Oxidized Rhi Presence of Recent Iron I Thin Muck Si ery (B7) Gauge or We	d Leaves (B9) a (B13) Plants (B14) Iffide Odor (C1 zospheres on Reduced Iron Reduction in T urface (C7)) Living Roots ((C4) illed Soils (C6)	Secondary II Surface S Drainage Dry-Seas Crayfish E Saturation Stunted o	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Depth (inches): emarks: oils inundated; assumed hydric. YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of one i X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Water-Staine Aquatic Faur True Aquatic Hydrogen Su Oxidized Rhi Presence of Recent Iron I Thin Muck Si ery (B7) Gauge or We	d Leaves (B9) a (B13) Plants (B14) Iffide Odor (C1 zospheres on Reduced Iron Reduction in T urface (C7)) Living Roots ((C4) illed Soils (C6)	Secondary II Surface S Drainage Dry-Seas Crayfish E Saturation Stunted o	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Depth (inches): emarks: oils inundated; assumed hydric. YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of one i X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Image	Water-Staine Aquatic Faur True Aquatic Hydrogen Su Oxidized Rhi Presence of Recent Iron I Thin Muck Si ery (B7) Gauge or We	d Leaves (B9) a (B13) Plants (B14) Iffide Odor (C1 zospheres on Reduced Iron Reduction in T urface (C7)) Living Roots ((C4) illed Soils (C6)	Secondary II Surface S Drainage Dry-Seas Crayfish E Saturation Stunted o	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Depth (inches): emarks: oils inundated; assumed hydric. YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of one in the second secon	Water-Staine Aquatic Faur True Aquatic Hydrogen Su Oxidized Rhi Presence of Recent Iron I Thin Muck Stary (B7) Gauge or We ace (B8) Other (Expla	d Leaves (B9) a (B13) Plants (B14) Iffide Odor (C1 zospheres on Reduced Iron Reduction in T urface (C7)) Living Roots ((C4) illed Soils (C6)	Secondary II Surface S Drainage Dry-Seas Crayfish E Saturation Stunted o	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Depth (inches): emarks: bils inundated; assumed hydric. YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of one in the second se	Water-Staine Aquatic Faur True Aquatic Hydrogen Su Oxidized Rhi Presence of Recent Iron I Thin Muck Si ery (B7) Gauge or We face (B8) Other (Expla	d Leaves (B9) a (B13) Plants (B14) Iffide Odor (C1 zospheres on Reduced Iron Reduction in Ti urface (C7) ell Data (D9) in in Remarks)) Living Roots ((C4) illed Soils (C6)	Secondary II Surface S Drainage Dry-Seas Crayfish E Saturation Stunted o X Geomorp X FAC-Neu	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1) hic Position (D2) tral Test (D5)
Depth (inches): emarks: bils inundated; assumed hydric. YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of one in the second se	Water-Staine Aquatic Faur True Aquatic Hydrogen Su Oxidized Rhi Presence of Recent Iron I Thin Muck Si ery (B7) Gauge or We face (B8) Other (Expla	d Leaves (B9) a (B13) Plants (B14) Iffide Odor (C1 zospheres on Reduced Iron Reducetion in Ti urface (C7) ell Data (D9) in in Remarks)) Living Roots ((C4) illed Soils (C6)	Secondary II Surface S Drainage Dry-Seas Crayfish E Saturation Stunted o	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1) hic Position (D2) tral Test (D5)
Depth (inches): emarks: oils inundated; assumed hydric. YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of one in inches) X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Image Sparsely Vegetated Concave Surface Water Present? eld Observations: urface Water Present? yes ater Table Present? Yes	Water-Staine Aquatic Faur True Aquatic Hydrogen Su Oxidized Rhi Presence of Recent Iron I Thin Muck Si ery (B7) Gauge or We face (B8) Other (Expla	d Leaves (B9) a (B13) Plants (B14) Iffide Odor (C1 zospheres on Reduced Iron Reduction in T urface (C7) ell Data (D9) in in Remarks) h (inches)) Living Roots ((C4) illed Soils (C6)	Secondary II Surface S Drainage Dry-Seas Crayfish E Saturation Stunted o X Geomorp X FAC-Neu	ndicators (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9) or Stressed Plants (D1) hic Position (D2) tral Test (D5)
Depth (inches): emarks: bils inundated; assumed hydric. YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of one in the second se	Water-Staine Aquatic Faur True Aquatic Hydrogen Su Oxidized Rhi Presence of Recent Iron I Thin Muck Si ery (B7) Gauge or We face (B8) Other (Expla	d Leaves (B9) a (B13) Plants (B14) Iffide Odor (C1 zospheres on Reduced Iron Reduction in Ti urface (C7) ell Data (D9) in in Remarks) h (inches) h (inches) h (inches)) Living Roots ((G4) illed Soils (C6)	Secondary II Surface S Drainage Dry-Seas Crayfish B Saturation Stunted o X Geomorp X FAC-Neu	ndicators (minimum of two required Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) In Stressed Plants (D1) In Position (D2) Itral Test (D5)
Depth (inches): emarks: bills inundated; assumed hydric. YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of one in the image) X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Image) Sparsely Vegetated Concave Surface Water Present? ater Table Present? Yes ater Table Present? Yes ater Table Present? Yes Acturation Present? Yes Secribe Recorded Data (stream gauge)	Water-Staine Aquatic Faur True Aquatic Hydrogen Su Oxidized Rhi Presence of Recent Iron I Thin Muck Si ery (B7) Gauge or We face (B8) Other (Expla	d Leaves (B9) a (B13) Plants (B14) Iffide Odor (C1 zospheres on Reduced Iron Reduction in Ti urface (C7) ell Data (D9) in in Remarks) h (inches) h (inches) h (inches)) Living Roots ((G4) illed Soils (C6)	Secondary II Surface S Drainage Dry-Seas Crayfish B Saturation Stunted o X Geomorp X FAC-Neu	ndicators (minimum of two required Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) In Stressed Plants (D1) In Position (D2) Itral Test (D5)
Depth (inches): emarks: bills inundated; assumed hydric. YDROLOGY etland Hydrology Indicators: Primary Indicators (minimum of one in the second of the s	Water-Staine Aquatic Faur True Aquatic Hydrogen Su Oxidized Rhi Presence of Recent Iron I Thin Muck Si ery (B7) Gauge or We face (B8) Other (Expla	d Leaves (B9) a (B13) Plants (B14) Iffide Odor (C1 zospheres on Reduced Iron Reduction in Ti urface (C7) ell Data (D9) in in Remarks) h (inches) h (inches) h (inches)) Living Roots ((G4) illed Soils (C6)	Secondary II Surface S Drainage Dry-Seas Crayfish B Saturation Stunted o X Geomorp X FAC-Neu	ndicators (minimum of two required Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) In Stressed Plants (D1) In Position (D2) Itral Test (D5)



Wetland Wetland 7		Sample Point w	v7	Longitude	Latitude
Cowardin Classification	n: PEM	and and a		-94.542899	38.863965
Size:					
Landform: Depression					
Tree Stratum:					
Sapling/Shrub:					
Herb Stratum: Echinoch	loa muricata Fraxinus p	ennsylvanica Persica	aria punctata		
Vine Stratum:					
Hydric Soil Indicators:	assumed hydric-inundat	ed			
Hydrology Indicators:	Surface Water (A1)	Saturation ((A3)		
Significant Nexus:	Adjacent:	Abuts:	Stream Nam	e:	
Jurisdictional Status a	nd Comments:				
Hydrology supplied by t6, as	n ephemeral drainage wh	ich is not jurisdictiona	I under the NWPR.		

Photo 1



Photo 2

Photo 3 Photo 4

APPENDIX C

Stream Assessment Data Forms



Date: 08/26/2020	Investigator(s)			38.860124 -94.545498
Unique Site ID: t1a Project name: HW	Y 150 and Botts R	oad		Stream Bottom Composition: Silt Concrete Sand Muck Gravel Other: Cobble Vegetation (% cover, type):
)-1871			bedrock
County, State: Jac	kson Co., MO			Riparian Type: Surface Flow:
Stream Classification:	□TNW	RPW	⊠Non-RPW	☐ Forested ☐ Discrete ☐ Confined
Side Slopes: 1:1		□3:1	4:1 or >	Herbaceous
Hydrology:		Standing	None	Overland Sheet Flow
Water Color/Quality:	⊠ Clear	Discolored	Oily film	Stream Characteristics: Natural Artificial Manipulated
Stream Has:	⊠Bed/Bank	⊠онwм:		Explain Artificial/Manipulated:
Tributary Geometry:	Relatively	Straight	Meandering	
OHWM width: 6'	Top of bank to	ank to top width:	15'	Stream Type: Perennial Intermittent Ephemeral Draws/Gullies/Erosional Pattern
OHWM height: 1'	Top of Backers height:	ank	4	Stream Type Rational: flowing water, well developed stream channel.
Riparian Buffer Width	N/E side		Ft.	
Buffer (adjacent bank)		-		
				Significant Nexus: Yes No Explain: The ventually flows into the Little Blue River which flows in the Missouri River, a traditional navigable stream.
OHWM has: clear, natural line o shelving veg. matted down o leaf litter disturbed	or absent scour	ge in plant com	munity	Stream Condition/Stability: Mexcessive erosion







Date: 08/26/2020	Investigator(s)			38.861545 -94.541613
Unique Site ID: t1b	tary 1b 150 and Botts R 871	oad		Stream Bottom Composition: Silt concrete sand muck gravel other: Cobble vegetation (% cover, type):
County, State: Jacks	on Co., MO			Riparian Type: Surface Flow:
Stream Classification:	□TNW	□RPW	□Non-RPW	Forested
Side Slopes: 1:1	2:1	□3:1	4:1 or >	Herbaceous Confined Ag. Field Discrete and Confined
Hydrology:		☐ Standing	☐ None	Overland Sheet Flow
Water Color/Quality:	Clear	Discolored	Oily film	Stream Characteristics: Natural Artificial Manipulated
Stream Has:	⊠Bed/Bank	⊠онwм:		Explain Artificial/Manipulated:
Tributary Geometry:	Relatively	Straight	Meandering	
OHWM width: 13'	Top of b	ank to top width:	20'	Stream Type: Perennial Intermittent Ephemeral Draws/Gullies/Erosional Pattern
OHWM height: 1.5'	Top of B height:	ank	S-4', N-8'	Stream Type Rational: Flowing water, well developed channel.
Riparian Buffer Width:	N/E side		Ft.	
Buffer (adjacent bank) ve	getation:			
Bush honeysuckle, hack	berry.			Significant Nexus: Yes No Explain: It eventually flows into the Little Blue River which flows in the Missouri River, a traditional navigable stream.
OHWM has: clear, natural line on be clear, natural line on be clear line on be clear line on be clear line of clear l	absent Schan	r ge in plant com	munity	Stream Condition/Stability: excessive erosion







Date: 08/20/2020	Investigator(s):	38.860268 -94.544833
Feature ID: Tributa	ary 2	Stream Bottom Composition:
Unique Site ID: t2		Ssilt □concrete □sand □muck
Project name: HWY 1	50 and Botts Road	gravelother:cobblevegetation (% cover, type):
Project #: 019-18	71	bedrock
County, State: Jackso	n Co., MO	Riparian Type: Surface Flow:
Stream Classification:	□TNW □RPW ☑Non-RPW	
Side Slopes: 1:1	□2:1 □3:1 ☑4:1 or >	─────────────────────────────────────
Hydrology:	☐ Flowing ☐ Standing ☒ None	Overland Sheet Flow
Water Color/Quality:	☐Clear ☐Discolored ☐Oily film	Stream Characteristics: Natural Artificial Manipulated
Stream Has:	⊠Bed/Bank ⊠OHWM:	Explain Artificial/Manipulated:
Tributary Geometry:	Relatively Straight Meanderi	ng
OHWM width: 1.5'	Top of bank to top 20' of bank width:	Stream Type: Perennial Intermittent XEphemeral Draws/Gullies/Erosional Pattern
OHWM height: 0.5'	Top of Bank height:	Stream Type Rational: Dry, poorly developed.
Riparian Buffer Width:	N/E side: >50 Ft. S/W side: >50 Ft.	
Buffer (adjacent bank) veg	5) 11 SM2C: 11.	
osage orange	-	
		Significant Nexus: Yes No Explain: Ephemeral streams are not jurisdictional under the NWPR.
OHWM has: clear, natural line on ba shelving veg. matted down or al leaf litter disturbed	Scour	Stream Condition/Stability: exposed tree roots bank collapse cut-off channels riffles/runs pools incised stream channel

Biological Function and Comments:

Upstream Photo: view south







Date: 08/20/2020	nvestigator(s):		38.863601 -94.541483		
Unique Site ID: t3 Project name: HWY 15 Project #: 019-187	0 and Botts Road		Stream Bottom Composition: Ssilt		
County, State: Jackson	Co., MO		Riparian Type: Surface Flow:		
Stream Classification:	□TNW □RPW	⊠Non-RPW	Forested		
Side Slopes: 1:1	⊠ 2:1	☐4:1 or >	Herbaceous Confined Ag. Field Discrete and Confined		
Hydrology:	☐ Flowing ☐ Standing	None None	Overland Sheet Flow		
Water Color/Quality:	Clear Discolored	d Oily film	Stream Characteristics: Natural Artificial Manipulated		
Stream Has:	⊠Bed/Bank ⊠OHWM:		Explain Artificial/Manipulated:		
Tributary Geometry:	Relatively Straight	Meandering			
OHWM width: 1.5' Top of bank to top of bank width: 6'			Stream Type: Perennial Intermittent Ephemeral Draws/Gullies/Erosional Pattern		
OHWM height: 0.5' Top of Bank 2' height:		2'	Stream Type Rational: No flow and a channel that shows little development and no likely groundwater		
Riparian Buffer Width: N/E side: .>50 Ft. S/W side: .>50 Ft.			connection.		
Buffer (adjacent bank) vege	tation:				
American elm, bush honey	suckle		Significant Nexus: Yes No Explain: Ephemeral streams are not jurisdictional under the NWPR.		
OHWM has: Clear, natural line on ban shelving veg. matted down or abs leaf litter disturbed Biological Function and Com	scour som	nmunity	Stream Condition/Stability: excessive erosion		







Date: 08/26/2020	Investigator(s):	38.863597 -94.541586		
Feature ID: Tibutary	y 4	Stream Bottom Composition: Ssilt		
Unique Site ID: t4				
Project name: HWY 15	50 and Botts Road			
Project #: 019-187	71			
County, State: Jackson	Co., MO	Riparian Type: Surface Flow:		
Stream Classification:	□TNW □RPW ☑Non-RPW	☑ Forested ☐ Discrete		
Side Slopes: 1:1	□2:1 □3:1 □4:1 or >	Herbaceous Confined Ag. Field Discrete and Confined		
Hydrology:	☐ Flowing ☐ Standing ☒ None	Overland Sheet Flow		
Water Color/Quality:	Clear Discolored Oily film	Stream Characteristics: Natural Artificial Manipulated		
Stream Has: Stream Bed/Bank OHWM:		Explain Artificial/Manipulated:		
Tributary Geometry:	Relatively Straight Meandering			
OHWM width: 2'	Top of bank to top 5' of bank width:	Stream Type: Perennial Intermittent Ephemeral Draws/Gullies/Erosional Pattern		
OHWM height: .75'	Top of Bank 2' height:	Stream Type Rational: No flow and a channel that shows little development and no likely groundwater		
Riparian Buffer Width:	N/E side: >50 Ft. S/W side: >50 Ft.	connection.		
Buffer (adjacent bank) vege	DJ FI SIGLI	-		
bush honeysuckle				
		Significant Nexus: Yes No Explain: Ephemeral streams are not jurisdictional under the NWPR.		
OHWM has: Clear, natural line on bar shelving veg. matted down or abe	Scour	Stream Condition/Stability: excessive erosion		

Biological Function and Comments:

Upstream Photo: View north







Date: 08/26/2020 38.863683 -94.542499 Investigator(s): Tributary 5 Feature ID: Stream Bottom Composition: **⊠**silt □ concrete t5 Unique Site ID: muck sand gravel Other: Project name: HWY 150 and Botts Road cobble vegetation (% cover, type): bedrock 019-1871 Project #: Jackson Co., MO County, State: Riparian Type: Surface Flow: **□TNW** RPW Non-RPW ▼ Forested Discrete Stream Classification: Herbaceous □Confined 3:1 **Side Slopes:** 1:1 🔲 **2:1** 4:1 or > Discrete and Confined Ag. Field Overland Sheet Flow Hydrology: Flowing ☐ Standing X None Water Color/Quality: Clear Stream Characteristics: Natural ■ Artificial ■ Manipulated ☐Discolored ☐Oily film Explain Artificial/Manipulated: Stream Has: Bed/Bank ⊠OHWM: Relatively Straight **Tributary Geometry:** Meandering Stream Type: Top of bank to top 3' **OHWM** width: of bank width: Perennial Intermittent XEphemeral Draws/Gullies/Erosional Pattern Top of Bank 1' Stream Type Rational: 0.5 OHWM height: height: No flow and a channel that shows little development and no likely groundwater connection. Riparian Buffer Width: >50 N/E side: Ft. >50 S/W side: Ft. Buffer (adjacent bank) vegetation: bush honeysuckle ☐ Yes No. Significant Nexus: Explain: Ephemeral streams are not jurisdictional under the NWPR. OHWM has: Stream Condition/Stability: Clear, natural line on bank wrack line excessive erosion exposed tree roots shelving bank collapse steep side slopes scour veg. matted down or absent cut-off channels riffles/runs vegetated banks
Stable stream channel change in plant community ☐ leaf litter disturbed Other: pools incised stream channel

Biological Function and Comments:

Upstream Photo: View north







Date: 09/02/20	020	nvestigator(s):			38.865998 -94.	.544275	
Feature ID: Tributary 6a					Stream Bottom Composition: Silt Concrete Sand Muck		
Unique Site ID: t6a							
Project name:	HWY 15	0 and Botts Ro	oad		☐gravel ☐other: ☐cobble ☐vegetation (% cover, type): ☐bedrock		
Project #:	019-187	1					
County, State:	Jackson	Co., Missouri			Riparian Type:	Surface Flow:	
Stream Classific	ation:	□TNW	RPW	⊠Non-RPW		Discrete	
Side Slopes:	1:1	∑ 2:1	3:1	4:1 or >	Herbaceous Ag. Field	☐ Confined ☐ Discrete and Confined	
Hydrology:			Standing	None		Overland Sheet Flow	
Water Color/Qu	ality:	Clear	Discolored	Oily film	Stream Characteristics: XNatural	Artificial Manipulated	
Stream Has:		⊠Bed/Bank	□онwм:		Explain Artificial/Manipulated:		
Tributary Geometry: Relatively Straight Meandering				Meandering			
OHWM width: 2' Top of bank to top of bank width:			15'	Stream Type: Perennial Intermittent Ephemeral Draws/Gullies/Erosional Pattern			
OHWM height:	ght: 0.75' Top of Bank 6' height:		Stream Type Rational: The channel shows less development than many intermittent streams and a				
Riparian Buffer Width: N/E side: >50 Ft. S/W side: <50 Ft.		strong groundwater connection is not a	apparent.				
Buffer (adjacent	bank) veget			ri.			
	-				Significant Nexus: Yes No Explain: Ephemeral streams are not jurisdiction.	al under the NWPR.	
OHWM has: Clear, natural line on bank wrack line shelving scour change in plant community other:				nunity	bank collapse cut-off channels riffles/runs	exposed tree roots Steep side slopes Vegetated banks stable stream channel incised stream channel	
Biological Functio	in and comi	nents:					







Date: 09/02/2020 In	vestigator(s):		38.863878 -94.	542803	
Feature ID: Tributary	6b		Stream Bottom Composition:		
Unique Site ID: 16b			Silt		
Project name: HWY 150	and Botts Road				
Project #: 019-1871			bedrock		
County, State: Jackson C	Co., Missouri		Riparian Type:	Surface Flow:	
Stream Classification:	□TNW □RPW	⊠Non-RPW	Forested	Discrete	
Side Slopes: 1:1	□ 2:1 □ 3:1	⊠ 4:1 or >	Herbaceous Ag. Field	Confined Discrete and Confined	
Hydrology:		☐ None		Overland Sheet Flow	
Water Color/Quality:		Oily film	Stream Characteristics: Natural Artificial Manipulated Explain Artificial/Manipulated:		
Stream Has:	⊠Bed/Bank ⊠OHWM:				
Tributary Geometry:	Relatively Straight	Meandering			
OHWM width: 2'	Top of bank to top of bank width:	3'	Stream Type:	neral Draws/Gullies/Erosional Pattern	
OHWM height: 0.5'	Top of Bank height:	1.5'	Stream Type Rational: Channel that shows less development	than an intermittent stream and a	
Riparian Buffer Width:		Ft.	groundwater connection is not apparer	nt.	
Buffer (adjacent bank) vegeta		•			
goldenrod, green ash					
			Significant Nexus: Yes No		
			Explain: Ephemeral streams are not jurisdiction:	al under the NWPR.	
OHWM has: Clear, natural line on bank shelving veg. matted down or absertal leaf litter disturbed	Scour	nunity	Stream Condition/Stability: excessive erosion bank collapse cut-off channels riffles/runs pools	exposed tree roots steep side slopes vegetated banks stable stream channel incised stream channel	
Biological Function and Comm	ents:				
Upstream Photo: view we	st		Downstream Photo:		



Downstream Photo:



Date: 08/26/20)20 In	ivestigator(s):	-		38.863624 -94.	.542515	
Feature ID: Tributary 6c					Stream Bottom Composition: Silt Concrete sand muck		
Unique Site ID:	Unique Site ID: 16c						
Project name:	HWY 150	and Botts Ro	oad		gravelother:cobblevegetation (% cover, type):bedrock		
Project #:	019-1871						
County, State:	Jackson (Co., Missouri			Riparian Type:	Surface Flow:	
Stream Classifica	ation:	□TNW	RPW	⊠Non-RPW	Forested	Discrete	
Side Slopes:	1:1	⊠ 2:1	□3:1	4:1 or >	Herbaceous Ag. Field	Confined Discrete and Confined	
Hydrology:			☐ Standing	None		Overland Sheet Flow	
Water Color/Qua	ality:	Clear	Discolored	Oily film	Stream Characteristics: Natural	Artificial Manipulated	
Stream Has:	Stream Has: Seed/Bank OHWM:			Explain Artificial/Manipulated:			
Tributary Geome	Tributary Geometry: Relatively Straight Meandering						
OHWM width:	OHWM width: 2' Top of bank to top 15' of bank width:			15'	Stream Type: Perennial Intermittent Ephemeral Draws/Gullies/Erosional Pattern		
OHWM height:	0.5' Top of Bank 10' height:		Stream Type Rational: The channel shows less development than a typical intermittent stream and a				
Riparian Buffer V	Vidth:	N/E side:		Ft.	groundwater connection is unknown.		
Buffer (adjacent i	bank) veget			F1.			
hackberry, walnu	t, and bush	n honeysuckle	•				
					Significant Nexus: Yes No Explain: Ephemeral streams are not jurisdiction:	al under the NWPR.	
OHWM has:	own or abse	scour	e in plant com	nunity	□ bank collapse □ cut-off channels □ riffles/runs	exposed tree roots Steep side slopes vegetated banks Stable stream channel incised stream channel	

Biological Function and Comments:

Upstream Photo: View north







Date: 09/26/2020 Investigato	r(s):	38.862241 -94.541555	ASSOCIATES
Feature ID: Tributary 7 Unique Site ID: t7 Project name: HWY 150 and Bott Project #: 019-1871	s Road	Stream Bottom Composition: Sailt Concrete sand Muck gravel Other: Cobble Vegetation (% cover, type):	
County, State: Jackson Co., Miss Stream Classification: □TNW Side Slopes: 1:1 □ ☑2:1 Hydrology: □ Flow	□RPW	Riparian Type: Surface Flow: Discrete Confined Ag. Field Overland Sh	
Water Color/Quality: ☐Clear Stream Has: ☐Bed/B Tributary Geometry: ☐Relati	□Discolored □Oily film ank ☑OHWM: vely Straight ☑ Meandering	Explain Artificial/Manipulated:	Manipulated
OHWM height: 0.75 OHWM height: 0.75 Riparian Buffer Width: N/E	of bank to top 20' ank width: of Bank 12' ht: side: >50 Ft. side: >50 Ft.	Stream Type: Perennial Intermittent Ephemeral Draws/ Stream Type Rational: Channel shows less development than an intermittent connection is not apparent.	Gullies/Erosional Pattern stream and a groundwater
OHWM has:		Significant Nexus: Yes No Explain: Ephemeral streams are not jurisdictional under the NW Stream Condition/Stability:	/PR.
Sclear, natural line on bank shelving veg. matted down or absent	wrack line cour hange in plant community ther:	excessive erosion	es ks hannel
Riological Function and Comments:			

Upstream Photo: View NW



Downstream Photo: View SE





Date: 09/26/2	020 1	nvestigator(s):	-		38.863419 -94.	541499	
Feature ID: Tributary 8a					Stream Bottom Composition: Silt Concrete Sand Muck		
Unique Site ID: t8a							
Project name:	HWY 15	0 and Botts Ro	oad		☐gravel ☐other: ☑cobble ☐vegetation (% cover, type): ☐bedrock		
Project #:	019-187	1					
County, State:	Jackson	Co., Missouri			Riparian Type:	Surface Flow:	
Stream Classific	ation:	□TNW	RPW	⊠Non-RPW	Forested	Discrete	
Side Slopes:	1:1	∑ 2:1	3:1	☐4:1 or >	Herbaceous Ag. Field	☐Confined ☐Discrete and Confined	
Hydrology:			Standing	None		Overland Sheet Flow	
Water Color/Qu	ality:	Clear	Discolored	Oily film	Stream Characteristics: Natural	Artificial Manipulated	
Stream Has:		⊠Bed/Bank	⊠онwм:		Explain Artificial/Manipulated:		
Tributary Geometry: Relatively Straight Meandering				Meandering			
OHWM width: 6' Top of bank to top of bank width:			10'	Stream Type: ☐Perennial ☑Intermittent ☐Ephemeral ☐Draws/Gullies/Erosional Pattern			
OHWM height:	OHWM height: 0.75' Top of Bank 20' height:		Stream Type Rational: Flowing water, well developed channel with a likely groundwater connection				
Riparian Buffer Width: N/E side: >50 Ft. S/W side: <50 Ft.		since it is the lowest part of the landsca	ape.				
Buffer (adjacent	bank) veget			111			
oush honeysuck	le _						
					Significant Nexus: Yes No Explain: It eventually flows into the Little Blue Ri traditional navigable stream.	iver which flows in the Missouri River, a	
OHWM has: Clear, natural line on bank wrack line scour change in plant community other:				munity	□ bank collapse □ cut-off channels	exposed tree roots Steep side slopes Vegetated banks Stable stream channel Incised stream channel	
Biological Functio	n and Comr	ments:					



Downstream Photo:





DEPARTMENT OF THE ARMY

U.S. ARMY CORPS OF ENGINEERS, KANSAS CITY DISTRICT 601 E. 12^{TH} STREET, 635 FEDERAL BUILDING KANSAS CITY, MO 64106-2824

January 11, 2021

Regulatory Branch NWK-2021-00041

Mr. Aaron Ball Olsson Associates, Inc. 7301 West 133rd Street, Suite 200 Overland Park, KS 66213

Dear Mr. Ball:

This letter is in response to your request submitted on behalf of Promontory 150 LLC for a Jurisdictional Determination for commercial land development. The site is located in Section 26, Township 47 north, Range 33 west, Jackson County, Missouri. Your request has been assigned Regulatory File No. NWK-2021-00041. Please reference this file number on any correspondence to us or to other interested parties concerning this matter.

This letter contains an approved jurisdictional determination for your project site. This jurisdictional determination is valid for a 5-year period from the date of this letter unless new information warrants revision of the determination before the expiration date. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Administrative Appeal Options and Process and Request for Appeal (NAO-RFA) form. If you request to appeal this determination, you must submit a completed NAO-RFA form to the Northwestern Division Office at the following address:

Division Engineer U.S. Army Corps of Engineers, Northwestern Division ATTN: Melinda M. Larsen Regulatory Appeals Review Officer 1201 NE Lloyd Blvd., Suite 400 Portland, OR 97232

Telephone: 503-808-3888

In order for an NAO-RFA to be accepted by the Corps, the Corps must determine that it is completed, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAO-RFA. Should you decide to submit a NAO-RFA form, it must be received at the above address by March 12, 2021. It is not necessary to submit a NAO-RFA form to the Division Office if you do not object to the determination in this letter.

In the event that you disagree with an approved jurisdictional determination and you have **new information** not considered in the original determination, you may request reconsideration of that determination by the Corps District prior to initiating an appeal. To request this reconsideration based upon new information, you must submit the completed NAO-RFA form and the new information to the District Office so that it is received within 60 days of the date of the NAO-RFA. Send approved jurisdictional determination reconsideration requests to:

District Commander U.S. Army Corps of Engineers, Kansas City District ATTN: Mark D. Frazier Chief, Regulatory Branch 601 East 12th Street, Suite 402

Kansas City, MO 64106-2824 Telephone: 816-389-3990 - FAX: 816-389-2032

The Corps of Engineers has jurisdiction over all waters of the United States. Discharges of dredged or fill material in waters of the United States, including wetlands, require prior authorization from the Corps under Section 404 of the Clean Water Act (33 USC 1344). The implementing regulation for this Act is found at 33 CFR 320-332.

We are interested in your thoughts and opinions concerning your experience with the Kansas City District, Corps of Engineers Regulatory Program. Please feel free to complete our Customer Service Survey form on our website at: http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey. You may also call and request a paper copy of the survey which you may complete and return to us by mail.

If you have any questions concerning this matter, please feel free to write or contact me at 816-389-3115 or by email at Connor.N.Bickford@usace.army.mil. Please reference Regulatory File No. NWK-2021-00041 in all comments and/or inquiries relating to this project. This letter is only being provided to you electronically at aball@olsson.com.

Sincerely,

Connor Bickford Regulatory Specialist

Connor N. Bickford

Enclosures

cc (electronically w/o enclosures):

Environmental Protection Agency,
Watershed Planning and Implementation Branch
U.S. Fish and Wildlife Service, Columbia, Missouri
Missouri Department of Natural Resources,
Water Protection Program
State Historic Preservation Office
Missouri Department of Conservation



DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, KANSAS CITY DISTRICT 635 FEDERAL BUILDING 601 E. 12^{TH} STREET

KANSAS CITY, MISSOURI 64106-2824

November 9, 2020

Regulatory Branch NWK-2020-00813

Mr. Aaron Ball Olsson 7301 West 133rd Street, Suite 200 Overland Park, Kansas 66213

Dear Mr. Ball:

This letter is in response to the approved jurisdictional determination request you submitted on behalf of Platform Ventures. It was received on September 29, 2020. The area covered by the jurisdictional determination involves waters within the upper watershed of the Little Blue River. The project is located in Section 26, Township 47 North, Range 33 West, Jackson County, Missouri.

This letter contains an approved jurisdictional determination for your project site. This jurisdictional determination is valid for a 5-year period from the date of this letter unless new information warrants revision of the determination before the expiration date. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Administrative Appeal Options and Process and Request for Appeal (NAO-RFA) form. If you request to appeal this determination, you must submit a completed NAO-RFA form to the Northwestern Division Office at the following address:

Division Engineer U.S. Army Corps of Engineers, Northwestern Division ATTN: Melinda M. Larsen Regulatory Appeals Review Officer 1201 NE Lloyd Blvd., Suite 400 Portland, OR 97232

Telephone: 503-808-3888

In order for an NAO-RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAO-RFA. Should you decide to submit an NAO-RFA form, it must be received at the above address by January 8, 2021. It is not necessary to submit an NAO-RFA form to the Division Office if you do not object to the determination in this letter.

In the event that you disagree with an approved jurisdictional determination, and you have **new information** not considered in the original determination, you may request reconsideration of that determination by the Corps District prior to initiating an appeal. To request this reconsideration based upon new information, you must submit the completed NAO-RFA form and the new information to the District Office so that it is received within 60 days of the date of the NAO-RFA. Send approved jurisdictional determination reconsideration requests to:

District Commander
ATTN: Mark D. Frazier
Chief, Regulatory Branch
U.S. Army Engineer District, Kansas City
601 East 12th Street, Suite 402
Kansas City, MO 64106-2824

Voice: 816-389-3990 – FAX: 816-389-2032

The Corps of Engineers has jurisdiction over all waters of the United States. Discharges of dredged or fill material in waters of the United States, including wetlands, require prior authorization from the Corps under Section 404 of the Clean Water Act (33 U.S.C. 1344). The implementing regulation for this Act is found at 33 CFR 320-332.

We are interested in your thoughts and opinions concerning your experience with the Kansas City District, Corps of Engineers Regulatory Program. Please feel free to complete our Customer Service Survey form on our website at: http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey. You may also call and request a paper copy of the survey which you may complete and return to us by mail.

If you have any questions concerning this matter, please feel free to write or contact me at 816-389-3739 or by email at jesse.s.cochran@usace.army.mil. Please reference Regulatory File No. NWK-2020-813 in all comments and/or inquiries relating to this project. This letter is only being provided to you electronically at: aball@olsson.com.

Sincerely,

Jesse Cochran

Regulatory Specialist

Enclosures

cc (electronically w/o enclosures):

Environmental Protection Agency,
Watershed Planning and Implementation Branch
U.S. Fish and Wildlife Service, Columbia, Missouri
Missouri Department of Natural Resources,
Water Protection Program
State Historic Preservation Office
Missouri Department of Conservation