Letter of Notification for the South Canton – Torrey 138 kV Transmission Line Project



An **AEP** Company

BOUNDLESS ENERGY™

PUCO Case No. 23-0475-EL-BLN

Submitted to:

The Ohio Power Siting Board Pursuant to Ohio Administrative Code Section 4906-6-05

Submitted by:

AEP Ohio Transmission Company, Inc.

May 12, 2023

Letter of Notification

AEP Ohio Transmission Company, Inc. South Canton-Torrey 138 kV Transmission Line Project

4906-6-05

AEP Ohio Transmission Company, Inc. ("AEP Ohio Transco" or the "Company") is providing the following information to the Ohio Power Siting Board ("OPSB") in accordance with the accelerated application requirements of Ohio Administrative Code ("OAC") Section 4906-6-05.

4906-6-05(B) General Information

B(1) Project Description

The applicant shall provide the name of the project and applicant's reference number, names and reference number(s) of resulting circuits, a brief description of the project, and why the project meets the requirements for a Letter of Notification or Construction Notice application.

The Company proposes to construct the South Canton-Torrey 138 kilovolt ("kV") Transmission Line Project (the "Project") in Stark County, Ohio. The Project consists of rebuilding approximately 3.4 miles of the existing Philo-Torrey 138 kV Transmission Line (South Canton – Torrey) primarily within the Company's existing right-of-way ("ROW") between Structure 294 (approximately 2,000 feet east of the South Canton Substation) and the Torrey Substation. The existing steel lattice towers will be replaced with steel monopoles. The location of the Project is shown on a United States Geological Survey ("USGS") topographic map as **Exhibit 1** in **Appendix A**.

The Project meets the requirements for a Letter of Notification ("LON") because it is consistent with Item (2)(b) of 4906-1-01 *Appendix A Application Requirement Matrix For Electric Power Transmission Lines* as the Project involves replacing structures with a different type of structure for more than 2 miles. Item (2)(b) of 4906-1-01 *Appendix A* states:

- (2) Adding new circuits on existing structures designed for multiple circuit use, replacing conductors on existing structures with larger or bundled conductors, adding structures to an existing transmission line, or replacing structures with a different type of structure, for a distance of:
 - (b) More than two miles.

The Project has been assigned PUCO Case No. 23-0475-EL-BLN.

B(2) Statement of Need

If the proposed project is an electric power transmission line or natural gas transmission line, a statement explaining the need for the proposed facility.

The Company proposes to rebuild nine miles of aging 138 kV transmission lines in the Canton, Ohio area to address equipment material condition, performance, and risk needs. The Philo-Canton 138 kV Transmission Line (South Canton – Sunnyside) was constructed in 1923 and most structures,



conductors, and hardware are original. Insulator assemblies are showing corrosion and deterioration, which could lead to failures, power outages, and safety hazards. Current open conditions include broken insulators and disconnected ground wire. The Philo-Canton 138 kV Transmission Line (South Canton – Sunnyside) will be filed under a separate case number, No. 23-0474-EL-BLN.

The Philo-Torrey 138 kV Transmission Line (South Canton – Torrey), the subject of this filing, was constructed in 1942 and the transmission line does not meet current grounding and shielding requirements due to the condition and advanced age of the original shield wire, the obsolete wire size (159 ACSR), and the inadequate line shielding angle. The line is grounded with grillage foundations, which do not meet current Company standards. Current open conditions include broken suspension insulators and missing signage.

The overall deterioration of the two transmission lines is an indicator of the need to rebuild the assets rather than conduct repairs. Retirement of these lines is not feasible because a portion of the Philo-Canton 138 kV Transmission Line directly serves the Faircrest Street distribution substation, which serves over 2,700 local AEP Ohio customers. In addition, the Philo-Torrey 138 kV Transmission Line provides a critical source to two customers which serve upwards of 240 MW of industrial load and serve as a major employer for the area. Failure to move forward with this Project could expose customers served from the lines to outages as the assets continue to deteriorate. It could also be detrimental to the major industrial customers' operations, as high levels of power system reliability are essential for their business operations.

The need and solution for the supplemental Project was presented and reviewed with stakeholders at the March 19, 2020 and October 15, 2021 PJM Subregional RTEP-West meetings and subsequently assigned PJM identifier s2651. The Project was listed in the Company's 2023 Long-Term Forecast Report on page 49-50, see **Appendix B**.

B(3) Project Location

The applicant shall provide the location of the project in relation to existing or proposed lines and substations shown on an area system map of sufficient scale and size to show existing and proposed transmission facilities in the project area.

The Project is located in Stark County, Ohio. The Project begins approximately 2,000 feet east of the South Canton Substation at Structure 294 (40.714 longitude, -81.408 latitude) and extends approximately 3.4 miles northwest to the Torrey Substation north of Shepler Church Avenue (40.763 latitude, -81.413 longitude).

Exhibit 1 in **Appendix A** shows the proposed Project relative to existing, nearby transmission facilities on a USGS topographic map (Bolivar and Canton West quadrangles). **Exhibit 2** in **Appendix A** shows the Project components on aerial imagery (2020/2021).

B(4) Alternatives Considered

The applicant shall describe the alternatives considered and reasons why the proposed location or route is best suited for the proposed facility. The discussion shall include, but not be limited to, impacts associated with socioeconomic, ecological, construction, or engineering aspects of the project.



The Project is proposing to rebuild on or near the centerline of the existing Philo-Torrey 138 kV Transmission Line, primarily within existing ROW. Abandoning the existing ROW for a new greenfield route is neither practical nor necessary for the Project. As such, no other alternatives were considered for the Project. Any greenfield-based route alternative would likely add additional length to the Project, and likely more (or new) impacts to the human and natural environment and land use. Slight line shifts will be necessary during construction to allow for installation of the new structures while reducing operational interruptions for the existing transmission line. However, these shifts are minor and do not impact any additional landowners, wetlands, streams, or known cultural resources. Therefore, this Project represents the most suitable location and is the most appropriate solution for meeting the Project needs.

B(5) Public Information Program

The applicant shall describe its public information program to inform affected property owners and tenants of the nature of the project and the proposed timeframe for project construction and restoration activities.

The Company will inform affected property owners and tenants about this Project through several different mediums. Within seven days of filing this LON, the Company will issue a public notice in a newspaper of general circulation in the Project area. The notice will comply with all requirements of OAC Section 4906-6-08(A) (1-6). Further, the Company has mailed (or will mail) a letter, via first class mail, to affected landowners, tenants, contiguous owners and any other landowner the Company may approach for an easement necessary for the construction, operation, or maintenance of the Project. The letter will comply with all requirements of OAC Section 4906-6-08(B). The Company maintains a website (http://aeptransmission.com/ohio/), which provides the public access to an electronic copy of this LON and the public notice for this LON. An electronic copy of the LON will be served to the public library in each political subdivision for this Project. The Company retains ROW land agents that discuss Project timelines, construction and restoration activities and convey information to affected owners and tenants throughout the Project.

B(6) Construction Schedule

The applicant shall provide an anticipated construction schedule and proposed inservice date of the project.

Construction of the Project is planned to begin in November 2023, and the anticipated in-service date will be March 2025.

B(7) Area Map

The applicant shall provide a map of at least 1:24,000 scale clearly depicting the facility with clearly marked streets, roads, and highways, and an aerial image.

Exhibit 1 in **Appendix A** shows the location of the Project area on a USGS 1:24,000 quadrangle map (Bolivar and Canton West quadrangles). **Exhibit 2** in **Appendix A** consists of an aerial imagery map (2020/2021) of the Project area.



To visit the Project starting point from Columbus, take Interstate ("I-") 71 N for approximately 68.3 miles. From I-71 N take exit 176 to merge onto U.S. Highway ("US-") 30 E toward Wooster for approximately 54.2 miles. Then take exit 190 for Ohio Route ("OH-") 297/Whipple Avenue toward Raff Avenue for approximately 0.8 miles. Turn right onto 246/Gambrinus Avenue SW/Raff Road SW and continue for approximately 1.2 miles. Then turn left onto Shepler Church Avenue SW and continue for approximately 0.3 miles and Torrey Substation will be on your left.

B(8) Property Agreements

The applicant shall provide a list of properties for which the applicant has obtained easements, options, and/or land use agreements necessary to construct and operate the facility and a list of the additional properties for which such agreements have not been obtained.

A list of properties for which the Company will need to obtain easements/options is provided below.

Property Parcel Number	Agreement Type	Easement Agreement/Option Obtained (Yes/No)
4909409*	Easement Not Required	N/A
4909419*	Easement Not Required	N/A
4909407*	Easement Not Required	N/A
1380170*	Easement Not Required	N/A
1312110*	Easement Not Required	N/A
1380174*	Easement Not Required	N/A
8300013*	Easement Not Required	N/A
8300023*	Easement Not Required	N/A
1314964*	Easement Not Required	N/A
8300015*	Easement Not Required	N/A
4909700	Supplemental Easement	No
4900718	Supplemental Easement	No
4900840	Supplemental Easement	No
4909529	Supplemental Easement	No

^{*} Parcel is owned by the Company or the State of Ohio, Department of Transportation, and therefore does not require an easement.

B(9) Technical Features

The applicant shall describe the following information regarding the technical features of the project:



N/A = not applicable

B(9)(a) Operating characteristics, estimated number and types of structures required, and right-of-way and/or land requirements.

The South Canton – Torrey 138 kV Transmission Line Project is estimated to include the following:

Voltage: 138 kV

Conductors: Single Circuit, 1033KCM ACSR 54/7 Strand, CURLEW Static Wire: (1) AFL OPGW DNO-12739 S1-36/101/646 0.646 144 Fiber

Insulators: Polymer ROW Width: 100-foot

Structure Type: Two monopole double circuit dead-end structures,

Four monopole single circuit dead-end structure, Two monopole steel running angle structures, and

10 monopole steel tangent structures.

B(9)(b) Electric and Magnetic Fields

For electric power transmission lines that are within one hundred feet of an occupied residence or institution, the production of electric and magnetic fields during the operation of the proposed electric power transmission line.

There is one residence and one church within 100 feet of the centerline for this Project. Three loading conditions were examined: (1) Normal Maximum Loading, (2) Emergency Loading, and (3) Winter Normal Conductor Rating, consistent with the OPSB requirements. Normal Maximum Loading represents the peak flow expected with all system facilities in service; daily/hourly flows fluctuate below this level. Emergency loading is the maximum current flow during unusual (contingency) conditions, which exist only for short periods of time. Winter normal ("WN") conductor rating represents the maximum current flow that a line, including its terminal equipment, can carry during winter conditions. It is not anticipated that this line would operate at its WN rating in the foreseeable future.

Electromagnetic frequency ("EMF") levels were computed 1 meter above ground under the line and at the ROW edges (50/50 feet, left/right, of centerline).

Results calculated below use EPRI's EMF Workstation 2015 software.

South Canton – Torrey 138 kV Transmission Line Structure 1/ Structure 2					
Condition	Load (A)	Phasing Arrangements	Ground Clearance (feet)	Electric Field (kV/m)*	Magnetic Field (mG)*
(1) Normal Max. Loading^	544.53/544.53	A-B-C / A-B-C	53.9/53.9	(0.40/0.53/0.28)/ (0.06/0.41/0.12)	(16.86/29.93/16.61) / (3.3/14.89/10.12)
(2) Emergency Line Loading^^	867.05/867.05	A-B-C / A-B-C	25.0/25.0	(0.54/2.0/0.46) / (0.06/0.91/0.05)	(47.68/197.35/47.55) / (5.53/60.85/27.92)
(3) Winter Conductor Rating^^^	1570.75/1570.75	A-B-C / A-B-C	53.9/53.9	(0.40/0.53/0.28)/ (0.06/0.41/0.12)	(48.63/86.35/47.92) / (9.53/42.94/29.2)

For power-frequency EMF, IEEE Standard C95.6TM-2002 recommends the following limits:

General Controlled Public Environment



Electric Field Limit (kV/m)	5.0	20.0
Magnetic Field Limit (mG)	9040	27,100

The above EMF levels are well within the limits specified in IEEE Standard C95.6TM-2002. Those limits have been established to "prevent harmful effects in human beings exposed to electromagnetic fields in the frequency range of o-3 kHz."

B(9)(c) Project Costs

The estimated capital cost of the project.

The capital cost estimate for the proposed Project, which is comprised of applicable tangible and capital costs, is approximately \$7,500,000 based on a Class 4 estimate. Pursuant to the PJM Open Access Transmission Tariff ("OATT"), the costs for this Project will be recovered in the Company's Federal Energy Regulatory Commission ("FERC") formula rate (Attachment H-20 to the PJM OATT) and allocated to the AEP Zone.

B(10) Social and Ecological Impacts

The applicant shall describe the social and ecological impacts of the project. B(10)(a) Land Use Characteristics

Provide a brief, general description of land use within the vicinity of the proposed project, including a list of municipalities, townships, and counties affected.

The Project is located in Canton and Pike Townships in Stark County, Ohio. Land use observed within the Project area includes undeveloped land, agricultural land, and low-density residential developments. The Project has one place of worship and no airports identified within 1,000 feet of the Project. There is one residence identified within 100 feet of the Project.

B(10)(b) Agricultural Land Information

Provide the acreage and a general description of all agricultural land, and separately all agricultural district land, existing at least sixty days prior to submission of the application within the potential disturbance area of the project.

Approximately 25.2 acres of agricultural land is located within the 100-foot ROW corridor where construction activities are planned. This general agricultural land includes a mix of cropland, fallow fields, and pastures.

The Stark County Auditor's Office provided a list of parcels registered as Agricultural District Land in March 2023. Approximately 3.2 acres of Agricultural District Land is located within the 100-foot ROW corridor where construction activities are planned. Impacts to Agricultural District Land will be limited to the footprint of the monopole structures.

B(10)(c) Archaeological and Cultural Resources



Provide a description of the applicant's investigation concerning the presence or absence of significant archeological or cultural resources that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.

A Phase I Archaeological Investigation was conducted for the Project and the report, *Phase I Archaeological Investigation for the 5.6 km (3.5 mi) South Canton – Torrey 138kV Transmission Line Rebuild in Canton and Pike Townships, Stark County, Ohio,* was provided to the Ohio State Historic Preservation Office ("SHPO") for consultation. SHPO correspondence was provided on February 8, 2023, see **Appendix C**. No previously identified archaeological sites are within the project area; however, one newly identified archaeological site, Ohio Archaeology Inventory #33ST1185, was discovered. The SHPO concurred with the report's conclusions that Site 33ST1185 is not eligible for listing on the National Register of Historic Places ("NRHP") and that no further work is recommended.

The Company's consultant conducted additional investigations within an addendum project area and provided a report, *Addendum Archaeological Investigation for the 5.6 km (3.5 mi) South Canton – Torrey 138kV Transmission Line Rebuild in Canton and Pike Townships, Stark County, Ohio,* to the SHPO for review. SHPO responded on February 22, 2023 and concurred that because there were no previously identified sites and no newly identified sites within the addendum Project area, no further work is recommended.

Additionally, the Company's consultant conducted a review and field survey of historic structure resources along the Project. The report, *History/Architecture Investigations for the 5.6 km (3.5 mi) South Canton – Torrey 138kV Transmission Line Rebuild in Canton and Pike Townships, Stark County, Ohio*, was reviewed by the SHPO and their comment letter was received on February 8, 2023. The SHPO concurred that the project as proposed will have no adverse effect on the identified historic properties. A copy of the SHPO's correspondence letters is provided in **Appendix C**.

B(10)(d) Local, State, and Federal Agency Correspondence

Provide a list of the local, state, and federal governmental agencies known to have requirements that must be met in connection with the construction of the project, and a list of documents that have been or are being filed with those agencies in connection with siting and constructing the project.

A Notice of Intent will be filed with the Ohio Environmental Protection Agency for authorization of construction storm water discharges under General Permit OHCooooo6. The Company will implement and maintain best management practices ("BMPs"), as outlined in the project-specific Storm Water Pollution Prevention Plan ("SWPPP"), to minimize erosion and control sediment to protect surface water quality during storm events.

The Stark County Soil and Water Conservation District requires a Project-specific SWPPP approval and an Earth Disturbance Permit. The Company will obtain the required SWPPP approval and Earth Disturbance Permit prior to commencement of the Project.



The Company's consultant completed a wetland delineation and stream identification field review of the existing and planned ROW for the Project (**Appendix D**). A total of 17 wetlands and 9 streams were delineated within the environmental survey corridor. One wetland will be temporarily impacted by matting for construction access. Appropriate permits will be obtained. The remaining identified wetlands and streams are located within or adjacent to the planned transmission line ROW and are proposed to be aerially spanned by the Project or avoided. Therefore, impacts to aquatic resources are not anticipated and Clean Water Act Section 401/404 permits will not be necessary.

According to the Federal Emergency Management Agency ("FEMA") Flood Insurance Rate Map ("FIRM"), the Project does not cross a FEMA 100-year floodplain.

There are no other known local, state, or federal requirements that must be met prior to commencement of the Project.

B(10)(e) Threatened, Endangered, and Rare Species

Provide a description of the applicant's investigation concerning the presence or absence of federal and state designated species (including endangered species, threatened species, rare species, species proposed for listing, species under review for listing, and species of special interest) that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.

Coordination with Ohio Department of Natural Resources-Division of Wildlife ("ODNR-DOW") was initiated on August 18, 2021, to obtain Environmental Review and Ohio Natural Heritage Database records. ODNR-DOW's response was received on September 13, 2021 (**Appendix C**). In addition, a technical assistance request letter was submitted to the U.S. Fish and Wildlife Service ("USFWS") on August 18, 2021, with a response received on August 30, 2021. Copies of the agency's correspondence letters are provided in **Appendix C**.

Based on consultation from the USFWS, the Project area lies within the vicinity of Northern long-eared bat (threatened) and Indiana bat (endangered) hibernaculum buffers and roost tree buffers. The USFWS recommended avoiding tree removal, wherever possible. If trees ≥3 inches diameter at breast height ("dbh") cannot be avoided, USFW recommended removal of any trees ≥3 inches dbh only take place between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bat species. If implementation of seasonal tree cutting is not possible, USFWS indicated that a summer presence/absence survey may be conducted for Indiana bats. Based upon survey results, tree clearing may occur during any time of the year. USFW also indicated that summer mist net surveys can only take place between June 1 and August 15. The Company intends to clear trees between October 1st and March 31st. If summer tree clearing is required, further coordination with USFWS will be conducted to avoid impacts to this species.

ODNR-DOW stated that the entire state of Ohio is within the range of the Indiana bat (*Myotis Sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. If trees within the Project area must be cut, the ODNR-DOW recommends cutting take place only from October 1 to March 31, conserving roost trees with loose, shaggy bark and/or



crevices holes, or cavities and trees with $dbh \ge 20$ inches where possible. Because presence of state endangered bat species has been established in the area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. However, limited summer tree cutting inside this buffer may be acceptable after further consultation with ODNR. The company intends to clear trees between October 1st and March 31st. If summer tree clearing is required, further coordination with ODNR-DOW will be conducted to avoid impacts to this species.

ODNR-DOW recommended a desktop habitat assessment be conducted to determine the presence of bat hibernacula within 0.25 mile of the Project area. The company's consultant completed a desktop habitat assessment (in accordance with the 2020 Range-wide Indiana Bat and Northern long-eared Bat Survey Guidelines). The desktop assessment identified abandoned underground mines within 0.25 mile of the Project area. However, no suitable bat hibernacula were observed within the Project area during the field surveys. Due to the desktop finding of underground mines within 0.25 mile of the Project area, the Company's consultant will pursue further coordination with ODNR-DOW for Project recommendations.

The ODNR-DOW stated that the Project is within the range of the long-solid (*Fusconaia maculata maculata*), a state endangered mussel. ODNR-DOW stated that due to the location, and no proposed in-water work in a perennial stream of sufficient size, the Project is not likely to impact this species. The Company anticipates no impact to this species due to no proposed in-water work.

The ODNR-DOW stated that the Project is within that range of the Iowa darter (*Etheostoma exile*), a state endangered fish. The ODNR-DOW recommended no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no inwater work is proposed in a perennial stream, this project is not likely to impact this or other aquatic species. The Company anticipates no impact to this species due to no proposed in-water work.

The ODNR-DOW stated that the Project also lies within the range of the spotted turtle (*Clemmys guttata*), a state threatened species. This species is known to inhabit fens, bogs and marshes, wet prairies, meadows, pond edges, wet woods, and the shallow, sluggish waters of small streams and ditches. Due to the location, the type of habitat within the Project area and the type of work proposed, the Project is not likely to impact this species. The Company anticipates no impact to this species due to the type of work proposed.

Lastly, the ODNR-DOW stated that the Project is within the range of the northern harrier (*Circus hudsonis*), a state endangered bird. This is a common migrant and winter species. Nesters are rare, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies on the ground or on top of mounds. Harriers hunt over grasslands. The ODNR-DOW recommended construction be avoided in this habitat during the species' nesting period of April 15 to July 31. However, no suitable nesting habitat for the Northern Harrier was observed within the Project area during field surveys (unfragmented grasslands or wetlands). Therefore, the Project is not likely to impact this species and nesting season avoidance dates are not applicable.

The ODNR-DOW correspondence letter included species data from the Natural Heritage Database that was located at or within a 1-mile radius of the Project area. The Natural Heritage Database list included the following species: Shore-growing peat moss and Brush-tipped emerald. The ODNR-DOW recommended that impacts to streams, wetlands, and other water resources be avoided and minimized,



and BMPs be implemented to minimize erosion and sedimentation. However, no suitable habitat was observed for these species during field surveys. Therefore, the Project is not likely to impact these species.

B(10)(f) Areas of Ecological Concern

Provide a description of the applicant's investigation concerning the presence or absence of areas of ecological concern (including national and state forests and parks, floodplains, wetlands, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, and wildlife sanctuaries) that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.

The coordination letter received from the USFWS did not indicate any federal wilderness areas, wildlife refuges, or designated critical habitat within the vicinity of the Project. The ODNR-DOW's response letter also indicated no known unique ecological sites, geologic features, scenic rivers, state wildlife areas, state natural preserves, state or national parks, national forests, or national wildlife refuges within the Project area. The Natural Heritage Database identified the Bolivar Reservoir, managed by the Muskingum Watershed Conservancy District within a one-mile radius of the Project Area. No impacts to the reservoir are expected due to the distance from the reservoir. As outlined above in B(10)(e) Threatened, Endangered, and Rare Species, several federal and state listed species were identified to potentially occur within the Project area. Based on the nature of the proposed project activities and habitat characteristics of the surrounding vicinity, construction impacts to protected species are not anticipated.

The Company's consultant prepared an Ecological Resource Survey Report which outlines the presence or absence of areas of ecological concern, including but not limited to wetlands, waterbodies and wildlife habitats. The Ecological Resource Survey Report and Addendum are provided in **Appendix D**. Wetland delineation, stream delineation, and terrestrial habitat field surveys were completed within the existing ROW in April 2022. A total of 17 wetlands and nine streams were delineated within the environmental survey corridor. No open waters were identified within the environmental survey corridor. The Company will utilize erosion and sediment control BMPs to avoid or minimize impacts to natural resources where possible.

Based on the FIRM, the Project does not cross a FEMA floodway or FEMA-mapped 100-year floodplain (FIRM Panel ID numbers 39151Co360F and 39151Co218E). These resources are shown on **Figure 2** in **Appendix D**.

B(10)(g) Unusual Conditions

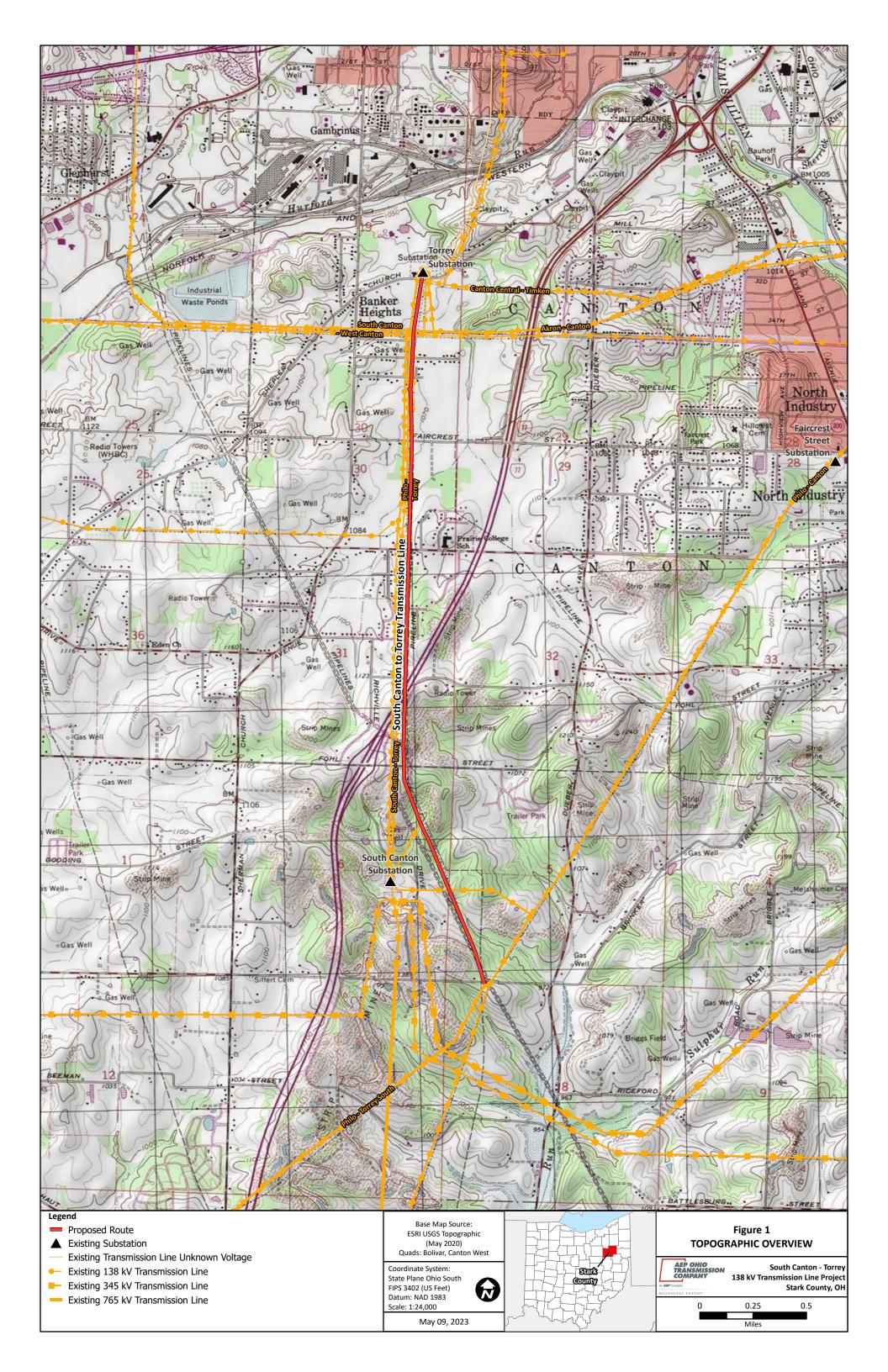
Provide any known additional information that will describe any unusual conditions resulting in significant environmental, social, health, or safety impacts.

To the best of the Company's knowledge, no unusual conditions exist that would result in significant environmental, social, health, or safety impacts.

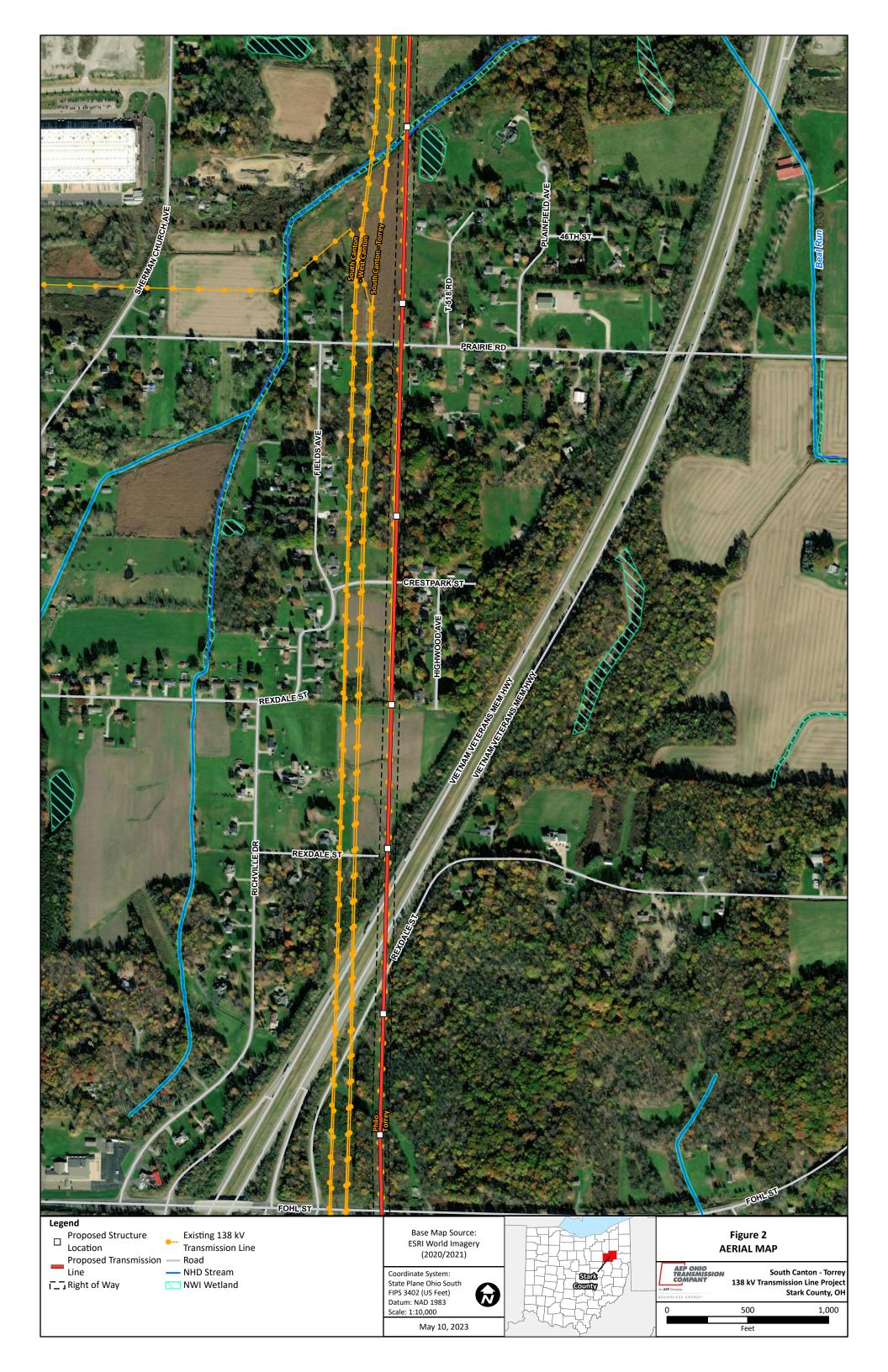


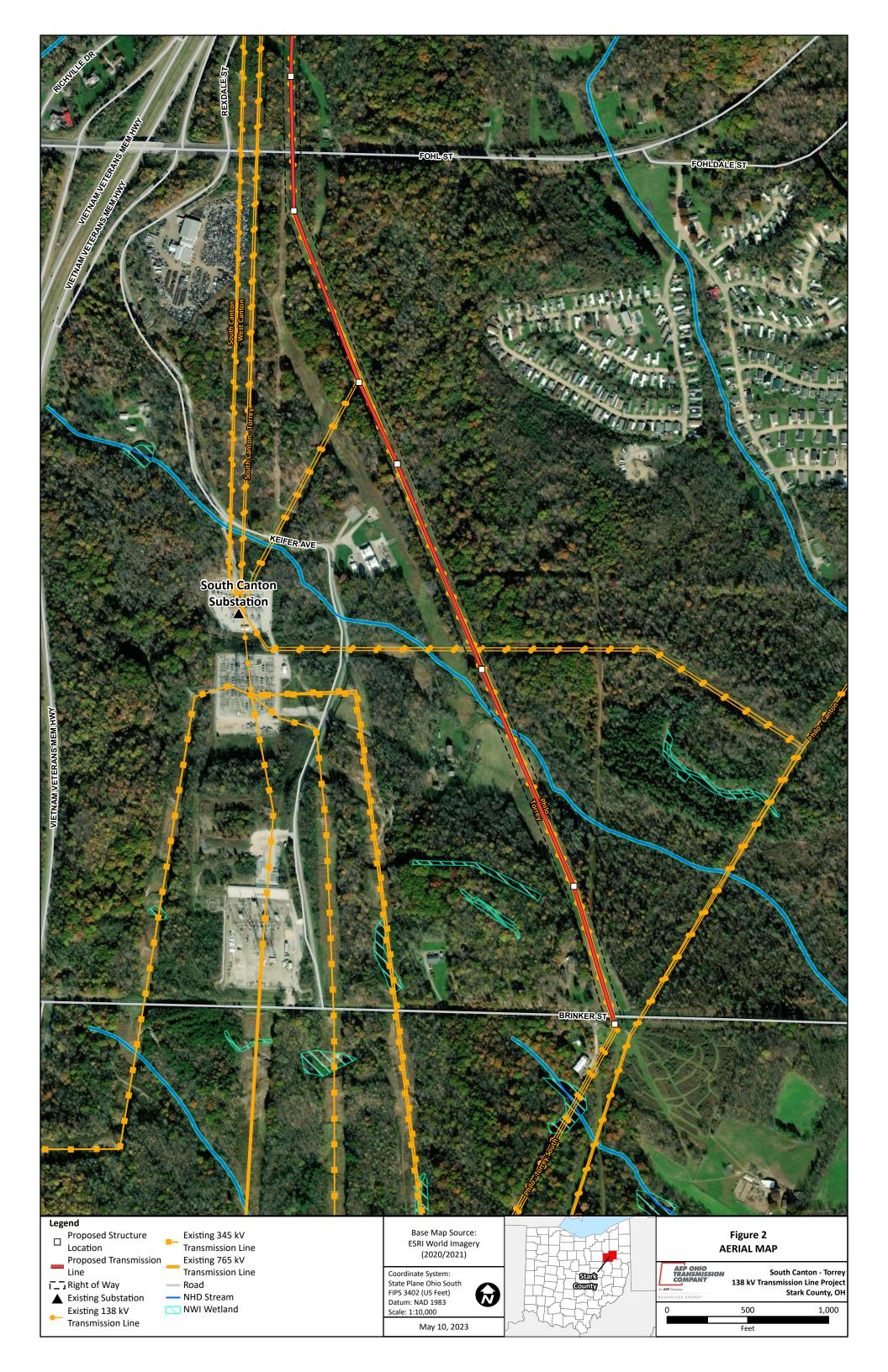
Appendix A Project Maps











Appendix B LTFR Reference and PJM Interconnection Submittal



13.	MISCELLANEOUS:	
1.	LINE NAME AND NUMBER:	Carrothers - Founders - Greenlawn s2637 TP2020011
2.	POINTS OF ORIGIN AND TERMINATION	Carrothers - Founders - Greenlawn INTERMEDIATE STATIONS - North Bloomville Switch, Bloomville, St Stephen Switch
3.	RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS	0.83 mi / 60 ft / 2 circuit (of new construction)
4.	VOLTAGE: DESIGN / OPERATE	69 kV /69 kV
5.	APPLICATION FOR CERTIFICATE:	N/A
6.	CONSTRUCTION:	2023 - 2024
7.	CAPITAL INVESTMENT:	\$2.4 M
8.	PLANNED SUBSTATION:	Founders
9.	SUPPORTING STRUCTURES:	Steel
10.	PARTICIPATION WITH OTHER UTILITIES	N/A
11.	PURPOSE OF THE PLANNED TRANSMISSION LINE	This is a rebuild / reconfiguration of the existing line to connect into founders station while also removing several switches.
12.	CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR TERMINATION	Risk of operational/reliability issues
13.	MISCELLANEOUS:	
1.	LINE NAME AND NUMBER:	South Canton - Southeast Canton 138kV S2651 TP2020224
2.	POINTS OF ORIGIN AND TERMINATION	South Canton - Southeast Canton; INTERMEDIATE STATIONS - Faircrest Street
3.	RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS	7.2 mi / 100 ft / 1 circuit (Only 4.2 mi is being rebuilt)
4.	VOLTAGE: DESIGN / OPERATE	138 kV / 138 kV
5.	APPLICATION FOR CERTIFICATE:	5/19/2023
6.	CONSTRUCTION:	2024 - 2025
7.	CAPITAL INVESTMENT:	\$10.8M
8.	PLANNED SUBSTATION:	N/A
9.	SUPPORTING STRUCTURES:	Steel
10.	PARTICIPATION WITH OTHER UTILITIES	N/A
11.	PURPOSE OF THE PLANNED TRANSMISSION LINE	Rebuild of existing 138 kV line

12.	CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR TERMINATION	Increased risk of equipment failure, reliability, and operational issues
13.	MISCELLANEOUS:	
1.	LINE NAME AND NUMBER:	Southeast Canton - Sunnyside 138kV S2651 TP2020224
2.	POINTS OF ORIGIN AND TERMINATION	Southeast Canton - Sunnyside INTERMEDIATE STATIONS N/A
3.	RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS	3.19 mi / 100 ft / 1 circuit (Only 0.9 mi is being rebuilt)
4.	VOLTAGE: DESIGN / OPERATE	138 kV / 138 kV
5.	APPLICATION FOR CERTIFICATE:	5/19/2023
6.	CONSTRUCTION:	2024 - 2025
7.	CAPITAL INVESTMENT:	\$2.32M
8.	PLANNED SUBSTATION:	N/A
9.	SUPPORTING STRUCTURES:	Steel
10.	PARTICIPATION WITH OTHER UTILITIES	N/A
11.	PURPOSE OF THE PLANNED TRANSMISSION LINE	Rebuild of existing 138 kV line
12.	CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR TERMINATION	Increased risk of equipment failure, reliability, and operational issues
13.	MISCELLANEOUS:	
1.	LINE NAME AND NUMBER:	North Intertie - South Canton 138kV S2651 TP2020224
2.	POINTS OF ORIGIN AND TERMINATION	North intertie - South Canton INTERMEDIATE STATIONS Bolivar
3.	RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS	15.24 mi / 100 ft / 1 circuit (Only 0.4 mi is being rebuilt)
4.	VOLTAGE: DESIGN / OPERATE	138 kV / 138 kV
5.	APPLICATION FOR CERTIFICATE:	10/2/2023
6.	CONSTRUCTION:	2024 - 2025
7.	CAPITAL INVESTMENT:	\$1.03M
8.	PLANNED SUBSTATION:	N/A
9.	SUPPORTING STRUCTURES:	Steel
10.	PARTICIPATION WITH OTHER UTILITIES	N/A
11.	PURPOSE OF THE PLANNED TRANSMISSION LINE	Rebuild of existing 138 kV line



AEP Transmission Zone M-3 Process Canton, Ohio

Need Number: AEP-2020-OH052

Process Stage: Solution Meeting 10/15/2021
Previously Presented: Need Meeting 3/19/2020

Supplemental Project Driver:

Equipment Material Condition, Performance and Risk; Operational

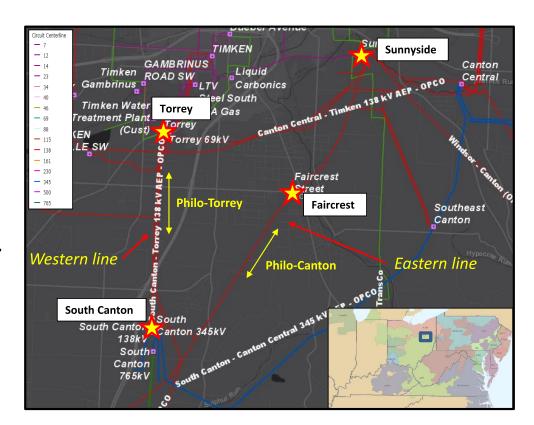
Flexibility & Efficiency

Specific Assumption Reference:

AEP Guidelines for Transmission Owner Identified Needs (AEP Assumptions Slide 8), AEP Presentation on Pre-1930s Lines

Problem Statement:

- The South Canton Sunnyside eastern 138kV transmission line is 5.5 miles long, originally constructed in 1923. The vast majority of the structures are still original, as well as the six-wired 336 ACSR conductor, insulators, and hardware. This line is made up of several circuits connected between South Canton and Sunnyside stations.
- Insulator assemblies are showing corrosion and deterioration, which could lead to additional failures and safety concerns.
- This line has experienced 3 momentary outages and 1 sustained outages over the past 10 years (2008/2018).





AEP Transmission Zone M-3 Process Canton, Ohio

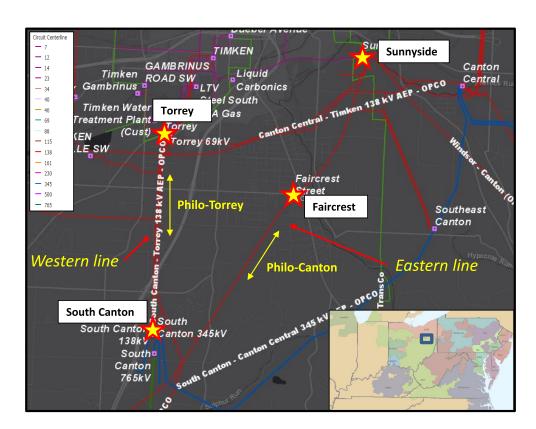
Need Number: AEP-2020-OH052

Process Stage: Solution Meeting 10/15/2021

Previously Presented: Need Meeting 3/19/2020

Problem Statement, continued:

- The South Canton-Torrey western 138kV transmission line is 3.5 miles long and consists of portions of the following circuits: Philo-South Canton (0.9 miles of the total circuit length of 75 miles)); South Canton-Timken Richville (2.0 of 3.5 miles), and Timken Richville-Timken (0.6 of 3.4 miles). The line was originally built in 1942 with steel lattice towers. The conductor is 6-wired single-circuit, with one side installed in 1942 (397 ACSR) and the other side installed in 1954 (477 ACSR). The line does not meet current grounding and shielding requirements, due to the condition of the obsolete shield wire size (159 ACSR), and the line shielding angle being inadequate. This T-line exhibits similar conditions as the examples listed in AEP's 1930's steel lattice tower line presentation.
- The 2-138kV line switches at Faircrest station (part of S.Canton-SE Canton circuit) are barely functional, difficult to open/close, and date to 1971.
- The protection equipment on the Southeast Canton-Sunnyside 138kV circuit consists of legacy electromechanical relays and pilot wire communications channel. Electromechanical relays lack vendor support, don't have SCADA, and lack fault data collection capabilities. Aging pilot wire is increasingly prone to failure and increased maintenance, leading to risk of having to rely on backup protection methods.





Need Number: AEP-2020-OH052

Process Stage: Solution Meeting 10/15/2021

Proposed Solution:

Rebuild the Philo-Torrey 138kV transmission line between South Canton and Torrey (3.5 miles). The circuits affected are South Canton-Timken Richville and Timken Richville-

Timken 138kV. Estimated Cost: \$7.64M

Rebuild the Philo-Canton 138kV transmission line between South Canton and Sunnyside (5.5 miles). The circuits affected are South Canton-Southeast Canton and Southeast

Canton-Sunnyside 138kV. Estimated Cost: \$14.22M

Replace the 138kV switches at Faircrest Street station to accommodate the new line

structures. Estimated Cost: \$0.12 M

At Sunnyside, upgrade the relays on the 138kV circuit to Southeast Canton. The control building needs expanded to accommodate the new relay panels. **Estimated Cost: \$0.73 M**

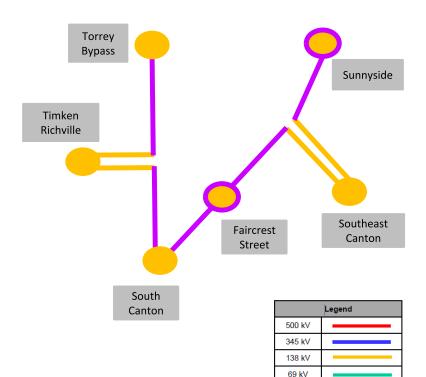
Total Estimated Transmission Cost: \$22.71 Million

Alternatives Considered: No viable alternatives. The two transmission lines serve a number of customer stations in the Canton area, and are physically distant, so neither line can be retired.

Projected In-Service: 11/01/2025

Project Status: Scoping

AEP Transmission Zone M-3 Process Canton, Ohio



34.5 kV 23 kV

Appendix C Agency Correspondence





In reply, refer to 2023-STA-56787

February 8, 2023

Mr. Ryan J. Weller Weller & Associates, Inc. 1395 West Fifth Avenue Columbus, Ohio 43212

RE: South Canton-Torrey 138kV Transmission Line Rebuild Project, Canton and Pike Townships, Stark County, Ohio

Dear Mr. Weller:

This letter is in response to the correspondence received January 10, 2023 regarding the proposed South Canton-Torrey 138kV Transmission Line Rebuild Project, Canton and Pike Townships, Stark County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code and the Ohio Power Siting Board rules for siting this project (OAC 4906-5). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The following comments pertain to the *Phase I Archaeological Investigations for the 5.6 km (3.5 mi) South Canton-Torrey 138kV Transmission Line Rebuild Project in Canton and Pike Townships, Stark County, Ohio* by Ryan J. Weller (Weller & Associates, Inc., 2022).

A literature review, visual inspection, surface collection, shovel probe, and shovel test unit excavation was completed as part of the investigations. No previously identified archaeological site is located within the project area. One (1) new archaeological site was identified during survey, Ohio Archaeological Inventory (OAI) #33ST1185. The site is recommended not eligible for listing in the National Register of Historic Places (NRHP). Our office agrees with this recommendation and no further archaeological survey is necessary.

The following comments pertain to the *History/Architecture Investigations for the 5.6 km (3.5 mi) South Canton-Torrey 138kV Transmission Line Rebuild Project in Canton and Pike Townships, Stark County, Ohio* by Scott McIntosh (Weller & Associates, Inc., 2022).

A literature review and field survey were completed as part of the investigations. A total of eighty-six (86) resources fifty years of age or older were identified within the Area of Potential Effects (APE). Weller recommends these properties are not eligible for listing in the NRHP. Our office agrees with Weller's recommendations of eligibility. Therefore, we agree that there will be no effect on historic resources as a result of the project.

The following comments pertain to the Addendum Archaeological Investigations for the South Canton-Torrey 138kV Rebuild Project in Canton and Pike Townships, Stark County, Ohio by Ryan J. Weller (Weller & Associates, Inc., 2023).

A literature review, visual inspection, surface collection, shovel probe, and shovel test unit excavation was completed as part of the investigations. No previously identified archaeological site is located within the addendum project area and no new archaeological sites were identified during survey. Our office agrees no further archaeological survey is necessary for the access roads. No additional architectural resources or buildings were surveyed during this addendum work.

Based on the information provided, we agree that the project as proposed will have no effect on historic properties. No further coordination with this office is necessary, unless the project changes or unless new or additional historic properties are discovered during implementation of this project. In such a situation, this office should be contacted. If you have any questions, please contact me at (614) 298-2022, or by e-mail at khorrocks@ohiohistory.org, or Joy Williams at jwilliams@ohiohistory.org. Thank you for your cooperation.

Sincerely,

Krista Horrocks, Project Reviews Manager

Resource Protection and Review

RPR Serial No: 1096376, 1096377, 1096378



In reply, refer to 2023-STA-56787

February 22, 2023

Mr. Ryan J. Weller Weller & Associates, Inc. 1395 West Fifth Avenue Columbus, Ohio 43212

RE: South Canton-Torrey 138kV Transmission Line Rebuild Project, Canton and Pike Townships, Stark County, Ohio – Addendum 2

Dear Mr. Weller:

This letter is in response to the correspondence received January 16, 2023 regarding the proposed South Canton-Torrey 138kV Transmission Line Rebuild Project, Canton and Pike Townships, Stark County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code and the Ohio Power Siting Board rules for siting this project (OAC 4906-5). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The following comments pertain to the Addendum 2 Archaeological Investigations for a small Access Road reroute for the South Canton-Torrey 138kV Rebuild Project in Canton and Pike Townships, Stark County, Ohio by Ryan J. Weller (Weller & Associates, Inc., 2023).

A visual inspection was completed as part of the investigations as the entirety of the addendum project area was disturbance from previous activities. No previously identified archaeological site is located within the addendum project area and no new archaeological sites were identified during survey. Our office agrees no further archaeological survey is necessary. No additional architectural resources or buildings were surveyed during this addendum work.

Based on the information provided, we agree that the project as proposed will have no effect on historic properties. No further coordination with this office is necessary, unless the project changes or unless new or additional historic properties are discovered during implementation of this project. In such a situation, this office should be contacted. If you have any questions, please contact me at (614) 298-2022, or by e-mail at khorrocks@ohiohistory.org. Thank you for your cooperation.

Sincerely,

Krista Horrocks, Project Reviews Manager

Resource Protection and Review

RPR Serial No: 1096984



Office of Real Estate

John Kessler, Chief 2045 Morse Road – Bldg. E-2 Columbus, OH 43229 Phone: (614) 265-6621 Fax: (614) 267-4764

September 13, 2021

Daniel Godec Stantec Consulting Services Inc. 11687 Lebanon Road Cincinnati, Ohio 45241

Re: 21-0792; South Canton - Torrey 138 kV Line Rebuild Project

Project: The proposed project involves rebuilding approximately 3.5 miles of existing 138 kV transmission line between existing structure number 294 and Torrey Station.

Location: The proposed project is located in Canton and East Sparta, Stark County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

Natural Heritage Database: The Natural Heritage Database has the following data at or within a one mile radius of the project area:

Shore-growing peat moss (*Sphagnum riparium*), E Brush-tipped emerald (Somatochlora walshii), E Bolivar Reservoir – Muskingum Watershed Conservancy District

The review was performed on the project area specified in the request as well as an additional one mile radius. Records searched date from 1980. This information is provided to inform you of features present within your project area and vicinity. Additional comments on some of the features may be found in pertinent sections below.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Although all types of plant communities have been surveyed, we only maintain records on the highest quality areas.

Statuses are defined as: E = state endangered; T = state threatened; P = state potentiallythreatened; SC = state species of concern; SI = state special interest; U = state status under review; X =presumed extirpated in Ohio; FE =federal endangered, and FT =federal threatened. **Fish and Wildlife:** The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that Best Management Practices be utilized to minimize erosion and sedimentation.

The portion of the project from Crestpark Street Southwest to the southern terminus is within the vicinity of records for the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species. Because presence of state endangered bat species has been established in the area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. However, limited summer tree cutting inside this buffer may be acceptable after further consultation with DOW (contact Erin Hazelton at Erin.hazelton@dnr.ohio.gov).

In addition, the entire state of Ohio is within the range of the Indiana bat ($Myotis\ sodalis$), a state endangered and federally endangered species, the northern long-eared bat ($Myotis\ septentrionalis$), a state endangered and federally threatened species, the little brown bat ($Myotis\ lucifugus$), a state endangered species, and the tricolored bat ($Perimyotis\ subflavus$), a state endangered species. During the spring and summer (April 1 through September 30), these bat species predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, these species are also dependent on the forest structure surrounding roost trees. The DOW recommends tree cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH ≥ 20 if possible.

The DOW also recommends that a desktop habitat assessment is conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the project area. Direction on how to conduct habitat assessments can be found in the current USFWS "Range-wide Indiana Bat Survey Guidelines." If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Erin Hazelton for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

The project is within the range of the long-solid (*Fusconaia maculata maculata*), a state endangered mussel. Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact this species.

The project is within the range of the Iowa darter (*Etheostoma exile*), a state endangered fish. The DOW recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact this or other aquatic species.

The project is within the range of the spotted turtle (*Clemmys guttata*), a state threatened species. This species prefers fens, bogs and marshes, but also is known to inhabit wet prairies, meadows, pond edges, wet woods, and the shallow sluggish waters of small streams and ditches. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the northern harrier (*Circus hudsonis*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this habitat will not be impacted, this project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.

Water Resources: The Division of Water Resources has the following comment.

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project. Your local floodplain administrator contact information can be found at the website below.

 $\frac{http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community}{\%\,20Contact\%\,20List_8_16.pdf}$

ODNR appreciates the opportunity to provide these comments. Please contact Mike Pettegrew at mike.pettegrew@dnr.ohio.gov if you have questions about these comments or need additional information.

Mike Pettegrew Environmental Services Administrator (Acting) From: Ohio, FW3
To: Godec, Daniel

Cc: nathan.reardon@dnr.state.oh.us; Parsons, Kate

Subject: AEP South Canton - Torrey 138 kV Line Rebuild, Stark County, Ohio

Date: Monday, August 30, 2021 9:37:16 AM



TAILS# 03E15000-2021-TA-2144

Dear Mr. Godec,

The U.S Fish and Wildlife Service (Service) has received your recent correspondence requesting information about the subject proposal. We offer the following comments and recommendations to assist you in minimizing and avoiding adverse impacts to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

<u>Federally Threatened and Endangered Species</u>: The endangered Indiana bat (*Myotis sodalis*) and threatened northern long-eared bat (Myotis septentrionalis) occur throughout the State of Ohio. The Indiana bat and northern long-eared bat may be found wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and breed that may also include adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, woodlots, fallow fields, and pastures. Roost trees for both species include live and standing dead trees ≥3 inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities. These roost trees may be located in forested habitats as well as linear features such as fencerows, riparian forests, and other wooded corridors. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves, rock crevices and abandoned mines.

Seasonal Tree Clearing for Federally Listed Bat Species: Should the proposed project site contain trees ≥3 inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, we recommend removal of any trees ≥3 inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule (see http://www.fws.gov/midwest/endangered/mammals/nleb/index.html), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is recommended where Indiana bats are assumed present.

If implementation of this seasonal tree cutting recommendation is not possible, a summer presence/absence survey may be conducted for Indiana bats. If Indiana bats are not detected during the survey, then tree clearing may occur at any time of the year. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the

Ohio Field Office. Surveyors must have a valid federal permit. Please note that in Ohio summer mist net surveys may only be conducted between June 1 and August 15.

Section 7 Coordination: If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), then no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence. This letter provides technical assistance only and does not serve as a completed section 7 consultation document.

Stream and Wetland Avoidance: Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus is it important to conserve the functions and values of the remaining wetlands in Ohio (https://epa.ohio.gov/portals/47/facts/ohio_wetlands.pdf). We recommend avoiding and minimizing project impacts to all wetland habitats (e.g., forests, streams, vernal pools) to the maximum extent possible in order to benefit water quality and fish and wildlife habitat. Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the U.S. Army Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. Disturbed areas should be mulched and revegetated with native plant species. In addition, prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat. Should the project design change, or additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, coordination with the Service should be initiated to assess any potential impacts.

Thank you for your efforts to conserve listed species and sensitive habitats in Ohio. We recommend coordinating with the Ohio Department of Natural Resources due to the potential for the proposed project to affect state listed species and/or state lands. Contact Mike Pettegrew, Acting Environmental Services Administrator, at (614) 265-6387 or at mike.pettegrew@dnr.state.oh.us.

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or ohio@fws.gov.



Patrice M. Ashfield

Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW Kate Parsons, ODNR-DOW

Appendix D Ecological Survey Report





South Canton-Torrey 138 kV Line Rebuild Project, Stark County, Ohio

Ecological Survey Report

Prepared for:

AEP Ohio Transmission Company, Inc. 8600 Smiths Mill Road New Albany, OH 43054

Prepared by:

Stantec Consulting Services, Inc. 11687 Lebanon Road Cincinnati, OH 45241

March 16, 2023

Sign-off Sheet

This document entitled Ecological Survey Report, South Canton-Torrey 138 kV Line Rebuild Project, Stark County, Ohio was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of AEP Ohio Transmission Company, Inc. Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by Kataba

(signature)

Kate Bomar

Reviewed by Omic J. Godec

(signature)

Dan Godec

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Introduction March 16, 2023

1.0 INTRODUCTION

AEP Ohio Transmission Company, Inc. (AEP) is proposing construction activities associated with the South Canton-Torrey 138 kV Line Rebuild Project. The Project includes rebuilding approximately 3.5 miles of the existing South Canton-Torrey 138 kV transmission line. The Project will begin near East Sparta, Stark County, Ohio at existing structure number 294 (located south of Brinker Street) and will end at the existing Torrey Station facility near Canton, Stark County, Ohio (Figure 1, Appendix A). The Project area was surveyed for wetlands, waterbodies, open water features, and potential threatened, endangered, and rare species habitat by Stantec Consulting Services Inc. (Stantec) biologists on April 4-6, 2022. The approximate locations of features located up to 50 feet outside of the Project area were also recorded during the field surveys, where landowner access was permitted. However, no data forms were collected on features that did not extend into the Project area. The approximate locations of these features are shown on the Figure 2 maps in Appendix A as "approximate" wetlands, streams (waterways), open waters, and upland drainage features.

Methods March 16, 2023

2.0 METHODS

2.1 WETLAND DELINEATION

Prior to completing the field surveys, a desktop review of the Project area was conducted using U.S. Geological Survey (USGS) topographic mapping, National Wetlands Inventory (NWI) maps, U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey data, and aerial imagery mapping. Stantec completed a wetland delineation study in accordance with the Corps of Engineers Wetlands Delineation Manual (USACE 1987), the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0) (USACE 2012b) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0) (USACE 2012a). Wetland categories were classified using the Ohio Rapid Assessment Method (ORAM) for Wetlands Version 5.0 (Mack 2001).

2.2 STREAM DELINEATION

Streams that demonstrated a continuously defined channel (bed and bank), ordinary high water mark (OHWM), and the disturbance of terrestrial vegetation were delineated within the Project area, per the protocols outlined in the USACE's Guidance on Ordinary High Water Mark Identification (Regulatory Guidance Letter, No. 05-05) (USACE 2005). Delineated streams were classified as ephemeral, intermittent, or perennial per definitions in the Federal Register/Vol. 67, No. 10 (USACE 2002). Functional assessment of streams within the Project area was based on completion of the Ohio Environmental Protection Agency's (OEPA) Headwater Habitat Evaluation Index (HHEI; OEPA 2018) and/or Qualitative Habitat Evaluation Index (QHEI; OEPA 2006). The centerline of each waterway and/or the OHWM of each waterway was identified and surveyed using a handheld sub-meter accuracy global positioning system (GPS) unit and mapped with geographic information system (GIS) software. Additionally, the locations of ponds/open water features and upland drainage features (which lacked a continuously defined bed and bank/OHWM) identified within the Project area were also recorded with a sub-meter accuracy GPS unit during the field surveys.

2.3 RARE SPECIES

Prior to conducting the field surveys, Stantec contacted the Ohio Department of Natural Resources (ODNR) and the U.S. Fish and Wildlife Service (USFWS) for information regarding rare, threatened, or endangered species and their habitats of concern within the vicinity of the Project area (Appendix B – Agency Correspondence). To assess potential impacts to rare, threatened, or endangered species, Stantec scientists conducted a pedestrian reconnaissance of the proposed Project area, collected information on existing habitats within the Project area, and assessed the potential for these habitats to be used by federally listed or state-listed species that have the potential to occur within Stark County.

3.0 RESULTS

3.1 TERRESTRIAL HABITAT

Stantec completed field surveys for threatened and endangered species or their habitats on April 4-6, 2022. Figure 3 (Appendix A) shows the vegetation communities/habitats identified within the Project area and the locations of any identified rare, threatened, or endangered species habitat observed within the Project area during the time of the habitat assessment surveys. Representative photographs of the vegetation communities/habitats and land cover types identified within the Project area are included in Appendix C of this report (photo locations are shown on Figure 3, Appendix A). Information regarding the vegetation communities/habitats/land cover types identified within the Project area is provided in Table 1.

Table 1. Vegetation Communities and Land Cover Found within the South Canton-Torrey 138 kV Line Rebuild Project Area, Stark County, Ohio

Vegetation Communities and Land Cover Types within the Project Area	Degree of Human-Related Ecological Disturbance	Unique, Rare, or High Quality?	Approximate Acreage Within Project Area
Agricultural Field	Extreme Disturbance/Ruderal Community dominated by planted row crop species such as corn (Zea mays) and soybean (Glycine max).	No	14.8
Old Field	Extreme Disturbance/Ruderal Community (dominated by opportunistic invaders and/or native highly tolerant taxa). Common plant species included Fuller's teasel (Dipsacus fullonum), Allegheny blackberry (Rubus allegheniensis), Amur honeysuckle (Lonicera maackii), reed canarygrass (Phalaris arundinacea), giant ironweed (Vernonia gigantea), Canada goldenrod (Solidago canadensis), poison hemlock (Conium maculatum), broomsedge bluestem (Andropogon virginicus), multiflora rose (Rosa multiflora), Japanese bristlegrass (Setaria faberi), American pokeweed (Phytolacca americana), Queen Anne's lace (Daucus carota), common evening primrose (Oenothera biennis), deertongue (Dichanthelium clandestinum), Indianhemp (Apocynum cannabinum), hairy white oldfield aster (Symphyotrichum pilosum), common selfheal (Prunella vulgaris), lesser burdock (Arctium	No	10.0

Vegetation Communities and Land Cover Types within the Project Area	Degree of Human-Related Ecological Disturbance	Unique, Rare, or High Quality?	Approximate Acreage Within Project Area
	minus)and purpletop tridens (Tridens flavus).		
New Field	Extreme Disturbance/Ruderal Community (dominated by opportunistic invaders and/or native highly tolerant taxa). Common plant species included reed canarygrass, Canada goldenrod, tall fescue (Schedonorus arundinaceus), common milkweed (Asclepias syriaca), broomsedge bluestem, timothy (Phleum pratense), Kentucky bluegrass (Poa pratensis), smooth brome (Bromus inermis), curly dock (Rumex crispus), and common mullein (Verbascum thapsus).	No	6.9
Pasture	Extreme Disturbance/Ruderal Community (dominated by opportunistic invaders and/or native highly tolerant taxa). Common plant species included tall fescue, Kentucky bluegrass, white clover (Trifolium repens), red clover (Trifolium pratense), common dandelion (Taraxacum officinale), Canada thistle (Cirsium arvense), common milkweed, Carolina horsenettle (Solanum carolinense), and Japanese bristlegrass.	No	4.2
Residential Lawn	Extreme Disturbance/Ruderal Community (dominated by planted non-native species, opportunistic invaders, and/or native highly tolerant taxa). Common plant species included bermudagrass (Cynodon dactylon), common dandelion, white clover, Kentucky bluegrass, narrowleaf plantain (Plantago lanceolata), tall fescue, and perennial ryegrass (Lolium perenne).	No	1.7
Existing Paved Roadway/Surface	Extreme Disturbance/existing gravel or paved road.	No	1.1
Early Successional Deciduous Forest	Moderate Disturbance/Natural Community (dominated by native woody and herbaceous species and/or opportunistic invaders). Common plant species included multiflora rose, glossy buckthorn (Frangula alnus), silky dogwood (Cornus amomum), Allegheny blackberry, Morrow's honeysuckle (Lonicera morrowii),	No	2.5

Vegetation Communities and Land Cover Types within the Project Area	Degree of Human-Related Ecological Disturbance	Unique, Rare, or High Quality?	Approximate Acreage Within Project Area
	Canada wildrye (Elymus canadensis), American pokeweed, honeylocust (Gleditsia triacanthos), and American hazelnut (Corylus americana).		
Mixed Early Successional/ Second Growth Deciduous Forest	Moderate Disturbance/Natural Community (dominated by native woody and herbaceous species and/or opportunistic invaders). Common plant species included multiflora rose, Allegheny blackberry, Morrow's honeysuckle, red maple (Acer rubrum), black cherry (Prunus serotina), white oak (Quercus alba), and northern red oak (Quercus rubra).	No	0.3
Industrial Land	Extreme Disturbance/Ruderal Community (little to no vegetation is present in these habitats).	No	0.4
Palustrine Emergent Wetland	Moderate Disturbance/Natural Community (dominated by native herbaceous species and/or opportunistic invaders). Common plant species included reed canarygrass, broadleaf cattail (Typha latifolia), common rush (Juncus effusus), fowl bluegrass (Poa palustris), deertongue, Frank's sedge (Carex frankii), woolgrass (Scirpus cyperinus), giant goldenrod (Solidago gigantea), skunk cabbage (Symplocarpus foetidus), sensitive fern (Onoclea sensibilis), and curly dock.	No	2.7
Palustrine Scrub-Shrub Wetland	Moderate Disturbance/Natural Community (dominated by native shrub, tree, and herbaceous species and/or opportunistic invaders). Common plant species included silky dogwood, giant goldenrod, pin oak (Quercus palustris), and switchgrass (Panicum virgatum).	No	0.2
		TOTAL	44.8

3.2 WETLANDS

Stantec completed field surveys within the Project area on April 4-6, 2022, for wetlands. As a result of the field surveys, Stantec identified 13 wetlands within the Project area. Figure 2 (Appendix A) shows the wetlands

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identified by Stantec within the Project area. Representative photographs of the wetlands identified within the Project area are included in Appendix C of this report (photo locations are shown on Figure 2, Appendix A). Completed wetland determination data forms and ORAM data forms are included in Appendix D. Information regarding the Cowardin classification and ORAM categories of wetlands identified within the Project area is provided in Table 2. A summary of the disposition of NWI-mapped wetlands within the Project area is provided in Table 3.

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Table 2. Summary of Wetland Resources Found within the South Canton-Torrey 138 kV Line Rebuild Project Area, Stark County,
Ohio

	Loc	ation					ORAM	Negrest	Existing	Proposed		Proposed	l Impacts
Wetland ID	Latitude	Longitude	Isolated ?1	Habitat Type ²	Delineated Area (acre)	Score	Category	Proposed Structure Number	Structure Number in Wetland	Structure Number in Wetland	Structure Installation Method	Temporary Matting Area (acre)	Permanent Impact Area (acre)
Wetland 1	40.752206	-81.414079	No	PEM	0.07	11	1	305	N/A	N/A	N/A	0	0
Wetland 2	40.716826	-81.409434	No	PEM	0.08	29	1	295	N/A	N/A	N/A	0	0
Wetland 3	40.718414	-81.410126	No	PEM	0.15	33	2	295	N/A	N/A	N/A	0	0
Wetland 4	40.719564	-81.410812	No	PEM	0.13	34	2	296	N/A	N/A	N/A	0	0
Wetland 5	40.722331	-81.412075	No	PEM	0.05	28	1	297	N/A	N/A	N/A	0	0
Wetland 6	40.724380	-81.413169	No	PEM	0.03	28	1	297	N/A	N/A	N/A	0.005	0
Wetland 7	40.725804	-81.414049	No	PEM	0.26	28	1	297A	N/A	N/A	N/A	0	0
Wetland 8	40.731863	-81.415266	No	PEM	0.07	23	1	300	N/A	N/A	N/A	0	0
Wetland 9	40.748683	-81.414322	No	PEM	0.99	27	1	304	N/A	N/A	N/A	0	0
Wetland 10	40.746445	-81.414411	No	PEM	0.27	15	1	304	N/A	N/A	N/A	0	0
\\\ II 1.1.1	40.742528	-81.414655	No	PEM	0.39	0.4	1	302	N/A	N/A	N/A	0	0
Wetland 11	40.743085	-81.414740	No	PSS	0.23	26	I	303	N/A	N/A	N/A	0	0
Wetland 12	40.740205	-81.414856	No	PEM	0.09	19	1	302	N/A	N/A	N/A	0	0
Wetland 13	40.740997	-81.414661	No	PEM	0.12	21	1	302	N/A	N/A	N/A	0	0
10 5		TOTAL			2.94							0.005	0.000

Preliminary jurisdictional determinations were made in concurrence with the U.S. Supreme Court decision following Rapanos v United States, prior to the establishment of the Navigable Waters Protection Rule. 2Wetland classification is based on Cowardin et al. (1979).

³PEM = Palustrine Emergent Wetland

4PSS = Palustrine Scrub-Shrub Wetland

⁵PFO = Palustrine Forested Wetland

Table 3. Summary of NWI Disposition within the South Canton-Torrey 138 kV Line Rebuild Project Area, Stark County, Ohio

NWI Code	NWI Description	Figure 2 Page Number	Related Field Inventoried Resource(s)	Comments
R4SBC	Riverine, intermittent, streambed, seasonally flooded	2	Stream 2	Stream 2 was identified within the NWI feature. Representative photographs are included in Appendix C and HHEI data form is included in Appendix D.
R2UBF	Riverine, lower perennial, unconsolidated bottom, semi permanently flooded	8	Stream 8	Stream 8 was identified within the NWI feature. Representative photographs are included in Appendix C and HHEI data form is included in Appendix D.
R4SBC	Riverine, intermittent, streambed, seasonally flooded	10	Stream 1	Stream 1 was identified within the NWI feature. Representative photographs are included in Appendix C and HHEI data form is included in Appendix D.

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3.3 STREAMS

Stantec completed field surveys for streams (waterways) within the Project area on April 4-6, 2022. Figure 2 (Appendix A) shows the locations of streams identified by Stantec within the Project area. Representative photographs of the streams are included in Appendix C of this report (photo locations are shown on Figure 2, Appendix A). Completed QHEI and HHEI data forms for the identified streams are included in Appendix D. Information regarding the identified streams is provided in Table 4.

Table 4. Summary of Stream Resources Found within the South Canton-Torrey 138 kV Line Rebuild Project Area, Stark County,
Ohio

	Loca	ation						i	ield Evalu	ation			Proposed Impacts	
Stream ID	Latitude	Longitude	Stream Type	Stream Name ¹	Delineated Length (feet)	Bankfull Width (feet)	OHWM Width (feet)	Method	Score ^{2,3}	Category/ Rating/ OAC Use Designation 2.3,4	Ohio EPA 401 Eligibility	Stream Crossing?	Fill Type	Area (acre)
Stream 1	40.759539	-81.413717	Intermittent	UNT to Beal Run	106	9.8	7	HHEI	42	Modified Class II PHW	Eligible	No	N/A	N/A
Stream 2	40.719197	-81.410541	Intermittent	UNT to Bear Run	242	9.5	7	QHEI/ HHEI	41.5/ 66	Modified Class II PHW	Eligible	No	N/A	N/A
Stream 3	40.719434	-81.410816	Intermittent	UNT to Bear Run	41	2.5	1	HHEI	24	Modified Class I PHW	Eligible	No	N/A	N/A
Stream 4	40.722226	-81.412119	Ephemeral	UNT to Bear Run	202	1.6	0.75	HHEI	24	Modified Class I PHW	Eligible	Yes	N/A	N/A
Stream 5	40.724261	-81.413398	Ephemeral	UNT to Bear Run	28	3.2	1.5	HHEI	18	Modified Class I PHW	Eligible	No	N/A	N/A
Stream 6	40.725547	-81.413918	Intermittent	UNT to Bear Run	162	6.6	4.5	HHEI	63	Modified Class II PHW	Eligible	No	N/A	N/A
Stream 7	40.731965	-81.415077	Ephemeral	UNT to Bear Run	38	4.9	2.5	HHEI	52	Modified Class II PHW	Eligible	No	N/A	N/A

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	Location							Field Evaluation					Proposed Impacts	
Stream ID	Latitude	Longitude	Stream Type	Stream Name ¹	Delineated Length (feet)	Bankfull Width (feet)	OHWM Width (feet)	Method	Score ^{2,3}	Category/ Rating/ OAC Use Designation 2.3,4	Ohio EPA 401 Eligibility	Stream Crossing?	Fill Type	Area (acre)
Stream 8	40.747403	-81.414372	Perennial	UNT to Beal Run	143	10	8	QHEI/ HHEI	46.5/ 66	Modified Class II PHW	Eligible	No	N/A	N/A
Stream 9	40.747286	-81.414227	Ephemeral	UNT to Beal Run	132	4.9	1.5	HHEI	29	Modified Class I PHW	Eligible	No	N/A	N/A
	TOTAL:													

¹UNT = Unnamed Tributary

Based on the designated use evaluation presented in the Field Methods for Evaluating Primary Headwater Habitat Streams in Ohio, Version 4.0 (OEPA 2018).

Based on the designated use evaluation presented in the Methods for Assessing Habitat in Flowing Waters: Using the Qualitative Habitat Evaluation Index (OEPA 2006).

Based on Ohio Administrative Code (OAC) 3745-1-16.

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3.4 OPEN WATERS

No open waters were identified within the Project area during the field surveys that took place on April 4-6, 2022.

3.5 RARE, THREATENED, OR ENDANGERED SPECIES HABITAT

Table 5. Summary of Potential Federally Listed and Ohio State-Listed Species within the South Canton-Torrey 138 kV Line Rebuild Project Area, Stark County, Ohio

Common Name/Scientific Name	State Listed Status ^{1,2}	Federally Listed Status ^{1,3}	Typical Habitat	Habitat Observed	Agency Comments (Appendix B)	Potential Impacts and Avoidance Dates
				Plants		
Shore-growing Peat Moss/Sphagnum riparium	E	N/A	Typically found in weakly to moderately base-rich springs, flushes and in poor fens (BBS 2022).	No suitable habitat was observed within the Project area.	ODNR – The Natural Heritage Database has records of this species within a one-mile radius of the Project area; No other comments received. USFWS – No comments received.	According to the State Listed Wildlife and Plant Species by County List for Stark County (ODNR 2022a), shore-growing peat moss is not found within Stark County. Additionally, no suitable habitat was observed within the Project area. Therefore, impacts to this species are not anticipated and avoidance activities are not applicable.
				Insects		
Brush-tipped Emerald/ Somatochlora walshii	E	N/A	The habitat preference for the brush- tipped emerald includes small, slow- flowing streams that flow through open bogs, sedge fens, marshes, and meadows. This species can also be found at lake or pond outlets (Dunkle 2000; Paulson 2009).	No suitable habitat was observed within the Project area.	ODNR – The Natural Heritage Database has records of this species within a one-mile radius of the Project area; No other comments received. USFWS – No comments received.	No suitable habitat was observed within the Project area and no work within perennial streams is anticipated to be required for the Project. Therefore, no impacts are anticipated, and avoidance dates are not applicable.
	•			Reptiles		
Spotted Turtle/Clemmys guttata	E	N/A	Spotted turtles inhabit mostly unpolluted, shallow bodies of water with a soft bottom and aquatic vegetation, such as small marshes, marshy pastures, bogs, fens, woodland streams, swamps, small ponds, vernal pools, and lake margins; in some areas they occur in brackish tidal streams. Ponds surrounded by relatively undisturbed meadow or undergrowth are most favorable. These turtles favor waters with a soft bottom and aquatic vegetation (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR – The Project is within the range of the spotted turtle. Due to the location, the type of habitat within the Project area, and the type of work proposed, this Project is not likely to impact this species. USFWS – No comments received.	No suitable habitat was observed within the Project area. Therefore, no impacts are anticipated, and avoidance dates are not applicable.
				Fishes		

March 16, 2023	611	Faster II				
Common Name/Scientific Name	State Listed Status ^{1,2}	Federally Listed Status ^{1,3}	Typical Habitat	Habitat Observed	Agency Comments (Appendix B)	Potential Impacts and Avoidance Dates
lowa Darter/Etheostoma exile	E	N/A	This species is typically found in natural lakes and very sluggish streams or marshes with dense aquatic vegetation and clear waters over sandy substrates. In Ohio, this species has been found in pothole or kettle lakes (ODNR 2018).	No suitable habitat was observed within the Project area.	ODNR – The Project is within the range of the Iowa darter. ODNR recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this Project is not likely to impact this species. USFWS – No comments received.	No suitable habitat for this species was observed within the Project area and no in-water work in perennial streams is proposed by AEP. Therefore, impacts to this species are not anticipated and avoidance dates are not applicable.
	ı			Mussels		
Long solid/Fusconaia maculata maculata	E	N/A	This species is found in medium to large rivers with a strong current and often in sand and gravel (NatureServe 2022).	No suitable habitat was observed within the Project area	ODNR – The Project area is within the range of the long-solid mussel. Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species. USFWS – No comments received.	No suitable habitat was observed within the Project area. Additionally, no in-water work in perennial streams is proposed by AEP. Therefore, impacts to this species are not anticipated and avoidance dates are not applicable.
	1	T	,	Mammals		,
Indiana Bat/Myotis sodalis	E	E	The Indiana bat is likely distributed over the entire State of Ohio, though not uniformly. This species generally forages in openings and edge habitats within upland and floodplain forest, but they also forage over old fields and pastures (Brack et al. 2010). Natural roost structures include trees (live or dead) with exfoliating bark, and exposure to solar radiation. Other important factors for roost trees include relative location to other trees, a permanent water source and foraging areas; Dead trees are preferred as maternity roosts; however, live trees are often used as secondary roosts depending on microclimate conditions (USFWS 2007; USFWS 2022). Roosts have also occasionally been found to consist of cracks and hollows in trees, utility poles, buildings, and bat boxes. Primarily use caves for hibernacula, although are also known to hibernate in abandoned underground mines (Brack et al. 2010).	Potentially suitable summer roosting and foraging habitat was observed within mixed early successional/second growth deciduous forest habitats within the Project area	of the Indiana bat. If trees are present within the Project area and trees must be cut the ODNR recommends cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with dbh ≥ 20 if possible. In addition, ODNR recommends a desktop habitat assessment, followed by field a field assessment if needed, to determine if there are potential hibernacula present within the Project area. If a habitat assessment finds that potential hibernacula are present within 0.25 miles of the Project area, please send this information to Erin Hazelton for project recommendations. USFWS - Should the proposed project site contain trees ≥3 inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, we recommend removal of any trees ≥3 inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to	Potentially suitable summer roosting and foraging habitat was observed within mixed early successional/second growth deciduous forest habitat areas within the Project area. AEP intends to clear trees between October 1 and March 31. If any summer tree clearing is required, AEP will proceed accordingly with agency recommendations to avoid impacts to this species. Additionally, a desktop bat hibernacula habitat assessment was completed by Stantec (Figure 4, Appendix B). The assessment identified abandoned underground mines within 0.25 miles of the Project area. No potentially suitable hibernacula were observed within the Project area during the field surveys completed by Stantec. Avoidance Dates: April 1 – September 30

Common Name/Scientific Name	State Listed Status ^{1,2}	Federally Listed Status ^{1,3}	Typical Habitat	Habitat Observed	Agency Comments (Appendix B)	Potential Impacts and Avoidance Dates
Northern Long-eared Bat/Myotis septentrionalis	E	T	The northern long-eared bat is found throughout Ohio. This species generally forages in forested habitat and openings in forested habitat and utilizes cracks, cavities, and loose bark within live and dead trees, as well as buildings as roosting habitat (Brack et al. 2010; USFWS 2020). The species utilizes caves and abandoned mines as winter hibernacula. Various sized caves are used providing they have a constant temperature, high humidity, and little to no air current (Brack et al. 2010).	forest habitats within the Project area (Figure 3, Appendix A). No potentially	Indiana bats. If implementation of this seasonal tree cutting recommendation is not possible, a summer presence/absence survey may be conducted for Indiana bats. If Indiana bats are not detected during the survey, then tree clearing may occur at any time of the year. ODNR - The portion of the Project from Fohl Street Southwest to the southern terminus at existing Structure 282 is within the vicinity of records for the northern long-eared bat. Because presence of state endangered bat species has been established in the area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. However, limited summer tree cutting inside this buffer may be acceptable after further consultation with ODNR. (Contact Erin Hazelton at Erin.hazelton@dnr.ohio.gov). USFWS - Should the proposed project site contain trees ≥3 inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, we recommend removal of any trees ≥3 inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats. Incidental take of northern longeared bats from most tree clearing is exempted by a 4(d) rule.	Potentially suitable summer roosting and foraging habitat was observed within mixed early successional/second growth deciduous forest habitat areas within the Project area. AEP intends to clear trees between October 1 and March 31. If any summer tree clearing is required, AEP will proceed accordingly with agency recommendations to avoid impacts to this species. Additionally, a desktop bat hibernacula habitat assessment was completed by Stantec. The assessment identified abandoned underground mines within 0.25 miles of the Project area. No potentially suitable hibernacula were observed within the Project area during the field surveys completed by Stantec. Avoidance Dates: April 1 – September 30
Little Brown Bat/Myotis Iucifugus	E	N/A	The little brown bat is found throughout Ohio. This species seems to prefer to forage over water but also forages among trees in rather open areas (Harvey et al. 1999). During summer, it typically inhabits buildings, attics, church belfries, barns and outbuildings, and occasionally more natural habitats such as sloughing bark of a dead tree. During summer, two types of roosts are utilized: day roosts and night roosts. Day roosts are the maternity colony roost, while little brown bats often roost in	habitat was observed within mixed early successional/second growth deciduous forest habitat areas within the Project area (Figure 3,	oDNR - The entire state of Ohio is within the range of the little brown bat. If trees are present within the Project area and trees must be cut the ODNR recommends cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with dbh ≥ 20 if possible. In addition, ODNR recommends a desktop habitat assessment, followed by field a field assessment if needed, to determine if there are potential hibernacula present within the Project area. If a habitat assessment finds that potential hibernacula are present within 0.25 miles of the	Potentially suitable summer roosting and foraging habitat was observed within mixed early successional/second growth deciduous forest habitat areas within the Project area. AEP intends to clear trees between October 1 and March 31. If any summer tree clearing is required, AEP will proceed accordingly with agency recommendations to avoid impacts to this species. Additionally, a desktop bat hibernacula habitat assessment was completed by Stantec. The assessment identified abandoned underground mines within 0.25 miles of the Project area. No potentially suitable hibernacula were

Common Name/Scientific Name	State Listed Status ^{1,2}	Federally Listed Status ^{1,3}	Typical Habitat	Habitat Observed	Agency Comments (Appendix B)	Potential Impacts and Avoidance Dates
			other areas where they rest and congregate to digest their food in between foraging bouts. In Ohio, this species typically utilizes caves and mines as hibernacula, although at least one hibernaculum was found to be located in an attic of an old building (Brack et al. 2010).	potentially suitable hibernacula were observed within the Project area.	Project area, please send this information to Erin Hazelton for project recommendations. USFWS – No comments received.	observed within the Project area during the field surveys completed by Stantec. Avoidance Dates: April 1 – September 30
Tri-colored Bat/Perimyotis subflavus	E	N/A	The tricolored bat is found throughout Ohio. This species has been found to forage above and within a variety of habitats, including woodlands, agricultural fields, grassy areas, and over streamside vegetation (Sparks et al. 2011). Maternity colonies have often been found within clusters of dead leaves, hanging in trees. Maternity colonies have also been found in or on buildings. Little is known of male tri-colored bats in summer, but it is thought that they are probably solitary and spend their days in similar situations, as well as crevices, caves and mines (Brack et al. 2010). In Ohio, this species typically utilizes caves and mines as hibernacula, utilizing a variety of situations, including very cold areas near cave entrances to deeper passages that seem to be too warm for other species of bats (Brack et al. 2010).	and foraging habitat was observed within mixed early successional/second growth deciduous forest habitat areas within the Project area (Figure 3, Appendix A). No potentially suitable	ODNR - The entire state of Ohio is within the range of the tri-colored bat. If trees are present within the Project area and trees must be cut the ODNR recommends cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with dbh ≥ 20 if possible. In addition, ODNR recommends a desktop habitat assessment, followed by field a field assessment if needed, to determine if there are potential hibernacula present within the Project area. If a habitat assessment finds that potential hibernacula are present within 0.25 miles of the Project area, please send this information to Erin Hazelton for project recommendations. USFWS – No comments received.	Potentially suitable summer roosting and foraging habitat was observed within mixed early successional/second growth deciduous forest habitat areas within the Project area. AEP intends to clear trees between October 1 and March 31. If any summer tree clearing is required, AEP will proceed accordingly with agency recommendations to avoid impacts to this species. Additionally, a desktop bat hibernacula habitat assessment was completed by Stantec. The assessment identified abandoned underground mines within 0.25 miles of the Project area. No potentially suitable hibernacula were observed within the Project area during the field surveys completed by Stantec. Avoidance Dates: April 1 – September 30
	1	1		Birds		
Northern Harrier/Circus hudsonius E=Endangered; T=Threater	Е	N/A	Harriers hunt low over grasslands, with wings held in a distinctive dihedral (V-shape). This is a common migrant and winter species; nesters are much rarer, although they occasionally breed in large marshes and grasslands (ODNR 2018). Northern harriers appear to be associated with large tracts of undisturbed habitat. They are uncommon in blocks of contiguous grassland less than 100 hectares (Slater and Rock 2005).	No suitable nesting habitat was observed within the Project area.	ODNR – The Project is within the range of the northern harrier. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this habitat will not be impacted, this Project is not likely to impact this species. USFWS - No comments received.	Northern harriers require large tracts of wetlands and/or grasslands that are 100 hectares (247 acres) or more for suitable breeding/nesting habitat (Slater and Rock 2005). No suitable nesting habitat (large tracts of wetland and/or grasslands were observed within the Project area. Therefore no impacts are anticipated, and avoidance date are not applicable.

Common Name/Scientific Name	State Listed Status ^{1,2}	Federally Listed Status ^{1,3}	Typical Habitat	Habitat Observed	Agency Comments (Appendix B)	Potential Impacts and Avoidance Dates
³ According to USFWS (2018).						

Conclusions and Recommendations March 16, 2023

4.0 CONCLUSIONS AND RECOMMENDATIONS

Stantec conducted a wetland and waterbodies delineation and a preliminary habitat assessment for threatened and endangered species within the Project area on April 4-6, 2022. Twelve PEM wetlands totaling approximately 2.32 acres and one mixed PEM/PSS wetland totaling approximately 0.62 acres were identified within the Project area. Four ephemeral streams totaling approximately 400 linear feet in length, four intermittent streams totaling approximately 551 linear feet in length, and one perennial stream totaling approximately 143 linear feet in length were identified within the Project area. Data forms for the identified wetland and stream features are provided in Appendix D and representative photographs are provided in Appendix C.

The information provided by Stantec regarding wetland and stream boundaries is based on an analysis of the wetland and upland conditions present within the Project area at the time of the field work. The delineations were performed by experienced and qualified professionals using regulatory agency-accepted practices and sound professional judgment.

An ODNR Ohio Natural Heritage Program data request and environmental review request letter was sent to the ODNR Office of Real Estate on August 18, 2021. The ODNR Office of Real Estate response dated September 13, 2021 (Appendix B) states that there are records of the shoregrowing peat moss (state listed endangered) and brush-tripped emerald (state listed endangered) within a one-mile radius of the Project area. There was no potential habitat for either of these species observed within the Project area and the ODNR State Listed Wildlife and Plant Species by County list indicates shore-growing peat moss is not known to occur in Stark County (ODNR 2022a). Therefore, no impacts to these species are anticipated.

Additionally, a search for unique ecological sites, scenic rivers, state nature preserves, wildlife areas, parks or forests, national wildlife refuges, and other protected natural areas indicated Bolivar Reservoir, managed by the Muskingum Watershed Conservancy District, occurs within a one-mile radius of the Project area. The Project will not impact this reservoir.

The ODNR stated that the portion of the Project area from Fohl Street to existing Structure 282 is within the vicinity of records for the northern long-eared bat. Because presence of a state endangered bat species has been established in the area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. However, limited summer tree cutting outside this buffer may be acceptable after further consultation with Erin Hazelton at ODNR.

According to the ODNR, the entire state of Ohio is within the range of the Indiana bat, northern long-eared bat, little brown bat, and the tri-colored bat. If trees are present within the Project area and trees must be cut, the ODNR Division of Wildlife (DOW) recommends cutting only occur from October 1 – March 31, conserving trees with loose, shaggy bark and/or crevices holes, or cavities as well as trees with diameter at breast height (dbh) \geq 20 inches if possible.

Conclusions and Recommendations March 16, 2023

The ODNR also recommended that a desktop habitat assessment be conducted, followed by a field assessment if needed, to determine if there are potential bat hibernacula present within 0.25 miles of the Project area. Stantec completed a desktop habitat desktop assessment in accordance with the 2022 Range-wide Indiana Bat Survey Guidelines (USFWS 2022) utilizing available ODNR websites, including data on known abandoned or active mines (ODNR 2022b) and locations of known or suspected karst geology (ODNR 2022c). The desktop assessment identified abandoned underground mines within 0.25 miles of the Project area. However, no potential bat hibernacula were observed by Stantec within the Project area during the field surveys.

The ODNR states that the Project is within the range of the following state-listed and federally listed threatened and endangered species: long solid, lowa darter, spotted turtle, and the northern harrier. Due to the location, the type of habitat within the Project area, and the type of work proposed, the ODNR concluded that this Project is not like to impact the long solid, lowa darter, or the spotted turtle.

The ODNR recommends that nesting habitats for the northern harrier be avoided during their nesting period. However, no suitable northern harrier nesting habitat (large tracts of grasslands or wetlands) is present within the Project area for this species. Grassland and wetland habitats within the Project area were fragmented and not in the large tracts of undisturbed habitat that the northern harrier requires for nesting habitat (Slater and Rock 2005). Therefore, this Project is not likely to impact this species and nesting season avoidance dates are not applicable.

A technical assistance request letter was also submitted to the USFWS on August 18, 2021. The USFWS response letter dated August 30, 2021, recommends that impacts to wetlands and other water resources be avoided or minimized to the fullest extent possible, and that best management practices be utilized to minimize erosion and sedimentation (Appendix B).

According to the USFWS response, all projects in the State of Ohio lie within range of the federally endangered Indiana bat and the federally threatened northern long-eared bat. In Ohio, presence of these species is assumed wherever suitable habitat occurs unless a presence/probable absence survey has been performed to document probable absence. The USFWS response letter states that, should the Project site contain trees ≥3 inches dbh, the USFWS recommends trees be saved whenever possible. If any caves or abandoned mines may be disturbed, further coordination is requested. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, the USFWS recommends that removal of trees ≥3 inches dbh only occur between October 1 and March 31 in order to avoid adverse effects to these species. If implementation of seasonal tree clearing is not possible, the USFWS recommends summer presence/probable absence surveys be conducted between June 1 and August 15 (however the ODNR response stated that additional summer surveys would not constitute presence/absence, as there are records of northern long-eared bat captures within the vicinity of the Project area).

Conclusions and Recommendations March 16, 2023

Additionally, the USFWS states that they do not anticipate adverse effects to any other federally endangered, threatened, proposed or candidate species due to the Project type, size, and location.

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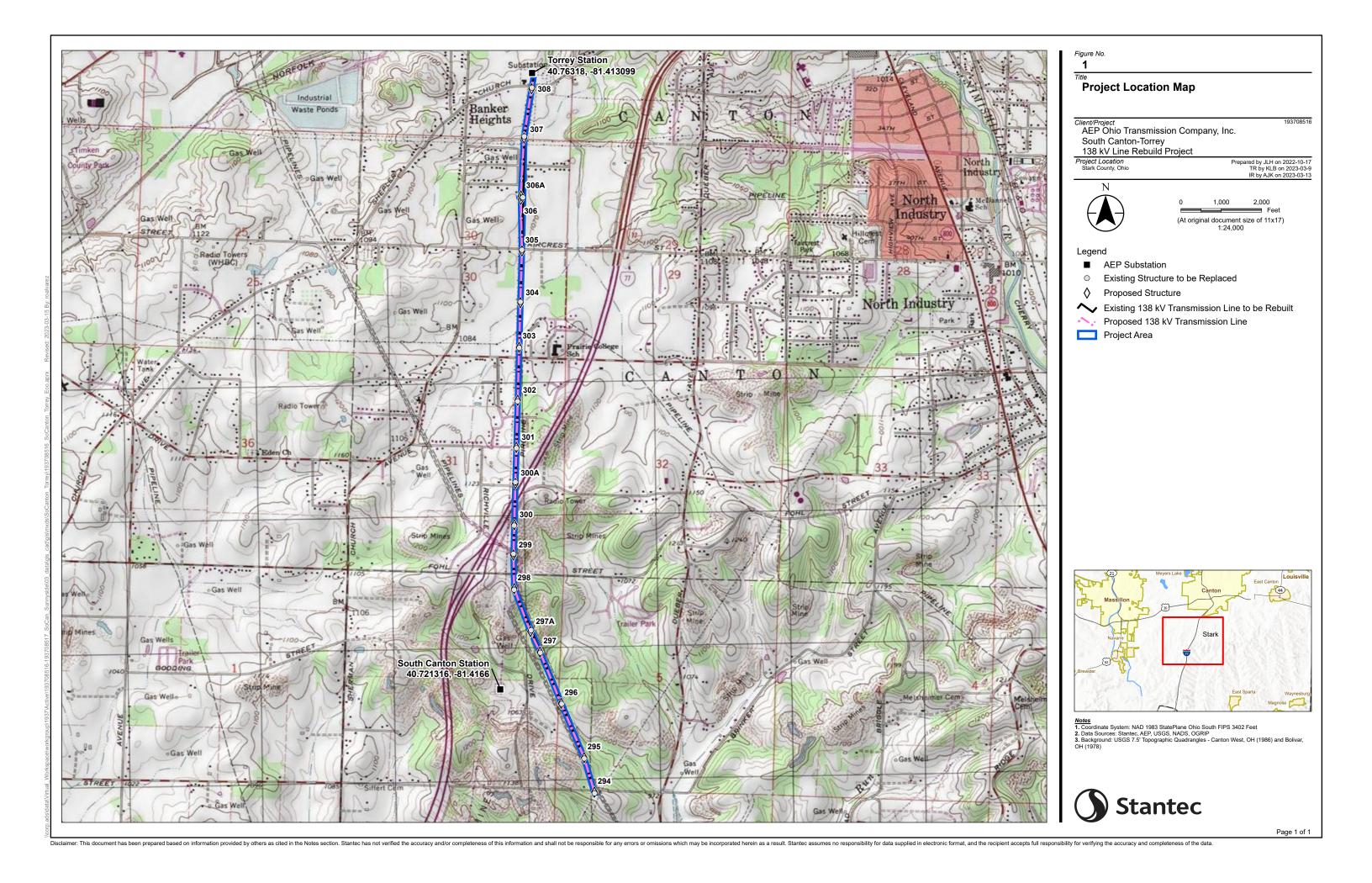
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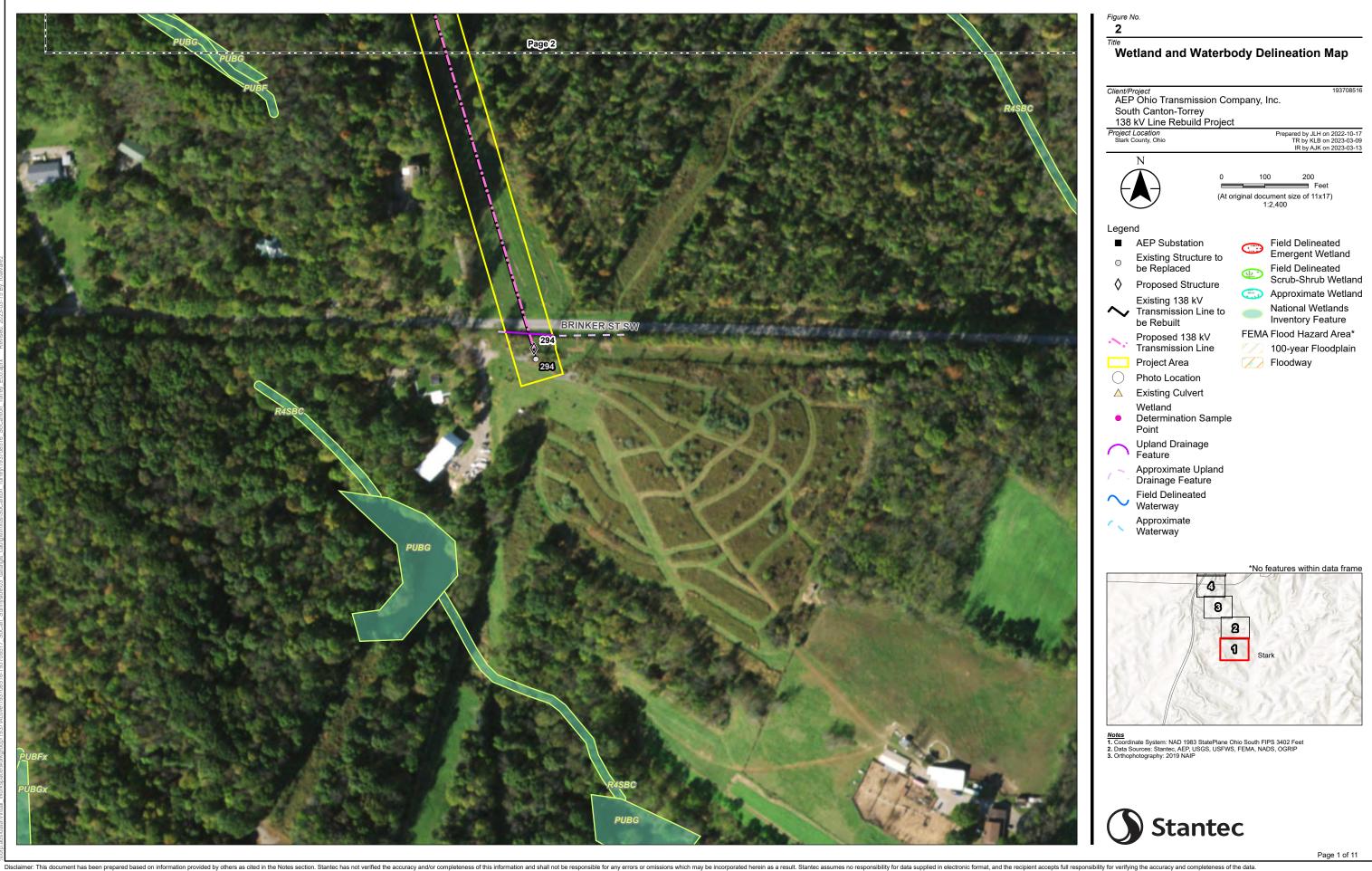
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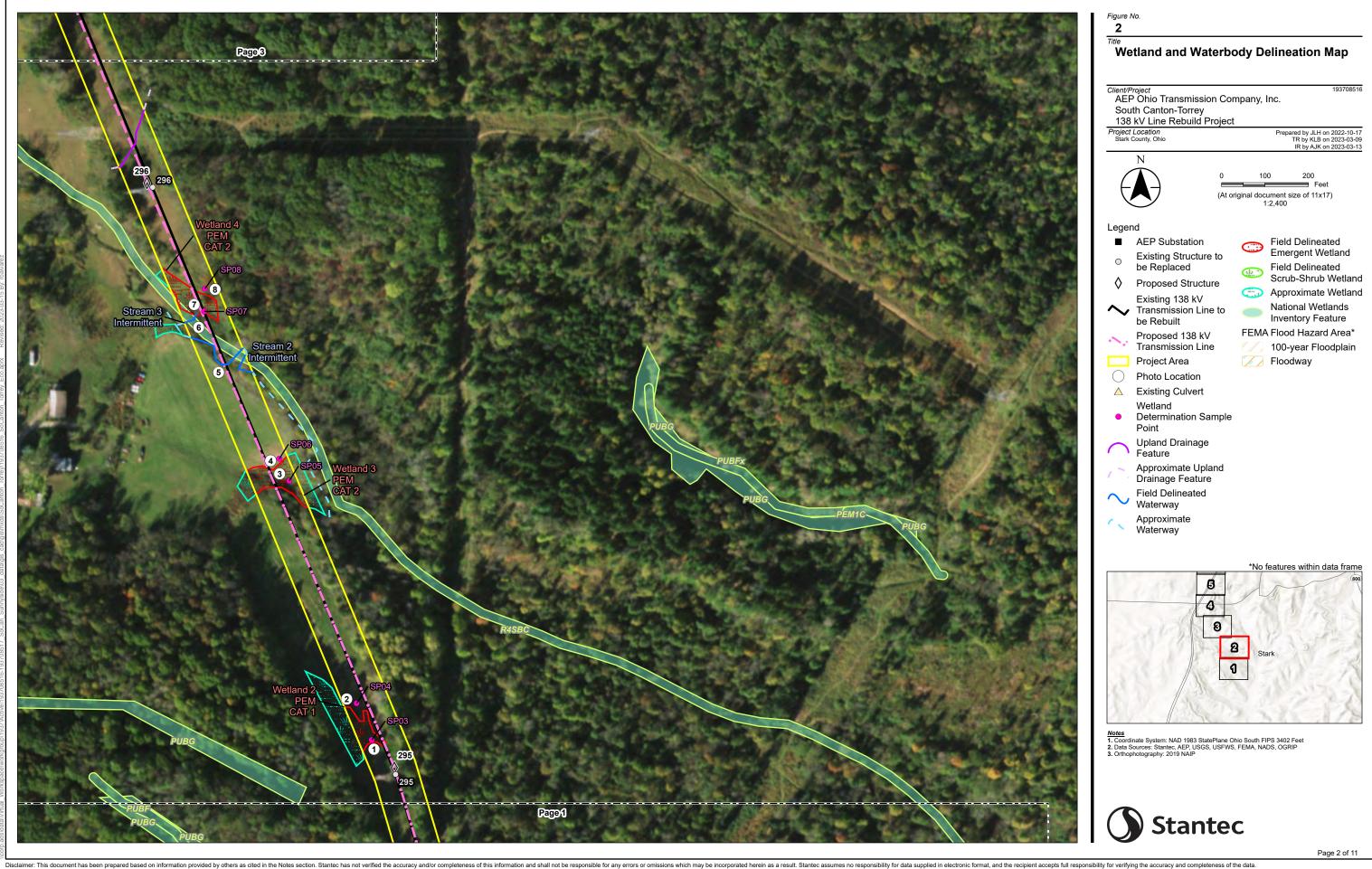
Appendix A FIGURES

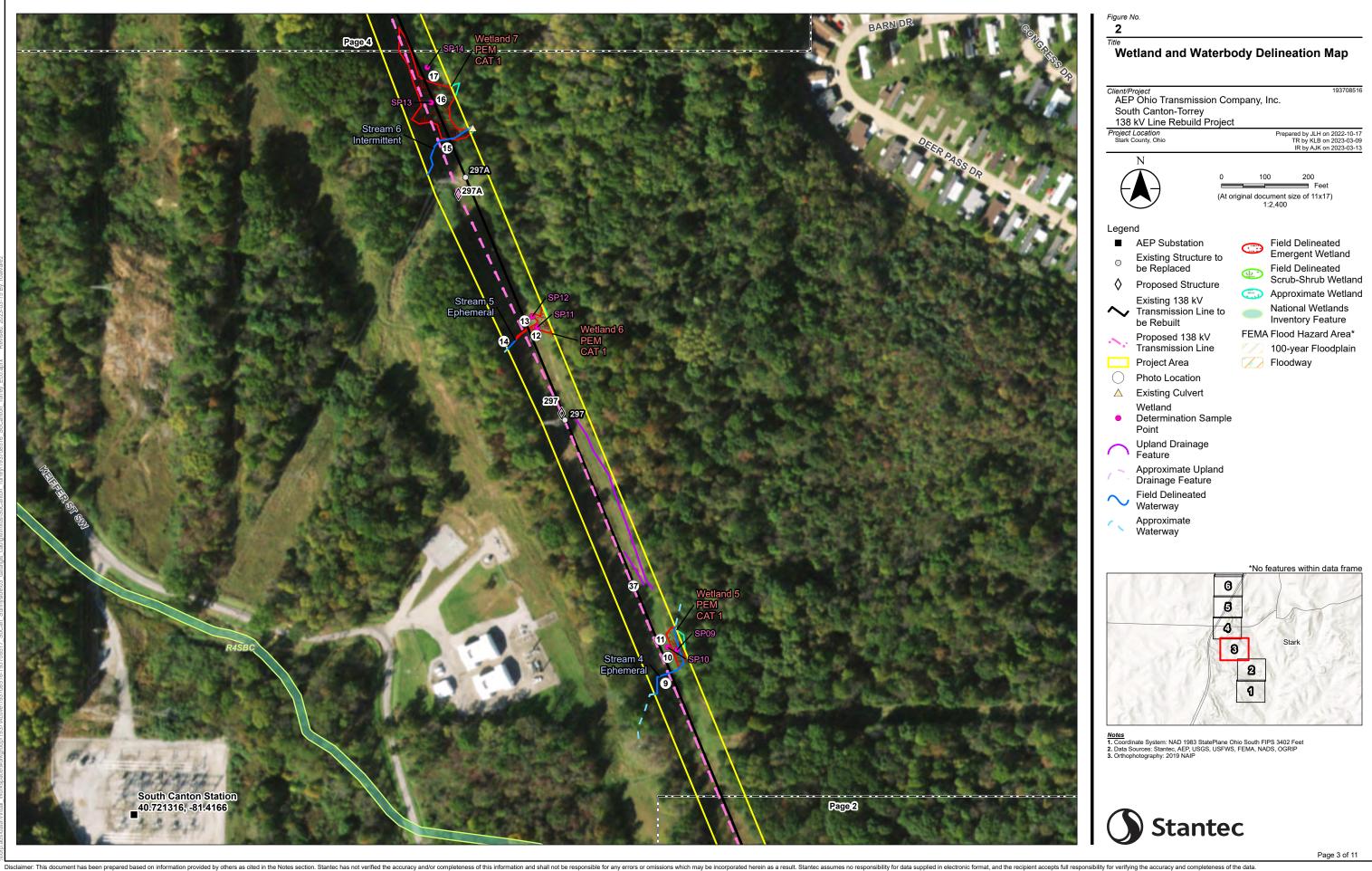
A.1 FIGURE 1 - PROJECT LOCATION MAP

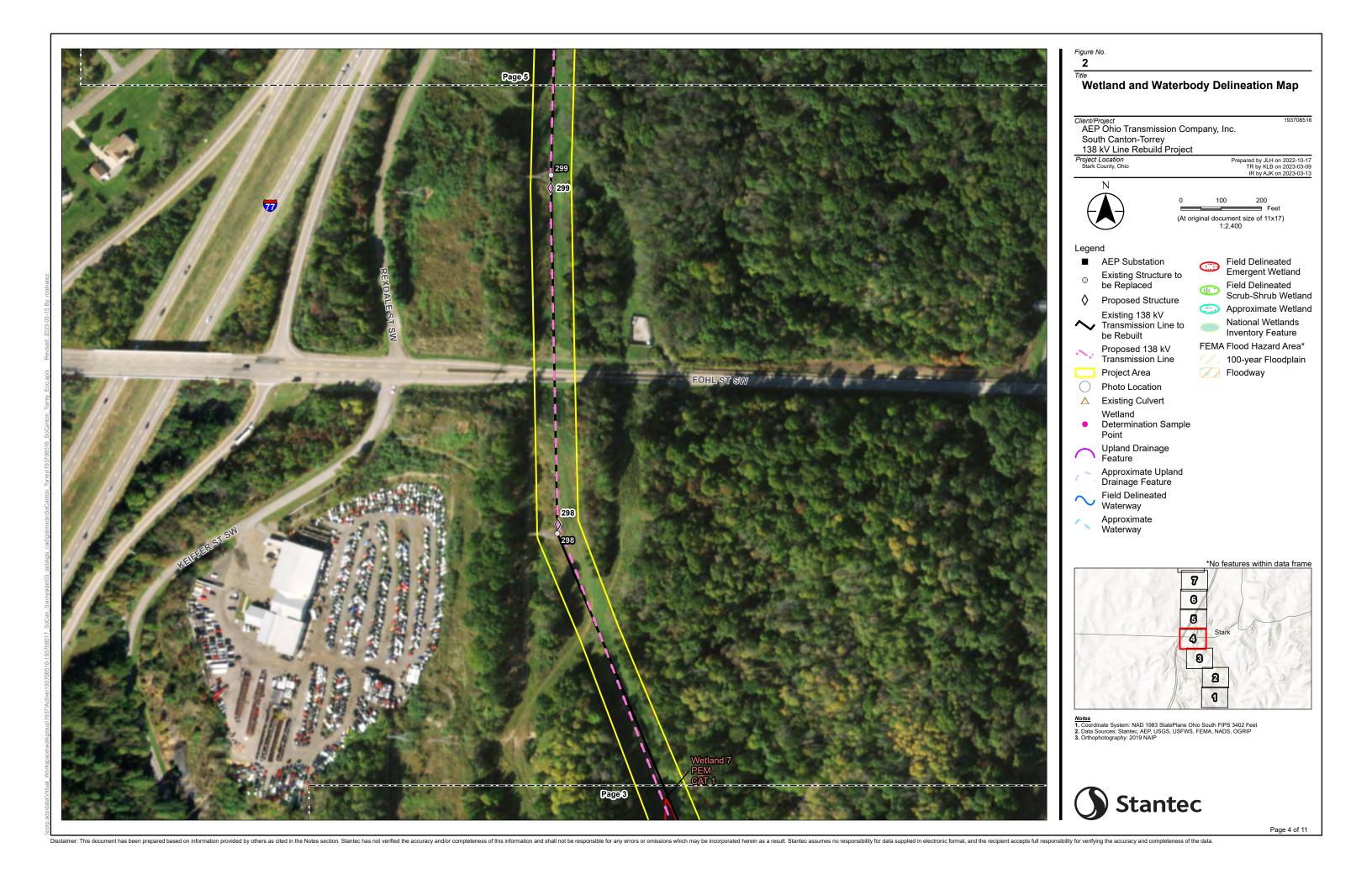


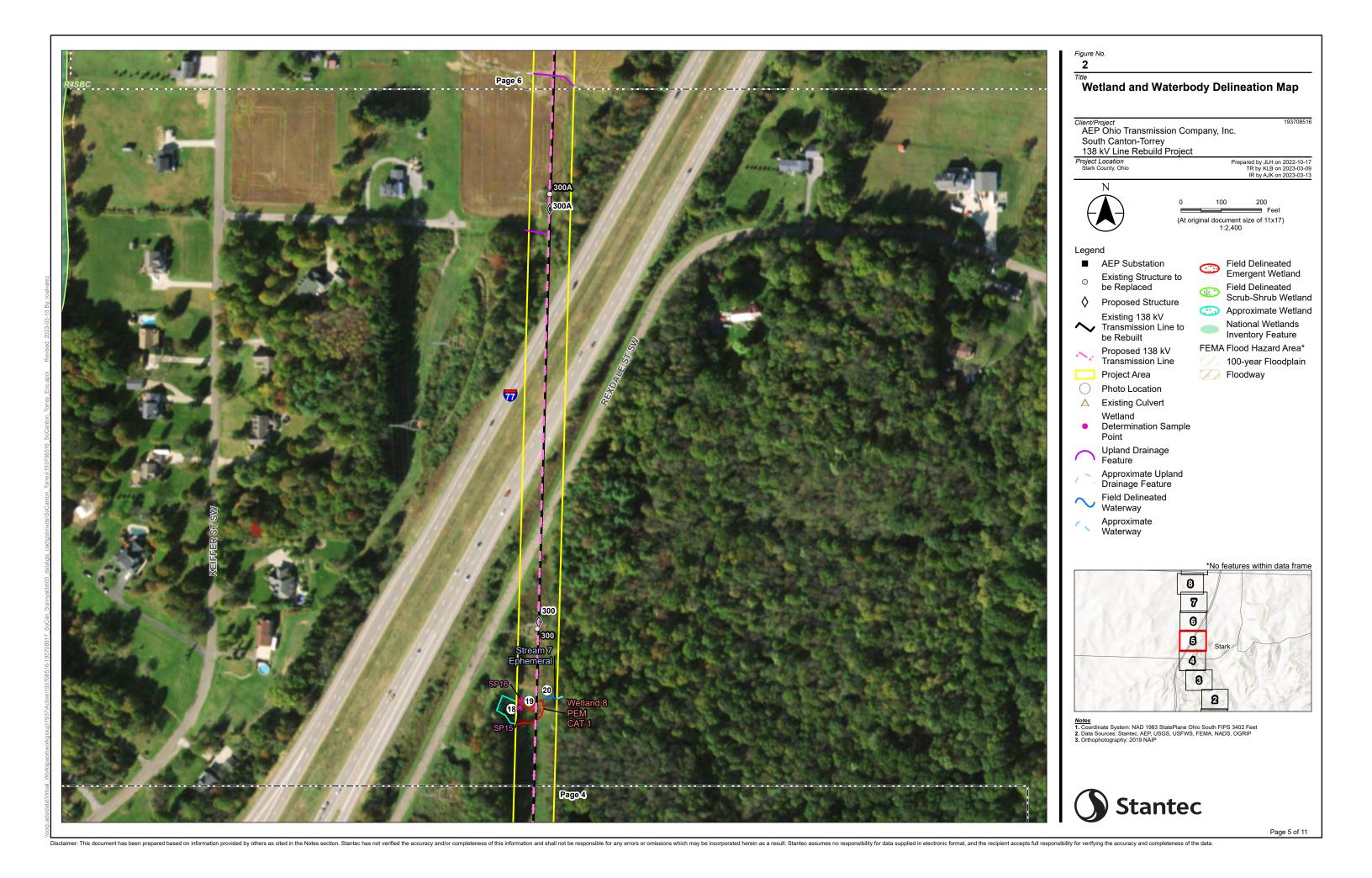
A.2 FIGURE 2 – WETLAND AND WATERBODY DELINEATION MAP

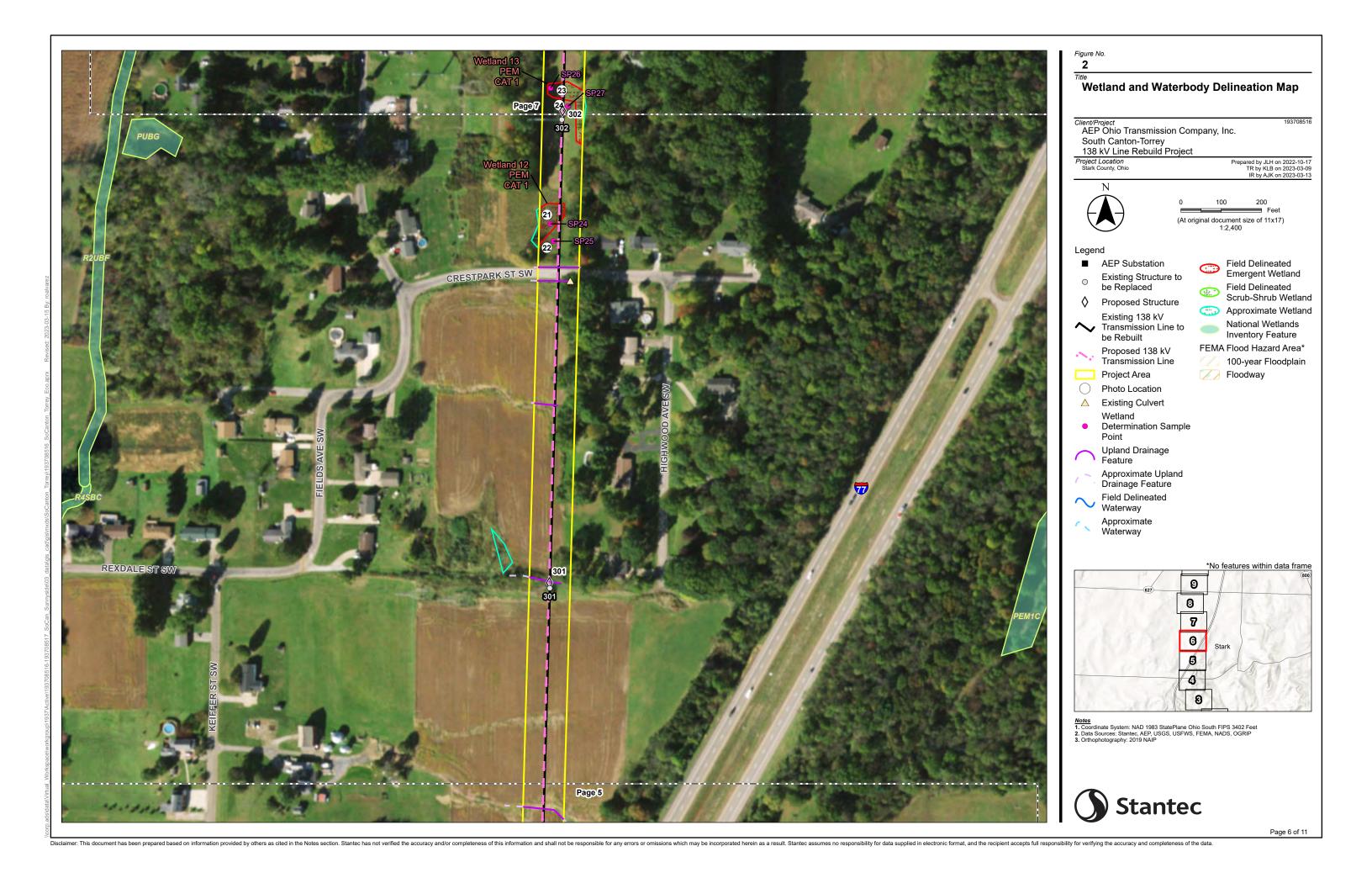


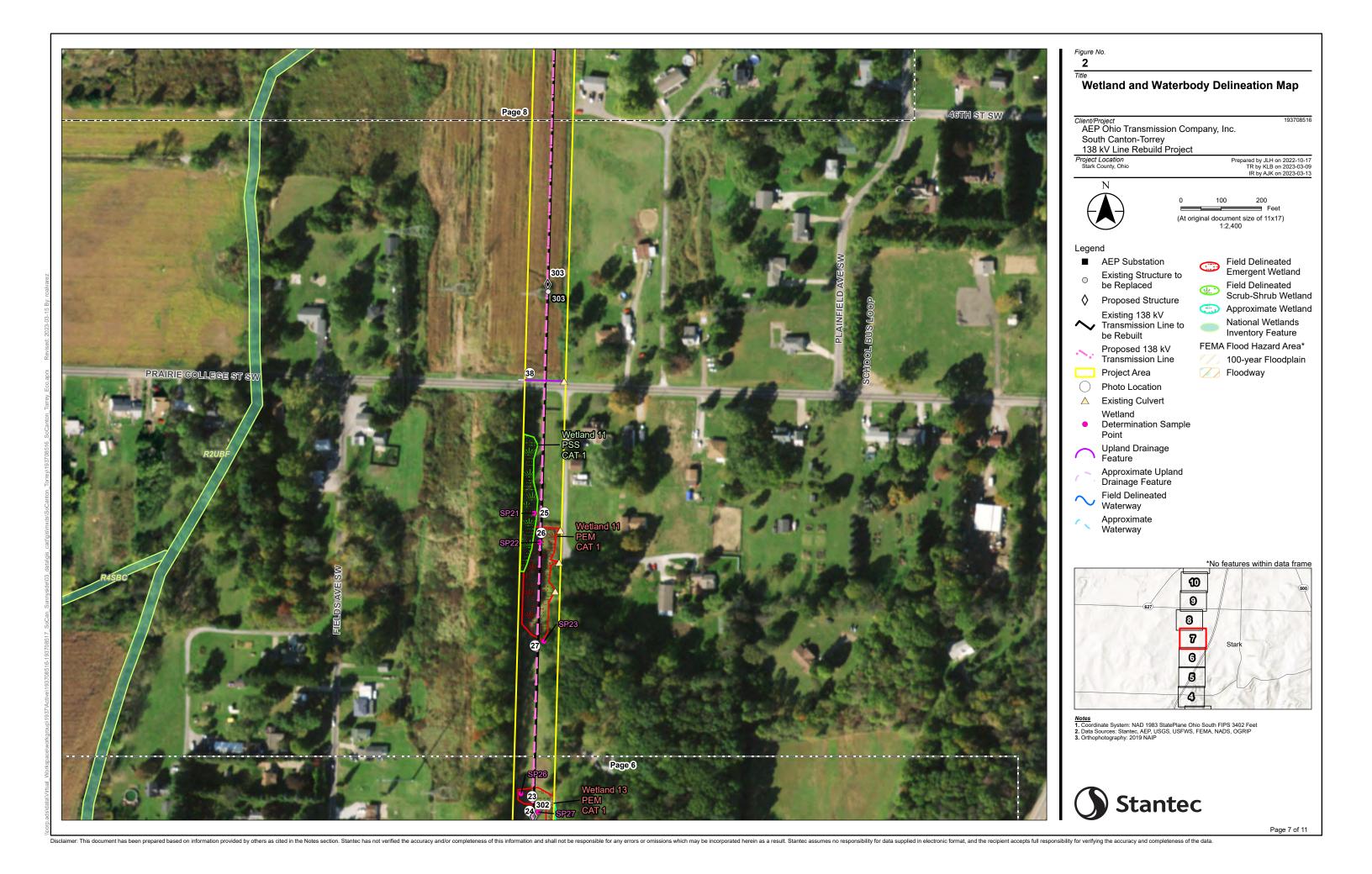


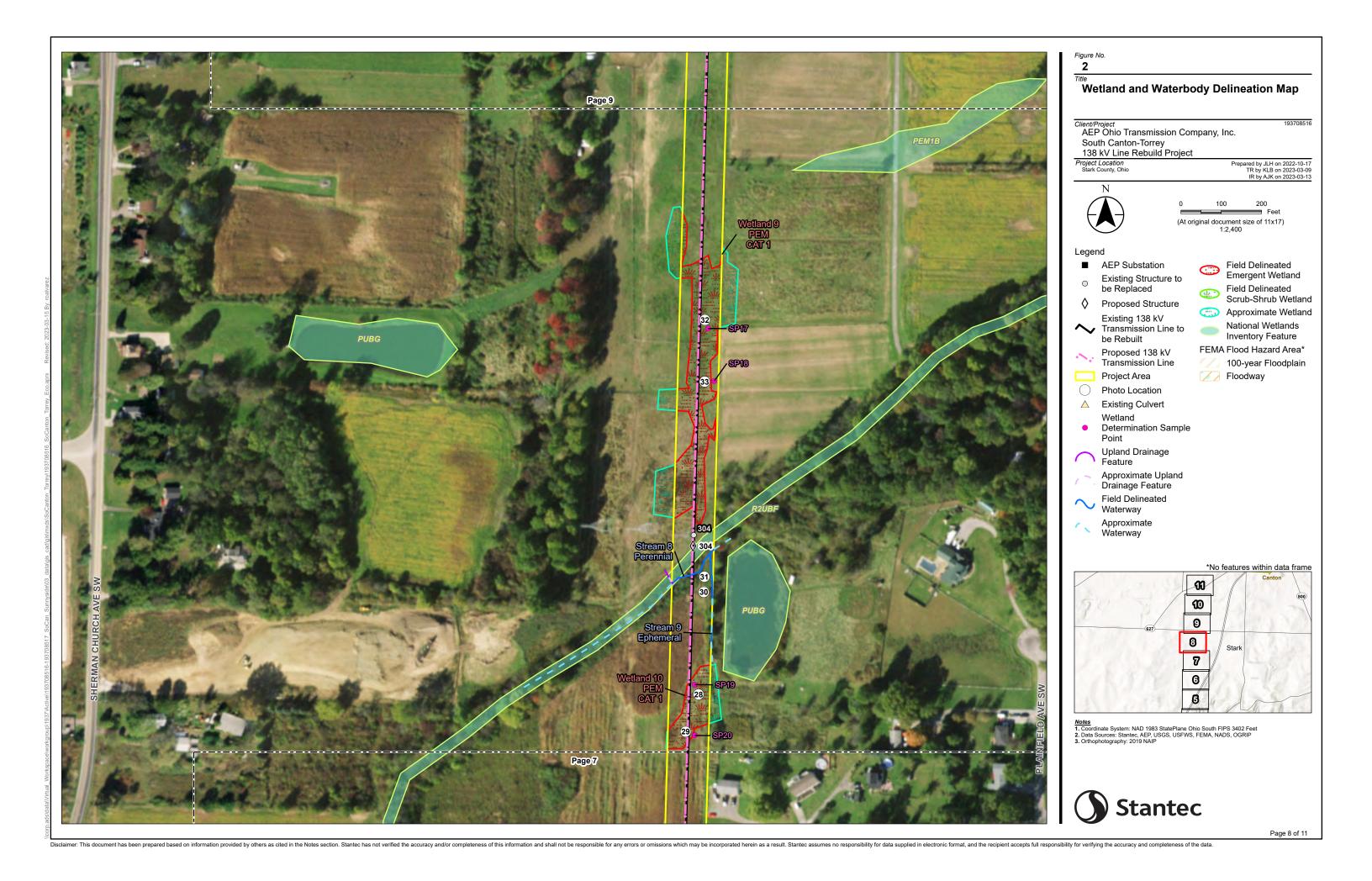


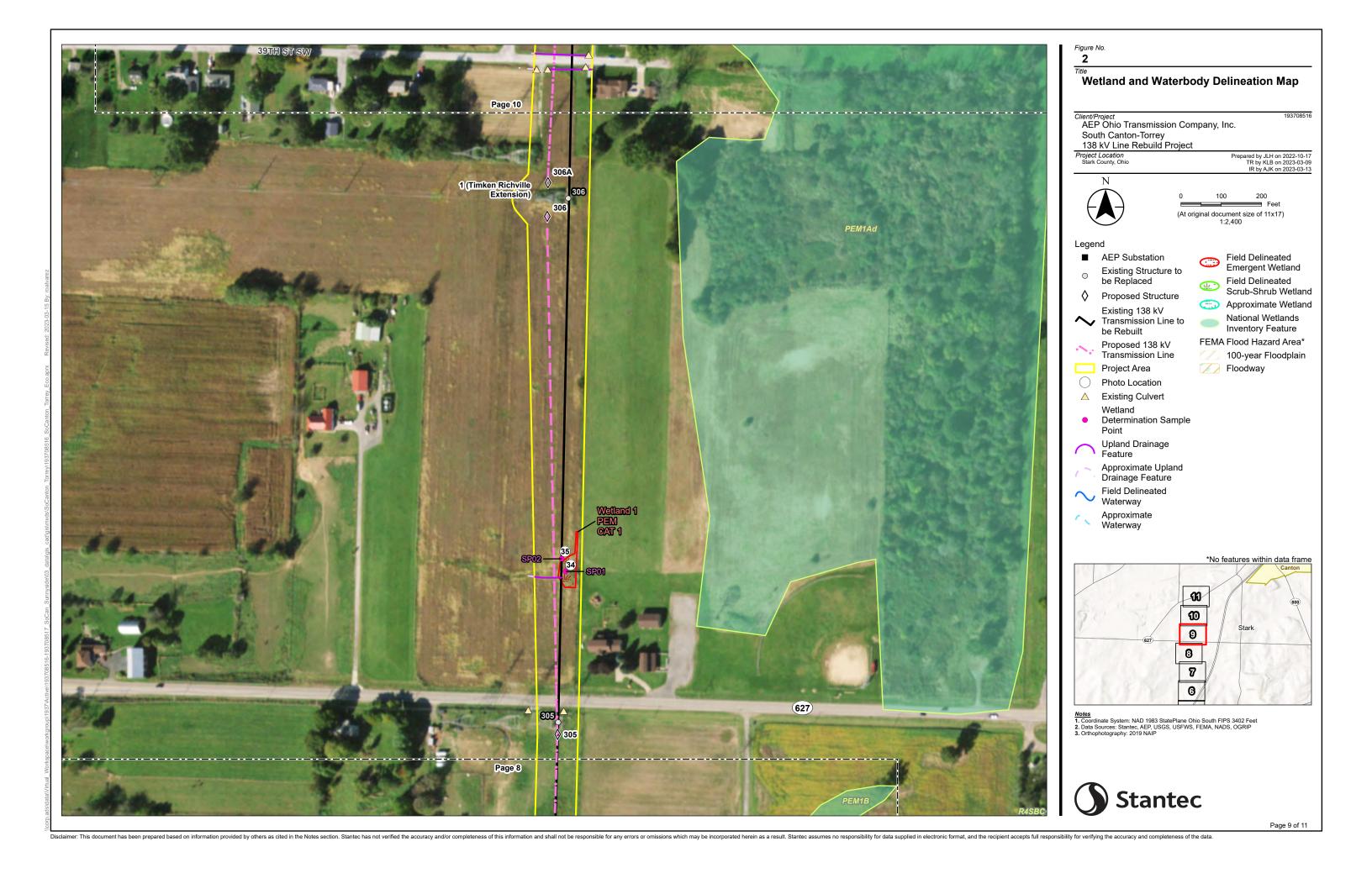


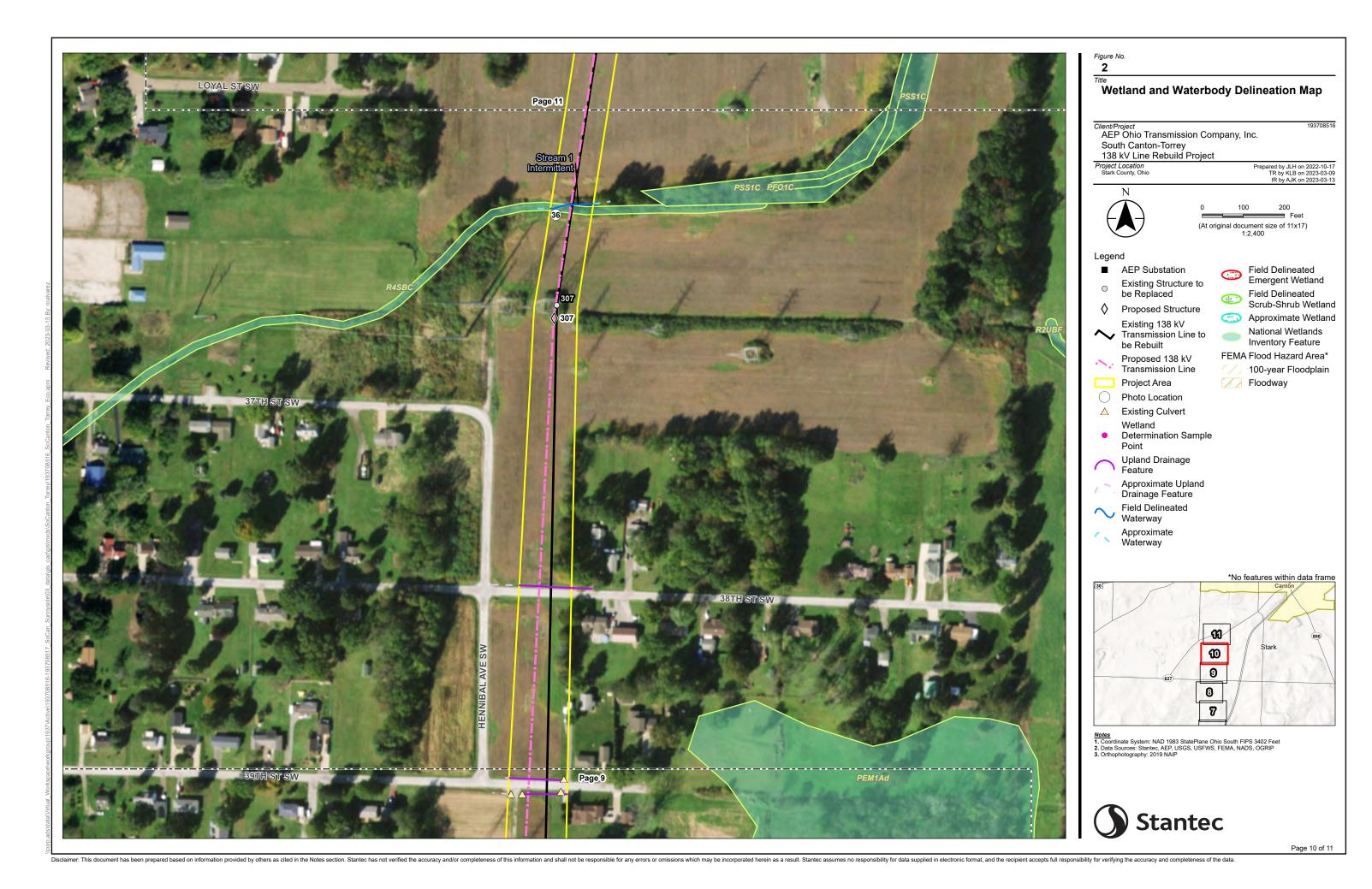










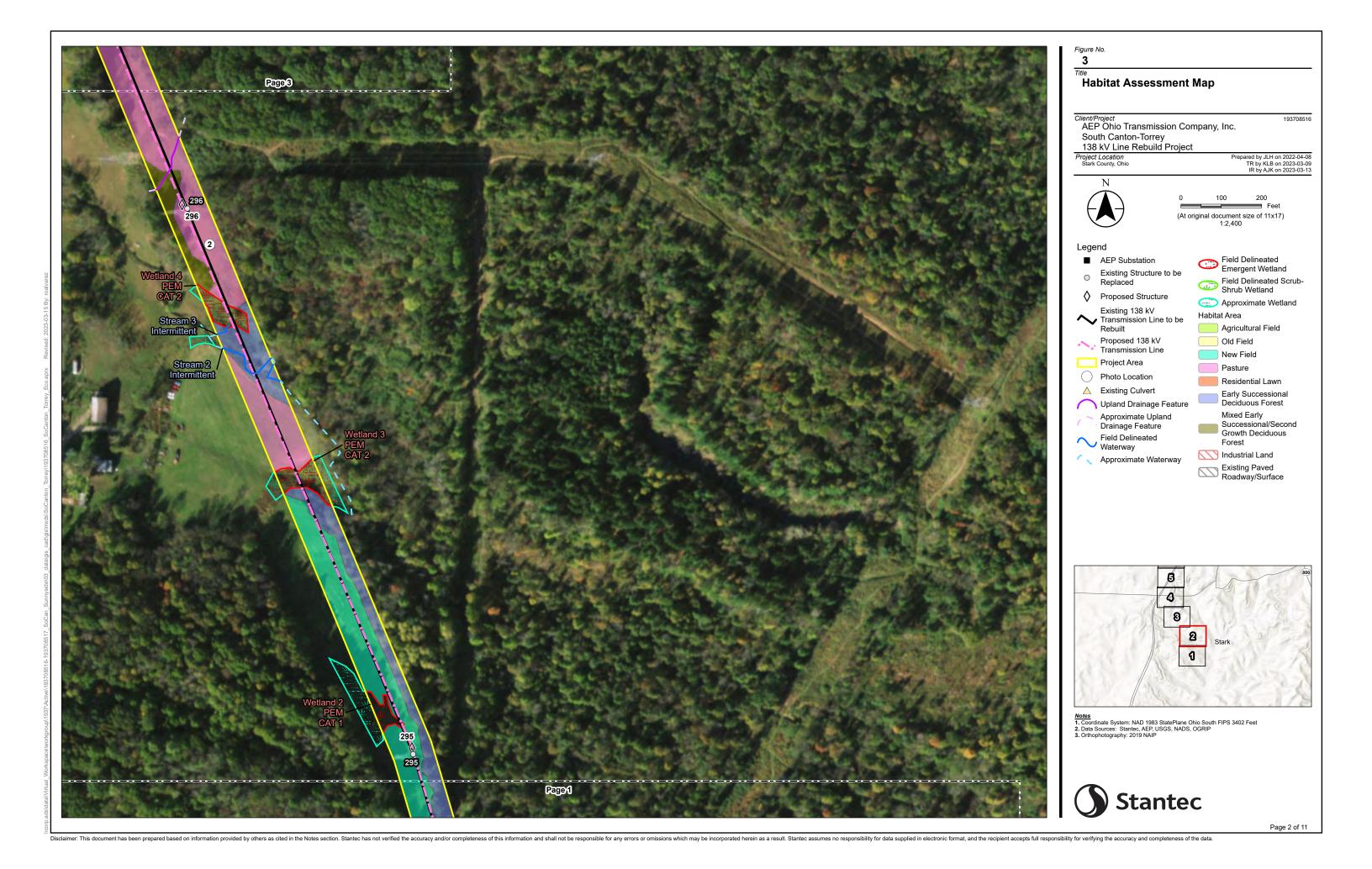


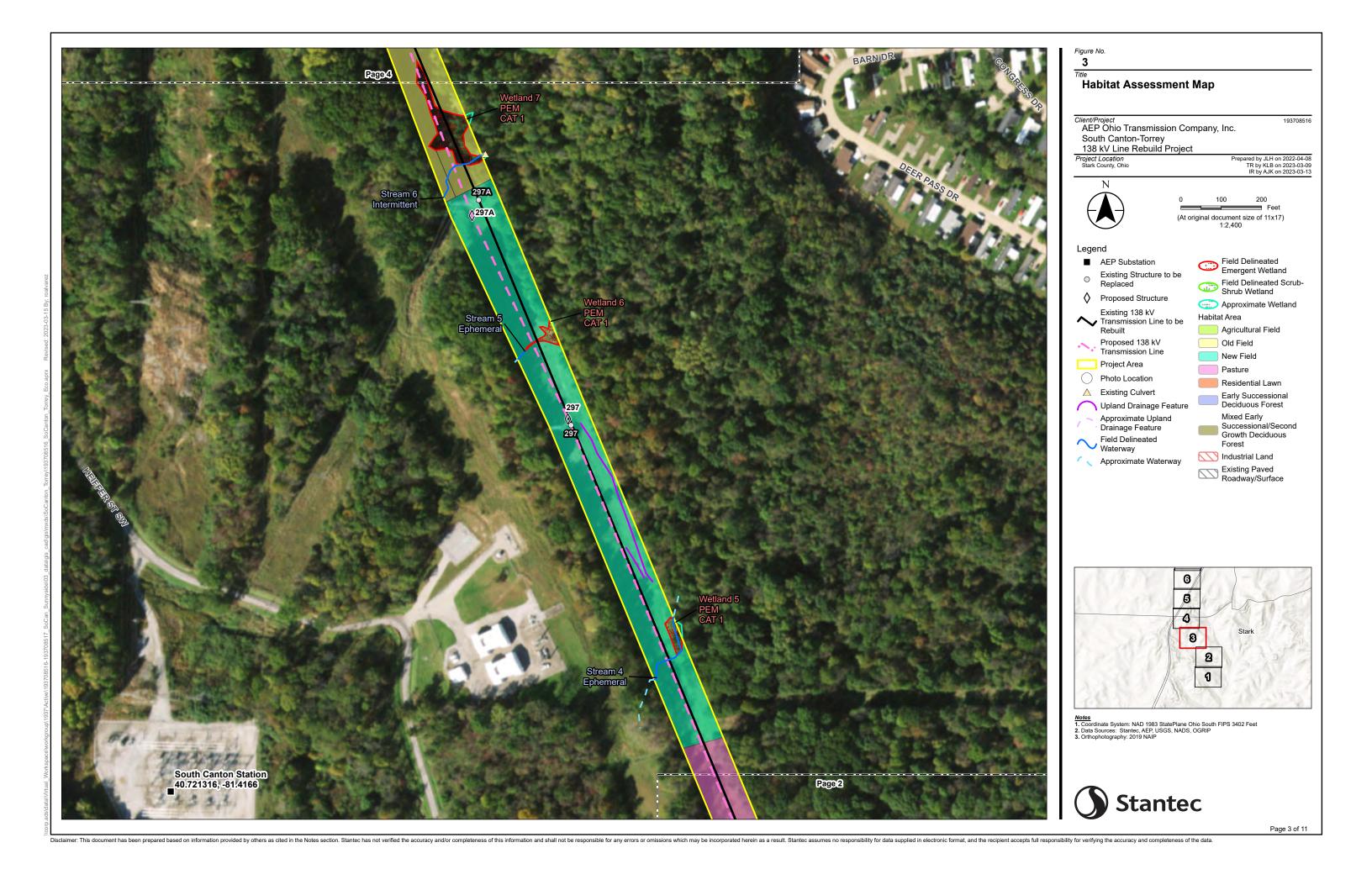


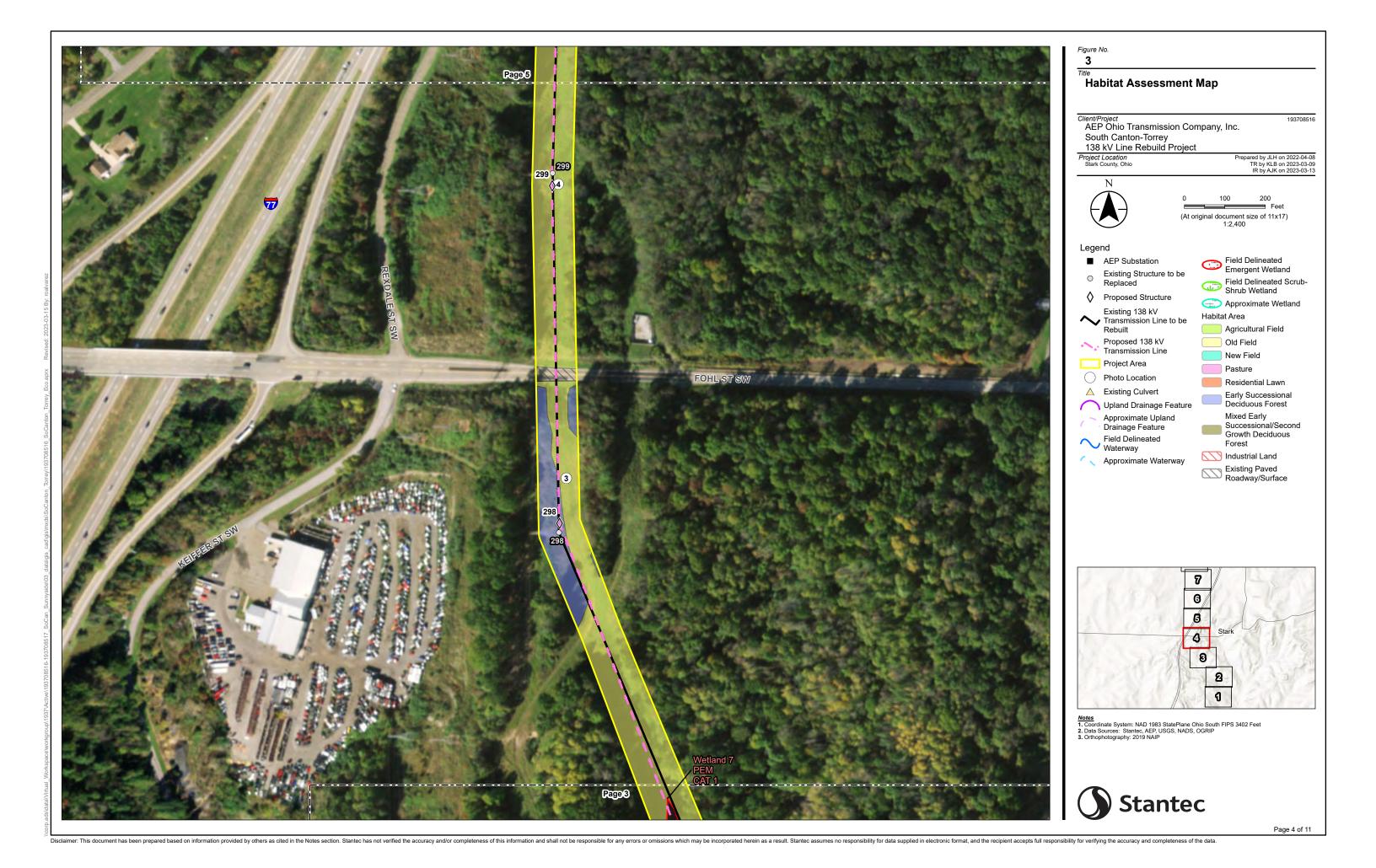
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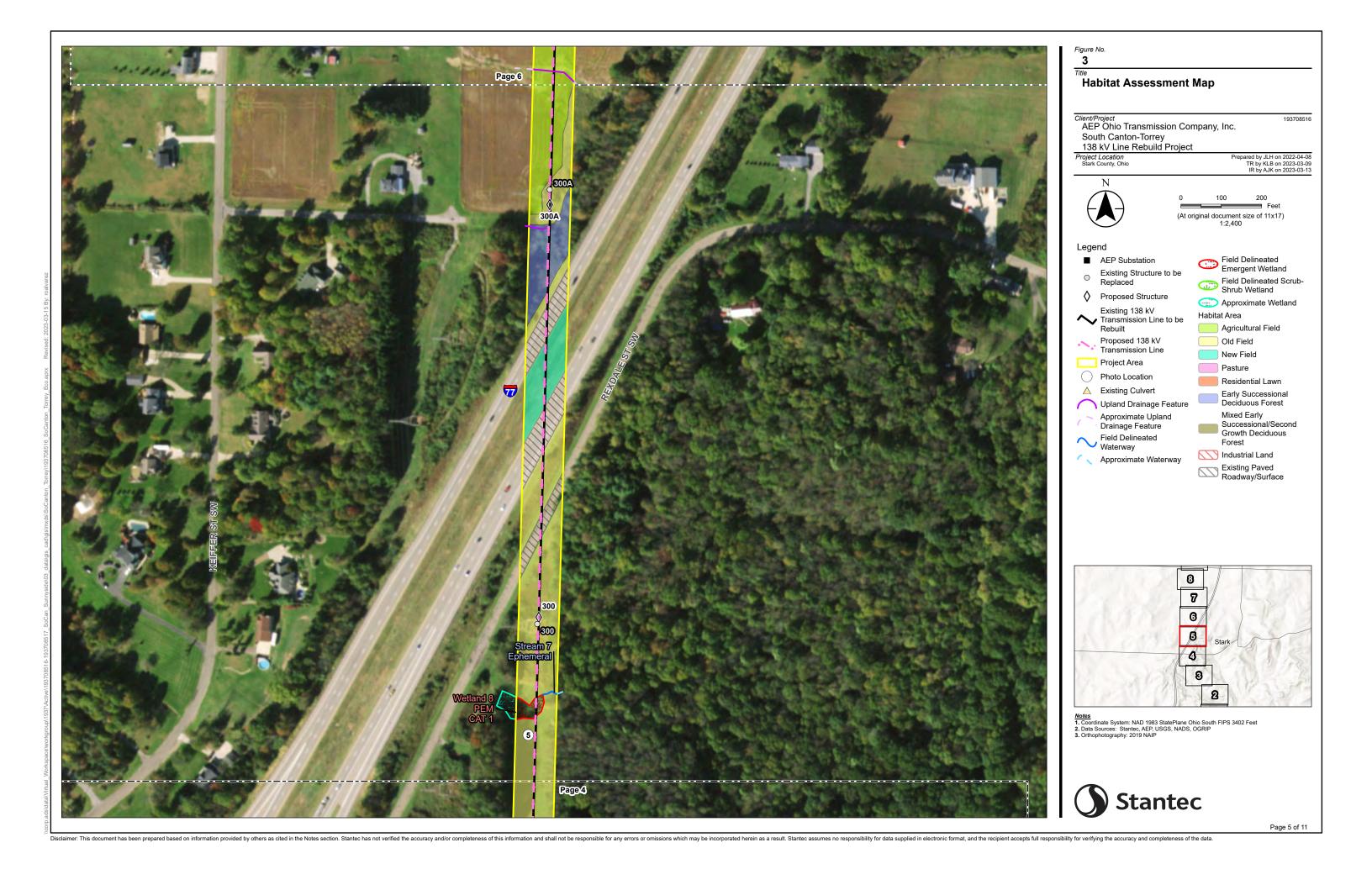
FIGURE 3 – HABITAT ASSESSMENT MAP

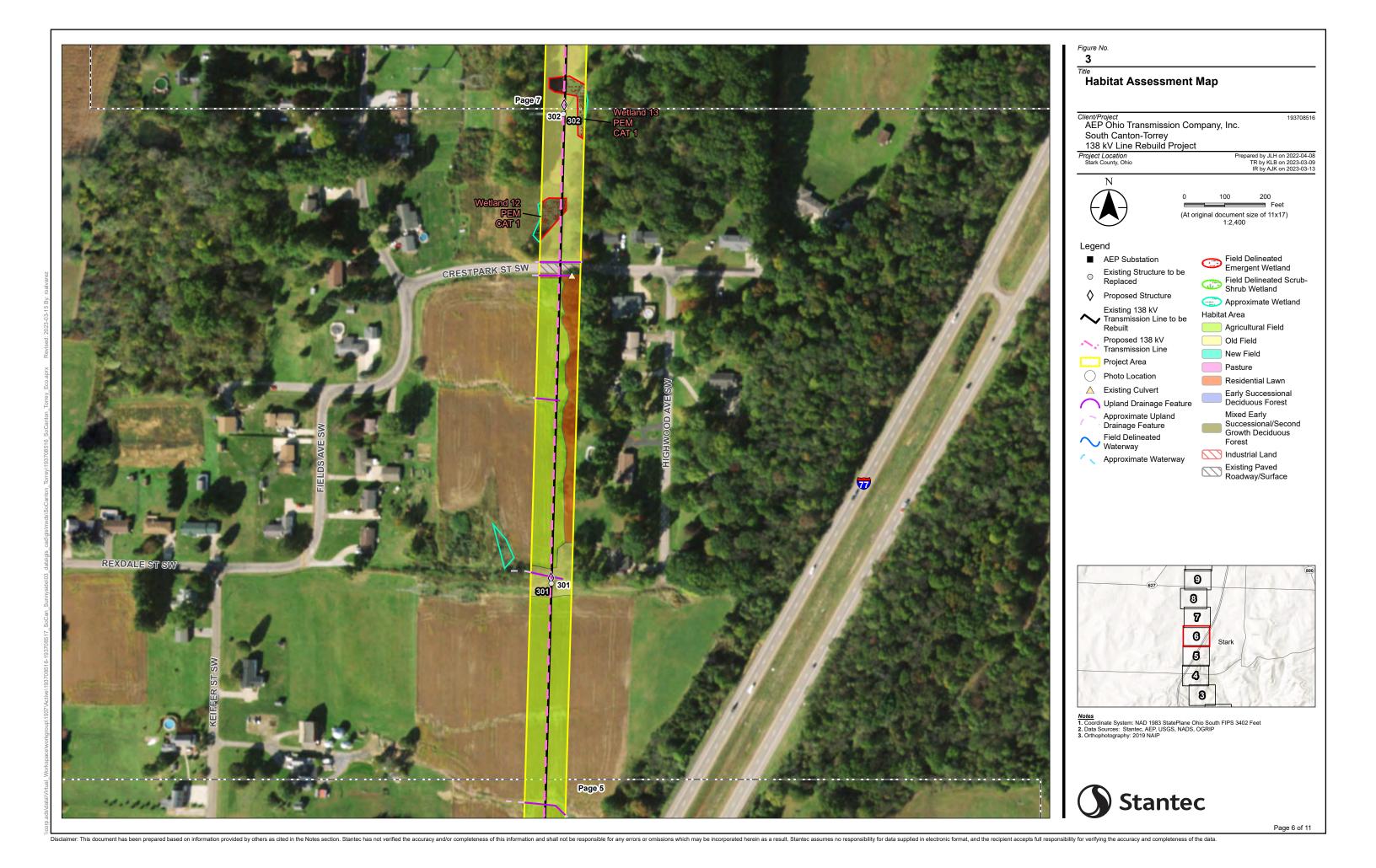


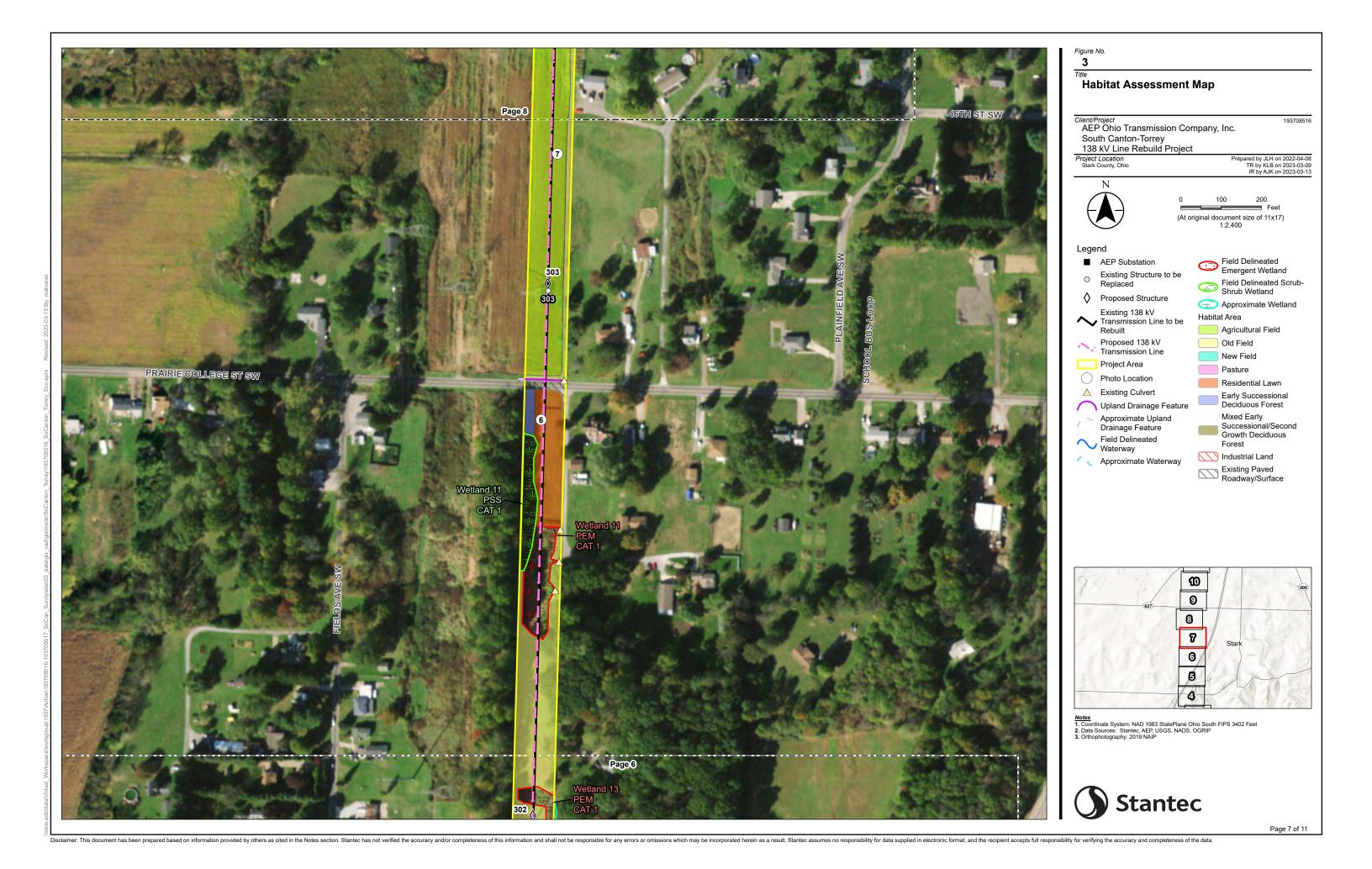


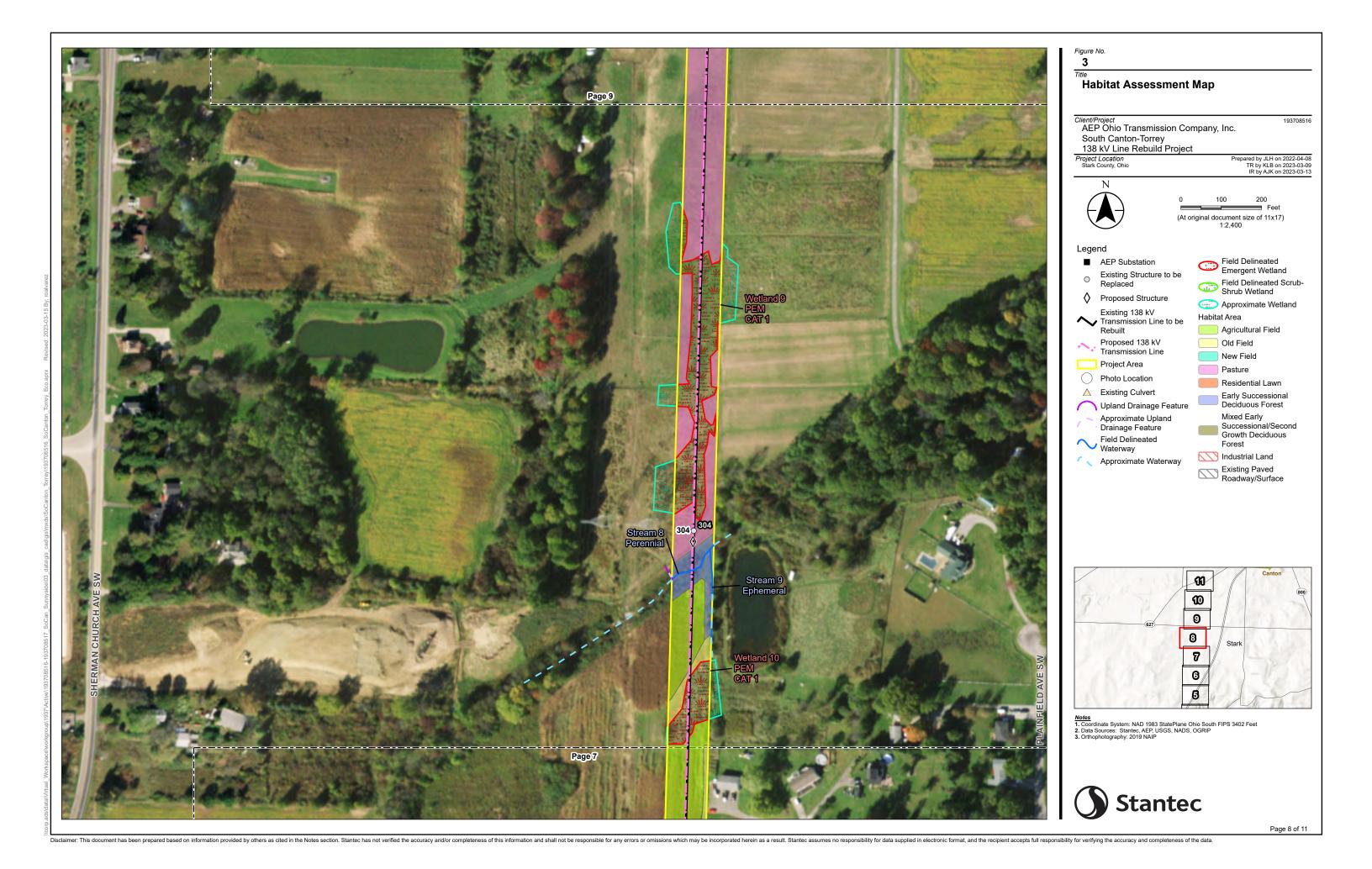


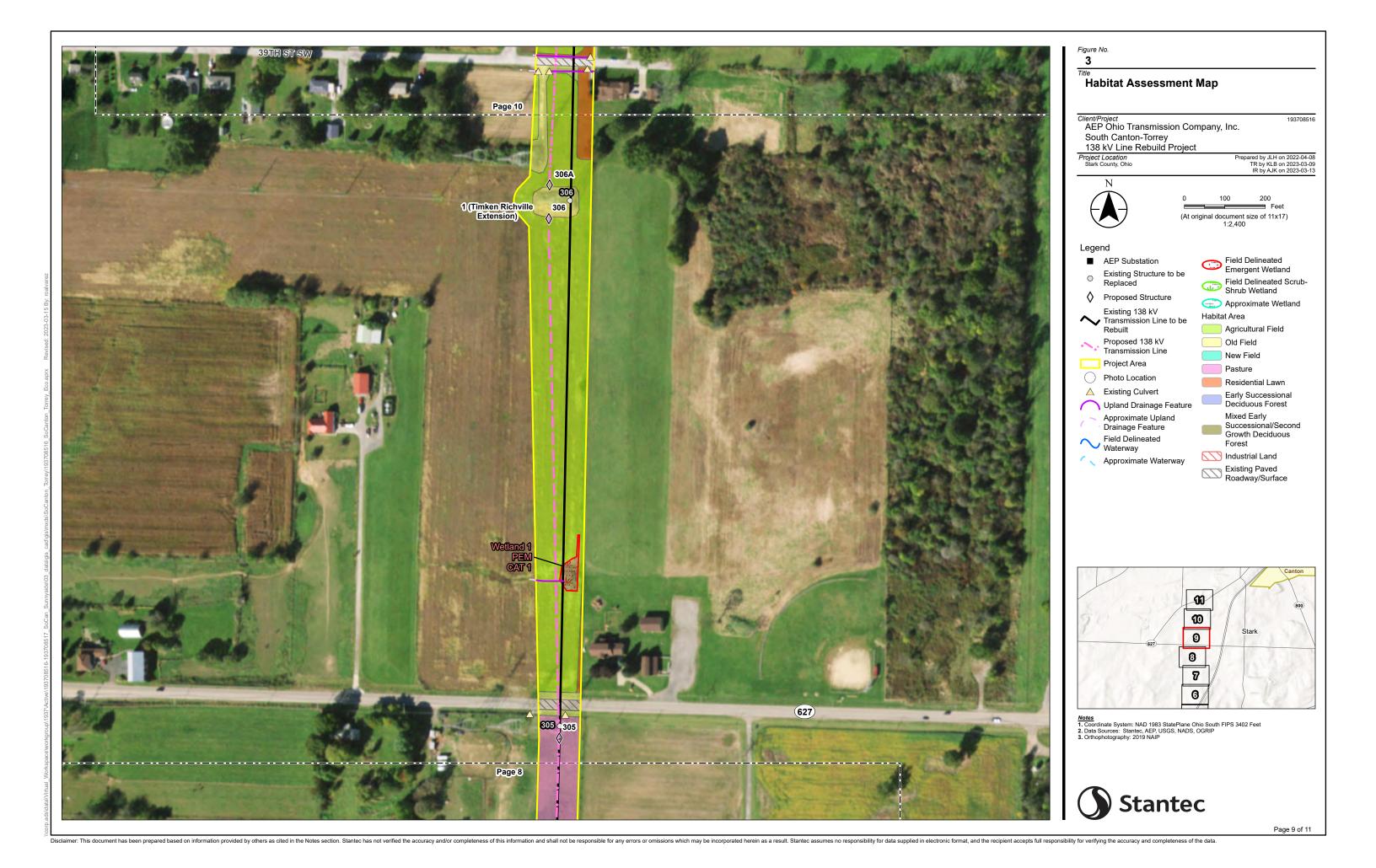


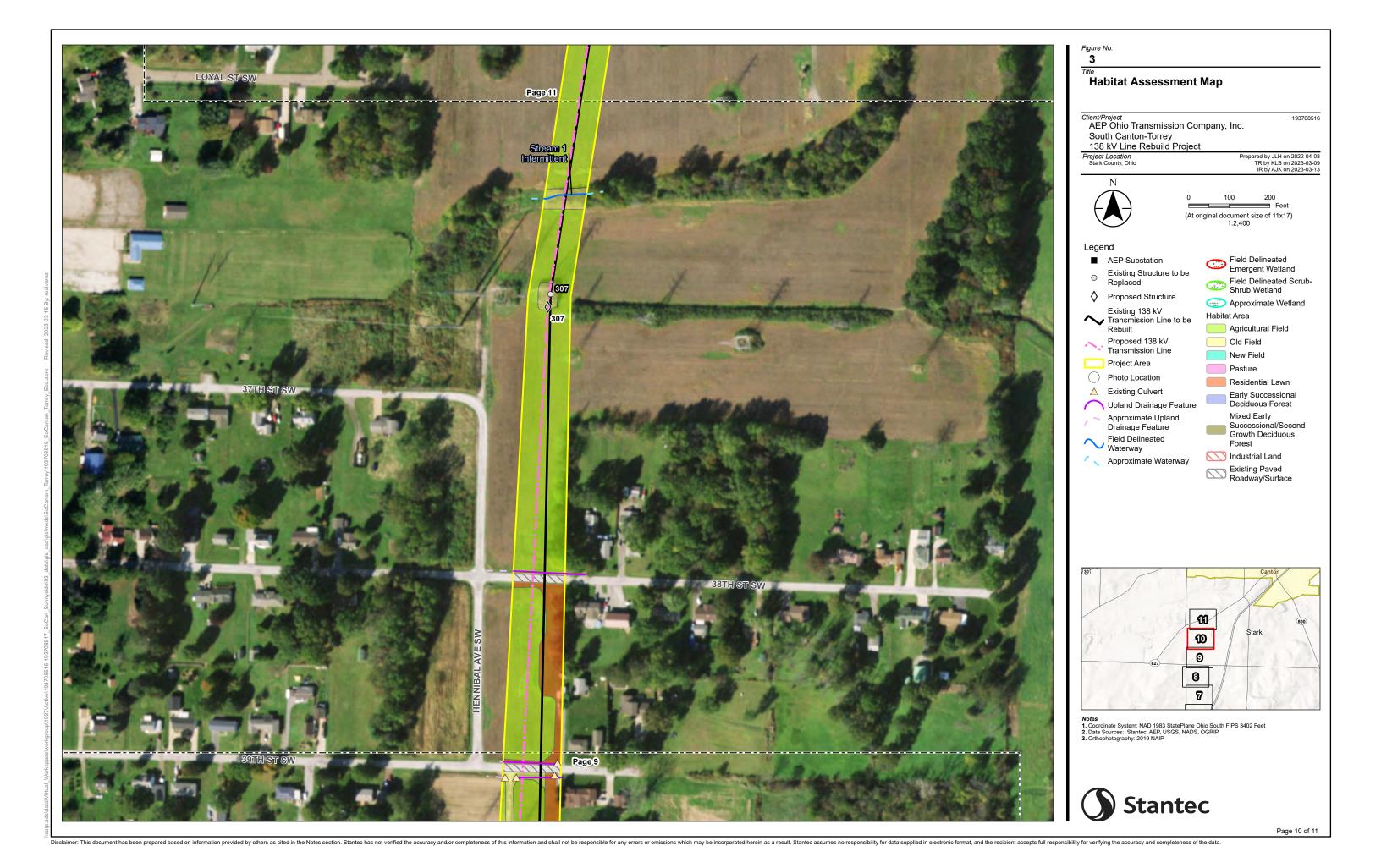








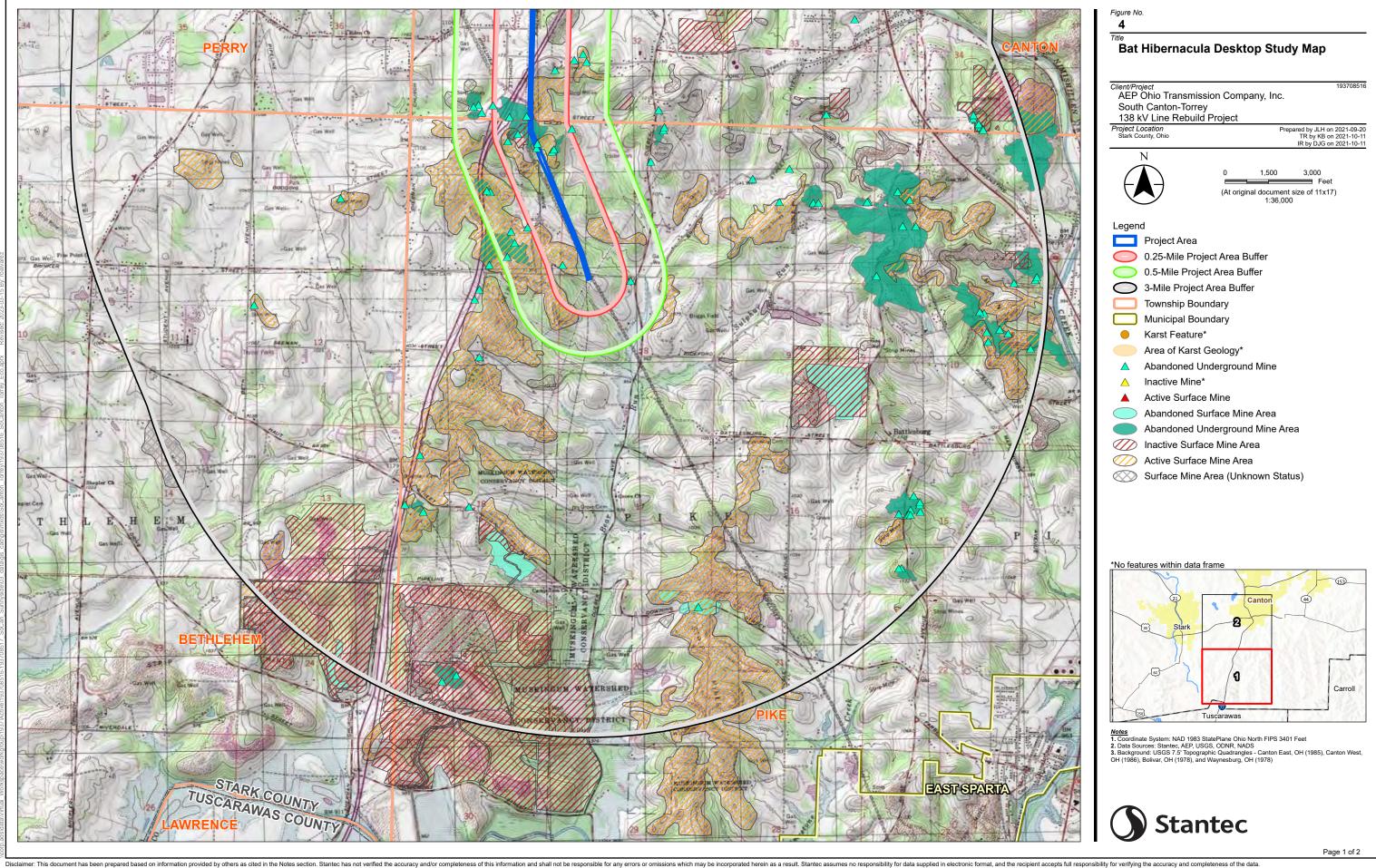


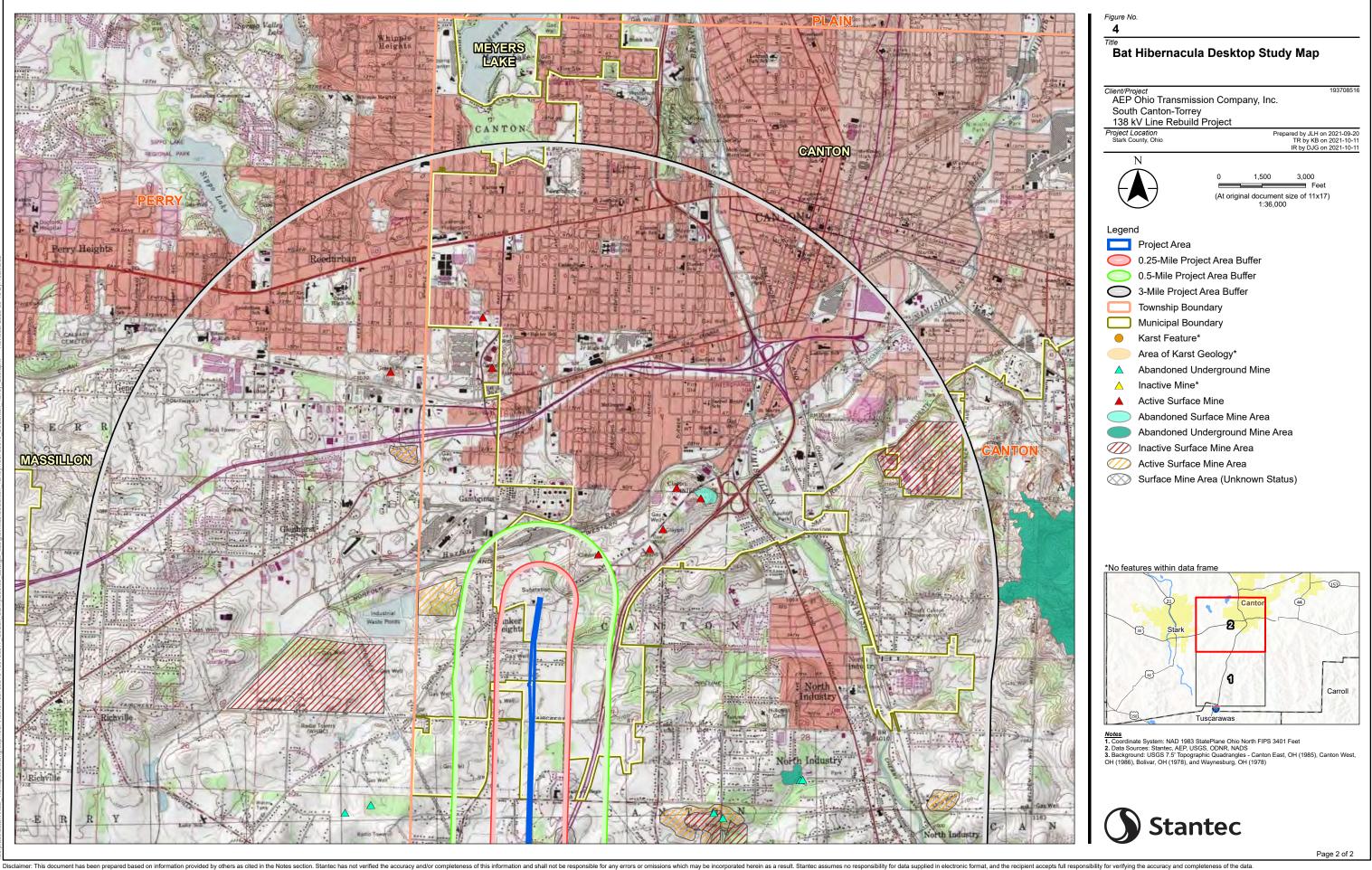




Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

FIGURE 4 – BAT HIBERNACULA DESKTOP STUDY MAP





Appendix B AGENCY CORRESPONDENCE



Office of Real Estate

John Kessler, Chief 2045 Morse Road – Bldg. E-2 Columbus, OH 43229 Phone: (614) 265-6621 Fax: (614) 267-4764

September 13, 2021

Daniel Godec Stantec Consulting Services Inc. 11687 Lebanon Road Cincinnati, Ohio 45241

Re: 21-0792; South Canton - Torrey 138 kV Line Rebuild Project

Project: The proposed project involves rebuilding approximately 3.5 miles of existing 138 kV transmission line between existing structure number 294 and Torrey Station.

Location: The proposed project is located in Canton and East Sparta, Stark County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

Natural Heritage Database: The Natural Heritage Database has the following data at or within a one mile radius of the project area:

Shore-growing peat moss (*Sphagnum riparium*), E Brush-tipped emerald (Somatochlora walshii), E Bolivar Reservoir – Muskingum Watershed Conservancy District

The review was performed on the project area specified in the request as well as an additional one mile radius. Records searched date from 1980. This information is provided to inform you of features present within your project area and vicinity. Additional comments on some of the features may be found in pertinent sections below.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Although all types of plant communities have been surveyed, we only maintain records on the highest quality areas.

Statuses are defined as: E = state endangered; T = state threatened; P = state potentiallythreatened; SC = state species of concern; SI = state special interest; U = state status under review; X =presumed extirpated in Ohio; FE =federal endangered, and FT =federal threatened. **Fish and Wildlife:** The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that Best Management Practices be utilized to minimize erosion and sedimentation.

The portion of the project from Crestpark Street Southwest to the southern terminus is within the vicinity of records for the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species. Because presence of state endangered bat species has been established in the area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. However, limited summer tree cutting inside this buffer may be acceptable after further consultation with DOW (contact Erin Hazelton at Erin.hazelton@dnr.ohio.gov).

In addition, the entire state of Ohio is within the range of the Indiana bat ($Myotis\ sodalis$), a state endangered and federally endangered species, the northern long-eared bat ($Myotis\ septentrionalis$), a state endangered and federally threatened species, the little brown bat ($Myotis\ lucifugus$), a state endangered species, and the tricolored bat ($Perimyotis\ subflavus$), a state endangered species. During the spring and summer (April 1 through September 30), these bat species predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, these species are also dependent on the forest structure surrounding roost trees. The DOW recommends tree cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH ≥ 20 if possible.

The DOW also recommends that a desktop habitat assessment is conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the project area. Direction on how to conduct habitat assessments can be found in the current USFWS "Range-wide Indiana Bat Survey Guidelines." If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Erin Hazelton for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

The project is within the range of the long-solid (*Fusconaia maculata maculata*), a state endangered mussel. Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact this species.

The project is within the range of the Iowa darter (*Etheostoma exile*), a state endangered fish. The DOW recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact this or other aquatic species.

The project is within the range of the spotted turtle (*Clemmys guttata*), a state threatened species. This species prefers fens, bogs and marshes, but also is known to inhabit wet prairies, meadows, pond edges, wet woods, and the shallow sluggish waters of small streams and ditches. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the northern harrier (*Circus hudsonis*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this habitat will not be impacted, this project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.

Water Resources: The Division of Water Resources has the following comment.

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project. Your local floodplain administrator contact information can be found at the website below.

 $\frac{http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community}{\%\,20Contact\%\,20List_8_16.pdf}$

ODNR appreciates the opportunity to provide these comments. Please contact Mike Pettegrew at mike.pettegrew@dnr.ohio.gov if you have questions about these comments or need additional information.

Mike Pettegrew Environmental Services Administrator (Acting) From: Ohio, FW3
To: Godec, Daniel

Cc: nathan.reardon@dnr.state.oh.us; Parsons, Kate

Subject: AEP South Canton - Torrey 138 kV Line Rebuild, Stark County, Ohio

Date: Monday, August 30, 2021 9:37:16 AM



TAILS# 03E15000-2021-TA-2144

Dear Mr. Godec,

The U.S Fish and Wildlife Service (Service) has received your recent correspondence requesting information about the subject proposal. We offer the following comments and recommendations to assist you in minimizing and avoiding adverse impacts to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

<u>Federally Threatened and Endangered Species</u>: The endangered Indiana bat (*Myotis sodalis*) and threatened northern long-eared bat (Myotis septentrionalis) occur throughout the State of Ohio. The Indiana bat and northern long-eared bat may be found wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and breed that may also include adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, woodlots, fallow fields, and pastures. Roost trees for both species include live and standing dead trees ≥3 inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities. These roost trees may be located in forested habitats as well as linear features such as fencerows, riparian forests, and other wooded corridors. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves, rock crevices and abandoned mines.

Seasonal Tree Clearing for Federally Listed Bat Species: Should the proposed project site contain trees ≥3 inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, we recommend removal of any trees ≥3 inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule (see http://www.fws.gov/midwest/endangered/mammals/nleb/index.html), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is recommended where Indiana bats are assumed present.

If implementation of this seasonal tree cutting recommendation is not possible, a summer presence/absence survey may be conducted for Indiana bats. If Indiana bats are not detected during the survey, then tree clearing may occur at any time of the year. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the

Ohio Field Office. Surveyors must have a valid federal permit. Please note that in Ohio summer mist net surveys may only be conducted between June 1 and August 15.

Section 7 Coordination: If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), then no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence. This letter provides technical assistance only and does not serve as a completed section 7 consultation document.

Stream and Wetland Avoidance: Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus is it important to conserve the functions and values of the remaining wetlands in Ohio (https://epa.ohio.gov/portals/47/facts/ohio_wetlands.pdf). We recommend avoiding and minimizing project impacts to all wetland habitats (e.g., forests, streams, vernal pools) to the maximum extent possible in order to benefit water quality and fish and wildlife habitat. Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the U.S. Army Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. Disturbed areas should be mulched and revegetated with native plant species. In addition, prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat. Should the project design change, or additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, coordination with the Service should be initiated to assess any potential impacts.

Thank you for your efforts to conserve listed species and sensitive habitats in Ohio. We recommend coordinating with the Ohio Department of Natural Resources due to the potential for the proposed project to affect state listed species and/or state lands. Contact Mike Pettegrew, Acting Environmental Services Administrator, at (614) 265-6387 or at mike.pettegrew@dnr.state.oh.us.

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or ohio@fws.gov.



Patrice M. Ashfield

Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW Kate Parsons, ODNR-DOW

Appendix C REPRESENTATIVE PHOTOGRAPHS

C.1 WETLAND AND WATERBODY PHOTOGRAPHS





Photograph Location 1. View of Wetland 1. Photograph taken facing north.



Photograph Location 1. View of Wetland 1. Photograph taken facing east.





Photograph Location 1. View of Wetland 1. Photograph taken facing south.



Photograph Location 1. View of Wetland 1. Photograph taken facing west.





Photograph Location 1. View of soil profile at wetland determination sample point SP03 within Wetland 1.



Photograph Location 2. View of upland (new field habitat) at wetland determination sample point SP04. Photograph taken facing north.





Photograph Location 2. View of upland (new field habitat) at wetland determination sample point SP04. Photograph taken facing east.



Photograph Location 3. View of Wetland 2. Photograph taken facing north.





Photograph Location 3. View of Wetland 2. Photograph taken facing east.



Photograph Location 3. View of Wetland 2. Photograph taken facing south.





Photograph Location 3. View of Wetland 2. Photograph taken facing west.



Photograph Location 3. View of soil profile at wetland determination sample point SP05 within Wetland 2.





Photograph Location 4. View of upland (pasture habitat) at wetland determination sample point SP06. Photograph taken facing north.



Photograph Location 4. View of upland (pasture habitat) at wetland determination sample point SP06. Photograph taken facing west.





Photograph Location 5. View of Stream 2. Photograph taken facing upstream/west.



Photograph Location 5. View of Stream 2. Photograph taken facing downstream/east.





Photograph Location 5. View of substrates of Stream 2.



Photograph Location 6. View of Stream 3. Photograph taken facing upstream/north.





Photograph Location 6. View of Stream 3. Photograph taken facing downstream/south.



Photograph Location 6. View of substrates of Stream 3.





Photograph Location 7. View of Wetland 3. Photograph taken facing north.



Photograph Location 7. View of Wetland 3. Photograph taken facing east.





Photograph Location 7. View of Wetland 3. Photograph taken facing south.



Photograph Location 7. View of Wetland 3. Photograph taken facing west.





Photograph Location 7. View of soil profile at wetland determination sample point SP07 within Wetland 3.



Photograph Location 8. View of upland (pasture habitat) at wetland determination sample point SP08. Photograph taken facing north.





Photograph Location 8. View of upland (pasture habitat) at wetland determination sample point SP08. Photograph taken facing west.



Photograph Location 9. View of Stream 4. Photograph taken facing upstream/northeast.





Photograph Location 9. View of Stream 4. Photograph taken facing downstream/southwest.



Photograph Location 9. View of substrates of Stream 4.





Photograph Location 10. View of Wetland 4. Photograph taken facing north.



Photograph Location 10. View of Wetland 4. Photograph taken facing east.





Photograph Location 10. View of Wetland 4. Photograph taken facing south.



Photograph Location 10. View of Wetland 4. Photograph taken facing west.





Photograph Location 10. View of soil profile at wetland determination sample point SP09 within Wetland 4.



Photograph Location 11. View of upland (new field habitat) at wetland determination sample point SP10. Photograph taken facing north.





Photograph Location 11. View of upland (new field habitat) at wetland determination sample point SP10. Photograph taken facing west.



Photograph Location 12. View of Wetland 5. Photograph taken facing north.





Photograph Location 12. View of Wetland 5. Photograph taken facing east.



Photograph Location 12. View of Wetland 5. Photograph taken facing south.





Photograph Location 12. View of Wetland 5. Photograph taken facing west.



Photograph Location 12. View of soil profile at wetland determination sample point SP11 within Wetland 5.





Photograph Location 13. View of upland (new field habitat) at wetland determination sample point SP12. Photograph taken facing north.



Photograph Location 13. View of upland (new field habitat) at wetland determination sample point SP12. Photograph taken facing south.





Photograph Location 14. View of Stream 5. Photograph taken facing upstream/northeast.



Photograph Location 14. View of Stream 5. Photograph taken facing downstream/southwest.





Photograph Location 14. View of substrates of Stream 5.



Photograph Location 15. View of Stream 6. Photograph taken facing upstream/east.





Photograph Location 15. View of Stream 6. Photograph taken facing downstream/southwest.



Photograph Location 15. View of substrates of Stream 6.





Photograph Location 16. View of Wetland 6. Photograph taken facing north.



Photograph Location 16. View of Wetland 6. Photograph taken facing east.





Photograph Location 16. View of Wetland 6. Photograph taken facing south.



Photograph Location 16. View of Wetland 6. Photograph taken facing west.





Photograph Location 16. View of soil profile at wetland determination sample point SP13 within Wetland 6.



Photograph Location 17. View of upland (old field habitat) wetland determination sample point SP14. Photograph taken facing north.





Photograph Location 17. View of upland (old field habitat) wetland determination sample point SP14. Photograph taken facing east.



Photograph Location 18. View of Wetland 7. Photograph taken facing north.





Photograph Location 18. View of Wetland 7. Photograph taken facing east.



Photograph Location 18. View of Wetland 7. Photograph taken facing south.





Photograph Location 18. View of Wetland 7. Photograph taken facing west.



Photograph Location 18. View of soil profile at wetland determination sample point SP15 within Wetland 7.





Photograph Location 19. View of upland (old field habitat) wetland determination sample point SP16. Photograph taken facing north.



Photograph Location 19. View of upland (old field habitat) wetland determination sample point SP16. Photograph taken facing east.





Photograph Location 20. View of Stream 7. Photograph taken facing upstream/west.



Photograph Location 20. View of Stream 7. Photograph taken facing downstream/east.





Photograph Location 20. View of substrates of Stream 7.



Photograph Location 21. View of Wetland 11. Photograph taken facing north.





Photograph Location 21. View of Wetland 11. Photograph taken facing east.



Photograph Location 21. View of Wetland 11. Photograph taken facing south.





Photograph Location 21. View of Wetland 11. Photograph taken facing west.



Photograph Location 21. View of soil profile at wetland determination sample point SP24 within Wetland 11.





Photograph Location 22. View of upland (old field habitat) at wetland determination sample point SP25. Photograph taken facing north.



Photograph Location 22. View of upland (old field habitat) at wetland determination sample point SP25. Photograph taken facing east.





Photograph Location 23. View of Wetland 12. Photograph taken facing north.



Photograph Location 23. View of Wetland 12. Photograph taken facing east.





Photograph Location 23. View of Wetland 12. Photograph taken facing south.



Photograph Location 23. View of Wetland 12. Photograph taken facing west.





Photograph Location 23. View of soil profile at wetland determination sample point SP26 within Wetland 12.



Photograph Location 24. View of upland (old field habitat) at wetland determination sample point SP 27. Photograph taken facing south.





Photograph Location 24. View of upland (old field habitat) at wetland determination sample point SP27. Photograph taken facing west.



Photograph Location 25. View of palustrine scrub-shrub (PSS) portion of Wetland 10. Photograph taken facing north.





Photograph Location 25. View of PSS portion of Wetland 10. Photograph taken facing east.



Photograph Location 25. View of PSS portion of Wetland 10. Photograph taken facing south.





Photograph Location 25. View of PSS portion of Wetland 10. Photograph taken facing west.



Photograph Location 25. View of soil profile at PSS wetland determination sample point SP21 within Wetland 10.





Photograph Location 26. View of palustrine emergent (PEM) portion of Wetland 10. Photograph taken facing north.



Photograph Location 26. View of PEM portion of Wetland 10. Photograph taken facing east.





Photograph Location 26. View of PEM portion of Wetland 10. Photograph taken facing south.



Photograph Location 26. View of PEM portion of Wetland 10. Photograph taken facing west.





Photograph Location 26. View of soil profile at PEM wetland determination sample point SP22 within Wetland 10.



Photograph Location 27. View of upland (old field habitat) at wetland determination sample point SP23. Photograph taken facing east.





Photograph Location 27. View of upland (old field habitat) at wetland determination sample point SP23. Photograph taken facing south.



Photograph Location 28. View of Wetland 9. Photograph taken facing north.





Photograph Location 28. View of Wetland 9. Photograph taken facing east.



Photograph Location 28. View of Wetland 9. Photograph taken facing south.





Photograph Location 28. View of Wetland 9. Photograph taken facing west.



Photograph Location 28. View of soil profile at wetland determination sample point SP19 within Wetland 09.





Photograph Location 29. View of upland (agricultural field habitat) at wetland determination sample point SP20. Photograph taken facing east.



Photograph Location 29. View of upland (agricultural field habitat) at wetland determination sample point SP20. Photograph taken facing south.





Photograph Location 30. View of Stream 9. Photograph taken facing upstream/south.



Photograph Location 30. View of Stream 9. Photograph taken facing downstream/north.





Photograph Location 30. View of substrates of Stream 9.



Photograph Location 31. View of Stream 8. Photograph taken facing upstream/northeast.





Photograph Location 31. View of Stream 8. Photograph taken facing downstream/west.



Photograph Location 31. View of substrates of Stream 8.





Photograph Location 32. View of Wetland 8. Photograph taken facing north.



Photograph Location 32. View of Wetland 8. Photograph taken facing east.





Photograph Location 32. View of Wetland 8. Photograph taken facing south.



Photograph Location 32. View of Wetland 8. Photograph taken facing west.





Photograph Location 32. View of soil profile at wetland determination sample point SP17 within Wetland 8.



Photograph Location 33. View of upland (pasture habitat) at wetland determination sample point SP18. Photograph taken facing north.





Photograph Location 33. View of upland (pasture habitat) at wetland determination sample point SP 18. Photograph taken facing south.



Photograph Location 34. View of Wetland 13. Photograph taken facing north.





Photograph Location 34. View of Wetland 13. Photograph taken facing east.



Photograph Location 34. View of Wetland 13. Photograph taken facing south.





Photograph Location 34. View of Wetland 13. Photograph taken facing west.



Photograph Location 34. View of soil profile at wetland determination sample point SP01 within Wetland 13.





Photograph Location 35. View of upland (agricultural field habitat) at wetland determination sample point SP02. Photograph taken facing north.



Photograph Location 35. View of upland (agricultural field habitat) at wetland determination sample point SP02. Photograph taken facing west.





Photograph Location 36. View of Stream 1. Photograph taken facing upstream/west.



Photograph Location 36. View of Stream 1. Photograph taken facing downstream/east.





Photograph Location 36. View of substrates of Stream 1.



Photograph Location 37. Representative view of an upland drainage feature. Photograph taken facing north.





Photograph Location 38. Representative view of an upland drainage feature. Photograph taken facing east.

C.2 HABITAT PHOTOGRAPHS





Photograph Location 1. Representative view of new field habitat. Photograph taken facing north.



Photograph Location 2. Representative view of pasture habitat. Photograph taken facing north.





Photograph Location 2. Representative view of pasture habitat. Photograph taken facing south.



Photograph Location 3. Representative view of early successional deciduous forest habitat.

Photograph taken facing east.





Photograph Location 3. Representative view of old field habitat. Photograph taken facing south.



Photograph Location 4. Representative view of mixed early successional/second growth deciduous forest habitat. Photograph taken facing east.





Photograph Location 5. Representative view of existing access road. Photograph taken facing west.



Photograph Location 6. Representative view of residential lawn habitat. Photograph taken facing south.





Photograph Location 6. Representative view of early successional deciduous forest habitat. Photograph taken facing west.



Photograph Location 7. Representative view of agricultural field habitat. Photograph taken facing north.





Photograph Location 8. Representative view of industrial land (existing Torrey Station). Photograph taken facing north.

Appendix D DATA FORMS

D. 1 WETLAND DETERMINATION DATA FORMS



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Project/Site:	South Cantor	n-Torrey 138 kV Line Re	ebuild Projec	t			Stantec Project #:	193708516		Date:	04/04/22
Applicant:		Transmission Compa					,			County:	Stark
Investigator #1:				Invest	igator #2:	Matt De	nzler			State:	Ohio
Soil Unit:	Sebring silt	loam, 0-2% slopes					/I/WWI Classification:	N/A		Wetland ID:	Wetland 1
Landform:	Depression	· 1		Loc	cal Relief:	Concav	9			Sample Point:	SP01
Slope (%):	0-2	Latitude:	40.752200	L	ongitude:	-81.414	114	Datum:	NAD83	Community ID:	PEM
Are climatic/hyd	drologic cond	ditions on the site typ						□ Yes □	No	Section:	
		or Hydrology □sigr					Are normal circumsta	ances present	?	Township:	
		or Hydrology 🗆 natu					Yes	□ No ·		Range:	Dir:
SUMMARY OF		, , ,									
Hydrophytic Ve		sent?			. □ No			Hydric Soils I	Present?		
Wetland Hydrol				Yes						Within A Wetlan	
Remarks:								•	<u> </u>		
HYDROLOGY											
	ology Indio	ntare (Chack hara if	indicators	ara not r	orocont	١□					
Primary		ators (Check here if	indicators	are not p	Jieseni)□			Secondary:		
<u>r minary</u>		Water		П	B9 - Wate	er-Stained	Leaves			B6 - Surface Soil	Cracks
~					B13 - Aqu					B10 - Drainage P	
	A3 - Saturation				B15 - Mar					B16 - Moss Trim	
				_	C1 - Hydr		de Odor spheres on Living Roots			C2 - Dry-Season C8 - Cravfish Bur	
							spheres on Living Roots				rows isible on Aerial Imagery
				П			duction in Tilled Soils			D1 - Stunted or S	
	B5 - Iron Dep	oosits			C7 - Thin	Muck Surf	ace			D2 - Geomorphic	
		on Visible on Aerial Ima			Other (Ex	plain in Re	marks)			D3 - Shallow Aqu	
	B8 - Sparsely	y Vegetated Concave S	urtace							D4 - Microtopogra D5 - FAC-Neutral	
E: 1101										D3 - 1 AC-Neutral	1631
Field Observat				0.0	<i>(</i> ;)						
Surface Water		☑ Yes □ No	Depth:		(in.)			Wetland Hyd	drology Pr	esent?	Yes □ No
Water Table Pr		☑ Yes ☐ No	Depth:		(in.)			·			
Saturation Pres	sent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	ded Data (str	eam gauge, monitorin	ng well, aeria	al photos	, previous	inspectio	ns), if available:		N/A		
Damanlini											
Remarks:											
Remarks:											
SOILS											
	e:	Sebring silt loam, 0-	-2% slopes	i							
SOILS Map Unit Name					ators.) (Type: C=0	Concentration, D:	-Depletion, RM-Reduced Matrix, CS-Cov	vered/Coated Sand Grains;	Location: PL=Pore I	Lining, M=Matrix)	
SOILS Map Unit Name					ators.) (Type: C=0	Concentration, Da		rered/Coated Sand Grains;	Location: PL=Pore I	Lining, M=Matrix)	Texture
SOILS Map Unit Name Profile Descrip	otion (Describe to			Matrix	ators.) (Type: C=0	Concentration, D:			Location: PL=Pore I	Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Profile Descrip	Describe to Bottom	the depth needed to document the indi	cator or confirm the a	Matrix		Concentration, D:	Re	edox Features	1	1	
SOILS Map Unit Name Profile Descrip Top Depth	Bottom Depth	the depth needed to document the indi	cator or confirm the a	Matrix Moist)	%		Color (Moist)	edox Features %	Туре	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Profile Descrip Top Depth 0	Bottom Depth 16	the depth needed to document the indi Horizon	Color (I	Matrix Moist) 5/2	% 95	10YR	Color (Moist) 5/8	edox Features % 5	Type C	Location M	(e.g. clay, sand, loam)
SOILS Map Unit Name Profile Descrip Top Depth 0	Bottom Depth 16	the depth needed to document the indi Horizon 1	Color (I	Matrix Moist) 5/2	% 95 	10YR 	Re Color (Moist) 5/8	edox Features % 5 	Type C 	Location M	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0	Bottom Depth 16	the depth needed to document the indi Horizon 1	Color (I	Matrix Moist) 5/2	% 95 	10YR 	Color (Moist) 5/8	edox Features % 5	Type C 	Location M 	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth	Bottom Depth 16	the depth needed to document the indi Horizon 1	Color (I	Matrix Moist) 5/2	% 95 	10YR 	Re Color (Moist) 5/8 	% 5	Type C	Location M 	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0	Bottom Depth 16	the depth needed to document the indi Horizon 1	Color (I	Matrix Moist) 5/2	% 95 	10YR	Re Color (Moist) 5/8 	edox Features	Type C 	Location M	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0	Dotion (Describe to Depth 16	the depth needed to document the indi Horizon 1	Color (I	Matrix Moist) 5/2	% 95 	10YR	Re Color (Moist) 5/8 	edox Features % 5	Type C	Location M	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0	Depth 16	the depth needed to document the indi Horizon 1	Color (I	Matrix Moist) 5/2	% 95	10YR	Re Color (Moist) 5/8 	edox Features % 5	Type C	Location M	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field In	Horizon 1	Color (I	basence of indicates the state of the state	% 95	10YR	Re Color (Moist) 5/8 	edox Features	Type C	Location M matic Soils ¹	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth O NRCS Hydric	Detion (Describe to: Bottom Depth 16 Soil Field Ir A1- Histosol A2 - Histic Ej	Horizon 1 ndicators (check helpipedon	Color (I	basence of indicates the state of the state	% 95	10YR	Re Color (Moist) 5/8 	edox Features	Type C s for Proble	Location M	(e.g. clay, sand, loam)
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field Ir A1- Histosol A2 - Histos E A3 - Black Hi	Horizon 1	Color (I	basence of indicates the state of the state	% 95 tot preser 88 - Polyv. S9 - Thin S11 - Higl	10YR	Re Color (Moist) 5/8 w Surface (LRR R, MLRA 149B) Sands	edox Features % 5 Indicator	Type C s for Proble A10 - 2 cm I/A16 - Coast S3 - 5cm Mi	Location M matic Soils Muck (LRR K, L, MLRA † Prairie Redox (LRR ucky Peat of Peat ((e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Detion (Describe to: Bottom Depth 16 Soil Field In A1- Histosol A2 - Histic E _I A3 - Black Hi A4 - Hydroge	Horizon 1 dicators (check here)	Color (I	basence of indicates the indic	% 95	10YR	Re Color (Moist) 5/8 w Surface (LRR R, MLRA 1498) GCE (LRR R, MLRA 1498) Sands Mineral (LRR K, L)	edox Features % 5	Type C S for Proble A10 - 2 cm A16 - Coast S3 - 5 cm Mt S7 - Dark S	Location M Muck (LRR K, L, MILRA A Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M)	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Detion (Describe to: Bottom Depth 16 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier	Horizon 1	Color (I	besence of indicates Matrix Moist) 5/2 ors are r	% 95 S8 - Polyv S9 - Thin S11 - Higl F1 - Loarn F2 - Loarn	10YR tt	Re Color (Moist) 5/8 W Surface (LRR R, MLRA 149B) 3CG (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	edox Features % 5 Indicator	Type C s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S7 - Dark S S8 - Polyval	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Depth Bottom Depth 16 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete	Horizon 1 ndicators (check herein istic an Sulfide di Layers ed Below Dark Surface	Color (I	besence of indicate Matrix Moist) 5/2 ors are r	% 95 se Polyx S9 - Thin S11 - Higl F1 - Loarr F3 - Deple	10YR	Re Color (Moist) 5/8 W Surface (LRR R, MLRA 149B) Sands Alineral (LRR K, L) Matrix K	edox Features % 5 Indicator	Type C	Location M matic Soils Muck (LRR K, L, MLRA + Prairie Redox (LRR ucky Peat of Peat , L urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth O NRCS Hydric	Depth Bottom Depth 16 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplett A12 - Thick It	Horizon 1	Color (I	besence of indicate Matrix Moist) 5/2 ors are r	% 95	10YR	Re Color (Moist) 5/8 w Surface (LRR R, MLRA 149B) Sands Alineral (LRR K, L) Matrix (fface	edox Features % 5 Indicator	Type C sfor Proble A10 - 2 coast S3 - 5cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M	Location M matic Soils Muck (LRR K, L, MLRA † Prairie Redox (LRR k, L, M) urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L, M) ark Surface (LRR K, L, M)	(e.g. clay, sand, loam) clay loam (LA9B) LK, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Detion (Describe to: Bottom Depth 16 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black HI A4 - Hydroge A5 - Stratifier A11 - Deplete A12 - Thick I S1 - Sandy M S4 - Sandy G	Horizon 1	Color (I	besence of indicate Matrix Moist) 5/2	% 95	10YR	Re Color (Moist) 5/8	edox Features % 5	Type C sfor Proble A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm	Location M matic Soils Muck (LRR K, L, MLRA + Prairie Redox (LRR ucky Peat of Peat , L urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L	(e.g. clay, sand, loam) clay loam (LA9B) LK, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Detion (Describe to: Bottom Depth 16 Soil Field In A1- Histosol A2 - Histic El A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy S S5 - Sandy R	Horizon 1	Color (I	besence of indicates the indic	% 95	10YR	Re Color (Moist) 5/8	edox Features % 5 Indicator	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L M) Prairie Redox (LRR K, L M) Urface (LRR K, L M) Ianganese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, 1	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth O NRCS Hydric	Depth Bottom Depth 16 Soil Field Ir A1- Histosol A2- Histic Ep A3- Black Hi A4- Hydroge A5- Stratifiee A11- Deplet A12- Thick I S1- Sandy M S4- Sandy G S5- Sandy F S6- Strippec	Horizon 1	Color (I	besence of indicates the indic	% 95	10YR	Re Color (Moist) 5/8	edox Features % 5	Type C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-N F19 - Piedm F21 - Red P F21 - Red P F21 - Red P F21 - Red P F21 - West	Location M	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth O NRCS Hydric	Depth Bottom Depth 16 Soil Field Ir A1- Histosol A2- Histic Ep A3- Black Hi A4- Hydroge A5- Stratifiee A11- Deplet A12- Thick I S1- Sandy M S4- Sandy G S5- Sandy F S6- Strippec	Horizon 1	Color (I	besence of indicates the indic	% 95	10YR	Re Color (Moist) 5/8	edox Features % 5	Type C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Depth Bottom Depth 16 Soil Field Ir A1- Histosol A2- Histic Ep A3- Black Hi A4- Hydroge A5- Stratifiee A11- Deplet A12- Thick I S1- Sandy M S4- Sandy G S5- Sandy F S6- Strippec	Horizon 1	Color (I	besence of indicates the indic	% 95	10YR	Re Color (Moist) 5/8	edox Features % 5 Indicator	Type C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Depth Bottom Depth 16 Soil Field Ir A1- Histosol A2- Histic Ep A3- Black Hi A4- Hydroge A5- Stratifiee A11- Deplet A12- Thick I S1- Sandy M S4- Sandy G S5- Sandy F S6- Strippec	Horizon 1	Color (I	besence of indicates the indic	% 95	10YR	Re Color (Moist) 5/8	edox Features % 5 Indicator	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L) Prairie Redox (LRR K, L) Urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) anganese Masses iont Floodplain Soi arent Material Spodic (MLRA 144A, 1 Shallow Dark Surf ain in Remarks) sition and wetland hydrology ((e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Detion (Describe to: Bottom Depth 16 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydros A5 - Stratifiec A11 - Deplete A12 - Thick I S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S7 - Dark Su	Horizon 1	Color (I	besence of indicate Matrix Moist) 5/2 Ors are r	% 95 S8 - Poly S9 - Thin S11 - Higl F1 - Loarn F3 - Deple F6 - Redo	10YR	Re Color (Moist) 5/8	edox Features % 5 Indicator Indicators of disturbed on disturbed	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L) Prairie Redox (LRR K, L) Urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) anganese Masses iont Floodplain Soi arent Material Spodic (MLRA 144A, 1 Shallow Dark Surf ain in Remarks) sition and wetland hydrology ((e.g. clay, sand, loam) clay loam



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Wetland ID: Wetland 1 Sample Point: SP01 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant 2. Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 4 Total Number of Dominant Species Across All Strata: 2 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) 7 8. Prevalence Index Worksheet 9 Total % Cover of: Multiply by: 10. OBL spp. __ _ x 1 = FACW spp. ____ Total Cover = 90 x 2 = 180 FAC spp. 0 x 3 = FACU spp. _ Sapling/Shrub Stratum (Plot size: 5 meter radius) x 5 = UPL spp. 0 2. 100 ____(A) 190 ____(B) 3. Total 4. 5. Prevalence Index = B/A = 1.900 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. Yes □ No Rapid Test for Hydrophytic Vegetation 10. □ No Yes Dominance Test is > 50% Total Cover = 0 Yes □ No Prevalence Index is ≤ 3.0 * ✓ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ✓ No Problem Hydrophytic Vegetation (Explain) * Juncus effusus 10 OBL * Indicators of hydric soil and wetland hydrology must be Υ **FACW** Phalaris arundinacea 30 present, unless disturbed or problematic. Υ 3. Poa palustris 60 FACW 4. **Definitions of Vegetation Strata:** 5. __ --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 100 Woody Vine Stratum (Plot size: 10 meter radius) 2. 3. Hydrophytic Vegetation Present ☐ Yes ☐ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Project/Site:	South Canto	n-Torrey 138 kV Line Re	ebuild Proiec	t			Stantec Project #:	193708516		Date:	04/04/22
Applicant:		Transmission Comp					,			County:	Stark
Investigator #1	: Kate Boma	ar	•	Investi	igator #2:	Matt De	nzler			State:	Ohio
Soil Unit:	Sebring silt	t loam, 0-2% slopes				NV	/I/WWI Classification:	N/A		Wetland ID:	Wetland 1
Landform:	Plain			Loc	al Relief:	Linear				Sample Point:	SP02
Slope (%):	0-2	Latitude:			ongitude:				NAD83	Community ID:	UPL
Are climatic/hy	drologic cond	ditions on the site typ	oical for this	s time of	year? (If no	o, explain in	remarks)	□ Yes □	No	Section:	
Are Vegetation	☑, Soil □,	or Hydrology □sign	nificantly dis	sturbed?			Are normal circumst	ances present	?	Township:	
Are Vegetation	□, Soil □,	or Hydrology 🗆 natu	urally proble	ematic?			Yes	□No		Range:	Dir:
SUMMARY OF	FINDINGS										
Hydrophytic Ve	getation Pre	sent?		☐ Yes	☑ No			Hydric Soils	Present?		☐ Yes ☑ No
Wetland Hydro	logy Present	?		□ Yes	. ☑ No			Is This Samp	ling Point \	Within A Wetlan	d?
Remarks:											
HYDROLOGY											
	ology Indic	ators (Check here if	indicators	are not r	resent) 🗾					
Primary		ators (Check here ii	iliulcators	are not p	n esent) <u>U</u>			Secondary:		
	A1 - Surface	Water			B9 - Wate	er-Stained	Leaves			B6 - Surface Soil	Cracks
	A2 - High Wa				B13 - Aqu					B10 - Drainage Pa	
					B15 - Mar					B16 - Moss Trim I	
					C1 - Hydr		spheres on Living Roots			C2 - Dry-Season 'C8 - Crayfish Burn	
				H			educed Iron		H		sible on Aerial Imagery
							duction in Tilled Soils			D1 - Stunted or St	
					C7 - Thin					D2 - Geomorphic	
		on Visible on Aerial Ima		Ш	Other (Ex	plain in Re	marks)			D3 - Shallow Aqui	
	B8 - Sparsei	y Vegetated Concave S	итасе							D4 - Microtopogra D5 - FAC-Neutral	
Field Observa	41									Do 1710 Houlia	1000
					<i>(</i> : \						
Surface Water		☐ Yes ☑ No	Depth:		(in.)			Wetland Hyd	drology Pr	esent?	Yes 🗹 No
Water Table P		☐ Yes ☑ No	Depth:		(in.)						
Saturation Pres	sent?	☐ Yes ☑ No	Depth:		(in.)						
December D											
Describe Record	ded Data (str	eam gauge, monitorin	ng well, aeria	al photos	, previous	inspectio	ns), if available:		N/A		
Remarks:	ded Data (str	eam gauge, monitorin	ng well, aeria	al photos	, previous	inspectio	ns), if available:		N/A		
Remarks:	ded Data (str	eam gauge, monitorin	ng well, aeria	al photos	, previous	inspectio	ns), if available:		N/A		
	ded Data (str	eam gauge, monitorin	ng well, aeria	al photos	, previous	inspectio	ns), if available:		N/A		
Remarks:	,	eam gauge, monitoring silt loam, 0-			, previous	inspectio	ns), if available:		N/A		
Remarks: SOILS Map Unit Name	e:	Sebring silt loam, 0-	-2% slopes			·	ns), if available: -Depletion, RM=Reduced Matrix, CS=Cov	vered/Coated Sand Grains;		.ining, M=Matrix)	
Remarks: SOILS Map Unit Name Profile Descri	e:	Sebring silt loam, 0-	-2% slopes	absence of indica	ators.) (Type: C=0	·	=Depletion, RM=Reduced Matrix, CS=Cox	edox Features		.ining, M=Matrix)	Texture
Remarks: SOILS Map Unit Name Profile Descri	e: ption (Describe to	Sebring silt loam, 0-	-2% slopes	absence of indica		·	=Depletion, RM=Reduced Matrix, CS=Cov			Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam)
Remarks: SOILS Map Unit Name Profile Descri	e: ption (Describe to Bottom	Sebring silt loam, 0-	-2% slopes	absence of indica	ators.) (Type: C=0	·	=Depletion, RM=Reduced Matrix, CS=Cox	edox Features	Location: PL=Pore I	1	
Remarks: SOILS Map Unit Name Profile Descri Top Depth	e: ption (Describe to Bottom Depth	Sebring silt loam, 0 the depth needed to document the indi	-2% slopes cator or confirm the a	Matrix Moist)	ators.) (Type: C=0	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist)	edox Features %	Location: PL=Pore I	Location	(e.g. clay, sand, loam)
Remarks: SOILS Map Unit Name Profile Descri Top Depth 0	e: ption (Describe to Bottom Depth	Sebring silt loam, 0 the depth needed to document the indi	-2% slopes cator or confirm the a Color (I 10YR	Matrix Moist) 4/3	ators.) (Type: C=0	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist)	edox Features % 	Location: PL=Pore I	Location	(e.g. clay, sand, loam) silt loam
Remarks: SOILS Map Unit Name Profile Descri Top Depth 0	e: ption (Describe to Bottom Depth 16	Sebring silt loam, 0- the depth needed to document the indi Horizon 1	-2% slopes cator or confirm the a Color (I 10YR 10YR	Matrix Moist) 4/3 6/3	% 90 10	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Coo Re Color (Moist) 	edox Features % 	Type	Location 	(e.g. clay, sand, loam) silt loam silt loam
Remarks: SOILS Map Unit Name Profile Descri Top Depth 0	e: Bottom Depth 16	Sebring silt loam, 0 the depth needed to document the indi Horizon 1 1	-2% slopes cator or confirm the a Color (I 10YR 10YR	Matrix Moist) 4/3 6/3	9/6 90 10	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Coo Re Color (Moist) 	edox Features % 	Type	Location 	(e.g. clay, sand, loam) silt loam silt loam
Remarks: SOILS Map Unit Name Profile Descri Top Depth 0	e: ption (Describe to Bottom Depth 16	Sebring silt loam, 0- the depth needed to document the indi Horizon 1	-2% slopes cator or confirm the s	Matrix Moist) 4/3 6/3	9/6 90 10	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Cox Re Color (Moist) 	edox Features %	Type	Location 	(e.g. clay, sand, loam) silt loam silt loam
Remarks: SOILS Map Unit Name Profile Descri Top Depth 0	e: ption (Describe to Bottom Depth 16	Sebring silt loam, 0- the depth needed to document the indi Horizon 1	-2% slopes cator or confirm the s	Matrix Moist) 4/3 6/3	% 90 10	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Coo Re Color (Moist) 	edox Features %	Type	Location	(e.g. clay, sand, loam) silt loam silt loam
Remarks: SOILS Map Unit Name Profile Descri Top Depth 0	e: ption (Describe to Bottom Depth 16	Sebring silt loam, 0- the depth needed to document the indi Horizon 1	-2% slopes cator or confirm the s	sibsence of indical Matrix Moist) 4/3 6/3	% 90 10	Concentration, D.	=Depletion, RM=Reduced Matrix, CS=Cox Re Color (Moist) 	edox Features %	Type	Location	(e.g. clay, sand, loam) silt loam silt loam
Remarks: SOILS Map Unit Name Profile Descri Top Depth 0	e: ption (Describe to Depth 16	Sebring silt loam, 0- the depth needed to document the indi Horizon 1 1	-2% slopes cator or confirm the a Color (I 10YR 10YR	sabsence of indical Matrix Moist) 4/3 6/3	% 90 10	Concentration, D.	=Depletion, RM=Reduced Matrix, CS=Coo Re Color (Moist) =- 	edox Features %	Type	Location	(e.g. clay, sand, loam) silt loam silt loam
Remarks: SOILS Map Unit Name Profile Descri Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field Ir	Sebring silt loam, 0 the depth needed to document the indi Horizon 1 1 ndicators (check he	-2% slopes cator or confirm the a Color (I 10YR 10YR	Matrix Moist) 4/3 6/3 ors are r	% 90 10 S8 - Polyv	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Co- R6 Color (Moist)	edox Features % Indicator	Type s for Proble	Location	(e.g. clay, sand, loam) silt loam
Remarks: SOILS Map Unit Name Profile Descri Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field Ir A1- Histosol A2 - Histic E	Sebring silt loam, 0 the depth needed to document the indi Horizon 1 ndicators (check helpipedon	-2% slopes cator or confirm the a Color (I 10YR 10YR	Matrix Moist) 4/3 6/3 ors are r	% 90 10 S8 - Polyx S9 - Thin	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Cox Re Color (Moist)	edox Features % Indicator	Type	Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR	(e.g. clay, sand, loam) silt loam silt loam
Remarks: SOILS Map Unit Name Profile Descri Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H	Sebring silt loam, 0 the depth needed to document the indi Horizon 1 ndicators (check here)	-2% slopes cator or confirm the a Color (I 10YR 10YR	Matrix Moist) 4/3 6/3 ors are r	% 90 10 ot preser S8 - Polyn S11 - High	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cox Re Color (Moist) w Surface (LRR R, MLRA 149B) Sands	edox Features %	Type s for Proble A10 - 2 cm I/16 A16 - Coast S3 - 5cm Mi	Location matic Soils Prairie Redox (LRR K, L, MLRA 1 Prairie Redox (LRR Locky Peat of Peat (Locky Pea	(e.g. clay, sand, loam) silt loam silt loam
Remarks: SOILS Map Unit Name Profile Descri Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black A4 - Hydroge	Sebring silt loam, 0 the depth needed to document the indi Horizon 1 1 ndicators (check here) pipedon istic en Sulfide	-2% slopes cator or confirm the a Color (I 10YR 10YR	Matrix Moist) 4/3 6/3 ors are r	90 10 	Concentration, D	Depletion, RM=Reduced Matrix, CS=Cox Re Color (Moist)	edox Features %	Type	Location	(e.g. clay, sand, loam) silt loam silt loam
Remarks: SOILS Map Unit Name Profile Descri Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie	Sebring silt loam, 0 the depth needed to document the indi Horizon 1 1 ndicators (check her pipedon istic en Sulfide d Layers	-2% slopes cator or confirm the a Color (I 10YR 10YR	Matrix Moist) 4/3 6/3 ors are r	% 90 10 S8 - Polyv S9 - Thin S11 - High F1 - Loarn F2 - Loarn F2 - Loarn F2 - Loarn	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co-ReCOlor (Moist)	edox Features %	Type s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S8 - Polyval	Location	(e.g. clay, sand, loam) silt loam
Remarks: SOILS Map Unit Name Profile Descri Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie	Sebring silt loam, 0 the depth needed to document the indi Horizon 1 1 ndicators (check her pipedon istic en Sulfide d d Layers ed Below Dark Surface	-2% slopes cator or confirm the a Color (I 10YR 10YR	Matrix Moist) 4/3 6/3 ors are r	90 10 	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Co-ReCOlor (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	edox Features % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR L, LM) Urface (LRR K, L, M) urface (LRR K, L) ark Surface (LRR K, L)	(e.g. clay, sand, loam) silt loam silt loam 49B) K. L, R) LRR K, L, R)
Remarks: SOILS Map Unit Name Profile Descri Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier A11 - Deplet A12 - Thick I S1 - Sandy N	Sebring silt loam, 0 the depth needed to document the indi Horizon 1 1 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Oark Surface Jourk Mineral	-2% slopes cator or confirm the a Color (I 10YR 10YR	basence of indice Matrix Moist) 4/3 6/3 ors are r	% 90 10 S8 - Polyv S9 - Thin S11 - High F1 - Loarn F3 - Deple	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Cox Re Color (Moist)	edox Features %	Type	Location	(e.g. clay, sand, loam) silt loam silt loam
Remarks: SOILS Map Unit Name Profile Descri Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy O S4 - Sandy O	Sebring silt loam, 0 the depth needed to document the indi Horizon 1 1	-2% slopes cator or confirm the a Color (I 10YR 10YR	subsence of indication Matrix Moist) 4/3 6/3 ors are r	% 90 10	Concentration. D	Depletion, RM=Reduced Matrix, CS=Cox Re Color (Moist)	edox Features % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR k, L) urface (LRR K, L, M) urface (LRR K, L) anganese Masen ont Floodplain Soil arent Material	(e.g. clay, sand, loam) silt loam silt loam
Remarks: SOILS Map Unit Name Profile Descri Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydros A5 - Stratifies A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy G S5 - Sandy F	Sebring silt loam, 0 the depth needed to document the indi Horizon 1 1 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox	-2% slopes cator or confirm the a Color (I 10YR 10YR	basence of indice Matrix Moist) 4/3 6/3 ors are r	90 10 	Concentration. D	Depletion, RM=Reduced Matrix, CS=Cox Re Color (Moist)	edox Features %	Type	Location	(e.g. clay, sand, loam) silt loam silt loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (MLRA 149B) 45, 149B)
Remarks: SOILS Map Unit Name Profile Descri Top Depth 0 NRCS Hydric	Bottom Depth 16	Sebring silt loam, O the depth needed to document the indi Horizon 1 1	-2% slopes cator or confirm the a Color (I 10YR 10YR	basence of indice Matrix Moist) 4/3 6/3 ors are r	90 10 	Concentration. D	Depletion, RM=Reduced Matrix, CS=Cox Re Color (Moist)	edox Features %	Type	Location	(e.g. clay, sand, loam) silt loam silt loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (MLRA 149B) 45, 149B)
Remarks: SOILS Map Unit Name Profile Descri Top Depth 0 NRCS Hydric	Bottom Depth 16	Sebring silt loam, 0 the depth needed to document the indi Horizon 1 1 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox	-2% slopes cator or confirm the a Color (I 10YR 10YR	basence of indice Matrix Moist) 4/3 6/3 ors are r	90 10 	Concentration. D	Depletion, RM=Reduced Matrix, CS=Cox Re Color (Moist)	edox Features % Indicator 'Indicators of	Type	Location	(e.g. clay, sand, loam) silt loam silt loam
Remarks: SOILS Map Unit Name Profile Descri Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroga A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy M S4 - Sandy G S5 - Sandy F S6 - Stripped S7 - Dark Su	Sebring silt loam, 0 the depth needed to document the indi Horizon 1 1 ndicators (check hele pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox I Matrix Irface (LRR R, MLRA 149B)	-2% slopes cator or confirm the a Color (I 10YR 10YR	subsence of indications indicated indications in indicated indications in indicated in	% 90 10	Concentration. D	Depletion, RM=Reduced Matrix, CS=Cox Re Color (Moist)	edox Features % Indicator Indicators of disturbed or disturbe	Type s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mt S7 - Dark S7 S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm TA6 - Mesic TF12 - Very Other (Expla	Location	(e.g. clay, sand, loam) silt loam silt loam 49B) K, L, R) LRR K, L, R) LRR K, L, R) (LRR K, L, R) 45, 149B) aCe must be present, unless
Remarks: SOILS Map Unit Name Profile Descri Top Depth 0 NRCS Hydric	Bottom Depth 16	Sebring silt loam, 0 the depth needed to document the indi Horizon 1 1 ndicators (check hele pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox I Matrix Irface (LRR R, MLRA 149B)	-2% slopes cator or confirm the a Color (I 10YR 10YR	basence of indice Matrix Moist) 4/3 6/3 ors are r	% 90 10	Concentration. D	Depletion, RM=Reduced Matrix, CS=Cox Re Color (Moist)	edox Features % Indicator 'Indicators of	Type s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mt S7 - Dark S7 S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm TA6 - Mesic TF12 - Very Other (Expla	Location	(e.g. clay, sand, loam) silt loam silt loam



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Wetland ID: Wetland 1

Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Sample Point: SP02 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant 2. Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) 3. 4 Total Number of Dominant Species Across All Strata: 2 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B) 7 8. Prevalence Index Worksheet 9 Total % Cover of: Multiply by: _ x 1 = 10. OBL spp. __ FACW spp. Total Cover = 0 x 2 = FAC spp. 0 x 3 = FACU spp. _ Sapling/Shrub Stratum (Plot size: 5 meter radius) _ x 5 = UPL spp. 0 0 2. **75** (A) 300 ____(B) 3. Total 4. 5. Prevalence Index = B/A = 4.000 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation ☐ Yes 10. ✓ No Dominance Test is > 50% Total Cover = 0 ☐ Yes ✓ No Prevalence Index is ≤ 3.0 * ☐ Yes ✓ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ✓ No Problem Hydrophytic Vegetation (Explain) * Plantago lanceolata **FACU** * Indicators of hydric soil and wetland hydrology must be Ν **FACU** Taraxacum officinale 10 present, unless disturbed or problematic. 3. Schedonorus arundinaceus 50 FACU 4. **Definitions of Vegetation Strata:** 5. ----6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 75 Woody Vine Stratum (Plot size: 10 meter radius) --2. 3. Hydrophytic Vegetation Present ☐ Yes ☑ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



WETLAND DETERMINATION DATA FORM Eastern Mountains and Piedmont Region

Project/Site:	South Canto	n-Torrey 138 kV Line R	ebuild Project			Stante	ec Project #:	193708516		Date:	04/05/22
Applicant:		Transmission Comp	oany, Inc.							County:	Stark
Investigator #1:				Investi	gator #2:			NI/A		State: Wetland ID:	Ohio Watland 2
Soil Unit: Landform:	Side slope	am, 6-12% slopes, mode	rately eroded	Loc	NV :al Relief:		Classification:	N/A		Sample Point:	
Slope (%):	2-4		9: 40.71677		ongitude:		39	Datum:	NAD83	Community ID:	
		litions on the site ty						☑ Yes □	No	Section:	
		or Hydrology sig						mstances pre	sent?	Township:	
		or Hydrology □nat					Yes	□ No		Range:	Dir:
SUMMARY OF F											
Hydrophytic Veg					□ No			Hydric Soils I			✓ Yes □ No
Wetland Hydrold	ogy Present	?		✓ Yes	□ No			Is This Samp	oling Point V	Within A Wetl	and? ✓ Yes No
Remarks:											
HYDROLOGY											
	loay Indica	tors (Check here if	indicators at	re not nresu	ent):	П			Secondary:		
Primary:		itors (Check hele ii	ilidicators ar	e not prese	JIIL).					B6 - Surface So	oil Cracks
✓	A1 - Surface					er-Stained				B8 - Sparsely V	egetated Concave Surface
✓	A2 - High Wa				B13 - Aqu					B10 - Drainage	
	A3 - Saturation B1 - Water M				B14 - True C1 - Hydr					B16 - Moss Trii C2 - Dry Seaso	
	B2 - Sedime						spheres on Livin	g Roots		C8 - Crayfish B	
	B3 - Drift De						duced Iron				Visible on Aerial Imagery
	B4 - Algal Ma B5 - Iron Der				C6 - Rece		duction in Tilled	Soils		D1 - Stunted or D2 - Geomorph	r Stressed Plants
		on Visible on Aerial Ima	agery		Other (Ex					D3 - Shallow A	
										D4 - Microtopo	
<u> </u>	,					1				D5 - FAC-Neut	rai l'est
Field Observation					(:- \						
Surface Water P Water Table Pre		✓ Yes✓ No✓ Yes✓ No	Depth:		(in.)			Wetland Hyd	Irology Pre	esent?	Yes 🗆 No
Saturation Prese		☐ Yes ☐ No	Depth: Depth:		(in.) (in.)						
			· .		,	-t'\ 'f			N/A		
Remarks:	ed Data (Stre	am gauge, monitorin	j well, aerial p	notos, previ	ous inspe	ctions), ii	avallable:		IN/A		
Remarks.											
SOILS											
	Latham silt loa	am, 6-12% slopes, mode	rately eroded		ξ	Series Dra	ainage Class:				
Taxonomy (Sub		,					J				
Profile Descript	tion (Describe to t	he depth needed to document the inc	icator or confirm the abs	ence of indicators.)	(Type: C=Concer	ntration, D=Deple	etion, RM=Reduced Matrix	, CS=Covered/Coated Sar	nd Grains; Location:	PL=Pore Lining, M=Matri	
Тор	Bottom			Matrix				Mottles			Texture
Depth	Depth	Horizon		(Moist)	%		or (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	16	1	10YR	5/1	60	10YR	5/8	10	С	M	clay loam
		1	10YR	2/2	15						
			400/10	0/0	1						clay loam
		1	10YR	6/6	15						clay loam
					15 						clay loam
					15 					 	clay loam
					15 					 	clay loam
					15 					 	clay loam
	 				15 	 	 				clay loam
	 			 rs are not p	15 		 		 SSES (LRR N, N	 Indicators fc A10 - 2cm M	clay loam
NRCS Hydric S 1- Histosol 2 - Histic Epipee	 Goil Field In		re if indicator S5 - Sandy F S6 - Stripped	 rs are not p	15 	 	 F12 - Iron		 SSES (LRR N, N	 Indicators for A10 - 2cm M	Clay loam
NRCS Hydric S 1- Histosol 2 - Histic Epiped 3 - Black Histic	 Soil Field In		re if indicator S5 - Sandy F S6 - Stripper S7 - Dark St	 rs are not p Redox d Matrix urface	15 oresent): \Box	 		 SSSS (LRR N, N. A 122, 136)		clay loam
NRCS Hydric S 1- Histosol 2 - Histic Epiper 3 - Black Histic 4 - Hydrogen Si	 Soil Field In don		re if indicator S5 - Sandy F S6 - Strippe S7 - Dark St S8 - Polyvalt		15): \Box					clay loam
NRCS Hydric S 1- Histosol 2 - Histic Epiped 3 - Black Histic			re if indicator S5 - Sandy I S6 - Stripper S7 - Dark S0 S8 - Polyvalt S9 - Thin Da	 rs are not p Redox d Matrix urface	15 resent): \Box					clay loam
NRCS Hydric S 1- Histosol 2 - Histic Epipeo 3 - Black Histic 4 - Hydrogen Si 5 - Stratified La; 10 - 2 cm Muck		 dicators (check he	re if indicator S5 - Sandy I S6 - Strippec S7 - Dark St S8 - Polyval S9 - Thin Da F2 - Loamy I F3 - Deplete	s are not p Redox d Matrix urface ue Below Dai ark Surface (M Gleyed Matrix d Matrix	15): \Box					clay loam
NRCS Hydric S 1- Histosol 2 - Histic Epiper 3 - Black Histic 4 - Hydrogen St 5 - Stratified Lav 10 - 2 cm Muck 11 - Depleted B 12 - Thick Dark		dicators (check he	re if indicator S5 - Sandy I S6 - Strippec S7 - Dark St S8 - Polyvalt S9 - Thin Da F2 - Loamy V F3 - Deplete F6 - Redox I	rs are not p Redox d Matrix urface ue Below Dai rk Surface (M Gleyed Matrix d Matirx Dark Surface	15): \Box					clay loam
NRCS Hydric S 1- Histosol 2 - Histic Epipee 3 - Black Histic 4 - Hydrogen St 5 - Stratified Lat 10 - 2 cm Muck 11 - Depleted B 12 - Thick Dark 1 - Sandy Muck		dicators (check he	re if indicator S5 - Sandy if S6 - Stripper S7 - Dark St S8 - Polyvalt S9 - Thin Da F2 - Loamy if F3 - Deplete F6 - Redox if F7 - Deplete	rs are not p Redox d Matrix urface ue Below Dal ark Surface (M Gleyed Matrix d Matirx Dark Surface d Dark Surface	15): \Box				Indicators for A10 - 2cm N A16 - Coast F F19 - Piedmor TF12 - Very Other (Explain	clay loam
NRCS Hydric S 1- Histosol 2 - Histic Epiper 3 - Black Histic 4 - Hydrogen St 5 - Stratified Lav 10 - 2 cm Muck 11 - Depleted B 12 - Thick Dark		dicators (check he	re if indicator S5 - Sandy I S6 - Strippec S7 - Dark St S8 - Polyvalt S9 - Thin Da F2 - Loamy V F3 - Deplete F6 - Redox I	rs are not p Redox d Matrix urface ue Below Dai rk Surface (M Gleyed Matrix Dark Surface dd Dark Surface Depressions	15): \Box				Indicators for A10 - 2cm N A16 - Coast F F19 - Piedmor TF12 - Very Other (Expla	clay loam
NRCS Hydric S 1- Histosol 2 - Histic Epipeo 3 - Black Histic 4 - Hydrogen Si 5 - Stratified La; 10 - 2 cm Muck 11 - Depleted B 12 - Thick Dark 1 - Sandy Muck 4 - Sandy Gleye Restrictive Layer (If Observed)		dicators (check he	re if indicator S5 - Sandy if S6 - Stripper S7 - Dark St S8 - Polyvalt S9 - Thin Da F2 - Loamy if F3 - Deplete F6 - Redox if F7 - Deplete	rs are not p Redox d Matrix urface ue Below Dal ark Surface (M Gleyed Matrix d Matirx Dark Surface d Dark Surface	15): \Box				Indicators for A10 - 2cm N A16 - Coast F F19 - Piedmor TF12 - Very Other (Expla	clay loam
NRCS Hydric S 1- Histosol 2 - Histic Epipeo 3 - Black Histic 4 - Hydrogen Si 5 - Stratified La; 10 - 2 cm Muck 11 - Depleted B 12 - Thick Dark 1 - Sandy Muck 4 - Sandy Gleye Restrictive Layer		dicators (check he	re if indicator S5 - Sandy if S6 - Stripper S7 - Dark St S8 - Polyvalt S9 - Thin Da F2 - Loamy if F3 - Deplete F6 - Redox if F7 - Deplete	rs are not p Redox d Matrix urface ue Below Dai rk Surface (M Gleyed Matrix Dark Surface dd Dark Surface Depressions	15): \Box				Indicators for A10 - 2cm N A16 - Coast F F19 - Piedmor TF12 - Very Other (Expla	clay loam
NRCS Hydric S 1- Histosol 2 - Histic Epipeo 3 - Black Histic 4 - Hydrogen Si 5 - Stratified La; 10 - 2 cm Muck 11 - Depleted B 12 - Thick Dark 1 - Sandy Muck 4 - Sandy Gleye Restrictive Layer (If Observed)		dicators (check he	re if indicator S5 - Sandy if S6 - Stripper S7 - Dark St S8 - Polyvalt S9 - Thin Da F2 - Loamy if F3 - Deplete F6 - Redox if F7 - Deplete	rs are not p Redox d Matrix urface ue Below Dai rk Surface (M Gleyed Matrix Dark Surface dd Dark Surface Depressions	15): \Box				Indicators for A10 - 2cm N A16 - Coast F F19 - Piedmor TF12 - Very Other (Expla	clay loam
NRCS Hydric S 1- Histosol 2 - Histic Epipeo 3 - Black Histic 4 - Hydrogen Si 5 - Stratified La; 10 - 2 cm Muck 11 - Depleted B 12 - Thick Dark 1 - Sandy Muck 4 - Sandy Gleye Restrictive Layer (If Observed)		dicators (check he	re if indicator S5 - Sandy if S6 - Stripper S7 - Dark St S8 - Polyvalt S9 - Thin Da F2 - Loamy if F3 - Deplete F6 - Redox if F7 - Deplete	rs are not p Redox d Matrix urface ue Below Dai rk Surface (M Gleyed Matrix Dark Surface dd Dark Surface Depressions	15): \Box				Indicators for A10 - 2cm N A16 - Coast F F19 - Piedmor TF12 - Very Other (Expla	clay loam



WETLAND DETERMINATION DATA FORM

Eastern Mountains and Piedmont Region

Project/Site:	South Canton-Torrey 138 kV Line Rebuild Project				Wetland ID: Wetland 2 Sample Point SP03
VEGETATION	(Species identified in all uppercase are non-native s	pecies.)			
Tree Stratum (Plo	ot size: 30 ft radius)				
4	<u>Species Name</u>		Dominant	Ind.Status	Dominance Test Worksheet
1.					N
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					
4.					Total Number of Dominant Species Across All Strata:(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 10
	Total Cover =	0			FACW spp. 30 X 2 = 60
					FAC spp. 20 x 3 = 60
	atum (Plot size: 15 ft radius)				FACU spp. 0
1.					UPL spp0
2.					-
3.					Total 60 (A) 130 (B)
4.					
5.					Prevalence Index = B/A = 2.167
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Yes ☑ ☐ No Rapid Test for Hydrophytic Vegetation
10.					Yes ☑ ☐ No Dominance Test is > 50%
	Total Cover =	0			Yes ☑ ☐ No Prevalence Index is ≤ 3.0 *
					Yes 🗆 📮 No 💮 Morphological Adaptations (Explain) *
	ot size: 5 ft radius)				Yes □ □ No Problem Hydrophytic Vegetation (Explain) *
1.	Juncus effusus	30	Y	FACW	* Indicators of hydric soil and wetland hydrology must be
2.	Dichanthelium clandestinum	20	Υ	FAC	present, unless disturbed or problematic.
3.	Carex frankii	10	N	OBL	
4.					Definitions of Vegetation Strata:
5.					_
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.					height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					Figure 1900 than one it dail
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	60			
	rum (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.					
	Total Cover =	0			
Remarks:					
Additional Rea	marks:				



WETLAND DETERMINATION DATA FORM Eastern Mountains and Piedmont Region

Project/Site:	South Cantor	n-Torrey 138 kV Line Re	build Project			Stante	ec Project #:	193708516		Date:	04/05/22
Applicant:		Transmission Comp					-			County:	Stark
Investigator #1:				Investi	gator #2:					State:	Ohio
Soil Unit:	Latham silt loa	am, 6-12% slopes, moder	ately eroded		N۷	VI/WWI (Classification:	N/A		Wetland ID:	Wetland 2
Landform:	Side slope				al Relief:					Sample Point:	
Slope (%):	3-5		40.71700		ongitude:			Datum:		Community ID:	UPL
		itions on the site typ			r? (If no, ex			✓ Yes □		Section:	
Are Vegetation	□, Soil ☑, d	or Hydrology □sign	ificantly dist	urbed?		Are		mstances pre	sent?	Township:	
		or Hydrology □natu	rally proble	matic?			Yes	□ No		Range:	Dir:
SUMMARY OF F											
Hydrophytic Veg	getation Pres	sent?		□ Yes				Hydric Soils I			☐ Yes ☑ No
Wetland Hydrolo	ogy Present?	?		☐ Yes	☑ No			Is This Samp	oling Point V	Vithin A Wetla	and? Yes No
Remarks:											
HYDROLOGY											
Wetland Hydro	ology Indica	tors (Check here if	ndicators ar	e not prese	ent):	J			Secondary:		
Primary		(0110011111010111			,-					B6 - Surface So	oil Cracks
	A1 - Surface					r-Stained I					egetated Concave Surface
	A2 - High Wa					atic Fauna				B10 - Drainage	
	A3 - Saturation B1 - Water M					e Aquatic F ogen Sulfic				B16 - Moss Trir C2 - Dry Seaso	
	B2 - Sedimer						spheres on Livin	a Roots		C8 - Crayfish B	
	B3 - Drift Dep						duced Iron	9			Visible on Aerial Imagery
	B4 - Algal Ma						duction in Tilled	Soils			Stressed Plants
	B5 - Iron Dep					Muck Surfa				D2 - Geomorph	
	B7 - Inundation	on Visible on Aerial Ima	gery		Other (Ex	plain in Re	marks)			D3 - Shallow Ad D4 - Microtopog	
										D5 - FAC-Neuti	
Field Observati	ione:										
Surface Water F		□ V □ N-	Danath		(in)						
Water Table Pre		☐ Yes ☑ No ☐ Yes ☑ No	Depth:		(in.)			Wetland Hyd	Irology Pre	sent?	Yes ☑ No
Saturation Prese		☐ Yes ☑ No	Depth:		(in.) (in.)						
	*****		Depth:		, ,						
Describe Recorde	ed Data (stre	am gauge, monitoring	well, aerial p	hotos, prev	ious inspe	ctions), if	available:		N/A		
Remarks:											
SOILS											
		am, 6-12% slopes, moder	ately eroded		5	Series Dra	ainage Class:				
Taxonomy (Sub	<u> </u>										
		ne depth needed to document the indic	ator or confirm the abs		(Type: C=Concer	ntration, D=Deple	tion, RM=Reduced Matrix	r, CS=Covered/Coated Sar	nd Grains; Location: F	L=Pore Lining, M=Matrix	x)
Тор	Bottom			Matrix				Mottles			_
Depth	Depth										Texture
	Deptili	Horizon	Color	(Moist)	%	Cold	or (Moist)	%	Туре	Location	Texture (e.g. clay, sand, loam)
0	8	Horizon 1	Color 10YR	(Moist) 4/3	% 100	Cold	or (Moist)		Type 	Location 	
0 8								%			(e.g. clay, sand, loam)
	8	1	10YR	4/3	100			% 			(e.g. clay, sand, loam) clay loam
8	8 12	1 2	10YR 10YR	4/3 6/6	100 100			% 			(e.g. clay, sand, loam) clay loam clay loam
8 12	8 12 16	1 2 3	10YR 10YR 10YR	4/3 6/6 7/6	100 100 100		 	% 			(e.g. clay, sand, loam) clay loam clay loam clay loam
8 12 	8 12 16 	1 2 3 	10YR 10YR 10YR 	4/3 6/6 7/6	100 100 100 			% 			(e.g. clay, sand, loam) clay loam clay loam clay loam
8 12 	8 12 16 	1 2 3 	10YR 10YR 10YR 	4/3 6/6 7/6 	100 100 100 			 			(e.g. clay, sand, loam) clay loam clay loam clay loam
8 12 	8 12 16 	1 2 3 	10YR 10YR 10YR 	4/3 6/6 7/6 	100 100 100 		 	%			(e.g. clay, sand, loam) clay loam clay loam clay loam
8 12 	8 12 16 	1 2 3	10YR 10YR 10YR 	4/3 6/6 7/6 	100 100 100 			% 		 	(e.g. clay, sand, loam) clay loam clay loam clay loam
8 12 	8 12 16 	1 2 3 	10YR 10YR 10YR 	4/3 6/6 7/6 s are not p	100 100 100 			%		 Indicators fo	(e.g. clay, sand, loam) clay loam clay loam clay loam
8 12 NRCS Hydric S	8 12 16 Soil Field Ind	1 2 3	10YR 10YR 10YR 	4/3 6/6 7/6 s are not p	100 100 100 		 	% 		 Indicators fo	(e.g. clay, sand, loam) clay loam clay loam clay loam
8 12 NRCS Hydric \$ 1 - Histosol 2 - Histic Epipe 3 - Black Histic	8 12 16 Soil Field Ind	1 2 3	10YR 10YR 10YR 10YR if indicator S5 - Sandy I S6 - Strippes S7 - Dark St	4/3 6/6 7/6 s are not p Redox d Matrix	100 100 100 		 	%			(e.g. clay, sand, loam) clay loam clay loam clay loam
8 12 NRCS Hydric S 1- Histosol 2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S	8 12 16 Soil Field Incomplete don	1 2 3	10YR 10YR 10YR 10YR a if indicator S5 - Sandy l S6 - Stripper S7 - Dark St S8 - Polyval	4/3 6/6 7/6 s are not p Redox d Matrix urface ue Below Da	100 100 100 present		 	%			(e.g. clay, sand, loam) clay loam clay loam clay loam
8 12 NRCS Hydric S 1- Histosol -2 - Histic Epipe -3 - Black Histic -4 - Hydrogen S 5 - Stratified La	8 12 16 Soil Field Incomplete	1 2 3	10YR 10YR 10YR 10YR	4/3 6/6 7/6 s are not p Redox Matrix urface ue Below Da rk Surface (h	100 100 100 oresent		 	%			(e.g. clay, sand, loam) clay loam clay loam clay loam
8 12 NRCS Hydric S 1- Histosol 2- Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified La 10 - 2 cm Muck	8 12 16 Soil Field Index by yers ((LRRN)	1 2 3	10YR 10YR 10YR 10YR a if indicator S5 - Sandy I S6 - Stripper S7 - Dark St S8 - Polyval S9 - Thin Da F2 - Loamy	4/3 6/6 7/6 S are not p Redox Matrix urface ue Below Da urk Surface (A Gleyed Matri	100 100 100 oresent		 	%			(e.g. clay, sand, loam) clay loam clay loam clay loam
8 12 NRCS Hydric \$ NRCS Hydric \$ NRCS Hydric \$	8 12 16 Soil Field Indexes of Currence Selow Dark Suited Selow Dark Selow Dark Suited Selow Dark Suited Selow Dark Suited Selow D	1 2 3	10YR 10YR 10YR 10YR if indicator S5 - Sandy I S6 - Strippe S7 - Dark St S8 - Polyvalt S9 - Thin Da F2 - Loamy F3 - Deplete	4/3 6/6 7/6 s are not p Redox d Matrix urface ue Below Da rk Surface (Matrid d Matrix	100 100 100 rresent		 	%			(e.g. clay, sand, loam) clay loam clay loam clay loam
8 12 NRCS Hydric S 1- Histosol 2- Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified La 10 - 2 cm Muck	8 12 16 Soil Field Indudon uulfide tyers ((LRR N) sellow Dark Suit Surface	1 2 3 dicators (check her	10YR 10YR 10YR 10YR a if indicator S5 - Sandy I S6 - Stripper S7 - Dark S1 S8 - Polyval S9 - Thin Da F2 - Loamy F3 - Deplete F6 - Redox I F7 - Deplete	4/3 6/6 7/6 s are not p Redox d Matrix urface ue Below Da rk Surface (Matrix d Matrix	100 100 100 		 	%			(e.g. clay, sand, loam) clay loam clay loam clay loam
8 12 NRCS Hydric S 1- Histosol 2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified La 10 - 2 cm Muck 11 - Depleted E 12 - Thick Dark	8 12 16 Soil Field Index don uulfide tyers ((LRR N) Selow Dark Sur	1 2 3 dicators (check her	10YR 10YR 10YR 10YR a if indicator S5 - Sandy I S6 - Strippee S7 - Dark St S8 - Polyval S9 - Thin Da F2 - Loamy F3 - Deplete F6 - Redox I	4/3 6/6 7/6 s are not p Redox d Matrix urface ue Below Da rk Surface (Matrix d Matrix	100 100 100 		 	-Manganese Ma bric Surface (MLR.dmnt Floodplair	SSES (LRR N, N A 122, 136) SOIls (MLRA 127, 147)		(e.g. clay, sand, loam) clay loam clay loam clay loam
8 12 NRCS Hydric \$ NRCS Hydric \$ NRCS Hydric \$ NRCS Hydric \$	8 12 16 Soil Field Indudon ulfide eyers ((LRR N) Sellow Dark Suit s Surface k Mineral (LRR N, ed Matrix	1 2 3 dicators (check her	10YR 10YR 10YR 10YR a if indicator S5 - Sandy I S6 - Stripper S7 - Dark S1 S8 - Polyval S9 - Thin Da F2 - Loamy F3 - Deplete F6 - Redox I F7 - Deplete	4/3 6/6 7/6 s are not p Redox to Matrix urface ue Below Da rk Surface (M Gleyed Matri d Matirx Dark Surfaced Dark Surface	100 100 100 		 	9%	SSES (LRR N, N A 122, 136) ON SOILS (MLRA 127, 147) ON SOILS (MLRA 127,	Indicators fo A10 - 2cm N A16 - Coast F F19 - Piedmon TF12 - Very Other (Expla	(e.g. clay, sand, loam) clay loam clay loam clay loam clay loam r Problematic Soils tr Floodplain Soils (MLRA 147, 148) tr Floodplain Soils (MLRA 138, 147) Shallow Dark Surface in in Remarks)
8 12 NRCS Hydric \$ NRCS Hydric \$ NRCS Hydric \$	8 12 16 Soil Field Index don uulfide tyers ((LRR N) Selow Dark Sur	1 2 3 dicators (check her	10YR 10YR 10YR 10YR a if indicator S5 - Sandy I S6 - Stripper S7 - Dark S1 S8 - Polyval S9 - Thin Da F2 - Loamy F3 - Deplete F6 - Redox I F7 - Deplete	4/3 6/6 7/6 s are not p Redox d Matrix urface ue Below Da rk Surface (Matrix d Matrix	100 100 100 		 	-Manganese Ma bric Surface (MLR.dmnt Floodplair	SSES (LRR N, N A 122, 136) ON SOILS (MLRA 127, 147) ON SOILS (MLRA 127,	Indicators fo A10 - 2cm N A16 - Coast F F19 - Piedmon TF12 - Very Other (Expla	(e.g. clay, sand, loam) clay loam clay loam clay loam clay loam r Problematic Soils fuck (MLRA 147) Prairie Redox (MLRA 147, 148) tr Floodplain Soils (MLRA 136, 147) Shallow Dark Surface in in Remarks)
8 12 NRCS Hydric \$ NRCS Hydric \$ NRCS Hydric \$ NRCS Hydric \$	8 12 16 Soil Field Indudon ulfide eyers ((LRR N) Sellow Dark Suit s Surface k Mineral (LRR N, ed Matrix	1 2 3 dicators (check her	10YR 10YR 10YR 10YR a if indicator S5 - Sandy I S6 - Stripper S7 - Dark S1 S8 - Polyval S9 - Thin Da F2 - Loamy F3 - Deplete F6 - Redox I F7 - Deplete	4/3 6/6 7/6 s are not p Redox to Matrix urface ue Below Da rk Surface (M Gleyed Matri d Matirx Dark Surfaced Dark Surface	100 100 100 		 	9%	SSES (LRR N, N A 122, 136) ON SOILS (MLRA 127, 147) ON SOILS (MLRA 127,	Indicators fo A10 - 2cm N A16 - Coast F F19 - Piedmon TF12 - Very Other (Expla	(e.g. clay, sand, loam) clay loam clay loam clay loam clay loam r Problematic Soils fuck (MLRA 147) Prairie Redox (MLRA 147, 148) tr Floodplain Soils (MLRA 136, 147) Shallow Dark Surface in in Remarks)
8 12 NRCS Hydric \$ NRCS Hydric \$ NRCS Hydric \$	8 12 16 Soil Field Indudon ulfide eyers ((LRR N) Sellow Dark Suit s Surface k Mineral (LRR N, ed Matrix	1 2 3 dicators (check her	10YR 10YR 10YR 10YR a if indicator S5 - Sandy I S6 - Stripper S7 - Dark S1 S8 - Polyval S9 - Thin Da F2 - Loamy F3 - Deplete F6 - Redox I F7 - Deplete	4/3 6/6 7/6 s are not p Redox to Matrix urface ue Below Da rk Surface (M Gleyed Matri d Matirx Dark Surfaced Dark Surface	100 100 100 		 	9%	SSES (LRR N, N A 122, 136) ON SOILS (MLRA 127, 147) ON SOILS (MLRA 127,	Indicators fo A10 - 2cm N A16 - Coast F F19 - Piedmon TF12 - Very Other (Expla	(e.g. clay, sand, loam) clay loam clay loam clay loam clay loam r Problematic Soils fuck (MLRA 147) Prairie Redox (MLRA 147, 148) tr Floodplain Soils (MLRA 136, 147) Shallow Dark Surface in in Remarks)
8 12 NRCS Hydric S NRCS Hydric S NRCS Hydric S	8 12 16 Soil Field Indudon ulfide eyers ((LRR N) Sellow Dark Suit s Surface k Mineral (LRR N, ed Matrix	1 2 3 dicators (check her	10YR 10YR 10YR 10YR a if indicator S5 - Sandy I S6 - Stripper S7 - Dark S1 S8 - Polyval S9 - Thin Da F2 - Loamy F3 - Deplete F6 - Redox I F7 - Deplete	4/3 6/6 7/6 s are not p Redox to Matrix urface ue Below Da rk Surface (M Gleyed Matri d Matirx Dark Surfaced Dark Surface	100 100 100 		 	9%	SSES (LRR N, N A 122, 136) ON SOILS (MLRA 127, 147) ON SOILS (MLRA 127,	Indicators fo A10 - 2cm N A16 - Coast F F19 - Piedmon TF12 - Very Other (Expla	(e.g. clay, sand, loam) clay loam clay loam clay loam clay loam r Problematic Soils fuck (MLRA 147) Prairie Redox (MLRA 147, 148) tr Floodplain Soils (MLRA 136, 147) Shallow Dark Surface in in Remarks)



WETLAND DETERMINATION DATA FORM

Eastern Mountains and Piedmont Region

Project/Site:	South Canton-Torrey 138 kV Line Rebuild Project				Wetland ID: Wetland 2 Sample Point SP04
VEGETATION	(Species identified in all uppercase are non-native s	pecies.)			
Tree Stratum (Plo	ot size: 30 ft radius)				
	<u>Species Name</u>		Dominant	Ind.Status	Dominance Test Worksheet
1.					N
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					
4.					Total Number of Dominant Species Across All Strata:3 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0
	Total Cover =	0			FACW spp. 0 x 2 = 0
					FAC spp. 25
	atum (Plot size: 15 ft radius)				FACU spp. 75 x 4 = 300
1.					UPL spp. 0
2.					
3.					Total 100 (A) 375 (B)
4.					
5.					Prevalence Index = B/A = 3.750
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Yes □ ☑ No Rapid Test for Hydrophytic Vegetation
10.					Yes □ ☑ No Dominance Test is > 50%
	Total Cover =	0			Yes ☐ ☑ No Prevalence Index is ≤ 3.0 *
					Yes □ ☑ No Morphological Adaptations (Explain) *
	ot size: 5 ft radius)				Yes □ ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Andropogon virginicus	15	Υ	FACU	* Indicators of hydric soil and wetland hydrology must be
2.	Dichanthelium clandestinum	25	Υ	FAC	present, unless disturbed or problematic.
3.	Schedonorus arundinaceus	60	Υ	FACU	
4.					Definitions of Vegetation Strata:
5.					_
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.					height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					Figure 1900 than one it dail
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	100			
	tum (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
4.					
5.					
	Total Cover =	0			
Remarks:					
Additional Rei	marks:				
i					



WETLAND DETERMINATION DATA FORM Eastern Mountains and Piedmont Region

Project/Site:	South Cantor	n-Torrey 138 kV Line Re	ebuild Project			Stante	ec Project #:	193708516		Date:	04/05/22	l
Applicant:		Transmission Comp	any, Inc.							County:	Stark	
Investigator #1:				Investi		Matt Der				State:	Ohio	
Soil Unit:		am, 0-2% slopes					Classification:	N/A		Wetland ID:		
Landform:	Side slope					Concave				Sample Point:		
Slope (%):	2-4		40.71841			-81.41002			NAD83	Community ID:	: PEM	
		itions on the site typ			Ir? (If no, ex			☑ Yes □		Section:		
		or Hydrology 🔲 sign				Are		mstances pre	sent?	Township:		
		or Hydrology □natu	urally probler	natic?			Yes	. □ No		Range:	Dir:	
SUMMARY OF												
Hydrophytic Ve				Yes				Hydric Soils				No
Wetland Hydrol	ogy Present?	?		Yes	□ No)		Is This Samp	oling Point V	Vithin A Wetl	and? 🛛 Yes 🗏 N	No
Remarks:												
HYDROLOGY												
Wetland Hydro	ology Indica	tors (Check here if	indicators are	e not prese	ent):				Secondary:			
Primary		•		•	,					B6 - Surface So		
	A1 - Surface					er-Stained L					egetated Concave Surface	
✓	A2 - High Wa					uatic Fauna				B10 - Drainage		
	A3 - Saturation B1 - Water M					e Aquatic P rogen Sulfic				B16 - Moss Trii C2 - Dry Seaso		
	B2 - Sedimer						spheres on Livir	na Roots		C8 - Crayfish B		
	B3 - Drift Dep					ence of Re		.g			Visible on Aerial Imagery	
	B4 - Algal Ma						duction in Tilled	Soils			Stressed Plants	
	B5 - Iron Dep					Muck Surfa				D2 - Geomorph		
	B7 - Inundati	on Visible on Aerial Ima	gery		Other (Ex	plain in Rei	marks)			D3 - Shallow A D4 - Microtopo		
										D5 - FAC-Neut		
Field Observet	iono									20 17.0 11001		
Field Observat					<i>(</i> :)							
Surface Water I		✓ Yes □ No	Depth:		(in.)			Wetland Hyd	drology Pre	esent?	Yes 🗆 No	
Water Table Pro		☑ Yes □ No	Depth:		(in.)			•	o,			
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)							
Describe Record	ed Data (stre	am gauge, monitoring	ywell, aerial pl	hotos, previ	ious inspe	ections), if	available:		N/A			
Damada.												
Remarks:												
Remarks:												
SOILS												
	: Sebring silt loa	am, 0-2% slopes				Series Dra	ainage Class:					
SOILS		am, 0-2% slopes			Ş	Series Dra	ainage Class:					
SOILS Map Unit Name Taxonomy (Sub	group):	am, 0-2% slopes	cator or confirm the abse	ence of indicators.)			Ĭ		nd Grains; Location: I	PL=Pore Lining, M=Matri	(x)	
SOILS Map Unit Name Taxonomy (Sub	group):		cator or confirm the abso	ence of indicators.) Matrix			Ĭ		and Grains; Location: I	PL=Pore Lining, M=Matri	xx) Texture	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to the		cator or confirm the absor	Matrix		entration, D=Deple	Ĭ	x, CS=Covered/Coated Sa	and Grains; Location: I	PL=Pore Lining, M=Matri		ım)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	ogroup): otion (Describe to the	ne depth needed to document the indic	Color (Matrix Moist)	(Type: C=Conce	entration, D=Deple	tion, RM=Reduced Matri:	x, CS=Covered/Coated Sa	Туре		Texture (e.g. clay, sand, loa	ım)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): btion (Describe to the Bottom Depth 4	ne depth needed to document the indic Horizon	Color (Matrix Moist) 4/2	(Type: C=Conce	Colo	or (Moist) 5/8	Mottles % 10	Type C	Location M	Texture (e.g. clay, sand, loa clay loam	ım)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	ogroup): Deption (Describe to the source of	ne depth needed to document the indice Horizon 1 2	Color (10YR 2.5Y	Matrix Moist) 4/2 4/1	(Type: C=Conce	contration, D=Deple	or (Moist) 5/8 5/8	Mottles Mottles 10 10	Type C C	Location M M	Texture (e.g. clay, sand, loa clay loam clay loam	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 6	pgroup): tion (Describe to the sound of the	Horizon 1 2 3	Color (10YR 2.5Y 2.5Y	Matrix Moist) 4/2 4/1 4/2	(Type: C=Conce	Colo 10YR 10YR 10YR	tion, RM=Reduced Matri Dr (Moist) 5/8 5/8 5/8	CS=Covered/Coated Sa Mottles % 10 10 15	Type C C C	Location M M M	Texture (e.g. clay, sand, loa clay loam clay loam clay loam	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 6	egroup): tion (Describe to II Bottom Depth 4 6 16	Horizon 1 2 3	Color (10YR 2.5Y 2.5Y	Matrix (Moist) 4/2 4/1 4/2	% 90 90 85	Colc 10YR 10YR 10YR	tion, RM=Reduced Matri Dr (Moist) 5/8 5/8 5/8	X CS=Covered/Coated Sa Mottles % 10 10 15	Type C C C	Location M M M	Texture (e.g. clay, sand, loa clay loam clay loam clay loam	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 6	pgroup): Detion (Describe to the Bottom Depth 4 6 16	Horizon 1 2 3	Color (10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/1 4/2	(Type: C=Conce	Colc 10YR 10YR 10YR	5/8 5/8 5/8 	X CS=Covered/Coated Sa Mottles % 10 10 15	Type C C C C	Location M M M	Texture (e.g. clay, sand, loa clay loam clay loam clay loam	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 6	pgroup): btion (Describe to the Depth 4 6 16	Horizon 1 2 3	Color (10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/1 4/2	% 90 90 85	COIC 10YR 10YR 10YR 10YR	5/8 5/8 5/8	X. CS=Covered/Coated Sa Mottles % 10 10 15	Type C C C	Location M M M	Texture (e.g. clay, sand, loa clay loam clay loam clay loam	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 6	pgroup): btion (Describe to the Depth 4 6 16	Horizon 1 2 3	Color (10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/1 4/2	% 90 90 85	COIC 10YR 10YR 10YR 10YR	5/8 5/8 5/8	X CS=Covered/Coated Sa Mottles % 10 10 15	Type	Location M M M	Texture (e.g. clay, sand, loa clay loam clay loam clay loam	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 6	pgroup): btion (Describe to the Depth 4 6 16	Horizon 1 2 3	Color (10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/1 4/2	% 90 90 85	COIC 10YR 10YR 10YR 10YR	5/8 5/8 5/8	X. CS=Covered/Coated Sa Mottles % 10 10 15	Type C C C	Location M M M	Texture (e.g. clay, sand, loa clay loam clay loam clay loam	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 6 NRCS Hydric :	pgroup): btion (Describe to the Depth 4 6 16	Horizon 1 2 3	Color (10YR 2.5Y 2.5Y	Matrix Moist) 4/2 4/1 4/2 s are not p	% 90 90 85	COIC 10YR 10YR 10YR 10YR	5/8 5/8 5/8	X CS=Covered/Coated Sa Mottles % 10 10 15	Type C C C C	Location M M M Indicators for	Texture (e.g. clay, sand, loa clay loam clay loam clay loam	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 6 NRCS Hydric 3	pgroup): stion (Describe to 10 Bottom Depth 4 6 16 Soil Field In	Horizon 1 2 3	Color (10YR 2.5Y 2.5Y e if indicator. S5 - Sandy F	Matrix Moist) 4/2 4/1 4/2 s are not p	% 90 90 85	Cold 10YR 10YR 10YR 	5/8 5/8 5/8	Mottles	Type C C C	Location M M M Indicators fc A10 - 2cm M	Texture (e.g. clay, sand, loa clay loam clay loam clay loam	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 6 NRCS Hydric : 1- Histosol 2 - Histic Epipe	pgroup): btion (Describe to the Depth	Horizon 1 2 3	Color (10YR 2.5Y 2.5Y e if indicator: \$5 - Sandy F \$6 - Stripped	Matrix Moist) 4/2 4/1 4/2 s are not peedox Matrix	% 90 90 85	Cold 10YR 10YR 10YR 	5/8 5/8 5/8	Mottles Mottles % 10 10 15	Type C C C C	Location M M M Indicators fc A10 - 2cm N A16 - Coast F	Texture (e.g. clay, sand, loa clay loam clay loam clay loam	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 6 NRCS Hydric 3 1- Histosol 2 - Histic Epipe 3 - Black Histic	pgroup): stion (Describe to the Bottom Depth 4 6 116 Soil Field In sedon	Horizon 1 2 3	Color (10YR 2.5Y 2.5Y e if indicator S5 - Sandy F S6 - Strippec S7 - Dark Su	Matrix Moist) 4/2 4/1 4/2 sare not p Redox I Matrix rface	% 90 90 90	Colc 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	Dr (Moist) 5/8 5/8 5/8 F12 - Iror F13 - Um F19 - Pie	Mottles	Type C C C	Location M M M Indicators fo A10 - 2cm M A16 - Coast I F19 - Piedmor	Texture (e.g. clay, sand, loa clay loam clay loam clay loam	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 6 NRCS Hydric : -1 - Histosol -2 - Histic Epipe -3 - Black Histic -4 - Hydrogen S	egroup): stion (Describe to III Bottom Depth 4 6 16 Soil Field In	Horizon 1 2 3	Color (10YR 2.5Y 2.5Y e if indicator: \$5 - Sandy F \$6 - Strippec \$7 - Dark Su \$8 - Polyvalu	Matrix Moist) 4/2 4/1 4/2 s are not p Redox I Matrix rface I Below Da	(Type: C=Conce	Colc 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	5/8 5/8 5/8 5/8	Mottles Mottles % 10 10 15	Type C C C	Location M M M Indicators fc A10 - 2cm N A16 - Coast N F19 - Piedmor	Texture (e.g. clay, sand, loa clay loam clay loam clay loam	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 6 NRCS Hydric 3 1- Histosol _2 - Histic Epipe _3 - Black Histic	pgroup): ition (Describe to 10 Describe to 10 Depth 4 6 16 Soil Field In decon control of the payers	Horizon 1 2 3	Color (10YR 2.5Y 2.5Y e if indicator S5 - Sandy F S6 - Strippec S7 - Dark Su	Matrix Moist) 4/2 4/1 4/2 s are not p tedox Matrix fface Below Da rk Surface (w	(Type: C=Conce	Colc 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	5/8 5/8 5/8 5/8	Mottles Mottles % 10 10 15	Type C C C	Location M M M Indicators fc A10 - 2cm N A16 - Coast N F19 - Piedmor	Texture (e.g. clay, sand, loa clay loam clay loam clay loam	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 6 NRCS Hydric 3 1- Histosol 2- Histic Epipe 3- Black Histic 4- Hydrogen S 5- Stratified Le 10 - 2 cm Mucl 11 - Depleted I	egroup): Stion (Describe to the stide of	Horizon 1 2 3 dicators (check her	Color (10YR 2.5Y 2.5Y e if indicator S5 - Sandy F S6 - Strippec S7 - Dark Su S8 - Polyvalu S8 - Polyvalu F2 - Loamy (F3 - Depleter	Matrix Moist) 4/2 4/1 4/2 s are not p Redox Matrix rface Below Da rk Surface (N Gleyed Matrid	(Type: C=Conce	Colc 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	5/8 5/8 5/8 5/8	Mottles Mottles % 10 10 15	Type C C C	Location M M M Indicators fc A10 - 2cm N A16 - Coast N F19 - Piedmor	Texture (e.g. clay, sand, loa clay loam clay loam clay loam	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 6 NRCS Hydric: 1- Histosol 2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified La 10 - 2 cm Mucl 11 - Depleted 1 12 - Thick Dark	egroup): ition (Describe to III Describe to I	Horizon 1 2 3 dicators (check her	Color (10YR 2.5Y 2.5Y e if indicator: \$5 - Sandy F \$6 - Strippec \$7 - Dark Su \$8 - Polyvalu \$9 - Thin Da F2 - Loamy C F3 - Depletes F6 - Redox E	Matrix Moist) 4/2 4/1 4/2 s are not p Redox I Matrix rface le Below Da rk Surface (w Sileyed Matrix J Matirx J Matirx Dark Surface	(Type: C=Conce	Colc 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	5/8 5/8 5/8 5/8	Mottles Mottles % 10 10 15	Type C C C	Location M M M Indicators fc A10 - 2cm N A16 - Coast N F19 - Piedmor	Texture (e.g. clay, sand, loa clay loam clay loam clay loam	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 6 NRCS Hydric: 1- Histosol 2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified La 10 - 2 cm Mucl 11 - Depleted I 12 - Thick Dark 11 - Sandy Muc	egroup): stion (Describe to 10 Bottom Depth 4 6 16 Soil Field Independent of the second o	Horizon 1 2 3 dicators (check her	Color (10YR 2.5Y 2.5Y e if indicator: \$5 - Sandy F \$6 - Strippec \$7 - Dark Su \$8 - Polyvalu. \$9 - Thin Da F2 - Loamy (F3 - Deplete: F6 - Redox E F7 - Deplete:	Matrix Moist) 4/2 4/1 4/2 s are not p tedox Matrix fface Below Da rk Surface (w Gleyed Matrix d Matrix Oark Surface d Dark Surface	(Type: C=Conce	Colc 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	5/8 5/8 5/8 5/8	Mottles Mottles % 10 10 15	Type C C C	Location M M M Indicators fc A10 - 2cm N A16 - Coast I F19 - Pledmor TF12 - Very Other (Expla	Texture (e.g. clay, sand, loa clay loam clay loam clay loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 6 NRCS Hydric: 1- Histosol 2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified Le 10 - 2 cm Mucl 11 - Depleted I 12 - Thick Dark 1 - Sandy Muc 4 - Sandy Gley	egroup): stion (Describe to 10 Bottom Depth 4 6 16 Soil Field Independent of the second o	Horizon 1 2 3 dicators (check her	Color (10YR 2.5Y 2.5Y e if indicator: \$5 - Sandy F \$6 - Strippec \$7 - Dark Su \$8 - Polyvalu \$9 - Thin Da F2 - Loamy C F3 - Depletes F6 - Redox E	Matrix Moist) 4/2 4/1 4/2 s are not p tedox Matrix fface Below Da rk Surface (w Gleyed Matrix d Matrix Oark Surface d Dark Surface	(Type: C=Conce	Colc 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	5/8 5/8 5/8 5/8	Mottles Mottles % 10 10 15	Type C C C	Location M M M Indicators fc A10 - 2cm N A16 - Coast I F19 - Pledmor TF12 - Very Other (Expla	Texture (e.g. clay, sand, loa clay loam clay loam clay loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 6 NRCS Hydric 3 1- Histosol 2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified Le 10 - 2 cm Mucl 11 - Depleted I 12 - Thick Darl 1 - Sandy Muc 4 - Sandy Gley Restrictive Layer	egroup): stion (Describe to 10 Bottom Depth 4 6 16 Soil Field Independent of the second o	Horizon 1 2 3 dicators (check her	Color (10YR 2.5Y 2.5Y e if indicator: \$5 - Sandy F \$6 - Strippec \$7 - Dark Su \$8 - Polyvalu. \$9 - Thin Da F2 - Loamy (F3 - Deplete: F6 - Redox E F7 - Deplete:	Matrix Moist) 4/2 4/1 4/2 s are not p tedox Matrix fface Below Da rk Surface (w Gleyed Matrix d Matrix Oark Surface d Dark Surface	(Type: C=Conce	Colc 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	5/8 5/8 5/8 5/8	Mottles Mottles % 10 10 15	Type C C C	Location M M M Indicators fc A10 - 2cm N A16 - Coast F19 - Piedmor TF12 - Very Other (Expla	Texture (e.g. clay, sand, loa clay loam clay loam clay loam	
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SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 6 NRCS Hydric 3 1- Histosol 2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified Le 10 - 2 cm Mucl 11 - Depleted I 12 - Thick Darl 1 - Sandy Muc 4 - Sandy Gley Restrictive Layer (If Observed)	egroup): stion (Describe to III Describe to I	Horizon 1 2 3 dicators (check her	Color (10YR 2.5Y 2.5Y e if indicator: \$5 - Sandy F \$6 - Strippec \$7 - Dark Su \$8 - Polyvalu. \$9 - Thin Da F2 - Loamy (F3 - Deplete: F6 - Redox E F7 - Deplete:	Matrix Moist) 4/2 4/1 4/2 s are not p Redox I Matrix Irface Ie Below Da rk Surface (Iv Bileyed Matrix Dark Surface do Matrix Dark Surface Dark Surface Dark Surface Dark Surface	(Type: C=Conce	Colc 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	5/8 5/8 5/8 5/8	Mottles Mottles % 10 10 15	Type C C C	Location M M M Indicators fc A10 - 2cm N A16 - Coast F19 - Piedmor TF12 - Very Other (Expla	Texture (e.g. clay, sand, loa clay loam clay loam clay loam	
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WETLAND DETERMINATION DATA FORM

Eastern Mountains and Piedmont Region

Project/Site:	South Canton-Torrey 138 kV Line Rebuild Project				Wetland ID: Wetland 3 Sample Point SP05
VEGETATION	(Species identified in all uppercase are non-native species)	pecies.)			
Tree Stratum (Plot	size: 30 ft radius)				
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC: (A)
3.					· · · · · · · · · · · · · · · · · · ·
4.					Total Number of Dominant Species Across All Strata: 2 (B)
5.					Total Number of Borninant Openies Across All Strata.
					D
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.				-	OBL spp. 20 x 1 = 20
	Total Cover =	0			FACW spp. 65 X 2 = 130
					FAC spp. 15 X 3 = 45
Sanling/Shrub Strat	um (Plot size: 15 ft radius)				FACU spp. 0 x 4 = 0
1.					UPL spp. 0
2.					
3.					Total 100 (A) 195 (B)
4.					
5.					Prevalence Index = B/A = 1.950
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Yes ☑ □ No Rapid Test for Hydrophytic Vegetation
10.					, , , , ,
10.					Yes ☑ ☐ No Dominance Test is > 50%
	Total Cover =	0			Yes ☑ ☐ No Prevalence Index is ≤ 3.0 *
					Yes □ □ No Morphological Adaptations (Explain) *
Herb Stratum (Plot	size: 5 ft radius)				Yes ☐ ☐ No Problem Hydrophytic Vegetation (Explain) *
1.	Juncus effusus	30	Υ	FACW	* lastication of building and analysis of building to the
2.	Carex frankii	10	N	OBL	* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.	Scirpus cyperinus	15	N	FACW	present, unless disturbed of problematic.
4.	Solidago gigantea	20	Y	FACW	Definitions of Vegetation Strata:
5.	Typha latifolia	10	N	OBL	Dominatio of Togotation Official
6		15	N	FAC	Troo
	Dichanthelium clandestinum				Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.					וופקוו (ביבוי), regardless of fleight.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.				1	it. tali.
11.					
12.				-	Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.				-	Woody Vines - All woody vines greater than 3.28 ft. in height.
15.					Woody Vines - All woody vines gleater trial 3.26 ft. If height.
	Total Cover =	100			
Woody Vine Stratu	m (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					Hydrophydd fogolddon i feacht 19 100 11 110
5.					
<u> </u>	Total Cover =	0			
Remarks:					
-					
Additional Rem	arks:				
aantionai itelli					



WETLAND DETERMINATION DATA FORM Eastern Mountains and Piedmont Region

A 11 4	South Cantor	n-Torrey 138 kV Line Re	ebuild Project			Stant	ec Project #:	193708516		Date:	04/05/22
Applicant:		Transmission Comp	any, Inc.							County:	Stark
Investigator #1:				Investi	gator #2:			NI/A		State:	Ohio
Soil Unit: Landform:	Sebring silt loa	am, 0-2% slopes		Loc	ואו :al Relief:		Classification:	N/A		Wetland ID: Sample Point:	
Slope (%):	0	I atitude	40.71855		ongitude:		11	Datum:	NAD83	Community ID:	
	-	litions on the site typ						☑ Yes □		Section:	
		or Hydrology sigr					normal circu	mstances pre	sent?	Township:	
		or Hydrology □natu	rally probler	matic?			✓ Yes	□ No		Range:	Dir:
SUMMARY OF F											_
Hydrophytic Veg					☑ No			Hydric Soils		A (1) (1)	☐ Yes ☑ No
Wetland Hydrolo Remarks:	ogy Present	!		□ Yes	☑ No			Is This Samp	oling Point \	Within A Weti	and? Yes No
Remarks.											
HYDROLOGY											
	ology Indica	tors (Check here if	indicators ar	e not nres	ent \•	J			Secondary:		
Primary:		tors (Oneck nere in	indicators ar	e not prest	J.).					B6 - Surface So	oil Cracks
	A1 - Surface					er-Stained					egetated Concave Surface
	A2 - High Wa A3 - Saturation				B13 - Aqu B14 - Tru					B10 - Drainage B16 - Moss Trir	
	B1 - Water M				C1 - Hydr					C2 - Dry Seaso	
	B2 - Sedimer				C3 - Oxid	ized Rhizo	spheres on Livin	g Roots		C8 - Crayfish B	Burrows
	B3 - Drift Dep B4 - Algal Ma						educed Iron duction in Tilled	Soilo			Visible on Aerial Imagery Stressed Plants
	B5 - Iron Dep				C7 - Thin			30115		D2 - Geomorph	
	B7 - Inundati	on Visible on Aerial Ima	gery		Other (Ex	plain in Re	marks)			D3 - Shallow A	
										D4 - Microtopog D5 - FAC-Neut	
Field Observati	ions:									20 17.0 11000	
Surface Water F		☐ Yes ☑ No	Depth:		(in.)					_	
Water Table Pre		☐ Yes ☑ No	Depth:		(in.)			Wetland Hyd	drology Pre	esent?	Yes 🗹 No
Saturation Prese	ent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Recorde	ed Data (stre	am gauge, monitoring	well aerial n	hotos prev	ious inspe	ctions) if	available:		N/A		
Remarks:		99-,9	,, <u>r</u>	, μ		,,					
SOILS											
		am, 0-2% slopes			Ş	Series Dr	ainage Class:				
Taxonomy (Sub	group):										
Taxonomy (Sub-	group): tion (Describe to the	am, 0-2% slopes	cator or confirm the abs					, CS=Covered/Coated Sar	nd Grains; Location:	PL=Pore Lining, M=Matri	
Taxonomy (Sub-	group): tion (Describe to the Bottom	he depth needed to document the indic		Matrix	(Type: C=Conce	ntration, D=Deple	ation, RM=Reduced Matrix	, CS=Covered/Coated Sar Mottles	1		Texture
Taxonomy (Sub-	group): tion (Describe to the Bottom Depth	he depth needed to document the indic	Color	Matrix (Moist)	(Type: C=Conce	ntration, D=Deple		, CS=Covered/Coated Sar	nd Grains; Location:	PL=Pore Lining, M=Matri Location	Texture (e.g. clay, sand, loam)
Taxonomy (Sub-	group): tion (Describe to the Bottom	he depth needed to document the indic		Matrix	(Type: C=Conce	ntration, D=Deple	or (Moist)	, CS=Covered/Coated Sai	Туре	Location	Texture
Taxonomy (Sub- Profile Descripe Top Depth	group): tion (Describe to the Bottom Depth 16	he depth needed to document the indie Horizon 1	Color (Matrix (Moist) 4/3	(Type: C=Conce	ntration, D=Deple	or (Moist)	, CS=Covered/Coated Sar Mottles % 	Type 	Location 	Texture (e.g. clay, sand, loam) silt loam
Taxonomy (Sub- Profile Descripe Top Depth	group): tion (Describe to the Bottom Depth 16	he depth needed to document the india Horizon 1	Color (Matrix (Moist) 4/3	(Type: C=Conce	Col	or (Moist)	Mottles %	Type	Location 	Texture (e.g. clay, sand, loam) silt loam
Taxonomy (Sub- Profile Descrip Top Depth 0	group): tion (Describe to the Bottom Depth 16	Horizon 1	Color (Matrix (Moist) 4/3 	(Type: C=Conce	Col	or (Moist)	Mottles Mottles	Type	Location 	Texture (e.g. clay, sand, loam) silt loam
Taxonomy (Sub- Profile Descrip Top Depth 0	group): tion (Describe to the Bottom Depth 16	Horizon 1	Color (10YR 	Matrix (Moist) 4/3	(Type: C=Conce	Col	or (Moist)	. CS=Covered/Coated Sar Mottles %	Type	Location 	Texture (e.g. clay, sand, loam) silt loam
Taxonomy (Sub- Profile Descrip Top Depth O	group): tion (Describe to the Depth 16	Horizon 1	Color (10YR	Matrix (Moist) 4/3 	(Type: C=Conce	Col	or (Moist)	. CS=Covered/Coated Sar Mottles %	Type		Texture (e.g. clay, sand, loam) silt loam
Taxonomy (Sub- Profile Descrip Top Depth O	group): tion (Describe to the Depth 16	Horizon 1	Color (10YR	Matrix (Moist) 4/3 	(Type: C=Conce	Col	or (Moist)	. CS=Covered/Coated Sar Mottles %	Type	Location	Texture (e.g. clay, sand, loam) silt loam
Taxonomy (Subsection of Subsection of Subsec	group): tion (Describe to the Depth 16	Horizon 1	Color 10YR e if indicator	Matrix (Moist) 4/3 s are not p	(Type: C=Conce	Col	or (Moist)	Mottles %	Type	Location Indicators for	Texture (e.g. clay, sand, loam) silt loam
Taxonomy (Subsection of Subsection of Subsec	group): tion (Describe to the Depth	Horizon 1	Color 10YR	Matrix (Moist) 4/3 s are not p	(Type: C=Conce	Col	or (Moist)	Mottles %	Type	Location Indicators for	Texture (e.g. clay, sand, loam) silt loam
Taxonomy (Sub- Profile Descrip Top Depth 0 NRCS Hydric S _1- Histosol _2 - Histic Epipe _3 - Black Histic	group): tion (Describe to the Depth	Horizon 1	Color 10YR e if indicator	Matrix (Moist) 4/3 s are not p Redox Matrix	(Type: C=Conce	Col	or (Moist)	Mottles %	Type	Location Indicators for A10 - 2 cms IF 19 - Piedmon	Texture (e.g. clay, sand, loam) silt loam
Taxonomy (Subsection of Subsection of Subsec	group): tion (Describe to II Bottom Depth 16 Soil Field Induction	Horizon 1	Color 1 10YR e if indicator \$5 - Sandy F \$6 - Strippec \$7 - Dark St. \$8 - Polyvalu	Matrix (Moist) 4/3 s are not predox d Matrix urface use Below Da	(Type: C=Conce % 100 resent	Coi	or (Moist)	Mottles %	Type	Location	Texture (e.g. clay, sand, loam) silt loam
Taxonomy (Subprofile Descrip) Top Depth 0 NRCS Hydric S 1- Histosol 2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified La	group): tion (Describe to the Depth	Horizon 1	Color 10YR	Matrix (Moist) 4/3 s are not p Redox I Matrix Inface Je Below Da rk Surface (h	(Type: C=Conce	Coi	or (Moist)	Mottles %	Type	Location	Texture (e.g. clay, sand, loam) silt loam
Taxonomy (Subsection of Subsection of Subsec	group): tion (Describe to 10 Bottom Depth 16 Soil Field Indon uulfide typers ((LRR N)	Horizon 1 dicators (check her	Color 1 10YR e if indicator \$5 - Sandy F \$6 - Strippec \$7 - Dark St. \$8 - Polyvalu	Matrix (Moist) 4/3 s are not p Redox Matrix Inface Lee Below Da rk Surface (Moist) Gleyed Matrix	(Type: C=Conce	Coi	or (Moist)	Mottles %	Type	Location	Texture (e.g. clay, sand, loam) silt loam
Taxonomy (Subprofile Descrip) Top Depth 0 NRCS Hydric S	group): tion (Describe to the Depth	Horizon 1 dicators (check here	Color 1 10YR	Matrix (Moist) 4/3 s are not p Redox H Matrix urface Le Below Da rk Surface (k Gleyed Matrix Oark Surface	(Type: C=Conce	Coi	or (Moist)	Mottles %	Type	Location	Texture (e.g. clay, sand, loam) silt loam
Taxonomy (Subprofile Descrip) Top Depth 0 NRCS Hydric S 1- Histosol 2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified La 10 - 2 cm Muck 11 - Depleted E 12 - Thick Dark 1 - Sandy Muck	group): tion (Describe to the Depth	Horizon 1 dicators (check here	Color 1 10YR	Matrix (Moist) 4/3 s are not p Redox d Matrix urface use Below Da rk Surface (Moist) Gleyed Matrix Oark Surface d Matrix Dark Surface d Dark Surface	(Type: C=Conce	Coi	or (Moist)	Mottles %	Type	Location	Texture (e.g. clay, sand, loam) silt loam
Taxonomy (Subprofile Descrip) Top Depth 0	group): tion (Describe to the Depth	Horizon 1 dicators (check here	Color 1 10YR	Matrix (Moist) 4/3 s are not p Redox d Matrix urface ue Below Da rk Surface (h Gleyed Matri d Matirx Dark Surface d Dark Surface d Dark Surface	(Type: C=Conce	Coi	or (Moist)	Mottles %	Type	Location	Texture (e.g. clay, sand, loam) silt loam
Taxonomy (Subprofile Descrip) Top Depth 0 NRCS Hydric S 1- Histosol 2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified La 10 - 2 cm Muck 11 - Depleted E 12 - Thick Dark 1 - Sandy Muck	group): tion (Describe to the Depth	Horizon 1 dicators (check here	Color 1 10YR	Matrix (Moist) 4/3 s are not p Redox d Matrix urface use Below Da rk Surface (Moist) Gleyed Matrix Oark Surface d Matrix Dark Surface d Dark Surface	(Type: C=Conce	Coi	or (Moist)	Mottles %	Type	Location	Texture (e.g. clay, sand, loam) silt loam
Taxonomy (Subsection of Subsection of Subsec	group): tion (Describe to the Depth	Horizon 1 dicators (check here	Color 1 10YR	Matrix (Moist) 4/3 s are not p Redox d Matrix urface ue Below Da rk Surface (h Gleyed Matri d Matirx Dark Surface d Dark Surface d Dark Surface	(Type: C=Conce	Coi	or (Moist)	Mottles %	Type	Location	Texture (e.g. clay, sand, loam) silt loam
Taxonomy (Subsection of Subsection of Subsec	group): tion (Describe to the Depth	Horizon 1 dicators (check here	Color 1 10YR	Matrix (Moist) 4/3 s are not p Redox d Matrix urface ue Below Da rk Surface (h Gleyed Matri d Matirx Dark Surface d Dark Surface d Dark Surface	(Type: C=Conce	Coi	or (Moist)	Mottles %	Type	Location	Texture (e.g. clay, sand, loam) silt loam
Taxonomy (Subsection of Subsection of Subsec	group): tion (Describe to the Depth	Horizon 1 dicators (check here	Color 1 10YR	Matrix (Moist) 4/3 s are not p Redox d Matrix urface ue Below Da rk Surface (h Gleyed Matri d Matirx Dark Surface d Dark Surface d Dark Surface	(Type: C=Conce	Coi	or (Moist)	Mottles %	Type	Location	Texture (e.g. clay, sand, loam) silt loam



WETLAND DETERMINATION DATA FORM

Eastern Mountains and Piedmont Region

Project/Site:	South Canton-Torrey 138 kV Line Rebuild Project				Wetland ID: Wetland 3 Sample Point SP06
VEGETATION	(Species identified in all uppercase are non-native species)	pecies.)			
Tree Stratum (Plot	size: 30 ft radius)				
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.				-	Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					· · · · · · · · · · · · · · · · · · ·
4.					Total Number of Dominant Species Across All Strata: 1 (B)
5.					10tal 1tal 1201 01 201 mila it oposioo 7 iii 0talaa(2)
6.					Descent of Deminant Charles That Are ODL FACIAL as FAC: 0.00/ (A/D)
					Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp 0
	Total Cover =	0			FACW spp. $0 x 2 = 0$
					FAC spp. 15 $\times 3 = 45$
Sapling/Shrub Strat	um (Plot size: 15 ft radius)				FACU spp. 85 X 4 = 340
1.					UPL spp. 0 $x = 0$
2.					0. 2 spp
3.					Total 100 (A) 385 (B)
					Total 100 (A) 385 (B)
4.					
5.					Prevalence Index = B/A = 3.850
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Yes □ ☑ No Rapid Test for Hydrophytic Vegetation
10.					Yes □ ☑ No Dominance Test is > 50%
_	Total Cover =	0			Yes □ ☑ No Prevalence Index is ≤ 3.0 *
	. 3 (2)	Ŭ			Yes □ ☑ No Morphological Adaptations (Explain) *
Llark Ctratum (Diat	oizo. E ft rodius)				
Herb Stratum (Plot		15	NI.	ΕΛC	Yes ☐ ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Dichanthelium clandestinum	15	N	FAC	* Indicators of hydric soil and wetland hydrology must be
2.	Andropogon virginicus	15	N	FACU	present, unless disturbed or problematic.
3.	Schedonorus arundinaceus	70	Y	FACU	
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.					height (DBH), regardless of height.
8.					
9.				-	Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.					ft. tall.
11.					II I All harbassasse (ann suands) planta sacardlana af aire
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	100			
Woody Vine Stratu	m (Plot size: 30 ft radius)				
1.					
2.					
					Hydranhytia Vagatation Brasset - Vag No
3.				-	Hydrophytic Vegetation Present ☐ Yes ☑ No
4.					
5.					
	Total Cover =	0			
Remarks:					
Additional Rem	arke:				
Auditional Reff	ains.				



WETLAND DETERMINATION DATA FORM Eastern Mountains and Piedmont Region

Project/Site:		n-Torrey 138 kV Line F				Stant	ec Project #:	193708516		Date:	04/05/22	
Applicant:		Transmission Com	pany, Inc.							County:	Stark	
Investigator #1: Soil Unit:				Investi	gator #2:		nzler Classification:	NI/A		State: Wetland ID:	Ohio	
Landform:	Depression	am, 0-2% slopes		Loc	al Relief:			IN/A		Sample Point:		
Slope (%):	0		e: 40.71949		ongitude:			Datum:	NAD83	Community ID:		
	-	litions on the site ty						☑ Yes □	No	Section:		
Are Vegetation	□ , Soil □, o	or Hydrology sig	nificantly dist	urbed?			e normal circu	mstances pre	sent?	Township:		
Are Vegetation	□, Soil □, o	or Hydrology □na	turally probler	matic?			Yes	□ No		Range:	Dir:	
SUMMARY OF F												
Hydrophytic Veg					□ No			Hydric Soils			✓ Yes □	No
Wetland Hydrolo Remarks:	ogy Present	?		✓ Yes	□ No	l		Is This Samp	oling Point \	Within A Wetl	and? 🛛 Yes 🔳	No
Remarks.												
HYDROLOGY												
	ology Indica	tors (Check here it	indicators ar	a not nres	ant \-				Secondary:			
Primary:		itors (Check here ii	iliuicators ai	e not presi	ent).					B6 - Surface So	oil Cracks	
✓	A1 - Surface					er-Stained				B8 - Sparsely V	egetated Concave Surfac	е
✓	A2 - High Wa					uatic Fauna				B10 - Drainage B16 - Moss Trir		
	A3 - Saturation B1 - Water M			ä		e Aquatic F ogen Sulfic				C2 - Dry Seaso		
	B2 - Sedimer	nt Deposits			C3 - Oxid	ized Rhizo	spheres on Livin	g Roots		C8 - Crayfish B	urrows	
	B3 - Drift Dep						educed Iron	0 "			Visible on Aerial Image	ry
	B4 - Algal Ma B5 - Iron Der					ent Iron Re Muck Surf	duction in Tilled	Soils		D1 - Stunted or D2 - Geomorph	Stressed Plants	
		on Visible on Aerial Im	agery			plain in Re				D3 - Shallow A	quitard	
									무	D4 - Microtopo	graphic Relief	
Field Observati										D5 - FAC-Neul	rai rest	
Field Observati			5 11	0.0	(: \							
Surface Water F Water Table Pre		✓ Yes✓ No✓ Yes✓ No	Depth: Depth:		(in.) (in.)			Wetland Hyd	drology Pre	esent? 🗵	Yes 🗆 No	
Saturation Prese		☐ Yes ☑ No	Depth:		(in.)							
					. ,	-4:\ if	au ailahla.		N/A			
<u> </u>	ed Data (Sile	am gauge, monitorin	g well, aerial p	notos, prev	ious ilispe	CHOHS). II			IN/A			
Domarke:						-,,	a ranabio.					
Remarks:					<u> </u>							
					·							
Remarks: SOILS Map Unit Name:	: Sebring silt loa	am, 0-2% slopes			•	·	ainage Class:					
SOILS Map Unit Name: Taxonomy (Sub	group):				5	Series Dr	ainage Class:					
SOILS Map Unit Name: Taxonomy (Sub-	group): tion (Describe to the	am, 0-2% slopes	dicator or confirm the abs		5	Series Dr	ainage Class:	, CS=Covered/Coated Sar	nd Grains; Location:	PL=Pore Lining, M=Matri		
SOILS Map Unit Name: Taxonomy (Sub-	group): tion (Describe to the Bottom	he depth needed to document the in		Matrix	(Type: C=Conce	Series Dr.	ainage Class: etion, RM=Reduced Matrix	, CS=Covered/Coated Sar Mottles	1		Texture	
SOILS Map Unit Name: Taxonomy (Sub- Profile Descript Top Depth	group): tion (Describe to the Bottom Depth	he depth needed to document the in-	Color	Matrix (Moist)	(Type: C=Conce	Series Dr.	ainage Class: etion, RM=Reduced Matrix or (Moist)	, CS=Covered/Coated Sai	Туре	Location	Texture (e.g. clay, sand	d, loam)
SOILS Map Unit Name: Taxonomy (Sub- Profile Descript Top Depth 0	group): tion (Describe to the Bottom Depth 16	he depth needed to document the in Horizon 1	Color (Matrix (Moist) 5/2	(Type: C=Conce	Series Dra	ainage Class: ation, RM=Reduced Matrix or (Moist) 5/8	, CS=Covered/Coated Sar Mottles % 6	Type C	Location M	Texture (e.g. clay, sand clay loa	d, loam)
SOILS Map Unit Name: Taxonomy (Sub- Profile Descript Top Depth 0	group): tion (Describe to the Bottom Depth 16	Horizon 1	Color (Matrix (Moist) 5/2	(Type: C=Conce	Series Dra	ainage Class: etion, RM=Reduced Matrix or (Moist) 5/8	Mottles % 6	Type C 	Location M	Texture (e.g. clay, sand clay load	d, loam)
SOILS Map Unit Name: Taxonomy (Sub- Profile Descript Top Depth 0	group): tion (Describe to the Bottom Depth 16	Horizon 1	Color (10YR 	Matrix (Moist) 5/2	(Type: C=Conce	Series Dramation, D=Depletor Col 10YR	ainage Class: etion, RM=Reduced Matrix or (Moist) 5/8	Mottles Mottles 6	Type C 	Location M 	Texture (e.g. clay, sand clay load	d, loam)
SOILS Map Unit Name: Taxonomy (Sub- Profile Descript Top Depth 0	group): tion (Describe to the Bottom Depth 16	Horizon 1	Color (Matrix (Moist) 5/2	(Type: C=Conce	Series Dra	ainage Class: etion, RM=Reduced Matrix or (Moist) 5/8	Mottles % 6	Type C 	Location M	Texture (e.g. clay, sand clay load	d, loam)
SOILS Map Unit Name: Taxonomy (Sub- Profile Descript Top Depth 0	group): tion (Describe to the Bottom Depth 16	Horizon 1	Color (10YR	Matrix (Moist) 5/2 	(Type: C=Conce	Series Dr. miration, D=Deple Col 10YR	ainage Class: etion, RM=Reduced Matrix or (Moist) 5/8	Mottles % 6	Type C	Location M 	Texture (e.g. clay, sand	d, loam)
SOILS Map Unit Name: Taxonomy (Sub- Profile Descrip Top Depth 0	group): tion (Describe to the Bottom Depth 16	Horizon 1	Color (10YR	Matrix (Moist) 5/2	(Type: C=Conce	Series Dr. mtration, D=Deple Col 10YR	ainage Class: etion, RM=Reduced Matrix or (Moist) 5/8	Mottles % 6	Type C	Location M	Texture (e.g. clay, sand	d, loam)
SOILS Map Unit Name: Taxonomy (Sub: Profile Descrip Top Depth 0	group): tion (Describe to III Bottom Depth 16	Horizon 1	Color (10YR	Matrix (Moist) 5/2	(Type: C=Conce	Series Dr. ntration, D=Depletion Coll 10YR	ainage Class: etion, RM=Reduced Matrix or (Moist) 5/8	Mottles % 6	Type C	Location M	Texture (e.g. clay, sand	d, loam)
SOILS Map Unit Name: Taxonomy (Subprofile Descript Top Depth 0	group): tion (Describe to the Depth 16	Horizon 1	Color (10YR	Matrix (Moist) 5/2 	(Type: C=Conce	Series Dr. notration, D=Deple Col 10YR	ainage Class: etion, RM=Reduced Matrix or (Moist) 5/8	Mottles Mottles % 6	Type C	Location M	Texture (e.g. clay, sand	d, loam)
SOILS Map Unit Name: Taxonomy (Subine Profile Description Control Profile Description	group): tion (Describe to the Depth	Horizon 1	Color (10YR	Matrix (Moist) 5/2 s are not p	(Type: C=Conce	Series Dr. ntration, D=Depth Coll 10YR	ainage Class: etion, RM=Reduced Matrix or (Moist) 5/8	Mottles % 6	Type C	Location M	(e.g. clay, sand	d, loam)
SOILS Map Unit Name: Taxonomy (Sub: Profile Descript Top Depth 0	group): tion (Describe to the Depth	Horizon 1	Color (10YR	Matrix (Moist) 5/2 ss are not predox at Matrix	(Type: C=Conce	Series Dr. notration, D=Deple Col 10YR	ainage Class: etion, RM=Reduced Matrix or (Moist) 5/8	Mottles % 6	Type C	Location M Indicators fc A10 - 2cm N A16 - Coast F	(e.g. clay, sand	d, loam) m
SOILS Map Unit Name: Taxonomy (Subprofile Descript Top Depth 0 NRCS Hydric S 1- Histosol 2 - Histic Epipe 3 - Black Histic	group): tion (Describe to the Depth	Horizon 1	Color (10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface	(Type: C=Conce	Series Dr. notration, D=Deple Coll 10YR):	ainage Class: etion, RM=Reduced Matrix or (Moist) 5/8	Mottles % 6	Type	Location M Indicators fc A10 - 2cm M A16 - Coast F	Texture (e.g. clay, sand clay loat	d, loam) m
SOILS Map Unit Name: Taxonomy (Sub: Profile Descript Top Depth 0	group): tion (Describe to II Bottom Depth 16 Soil Field Induction	Horizon 1	Color (10YR	Matrix (Moist) 5/2	% 94 rresent	Series Dr. notration, D=Deple Coll 10YR):	ainage Class: or (Moist) 5/8 F12 - Iron F13 - Um F19 - Piec	Mottles % 6	Type C	Location M Indicators fc A10 - 2cm N A16 - Coast F F19 - Piedmor	(e.g. clay, sand	d, loam)
SOILS Map Unit Name: Taxonomy (Subreme Profile Descript) Top Depth 0	group): tion (Describe to 10 Bottom Depth 16 Soil Field Indon uulfide typers ((LRR N)	Horizon 1 dicators (check he	Color (10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface ue Below Da urk Surface (Moist)	(Type: C=Conce % 94	Series Dr. notration, D=Deple Coll 10YR):	ainage Class: or (Moist) 5/8 F12 - Iron F13 - Um F19 - Piec	Mottles % 6	Type C	Location M Indicators fc A10 - 2cm N A16 - Coast F F19 - Piedmor	Texture (e.g. clay, sand clay load	d, loam) m
SOILS Map Unit Name: Taxonomy (Subpersolution) Top Depth O	group): tion (Describe to II Bottom Depth 16 Soil Field In don uuffide tyers (LIRR N) Selow Dark Suil	Horizon 1 dicators (check he	Color (10YR	Matrix (Moist) 5/2 S are not p Redox d Matrix urface ue Below Da rk Surface (h Gleyed Matrid d Matrix	(Type: C=Conce	Series Dr. notration, D=Deple Coll 10YR):	ainage Class: or (Moist) 5/8 F12 - Iron F13 - Um F19 - Piec	Mottles % 6	Type C	Location M Indicators fc A10 - 2cm N A16 - Coast F F19 - Piedmor	Texture (e.g. clay, sand clay load	d, loam) m
SOILS Map Unit Name: Taxonomy (Sub: Profile Descript Top Depth O NRCS Hydric S 1- Histosol 2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified La 10 - 2 cm Muck 11 - Depleted E 12 - Thick Dark	group): tion (Describe to the Depth	Horizon 1	Color (10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface urface urface (% Gleyed Matrix Gleyed Matrix Dark Surface Orange (% Control of the contro	(Type: C=Conce 96 94	Series Dr. notration, D=Deple Coll 10YR):	ainage Class: or (Moist) 5/8 F12 - Iron F13 - Um F19 - Piec	Mottles % 6	Type C	Location M Indicators fc A10 - 2cm N A16 - Coast F F19 - Piedmor	Texture (e.g. clay, sand clay load	d, loam) m
SOILS Map Unit Name: Taxonomy (Subpersolution) Top Depth O	group): tion (Describe to the Depth	Horizon 1	Color (10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface ue Below Da rk Surface (Moist) Gleyed Matrix Dark Surface d Matrix Dark Surface d Dark Surface	(Type: C=Conce 96 94	Series Dr. notration, D=Deple Coll 10YR):	ainage Class: or (Moist) 5/8 F12 - Iron F13 - Um F19 - Piec	Mottles % 6	Type C	Location M Indicators fc A10 - 2cm M A16 - Coast F F19 - Piedmor TF12 - Very Other (Expla	Texture (e.g. clay, sand clay load	1, loam) m
SOILS Map Unit Name: Taxonomy (Sub: Profile Descrip Top Depth O	group): tion (Describe to the Depth	Horizon 1	Color (10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface ue Below Da rk Surface (Moist) Gleyed Matrix Dark Surface d Matrix Dark Surface d Dark Surface	(Type: C=Conce 96 94	Series Dr. notration, D=Deple Coll 10YR):	ainage Class: or (Moist) 5/8 F12 - Iron F13 - Um F19 - Piec	Mottles % 6	Type C	Location M Indicators fc A10 - 2cm N A16 - Coast F F19 - Piedmor TF12 - Very Other (Expla	Texture (e.g. clay, sand clay loat	1, loam) m
SOILS Map Unit Name: Taxonomy (Sub: Profile Descrip Top Depth O	group): tion (Describe to the Depth	Horizon 1	Color (10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface ue Below Da rk Surface (h Gleyed Matri d Matirx Dark Surface d Dark Surface d Dark Surface	(Type: C=Conce 96 94	Series Dr. notration, D=Deple Coll 10YR):	ainage Class: or (Moist) 5/8 F12 - Iron F13 - Um F19 - Piec	Mottles % 6	Type C	Location M Indicators fc A10 - 2cm N A16 - Coast F F19 - Piedmor TF12 - Very Other (Expla	Texture (e.g. clay, sand clay loat	1, loam) m
SOILS Map Unit Name: Taxonomy (Sub: Profile Descrip Top Depth O	group): tion (Describe to the Depth	Horizon 1	Color (10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface ue Below Da rk Surface (h Gleyed Matri d Matirx Dark Surface d Dark Surface d Dark Surface	(Type: C=Conce 96 94	Series Dr. notration, D=Deple Coll 10YR):	ainage Class: or (Moist) 5/8 F12 - Iron F13 - Um F19 - Piec	Mottles % 6	Type C	Location M Indicators fc A10 - 2cm N A16 - Coast F F19 - Piedmor TF12 - Very Other (Expla	Texture (e.g. clay, sand clay loat	1, loam) m
SOILS Map Unit Name: Taxonomy (Sub: Profile Descrip Top Depth O	group): tion (Describe to the Depth	Horizon 1	Color (10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface ue Below Da rk Surface (h Gleyed Matri d Matirx Dark Surface d Dark Surface d Dark Surface	(Type: C=Conce 96 94	Series Dr. notration, D=Deple Coll 10YR):	ainage Class: or (Moist) 5/8 F12 - Iron F13 - Um F19 - Piec	Mottles % 6	Type C	Location M Indicators fc A10 - 2cm N A16 - Coast F F19 - Piedmor TF12 - Very Other (Expla	Texture (e.g. clay, sand clay loat	1, loam) m



	Project/Site:	South Canton-Torrey 138 kV Line Rebuild Project				Wetland ID: Wetland 4 Sample Point SP07
Total Cover = Total Cover						
			pecies.)			
1.	Tree Stratum (Plo					
2.		· · · · · · · · · · · · · · · · · · ·		_		Dominance Test Worksheet
3.						N
A						Number of Dominant Species that are OBL, FACW, or FAC: 4 (A)
S.						
Record of Dominant Species That Are OBL, FACW, or FAC; 100.0% (A/B)						Total Number of Dominant Species Across All Strata:4 (B)
Total Cover =	_					
S						Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
9.						
10.						
Total Cover = 0						
FAC Spp. 25	10.					
Septing/Shrub Stratum (Piot size: 15 ft radius)		Total Cover =	0			FACW spp. 50
1						FAC spp. 25
2						FACU spp. 0 x 4 = 0
3.						UPL spp0
4,						
S						Total <u>85</u> (A) <u>185</u> (B)
6.						
Total Cover Stratum (Plot size: 30 ft radius)						Prevalence Index = B/A = 2.176
Remarks:						
9						
10	_					
Herb Stratum (Plot size: 5 ft radius)						, , , , , ,
Herb Stratum (Plot size: 5 ft radius)	10.					
Herb Stratum (Plot size: 5 ft radius)		Total Cover =	0			
1. Symplocarpus foetidus 2. Dicharthelium clandestinum 15 Y FACW 3. Solidago gigantea 15 Y FACW 4. Onoclea sensibilis 15 Y FACW 5. Rumex crispus 10 N FACW 7						Yes □ ☑ No Morphological Adaptations (Explain) *
2.	Herb Stratum (Plo					Yes □ ☑ No Problem Hydrophytic Vegetation (Explain) *
2.						* Indicators of hydric soil and wetland hydrology must be
4.						
5. Rumex crispus 6 Scirpus cyperinus 7	3.	Solidago gigantea			FACW	, , , , , , , , , , , , , , , , , , ,
Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.						Definitions of Vegetation Strata:
7		Rumex crispus	10		FAC	
8		Scirpus cyperinus	20	Υ	FACW	Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
9						height (DBH), regardless of height.
10	8.					
10	9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
12	10.					rt. tan.
13	11.					
13						Herb - All herbaceous (non-woody) plants, regardless of size,
15 Woody Vines - All woody vines greater than 3.28 ft. in height. Total Cover = 85						and woody plants 1655 than 3.20 ft. tall.
Total Cover = 85 Woody Vine Stratum (Plot size: 30 ft radius) 1						
Woody Vine Stratum (Plot size: 30 ft radius) 1 2 3 4 5 Total Cover = 0 Remarks:	15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
1		Total Cover =	85			
1						
2	Woody Vine Strat	um (Plot size: 30 ft radius)				
3						
4	2.					
5 Total Cover = 0 Remarks:	3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
Total Cover = 0 Remarks:						
Remarks:	5.					
		Total Cover =	0			
Additional Remarks:	Remarks:					
Additional Remarks:						
Additional Remarks:						
	Additional Rea	marks:				
		**				



WETLAND DETERMINATION DATA FORM Eastern Mountains and Piedmont Region

Project/Site:	South Canto	n-Torrey 138 kV Line R	ebuild Project			Stant	ec Project #:	193708516		Date:	04/05/22
Applicant:		Transmission Comp	any, Inc.							County:	Stark
Investigator #1:				Investi	gator #2:			NI/A		State:	Ohio
Soil Unit: Landform:	Sebring silt loa	am, 0-2% slopes		Loc	Nv :al Relief:		Classification:	N/A		Wetland ID: Sample Point:	
Slope (%):	3-5		: 40.71963		ongitude:		11	Datum:	NAD83	Community ID:	
		litions on the site typ						☑ Yes □	No	Section:	
		or Hydrology sigr					e normal circu	mstances pre	sent?	Township:	
		or Hydrology □nati	urally proble	matic?			Yes	□ No		Range:	Dir:
SUMMARY OF F											
Hydrophytic Veg					☑ No			Hydric Soils		A () A A A	☐ Yes ☑ No
Wetland Hydrolo Remarks:	ogy Present	!		□ Yes	☑ No			Is This Samp	oling Point \	Within A Weti	and? Yes No
Remarks.											
HYDROLOGY											
	logy Indica	tors (Check here if	indicators ar	re not nrese	ent \•	J			Secondary:		
Primary:		tors (Oneck nere ii	ilidicators ai	ie not prest	J.).					B6 - Surface So	oil Cracks
						er-Stained					egetated Concave Surface
	A2 - High Wa A3 - Saturation				B13 - Aqu B14 - True					B10 - Drainage B16 - Moss Trir	
	B1 - Water N				C1 - Hydr					C2 - Dry Seaso	
	B2 - Sedime						spheres on Livin	g Roots		C8 - Crayfish B	
	B3 - Drift De						educed Iron duction in Tilled	Soils			Visible on Aerial Imagery Stressed Plants
	B5 - Iron Dep	oosits			C7 - Thin	Muck Surf	ace	C 00		D2 - Geomorph	nic Position
	B7 - Inundati	on Visible on Aerial Ima	gery		Other (Ex	plain in Re	marks)		님	D3 - Shallow Ao D4 - Microtopog	quitard
										D5 - FAC-Neut	ral Test
Field Observati	ions:										
Surface Water F	Present?	☐ Yes ☑ No	Depth:	:	(in.)			Wetland Hyd	dralamı Dr		Voc. 🗆 No.
Water Table Pre	esent?	☐ Yes ☑ No	Depth:		(in.)			wetiand Hyd	arology Pre	esent?	Yes 🗵 No
Saturation Prese	ent?	☐ Yes ☑ No	Depth:	:	(in.)						
Describe Recorde	ed Data (stre	am gauge, monitoring	well, aerial p	hotos, previ	ious inspe	ctions), if	available:		N/A		
Remarks:											
SOILS) i D-	-:				
Map Unit Name: Taxonomy (Sub		am, 0-2% slopes				series Dr	ainage Class:				
		he depth needed to document the indi	cator or confirm the abs	sence of indicators.)	(Type: C=Conce	ntration D=Denl	etion. RM=Reduced Matrix	CS=Covered/Coated Sar	nd Grains: Location:	PI =Pore Lining, M=Matri	
Тор	Bottom				(.)pare earnes			,		3,	
				ivialiix				Mottles			Texture
Depth	Depth	Horizon	Color	Matrix (Moist)	%	Col	or (Moist)	Mottles %	Туре	Location	
Depth 0	Depth 5	Horizon 1	Color 2.5Y		% 100	Col			1	Location 	Texture
				(Moist)	1		or (Moist)	%	Туре		Texture (e.g. clay, sand, loam)
0 5 	5 16 	1 2	2.5Y 2.5Y	(Moist) 4/3 6/3	100 95 	 10YR 	or (Moist) 5/8	% 5 	Type C 	 PL 	Texture (e.g. clay, sand, loam) clay loam clay loam
0 5 	5 16 	1 2 	2.5Y 2.5Y 	(Moist) 4/3 6/3 	100 95 	 10YR 	or (Moist) 5/8	% 5 	Type C	 PL 	Texture (e.g. clay, sand, loam) clay loam clay loam
5 	5 16 	1 2 	2.5Y 2.5Y 	(Moist) 4/3 6/3 	100 95 	 10YR 	5/8	% 5 	Type C	 PL 	Texture (e.g. clay, sand, loam) clay loam clay loam
0 5 	5 16 	1 2 	2.5Y 2.5Y 	(Moist) 4/3 6/3	100 95 	 10YR 	or (Moist) 5/8	% 5 	Type C	 PL 	Texture (e.g. clay, sand, loam) clay loam clay loam
5 	5 16 	1 2 	2.5Y 2.5Y 	(Moist) 4/3 6/3 	100 95 	 10YR 	5/8	% 5 	Type C	 PL 	Texture (e.g. clay, sand, loam) clay loam clay loam
0 5 	5 16 	1 2 	2.5Y 2.5Y 	(Moist) 4/3 6/3	100 95 	 10YR 	or (Moist) 5/8	% 5 	Type C	 PL 	Texture (e.g. clay, sand, loam) clay loam clay loam
0 5 	5 16 	1 2 	2.5Y 2.5Y 	(Moist) 4/3 6/3 rs are not p	100 95 	 10YR 	or (Moist) 5/8	% 5 	Type C	 PL Indicators fo	Texture (e.g. clay, sand, loam) clay loam clay loam
0 5 NRCS Hydric S1 - Histosol2 - Histic Epipe	5 16 Soil Field In	1 2 	2.5Y 2.5Y e if indicator S5 - Sandy I S6 - Stripper	(Moist) 4/3 6/3 s are not p Redox d Matrix	100 95 	 10YR 	or (Moist) 5/8	% 5	Type C	PL Indicators fo A10 - 2cm M A16 - Coast F	Texture (e.g. clay, sand, loam) clay loam clay loam pr Problematic Soils 1 Auck (MLRA 147) Prairie Redox (MLRA 147, 148)
0 5 NRCS Hydric S	5 16 Soil Field In	1 2 	2.5Y 2.5Y	(Moist) 4/3 6/3 s are not p Redox d Matrix urface	100 95 	10YR):	or (Moist) 5/8	% 5	Type C	PL	Texture (e.g. clay, sand, loam) clay loam clay loam
0 5 NRCS Hydric S1 - Histosol2 - Histic Epipe	5 16 Soil Field In	1 2 	2.5Y 2.5Y e if indicator S5 - Sandy I S6 - Stripper S7 - Dark St S8 - Polyvali	(Moist) 4/3 6/3 s are not p Redox d Matrix	100 95 	10YR):	or (Moist) 5/8	% 5	Type C	PL	Texture (e.g. clay, sand, loam) clay loam clay loam pr Problematic Soils 1 Auck (MLRA 147) Prairie Redox (MLRA 147, 148)
0 5 NRCS Hydric S 1- Histosol 2- Histic Epipe 3- Black Histic 4- Hydrogen S 5- Stratified a 10-2 cm Muck	5 16 Soil Field In don ulfide typers (LRR N)	1 2 dicators (check her	2.5Y 2.5Y e if indicator S5 - Sandy I S6 - Stripper S7 - Dark St S8 - Polyval S9 - Thin Da F2 - Loamy	(Moist) 4/3 6/3 rs are not p Redox d Matrix urface ue Below Da ark Surface (w Gleyed Matrix	100 95 resent	10YR):	or (Moist) 5/8	% 5	Type C	PL	Texture (e.g. clay, sand, loam) clay loam clay loam
NRCS Hydric S 1- Histosol 2- Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified La 10 - 2 cm Muck 11 - Depleted B	5 16 Soil Field In don ulfide yyers ((LRR N)	1 2 dicators (check her	2.5Y 2.5Y 2.5Y e if indicator S5 - Sandy I S6 - Stripper S7 - Dark St S8 - Polyvalt S9 - Thin Da F2 - Loamy F3 - Deplete	(Moist) 4/3 6/3 rs are not p Redox d Matrix urface ue Below Da ark Surface (N Gleyed Matrix dd Matrix	100 95 	10YR):	or (Moist) 5/8	% 5	Type C	PL	Texture (e.g. clay, sand, loam) clay loam clay loam
0 5 NRCS Hydric S 1- Histosol 2- Histic Epipe 3- Black Histic 4- Hydrogen S 5- Stratified a 10-2 cm Muck	5 16 Soil Field In don ulfide tyers (LRR N) sellow Dark Su Surface	1 2 dicators (check hear	2.5Y 2.5Y e if indicator S5 - Sandy l S6 - Strippe S7 - Dark St S8 - Polyval S9 - Thin Da F2 - Loamy F3 - Deplete F6 - Redox l	(Moist) 4/3 6/3 rs are not p Redox d Matrix urface ue Below Da ark Surface (w Gleyed Matrix	100 95 rresent	10YR):	or (Moist) 5/8	% 5	Type C	PL	Texture (e.g. clay, sand, loam) clay loam clay loam
O 5	5 16 Soil Field In don ulfide tyers ((LRR N) Sellow Dark Su Surface t Mineral (LRR N	1 2 dicators (check hear	2.5Y 2.5Y e if indicator S5 - Sandy l S6 - Strippe S7 - Dark St S8 - Polyval S9 - Thin Da F2 - Loamy F3 - Deplete F6 - Redox l	(Moist) 4/3 6/3 s are not p Redox d Matrix urface ue Below Da ark Surface (Molecular Surface) Gleyed Matrix Dark Surface do Dark Surface and Dark Surface and Dark Surface and Dark Surface and Dark Surface	100 95 rresent	10YR):	or (Moist) 5/8	% 5	Type C	PL	Texture (e.g. clay, sand, loam) clay loam clay loam
0 5	5 16 Soil Field In don ulfide tyers ((LRR N) Sellow Dark Su Surface t Mineral (LRR N	1 2 dicators (check hear	2.5Y 2.5Y 2.5Y e if indicator S5 - Sandy I S6 - Strippe S7 - Dark SI S8 - Polyval S9 - Thin Da F2 - Loamy F3 - Deplete F6 - Redox I F7 - Deplete	(Moist) 4/3 6/3 s are not p Redox d Matrix urface ue Below Da ark Surface (Molecular Surface) Gleyed Matrix Dark Surface do Dark Surface and Dark Surface and Dark Surface and Dark Surface and Dark Surface	100 95 rresent	10YR):	or (Moist) 5/8	% 5	Type C	PL Indicators for A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very Other (Expla	Texture (e.g. clay, sand, loam) clay loam clay loam
O 5	5 16 Soil Field In don ulfide tyers ((LRR N) selow Dark Su Surface t Mineral (LRR N ed Matrix	1 2 dicators (check hear	2.5Y 2.5Y 2.5Y e if indicator S5 - Sandy I S6 - Strippe S7 - Dark SI S8 - Polyval S9 - Thin Da F2 - Loamy F3 - Deplete F6 - Redox I F7 - Deplete	(Moist) 4/3 6/3 s are not p Redox d Matrix urface ue Below Da ark Surface (N Gleyed Matrix Dark Surface d Matirx Dark Surface d Dark Surface d Dark Surface	100 95 rresent	10YR):	or (Moist) 5/8	% 5	Type C	PL Indicators for A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very Other (Expla	Texture (e.g. clay, sand, loam) clay loam clay loam
NRCS Hydric S 1- Histosol 2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified La 10 - 2 cm Muck 11 - Depleted E 12 - Thick Dark 1 - Sandy Muck 4 - Sandy Gleys Restrictive Layer	5 16 Soil Field In don ulfide tyers ((LRR N) selow Dark Su Surface t Mineral (LRR N ed Matrix	1 2 dicators (check hear	2.5Y 2.5Y 2.5Y e if indicator S5 - Sandy I S6 - Strippe S7 - Dark SI S8 - Polyval S9 - Thin Da F2 - Loamy F3 - Deplete F6 - Redox I F7 - Deplete	(Moist) 4/3 6/3 s are not p Redox d Matrix urface ue Below Da ark Surface (N Gleyed Matrix Dark Surface d Matirx Dark Surface d Dark Surface d Dark Surface	100 95 rresent	10YR):	or (Moist) 5/8	% 5	Type C	PL Indicators for A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very Other (Expla	Texture (e.g. clay, sand, loam) clay loam clay loam
O 5	5 16 Soil Field In don ulfide tyers ((LRR N) selow Dark Su Surface t Mineral (LRR N ed Matrix	1 2 dicators (check hear	2.5Y 2.5Y 2.5Y e if indicator S5 - Sandy I S6 - Strippe S7 - Dark SI S8 - Polyval S9 - Thin Da F2 - Loamy F3 - Deplete F6 - Redox I F7 - Deplete	(Moist) 4/3 6/3 s are not p Redox d Matrix urface ue Below Da ark Surface (N Gleyed Matrix Dark Surface d Matirx Dark Surface d Dark Surface d Dark Surface	100 95 rresent	10YR):	or (Moist) 5/8	% 5	Type C	PL Indicators for A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very Other (Expla	Texture (e.g. clay, sand, loam) clay loam clay loam



Project/Site:	South Canton-Torrey 138 kV Line Rebuild Project				Wetland ID: Wetland 4 Sample Point SP08
ECETATION	(0)	. ,			
EGETATION	(Species identified in all uppercase are non-native soft size: 30 ft radius)	pecies.)			
ree Stratum (Pic	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.		<u> 78 COVEI</u>	Dominant	<u></u>	Dominance rest worksheet
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					()
4.					Total Number of Dominant Species Across All Strata: 2 (B)
5.					Total Number of Bothman openies Notoco Air Strate.
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
7.					(10)
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
10.	Total Cover =	0			FACW spp. 0 x 2 = 0
		ŭ			FAC spp. 0 x 3 = 0
anling/Shrub Str	ratum (Plot size: 15 ft radius)				FACU spp. 70 x 4 = 280
1.					$\begin{array}{cccccccccccccccccccccccccccccccccccc$
2.					
3.					Total 70 (A) 280 (B)
4.					
5.					Prevalence Index = B/A = 4.000
6.					1 10 talo 100 11 alon = 5/11 =
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Yes 🗆 🗷 No Rapid Test for Hydrophytic Vegetation
10.					Yes □ ☑ No Dominance Test is > 50%
10.	Total Cover =				Yes □ ✓ No Prevalence Index is ≤ 3.0 *
	Total Gover =	O			Yes □ ☑ No Morphological Adaptations (Explain) *
erh Stratum (Plo	ot size: 5 ft radius)				Yes 🗆 🔻 No Problem Hydrophytic Vegetation (Explain) *
1.	Solidago canadensis	30	Υ	FACU	1 es 🗀 140 Problem Hydrophytic Vegetation (Explain)
2.	Schedonorus arundinaceus	25	Y	FACU	* Indicators of hydric soil and wetland hydrology must be
3.	Potentilla simplex	5	N	FACU	present, unless disturbed or problematic.
4.	Achillea millefolium	10	N	FACU	Definitions of Vegetation Strata:
5.					- Dominiono di Vogotation di ata.
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.					height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.					ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
13.	Total Cover =	70			Troody Tilles
	Total Cover =	70			
loody Vina Strat	tum (Plot size: 30 ft radius)				
1.	um (Plot size. 50 it radius)				
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
3. 4.					Tiyuropiiyuo vegetation Fresent Lines 110
<u>4.</u> 5.					
ა.	Total Cover =	0			
Remarks:	Total Cover =	U			
terriarks.					
dditional Rei	marks:				



WETLAND DETERMINATION DATA FORM Eastern Mountains and Piedmont Region

	South Cantor	n-Torrey 138 kV Line R	ebuild Project			Stant	ec Project #:	193708516		Date:	04/05/22	
Applicant:		Transmission Comp	oany, Inc.							County:	Stark	
Investigator #1:				Investi	gator #2:			NI/A		State:	Ohio	
Soil Unit: Landform:	Side slope	am, 8-15% slopes		Loc	ואו :al Relief		Classification:	N/A		Wetland ID: Sample Point:		
Slope (%):	2-4		: 40.72232		ongitude:			Datum:	NAD83	Community ID:		
		itions on the site typ						☑ Yes □		Section:		
Are Vegetation	□ , Soil □, o	or Hydrology sigr	nificantly dist	urbed?			normal circu	mstances pre	sent?	Township:		
Are Vegetation	□, Soil □, o	or Hydrology nat	urally probler	matic?				□ No		Range:	Dir:	
SUMMARY OF F											_	
Hydrophytic Veg					□ No			Hydric Soils		A / · · · · · · · · · · · · · · · · · ·	✓ Yes □ No	
Wetland Hydrolo Remarks:	ogy Present	?		✓ Yes	□ No	ı		Is This Samp	oling Point V	Vithin A Wetl	and? ☑ Yes ■ No	•
Remarks.												
HYDROLOGY												
	ology Indica	tors (Check here if	indicators ar	e not nres	ent \•				Secondary:			
Primary:		tors (Officer fiere if	indicators ar	e not prest	. J.					B6 - Surface So	oil Cracks	
✓	A1 - Surface					er-Stained					egetated Concave Surface	
✓ □	A2 - High Wa A3 - Saturation					uatic Fauna e Aquatic F				B10 - Drainage B16 - Moss Trir		
	B1 - Water M					ogen Sulfi				C2 - Dry Seaso		
	B2 - Sedimer				C3 - Oxid	ized Rhizo	spheres on Livin	g Roots		C8 - Crayfish B	urrows	
	B3 - Drift Dep B4 - Algal Ma						duced Iron duction in Tilled	Soilo			Visible on Aerial Imagery Stressed Plants	
	B5 - Iron Dep					Muck Surf		30115		D2 - Geomorph		
	B7 - Inundati	on Visible on Aerial Ima	agery		Other (Ex	plain in Re	marks)			D3 - Shallow A	quitard	
									H	D4 - Microtopog D5 - FAC-Neut	graphic Relief ral Test	
Field Observati	ions:									20 1710 11000	1.001	
Surface Water F		✓ Yes □ No	Depth:	1-2"	(in.)							
Water Table Pre		☑ Yes □ No	Depth:		(in.)			Wetland Hyd	drology Pre	esent?	Yes 🗆 No	
Saturation Prese		☐ Yes ☑ No	Depth:		(in.)							
Describe Recorde	ed Data (stre	am gauge, monitoring	n well aerial n	hotos prev	inus inspe	ections) if	available:		N/A			
Remarks:	ou Duta (ot.o	am gaage, meme	g 17011, GOTTGI P		.ouoopo	,,	a ranazio.					
SOILS												
Map Unit Name:		am, 8-15% slopes			S	Series Dr	ainage Class:					
Map Unit Name: Taxonomy (Sub	group):											
Map Unit Name: Taxonomy (Sub- Profile Descrip	group): tion (Describe to the	am, 8-15% slopes	icator or confirm the abs					, CS=Covered/Coated Sar	nd Grains; Location:	PL=Pore Lining, M=Matri		
Map Unit Name: Taxonomy (Sub- Profile Descripe Top	group): tion (Describe to the Bottom	ne depth needed to document the indi		Matrix	(Type: C=Conce	ntration, D=Deple	ition, RM=Reduced Matrix	, CS=Covered/Coated Sar Mottles			Texture	n)
Map Unit Name: Taxonomy (Sub- Profile Descript Top Depth	group): tion (Describe to the Bottom Depth	ne depth needed to document the indi	Color	Matrix (Moist)	(Type: C=Conce	ntration, D=Deple	or (Moist)	, CS=Covered/Coated Sai	Туре	Location	Texture (e.g. clay, sand, loam	า)
Map Unit Name: Taxonomy (Sub- Profile Descripe Top	group): tion (Describe to the Bottom	ne depth needed to document the indi		Matrix	(Type: C=Conce	ntration, D=Deple	ition, RM=Reduced Matrix	, CS=Covered/Coated Sar Mottles			Texture	n)
Map Unit Name: Taxonomy (Sub- Profile Descripe Top Depth 0	group): tion (Describe to the Bottom Depth 16	ne depth needed to document the indi Horizon 1	Color (Matrix (Moist) 5/2	(Type: C=Conce	col Col 10YR	or (Moist)	, CS=Covered/Coated Sar Mottles % 15	Type C	Location M	Texture (e.g. clay, sand, loam clay loam	n)
Map Unit Name: Taxonomy (Sub: Profile Descript Top Depth 0	group): tion (Describe to the Bottom Depth 16	Horizon 1	Color (Matrix (Moist) 5/2	(Type: C=Conce	Col 10YR	or (Moist) 5/8	Mottles % 15	Type C 	Location M	Texture (e.g. clay, sand, loam clay loam	า)
Map Unit Name: Taxonomy (Sub: Profile Descript Top Depth 0	group): tion (Describe to the Bottom Depth 16	Horizon 1	Color (10YR 	Matrix (Moist) 5/2 	(Type: C=Conce	COI 10YR	or (Moist) 5/8	Mottles Mottles 15	Type C 	Location M 	Texture (e.g. clay, sand, loam clay loam	n)
Map Unit Name: Taxonomy (Sub: Profile Descript Top Depth 0	group): tion (Describe to the Bottom Depth 16	Horizon 1	Color (10YR	Matrix (Moist) 5/2	(Type: C=Conce	Col 10YR	tion, RM=Reduced Matrix Or (Moist) 5/8	Mottles % 15	Type C	Location M 	Texture (e.g. clay, sand, loam clay loam	n)
Map Unit Name: Taxonomy (Sub: Profile Descrip Top Depth 0	group): tion (Describe to the Bottom Depth 16	Horizon 1	Color (10YR	Matrix (Moist) 5/2	% 85	COI 10YR	or (Moist) 5/8	Mottles % 15	Type C	Location M	Texture (e.g. clay, sand, loam clay loam	n)
Map Unit Name: Taxonomy (Sub: Profile Descrip Top Depth 0	group): tion (Describe to the State of the S	Horizon 1	Color (Matrix (Moist) 5/2 	% 85	Col 10YR	or (Moist) 5/8	Mottles % 15	Type C 	Location M	Texture (e.g. clay, sand, loam clay loam	n)
Map Unit Name: Taxonomy (Subremotive Description Control Contr	group): tion (Describe to the State of the S	Horizon 1	Color 10YR	Matrix (Moist) 5/2 s are not p	% 85	COI 10YR	or (Moist) 5/8	Mottles % 15	Type C	Location M Indicators for	Texture (e.g. clay, sand, loam clay loam	n)
Map Unit Name: Taxonomy (Subo Profile Descript Top Depth 0 NRCS Hydric S	group): tion (Describe to the Bottom Depth 16 Soil Field In	Horizon 1	Color (10YR te if indicator S5 - Sandy F	Matrix (Moist) 5/2 s are not p	% 85	Col 10YR	or (Moist) 5/8	Mottles % 15	Type C	Location M Indicators for A10 - 2cm M	Texture (e.g. clay, sand, loam clay loam	n)
Map Unit Name: Taxonomy (Subremotive Description Control Contr	group): tion (Describe to the Bottom Depth 16 Soil Field Incode	Horizon 1	Color 10YR	Matrix (Moist) 5/2 s are not p Redox Matrix	% 85	Col 10YR	5/8	Mottles % 15	Type C	Location M Indicators for A10 - 2cm M A16 - Coast F	Texture (e.g. clay, sand, loam clay loam	n)
Map Unit Name: Taxonomy (Subit Profile Descript) Top Depth 0 NRCS Hydric S 1- Histosol 2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S	group): tion (Describe to the Bottom Depth 16 Soil Field Incident	Horizon 1	Color of 10YR	Matrix (Moist) 5/2 s are not predox d Matrix urface ue Below Da	(Type: C-Conce	Coi 10YR):	State	Mottles % 15	Type C	Location M Indicators for A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very	Texture (e.g. clay, sand, loam clay loam	n)
Map Unit Name: Taxonomy (Subressel Profile Description Control Profile Description Con	group): tion (Describe to the Bottom Depth 16	Horizon 1	Color (10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface use Below Da rk Surface (h	(Type: C=Conce	Coi 10YR):	State	Mottles % 15	Type C	Location M Indicators for A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very	Texture (e.g. clay, sand, loam clay loam	n)
Map Unit Name: Taxonomy (Sub: Profile Descrip Top Depth 0	group): tion (Describe to the Bottom Depth 16	Horizon 1 dicators (check he	Color (10YR	Matrix (Moist) 5/2 s are not p Redox Matrix Inface Lee Below Da rk Surface (Moist) Gleyed Matrix	(Type: C=Conce	Coi 10YR):	State	Mottles % 15	Type C	Location M Indicators for A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very	Texture (e.g. clay, sand, loam clay loam	n)
Map Unit Name: Taxonomy (Subressering) Top Depth 0 NRCS Hydric S 1- Histosol 2- Histic Epipe 3- Black Histic 4- Hydrogen S 5- Stratified La 10- 2 cm Muck 11- Depleted E 12- Thick Dark	group): tion (Describe to the Depth	Horizon 1 dicators (check here	Color (10YR	Matrix (Moist) 5/2 s are not p Redox H Matrix urface Le Below Da rk Surface (k Gleyed Matrix Oark Surface	(Type: C-Conce	Coi 10YR):	State	Mottles % 15	Type C	Location M Indicators for A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very	Texture (e.g. clay, sand, loam clay loam	n)
Map Unit Name: Taxonomy (Subrofile Descript Top Depth 0	group): tion (Describe to the Bottom Depth 16	Horizon 1 dicators (check here	Color (10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface use Below Da rk Surface (Moist) Gleyed Matrix Oark Surface d Matrix Dark Surface d Dark Surface	(Type: C-Conce	Coi 10YR):	State	Mottles % 15	Type C	Location M Indicators for A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very Other (Expla	Texture (e.g. clay, sand, loam clay loam	
Map Unit Name: Taxonomy (Subrofile Descrip) Top Depth 0	group): tion (Describe to the Bottom Depth 16	Horizon 1 dicators (check here	Color (10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface ue Below Da rk Surface (h Gleyed Matri d Matirx Dark Surface d Dark Surface d Dark Surface	(Type: C-Conce	Coi 10YR):	State	Mottles % 15	Type C	Location M Indicators for A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very Other (Expla	Texture (e.g. clay, sand, loam clay loam	
Map Unit Name: Taxonomy (Subrofile Descript Top Depth 0	group): tion (Describe to the Bottom Depth 16	Horizon 1 dicators (check here	Color (10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface use Below Da rk Surface (Moist) Gleyed Matrix Oark Surface d Matrix Dark Surface d Dark Surface	(Type: C-Conce	Coi 10YR):	State	Mottles % 15	Type C	Location M Indicators for A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very Other (Expla	Texture (e.g. clay, sand, loam clay loam	
Map Unit Name: Taxonomy (Subit Profile Descript) Top Depth 0	group): tion (Describe to the Bottom Depth 16	Horizon 1 dicators (check here	Color (10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface ue Below Da rk Surface (h Gleyed Matri d Matirx Dark Surface d Dark Surface d Dark Surface	(Type: C-Conce	Coi 10YR):	State	Mottles % 15	Type C	Location M Indicators for A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very Other (Expla	Texture (e.g. clay, sand, loam clay loam	
Map Unit Name: Taxonomy (Subit Profile Descript) Top Depth 0	group): tion (Describe to the Bottom Depth 16	Horizon 1 dicators (check here	Color (10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface ue Below Da rk Surface (h Gleyed Matri d Matirx Dark Surface d Dark Surface d Dark Surface	(Type: C-Conce	Coi 10YR):	State	Mottles % 15	Type C	Location M Indicators for A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very Other (Expla	Texture (e.g. clay, sand, loam clay loam	
Map Unit Name: Taxonomy (Subit Profile Descript) Top Depth 0	group): tion (Describe to the Bottom Depth 16	Horizon 1 dicators (check here	Color (10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface ue Below Da rk Surface (h Gleyed Matri d Matirx Dark Surface d Dark Surface d Dark Surface	(Type: C-Conce	Coi 10YR):	State	Mottles % 15	Type C	Location M Indicators for A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very Other (Expla	Texture (e.g. clay, sand, loam clay loam	



Project/Site:	South Canton-Torrey 138 kV Line Rebuild Pro	oject			Wetland ID: Wetland 5 Sample Point SP09
VEGETATION	(Species identified in all uppercase are non-n	ative species.)			
Tree Stratum (Pl	ot size: 30 ft radius)				Bandana Tari Wadahari
1	<u>Species Name</u>		Dominant	Ind.Status	Dominance Test Worksheet
1. 2.					Number of Deminent Chasins that are ORL EACIN or EAC:
3.	 				Number of Dominant Species that are OBL, FACW, or FAC:3(A)
3. 4.					Total Number of Demissant Country Assess All Ctaster (P)
5.					Total Number of Dominant Species Across All Strata: 3 (B)
6.		<u></u>			Description of Description That Are ORL FACILITIES AND 100 (A/D)
	 				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7. 8.	 				Prevalence Index Worksheet
9.					
	 	-			Total % Cover of: Multiply by:
10.	 Total Co				OBL spp. 0
	Total Co	vei = 0			FACW spp. 100
Capling/Chruh Ctr	otum (Diet eizer 45 ft redius)				FAC spp. 0 x 3 = 0 FACU spp. 0 x 4 = 0
Sapiing/Shrub Str	atum (Plot size: 15 ft radius)				FACU spp. 0 $x = 4$ 0 UPL spp. 0 $x = 5$ 0
2.	 				Οι Ε ορφ. <u> </u>
3.					Total 100 (A) 200 (B)
3. 4.	 				Total 100 (A) 200 (B)
4. 5.					Prevalence Index = B/A = 2.000
6.	 				Prevalence index = B/A = 2.000
7.	 				
8.					Hydrophytic Vegetation Indicators:
9.	 				Yes ☑ ☐ No Rapid Test for Hydrophytic Vegetation
10.	 				Yes ☑ No Rapid Test for Hydrophytic Vegetation Yes ☑ □ No Dominance Test is > 50%
10.	Total Co				Yes ☑ No Prevalence Index is ≤ 3.0 *
	Total Co	vei – 0			
Harb Stratum /Dla	ot size: 5 ft radius)				Yes □ ☑ No Morphological Adaptations (Explain) * Yes □ ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Juncus effusus	35	Υ	FACW	res 🗆 🖰 No Problem hydrophydd vegetalion (Explain)
2.	Scirpus cyperinus	35	Y	FACW	* Indicators of hydric soil and wetland hydrology must be
3.	Solidago gigantea	30	Y	FACW	present, unless disturbed or problematic.
4.					Definitions of Vegetation Strata:
5.					Deminions of Vegetation offata.
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.					height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.					ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Co				
	. star 80				
Woody Vine Strat	rum (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.					
	Total Co	ver = 0			
Remarks:					
-					
Additional Re	marks:				



WETLAND DETERMINATION DATA FORM Eastern Mountains and Piedmont Region

Project/Site:	South Canto	n-Torrey 138 kV Line Re	build Project			Stant	tec Project #:	193708516		Date:	04/05/22	
Applicant:		Transmission Compa	any, Inc.							County:	Stark	
Investigator #1:				Invest	igator #2:			N1/A		State:	Ohio	
Soil Unit:		ilt loam, 12-18% slopes					Classification:	N/A		Wetland ID:		
Landform:	Side slope 2-4		40.70000		cal Relief:		50	Dotum	MADOS	Sample Point:		
Slope (%):		ditions on the site typ	40.72233		ongitude:				NAD83 No	Community ID: Section:	UPL	
		or Hydrology □sign			ai: (ii no, ex		e normal circu			Township:		
		or Hydrology □sign or Hydrology □natu					e normal circu ☑ Yes		Sent:	Range:	Dir:	
SUMMARY OF		or riyarology — nate	rany probici	natio:			00			rtange.	DII.	
Hydrophytic Ve		sent?		□ Yes	s ☑ No			Hydric Soils	Present?		□ Yes ☑	No
Wetland Hydrol	~			☐ Yes						Within A Wetl		No
Remarks:	. 37								3			
HYDROLOGY												
		itors (Check here if i	ndicators ar	e not pres	ent):	J			Secondary			
Primary	<u>r:</u> A1 - Surface	Water			DO West	er-Stained	Looves			B6 - Surface So	oil Cracks egetated Concave Surface	
	A2 - High Wa					uatic Faun				B10 - Drainage		
	A3 - Saturati	on			B14 - Tru	e Aquatic	Plants			B16 - Moss Tri	m Lines	
	B1 - Water N					rogen Sulfi				C2 - Dry Seaso		
	B2 - Sedime B3 - Drift De						ospheres on Livin educed Iron	ig Roots		C8 - Crayfish B	Burrows I Visible on Aerial Imagery	.,
	B4 - Algal Ma						eduction in Tilled	Soils	ä		r Stressed Plants	,
	B5 - Iron De					Muck Sur		Collo		D2 - Geomorph		
	B7 - Inundati	on Visible on Aerial Imaç	gery		Other (Ex	plain in Re	emarks)			D3 - Shallow A		
										D4 - Microtopo D5 - FAC-Neut		
Field Observed										D5 - FAC-Neut	lai rest	
Field Observat			-		(:- \							
Surface Water Water Table Pr		☐ Yes ☑ No ☐ Yes ☑ No	Depth:		(in.) (in.)			Wetland Hyd	drology Pr	esent?	Yes 🗵 No	
Saturation Pres		☐ Yes ☑ No	Depth: Depth:		(in.)							
					,							
	ed Data (stre	am gauge, monitoring	well, aerial p	notos, prev	ious inspe	ections), if	available:		N/A			
Remarks:												
SOILS												
	. M. salsia assas ai	ilt loam, 12-18% slopes				Corios Di	rainage Class:					
Taxonomy (Sub		iit ioam, 12-18% slopes				selles Di	alliage Class.					
		he depth needed to document the indic	ator or confirm the abs	ence of indicators)	(Type: C=Conce	entration D-Den	letion RM-Reduced Matrix	CS-Covered/Coated Sa	nd Grains: Location	PI -Pore Lining M-Matri	ivì	
Тор	Bottom	To depart to decarron and an and	dior or committee doc	Matrix	(1)po. 0=00100	Intration, D=Dop	iolori, rivi–riodocid vidina	Mottles	no Orano, Locaso	. I L-I did Lining, m-main	Texture	
Depth	Depth	Horizon	Color	(Moist)	%	Co	lor (Moist)	%	Type	Location	(e.g. clay, sand	
0	16	1	10YR	4/4	70						clay loam	
		1	10YR	5/6	30							
								-				
												•
	Soil Field In	dicators (check here			present):				_	or Problematic Soils 1	
1- Histosol		_	S5 - Sandy F					n-Manganese Ma			Muck (MLRA 147)	
2 - Histic Epipe 3 - Black Histic		_	S6 - Stripped S7 - Dark Su					bric Surface (MLR dmont Floodplair			Prairie Redox (MLRA 147, 148) nt Floodplain Soils (MLRA 136, 14	477
4 - Hydrogen S			S8 - Polyvali		rk Surface	(MI RA 147, 14		umont i looupiali			Shallow Dark Surface	47)
5 - Stratified La			S9 - Thin Da			(d Parent Materia			ain in Remarks)	
10 - 2 cm Muc			F2 - Loamy	Gleyed Matri	ix							
11 - Depleted		rface	F3 - Deplete									
12 - Thick Darl		L MI DA 447, 440)	F6 - Redox I									
4 - Sandy Muc		I, MLKA 147, 148)	F7 - Deplete F8 - Redox I					1 Indicato	rs of hydronhytic u	egetation and wetland hu	drology must be present, unless distu	urbed or problematic
Restrictive Layer			. O . NOGON I								Yes 🗵 No	proportiali
(If Observed)	Type:			Depth:				Hydric Soil	riesent?		res 🖾 INO	
Remarks:	_					_						
Ī												



Project/Site:	South Canton-Torrey 138 kV Line Rebuild Project				Wetland ID: Wetland 5 Sample Point SP10
VEGETATION	(Species identified in all uppercase are non-native species)	pecies.)			
Tree Stratum (Plo	t size: 30 ft radius)				
	<u>Species Name</u>	% Cover	="	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					
4.					Total Number of Dominant Species Across All Strata: (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0
	Total Cover =	0			FACW spp. 10 X 2 = 20
					FAC spp. $0 x 3 = 0$
	atum (Plot size: 15 ft radius)				FACU spp. 85 x 4 = 340
1.	Rosa multiflora	5	Υ	FACU	UPL spp. $0 X 5 = 0$
2.					
3.					Total <u>95</u> (A) <u>360</u> (B)
4.					
5.					Prevalence Index = B/A = 3.789
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Yes ☐ ☑ No Rapid Test for Hydrophytic Vegetation
10.					Yes □ ☑ No Dominance Test is > 50%
	Total Cover =	5			Yes □ ☑ No Prevalence Index is ≤ 3.0 *
					Yes 🗆 🗹 No 💮 Morphological Adaptations (Explain) *
Herb Stratum (Plot					Yes □ ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Schedonorus arundinaceus	80	Y	FACU	* Indicators of hydric soil and wetland hydrology must be
2.	Juncus effusus	10	N	FACW	present, unless disturbed or problematic.
3.					
4.					Definitions of Vegetation Strata:
5.					_
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.					neight (DBH), regardless of height.
8.					But the two
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					
11.					All hash are seen from more than a resulting of all a
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					••
14.					Marie I. M All woody vince greater than 2.00 ft. in bright
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	90			
	um (Plot size: 30 ft radius)				
1.					
2.					Hudranhytia Vanatatian Brasset G Van G Na
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
4.					
5.	Total Cover				
Domarks:	Total Cover =	0			
Remarks:					
Additional Ren	narks:				



WETLAND DETERMINATION DATA FORM Eastern Mountains and Piedmont Region

Project/Site:	South Cantor	n-Torrey 138 kV Line Re	build Project			Stant	ec Project #:	193708516		Date:	04/05/22	
Applicant:		Transmission Comp	any, Inc.							County:	Stark	
Investigator #1: Soil Unit:				Invest	gator #2:		nzler Classification:	NI/A		State: Wetland ID:	Ohio	
Landform:	Terrace	am, 12-18% slopes, mode	rately eroded	Loc	al Relief:		Jiassilication.	IN/A		Sample Point:		
Slope (%):	0-1	Latitude	40.72436		ongitude:		02	Datum:	NAD83	Community ID:		
	Irologic cond	itions on the site typ	ical for this t					✓ Yes □	No	Section:		
		or Hydrology □sign				Are		mstances pre	sent?	Township:		
		or Hydrology 🗆 natu	rally probler	matic?			Yes	□ No		Range:	Dir:	
SUMMARY OF		- m+O		□ Vaa	□ Na			Lludria Caila I	Dunnanto		U Vee U	Ma
Hydrophytic Veg Wetland Hydrol	•			✓ Yes ✓ Yes				Hydric Soils I Is This Samp		Vithin A Wetl	✓ Yes □ and? ✓ Yes ■	No No
Remarks:	ogy i rosciit.			_ 100				is This Camp	omig i omic v	vidili / / vvod	ana: = res =	110
HYDROLOGY												
		tors (Check here if i	ndicators ar	re not pres	ent):	J			Secondary:			
Primary		14/			DO 14/-4	Ct-:I				B6 - Surface So		
7	A1 - Surface A2 - High Wa					er-Stained uatic Fauna				B8 - Sparsely ve B10 - Drainage	egetated Concave Surface Patterns	e
	A3 - Saturation	on			B14 - Tru	e Aquatic F	Plants			B16 - Moss Trir	m Lines	
	B1 - Water M B2 - Sedimer					rogen Sulfic		a Doots		C2 - Dry Seaso		
	B2 - Sedimer B3 - Drift Der						spheres on Livin educed Iron	ig Roots		C8 - Crayfish B C9 - Saturation	urrows Visible on Aerial Image	rv
	B4 - Algal Ma	at or Crust					duction in Tilled	Soils			Stressed Plants	.,
	B5 - Iron Dep					Muck Surf				D2 - Geomorph		
	B7 - Inundatio	on Visible on Aerial Ima	gery	Ш	Other (Ex	plain in Re	marks)			D3 - Shallow Ac D4 - Microtopog		
										D5 - FAC-Neuti		
Field Observat	ions:											
Surface Water F	Present?	✓ Yes □ No	Depth:	0-2	(in.)			Wetland Hyd	drology Pre	sent?	Yes □ No	
Water Table Pre		Yes 🗆 No	Depth:		(in.)			Wedana riye	arology i ic	Jones =	103 🗆 110	
Saturation Pres	ent?	☐ Yes ☑ No	Depth:	:	(in.)							
Describe Recorde	ed Data (stre	am gauge, monitoring	well, aerial p	hotos, prev	ious inspe	ections), if	available:		N/A			
Remarks:												
SOILS	: Latham silt los	am 12 190/ slopes mode	rataly araded			Sarias Dr	ainaga Class:					
SOILS Map Unit Name		ım, 12-18% slopes, mode	rately eroded		9	Series Dr	ainage Class:					
SOILS Map Unit Name Taxonomy (Sub	group):	nm, 12-18% slopes, mode		sence of indicators.)			Ĭ		nd Grains; Location:	PL=Pore Lining, M=Matri	x)	
SOILS Map Unit Name Taxonomy (Sub	group):	•		sence of indicators.) Matrix			Ĭ		nd Grains; Location: I	PL=Pore Lining, M=Matri	×) Texture	e
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to th	•	ator or confirm the abs			ntration, D=Deple	Ĭ	x, CS=Covered/Coated Sar	nd Grains; Location: I	PL=Pore Lining, M=Matri Location		
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): otion (Describe to the Bottom	ne depth needed to document the indic	ator or confirm the abs	Matrix	(Type: C=Conce	ntration, D=Deple	etion, RM=Reduced Matrix or (Moist) 5/6	Mottles % 10			Texture	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): Notion (Describe to the Bottom Depth 12	HORIZON 1	Color (Matrix (Moist) 5/2	(Type: C=Conce	Col 10YR	or (Moist) 5/6	Mottles % 10	Type C	Location M	Texture (e.g. clay, san	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to the Bottom Depth 12	Horizon 1	Color (Matrix (Moist) 5/2 	(Type: C=Conce	COI 10YR	or (Moist) 5/6	Mottles Mottles 10	Type C 	Location M 	Texture (e.g. clay, san clay loa	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to It Bottom Depth 12	Horizon 1	color (Matrix (Moist) 5/2 	(Type: C=Cance	COI 10YR	or (Moist) 5/6	Mottles % 10	Type C	Location M 	Texture (e.g. clay, san clay loa	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	egroup): Ition (Describe to the Bottom Depth 12	Horizon 1	Color (Matrix (Moist) 5/2 	(Type: C=Conce	Col 10YR	or (Moist) 5/6	Mottles % 10	Type C	Location M	Texture (e.g. clay, san clay loa	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to It Bottom Depth 12	Horizon 1	color (Matrix (Moist) 5/2 	(Type: C=Cance	COI 10YR	or (Moist) 5/6	Mottles % 10	Type C	Location M 	Texture (e.g. clay, san clay loa	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to the Depth 12	Horizon 1	Color (Matrix (Moist) 5/2	% 90	Col 10YR	or (Moist) 5/6	Mottles % 10	Type C	Location M	Texture (e.g. clay, san clay loa	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to II Bottom Depth 12	Horizon 1	Color (10YR	Matrix (Moist) 5/2	(Type: C=Conce	Col 10YR	or (Moist) 5/6	Mottles Mottles % 10	Type C	Location M	Texture (e.g. clay, san clay loa	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S	group): tion (Describe to the Depth	Horizon 1	Color (10 YR	Matrix (Moist) 5/2 s are not p	(Type: C=Conce	COI 10YR	or (Moist) 5/6	Mottles % 10	Type C	Location M Indicators fo	(e.g. clay, san clay loa clay	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S1- Histosol2 - Histic Epipe	group): stion (Describe to the Depth	Horizon 1	Color (10YR	Matrix (Moist) 5/2	(Type: C=Conce	COI 10YR	or (Moist) 5/6	Mottles Mottles % 10	Type C	Location M Indicators fo A10 - 2cm M A16 - Coast F	Texture (e.g. clay, san clay loa	d, loam) m
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric \$1 - Histosol2 - Histic Epipe3 - Black Histic	group): tion (Describe to the Depth 12	Horizon 1	Color (10 YR	Matrix (Moist) 5/2 s are not p. Redox d Matrix urface	(Type: C=Conce	Col 10YR	or (Moist) 5/6	Mottles % 10	Type C	Location M Indicators fo A10 - 2cm M A16 - Coast F	Texture (e.g. clay, san clay loa	d, loam) m
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S1- Histosol2 - Histic Epipe	group): tion (Describe to the Depth	Horizon 1	Color (10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface ue Below Da	(Type: C=Conce	Col 10YR	or (Moist) 5/6	Mottles Mottles % 10	Type C	Location M Indicators fo A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very	Texture (e.g. clay, san clay loa	d, loam) m
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): stion (Describe to the Depth	Horizon 1 dicators (check here	Color (10YR	Matrix (Moist) 5/2 rs are not predox d Matrix urface ue Below Da ark Surface (Gleyed Matrix	(Type: C=Conce	Col 10YR	or (Moist) 5/6	Mottles % 10	Type C	Location M Indicators fo A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very	Texture (e.g. clay, san clay loa	d, loam) m
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth O	group): tion (Describe to the Depth	Horizon 1 dicators (check here	color (Color (10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface ue Below Da ark Surface (ark Surface (ark Surface (ark of decire)) d Matrix	(Type: C=Conce	Col 10YR	or (Moist) 5/6	Mottles % 10	Type C	Location M Indicators fo A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very	Texture (e.g. clay, san clay loa	d, loam) m
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S 1- Histosol 2 - Histosol 2 - Histosol 4 - Hydrogen S 5 - Stratified Le 10 - 2 cm Muck 11 - Depleted E 12 - Thick Dark	group): ition (Describe to the Depth	Horizon 1	Color (10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface ue Below Da ark Surface (Gleyed Matrix Dark Surface	(Type: C=Conce	Col 10YR	or (Moist) 5/6	Mottles % 10	Type C	Location M Indicators fo A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very	Texture (e.g. clay, san clay loa	d, loam) m
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): stion (Describe to the Depth	Horizon 1	color (Color (10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface use Below Da ark Surface (Gleyed Matrix d Matrix Dark Surface d Dark Surface	(Type: C=Conce	Col 10YR	or (Moist) 5/6	Mottles Mottles % 10 Mottles % 10	Type C	Location M	Texture (e.g. clay, san clay loa	d, loam) m
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth O	group): stion (Describe to the Depth	Horizon 1	Color 10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface use Below Da ark Surface (Gleyed Matrix d Matrix Dark Surface d Dark Surface	(Type: C=Conce	Col 10YR	or (Moist) 5/6	Mottles Mottles % 10 Mottles % 10	Type C	Location M Indicators fo A10 - 2cm N A16 - Coast F F19 - Piedmon TF12 - Very Other (Expla	Texture (e.g. clay, san clay loa	d, loam) m
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth O	group): stion (Describe to the Depth	Horizon 1	Color 10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface ue Below Da ark Surface de Matrix Dark Surface do Matrix Dark Surface do Dark Surface	(Type: C=Conce	Col 10YR	or (Moist) 5/6	Mottles Mottles % 10 Manganese Mabric Surface (MLR dmont Floodplair dm Parent Material) 1 Indicator	Type C	Location M Indicators fo A10 - 2cm N A16 - Coast F F19 - Piedmon TF12 - Very Other (Expla	Texture (e.g. clay, san clay loa clay loa	d, loam) m
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth O	group): stion (Describe to the Depth	Horizon 1	Color 10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface ue Below Da ark Surface de Matrix Dark Surface do Matrix Dark Surface do Dark Surface	(Type: C=Conce	Col 10YR	or (Moist) 5/6	Mottles Mottles % 10 Manganese Mabric Surface (MLR dmont Floodplair dm Parent Material) 1 Indicator	Type C	Location M Indicators fo A10 - 2cm N A16 - Coast F F19 - Piedmon TF12 - Very Other (Expla	Texture (e.g. clay, san clay loa clay loa	d, loam) m
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth O	group): stion (Describe to the Depth	Horizon 1	Color 10YR	Matrix (Moist) 5/2 s are not p Redox d Matrix urface ue Below Da ark Surface de Matrix Dark Surface do Matrix Dark Surface do Dark Surface	(Type: C=Conce	Col 10YR	or (Moist) 5/6	Mottles Mottles % 10 Manganese Mabric Surface (MLR dmont Floodplair dm Parent Material) 1 Indicator	Type C	Location M Indicators fo A10 - 2cm N A16 - Coast F F19 - Piedmon TF12 - Very Other (Expla	Texture (e.g. clay, san clay loa clay loa	d, loam) m



Project/Site:	South Canton-Torrey 138 kV Line Rebuild Project				Wetland ID: Wetland 6 Sample Point SP11
-	·				
VEGETATION	(Species identified in all uppercase are non-native s	pecies.)			
Tree Stratum (Plot					
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
3.					· · · · · · · · · · · · · · · · · · ·
4.					Total Number of Dominant Species Across All Strata: 1 (B)
5.					10tal 1tal 1201 01 2011 intal 1t openior 7 in ordata.
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
7.					referred bottomatic species that Are ODE, I AGW, of I AG(A/D)
8.					Prevalence Index Worksheet
9.					
					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cover =	0			FACW spp. 100 x 2 = 200
					FAC spp. $0 x 3 = 0$
	tum (Plot size: 15 ft radius)				FACU spp 0
1.					UPL spp. $0 x 5 = 0$
2.					
3.					Total 100 (A) 200 (B)
4.					
5.					Prevalence Index = B/A = 2.000
6.				-	
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Yes ☑ □ No Rapid Test for Hydrophytic Vegetation
10.					Yes ☑ ☐ No Dominance Test is > 50%
	Total Cover =	0			Yes ☑ ☐ No Prevalence Index is ≤ 3.0 *
	Total Cover =	O			Yes □ ✓ No Morphological Adaptations (Explain) *
Llorb Ctrotum (Diot	size. Eft radius)				
Herb Stratum (Plot 1.	Juncus effusus	60	Υ	FACW	Yes □ ☑ No Problem Hydrophytic Vegetation (Explain) *
2.	Onoclea sensibilis	10	N		* Indicators of hydric soil and wetland hydrology must be
				FACW	present, unless disturbed or problematic.
3.	Scirpus cyperinus	30		FACW	
4.					Definitions of Vegetation Strata:
5.					_
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.					height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					it. taii.
11.					
12.				-	Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
-	Total Cover =	100			
	10101 00001 =	.00			
Woody Vine Stratu	m (Plot size: 30 ft radius)				
1.					
2.	_ 				
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
					nyurophytic vegetation riesent 12 165 11 110
4.					
5.	Total Occurs			-	
<u> </u>	Total Cover =	0			
Remarks:					
Additional Rem	narks:				
1					



WETLAND DETERMINATION DATA FORM Eastern Mountains and Piedmont Region

Project/Site:	South Canto	n-Torrey 138 kV Line Re	ebuild Project			Stant	ec Project #:	193708516		Date:	04/05/22
Applicant:		Transmission Comp	any, Inc.				_			County:	Stark
Investigator #1:				Investi	gator #2:			NI/A		State:	Ohio
Soil Unit: Landform:	Side slope	am, 12-18% slopes, mode	erately eroded	Loc	ואי :al Relief		Classification:	N/A		Wetland ID: Sample Point:	
Slope (%):	2-4		40.72443		ongitude:		45	Datum:	NAD83	Community ID:	
		litions on the site typ						☑ Yes □	No	Section:	
Are Vegetation	☐ , Soil ☐, o	or Hydrology □sign	nificantly dist	urbed?		Are	e normal circu	mstances pre	sent?	Township:	
		or Hydrology □natu	urally probler	matic?			Yes	□ No		Range:	Dir:
SUMMARY OF F											
Hydrophytic Veg					☑ No ☑ No			Hydric Soils I		A/:+b: A \A/-+1	☐ Yes ☑ No
Wetland Hydrolo Remarks:	ogy Present	<u> </u>		□ Yes	☑ NO			is This Samp	iling Point v	vitnin A vveti	and? Yes No
Nemarks.											
HYDROLOGY											
	ology Indica	tors (Check here if	indicators ar	e not prese	ent):	J			Secondary:		
Primary:		toro (Oncor noro in	maroatoro ar	o not proot).					B6 - Surface So	oil Cracks
						er-Stained					egetated Concave Surface
	A2 - High Wa A3 - Saturation				B13 - Aqu B14 - True					B10 - Drainage B16 - Moss Trir	
	B1 - Water M				C1 - Hydr	ogen Sulfi	de Odor			C2 - Dry Seaso	on Water Table
	B2 - Sedimer						spheres on Livin educed Iron	g Roots		C8 - Crayfish B	
	B3 - Drift Dep B4 - Algal Ma						educed from eduction in Tilled :	Soils			Visible on Aerial Imagery Stressed Plants
	B5 - Iron Dep	oosits			C7 - Thin	Muck Surf	ace			D2 - Geomorph	nic Position
	B7 - Inundati	on Visible on Aerial Imag	gery		Other (Ex	plain in Re	emarks)			D3 - Shallow Ao D4 - Microtopoo	
										D5 - FAC-Neut	
Field Observati	ions:										
Surface Water F	Present?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hyd	Irology Br	ncont?	Yes 🗹 No
Water Table Pre		☐ Yes ☑ No	Depth:		(in.)			welland nyc	ilology Fit	esent -	res 🖾 No
Saturation Prese	ent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Recorde	ed Data (stre	am gauge, monitoring	well, aerial p	hotos, previ	ious inspe	ctions), if	available:		N/A		
Remarks:											
SOILS		10.100/				Sauisa Du	oine na Classi				
Taxonomy (Sub		am, 12-18% slopes, mode	erately eroded			selles Di	ainage Class:				
		he depth needed to document the indic	cator or confirm the abs	ence of indicators.)	(Type: C=Concer	ntration, D=Depl	letion, RM=Reduced Matrix	, CS=Covered/Coated Sar	d Grains; Location:	PL=Pore Lining, M=Matri	ix)
Тор	Bottom			Matrix				Mottles	·	-	Texture
Depth	Depth	Horizon	Color	(Moist)	%	Col	lor (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	10	1	10YR	4/3	70						silt loam
		1	10YR	5/6	30						silt loam
NRCS Hydric S		dicators (check her	e if indicator	s are not p	resent): 🗵				Indicators fo	or Problematic Soils 1
	Soil Field In		_			,-	☐ F12 - Iron	-Manganese Ma	SSES (LRR N, N		Muck (MLRA 147)
1- Histosol	Soil Field In		_∣S5 - Sandy F	\euux							
2 - Histic Epipe	edon		S6 - Stripped	d Matrix			☐ F13 - Uml	bric Surface (MLR.			Prairie Redox (MLRA 147, 148)
2 - Histic Epipe 3 - Black Histic	edon :		S6 - Stripped S7 - Dark Su	d Matrix ırface	rk Surface	(MI RA 147. 14	☐ F13 - Uml ☐ F19 - Pied		Soils (MLRA	F19 - Piedmon	nt Floodplain Soils (MLRA 136, 147)
2 - Histic Epipe	edon : Sulfide		S6 - Stripped	d Matrix ırface ue Below Da		(MLRA 147, 14	☐ F13 - Um ☐ F19 - Pied	bric Surface (MLR.	Soils (MLRA [F19 - Piedmon	, , ,
2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified La 10 - 2 cm Muck	edon : : : : : : : : : : : : : : : : : : :		S6 - Stripped S7 - Dark St S8 - Polyvalt S9 - Thin Da F2 - Loamy (d Matrix Irface Je Below Da rk Surface (N Gleyed Matri	ILRA 147, 148)	(MLRA 147, 14	☐ F13 - Um ☐ F19 - Pied	bric Surface (MLR. dmont Floodplair	Soils (MLRA [F19 - Piedmon	nt Floodplain Soils (MLRA 136, 147) Shallow Dark Surface
2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified La 10 - 2 cm Muck 11 - Depleted E	edon : Sulfide ayers K (LRR N) Below Dark Sul		S6 - Stripped S7 - Dark St S8 - Polyvalt S9 - Thin Da F2 - Loamy (F3 - Deplete	d Matrix Irface Ile Below Da rk Surface (M Gleyed Matri d Matirx	ILRA 147, 148) X	(MLRA 147, 14	☐ F13 - Um ☐ F19 - Pied	bric Surface (MLR. dmont Floodplair	Soils (MLRA [F19 - Piedmon	nt Floodplain Soils (MLRA 136, 147) Shallow Dark Surface
2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified La 10 - 2 cm Muck	edon ; Sulfide ayers < (LRR N) Below Dark Sul < Surface	rface	S6 - Stripped S7 - Dark St S8 - Polyvalt S9 - Thin Da F2 - Loamy (d Matrix urface ue Below Da rk Surface (w Gleyed Matri: d Matirx Dark Surface	ILRA 147, 148) X	(MLRA 147, 14	☐ F13 - Um ☐ F19 - Pied	bric Surface (MLR. dmont Floodplair	Soils (MLRA [F19 - Piedmon	nt Floodplain Soils (MLRA 136, 147) Shallow Dark Surface
2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratiffed La 10 - 2 cm Muck 11 - Depleted E 12 - Thick Dark 1 - Sandy Muck 4 - Sandy Gleye	edon : : Sulfide ayers < (LRR N) Below Dark Sul < Surface k Mineral (LRR N	rface	S6 - Stripped S7 - Dark St S8 - Polyvalt S9 - Thin Da F2 - Loamy (F3 - Deplete F6 - Redox I	d Matrix urface ue Below Da rk Surface (w Gleyed Matri: d Matirx Dark Surface d Dark Surfa	ILRA 147, 148) X	(MLRA 147, 14	☐ F13 - Um ☐ F19 - Pied	bric Surface (M∟R dmont Floodplair d Parent Material	n Soils (MLRA C C (MLRA 127, 147)	F19 - Piedmon TF12 - Very Other (Expla	nt Floodplain Soils (MLRA 136, 147) Shallow Dark Surface
2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified La 10 - 2 cm Muck 11 - Depleted E 12 - Thick Dark 1 - Sandy Muck	edon : : Sulfide ayers < (LRR N) Below Dark Sul < Surface k Mineral (LRR N	rface , MLRA 147, 148)	S6 - Stripped S7 - Dark Su S8 - Polyvalu S9 - Thin Da F2 - Loamy 0 F3 - Deplete F6 - Redox I F7 - Deplete	d Matrix urface ue Below Da rk Surface (w Gleyed Matri: d Matirx Dark Surface d Dark Surfa	ILRA 147, 148) X	(MLRA 147, 14	☐ F13 - Um ☐ F19 - Pied	bric Surface (M∟R dmont Floodplair d Parent Material	Soils (MLRA C (MLRA 127, 147)	F19 - Piedmon TF12 - Very Other (Expla	nt Floodplain Soils (MLRA 136, 147) Shallow Dark Surface ain in Remarks)
2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified a 10 - 2 cm Muck 11 - Depleted E 12 - Thick Dark 1 - Sandy Muck 4 - Sandy Gleye Restrictive Layer	edon : : sulfide ayers < (LRR N) Below Dark Sul < Surface k Mineral (LRR N red Matrix	rface , MLRA 147, 148)	S6 - Stripped S7 - Dark Su S8 - Polyvalu S9 - Thin Da F2 - Loamy 0 F3 - Deplete F6 - Redox I F7 - Deplete	d Matrix urface ue Below Da rk Surface (N Gleyed Matri d Matirx Dark Surface d Dark Surface Depressions	ILRA 147, 148) X Ce	(MLRA 147, 14	☐ F13 - Um ☐ F19 - Pied	bric Surface (MLR dmont Floodplair d Parent Material	Soils (MLRA C (MLRA 127, 147)	F19 - Piedmon TF12 - Very Other (Expla	nt Floodplain Soils (MLRA 136, 147) Shallow Dark Surface ain in Remarks) drology must be present, unless disturbed or problem
2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Strattified La 10 - 2 cm Muck 11 - Depleted E 12 - Thick Dark 1 - Sandy Muck 4 - Sandy Gleyt Restrictive Layer (If Observed)	edon : : sulfide ayers < (LRR N) Below Dark Sul < Surface k Mineral (LRR N red Matrix	rface , MLRA 147, 148)	S6 - Stripped S7 - Dark Su S8 - Polyvalu S9 - Thin Da F2 - Loamy 0 F3 - Deplete F6 - Redox I F7 - Deplete	d Matrix urface ue Below Da rk Surface (N Gleyed Matri d Matirx Dark Surface d Dark Surface Depressions	ILRA 147, 148) X Ce	(MLRA 147, 14	☐ F13 - Um ☐ F19 - Pied	bric Surface (MLR dmont Floodplair d Parent Material	Soils (MLRA C (MLRA 127, 147)	F19 - Piedmon TF12 - Very Other (Expla	nt Floodplain Soils (MLRA 136, 147) Shallow Dark Surface ain in Remarks) drology must be present, unless disturbed or problem
2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified Lade Lade Lade Lade Lade Lade Lade La	edon : : sulfide ayers < (LRR N) Below Dark Sul < Surface k Mineral (LRR N red Matrix	rface , MLRA 147, 148)	S6 - Stripped S7 - Dark Su S8 - Polyvalu S9 - Thin Da F2 - Loamy 0 F3 - Deplete F6 - Redox I F7 - Deplete	d Matrix urface ue Below Da rk Surface (N Gleyed Matri d Matirx Dark Surface d Dark Surface Depressions	ILRA 147, 148) X Ce	(MLRA 147, 14	☐ F13 - Um ☐ F19 - Pied	bric Surface (MLR dmont Floodplair d Parent Material	Soils (MLRA C (MLRA 127, 147)	F19 - Piedmon TF12 - Very Other (Expla	nt Floodplain Soils (MLRA 136, 147) Shallow Dark Surface ain in Remarks) drology must be present, unless disturbed or problem



Project/Site:	South Canton-Torrey 138 kV Line Rebuild Project				Wetland ID: Wetland 6 Sample Point SP12
V					
VEGETATION	(Species identified in all uppercase are non-native s	pecies.)			
Tree Stratum (Plo					
4	<u>Species Name</u>	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					N
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					T
4.					Total Number of Dominant Species Across All Strata:(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.	••				OBL spp. 0
	Total Cover =	0			FACW spp. 0
					FAC spp. 0
	atum (Plot size: 15 ft radius)				FACU spp. 90 x 4 = 360
1.					UPL spp. 10
2.					
3.					Total(A)(B)
4.					
5.					Prevalence Index = B/A = 4.100
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Yes □ ☑ No Rapid Test for Hydrophytic Vegetation
10.					Yes □ ☑ No Dominance Test is > 50%
	Total Cover =	0			Yes □ ☑ No Prevalence Index is ≤ 3.0 *
					Yes □ ☑ No Morphological Adaptations (Explain) *
Herb Stratum (Plot	t size: 5 ft radius)				Yes □ ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Solidago canadensis	20	Υ	FACU	*1.5.4.61.12.13.14.14.14.14.14.14.14.14.14.14.14.14.14.
2.	Schedonorus arundinaceus	70	Υ	FACU	* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.	Daucus carota	10	N	UPL	present, unless disturbed of problematic.
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.					height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.					ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
10.	Total Cover =	100			
	Total Cover =	100			
Woody Vine Strati	um (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
4.					Tryurophytic vegetation i rescrit L 165 E 110
5.					
J.	Total Cover =	0			
Remarks:	Total Cover =	U			
itemants.					
Additional Ren	narks:				



WETLAND DETERMINATION DATA FORM Eastern Mountains and Piedmont Region

Project/Site:	South Cantor	n-Torrey 138 kV Line Re	ebuild Project			Stante	ec Project #:	193708516		Date:	04/05/22	
Applicant:		Transmission Comp					-			County:	Stark	
Investigator #1:				Invest	igator #2:					State:	Ohio	
Soil Unit:		ım, 12-18% slopes, mode	erately eroded				Classification:	N/A		Wetland ID:		
Landform:	Side slope				al Relief:					Sample Point:		
Slope (%):	2-4		40.72579		ongitude:				NAD83	Community ID	: PEM	
		itions on the site typ			ar'? (If no, ex			☑ Yes □		Section:		
Are Vegetation	□, Soil □, o	or Hydrology sign	ificantly dist	turbed?		Are		mstances pre	sent?	Township:	D:	
SUMMARY OF		or Hydrology □natu	irally proble	matic?			≝ fes			Range:	Dir:	
Hydrophytic Ve		eant?		☑ Yes	. □ No			Hydric Soils	Drocont?		✓ Yes □	No
Wetland Hydrol				✓ Yes ✓ Yes				Is This Samp		Within A Wet		No No
Remarks:	ogy i resent			_ 163	<u> </u>			is This Dainp	Jillig i Ollik v	vidili A vved	and: - res -	NO
rtemants.												
HYDROLOGY												
	alagu Indiaa	toro (Chaok bara if	indiantara a	ro not nroo	ont \.				0			
Primary		tors (Check here if	indicators ai	re not pres	ent):	Ш			Secondary:	B6 - Surface S	oil Cracks	
	A1 - Surface	Water			B9 - Wate	er-Stained	Leaves				egetated Concave Surface	
✓	A2 - High Wa					atic Fauna				B10 - Drainage	Patterns	
✓	A3 - Saturation					e Aquatic F				B16 - Moss Tri		
	B1 - Water M			✓	C1 - Hydr			D		C2 - Dry Seaso		
	B2 - Sedimer B3 - Drift Dep						spheres on Livir educed Iron	ig Roots		C8 - Crayfish B	urrows Visible on Aerial Imagery	
	B4 - Algal Ma			ä			duction in Tilled	Soils			Stressed Plants	
	B5 - Iron Dep					Muck Surfa		COIIC		D2 - Geomorph		
		on Visible on Aerial Ima	gery			plain in Re				D3 - Shallow A		
										D4 - Microtopo		
									Ш	D5 - FAC-Neut	ral Test	
Field Observat	ions:											
Surface Water I	Present?	✓ Yes □ No	Depth	1-2"	(in.)			Wetland Hyd	drology Bro	seant?	Yes □ No	
Water Table Pre	esent?	Yes No	Depth	2"	(in.)			welland my	arology Fre	Sout:	162 - 140	
Saturation Pres	ent?	Yes No	Depth	surface	(in.)							
Describe Recorde	ed Data (stre	am gauge, monitoring	well aerial n	hotoe prev	ious inspo	otiona) if	a. ailahla.		N/A			
	,	am gaago, montoning	, won, donar p	niolos, prev	ious irispe	ctions), ii	avallable:		IN/A			
Remarks:		am gaago, momoning	won, donar p	niotos, prev	ious irispe	cuons), n	avaliable:		N/A			
Remarks:	,	am gaago, momoring	won, donar p	niotos, prev	ious irispe	ctions), ii	avallable:		N/A			
Remarks: SOILS				niotos, prev					N/A			
Remarks: SOILS Map Unit Name	:: Latham silt loa	im, 12-18% slopes, mode		niotos, prev			available:		N/A			
Remarks: SOILS Map Unit Name Taxonomy (Sub	:: Latham silt loa	nm, 12-18% slopes, mode	erately eroded		S	Series Dra	ainage Class:			DI - Dece Lining M-Moto		
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip	:: Latham silt loa ogroup): otion (Describe to the		erately eroded	sence of indicators.)	S	Series Dra	ainage Class:	x, CS=Covered/Coated Sar		PL=Pore Lining, M=Matr		
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	E: Latham silt loa ogroup): tion (Describe to the Bottom	nm, 12-18% slopes, mode be depth needed to document the indic	erately eroded	sence of indicators.) Matrix	(Type: C=Concer	Series Dra	ainage Class:	x, CS=Covered/Coated Sar Mottles	nd Grains; Location: I		Texture	pam)
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	E: Latham silt loa ogroup): tion (Describe to the Bottom Depth	nm, 12-18% slopes, mode te depth needed to document the indic Horizon	cator or confirm the abs	sence of indicators.) Matrix (Moist)	(Type: C=Concer	Series Dra	ainage Class: etion, RM=Reduced Matris or (Moist)	x, CS=Covered/Coated Sai Mottles %	nd Grains; Location: I	Location	Texture (e.g. clay, sand, lo	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	E: Latham silt load ogroup): otion (Describe to the Bottom Depth	nm, 12-18% slopes, mode to depth needed to document the indic Horizon 1	cator or confirm the abs	sence of indicators.) Matrix (Moist) 3/1	(Type: C=Concer % 100	Series Dra	ainage Class: etion, RM=Reduced Matris or (Moist)	Mottles %	nd Grains; Location: I	Location 	Texture (e.g. clay, sand, lo mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	E: Latham silt loa ogroup): otion (Describe to the Bottom Depth 2	nm, 12-18% slopes, mode to depth needed to document the indice Horizon 1 2	cator or confirm the above Color 10Y 10Y	sence of indicators.) Matrix (Moist) 3/1 4/1	(Type: C=Concer % 100 100	Series Dra	ainage Class: etion, RM=Reduced Matris or (Moist)	Mottles Mottles	nd Grains; Location: I	Location 	Texture (e.g. clay, sand, lo mucky loam mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	E: Latham silt loa ogroup): otion (Describe to the Bottom Depth 2 14	tm, 12-18% slopes, mode te depth needed to document the indice Horizon 1 2	cator or confirm the above Color 10Y 10Y	Matrix (Moist) 3/1 4/1	(Type: C=Concer % 100 100	Series Dra	ainage Class: etion, RM=Reduced Matrix or (Moist)	Mottles Mottles	nd Grains; Location: I	Location 	Texture (e.g. clay, sand, lo mucky loam mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	E: Latham silt loa ogroup): otion (Describe to the Depth 2 14	Horizon 1 2	cator or confirm the above Color 10Y 10Y	Matrix (Moist) 3/1 4/1	(Type: C=Concer % 100 100	Series Dramtration, D=Depler	ainage Class: etion, RM=Reduced Matrix or (Moist)	Mottles Mottles %	nd Grains; Location: I	Location	Texture (e.g. clay, sand, lo mucky loam mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	E: Latham silt load orgroup): stion (Describe to the Depth 2 14	Horizon 1 2	cator or confirm the above Color 10Y 10Y	Matrix (Moist) 3/1 4/1	(Type: C=Concer % 100 100 	Series Dramation, D=Depleton Col.	ainage Class: etion, RM=Reduced Matrix or (Moist)	Mottles Mottles %	nd Grains: Location: I	Location	Texture (e.g. clay, sand, lo mucky loam mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	:: Latham silt loa group): tion (Describe to the Bottom Depth 2 14 	im, 12-18% slopes, mode the depth needed to document the indice Horizon 1 2	Color 10Y 10Y	Matrix (Moist) 3/1 4/1	(Type: C=Concer	Series Dramation, D=Depleton Col.	ainage Class: etion, RM=Reduced Matrix or (Moist)	Mottles Mottles %	nd Grains; Location: I	Location	Texture (e.g. clay, sand, lo mucky loam mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	:: Latham silt loa group): tition (Describe to the Bottom Depth 2 14 	Horizon 1 2	Color 10Y 10Y	Matrix (Moist) 3/1 4/1	(Type: C=Concer	Series Dra	ainage Class: etion, RM=Reduced Matrix or (Moist)	Mottles Mottles %	Type	Location	Texture (e.g. clay, sand, lo mucky loam mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	:: Latham silt loa group): tion (Describe to the Bottom Depth 2 14 	im, 12-18% slopes, mode the depth needed to document the indice Horizon 1 2	Color 10Y 10Y	Matrix (Moist) 3/1 4/1	(Type: C=Concer	Series Dramation, D=Depleton Col.	ainage Class: etion, RM=Reduced Matrix or (Moist)	Mottles Mottles %	nd Grains; Location: I	Location	Texture (e.g. clay, sand, lo mucky loam mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	:: Latham silt loa group): tition (Describe to the Bottom Depth 2 14 	Horizon 1 2	Color 10Y 10Y q if indicator	Matrix (Moist) 3/1 4/1 rs are not p	(Type: C=Concer	Series Dra	ainage Class: etion, RM=Reduced Matrix or (Moist)	Mottles Mottles	Type	Location Indicators for	Texture (e.g. clay, sand, lo mucky loam mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	E: Latham silt loa group): tition (Describe to II Bottom Depth 2 14 Soil Field Inc	m, 12-18% slopes, mode the depth needed to document the indice Horizon 1 2	Color 10Y 10Y e if indicator S5 - Sandy	Matrix (Moist) 3/1 4/1 s are not p	(Type: C=Concer	Series Dra	ainage Class: etion, RM=Reduced Matrix or (Moist)	Mottles Mottles %	Type	Location	Texture (e.g. clay, sand, lo mucky loam mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric 31- Histosol2 - Histic Epipe	E: Latham silt los group): tion (Describe to the Bottom Depth 2 14 	m, 12-18% slopes, mode the depth needed to document the indice Horizon 1 2	Color 10Y 10Y e if indicator S5 - Sandy S6 - Stripper	Matrix (Moist) 3/1 4/1 rs are not p	(Type: C=Concer	Series Dra	ainage Class: etion, RM-Reduced Matrix or (Moist)	Mottles Mottles %	Type	Location Indicators fc A10 - 2cm N A16 - Coast I	Texture (e.g. clay, sand, lo mucky loam mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S 1- Histosol 2 - Histic Epipe 3 - Black Histic	E: Latham silt loa ggroup): htton (Describe to the Bottom Depth 2 14 Soil Field Inc	m, 12-18% slopes, mode the depth needed to document the indice Horizon 1 2	cator or confirm the above cator or confirm the	Matrix (Moist) 3/1 4/1 s are not p Redox d Matrix d Matrix urface	(Type: C=Concer	Series Dra	ainage Class: or (Moist)	Mottles Mottles %	Type	Location Indicators fo A10 - 2cm M A16 - Coast I F19 - Pledmor	Texture (e.g. clay, sand, lo mucky loam mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric 3 1- Histosol 2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S	E: Latham silt loa ggroup): htton (Describe to the Depth 2 14 	m, 12-18% slopes, mode the depth needed to document the indice Horizon 1 2	Color 10Y 10Y	Matrix (Moist) 3/1 4/1 rs are not p Redox d Matrix urface ue Below Da	% 100 100	Series Dra	ainage Class: or (Moist)	Mottles Mottles %	Type	Location Indicators fc A10 - 2cm N A16 - Coast I F19 - Piedmor	Texture (e.g. clay, sand, lo mucky loam mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric :	E: Latham silt loa ggroup): tition (Describe to II Bottom Depth 2 14 Soil Field Inc	m, 12-18% slopes, mode the depth needed to document the indice Horizon 1 2	cator or confirm the absence of the confirmation of the confirmati	Matrix (Moist) 3/1 4/1 rs are not predox d Matrix urface (no bark Surface (n	(Type: C=Concer	Series Dra	ainage Class: or (Moist)	Mottles Mottles %	Type	Location Indicators fc A10 - 2cm N A16 - Coast I F19 - Piedmor	Texture (e.g. clay, sand, lo mucky loam mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric 3 Slack Histic 4 - Hydrogen S 5 - Stratified L	E: Latham silt loa ggroup): tion (Describe to the Bottom Depth 2 14 Soil Field Income	m, 12-18% slopes, mode the depth needed to document the indice Horizon 1 2 dicators (check her	cater or confirm the above the second of the	Matrix (Moist) 3/1 4/1 rs are not predox districted with the control of the control o	(Type: C=Concer	Series Dra	ainage Class: or (Moist)	Mottles Mottles %	Type	Location Indicators fc A10 - 2cm N A16 - Coast I F19 - Piedmor	Texture (e.g. clay, sand, lo mucky loam mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	ELatham silt loa ggroup): tition (Describe to the Depth 2 14	m, 12-18% slopes, mode the depth needed to document the indice Horizon 1 2 dicators (check her	cator or confirm the above confirmation confirm	Matrix (Moist) 3/1 4/1 s are not p Redox d Matrix urface ue Below Da ark Surface (ark Gleyed Matrix d Matrix d Matrix	(Type: C=Concer	Series Dra	ainage Class: or (Moist)	Mottles Mottles %	Type	Location Indicators fc A10 - 2cm N A16 - Coast I F19 - Piedmor	Texture (e.g. clay, sand, lo mucky loam mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric 3 1- Histosol 2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified Le 10 - 2 cm Much 11 - Depleted I 12 - Thick Dark	ELatham silt loa ggroup): tition (Describe to the Depth 2 14	m, 12-18% slopes, mode Horizon 1 2 dicators (check her	cator or confirm the absence of the confirmation of the confirmati	Matrix (Moist) 3/1 4/1 rs are not predox districted with the control of the control o	% 100 100	Series Dra	ainage Class: or (Moist)	Mottles Mottles %	Type	Location Indicators fc A10 - 2cm N A16 - Coast I F19 - Piedmor	Texture (e.g. clay, sand, lo mucky loam mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric 3 1- Histosol 2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified Le 10 - 2 cm Much 11 - Depleted I 12 - Thick Dark	E: Latham silt loa ggroup): tion (Describe to II Bottom Depth 2 14 Soil Field Index constitution of the sayers k (LRR N) Bellow Dark Sur & Surface k Mineral (LRR N,	m, 12-18% slopes, mode Horizon 1 2 dicators (check her	cator or confirm the absence of the confirmation of the confirmati	Matrix (Moist) 4/1 rs are not predection of Matrix discussed Matrix Gleyed Matrix Dark Surface do Da	(Type: C=Concer 9% 100 100	Series Dra	ainage Class: or (Moist)	Mottles Mottles %	Type	Location	Texture (e.g. clay, sand, lo mucky loam mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric : NRCS Hydric : Stratified La	E: Latham silt loa ggroup): tion (Describe to II Bottom Depth 2 14 Soil Field Index constitution of the sayers k (LRR N) Bellow Dark Sur & Surface k Mineral (LRR N,	m, 12-18% slopes, mode Horizon 1 2 dicators (check her	cater or confirm the above the state of confirm the above the state of	Matrix (Moist) 4/1 rs are not predection of Matrix discussed Matrix Gleyed Matrix Dark Surface do Da	(Type: C=Concer 9% 100 100	Series Dra	ainage Class: or (Moist)	Mottles Mottles %	Type	Location Indicators fc A10 - 2cm M A16 - Coast I F19 - Piedmon TF12 - Very Other (Expla	Texture (e.g. clay, sand, lo mucky loam mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	E: Latham silt loa ggroup): htton (Describe to the Bottom Depth 2 14 	m, 12-18% slopes, mode Horizon 1 2 dicators (check her	cater or confirm the above the state of confirm the above the state of	Matrix (Moist) 3/1 4/1 rs are not predox d Matrix urface ure Below Da ark Surface urd Matrix Dark Surface do Matrix Dark Surface do Dark Surface	(Type: C=Concer 9% 100 100	Series Dra	ainage Class: or (Moist)	Mottles Mottles %	Type	Location Indicators fc A10 - 2cm M A16 - Coast I F19 - Piedmon TF12 - Very Other (Expla	Texture (e.g. clay, sand, lo mucky loam mucky loam mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	E: Latham silt loa ggroup): htton (Describe to the Bottom Depth 2 14 	m, 12-18% slopes, mode Horizon 1 2 dicators (check her	cater or confirm the above the state of confirm the above the state of	Matrix (Moist) 3/1 4/1 rs are not predox d Matrix urface ure Below Da ark Surface urd Matrix Dark Surface do Matrix Dark Surface do Dark Surface	(Type: C=Concer 9% 100 100	Series Dra	ainage Class: or (Moist)	Mottles Mottles %	Type	Location Indicators fc A10 - 2cm M A16 - Coast I F19 - Piedmon TF12 - Very Other (Expla	Texture (e.g. clay, sand, lo mucky loam mucky loam mucky loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	E: Latham silt loa ggroup): htton (Describe to the Bottom Depth 2 14 	m, 12-18% slopes, mode Horizon 1 2 dicators (check her	cater or confirm the above the state of confirm the above the state of	Matrix (Moist) 3/1 4/1 rs are not predox d Matrix urface ure Below Da ark Surface urd Matrix Dark Surface do Matrix Dark Surface do Dark Surface	(Type: C=Concer 9% 100 100	Series Dra	ainage Class: or (Moist)	Mottles Mottles %	Type	Location Indicators fc A10 - 2cm M A16 - Coast I F19 - Piedmon TF12 - Very Other (Expla	Texture (e.g. clay, sand, lo mucky loam mucky loam mucky loam	



Sprature Sprature		roject/Site:	South Canton-Torrey 138 kV Line Rebuild Pr	roject			Wetland ID: Wetland 7 Sample Point SP13
		ECETATION	(0)		`		
Spring Street Marker No Compared Marker No Compared No Compar	Suppose Nume Suppose Destination Let Service Let Le			native species.)		
1	1.	iee Stratum (Fit		% Co	ver Dominant	Ind Status	Dominance Test Worksheet
2	2.	1.					Dominance rest Worksheet
3.	3.						Number of Dominant Species that are OBL_FACW_or FAC: 1 (A)
Total Number of Dominant Species Across All Strata.	Total Number of Dominant Species Across All Strate.						()
Percent of Dominant Species That Are OBL_FACW, or FAC_100.0% (A/B)	Second Process Second Process Total Are OBL, FACW, or FAC 100.0%						Total Number of Dominant Species Across All Strata: 1 (B)
Factor of Dominant Species That Are OBL, FACW, or FAC: 100.0% (NB)	Ferror of Commant Species That Air OBL, FACW, or FAC: 100.0%						Total Number of Dominant Species Across All Strata.
True	7.						Descript of Description Country That Are ODL FACIAL SERVICE 400 08/ (A/D)
Signature Continue Continu	8						Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
9	9						Businels and Indian Westerland
10.	Total Cover O						
Total Cover = 0	Total Cover 0						
FAC spp.	FAC spn.	10.					
			Total Co	over = 0			FACW spp. 85
1	1						FAC spp. 0 X 3 = 0
2.	2						FACU spp. 0 X 4 = 0
3.	3.						UPL spp. 0
4,	4						
Prevalence Index = B/A = 1.850	Prevalence Index = BIA = 1.850						Total 100 (A) 185 (B)
6.	6.						
7.	Total Cover 100 1						Prevalence Index = B/A = 1.850
B.	B.						
9	9	7.					
Total Cover = 0	10	8.					Hydrophytic Vegetation Indicators:
Total Cover = 0 Yes No Prevalence Index is ≤ 3.0 * Yes No No No No No No No N	Total Cover = O	9.					Yes ☑ ☐ No Rapid Test for Hydrophytic Vegetation
#b Stratum (Plot size: 5 ft radius) 1.	Stratum (Plot size: 5 ft radius)	10.					Yes ☑ ☐ No Dominance Test is > 50%
# Stratum (Plot size: 5 ft radius) 1.	Signatum (Plot size: 5 ft radius)		Total Co	ver = 0			Yes ☑ □ No Prevalence Index is ≤ 3.0 *
1.	Stratum (Plot size: 5 ft radius)						
1. Scirpus cyperinus	1.	erb Stratum (Plo	ot size: 5 ft radius)				
2.	2.		·	60) Y	FACW	1
3. Carex frankii 4. Onoclea sensibilis 10 N FACW 5	3.						
4.	4.						present, unless disturbed or problematic.
5	Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (D8H), regardless of height.						Definitions of Vegetation Strata:
Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 8	Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 8						
7	7						Tree - Wands plants 2 in 77 Com) or more in diameter at broad
8	8						height (DBH), regardless of height.
9	9						1
10.	10.						Sanling/Shrub - Woody plants less than 3 in DBH and greater than 3.28
11	11						ft. tall.
12	12						-
13	13						Havis All harbacoous (son woods) plants, recordings of size
13	13						
15	15						-
Total Cover = 100 Dody Vine Stratum (Plot size: 30 ft radius)	Total Cover = 100 May Vine Stratum (Plot size: 30 ft radius)						All weeks since a section in a contract of the
Dody Vine Stratum (Plot size: 30 ft radius) 1.	ady Vine Stratum (Plot size: 30 ft radius) 1.	15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
1	1		Total Co	ver = 10	0		
1	1						
2	2	oody Vine Strat	um (Plot size: 30 ft radius)				
3	3 Hydrophytic Vegetation Present ☑ Yes □ No 4 5 Total Cover = 0						
4	4	2.					
5	5	3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
Total Cover = 0 emarks:	Total Cover = 0 marks:	4.					
Total Cover = 0 emarks:	Total Cover = 0 marks:	5.					
emarks:	marks:		Total Co	ver = 0			
		emarks:					
dditional Remarks:	ditional Remarks:						
dditional Remarks:	ditional Remarks:						
aditional Remarks:	ntional Kemarks:	al alisi a 1					
		autional Rei	marks:				



WETLAND DETERMINATION DATA FORM Eastern Mountains and Piedmont Region

Project/Site:	South Cantor	n-Torrey 138 kV Line Re	ebuild Project			Stante	ec Project #:	193708516		Date:	04/05/22	
Applicant:		Fransmission Comp					-			County:	Stark	
Investigator #1:				Investi	gator #2:					State:	Ohio	
Soil Unit:		m, 12-18% slopes, mode	erately eroded				Classification:	N/A		Wetland ID:		
Landform:	Side slope				al Relief:					Sample Point:		
Slope (%):	2-4		40.72601		ongitude:				NAD83	Community ID:	UPL	
		itions on the site typ			Ir? (If no, ex			☑ Yes □		Section:		
Are Vegetation	⊔ , Soil ⊔, d	or Hydrology 🔲 sign	nificantly dist	urbed?		Are		mstances pre	sent?	Township:		
		or Hydrology □natu	urally probler	natic?			⊻ Yes	□ No		Range:	Dir:	
SUMMARY OF												
Hydrophytic Ve	~			☐ Yes				Hydric Soils I		A / · · · · · · · · · · · · · · · · · ·	☐ Yes ☑	No
Wetland Hydrol	ogy Present?			□ Yes	☑ No			Is This Samp	oling Point v	Within A Wetl	and? ■ Yes ☑	No
Remarks:												
HYDROLOGY												
,		tors (Check here if	indicators ar	e not prese	ent):	1			Secondary:			
Primary	<u>/:</u> A1 - Surface	Water			DO Wate	er-Stained I	Laguag			B6 - Surface So	oil Cracks egetated Concave Surface	
	A1 - Surface A2 - High Wa					atic Fauna				B10 - Sparsely vi		
	A3 - Saturation					e Aquatic F				B16 - Moss Trir		
	B1 - Water M					ogen Sulfic		_		C2 - Dry Seaso		
	B2 - Sedimer B3 - Drift Dep						spheres on Livin educed Iron	g Roots		C8 - Crayfish B	urrows Visible on Aerial Imagery	
	B4 - Algal Ma			ä			duction in Tilled	Soils			Stressed Plants	
	B5 - Iron Dep	osits				Muck Surfa				D2 - Geomorph		
	B7 - Inundation	on Visible on Aerial Ima	gery		Other (Ex	plain in Re	marks)			D3 - Shallow A		
										D4 - Microtopog D5 - FAC-Neut		
Field Observed										D3 - 1 AC-Neut	101 1031	
Field Observat					(:)							
Surface Water		☐ Yes ☑ No	Depth:		(in.)			Wetland Hyd	drology Pre	esent?	Yes 🛮 No	
Water Table Pro		☐ Yes ☑ No	Depth:		(in.)							
		☐ Yes ☑ No	Depth:		(in.)							
Describe Record	ed Data (strea	am gauge, monitoring	well, aerial p	hotos previ	ioue ineno	ationa) if	arrailable.		NI/A			
			,, e.e	notoo, prov	ious irispe	ctions), ii	available:		N/A			
Remarks:			,, <u>r</u>	notos, prov	ious irispe	cuoris), ii	avallable:		N/A			
			,,	notos, prov	ious irispe	ctions), ii	avallable:		N/A			
SOILS				notos, prov					N/A			
SOILS Map Unit Name		ım, 12-18% slopes, mode		notos, prov			avallable:		N/A			
SOILS Map Unit Name Taxonomy (Sub	group):	m, 12-18% slopes, mode	erately eroded		S	Series Dra	ainage Class:					
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to th		erately eroded	ence of indicators.)	S	Series Dra	ainage Class:	x, CS=Covered/Coated Sar		PL=Pore Lining, M=Matri		
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to the Bottom	m, 12-18% slopes, mode	erately eroded	ence of indicators.) Matrix	(Type: C=Concer	Series Dra	ainage Class:	s, CS=Covered/Coated Sar	nd Grains; Location: I		Texture	oam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to the Bottom Depth	rm, 12-18% slopes, mode to depth needed to document the indice Horizon	cator or confirm the abs	ence of indicators.) Matrix (Moist)	(Type: C=Concer	Series Dra	ainage Class: ation, RM=Reduced Matrix or (Moist)	Mottles	nd Grains; Location: I	Location	Texture (e.g. clay, sand, I	oam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): otion (Describe to the Bottom Depth 12	m, 12-18% slopes, mode to depth needed to document the indice Horizon 1	cator or confirm the abs	ence of indicators.) Matrix (Moist) 6/2	(Type: C=Concer	Series Dra	ainage Class: ation, RM=Reduced Matrix or (Moist)	, CS=Covered/Coated Sar Mottles % 	nd Grains; Location: I	Location	Texture (e.g. clay, sand, l clay loam	oam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): Dtion (Describe to the Bottom Depth 12	m, 12-18% slopes, mode e depth needed to document the indice Horizon 1	cator or confirm the abs Color of 7.5YR 10YR	ence of indicators.) Matrix (Moist) 6/2 5/8	(Type: C=Concer % 70 10	Series Dra	ainage Class: stion, RM=Reduced Matrix or (Moist)	Mottles %	nd Grains; Location: I	Location 	Texture (e.g. clay, sand, I clay loam clay loam	oam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to the Bottom Depth 12	m, 12-18% slopes, mode e depth needed to document the indice Horizon 1 1	cator or confirm the abs Color of 7.5YR 10YR 10YR	ence of indicators.) Matrix (Moist) 6/2 5/8 4/2	(Type: C=Concer	Series Dra	ainage Class: stion, RM=Reduced Matrix or (Moist)	Mottles %	nd Grains; Location: I	Location 	Texture (e.g. clay, sand, l clay loam clay loam clay loam	oam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to the Bottom Depth 12	m, 12-18% slopes, mode e depth needed to document the indice Horizon 1 1 1	cator or confirm the abs Color of 7.5YR 10YR 10YR	ence of indicators.) Matrix (Moist) 6/2 5/8 4/2	(Type: C=Concer % 70 10 20	Series Dra	ainage Class: stion, RM=Reduced Matrix or (Moist)	Mottles %	nd Grains; Location: I	Location 	Texture (e.g. clay, sand, I clay loam clay loam clay loam	oam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): Detion (Describe to the Bottom Depth 12	m, 12-18% slopes, mode e depth needed to document the indice Horizon 1 1	cator or confirm the abs	ence of indicators.) Matrix (Moist) 6/2 5/8 4/2	(Type: C=Concer % 70 10 20	Series Dra	ainage Class: stion, RM=Reduced Matrix or (Moist)	Mottles %	nd Grains; Location: I	Location	Texture (e.g. clay, sand, I clay loam clay loam clay loam	oam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): btion (Describe to the Depth 12	m, 12-18% slopes, mode e depth needed to document the indice Horizon 1 1	cator or confirm the abs Color (7.5YR 10YR 10YR	Matrix (Moist) 6/2 5/8 4/2	(Type: C=Concer % 70 10 20	Series Dra	ainage Class: ation, RM=Reduced Matrix or (Moist)	Mottles Mottles %	nd Grains; Location: I	Location	Texture (e.g. clay, sand, I clay loam clay loam clay loam	oam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): ation (Describe to the Depth 12	m, 12-18% slopes, mode e depth needed to document the indice Horizon 1 1	cator or confirm the abs Color 1 7.5YR 10YR 10YR	ence of indicators.) Matrix (Moist) 5/8 4/2	(Type: C=Concer	Series Dra	ainage Class: ation, RM=Reduced Matrix or (Moist)	Mottles %	Type	Location	Texture (e.g. clay, sand, I clay loam clay loam clay loam	oam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): btion (Describe to the Depth 12	m, 12-18% slopes, mode e depth needed to document the indice Horizon 1 1	cator or confirm the abs Color of 7.5YR 10YR 10YR	ence of indicators.) Matrix (Moist) 6/2 5/8 4/2	(Type: C=Concer	Series Dra	ainage Class: ation, RM=Reduced Matrix or (Moist)	Mottles Mottles %	nd Grains; Location: I	Location	Texture (e.g. clay, sand, I clay loam clay loam clay loam	oam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	ogroup): btion (Describe to the Depth 12	m, 12-18% slopes, mode e depth needed to document the indice Horizon 1 1	cator or confirm the abs Color (7.5YR 10YR e if indicator	Matrix (Moist) 6/2 5/8 4/2 s are not p	(Type: C=Concer	Series Dra	ainage Class: etion, RM=Reduced Matrix or (Moist)	Mottles %	Type	Location Indicators for	Texture (e.g. clay, sand, I clay loam clay loam clay loam	oam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	ogroup): btion (Describe to the Depth	m, 12-18% slopes, mode e depth needed to document the indice Horizon 1 1	Color (7.5YR 10YR 10YR	Matrix (Moist) 6/2 5/8 4/2 s are not p	(Type: C=Concer	Series Dra	ainage Class: elton, RM=Reduced Matrix or (Moist)	Mottles %	Type	Location Indicators for A10 - 2cm M	Texture (e.g. clay, sand, I clay loam clay loam clay loam	oam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric 1- Histosol 2 - Histic Epipe	ogroup): otion (Describe to the Depth	m, 12-18% slopes, mode e depth needed to document the indice Horizon 1 1	cator or confirm the abs Color (7.5YR 10YR e if indicator	Matrix (Moist) 6/2 5/8 4/2 s are not p	(Type: C=Concer	Series Dra	ainage Class: or (Moist)	Mottles %	Type	Location Indicators for A10 - 2cm M A16 - Coast F	Texture (e.g. clay, sand, I clay loam clay loam clay loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	pgroup): btion (Describe to the Depth 12	m, 12-18% slopes, mode e depth needed to document the indice Horizon 1 1	Color Confirm the abs Color T.5YR 10YR 10YR e if indicator S5 - Sandy F S6 - Stripper	ence of indicators.) Matrix (Moist) 6/2 5/8 4/2 s are not p	(Type: C=Concer	Series Dra	ainage Class: ation, RM=Reduced Matrix or (Moist)	Mottles %	Type	Location Indicators for A10 - 2 cm M A16 - Coast F	Texture (e.g. clay, sand, I clay loam clay loam clay loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric -1- Histosol -2 - Histic Epipe -3 - Black Histic -4 - Hydrogen S -5 - Stratified La	ogroup): otion (Describe to the Depth	m, 12-18% slopes, mode e depth needed to document the indice Horizon 1 1	Color (7.5YR 10YR 10YR e if indicator S5 - Sandy F S6 - Stripper S7 - Dark St. S8 - Polyvalt S9 - Thin Da	matrix (Moist) 6/2 5/8 4/2 s are not p Redox t Matrix irrace us Below Da rk Surface (N	(Type: C=Concer 9% 70 10 20	Series Dra	ainage Class: or (Moist)	Mottles %	Type	Location Indicators for A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very	Texture (e.g. clay, sand, I clay loam clay loam clay loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to the Depth 12	m, 12-18% slopes, mode te depth needed to document the indice Horizon 1 1 dicators (check her	cator or confirm the abs Color of the state	Matrix (Moist) 6/2 5/8 4/2 s are not p Redox d Matrix urface Le Below Da rk Surface (A Gleyed Matrix	(Type: C=Concer 9% 70 10 20	Series Dra	ainage Class: or (Moist)	Mottles %	Type	Location Indicators for A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very	Texture (e.g. clay, sand, I clay loam clay loam clay loam clay loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	ogroup): ition (Describe to the Depth	m, 12-18% slopes, mode te depth needed to document the indice Horizon 1 1 dicators (check her	cator or confirm the abs Color of 7.5YR 10YR 10YR e if indicator S5 - Sandy F S6 - Stripped S7 - Dark SU S8 - Polyvalu S9 - Thin Da	ence of indicators.) Matrix (Moist) 6/2 5/8 4/2 s are not p Redox 1 Matrix urface ue Below Da rk Surface (Moist) Gleyed Matrid d Matrix	(Type: C=Concer 9% 70 10 20	Series Dra	ainage Class: or (Moist)	Mottles %	Type	Location Indicators for A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very	Texture (e.g. clay, sand, I clay loam clay loam clay loam clay loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric 1- Histosol 2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified La 10 - 2 cm Mucl 11 - Depleted 12 - Thick Darl	ogroup): ition (Describe to the Depth	m, 12-18% slopes, mode the depth needed to document the indic Horizon 1 1 dicators (check her	cator or confirm the abs Color of the state	Matrix (Moist) 6/2 5/8 4/2 s are not p d datrix urface ue Below Da rK Suyrface (In d Matirx Dark Surface	% 70 10 20	Series Dra	ainage Class: or (Moist)	Mottles %	Type	Location Indicators for A10 - 2cm M A16 - Coast F F19 - Piedmon TF12 - Very	Texture (e.g. clay, sand, I clay loam clay loam clay loam clay loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric 1- Histosol 2 - Histic Epipe 3 - Black Histic 4 - Hydrogen S 5 - Stratified La 10 - 2 cm Mucl 11 - Depleted 12 - Thick Darl	ogroup): btion (Describe to the Depth	m, 12-18% slopes, mode the depth needed to document the indic Horizon 1 1 dicators (check her	cator or confirm the abs Color (7.5YR 10YR 10YR e if indicator \$5 - Sandy F \$6 - Strippec \$7 - Dark Su \$8 - Polyvalu \$9 - Thin Du F2 - Loamy F3 - Deplete F6 - Redox I	Matrix (Moist) 6/2 5/8 4/2 s are not p Redox d Matrix d Matrix Urface use Below Da rk Surface (Moist) Gleyed Matrix d Matrix Oark Surface d Dark Surface d Dark Surface	% 70 10 20	Series Dra	ainage Class: or (Moist)	Mottles %	Type	Location	Texture (e.g. clay, sand, I clay loam clay loam clay loam clay loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): btion (Describe to the Depth	m, 12-18% slopes, mode the depth needed to document the indic Horizon 1 1 dicators (check her	cator or confirm the abs Color of the state	Matrix (Moist) 6/2 5/8 4/2 s are not p Redox d Matrix d Matrix Urface use Below Da rk Surface (Moist) Gleyed Matrix d Matrix Oark Surface d Dark Surface d Dark Surface	% 70 10 20	Series Dra	ainage Class: or (Moist)	Mottles %	Type	Location	Texture (e.g. clay, sand, I clay loam clay loam clay loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): btion (Describe to the Depth	m, 12-18% slopes, mode the depth needed to document the indic Horizon 1 1 dicators (check her	cator or confirm the abs Color of the state	Matrix (Moist) 6/2 5/8 4/2	% 70 10 20	Series Dra	ainage Class: or (Moist)	Mottles %	Type	Location	Texture (e.g. clay, sand, I clay loam clay loam clay loam clay loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): btion (Describe to the Depth	m, 12-18% slopes, mode the depth needed to document the indic Horizon 1 1 dicators (check her	cator or confirm the abs Color of the state	Matrix (Moist) 6/2 5/8 4/2	% 70 10 20	Series Dra	ainage Class: or (Moist)	Mottles %	Type	Location	Texture (e.g. clay, sand, I clay loam clay loam clay loam clay loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): btion (Describe to the Depth	m, 12-18% slopes, mode the depth needed to document the indic Horizon 1 1 dicators (check her	cator or confirm the abs Color of the state	Matrix (Moist) 6/2 5/8 4/2	% 70 10 20	Series Dra	ainage Class: or (Moist)	Mottles %	Type	Location	Texture (e.g. clay, sand, I clay loam clay loam clay loam clay loam	



Project/Site:	South Canton-Torrey 138 kV Line Rebuild Project				Wetland ID: Wetland 7 Sample Point SP14
VEGETATION		pecies.)			
Tree Stratum (Pla	ot size: 30 ft radius)				Daminanaa Tast Waylishaat
1	<u>Species Name</u>		Dominant 	Ind.Status	Dominance Test Worksheet
1. 2.					Number of Deminant Charles that are OBL FACIN or FACI
3.					Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)
4.					Total Number of Deminant Cassing Agrees All Ctrates 1 (D)
5.					Total Number of Dominant Species Across All Strata: 1 (B)
6.					Description of Description of Consider That Are ORL FACING as FACING (A/R)
7.					Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
10.	Total Cover =				FACW spp. 20 X 2 = 40
	Total Gover =	O			FAC spp. 0 x 3 = 0
Sanling/Shruh Str	atum (Plot size: 15 ft radius)				FACU spp. 80 x 4 = 320
1.					UPL spp. 0
2.					
3.					Total 100 (A) 360 (B)
4.					<u> </u>
5.					Prevalence Index = B/A = 3.600
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Yes □ ☑ No Rapid Test for Hydrophytic Vegetation
10.					Yes □ ☑ No Dominance Test is > 50%
	Total Cover =	0			Yes □ ☑ No Prevalence Index is ≤ 3.0 *
					Yes □ ☑ No Morphological Adaptations (Explain) *
Herb Stratum (Plo	ot size: 5 ft radius)				Yes □ ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Schedonorus arundinaceus	80	Υ	FACU	* Indicators of hydric soil and wetland hydrology must be
2.	Elymus virginicus	10	N	FACW	present, unless disturbed or problematic.
3.	Juncus effusus	10	N	FACW	' '
4.					Definitions of Vegetation Strata:
5.					_
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.					neight (DBH), regardless of neight.
8.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
9.					ft. tall.
10. 11.					
11.					Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
10.	Total Cover =	100			Troody Tilloo
	i otal covel =	100			
Woody Vine Strat	tum (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
4.					• • •
5.					
	Total Cover =	0			
Remarks:					
Additional Re	marks:				
Ī					



Project/Site:	South Cantor	n-Torrey 138 kV Line Re	ebuild Projec	t			Stantec Project #:	193708516		Date:	04/05/22
Applicant:	AEP Ohio	Fransmission Compa	any, Inc.							County:	Stark
Investigator #1:	Kate Boma	r		Invest	igator #2:	Matt De	nzler			State:	Ohio
Soil Unit:	Latham silt	loam, 8-15% slopes	3			NV	/I/WWI Classification:	N/A		Wetland ID:	Wetland 8
Landform:	Depression	1		Loc	al Relief:	Concav	е			Sample Point:	SP15
Slope (%):	0-1	Latitude:	40.731902	L	ongitude:	-81.415	352		NAD83	Community ID:	PEM
Are climatic/hyd	rologic conc	litions on the site typ	ical for this	s time of	year? (If no	o, explain in	remarks)	□ Yes □	No	Section:	
		or Hydrology □sign					Are normal circumst	ances present	t?	Township:	
Are Vegetation	□, Soil □,	or Hydrology 🗆 natu	rally proble	ematic?			Yes	□No		Range:	Dir:
SUMMARY OF	FINDINGS										
Hydrophytic Ve	getation Pres	sent?		Yes	□ No			Hydric Soils	Present?		✓ Yes □ No
Wetland Hydrol	ogy Present	?		Yes	□ No			Is This Samp	oling Point \	Within A Wetlan	d? 🛛 Yes 🗖 No
Remarks:											
HYDROLOGY											
	ology Indio	ators (Check here if	indicators	ara not r	rocont) 🗆					
Primary:		ators (Check here ii	IIIUICaluis	are not p	Jieseiii	<i>)</i> ⊔			Secondary:		
	A1 - Surface	Water		П	B9 - Wate	er-Stained	Leaves				Cracks
√	A2 - High Wa									B10 - Drainage Pa	
	A3 - Saturation									B16 - Moss Trim I	
	B1 - Water M				C1 - Hydr					C2 - Dry-Season	
	B2 - Sedimer						spheres on Living Roots educed Iron			C8 - Crayfish Buri	rows isible on Aerial Imagery
	B3 - Drift Dep B4 - Algal Ma						duction in Tilled Soils		H	D1 - Stunted or St	
	B5 - Iron Dep	osits		Н	C7 - Thin					D2 - Geomorphic	
		on Visible on Aerial Ima	gery								
	B8 - Sparsely	Vegetated Concave S	urface							D4 - Microtopogra	
									Ш	D5 - FAC-Neutral	Test
Field Observat	ions:										
Surface Water	Present?	☑ Yes □ No	Depth:	0-1	(in.)			Wetland Hy	drology Pr	ocont?	Yes □ No
Water Table Pr	esent?	☑ Yes □ No	Depth:	4	(in.)			welland ny	urology Fi	esent:	TES INU
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Doscribo Pocoro	lod Data (etr	eam gauge, monitorin	a woll pori	al photos	provious	inepoetio	ne) if available:		N/A		
Describe Record	ieu Dala (Sili	sam gauge, monitorin	ig well, aerik	ai priotos	, previous	inspectio	is), ii avallable.		14/73		
Remarks:											
Remarks:											
SOILS		Latham ailt laam 0	150/ alana								
SOILS Map Unit Name		Latham silt loam, 8-									
SOILS Map Unit Name Profile Descrip	otion (Describe to t			absence of indica	ators.) (Type: C=0	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co			Lining, M=Matrix)	Toytura
SOILS Map Unit Name Profile Descrip	Bottom	he depth needed to document the indic	cator or confirm the a	Matrix	1	Concentration, D	Re	edox Features		1	Texture
SOILS Map Unit Name Profile Descrip Top Depth	Bottom Depth	he depth needed to document the indice	cator or confirm the a	Matrix Moist)	%		Color (Moist)	edox Features %	Туре	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Profile Descrip Top Depth 0	Bottom Depth 14	the depth needed to document the indiction Horizon	Color (I	Matrix Moist) 5/1	% 80	10YR	Color (Moist) 5/8	edox Features % 5	Type C	Location M	(e.g. clay, sand, loam)
SOILS Map Unit Name Profile Descrip Top Depth 0	Bottom Depth 14	he depth needed to document the indicember of th	Color (I	Matrix Moist) 5/1 3/1	% 80 15	10YR	Re Color (Moist) 5/8 	edox Features % 5 	Type C 	Location M	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0	Bottom Depth 14	the depth needed to document the indiction Horizon	Color (I	Matrix Moist) 5/1	% 80	10YR	Color (Moist) 5/8	edox Features % 5	Type C	Location M	(e.g. clay, sand, loam)
SOILS Map Unit Name Profile Descrip Top Depth 0	Bottom Depth 14	he depth needed to document the indicember of th	Color (I	Matrix Moist) 5/1 3/1	% 80 15	10YR	Re Color (Moist) 5/8 	edox Features % 5 	Type C 	Location M	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0	Bottom Depth 14	he depth needed to document the india Horizon 1 1	Color (I 10YR 10YR	Matrix Moist) 5/1 3/1	% 80 15 	10YR 	Color (Moist) 5/8	edox Features % 5 	Type C 	Location M 	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0	Bottom Depth 14	he depth needed to document the india Horizon 1 1	Color (I 10YR 10YR	Matrix Moist) 5/1 3/1	% 80 15 	10YR 	Color (Moist) 5/8	## section	Type C	Location M	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0	Bottom Depth 14	Horizon 1 1	Color (I	Matrix Moist) 5/1 3/1	% 80 15 	10YR	Re Color (Moist) 5/8 	edox Features	Type C	Location M 	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0	Bottom Depth 14	Horizon 1 1	Color (I 10YR 10YR	Matrix Moist) 5/1 3/1	% 80 15 	10YR	Re Color (Moist) 5/8 	edox Features	Type C	Location M	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0	Bottom Depth 14	Horizon 1 1	Color (I	Matrix Moist) 5/1 3/1	% 80 15 	10YR	Re Color (Moist) 5/8 	edox Features	Type C	Location M	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14	Horizon 1 1	Color (I	Matrix Moist) 5/1 3/1 ors are r	% 80 15	10YR	Re Color (Moist) 5/8 	edox Features	Type	Location M	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14 Soil Field In A1- Histosol A2 - Histic Ep	Horizon 1 1 dicators (check here	Color (I	matrix Matrix Moist) 5/1 3/1 ors are r	% 80 15 not preser \$8 - Polyv	10YR	Re Color (Moist) 5/8 	edox Features	Type C	Location M	(e.g. clay, sand, loam)
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi	Horizon 1 1 dicators (check here)	Color (I	Matrix Moist) 5/1 3/1 ors are r	% 80 15 ot preser \$8 - Poly. \$9 - Thin \$11 - Higl	10YR tt	Re Color (Moist) 5/8 w Surface (LRR R, MLRA 149B) Sands	edox Features	Type C s for Proble A10 - 2 Coast S3 - 5cm M	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat ((e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge	Horizon 1 1 dicators (check here)	Color (I	Matrix Moist) 5/1 3/1 ors are r	% 80 15 not preser \$8 - Polyv \$9 - Thin \$11 - Higl	10YR	Re Color (Moist) 5/8 w Surface (LRR R, MLRA 149B) GCE (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	edox Features	Type C	Location M Muck (LRR K, L, MLRA 1 P Urkipe Redox (LRR LOKY Peat of Peat (Urface (LRR K, L, M)	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec	Horizon 1 1 dicators (check here) bipedon stic sin Sulfide d Layers	Color (I	subsence of indicates Matrix Moist) 5/1 3/1 ors are r	% 80 15 S8 - Polyv S9 - Thin S11 - Higl F1 - Loarn F2 - Loarn F2 - Loarn	10YR tt JJ ralue Belor Dark Surfa h Chroma ny Mucky I ny Gleyed	Re Color (Moist) 5/8 W Surface (LRR R, MLRA 149B) 3CG (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	edox Features	Type C	Location M	(e.g. clay, sand, loam) clay loam 49B) K, L, R) LRR K, L, R)
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratiffec A11 - Deplete	Horizon 1 1 dicators (check here) site on Sulfide et Layers et Below Dark Surface	Color (I	sbeence of indicate Matrix Moist) 5/1 3/1 ors are r	% 80 15 	10YR	ReColor (Moist) 5/8 W Surface (LRR R, MLRA 149B) ACC (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	edox Features	Type C	Location M	(e.g. clay, sand, loam) clay loam 49B) K, L, R) LRR K, L, R)
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14 Soil Field In A1 - Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick E	Horizon 1 1	Color (I	matrix Matrix Moist) 5/1 3/1 ors are r	% 80 15	10YR	Re Color (Moist) 5/8	edox Features	Type C	Location M	(e.g. clay, sand, loam) clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratiffec A11 - Deplete	Horizon 1 1 dicators (check her bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface luck Mineral	Color (I	Matrix Moist) 5/1 3/1 ors are r	% 80 15 	10YR	Re Color (Moist) 5/8	edox Features	Type C	Location M	(e.g. clay, sand, loam) clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R)
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A1 - Deplete A12 - Thick E S1 - Sandy R S5 - Sandy R S5 - Sandy R	Horizon 1 1 dicators (check here) site on Sulfide of Layers and Below Dark Surface duck Mineral sleyed Matrix leedox	Color (I	Matrix Moist) 5/1 3/1 ors are r	% 80 15	10YR	Re Color (Moist) 5/8	edox Features % 5 Indicator	Type C	Location M	(e.g. clay, sand, loam) clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (MRA 149B) 45, 149B)
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14 Soil Field In A4 - Hydroge A5 - Stratifiee A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S6 - Stripped	Horizon 1 1	Color (I	Matrix Moist) 5/1 3/1 ors are r	% 80 15	10YR	Re Color (Moist) 5/8	edox Features	Type C	Location M	(e.g. clay, sand, loam) clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (MRA 149B) 45, 149B)
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14 Soil Field In A4 - Hydroge A5 - Stratifiee A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S6 - Stripped	Horizon 1 1 dicators (check here) site on Sulfide of Layers and Below Dark Surface duck Mineral sleyed Matrix leedox	Color (I	Matrix Moist) 5/1 3/1 ors are r	% 80 15	10YR	Re Color (Moist) 5/8	edox Features	Type C	Location M	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14 Soil Field In A4 - Hydroge A5 - Stratifiee A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S6 - Stripped	Horizon 1 1	Color (I	Matrix Moist) 5/1 3/1 ors are r	% 80 15	10YR	Re Color (Moist) 5/8	edox Features % 5 Indicator 'Indicators of	Type C	Location M	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14	Horizon 1 1 dicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface bark Surface fluck Mineral bleyed Matrix ledox Matrix rface (LRR R, MLRA 149B)	Color (I	sesence of indicate Matrix Moist) 5/1 3/1 ors are r	% 80 15 88 - Poly S9 - Thin S11 - Higl F1 - Loarr F2 - Loarr F3 - Deple F6 - Redo F7 - Deple F8 - Redo	10YR	Re Color (Moist) 5/8	edox Features % 5 Indicator Indicators of disturbed of disturb	Type C	Location M	(e.g. clay, sand, loam) clay loam
SOILS Map Unit Name Profile Descrip Top Depth NRCS Hydric	Bottom Depth 14 Soil Field In A4 - Hydroge A5 - Stratifiee A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S6 - Stripped	Horizon 1 1 dicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface bark Surface fluck Mineral bleyed Matrix ledox Matrix rface (LRR R, MLRA 149B)	Color (I	Matrix Moist) 5/1 3/1 ors are r	% 80 15 88 - Poly S9 - Thin S11 - Higl F1 - Loarr F2 - Loarr F3 - Deple F6 - Redo F7 - Deple F8 - Redo	10YR	Re Color (Moist) 5/8	edox Features % 5 Indicator 'Indicators of	Type C	Location M	(e.g. clay, sand, loam) clay loam



Northeast and Northcentral Region

Wetland ID: Wetland 8

Sample Point: SP15 Project/Site: South Canton-Torrey 138 kV Line Rebuild Project **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant 2. Number of Dominant Species that are OBL, FACW, or FAC: 1 (A) 3. 4 Total Number of Dominant Species Across All Strata: 2 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B) 7 8. Prevalence Index Worksheet 9 Total % Cover of: Multiply by: 10. OBL spp. x 1 = FACW spp. ____ Total Cover = 10 x 2 = FAC spp. 10 x 3 = FACU spp. _ 55 x 4 = Sapling/Shrub Stratum (Plot size: 5 meter radius) x 5 = UPL spp. 0 0 2. 100 ____(A) 295 ____(B) 3. Total 4. 5. Prevalence Index = B/A = 2.950 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation ☐ Yes 10. √ No Dominance Test is > 50% Total Cover = 0 Yes □ No Prevalence Index is ≤ 3.0 * ✓ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ✓ No Problem Hydrophytic Vegetation (Explain) * Apocynum cannabinum 10 FAC * Indicators of hydric soil and wetland hydrology must be Υ 2. OBL Juncus effusus 20 present, unless disturbed or problematic. FACW 3. Onoclea sensibilis 10 Ν 4. Typha angustifolia 5 N OBL **Definitions of Vegetation Strata:** Υ 5. Schedonorus arundinaceus 55 FACU 6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. 12. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 100 Woody Vine Stratum (Plot size: 10 meter radius) --2. 3. Hydrophytic Vegetation Present ☐ Yes ☐ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



Are Vegetation	AEP Ohio : Kate Boma Latham silt Side slope 1-2 drologic cond , Soil , , , , FINDINGS	Latitude: Latitude: ditions on the site typ or Hydrology □ sigr or Hydrology □ natu	40.731963 bical for this	Loc Los time of sturbed? ematic?	₃ ☑ No	NW Linear -81.415 o, explain in	/I/WWI Classification: 344 remarks) Are normal circumsta	Datum:	NAD83 No ??	Date: County: State: Wetland ID: Sample Point: Community ID: Section: Township: Range:	04/05/22 Stark Ohio Wetland 8 SP16 UPL Dir:
Wetland Hydro	logy Present	?		□ Yes	. ☑ No			Is This Samp	oling Point \	Within A Wetlan	d? I Yes I No
Primary	A1 - Surface A2 - High W: A3 - Saturati B1 - Water B2 - Sedime B3 - Drift De B4 - Algal M: B5 - Iron De	ater Table on Aarks nt Deposits posits at or Crust posits			B9 - Wate B13 - Aqu B15 - Mar C1 - Hydr C3 - Oxidi C4 - Pres C6 - Rece C7 - Thin	atic Fauna I Deposits ogen Sulficited Rhizo ence of Re ent Iron Re Muck Surf	de Odor spheres on Living Roots educed Iron duction in Tilled Soils ace			C9 - Saturation Vi D1 - Stunted or Si D2 - Geomorphic	atterns Lines Water Table rows isible on Aerial Imagery tressed Plants Position
		on Visible on Aerial Ima y Vegetated Concave S		Ш	Other (Ex	plain in Re	emarks)			D3 - Shallow Aqui D4 - Microtopogra	
Field Observa Surface Water Water Table Pi Saturation Pres Describe Record	Present? resent? sent?	☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No eam gauge, monitorir	Depth: Depth: Depth:		(in.) (in.) (in.)	inspectio	ns), if available:	Wetland Hyd		D5 - FAC-Neutral	Yes No
Remarks:			<u> </u>	•			•				
2011.0											
SOILS Map Unit Name	3.	Latham silt loam, 8-	.15% slone	ie.							
					ators.) (Type: C=0	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov	vered/Coated Sand Grains;	Location: PL=Pore I	Lining, M=Matrix)	
Тор	Bottom			Matrix			Re	edox Features			Texture
Depth	Depth	Horizon	Color (Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	4	1	10YR	4/2	100						(e.g. clay, sand, loan)
4	7	2	10YR	4/2							clay loam
		2			50						
		2	10YR	6/6	40					t	clay loam clay loam clay loam
		2	10YR	6/6 8/1	40 10						clay loam clay loam clay loam clay loam
		2	10YR 	6/6 8/1 	40 10 	 			 	 	clay loam clay loam clay loam clay loam clay loam
		2	10YR 	6/6 8/1 	40 10 	 		 			clay loam clay loam clay loam clay loam clay loam
		2	10YR 	6/6 8/1 	40 10 	 			 	 	clay loam clay loam clay loam clay loam
NRCS Hydric	Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy S S5 - Sandy F S6 - Strippec	2	10YR 	6/6 8/1 ors are r	40 10 cot preser 88 - Polyv 59 - Thin S11 - Higl F1 - Loam F2 - Loam F3 - Deple F6 - Redo	t Jz ralue Belor Dark Surfa o Chroma ny Mucky I Ny Gleyed eteted Matrix xx Dark Suc	w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (face Surface	Indicator		 	clay loam clay loam clay loam clay loam clay loam 498) K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (LRR K, L, R) 15 (MLRA 1498) 45, 1498)
NRCS Hydric	Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy S S5 - Sandy F S6 - Strippec	2	10YR 	6/6 8/1 ors are r	40 10 	t Jz ralue Belor Dark Surfa o Chroma ny Mucky I Ny Gleyed eteted Matrix xx Dark Suc	w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (face Surface	Indicator	s for Problematic. For Problematic.	matic Soils 1 Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L) Urface (LRR K, L, M) ue Below Surface (LRR K, L) flanganese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1 Shallow Dark Surf ain in Remarks)	clay loam clay loam clay loam clay loam clay loam 498) K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (LRR K, L, R) 15 (MLRA 1498) 45, 1498)



Northeast and Northcentral Region

Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Wetland ID: Wetland 8 Sample Point: SP16 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant 2. Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) 3. 4 Total Number of Dominant Species Across All Strata: 1 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B) 7 8. Prevalence Index Worksheet 9 Total % Cover of: Multiply by: 10. _ x 1 = OBL spp. FACW spp. Total Cover = 0 x 2 = FAC spp. x 3 = FACU spp. _ Sapling/Shrub Stratum (Plot size: 5 meter radius) x 5 = UPL spp. 0 0 2. 100 ____(A) 395 ____(B) 3. Total 4. 5. Prevalence Index = B/A = 3.950 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation ☐ Yes 10. ✓ No Dominance Test is > 50% Total Cover = 0 ☐ Yes ✓ No Prevalence Index is ≤ 3.0 * ☐ Yes ✓ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ✓ No Problem Hydrophytic Vegetation (Explain) * Schedonorus arundinaceus 95 **FACU** * Indicators of hydric soil and wetland hydrology must be 2. Ν **FAC** Apocynum cannabinum 5 present, unless disturbed or problematic. 3. 4. **Definitions of Vegetation Strata:** 5. ----6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 100 Woody Vine Stratum (Plot size: 10 meter radius) --2. 3. Hydrophytic Vegetation Present ☐ Yes ☑ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



Applicant: Investigator #1:		Fransmission Compa r	arry, mo.	Invest	igator #2:	Matt De	nzler			County: State:	Stark Ohio
Soil Unit:		loam, 0-2% slopes		IIIVCSt	igator #2.		/I/WWI Classification:	N/A		Wetland ID:	Wetland 9
Landform:	Plain	, - =,		Loc	cal Relief:					Sample Point:	SP17
Slope (%):	0	Latitude:			ongitude:			Datum:	NAD83	Community ID:	PEM
Are climatic/hyd	drologic cond	ditions on the site typ	oical for this	time of	year? (If no	o, explain in	remarks)	□ Yes □	No	Section:	
		or Hydrology □sign					Are normal circumsta		t?	Township:	
		or Hydrology 🗆 natu	urally proble	ematic?			Yes	□No		Range:	Dir:
SUMMARY OF											
Hydrophytic Ve				Yes				Hydric Soils			
Wetland Hydro	logy Present	?		Yes	□ No			Is This Samp	oling Point \	Within A Wetlan	d? Yes No
Remarks:											
v											
HYDROLOGY											
		ators (Check here if	indicators	are not p	oresent)□					
Primary		10/			DO W-4-	04=:			Secondary:	DC Cf C-il	0
✓ ✓	A1 - Surface A2 - High Wa				B9 - Wate B13 - Aqu					B6 - Surface Soil B10 - Drainage Pa	
	A3 - Saturation				B15 - Mar					B16 - Moss Trim	
	B1 - Water M			_	C1 - Hydr					C2 - Dry-Season	
	B2 - Sedimer B3 - Drift Dep						spheres on Living Roots duced Iron			C8 - Crayfish Buri	rows isible on Aerial Imagery
	B4 - Algal Ma			П			duction in Tilled Soils			D1 - Stunted or St	
	B5 - Iron Dep	oosits			C7 - Thin					D2 - Geomorphic	
		on Visible on Aerial Ima		Ц	Other (Ex	plain in Re	marks)			D3 - Shallow Aqui	
	Do - Sparsei	Vegetated Concave S	urrace							D4 - Microtopogra D5 - FAC-Neutral	
Field Observat	lione:									20 1710 11041141	1001
Surface Water		☑ Yes □ No	Donth:	1-2"	(in.)						
Water Table Pr		☑ Yes ☐ No		surface	` '			Wetland Hyd	drology Pr	esent?	Yes No
Saturation Pres		☐ Yes ☑ No	Depth:		(in.)						
			•		. ,		\ 'f'l-bl		N/A		
Describe Record	ied Data (Str	eam gauge, monitorin	ig well, aeria	ai priotos	, previous	inspectio	is), ii avallable.		IN/A		
Domorko				-							
Remarks:			-	-	-		,,				
				-		·	,				
SOILS	·	Sehring silt loam 0	-2% slones		-	-	,				
SOILS Map Unit Name		Sebring silt loam, 0			ators.) (Type: C=	Concentration D		vered/Coated Sand Grains:	Location: PL=Pore L	ining M=Matrix)	
SOILS Map Unit Name Profile Descrip	otion (Describe to			absence of indica	ators.) (Type: C=0	Concentration, D	Depletion, RM=Reduced Matrix, CS=Cow			Lining, M=Matrix)	Texture
SOILS Map Unit Name Profile Descrip	Bottom		cator or confirm the a	Matrix	ators.) (Type: C=0	Concentration, D	Depletion, RM-Reduced Matrix, CS-Cov	vered/Coated Sand Grains; edox Features %	1	Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Profile Descrip	otion (Describe to	the depth needed to document the indi		Matrix		Concentration, D	Depletion, RM=Reduced Matrix, CS=Cow	edox Features		1	(e.g. clay, sand, loam)
SOILS Map Unit Name Profile Descrip Top Depth	Bottom Depth	the depth needed to document the indi	cator or confirm the a	Matrix Moist)	%		Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist)	edox Features %	Туре	Location	
SOILS Map Unit Name Profile Descrip Top Depth 0	Bottom Depth 2	the depth needed to document the indi Horizon	Color (I	Matrix Moist) 4/1	% 100		Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist)	edox Features % 	Type 	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Profile Descrip Top Depth 0 2	Bottom Depth 2 14	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 4/1 5/1	% 100 95	 7.5YR	Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist) 5/6	edox Features % 5	Type C	Location M	(e.g. clay, sand, loam) clay loam clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2	Bottom Depth 2 14	Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 4/1 5/1	% 100 95 	 7.5YR	Depletion, RM-Reduced Matrix, CS-Cov Re Color (Moist) 5/6 	edox Features % 5	Type C	Location M	(e.g. clay, sand, loam) clay loam clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2	Bottom (Depth 2 14	Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 4/1 5/1	% 100 95 	7.5YR 	Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist) 5/6 	edox Features	Type C	Location M	(e.g. clay, sand, loam) clay loam clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2	Bottom Depth 2 14	Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 4/1 5/1	% 100 95 	7.5YR 	Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist) 5/6 	edox Features	Type C	Location M	(e.g. clay, sand, loam) clay loam clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2	Depth Depth 2 14	Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 4/1 5/1	% 100 95 	7.5YR 	Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist) 5/6 	edox Features % 5	Type C	Location M	(e.g. clay, sand, loam) clay loam clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2	Bottom Depth 2 14	Horizon 1 2	Color (I	Matrix Moist) 4/1 5/1	% 100 95	7.5YR	Depletion, RM=Reduced Matrix, CS=Covor Re Color (Moist) 5/6	edox Features % 5	Type C	Location M	(e.g. clay, sand, loam) clay loam clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	btion (Describe to: Bottom Depth 2 14 Soil Field In A1- Histosol	Horizon 1 2 dicators (check he	Color (I	besence of indicates the state of the state	% 100 95 not preser \$8 - Polyy	7.5YR	Depletion, RM=Reduced Matrix, CS=Cow Re Color (Moist) 5/6 v Surface (LRR R, MLRA 1498)	edox Features % 5 Indicator	Type C	Location M matic Soils ¹ Muck (LRR K, L, MLRA 1	(e.g. clay, sand, loam) clay loam clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	Bottom Depth 2 14 Soil Field Ir A1- Histosol A2 - Histic Ep	Horizon 1 2 ndicators (check helpipedon	Color (I	besence of indicates the state of the state	% 100 95 not preser \$8 - Polyx \$9 - Thin	7.5YR	Depletion, RM-Reduced Matrix, CS-Cov Re Color (Moist) 5/6 v Surface (LRR R, MLRA 149B) CC (LRR R, MLRA 149B)	edox Features % 5 Indicator	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR	(e.g. clay, sand, loam) clay loam clay loam 49B) K. L. R)
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	Detion (Describe to: Bottom Depth 2 14 Soil Field In A1- Histosol A2 - Histic E A3 - Black Hi	Horizon 1 2 dicators (check here)	Color (I	besence of indicates the service of indicates	% 100 95 tot preser S8 - Polyv. S9 - Thin S11 - Higl	7.5YR	Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist) 5/6 v Surface (LRR R, MLRA 149B) CGE (LRR R, MLRA 149B) Sands	edox Features % 5 Indicator	Type C s for Proble A10 - 2 Coast S3 - 5cm Mi	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR kucky Peat of Peat ((e.g. clay, sand, loam) clay loam clay loam 49B) K. L. R)
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	Bottom Depth 2 14 Soil Field Ir A1- Histosol A2 - Histic Ep	Horizon 1 2 dicators (check here) biggedon istic en Sulfide	Color (I	besence of indicates the state of the state	% 100 95	7.5YR	Depletion, RM-Reduced Matrix, CS-Cow Re Color (Moist) 5/6 v Surface (LRR R, MLRA 1498) CGe (LRR R, MLRA 1498) Sands filneral (LRR K, L)	edox Features % 5 Indicator	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR	(e.g. clay, sand, loam) clay loam clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	Bottom Depth 2 14 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifies A11 - Deplete	Horizon 1 2 adicators (check here) bipedon istic en Sulfide d Layers ad Below Dark Surface	Color (I	besence of indicates Matrix Moist) 4/1 5/1	% 100 95 S8 - Poly S9 - Thin S11 - Higl F1 - Loarn F3 - Deple	7.5YR	Depletion, RM-Reduced Matrix, CS-Cov Re Color (Moist) 5/6 v Surface (LRR R, MLRA 149B) ICE (LRR R, MLRA 149B) Sands dineral (LRR K, L) Matrix	edox Features % 5 Indicator	Type C	Location M matic Soils Prairie Redox (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, MLRA 2 Prairie Redox (LRR K, L, MLRA 4 Prairie Redox (LRR K, L)	(e.g. clay, sand, loam) clay loam clay loam 49B) K. L. R) (LRR K, L, R)
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	Bottom Depth 2 14 Soil Field Ir A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick I	Horizon 1 2	Color (I	besence of indicates the indic	% 100 95	7.5YR	Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist) 5/6 v Surface (LRR R, MLRA 149B) Sands dineral (LRR K, L) Matrix fface	edox Features % 5 Indicator	Type C s for Proble A10 - 2 coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L) Urface (LRR K, L, M) ue Below Surface (LRR K, L) langanese Masses	(e.g. clay, sand, loam)
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	Bottom Depth 2 14 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick I S1 - Sandy M	Horizon 1 2	Color (I	besence of indicates the indic	% 100 95	7.5YR	Depletion, RM-Reduced Matrix, CS-Cow Re Color (Moist) 5/6 v Surface (LRR R, MLRA 1498) Sands Ilineral (LRR K, L) Watrix //face Surface	edox Features % 5	Type C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da S9 - Thin Da F12 - Iron-M F19 - Piedm	Location M	(e.g. clay, sand, loam)
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	Bottom Depth 2 14 Soil Field Ir A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick I	Horizon 1 2 dicators (check here) site on Sulfide d Layers ed Below Dark Surface bark Surface duck Mineral leleyed Matrix	Color (I	besence of indicates the indic	% 100 95	7.5YR	Depletion, RM-Reduced Matrix, CS-Cow Re Color (Moist) 5/6 v Surface (LRR R, MLRA 1498) Sands Ilineral (LRR K, L) Watrix //face Surface	edox Features % 5 Indicator	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L) Urface (LRR K, L, M) ue Below Surface (LRR K, L) langanese Masses	(e.g. clay, sand, loam)
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	Position (Describe to: Bottom Depth 2 14 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick It S1 - Sandy M S4 - Sandy M S4 - Sandy S S5 - Sandy R S6 - Strippec	Horizon 1 2	Color (I	besence of indicates the indic	% 100 95	7.5YR	Depletion, RM-Reduced Matrix, CS-Cow Re Color (Moist) 5/6 v Surface (LRR R, MLRA 1498) Sands Ilineral (LRR K, L) Watrix //face Surface	edox Features % 5	Type C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mr S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-N F19 - Piedm F21 - Red P F21 - Red P F21 - Red P F21 - Red P F21 - Wesic TF12 - Very	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR k, L) Urface (LRR K, L, M) ue Below Surface (LRR K, L) langanese Masses ont Floodplain Soil derent Material Spodic (MLRA 144A, 1 Shallow Dark Surf	(e.g. clay, sand, loam) clay loam clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (LRR K, L, R) 15 (MLRA 149B)
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	Position (Describe to: Bottom Depth 2 14 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick It S1 - Sandy M S4 - Sandy M S4 - Sandy S S5 - Sandy R S6 - Strippec	Horizon 1 2	Color (I	besence of indicates the indic	% 100 95	7.5YR	Depletion, RM-Reduced Matrix, CS-Cow Re Color (Moist) 5/6 v Surface (LRR R, MLRA 1498) Sands Ilineral (LRR K, L) Watrix //face Surface	edox Features % 5	Type C sfor Proble A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M matic Soils Muck (LRR K, L, MLRA 1 matic Fedox (LRR Roucky Peat of Peat (urface (LRR K, L, M) ue Below Surface (urface (LRR K, L, M) ark Surface (LRR K, L) alanganese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1 Shallow Dark Surf ain in Remarks)	(e.g. clay, sand, loam)
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	Position (Describe to: Bottom Depth 2 14 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick It S1 - Sandy M S4 - Sandy M S4 - Sandy S S5 - Sandy R S6 - Strippec	Horizon 1 2	Color (I	besence of indicates the indic	% 100 95	7.5YR	Depletion, RM-Reduced Matrix, CS-Cow Re Color (Moist) 5/6 v Surface (LRR R, MLRA 1498) Sands Ilineral (LRR K, L) Watrix //face Surface	edox Features % 5 Indicator	Type C sfor Proble A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR k, L) Urface (LRR K, L, M) ue Below Surface (LRR K, L) langanese Masses ont Floodplain Soil derent Material Spodic (MLRA 144A, 1 Shallow Dark Surf	(e.g. clay, sand, loam)
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	Position (Describe to: Bottom Depth 2 14 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick It S1 - Sandy M S4 - Sandy M S4 - Sandy S S5 - Sandy R S6 - Strippec	Horizon 1 2	Color (I	besence of indicates the indic	% 100 95	7.5YR	Depletion, RM-Reduced Matrix, CS-Cow Re Color (Moist) 5/6 v Surface (LRR R, MLRA 1498) Sands Ilineral (LRR K, L) Watrix //face Surface	edox Features % 5 Indicator	Type C	Location M matic Soils Prairie Redox (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, M) ue Below Surface (LRR K, L) anganese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1 Shallow Dark Surf	(e.g. clay, sand, loam)
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	Pation (Describe to: Bottom Depth 2 14 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydros A5 - Stratified A11 - Deplete A12 - Thick I S1 - Sandy N S4 - Sandy G S5 - Sandy R S6 - Stripec S7 - Dark Su	Horizon 1 2	Color (I	besence of indicates Matrix Moist) 4/1 5/1 ors are r	% 100 95	7.5YR	Depletion, RM-Reduced Matrix, CS-Cow Re Color (Moist) 5/6 v Surface (LRR R, MLRA 1498) Sands Ilineral (LRR K, L) Watrix //face Surface	edox Features % 5 Indicator	Type C	Location M matic Soils Prairie Redox (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, M) ue Below Surface (LRR K, L) anganese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1 Shallow Dark Surf	(e.g. clay, sand, loam) clay loam clay loam 49B) K. L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (LRR K, L, R) 45, 149B) acce must be present, unless



Northeast and Northcentral Region

Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Wetland ID: Wetland 9 Sample Point: SP17 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant 2. Number of Dominant Species that are OBL, FACW, or FAC: 3 (A) 3. 4 Total Number of Dominant Species Across All Strata: 3 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) 7 8. Prevalence Index Worksheet 9 Total % Cover of: Multiply by: 10. OBL spp. x 1 = FACW spp. ____ Total Cover = 60 x 2 = 120 FAC spp. 0 x 3 = 0 x 4 = Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. x 5 = UPL spp. 0 2. 100 ____(A) 160 ____(B) 3. Total 4. 5. Prevalence Index = B/A = 1.600 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. Yes □ No Rapid Test for Hydrophytic Vegetation 10. Yes □ No Dominance Test is > 50% Total Cover = 0 Yes □ No Prevalence Index is ≤ 3.0 * ✓ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ✓ No Problem Hydrophytic Vegetation (Explain) * Ranunculus sceleratus OBL * Indicators of hydric soil and wetland hydrology must be Υ 2. **FACW** Poa palustris 50 present, unless disturbed or problematic. Υ 3. Juncus effusus 20 OBL 4. Lysimachia nummularia 10 Ν **FACW Definitions of Vegetation Strata:** 5. --__ --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. 12. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 100 Woody Vine Stratum (Plot size: 10 meter radius) 2. 3. Hydrophytic Vegetation Present ☐ Yes ☐ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



Are Vegetation Are Vegetation SUMMARY OF Hydrophytic Veg Wetland Hydrol	AEP Ohio Kate Boma Sebring silt Plain 0 drologic conc , Soil , Soil , Soil , FINDINGS getation Pre	Latitude: Latitude: ditions on the site typ or Hydrology ☐ sigr or Hydrology ☐ natu sent?	40.748686 bical for this	Loc Los time of sturbed?	s ☑ No	NV Linear -81.414 o, explain in	VI/WWI Classification: 185 remarks) Are normal circumsta Yes	Datum: ☐ Yes ☐ ances present ☐ No Hydric Soils	NAD83 No t?	Date: County: State: Wetland ID: Sample Point: Community ID: Section: Township: Range:	04/06/22 Stark Ohio Wetland 9 SP18 UPL Dir: ✓ Yes □ No d? ■ Yes ☑ No
Remarks:											
HYDROLOGY											
	ology Indic	ators (Check here if	indicators	are not r	oresent)[]					
Primary:	A1 - Surface A2 - High Wa A3 - Saturati B1 - Water M B2 - Sedime B3 - Drift De B4 - Algal Ma B5 - Iron De B7 - Inundati	Water Table on Marks nt Deposits posits at or Crust	gery		B9 - Wate B13 - Aqu B15 - Mar C1 - Hydr C3 - Oxidi C4 - Prese	er-Stained latic Faun I Deposits ogen Sulfi ized Rhizo ence of R ent Iron Re Muck Sur	a side Odor sospheres on Living Roots educed Iron eduction in Tilled Soils face			B6 - Surface Soil B10 - Drainage Pi B16 - Moss Trim I C2 - Dry-Season I C8 - Crayfish Buri C9 - Saturation Vi D1 - Stunted or Si D2 - Geomorphic D3 - Shallow Aqui D4 - Microtopogra D5 - FAC-Neutral	atterns Lines Water Table Tows Sible on Aerial Imagery tressed Plants Position tard uphic Relief
Surface Water Water Table Pr. Saturation Pres	Present? esent? ent?	☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No eam gauge, monitorin	Depth: Depth: Depth:		(in.) (in.) (in.)	inenoctic	nes) if available:	Wetland Hy	drology Pr	esent?	Yes I No
Remarks:	led Data (Str	eam gauge, monitorir	ig well, aeri	ai priotos	, previous	inspectio	ons), ii avaliable:		IN/A		
SOILS											
Map Unit Name		Sebring silt loam, 0-									
Top	Bottom	the depth needed to document the indi	cator or confirm the a	Matrix	ators.) (Type: C=0	Concentration, D	D=Depletion, RM=Reduced Matrix, CS=Cove	ered/Coated Sand Grains; edox Features		Lining, M=Matrix)	Texture
Depth	Depth	Horizon	Color (%		Color (Moist)	%	Туре	Location	(e.g. clay, sand, loam)
0	14	1	10YR	5/1	92	5YR	4/6	8	C	M	clay loam
	A1- Histosol A2 - Histic E _I A3 - Black H A4 - Hydroge A5 - Stratifier A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy S S5 - Sandy F S6 - Stripped	istic en Sulfide d Layers ed Below Dark Surface Dark Surface duck Mineral Bleyed Matrix Redox	re if indicat		S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	value Belo Dark Surf n Chroma ny Mucky ny Gleyed eted Matri ex Dark Su eted Dark	Mineral (LRR K, L) Matrix x urface Surface	Indicators of	A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-N F19 - Piedm F21 - Red F TA6 - Mesic TF12 - Very Other (Expla	matic Soils ' Muck (LIRR K. L., MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K. L., M) ue Below Surface (LRR K. L. langanese Masses ont Floodplain Soil 'arent Material 's Spodic (MLRA 144A, 1 Shallow Dark Surf ain in Remarks) stion and wetland hydrology r	K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) S (MLRA 149B) 45, 149B)
Restrictive Layer	- -			D"					r problematic.		Van 🗆 Na
(If Observed)	Type:			Depth:				Hydric Soil	Present?	✓.	Yes □ No
Remarks:					_						



Northeast and Northcentral Region

Wetland ID: Wetland 9

Sample Point: SP18 Project/Site: South Canton-Torrey 138 kV Line Rebuild Project **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant 2. Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 4 Total Number of Dominant Species Across All Strata: 6 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B) 7 8. Prevalence Index Worksheet 9 Total % Cover of: Multiply by: 10. x 1 = OBL spp. _ FACW spp. ____ Total Cover = 10 x 2 = FAC spp. 10 x 3 = FACU spp. _ x 4 = Sapling/Shrub Stratum (Plot size: 5 meter radius) 70 Rosa multiflora 5 Υ FACU x 5 = UPL spp. 0 2. 90 ____(A) 3. Total 330 4. 5. Prevalence Index = B/A = 3.667 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ✓ No Rapid Test for Hydrophytic Vegetation ☐ Yes 10. ✓ No Dominance Test is > 50% Total Cover = 5 ☐ Yes ✓ No Prevalence Index is ≤ 3.0 * ☐ Yes ✓ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ✓ No Problem Hydrophytic Vegetation (Explain) * Setaria faberi 10 **FACU** * Indicators of hydric soil and wetland hydrology must be 2. Ν **FACU** Trifolium repens 5 present, unless disturbed or problematic. Rumex crispus 3. 10 FAC ٧ 4. Ranunculus bulbosus 10 **FACW Definitions of Vegetation Strata:** Plantago major Υ FACU 5. 10 Υ 6 Poa pratensis 40 **FACU** Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 10. 11. 12. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 85 Woody Vine Stratum (Plot size: 10 meter radius) --2. 3. Hydrophytic Vegetation Present □ Yes ☑ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



Ammline - to		n-Torrey 138 kV Line Re		t	_		Stantec Project #:	193708516		Date:	04/06/22
Applicant:		Transmission Compa	any, Inc.							County:	Stark
Investigator #1:				Investi	igator #2:					State:	Ohio
Soil Unit:	•	loam, 0-2% slopes					/I/WWI Classification:	: N/A		Wetland ID:	Wetland 10
Landform:	Depression				al Relief:			Б.	NABOO	Sample Point:	SP19
Slope (%):	0	Latitude:			ongitude:				NAD83	Community ID:	PEM
		ditions on the site typ				o, explain in				Section:	
		or Hydrology ☐sign					Are normal circumsta		17	Township:	
		or Hydrology ☐ natu	urally probl	ematic?			□ Yes	□No		Range:	Dir:
SUMMARY OF											
Hydrophytic Ve				☑ Yes				Hydric Soils		Aftilistic A NAT of Love	✓ Yes □ No
Wetland Hydrol Remarks:	logy Present	<u> </u>		Yes	□ INO			is this Samp	oling Point v	Within A Wetlan	d? ✓ Yes ✓ No
Remarks:											
LIVERGLOOV											
HYDROLOGY											
		ators (Check here if	indicators	are not p	present)□					
Primary		14/			DO 14/11	. 0			Secondary:	DO 0 (0	01
					B9 - Wate B13 - Aqu					B6 - Surface Soil B10 - Drainage P	
	A3 - Saturation				B15 - Mar		•			B16 - Moss Trim	
					C1 - Hydr	ogen Sulfi				C2 - Dry-Season	
							spheres on Living Roots			C8 - Crayfish Bur	
							educed Iron duction in Tilled Soils				isible on Aerial Imagery
	B4 - Algal Ma B5 - Iron Dep				C6 - Rece					D1 - Stunted or S D2 - Geomorphic	
		on Visible on Aerial Ima	gery		Other (Ex					D3 - Shallow Aqu	
	B8 - Sparsely	Vegetated Concave S	urface				,			D4 - Microtopogra	aphic Relief
										D5 - FAC-Neutral	Test
Field Observat	tions:										
Surface Water	Present?	☑ Yes □ No	Depth:	1-2"	(in.)			Wetland Hyd	drology Pr	esent?	Yes □ No
Water Table Pr	esent?	☐ Yes ☑ No	Depth:		(in.)			Wettalia Hy	urology i i	escrit:	163 🗆 110
Saturation Pres	sent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	ded Data (stre	eam gauge, monitorin	ng well, aeria	al photos.	, previous	inspectio	ns), if available:		N/A		
Remarks:		<u> </u>	,		· ·		7,				
SOILS											
Map Unit Name	9:										
I IVIAD UTIL IVATTE		Sebring silt loam, 0	-2% slopes	•							
		Sebring silt loam, 0-			ators.) (Type: C=0	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cow	vered/Coated Sand Grains;	Location: PL=Pore I	Lining, M=Matrix)	
Profile Descrip					ators.) (Type: C=0	Concentration, D				Lining, M=Matrix)	Texture
	Bottom			Matrix	ators.) (Type: C=0	Concentration, D		vered/Coated Sand Grains; edox Features %	1	Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam)
Profile Descrip	Bottom Depth	the depth needed to document the indi	cator or confirm the a	Matrix Moist)			Color (Moist)	edox Features %		Location	(e.g. clay, sand, loam)
Profile Descrip Top Depth	Bottom	the depth needed to document the indi	cator or confirm the a	Matrix	%	Concentration, D	Re	edox Features	Туре	1	
Profile Descrip Top Depth 0	Bottom Depth 16	the depth needed to document the indi Horizon	Color (I	Matrix Moist) 5/2	% 90	10YR	Color (Moist) 5/8	edox Features % 10	Type C	Location M	(e.g. clay, sand, loam) clay loam
Top Depth 0	Bottom (Describe to 1 Bottom Depth 16	the depth needed to document the indi Horizon 1	Color (I	Matrix Moist) 5/2	% 90 	10YR	Re Color (Moist) 5/8	edox Features % 10 	Type C 	Location M	(e.g. clay, sand, loam) clay loam
Profile Descrip Top Depth 0	Bottom Depth 16	the depth needed to document the indi Horizon 1	Color (I	Matrix Moist) 5/2	% 90 	10YR 	Color (Moist) 5/8	edox Features % 10	Type C 	Location M 	(e.g. clay, sand, loam) clay loam
Profile Descrip Top Depth 0	Bottom Depth 16	Horizon 1	Color (I	Matrix Moist) 5/2	% 90 	10YR 	Re Color (Moist) 5/8 	edox Features	Type	Location M 	(e.g. clay, sand, loam) clay loam
Profile Descrip Top Depth 0	Bottom (Describe to 1 Bottom Depth 16	Horizon 1	Color (I	Matrix Moist) 5/2	% 90 	10YR	Re Color (Moist) 5/8 	edox Features	Type C	Location M	(e.g. clay, sand, loam) clay loam
Profile Descrip Top Depth 0	Bottom Depth 16	Horizon 1	Color (I	Matrix Moist) 5/2	% 90 	10YR 	Re Color (Moist) 5/8 	edox Features % 10	Type C 	Location M	(e.g. clay, sand, loam) clay loam
Profile Descrip Top Depth 0	Bottom Depth 16	Horizon 1	Color (I	Matrix Moist) 5/2	% 90	10YR	Re Color (Moist) 5/8 	edox Features % 10	Type C	Location M	(e.g. clay, sand, loam) clay loam
Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field In	Horizon 1	Color (I	Matrix Moist) 5/2 ors are r	% 90	10YR	Re Color (Moist) 5/8 	edox Features	Type	Location M matic Soils ¹	(e.g. clay, sand, loam) clay loam
Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field In A1- Histosol	Horizon 1	Color (I	Matrix Moist) 5/2 ors are r	% 90	10YR	Re Color (Moist) 5/8 	edox Features	Type C s for Proble	Location M	(e.g. clay, sand, loam) clay loam
Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi	Horizon 1	Color (I	Matrix Moist) 5/2 ors are r	% 90 tot preser 88 - Polyn S9 - Thin S11 - Higl	10YR	Re Color (Moist) 5/8 w Surface (LRR R, MLRA 149B) Sands	edox Features	Type C s for Proble A10 - 2 Coast S3 - 5cm M	Location M matic Soils Muck (LRR K, L, MLRA † Prairie Redox (LRR ucky Peat of Peat ((e.g. clay, sand, loam) clay loam 49B) K. L. R)
Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field In A1- Histosol A2 - Histic Et A3 - Black Hi A4 - Hydroge	Horizon 1 dicators (check here) biggedon istic en Sulfide	Color (I	Matrix Moist) 5/2 ors are r	% 90	10YR tt JJ ralue Belon Dark Surfa h Chroma	Re Color (Moist) 5/8 w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	edox Features	Type C	Location M Muck (LRR K, L, MILRA A Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M)	(e.g. clay, sand, loam) clay loam
Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier	Horizon 1	Color (I	subsence of indicates Matrix Moist) 5/2 ors are r	% 90	10YR tt	Re Color (Moist) 5/8 W Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands dinieral (LRR K, L) Matrix	edox Features % 10 Indicator	Type C s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S7 - Dark S S8 - Polyval	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface	(e.g. clay, sand, loam) clay loam (JRR K, L, R) (LRR K, L, R)
Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A11 - Deplete	Horizon 1	Color (I	subsence of indicate Matrix Moist) 5/2	% 90	10YR	Re Color (Moist) 5/8 W Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	edox Features % 10 Indicator	Type C	Location M matic Soils Muck (LRR K, L, MLRA + Prairie Redox (LRR ucky Peat of Peat , L urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L	(e.g. clay, sand, loam) clay loam 49B) K. L. R) (LRR K, L, R)
Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier	Horizon 1	Color (I	subsence of indicate Matrix Moist) 5/2	% 90	10YR	Re Color (Moist) 5/8 w Surface (LRR R, MLRA 149B) Sands Alineral (LRR K, L) Matrix Krace	edox Features	Type C s for Proble A10 - 2 cast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface	(e.g. clay, sand, loam) clay loam
Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A1- Deplete A11 - Deplete A12 - Thick I Sandy M S4 - Sandy G	Horizon 1 dicators (check here) site on Sulfide d Layers ed Below Dark Surface bark Surface duck Mineral leleyed Matrix	Color (I	Matrix Moist) 5/2 ors are r	% 90	10YR	Re Color (Moist) 5/8	edox Features % 10 Indicator	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR LCK) Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses carent Material	(e.g. clay, sand, loam) clay loam 49B) K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MR A 149B)
Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R	Horizon 1	Color (I	Matrix Moist) 5/2 ors are r	% 90	10YR	Re Color (Moist) 5/8	edox Features % 10 Indicator	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, MLRA 2 Prairie Redox (LRR K, L, MLRA 2 Prairie Redox (LRR K, L, MLRA 3 Prairie Redox (LRR K, L) (LR K, L	(e.g. clay, sand, loam) clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (LRR K, L, R) 15 (MLRA 149B) 45, 149B)
Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field In A4 - Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplets A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped	Horizon 1	Color (I	Matrix Moist) 5/2 ors are r	% 90	10YR	Re Color (Moist) 5/8	edox Features	Type C	Location M	(e.g. clay, sand, loam) clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (LRR K, L, R) 15 (MLRA 149B) 45, 149B)
Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field In A4 - Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplets A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped	Horizon 1	Color (I	Matrix Moist) 5/2 ors are r	% 90	10YR	Re Color (Moist) 5/8	edox Features % 10 Indicator	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, MLRA 2 Prairie Redox (LRR K, L, MLRA 2 Prairie Redox (LRR K, L, MLRA 3 Prairie Redox (LRR K, L) (LR K, L	(e.g. clay, sand, loam) clay loam
Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field In A4 - Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplets A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped	Horizon 1	Color (I	Matrix Moist) 5/2 ors are r	% 90	10YR	Re Color (Moist) 5/8	edox Features % 10 Indicator 'Indicators of disturbed of	Type C	Location M	(e.g. clay, sand, loam) clay loam
Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field In A4 - Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplets A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped	Horizon 1	Color (I	Matrix Moist) 5/2 ors are r	% 90	10YR	Re Color (Moist) 5/8	edox Features % 10 Indicator	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L) Prairie Redox (LRR K, L) Urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) anganese Masses iont Floodplain Soi arent Material Spodic (MLRA 144A, 1 Shallow Dark Surf ain in Remarks) sition and wetland hydrology ((e.g. clay, sand, loam) clay loam
Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 16 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydros A5 - Stratifier A11 - Deplete A12 - Thick E S1 - Sandy R S4 - Sandy G S5 - Sandy R S6 - Striped S7 - Dark Su	Horizon 1	Color (I	subsence of indication indication in indicat	% 90	10YR	Re Color (Moist) 5/8	edox Features % 10 Indicator 'Indicators of disturbed of	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L) Prairie Redox (LRR K, L) Urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) anganese Masses iont Floodplain Soi arent Material Spodic (MLRA 144A, 1 Shallow Dark Surf ain in Remarks)	(e.g. clay, sand, loam) clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (LRR K, L, R) 45, 149B) acce must be present, unless



Northeast and Northcentral Region

Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Wetland ID: Wetland 10 Sample Point: SP19 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant 2. Number of Dominant Species that are OBL, FACW, or FAC: 1 (A) 3. 4 Total Number of Dominant Species Across All Strata: 1 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) 7 8. Prevalence Index Worksheet 9 Total % Cover of: Multiply by: 10. _ x 1 = OBL spp. __ FACW spp. ____ Total Cover = 90 x 2 = 180 FAC spp. 0 x 3 = FACU spp. _ Sapling/Shrub Stratum (Plot size: 5 meter radius) x 5 = UPL spp. 0 2. 100 ____(A) 190 ____(B) 3. Total 4. 5. Prevalence Index = B/A = 1.900 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. Yes □ No Rapid Test for Hydrophytic Vegetation 10. ☐ No Yes Dominance Test is > 50% Total Cover = 0 Yes □ No Prevalence Index is ≤ 3.0 * ✓ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ✓ No Problem Hydrophytic Vegetation (Explain) * Phalaris arundinacea 90 **FACW** * Indicators of hydric soil and wetland hydrology must be 2. Ν OBL Lythrum salicaria 10 present, unless disturbed or problematic. 3. 4. **Definitions of Vegetation Strata:** 5. __ ----6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 100 Woody Vine Stratum (Plot size: 10 meter radius) --2. 3. Hydrophytic Vegetation Present ☐ Yes ☐ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



A 1!	South Cantor	n-Torrey 138 kV Line Re	ebuild Projec	t			Stantec Project #:	193708516		Date:	04/06/22
Applicant:		Transmission Compa	any, Inc.							County:	Stark
Investigator #1:				Investi	igator #2:					State:	Ohio
Soil Unit:		It loam, 0-2% slopes	3				/I/WWI Classification:	N/A		Wetland ID:	Wetland 10
Landform:	Depression				al Relief:					Sample Point:	SP20
Slope (%):	0	Latitude:			ongitude:				NAD83	Community ID:	UPL
		ditions on the site typ				o, explain in				Section:	
		or Hydrology ☑ sign					Are normal circumsta	ances present □ No	17	Township:	
		or Hydrology ☐ natu	urally probl	ematic?			□ Yes	□ INO		Range:	Dir:
SUMMARY OF		10		□ V	□ N-			Llevelei e O eile l	D10		U Vaa U Na
Hydrophytic Ve Wetland Hydrol				☐ Yes				Hydric Soils		Within A Wetlan	☐ Yes ☑ No d? ☐ Yes ☑ No
Remarks:	logy Present	!		- res	i ino			is this same	ning Point v	Willim A Wellan	ur Tes INO
Remarks.											
HYDROLOGY											
		. (2)				`-					
Wetland Hydr Primary		ators (Check here if	indicators	are not p	present) 🗹			Casandan		
	A1 - Surface	Water		П	B9 - Wate	er-Stained	Leaves		Secondary:	B6 - Surface Soil	Cracks
					B13 - Aqu					B10 - Drainage Pa	
	A3 - Saturation				B15 - Mar					B16 - Moss Trim	
				_	C1 - Hydr		de Odor spheres on Living Roots			C2 - Dry-Season C8 - Cravfish Bur	
							spheres on Living Roots				rows isible on Aerial Imagery
	B4 - Algal Ma						duction in Tilled Soils		Ī	D1 - Stunted or S	
					C7 - Thin					D2 - Geomorphic	
		on Visible on Aerial Ima			Other (Ex	plain in Re	marks)			D3 - Shallow Aqui	
	B8 - Sparsely	Vegetated Concave S	итасе							D4 - Microtopogra D5 - FAC-Neutral	
Field Observat	tiono.									20 1710 14041141	1001
Surface Water		□ v □ N-	Danath		(in)						
Water Table Pr		☐ Yes ☑ No ☐ Yes ☑ No	Depth:		(in.)			Wetland Hyd	drology Pr	esent?	Yes 🗹 No
Saturation Pres		□ Yes ☑ No	Depth: Depth:		(in.) (in.)						
					. ,						
	ded Data (str	eam gauge, monitorin	ng well, aeria	al photos	, previous	inspectio	ns), if available:		N/A		
Remarks:											
0011.0											
SOILS		F2 1 20 201									
Map Unit Name											
	ation	Fitchville silt loam, (
-	1			absence of indica	ators.) (Type: C=	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Cov			ining, M=Matrix)	Toyturo
Тор	Bottom	the depth needed to document the indi	cator or confirm the a	Matrix		Concentration, D	Re	edox Features	1	1	Texture
Top Depth	Bottom Depth	the depth needed to document the indi	cator or confirm the a	Matrix Moist)	%		Re Color (Moist)	edox Features %	Туре	Location	(e.g. clay, sand, loam)
Top Depth	Bottom Depth	the depth needed to document the indi Horizon	Color (I	Matrix Moist) 5/3	% 90	10YR	Re Color (Moist) 5/8	edox Features % 10	Type C	Location M	(e.g. clay, sand, loam)
Top Depth 0 12	Bottom Depth 12 14	Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 5/3 5/2	% 90 85	10YR 10YR	Re Color (Moist) 5/8 5/8	edox Features % 10 15	Type C C	Location M M	(e.g. clay, sand, loam) clay loam clay loam
Top Depth 0 12	Bottom Depth 12 14	Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 5/3 5/2	% 90 85 	10YR 10YR 	Re Color (Moist) 5/8 5/8	edox Features % 10 15	Type C C	Location M M	(e.g. clay, sand, loam) clay loam clay loam
Top Depth 0 12	Bottom Depth 12 14	Horizon 1 2	Color (IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Matrix Moist) 5/3 5/2	% 90 85 	10YR 10YR 	Re Color (Moist) 5/8 5/8 	edox Features	Type C C	Location M M	(e.g. clay, sand, loam) clay loam clay loam
Top Depth 0 12	Bottom Depth 12 14	Horizon 1 2	Color (I	Matrix Moist) 5/3 5/2	% 90 85 	10YR 10YR 	Re Color (Moist) 5/8 5/8 	edox Features	Type C C 	Location M M 	(e.g. clay, sand, loam) clay loam clay loam
Top Depth 0 12	Bottom Depth 12 14	Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 5/3 5/2	% 90 85 	10YR 10YR 	Re Color (Moist) 5/8 5/8 	edox Features % 10 15	Type	Location M M	(e.g. clay, sand, loam) clay loam clay loam
Top Depth 0 12	Bottom Depth 12 14	Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 5/3 5/2	% 90 85 	10YR 10YR 	Re Color (Moist) 5/8 5/8 	edox Features % 10 15	Type C C 	Location M M	(e.g. clay, sand, loam) clay loam clay loam
Top Depth 0 12	Bottom Depth 12 14	Horizon 1 2	Color (I	Matrix Moist) 5/3 5/2	% 90 85 	10YR 10YR 	Re Color (Moist) 5/8 5/8 	edox Features % 10 15	Type C C 	Location M M	(e.g. clay, sand, loam) clay loam clay loam
Top Depth 0 12 NRCS Hydric	Bottom Depth 12 14 Soil Field In	Horizon 1 2	Color (I	Matrix	% 90 85 oot preser	10YR 10YR 	Re Color (Moist) 5/8 5/8 	edox Features	Type C C s for Proble	Location M M matic Soils ¹	(e.g. clay, sand, loam) clay loam clay loam
Top Depth 0 12 NRCS Hydric	Bottom Depth 12 14 Soil Field Ir A1- Histosol A2 - Histic Ep	Horizon 1 2 adicators (check helpipedon	Color (I	Matrix	% 90 85 not preser \$8 - Poly	10YR 10YR tt 🔀	Re Color (Moist) 5/8 5/8 	edox Features	Type	Location M M	(e.g. clay, sand, loam) clay loam clay loam
Top Depth 0 12 NRCS Hydric	Bottom Depth 12 14 Soil Field Ir A1- Histosol A2 - Histic E _I A3- Black Hi	Horizon 1 2 dicators (check here)	Color (I	Matrix Moist) 5/3 5/2 ors are r	% 90 85 tot preser S8 - Polyn S9 - Thin S11 - Higi	10YR 10YR t	Re Color (Moist) 5/8 5/8 v Surface (LRR R, MLRA 149B) Sands	edox Features	Type C C s for Proble A10 - 2 Coast S3 - 5cm M	Location M M matic Soils Prairie Redox (LRR K, L, MLRA 1 Prairie Preat (c)	(e.g. clay, sand, loam) clay loam clay loam 49B) K. L. R)
Top Depth 0 12 NRCS Hydric	Bottom Depth 12 14 Soil Field In A1- Histosol A2 - Histic Eg A3 - Black Hi A4 - Hydroge	Horizon 1 2 dicators (check heropstic on Sulfide	Color (I	Matrix Moist) 5/3 5/2 ors are r	% 90 85	10YR 10YR tr JJ avalue Belon Dark Surfa h Chroma	Re Color (Moist) 5/8 5/8 v Surface (LRR R, MLRA 149B) Idee (LRR R, MLRA 149B) Sands #fineral (LRR K, L)	edox Features	Type C C	Location M M Matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Locky Peat of Peat (urface (LRR K, L, M))	(e.g. clay, sand, loam) clay loam clay loam
Top Depth 0 12 NRCS Hydric	Bottom Depth 12 14 Soil Field Ir A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier	Horizon 1 2 dicators (check here) stic en Sulfide di Layers	Color (I	matrix Matrix Moist) 5/3 5/2 ors are r	% 90 85 sot preser S8 - Polyv S9 - Thin S11 - Higi F1 - Loan F2 - Loan	10YR 10YR tt J ralue Belor Dark Surfa ny Mucky h ny Gleyed	Re Color (Moist) 5/8 5/8 v Surface (LRR R, MLRA 149B) CCE (LRR R, MLRA 149B) Sands dinieral (LRR K, L) Matrix	edox Features	Type C C s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S7 - Dark S S8 - Polyval	Location M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Locky Peat of Peat of Locky Clark K, L, M) ue Below Surface	(e.g. clay, sand, loam)
Top Depth 0 12 NRCS Hydric	Bottom Depth 12 14 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete	Horizon 1 2 adicators (check here) bipedon istic en Sulfide d 1 Layers ad Below Dark Surface	Color (I	matrix Matrix Moist) 5/3 5/2 ors are r	% 90 85 S8 - Polyn S9 - Thin S11 - Hig F1 - Loarn F3 - Deple	10YR 10YR nt	Re Color (Moist) 5/8 5/8 w Surface (LRR R, MLRA 149B) ICC (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	edox Features % 10 15 Indicator	Type C C	Location M M matic Soils Muck (LRR K, L, MLRA + Prairie Redox (LRR K, L, MLRA + Prairie Redox (LRR K, L, MLRA + Below Surface (LRR K, L, M) use Below Surface (LRR K, L, K) use Below Surface (LRR K, L, K) ark Surface (LRR K, L, K) ark Surface (LRR K, L, K) ark Surface (LRR K, L, K)	(e.g. clay, sand, loam)
Top Depth 0 12 NRCS Hydric	Bottom Depth 12 14 Soil Field Ir A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier	Horizon 1 2	Color (I	matrix Matrix Moist) 5/3 5/2 ors are r	% 90 85 ot preser S8 - Polyx S9 - Thin S11 - Hig F1 - Loam F2 - Loam F3 - Deplb	10YR 10YR	Re Color (Moist) 5/8 5/8 v Surface (LRR R, MLRA 149B) Sands Alineral (LRR K, L) Matrix fface	edox Features	Type C C s for Proble A10 - 2 cast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M	Location M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Locky Peat of Peat of Locky Clark K, L, M) ue Below Surface	(e.g. clay, sand, loam)
Top Depth 0 12 NRCS Hydric	Bottom Depth 12 14 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A11 - Deplete A12 - Thick I S31 - Sandy N S4 - Sandy O S4 - Sandy O	Horizon 1 2	Color (I	Matrix Moist) 5/3 5/2 ors are r	% 90 85	10YR 10YR 10YR	Re Color (Moist) 5/8 5/8	edox Features % 10 15 Indicator	Type C C C	Location M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR LCK) Peat of Peat (LTRACE (LRR K, L, M) ue Below Surface (LRR K, L) anganese Massent Floodplain Soil arent Material	(e.g. clay, sand, loam)
Top Depth 0 12 NRCS Hydric	Bottom Depth 12 14 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I S1 - Sandy N S4 - Sandy S S5 - Sandy R	Horizon 1 2	Color (I	matrix Moist) 5/3 5/2 ors are r	% 90 85 ot preser S8 - Poly S9 - Thin S11 - Higl F1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple	10YR 10YR 10YR	Re Color (Moist) 5/8 5/8	edox Features % 10 15 Indicator	Type C C C	Location M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, 1	(e.g. clay, sand, loam) clay loam clay loam 49B) K. L. R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (LRR K, L, R) 15 (MLRA 149B) 45, 149B)
Top Depth 0 12 NRCS Hydric	Bottom Depth 12 14 Soil Field Ir A1- Histosol A2- Histic E; A3- Black Hi A4- Hydroge A5- Stratifiee A11- Deplete A12- Thick I S1- Sandy M S4- Sandy G S5- Sandy F S6- Stripped	Horizon 1 2	Color (I	matrix Moist) 5/3 5/2 ors are r	% 90 85 ot preser S8 - Poly S9 - Thin S11 - Higl F1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple	10YR 10YR 10YR	Re Color (Moist) 5/8 5/8	edox Features	Type C C s for Proble A10 - 2 cm M S7 - Dark S S8 - Polyval S9 - Thin Di F12 - Iron-N F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very	Location M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L will Land 1) Below Surface (LRR K, L will Land 1) Below Surface (LRR K, L will Land 1) Brairie Marerial Surface (LRR K, L will Land 1) Shallow Dark Surf	(e.g. clay, sand, loam) clay loam clay loam 49B) K. L. R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (LRR K, L, R) 15 (MLRA 149B) 45, 149B)
Top Depth 0 12 NRCS Hydric	Bottom Depth 12 14 Soil Field Ir A1- Histosol A2- Histic E; A3- Black Hi A4- Hydroge A5- Stratifiee A11- Deplete A12- Thick I S1- Sandy M S4- Sandy G S5- Sandy F S6- Stripped	Horizon 1 2	Color (I	matrix Moist) 5/3 5/2 ors are r	% 90 85 ot preser S8 - Poly S9 - Thin S11 - Higl F1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple	10YR 10YR 10YR	Re Color (Moist) 5/8 5/8	edox Features % 10 15 Indicator	Type C C C	Location M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, 1	(e.g. clay, sand, loam)
Top Depth 0 12 NRCS Hydric	Bottom Depth 12 14 Soil Field Ir A1- Histosol A2- Histic E; A3- Black Hi A4- Hydroge A5- Stratifiee A11- Deplete A12- Thick I S1- Sandy M S4- Sandy G S5- Sandy F S6- Stripped	Horizon 1 2	Color (I	matrix Moist) 5/3 5/2 ors are r	% 90 85 ot preser S8 - Poly S9 - Thin S11 - Higl F1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple	10YR 10YR 10YR	Re Color (Moist) 5/8 5/8	edox Features % 10 15 Indicator 'Indicators of disturbed or	Type C C C	Location M M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, MLRA	(e.g. clay, sand, loam) clay loam clay loam 49B) K. L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (LRR K, L, R) 45, 149B) acce must be present, unless
Top Depth 0 12 NRCS Hydric	Bottom Depth 12 14 Soil Field Ir A1- Histosol A2- Histic E; A3- Black Hi A4- Hydroge A5- Stratifiee A11- Deplete A12- Thick I S1- Sandy M S4- Sandy G S5- Sandy F S6- Stripped	Horizon 1 2	Color (I	matrix Moist) 5/3 5/2 ors are r	% 90 85 ot preser S8 - Poly S9 - Thin S11 - Higl F1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple	10YR 10YR 10YR	Re Color (Moist) 5/8 5/8	edox Features % 10 15 Indicator	Type C C C	Location M M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, MLRA	(e.g. clay, sand, loam)
Top Depth 0 12 NRCS Hydric	Bottom Depth 12 14 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick I S1 - Sandy N S4 - Sandy G S5 - Sandy F S6 - Strippec S7 - Dark Su	Horizon 1 2	Color (I	matrix Matrix Moist) 5/3 5/2 ors are r	% 90 85 ot preser S8 - Poly S9 - Thin S11 - Higl F1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple	10YR 10YR 10YR	Re Color (Moist) 5/8 5/8	edox Features % 10 15 Indicator 'Indicators of disturbed or	Type C C C	Location M M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, MLRA	(e.g. clay, sand, loam) clay loam clay loam 49B) K. L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (LRR K, L, R) 45, 149B) acce must be present, unless



Northeast and Northcentral Region

Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Wetland ID: Wetland 10 Sample Point: SP20 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant 2. Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) 3. 4 Total Number of Dominant Species Across All Strata: 1 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B) 7 8. Prevalence Index Worksheet 9 Total % Cover of: Multiply by: 10. _ x 1 = OBL spp. FACW spp. ____ Total Cover = 0 x 2 = FAC spp. 0 x 3 = FACU spp. _ Sapling/Shrub Stratum (Plot size: 5 meter radius) x 5 = UPL spp. 60 300 2. **70** (A) 340 ____(B) 3. Total 4. 5. Prevalence Index = B/A = 4.857 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation ☐ Yes 10. ✓ No Dominance Test is > 50% Total Cover = 0 ☐ Yes ✓ No Prevalence Index is ≤ 3.0 * ☐ Yes ✓ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ✓ No Problem Hydrophytic Vegetation (Explain) * Zea mays 60 UPL * Indicators of hydric soil and wetland hydrology must be 2. Ν **FACU** Setaria faberi 10 present, unless disturbed or problematic. 3. 4. **Definitions of Vegetation Strata:** 5. ----6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 70 Woody Vine Stratum (Plot size: 10 meter radius) --2. Hydrophytic Vegetation Present ☐ Yes ☑ No 3. 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



Project/Site:	South Canton	n-Torrey 138 kV Line Re	ebuild Projec	t			Stantec Project #:	193708516		Date:	04/06/22	
Applicant:	AEP Ohio	Transmission Compa	any, Inc.							County:	Stark	
Investigator #1:				Invest	igator #2:	Matt De	enzler			State:	Ohio	
Soil Unit:	Luray silt lo	oam, 0-2% slopes				NV	VI/WWI Classification:	N/A		Wetland ID:	Wetland 11	
Landform:	Depression	า		Loc	al Relief:	Concav	re			Sample Point:	SP21	
Slope (%):	0	Latitude:	40.743008	L	ongitude:	-81.414	691		NAD83	Community ID:	PSS	
Are climatic/hyd	drologic cond	ditions on the site typ	oical for this	time of	year? (If no	o, explain in	remarks)	□ Yes □	No	Section:		
		or Hydrology □sign					Are normal circumsta	ances present	?	Township:		
Are Vegetation	□, Soil □,	or Hydrology □ natu	urally proble	ematic?			Yes	□No		Range:	Dir:	
SUMMARY OF	FINDINGS											
Hydrophytic Ve	getation Pres	sent?		Yes	□ No			Hydric Soils	Present?			10
Wetland Hydrol	ogy Present	?		Yes	□ No			Is This Samp	oling Point \	Within A Wetlan		
Remarks:												
HYDROLOGY												
	ology Indio	ators (Check here if	indicators	ara not r	orocont) 🗆						
Primary		ators (Check here ii	IIIulcators	are not p	neseni	<i>)</i> ⊔			Secondary:			
	A1 - Surface	Water			B9 - Wate	er-Stained	Leaves			B6 - Surface Soil	Cracks	
✓	A2 - High Wa									B10 - Drainage P		
	A3 - Saturation									B16 - Moss Trim		
	B1 - Water M				C1 - Hydro					C2 - Dry-Season		
	B2 - Sedimer						ospheres on Living Roots educed Iron			C8 - Crayfish Burn		
	B3 - Drift Dep B4 - Algal Ma						eduction in Tilled Soils			D1 - Stunted or S	sible on Aerial Imagery	
	B5 - Iron Dep			H	C7 - Thin				- i	D2 - Geomorphic		
		on Visible on Aerial Ima	gery							D3 - Shallow Aqui		
		y Vegetated Concave S			` '	•	,			D4 - Microtopogra	phic Relief	
										D5 - FAC-Neutral	Test	
Field Observat	ions:											
Surface Water	Present?	✓ Yes □ No	Depth:	2	(in.)			Watland Hu	dralagy Dr	200mt2	Voc. D No.	
Water Table Pr	esent?	✓ Yes □ No	Depth:		(in.)			Wetland Hy	arology Fr	esent? 🗹	Yes No	
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)							
Deceribe Decer	lad Data (atr				. ,	inanaatia	yna) if ayailahlar		N/A			
<u> </u>	ied Data (Str	eam gauge, monitorin	ig weil, aeri	ai priotos	, previous	inspectio	ons), ii avaliable:		IN/A			
Remarks:												
~~												
SOILS												
Map Unit Name		Luray silt loam, 0-29										
	1	the depth needed to document the indic	cator or confirm the		ators.) (Type: C=0	Concentration, D	D=Depletion, RM=Reduced Matrix, CS=Cov		Location: PL=Pore I	Lining, M=Matrix)		
Тор	Bottom			Matrix	1			edox Features	1	1	Texture	
Depth	Depth	Horizon	Color (Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loa	am)
0	16	1	10YR	4/1	95	7.5YR	4/6	5	С	M	clay loam	
	1	ndicators (check he	ro if indicat	ore ore r	ot procor		<u> </u>	Indianta		matic Soils 1	L	_
	A1- Histosol	idicators (check her	re ii indicat				w Surface (LRR R, MLRA 149B)			Muck (LRR K, L, MLRA 1	40D)	
	A2 - Histic Ep	ninedon					ace (LRR R, MLRA 149B)			Prairie Redox (LRR		
	A3 - Black Hi				S11 - High					ucky Peat of Peat		
	A4 - Hydroge	en Sulfide					Mineral (LRR K, L)			urface (LRR K, L, M)		
	A5 - Stratified								S8 - Polyval	ue Below Surface	LRR K, L)	
		ed Below Dark Surface			F3 - Deple					ark Surface (LRR K, L		
	A12 - Thick [F6 - Redo					langanese Masses		
	S1 - Sandy N				F7 - Deple					ont Floodplain Soil	S (MLRA 149B)	
	S4 - Sandy G S5 - Sandy R			Ш	F8 - Redo	x Depress	SIONS			arent Material Spodic (MLRA 144A, 1	45 440D)	
	S6 - Stripped									Shallow Dark Surf		
		Irface (LRR R, MLRA 149B)						_		ain in Remarks)		
Ī	o, bancoa									ation and wetland hydrology r	nust be present, unless	
Restrictive Laver								disturbed o	r problematic.			
Restrictive Layer (If Observed)	Туре:			Depth:					r problematic.		Yes No	
				Depth:				disturbed o	r problematic.			



Northeast and Northcentral Region

Sample Point: SP21 Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Wetland ID: Wetland 11 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant Quercus palustris 5 **FACW** Number of Dominant Species that are OBL, FACW, or FAC: ____4 (A) 2. --3. 4 Total Number of Dominant Species Across All Strata: 4 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) 7 8. Prevalence Index Worksheet 9 Total % Cover of: Multiply by: 10. _ x 1 = OBL spp. FACW spp. ____ Total Cover = 75 x 2 = 150 15 FAC spp. x 3 = FACU spp. _ 0 x 4 = Sapling/Shrub Stratum (Plot size: 5 meter radius) Cornus amomum 30 Υ **FACW** x 5 = UPL spp. 2. 90 ____(A) 195 ____(B) 3. Total 4. 5. Prevalence Index = B/A = 2.167 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation 10. ☐ No Yes Dominance Test is > 50% Total Cover = 30 Yes □ No Prevalence Index is ≤ 3.0 * ✓ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ✓ No Problem Hydrophytic Vegetation (Explain) * Solidago gigantea 40 **FACW** * Indicators of hydric soil and wetland hydrology must be Υ 2. **FAC** Panicum virgatum 15 present, unless disturbed or problematic. 3. 4. **Definitions of Vegetation Strata:** 5. __ --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 55 Woody Vine Stratum (Plot size: 10 meter radius) --2. 3. Hydrophytic Vegetation Present ☐ Yes ☐ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



Wetland Hydrology Present? Remarks: HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present) Primary: A1 - Surface Water	Investigator #1: Kate Bomar	Investigator #2: Matt Denzler NWI/WWI Classification: N/A Local Relief: Concave Longitude: -81,414646 Stime of year? (If no, explain in remarks) Stime of year? (If no, explain in remarks) Stime of year? (If no, explain in remarks) Yes No Are normal circumstances present? Panaloge: Dir: Yes No Yes No Hydric Soils Present? Yes No Is This Sampling Point Within A Wetland? Yes No Secondary: B13 - Aquatic Fauna B15 - Marl Deposits B16 - Moss Trim Lines C1 - Hydrogen Sulfide Odor C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface Other (Explain in Remarks) State: Ohio Wetland ID: Wetland 11 Sample Point: SP22 Community ID: PEM Section: Township: Range: Dir: No Yes No Secondary: B6 - Surface Soil Cracks B10 - Drainage Patterns B10 - Drainage Patterns B10 - Drainage Patterns B16 - Moss Trim Lines C2 - Dry-Season Water Table C3 - Oxidized Rhizospheres on Living Roots C6 - Recent Iron Reduction in Tilled Soils D1 - Sturation Visible on Aerial Imagery D2 - Geomorphic Position D3 - Shallow Aquitard D4 - Microtopographic Relief
Soil Unit: Luray sit loam, 0-2% slopes	Soil Unit: Luray silt loam, 0-2% slopes NWI/WWI Classification: N/A Depression Local Relief: Concarding Sope (%): 0 Latitude: 40,742811 Longitude: -81.414646 Datum: NAD83 Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes No No Yes No Section: Township:	NWI/WWI Classification: N/A Local Relief: Concave Longitude: -81.414646
Landform: Depression Local Relief: Concave Slope (%): 0	Landform: Depression Slope (%): 0	Local Relief: Concave Longitude: -81.414646 Datum: NAD83 stime of year? (If no, explain in remarks) sturbed? ematic? Are normal circumstances present? ematic? Are normal circumstances present? ematic? Are normal circumstances present? Yes No Hydric Soils Present? Township: Range: No Is This Sampling Point Within A Wetland? Yes No Secondary: B6 - Surface Soil Cracks B13 - Aquatic Fauna B15 - Marl Deposits B15 - Marl Deposits C1 - Hydrogen Sulfide Odor C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface Other (Explain in Remarks) Secondary: B6 - Surface Soil Cracks B10 - Drainage Patterns B16 - Moss Trim Lines C1 - C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery D1 - Stunted or Stressed Plants C7 - Thin Muck Surface D2 - Geomorphic Position D3 - Shallow Aquitard D4 - Microtopographic Relief
Slope (%):	Slope (%):	Longitude: -81.414646
Are climatic/hydrologic conditions on the site typical for this time of year? (tr.no, explain in remarks)	Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks)	stime of year? (If no, explain in remarks) Settine of year? (If no, explain in remarks) Are normal circumstances present? Township: Range: Dir: Pyes No Hydric Soils Present? Yes No Is This Sampling Point Within A Wetland? Secondary: Second
Are Vegetation	Are Vegetation	Are normal circumstances present? Yes
Are Vegetation Soil or Hydrology naturally problematic? SUMMARY OF FINDINGS Wetland Hydrology Present? Yes No Hydric Soils Present? Yes Wetland Hydrology Present? Yes No Is This Sampling Point Within A Wetland? Yes Is This Sampling Point Within A Wetland? Yes Is This Sampling Point Within A Wetland? Yes Is This Sampling Point Within A	Are Vegetation , Soil , or Hydrology naturally problematic? SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Wetland Hydrology Present? Primary: At - Surface Water B9 - Water-Stained Leaves B10 - Drainage Patterns B11 - Water Marks C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots C8 - Craftish Burrows C9 - Saturation Visible on Aerial Imagery D1 - Stunted or Stressed Plants D2 - Geomorphic Position D3 - Shallow Aquitard D3 - Shallow Aquitard D4 - Microtopographic Relief D5 - FAC-Neutral Test Field Observations: Surface Water Present?	ematic?
SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Wetland Hydrology Present? Wetland Hydrology Indicators (Check here if indicators are not present Primary A1 - Surface Water A2 - High Water Table B1 - Water Marks B1 - Water Marks B1 - Water Marks B1 - Water Marks C2 - Pry-Season Water Table B2 - Sediment Deposits B3 - Suff Deposits C3 - Oxidized Rhizospheres on Living Roots B3 - B4 - Algal Mat or Crust B5 - Inn Deposits B6 - Inno Peposits B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface Field Observations: Surface Water Pesent? Yes No Depth: 1 (in.) Wetland Hydrology Present? Yes No No Wetland Hydrology Present? Yes No No Wetland Hydrology Present? Yes No No Wetland Hydrology Present? Yes No No Wetland Hydrology Present? Yes No No Wetland Hydrology Present? Yes No No No Wetland Hydrology Present? Yes No No Remarks: SOILS	SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Wetland Hydrology Present? Remarks: HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present	
Hydrophytic Vegetation Present?	Hydrophytic Vegetation Present? Wetland Hydrology Present? Remarks: HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present) Primary: A1 - Surface Water B9 - Water-Stained Leaves B10 - Drainage Patterns B10 - Drainage Patterns B15 - Marl Deposits B15 - Marl Deposits B16 - Moss Trim Lines B16 - M	Is This Sampling Point Within A Wetland? Yes
Wetland Hydrology Present? Yes No Is This Sampling Point Within A Wetland? ☑ Yes ■ Remarks: HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present) Primary. A1 - Surface Water B9 - Water-Stained Leaves B6 - Surface Soil Cracks B1 - Water Table B13 - Aquatic Fauna B10 - Drainage Patterns A3 - Saturation B15 - Man Deposits B16 - Moss Trim Lines B1 - Water Marks C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table B2 - Sediment Deposits C3 - Staturation Visible on Aerial Imagery C4 - Presence of Reduced Iron C9 - Saturation Visible on Aerial Imagery B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D1 - Sturited or Stressed Plants B5 - Iron Deposits C7 - Thin Muck Surface D2 - Geomorphic Position B7 - Inundation Visible on Aerial Imagery Other (Explain in Remarks) D3 - Shallow Aquitard B8 - Sparsely Vegetated Concave Surface D5 - FAC-Neutral Test Field Observations: Surface Water Present? Yes No Depth: 10 (in.) Water Table Present?	Wetland Hydrology Present? Yes No Is This Sampling Point Within A Wetland? ▼ Yes ■ Yes ■ In This Sampling Point Within A Wetland? ■ Yes ■ In This Sampling Point Within A Wetland? ■ Yes ■ In This Sampling Point Within A Wetland? ■ Yes ■ In This Sampling Point Within A Wetland? ■ Yes ■ In This Sampling Point Within A Wetland? ■ Yes ■ In This Sampling Point Within A Wetland? ■ Yes ■ In This Sampling Point Within A Wetland? ■ Yes ■ In This Sampling Point Within A Wetland? ■ Yes ■ In This Sampling Point Within A Wetland? ■ Yes ■ In This Sampling Point Within A Wetland? ■ Yes ■ Yes ■ In This Sampling Point Within A Wetland? ■ Yes ■ In This Sampling Point Within A Wetland? ■ Yes ■ In This Sampling Point Within A Wetland? ■ Yes ■ In This Sampling Point Within A Wetland? ■ Yes ■ In This Sampling Point Within A Wetland? ■ Yes ■ In This Sampling Point Within A Wetland? ■ Yes ■ In This Sampling Point Wetland? ■ In This Sampling Point Wetland? ■ In This Sampling Point Wetland? ■ In This Sampling Point Wetland Bases and Park In This Sampling Point As In This	Is This Sampling Point Within A Wetland? Yes
Remarks: HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present)	Remarks: HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present) Primary: A1 - Surface Water	are not present) B9 - Water-Stained Leaves B6 - Surface Soil Cracks B13 - Aquatic Fauna B10 - Drainage Patterns B15 - Marl Deposits B16 - Moss Trim Lines C1 - Hydrogen Sulfide Odor C3 - Oxidized Rhizospheres on Living Roots C8 - Crayfish Burrows C4 - Presence of Reduced Iron C9 - Saturation Visible on Aerial Imagery C6 - Recent Iron Reduction in Tilled Soils D1 - Stunted or Stressed Plants C7 - Thin Muck Surface D2 - Geomorphic Position D3 - Shallow Aquitard D4 - Microtopographic Relief
HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present	HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present) Primary: A1 - Surface Water	B9 - Water-Stained Leaves B6 - Surface Soil Cracks B13 - Aquatic Fauna B10 - Drainage Patterns B15 - Marl Deposits B16 - Moss Trim Lines C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table C3 - Oxidized Rhizospheres on Living Roots C8 - Crayfish Burrows C4 - Presence of Reduced Iron C9 - Saturation Visible on Aerial Imagery C6 - Recent Iron Reduction in Tilled Soils D1 - Stunted or Stressed Plants C7 - Thin Muck Surface D2 - Geomorphic Position Other (Explain in Remarks) D3 - Shallow Aquitard D4 - Microtopographic Relief
Wetland Hydrology Indicators (Check here if indicators are not present) Primary: Secondary: Ba - Surface Soil Cracks Ba	Wetland Hydrology Indicators (Check here if indicators are not present) Primary:	B9 - Water-Stained Leaves B6 - Surface Soil Cracks B13 - Aquatic Fauna B10 - Drainage Patterns B15 - Marl Deposits B16 - Moss Trim Lines C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table C3 - Oxidized Rhizospheres on Living Roots C8 - Crayfish Burrows C4 - Presence of Reduced Iron C9 - Saturation Visible on Aerial Imagery C6 - Recent Iron Reduction in Tilled Soils D1 - Stunted or Stressed Plants C7 - Thin Muck Surface D2 - Geomorphic Position Other (Explain in Remarks) D3 - Shallow Aquitard D4 - Microtopographic Relief
Wetland Hydrology Indicators (Check here if indicators are not present) Primary: Secondary: Ba - Surface Soil Cracks Ba	Wetland Hydrology Indicators (Check here if indicators are not present) Primary:	B9 - Water-Stained Leaves B6 - Surface Soil Cracks B13 - Aquatic Fauna B10 - Drainage Patterns B15 - Marl Deposits B16 - Moss Trim Lines C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table C3 - Oxidized Rhizospheres on Living Roots C8 - Crayfish Burrows C4 - Presence of Reduced Iron C9 - Saturation Visible on Aerial Imagery C6 - Recent Iron Reduction in Tilled Soils D1 - Stunted or Stressed Plants C7 - Thin Muck Surface D2 - Geomorphic Position Other (Explain in Remarks) D3 - Shallow Aquitard D4 - Microtopographic Relief
Primary: A1 - Surface Water B9 - Water-Stained Leaves B6 - Surface Soil Cracks B6 - Surface Soil Cracks B13 - Aquatic Fauna B10 - Drainage Patterns B10 - Drain	Primary: A1 - Surface Water B9 - Water-Stained Leaves B13 - Aquatic Fauna B15 - Marl Deposits B16 - Moss Trim Lines B17 - Hydrogen Sulfide Odor B18 - Sediment Deposits B19 - Water Marks C10 - Hydrogen Sulfide Odor B2 - Sediment Deposits B3 - Drift Deposits B4 - Algal Mat or Crust B5 - Iron Deposits C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface C7 - Thin Muck Surface C8 - Crayfish Burrows C9 - Saturation Visible on Aerial Imagery C7 - Thin Muck Surface C9 - Stunted or Stressed Plants C7 - Thin Muck Surface C9 - Sediment Deposits C7 - Thin Muck Surface C9 - Sediment Deposits C9 - Stunted or Stressed Plants C9 - Stunted Soils C7 - Thin Muck Surface C9 - Stunted Soils C9 - Stunted Or Stressed Plants C9 - Stunted Soils C9 - Stunted Or Stressed Plants C9 - Stunted Soils C9 - Stunted Or Stressed Plants C9 - Stunted Soils C9 - Stunted Soils C9 - Stunted Soils C9 - Stunted Soils C8 - Crayfish Burrows C8 - Crayfish Burrows C9 - Stunted Or Stressed Plants C9 - Stunted Soils C9 - Stunted Soils C8 - Crayfish Burrows C9 - Stunted Soils C8 - Crayfish Burrows C9 - Stunted Soils C8 - Crayfish Burrows C9 - Stunted Or Stressed Plants C9 - Stunted Soils C9 - Stunted Soils C8 - Crayfish Burrows C9 - Stunted Soils C8 - Crayfish Burrows C9 - Stunted Or Stressed Plants C9 - Stunted Soils C8 - Crayfish Burrows C9 - Stunted Or Stressed Plants C9 - Stunted Soils C8 - Crayfish Burrows C9 - Stunted Or Stressed Plants C9 - Fach Stunted Or Stressed Plants C9 - Stunted Or Stressed Plants C9 - Stunted Or Stre	B9 - Water-Stained Leaves B6 - Surface Soil Cracks B13 - Aquatic Fauna B10 - Drainage Patterns B15 - Marl Deposits B16 - Moss Trim Lines C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table C3 - Oxidized Rhizospheres on Living Roots C8 - Crayfish Burrows C4 - Presence of Reduced Iron C9 - Saturation Visible on Aerial Imagery C6 - Recent Iron Reduction in Tilled Soils D1 - Stunted or Stressed Plants C7 - Thin Muck Surface D2 - Geomorphic Position Other (Explain in Remarks) D3 - Shallow Aquitard D4 - Microtopographic Relief
A1 - Surface Water	A1 - Surface Water	□ B9 - Water-Stained Leaves □ B6 - Surface Soil Cracks □ B13 - Aquatic Fauna □ B10 - Drainage Patterns □ B15 - Marl Deposits □ B16 - Moss Trim Lines □ C1 - Hydrogen Sulfide Odor □ C2 - Dry-Season Water Table □ C3 - Oxidized Rhizospheres on Living Roots □ C8 - Crayfish Burrows □ C4 - Presence of Reduced Iron □ C9 - Saturation Visible on Aerial Imagery □ C6 - Recent Iron Reduction in Tilled Soils □ D1 - Stunted or Stressed Plants □ C7 - Thin Muck Surface □ D2 - Geomorphic Position □ Other (Explain in Remarks) □ D3 - Shallow Aquitard □ D4 - Microtopographic Relief
A3 - Saturation B15 - Marl Deposits B16 - Moss Trim Lines B16 - Moss Trim Lines B1 - Water Marks C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots C3 - Crayfish Burrows C3 - Crayfish Burrows C4 - Presence of Reduced Iron C4 - Presence of Reduced Iron C3 - Saturation Visible on Aerial Imagery D1 - Stunted or Stressed Plants D2 - Geomorphic Position D3 - Shallow Aquitard D3 - Shallow Aquitard D4 - Microtopographic Relief D5 - FAC-Neutral Test D4 - Microtopographic Relief D5 - FAC-Neutral Test D4 - Microtopographic Relief D5 - FAC-Neutral Test D6 - Moss Trim Lines D7 - Invited Table Present? Yes No Depth: 10 (in.) Wetland Hydrology Present? Yes No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A	A3 - Saturation B15 - Marl Deposits B16 - Moss Trim Lines C2 - Dry-Season Water Table C2 - Dry-Season Water Table C3 - Oxidized Rhizospheres on Living Roots C3 - Cxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron C9 - Saturation Visible on Aerial Imagery D1 - Stunted or Stressed Plants D1 - Stunted or Stressed Plants D2 - Geomorphic Position D3 - Shallow Aquitard D3 - Shallow Aquitard D3 - Shallow Aquitard D3 - Shallow Aquitard D4 - Microtopographic Relief D5 - FAC-Neutral Test D5 - FAC-Neutral Test D5 - FAC-Neutral Test D5 - FAC-Neutral Test Vestand Hydrology Present? Yes No Depth: 10 (in.)	□ B15 - Marl Deposits □ B16 - Moss Trim Lines □ C1 - Hydrogen Sulfide Odor □ C2 - Dry-Season Water Table □ C3 - Oxidized Rhizospheres on Living Roots □ C8 - Crayfish Burrows □ C4 - Presence of Reduced Iron □ C9 - Saturation Visible on Aerial Imagery □ C6 - Recent Iron Reduction in Tilled Soils □ D1 - Stunted or Stressed Plants □ C7 - Thin Muck Surface □ D2 - Geomorphic Position □ Other (Explain in Remarks) □ D3 - Shallow Aquitard □ D4 - Microtopographic Relief
B1 - Water Marks	B1 - Water Marks	□ C1 - Hydrogen Sulfide Odor □ C2 - Dry-Season Water Table □ C3 - Oxidized Rhizospheres on Living Roots □ C8 - Crayfish Burrows □ C4 - Presence of Reduced Iron □ C9 - Saturation Visible on Aerial Imagery □ C6 - Recent Iron Reduction in Tilled Soils □ D1 - Stunted or Stressed Plants □ C7 - Thin Muck Surface □ D2 - Geomorphic Position □ Other (Explain in Remarks) □ D3 - Shallow Aquitard □ D4 - Microtopographic Relief
B2 - Sediment Deposits	B2 - Sediment Deposits	□ C3 - Oxidized Rhizospheres on Living Roots □ C8 - Crayfish Burrows □ C4 - Presence of Reduced Iron □ C9 - Saturation Visible on Aerial Imagery □ C6 - Recent Iron Reduction in Tilled Soils □ D1 - Stunted or Stressed Plants □ C7 - Thin Muck Surface □ D2 - Geomorphic Position □ Other (Explain in Remarks) □ D3 - Shallow Aquitard □ D4 - Microtopographic Relief
B3 - Drift Deposits	B3 - Drift Deposits	□ C4 - Presence of Reduced Iron □ C9 - Saturation Visible on Aerial Imagery □ C6 - Recent Iron Reduction in Tilled Soils □ D1 - Stunted or Stressed Plants □ C7 - Thin Muck Surface □ D2 - Geomorphic Position □ Other (Explain in Remarks) □ D3 - Shallow Aquitard □ D4 - Microtopographic Relief
B5 - Iron Deposits	B5 - Iron Deposits	 □ C7 - Thin Muck Surface □ D2 - Geomorphic Position □ D3 - Shallow Aquitard □ D4 - Microtopographic Relief
B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) B8 - Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes No Depth: 1 (in.) Water Table Present? Yes No Depth: 10 (in.) Saturation Present? Yes No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks:	B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) B8 - Sparsely Vegetated Concave Surface D4 - Microtopographic Relief D5 - FAC-Neutral Test Field Observations: Surface Water Present? Yes No Depth: 1 (in.) Water Table Present? Yes No Depth: 10 (in.) Wetland Hydrology Present? Yes No	☐ Other (Explain in Remarks) ☐ D3 - Shallow Aquitard ☐ D4 - Microtopographic Relief
B8 - Sparsely Vegetated Concave Surface	□ B8 - Sparsely Vegetated Concave Surface □ D4 - Microtopographic Relief □ D5 - FAC-Neutral Test Field Observations: Surface Water Present? □ Yes □ No Depth: 1 (in.) Water Table Present? □ Yes □ No Depth: 10 (in.) Wetland Hydrology Present? □ Yes □ No	☐ D4 - Microtopographic Relief
Field Observations: Surface Water Present?	Field Observations: Surface Water Present?	
Surface Water Present?	Surface Water Present?	
Surface Water Present?	Surface Water Present?	
Water Table Present?	Water Table Present?	1 (in)
Saturation Present?		Welland Hydrology Fresent:
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A SOILS	I Saturation Present? ☐ Yes ☑ No Denth: (in)	
Remarks: SOILS		
SOILS		al pnotos, previous inspections), if available:
	Remarks:	
Map Unit Name: Luray silt loam, U-2% slopes		
Brofile Description		
		absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)
		Matrix Redox Features Texture
		Matrix Redox Features Texture Moist) % Type Location (e.g. clay, sand, loam)
		Matrix Redox Features Texture Moist) % Color (Moist) % Type Location (e.g. clay, sand, loam) 5/1 85 7.5YR 5/8 15 C M clay loam
		Matrix Redox Features Texture Moist) % Color (Moist) % Type Location (e.g. clay, sand, loam) 5/1 85 7.5YR 5/8 15 C M clay loam
		Matrix Redox Features Texture Moist) % Color (Moist) % Type Location (e.g. clay, sand, loam) 5/1 85 7.5YR 5/8 15 C M clay loam
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		Matrix Redox Features Texture Moist) % Type Location (e.g. clay, sand, loam) 5/1 85 7.5YR 5/8 15 C M clay loam
		Matrix Redox Features Texture Moist) % Type Location (e.g. clay, sand, loam) 5/1 85 7.5YR 5/8 15 C M clay loam
	NRCS Hydric Soil Field Indicators (check here if indicators are not present	Matrix Redox Features Texture Moist) % Color (Moist) % Type Location (e.g. clay, sand, loam) 5/1 85 7.5YR 5/8 15 C M clay loam
	NRCS Hydric Soil Field Indicators (check here if indicators are not present	Matrix Redox Features Texture Moist) % Color (Moist) % Type Location (e.g. clay, sand, loam) 5/1 85 7.5YR 5/8 15 C M clay loam
NRCS Hydric Soil Field Indicators (check here if indicators are not present	NRCS Hydric Soil Field Indicators (check here if indicators are not present S8 - Polyvalue Below Surface (LRR R, MLRA 1498) A1- Histic Epipedon S9 - Thin Dark Surface (LRR R, MLRA 1498) A3 - Black Histic S11 - High Chroma Sands S1 - Loamy Mucky Mineral (LRR K, L) S7 - Dark Surface (LRR K, L, M)	Matrix Redox Features Texture Moist) % Type Location (e.g. clay, sand, loam) 5/1 85 7.5YR 5/8 15 C M clay loam </td
NRCS Hydric Soil Field Indicators (check here if indicators are not present	NRCS Hydric Soil Field Indicators (check here if indicators are not present	Matrix Redox Features Texture Moist) % Type Location (e.g. clay, sand, loam) 5/1 85 7.5YR 5/8 15 C M clay loam
NRCS Hydric Soil Field Indicators (check here if indicators are not present A1- Histosol A2- Histic Epipedon A3- Black Histic A4- Hydrogen Sulfide A5- Stratified Layers A1- Depleted Below Dark Surface F1- Loamy Mucky Mineral (LRR R, LL) A1- Depleted Below Dark Surface (LRR R, LL) F3- Depleted Matrix S9- Thin Dark Surface (LRR R, LL) S9- Thin Dark Surface (LRR R, LL) S7- Dark Surface (LRR R, LL) S8- Polyvalue Below Surface (LRR R, MLRA 149B) A10- 2 cm Muck (LRR K, L, R) A11- Depleted Below LRR K, L, R) S1- Depleted Matrix	NRCS Hydric Soil Field Indicators (check here if indicators are not present	Matrix Redox Features Texture Moist) % Color (Moist) % Type Location (e.g. clay, sand, loam) 5/1 85 7.5YR 5/8 15 C M clay loam <td< td=""></td<>
NRCS Hydric Soil Field Indicators (check here if indicators are not present	NRCS Hydric Soil Field Indicators (check here if indicators are not present	Matrix Redox Features Texture Moist) % Color (Moist) % Type Location (e.g. clay, sand, loam) 5/1 85 7.5YR 5/8 15 C M clay loam <td< td=""></td<>
NRCS Hydric Soil Field Indicators (check here if indicators are not present A1- Histosol A2 - Histic Epipedon A3 - Black Histic A4 - Hydrogen Sulfide A5 - Stratified Layers A11 - Depleted Below Dark Surface A12 - Thick Dark Surface F3 - Depleted Matrix S1 - Sandy Muck Mineral A12 - Thick Dark Surface F6 - Redox Dark Surface S4 - Sandy Gleyed Matrix S4 - Sandy Gleyed Matrix S5 - Stratified S6 - Stratified S7 - Depleted Dark Surface S6 - Redox Depressions S6 - Polyvalue Below Surface (LRR R, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MLRA 149B) A11 - Coast Prairie Redox (LRR K, L, R) A12 - To Dark Surface F1 - Dark Surface (LRR K, L) S7 - Dark Surface F12 - Iron-Manganese Masses (LRR K, L, R) F13 - Poleted Dark Surface F14 - Piedmont Floodplain Soils (MLRA 149B) F2 - Redox Depressions F21 - Red Parent Material	NRCS Hydric Soil Field Indicators (check here if indicators are not present	Matrix Redox Features Texture Moist) % Color (Moist) % Type Location (e.g. clay, sand, loam) 5/1 85 7.5YR 5/8 15 C M clay loam <td< td=""></td<>
NRCS Hydric Soil Field Indicators (check here if indicators are not present	NRCS Hydric Soil Field Indicators (check here if indicators are not present A1- Histosol A2- Histic Epipedon A3- Black Histic A4- Hydrogen Sulfide A4- Hydrogen Sulfide A5- Stratified Layers A11- Depleted Below Dark Surface A12- Thick Dark Surface A13- Depleted Below Dark Surface A14- Depleted Below Dark Surface A15- Sandy Muck Mineral A15- Sandy Muck Mineral A16- Coast Prairie Redox (LRR K, L, MLRA 1498) A17- Depleted Below Dark Surface A18- Polyvalue Below Surface (LRR K, L) A19- Servatified Layers A19- Depleted Matrix A11- Depleted Below Dark Surface A11- Servatified Layers A12- Thick Dark Surface A13- Sandy Muck Mineral A14- Sandy Muck Mineral A15- Sandy Muck Mineral A16- Coast Prairie Redox (LRR K, L, R) A17- Depleted Below Dark Surface A18- Polyvalue Below Surface (LRR K, L) A19- Piedmont Floodplain Soils (MLRA 1498)	Matrix
NRCS Hydric Soil Field Indicators (check here if indicators are not present A1- Histosol A2- Histic Epipedon A3- Black Histic A4- Hydrogen Sulfide A5- Stratified Layers A1- Depleted Below Dark Surface A1- Depleted Below Dark Surface S1- Sandy Muck Mineral S1- Sandy Muck Mineral S1- Sandy Redox S6- Stripped Matrix S7- Depleted Dark Surface S1- Sandy Redox S6- Stripped Matrix S6- Stripped Matrix S6- Stripped Matrix S6- Stripped Matrix S7- Depleted Dark Surface S1- Sandy Redox S6- Stripped Matrix S6- Stripped Matrix S7- Depleted Matrix S8- Polyvalue Below Surface (LRR R, L, R) A10- 2 cm Muck (LRR K, L, R) A10- 2 cm Muck (NRCS Hydric Soil Field Indicators (check here if indicators are not present	Matrix
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NRCS Hydric Soil Field Indicators (check here if indicators are not present	NRCS Hydric Soil Field Indicators (check here if indicators are not present NRCS Hydric Soil Field Indicators (check here if indicators are not present	Matrix



Northeast and Northcentral Region

Sample Point: SP22 Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Wetland ID: Wetland 11 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant 2. Number of Dominant Species that are OBL, FACW, or FAC: 3 (A) 3. 4 Total Number of Dominant Species Across All Strata: 3 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) 7 8. Prevalence Index Worksheet 9 Total % Cover of: Multiply by: 10. OBL spp. __ _ x 1 = FACW spp. Total Cover = 93 x 2 = 186 FAC spp. 0 x 3 = FACU spp. _ Sapling/Shrub Stratum (Plot size: 5 meter radius) Salix discolor 3 ٧ **FACW** x 5 = UPL spp. 0 2. Rosa palustris Υ OBL 3 106 ____(A) 199 ____(B) 3. Total 4. 5. Prevalence Index = B/A = 1.877 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. Yes □ No Rapid Test for Hydrophytic Vegetation 10. ☐ No Yes Dominance Test is > 50% Total Cover = 6 Yes □ No Prevalence Index is ≤ 3.0 * ✓ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ✓ No Problem Hydrophytic Vegetation (Explain) * Phalaris arundinacea **FACW** * Indicators of hydric soil and wetland hydrology must be FACW 2. Ν Onoclea sensibilis 10 present, unless disturbed or problematic. 3. Juncus effusus 10 Ν OBL 4. **Definitions of Vegetation Strata:** 5. __ --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. 12. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 100 Woody Vine Stratum (Plot size: 10 meter radius) --2. 3. Hydrophytic Vegetation Present ☐ Yes ☐ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



NRCS Hydric Soil Field Indicators (check here if indicators are not present		Oddin Canto	FIGURE 130 KV LINE KE	ebuild Projec	t			Stantec Project #:	193708516	i	Date:	04/06/22
Soil Diff: Fictivities th Loan 0.2% stopes Loan Roller: Linear Loan Roller: Li	Investigator #1:	AEP Ohio	Transmission Comp	any, Inc.							County:	Stark
Landform		Kate Boma	r		Invest	igator #2:	Matt De	nzler			State:	Ohio
Sloge (R):	Soil Unit:	Fitchville si	It loam, 0-2% slopes	3			NV	/I/WWI Classification:	: N/A		Wetland ID:	Wetland 11
Are Vegetation Soil or Hydrology Significant for this time of year? # ins caption remember. Yes No No No No No No No N	Landform:	Plain			Loc	al Relief:	Linear				Sample Point:	SP23
Are Negeration Soil or Phydrology significantly disturbed? Are normal circumstances present? Township:	Slope (%):	0	Latitude:	40.742134	L	ongitude:	-81.414	619			Community ID:	UPL
Are Vegleation Soil or Hydrology naturally problematic? Ves No Hydrology No Hydrology Pesent? Ves No Hydrology Pesent? Ves No Is Tals Sampling Point Within A Wetland? Ves No Is Tals Sampling Point Within A Wetland? Ves No Is Tals Sampling Point Within A Wetland? Ves No Is Tals Sampling Point Within A Wetland? Ves No Is Tals Sampling Point Within A Wetland? Ves No Is Tals Sampling Point Within A Wetland? Ves No Is Tals Sampling Point Within A Wetland? Ves No Is Tals Sampling Point Within A Wetland Yet No Is Tals Sampling Point Within A Wetland? Ves No Is Tals Sampling Point Within A Wetland? Ves No Is Tals Sampling Point Within A Wetland? Ves No Is Tals Sampling Point Within A Wetland? Ves No Is Tals Sampling Point Within A Wetland? Ves No Is Tals Sampling Point Within A Wetland? Ves No Is Tals Sampling Point Within A Wetland? Ves No Is Tals Sampling Point Within A Wetland? Ves No Is Tals Sampling Point Within A Wetland? Ves No Is Tals Sampling Point Within A Wetland? Ves No Is Tals Sampling Point Within A Wetland? Ves No Is Tals Sampling Point Within A Wetland? Ves Is No Is Tals Sampling Point Within A Wetland? Ves Is No	Are climatic/hyd	drologic cond	litions on the site typ	oical for this	s time of	year? (If no	o, explain in	remarks)	□ Yes □	No	Section:	
SUMMARY OF FINDINGS								Are normal circumst	tances presen	t?	Township:	
Hydric Sols Present?	Are Vegetation	□, Soil □,	or Hydrology 🗆 natu	urally proble	ematic?			Yes	□No		Range:	Dir:
Wetland Hydrology Indicators (Check here if indicators are not present	SUMMARY OF	FINDINGS										
Remarks:	Hydrophytic Ve	getation Pres	sent?		☐ Yes	☑ No			Hydric Soils	Present?		☐ Yes ☑ No
HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present	Wetland Hydrol	logy Present	?		□ Yes	☑ No			Is This Sam	oling Point \	Within A Wetlan	d?
Wetland Hydrology Indicators (Check here if indicators are not present	Remarks:											
Wetland Hydrology Indicators (Check here if indicators are not present												
Wetland Hydrology Indicators (Check here if indicators are not present	HYDROLOGY											
A1 - Surface Water		ology Indic	store (Chack hara if	indicators	are not r	orocont	\C					
A1 - Surface Water Table B8 - Marker-Stained Leaves B8 - Surface Soli Cracks B13 - Algain Mart Table B10 - Diningo Patterns B10 - Diningo Patterns B16 - Moss Tirm Lines B17 - Marker Table B18 - Moss Tirm Lines B			ators (Check here ii	IIIulcators	are not p	Jieseiii) <u>U</u>			Secondary:		
			Water		П	B9 - Wate	er-Stained	Leaves				Cracks
B1 - Water Marks												
B2 - Sadment Deposits G3 - Oxidized Rhizospheres on Living Roots G6 - Crayfish Burrows G6 - Recent from Reduction in Titled Soils G1 - Started or Visible on Aerial Imagery G4 - Presence or Reduced from Color G6 - Recent from Reduction in Titled Soils G1 - Started or Stressed Plants G7 - Thin Muck Surface G1 - Started or Stressed Plants G1 - Started										_		
B3 - Drift Deposits												
B4 - Algal Mail or Crust												
B8 - Fino Deposits C7 - Thin Muck Surface D2 - Geomorphic Position D3 - Shallow Aquitard D4 - Microtopographic Residence D5 - FAC-Neutral Test D6 - FAC-Neutral Test D6 - FAC-Neutral Test D6 - FAC-Neutral Test D7 - FAC-Neutral Test D8 - Shallow Aquitard D8 - Shallow Aquitard D8 - Shallow Aquitard D8 - FAC-Neutral Test D8 - FAC-Neutral										=		
B8 - Sparsely Vegetated Concave Surface D4 - Microtopographic Relief D5 - FAC-Neutral Test D5 - FAC-Neutral Test D6 - FAC-Neutral Test D7 - FAC-Neutral Test D8		B5 - Iron Dep	oosits		ä							
Sourcace Water Present? Yes No Depth: (in.) Wetland Hydrology Present? Yes No Depth: (in.) Saturation Present? Yes No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A No Depth: (in.) N/A No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A N		B7 - Inundati	on Visible on Aerial Ima	gery		Other (Ex	plain in Re	marks)				
Field Observations: Surface Water Present? Yes No Depth: (in.) Wetland Hydrology Present? Yes No Depth: (in.) Saturation Present? Yes No Depth: (in.) Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A		B8 - Sparsely	Vegetated Concave S	urface								
Surface Water Present?											D5 - FAC-Neutral	Test
Water Table Present?	Field Observat	tions:										
Water Table Present?	Surface Water	Present?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes V No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Fitchville silt loam, 0-2% slopes Profile Description Descripti	Water Table Pr	esent?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	urology i i	escrit:	163 🗈 110
Remarks: SOILS Map Unit Name: Fitchville silt loam, 0-2% slopes Profile Description, (becare us the layer loaded as course the indicators or contem the assence of indicators). (Type C-Concentration, 10-beption, 10-bepti	Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Remarks: SOILS Map Unit Name: Fitchville silt loam, 0-2% slopes Profile Description (Decrete one depth consider decourser the indicator or confirm the decrete of indicators). (Type C-Concentration, 10-Oeptition, RM-Redox Features). Texture Top Bottom Matrix Redox Features Texture Depth Depth Horizon Color (Moist) % Color (Moist) % Type Location (e.g. clay, sand, loam). 0 8 1 10YR 5/2 100	Describe Record	led Data (str	eam gauge monitorin	ng well aeri	al photos	previous	inspectio	ns) if available:		N/A		
SOILS Map Unit Name: Fitchville silt loam, 0-2% slopes Profile Description (Descript a sign resided to accurant the reductor or contine the absence of indicators, (Type C-Concentation, D-Deplated, RM-Reduced Mate, CS-Covered Content Start Grains, Location: PL-Pive Lering, M-Materia) Top Bottom (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) % Color (Moist) % Type Location (e.g. clay, sand, loam) 0 8 1 1 10YR 5/2 100		(5.1	gg-,	·9 ····, ····	ро.о	,		,,				
Map Unit Name: Fitchville silt loam, 0-2% slopes	T to marrier											
Map Unit Name: Fitchville silt loam, 0-2% slopes	SOILS											
Profile Description Descri		· ·	Eitabuille eilt leese i									
Top Depth Horizon Depth Horizon Color (Moist) % Color (Moist) % Type Location (e.g. clay, sand, loam)	Map Office Name			0-2% slone	ie.							
Depth Depth Horizon Color (Moist) % Color (Moist) % Type Location (e.g. clay, Sand, Ioam)		ntion (Describe to				atore \ (Tuno: C=0	Concentration D	-Daniation PM-Paduced Matrix CS-Co	wared/Coated Sand Graine	· Location: DI _Pore	Lining MaMatriy	
NRCS Hydric Soil Field Indicators (check here if indicators are not present	Profile Descrip				absence of indic	ators.) (Type: C=0	Concentration, D				Lining, M=Matrix)	Texture
NRCS Hydric Soil Field Indicators (check here if indicators are not present Indicators for Problematic Soils	Profile Descrip	Bottom	the depth needed to document the indi	cator or confirm the a	absence of indic		Concentration, D	Re	edox Features	3	1	
NRCS Hydric Soil Field Indicators (check here if indicators are not present	Profile Descrip Top Depth	Bottom Depth	the depth needed to document the indi	cator or confirm the a	Matrix Moist)	%		Color (Moist)	edox Features %	Туре	Location	(e.g. clay, sand, loam)
NRCS Hydric Soil Field Indicators (check here if indicators are not present	Profile Descrip Top Depth 0	Bottom Depth 8	the depth needed to document the indi Horizon	Color (I	Matrix Moist) 5/2	% 100		Color (Moist)	edox Features % 	Type	Location	(e.g. clay, sand, loam) clay loam
NRCS Hydric Soil Field Indicators (check here if indicators are not present	Top Depth 0 8	Bottom Depth 8 12	the depth needed to document the indi Horizon 1 2	Color (I	Matrix Moist) 5/2 6/6	% 100 100		Color (Moist)	edox Features % 	Type	Location 	(e.g. clay, sand, loam) clay loam clay loam
NRCS Hydric Soil Field Indicators (check here if indicators are not present	Top Depth 8	Bottom Depth 8 12	Horizon 1 2	Color (I	Matrix Moist) 5/2 6/6	% 100 100 		Re Color (Moist) 	edox Features %	 	Location 	(e.g. clay, sand, loam) clay loam clay loam
NRCS Hydric Soil Field Indicators (check here if indicators are not present	Profile Descrip Top Depth 0 8	Bottom Depth 8 12	Horizon 1 2	Color (I	Matrix Moist) 5/2 6/6	% 100 100 	 	Color (Moist)	edox Features %	Type	Location	(e.g. clay, sand, loam) clay loam clay loam
NRCS Hydric Soil Field Indicators (check here if indicators are not present	Profile Descrip Top Depth 0 8	Bottom Depth 8 12	Horizon 1 2	Color (I	Matrix Moist) 5/2 6/6	% 100 100 	 	Color (Moist)	edox Features	Type	Location	(e.g. clay, sand, loam) clay loam clay loam
NRCS Hydric Soil Field Indicators (check here if indicators are not present	Profile Descrip Top Depth 0 8	Bottom Depth 8 12	Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 5/2 6/6	% 100 100 		Color (Moist)	edox Features	Type	Location	(e.g. clay, sand, loam) clay loam clay loam
A1-Histosol S8 - Polyvalue Below Surface (LRR R, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MLRA 149B) A16 - Coast Prairie Redox (LRR K, L, R) A16 - Coast Prairie Redox (LRR K, L, R) A16 - Coast Prairie Redox (LRR K, L, R) A16 - Coast Prairie Redox (LRR K, L, R) A16 - Coast Prairie Redox (LRR K, L, R) A16 - Coast Prairie Redox (LRR K, L, R) A16 - Coast Prairie Redox (LRR K, L, R) A16 - Coast Prairie Redox (LRR K, L, R) A16 - Coast Prairie Redox (LRR K, L, R) A17 - Coast Prairie Redox (LRR K, L, R) A17 - Coast Prairie Redox (LRR K, L, R) A17 - Coast Prairie Redox (LRR K, L, R) A17 - Coast Prairie Redox (LRR K, L) A11 - Depleted Below Dark Surface F12 - Loamy Mucky Mineral A11 - Depleted Below Surface A12 - Thick Dark Surface F3 - Depleted Matrix S9 - Thin Dark Surface (LRR K, L) S7 - Dark Surface (LRR K, L) S9 - Thin Dark Surface (LRR K, L) S1 - Sandy Muck Mineral F7 - Depleted Dark Surface F12 - Iron-Manganese Masses (LRR K, L, R) F12 - Iron-Manganese Masses (LRR K, L, R) F12 - Piedmont Floodplain Soils (MLRA 149B) F14 - Piedmont Floodplain Soils (MLRA 149B) F14 - Piedmont Floodplain Soils (MLRA 149B) TA6 - Mesic Spodic (MLRA 144A, 145,	Profile Descrip Top Depth 0 8	Bottom Depth 8 12	Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 5/2 6/6	% 100 100 	 	Re Color (Moist) 	edox Features		Location	(e.g. clay, sand, loam) clay loam clay loam
A2 - Histic Epipedon S9 - Thin Dark Surface (LRR R, MLRA 149B) A16 - Coast Prairie Redox (LRR K, L, R) S1 - High Chroma Sands S3 - 5cm Mucky Peat of Peat (LRR K, L, R) S1 - High Chroma Sands S3 - 5cm Mucky Peat of Peat (LRR K, L, R) S1 - Loamy Mucky Mineral (LRR K, L) S7 - Dark Surface (LRR K, L, M) S8 - Polyvalue Below Surface (LRR K, L) S8 - Polyvalue Below Surface (LRR K, L) S9 - Thin Dark Surfa	Profile Descrip Top Depth 0 8	Bottom Depth 8 12	Horizon 1 2	Color (I	absence of indic Matrix Moist) 5/2 6/6	% 100 100	 	Re Color (Moist) 	edox Features	Type		(e.g. clay, sand, loam) clay loam clay loam
A3 - Black Histic	Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 12 Soil Field In	Horizon 1 2	Color (I	absence of indic Matrix Moist) 5/2 6/6 ors are r	% 100 100	 t \(\mathref{\sum}	Re Color (Moist) 	edox Features % Indicato	Type	Location	(e.g. clay, sand, loam) clay loam clay loam
A4 - Hydrogen Sulfide	Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 12 Soil Field Ir A1- Histosol	Horizon 1 2 dicators (check he	Color (I	absence of indic	% 100 100 not preser \$8 - Polyy		Color (Moist) W Surface (LRR R, MLRA 1498)	edox Features % Indicato	Type	Location	(e.g. clay, sand, loam) clay loam clay loam
A5 - Stratified Layers F2 - Loamy Gleyed Matrix S8 - Polyvalue Below Surface (LRR K, L) A11 - Depleted Below Dark Surface F3 - Depleted Matrix S9 - Thin Dark Surface (LRR K, L) A12 - Thick Dark Surface F6 - Redox Dark Surface F12 - Iron-Manganese Masses (LRR K, L, R) S1 - Sandy Muck Mineral F7 - Depleted Dark Surface F19 - Piedmont Floodplain Soils (MLRA 1498) S4 - Sandy Gleyed Matrix F8 - Redox Depressions F21 - Red Parent Material S5 - Sandy Redox TA6 - Mesic Spodic (MLRA 144A, 145, 1498) S6 - Stripped Matrix S7 - Dark Surface (LRR R, MLRA 149B) S7 - Dark Surface (LRR R, MLRA 149B) Restrictive Layer (If Observed) Type: Depth: Hydric Soil Present? Yes ✓ No	Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 12 Soil Field Ir A1- Histosol A2 - Histic Ep	Horizon 1 2 ndicators (check he	Color (I	absence of indic	% 100 100 not preser \$8 - Polyx \$9 - Thin		Re Color (Moist)	edox Features	Type	Location	(e.g. clay, sand, loam) clay loam clay loam
A11 - Depleted Below Dark Surface	Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 12 Soil Field Ir A1- Histosol A2 - Histic E _I A3 - Black Hi	Horizon 1 2	Color (I	matrix Moist) 5/2 6/6 ors are r	% 100 100 tot preser S8 - Polyx S9 - Thin S11 - Higl		Re Color (Moist) w Surface (LRR R, MLRA 149B) Sands	edox Features	Type	Location	(e.g. clay, sand, loam) clay loam clay loam
S1 - Sandy Muck Mineral	Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 12 Soil Field In A1- Histosol A2 - Histic Eq. A3 - Black Hi A4 - Hydroge	Horizon 1 2 dicators (check he objector style)	Color (I	absence of indic Matrix Moist) 5/2 6/6 ors are r	% 100 100		Re Color (Moist) w Surface (LRR R, MLRA 149B) dace (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	edox Features %	Type	Location	(e.g. clay, sand, loam) clay loam clay loam
S4 - Sandy Gleyed Matrix	Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 12 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete	Horizon 1 2 adicators (check he bipedon stic on Sulfide d Layers ed Below Dark Surface	Color (I	absence of indic. Matrix Moist) 5/2 6/6 ors are r	% 100 100	t	ReColor (Moist)	edox Features	Type	Location	(e.g. clay, sand, loam)
S5 - Sandy Redox S6 - Stripped Matrix S7 - Dark Surface (LRR R, MLRA 149B) Restrictive Layer (If Observed) TA6 - Mesic Spodic (MLRA 144A, 145, 149B) TF12 - Very Shallow Dark Surface Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes Vo	Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 12 Soil Field Ir A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplett A12 - Thick I	Horizon 1 2	Color (I	absence of indic Matrix Moist) 5/2 6/6 Ors are r	% 100 100	and the surface shows the surface show to the surface shows the su	Re Color (Moist)	edox Features %	Type	Location	(e.g. clay, sand, loam) clay loam clay loam (LRR K, L, R) (LRR K, L, R)
S6 - Stripped Matrix S7 - Dark Surface (LRR R, MLRA 149B) Restrictive Layer (If Observed) Type: Depth: TF12 - Very Shallow Dark Surface Other (Explain in Remarks) Indicators of hydrohypic vegetation and wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Type: Depth: Hydric Soil Present?	Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 12 Soil Field In A1- Histosol A2 - Histic E _I A3- Black Hi A4 - Hydroge A5 - Stratified A11 - Deplett A12 - Thick I S1 - Sandy M	Horizon 1 2 dicators (check he objector of stitic an Sulfide d Layers ed Below Dark Surface Ourk Surface Muck Mineral	Color (I	absence of indic Matrix Moist) 5/2 6/6 ors are r	% 100 100	and the second of the second o	Re Color (Moist)	edox Features %	Type	Location	(e.g. clay, sand, loam) clay loam clay loam (LRR K, L, R) (LRR K, L, R)
S7 - Dark Surface (LRR R, MLRA 149B) S7 - Dark Surface (LRR R, MLRA 149B) CREStrictive Layer (If Observed) Type: Depth: CRESTRICTIVE LAYER (Nother (Explain in Remarks) 1 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Type: Depth: Hydric Soil Present? Yes V No	Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 12 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A11 - Deplete A12 - Thick I Sandy M S4 - Sandy M S4 - Sandy M	Horizon 1 2 dicators (check he oipedon stic en Sulfide d Layers ed Below Dark Surface Auck Mineral sleyed Matrix	Color (I	absence of indic Matrix Moist) 5/2 6/6 ors are r	% 100 100	and the second of the second o	Re Color (Moist)	edox Features %	Type	Location	(e.g. clay, sand, loam) clay loam clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) S (MRA 149B)
Restrictive Layer (If Observed) Type: Depth: Hydric Soil Present? Yes No	Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 12 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick I S1 - Sandy N S4 - Sandy G S5 - Sandy R	Horizon 1 2	Color (I	absence of indic Matrix Moist) 5/2 6/6 ors are r	% 100 100	and the second of the second o	Re Color (Moist)	edox Features %	Type	Location	(e.g. clay, sand, loam) clay loam clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (M.RA 149B) 45, 149B)
Restrictive Layer (If Observed) Type: Depth: Hydric Soil Present?	Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 12 Soil Field Ir A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick I S1 - Sandy N S4 - Sandy G S6 - Strippec	Horizon 1 2	Color (I	absence of indic Matrix Moist) 5/2 6/6 ors are r	% 100 100	and the second of the second o	Re Color (Moist)	edox Features %	Type	Location	(e.g. clay, sand, loam) clay loam clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (M.RA 149B) 45, 149B)
(If Observed) Type: Deptn: Hydric Soil Present? Tes William No	Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 12 Soil Field Ir A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick I S1 - Sandy N S4 - Sandy G S5 - Sandy R S6 - Strippec	Horizon 1 2	Color (I	absence of indic Matrix Moist) 5/2 6/6 ors are r	% 100 100	and the second of the second o	Re Color (Moist)	edox Features %	Type	Location	(e.g. clay, sand, loam)
	Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 12 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick I S1 - Sandy N S4 - Sandy G S5 - Sandy F S6 - Strippec S7 - Dark Su	Horizon 1 2	Color (I	absence of indic Matrix Moist) 5/2 6/6 ors are r	% 100 100	and the second s	Re Color (Moist)	edox Features %	Type	Location	(e.g. clay, sand, loam) clay loam clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (MLRA 149B) 45, 149B) ace must be present, unless
Remarks:	Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 12 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick I S1 - Sandy N S4 - Sandy G S5 - Sandy F S6 - Strippec S7 - Dark Su	Horizon 1 2	Color (I	absence of indic Matrix Moist) 5/2 6/6 ors are r	% 100 100	and the second s	Re Color (Moist)	edox Features %	Type	Location	(e.g. clay, sand, loam) clay loam clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (MLRA 149B) 45, 149B) ace must be present, unless



Northeast and Northcentral Region

Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Wetland ID: Wetland 11 Sample Point: SP23 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant 2. Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) 3. 4 Total Number of Dominant Species Across All Strata: 1 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B) 7 8. Prevalence Index Worksheet 9 Total % Cover of: Multiply by: 10. _ x 1 = OBL spp. FACW spp. ____ Total Cover = 0 x 2 = FAC spp. 0 x 3 = 100 FACU spp. _ x 4 = Sapling/Shrub Stratum (Plot size: 5 meter radius) x 5 = UPL spp. 0 0 2. 100 ____(A) 400 ____(B) 3. Total 4. 5. Prevalence Index = B/A = 4.000 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation ☐ Yes 10. ✓ No Dominance Test is > 50% Total Cover = 0 ☐ Yes ✓ No Prevalence Index is ≤ 3.0 * ☐ Yes ✓ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ✓ No Problem Hydrophytic Vegetation (Explain) * Symphyotrichum ericoides 10 **FACU** * Indicators of hydric soil and wetland hydrology must be Υ 2. **FACU** Schedonorus arundinaceus 90 present, unless disturbed or problematic. 3. 4. **Definitions of Vegetation Strata:** 5. ----6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 100 Woody Vine Stratum (Plot size: 10 meter radius) 2. 3. Hydrophytic Vegetation Present ☐ Yes ☑ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



	South Cantor	n-Torrey 138 kV Line Re	ebuild Projec	t			Stantec Project #:	193708516		Date:	04/06/22
Applicant:	AEP Ohio	Transmission Compa	any, Inc.							County:	Stark
	gator #1: Kate Bomar hit: Canfield silt loam, 2-6% slopes					Matt De				State:	Ohio
Soil Unit:	Canfield sil	t loam, 2-6% slopes				NV	/I/WWI Classification:	: N/A		Wetland ID:	Wetland 12
Landform:	Side slope				al Relief:					Sample Point:	SP24
Slope (%):	3-5	Latitude:			ongitude:				NAD83	Community ID:	PEM
		ditions on the site typ				o, explain in		□ Yes □		Section:	
		or Hydrology □sigr					Are normal circumsta	•	t?	Township:	
		or Hydrology ☐natu	irally probl	ematic?			Yes	□No		Range:	Dir:
SUMMARY OF											
Hydrophytic Ve								Hydric Soils			
Wetland Hydrol	ogy Present	?		Yes	□ No			Is This Samp	oling Point \	Within A Wetlan	d? 🛛 Yes 🗏 No
Remarks:											
HYDROLOGY											
		ators (Check here if	indicators	are not p	resent)□					
<u>Primary</u> :									Secondary:		
✓ ✓	A1 - Surface				B9 - Wate					B6 - Surface Soil	
	A2 - High Wa A3 - Saturation				B13 - Aqu B15 - Mar					B10 - Drainage Pa B16 - Moss Trim I	
	B1 - Water M				C1 - Hydr					C2 - Dry-Season	
	B2 - Sedimer						spheres on Living Roots			C8 - Crayfish Buri	
	B3 - Drift Dep						educed Iron				sible on Aerial Imagery
	B4 - Algal Ma B5 - Iron Der				C6 - Rece		duction in Tilled Soils			D1 - Stunted or St D2 - Geomorphic	
		on Visible on Aerial Ima	aerv	=	Other (Ex					D3 - Shallow Aqui	
		y Vegetated Concave S					,			D4 - Microtopogra	
										D5 - FAC-Neutral	Test
Field Observat	ions:										
Surface Water	Present?	☑ Yes □ No	Depth:	1	(in.)			Wetland Hy	drology Pr	osont?	Yes □ No
Water Table Pr	esent?	✓ Yes ☐ No	Depth:	12	(in.)			wettand my	urology Fr	esent:	165 🗆 110
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	led Data (str	eam gauge, monitorin	a well, aeria	al photos	previous	inspectio	ns), if available:		N/A		
Remarks:	(3.1	gg-,	g,		, p		,,				
- tomanto											
0011.0											
50H 5											
SOILS Map Unit Name	ı.	Canfield silt loam 2	-6% slope:	S							
Map Unit Name		Canfield silt loam, 2			ators.) (Type: C=0	Concentration. D	=Depletion, RM=Reduced Matrix. CS=Cov	vered/Coated Sand Grains	: Location: PL=Pore I	.ining. M=Matrix)	
Map Unit Name Profile Descrip	otion (Describe to			absence of indica	ators.) (Type: C=0	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov			.ining, M=Matrix)	Texture
Map Unit Name Profile Descrip Top	Bottom	the depth needed to document the indi	cator or confirm the a	Matrix		Concentration, D	Re	edox Features		1	Texture (e.g. clay, sand, loam)
Map Unit Name Profile Descrip Top Depth	Bottom Depth	the depth needed to document the indi	cator or confirm the a	Matrix Moist)	%		Color (Moist)	edox Features %	Туре	Location	(e.g. clay, sand, loam)
Map Unit Name Profile Descrip Top	Bottom	the depth needed to document the indi	cator or confirm the a	Matrix		Concentration, D	Re	edox Features		1	
Map Unit Name Profile Descrip Top Depth 0	Bottom Depth 14	the depth needed to document the indi Horizon 1	Color (Matrix Moist) 4/1	% 92	5YR	Color (Moist) 4/6	edox Features % 8	Type C	Location M	(e.g. clay, sand, loam) silty clay loam
Map Unit Name Profile Descrip Top Depth 0	Bottom Depth 14	Horizon 1	Color (I	Matrix Moist) 4/1	% 92 	5YR 	Color (Moist) 4/6	edox Features % 8 	Type C 	Location M	(e.g. clay, sand, loam) silty clay loam
Map Unit Name Profile Descrip Top Depth 0	Bottom Depth 14	the depth needed to document the indi Horizon 1	Color (I	Matrix Moist) 4/1	% 92 	5YR 	Color (Moist) 4/6	edox Features % 8	Type C 	Location M	(e.g. clay, sand, loam) silty clay loam
Map Unit Name Profile Descrip Top Depth 0	Bottom Depth 14	the depth needed to document the indi Horizon 1	Color (I	Matrix Moist) 4/1	% 92 	5YR 	Re Color (Moist) 4/6 	edox Features % 8	Type C	Location M	(e.g. clay, sand, loam) silty clay loam
Map Unit Name Profile Descrip Top Depth 0	Bottom Depth 14	the depth needed to document the indi Horizon 1	Color (I	Matrix Moist) 4/1	% 92 	5YR	Re Color (Moist) 4/6 	edox Features	Type C	Location M	(e.g. clay, sand, loam) silty clay loam
Map Unit Name Profile Descrip Top Depth 0	Depth 14	the depth needed to document the indi Horizon 1	Color (I	Matrix Moist) 4/1	% 92 	5YR	Re Color (Moist) 4/6 	8	Type C	Location M	(e.g. clay, sand, loam) silty clay loam
Map Unit Name Profile Descrip Top Depth 0	btion (Describe to: Bottom Depth 14	Horizon 1	Color (I	Matrix Moist) 4/1	% 92	5YR	Re Color (Moist) 4/6 	edox Features	Type C	Location M	(e.g. clay, sand, loam) silty clay loam
Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	btion (Describe to: Bottom Depth 14 Soil Field In	Horizon 1	Color (I	Matrix Moist) 4/1 ors are r	% 92 oot preser	5YR	Re Color (Moist) 4/6 	edox Features	Type	Location M matic Soils ¹	(e.g. clay, sand, loam) silty clay loam
Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	btion (Describe to: Bottom Depth 14 Soil Field Ir A1- Histosol A2 - Histic E[Horizon 1 ndicators (check helpipedon	Color (I	Matrix Moist) 4/1 ors are r	% 92 sot preser	5YR tt	Re Color (Moist) 4/6 	edox Features	Type C	Location M	(e.g. clay, sand, loam) silty clay loam
Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	btion (Describe to: Bottom Depth 14 Soil Field Ir A1- Histosol A2 - Histic E; A3 - Black Hi	Horizon 1 ndicators (check here)	Color (I	Matrix Moist) 4/1 ors are r	% 92 tot preser 88 - Polyv. S9 - Thin S11 - Higl	5YR	Re Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Sands	edox Features	Type C	Location M matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR	(e.g. clay, sand, loam) silty clay loam 49B) K. L. R)
Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	btion (Describe to Describe to Depth 14	Horizon 1	Color (I	besence of indicates the second of the secon	% 92 oot preser S8 - Poly S9 - Thin S11 - Higl	5YR tt	Re Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Sands Mineral (LRR K, L)	edox Features	Type C	Location M Matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Loky Peat of Peat (urface (LRR K, L, M)	(e.g. clay, sand, loam) silty clay loam
Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Detion (Describe to Describe to Depth Depth 14	Horizon 1	Color (I	Matrix Moist) 4/1 ors are r	% 92	5YR tt	Re Color (Moist) 4/6 W Surface (LRR R, MLRA 149B) 3C9 (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix	edox Features % 8 Indicator	Type C	Location M matic Soils Wuck (LRR K, L, MLRA 1 Prairie Redox (LRR Locky Peat of Peat of Locky Peat Lock	(e.g. clay, sand, loam) silty clay loam 49B) K. L. R) LRR K, L, R)
Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14 Soil Field Ir A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier	Horizon 1 ndicators (check herein bipedon istice an Sulfide di Layers ed Below Dark Surface	Color (I	Matrix Moist) 4/1 ors are r	% 92 oot preser S8 - Poly S9 - Thin S11 - Higl	5YR	Re Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (edox Features	Type C A10 - 2 cm A16 - Coast S3 - 5cm Mt S7 - Dark S S8 - Polyval S9 - Thin Da	Location M Matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Loky Peat of Peat (urface (LRR K, L, M)	(e.g. clay, sand, loam) silty clay loam
Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	btion (Describe to Describe to Depth 14	Horizon 1	Color (I	besence of indicates the second of the secon	% 92 ort preser S8 - Poly S9 - Thin S11 - Higl F1 - Loam F2 - Loam F3 - Deple F6 - RedG F7 - Deple	5YR	Re Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (frace Surface	edox Features	Type C	Location M matic Soils Muck (LRR K, L, MURA 1 Prairie Redox (LRR K, L, M) ue Below Surface (LRR K, L, M) ue Below Surface (LRR K, L) langanese Masses ont Floodplain Soil	(e.g. clay, sand, loam) sifty clay loam
Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14 Soil Field Ir A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M	Horizon 1	Color (I	sesence of indicate Matrix Moist) 4/1 ors are r	% 92	5YR	Re Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (frace Surface	edox Features % 8 Indicato	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L) urface (LRR K, L, M) urface (LRR K, L) urface (LRR K, L) anganese Masen ont Floodplain Soil arent Material	(e.g. clay, sand, loam) silty clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) S (MRA 149B)
Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	btion (Describe to: Bottom Depth 14 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick I S1 - Sandy N S5 - Sandy R	Horizon 1 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Auck Mineral Sleyed Matrix kedox	Color (I	besence of indicates the second of the secon	% 92 ort preser S8 - Poly S9 - Thin S11 - Higl F1 - Loam F2 - Loam F3 - Deple F6 - RedG F7 - Deple	5YR	Re Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (frace Surface	edox Features % 8 Indicato	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, M) ue Below Surface (LRR K, L) langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1	(e.g. clay, sand, loam) silty clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (M.RA 149B) 45, 149B)
Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14 Soil Field Ir A4 - Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplett A12 - Thick I S1 - Sandy N S4 - Sandy S S5 - Sandy R S6 - Stripped	Horizon 1	Color (I	besence of indicates the second of the secon	% 92 ort preser S8 - Poly S9 - Thin S11 - Higl F1 - Loam F2 - Loam F3 - Deple F6 - RedG F7 - Deple	5YR	Re Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (frace Surface	edox Features % 8 Indicato	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L) Urface (LRR K, L, M) ue Below Surface (LRR K, L) langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1 Shallow Dark Surf	(e.g. clay, sand, loam) silty clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (M.RA 149B) 45, 149B)
Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14 Soil Field Ir A4 - Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplett A12 - Thick I S1 - Sandy N S4 - Sandy S S5 - Sandy R S6 - Stripped	Horizon 1 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Auck Mineral Sleyed Matrix kedox	Color (I	besence of indicates the second of the secon	% 92 ort preser S8 - Poly S9 - Thin S11 - Higl F1 - Loam F2 - Loam F3 - Deple F6 - RedG F7 - Deple	5YR	Re Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (frace Surface	edox Features % 8 Indicator 'Indicators of	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, M) ue Below Surface (LRR K, L) langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1	(e.g. clay, sand, loam) sifty clay loam
Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	btion (Describe to Describe to	Horizon 1	Color (I	streence of indicate Matrix Moist) 4/1 ors are r	% 92 ort preser S8 - Poly S9 - Thin S11 - Higl F1 - Loam F2 - Loam F3 - Deple F6 - RedG F7 - Deple	5YR	Re Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (frace Surface	edox Features % 8 Indicator 'Indicators of disturbed of	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L) Prairie Redox (LRR K, L) urface (LRR K, L) urface (LRR K, L) langanese Masses ont Floodplain Soil arrent Material Spodic (MLRA 144A, 1 Shallow Dark Surfa in in Remarks)	(e.g. clay, sand, loam) silty clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (M.RA 149B) 45, 149B) aCe must be present, unless
Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 14 Soil Field Ir A4 - Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplett A12 - Thick I S1 - Sandy N S4 - Sandy S S5 - Sandy R S6 - Stripped	Horizon 1	Color (I	besence of indicates the second of the secon	% 92 ort preser S8 - Poly S9 - Thin S11 - Higl F1 - Loam F2 - Loam F3 - Deple F6 - RedG F7 - Deple	5YR	Re Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (frace Surface	edox Features % 8 Indicator 'Indicators of	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L) Prairie Redox (LRR K, L) urface (LRR K, L) urface (LRR K, L) langanese Masses ont Floodplain Soil arrent Material Spodic (MLRA 144A, 1 Shallow Dark Surfa in in Remarks)	(e.g. clay, sand, loam) sifty clay loam
Map Unit Name Profile Descrip Top Depth 0 NRCS Hydric	btion (Describe to Describe to	Horizon 1	Color (I	streence of indicate the street of the stree	% 92 ort preser S8 - Poly S9 - Thin S11 - Higl F1 - Loam F2 - Loam F3 - Deple F6 - RedG F7 - Deple	5YR	Re Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Sace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (frace Surface	edox Features % 8 Indicator 'Indicators of disturbed of	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L) Prairie Redox (LRR K, L) urface (LRR K, L) urface (LRR K, L) langanese Masses ont Floodplain Soil arrent Material Spodic (MLRA 144A, 1 Shallow Dark Surfa in in Remarks)	(e.g. clay, sand, loam) silty clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (M.RA 149B) 45, 149B) aCe must be present, unless



Northeast and Northcentral Region

Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Wetland ID: Wetland 12 Sample Point: SP24 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant 2. Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 4 Total Number of Dominant Species Across All Strata: 2 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) 7 8. Prevalence Index Worksheet 9 Total % Cover of: Multiply by: _ x 1 = 10. OBL spp. __ FACW spp. ____ Total Cover = 30 x 2 = FAC spp. 0 x 3 = FACU spp. _ Sapling/Shrub Stratum (Plot size: 5 meter radius) x 5 = UPL spp. 2. 100 ____(A) 130 ____(B) 3. Total 4. 5. Prevalence Index = B/A = 1.300 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. Yes □ No Rapid Test for Hydrophytic Vegetation 10. ☐ No Yes Dominance Test is > 50% Total Cover = 0 Yes □ No Prevalence Index is ≤ 3.0 * ☐ Yes ✓ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ✓ No Problem Hydrophytic Vegetation (Explain) * Juncus effusus 70 OBL * Indicators of hydric soil and wetland hydrology must be Υ 2. **FACW** Phalaris arundinacea 30 present, unless disturbed or problematic. 3. 4. **Definitions of Vegetation Strata:** 5. ----6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 100 Woody Vine Stratum (Plot size: 10 meter radius) 2. 3. Hydrophytic Vegetation Present ☐ Yes ☐ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



		n-Torrey 138 kV Line Re		t			Stantec Project #:	193708516		Date:	04/06/22
Applicant:		Transmission Compa	any, Inc.		January Carter III. Matt Danalan					County:	Stark
Investigator #1:				Investigator #2: Matt Denzler						State:	Ohio
Soil Unit: Landform:						NWI/WWI Classification: Local Relief: Linear				Wetland ID: Sample Point:	Wetland 12 SP25
Slope (%):	3-5	Latitude:	40.740050		ongitude:		831	Datum:	NAD83	Community ID:	UPL
		ditions on the site typ						☐ Yes ☐		Section:	
		or Hydrology □sign				э, схрішіт ііі	Are normal circumsta			Township:	
	or Hydrology natu					□No	•	Range:	Dir:		
SUMMARY OF		, ,,								Ü	
Hydrophytic Ve		sent?		☐ Yes	☑ No			Hydric Soils	Present?		☐ Yes ☑ No
Wetland Hydrology Present?					☑ No			Is This Samp	oling Point V	Within A Wetlan	d? 🔲 Yes 🛂 No
Remarks:											
HYDROLOGY											
Wetland Hydr	ology Indica	ators (Check here if	indicators	are not p	oresent)☑					
Primary:				_					Secondary:		
	A1 - Surface A2 - High Wa			□ B9 - Water-Stained Leaves□ B13 - Aquatic Fauna						B6 - Surface Soil B10 - Drainage Pa	
	A3 - Saturation				B15 - Mar					B16 - Moss Trim	
	B1 - Water M				C1 - Hydro					C2 - Dry-Season	
	B2 - Sedimer B3 - Drift Dep						spheres on Living Roots educed Iron			C8 - Crayfish Buri	ows sible on Aerial Imagery
	B4 - Algal Ma						eduction in Tilled Soils			D1 - Stunted or St	
	B5 - Iron Dep				C7 - Thin					D2 - Geomorphic	Position
		on Visible on Aerial Ima			Other (Exp	plain in Re	emarks)			D3 - Shallow Aqui	
	B8 - Sparsely	Vegetated Concave S	ипасе							D4 - Microtopogra D5 - FAC-Neutral	
Field Observat	ione:										
Surface Water		☐ Yes ☑ No	Depth:		(in.)						
Water Table Pr		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes 🗹 No
Saturation Pres		☐ Yes ☑ No	Depth:		(in.)						
D " D	Is al Data Vata		•		()						
		oom gougo monitorin	a wall aari	al photoc	provious	inconctio	nc) if available:		NI/A		
	ied Data (Stre	eam gauge, monitorin	ng well, aeria	al photos	, previous	inspectio	ns), if available:		N/A		
Remarks:	led Data (Str	eam gauge, monitorin	ng well, aeria	al photos	, previous	inspectio	ns), if available:		N/A		
Remarks:	led Data (Str	eam gauge, monitorin	ng well, aeria	al photos	, previous	inspectio	ns), if available:		N/A		
Remarks:				·	, previous	inspection	ns), if available:		N/A		
Remarks: SOILS Map Unit Name	:	Canfield silt loam, 2	2-6% slopes	· S		·	,	rered/Coated Sand Grains;		Lining, M≡Matrix)	
Remarks: SOILS Map Unit Name Profile Descrip	:	Canfield silt loam, 2	2-6% slopes	· S		·	=Depletion, RM=Reduced Matrix, CS=Cov	nered/Coated Sand Grains,	Location: PL=Pore L	Lining, M=Matrix)	Texture
Remarks: SOILS Map Unit Name	tion (Describe to	Canfield silt loam, 2	2-6% slopes	S Matrix		·	=Depletion, RM=Reduced Matrix, CS=Cov		Location: PL=Pore L	Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam)
Remarks: SOILS Map Unit Name Profile Descrip Top	e: btion (Describe to) Bottom	Canfield silt loam, 2	2-6% slope:	S Matrix	ators.) (Type: C=C	·	=Depletion, RM=Reduced Matrix, CS=Cov	dox Features	Location: PL=Pore L	1	
Remarks: SOILS Map Unit Name Profile Descrip Top Depth	etion (Describe to the Depth	Canfield silt loam, 2 the depth needed to document the indi Horizon	2-6% slopes cator or confirm the a	S Matrix Moist)	ators.) (Type: C=C	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist)	edox Features %	Location: PL=Pore L	Location	(e.g. clay, sand, loam)
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0	btion (Describe to 1) Bottom Depth 10	Canfield silt loam, 2 the depth needed to document the indi Horizon 1	2-6% slopes cator or confirm the a	Matrix Moist) 4/3	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist)	edox Features % 	Location: PL=Pore L	Location	(e.g. clay, sand, loam) clay loam
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 10	Bottom Depth 10 16	Canfield silt loam, 2 the depth needed to document the indi Horizon 1 2	2-6% slopes cator or confirm the s Color (I 10YR 10YR	Matrix Moist) 4/3 5/6	% 100 60	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist) 	edox Features % 	Location: PL=Pore L	Location 	(e.g. clay, sand, loam) clay loam clay loam
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 10	Bottom Depth 10 16	Canfield silt loam, 2 the depth needed to document the indi Horizon 1 2 2	Color (I 10YR 10YR	Matrix Moist) 4/3 5/6 4/3	% 100 60 40	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist)	edox Features % 	Type	Location	(e.g. clay, sand, loam) clay loam clay loam
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 10	Bottom Depth 10 16	Canfield silt loam, 2 the depth needed to document the indi Horizon 1 2 2	2-6% slopes cator or confirm the s Color (I 10YR 10YR	basence of indiction Matrix Moist) 4/3 5/6 4/3	% 100 60 40	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist)	edox Features %	Type	Location	(e.g. clay, sand, loam) clay loam clay loam
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 10	Bottom Depth 10 16	Canfield silt loam, 2 the depth needed to document the indi Horizon 1 2 2	Color (I 10YR 10YR 10YR	basence of indications	% 100 60 40	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist)	edox Features	Type	Location	(e.g. clay, sand, loam) clay loam clay loam
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 10	Bottom Depth 10 16 16	Canfield silt loam, 2 the depth needed to document the indi Horizon 1 2 2	Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	Subsence of indications of indicatio	% 100 60 40	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist)	edox Features	Type	Location	(e.g. clay, sand, loam) clay loam clay loam
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 10 NRCS Hydric	Bottom Depth 10 16 16 Soil Field In	Canfield silt loam, 2 the depth needed to document the indi Horizon 1 2 2	Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	bissence of indice Matrix Moist) 4/3 5/6 4/3 ors are r	% 100 60 40 ot preserv	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist)	edox Features % Indicator	Type s for Proble	Location	(e.g. clay, sand, loam) clay loam clay loam
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 10 NRCS Hydric	Bottom Depth 10 16 16 Soil Field In	Canfield silt loam, 2 the depth needed to document the individual to the individual	Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	beence of indiction Matrix Moist) 4/3 5/6 4/3 ors are r	% 100 60 40 tot preser S8 - Polyv	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist) w Surface (LRR R, MLRA 1498)	edox Features %	Type s for Proble A10 - 2 cm I	Location	(e.g. clay, sand, loam) clay loam clay loam
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 10 NRCS Hydric	Bottom Depth 10 16 16 Soil Field In	Canfield silt loam, 2 the depth needed to document the individual to the depth needed to the depth needed to the depth needed to the depth needed to document the individual to the depth needed to document the individual to the depth needed to document the individual to the	Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR	bissence of indice Matrix Moist) 4/3 5/6 4/3 ors are r	% 100 60 40 S8 - Polyv S9 - Thin i	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist)	edox Features % Indicator	Type	Location	(e.g. clay, sand, loam) clay loam clay loam
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 10 10 NRCS Hydric	Bottom Depth 10 16 16 Soil Field In A1- Histosol A2 - Histic Et A4 - Hydroge	Canfield silt loam, 2 the depth needed to document the indi Horizon 1 2 2 adicators (check here) sistic en Sulfide	Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR	Matrix Moist) 4/3 5/6 4/3 Ors are r	% 100 60 40 tot preser 88 - Polyw 99 - Thin Is \$11 - Hoar	concentration. D	Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Wineral (LRR K, L)	edox Features % Indicato	Type	Location	(e.g. clay, sand, loam) clay loam clay loam
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 10 NRCS Hydric	Bottom Depth 10 16 16 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier	Canfield silt loam, 2 the depth needed to document the indi Horizon 1 2 2 dicators (check here) stic in Sulfide d Layers	Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR	beence of indiction Matrix Moist) 4/3 5/6 4/3 ors are r	% 100 60 40 S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F2 - Loam F2 - Loam F2 - Loam	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist)	edox Features % Indicator	Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Ms S8 - Polyval	Location	(e.g. clay, sand, loam)
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 10 NRCS Hydric	Bottom Depth 10 16 16 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete	Canfield silt loam, 2 the depth needed to document the indi Horizon 1 2 2 adicators (check here) bipedon istic en Sulfide d 1 Layers ad Below Dark Surface	Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR	Subsence of indictions when the subsence of indictions where the subsence of indictions where	% 100 60 40 S8 - Polyv S9 - Thin I S11 - High F1 - Loam F3 - Deple F3	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Matrix (Matrix	edox Features % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, ML A) utface (LRR K, L, ML A) ue Below Surface (LRR K, L) ark Surface (LRR K, L) ark Surface (LRR K, L)	(e.g. clay, sand, loam) clay loam clay loam 49B) K. L. R) LRR K, L, R)
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 10 NRCS Hydric	Bottom Depth 10 16 16 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier	Canfield silt loam, 2 the depth needed to document the individual to the depth needed to document the individual to the depth needed to document the individual to the depth needed to document the individual to the	Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR	Subsence of indictions when the subsence of indictions where the subsence of indictions where	% 100 60 40 ort preser S8 - Polyv S9 - Thin 1 S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist) w Surface (LRR R, MLRA 149B) 300 (LRR R, MLRA 149B) Sands dineral (LRR K, L) Matrix C urface	edox Features % Indicator	Type s for Proble A10 - 2 cm II A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval F12 - Iron-M	Location	(e.g. clay, sand, loam) clay loam clay loam
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 10 NRCS Hydric	Bottom Depth 10 16 16 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G	Canfield silt loam, 2 the depth needed to document the indi Horizon 1 2 2 dicators (check here) stic in Sulfide d Layers ed Below Dark Surface D	Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR	Matrix Moist) 4/3 5/6 4/3 Ors are r	% 100 60 40 ort preser S8 - Polyv S9 - Thin 1 S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo	concentration. D	Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist)	edox Features % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR k, L) urface (LRR K, L, M) urface (LRR K, L) anganese Masen ont Floodplain Soil arent Material	(e.g. clay, sand, loam)
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 10 NRCS Hydric	Bottom Depth 10 16 16 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A1 - Deplete A12 - Thick E S1 - Sandy R S5 - Sandy R	Canfield silt loam, 2 the depth needed to document the indi Horizon 1 2 2 adicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface bark Surface fluck Mineral sleyed Matrix ledox	Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR	Subsence of indication Matrix Moist) 4/3 5/6 4/3 ors are r	% 100 60 40 ot preser 88 - Polyw 99 - Thin Is F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	concentration. D	Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist)	edox Features % Indicator	Type	Location	(e.g. clay, sand, loam) clay loam clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (MLRA 149B) 45, 149B)
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 10 NRCS Hydric	Bottom Depth 10 16 16 16 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A11 - Deplete A11 - Deplete S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped	Canfield silt loam, 2 the depth needed to document the indi Horizon 1 2 2 adicators (check hele bipedon stic en Sulfide d Layers ed Below Dark Surface Jark Surface	Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR	Subsence of indication Matrix Moist) 4/3 5/6 4/3 ors are r	% 100 60 40 ot preser 88 - Polyw 99 - Thin Is F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	concentration. D	Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist)	edox Features %	Type	Location	(e.g. clay, sand, loam) clay loam clay loam 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) 5 (MLRA 149B) 45, 149B)
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 10 NRCS Hydric	Bottom Depth 10 16 16 16 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A11 - Deplete A11 - Deplete S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped	Canfield silt loam, 2 the depth needed to document the indi Horizon 1 2 2 adicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface bark Surface fluck Mineral sleyed Matrix ledox	Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR	Subsence of indication Matrix Moist) 4/3 5/6 4/3 ors are r	% 100 60 40 ot preser 88 - Polyw 99 - Thin Is F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	concentration. D	Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist)	edox Features % Indicator 'Indicators of	Type	Location	(e.g. clay, sand, loam) clay loam clay loam
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 10 NRCS Hydric	Bottom Depth 10 16 16 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A1 - Deplete A12 - Thick E Sandy R S4 - Sandy R S5 - Sandy R S6 - Stripped S7 - Dark Su	Canfield silt loam, 2 the depth needed to document the indi Horizon 1 2 2 adicators (check hele bipedon stic en Sulfide d Layers ed Below Dark Surface Jark Surface	Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR	besence of indiction Matrix Moist) 4/3 5/6 4/3 ors are r	% 100 60 40 ot preser 88 - Polyw 99 - Thin Is F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	concentration. D	Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist)	edox Features % Indicator 'Indicators of disturbed of	Type	Location	(e.g. clay, sand, loam) clay loam clay loam 49B) K. L, R) LRR K, L, R) LRR K, L, R) (LRR K, L, R) 45, 149B) aCe nust be present, unless
Remarks: SOILS Map Unit Name Profile Descrip Top Depth 0 10 NRCS Hydric	Bottom Depth 10 16 16 16 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A11 - Deplete A11 - Deplete S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped	Canfield silt loam, 2 the depth needed to document the indi Horizon 1 2 2 adicators (check hele bipedon stic en Sulfide d Layers ed Below Dark Surface Jark Surface	Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR	Subsence of indication Matrix Moist) 4/3 5/6 4/3 ors are r	% 100 60 40 ot preser 88 - Polyw 99 - Thin Is F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	concentration. D	Depletion, RM=Reduced Matrix, CS=Cov Re Color (Moist)	edox Features % Indicator 'Indicators of	Type	Location	(e.g. clay, sand, loam) clay loam clay loam



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Wetland ID: Wetland 12 Sample Point: SP25 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant 2. Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) 3. 4 Total Number of Dominant Species Across All Strata: 1 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B) 7 8. Prevalence Index Worksheet 9 Total % Cover of: Multiply by: 10. _ x 1 = OBL spp. __ FACW spp. Total Cover = 0 x 2 = FAC spp. 0 x 3 = FACU spp. _ Sapling/Shrub Stratum (Plot size: 5 meter radius) x 5 = UPL spp. 0 2. 100 ____(A) 370 ____(B) 3. Total 4. 5. Prevalence Index = B/A = 3.700 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation ☐ Yes 10. ✓ No Dominance Test is > 50% Total Cover = 0 ☐ Yes ✓ No Prevalence Index is ≤ 3.0 * ☐ Yes ✓ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ✓ No Problem Hydrophytic Vegetation (Explain) * Juncus effusus 10 OBL * Indicators of hydric soil and wetland hydrology must be Υ 2. **FACU** Schedonorus arundinaceus 90 present, unless disturbed or problematic. 3. 4. **Definitions of Vegetation Strata:** 5. ----6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 100 Woody Vine Stratum (Plot size: 10 meter radius) --2. 3. Hydrophytic Vegetation Present ☐ Yes ☑ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Project/Site: Applicant: Investigator #1:	AEP Ohio ⁻ : Kate Boma	n-Torrey 138 kV Line Re Transmission Comp ur It Ioam, 2-6% slopes	any, Inc.		igator #2:		Stantec Project #: nzler ///WWI Classification:	193708516		Date: County: State:	04/06/22 Stark Ohio Wetland 13
Soil Unit: Landform: Slope (%):	Side slope 1-2	Latitude:	40.741101	L	cal Relief: ongitude:	Concave -81.4148	e 341	Datum:	NAD83	Wetland ID: Sample Point: Community ID:	SP26 PEM
Are Vegetation Are Vegetation	□, Soil □, d □, Soil □, d	ditions on the site typor or Hydrology □sigr or Hydrology □nate	nificantly dis	sturbed?		o, explain in	Are normal circumst		No t?	Section: Township: Range:	 Dir:
SUMMARY OF Hydrophytic Ve		sent?		☑ Yes	. □ No			Hydric Soils	Present?		
Wetland Hydro				☑ Yes						Within A Wetlan	
Remarks:											
HYDROLOGY Wetland Hydr	ology Indica	ators (Check here if	indicators	are not r	oresent)□					
Primary	A1 - Surface A2 - High Wa A3 - Saturati B1 - Water N B2 - Sedimer	Water ater Table on Marks nt Deposits	muicators		B9 - Wate B13 - Aqu B15 - Mar C1 - Hydr C3 - Oxid	er-Stained uatic Fauna I Deposits rogen Sulficized Rhizo	ı			B6 - Surface Soil B10 - Drainage P B16 - Moss Trim C2 - Dry-Season C8 - Crayfish Bur	atterns Lines Water Table
	B4 - Algal Ma B5 - Iron Dep B7 - Inundati B8 - Sparsely	at or Crust			C6 - Rece	ent Iron Re Muck Surf	duction in Tilled Soils ace			D1 - Stunted or S D2 - Geomorphic D3 - Shallow Aqu	tressed Plants Position itard aphic Relief
Surface Water Water Table Pr Saturation Pres	Present? resent?	Yes No Yes No Yes No	Depth: Depth: Depth:	8	(in.) (in.) (in.)			Wetland Hy	drology Pr	esent?	Yes □ No
	ded Data (str	eam gauge, monitorir	ng well, aeria	al photos	, previous	inspectio	ns), if available:		N/A		
Remarks:											
1											
SOILS											
SOILS Map Unit Name	e:	Canfield silt loam, 2	2-6% slopes	S							
Map Unit Name Profile Descrip					ators.) (Type: C=	Concentration, Da	-Depletion, RM=Reduced Matrix, CS=Cov	vered/Coated Sand Grains;	; Location: PL=Pore l	Lining, M=Matrix)	
Map Unit Name Profile Descrip Top	Describe to Bottom	the depth needed to document the indi	cator or confirm the a	absence of indic		Concentration, Da	Re	edox Features		T	Texture
Map Unit Name Profile Descrip Top Depth	Bottom Depth	the depth needed to document the indi	cator or confirm the a	Matrix Moist)	%		Color (Moist)	edox Features %	Туре	Location	(e.g. clay, sand, loam)
Map Unit Name Profile Descrip Top Depth 0	Bottom Depth	the depth needed to document the indi Horizon	Color (I	Matrix Moist) 4/1	% 96	7.5YR	Color (Moist) 4/6	edox Features % 4	Type C	Location M	(e.g. clay, sand, loam) silty clay loam
Map Unit Name Profile Descrip Top Depth 0 4	Bottom Depth 10	the depth needed to document the indi Horizon 1 2	Color (I	Matrix Moist) 4/1 4/1	% 96 98	7.5YR 7.5YR	Re Color (Moist) 4/6 4/6	edox Features % 4 2	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam clay loam
Map Unit Name Profile Descrip Top Depth 0 4 10	Bottom Depth 10 10 14	the depth needed to document the indi Horizon 1 2 3	Color (I 10YR 10YR 10YR	Matrix Moist) 4/1 4/1 6/3	% 96 98 80	7.5YR 7.5YR 10YR	Color (Moist) 4/6 4/6 5/8	edox Features % 4 2 20	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam clay loam clay loam
Map Unit Name Profile Descrip Top Depth 0 4	Bottom Depth 10 10 14	the depth needed to document the indi Horizon 1 2	Color (I	Matrix Moist) 4/1 4/1	% 96 98	7.5YR 7.5YR	Re Color (Moist) 4/6 4/6	edox Features % 4 2	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam clay loam
Map Unit Name Profile Descrip Top Depth 0 4 10	Bottom Depth 10 10 14	Horizon 1 2 3	Color (I 10YR 10YR 10YR	Matrix Moist) 4/1 4/1 6/3	% 96 98 80	7.5YR 7.5YR 10YR	Color (Moist) 4/6 4/6 5/8	edox Features % 4 2 20	Type C C C	Location M M M	(e.g. clay, sand, loam) silty clay loam clay loam clay loam
Map Unit Name Profile Descrip Top Depth 0 4 10	Bottom Depth 10 10 14	Horizon 1 2 3	Color (I 10YR 10YR 10YR	absence of indic Matrix Moist) 4/1 4/1 6/3	% 96 98 80 	7.5YR 7.5YR 10YR	Re Color (Moist) 4/6 4/6 5/8 	edox Features % 4 2 20	Type C C C	Location M M M	(e.g. clay, sand, loam) silty clay loam clay loam clay loam
Map Unit Name Profile Descrip Top Depth 0 4 10	Bottom Depth 10 10 14	Horizon 1 2 3	Color (I 10YR 10YR 10YR	absence of indic Matrix Moist) 4/1 4/1 6/3	% 96 98 80 	7.5YR 7.5YR 10YR 	Re Color (Moist) 4/6 4/6 5/8 	edox Features	Type C C C	Location M M M	(e.g. clay, sand, loam) silty clay loam clay loam clay loam
Map Unit Name Profile Descrip Top Depth 0 4 10 NRCS Hydric	Depth Bottom Depth 10 10 14 Soil Field Ir A1- Histosol A2- Histic Ep A3- Black Hi A4- Hydroge A5- Stratifiee A11- Deplet A12- Thick I S1- Sandy M S4- Sandy G S5- Sandy F S6- Strippec	Horizon 1 2 3 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface druck Mineral Sleyed Matrix leedox	Color (I	absence of indic Matrix Moist) 4/1 4/1 6/3 tors are ri indic	% 96 98 80	7.5YR 7.5YR 10YR tr tr Dark Surfah Chroma	Re Color (Moist) 4/6 4/6 5/8 v Surface (LRR R, MLRA 149B) Sands Alineral (LRR K, L) Matrix face Surface Surface	edox Features % 4 2 20 Indicator 'Indicators of	Type C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-N F19 - Piedr F21 - Red F TA6 - Mesic TF12 - Very Other (Expla	Location M M	(e.g. clay, sand, loam) silty clay loam clay loam clay loam
Map Unit Name Profile Descrip Top Depth 0 4 10 NRCS Hydric	Depth Bottom Depth 10 10 14 Soil Field Ir A1- Histosol A2- Histic Ep A3- Black Hi A4- Hydroge A5- Stratifiee A11- Deplet A12- Thick I S1- Sandy M S4- Sandy G S5- Sandy F S6- Strippec	Horizon 1 2 3	Color (I	absence of indic. Matrix Moist) 4/1 4/1 6/3 cors are r	% 96 98 80	7.5YR 7.5YR 10YR	Re Color (Moist) 4/6 4/6 5/8 v Surface (LRR R, MLRA 149B) Sands Alineral (LRR K, L) Matrix face Surface Surface	edox Features % 4 2 20 Indicator 'Indicators of	Type C C C C se for Proble A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm TA6 - Mesic TF12 - Very Other (Expla	Location M M M M	(e.g. clay, sand, loam) silty clay loam clay loam clay loam



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Sample Point: SP26 Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Wetland ID: Wetland 13 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant 2. Number of Dominant Species that are OBL, FACW, or FAC: 1 (A) 3. 4 Total Number of Dominant Species Across All Strata: 1 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) 7 8. Prevalence Index Worksheet 9 Total % Cover of: Multiply by: 10. OBL spp. _ x 1 = FACW spp. ____ Total Cover = 60 x 2 = 120 FAC spp. 0 x 3 = 0 x 4 = Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. x 5 = UPL spp. 15 75 2. 100 ____(A) 220 ____(B) 3. Total 4. 5. Prevalence Index = B/A = 2,200 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. Yes □ No Rapid Test for Hydrophytic Vegetation 10. Yes □ No Dominance Test is > 50% Total Cover = 0 Yes □ No Prevalence Index is ≤ 3.0 * ✓ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ✓ No Problem Hydrophytic Vegetation (Explain) * Scirpus cyperinus OBL * Indicators of hydric soil and wetland hydrology must be Υ **FACW** Phalaris arundinacea 60 present, unless disturbed or problematic. 3. Juncus effusus 10 Ν OBL 4. Hemerocallis fulva 15 N UPL **Definitions of Vegetation Strata:** 5. ----__ --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. 12. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 100 Woody Vine Stratum (Plot size: 10 meter radius) --2. 3. Hydrophytic Vegetation Present ☐ Yes ☐ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Are Vegetation	AEP Ohio Kate Boma Canfield sil Side slope 2-4 drologic conc Soil Soi	Latitude: Latitude: ditions on the site typor Hydrology □ signor Hydrology □ nature.	40.740975 bical for this	Loc Los time of sturbed? ematic?	s ☑ No	NW Linear -81.414 o, explain in	VI/WWI Classification: 689 remarks) Are normal circumst	Datum: Yes ances present No Hydric Soils	NAD83 No	Date: County: State: Wetland ID: Sample Point: Community ID: Section: Township: Range:	04/06/22 Stark Ohio Wetland 13 SP27 UPL Dir: □ Yes ☑ No
Primary	A1 - Surface A2 - High Wa A3 - Saturati B1 - Water N B2 - Sedimer B3 - Drift Der B4 - Algal Ma B5 - Iron Der B7 - Inundati B8 - Sparsel	ater Table on Marks nt Deposits posits at or Crust	gery		B9 - Wate B13 - Aqu B15 - Mar C1 - Hydr C3 - Oxidi C4 - Prese	atic Fauna I Deposits ogen Sulficited Rhizo ence of Re ent Iron Re Muck Surf	de Odor spheres on Living Roots educed Iron duction in Tilled Soils face			B6 - Surface Soil B10 - Drainage P: B16 - Moss Trim I C2 - Dry-Season I C8 - Crayfish Burn C9 - Saturation Vi D1 - Stunted or Si D2 - Geomorphic D3 - Shallow Aqui	atterns Lines Water Table rows isible on Aerial Imagery tressed Plants Position tiard aphic Relief
Field Observation Surface Water Water Table Pr Saturation Pres Describe Record	Present? resent? sent?	☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No eam gauge, monitorir	Depth: Depth: Depth: ng well, aeri		(in.) (in.) (in.)	inspectio	ns), if available:	Wetland Hyd	drology Pr	esent?	Yes 🗵 No
Remarks:		0 0 7	,		7.1		,,				
SOILS		0 5 11 361	200/								
Map Unit Name		Canfield silt loam, 2			-t \ (T 0 (Daniel Da	=Depletion, RM=Reduced Matrix, CS=Cov		Leastless DL Desc	Links M. Marris	
Top	Bottom	the depth needed to document the indi	cator or confirm the	Matrix	ators.) (Type: C=C	Concentration, D		edox Features		Lining, M=Matrix)	Texture
Depth	Depth	Horizon	Color (%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	8	1	10YR	4/2	80						clay loam
0	8	1	10YR	6/4	20						clay loam
8	12	2	10YR	5/4	90						clay loam
8	12	2	10YR	6/6	10						clay loam
										1	
											*
								+		†	
NRCS Hydric	Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroga A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Strippec	adicators (check he pipedon sistic en Sulfide d Layers ed Below Dark Surface Jark Surface Muck Mineral Sleyed Matrix Ledox		 ors are r		alue Belor Dark Surfan Ork Surfan Ork Mucky I Ny Gleyed Seted Matrix Ork Sueted Dark	w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Wineral (LRR K, L) Matrix (rface Surface	Indicator Indicators	s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm M F12 - Iron-N F12 - Iron-N F12 - Red F TA6 - Mesic TF12 - Very Other (Expl.) of hydrophytic veget		49B) K, L, R) LRR K, L, R) (LRR K, L, R) 6 (LRR K, L, R) S (MLRA 149B) 45, 149B)
NRCS Hydric	Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy G S5 - Sandy F S6 - Strippec S7 - Dark Su	andicators (check he pipedon sistic pen Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Ledox I Matrix		ors are r	 	alue Belor Dark Surfan Ork Surfan Ork Mucky I Ny Gleyed Seted Matrix Ork Sueted Dark	w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Wineral (LRR K, L) Matrix (rface Surface	Indicator	s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-N F19 - Piedm F21 - Red F TA6 - Mesic TF12 - Very Other (Expl.) of hydrophytic veget	matic Soils 1 Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, M) uue Below Surface (LRR K, L) anganese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1 Shallow Dark Surf ain in Remarks)	49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (MLRA 149B) 45, 149B) aCCe must be present, unless
NRCS Hydric	Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroga A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Strippec	andicators (check he pipedon sistic pen Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Ledox I Matrix		ors are r	 	alue Belor Dark Surfan Ork Surfan Ork Mucky I Ny Gleyed Seted Matrix Ork Sueted Dark	w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Wineral (LRR K, L) Matrix (rface Surface	Indicator Indicators	s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-N F19 - Piedm F21 - Red F TA6 - Mesic TF12 - Very Other (Expl.) of hydrophytic veget	matic Soils 1 Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, M) uue Below Surface (LRR K, L) anganese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1 Shallow Dark Surf ain in Remarks)	49B) K, L, R) LRR K, L, R) (LRR K, L) 6 (LRR K, L, R) S (MLRA 149B) 45, 149B)



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Sample Point: SP27 Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Wetland ID: Wetland 13 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant 2. Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) 3. 4 Total Number of Dominant Species Across All Strata: 2 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B) 7 8. Prevalence Index Worksheet 9 Total % Cover of: Multiply by: 10. _ x 1 = OBL spp. FACW spp. ____ Total Cover = 0 x 2 = FAC spp. 0 x 3 = 100 FACU spp. _ x 4 = Sapling/Shrub Stratum (Plot size: 5 meter radius) Rosa multiflora 10 Υ FACU x 5 = UPL spp. 0 0 2. 100 ____(A) 400 ____(B) 3. Total 4. 5. Prevalence Index = B/A = 4.000 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation ☐ Yes 10. ✓ No Dominance Test is > 50% Total Cover = 10 ☐ Yes ✓ No Prevalence Index is ≤ 3.0 * ☐ Yes ✓ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ✓ No Problem Hydrophytic Vegetation (Explain) * Symphyotrichum ericoides **FACU** * Indicators of hydric soil and wetland hydrology must be 75 Υ 2. **FACU** Poa pratensis present, unless disturbed or problematic. 3. 4. **Definitions of Vegetation Strata:** 5. ----6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 90 Woody Vine Stratum (Plot size: 10 meter radius) --2. 3. Hydrophytic Vegetation Present ☐ Yes ☑ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**

D.2 ORAM DATA FORMS

Background Information

Name:
Name: Kate Bomar
Date: 4/4/2022
Stantec Consulting Services, Inc.
Address: 11687 Lebanon Rd. Ciacinnati, OH 45241
Phone Number:
513-842-8207 e-mail address:
Kate. bomara stantec. com
Name of Wetland: Wetland
Vegetation Communit(ies): PEM
HGM Class(es):
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
Faircrost street street
Prairie collège street Project Rous
Brinker Street
Lat/Long or UTM Coordinate 40.752208N, -81.414114°W
USGS Quad Name Canton West
County Stark County
Township TION R8W
Section and Subsection
Hydrologic Unit Code OSO40001 0 SDS
Site Visit 4 4 2022.
National Wetland Inventory Map
Ohio Wetland Inventory Map
Soil Survey Silt loam 0-270 Sloves
Delineation reportmap See Ecological Resources Inventory Post
1 COLOGICAL STREET

Wetland Size (acres, hectares	Vetland 1	
	0.01000	60/1
Sketch: Include north arrow,	elationship with other surface waters, vegetation zones, et	Maintained Journ
Comments, Narrative Discus	FAIVARCS FAIVARCS F	Street Su
Final score :		ategory:

Wetland 1

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.		
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.		
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	/	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.		

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Wetland 1

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	~
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	Go to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3	Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland Go to Question 4	NO Go to Question 4
4	Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	NO Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	NO Go to Question 6
5	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	NO Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	NO Go to Question 8a
Ва	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	NO Go to Question 8I

			-
8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES Go to Question 9b	Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 9c
•		Go to Question 10	
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES Wetland is a Category 3 wetland Go to Question 10	NO Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10	NO Go to Question 10
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in	YES YES	(NO)
0	Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Wetland is a Category 3 wetland. Go to Question 11	Go to Question 11
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	Complete Quantitative Rating

WeHand [

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palusiris	Carex cryptolepis	Culumagrostis vanadensi:
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var capillacea	Carex lasiocarpa	Calamogrostis stricto
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherodes
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumi
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellita
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwelli
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrewsi
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum	~ .	Helianthus grosseserratu.
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicate
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflore
77 0	Parnassia glauca	Schechzeria palustris		Lythrum alatun
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianum
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceur
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutan
	Salix candida	Vaccinium oxycoccos		Spartina pectinate
	Salix myricoides	Woodwardia virginica		Solidago riddelli
	Salix serissima	Xyris difformis		1000
	Solidago ohioensis	- 9		
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.



WIDE. Buffers average 50m (164Rt) or more around wetland perimeter (7) MARROW. Buffers average 25m to <50m (82 to 164ft) around wetland perimeter (4) NARROW. Buffers average 10m to <50m (32 to 164ft) around wetland perimeter (9) NARROW. Buffers average 10m to <50m (32 to 164ft) around wetland perimeter (10) Very NARROW. Buffers average <10m (<32t) around wetland perimeter (10) Very LOW. 20m (32 to 452ft) around wetland perimeter (10) Very LOW. 20m (32 to 452ft) around wetland perimeter (10) Very LOW. 20m (32 to 452ft) around wetland perimeter (10) Very LOW. 20m (32 to 452ft) around wetland perimeter (10) Very LOW. 20m (32 to 452ft) around wetland perimeter (10) Very LOW. 20m (32 to 452ft) around wetland perimeter (10) Very LOW. 20m (32 to 452ft) around wetland perimeter (10) Very LOW. 20m (32 to 452ft) around wetland perimeter (10) Very LOW. 20m (32 to 452ft) around wetland perimeter (10) Very LOW. 20m (32 to 452ft) around wetland perimeter (10) Very Low. 20m (32 to 452ft) around wetland perimeter (10) Very Low. 20m (32 to 452ft) around wetland perimeter (10) Very Low. 20m (32 to 452ft) around wetland perimeter (10) Very Low. 20m (32 to 452ft) around wetland perimeter (10) Very Low. 20m (32 to 452ft) around wetland perimeter (10) Very Low. 20m (32 to 452ft) around wetland perimeter (10) Very Low. 20m (10) V	Site:	We	tland 1	Rater(s): KBIND	Date:
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3 to <10 acres (1/2 to <1,2ha) (3 pts)					
0.3 to <3 acres (0.12 to <12 ha) (2pts)					
Metric 2. Upland buffers and surrounding land use. Metric 2. Upland buffers and surrounding land use.			0.3 to <3 acres (0.	12 to <1.2ha) (2pts)	
Metric 2. Upland buffers and surrounding land use. Metric 2. Upland buffers and surrounding land use.					
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Perennial surface water (lake or stream) (5) 3d, Duration inundation/saturation. Score one or dbl cheild standard depth. Select only one and assign score. Semi-to permanently inundated/saturated (4) Seasonally inundated/saturated (3) Regulary inundated/saturated (3) Seasonally inundated (2) Seasonally saturated in upper 30cm (12in) (1)		1		ent surface water (3)	Part of wetland/upland (e.g. forest), complex (1)
>0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) Seasonally inundated/saturated (3) Seasonally saturated in upper 30cm (12in) (1) 3e. Modifications to natural hydrologic regime. Score one or double check and average. None or none apparent (12) Recovering (3) Recent or no recovery (1) Metric 4. Habitat Alteration and Development. Metric 4. Habitat Alteration and Development. Substrate disturbance. Score one or double check and average. None or none apparent (4) Recovered (3) Recovering (2) Recovering (2) Recovering (2) Recovering (2) Recovering (3) Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or double check and average. None or none apparent (9) Recovered (6) Recovering (3) Recovering (4) Recovering (5) Recovering (6) Recovering (7) Recovering (7) Recovering (8) Recovering (9) Recovering (9			Perennial surface	water (lake or stream) (5) 3d	Duration inundation/saturation Score one or dbl check
O,4 to 0.7m (15.7 to 27.6in) (2) Seasonally inundated (2) Seasonally saturated in upper 30cm (12in) (1)					
None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1) Metric 4. Habitat Alteration and Development. **Augustate disturbance.** **Substrate disturbance.** **None or none apparent (4) Recovered (3) Recovered (3) Recovered (6) Good (5) Moderately good (4) Fair (3) Poor (1) **4c.** **Habitat alteration.** **Substrate disturbance.** **Substrate disturbance.** **Substrate disturbance.** **Substrate disturbance.** **Substrate disturbance.** **Substrate disturbance.** **None or none apparent (9) Recovered (6) Recov		- 1	0.4 to 0.7m (15.7 t	0 27.011) (2)	Seasonally inundated (2)
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Recovering (3) Recent or no recovery (1)					
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Metric 4. Habitat Alteration and Development. 4a. Substrate disturbance. Score one or double check and average. None or none apparent (4) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one and assign score. Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or double check and average. None or none apparent (9) Recovering (3) Recent or no recovery (1)					
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None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)				one or double check and average.	
Recovered (6) Recovering (3) Recent or no recovery (1) Recovered (6) Recovering (3) Recovering (3) Recovering (3) Recovering (3) Recovering (4) Recovering (4) Recovering (5) Recovering (6) Recovering (7)			None or none appa		
Recent or no recovery (1) clearcutting sedimentation dredging			Recovered (6)	mowing	
	1	12			dredging farming
toxic pollutants nutrient enrichment		10			
subtotal this page set revised 1 February 2001 jjm					



Site:	Wetle	and l	Rater(s)	K.Bor	Mark	M. Den Llex	Date:	41.	1/21	02 %
0	12 subtotal first pa	Metric 5. Spe		S.				,		
max 10 pts.	subjotal	Lake Erie coasta Lake Plain Sand Relict Wet Prairi Known occurren Significant migra	st (10) wetland (5) al/tributary wetland-unres al/tributary wetland-restri I Prairies (Oak Openings	icted hydrolo s) (10) ned or endal l habitat or u	ogy (5) ngered s usage (1	species (10) 0)				
	111	Metric 6. Plan					rotopogr	apl	ıy.	
max 20 pts.	subtotal	∫ 6a. Wetland Vegetation C	ommunities V	egetation (Commun	nity Cover Scale				
		Score all present using 0 to	-	0		t or comprises <0.1h	(0.2471 acres)	conf	auous	area
		Aquatic bed	_	1		nt and either comprise				GICU
		(Emergent				tation and is of mode				
	0	Shrub			100000000000000000000000000000000000000	ficant part but is of lo				
		Forest	-	2		nt and either comprise		rt of v	vetlanc	d'e
		Mudflats		_		tation and is of mode				
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			-	2		and is of high quality	16 sent need		- C (- 4)	
		Other		3		nt and comprises sign		iore,	of wetl	land's
		6b. horizontal (plan view)	Interspersion.		vege	tation and is of high	quality			
		Select only one.		200		C 1007 - 705 7 50	***			
		High (5)				n of Vegetation Qua				
	0	Moderately high	(4)	low		op diversity and/or pro		onna	tive or	•
		Moderate (3)			distu	rbance tolerant nativ	e species			
		Moderately low	(2)	mod	Native	spp are dominant co	mponent of the	vege	ation,	
		Low (1)			altho	ough nonnative and/o	r disturbance tol	erant	native	spp
		None (0)			can a	also be present, and	species diversity	/ mod	lerate t	to
		6c. Coverage of invasive	plants. Refer		mode	erately high, but gene	erally w/o preser	ice of	rare	
		to Table 1 ORAM long forr	n for list. Add		threa	atened or endangered	d spp			
		or deduct points for covera	age =	hìgh	A pred	ominance of native s	pecies, with non	nativ	e spp	
		Extensive >75%	cover (-5)		and/	or disturbance tolerar	nt native spp abs	ent o	or virtua	ally
		Moderate 25-75	% cover (-3)			ent, and high spp dive				
	1	Sparse 5-25% c				resence of rare, thre				,
		Nearly absent <			-			-		
		Absent (1)		fudflat and	Open W	later Class Quality				
		6d. Microtopography.		0	<u> </u>	t <0.1ha (0.247 acre	(2			
		Score all present using 0 to	o 3 scale	1		1 to <1ha (0.247 to 2				
		Vegetated humr		2		ate 1 to <4ha (2.47 t				
			lebris >15cm (6in)	3		ha (9.88 acres) or me				
	į		25cm (10in) dbh	-	1. agn 4	(0.00 00,00) 01 1110				
		Amphibian bree	, ,	Nicrotopogr	aphy Co	over Scale				
			ang pools	0	Absen			_	_	
			G-	1		t nt very small amounts	or if more som	mor		
				- 3		nt very small amount arginal quality	or il more com	поп		
			5-					ula o e f	-	
				2		nt in moderate amour				
			54			ity or in small amount		nty	_	
				-4	IPPOSOF	DE LO MAGAZATA AF AFA	DIOF OPPOSITOR			
	7			3		nt in moderate or greated or greated of highest quality	ater amounts			

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO)	If yes, Category 3.
	Question 2. Threatened or Endangered	YES (NO)	If yes, Category 3.
	Species Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (10)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
	Metric 2. Buffers and surrounding land use		
	Metric 3. Hydrology	M	
	Metric 4. Habitat	4	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-1	
	TOTAL SCORE	11	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one	(3)	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	(NO)	Is quantitative rating score less than the Category 2 scoring threshold (excluding gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(NO)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(NO)	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (including any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO)	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, loca or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Choose one Category 1 Category 2 Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Kate Bomar
Date: 4/5/2022
Stantec Consulting Services, Inc.
Address: 11687 Lebanon Rd. Cincinnati, OH 45241
Phone Number: 513-842-9207
e-mail address: Kate. bomar a stantec. com
Name of Wetland 2
Vegetation Communit(ies):
HGM Class(es): Slope
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
Torrey Station
Fairerest street
Prairie collège street Project Rous
N
Fohlstreet
werland 2 2 ~ 0.14 miles
Brinkerstreet
Lat/Long or UTM Coordinate 40.7147480N 81.409374°W
USGS Quad Name Bolivar
Stark County
Township 79N R8W
Section and Subsection S 5
Hydrologic Unit Code 05040010601
Site Visit 4 5 202.2.
National Wetland Inventory Map IN IA
Ohio Wetland Inventory Map V
Soil Survey Latham silt loam, 6-12% slopes, moderately evoded
See Ecological Resources Inventory Report

retland Size (acres, hectares): O B acres Well Well	
fetland Size (acres, hectares): 0.08 acres within Row	
ketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.	
A slope of ord field slope	N
(pow	, \
Comments, Narrative Discussion, Justification of Category Changes:	
Final score : 29 Category:	1

Wetland I

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.		
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	/	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	/	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Wetland 2

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	0
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	Go to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3	Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland Go to Question 4	Go to Question 4
4	Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	NO Go to Question 8a
8a	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	Go to Question 8b

8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES Go to Question 9b	Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10	NO Go to Question 9c
9c	Are Lake Erie water levels the wetland's primary hydrological influence,	YES	NO
	i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	Go to Question 9d	Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES Wetland is a Category 3 wetland Go to Question 10	NO Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance	YES	NO
	tolerant native plant species within its vegetation communities?	Wetland should be evaluated for possible Category 3 status	Go to Question 10
		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES Wetland is a Category 3 wetland. Go to Question 11	Go to Question 11
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	Complete Quantitative Rating

WeHand 2

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensi
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricte
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherode
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumi
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellit
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwell
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrews
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum		Helianthus grosseserratu
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicat
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflor
,,	Parnassia glauca	Schechzeria palustris		Lythrum alatu
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianu
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceu
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutai
	Salix candida	Vaccinium oxycoccos		Spartina pectina
	Salix myricoides	Woodwardia virginica		Solidago riddel.
	Salix serissima	Xyris difformis		U
	Solidago ohioensis	33		
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

Site:	Wetland 7	Rater(s):	K. Bomar/M. Do	enzler D	ate: 4/5/2022
1	Metric 1. Wet	land Area (size)			
max 6 pts.	10 to <25 acres 3 to <10 acres (0.3 to <3 acres	2ha) (6 pts) (10.1 to <20.2ha) (5 pts) (4 to <10.1ha) (4 pts) 1.2 to <4ha) (3 pts) (0.12 to <1.2ha) (2pts) s (0.04 to <0.12ha) (1 pt)	0.08 acres lex	tends outsid	ie project aureau
6	Metric 2. Upla	and buffers and	surrounding la	and use.	
max 14 pts.	WIDE. Buffers MEDIUM. Buffe NARROW. Buf VERY NARROW 2b. Intensity of surroundir VERY LOW. 2r LOW. Old field MODERATELY	ffer width. Select only one a average 50m (164ft) or more as average 25m to <50m (85 fers average 25m to <25m (85 fers average 10m to <25m (97 fers average 10m	around wetland perimeter of to <164ft) around wetland 32ft to <82ft) around wetland 32ft) around wetland 32ft) around wetland perimelouble check and average irie, savannah, wildlife areaing second growth forest. (5 pasture, park, conservation	(7) perimeter (4) d perimeter (1) ster (0) , etc. (7)) tillage, new fallow fi	eld. (3)
12	Metric 3. Hyd	rology.			
max 30 pts	3c. Maximum water depth >0.7 (27.6in) (3) 0.4 to 0.7m (15. <0.4m (<15.7in)	water (5) ter (3) wittent surface water (3) we water (lake or stream) (5) water (lake or stream) (5) Select only one and assig	3d. Duration Score.	art of wetland/uplan art of riparian or upla i inundation/saturati emi- to permanently egularly inundated/s easonally inundated easonally saturated	1) and other human use (1) d (e.g. forest), complex (1) and corridor (1) ion. Score one or dbl check. r inundated/saturated (4) saturated (3)
	None or none all Recovered (7) Recovering (3) Recent or no rec	ditch tile	fill ro	oint source (nonstor ling/grading ad bed/RR track edging her_	mwater)
Free	Metric 4. Hab	itat Alteration a	nd Developme	nt.	
max 20 pts	None or none approximately Recovered (3) Recovering (2) Recent or no recent approximately Recent (7) Very good (6) Good (5) Moderately good Fair (3) Poor to fair (2) Poor (1)	covery (1) Select only one and assign	score.		
	4c. Habitat alteration. Scornone appropriate (6)	parent (9) Check all distu	rbances observed	rub/popling rome:	
	Recovered (6) Recovering (3) Recent or no reconstitution this page	selective	ng he cutting dr ebris removal fai	rub/sapling remova erbaceous/aquatic b dimentation edging ming trient enrichment	

Site:	Wetland 2	Rater(s)	: K.Ban	nar / m. Dentler	Date: 4/5/2022
59	ubtotal first page Metric 5. Sp	pecial Wetlands	S.		
may 10 etc.		-d seers as indicated			
max 10 pts;	Lake Erie co Lake Erie co Lake Plain S Relict Wet F Known occu	forest (10) sted wetland (5) pastal/tributary wetland-unre pastal/tributary wetland-restr Sand Prairies (Oak Opening Prairies (10) urrence state/federal threate	ricted hydro s) (10) ned or enda	logy (5)	
		nigratory songbird/water fow Wetland. See Question 1 Q			
3				erspersion, micr	otopography.
max 20 pts	subtotal 6a. Wetland Vegetation	on Communities.	/egetation	Community Cover Scale	
	Score all present using	_	0		(0.2471 acres) contiguous area
	Aquatic bed Emergent Shrub		1	Present and either comprise vegetation and is of moder significant part but is of lov	ate quality, or comprises a
	Forest Mudflats Open water		2		s significant part of wetland's ate quality or comprises a small
	Other6b. horizontal (plan vi		3		ficant part, or more, of wetland's uality
	Select only one.		Norrativa D	escription of Vegetation Qua	Déu.
	High (5) Moderately		low	Low spp diversity and/or pre	
	Moderate (3	- ' '	1011	disturbance tolerant native	
	Moderately Low (1) None (0) 6c. Coverage of invasto Table 1 ORAM long	sive plants. Refer	mod	•	disturbance tolerant native spp pecies diversity moderate to rally w/o presence of rare
	or deduct points for co	overage	high	A predominance of native sp	
	Moderate 2	75% cover (-5) 5-75% cover (-3) 5% cover (-1)			t native spp absent or virtually sity and often, but not always, tened, or endangered spp
		ent <5% cover (0)		1 O 111 4 Ol O 124 .	
	Absent (1) 6d. Microtopography		Mudflat and	Open Water Class Quality Absent <0.1ha (0.247 acres	1
	Score all present usin	g 0 to 3 scale	1	Low 0.1 to <1ha (0.247 to 2.	
		nummucks/tussucks	2	Moderate 1 to <4ha (2.47 to	
	I. I	ody debris >15cm (6in)	3	High 4ha (9.88 acres) or mo	re
		ead >25cm (10in) dbh breeding pools	Microtopoo	raphy Cover Scale	
			0	Absent	
			1	Present very small amounts of marginal quality	
			2	Present in moderate amoun quality or in small amounts	
0	1		3	Present in moderate or great and of highest quality	ter amounts

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES (NO)	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size		
ŭ	Metric 2. Buffers and surrounding land use	6	
	Metric 3. Hydrology	12	
	Metric 4. Habitat	7	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	3	
	TOTAL SCORE	29	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one	<u></u>	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	(NO)	Is quantitative rating score less than the Category 2 scoring threshold (excluding gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(NO)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(NO)	Is quantitative rating score greater than the Category 2 scoring threshold (including any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Vetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO)	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, loca or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons of information for this determination should be provided.

	Fin	al Category	
Choose one	Category 1	Category 2	Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Kate Bomar	
Date: 4/5/2022	
Stantec Consulting Services, Inc.	
Address: 11487 Lebanon Rd. Cincinnati, OH 45241	
Phone Number: 513-842-8207	
e-mail address: Katc. bomara stantec. com	
Name of Wetland:	
Vegetation Communit(ies): PEM	
HGM Class(es): depressional, riverine	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
Torrey Station	
Faircrest street	
Prairie college street KProject Roul	
Fohlstreet	1
Zwetland3 Zno.37 miles	1
Brinker Street	
-) - Dimical Brief	
Lat/Long or UTM Coordinate	
USGS Quad Name P 118 413°N -81.410031°W	
County Stark County	
Township T9N 28W	
Section and Subsection S5	
Hydrologic Unit Code 050400010407	
Site Visit 4/5/2022.	
National Wetland Inventory Map	
Ohio Wetland Inventory Map	
Soil Survey Seloning 5:11 loam, D-2% Slopes	
Delineation report/map See Ecological Resources Inventory Report	
) 190	

Name of Wetland:	Fland 3
Wetland Size (acres, hectares):	olisacres within ROW
Sketch: Include north arrow, relatio	nship with other surface waters, vegetation zones, etc.
Comments, Narrative Discussion,	Sheam 2
Final score : 33	Category:

Wetland 3

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.		
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.		
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.		
Step 5	in all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.		

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	0
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	Go to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3	Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland Go to Question 4	Go to Question 4
4	Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	Go to Question 7
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	NO Go to Question 8a
8a	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	Go to Question 8b

			0
8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at	Go to Question 9a	(NO)
Ja	an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	Go to Question 9b	Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 9c
9c	And I also Cris water levels the water de private budget in the	Go to Question 10	110
90	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES Wetland is a Category 3 wetland Go to Question 10	NO Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10	NO Go to Question 10
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES Wetland is a Category 3 wetland. Go to Question 11	Go to Question 11
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	Complete Quantitative Rating

WeHand 3

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricto
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherodes
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumi
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellita
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwelli
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrewsi
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum		Helianthus grosseserratu
Typha angustifolia	Gentianopsis spp.	Larix laricina		 Liatris spicate
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflor
	Parnassia glauca	Schechzeria palustris		Lythrum alatur
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianun
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceur
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutan
	* Salix candida	Vaccinium oxycoccos		Spartina pectinat
	Salix myricoides	Woodwardia virginica		Solidago riddell
	Salix serissima	Xyris difformis		
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

Site:	Wella	ind3		R	ater(s): }	C. Bomar	mi	Denzler	Date:	15	22
	/ м	letric 1	. Wetlar	nd Are	a (size)					1	
max 6 pts	subtotal Se	>50 25 to 10 to 3 to 0.3 t	c class and assi acres (>20.2ha) <50 acres (10. <25 acres (4 to <10 acres (1.2 to <3 acres (0.12 o <0.3 acres (0.04ha)	1 (6 pts) 1 to <20.2i 5 <10.1ha) 5 <4ha) (3 2 to <1.2ha 04 to <0.12	(4 pts) pts)) (2pts)	0,15 0	core S				
9	10 M	etric 2	. Upland	d buffe	ers and	surround	ding	land use.			
max 14 pts.	4	WID MED NAR VER Intensity o VER LOW MOD	E. Buffers aver. IUM. Buffers a ROW. Buffers Y NARROW. B surrounding la Y LOW. 2nd gr Old field (>10 ERATELY HIG	age 50m (1 verage 25r average 10 uffers aver nd use. S owth or old years), sh H. Reside	164ft) or more on to <50m (82 om to <25m (82 om to <25m (92 om to <10m (93 om to <10m (94 om to <10m (94) om to <10m	32ft) around wetl louble check and irie, savannah, w ng second growt pasture, park, col	perimete nd wetlar und wetland and perii average rildlife are th forest. nservation	er (7) and perimeter (4) and perimeter (1) neter (0) e ea, etc. (7) (5) n tillage, new fallo	ow field. (3)		
12	3-M		. Hydrol		pasture, row	cropping, mining,	, constru	ction. (1)			
max 30 pts.	subtotal 3a.	Sources of High Other Prec Seas Pere Maximum > 0.7 0.4 tr	Water. Score pH groundwater (pitation (1) onal/intermitter nnial surface water depth. Sc (27.6in) (3) o 0.7m (15.7 to n (<15.7in) (1)	all that app ir (5) 3) at surface v ater (lake o elect only o 27,6in) (2)	vater (3) r stream) (5) ne and assig	30	d. Durati	ectivity. Score all 100 year floodpla Between stream/ Part of wetland/u Part of riparian or on inundation/sat Semi- to permana Regularly inunda Seasonally inund Seasonally satura average.	in (1) lake and othe pland (e.g. for upland corri- uration. Score ently inundate ted/saturated ated (2)	orest), dor (1 re one ed/sat I (3)	complex (1)) or dbl check. urated (4)
	3	Reco	or none appar vered (7) vering (3) nt or no recove	IE	check all distuditch tile dike weir stormwa	rbances observe ter input	ed ×	point source (non filling/grading road bed/RR trac dredging other_			
9	31 M	letric 4	. Habita	t Alte	ration a	nd Devel	opm	ent.			1
max 20 pts.	3 4b.	None Recc Recc Recc Habilat de: Exce Very Good Mode Fair Poor Poor Habilat alte	erately good (4) 3) to fair (2) (1) eration. Score o	ent (4) ry (1) ect only on	e and assign ole check and	score.					
Su	31	Reco	or none appare vered (6) vering (3) nt or no recove	II-	mowing grazing clearcutt selective	cutting ebris removal		shrub/sapling ren herbaceous/aqua sedimentation dredging farming nutrient enrichme	tic bed remo	val	

last revised 1 February 2001 jjm

Site:	We	Hand 3	Rater(s):	K.Bo	mar. M. Denzler	Date: 4/5/2017
s	3 ublotal first pa	7	-138/-41			U
0	3	Metric 5. Speci	iai vvetiands.	•		
x 10 pts.	subtotal	Check all that apply and scor	re as indicated.			
		Bog (10)				
		Fen (10)				
		Old growth forest (•			
		Mature forested w	elland (5) ributary wetland-unrest	ricted hyd	rology (10)	
			ributary wetland-restric	_		
		Lake Plain Sand P	rairies (Oak Openings)	(10)		
		Relict Wet Prairies	. ,			
			state/federal threatene			
			ry songbird/water fowl l nd. See Question 1 Qu			
_	1					tonogranhy
7	33	wetric 6. Plant	communitie	s, int	erspersion, micro	otopograpny.
x 20 pts.	subtotal	Co Modland Manadation Com		astation	Community Cover Scale	
A au ma.	SUNCH	6a. Wetland Vegetation Cor Score all present using 0 to 3		0	Absent or comprises <0 that	(0.2471 acres) contiguous are
		Aquatic bed		1	Present and either comprises	
		Emergent			vegetation and is of modera	ate quality, or comprises a
	1	Shrub	-		significant part but is of low	
		Forest		2	Present and either comprises	
		Mudflats			part and is of high quality	ate quality or comprises a sma
		Open water Other	(3 ²	3		icant part, or more, of wetland
		6b. horizontal (plan view) In	terspersion.		vegetation and is of high qu	
		Select only one.				
		High (5)			escription of Vegetation Qual	
		Moderately high(4)	low	Low spp diversity and/or pred disturbance tolerant native	
	1	Moderate (3) Moderately low (2)	1,00	mod	Native spp are dominant con	
		X Low (1)				disturbance tolerant native spr
		None (0)				pecies diversity moderate to
		6c. Coverage of invasive pla			moderately high, but gener	
		to Table 1 ORAM long form	_	high	A predominance of native sp	
		or deduct points for coverage Extensive >75% c		high		native spp absent or virtually
	1	Moderate 25-75%				sity and often, but not always,
	-1	Sparse 5-25% cov	/er (-1)		the presence of rare, threat	tened, or endangered spp
		Nearly absent <59	* *			
		Absent (1)	M		Open Water Class Quality Absent <0.1ha (0.247 acres)	
		6d. Microtopography. Score all present using 0 to	3 scale	0	Low 0.1 to <1ha (0.247 to 2.4	
		Vegetated hummi	_	2	Moderate 1 to <4ha (2.47 to	
		Coarse woody del		3	High 4ha (9.88 acres) or mor	
		Standing dead >2		en dilener		
		Amphibian breedi	ng pools Mi		raphy Cover Scale	
				0	Absent Present very small amounts	or if more common
				-	of marginal quality	or a more common
			-	2	Present in moderate amount	s, but not of highest
					quality or in small amounts	
	-		- T	3	Present in moderate or great	er amounts
22	1				and of highest quality	

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES (NO)	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size		
	Metric 2. Buffers and surrounding land use	q	
	Metric 3. Hydrology	12	
	Metric 4. Habitat	o	I Production
	Metric 5. Special Wetland Communities	0	Mark Control
	Metric 6. Plant communities, interspersion, microtopography	7	
	TOTAL SCORE	33	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one	(A)	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	(NO)	Is quantitative rating score less than the Category 2 scoring threshold (excluding gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(((((((((((((Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(NO)	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (including any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, loca or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

	Fina	al Category	
Choose one	Category 1	Category 2	Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Kate Bomar
Date: 4/5/2022
Stantec Consulting Services, Inc.
Address: 11687 Lebanon Rd. Cincinnati, OH 45241
Phone Number: 513-842-9207
e-mail address: Katc. bomara stantec. com
Name of Wetland: Wetland +
Vegetation Communit(ies):
HGM Class(es):
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
Torrey Startier
Torrey steamer
a constant
Faircrest street
Prairie collège street
Prairie Project Roul
N
Fohlstreet
exectland of
westland to miles
Brinkel Street
Lat/Long or UTM Coordinate 40, 719491°N, -81, 410138°N
LISCS Quad Nama
County Co. 2
Stark County
Township TON PSW
Section and Subsection
Hydrologic Unit Code 05040010407
Site Visit 4 5 2022.
National Wetland Inventory Map N A
Ohio Wetland Inventory Map
Soil Survey
Sebring sill loam 0-2% slopes
See Ecological Resources Inventory Report

Name of Wetland: Wetland	1 4
Wetland Size (acres, hectares): Sketch: Include north arrow, relationship with o	13 acres within ROW
Sketch: Include north arrow, relationship with o	other surface waters, vegetation zones, etc.
ROSTUVO	Pa Stwee
N	
Stream 2	Early Successional Early Successional Deciduous Prest
Comments, Narrative Discussion, Justification	of Category Changes:
Final score: 34	Category: 2

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.		
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.		
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	/	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		/
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	/	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	0
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	Go to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3	Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland Go to Question 4	NO Go to Question 4
4	Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	NO Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	NO Go to Question 8a
8a	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	NO Go to Question 8b

			~
8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of	YES	(NO)
	deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES Go to Question 9b	NO Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 9c
)c	Are Lake Erie water levels the wetland's primary hydrological influence,	Go to Question 10 YES	NO
	i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	Go to Question 9d	Go to Question 10
d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of	YES Wetland is a Category 3 wetland. Go to Question 11	Go to Question 11
	Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.		0
1	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES Wetland should be evaluated for possible Category 3 status Complete Quantitative	Complete Quantitative Rating
	Montgomery, van vvert etc.).	Rating	2

WeHand 4

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricta
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherodes
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumii
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellita
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwelli
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrewsi
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum		Helianthus grosseserratu
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicato
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflore
0	Parnassia glauca	Schechzeria palustris		Lythrum alatun
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianun
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceun
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutan
	Salix candida	Vaccinium oxycoccos		Spartina pectinate
	Salix myricoides	Woodwardia virginica		Solidago riddelli
	Salix serissima	Xyris difformis		ALTO TAKE OF THE PARTY OF THE P
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

KBMD WIO3

Site:	Wet	land 4		Rater(s):	4. Bomar	M. Denzier	Date: 4	5 2022
		Metric	c 1. Wetland	Area (size).			
max 6 pts.	subtotal		size class and assign s >50 acres (>20.2ha) (6 p 25 to <50 acres (10.1 to 10 to <25 acres (4 to <1) 3 to <10 acres (1.2 to <4 0.3 to <3 acres (0.12 to <0.1 to <0.3 acres (0.04 to <0.1 acres (0.04 to <0.1 acres (0.04ha) (0 p	ots) <20.2ha) (5 pts) 0.1ha) (4 pts) (4 pts) (5 pts) (1.2ha) (2pts) (6 color) (7 pt)	0,13			
5	6	Metric	2. Upland b	ouffers and	surround	ing land us	e.	
max 14 pts.	subtotal	2b. Intens	ate average buffer width WIDE. Buffers average MEDIUM. Buffers avera VERY NARROW. Buffers averally of surrounding land uvery LOW. 2nd growth LOW. Old field (>10 year MODERATELY HIGH.	50m (164ft) or morninge 25m to <50m (8 age 10m to <25m rs average <10m (< see Select one or or older forest, prairs), shrub land, you	e around wetland p 2 to <164ft) around (32ft to <82ft) arour (32ft) around wetlar double check and a airie, savannah, wil ung second growth	erimeter (7) I wetland perimeter (4 nd wetland perimeter nd perimeter (0) average. dlife area, etc. (7) forest. (5)	(1)	
	·	, 🖂	HIGH. Urban, industrial,	, open pasture, row			Tailow field. (3)	
15	21	Ivietric	3. Hydrolog	3 у.				
max 30 pts	subtotal	3c. Maxim	es of Water. Score all the High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface water depth. Select >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6	nface water (3) (lake or stream) (5) conly one and assig	3d.	Part of wetlan Part of riparial Duration inundation/ Semi- to perm	dplain (1) am/lake and other hu d/upland (e.g. forest) n or upland corridor (saturation. Score on nanently inundated/sa ndated/saturated (3)), complex (1) (1) ne or dbl check
			<0.4m (<15.7in) (1) cations to natural hydrol		one or double che	Seasonally sa	aturated in upper 30ci	m (12in) (1)
	2		None or none apparent (Recovered (7) Recovering (3) Recent or no recovery (1	(12) Check all dist ditch tile dike weir		-	nonstormwater) track	
a	20	Metric	c 4. Habitat A	Alteration a	and Develo	pment.		4
max 20 pts.	subtotal 3	X F	rate disturbance. Score None or none apparent (Recovered (3) Recovering (2) Recent or no recovery (1	(4)	-			
	3		It development. Select of Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3)	only one and assigr	score			
		4c. Habita	Poor to fair (2) Poor (1) t alteration. Score one of the score or none apparent (Recovered (6)	(9) Check all dist	d average. urbances observed	shrub/sapling		1
şi	30		Recovering (3) Recent or no recovery (1	selective	e cutting lebris removal	herbaceous/ac sedimentation dredging farming nutrient enrich		
last revised	1 Februa	ary 2001 jjm						

Site:	Nel	land 4	Rater	(s): KIBO	mar m. Denzler	Date: 4 5 207
	30					1. 1
0	30	i	Special Wetlan	ds.		
x 10 pts.	sublotal	Bog (1) Fen (10) Old gro Mature Lake E Lake E Lake P Relict \	ovith forest (10) forested wetland (5) rie coastal/tributary wetland-rie coastal/tributary wetland-rie coastal/tributary wetland-riain Sand Prairies (Oak Open	estricted hydro ings) (10)	logy (5)	
. (1 2.1	Signific Catego	occurrence state/federal thre cant migratory songbird/water bry 1 Wetland See Question	fowl habitat or 1 Qualitative R	usage (10)	otonography
× 20 pts.	34 subtotal				Community Cover Scale	topograpny.
x so bis	Suntotal		etation Communities. using 0 to 3 scale.	vegetation	Absent or comprises <0.1ha (0.2471 perce) contiguous arc-
	1	Aquation Emerg	bed	1	Present and either comprises vegetation and is of modera significant part but is of low	small part of wetland's te quality, or comprises a
		Forest Mudfla Open v		2	Present and either comprises	
			lan view) Interspersion	3	Present and comprises signification and is of high quarter.	
		Select only one. High (5	5)	Narrative D	escription of Vegetation Quali	ly
	1		ately high(4)	low	Low spp diversity and/or pred- disturbance tolerant native s	ominance of nonnative or
		Low (1 None (6c. Coverage of	•	mod	Native spp are dominant compatition and although nonnative and/or of can also be present, and sp moderately high, but general threatened or endangered s	listurbance tolerant native sprecies diversity moderate to ally w/o presence of rare
	1	Modera Sparse	ive >75% cover (-5) ate 25-75% cover (-3) e 5-25% cover (-1)	high		native spp absent or virtually ity and often, but not always,
		Absent	absent <5% cover (0)	Mudflat and	d Open Water Class Quality	
		6d Microtopogra		0	Absent <0.1ha (0.247 acres)	-
			using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.4	7 acres)
		// Vegeta	ated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to	
		Standi	e woody debris >15cm (6in) ng dead >25cm (10in) dbh	- 3 Migrotopoe	High 4ha (9.88 acres) or more graphy Cover Scale	9
		Amphi	bian breeding pools	0	Absent	
				1	Present very small amounts of marginal quality	
				2	Present in moderate amounts quality or in small amounts	

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle	
		answer or	
		insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES (NO)	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES (NO)	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (10)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size		
	Metric 2. Buffers and surrounding land use	5	
	Metric 3. Hydrology	15	
	Metric 4. Habitat	of	1 3 3 70
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	4	
	TOTAL SCORE	34	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one	(A)	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	(NO)	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (excluding gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(NO)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(80)	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (including any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	(NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, loca or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided

oose one	Category 1	Category 2	Category 3
oose one	Category	Oategory 2	outegory o
	1	1	
	\	1	
	1	1	

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Kate Bomar
Date: 4/5/2022
Stantec Consulting Services, Inc.
Address: 11687 Lebanon Rd. Cincinnati, OH 45241
Phone Number: 513-842-8207
e-mail address: Kate. bomara stantec. com
Name of Wetland: Wetland 5
Vegetation Communit(ies):
HGM Class(es): Riverine Depressiona
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
Faircrest street
Prairie collège street & Project Rous
Fahl Street Brinker Street
Lat/Long or UTM Coordinate
USGS Quad Name Bolivar
County Stark County
Township TION 29W
Section and Subsection
Hydrologic Unit Code 050460010(c07
Site Visit 4 5 2022.
National Wetland Inventory Map
Ohio Wetland Inventory Map N A
Soil Survey Latham silt loam 8-15% slopes Delineation report/map See Ecological Resources Inventory Report
See Ecological Resources Inventory Report

Name of Wetland: Wetland 5 Wetland Size (acres, hectares): 0.05 acres within Row Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.	
Wetland Size (acres, hectares): O.OS acres within Row Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.	
Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.	
rew field	
Final score : 28 Category:	

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.		
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	/	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.		
Step 5	In all Instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.		

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	0
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	Go to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3	Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland Go to Question 4	Go to Question 4
4	Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	NO Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	NO Go to Question 8a
8a	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	NO Go to Question 8b

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	(NO)
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this	YES	NO
01	elevation, or along a tributary to Lake Erie that is accessible to fish?	Go to Question 9b	Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erle due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 9c
		Go to Question 10	
9c	Are Lake Erie water levels the wetland's primary hydrological influence,	YES	NO
	i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	Go to Question 9d	Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance	YES	NO
	tolerant native plant species within its vegetation communities?	Wetland should be evaluated for possible Category 3 status	Go to Question 10
		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in	YES	(NO)
	Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	\bigcirc
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES	(NO)
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union	Wetland should be	Complete
	Counties), Sandusky Plains (Wyandot, Crawford, and Marion	evaluated for possible	Quantitative
	Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Category 3 status	Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricta
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherodes
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumi
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellito
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwelli
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrewsi
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum		Helianthus grosseserratu
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicate
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflor
	Parnassia glauca	Schechzeria palustris		Lythrum alatur
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianun
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceur
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutan
	Salix candida	Vaccinium oxycoccos		Spartina pectinat
	Salix myricoides	Woodwardia virginica		Solidago riddell
	Salix serissima	Xyris difformis		-
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

grazing

clearcutting

selective cutting

toxic pollutants

woody debris removal

herbaceous/aquatic bed removal

sedimentation

nutrient enrichment

dredging

farming

last revised 1 February 2001 jjm

Recovering (3)

Recent or no recovery (1)

Site:	We	tland5	Rater(s): Ka	te Bomar Matt Denzler Date: 4/5/2022
	25			
SI	ubtotal first pa	-i		
0	25	Metric 5. Specia	al Wetlands.	
ax 10 pts.	subtotal	Check all that apply and score	e as indicated.	
		Bog (10) Fen (10)		
		Old growth forest (1	10)	
		Mature forested we	\ /	
			ibutary wetland-unrestricted	
			ibutary wetland-restricted hy airies (Oak Openings) (10)	yarology (5)
		Relict Wet Prairies		
		Known occurrence	state/federal threatened or e	endangered species (10)
			y songbird/water fowl habitat	
	1		d. See Question 1 Qualitativ	
2	78	Metric 6. Plant	communities, ii	nterspersion, microtopography.
5	100			0
ax 20 pts.	subtotal	6a Wetland Vegetation Com	2000	ion Community Cover Scale
		Score all present using 0 to 3 Aguatic bed	scale. 0	Absent or comprises <0.1ha (0.2471 acres) contiguous area Present and either comprises small part of wetland's
		Emergent	,	vegetation and is of moderate quality, or comprises a
	L	Shrub		significant part but is of low quality
		Forest	2	Present and either comprises significant part of wetland's
		Mudflats		vegetation and is of moderate quality or comprises a small
		Open water Other	3	part and is of high quality Present and comprises significant part, or more, of wetland's
		6b. horizontal (plan view) Inte		vegetation and is of high quality
		Select only one.	_	
		High (5)		re Description of Vegetation Quality
		Moderately high(4)	low	 Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
	- 7	Moderate (3) Moderately low (2)	mod	
	,	X Low (1)		although nonnative and/or disturbance tolerant native spp
		None (0)		can also be present, and species diversity moderate to
		6c. Coverage of invasive plan		moderately high, but generally w/o presence of rare
		to Table 1 ORAM long form for or deduct points for coverage		threatened or endangered spp A predominance of native species, with nonnative spp
		Extensive >75% co		and/or disturbance tolerant native spp absent or virtually
•		Moderate 25-75% of	` '	absent, and high spp diversity and often, but not always,
		Sparse 5-25% cove	` '	the presence of rare, threatened, or endangered spp
	1	Nearly absent <5%		
		Absent (1) 6d. Microtopography	Mudnat	and Open Water Class Quality Absent <0.1ha (0.247 acres)
		Score all present using 0 to 3		
		Vegetated hummud		
		Coarse woody deb		High 4ha (9.88 acres) or more
		Standing dead >25	,	wayneshy Cayar Saala
		Amphibian breeding	g pools Microto	ppography Cover Scale Absent
			- 1	Present very small amounts or if more common of marginal quality
			2	Present in moderate amounts, but not of highest
			3	quality or in small amounts of highest quality Present in moderate or greater amounts

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (10)	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES (NO)	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES (NO)	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (10)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
	Metric 2. Buffers and surrounding land use	Q	
	Metric 3. Hydrology	12	
	Metric 4. Habitat	7	
	Metric 5. Special Wetland Communities	0	TE BEST N
	Metric 6. Plant communities, interspersion, microtopography	3	
	TOTAL SCORE	28	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one	(A)	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wotland is categorized as a Category 3 wetland	(NO)	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (excluding gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(NO)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(10)	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (including any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Vetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO)	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, loca or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided

Choose one	Category 1	al Category Category 2	Category 3
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End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Kate Bomar
Date: 4/5/2022
Stantec Consulting Services, Inc.
Address: 11687 Lebanon Rd. Cincinnati, OH 45241
Phone Number: 513-842-9207
e-mail address: Kate. bomara stantec. com
Name of Wetland: Wetland Le
Vegetation Communit(ies):
HGM Class(es):
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. Torrey Station
Faircrost Street
Prairie collège street «Project Rom
Fohlstreet 3 NO.35 mi Wetland le 3 NO.35 mi
Lat/Long or UTM Coordinate 40.724364°N - 81.413202°W
USGS Quad Name Bolivar
Stark County
Township Ton PBW Section and Subsection
Hydrologic Unit Code
Site Visit 4/5/2022.
National Wetland Inventory Map
Ohio Wetland Inventory Map
Soil Survey Latham Silt loam, 12-18% slopes, mod eroded
Delineation report/map See Ecological Resources Inventory Report

Name of Wetland:	and le		
Wetland Size (acres, hectares):	.03 acres within Re	lix	
Sketch: Include north arrow, relationsh	nip with other surface waters, vegetation	zones, etc.	XI.
N	new field	21	
}	New field		17
Comments, Narrative Discussion, Jus	Attion to a financial Colonia of		
Final score : 28		Category:	1

Wetland U

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.		
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.		
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.		
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.		

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	0
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	Go to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3	Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland Go to Question 4	(NO) Go to Question 4
4	Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	NO Go to Question 8a
8a	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	NO Go to Question 8b

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	(NO)
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this	YES	NO III
9b	elevation, or along a tributary to Lake Erie that is accessible to fish? Does the wetland's hydrology result from measures designed to	Go to Question 9b YES	Go to Question 10
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	YES Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	\bigcirc
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	Complete Quantitative Rating

WeHand 6

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricta
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherodes
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumi
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellita
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwelli
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrewsi
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum		Helianthus grosseserratu
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicate
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflor
77 0	Parnassia glauca	Schechzeria palustris		Lythrum alatun
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianum
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceur
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutan
	Salix candida	Vaccinium oxycoccos		Spartina pectinat
	Salix myricoides	Woodwardia virginica		Solidago riddell
	Salix serissima	Xyris difformis		
	Solidago ohioensis	2 00		
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

ORAM v. 5.0 Field Form Quantitative Rating

Site:	Wetla	nd le		Rater(s):	K. Bornos/	M. Denzle	ev Date: 4	5/2022
6	O	etric 1.	Wetland A	rea (size).		1	
max 6 pts.	subtotal Sel	>50 ad 25 to < 10 to < 3 to <1 0.3 to <	lass and assign scores (>20.2ha) (6 pts) 50 acres (10.1 to <2 25 acres (4 to <10.1 0 acres (1.2 to <4ha <3 acres (0.12 to <1.4 to <0.3 acres (0.04 to <0.3 acres (0.04 to <0.4 to <0.4 to <0.4 to <0.5 cres (0.04 to)))))))) 0.2ha) (5 pts) ha) (4 pts)) (3 pts) 2ha) (2pts)	0.3	03 acres	;	
7	7	etric 2.	Upland bu	ffers and	surround	ling land	use.	
max 14 pts.		WIDE. MEDIL NARR VERY Intensity of s VERY LOW MODE	erage buffer width. S Buffers average 50 JM. Buffers average DW. Buffers averag NARROW. Buffers urrounding land use LOW. 2nd growth o Old field (>10 years RATELY HIGH. Res Urban, industrial, op	m (164ft) or more 25m to <50m (8 e 10m to <25m (8 e 10m to <25m (8 e 25m (8 e 25m (9	e around wetland 2 to <164ft) aroun (32ft to <82ft) around (32ft) around wetlad double check and hirie, savannah, wi lang second growth pasture, park, cor	perimeter (7) d wetland perim und wetland perin and perimeter (0 average. ldlife area, etc. (0 forest. (5) servation tillage	eter (4) meter (1)) (7) , new fallow field_(3)	
12	19 M		Hydrology	• /			,	
max 30 pts.	4 3c.	High p Other s Precip Seaso Perenr Maximum wa >0.7 (2 0.4 to 6	Vater. Score all that H groundwater (5) groundwater (3) tation (1) nal/Intermittent surfails surface water (laiter depth. Select or (7.6in) (3) 0.7m (15.7 to 27.6in) (<15.7in) (1) s to natural hydrologi	ce water (3) ke or stream) (5) ally one and assig (2)	3c in score.	100 year Betwee Part of v Part of v Duration inunc Semi- to Regular Season Season	Score all that apply ar floodplain (1) n stream/lake and other I wetland/upland (e.g. fore: riparian or upland corrido dation/saturation. Score to permanently inundated/ly inundated/saturated (3 ally inundated (2) ally saturated in upper 30 to 10	st), complex (1) r (1) one or dbl check. /saturated (4)
	3	None of Recovery	or none apparent (12 ered (7) ering (3) c or no recovery (1)	Check all distributed distributed tile dike weir	urbances observe	point so	ource (nonstormwater) rading d/RR track	
	25 M	etric 4.	Habitat Al	teration a	and Devel	opment.		_
max 20 pts	7	None of Recover Recover Recover	ood (6)		2,,			
	4 c.	Fair (3 Poor to Poor (fair (2)	double check and	d average.			
	3 Ditotal this page 1 February 20	Recovi Recovi Recen	or none apparent (9) ered (6) ering (3) or no recovery (1)	mowing grazing X clearcut selective	e cutting lebris removal	shrub/sa herbace sedimer dredging farming	g	

Site:	We	fland a	Rater(s	s): K.F	Sornar	m. Denzler	Date: 4/5/2011
	25				,		
SI	ubtotal first pa	age					
0	25	Metric 5. Sp	ecial Wetland	ds.			
ax 10 pts.	subtotal	Check all that apply and	score as indicated				
		Bog (10)					
		Fen (10) Old growth for	rest (10)				
		Mature foreste	1 /				
			stal/tributary wetland-un	-			
			stal/tributary wetland-re	-	logy (5)		
		Relict Wet Pra	nd Prairies (Oak Openir airies (10)	igs) (10)			
			ence state/federal threa	tened or enda	angered spec	ies (10)	
			gratory songbird/water f				
		Category 1 W	etland. See Question 1	Qualitative R	tating (-10)		
0	28	Metric 6. Pla	int communit	ties, int	erspers	sion, microt	opography.
3	20						
nax 20 pts	subtotal	6a. Wetland Vegetation				Cover Scale	
		Score all present using (0 to 3 scale.	0		comprises <0.1ha (0.: nd either comprises sr	2471 acres) contiguous area
		Emergent					quality, or comprises a
		Shrub				nt part but is of low qu	
	1	Forest		2	The first factor of the control of		gnificant part of wetland's
		Mudflats					quality or comprises a small
		Open water Other		3		is of high quality	int part, or more, of wetland's
		6b. horizontal (plan view	w) Interspersion.		1000	on and is of high quali	
		Select only one.					
		High (5)				f Vegetation Quality	
		Moderately high	gh(4)	low			ninance of nonnative or
	Y	Moderate (3) Moderately lo	w (2)	mod	_	nce tolerant native sp	ecies ment of the vegetation,
		X Low (1)	(=)	11100	A second second	Company of the Compan	turbance tolerant native spp
		None (0)			can also	be present, and spec	cies diversity moderate to
		6c Coverage of invasiv					/ w/o presence of rare
		to Table 1 ORAM long for deduct points for covered to the control of the covered to the covered		high		ed or endangered spr	es, with nonnative spp
		Extensive >75	-	riigri			itive spp absent or virtually
			75% cover (-3)				and often, but not always,
	1	Sparse 5-25%	* *		the pres	ence of rare, threaten	ed, or endangered spp
		-	t <5% cover (0)	B.B 181 - 4		Ole - Overlite	
		Absent (1) 6d. Microtopography		Muditat and		r Class Quality 0.1ha (0.247 acres)	
		Score all present using	0 to 3 scale	-1		<1ha (0.247 to 2.47	acres)
			mmucks/tussucks	2		1 to <4ha (2.47 to 9.8	
			y debris >15cm (6in)	3	High 4ha	9.88 acres) or more	
			d >25cm (10in) dbh	Mioratonas	raphy Cove	r Saala	
		Amphibian bro	eeuing pools	Microtopog	Absent	Scale	
				- 1		ery small amounts or	if more common
					of margi	nal quality	
				2		moderate amounts, l	•
				- 3		or in small amounts of moderate or greater	
2 :-	1			3		ighest quality	amounts
) (2					GIIG OI II	Surson deserted	

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES (NO)	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES (NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (10)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
	Metric 2. Buffers and surrounding land use	7	DE VETTY
	Metric 3. Hydrology	12	NEW WORK
	Metric 4. Habitat	le	
	Metric 5. Special Wetland Communities	0	1445
	Metric 6. Plant communities, interspersion, microtopography	3	(- N4 NO -
	TOTAL SCORE	28	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one	<u></u>	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	(NO)	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(NO)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(NO)	Is quantitative rating score greater than the Category 2 scoring threshold (including any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Vetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO)	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, loca or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.
		Final Cate	in and the second secon
Choose	one Category	1 C	ategory 2 Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Kate Bomar
Date: 4/5/2022
Stantec Consulting Services, Inc.
Address: 11687 Lebanon Rd. Cincinnati, OH 45241
Phone Number: 513-842-8207
e-mail address: Katc. bomar/2 stantec.com
Name of Wetland: Wetland 7
Vegetation Communit(ies):
HGM Class(es):
Location of Wetland: Include map, address, north arrow, landmarks, distances, roads, etc.
Torrey Station
Faircrest street
Prairie collège street Project Rous
7
Fohlstreet 30,21 miles
westland.
Brinkelstreet
LaVLong or UTM Coordinate 40.725792°W, -81.4140U2°W
USGS Quad Name
County Stark County
TION POW
Section and Subsection
Hydrologic Unit Code 050400010607
Site Visit 4 5 2022.
National Wetland Inventory Map
Ohio Wetland Inventory Map N A
Soil Survey Latham Silt loam 12-18% slopes, mod. eroded
Delineation report/map See Ecological Resources Inventory Report
J

Name of Wetland: Wetland 7
Wetland Size (acres, hectares): O. 21. acres within ROW
Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.
Stream U Stream U Comments, Narrative Discussion, Justification of Category Changes:

Final score : 28 Category:

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

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Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
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Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		
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End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	0
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	Go to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3	Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland Go to Question 4	NO Go to Question 4
4	Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	NO Go to Question 8a
8a	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	NO Go to Question 8b

8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	1()
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES Go to Question 9b	Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10	NO Go to Question 9c
9c	Are Lake Erie water levels the wetland's primary hydrological influence,	YES YES	NO
30	i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	Go to Question 9d	Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES Wetland is a Category 3 wetland Go to Question 10	NO Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance	YES	NO
	tolerant native plant species within its vegetation communities?	Wetland should be evaluated for possible Category 3 status Go to Question 10	Go to Question 10
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in	YES	(NO)
.0	Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Wetland is a Category 3 wetland. Go to Question 11	Go to Question 11
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	Complete Quantitative Rating

WeHand 7

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricte
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherode
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumi
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellite
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwelli
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrews
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum	~ .	Helianthus grosseserratu
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicat
Typha xgl̄auca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflor
	Parnassia glauca	Schechzeria palustris		Lythrum alatu
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianui
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceur
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutan
	Salix candida	Vaccinium oxycoccos		Spartina pectinat
	Salix myricoides	Woodwardia virginica		Solidago riddell
	Salix serissima	Xyris difformis		
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

Site:	Wetla	ind 7		Rater(s): ∠, Bo	mar/m.D	enzler	Date: 4 5 2022
[/ N	/letric 1.	Wetland A	rea (size).			,
max 6 pts.	subtotal S	>50 a 25 to 10 to 3 to < 0.3 to 0.1 to	class and assign scor cres (>20.2ha) (6 pts) <50 acres (10,1 to <20 <25 acres (4 to <10.1] 10 acres (1.2 to <4ha <3 acres (0.12 to <1.2 <0.3 acres (0.04 to <1.2 cres (0.04ha) (0 pts)	0.2ha) (5 pts) ha) (4 pts)) (3 pts) 2ha) (2pts)	0,26	acres	
6	7	letric 2.	Upland bu	ffers and sur	rounding	land use.	
max 14 pts.		WIDE. MEDIL NARR VERY b. Intensity of services LOW. MODE	Buffers average 50r JM. Buffers average OW. Buffers average NARROW. Buffers a surrounding land use. LOW. 2nd growth or Old field (>10 years) RATELY HIGH. Res	Select only one and assin (164ft) or more around 25m to <50m (82 to <16 to 10m to <25m (32ft to 25m (32ft) ar Select one or double of older forest, prairie, say, shrub land, young secidential, fenced pasture en pasture, row croppin	d wetland perime 64ft) around wetla 682ft) around wetla 682ft) around wetland per 64heck and averag 7annah, wildlife a 64heck conservati, park, conservati	ter (7) and perimeter (4) tland perimeter (1) rimeter (0) ge. rea, etc. (7) . (5) on tillage, new fallo	w field. (3)
10	M		Hydrology		o. o ,	, ,	
max 30 pts	4	High p Other Precip Seaso Pereni c. Maximum w >0.7 (2 0.4 to <0.4m	27.6in) (3) 0.7m (15.7 to 27.6in) (<15.7in) (1)	ce water (3) se or stream) (5) ly one and assign score	3d. Dura	Part of wetland/up Part of riparian or tion inundation/satu Semi- to permane Regularly inundat Seasonally inunda Seasonally satura	n (1) ake and other human use (1) land (e.g. forest), complex (1) upland corridor (1) uration. Score one or dbl check. ntly inundated/saturated (4) ed/saturated (3)
	1	Recov Recov	or none apparent (12) ered (7) ering (3) I or no recovery (1)	Check all disturbance ditch tile dike weir stormwater inpu	×	point source (nons filling/grading road bed/RR track dredging other	
7	24	Metric 4.	Habitat Alt	eration and	Developm	nent.	
max 20 pts.	2	None of Recovery Recent Recovery Recent Rece	or none apparent (4) ered (3) ering (2) t or no recovery (1) elopment. Select only ent (7) ood (6) 5) ately good (4)) of fair (2)	e or double check and a	verage.		
	40	-	ation. Score one or d	ouble check and average			
	24 ubtotal this page I 1 February 2	Recovi Recovi Recen	or none apparent (9) ered (6) ering (3) t or no recovery (1)	Check all disturbance mowing grazing clearcutting selective cutting woody debris re toxic pollutants		shrub/sapling rem herbaceous/aquat sedimentation dredging farming nutrient enrichmer	ic bed removal

End of Quantitative Rating. Complete Categorization Worksheets.

Present in moderate or greater amounts

and of highest quality

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES (NO)	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (10)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	1	
	Metric 2. Buffers and surrounding land use	le	
	Metric 3. Hydrology	10	70
	Metric 4. Habitat	7	
	Metric 5. Special Wetland Communities	Ö	FT ROT
	Metric 6. Plant communities, interspersion, microtopography	4	
	TOTAL SCORE	28	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one	<u>(3)</u>	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	(NO)	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (excluding gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(<u>(</u>)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(NO)	Is quantitative rating score greater than the Category 2 scoring threshold (including any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, loca or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

		al Category	
Choose one	Category 1	Category 2	Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Kate Bomar
Date: 4/5/2022
Stantec Consulting Services, Inc.
Address: 11687 Lebanon Rd. Cincinnati, OH 45241
Phone Number: 513-842-8207
e-mail address: Katc. bomar/a stantec. com
Name of Wetland: Wetland 8
Vegetation Communit(ies):
HGM Class(es): depressional
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
Torrey Station
Faircrest Street
Prairie college street & Project Row (No. 1 Miles)
Nava 63 mon
Fahl Street
Brinker Street
Lat/Long or UTM Coordinate
USGS Quad Name 40.7319029N 1-91.415352°W
Bolivar
County Stark County
TION RAW
Section and Subsection
Hydrologic Unit Code 0.50400010407
Site Visit 4 5 202 2.
National Wetland Inventory Map
Ohio Wetland Inventory Map
Coil Currey
Delineation report/map See Ecological Resources Inventory Report

Wetland 8			
	cs within ROW		
, relationship with other si	urface waters, vegetation zo	ones, etc.	
Address recently	dfield oldfield		m 7 N 1
23		Category:	
	ROW- ussion, Justification of Cat	es): 0.07 acres within Row, relationship with other surface waters, vegetation z	es): O O A carcs within Row v, relationship with other surface waters, vegetation zones, etc.

Wetland 8

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.		
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	/	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.		
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		/
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	/	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	Go to Question 2
	has had critical habitat proposed (65 FR 41812 July 6, 2000).		1
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3	Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland Go to Question 4	NO Go to Question 4
4	Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	NO Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	NO Go to Question 8a
8a	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	Go to Question 8b

		A CONTRACTOR OF THE PARTY OF TH	
8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally	YES Wetland should be	Go to Question 9a
	diameters greater than 45cm (17.7in) dbh?	evaluated for possible Category 3 status.	Go to Question sa
		Go to Question 9a	
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES Go to Question 9b	NO Go to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO Question to
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
9c	Are Lake Erie water levels the wetland's primary hydrological influence.	YES YES	NO
	i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	Go to Question 9d	Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES	NO
	tolerant native plant species within its vegetation communities?	Wetland should be evaluated for possible Category 3 status	Go to Question 10
		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	YES	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this	Go to Question 11	\sim
11	type of wetland and its quality. Relict Wet Prairies. Is the wetland a relict wet prairie community	YES	(10)
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

WeHand 3

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricto
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherode
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaum
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellit
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwell
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrews
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum		Helianthus grosseserratu
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicat
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflor
778	Parnassia glauca	Schechzeria palustris		Lythrum alatu
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianu
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceu
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutai
	Salix candida	Vaccinium oxycoccos		Spartina pectinal
	Salix myricoides	Woodwardia virginica		Solidago riddeli
	Salix serissima	Xyris difformis		
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

ORAM v. 5.0 Field Form Quantitative Rating Site: Rater(s): Date: 4 2022 M. Durzler Metric 1. Wetland Area (size). max 6 pts Select one size class and assign score. 0.07 acres >50 acres (>20 2ha) (6 pts) 25 to <50 acres (10.1 to <20 2ha) (5 pts) 10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1.2 to <4ha) (3 pts) 0.3 to <3 acres (0.12 to <1.2ha) (2pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) <0.1 acres (0.04ha) (0 pts)</p> Metric 2. Upland buffers and surrounding land use. 2a. Calculate average buffer width. Select only one and assign score. Do not double check subtotal WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7) MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4) NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1) VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0) Intensity of surrounding land use. Select one or double check and average. VERY LOW 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7) LOW. Old field (>10 years), shrub land, young second growth forest. (5) MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3) HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1) Metric 3. Hydrology. 3 max 30 pts subtotal 3b. Connectivity. Score all that apply 3a. Sources of Water Score all that apply High pH groundwater (5) 100 year floodplain (1) Other groundwater (3) Between stream/lake and other human use (1) Precipitation (1) Part of wetland/upland (e.g. forest), complex (1) Seasonal/Intermittent surface water (3) Part of riparian or upland corridor (1) Perennial surface water (lake or stream) (5) Duration inundation/saturation. Score one or dbl check, Maximum water depth. Select only one and assign score. Зс Semi- to permanently inundated/saturated (4) >0.7 (27 6in) (3) Regularly inundated/saturated (3) 0.4 to 0.7m (15.7 to 27.6in) (2) Seasonally inundated (2) <0.4m (<15.7in) (1) Seasonally saturated in upper 30cm (12in) (1) 3e. Modifications to natural hydrologic regime. Score one or double check and average. None or none apparent (12) Check all disturbances observed Recovered (7) ditch point source (nonstormwater) Recovering (3) tile filling/grading Recent or no recovery (1) dike road bed/RR track weir dredging stormwater input Metric 4. Habitat Alteration and Development. 20 max 20 pls subtotal Substrate disturbance. Score one or double check and average. None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only one and assign score Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1) Habitat alteration. Score one or double check and average. None or none apparent (9) Check all disturbances observed Recovered (6) mowing shrub/sapling removal Recovering (3) herbaceous/aquatic bed removal grazing Recent or no recovery (1) clearcutting sedimentation selective cutting dredging woody debris removal farming nutrient enrichment toxic pollutants last revised 1 February 2001 jjm

ORAM v. 5.0 Field Form Quantitative Rating Rater(s): K. ivetland Date: 4 tal first nac Metric 5. Special Wetlands. Check all that apply and score as indicated Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland-unrestricted hydrology (10) Lake Erie coastal/tributary wetland-restricted hydrology (5) Lake Plain Sand Prairies (Oak Openings) (10) Relict Wet Prairies (10) Known occurrence state/federal threatened or endangered species (10) Significant migratory songbird/water fowl habitat or usage (10) Category 1 Wetland. See Question 1 Qualitative Rating (-10) Metric 6. Plant communities, interspersion, microtopography. subtotal Vegetation Community Cover Scale 6a. Wetland Vegetation Communities. Score all present using 0 to 3 scale. Absent or comprises <0.1ha (0.2471 acres) contiguous area Aquatic bed Present and either comprises small part of wetland's Emergent vegetation and is of moderate quality, or comprises a Shrub significant part but is of low quality Forest 2 Present and either comprises significant part of wetland's Mudflats vegetation and is of moderate quality or comprises a small Open water part and is of high quality Other 3 Present and comprises significant part, or more, of wetland's 6b. horizontal (plan view) Interspersion. vegetation and is of high quality Select only one. Narrative Description of Vegetation Quality High (5) Moderately high(4) Low spp diversity and/or predominance of nonnative or Moderate (3) disturbance tolerant native species Moderately low (2) mod Native spp are dominant component of the vegetation, Low (1) although nonnative and/or disturbance tolerant native spp None (0) can also be present, and species diversity moderate to 6c. Coverage of invasive plants. Refer moderately high, but generally w/o presence of rare to Table 1 ORAM long form for list. Add threatened or endangered spp or deduct points for coverage A predominance of native species, with nonnative spp high Extensive >75% cover (-5) and/or disturbance tolerant native spp absent or virtually Moderate 25-75% cover (-3) absent, and high spp diversity and often, but not always, Sparse 5-25% cover (-1) the presence of rare, threatened, or endangered spp Nearly absent <5% cover (0) Absent (1) Mudflat and Open Water Class Quality 6d. Microtopography 0 Absent <0.1ha (0.247 acres) Score all present using 0 to 3 scale. Low 0.1 to <1ha (0.247 to 2.47 acres) 1 Moderate 1 to <4ha (2.47 to 9.88 acres) Vegetated hummucks/tussucks Coarse woody debris >15cm (6in) 3 High 4ha (9.88 acres) or more Standing dead >25cm (10in) dbh Microtopography Cover Scale Amphibian breeding pools Absent Present very small amounts or if more common of marginal quality 2 Present in moderate amounts, but not of highest quality or in small amounts of highest quality Present in moderate or greater amounts and of highest quality

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES (NO)	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES (10)	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES (O)	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (10)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
ŭ	Metric 2. Buffers and surrounding land use	4	
	Metric 3. Hydrology	q	
	Metric 4. Habitat	7	
	Metric 5. Special Wetland Communities	0	1 537,0 50.00
	Metric 6. Plant communities, interspersion, microtopography	3	
	TOTAL SCORE	23	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one	(a)	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wotland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (excluding gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(NO)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(NO)	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (including any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO)	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, loca or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Kate Bomar
Date: 4/0/2022
Stantec Consulting Services, Inc.
Address: 11687 Lebanon Rd. Cincinnati, OH 45241
Phone Number: 513-842-9207
e-mail address: Kate. bomar astantec. com
Name of Wetland: Wetland 9
Vegetation Communit(ies):
HGM Class(es): Depressional
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
Torrey Startion
Torrey Station (0.12 mi south)
Faircrest street to west and 9
Prairie college street Project Bow
Prairie collège street
N
Fohlstreet
Brinkerstreet
- / Ulini-Oires
Lat/Long or UTM Coordinate / //o Cruichen Late / A continue / //o Cruichen Late / o Cruichen
40,749044°N, -81,414233°W
USGS Quad Name Bolivar
0
Stark County
Township TION RBW
Section and Subsection
Hydrologic Unit Code 050400010505
Site Visit 4 \ \(\lambda 2022.
National Wetland Inventory Map
Ohio Wetland Inventory Map
Soil Survey Sebring Silt loam D-220 slopes
Delineation report/map
See Ecological Kesources Inventory Report

Wetland 9

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.		
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	/	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.		
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.		

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	0
	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has	YES	NO
	been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has	Wetland should be evaluated for possible Category 3 status	Go to Question 2
	had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	5
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland.	Go to Question 3
		Go to Question 3	\cap
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	(NO)
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	
1	Significant Breeding or Concentration Area. Does the wetland	YES	(NO
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or 2) an acidic pond created or excavated on mined lands that has little or	YES Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses,	YES	(NO)
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	Wetland is a Category 3 wetland	Go to Question 7
		Go to Question 7	
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0)	YES Wetland is a Category	NO Go to Question 8a
	and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	3 wetland Go to Question 8a	
8a	"Old Growth Forest." Is the welland a forested welland and is the	YES T	NO /
-	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100	Wetland is a Category 3 wetland.	Go to Question 8b
	years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of	YES	NO
	deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this	YES	NO)
	elevation, or along a tributary to Lake Erie that is accessible to fish?	Go to Question 9b	Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 9c
		Go to Question 10	
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth	YES Go to Question 9d	NO Go to Question 10
0.4	wetlands, or those dominated by submersed aquatic vegetation.	VED	NO
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES Wetland is a Category 3 wetland	NO Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES	NO
		Wetland should be evaluated for possible Category 3 status	Go to Question 10
		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	YES	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	\bigcirc
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union	YES Wetland should be	NO
	Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	evaluated for possible Category 3 status	Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

WeHand 9

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensi
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis strict
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherode
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaum
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellit
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwell
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrews
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum		Helianthus grosseserrati
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spical
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadrifloi
	Parnassia glauca	Schechzeria palustris		Lythrum alatu
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianu
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceu
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutai
	Salix candida	Vaccinium oxycoccos		Spartina pectina
	Salix myricoides	Woodwardia virginica		Solidago riddeli
	Salix serissima	Xyris difformis		o o
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

Site:	Tilot	land 9		Rater(s):	W.12	Ina Don-law	Doto: //	Jula a. a
Site.	WEI	una 7		Rater(s):	K. Bomer	In Denzler	Date: 4	10/2012
2	2	Metric 1	. Wetland	Area (size)).			
max 6 pts.	subtotal	>50 a 25 to 10 to 3 to 0.1 to 0.1 to <0.1	class and assign acres (>20.2ha) (6 <50 acres (10.1 to <25 acres (4 to <610 acres (1.2 to <60 <3 acres (0.12 to <60 <3 acres (0.04 acres (0.04 acres (0.04ha) (0.04ha) (0.04 acres (0.04ha) (0.04ha) (0.04 acres (0.04ha) (0.0	pts) 0 <20.2ha) (5 pts) 10.1ha) (4 pts) 4ha) (3 pts) <1.2ha) (2pts) to <0.12ha) (1 pt) ots)	0,98 ac			
3	5	Metric 2	. Upland I	ouffers and	surroundi	ng land use.		
max 14 pts.	subtotal	2b. Intensity of LOW MOD	E. Buffers average IUM. Buffers avera ROW. Buffers aver Y NARROW. Buffer sourrounding land if Y LOW. 2nd growt . Old field (>10 ye ERATELY HIGH. I. Urban, industria	rage 10m to <25m (ers average <10m (< use. Select one or o th or older forest, pra ars), shrub land, you Residential, fenced l, open pasture, row	e around wetland pe 2 to <164ft) around v 32ft to <82ft) around 32ft) around wetland double check and av irie, savannah, wildl ing second growth fo pasture, park, conse	rimeter (7) wetland perimeter (4) d wetland perimeter (1) d perimeter (0) verage ife area, etc. (7) prest. (5) provation tillage, new fall		
13	18	Metric 3	. Hydrolog	gy.				
max 30 pts	subtotal	High Othe Preci Seas Perel 90.4 to 40.4 to 40.	vater depth. Selec (27.6in) (3) 0.7m (15.7 to 27 (n (<15 7in) (1)	urface water (3) (lake or stream) (5) t only one and assig	3d. I n score.	Connectivity. Score all 100 year floodple Between stream. Part of wetland/ Part of riparian of perman semi- to perman Regularly inundation. Seasonally inunct seasonally saturity and average.	ain (1) /lake and other upland (e.g. fore upland corrido turation. Score tently inundated ated/saturated (2)	est), complex (1) or (1) one or dbl check /saturated (4) 3)
		None Reco Reco	or none apparent vered (7) vering (3) nt or no recovery ((12) Check all distuditch tile	rbances observed	point source (noi filling/grading road bed/RR trad dredging other		
4	22	Metric 4	. Habitat A	Alteration a	nd Develo	pment.		
max 20 pts	subtotal	Ab. Habitat dev Lexcel Very Good Mode Fair (Poor Poor 4c. Habitat alte None Reco Reco	or none apparent vered (3) vering (2) nt or no recovery (elopment. Select lent (7) good (6) (5) rately good (4) 3) to fair (2) (1)	or double check and	average. rbances observed	shrub/sapling rer herbaceous/aqua sedimentation dredging		
	J2 subtotal this pa	ge ry 2001 jjm			ebris removal	farming nutrient enrichme	ent	

Site:	We	tland	্ প R	ater(s): ⊬	Bomar	M. Danzler	Date: 4/6/22
	22	1					7.6
s	ubtotal first pa	oe					
\sim		1	5. Special We	tlands.			
	22		or openiar rre				
10 pts.	subtotal		at apply and score as indica	ated.			
		-	og (10) en (10)				
			ld growth forest (10)				
			ature forested wetland (5)				
			ake Erie coastal/tributary we ake Erie coastal/tributary we			0)	
			ake Plain Sand Prairies (Oa				
			elict Wet Prairies (10)	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
			nown occurrence state/fede				
			ignificant migratory songbire ategory 1 Wetland. See Qu				
		-	6. Plant comr				tonography
5	21	WIELIIC	O. Plant Com	numics,	interspe	,, 31011, 1111010	topograpny.
x 20 pts	subtotal	6a. Wetland	d Vegetation Communities.	Vegeta	tion Commun	ity Cover Scale	
		-	esent using 0 to 3 scale.				.2471 acres) contiguous area
			quatic bed mergent			it and either comprises station and is of moderat	e quality, or comprises a
			hrub			ficant part but is of low of	
			orest				significant part of wetland's
			ludflats			tation and is of moderat and is of high quality	e quality or comprises a sma
			pen water other	1			ant part, or more, of wetland
		6b. horizon	tal (plan view) Interspersion	1.	and the second second	tation and is of high qua	
		Select only		Narrat	ivo Descriptio	n of Vegetation Quality	
			ligh (5) loderately high(4)	-			minance of nonnative or
			loderate (3)			rbance tolerant native s	
		_	loderately low (2)	m			onent of the vegetation, sturbance tolerant native spr
			ow (1) lone (0)			•	ecies diversity moderate to
		6c. Covera	ge of invasive plants. Refe		mode	erately high, but general	ly w/o presence of rare
			DRAM long form for list. Ad			tened or endangered sp	
			oints for coverage extensive >75% cover (-5)	D			cies, with nonnative spp ative spp absent or virtually
			Noderate 25-75% cover (-3)				y and often, but not always,
			parse 5-25% cover (-1)	-	the p	resence of rare, threate	ned, or endangered spp
			learly absent <5% cover (0) absent (1)		at and Onen W	later Class Quality	
		6d. Microto		-		t <0.1ha (0.247 acres)	
		Soore all pr	resent using 0 to 3 scale	_		1 to <1ha (0.247 to 2.47	
						ate 1 to <4ha (2.47 to 9	.88 acres)
		IV	egetated hummucks/tussue	(Gin)			
		□ v	coarse woody debris >15cm		3 Filgh 4	ha (9.88 acres) or more	
		I V	=	dbh	topography Co		
		I V	Coarse woody debris >15cm Standing dead >25cm (10in)	dbh	topography Co	over Scale t	
		I V	Coarse woody debris >15cm Standing dead >25cm (10in)	dbh	topography Co 0 Absen 1 Preser	over Scale	if more common
		I V	Coarse woody debris >15cm Standing dead >25cm (10in)	Micro	topography Co 0 Absen 1 Preser of m 2 Preser	over Scale t nt very small amounts o arginal quality nt in moderate amounts	but not of highest
		I V	Coarse woody debris >15cm Standing dead >25cm (10in)	Micro	topography Co 0 Absen 1 Preser of m 2 Preser qual	over Scale t nt very small amounts o arginal quality	but not of highest of highest quality

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert	Result
		score	
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES (NO)	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES (10)	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES (O)	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (10)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	2	MASON -
	Metric 2. Buffers and surrounding land use	3	
	Metric 3. Hydrology	13	
	Metric 4. Habitat	4	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	5	
	TOTAL SCORE	27	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one		Evaluation of Categorization Result of ORAM		
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	(NO)	Is quantitative rating score less than the Category 2 scoring threshold (excluding gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM		
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(NO)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.		
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(NO)	Is quantitative rating score greater than the Category 2 scoring threshold (including any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM		
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.		
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO C	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).		
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, loca or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons of information for this determination should be provided.		

01:		al Category	Cataman, 2	
Choose one	Category 1	Category 2	Category 3	

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Kate Bomar
Date: 4/0/2022
Stantec Consulting Services, Inc.
Address: 1187 Lebanon Rd. Cincinnati, OH 45241
Phone Number: 513-842-9207
e-mail address: Katc. bomara stantec. com
Name of Wetland: Wetland 10
Vegetation Communit(ies):
HGM Class(es): Pedressional
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
Torrey Station
Prairie college street westend 10 3 NO. 12 miles
Prairie collège street Project Row
N C
Fohlstreet
Brinkerstreet
Lat/Long or UTM Coordinate 40.7466230N -81.4143920W
USGS Quad Name Bolivar
Stark County
TION R8W
Section and Subsection
Hydrologic Unit Code 050400010505
Site Visit 4 U 2022.
National Wetland Inventory Map
Ohio Wetland Inventory Map N A
Soil Survey Sebning silt loam, 0-200 slopes
Delineation report/map See Ecological Resources Inventory Report

Name of Wetland Wetland Size (ac	We	tland	10	3	20.1		
Sketch: Include	north arrow, relati	0.27 a	surface waters, vi	egetation zor	nes, etc.		-
			Strcam &	3	-11		
			As field	7	Stream 9		0000
N	Y /	olderd	1/	V		2	
Rus		y	7	/	4		
	K	V	()		0 ~ /	X	
	← P0W -	Ag fi		_	\rightarrow		
Comments, Nari	auve Discussion,	Justification of Ca	negory Changes:				
Final score	e: 15				Categ	ory:	

Wetland 10

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.		
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.		
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	/	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.		

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	0
ı	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or	YES Wetland should be evaluated for possible Category 3 status	Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	6
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland.	Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	Go to Question 3 YES Wetland is a Category 3 wetland Go to Question 4	NO Go to Question 4
1	Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly Sphagnum spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	Go to Question 7
Z	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	NO Go to Question 8a
8a	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	Go to Question 8t

Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES Wetland should be	(NO)
	evaluated for possible Category 3 status.	Go to Question 9a
	Go to Question 9a	
Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this	YES	NO
		Go to Question 10
prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 90
	Go to Question 10	
Are Lake Erie water levels the wetland's primary hydrological influence,	YES	NO
i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	Go to Question 9d	Go to Question 10
Does the wetland have a predominance of native species within its	YES	NO
vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
	Go to Question 10	
Does the wetland have a predominance of non-native or disturbance	YES	NO
tocrant native plant species within its vegetation communities;	Wetland should be evaluated for possible Category 3 status	Go to Question 10
	Go to Question 10	
Lake Plain Sand Prairies (Oak Openings) Is the wetland located in	YES	NO
characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within	Wetland is a Category 3 wetland.	Go to Question 11
gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	\circ
Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	YES Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls? Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation. Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present? Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities? Lake Plain Sand Prairies (Oak Openings) Is the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality. Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Myadison and Union Counties), Sandusky Plains (Myandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties),	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls? Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation. Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native plant species within its vegetation communities? Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities? Wetland is a Category 3 wetland Go to Question 10 YES Wetland should be evaluated for possible Category 3 status Go to Question 10 YES Wetland should be evaluated for possible Category 3 status Go to Question 10 YES Wetland should be evaluated for possible Category 3 status Go to Question 10 YES Wetland should be evaluated for possible Category 3 status Go to Question 10 YES Wetland should be evaluated for possible Category 3 status Go to Question 10 YES Wetland should be evaluated for possible Category 3 status Go to Question 10 YES Wetland should be evaluated for possible Category 3 status Go to Question 10 YES Wetland should be evaluated for possible Category 3 status Go to Question 10 YES Wetland should be evaluated for possible Category 3 status Go to Question 10 YES Wetland should be evaluated for possible Category 3 status Go to Question 10 YES Wetland should be evaluated for possible Category 3 status Go to Question 10 YES Wetland should be evaluated for possible Category 3 status Go to Question 10 YES

Wetland 10

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	Oak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricta
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherodes
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumi
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellita
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwelli
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrewsi
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum	~ .	Helianthus grosseserratu.
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicate
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflore
,,,	Parnassia glauca	Schechzeria palustris		Lythrum alatun
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianum
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceun
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutan
	Salix candida	Vaccinium oxycoccos		Spartina pectinata
	Salix myricoides	Woodwardia virginica		Solidago riddelli
	Salix serissima	Xyris difformis		50.00 .00 .00
	Solidago ohioensis	<i>y</i> 33		
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

Site:	Wetl	and 10	Rater(s):	K. Bomar	M. Denzler	Date: 4/6/2022
1		Metric 1. Wetland	Area (size	·).		7-1
max 6 pts.	subtotal	Select one size class and assign s >50 acres (>20.2ha) (6 p 25 to <50 acres (10.1 to 10 to <25 acres (4 to <1) 3 to <10 acres (1.2 to <4) 0.3 to <3 acres (0.12 to < 0.1 to <0.3 acres (0.04 to <0.1 acres (0.04ha) (0 pi	ots) <20.2ha) (5 pts) 0.1ha) (4 pts) ha) (3 pts) <1.2ha) (2pts) o <0.12ha) (1 pt)	0.27	a.cv ^{es}	
2	3	Metric 2. Upland b	uffers and	d surround	ling land use.	
max 14 pts.		2a. Calculate average buffer width WIDE. Buffers average MEDIUM. Buffers avera NARROW. Buffers avera VERY NARROW. Buffer 2b. Intensity of surrounding land u VERY LOW. 2nd growth LOW. Old field (>10 yea MODERATELY HIGH. F	50m (164ft) or mor ge 25m to <50m (8 age 10m to <25m rs average <10m (se. Select one or n or older forest, pr rs), shrub land, yo Residential, fenced	re around wetland p 32 to <164ft) around (32ft to <82ft) around <32ft) around wetla double check and airie, savannah, will ung second growth pasture, park, con-	perimeter (7) Id wetland perimeter (4) Ind wetland perimeter (1) Ind perimeter (0) Id wetland perimeter (0) Id wetland perimeter (0) Id wetland (1) Id wetla	
8	11	Metric 3. Hydrolog			(-,	
max 30 pts	subtotal	3a. Sources of Water Score all th High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent sur Perennial surface water (3c. Maximum water depth. Select >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6 <0.4m (<15.7in) (1) 3e. Modifications to natural hydrological surface water (4) Modifications to natural hydrological surface water (5) Modifications to natural hydrological surface water (5) Modifications to natural hydrological surface water (5) Other groundwater (5) Precipitation (1) Seasonal/Intermittent surface water (5) Other groundwater (5) Precipitation (1) Seasonal/Intermittent surface water (5) Authorized water (5) Modification to natural hydrological water (5) Modification to natural hydrological water (5) Modification to natural hydrological water (5)	rface water (3) (lake or stream) (5 only one and assign) (2)) 3d, gn score.	Part of wetland/u Part of riparian or Duration inundation/sat Semi-to perman Regularly inunda Seasonally inunda Seasonally satura	ain (1) lake and other human use (1) pland (e.g. forest), complex (1) r upland corridor (1) uration. Score one or dbl check ently inundated/saturated (4) ted/saturated (3)
		None or none apparent (Recovered (7) Recovering (3) Recent or no recovery (1	12) Check all dist ditch tile dike weir			
6	17	Metric 4. Habitat A	Alteration a	and Develo	opment.	
max 20 pts		4a. Substrate disturbance. Score (None or none apparent (Recovered (3) Recovering (2) Recent or no recovery (1 4b. Habitat development. Select of Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one of	4)) nly one and assigr	n score.		
	aubiotal this page	None or none apparent (9) Recovering (3) Recent or no recovery (1)	Check all dist mowing grazing clearcut selective	urbances observed ting e cutting debris removal	shrub/sapling rem herbaceous/aqua sedimentation dredging farming nutrient enrichme	tic bed removal

Site:	Wet	land	10	Rater(s): K.Bo	mar	miDenzler	Date:	4/4/20
S	Ubtotal first pa	7	ic 5. Special V	Vetlan	ds.				
max 10 pts	subtotal	Check all	that apply and score as ir	ndicated					
		Olieck all	Bog (10) Fen (10) Old growth forest (10) Mature forested wetland Lake Erie coastal/tributar Lake Erie coastal/tributar Lake Plain Sand Prairies Relict Wet Prairies (10) Known occurrence state/ Significant migratory son	(5) y wetland-ur y wetland-re (Oak Openi federal threa gbird/water t	estricted hydrol ngs) (10) atened or enda fowl habitat or	logy (5) angered sp usage (10	pecies (10)		
-2	15	Metr	ic 6. Plant cor	mmuni	ties, into	erspe	rsion, micro	otopogra	ıphy.
max 20 pts.	subtotal		and Vegetation Communit		-		ity Cover Scale		
		Score all	present using 0 to 3 scale Aquatic bed Emergent Shrub		1	Present veget	or comprises <0.1ha and either comprises ation and is of modera cant part but is of low	small part of wate quality, or co	etland's
			Forest Mudflats Open water		2	Present	t and either comprises ation and is of modera and is of high quality	significant part	
			Other contal (plan view) Intersper	rsion.	3	Present	and comprises signif ation and is of high qu		ore, of wetland's
		Select or	The state of the s		Nametice D	i_ai	a of Vacatation Qual		
			High (5) Moderately high(4) Moderate (3)		low	Low sp	n of Vegetation Qual p diversity and/or pred bance tolerant native	dominance of no	onnative or
			Moderately low (2) Low (1) None (0) erage of invasive plants F		mod	althou can a mode	spp are dominant com ugh nonnative and/or lso be present, and sp rately high, but gener	disturbance tole becies diversity ally w/o present	erant native spp moderate to
		or deduc	1 ORAM long form for list. t points for coverage Extensive >75% cover (- Moderate 25-75% cover Sparse 5-25% cover (-1)	5) (-3)	high	A predo and/o abser	tened or endangered a ominance of native spoor or disturbance tolerant of, and high spp divers resence of rare, threat	ecies, with nonr native spp abso sity and often, b	ent or virtually out not always,
			Nearly absent <5% cove Absent (1)	r (0)	Mudflat and	Open W	ater Class Quality		
			otopography		0	Absent	<0.1ha (0.247 acres)		
		Score all	present using 0 to 3 scale		1		to <1ha (0.247 to 2.4		
		1	Vegetated hummucks/tu Coarse woody debris >1		2		ite 1 to <4ha (2.47 to na (9.88 acres) or mor		
			Standing dead >25cm (1	0in) dbh	-				
			Amphibian breeding poo	ıs	Microtopog 0	Absent			
					1	Presen	t very small amounts	or if more comn	ion
					2	Presen	t in moderate amounts		
	1				3	Presen	t in moderate or great		

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES (10)	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (10)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size		1 2 2 2 2 3
	Metric 2. Buffers and surrounding land use	2	
	Metric 3. Hydrology	8	
	Metric 4. Habitat	le	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-2	
	TOTAL SCORE	15	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one	13	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	(NO)	Is quantitative rating score less than the Category 2 scoring threshold (excluding gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(NO)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(NO)	Is quantitative rating score greater than the Category 2 scoring threshold (including any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	VES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	Vetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, loca or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Choose one Category 1 Category 2 Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Kate Bomar	
Date: 4/0/2022	
Stantec Consulting Services, Inc.	
Address: 11687 Lebanon Rd. Cincinnati, OH 4524	
Phone Number: 513-842-9207	
e-mail address: Kate. bomara stantec. com	
Name of Wetland: Wetland	
Vegetation Communit(les):	
HGM Class(es): PEMPSS PEMPSS Plyressional	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
Torrey Station	
Faircrest street	
Prairie collège street KPrairet Rout	
Prairie college street Wetland 11 7 Project Rout N	
Fahlstreet	6
Brinker Street	
- John Sings	
Lat/Long or UTM Coordinate	
USGS Quad Name Palities USGS Quad Name	
County Stark County	
Township TION PRW	
Section and Subsection	
Hydrologic Unit Code D S D 4 D D D D S D S	
Site Visit 4 1 202.2.	
National Wetland Inventory Map N	
Ohio Wetland Inventory Map	
Soil Survey Luray silt loam, 0.2 % slopes	
See Ecological Resources Inventory Report	

Name of Wetland: Wetland 11	
	within ROW
Netland Size (acres, hectares): Sketch: Include north arrow, relationship with other surface wa	ters, vegetation zones, etc.
Comments, Narrative Discussion, Justification of Category Ch	entrert culvert culvert anges:
Final score: $\partial \omega$	Category:

Wetland 11

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.		
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.		
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.		
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		/
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	/	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Wetland 1

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	_
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	Go to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3	Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland Go to Question 4	(NO) Go to Question 4
4	Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	Go to Question 7
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	NO Go to Question 8a
8a	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	NO Go to Question 8b

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	(NO)
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES	NO Control Control (Control Control Co
9b	Does the wetland's hydrology result from measures designed to	Go to Question 9b YES	Go to Question 10
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9d
9c	Are Lake Eric water levels the wetland's primary budgelegical influence	Go to Question 10	NO
ac.	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	YES	(NO)
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	\circ
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES	(NO)
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	menigeniery, ran viole own.	Rating	

WeHand 11

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricta
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherodes
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumii
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellita
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwelli
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrewsi
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum		Helianthus grosseserratus
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicata
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflora
	Parnassia glauca	Schechzeria palustris		Lythrum alatun
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianun
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceun
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutan.
	Salix candida	Vaccinium oxycoccos		Spartina pectinata
	Salix myricoides	Woodwardia virginica		Solidago riddelli
	Salix serissima	Xyris difformis		
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

Site:	Wet	and	11			Rater(s)	: K.Bom	ar/W	1. Denzler	Date: 4	10/22
2	12	Met	ric 1.	Wet	and A	rea (siz	e).			1	
max 6 pts,	subtotal	Select	>50 a 25 to 10 to 3 to < 0.3 to 0.1 to	cres (>20 <50 acres <25 acres 10 acres (<3 acres (<0.3 acres	(4 to <10.1 1.2 to <4ha 0.12 to <1) 20.2ha) (5 pts) Iha) (4 pts) a) (3 pts) .2ha) (2pts) 50.12ha) (1 pt)	D.U	Z a c	eres		
5	7	Met	ric 2.	Upla	nd bu	iffers an	d surrou	ındin	g land use	-	
max 14 pts.	subtotal		WIDE MEDII NARR VERY ensity of s VERY LOW. MODE	. Buffers a UM. Buffe OW. Buff NARROW surroundin LOW. 2n Old field ERATELY	average 50 rs average ers averag /. Buffers g land use d growth o />10 years HIGH. Re	m (164ft) or m 25m to <50m 10m to <25r average <10m to <25r average <10m to <25r average <10m to <25r average <10m 10m to <25r average <10m to <25r	ore around wetle (82 to <164ft) a m (32ft to <82ft) (<32ft) around or double check orairie, savanna roung second gr	and perim round we around v wetland p and aver n, wildlife owth fore conserve	etland perimeter (4) vetland perimeter (1) verimeter (0) verimeter (0) verimeter (7) verimeter (7) verimeter (7) verimeter (7) verimeter (8) verimeter (9) v	,	
9	110	Met			ology		w cropping, mir	ling, cons	struction. (1)		
max 30 pts.		3c. Ma	High p Other Precip Seaso Peren ximum w >0.7 (7 0.4 to <0.4m	oH ground groundwa iitation (1) inal/Interm nial surfac ater depth 27.6in) (3) 0.7m (15.7 (<15.7in)	ter (3) ittent surfa e water (la . Select or 7 to 27.6in) (1)	ce water (3) ke or stream) (nly one and as:	sign score.	3d. Du	Part of wetland/ Part of riparian iration inundation/sa Semi- to perma Regularly inund Seasonally inur Seasonally satu	lain (1) n/lake and other h upland (e.g. fores or upland corridor sturation. Score o nently inundated/s ated/saturated (3	st), complex (1) r (1) one or dbl check. saturated (4)
		3e. Mo	_				re one or double		and average.		
		×	Recov Recov	ered (7) ering (3) et or no red		ditch tile dike weir	water input	2	point source (no filling/grading road bed/RR tradredging other	,	
8	24	Met	ric 4.	Hab	itat Al	teration	and Dev	elop	ment.		
max 20 pts.	subtotal	4a. Sul	None (Recov Recov	or none ap ered (3) ering (2)	parent (4)	e or double ch	eck and average	e.			
		4b. Hal	Excelle Very g Good Moder Fair (3	ent (7) ood (6) (5) ately good) o fair (2)	Select only	y one and assi	gn score.				
		4c. Hal	itat alter	ation. Sco	re one or (parent (9)	Check all di	sturbances obse	erved	shrub/sapling re	moval	7
5	24 subtotal this pa	age E	Recov	ering (3) t or no rec	overy (1)	grazin clearc select woody	g			atic bed removal	
	d 1 Februa		jm								

ORAM v. 5.	.0 Field Fo	rm Quantitative Rating				1 1
Site:	Wetl	and 11	Rater(s):	K.Boma	· M. Denzler	Date: 4/6/22
ŞI	2H	i	J Wetlende		,	
0	24	Metric 5. Specia	ii wetianus.	•		
max 10 pts.	subtotal	Lake Erie coastal/trit Lake Plain Sand Pra Relict Wet Prairies (Known occurrence s Significant migratory Category 1 Wetland.	o)) and (5) butary wetland-unrest butary wetland-restric iries (Oak Openings) 10) tate/federal threatene songbird/water fowl See Question 1 Que	ted hydrology (5 (10) ed or endangere habitat or usage alitative Rating (d species (10) (10) -10)	tonography
7	26	Metric 6. Plant o				topograpny.
max 20 pts.	subtotal	6a. Wetland Vegetation Comm			unity Cover Scale	2474
		Score all present using 0 to 3 s	scale.		ent or comprises <0.1ha (0 sent and either comprises s	2471 acres) contiguous area
		/ Emergent / Shrub		Ve	getation and is of moderate gnificant part but is of low o	e quality, or comprises a
	2	Forest Mudflats Open water		Vé		significant part of wetland's e quality or comprises a small
		Other_ 6b. horizontal (plan view) Inter	rspersion.		sent and comprises signific getation and is of high qua	ant part, or more, of wetland's ality
		Select only one. High (5)	Na	rrative Descrir	tion of Vegetation Quality	V
	1	Moderately high(4) Moderate (3)	<u> </u>	low Low	spp diversity and/or predo sturbance tolerant native s	minance of nonnative or
	Ţ.	Moderately low (2) Low (1) None (0) 6c. Coverage of invasive plan to Table 1 ORAM long form fo		al ca m	•	sturbance tolerant native spp ecies diversity moderate to lly w/o presence of rare
		or deduct points for coverage	-		edominance of native spec	
-	-3	Extensive >75% cov Moderate 25-75% co Sparse 5-25% cove	over (-3) r (-1)	al		native spp absent or virtually ty and often, but not always, ned, or endangered spp
		Nearly absent <5% Absent (1)		udflat and Once	Water Class Quality	
		6d Microtopography	ivi.		ent <0.1ha (0.247 acres)	
		Score all present using 0 to 3	scale.		0.1 to <1ha (0.247 to 2.47	acres)
		Vegetated hummuc		2 Mo	derate 1 to <4ha (2.47 to 9	9.88 acres)
	2	Coarse woody debri	m (10in) dbh	- T	h 4ha (9.88 acres) or more	
		Amphibian breeding	pools M	icrotopography		
			-	1 Pre	ent sent very small amounts or imprainal quality	r if more common
			-	2 Pre	marginal quality sent in moderate amounts, uality or in small amounts o	
	1		_	3 Pre	sent in moderate or greate nd of highest quality	

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or	
		insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
. tanaaro raang	addotton i ontida manta		in yes, category s.
	Question 2. Threatened or Endangered Species	YES (NO)	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (10)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	2	
	Metric 2. Buffers and surrounding land use	5	Control of the
	Metric 3. Hydrology	9	
	Metric 4. Habitat	8	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	2	
	TOTAL SCORE	24	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one	(A)	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wotland is categorized as a Category 3 wetland	(NO)	Is quantitative rating score less than the Category 2 scoring threshold (excluding gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(NO)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(NO)	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (including any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO)	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, loca or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

	Fin	al Category	
Choose one	Category 1	Category 2	Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Kate Bomar
Dates
4/6/2022
Stantec Consulting Services, Inc.
Address: 11687 Lebanon Rd. Cincinnati, OH 45241
Phone Number: 513-842-9207
e-mail address: Kate. bomara stantec. com
Name of Wetland 12
Vegetation Communit(ies):
HGM Class(es): Slope
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
Torrey Station
Faircrest street
Prairie collège street
Crestparks - Wetland 12 (NO.05 minorth of Crestparks)
crestparkst of Crestparkst)
Fohlstreet
Tom street
2 miles 1
BrinkellStreet
Lat/Long or UTM Coordinate
USGS Quad Name >
Bolivar
County Stark County
Township
TIDN P&W Section and Subsection
Section and Subsection SS
Hydrologic Unit Code OS0460010505
Site Visit 4/10/2022.
National Wetland Inventory Map
Ohio Wetland Inventory Map
Soil Survey Canfield silt loam 2-620 Slopes
Delineation report/map
See Ecological Kesources Inventory Report

etland Size (acres, hec	Wetland tares):	12	alres	within 1	2011	
		surface waters	, vegetation	zones, etc.	-009	
	row, relationship with other	500000000000000000000000000000000000000	12 /	eld		
		9	Dio			
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	CHRS	tpark	Street			
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_	V				1	
1					1	
	1				1	
					1	
Discount Discount of Discount		-4 Oh			1	
omments, Narrative Di	scussion, Justification of C	ategory Chang	jes:			
Final score :	19			Cate	COR!	-

Wetland 12

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.		
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	/	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.		
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.		

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	0
	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	Go to Question 2
	has had critical habitat proposed (65 FR 41812 July 6, 2000).		5
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	Wetland is a Category 3 wetland.	Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in	Go to Question 3	/NO
3	Natural Heritage Database as a high quality wetland?	Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	
4	Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	Go to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly Sphagnum spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	Go to Question 7
Z	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	NO Go to Question 8a
8a	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	NO Go to Question 8t

86	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of	YES	(NO)
	deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this	YES	NO
9b	elevation, or along a tributary to Lake Erie that is accessible to fish? Does the wetland's hydrology result from measures designed to	Go to Question 9b	Go to Question 10
50	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 9c
		Go to Question 10	
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	À
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10
		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	YES	NO
	characterized by the following description: the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	\bigcirc
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES	(NO)
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

Welland 12

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria Myriophyllum spicatum Najas minor Phalaris arundinacea Phragmites australis Potamogeton crispus Ranunculus ficaria Rhamnus frangula Typha angustifolia Typha xglauca	Zygadenus elegans var. glaucus Cacalia plantaginea Carex flava Carex sterilis Carex stricta Deschampsia caespitosa Eleocharis rostellata Eriophorum viridicarinatum Gentianopsis spp. Lobelia kalmii Parnassia glauca Potentilla fruticosa Rhamnus alnifolia Rhynchospora capillacea Salix candida Salix myricoides Salix serissima Solidago ohioensis Tofieldia glutinosa Triglochin maritimum Triglochin palustre	Calla palustris Carex atlantica var. capillacea Carex echinata Carex oligosperma Carex trisperma Chamaedaphne calyculata Decodon verticillatus Eriophorum virginicum Larix laricina Nemopanthus mucronatus Schechzeria palustris Sphagnum spp. Vaccinium macrocarpon Vaccinium corymbosum Vaccinium oxycoccos Woodwardia virginica Xyris difformis	Carex cryptolepis Carex lastocarpa Carex stricta Cladium mariscoides Calamagrostis stricta Calamagrostis canadensis Quercus palustris	Calamagrostis canadensis Calamagrostis stricta Carex atherodes Carex buxbaumin Carex pellita Carex sartwelli Gentiana andrewsin Helianthus grosseserratus Liatris spicata Lysimachia quadriflora Lythrum alatum Pycnanthemum virginianum Silphium terebinthinaceum Sorghastrum nutans Spartina pectinata Solidago riddelli

End of Narrative Rating. Begin Quantitative Rating on next page.

KBNIDWILL

Site: Wet	and 12	Rater(s): K	Bomay	Mi Daneler	Date: 4	2022
	Motric 1 Wotland	Aroa (cizo)	1		1	
00	Metric 1. Wetland	Area (Size).				
max 6 pts. subtotal	Select one size class and assign s >50 acres (>20.2ha) (6 g 25 to <50 acres (10.1 to 10 to <25 acres (4 to <10 3 to <10 acres (0.12 to <4 0.3 to <3 acres (0.12 to <0.1 to <0.3 acres (0.04 to <0.1 acres (0.04ha) (0 g)	ots) <20.2ha) (5 pts) 0.1ha) (4 pts) .ha) (3 pts) <1.2ha) (2pts) o <0.12ha) (1 pt)	0.09			
5 5	Metric 2. Upland b	,	urroundi	ng land use.		
max 14 pts. subtotal	2a. Calculate average buffer width WIDE. Buffers average MEDIUM. Buffers avera NARROW. Buffers avera VERY NARROW. Buffer 2b. Intensity of surrounding land u VERY LOW. 2nd growth LOW. Old field (>10 yea MODERATELY HIGH. E HIGH. Urban, industrial,	50m (164ft) or more ar ge 25m to <50m (82 to age 10m to <25m (32) rs average <10m (<32) se. Select one or dou n or older forest, prairie ars), shrub land, young Residential, fenced pas	ound wetland per o <164ft) around vit to <82ft) around ft) around wetland ble check and average s, savannah, wildl second growth for ture, park, conse	rimeter (7) wetland perimeter (4) d wetland perimeter (1) d perimeter (0) verage. ife area, etc. (7) orest. (5) ervation tillage, new fallo	ow field. (3)	
8 13	Metric 3. Hydrolog		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(,		
max 30 pts. subtotal	3a. Sources of Water Score all th High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent su Perennial surface water	rface water (3)	ľ	Connectivity. Score all 100 year floodpla Between stream/l Part of wetland/up Part of riparian or Duration inundation/satu	in (1) ake and other hur pland (e.g. forest), upland corridor (1	complex (1)
Y	3c. Maximum water depth. Select >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6 < 0.4m (<15.7in) (1) 3e. Modifications to natural hydrole	only one and assign s	core. 2-	Semi- to permane Regularly inundat Seasonally inund Seasonally satura	ently inundated/sa ed/saturated (3) ated (2)	turated (4)
3	None or none apparent (Recovered (7) Recovering (3) Recent or no recovery (1	ditch tile		point source (non filling/grading road bed/RR track dredging other		
le 19	Metric 4. Habitat A	Alteration an	d Develo	pment.		2
max 20 pls. subtotal	4a. Substrate disturbance. Score None or none apparent (Recovered (3) Recovering (2) Recent or no recovery (1	4)	nd average.			
	4b. Habitat development. Select of Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2)		ore.			
	4c. Habitat alteration. Score one of Recovered (6)	Transport of		shrub/sapling rem	ioval	1
1 C	Recovering (3) Recent or no recovery (1	grazing	tting is removal	herbaceous/aqua sedimentation dredging farming nutrient enrichme	tic bed removal	
last revised 1 Februar	ry 2001 jjm	7				-

Site:	We	Hand 12	Rater(s): K.B	omar M. Denzler Date: 4/4/202
0	19 ubtotal first p	Metric 5. Special	Wetlands.	
nax 10 pts.	subtotal	Check all that apply and score as	indicated.	
		Lake Erie coastal/tribut: Lake Plain Sand Prairie Relict Wet Prairies (10) Known occurrence stat Significant migratory so	ary wetland-unrestricted hy ary wetland-restricted hydro es (Oak Openings) (10)	angered species (10) r usage (10)
0	19	Metric 6. Plant co	ommunities, int	terspersion, microtopography.
max 20 pts	subtotal	Metland Vegetation Commur	nities. Vegetation	Community Cover Scale
		Score all present using 0 to 3 sca	le 0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
	1	Aquatic bed Emergent Shrub	1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
		Forest Mudflats Open water	2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
		Other 6b horizontal (plan view) Intersp	ersion 3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality
		Select only one. High (5)	Narrative I	Description of Vegetation Quality
		Moderately high(4) Moderate (3)	low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
	1	Moderately low (2) Low (1) None (0) 6c. Coverage of invasive plants. to Table 1 ORAM long form for lis		Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
		or deduct points for coverage Extensive >75% cover Moderate 25-75% cover (-1) Sparse 5-25% cover (-1) Nearly absent <5% cov	er (-3) 1)	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp
	*****	Nearly absent <5% cov Absent (1)	* *	d Open Water Class Quality
		6d. Microtopography.	Mudifat an	Absent <0.1ha (0.247 acres)
		Score all present using 0 to 3 sca		Low 0.1 to <1ha (0.247 to 2.47 acres)
		Vegetated hummucks/t		Moderate 1 to <4ha (2.47 to 9.88 acres)
		Coarse woody debris > Standing dead >25cm		High 4ha (9.88 acres) or more
		Amphibian breeding po	'	graphy Cover Scale
			0	Absent
			1	Present very small amounts or if more common of marginal quality
			2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
	ì		3	Present in moderate or greater amounts and of highest quality

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES (NO)	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
	Metric 2. Buffers and surrounding land use	5	
	Metric 3. Hydrology	8	A STATE OF THE STA
	Metric 4. Habitat	6	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	0	
	TOTAL SCORE	19	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one	(A)	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	(NO)	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (excluding gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(№)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(NO)	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (<i>including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, loca or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons of information for this determination should be provided.

Choose one Category 1 Category 2 Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Kate Bomar
Date: 4/0/2022
Affiliation: Stantec Consulting Services, Inc.
Address: 11687 Lebanon Rd. Cincinnati, OH 45241
Phone Number: 513-842-8207
e-mail address: Kate. bomara stantec. com
Name of Wetland: Wetland 13
Vegetation Communit(ies):
HGM Class(es): Diprestional
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
Torrey Station
Faircrest street
Prairie collège street E Project Row Twestparkst Fohl Street
Brinkerstreet
Lat/Long or UTM Coordinate
USGS Quad Name Bolivar
County Stark County
Township TION ROW
Section and Subsection
Hydrologic Unit Code OSD4 000 1 0 50 5
Site Visit 4 U 202.2.
National Wetland Inventory Map
Ohio Wetland Inventory Map N A
Soil Survey Canfield silt loam 2-600 slopes
Delineation report/map See Ecological Resources Inventory Report

etch: Include north arrow, relationship with other surface waters, vegetation zones, etc. Carden Old field Structure 302 omments, Nerrative Discussion, Justification of Category Changes:	Name of Wetland: Wetland 13	
Ord Relation of Category Changes:	Netland Size (acres, hectares):	with in DOW
Ord Relation of Category Changes:	Sketch: Include north arrow, relationship with other surface	waters, vegetation zones, etc.
ord field Structure 302 ROW Ord Round Structure 302 A Property Changes:		arden
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onments, Narrative Discussion, Justification of Category Changes:		
ord Reld Structure 302 ROW Omments, Narrative Discussion, Justification of Category Changes:	V /	<i>y</i> (
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ord field Structure 302 ROW- omments, Narrative Discussion, Justification of Category Changes:	(1)	
ord field Structure 302 A ROW Omments, Narrative Discussion, Justification of Category Changes:	Y	
ord field Structure 302 A ROW Omments, Narrative Discussion, Justification of Category Changes:	N. V	
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omments, Narrative Discussion, Justification of Category Changes:	7	. \
Final score : 1	Comments, Narrative Discussion, Justification of Category	Changes:
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Final score :		
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Final score : (1)		
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Final score : 1		
Final score : 1		
Final score : 1		
	Final score : 21	Category:

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.		
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.		
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.		
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.		

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	0
1	Critical Habitat. Is the wetland in a township, section, or subsection of	YES	(NO)
	a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or	Wetland should be evaluated for possible Category 3 status	Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	6
2	Threatened or Endangered Species. Is the wetland known to contain	YES	NO)
	an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	Wetland is a Category 3 wetland.	Go to Question 3
		Go to Question 3	\wedge
3	Documented High Quality Wetland. Is the wetland on record in	YES	(NO)
	Natural Heritage Database as a high quality wetland?	Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	
4	Significant Breeding or Concentration Area. Does the wetland	YES	(NO)
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or	YES Wetland is a Category 1 wetland	Go to Question 6
	2) an acidic pond created or excavated on mined lands that has little or no vegetation?	Go to Question 6	6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no	YES	NO)
	significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	Wetland is a Category 3 wetland	Go to Question 7
		Go to Question 7	
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO /
	is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	Wetland is a Category 3 wetland	Go to Question 8a
		Go to Question 8a	
8a	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a	YES Wetland is a Category	NO Go to Question 8b
	projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100	3 wetland.	
	years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	(NO)
	50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
	A. L. C.	Go to Question 9a	
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this	YES	NO
9b	elevation, or along a tributary to Lake Erie that is accessible to fish? Does the wetland's hydrology result from measures designed to	Go to Question 9b YES	Go to Question 10
30	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erle due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
	A	Go to Question 10	
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland	YES	NO
	border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	Go to Question 9d	Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance	YES	NO
	tolerant native plant species within its vegetation communities?	Wetland should be evaluated for possible Category 3 status	Go to Question 10
		Go to Question 10	0
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in	YES	NO
	Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this	Go to Question 11	
11	type of wetland and its quality. Relict Wet Prairies. Is the wetland a relict wet prairie community	YES	(NO)
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Wetland should be evaluated for possible Category 3 status	Complete Quantitative Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricta
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherodes
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumi
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellita
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwelli
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrewsi
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum		Helianthus grosseserratu
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicate
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflor
71 0	Parnassia glauca	Schechzeria palustris		Lythrum alatun
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianur
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceur
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutan
	Salix candida	Vaccinium oxycoccos		Spartina pectinat
	Salix myricoides	Woodwardia virginica		Solidago riddell
	Salix serissima	Xyris difformis		-500 A M 107
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

Site:	setland	13	Rater(s): K Bow	a MiDenzler	Date: 4 0 22
1	Metric	: 1. Wetland A	rea (size).		<i>F</i> .1
max 6 pts. su		size class and assign score >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20 10 to <25 acres (4 to <10.1h 3 to <10 acres (1.2 to <4ha) 0.3 to <3 acres (0.12 to <1.2 1.1 to <0.3 acres (0.04 to <0 <0.1 acres (0.04ha) (0 pts)	0.2ha) (5 pts) (a) (4 pts) (3 pts) (ha) (2pts)	0.12 acres	
5	Metric	2. Upland but	fers and surro	unding land us	9.
max 14 pts. su	2b. Intensi	MIDE. Buffers average 50m MEDIUM. Buffers average 2 NARROW. Buffers average 2/ERY NARROW. Buffers average ity of surrounding land use. 7/ERY LOW. 2nd growth or LOW. Old field (>10 years),	n (164ft) or more around we 25m to <50m (82 to <164ft) 10m to <25m (32ft to <82: verage <10m (<32ft) aroun Select one or double che older forest, prairie, savanr shrub land, young second dential, fenced pasture, pa	around wetland perimeter (4 ft) around wetland perimeter (d wetland perimeter (0) ck and average. nah, wildlife area, etc. (7) growth forest. (5) rk, conservation tillage, new f	(1)
8		3. Hydrology.			
max 30 pts. su	3c. Maxim	es of Water. Score all that a digh pH groundwater (5) Other groundwater (3) Precipitation (1) Geasonal/Intermittent surface Perennial surface water (lake um water depth. Select only 0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (10.4 to 0.7m (15.7 to 0.7 to 0.7 to 0.7m (15.7 to 0.7 to 0.7 to 0.7m (15.7 to 0.7 to 0.7 to 0.7 to 0.7 to 0.7m (15.7 to 0.7 to 0.7 to 0.7 to 0.7 to 0.7m (15.7 to 0.7	e water (3) e or stream) (5) y one and assign score. 2)	Part of wetland Part of ripariar 3d. Duration inundation/s Semi- to perm Regularly inun Seasonally inu Seasonally sai ble check and average.	plain (1) m/lake and other human use (1) d/upland (e g. forest), complex (1) n or upland corridor (1) saturation. Score one or dbl check. anently inundated/saturated (4) dated/saturated (3)
		Recent or no recovery (1)	dike weir stormwater input	road bed/RR to dredging other	rack
7	Metric	ا 4. Habitat Alt			
max 20 pts. su	4b. Habital	ate disturbance. Score one None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1) I development. Select only excellent (7) April 2000 (6) Roderately good (4) Fair (3) Roor to fair (2) Roor (1) I alteration. Score one or development or none or development apparent of the series of the	one and assign score.		
subtota	X F	lone or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)	Check all disturbances of mowing grazing clearcutting selective cutting woody debris removitoxic pollutants	shrub/sapling and herbaceous/ac sedimentation dredging	uatic bed removal

last revised 1 February 2001 jjm

Site:	W	Hand	13	Rater(s): K.Bo	omar/midenzler	Date: 4/0/2012
5	21 autotal first p	1	c 5. Specia	al Wetland	s.		
V			_				
max 10 pts.	subtotal		that apply and score Bog (10) Fen (10) Old growth forest (1 Mature forested wei Lake Erie coastal/tr Lake Erie coastal/tr Lake Plain Sand Pr Relict Wet Prairies Known occurrence Significant migrator	I0) tland (5) ibutary wetland-unr ibutary wetland-res airies (Oak Opening (10) state/federal threate	tricted hydro gs) (10) ened or enda	logy (5)	
			Category 1 Wetland				
0	21	Metri	c 6. Plant	communit	ies, int	erspersion, micro	topography.
max 20 pts.	subtotal	J 6a Wetla	and Vegetation Com	munities	Vegetation	Community Cover Scale	
The Party	33575-41		present using 0 to 3		0	Absent or comprises <0.1ha (0	.2471 acres) contiguous area
	Ĭ		Aquatic bed Emergent Shrub		1	Present and either comprises s vegetation and is of moderat significant part but is of low of	small part of wetland's e quality, or comprises a
	(Forest Mudflats Open water		2	Present and either comprises of vegetation and is of moderate part and is of high quality	significant part of wetland's e quality or comprises a smal
		6b. horiz	Other ontal (plan view) Inte	erspersion	3	Present and comprises signific vegetation and is of high qua	
		Select on	ly one. High (5)		Marrativa D	escription of Vegetation Qualit	v.
			Moderately high(4)		low	Low spp diversity and/or predo	
			Moderate (3)		1470	disturbance tolerant native s	
			Moderately low (2) Low (1) None (0) rage of invasive plat 1 ORAM long form fo		mod	Native spp are dominant comp although nonnative and/or di can also be present, and spe moderately high, but general threatened or endangered sp	sturbance tolerant native spp ecies diversity moderate to lly w/o presence of rare
		or deduct	points for coverage Extensive >75% co Moderate 25-75% co Sparse 5-25% coverage	over (-5) cover (-3) er (-1)	high	A predominance of native speciand/or disturbance tolerant rabsent, and high spp diversithe presence of rare, threate	native spp absent or virtually ty and often, but not always,
		-	Nearly absent <5% Absent (1)	cover (U)	Mudflat and	d Open Water Class Quality	
		6d. Micro	otopography		0	Absent <0.1ha (0.247 acres)	
			present using 0 to 3		1	Low 0.1 to <1ha (0.247 to 2.47	
		1.1	Vegetated hummud		2	Moderate 1 to <4ha (2.47 to 9	
					3	THE PARTY OF THE PARTY OF MACHINE	
		1 =	Coarse woody deb			High 4ha (9.88 acres) or more	
		1	Coarse woody deb Standing dead >25 Amphibian breedin	icm (10in) dbh		graphy Cover Scale	-
		I	Standing dead >25	icm (10in) dbh	Microtopog 0	graphy Cover Scale Absent	
			Standing dead >25	icm (10in) dbh	Microtopog	graphy Cover Scale	

21

End of Quantitative Rating. Complete Categorization Worksheets.

Present in moderate or greater amounts

and of highest quality

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES (NO)	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1,
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (10)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size		
ŭ	Metric 2. Buffers and surrounding land use	5	
	Metric 3. Hydrology	8	
	Metric 4. Habitat	7	A CONTRACTOR
	Metric 5. Special Wetland Communities	D	
	Metric 6. Plant communities, interspersion, microtopography	0	
	TOTAL SCORE	21	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one	(A)	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	(NO)	Is quantitative rating score less than the Category 2 scoring threshold (excluding gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(NO)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(NO)	Is quantitative rating score greater than the Category 2 scoring threshold (including any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, loca or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons of information for this determination should be provided.

Final Category						
Choose one	Category 1	Category 2	Category 3			

End of Ohio Rapid Assessment Method for Wetlands.

D.3 HHEI/QHEI DATA FORMS

October 2018 Revision

Protettion Agenty	Primary Headw	ater Hab		n of metrics 1+2+3)	47
SITE NAME/LOCATION _ SITE NUMBER <u>Stream</u> LENGTH OF STREAM RE DATE <u>4/4/22</u> S	LL RIVER BASIN MUS ACH (#) 104 LAT 4	argum F	IVER CODE	DRAINAGE AREA (MP) _ 117°W RIVER MILE _	
·	ms On This Form - Refer		1		
(Max of 32). Add TYPE BLDR SLABS BOULDER (> BEDROCK [1] COBBLE (65- GRAVEL (2-6 SAND (<2 mm Total of Perce Bldr Slabs, Boulder	256 mm) [16 pts] 6 pts] 256 mm) [12 pts] 4 mm) [9 pts]) [6 pts]	TYPE		PERCENT 100 RIS [3 pts]	HHEI Metric Points Substrate Max = 40
	pts]		m water pipes) (Check 5 cm - 10 cm [15 pts] < 5 cm [5pts] NO WATER OR MOIST (ONLY one box):	Pool Depth Max = 30
BANK FULL WID > 4.0 meters (> 13 > 3.0 m - 4.0 m (>		e of 3 - 4 meas		.Yone box):	Bankfull Width Max=30
COMMENTS			AVERAGE BANKFU	LL WIDTH (meters)	20
RIPARIAN	This ZONE AND FLOODPLAIN QU		nustaisobe completed	t (D) se looking downstreem	
L R (Per E	N WIDTH Dank) L R Om	Mature Fores	QUALITY (Most Predomin L t, Wetland est, Shrub or Old Field ark, New Field	ant per Bank) R] Conservation Tillage	гор
FLOW REG Stream Flow Subsurface COMMENT	GIME (At Time of Evaluation) wing Iflow with isolated pools (inters	titial)	Moist Channel, iso Dry channel, no w	ntermittent	ent)
None 0.5 STREAM GRADIE	1.0 1.5	(2.0	3.0	
Flat (0.5 %100 %)	Flat to Moderate Mod	derate (2 %100 %)	Moderate to Sev	ere Severe (10 %	100 ୩)

Page 1

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed): QHEI PERFORMED? Tyes TYNO QHEI Score _____ (If Yes, Attach Completed QHEI form) DOWNSTREAM DESIGNATED USE(S) Distance from Evaluated Stream CWH Name: Distance from Evaluated Stream Distance from Evaluated Stream ☐ EWH Name: Distance from Evaluated Stream MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION. USGS Quadrangle Name: Canton West NRCS Soil Map Page: NRCS Soil Map Stream Order: County Stark Township/City: Canton MISCELLANEOUS Base Flow Conditions? (Y/N) Date of last precipitation: 413 vont Quantity: 0.07" Photo-documentation Notes: Were samples collected for water chemistry? (Y/N): \(\frac{\lambda}{\} \) Lab Sample # or ID (attach results): \(\frac{\}{\} \) Field Measures:Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) ____ Conductivity (umhos/cm) is the sampling reach representative of the stream (Y/N) Y If not, explain Additional comments/description of pollution impacts: BIOLOGICAL OBSERVATIONS (Record all observations below) Fish Observed? (Y/N) _ ____ Species observed (if known)._____ Frogs or Tadpoles Observed? (Y/N) V Species observed (if known): Salamanders Observed? (Y/N) N Species observed (if known): Aquatic Macroinvertebrates Observed? (Y/N) V Species observed (if known): Comments Regarding Biology: Aono abserved DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed) Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location por field Scrub-Strib FLOW

Field Methods for Evaluating Primary Headwater Streams in Ohio Ohio EPA, Division of Surface Water

Pomecon Aprica		ater Habitat Field HHEI Sco		netrics 1+2+3)	Lele
LENGTH OF STREAM REAC DATE 4 5 2012 SCOT	RIVER BASIN MUSK CH (#) 240 LAT 40 RER KLB CO	DIMMENTS LONG	000 81.410541	INAGE AREA (mr) 6).48n
		O "Field Evaluation Manual	1		
	I number of significant substants PERCENT Signature From [16 pts] Signature From [12 pts] From [9 pts]	FINE DETRITUS CLAY OF HARDP, MUCK [0 pts] ARTIFICIAL [3 p	ody DEBRIS (3 (3 pts) AN (0 pt)	pts] (B)	HHEI Metric Points Substra Max = 40
	void plunge pools fromroad ots] s]		(Check ONLY)	EL [Opts]	Pool Dep Max = 30
3. BANK FULL WIDTH > 4.0 meters (> 13') [3 > 3.0 m - 4.0 m (> 9' 7 > 1.5 m - 3.0 m (> 4' 8	30 pts] '"- 13') [25 pts]	e of 3 - 4 measurements) (Ch > 1.0 m - 1.5 m ≤ 1.0 m (≤ 3° 3°)	(> 3' 3" - 4' 8")[1		Bankful Width Max=30
COMMENTS		AVERAGE	BANKFULL WIG	OTH (meters) 2.9	
DIDADIAN ZO		information mustals obe con ALITY * NOTE: River Left (L	npleted		
RIPARIAN V L R (Per Bank Wide >10m Moderate 5 Narrow <5r	WIDTH k) L R i-10m	FLOODPLAIN QUALITY (Most Mature Forest, Wetland Immature Forest, Shrub or Ok Residential, Park, New Field Fenced Pasture	Predominant per LR		op.
COMMENTS _	E (At Time of Evaluation)	Moist Ch	annel, isolated po	ools, no flow (intermitte ohemeral)	nt)
Stream Flowing	w with isolated pools (interst	ntermittent			-
Stream Flowing Subsurface flor COMMENTS SINUOSITY (None 0.5 STREAM GRADIE/IT	w with isolated pools (interst Number of bends per 61 m (7 1.0 1.5 ESTIMATE	nterm itent 200 ft) of channel), (Check ONL 2.0 2.5	Y one box):	3.0 >3	

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? Yes No QHEI Score	(If Yes, Attach Completed QHEI form)
DOWNSTREAM DESIGNATED USE(S) WWH Name: BLAY P.WA CWH Name: EWH Name:	Distance from Evaluated Stream _ ~ O . V M I
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE	
USGS Quadrangle Name: BOIVAY NRCS So	il Map Page: NRCS Soil Map Stream Order:
County: Stark County Township	City:
MISCELLANEOUS Base Flow Conditions? (Y/N):	15/2.7 Quantity D. /1"
	duantity.
Photo-documentation Notes: Elevated Turbidity?(Y/N): Canopy (% open): 750	
Were samples collected for water chemistry? (Y/N): Lab S	Sample # or ID (attach results):
Field Measures:Temp (°C) Dissolved Oxygen (mg/l)	pH (S.U.) Conductivity (umhos/cm)
is the sampling reach representative of the stream (Y/N) $\underline{\hspace{1cm}}$ If not, e	explain:
Additional comments/description of pollution impacts:	
BIOLOGICAL OBSERV	
Fish Observed? (Y/N) Species observed (if known):	
Frogs or Tadpoles Observed? (Y/N) $\underline{\mathcal{N}}$ Species observed (if know	
Salamanders Observed? (Y/N) Species observed (if known):	
Aquatic Macroinvertebrates Observed? (Y/N) N Species observed	
Comments Regarding Biology:	
DRAWING AND NARRATIVE DESCRIPTION O	OF STREAM REACH (This must be completed)
Include important landmarks and other features of interest for s	ite evaluation and a narrative description of the stream's location
over hanging	
The state of the s	1
(601)	veg
LOW	el ba.
LOW downed graves	gravel bar
gravel bar	the sed
grand	Riffle poul forested
	79 /

OhioEPA

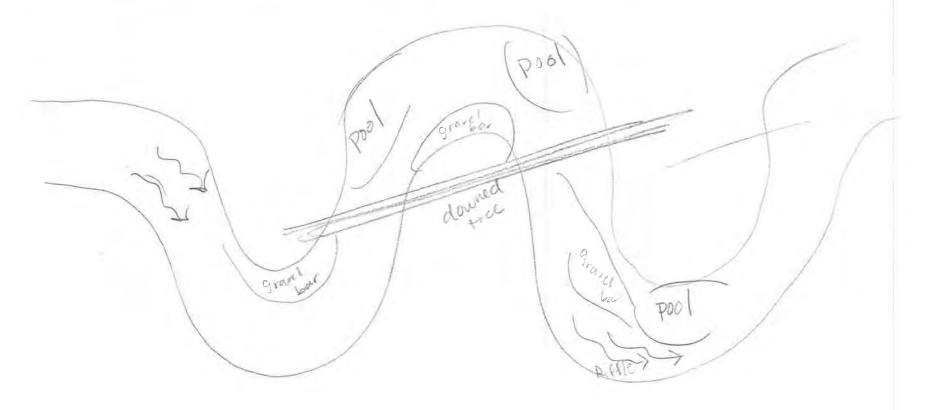
Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

QHEI Score:	41.5

Stream & Location:	Stream & South Canton	n-Torrea 138 KV Line F	RM: Date: 4 5 2022
Rebuild Project	Stark founty sc	orers Full Name & Affiliation: K	ale Bomar / Stanlec
River Code: -	- STORET #:	Lat./Long.: 40 . 719 197	
1] SUBSTRATE Check	ONLY Two substrate TYPE BOXES;		
DEST TYPES	te % or note every type present OOL RIFELE OTHER TYPES	ADIAIN	E (Or 2 & average) QUALITY
□ BLDR /SLABS [10]	OOL RIFFLE THER TYPES	POOL RIFFLE ORIGIN	HEAVY I-21
BOULDER [9]	DETRITUS [3]	☐ TILLS [1]	SILT MODERATE [-1] Substrate
COBBLE [8]	X X D MUCK [2]	WETLANDS [0]	LI NORMAL [0]
`Д	XXX		DDEA DEXTENSIVE [-2]
□□ BEDROCK [5]	(Score natural s	ubstrates; ignore RIP/RAP [0]	MODERATE [-1] Maximum
NUMBER OF BEST T		n point-sources) LACUSTURINE [0]	DEON DEXTENSIVE [-2] Maximum NORMAL [0] 20 NONE [1]
Comments	3 or less [0]	☐ SHALE [-1] ☐ COAL FINES [-2]	□ NONE [1]
	,		
quality; 3-Highest quality in	quality; 2-Moderate amounts, but no moderate or greater amounts (e.g., v well developed rootwad in deep / fast [1] POOLS > 700 GETATION [1] ROOTWADS		nighest check ONE (Or 2 & average) ols. □ EXTENSIVE >75% [11] [1] □ MODERATE 25-75% [7] S [1] □ SPARSE 5-<25% [3]
31 CHANNEL MORPH	OLOGY Check ONE in each catego	ry (Or 2 & average)	200
	ELOPMENT CHANNELIZ		
	CELLENT [7] ONE [6]	☐ HIGH [3]	
☐ MODERATE [3] ☐ GO LOW [2] FA	DOD [5] RECOVERED [4 IR [3] RECOVERING [
		RECOVERY [1]	Channel
		INEGOVER [1]	
Comments		ALCOVER [I]	Maximum 10
4] BANK EROSION AI River right looking downstream EROSION NONE / LITTLE [3]	ND RIPARIAN ZONE Check ON	IE in each category for EACH BANK (Or 2) R FLOOD PLAIN QUALITY FOREST, SWAMP [3] SHRUB OR OLD FIELD [2] RESIDENTIAL, PARK, NEW FIELD [1] FENCED PASTURE [1]	Der bank & average) CONSERVATION TILLAGE [1] URBAN OR INDUSTRIAL [0] MINING / CONSTRUCTION [0] Indicate predominant land use(s) past 100m riparian. Riparian Maximum
A] BANK EROSION AI River right looking downstream EROSION NONE / LITTLE [3] MODERATE [2] MHEAVY / SEVERE [1] Comments	ND RIPARIAN ZONE Check ON RIPARIAN WIDTH WIDE > 50m [4] WODERATE 10-50m [3] WODERATE 10-50m [2] WODERATE 10-50m [2] WODERATE 10-50m [1] WONE [0] WONE [0] WONE [0]	IE in each category for EACH BANK (Or 2) R FLOOD PLAIN QUALITY FOREST, SWAMP [3] SHRUB OR OLD FIELD [2] RESIDENTIAL, PARK, NEW FIELD [1] FENCED PASTURE [1]	Der bank & average) CONSERVATION TILLAGE [1] URBAN OR INDUSTRIAL [0] MINING / CONSTRUCTION [0] Indicate predominant land use(s) past 100m riparian. Riparian
4] BANK EROSION AI River right looking downstream EROSION NONE / LITTLE [3] MODERATE [2] Comments 5] POOL / GLIDE AND MAXIMUM DEPTH Check ONE (ONLY!) > 1m [6] 0.7-<1m [4]	ND RIPARIAN ZONE Check ON RIPARIAN WIDTH WIDE > 50m [4] WODERATE 10-50m [3] WODERATE 10-50m [2] WODERATE 10-50m [2] WODERATE 10-50m [1] WODERATE 10-50m [1] WONE [0] WONE [0]	IE in each category for EACH BANK (Or 2 PERCENT SWAMP [3] SHRUB OR OLD FIELD [2] RESIDENTIAL, PARK, NEW FIELD [1] FENCED PASTURE [1] OPEN PASTURE, ROWCROP [0] CURRENT VELOCITY Check ALL that apply TORRENTIAL [-1] SLOW [1] VERY FAST [1] INTERSTITIAL	Der bank & average) CONSERVATION TILLAGE [1] URBAN OR INDUSTRIAL [0] Indicate predominant land use(s) past 100m riparian. Riparian Maximum 10 Recreation Potential Primary Contact Secondary Contact (circle one and comment on back) IT [-2] Pool / Current Maximum Primary Contact Pool / Current Maximum P
4] BANK EROSION AI River right looking downstream EROSION NONE / LITTLE [3] MODERATE [2] HEAVY / SEVERE [1] Comments 5] POOL / GLIDE AND MAXIMUM DEPTH Check ONE (ONLY!) 1m [6] 0.7-<1m [4] 0.4-<0.7m [2] 0.4-<0.7m [2] 0.2-<0.4m [1] 0.0.2m [0] Comments	ND RIPARIAN ZONE Check ON RIPARIAN WIDTH WIDE > 50m [4] WIDE MODERATE 10-50m [3] WIDE MARROW 5-10m [2] WIDE MONE [0] WIDTH CHANNEL WIDTH Check ONE (Or 2 & average) POOL WIDTH > RIFFLE WIDTH [1] POOL WIDTH < RIFFLE WIDTH [0] POOL WIDTH < RIFFLE WIDTH [0]	FLOOD PLAIN QUALITY FLOOD PLAIN QUALITY FOREST, SWAMP [3] SHRUB OR OLD FIELD [2] RESIDENTIAL, PARK, NEW FIELD [1] FENCED PASTURE [1] OPEN PASTURE, ROWCROP [0] CURRENT VELOCITY Check ALL that apply TORRENTIAL [-1] SLOW [1] VERY FAST [1] INTERSTITIAL FAST [1] INTERSTITIAL MODERATE [1] EDDIES [1] Indicate for reach - pools and riffles	Der bank & average) CONSERVATION TILLAGE [1] URBAN OR INDUSTRIAL [0] URBAN OR INDUSTRIAL [0] Indicate predominant land use(s) past 100m riparian. Riparian Maximum 10 Recreation Potential Primary Contact Secondary Contact Secondary Contact (circle one and comment on back) Pool / Current Maximum 12
4] BANK EROSION AI River right looking downstream EROSION NONE / LITTLE [3] MODERATE [2] MODERATE [2] Comments 5] POOL / GLIDE AND MAXIMUM DEPTH Check ONE (ONLY!) > 1m [6] 0.7-<1m [4] 0.4-<0.7m [2] 0.2-<0.4m [1] < 0.2m [0] Comments Indicate for function of riffle-obligate s RIFFLE DEPTH BEST AREAS > 10cm [2]	ND RIPARIAN ZONE Check ON RIPARIAN WIDTH WIDE > 50m [4] WODERATE 10-50m [3] WODERATE 10-50m [4] WODER	FLOOD PLAIN QUALITY FLOOD PLAIN QUALITY FOREST, SWAMP [3] SHRUB OR OLD FIELD [2] RESIDENTIAL, PARK, NEW FIELD [1] FENCED PASTURE [1] OPEN PASTURE, ROWCROP [0] CURRENT VELOCITY Check ALL that apply TORRENTIAL [-1] SLOW [1] VERY FAST [1] INTERMITTEN MODERATE [1] INTERMITTEN MODERATE [1] DEDDIES [1] Indicate for reach - pools and riffles the large enough to support a pone (Or 2 & average). ELE / RUN SUBSTRATE RIFFLE	Der bank & average)
A] BANK EROSION AI River right looking downstream EROSION NONE / LITTLE [3] MODERATE [2] HEAVY / SEVERE [1] Comments 5] POOL / GLIDE AND MAXIMUM DEPTH Check ONE (ONLY!) 1m [6] 0.7-<1m [4] 0.2-<0.4m [1] < 0.2m [0] Comments Indicate for function of riffle-obligate seriffle-obligate s	ND RIPARIAN ZONE Check ON RIPARIAN WIDTH WIDE > 50m [4] WODERATE 10-50m [3] WODERATE 10-50m [4] WODER	FLOOD PLAIN QUALITY FLOOD PLAIN QUALITY FOREST, SWAMP [3] SHRUB OR OLD FIELD [2] RESIDENTIAL, PARK, NEW FIELD [1] FENCED PASTURE [1] OPEN PASTURE, ROWCROP [0] CURRENT VELOCITY Check ALL that apply TORRENTIAL [-1] SLOW [1] VERY FAST [1] INTERMITTEN MODERATE [1] INTERMITTEN MODERATE [1] DEDDIES [1] Indicate for reach - pools and riffles the large enough to support a pone (Or 2 & average). ELE / RUN SUBSTRATE RIFFLE	Der bank & average) CONSERVATION TILLAGE [1] URBAN OR INDUSTRIAL [0] MINING / CONSTRUCTION [0] Indicate predominant land use(s) past 100m riparian. Riparian Maximum 10 Recreation Potential Primary Contact Secondary Contact Secondary Contact (circle one and comment on back) IT [-2] Pool / Current Maximum 12 Opulation NO RIFFLE [metric=0] F RUN EMBEDDEDNESS NONE [2] LOW [1] MODERATE IN Riffle / Riffle
4] BANK EROSION AI River right looking downstream EROSION NONE / LITTLE [3] MODERATE [2] HEAVY / SEVERE [1] Comments 5] POOL / GLIDE AND MAXIMUM DEPTH Check ONE (ONLY!) 1m [6] 0.7-<1m [4] 0.4-<0.7m [2] 0.2-<0.4m [1] 0.2-<0.4m [1] 0.2-<0.4m [1] 0.2-<0.5m [0] Comments Indicate for function of riffle-obligate s RIFFLE DEPTH BEST AREAS > 10cm [2] BEST AREAS > 5-10cm [1] BEST AREAS < 5cm [metric=0]	ND RIPARIAN ZONE Check ON RIPARIAN WIDTH WIDE > 50m [4] WODERATE 10-50m [3] WODERATE 10-50m [4] WODER	FLOOD PLAIN QUALITY FLOOD PLAIN QUALITY FOREST, SWAMP [3] SHRUB OR OLD FIELD [2] RESIDENTIAL, PARK, NEW FIELD [1] FENCED PASTURE [1] OPEN PASTURE, ROWCROP [0] CURRENT VELOCITY Check ALL that apply TORRENTIAL [-1] SLOW [1] VERY FAST [1] INTERSTITIAL FAST [1] INTERMITTEN MODERATE [1] EDDIES [1] Indicate for reach - pools and riffles to be large enough to support a pone (Or 2 & average). ELE / RUN SUBSTRATE RIFFLE LE (e.g., Cobble, Boulder) [2] STABLE (e.g., Large Gravel) [1]	Der bank & average) CONSERVATION TILLAGE [1] URBAN OR INDUSTRIAL [0] Indicate predominant land use(s) past 100m riparian. Riparian Maximum 10 Recreation Potential Primary Contact Secondary Contact Secondary Contact (circle one and comment on back) Pool / Current Maximum 12 Opulation NO RIFFLE [metric=0] Indicate Primary Contact Indicate Primary Con
4] BANK EROSION AI River right looking downstream EROSION DINONE / LITTLE [3] DINONE /	ND RIPARIAN ZONE Check ON RIPARIAN WIDTH WIDE > 50m [4] WODERATE 10-50m [3] WODERATE 10-50m [4] WODER	FLOOD PLAIN QUALITY FLOOD PLAIN QUALITY FOREST, SWAMP [3] SHRUB-OR OLD FIELD [2] RESIDENTIAL, PARK, NEW FIELD [1] FENCED PASTURE [1] OPEN PASTURE, ROWCROP [0] CURRENT VELOCITY Check ALL that apply TORRENTIAL [-1] SLOW [1] VERY FAST [1] INTERSTITIAL FAST [1] INTERMITTEN MODERATE [1] DEDDIES [1] Indicate for reach - pools and riffles to be large enough to support a poole (Or 2 & average). ELE / RUN SUBSTRATE RIFFLE LE (e.g., Cobble, Boulder) [2] STABLE (e.g., Fine Gravel, Sand) [0]	Der bank & average) CONSERVATION TILLAGE [1] URBAN OR INDUSTRIAL [0] MINING / CONSTRUCTION [0] Indicate predominant land use(s) past 100m riparian. Riparian Maximum 10 Recreation Potential Primary Contact Secondary Contact Secondary Contact (circle one and comment on back) Topulation NO RIFFLE [metric=0] F RUN EMBEDDEDNESS NONE [2] Low [1] Moderate [0] Riffle / Run Maximum Ru

A] SAMPLED Check ALL	ALACII	Comment RE: Reach consistency/ I Typical reach	s reach typical of steam?, Recreation	n/ Observed - Inferred, Other	√ Sampling observations, Concerns, Acc	ess directions, etc.
L LINE	STAGE 1st -sample pass - 2nd HIGH UP NORMAL LOW					
0.15 Km	CLARITYsample pass 2nd < 20 cm	BJAESTHETICS NUISANCE ALGAE INVASIVE MACROPHYTES EXCESS TURBIDITY DISCOLORATION FOAM / SCUM OIL SHEEN	DJ MAINTENANCE PUBLIC / PRIVATE / BOTH / NA ACTIVE / HISTORIC / BOTH / NA YOUNG-SUCCESSION-OLD SPRAY / SNAG / REMOVED MODIFIED / DIPPED OUT / NA LEVEED / ONE SIDED	Circle some & COMMENT	EJ ISSUES WWTP / CSO / NPDES / INDUSTRY HARDENED / URBAN / DIRT&GRIME CONTAMINATED / LANDFILL BMPs-CONSTRUCTION-SEDIMENT LOGGING / IRRIGATION / COOLING BANK / EROSION / SURFACE	F] MEASUREMENTS X width X depth max. depth X bankfull width bankfull X depth
CANOPY > 85%- OPEN 55%-<85% 30%-<55% 10%-<30%	c] RECRE	☐ NUISANCE ODOR ☐ SLUDGE DEPOSITS ☐ CSOs/SSOs/OUTFALLS	RELOCATED / CUTOFFS MOVING-BEDLOAD-STABLE ARMOURED / SLUMPS ISLANDS / SCOURED IMPOUNDED / DESICCATED FLOOD CONTROL / DRAINAGE		FALSE BANK / MANURE / LAGOON WASH H ₂ 0 / TILE / H ₂ 0 TABLE ACID / MINE / QUARRY / FLOW NATURAL / WETLAND / STAGNANT PARK / GOLF / LAWN / HOME ATMOSPHERE / DATA PAUCITY	W/D ratio bankfull max. depth floodprone x² width entrench. ratio Legacy Tree:

Stream Drawing:



Field Methods for Evaluating Primary Headwater Streams in Ohio Ohio EPA, Division of Surface Water

Phio Chi Entrangental Protection Agency	Primary Headv	water Habitat Field Evaluation Form HHEI Score (sum of metrics 1+2+3)
LENGTH OF STREAM F	m3 river basin Mus leach (#) 39 Lat scorer LUK	n-Torrey 138 KV Line RebuildProjed Stark Co Skingum River code Drainage Area (mi) 41mi2 40,7194341 Long 9410916 W RIVER MILE
		Fer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instruction
(Max of 32) Add TYPE BLDR SLAB BOULDER (BEDROCK [COBBLE (65) GRAVEL (2- SAND (<2 m Total of Perc Bidr Slabs, Boulde	total number of significant surprise PERCENT	SiLT [3 pt] LEAF PACK/WOODY DEBRIS [3 pts] FINE DETRITUS [3 pts] CLAY or HARDPAN [0 pt] MUCK [0 pts] ARTIFICIAL [3 pts] (A) 14 (B) A + B
	n. Ávoid plunge pools fromro [20 pts] 0 pts]	Pool De mum pool depth within the 61 meter (200 feet) evaluation reach at the road culverts or storm water pipes) (Check ONLY one box): 5 cm - 10 cm [15 pts] < 5 cm [5pts] NO WATER OR MOIST CHANNEL [0pts] MAXIMUM POOL DEPTH (centimeters):
3. BANK FULL WI > 4.0 meters (> 1 > 3.0 m - 4.0 m (2	•	Prage of 3 - 4 measurements) (Check ONLY one box): > 1.0 m - 1.5 m (> 3' 3' - 4' 8')[15 pts] Width Max=3
COMMENTS		AVERAGE BANKFULL WIDTH (meters)
DIDADIA		This information mustalso be completed N QUALITY * NOTE: River Left (L) and Right (R) as looking downstream*
RIPARI L R (Per	AN WIDTH Bank) -10m ate 5-10m w <5m	FLOODPLAIN QUALITY (Most Predominant per Bank) R L R Mature Forest, Wetland Conservation Tillage
FLOW RI Stream Fit Subsurfac COMMEN	EGIME (At Time of Evaluation owing ce flow with isolated pools (inte	Moist Channel, isolated pools, no flow (intermittent) terstitial) Dry channel, no water (ephemeral) Aterm Hent I m (200 ft) of channel) (Check ONLY one box): 2.0 3.0
	IENT ESTIMATE Flat to Moderate	Moderate (2 %100 %) Moderate to Severe Severe Severe (10 %100 %)

October 2018 Revision

Page

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed): QHEI PERFORMED? Yes No QHEI Score _____ (If Yes, Attach Completed QHEI form) DOWNSTREAM DESIGNATED USE(S) Distance from Evaluated Stream CWH Name: Distance from Evaluated Stream EWH Name: MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION. NRCS Soil Map Page: _____ NRCS Soil Map Stream Order: _____ USGS Quadrangle Name: Bolivax County: Stark County Township/City: Cauton MISCELLANEOUS Base Flow Conditions? (Y/N): N Date of last precipitation: 4|5|2022 Quantity: 0.1" Photo-documentation Notes: ____ Canopy (% open):_____ Elevated Turbidity?(Y/N): Field Measures:Temp (°C) ______ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (umhos/cm) _____ Is the sampling reach representative of the stream (Y/N) Y If not, explain: entire length evaluated in project avea Additional comments/description of pollution impacts: **BIOLOGICAL OBSERVATIONS** (Record all observations below) Fish Observed? (Y/N) _ V Species observed (if known):_____ Frogs or Tadpoles Observed? (Y/N) Species observed (if known): Salamanders Observed? (Y/N) Species observed (if known): Aquatic Macroinvertebrates Observed? (Y/N) V Species observed (if known): Comments Regarding Biology: DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed) Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location DSDF FSDF

Primary Headwater Habitat Field Evaluation Form HHEI Score (sum of metrics 1+2+3)	24
SITE NAME/LOCATION SOUTH COUNTY TOVYCY 138 LV LINE REDUITED PROSPECTION OF STREAM REACH (#) 199 LAT 40.732 JUN LONG -81.412119°W RIVER MILE DATE 45 2012 SCORER LB COMMENTS NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instrumental Channel Recovered Recovering Recent or N	structions
1. SUBSTRATE (Estimate percent of every type present). Check ONLY two predominant substrate TYPE boxes. (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B TYPE PERCENT TYPE BLDR SLABS [16 pts] SiLT [3 pt] BOULDER (>256 mm) [16 pts] LEAF PACKWOODY DEBRIS [3 pts] BEDROCK [16 pts] FINE DETRITUS [3 pts] COBBLE (65-256 mm) [12 pts] CLAY or HARDPAN [0 pt] GRAVEL (2-64 mm) [9 pts] MUCK [0 pts] SAND (<2 mm) [6 pts] ARTIFICIAL [3 pts] Total of Percentages of Bidr Slabs, Boulder, Cobble, Bedrock (A) SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES:	HHEI Metric Points Substrate Max = 40
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts]	Pool Depth Max = 30
3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check ONLY one box): > 4.0 meters (> 13') [30 pts]	Bankfull Width Max=30
This information must also be completed	
RIPARIAN ZONE AND FLOODPLAIN QUALITY * NOTE: River Left (L) and Right (R) as looking downstream* RIPARIAN WIDTH (Per Bank) L R L R Wide >10m Mature Forest, Wetland Conservation Tillage Immature Forest, Shrub or Old Field Urban or Industrial Narrow <5m Residential, Park, New Field Open Pasture, Row Crimon Mining or Construction COMMENTS Moist Channel, isolated pools, no flow (intermitte Subsurface flow with isolated pools (interstitial) Dry channel, no water (ephemeral) COMMENTS Indicated pools None 1.0 2.0 3.0 3.0 0.5 1.5 2.5 3.3 STREAM GRADIENT ESTIMATE	-
☐ Flat (0.5 %100 %) ☐ Flat to Moderate ☐ Moderate (2.8100 %) ☐ Moderate to Severe ☐ Severe (10.811	00 व)

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QHEI PERFORMED? TYES No QHEI Score (If Yes, A	ttach Completed QHEI form)
DOWNSTREAM DESIGNATED USE(S) WWH Name: CWH Name: EWH Name:	Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED A	AREA. CLEARLY MARK THE SITE LOCATION.
USGS Quadrangle Name: Bolivar NRCS Soil Map Page:	NRCS Soil Map Stream Order:
County: Township/City:	Canton
MISCELLANEOUS	
Base Flow Conditions? (Y/N) Date of last precipitation: 45 207	Quantity: O. 1"
Photo-documentation Notes:	
Elevated Turbidity?(Y/N):N Canopy (% open):100	
Were samples collected for waterchemistry?(Y/N): Lab Sample # or ID) (attach results):
Field Measures:Temp (*C) Dissolved Oxygen (mg/l) pH (S.U.)	Conductivity (umhos/cm)
Is the sampling reach representative of the stream (Y/N) If not, explain:	
Additional comments/description of pollution impacts:	
BIOLOGICAL OBSERVATIONS	
(Record all observations below) Fish Observed? (Y/N) Species observed (if known);	
Frogs or Tadpoles Observed? (Y/N) N Species observed (if known):	
Salamanders Observed? (Y/N) N Species observed (if known):	
Aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):	
Comments Regarding Biology:	
DRAWING AND NARRATIVE DESCRIPTION OF STREAM	M REACH (This <u>must</u> be completed)
Include important landmarks and other features of interest for site evaluation :	and a narrative description of the stream's location
FLOW	
Row	

Primary neadw	vater Habitat Field Evaluation Form HHEI Score (sum of metrics 1+2+3)	18
SITE NUMBER STRUMS RIVER BASIN MUSE	- Torrey 138 KV Line Rebuild Project Lingum RIVER CODE	lmi2
	r to "Field Evaluation Manual for Ohio's PHWH Streams" for Ins	
	SILT [3 pt] LEAF PACKWOODY DEBRIS [3 pts] FINE DETRITUS [3 pts] CLAY or HARDPAN [0 pt] MUCK [0 pts] ARTIFICIAL [3 pts] (A)	HHEI Metric Points Substrate Max = 40
time of evaluation. Avoid plunge pools from roa 30 centimeters [20 pts] > 22.5 - 30 cm [30 pts] > 10 - 22.5 cm [25 pts]	5 cm - 10 cm [15 pts] < 5 cm [5pts] NO WATER OR MOIST CHANNEL [0pts]	Pool Dept Max = 30
COMMENTS 3. BANK FULL WIDTH (Measuredas the avera > 4.0 meters (> 13') [30 pts]	MAXIMUM POOL DEPTH (centimeters): Ige of 3 - 4 measurements) {Check ONLY one box}; > 1.0 m - 1.5 m (> 3' 3' - 4' 8') [15 pts] ≤ 1.0 m (≤ 3' 3') [5 pts] AVERAGE BANKFULL WIDTH (meters)	Bankfull Width Max=30
	ois information <u>must</u> also be completed	
<u>RIPARIAN WIDTH</u> L R (Per Bank) L R	QUALITY * NOTE: River Left (L) and Right (R) as looking downstream* FLOODPLAIN QUALITY (Most Predominant per Bank) L R Mature Forest, Wetland	р
FLOW REGIME (At Time of Evaluation) Stream Flowing Subsurface flow with isolated pools (inter COMMENTS SINUOSITY (Number of bends per 61 m	Moist Channel, isolated pools, no flow (intermitter	nt)
None 1.0 0.5 1.5 STREAM GRADIENT ESTIMATE	2.5	

QHEI PERFORMED? Yes No QHEI Score	(If Yes, Attach Completed QHEI form)
DOWNSTREAM DESIGNATED USE(S)	
WWH Name: Bear Run	Distance from Evaluated Stream
CWH Name:	Distance from Evaluated Stream
EWH Name:	Distance from Evaluated Stream
	ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION
SGS Quadrangle Name: SD i velv NF	RCS Soil Map Page: NRCS Soil Map Stream Order:
ounty: Stark County Tov	RCS Soil Map Page: NRCS Soil Map Stream Order:
MISCELLANEOUS	7 7
ase Flow Conditions? (Y/N): Date of last precipitation:	:
hoto-documentation Notes:	
levated Turbidity?(Y/N): Canopy (% open):	10
/ere samples collected for water chemistry? (Y/N):	Lab Sample # or ID (attach results):
ield Measures:Temp (*C) Dissolved Oxygen (mg/l) _	pH (S,U.) Conductivity (umhos/cm)
the sampling reach representative of the stream (Y/N)	If not, explain:
BIOLOGICAL O (Record all observed? (Y/N) Species observed (if known):	ervations below)
rogs or Tadpoles Observed? (Y/N) Species observed ((if known);
	wn):
	oserved (if known):
	SSETVER (II KIIO VIII P.
Comments Regarding Biology:	
	TON OF STREAM REACH (This must be completed) est for site evaluation and a narrative description of the stream's location
wellard leaf po	ALV (
ullaria	forested
m.	fore,
	>

Field Methods for Evaluating Primary Headwater Streams in Ohio Ohio EPA, Division of Surface Water

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BLDR SLABS [16 pts]	Primary Headwater Habitat Field Evaluation Form HHEI Score (sum of metrics 1+2+3)	43
STREAM CHANNEL MODIFICATIONS: NONE/NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVER (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B PERCENT P	SITE NUMBER STREAM REACH (11) 109 LAT 40.7255 47 VLONG 81.413918 WWW RIVER MILE DATE 4/5/20 SCORER KLB COMMENTS	
(Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes 4.8 Metric PERCENT YPE	× /	
time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): 30 centimeters [20 pts] 5 cm - 10 cm [16 pts] 22.5 - 30 cm [30 pts] 5 cm - 10 cm [16 pts] 10 - 22.5 cm [30 pts] 5 cm - 10 cm [16 pts] 22.5 - 30 cm [30 pts] 5 cm - 10 cm [16 pts] 20 COMMENTS MAXIMUM POOL DEPTH (centimeters): 31. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check ONLY one box): 32. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check ONLY one box): 33. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check ONLY one box): 34. 0 meters (> 13) [30 pts] > 1.0 m - 1.5 m (> 3' 3' - 4' 8') [15 pts] 35. 0 m - 4.0 m (> 9' 7' - 13) [25 pts] > 1.0 m - 1.5 m (> 3' 3' - 4' 8') [15 pts] 36. 0 m - 4.0 m (> 9' 7' - 13) [25 pts] > 1.0 m (< 3' 3') [5 pts] 37. 15 m - 3.0 m (> 4' 8' - 9' 7') [20 pts] 38. AVERAGE BANKFULL WIDTH (meters) 48. Comments L R	(Max of 32) Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B TYPE BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pts] COBBLE (65-256 mm) [12 pts] GRAVEL (2-64 mm) [9 pts] SAND (<2 mm) [6 pts] Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock (A) (B)	Metric Points Substrate Max = 40
3. BANK FULL WIDTH (Measuredas the average of 3 - 4 measurements) (Check ONLY one box): > 4.0 meters (> 13') [30 pts]	time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts]	Pool Depti Max = 30
> 4.0 meters (> 13') [30 pts]	COMMENTS MAXIMUM POOL DEPTH (centimeters): 25	-
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ** NOTE: River Left (L) and Right (R) as looking downstream* RIPARIAN WIDTH FLOODPLAIN QUALITY (Most Predominant per Bank) L R (Per Bank) L R L R Wide >10m Mature Forest, Wetland Conservation Tillage Moderate S-10m Immature Forest, Shrub or Old Field Urban or Industrial Narrow <5m Residential, Park, New Field Open Pasture, Row Crop None Fenced Pasture Mining or Construction COMMENTS Moist Channel, isolated pools, no flow (intermittent) Subsurface flow with isolated pools (interstitial) Dry channel, no water (ephemeral) COMMENTS JOHANNEL JOHANNEL	> 4.0 meters (>13') [30 pts] > 1.0 m - 1.5 m (> 3' 3' - 4' 8") [15 pts] > 3.0 m - 4.0 m (> 9' 7"-13') [25 pts] ≤1.0 m (≤ 3' 3") [5 pts]	
RIPARIAN ZONE AND FLOODPLAIN QUALITY ** NOTE: River Left (L) and Right (R) as looking downstream* RIPARIAN WIDTH	COMMENTS AVERAGE BANKFULL WIDTH (meters)	
R (Per Bank)		Π±
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing	RIPARIAN WIDTH L R (Per Bank) L R Wide >10m Mature Forest, Wetland Immature Forest, Shrub or Old Field Wide >5 In Narrow <5m None Residential, Park, New Field Mining or Construction Mining or Construction	Сгор
STREAM GRADIENT ESTIMATE	FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing	ttent)
	STREAM GRADIENT ESTIMATE	%100 व)

Page 1

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QHEI PERFORMED? Yes No QHEI Score	(If Yes, Attach Completed QHEI form)
DOWNSTREAM DESIGNATED USE(S)	21.00
CWH Name: Bear Puil	
EWH Name:	
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE	WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.
USGS Quadrangle Name: Bolivar NRCS Sc	oil Map Page: NRCS Soil Map Stream Order:
County: Township	1City: Canton
MISCELLANEOUS	
Base Flow Conditions? (Y/N): N Date of last precipitation:	5 2022 Quantity: O./
Photo-documentation Notes:	
Elevated Turbidity?(Y/N): Nanopy (% open): 90	_
Were samples collected for water chemistry? (Y/N): Lab 5	Sample # or ID (attach results):
Field Measures:Temp (°C) Dissolved Oxygen (mg/l)	
Is the sampling reach representative of the stream (Y/N) Y If not, e	
Sale Sale Park Control of the Sale Sale Sale Control of the Sale Sale Sale Sale Sale Sale Sale Sal	
Additional comments/description of pollution impacts:oil _sheck	or oil deposits
BIOLOGICAL OBSERV	
(Record all observations	s below)
Fish Observed? (Y/N) Species observed (if known); Frogs or Tadpoles Observed? (Y/N) Species observed (if know	
,	
Salamanders Observed? (Y/N) N Species observed (if known):	
Aquatic Macroinvertebrates Observed? (Y/N) Species observed	
Comments Regarding Biology:	
	OF STREAM REACH (This must be completed)
Include important landmarks and other features of interest for s	site evaluation and a narrative description of the stream's location $\setminus \lambda$
Stream that	era
	x x 200
	House and market parent particular Road
2 Electron Hay	FOOT WAY Warner OF
LOW	
6 3	Berm
2 7	1d Fred
4	K.
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Phio Protection Agency	Primary Hea	adwater Habitat Field Evaluation Form HHEI Score (sum of metrics 1+2+3)	77-
DATE 4 5 22	REACH (ft) 38 LA SCORER LLB Items On This Form - R	100,	ructions
(Max of 32) A TYPE BLDR SLA BOULDER BEDROCK COBBLE (GRAVEL (SAND (<2) Total of Pe	dd total number of significan PERC ABS [16 pts] 5 (>256 mm) [16 pts]	CENT TYPE SILT [3 pt]	HHEI Metric Points Substrate Max = 40
	tion. Avoid plunge pools from rs [20 pts] [30 pts]		Pool Depth Max = 30
> 4.0 meters (2 > 3.0 m - 4.0 m	·	> 1.0 m - 1.5 m (> 3' 3' - 4' 8")[15 pts]	Bankfull Width Max=30
		This information must also be completed	
L R (P	RIAN WIDTH er Bank) e >10m lerate 5-10m row <5m e ENTS REGIME (At Time of Evalua Flowing face flow with isolated pools (AIN QUALITY * NOTE: River Left (L) and Right (R) as looking downstream* FLOODPLAIN QUALITY (Most Predominant per Bank) L R Mature Forest, Wetland Conservation Tillage Immature Forest, Shrub or Old Field Urban or Industrial Residential, Park, New Field Open Pasture, Row Crop Fenced Pasture Mining or Construction (Check ONLY one box): Moist Channel, isolated pools, no flow (intermittent) Ory channel, no water (ephemeral)	
None 0.5	1	r 61 m (200 ft) of channel) (Check ONLY one box): 1.0	ম)

	ore (if Yes, Attach Completed QHEI form)
DOWNSTREAM DESIGNATED USE(S) WWH Name: DEAY PURE	Distance from Evaluated Stream _ N 3 nn/
CWH Name:	Distance from Evaluated Stream
EWH Name:	Distance from Evaluated Stream
	IG THE ENTIRE WATER SHED AREA. CLEARLY MARK THE SITE LOCATION.
	NRCS Soil Map Page: NRCS Soil Map Stream Order:
county:StarK	Township/City: Canton
MISCELLANEOUS	
	pitation: 45/2022 Quantity: O.1"
Photo-documentation Notes:	25
Elevated Turbidity?(Y/N): Canopy (% open)	x <u>85</u>
Vere samples collected for water chemistry? (Y/N):	Lab Sample # or ID (attach results):
Field Measures:Temp (°C)Dissolved Oxygen (r	mg/l) pH (S.U.) Conductivity (umhos/cm)
s the sampling reach representative of the stream (Y/N).	Y If not, explain
Fish Observed? (Y/N) Species observed (if known frogs or Tadpoles Observed? (Y/N) Species observed Salamanders Observed? (Y/N) Species observed	all observations below) wn): served (if known): ecies observed (if known):
Comments Regarding Biology:	
	CRIPTION OF STREAM REACH (This <u>must</u> be completed) of interest for site evaluation and a narrative description of the stream's location
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Field Methods for Evaluating Primary Headwater Streams in Ohio Ohio EPA, Division of Surface Water

Primary Headwater Habitat Field Evaluation Form HHEI Score (sum of metrics 1+2+3)	(eu
SITE NAME LOCATION SOUTH COUNTY TO VICY 138 K VINE REDUILD PROJECT SITE NUMBER STREAM REACH (#) 41 LAT 40.74740391 LONG 01.4143720W RIVER MILE DATE 46,2022 SCORER KLB COMMENTS	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for In STREAM CHANNEL MODIFICATIONS: NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR I	
1. SUBSTRATE (Estimate percent of every type present). Check ONLY two predominant substrate TYPE boxes. (Max of 32) Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B TYPE PERCENT TYPE, BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pts] COBBLE (65-256 mm) [12 pts] GRAVEL (2-64 mm) [9 pts] GRAVEL (2-64 mm) [9 pts] SAND (<2 mm) [6 pts] Total of Percentages of Bidr Slabs, Boulder, Cobble, Bedrock (A) SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: TOTAL NUMBER OF SUBSTRATE TYPES:	HHEI Metric Points Substrate Max = 40
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts]	Pool Depth Max = 30
3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check ONLY one box): > 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] ≤ 1.0 m (≤ 3' 3") [5 pts] > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	Bankfull Width Max=30
COMMENTS AVERAGE BANKFULL WIDTH (meters) 3	
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY A NOTE: River Left (L) and Right (R) as looking downstreams RIPARIAN WIDTH FLOODPLAIN QUALITY (Most Predominant per Bank) L R (Per Bank) L R Wide >10m Mature Forest, Wetland Conservation Tillage Moderate 5-10m Mature Forest, Shrub or Old Field Urban or Industrial Narrow <5m Residential, Park, New Field Open Pasture, Row Conservation None Fenced Pasture Mining or Construction	гор
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Subsurface flow with isolated pools (interstitial) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 2.0 3.0 0.5 3.0 0.5 5TREAM GRADIENT ESTIMATE Flat to Moderate Moderate (2 \$100 %) Moderate to Severe (10 %)	-

BE

QHEI PERFORMED? Yes No QHEI Score_	45,5 (If Yes, Attach Completed QHEI form)
DOWNSTREAM DESIGNATED USE(S)	47 5 44
WWH Name: Nimishillen Creek CWH Name:	Distance from Evaluated Stream 2.5 mi
EWH Name:	Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING TH	HE ENTIRE WATER SHED AREA. CLEARLY MARK THE SITE LOCATION,
SGS Quadrangle Name: Bolivar	NRCS Soil Map Page:NRCS Soil Map Stream Order:
ounty: Star K	Township/City: Canton
MISCELLANEOUS	
ase Flow Conditions? (Y/N): Date_of last precipitation	on: 4/5/2022 Quantity: 0,111
noto-documentation Notes:	
evated Turbidity?(Y/N): Canopy (% open):	90
Vere samples collected for water chemistry? (Y/N):	Lab Sample # or ID (attach results):
ield Measures:Temp (°C) Dissolved Oxygen (mg/l)	pH (S.U.) Conductivity (umhos/cm)
s the sampling reach representative of the stream (Y/N) $\stackrel{ extstyle }{ extstyle }$	If not, explain:
Additional comments/description of pollution impacts:	line crossing
BIOLOGICAL	OBSERVATIONS
(Record all ot	bservations below)
rish Observed? (Y/N) Species observed (if known);	
rogs or Tadpoles Observed? (Y/N) Species observe	d (if known):
Salamanders Observed? (Y/N) Species observed (if k	(nown)
Aquatic Macroinvertebrates Observed? (Y/N) N Species	observed (if known):
Comments Regarding Biology:	
DDAMING AND NADDATIVE DESCRIP	PTION OF STREAM REACH (This must be completed)
Include important landmarks and other features of int	terest for site evaluation and a narrative description of the stream's location
	horse pasture
VIV V	
Scrub-s	fore
ow Riffle	Tore
OW CHITE	ENN /
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7 /	
7	
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OhioEPA

Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

QHEI Score:	46.5
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Stream & Location: Stream 8/South Canton-Torrey 138 KV line RM: Date: 4/0/120:
Rebuild Project Scorers Full Name & Affiliation: Kate Bomar / Stantec
River Code: STORET #: Lat./ Long.: 40 . 141314 181 . 414 400 Office verified location
1] SUBSTRATE Check ONLY Two substrate TYPE BOXES; estimate % or note every type present BEST TYPES POOL RIFFLE OTHER TYPES POOL RIFFLE BLDR /SLABS [10]
quality; 3-Highest quality in moderate or greater amounts (e.g., very large boulders in deep or fast water, large diameter log that is stable, well developed rootwad in deep / fast water, or deep, well-defined, functional pools. UNDERCUT BANKS [1] POOLS > 70cm [2] OXBOWS, BACKWATERS [1] MODERATE 25-75% [7] AQUATIC MACROPHYTES [1] SPARSE 5-<25% [3] SHALLOWS (IN SLOW WATER) [1] BOULDERS [1] LOGS OR WOODY DEBRIS [1] NEARLY ABSENT <5% [1] Cover Maximum Maximum 20
3] CHANNEL MORPHOLOGY Check ONE in each category (Or 2 & average)
SINUOSITY DEVELOPMENT CHANNELIZATION STABILITY HIGH [4]
4] BANK EROSION AND RIPARIAN ZONE Check ONE in each category for EACH BANK (Or 2 per bank & average) River right looking downstream RIPARIAN WIDTH ROSION ROSION ROSION RIPARIA
Solution Pool Comments Pool
Indicate for functional riffles; Best areas must be large enough to support a population of riffle-obligate species: RIFFLE DEPTH RUN DEPTH RIFFLE / RUN SUBSTRATE RIFFLE / RUN EMBEDDEDNESS BEST AREAS > 10cm [2] BEST AREAS 5-10cm [1] BEST AREAS 5-10cm [1] BEST AREAS < 5cm [metric=0] Comments No Riffle, No run RIFFLE / RUN EMBEDDEDNESS No Riffle, No run RIFFLE / RUN EMBEDDEDNESS No Riffle, No run
6] GRADIENT (T) ft/mi) UVERY LOW - LOW [2-4] DRAINAGE AREA MODERATE [6-10] WRUN: WRIFFLE: 10 Maximum Maximum 10

AJ SAMPLED REACH Check ALL that apply	Comment RE: Reach consistency/ Is reach typical of steam?, Recreation/ Observed - Inferred, Other/ Sampling observations, Concerns, Access directions, etc. Typical reach								
METHOD STAGE BOAT 1st-sample pass-2nd HIGH	pipeline crossing Receive transmission line crossing								
DISTANCE	☐ INVASIVE MACROPHYTES ☐ EXCESS TURBIDITY ☐ DISCOLORATION ☐ FOAM / SCUM ☐ OIL SHEEN ☐ TRASH / LITTER ☐ NUISANCE ODOR ☐ SLUDGE DEPOSITS ☐ CSOs/SSOs/OUTFALLS	DJ MAINTENANCE PUBLIC / PRIVATE / BOTH / NA ACTIVE / HISTORIC / BOTH / NA YOUNG-SUCCESSION-OLD SPRAY / SNAG / REMOVED MODIFIED / DIPPED OUT / NA LEVEED / ONE SIDED RELOCATED / CUTOFFS MOVING-BEDLOAD-STABLE ARMOURED / SLUMPS ISLANDS / SCOURED IMPOUNDED / DESICCATED FLOOD CONTROL / DRAINAGE	Circle some & COMMENT	EJ ISSUES WWTP / CSO / NPDES / INDUSTRY HARDENED / URBAN / DIRT&GRIME CONTAMINATED / LANDFILL BMPS-CONSTRUCTION-SEDIMENT LOGGING / IRRIGATION / COOLING BANK / EROSION / SURFACE FALSE BANK / MANURE / LAGOON WASH H ₂ 0 / TILE / H ₂ 0 TABLE ACID / MINE / QUARRY / FLOW NATURAL / WETLAND / STAGNANT PARK / GOLF / LAWN / HOME ATMOSPHERE / DATA PAUCITY	F] MEASUREMENTS \$\overline{x}\$ width \$\overline{x}\$ depth max. depth \$\overline{x}\$ bankfull width bankfull \$\overline{x}\$ depth W/D ratio bankfull max. depth floodprone \$x^2\$ width entrench. ratio Legacy Tree:				
Stream Drawing:		hors	se pasture	Structure					
P.IFRIE 7	Run	Semp-shrub Po	(rubus, rose, the	or henself Dann	forested				
	Row Crops (Cor	Sant-strub							

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Primary Headwater Habitat Field Evaluation Form HHEI Score (sum of metrics 1+2+3)	29
SITE NAME/LOCATION SOUTH CANTON TOYION 18 KV Line Personal Project SITE NUMBER STREAM REACH (#) 132 LAT 40.747280°N LONG 81,414227°W RIVER MILE LENGTH OF STREAM REACH (#) 132 LAT 40.747280°N LONG 81,414227°W RIVER MILE DATE 4 10 22 SCORER WB COMMENTS NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for In STREAM CHANNEL MODIFICATIONS: NONE/NATURAL CHANNEL RECOVERED RECOVERING RECENT OR	nstructions
1. SUBSTRATE (Estimate percent of every type present), Check ONLY two predominant substrate TYPE boxes (Max of 32), Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B TYPE PERCENT TYPE PERCENT BLDR SLABS [16 pts] SILT [3 pt] 80 ULDER (>256 mm) [16 pts] LEAF PACKWOODY DEBRIS [3 pts] 15 ULEAF PACKWOODY DEBRIS [3 pts] 15 ULEA	HHEI Metric Points Substrate Max = 40
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] 5 cm - 10 cm [15 pts] > 22 5 - 30 cm [30 pts] > 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0pts] COMMENTS MAXIMUM POOL DEPTH (centimeters):	Pool Depth Max = 30
3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check ONLY one box): > 4.0 meters (> 13') [30 pts]	Bankfull Width Max=30
This information <u>must</u> also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY * NOTE: River Left (L) and Right (R) as looking downstream	
RIPARIAN WIDTH (Per Bank) Residential Park, Wetland (Per Bank) Residential Park, New Field (Per Bank) (Per Bank) Residential Park, New Field (Per Bank) (Per B	ғор 1 —
STREAM GRADIENT ESTIMATE STREAM GRADIENT ESTIMATE Select on a company of the Madarata in a company of the Madarata in Severa in the Severa i	1400 e
Flat (0.5 %100 %) Flat to Moderate Moderate (2.%100 %) Moderate to Severe (10.%	100 %

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DOWNSTREAM DESIGNATED USE(S)	Distance from Evaluated Stream ~2.5 m
CWH Name:	
EWH Name:	Distance from Evaluated Stream Distance from Evaluated Stream
	GITHE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.
SGS Quadrangle Name: <u>Bolivar</u>	NRCS Soil Map Page: NRCS Soil Map Stream Order:
ounty:Stay K	Township/City: Canton
MISCELLANEOUS	
ase Flow Conditions? (Y/N)	itation: 4 5 2022 Quantity: D. 1"
hoto-documentation Notes:	
levated Turbidity?(Y/N): Canopy (% open):	45
/	Lab Sample # or ID (attach results):
	ng/l) pH (S.U.) Conductivity (umhos/cm)
<u>*</u>	Y If not, explain:
s the sampling reach representative of the stream (Y/N) _	п пот, схрант.
Additional comments/description of pollution impacts:	
BIOLOGIC	CAL OBSERVATIONS
(Record	all observations below)
rish Observed? (Y/N) N Species observed (if know	vn):
	erved (if known):
	(ifknown):
Aquatic Macroinvertebrates Observed? (Y/N) Spec	cies observed (if known):
omments Regarding Biology:	
DRAWING AND NARRATIVE DESC	RIPTION OF STREAM REACH (This must be completed)
	of interest for site evaluation and a narrative description of the stream's vocation
Pi	orops
	Ci-f-
N V	
.ow	Loof pack
7	4 7 2
	field





Subject: South Canton-Torrey 138 kV Line Rebuild Project, Stark County, Ohio- Addendum

Ecological Survey Memo

Date: March 16, 2023

Amy Toohey

To: AEP Ohio Transmission Company, Inc.

8600 Smiths Mill Road New Albany, OH 43054

Dan Godec

From: 10200 Alliance Road, Suite 300

Blue Ash, Ohio 45242

Stantec Consulting Services, Inc. (Stantec) performed surveys for wetlands and waterbodies, as well as a habitat assessment survey, for additional access roads and workspaces for the South Canton-Torrey 138 kV Line Rebuild Project in Stark County, Ohio (Figure 1) on December 21, 2022, and February 14, 2023. Stantec's wetland delineation was performed in accordance with the onsite inspection, routine determination methodology described in the 1987 Corps of Engineers Wetlands Delineation Manual and the U.S. Army Corps of Engineers (USACE) Regional Supplement to the Corps of Engineers Wetland Delineation Manuals: Eastern Mountain and Piedmont Version 2.0 and Northcentral and Northeast Region Version 2.0.

As result of the survey, four palustrine emergent (PEM) wetlands (Wetland 14, Wetland 15, Wetland 16, Wetland 17) were identified within the Project area. Wetland 14 was identified within the Project area east of Keiffer Avenue SW. Wetland determination sample point SP28 was assessed within Wetland 14. The wetland was dominated by hydrophytic vegetation including common rush (*Juncus effusus*) and barnyardgrass (*Echinochloa crus-galli*). Soil at SP28 met the requirements of Hydric Soil Field Indicator F3-Depleted Matrix. Hydrology within Wetland 14 was confirmed by the presence of oxidized rhizospheres on living roots. Wetland 14 scored 27 points on the Ohio Rapid Assessment Method for Wetlands (ORAM) data form and was classified as a Category 1 wetland. SP29 was assessed in the upland area adjacent to Wetland 14.

Wetland 15 was identified within Project area east of Sherman Church Ave SW. Wetland determination sample point SP30 was assessed within Wetland 15. The wetland was dominated by hydrophytic vegetation including creeping jenny (*Lysimachia nummularia*) and Nuttall's waterweed (*Elodea nuttallii*). Soil at SP30 met the requirements of Hydric Soil Field Indicator F3-Depleted Matrix. Hydrology within Wetland 15 was confirmed by the presence of surface water, saturation and a high water table. Wetland 15 scored 24.5 points on the ORAM data form and was classified as a Category 1 wetland. SP31 was assessed in the upland area adjacent to Wetland 15.

Wetland 16 was identified within Project area east of Sherman Church Ave SW. Wetland determination sample point SP32 was assessed within Wetland 16. The wetland was dominated by hydrophytic vegetation including reed canarygrass (*Phalaris arundinacea*). Soil at SP32 met the requirements of Hydric Soil Field Indicator F3-Depleted Matrix. Hydrology within Wetland 16 was confirmed by the presence of saturation and oxidized rhizospheres on living roots. Wetland 16 scored 12 points on the ORAM data form and was classified as a Category 1 wetland. SP33 was assessed in the upland area adjacent to Wetland 15.

Wetland 17 was identified within Project area east of Sherman Church Ave SW. Wetland determination sample point SP34 was assessed within Wetland 17. The wetland was dominated by hydrophytic vegetation including reed canarygrass. Soil at SP34 met the requirements of Hydric Soil Field Indicator F3-Depleted Matrix. Hydrology within Wetland 17 was confirmed by the presence of saturation. Wetland 17 scored 18.5 points on the ORAM data form and was classified as a Category 1 wetland. SP35 was assessed in the upland area adjacent to Wetland 17.

January 4, 2023 South Canton-Torrey 138 kV Line Rebuild Project, Stark County, Ohio Page 2 of 4

Representative photographs of wetlands and the wetland determination sample points are attached. Photograph locations are shown on Figure 2. Completed wetland determination data forms and the completed ORAM data form are included as attachments to this memo. Additional information regarding the identified wetlands is provided in Table 1.



Memo

Table 1. Summary of Wetland Resources Found within the South Canton-Torrey 138 kV Line Rebuild Project, Stark County, Ohio

Wetland ID	Location				Delineated	ORAM⁴		Nearest	Existing	Proposed		Proposed Impacts	
	Latitude	Longitude	Isolated? ¹	Habitat Type ^{2,3}	Area within Project Area (acre)	Score	Category	Proposed Structure Number	Structure Number in Wetland	Structure Number in Wetland	Installation Method	Temporary Matting Area (acre)	Permanent Impact Area (acre)
Wetland 14	40.721503	-81.412514	No	PEM	0.01	27	1	299	N/A	N/A	N/A	0	0
Wetland 15	40.747187	-81.41509	No	PEM	0.003	24.5	1	304	N/A	N/A	N/A	0	0
Wetland 16	40.746918	-81.416467	No	PEM	0.001	12	1	304	N/A	N/A	N/A	0	0
Wetland 17	40.746716	-81.416728	No	PEM	0.004	18.5	1	304	N/A	N/A	N/A	0	0
Total:				0.018	Total:				0	0			

¹Pending USACE jurisdictional review
² Habitat type based on Cowardin et al. (1979).
³ PEM = Palustrine Emergent Wetland

⁴ ORAM Score and Category are based on the Ohio Rapid Assessment Method for Wetland v. 5.0 (Mack 2001).

Memo



Stantec also categorized the habitats and land cover types present within the Project area during the surveys completed on December 21, 2022 and February 14, 2023. The land cover types found within the additional Project area included new field, mixed early successional/second growth deciduous forest, old field, existing gravel road, residential lawn, agricultural field, pasture, and industrial land. Figure 3 shows the locations of habitats observed within the Project area during the habitat assessment surveys. Representative photographs of the vegetation communities/habitats and land cover types identified within the Project area are also attached.

New field habitat within the Project area was dominated by Canada goldenrod (*Solidago canadensis*), Kentucky bluegrass (*Poa pratensis*), tall fescue (*Schedonorus arundinaceus*), curly dock (*Rumex crispus*) and timothy (*Phleum pratense*).

Mixed early successional/second growth deciduous forest habitat within the Project area was dominated by multiflora rose (*Rosa multiflora*), Allegheny blackberry (*Rubus allegheniensis*), Morrow's honeysuckle (*Lonicera morrowii*), red maple (*Acer rubrum*), white oak (*Quercus alba*), and northern red oak (*Quercus rubra*).

Old field habitat within the Project area was dominated by Fuller's teasel (*Dipsacus fullonum*), Amur honeysuckle (*Lonicera maackii*), reed canarygrass, giant ironweed (*Vernonia gigantea*), Canada goldenrod, Japanese bristlegrass (*Setaria faberi*), Queen Anne's lace (*Daucus carota*), deertongue (*Dichanthelium clandestinum*), and hairy white oldfield aster (*Symphyotrichum pilosum*).

Residential lawn habitat within the Project area was dominated by Kentucky bluegrass, common dandelion (*Taraxacum officinale*), and narrowleaf plantain (*Plantago lanceolata*).

Agricultural field habitat within the Project area was dominated by row crops including corn (*Zea mays*) and soybean (*Glycine max*).

Pasture habitat within the Project area is dominated by Kentucky bluegrass, English plantain, common plantain (*Plantago major*), red clover (*Trifolium pratense*), and curly dock.

Industrial land and existing gravel access roads consisted of highly disturbed areas and contained no identifiable vegetation.

In summary, Stantec identified four PEM wetlands during the wetland, waterbody, and habitat assessment surveys completed within the additional survey areas of the South Canton-Torrey 138 kV Line Rebuild Project on December 21, 2022 and February 14, 2023. During the field surveys, the following habitat/land cover types were found within the additional Project area; new field, mixed early successional/second growth deciduous forest, old field, existing gravel access road, residential lawn, agricultural field, pasture, and industrial land. Project maps, representative photographs, and completed data forms are attached.

Stantec Consulting Services, Inc.

miel J. Goder

Dan Godec

Phone: (513) 842-8203 Daniel.Godec@stantec.com

Attachments - Figure 1 – Addendum Project Location Map

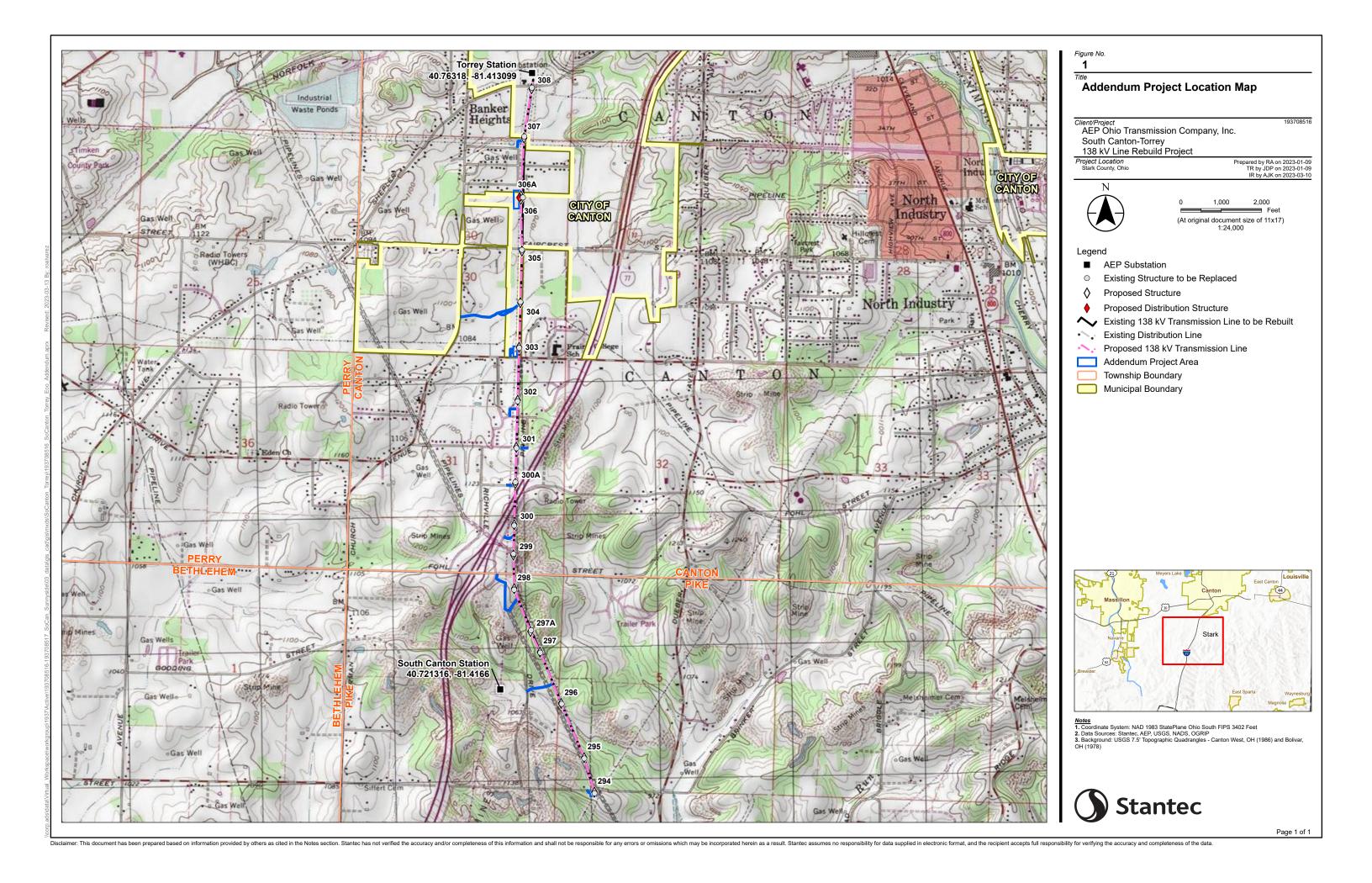
Figure 2 – Addendum Wetland and Waterbody Delineation Map

Figure 3 – Addendum Habitat Assessment Map Wetland and Waterbody Delineation Photographs

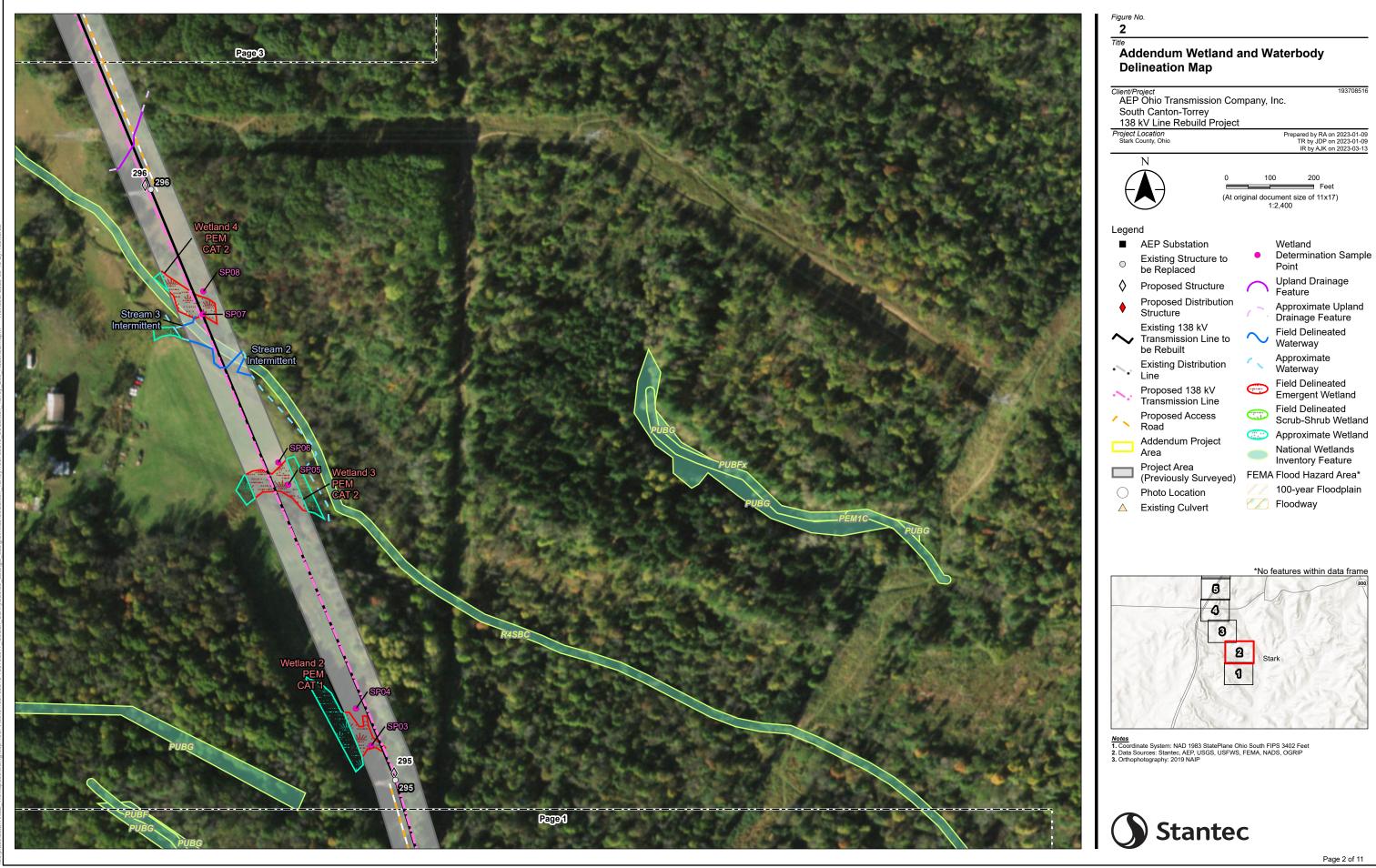
Wetland Determination Data Forms

ORAM Data Forms

Habitat Assessment Photographs



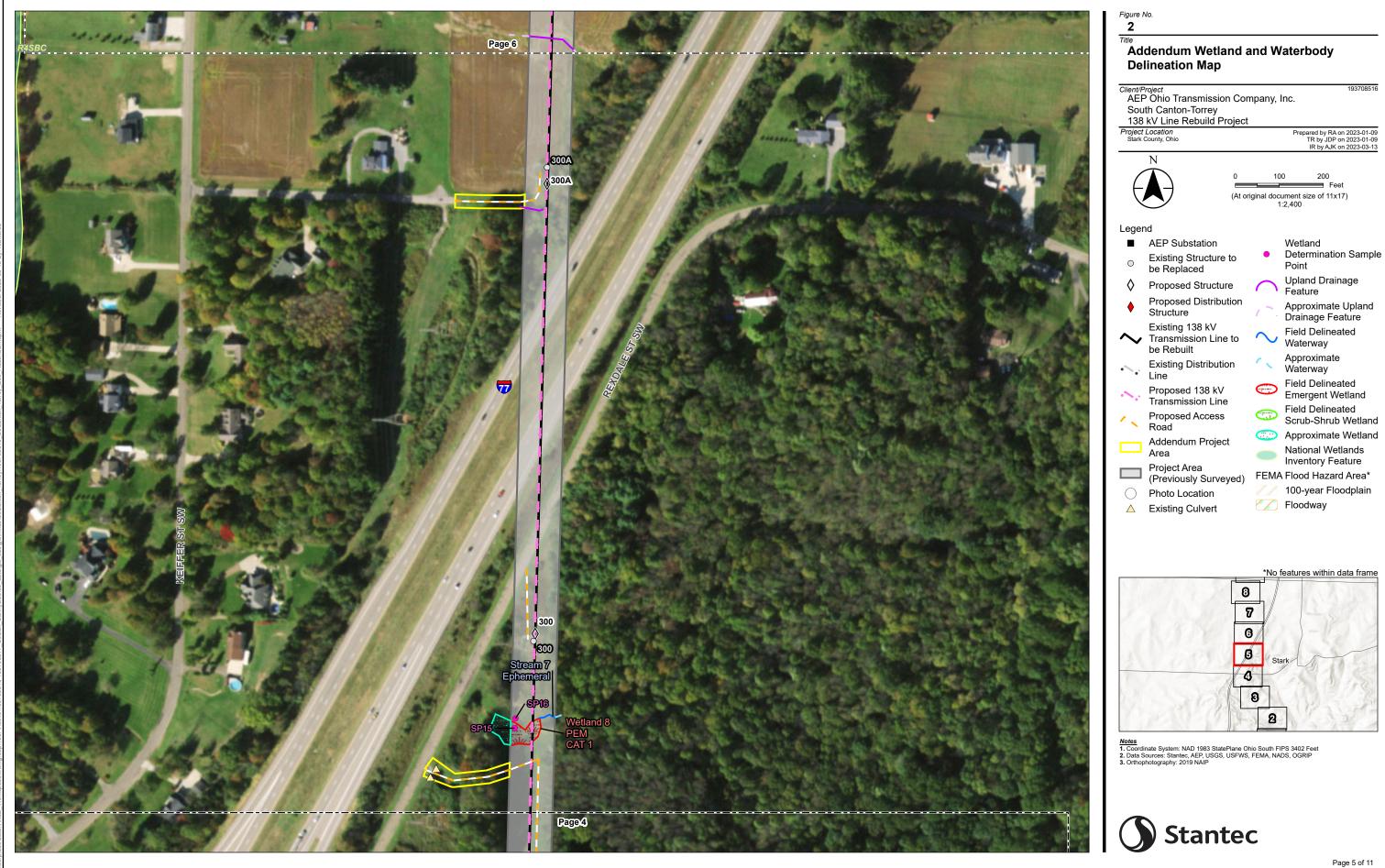


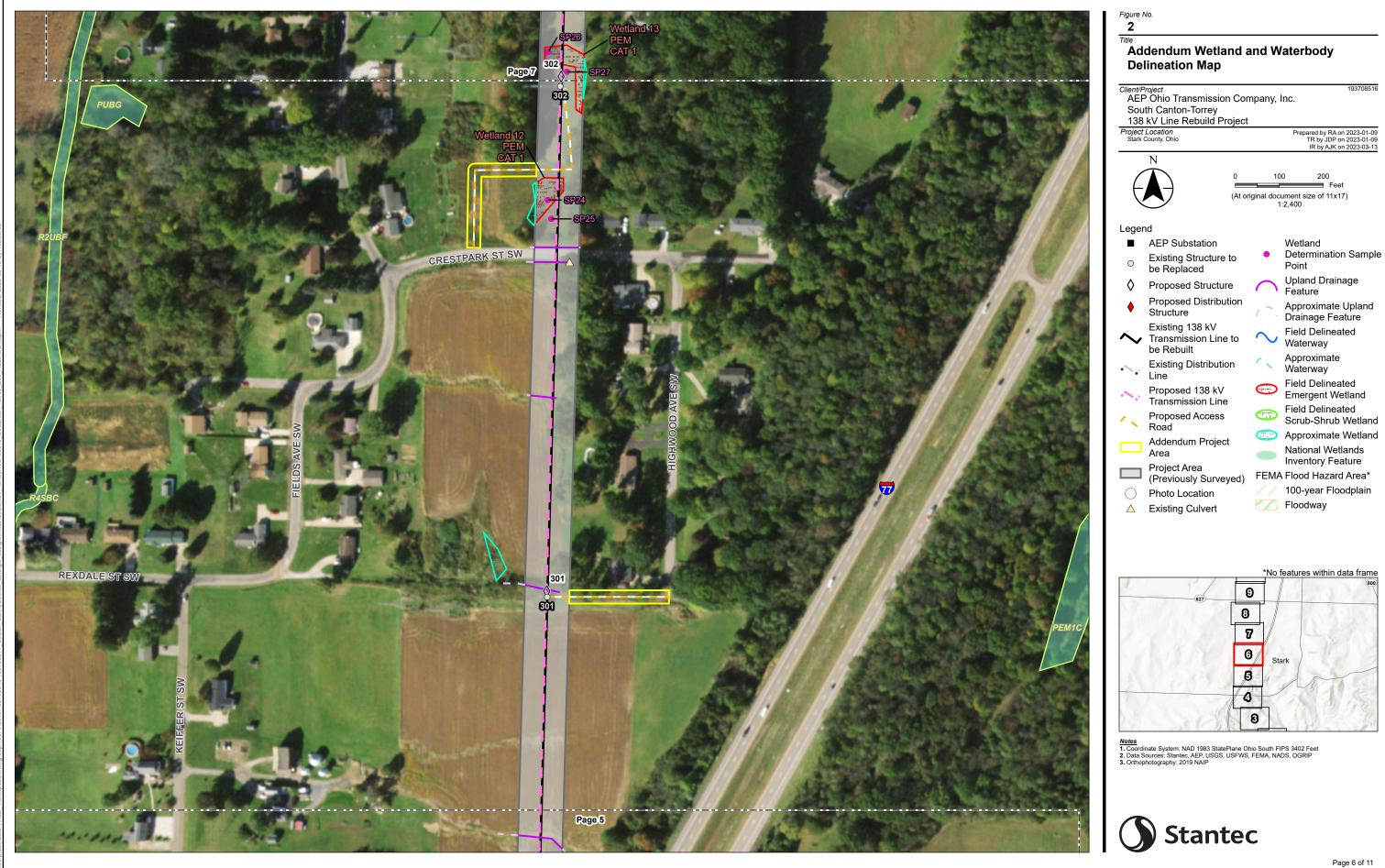


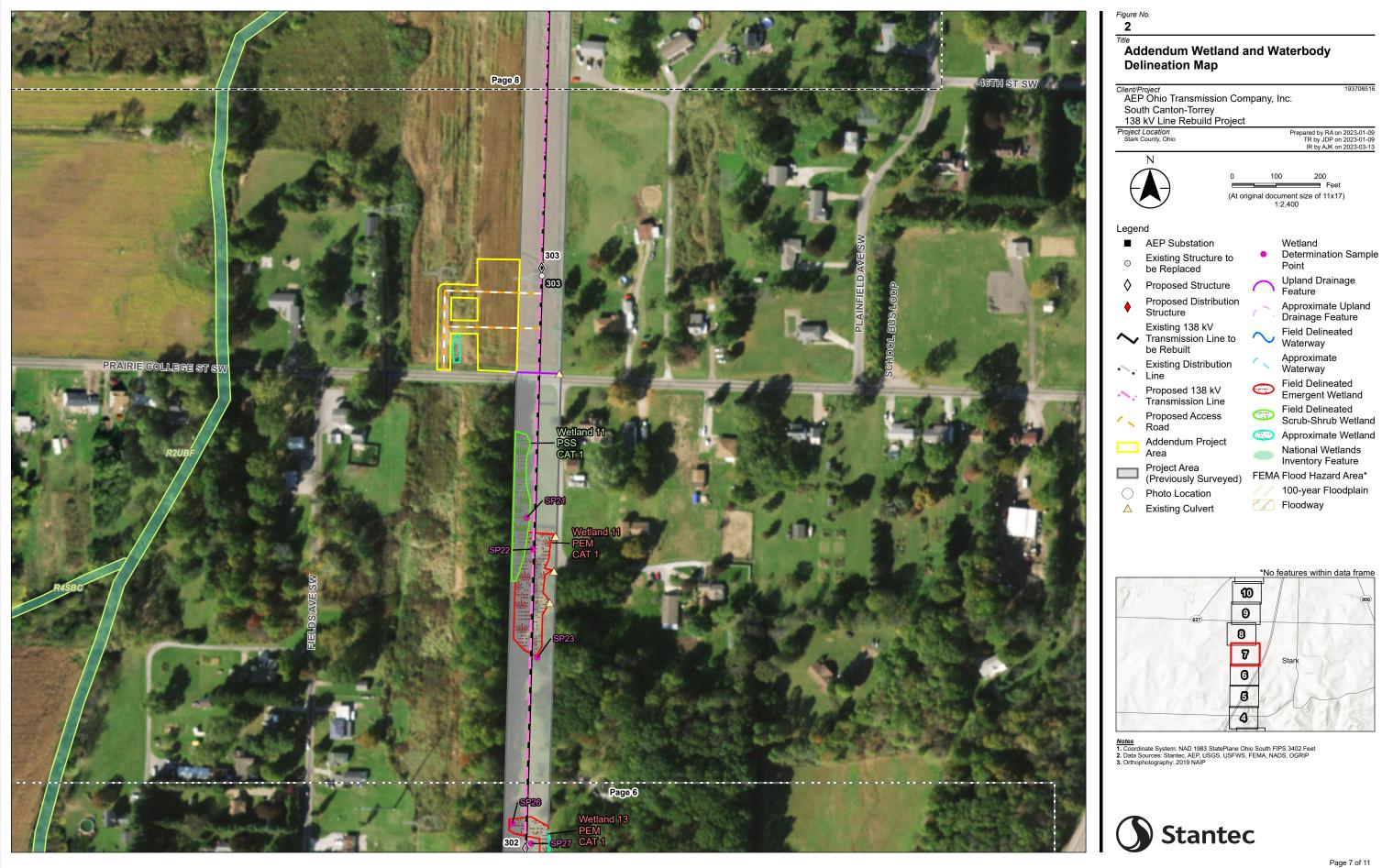


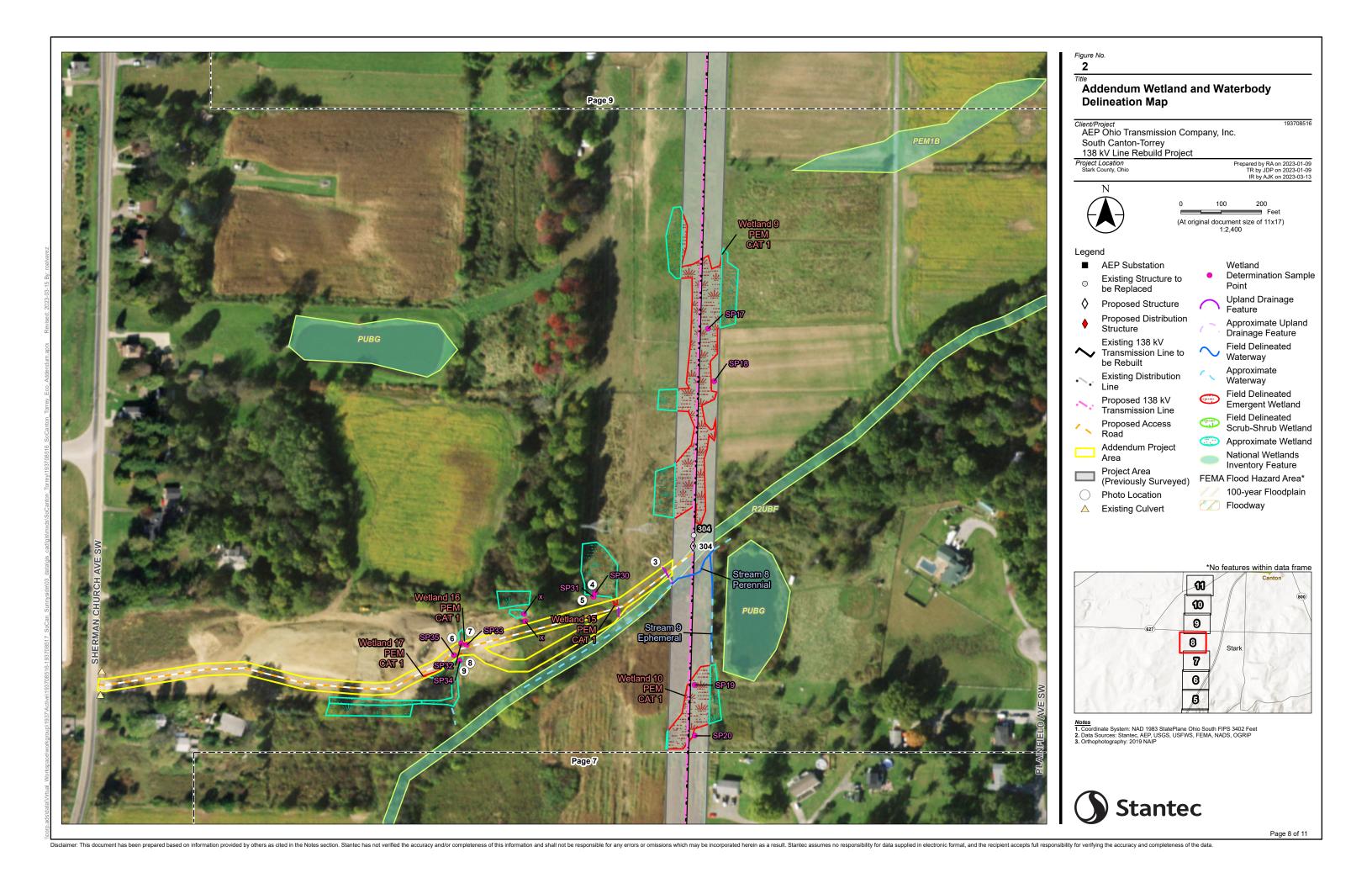


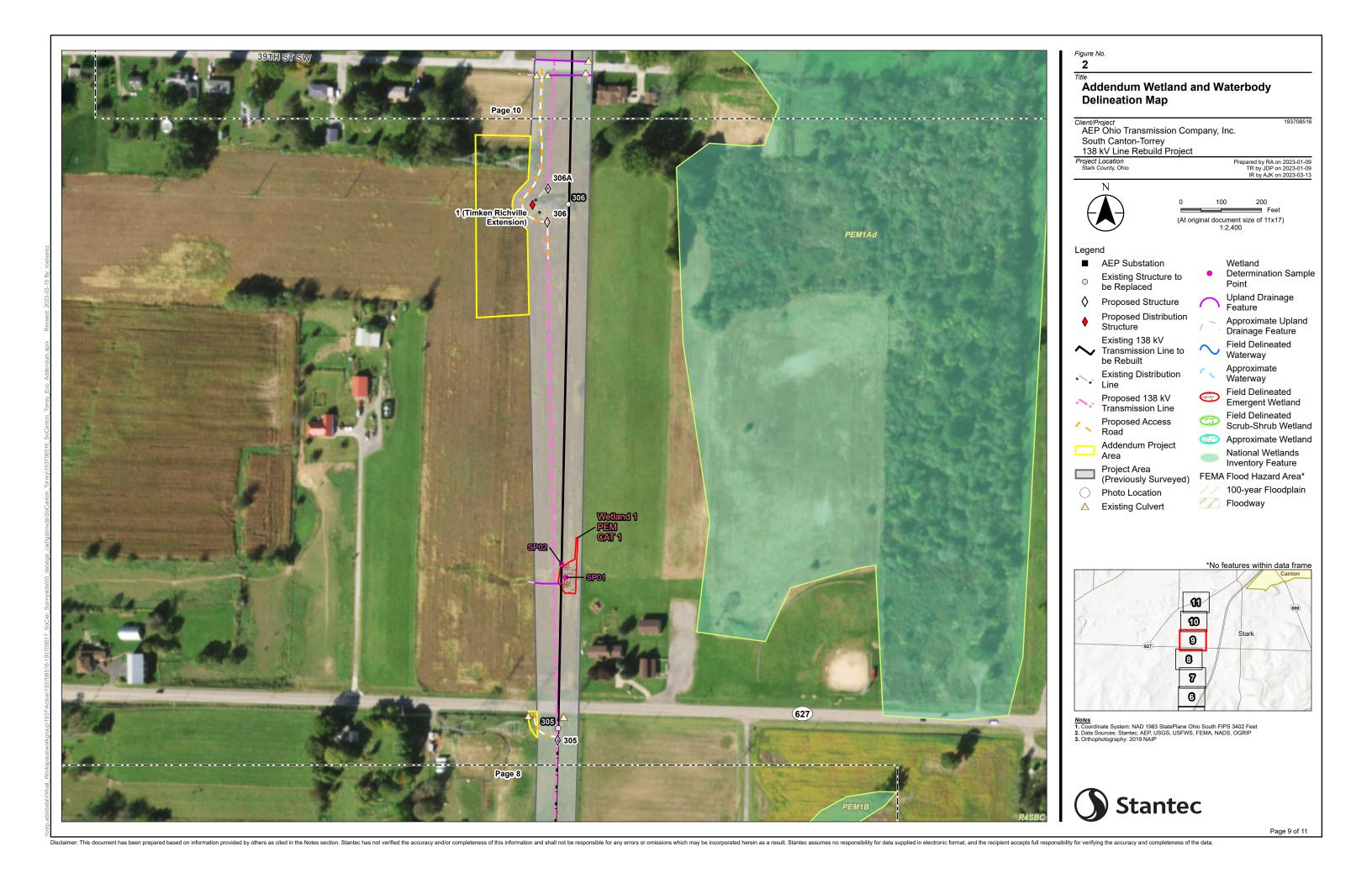
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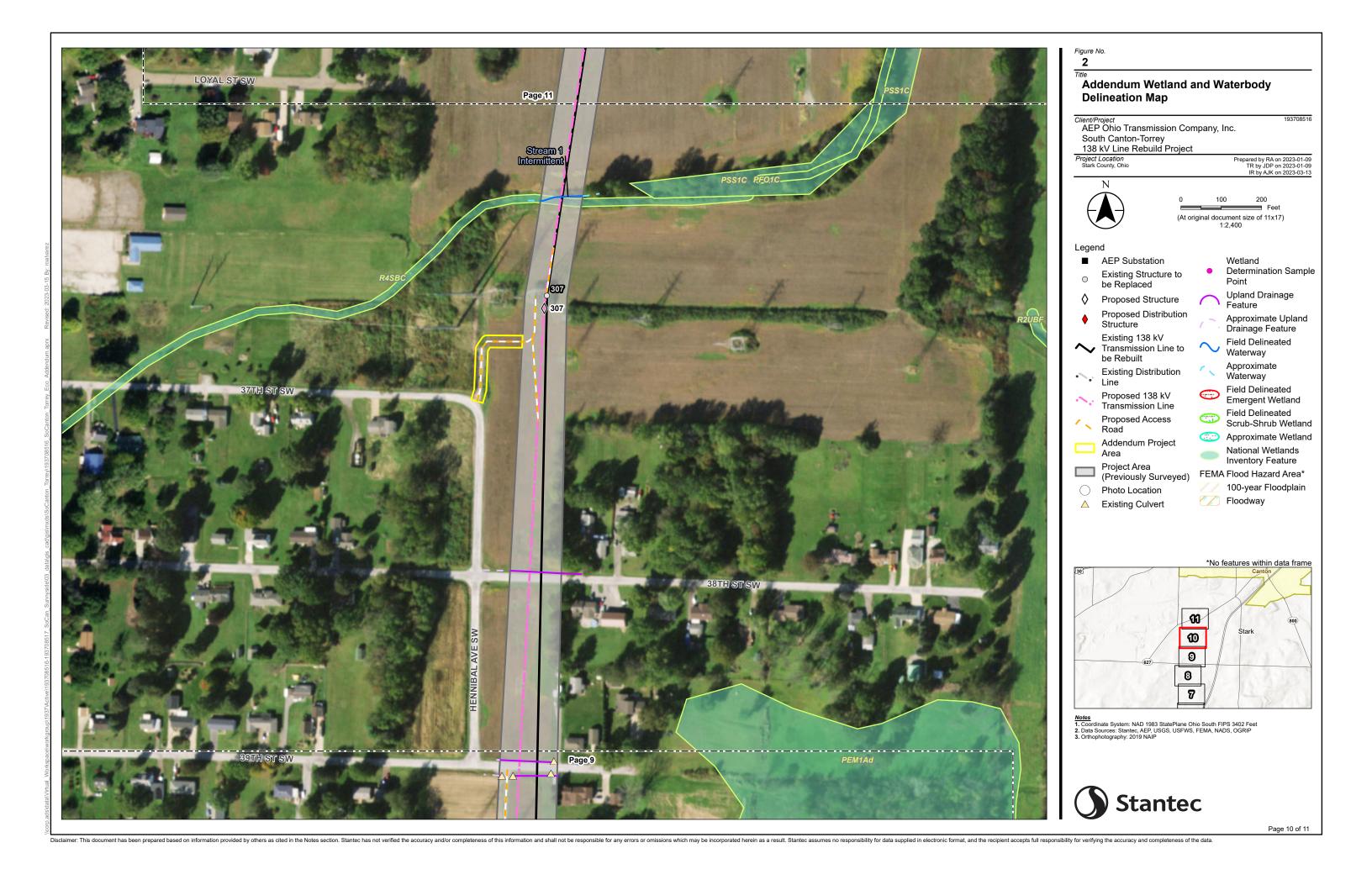






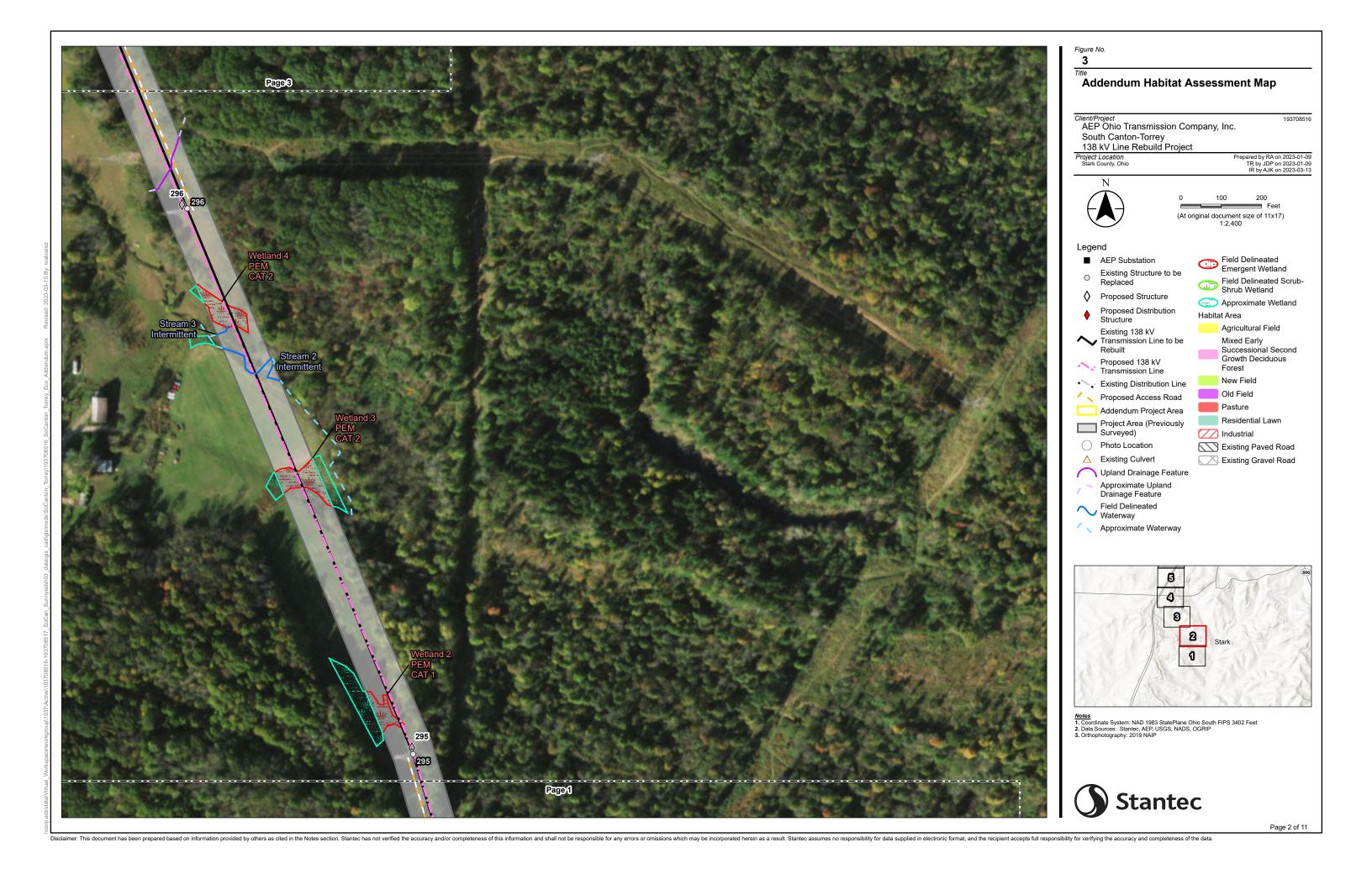




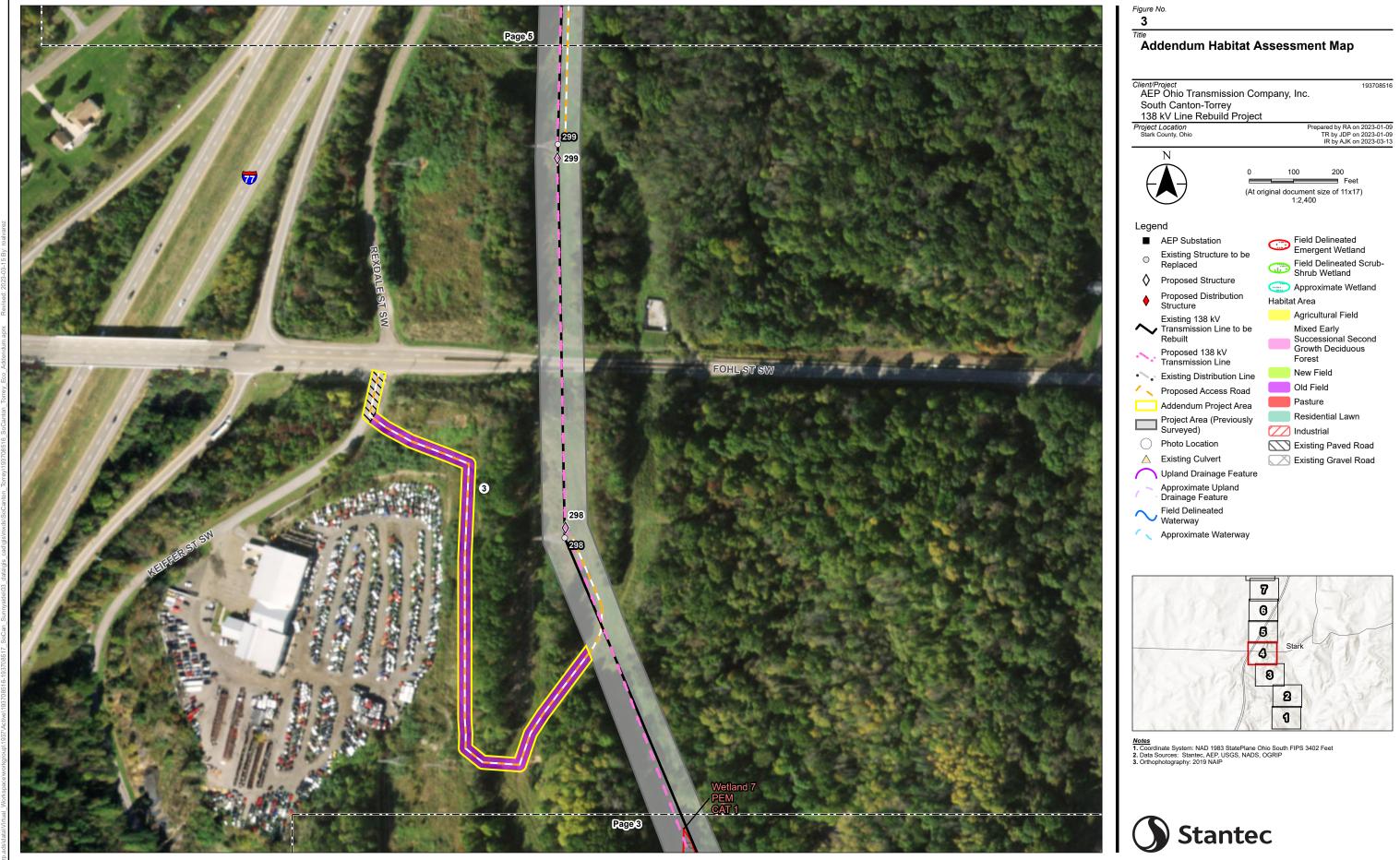




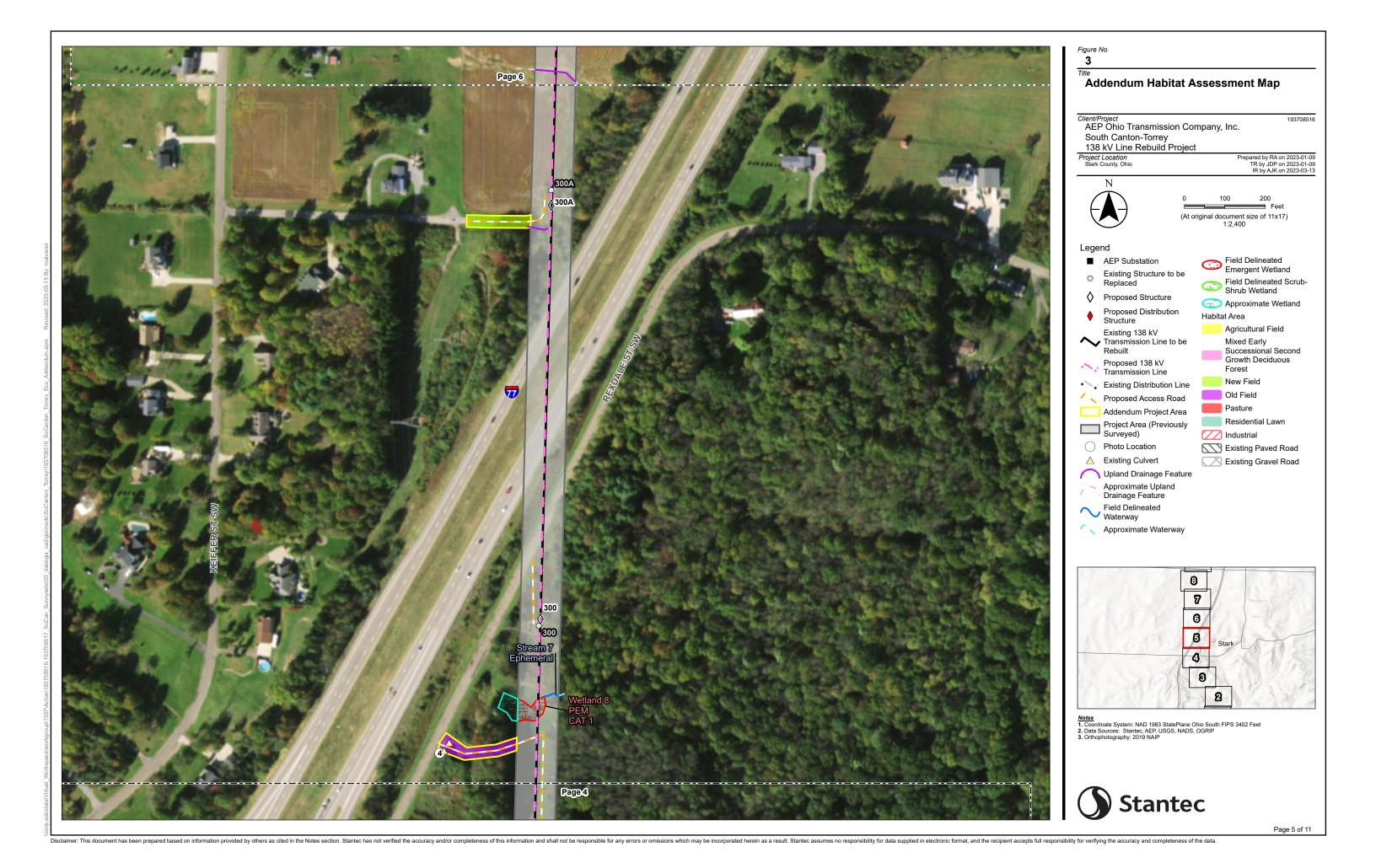


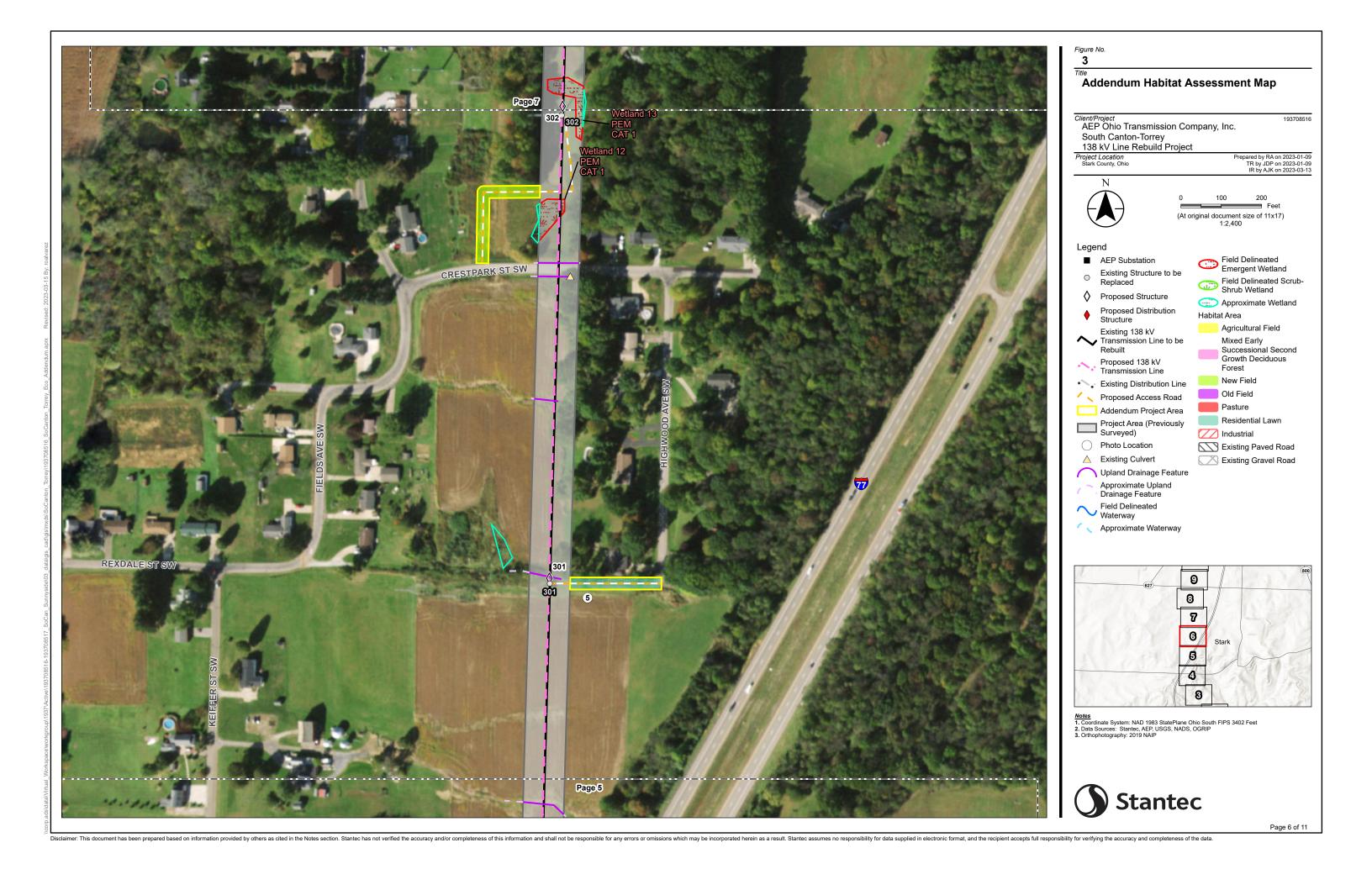


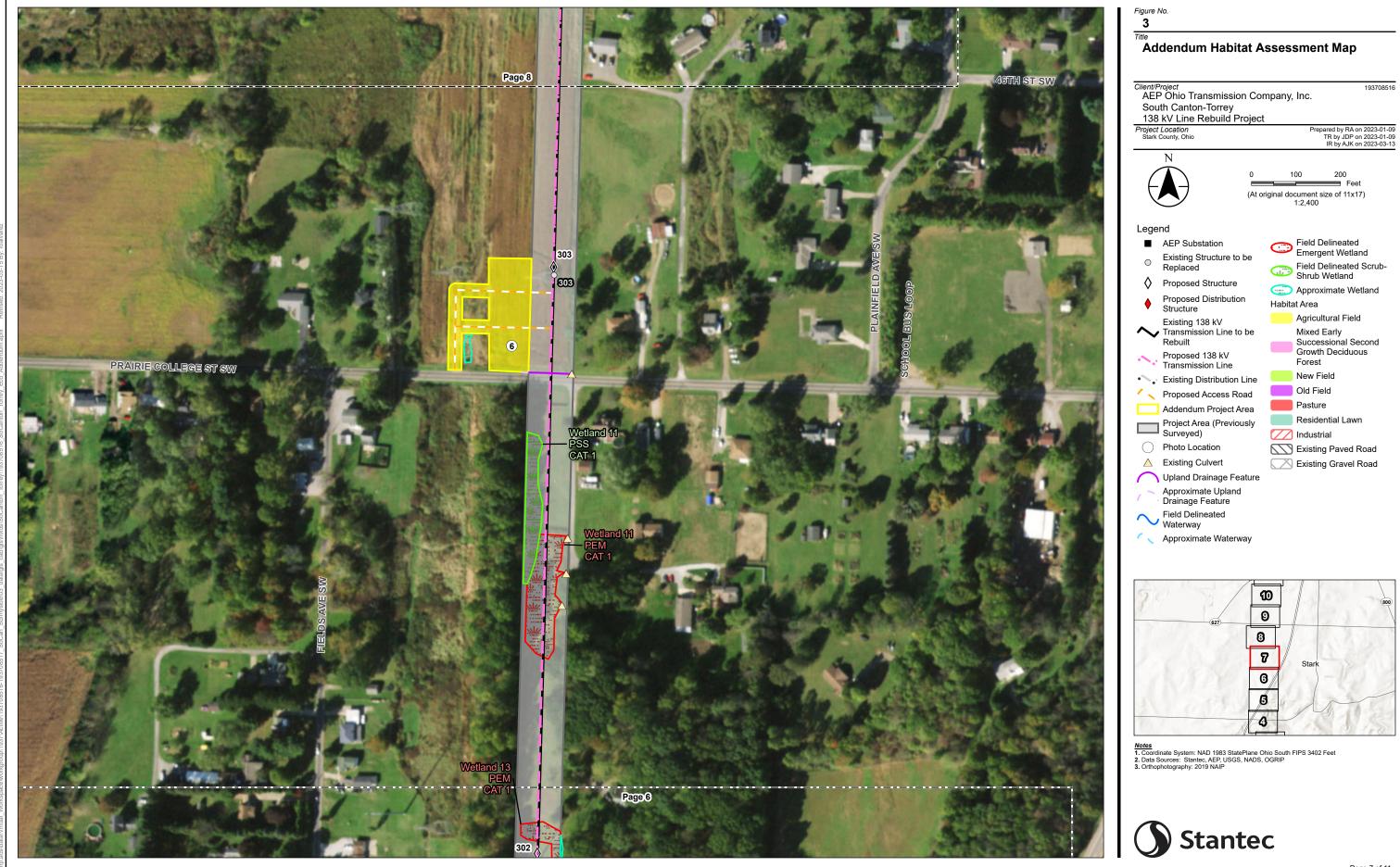




Page 4 of 11

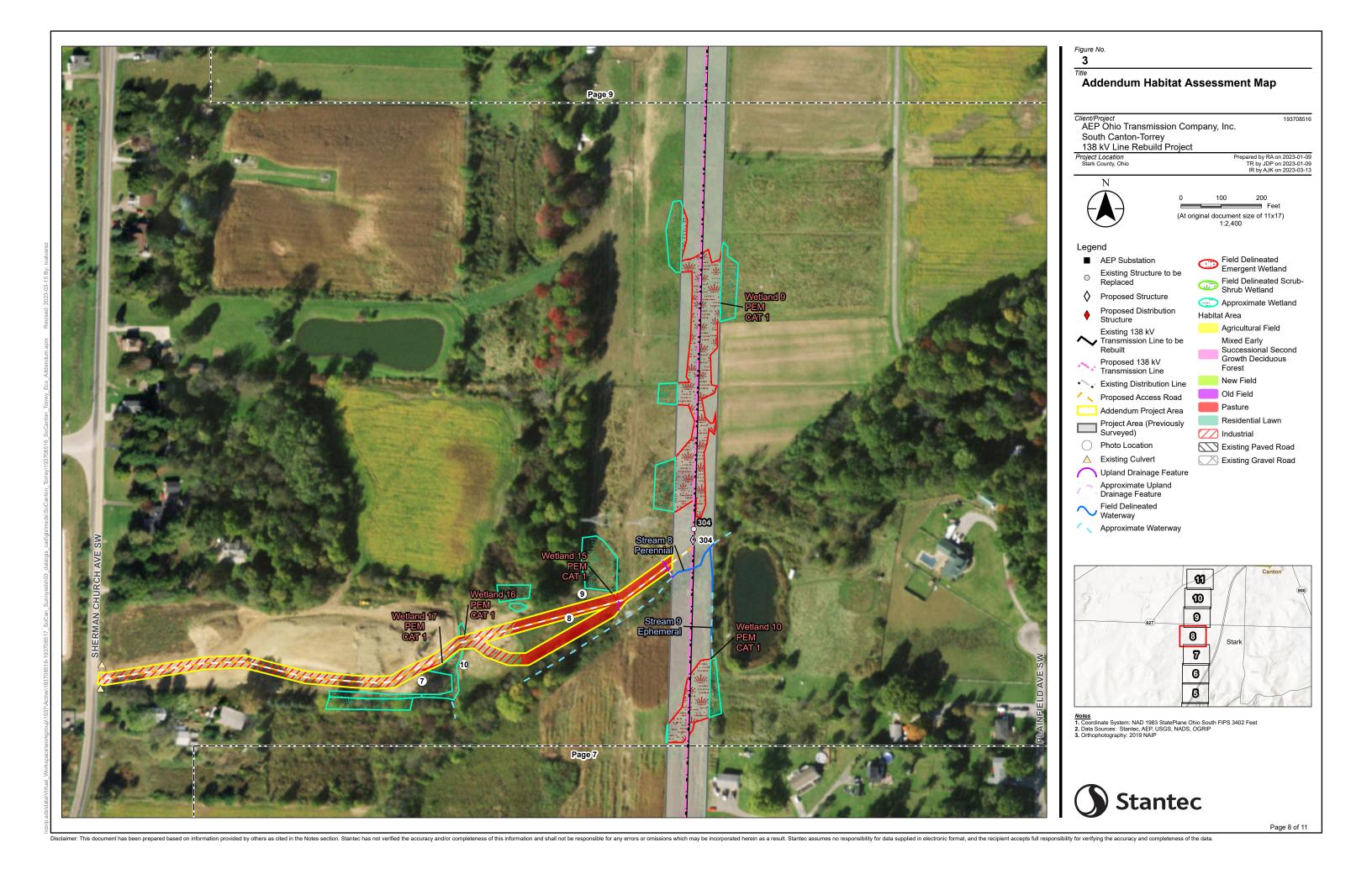


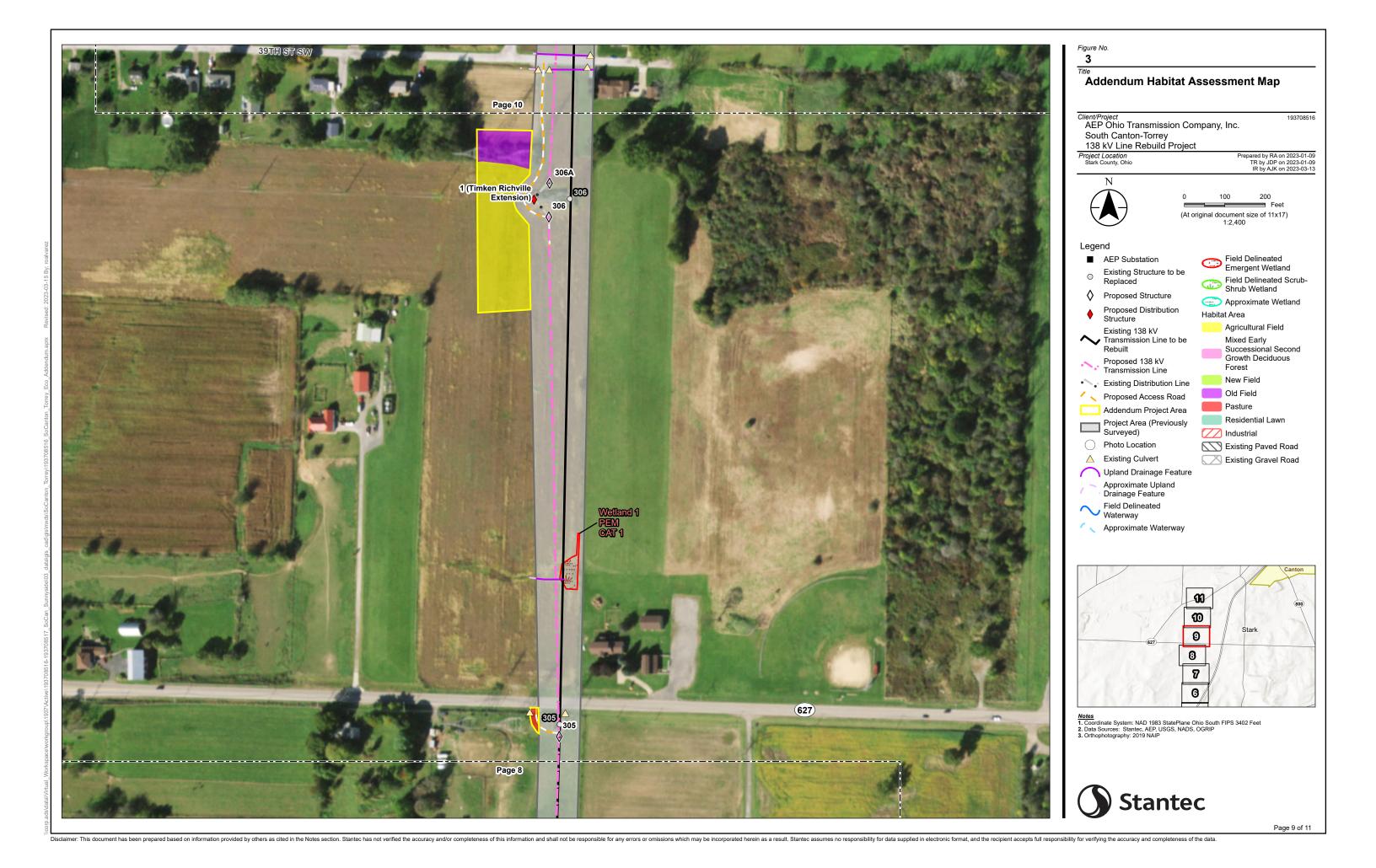




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Photograph Location 1. View of Wetland 14. Photograph taken facing north.



Photograph Location 1. View of Wetland 14. Photograph taken facing east.



AEP Ohio Transmission Company, Inc. South Canton-Torrey 138 kV Line Rebuild Project, Stark County, Ohio Addendum Ecological Survey Memo



Photograph Location 1. View of Wetland 14. Photograph taken facing south.



Photograph Location 1. View of Wetland 14. Photograph taken facing west.





Photograph Location 1. View of soil profile at wetland determination sample point SP28.



Photograph Location 2. View of upland (pasture habitat) at wetland determination sample point SP29. Photograph taken facing north.





Photograph Location 2. View of upland (pasture habitat) at wetland determination sample point SP29. Photograph taken facing south.



Photograph Location 3. Representative view of an upland drainage feature within the Project area. Photograph taken facing southeast.



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South Canton-Torrey 138 kV Line Rebuild Project, Stark County, Ohio
Addendum Ecological Survey Memo



Photograph Location 4. View of Wetland 15. Photograph taken facing north.



Photograph Location 4. View of Wetland 15. Photograph taken facing east.



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Photograph Location 4. View of Wetland 15. Photograph taken facing south.



Photograph Location 4. View of Wetland 15. Photograph taken facing west.





Photograph Location 4. View of soil profile at wetland determination sample point SP30.



Photograph Location 5. View of upland (pasture habitat) at wetland determination sample point SP31. Photograph taken facing south.





Photograph Location 5. View of upland (pasture habitat) at wetland determination sample point SP31. Photograph taken facing west.



Photograph Location 6. View of Wetland 16. Photograph taken facing north.





Photograph Location 6. View of Wetland 16. Photograph taken facing east.



Photograph Location 6. View of Wetland 16. Photograph taken facing south.





Photograph Location 6. View of Wetland 16. Photograph taken facing west.



Photograph Location 6. View of soil profile at wetland determination sample point SP32.





Photograph Location 7. View of upland (industrial land) at wetland determination sample point SP33. Photograph taken facing south.



Photograph Location 7. View of upland (industrial land) at wetland determination sample point SP33. Photograph taken facing west.





Photograph Location 8. View of Wetland 17. Photograph taken facing north.



Photograph Location 8. View of Wetland 17. Photograph taken facing east.





Photograph Location 8. View of Wetland 17. Photograph taken facing south.



Photograph Location 8. View of Wetland 17. Photograph taken facing west.





Photograph Location 8. View of soil profile at wetland determination sample point SP34.



Photograph Location 9. View of upland (industrial land) at wetland determination sample point SP35. Photograph taken facing east.





Photograph Location 9. View of upland (industrial land) at wetland determination sample point SP35. Photograph taken facing north.



Are Vegetation Are Vegetation SUMMARY OF Hydrophytic Ve Wetland Hydrol Remarks:	AEP Ohio Kate Boma MsD- Musk Toeslope 1-2 drologic cone , Soil , , Soil , FINDINGS getation Pre	Latitude: Latitude: ditions on the site ty or Hydrology□ sig or Hydrology□ nat	to 18 perc 40.721541 pical for the nificantly d	Investi ent slopes Loc L s time of ye isturbed?	□ No	NW Concave -81.4129 explain in rer	/////////////////////////////////////	Datum: ✓ Yes □ ances present ─ No Hydric Soils	Present?	Date: County: State: Wetland ID: Sample Point: Community ID: Section: Township: Range:	12/21/22 Stark Ohio Wetland 14 SP28 PEM
Wetland Hydro Primary:	A1 - Surface A2 - High Wa A3 - Saturation B1 - Water M B2 - Sedimen B3 - Drift Den B4 - Alqal Ma B5 - Iron Den B7 - Inundation B8 - Sparsel	ater Table on Marks nt Deposits posits at or Crust	gery	are not pre	B9 - Wate B13 - Aqu B15 - Mar C1 - Hydr C3 - Oxidi C4 - Presi C6 - Rece C7 - Thin	ogen Sulfic ized Rhizo ence of Re	de Odor spheres on Living Roots duced Iron duction in Tilled Soils ace			B6 - Surface Soil 0 B10 - Drainage P2 B16 - Moss Trim L C2 - Dry-Season \(C8 - Crayfish Burr C9 - Saturation \(Vi D1 - Stunted or St D2 - Geomorphic \(D3 - Shallow Aqui D4 - Microtopogra D5 - FAC-Neutral \(\)	atterns ines vines Water Table ows sible on Aerial Imagery ressed Plants Position tard phic Relief
Surface Water Water Table Pr Saturation Pres	Present? esent? sent?	☐ Yes ☑ No☐ Yes ☑ No☐ Yes ☑ No☐ Yes ☑ No☐ Hearn gauge, monitoring	Depth: Depth: Depth: g well, aeria	l photos, pre	(in.) (in.) (in.) evious insp	ections),	if available:	Wetland Hyd	drology Pr	esent?	Yes □ No
Remarks: SOILS Map Unit Name		MsD- Muskingum s									
Profile Descrip		the depth needed to document the inc	licator or confirm the		s.) (Type: C=Con	centration, D=De	pletion, RM=Reduced Matrix, CS=Covere		ocation: PL=Pore Lin	ning, M=Matrix)	
Тор	Bottom			Matrix				dox Features		1	Texture
Depth	Depth	Horizon		(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	3	1	10YR	4/2	85	2.5YR	4/6	15	С	M	clay loam
3	18	1	10YR	5/3	80	5YR	5/8	20	С	PL	clay loam
			-				-				
	A1- Histosol A2 - Histic E _I A3 - Black HI A4 - Hydroge A5 - Stratifier A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy G S5 - Sandy F S6 - Stripped S7 - Dark Su	istic en Sulfide d Layers ed Below Dark Surface Dark Surface Juck Mineral Bleyed Matrix kedox		· · · · · · · · · · · · · · · · · · ·	present S8 - Polyv S9 - Thin S11 - High F1 - Loarn F2 - Loarn F3 - Deple F6 - Redo F7 - Deple): ☑ /alue Belov Dark Surfa h Chroma :	w Surface (LRR R, MLRA 1498) Ce (LRR R, MLRA 1498) Sands Mineral (LRR K, L) Matrix : :face Surface	1 Indicators of disturbed of	s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red F TA6 - Mesic TF12 - Veryl Other (Expla of hydrophytic veget r problematic.	matic Soils 1 Muck (LRR K. L. MLRA 1- Prairie Redox (LRR LCRR K. L. M LOBER LO	49B) K, L, R) LRR K, L, R) LRR K, L, R) (LRR K, L, R) S (MLRA 149B) 15, 149B) acce must be present, unless
(If Observed) Remarks:	Type:			Depth:				Hydric Soil I	Present?	V	Yes □ No
i tomanto.											



Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Wetland ID: Wetland 14 Sample Point: SP28

VEGETATION	(Species identified in all upper	case are non-native	species.)			
	Plot size: 10 meter radius)		,			
	<u>Species Name</u>	=	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1. 2.			-			N
3.					-	Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)
3. 4.						Total Number of Dominant Species Across All Strata: 2 (B)
5.						Total Number of Dominant Species Across All Strata(D)
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.						(VB)
8.					-	Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.			-			OBL spp. 34 x 1 = 34
		Total Cover =	0			FACW spp. 1
						FAC spp. 70 x 3 = 210
	tratum (Plot size: 5 meter radius)					FACU spp. 2 x 4 = 8
1.					-	UPL spp 0
2. 3.	<u></u>					Tetal 407 (A) 254 (D)
<u> </u>						Total <u>107</u> (A) <u>254</u> (B)
5.						Prevalence Index = B/A = 2.374
6.						1 Tovalence Index - DIA - 2.014
7.					-	
8.						Hydrophytic Vegetation Indicators:
9.					-	☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.			-			
		Total Cover =	0			✓ Yes ☐ No Prevalence Index is ≤ 3.0 *
						☐ Yes ☑ No Morphological Adaptations (Explain) *
	lot size: 2 meter radius)					☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Echinochloa crus-galli		70	Υ	FAC	* Indicators of hydric soil and wetland hydrology must be
2.	Juncus effusus		30	Y	OBL	present, unless disturbed or problematic.
3. 4.	Carex sp.		5 4	N N	OBL	Definitions of Vegetation Strata:
<u>4.</u> 5.	Scirpus cyperinus Solidago canadensis		2	N N	FACU	Definitions of vegetation Strata:
5. 6	Onoclea sensibilis		1	N	FACW	Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.						height (DBH), regardless of height.
8.						
9.					_	Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft.
10.				-	-	tall.
11.						
12.					-	Herb - All herbaceous (non-woody) plants, regardless of size, and
13.						woody plants less than 3.28 ft. tall.
14.					-	
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	112			
Woody Vina Ct	atum (Plot size: 10 meter radius)					
1.	atum (Plot size. To meter radius)					
2.						
3.						Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					-	
5.					_	
		Total Cover =	0			
Remarks:						

Additional Remarks:		



Are Vegelation Soil Or Hydrology naturally problematic?	Are Vegetation	AEP Ohio Kate Boma MsD- Musl Hillslope 2-4 Irologic con	cingum silt loam, 12 Latitude: ditions on the site ty or Hydrology□ sig	to 18 perc 40.721546 pical for the nificantly d	Invest ent slopes Loc L is time of ye isturbed?	igator #2: cal Relief: ongitude: ear? (If no, e	NW Linear -81.412	/I/WWI Classification: 341 marks) Are normal circumsta	Datum: ☑ Yes □ ances present	NAD83 No	Date: County: State: Wetland ID: Sample Point: Community ID: Section: Township:	12/20/21 Stark Ohio Wetland 14 SP29 UPL
Mydrand Hydrology Present?	Are Vegetation	□ , Soil□ ,	or Hydrology□ nat	urally prob	lematic?			Yes	□ No		Range:	Dir:
Wetland Hydrology Present?			10		- V	- N-			Lhadaia Oaila	D 40		D Var D Na
Wetland Hydrology Indicators (Check here if indicators are not present											Within A Wetlan	
Wetland Hydrology Indicators (Check here if indicators are not present S A1 - Surface Water B8 - Water-Stained Leaves B8 - Surface Soli Cracks B9 - Surface Soli Cracks		ogy Fieseii	i.i		<u> </u>	- INU			is This Sainp	ning Folint	Willim A Wellan	u: I les I No
A1 - Surface Water Table B8 - Water Mark Prosents B13 - Aquate Fauna B16 - Mora F	T to mante.											
Permary	HYDROLOGY											
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Primary:	A1 - Surface A2 - High Wa A3 - Saturati B1 - Water M B2 - Sedimet B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundati B8 - Sparsely ions: Present?	Water ater Table on larks to Deposits oosits on Visible on Aerial Ima y Vegetated Concave S	gery urface Depth:		B9 - Water B13 - Aqu B15 - Mar C1 - Hydr C3 - Oxidi C4 - Presi C6 - Rece C7 - Thin Other (Ex	er-Stained latic Fauna I Deposits ogen Sulfii ized Rhizo ence of Re ent Iron Re Muck Surfi	de Odor spheres on Living Roots educed Iron duction in Tilled Soils ace	Wetland Hyd		B10 - Drainage Pa B16 - Moss Trim L C2 - Dry-Season V C8 - Crayfish Burr C9 - Saturation Vi D1 - Stunted or J D2 - Geomorphic D3 - Shallow Aqui D4 - Microtopogra D5 - FAC-Neutral	atterns ines vater Table ows sible on Aerial Imagery ressed Plants Position tard phic Relief Test
Remarks:						1. 1						
Map Unit Name: MsD - Muskingum silt loam, 12 to 18 percent slopes	Describe Record	ed Data (stre	eam gauge, monitorin	g well, aeria	l photos, pre	vious insp	ections),	if available:		N/A		
Profile Description Descr	SOILS		MeD. Muckingum e	ilt loam 10	to 18 perc	ent slope						
Top								enletion RM=Reduced Matrix CS=Covere	ed/Coated Sand Grains: I	ocation: PI =Pore I in	ning M=Matrix)	
Depth Depth Horizon Color (Moist) % Color (Moist) % Type Location (e.g. clay, sand, loam)			are departitioned to decement are are	iodioi oi committud		o., (19pc. 0 Our	oonii alon, D. De				mg, m mausy	Texture
1	•		Horizon	Color		%					Location	(e.g. clay, sand, loam)
NRCS Hydric Soil Field Indicators (check here if indicators are not present):	0	4	1	10YR	4/3	100						clay loam
NRCS Hydric Soil Field Indicators (check here if indicators are not present	4	16	1	10YR	4/3	70						clay loam
NRCS Hydric Soil Field Indicators (check here if indicators are not present): NRCS Hydric Soil Field Indicators (check here if indicators are not present): Indicators for Problematic Soils				10YR	5/6	30						
NRCS Hydric Soil Field Indicators (check here if indicators are not present): A1 - Histosol			-									
NRCS Hydric Soil Field Indicators (check here if indicators are not present): □ A1- Histosol			-									
NRCS Hydric Soil Field Indicators (check here if indicators are not present :			-									
NRCS Hydric Soil Field Indicators (check here if indicators are not present):							1					
A1- Histosol S8 - Polyvalue Below Surface (LRR R, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MLRA 149B) A2 - Histic Epipedon S9 - Thin Dark Surface (LRR R, MLRA 149B) A16 - Coast Prairie Redox (LRR K, L, R) A16 - Coast Prairie Redox (LRR K, L, R) A16 - Coast Prairie Redox (LRR K, L, R) A16 - Coast Prairie Redox (LRR K, L, R) A17 - Coast Prairie Redox (LRR K, L, R) A18 - A5 - Stratified Layers F1 - Loamy Mucky Mineral (LRR K, L) S7 - Dark Surface (LRR K, L) S7 - Dark Surface (LRR K, L) S8 - Polyvalue Below Surface (LRR K, L) S8 - Polyvalue Below Surface (LRR K, L) S9 - Thin Dark Surface (LRR K, L) S9 - Thin Dark Surface (LRR K, L) S9 - Thin Dark Surface (LRR K, L) S1 - Sandy Muck Mineral F7 - Depleted Dark Surface F12 - Iron-Manganese Masses (LRR K, L, R) S1 - Sandy Muck Mineral F7 - Depleted Dark Surface F19 - Piedmont Floodplain Soils (MLRA 149B) F8 - Redox Depressions F21 - Red Parent Material TA6 - Mesic Spodic (MLRA 144A, 145, 149B) T740 -												
(If Observed) 1ype: Deptn: Hydric Soil Present?		A1- Histosol A2 - Histic E _I A3 - Black HI A4 - Hydroge A5 - Stratified A11 - Deplet A12 - Thick E S1 - Sandy N S4 - Sandy F S5 - Sandy F S6 - Stripped	bipedon stic stic stic stic stic stic stic stic	. S maroa		S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	value Belon Dark Surfa h Chroma ny Mucky M ny Gleyed I eted Matrix ox Dark Su eted Dark S	ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (rface Surface	¹ Indicators of	A10 - 2 cm I A16 - Coast S3 - 5 cm Mu S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla	Muck (LRR K, L, MLRA 1. Prairie Redox (LRR K, L) Lucky Peat of Peat (il Lufface (LRR K, L, M) Lucky Peat of Peat (il Lufface (LRR K, L) Langanese Masses Lont Floodplain Soil Larent Material Spodic (MLRA 144A, 1. Shallow Dark Surf Lain in Remarks)	K, Ĺ, Ř) LRR K, L, Ř) (LRR K, L, Ř) S (MLRA 149B) 45, 149B) ACCE
(ii Observed)		Type:			Depth:				Hydric Soil I	Present?		Yes ☑ No
		. ,,,,			-r-"				,			



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Wetland ID: Wetland 14 Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Sample Point: SP29 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 2. Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) 3. Total Number of Dominant Species Across All Strata: 1 (B) 5 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B) 8. Prevalence Index Worksheet 9. __ Total % Cover of: Multiply by: 10 OBL spp. x 1 = Total Cover = 0 FACW spp. x 2 = 10 20 FAC spp. x 3 = Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. x 4 = UPL spp. x 5 = 0 2 3. 100 380 5 Prevalence Index = B/A = 3.800 6. **Hydrophytic Vegetation Indicators:** 8. 9 □ Yes ✓ No Rapid Test for Hydrophytic Vegetation 10. □ Yes ☑ No Dominance Test is > 50% Total Cover = 0 □ Yes ✓ No Prevalence Index is ≤ 3.0 * Yes ✓ No Morphological Adaptations (Explain) * □ Yes Herb Stratum (Plot size: 2 meter radius) ✓ No Problem Hydrophytic Vegetation (Explain) * FACU Schedonorus arundinaceus 80 * Indicators of hydric soil and wetland hydrology must be Pycnanthemum virginianum 10 Ν **FACW** present, unless disturbed or problematic. Symphyotrichum ericoides 3. 10 Ν FACU **Definitions of Vegetation Strata:** 4 --5. 6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12 woody plants less than 3.28 ft. tall. 13. 14. 15 Woody Vines - All woody vines greater than 3.28 ft. in height. Total Cover = 100 Woody Vine Stratum (Plot size: 10 meter radius) 3. Hydrophytic Vegetation Present □ Yes ☑ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



Project/Site:	South Cantor	n-Torrey 138 kV Line Re	ebuild Proiec	t			Stantec Project #:	193708516		Date:	02/14/23
Applicant:		Fransmission Comp		•			otantoo i rojoot ii.	100700010		County:	Stark
Investigator #1:	Malea Case	ev		Invest	igator #2:	Matt De	nzler			State:	Ohio
Soil Unit:	Sb-Sebring	silt loam, 0-2 perce	ent slopes				/I/WWI Classification:	N/A		Wetland ID:	Wetland 15
Landform:	Depression		•	Loc	cal Relief:	Concav	e			Sample Point:	SP30
Slope (%):	1		40.747256		ongitude:			Datum:	WGS84	Community ID:	PEM
Are climatic/hyd	trologic cond	ditions on the site ty	pical for th	is time of ye	ear? (If no, o	explain in rer	marks)	✓ Yes □	No	Section:	
Are Vegetation	□ , Soil□ ,	or Hydrology□ sig	nificantly d	isturbed?			Are normal circumsta	ances present	t?	Township:	
Are Vegetation	□ , Soil□ ,	or Hydrology□ nat	urally prob	lematic?			Yes	□ No		Range:	Dir:
SUMMARY OF											
Hydrophytic Ve				✓ Yes				Hydric Soils I	Present?		
Wetland Hydrol	ogy Present	?		Yes	□ No			Is This Samp	oling Point \	Within A Wetlan	d? ☑ Yes ■ No
Remarks:											
HYDROLOGY											
Wetland Hydro	ology Indica	ators (Check here if	indicators	are not pre	sent):	: 🗆					
Primary:					,				Secondary:		
V	A1 - Surface			~		er-Stained				B6 - Surface Soil (
✓	A2 - High Wa					iatic Fauna				B10 - Drainage Pa	
	A3 - Saturatio					rl Deposits				B16 - Moss Trim L	
	B1 - Water M B2 - Sedimer					ogen Sulfid	spheres on Living Roots			C2 - Dry-Season \ C8 - Crayfish Burr	
	B3 - Drift Dep						educed Iron				sible on Aerial Imagery
	B4 - Algal Ma						duction in Tilled Soils			D1 - Stunted or St	
	B5 - Iron Dep					Muck Surf			V	D2 - Geomorphic	Position
		on Visible on Aerial Ima			Other (Ex	plain in Re	emarks)			D3 - Shallow Aqui	
	B8 - Sparsely	Vegetated Concave S	urface							D4 - Microtopogra	
									Ш	D5 - FAC-Neutral	Test
Field Observat	ions:										
Surface Water	Present?	☑ Yes □ No	Depth:	2	(in.)			Wetland Hyd	drology Pr	osont?	Yes □ No
Water Table Pr	esent?	✓ Yes ☐ No	Depth:	0	(in.)			wettand riye	arology i i	esent:	163 🗆 110
Saturation Pres	ent?	✓ Yes □ No	Depth:	0	(in.)						
Describe Record	ed Data (stre	eam gauge, monitorin	a well seris	I nhotos nre	wioue iner	ti \			N/A		
Docombo Modord	oa bata (otto						it available.				
Remarks:		3 3 7	9 11011, 40110	ii priotos, pre	zvious irisp	pections),	if available:		IN/A		
Remarks:		J J /	g 110, aoine	ii priotos, pre	evious irisp	bections),	if available:		N/A		
		3 3 /	g, ao	ii priotos, pre	evious irisp	bections),	if available:		NA		
SOILS					svious ilisp	bections),	it avallable:		N/A		
SOILS Map Unit Name		Sb-Sebring silt loan	n, 0-2 perc	ent slopes		,-		adiContad Sand Craine: L		ning M-Matriy)	
SOILS Map Unit Name Profile Descrip	otion (Describe to	Sb-Sebring silt loan	n, 0-2 perc	ent slopes		,-	spletion, RM=Reduced Matrix, CS=Covere			ning, M=Matrix)	Texture
SOILS Map Unit Name Profile Descrip Top	Bottom	Sb-Sebring silt loan	n, 0-2 perc	ent slopes absence of indicator Matrix	s.) (Type: C=Con	,	epletion, RM=Reduced Matrix, CS=Coverre Re	dox Features	.ocation: PL=Pore Lir	T	Texture
SOILS Map Unit Name Profile Descrip Top Depth	Bottom Depth	Sb-Sebring silt loan the depth needed to document the inc	n, 0-2 perc	ent slopes absence of indicator Matrix (Moist)	s.) (Type: C=Con	centration, D=De	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist)	dox Features %	.ocation: PL=Pore Lir	ning, M=Matrix) Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Profile Descrip Top Depth 0	Bottom Depth	Sb-Sebring silt loan the depth needed to document the inc Horizon 1	n, 0-2 percolicator or confirm the Color 10YR	ent slopes absence of indicator Matrix (Moist) 3/2	s.) (Type: C=Con	ncentration, D=De	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist)	dox Features % 	ocation: PL=Pore Lir Type	Location 	(e.g. clay, sand, loam) clay loam, fibrous
SOILS Map Unit Name Profile Descrip Top Depth 0 2	Bottom Depth 2 18	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2	n, 0-2 perc ficator or confirm the Color 10YR 2.5Y	ent slopes absence of indicator Matrix (Moist) 3/2 6/2	s.) (Type: C=Con % 100 75	ncentration, D=De	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist) 5/8	dox Features % 25	Type	Location M	(e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2	Bottom Depth 2 18	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2	n, 0-2 perc ficator or confirm the Color 10YR 2.5Y	ent slopes absence of indicator Matrix (Moist) 3/2 6/2	ss.) (Type: C=Con % 100 75	centration, D=De	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist) 5/8	% 25	Type C	Location M	(e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2	Bottom Depth 2 18	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2	n, 0-2 perc ficator or confirm the Color 10YR 2.5Y	ent slopes absence of indicator Matrix (Moist) 3/2 6/2	s.) (Type: C=Con	7.5YR	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist) 5/8	dox Features	Type C	Location M	(e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2	Bottom Depth 2 18	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2	n, 0-2 perc Color 10YR 2.5Y	ent slopes absence of indicator Matrix (Moist) 3/2 6/2	s.) (Type: C=Con	7.5YR	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist) 5/8	dox Features	.ocation: PL=Pore Lir	Location M	(e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2	Bottom Depth 2 18	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2	Color Color 10YR 2.5Y	ent slopes absence of indicator Matrix (Moist) 3/2 6/2	s.) (Type: C=Con	7.5YR	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist) 5/8	dox Features	Type C	Location M	(e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2	Bottom Depth 2 18	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2	n, 0-2 perc Color 10YR 2.5Y	ent slopes absence of indicator Matrix (Moist) 3/2 6/2	s) (Type: C=Con % 100 75	7.5YR	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist) 5/8	dox Features	Type C	Location M	(e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2	btion (Describe to Describe to Describe to Describe to Depth 2 18	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2	n, 0-2 perc Color Color 10YR 2.5Y	ent slopes absence of indicator Matrix (Moist) 3/2 6/2	s.) (Type: C=Con	7.5YR	epletion, RM=Reduced Matrix, CS=Coverer Re Color (Moist) 5/8	dox Features	Type C	Location M	(e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2	btion (Describe to Describe to Describe to Describe to Depth 2 18	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2	n, 0-2 perc Color Color 10YR 2.5Y	ent slopes absence of indicator Matrix (Moist) 3/2 6/2	s.) (Type: C=Con	7.5YR	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist) 5/8	dox Features	Type C	Location M	(e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	btion (Describe to Describe to	Sb-Sebring silt loan the depth needed to document the inc Horizon 2 addicators (check he	n, 0-2 perc Color Color 10YR 2.5Y	ent slopes absence of indicator Matrix (Moist) 3/2 6/2 tors are not	s.) (Type: C=Con % 100 75	7.5YR	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist) 5/8 w Surface (LRR R, MLRA 1498)	dox Features	Type C s for Proble A10 - 2 cm l	Location M matic Soils ¹ Vluck (LRR K, L, MLRA 14	(e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	btion (Describe to Describe to	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2 ndicators (check he	n, 0-2 perc Color Color 10YR 2.5Y	ent slopes s absence of indicator Matrix (Moist) 3/2 6/2 tors are not	s.) (Type: C=Con % 100 75	7.5YR	epletion, RM=Reduced Matrix, CS=Coverer Re Color (Moist) 5/8 w Surface (LRR R, MLRA 1498)	dox Features % 25 Indicator	Type	Location M matic Soils ¹ Muck (LRR K, L, MLRA 1- Prairie Redox (LRR	(e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	btion (Describe to Describe to	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2 idicators (check he	n, 0-2 perc Color Color 10YR 2.5Y	ent slopes absence of indicator Matrix (Moist) 3/2 6/2 tors are not	s) (Type: C=Con % 100 75 present 88 - Polyx 89 - Thin S11 - Higl	7.5YR	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist) 5/8	dox Features % 25 Indicator	Type C s for Proble A10 - 2 cm II A16 - Coast S3 - 5cm Mu	Location M matic Soils ¹ Muck (LRR K, L, MLRA ¹ Prairie Redox (LRR Locky Peat of Peat (L	(e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	btion (Describe to Describe to	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2 adicators (check he objeedon stic n Sulfide	n, 0-2 perc Color Color 10YR 2.5Y	ent slopes s absence of indicator Matrix (Moist) 3/2 6/2 tors are not	s.) (Type: C=Con % 100 75 present \$8 - Polyx \$9 - Thin \$11 - Higi F1 - Loar	7.5YR	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist) 5/8 w Surface (LRR R, MLRA 1498) 3CG (LRR R, MLRA 1498) Sands Mineral (LRR K, L)	dox Features % 25 Indicator	Type C s for Proble A10 - 2 cm II A16 - Coast S3 - 5 cm Mt S7 - Dark Sr	Location M matic Soils ¹ Muck (I,RR, K, L, MLRA 1- Prairie Redox (I,RR Lycky Peat of Peat (i	(e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	btion (Describe to Describe to	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2 adicators (check he objeedon stic n Sulfide	n, 0-2 perc Color Color 10YR 2.5Y	ent slopes states of indicator Matrix (Moist) 3/2 6/2 tors are not	s.) (Type: C=Con % 100 75 present S8 - Polyn S9 - Thin S11 - High F1 - Loan F2 - Loan	7.5YR	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist)	dox Features % 25 Indicator	Type C S for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mt S7 - Dark S0 S8 - Polyval	Location M matic Soils ¹ Muck (LRR K, L, MLRA ¹ Prairie Redox (LRR Locky Peat of Peat (L	(e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	btion (Describe to Describe to	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2 ndicators (check he oipedon stic n Sulfide bl Layers ad Below Dark Surface	n, 0-2 perc Color Color 10YR 2.5Y	ent slopes absence of indicator Matrix (Moist) 3/2 6/2 tors are not	s.) (Type: C=Con % 100 75	7.5YR	epletion, RM=Reduced Matrix, CS=Coverer Re Color (Moist) 5/8 W Surface (LRR R, MLRA 149B) 3CG (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (dox Features % 25 Indicator	Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mt S7 - Dark S0 S8 - Polyval S9 - Thin Da	Location M matic Soils ¹ Wuck (LRR K, L, MLRA 14 Prairie Redox (LRR R, L, M) urface (LRR K, L, M) ue Below Surface ((e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	btion (Describe to Describe to	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2 dicators (check he objectors it can be sufficed at Layers and Below Dark Surface bluck Mineral	n, 0-2 perc Color Color 10YR 2.5Y	ent slopes Patiente of indicator Matrix (Moist) 6/2 tors are not	s.) (Type: C=Con % 100 75 present S8 - Polyx S9 - Thin S1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple	7.5YR 7.5YR	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (frace Surface Surface	dox Features % 25 Indicator	Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mi S9 - Thin Da F12 - Iro Da F12 - Iro Da F12 - Iro Da F19 - Piedm	Location M	(e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	btion (Describe to the Constraint of the Constra	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2 ndicators (check he bipedon stic n Sulfide I Layers ad Below Dark Surface lark Surface luck Mineral Gleyed Matrix	n, 0-2 perc Color 10YR 2.5Y	ent slopes rabsence of indicator Matrix (Moist) 3/2 6/2 tors are not	s.) (Type: C=Con % 100 75 present S8 - Polyx S9 - Thin S1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple	7.5YR	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (frace Surface Surface	dox Features % 25 Indicator	Type C S for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark S1 S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P	Location M	(e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	Bottom Depth 2 18 Soil Field In A1- Histosol A2 - Histo Ep A3 - Histo Ep A4 - Hydroge A5 - Stratifice A12 - Thick D S1 - Sandy M S5 - Sandy R S5 - Sandy R	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2	n, 0-2 perc Color 10YR 2.5Y	ent slopes Patiente of indicator Matrix (Moist) 6/2 tors are not	s.) (Type: C=Con % 100 75 present S8 - Polyx S9 - Thin S1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple	7.5YR 7.5YR	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (frace Surface Surface	dox Features % 25 Indicator	Type Type C Type Typ	Location M matic Soils Muck (LRR K, L, MLRA 1+ Prairie Redox (LRR k, L, M) ue Below Surface (LRR K, L, M) ue Below Surface (LRR K, L) langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1+	(e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	Bottom Depth 2 18	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2	n, 0-2 perc Color 10YR 2.5Y	ent slopes Patiente of indicator Matrix (Moist) 6/2 tors are not	s.) (Type: C=Con % 100 75 present S8 - Polyx S9 - Thin S1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple	7.5YR 7.5YR	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (frace Surface Surface	Section Sect	Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Ms S7 - 5 cm S8 - Polyval S9 - Thin Da F12 - I ron-M F19 - Piedm F21 - Red P TA6 - Mesicc TF12 - Very	Location M matic Soils Muck (LRR K, L, MIRA 11 Prairie Redox (LRR K, L, M) ue Below Surface (LRR K, L, M) ue Below Surface (LRR K, L) langanese Masses iont Floodplain Soil arent Material Spodic (MLRA 144A, 14 Shallow Dark Surf. Shallow Dark Surf.	(e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	Bottom Depth 2 18	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2	n, 0-2 perc Color 10YR 2.5Y	ent slopes Patiente of indicator Matrix (Moist) 6/2 tors are not	s.) (Type: C=Con % 100 75 present S8 - Polyx S9 - Thin S1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple	7.5YR 7.5YR	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (frace Surface Surface	dox Features % 25 Indicator	Type C S for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Ms S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Exple	Location M matic Soils Muck (LRR K, L, MLRA 1+ Prairie Redox (LRR k, L, M) ue Below Surface (LRR K, L, M) ue Below Surface (LRR K, L) langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1+	(e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	Bottom Depth 2 18	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2	n, 0-2 perc Color 10YR 2.5Y	ent slopes Patiente of indicator Matrix (Moist) 6/2 tors are not	s.) (Type: C=Con % 100 75 present S8 - Polyx S9 - Thin S1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple	7.5YR 7.5YR	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (frace Surface Surface	dox Features % 25 Indicator	Type C S for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Ms S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Exple	Location M	(e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	Bottom Depth 2 18	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2	n, 0-2 perc Color 10YR 2.5Y	ent slopes Patiente of indicator Matrix (Moist) 6/2 tors are not	s.) (Type: C=Con % 100 75 present S8 - Polyx S9 - Thin S1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple	7.5YR 7.5YR	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (frace Surface Surface	dox Features % 25 Indicator	Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla)	Location M	(e.g. clay, sand, loam) clay loam, fibrous clay loam
SOILS Map Unit Name Profile Descrip Top Depth 0 2 NRCS Hydric	Bottom Depth 2 18 Soil Field In A1- Histosol A2 - Histo Ep A3 - Histo Ep A4 - Hydroge A5 - Stratifice A12 - Thick D S1 - Sandy R S5 - Sandy R S6 - Stripped S7 - Dark Sur	Sb-Sebring silt loan the depth needed to document the inc Horizon 1 2	n, 0-2 perc Color 10YR 2.5Y	ent slopes absence of indicator Matrix (Moist) 3/2 6/2 tors are not	s.) (Type: C=Con % 100 75 present S8 - Polyx S9 - Thin S1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple	7.5YR 7.5YR	epletion, RM=Reduced Matrix, CS=Covere Re Color (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Sands Mineral (LRR K, L) Matrix (frace Surface Surface	dox Features % 25 Indicator 'Indicators of disturbed of	Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla)	Location M	(e.g. clay, sand, loam) clay loam, fibrous clay loam



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Wetland ID: Wetland 15 Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Sample Point: SP30 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 2. Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. Total Number of Dominant Species Across All Strata: 3 (B) 5 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B) 8. Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10 OBL spp. x 1 = Total Cover = 0 FACW spp. x 2 = 46 92 FAC spp. x 3 = Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. x 4 = **FACW** UPL spp. x 5 = 6 Cornus amomum 0 2 3. (A) 134 5 Prevalence Index = B/A = 1.634 6. **Hydrophytic Vegetation Indicators:** 8. 9 □ Yes ✓ No Rapid Test for Hydrophytic Vegetation 10. ✓ Yes □ No Dominance Test is > 50% Total Cover = 6 ✓ Yes □ No Prevalence Index is ≤ 3.0 * Yes ✓ No Morphological Adaptations (Explain) * □ Yes Herb Stratum (Plot size: 2 meter radius) ✓ No Problem Hydrophytic Vegetation (Explain) * OBL Ν 1. Juncus effusus * Indicators of hydric soil and wetland hydrology must be Symphyotrichum pilosum 4 Ν FACU present, unless disturbed or problematic. 3. Lysimachia nummularia 40 **FACW Definitions of Vegetation Strata:** 4 Penthorum sedoides N OBL 5. Elodea nuttallii 25 OBL 6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12 woody plants less than 3.28 ft. tall. 13. 14. 15 Woody Vines - All woody vines greater than 3.28 ft. in height. Total Cover = 78 Woody Vine Stratum (Plot size: 10 meter radius) 3 Hydrophytic Vegetation Present ☑ Yes □ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



	AEP Ohio Malea Cas Sb-Sebring Hillslope 2-4 drologic cond	n-Torrey 138 kV Line Re Transmission Comp ey g silt loam, 0-2 perce Latitude: ditions on the site ty or Hydrology sig	ent slopes 40.747231 pical for th	Investi Loc Loc is time of ye	igator #2: eal Relief: ongitude: ear? (If no, e	NW Convex -81.41528	/I/WWI Classification: 88 marks) Are normal circumsta	Datum: ☑ Yes □	WGS84 No	Date: County: State: Wetland ID: Sample Point: Community ID: Section: Township:	02/14/23 Stark Ohio N/A SP31 UPL
Are Vegetation	□ , Soil□ ,	or Hydrology□ nat					Yes	□ No ˙		Range:	Dir:
SUMMARY OF											
Hydrophytic Ve					☑ No			Hydric Soils		\A/:41-: A \A/-41	☐ Yes ☑ No
Wetland Hydrol Remarks:	ogy Present	[/		□ Yes	☑ No			is This Samp	oling Point	Within A Wetlan	d? ■ Yes ■ No
Remarks:											
HYDROLOGY											
	A1 - Surface A2 - High Wa A3 - Saturation B1 - Water M B2 - Sedimer B3 - Drift Der B4 - Algal Ma B5 - Iron Dep B7 - Inundation B8 - Sparsel	ater Table on Iarks nt Deposits posits at or Crust	gery	are not pre	B9 - Wate B13 - Aqu B15 - Mar C1 - Hydr C3 - Oxidi C4 - Presi C6 - Rece C7 - Thin	ence of Re	de Odor spheres on Living Roots educed Iron duction in Tilled Soils ace			B16 - Moss Trim L C2 - Dry-Season V C8 - Crayfish Burr C9 - Saturation Vi D1 - Stunted or St	atterns .ines Water Table ows sible on Aerial Imagery ressed Plants Position tard phic Relief
Surface Water I Water Table Pro Saturation Pres	Present? esent? ent?	☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No eam gauge, monitorin	Depth: Depth: Depth:	al photos, pre	(in.) (in.) (in.)	ections).	if available:	Wetland Hyd	drology Pr	esent? -	Yes ☑ No
Remarks:	ou Duta (our	sam gaage, memem	9 110, 401	po.too, p. o	Troug mop	,	available:				
SOILS Map Unit Name		Sb-Sebring silt loan									
Top	Bottom	the depth needed to document the inc	licator or confirm the	Matrix	s.) (Type: C=Con	centration, D=De	epletion, RM=Reduced Matrix, CS=Covere	dox Features		ning, M=Matrix)	Texture
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	3	1	10YR	4/3	100						clay loam
3	18	2	10YR	4/3	95	10YR	5/6	5	С	M	clay loam
		-	-			-					
		-									
			-								
		-									
NDOO Ubadala						\					
	A1- Histosol A2 - Histic E _I A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy G S6 - Stripped	stic n Sulfide d Layers ed Below Dark Surface Dark Surface fluck Mineral Sleyed Matrix tedox	io ii iiiulod		S8 - Polyv S9 - Thin S11 - High F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	Dark Surfa h Chroma	Mineral (LRR K, L) Matrix K rface Surface	landicators of	A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-N F19 - Piedm F21 - Red P T216 - Mesic TF12 - Very Other (Expla	matic Soils 1 Muck (LRR K. L. MLRA 1. Prairie Redox (LRR Loky Peat of Peat (i urface (LRR K. L. M) tue Below Surface , ark Surface (LRR K. L) langanese Masses nont Floodplain Soil rarent Material Spodic (MLRA 144A, 1. Shallow Dark Surf ain in Remarks) attorn and wetland hydrology	K, Ĺ, Ř) LRR K, L, Ř) (LRR K, L, Ř) (LRR K, L, Ř) S (MLRA 149B) 45, 149B) ACCE
Restrictive Layer (If Observed)	Type:			Depth:				Hydric Soil	Present?		Yes ☑ No
(If Observed) Remarks:	71			•				y			



Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Wetland ID: N/A Sample Point: SP31

V=0==4=10N					
VEGETATION		species.)			
rree Stratum (P	ot size: 10 meter radius)	0/ 0	Daw!	Ind Ct-t-	Dominance Test Worksheet
1.	<u>Species Name</u>	% Cover	Dominant 	Ind.Status	Dominance Test Worksneet
2.					Number of Deminerat Consider that are ORL FACING on FACING.
					Number of Dominant Species that are OBL, FACW, or FAC:0 (A)
3.					T
4.		-			Total Number of Dominant Species Across All Strata: 2 (B)
5.		-			D
6.					Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7.			-		Bassalana a Indoo Madahaat
8.				-	Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.			-	-	OBL spp. 0 x 1 = 0
	Total Cover =	0			FACW spp. 4
0 11 101 1 01	(5)				FAC spp. 3
	ratum (Plot size: 5 meter radius)	4	NI.	EACH	FACU spp. 96 x 4 = 384
1.	Rosa multiflora	4	N	FACU	UPL spp 2
2.	Rubus allegheniensis	5	Y	FACU	T () () () () () () () () () (
3.					Total <u>105</u> (A) <u>411</u> (B)
4.					D
5.		-		-	Prevalence Index = B/A = 3.914
6.					
7.		-			Hadrank de Verstellen bellestere
8.		-	-	-	Hydrophytic Vegetation Indicators:
9.		-	-	-	☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.	 				☐ Yes ☑ No Dominance Test is > 50%
	Total Cover =	9			
					☐ Yes ☑ No Morphological Adaptations (Explain) *
	ot size: 2 meter radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Prunella vulgaris	3	N	FAC	* Indicators of hydric soil and wetland hydrology must be
2.	Glechoma hederacea	8	N	FACU	present, unless disturbed or problematic.
3.	Daucus carota	2	N	UPL	
4.	Solidago canadensis	4	N	FACU	Definitions of Vegetation Strata:
5.	Dichanthelium clandestinum	4	N	FACW	
6	Poa pratensis	75	Υ	FACU	Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.					height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft.
10.					tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and
13.					woody plants less than 3.28 ft. tall.
14.				-	
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	96			
Woody Vine Stra	tum (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present □ Yes ☑ No
4.					,
5.					
	Total Cover =	0			
Remarks:	*****				

Ac	lditional Remarks:			



Are Vegetation	AEP Ohio Malea Case Sb-Sebring Depression O drologic cone , Soil , Soil , Soil , Soil FINDINGS getation Pre	g silt loam, 0-2 percent Latitude: Latitude: ditions on the site ty or Hydrology□ sig or Hydrology□ nat	ent slopes 40.746925 pical for thi nificantly di	Investig Loca Loca is time of ye isturbed?	□ No	NW Concave -81.41647 explain in ren	//////////////////////////////////////	Datum: ☑ Yes □ ances present □ No Hydric Soils	Present?	Date: County: State: Wetland ID: Sample Point: Community ID: Section: Township: Range:	02/14/23 Stark Ohio Wetland 16 SP32 PEM Dir: ✓ Yes □ No d? ☑ Yes ■ No
HYDROLOGY											
Primary:	A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Alqal Ma B5 - Iron Dep B7 - Inundatio B8 - Sparsely	ater Table on Marks nt Deposits posits at or Crust	gery	are not pres	B9 - Wate B13 - Aqua B15 - Marl C1 - Hydro C3 - Oxidi C4 - Prese C6 - Rece C7 - Thin I	ogen Sulfic ized Rhizos ence of Re	de Odor spheres on Living Roots duced Iron duction in Tilled Soils ace			B6 - Surface Soil 0 B10 - Drainage Pa B16 - Moss Trim L C2 - Dry-Season \ C8 - Crayfish Burr C9 - Saturation Vis D1 - Stunted or St D2 - Geomorphic I D3 - Shallow Aquit D4 - Microtopogra D5 - FAC-Neutral	atterns ines vines Water Table ows sible on Aerial Imagery ressed Plants Position tard phic Relief
Surface Water Water Table Pro Saturation Pres	Present? resent? sent?	☐ Yes ☑ No ☑ Yes ☐ No ☑ Yes ☐ No	Depth: Depth: Depth:	7 0	(in.) (in.) (in.)			Wetland Hyd		esent?	Yes □ No
Describe Record Remarks:	ed Data (stre	eam gauge, monitorin	g well, aeria	I photos, pre	vious insp	ections), i	if available:		N/A		
Remarks.											
SOILS			سييا								
Map Unit Name		Sb-Sebring silt loan			` (T:: C=Coo.	-tti-n D=Do	pletion, RM=Reduced Matrix, CS=Covere	"Ctd C-nd Crains: I	# DI =Doro I is	* ******	
Top	Bottom	the depth needed to document are mo	icator or commin are	Matrix	.) (Type: 0-0610	entration, D-De		edox Features	OCAUON: PL-FOIG LI	ning, ivi=iviatrix)	Texture
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Туре	Location	(e.g. clay, sand, loam)
Ô	18	1	10YR	4/2	80	10YR	4/1	4	Ċ	М	clay loam, fibrous
						5YR	4/6	10	С	PL	clay loam
						10YR	6/6	6	С	M	olov loom
								1			clay loam
							1				
		-									
							1				
NRCS Hydric): □ value Belov Dark Surfa	w Surface (LRR R, MLRA 1498) CCE (LRR R, MLRA 1498) Sands dineral (LRR K, L) Matrix	Indicator	s for Proble A10 - 2 cm I A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F12 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Exple		
NRCS Hydric			 	tors are not): ralue Belov Dark Surfa n Chroma S ny Mucky M ny Gleyed M teted Matrix xx Dark Sur	w Surface (LRR R, MLRA 1498) CCE (LRR R, MLRA 1498) Sands dineral (LRR K, L) Matrix	Indicator	s for Proble A10 - 2 cm l A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-N F19 - Piedm F21 - Red F TA6 - Mesic TF12 - Very Other (Expla) f hydrophytic veget	matic Soils ¹ Muck (LRR K, L, MLRA 14 Prairie Redox (LRR Loky Peat of Peat (L LRR K, L, M) ue Below Surface (LRR K, L) langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1 Shallow Dark Surfa in in Remarks)	



Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Wetland ID: Wetland 16 Sample Point: SP32

VEGETA	TION	(Species identified in all upper	ase are non-native	species)			
		ot size: 10 meter radius)	acc are non nauve t	оробіоб.)			
		Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.			_				
2.						-	Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
3.						-	
4.						-	Total Number of Dominant Species Across All Strata: 1 (B)
5.						_	·· ,
6.						-	Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.						-	
8.						-	Prevalence Index Worksheet
9.						-	Total % Cover of: Multiply by:
10						-	OBL spp. 23 X 1 = 23
			Total Cover =	0			FACW spp. 55 x 2 = 110
							FAC spp. $0 \times 3 = 0$
Sapling/Sh	rub Stra	atum (Plot size: 5 meter radius)					FACU spp. 0 x 4 = 0
1.							UPL spp. $0 x 5 = 0$
2.							
3.							Total 78 (A) 133 (B)
4.						-	
5.						-	Prevalence Index = B/A = 1.705
6.						-	
7.							
8.						-	Hydrophytic Vegetation Indicators:
9.						-	
10						-	☑ Yes □ No Dominance Test is > 50%
			Total Cover =	0			Yes □ No Prevalence Index is ≤ 3.0 *
							☐ Yes ☑ No Morphological Adaptations (Explain) *
Herb Strat	um (Plo	t size: 2 meter radius)					☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	_	Typha latifolia		8	N	OBL	
2.		Juncus effusus		10	N	OBL	* Indicators of hydric soil and wetland hydrology must be
3.		Scirpus cyperinus		5	N	OBL	present, unless disturbed or problematic.
4.		Phalaris arundinacea		55	Υ	FACW	Definitions of Vegetation Strata:
5.							
6							Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.							height (DBH), regardless of height.
8.							
9.							Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft.
10							tall.
11							
12							Herb - All herbaceous (non-woody) plants, regardless of size, and
13							woody plants less than 3.28 ft. tall.
14							
15							Woody Vines - All woody vines greater than 3.28 ft. in height.
10	•		Total Cover =	78			, , ,
			Total Gover –	70			
Woody Vir	ne Strati	um (Plot size: 10 meter radius)					
1.							
2.							
3.					<u></u>		Hydrophytic Vegetation Present ☑ Yes ☐ No
4.		<u></u>					Tryurophytic vegetation Fresent 1 185 110
5.							
J.			Total Cover =	0			
Remarks	· ·		Total Covel -	U			
TOHIAINS	٠.						

Additional Remarks:



Are Vegetation	AEP Ohio Malea Cas Sb-Sebring Hillslope 2-4 direlogic cone , Soil , Soil , FINDINGS getation Pre	Latitude: Latitude: ditions on the site ty or Hydrology□ sig or Hydrology□ nat	ent slopes 40.746912 pical for thi nificantly di	Investi Loc Loc s time of ye isturbed?	☑ No	NW Convex -81.41642 explain in rer	/I/WWI Classification: 26	Datum: ✓ Yes □ ances present ─ No Hydric Soils	Present?	Date: County: State: Wetland ID: Sample Point: Community ID: Section: Township: Range: Within A Wetlan	02/14/23 Stark Ohio N/A SP33 UPL Dir: □ Yes □ No d? ■ Yes ଅ No
HYDROLOGY											
Primary:	A1 - Surface A2 - High Wa A3 - Saturation B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Alqal Ma B5 - Iron Dep B7 - Inundation B8 - Sparsely	ater Table on Marks nt Deposits posits at or Crust	gery	are not pres	B9 - Wate B13 - Aqu B15 - Mar C1 - Hydr C3 - Oxidi C4 - Presc C6 - Rece C7 - Thin	l Deposits ogen Sulfic ized Rhizo ence of Re	de Odor spheres on Living Roots duced Iron duction in Tilled Soils ace			B6 - Surface Soil I B10 - Drainage Pa B16 - Moss Trim L C2 - Dry-Season V C8 - Crayfish Burr C9 - Saturation Vi D1 - Stunted or St D2 - Geomorphic D3 - Shallow Aqui D4 - Microtopogra D5 - FAC-Neutral	atterns ines vines Water Table ows sible on Aerial Imagery ressed Plants Position tard phic Relief
Surface Water Water Table Pro Saturation Pres	Present? esent? ent?	☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No	Depth: Depth: Depth:		(in.) (in.) (in.)			Wetland Hyd		esent?	Yes ☑ No
Describe Record Remarks:	ed Data (stre	eam gauge, monitorin	g well, aeria	l photos, pre	vious insp	ections),	if available:		N/A		
Remarks.											
SOILS											
Map Unit Name		Sb-Sebring silt loan	n, 0-2 perc	ent slopes							
LIGHIE POSCUL	JUOII (Describe to				· (Time: C=Con	stration D=De	-1-4 DM-Dadward Matrix CS-Count	1/Control Cond Graine: I	ation: DI =Dore Lie	-i Manh Antriol	
Top	Bottom		ficator or confirm the	absence of indicators Matrix	.) (Type: C=Cond	centration, D=De	pletion, RM=Reduced Matrix, CS=Covere			ning, M=Matrix)	Texture
Top Depth					.) (Type: C=Cond	centration, D=De		ed/Coated Sand Grains; Ledox Features		Location	
•	Bottom	the depth needed to document the inc		Matrix		7.5YR	Re	edox Features	ı	T .	
Depth 0 	Bottom Depth 18	the depth needed to document the inc Horizon 1	Color 10YR 	Matrix (Moist) 4/2 	% 80 	7.5YR 	Color (Moist) 5/6	edox Features % 20	Type C 	Location M 	(e.g. clay, sand, loam) clay loam, fill material
Depth 0 	Bottom Depth 18	the depth needed to document the inc Horizon 1	Color 10YR 	Matrix (Moist) 4/2 	% 80 	7.5YR 	Color (Moist) 5/6	edox Features	Type C 	Location M 	(e.g. clay, sand, loam) clay loam, fill material
Depth 0 	Bottom Depth 18	the depth needed to document the inc Horizon 1	Color 10YR 	Matrix (Moist) 4/2 	% 80 	7.5YR 	Color (Moist) 5/6	edox Features	Type C 	Location M	(e.g. clay, sand, loam) clay loam, fill material
Depth 0	Bottom Depth 18	the depth needed to document the inc Horizon 1	Color 10YR 	Matrix (Moist) 4/2 	% 80 	7.5YR	Re Color (Moist) 5/6 	edox Features	Type C	Location M	(e.g. clay, sand, loam) clay loam, fill material
Depth 0	Bottom Depth 18	the depth needed to document the inc Horizon 1	Color 10YR 	Matrix (Moist) 4/2 	% 80 	7.5YR	Re Color (Moist) 5/6 	edox Features	Type C	Location M	(e.g. clay, sand, loam) clay loam, fill material
Depth 0	Bottom Depth 18	the depth needed to document the inc Horizon 1	Color 10YR 	Matrix (Moist) 4/2 	% 80 	7.5YR	Re Color (Moist) 5/6 	edox Features	Type C	Location M	(e.g. clay, sand, loam) clay loam, fill material
Depth 0 NRCS Hydric	Bottom Depth 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A11 - Deplete A12 - Thick D S1 - Sandy M S4 - Sandy G S5 - Sandy S S6 - Stripped	the depth needed to document the inc Horizon 1	Color 10YR	Matrix (Moist) 4/2 	% 80	7.5YR	ReColor (Moist) 5/6	edox Features % 20	Type C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic	Location M	(e.g. clay, sand, loam) clay loam, fill material
Depth 0 NRCS Hydric	Bottom Depth 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A11 - Deplete A12 - Thick D S1 - Sandy M S4 - Sandy G S5 - Sandy S S6 - Stripped	Horizon 1	Color 10YR	Matrix (Moist) 4/2 tors are not	% 80	7.5YR	Re Color (Moist) 5/6	edox Features % 20	Type C s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S7 - Dark S S8 - Polyval F19 - Piedrr F21 - Red P TA6 - Mesic TF12 - Very Other (Expla)	Location M	(e.g. clay, sand, loam) clay loam, fill material 498) K, L, R) K, L, R) LRR K, L, R) LRR K, L, R) LRR K, L, R) S (MLRA 1498) 45, 1498) acce



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Wetland ID: N/A Sample Point: SP33 **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 2. Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) 3. Total Number of Dominant Species Across All Strata: 1 (B) 5 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B) 8. Prevalence Index Worksheet 9. __ Total % Cover of: Multiply by: 10 OBL spp. x 1 = Total Cover = 0 FACW spp. x 2 = 0 0 FAC spp. x 3 = Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. x 4 = UPL spp. x 5 = 11 55 2 3. 96 (A) 395 5 Prevalence Index = B/A = 4.115 6. **Hydrophytic Vegetation Indicators:** 8. 9 □ Yes ✓ No Rapid Test for Hydrophytic Vegetation 10. □ Yes ✓ No Dominance Test is > 50% Total Cover = 0 □ Yes ✓ No Prevalence Index is ≤ 3.0 * Yes ✓ No Morphological Adaptations (Explain) * □ Yes Herb Stratum (Plot size: 2 meter radius) ✓ No Problem Hydrophytic Vegetation (Explain) * FACU Symphyotrichum pilosum 10 Ν * Indicators of hydric soil and wetland hydrology must be Setaria faberi 75 V FACU present, unless disturbed or problematic. UPL 3. Datura stramonium 4 Ν **Definitions of Vegetation Strata:** 4 UPL Xanthium strumarium Ν 5. 6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12 woody plants less than 3.28 ft. tall. 13. 14. 15 Woody Vines - All woody vines greater than 3.28 ft. in height. Total Cover = 96 Woody Vine Stratum (Plot size: 10 meter radius) 3 Hydrophytic Vegetation Present □ Yes ☑ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



Are Vegetation Are Vegetation SUMMARY OF Hydrophytic Ve Wetland Hydrol Remarks:	AEP Ohio Malea Cas Sb-Sebring Depression 0 drologic con , Soil , Soil , Soil , FINDINGS getation Pre	g silt loam, 0-2 percent Latitude: Latitude: ditions on the site ty or Hydrology□ sig or Hydrology□ nat	ent slopes 40.746805 pical for the nificantly d	Investi Loc L is time of ye isturbed?	. □ No	NW Concave -81.41648 explain in rer	/////////////////////////////////////	Datum: ✓ Yes □ ances present ─ No Hydric Soils	Present?	Date: County: State: Wetland ID: Sample Point: Community ID: Section: Township: Range:	02/14/23 Stark Ohio Wetland 17 SP34 PEM Dir: ✓ Yes □ No d? ☑ Yes ■ No	
Wetland Hydro	A2 - High Water Table B13 - Aquatic Fauna B16 - Drainage Patterns A3 - Saturation B15 - Marl Deposits B16 - Moss Trim Lines B1 - Water Marks C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots C3 - Cayfish Burrows B3 - Drift Deposits C4 - Presence of Reduced Iron C9 - Saturation Visible on Aerial Imagery B4 - Algal Mat or Crust C7 - Thin Muck Surface D1 - Stunted or Stressed Plants B5 - Iron Deposits C7 - Thin Muck Surface D2 - Geomorphic Position B7 - Inundation Visible on Aerial Imagery Other (Explain in Remarks) D3 - Shallow Aquitard											
Field Observations: Surface Water Present?												
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: SOILS Map Unit Name: Sb-Sebring silt loam, 0-2 percent slopes												
Map Unit Name					-) (T 0-0	tti D-D-	pletion, RM=Reduced Matrix, CS=Covere	-1/0	ti DI I i	-1 14-14-4-1-3		
Top	Bottom	the depth needed to document the inc	icator or confirm the	Matrix	s.) (Type: C=Con	centration, D=De		edox Features	.ocauon: PL=Pore Li	ning, ivi=matrix)	Texture	
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Туре	Location	(e.g. clay, sand, loam)	
0 0	5	1	2.5Y	5/2	100					Location	clay loam, fibrous	
										 N4		
5	18	2	2.5Y	5/2	85	7.5YR	5/8	15	С	M	clay loam	
							-					
			-				-					
							-					
							-					
			 :£ :!:): ☑				matic Soils ¹		
	A1- Histosol A2 - Histic Epipedon A3 - Black Histic A4 - Hydrogen Sulfide A5 - Stratified Layers A11 - Depleted Below Dark Surface A12 - Thick Dark Surface S1 - Sandy Muck Mineral S4 - Sandy Gleyed Matrix S5 - Sandy Redox S6 - Stripped Matrix			OIS ARE HOL	S8 - Polyvalue Below Surface (LRR R, MLRA 1496) S9 - Thin Dark Surface (LRR R, MLRA 1496) S11 - High Chroma Sands F1 - Loamy Mucky Mineral (LRR K, L) F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface F7 - Depleted Dark Surface				A10 - 2 cm Muck (LRR K, L, MLRA 1498) A16 - Coast Prairie Redox (LRR K, L, R) S3 - 5 cm Mucky Peat of Peat (LRR K, L, R) S7 - Dark Surface (LRR K, L, M) S8 - Polyvalue Below Surface (LRR K, L) S9 - Thin Dark Surface (LRR K, L) F12 - Iron-Manganese Masses (LRR K, L, R) F19 - Piedmont Floodplain Soils (MLRA 1498) F21 - Red Parent Material TA6 - Mesic Spodic (MLRA 144A, 145, 1498) TF12 - Very Shallow Dark Surface Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.			
Restrictive Layer	Type:			Depth:				Hydric Soil I		V	Yes □ No	
(If Observed)	Recently graded, fill material						Tryunc 3011 I	resentí		163 🗆 110		
Remarks:	тесениу д	raueu, iiii Malendi										



Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Wetland ID: Wetland 17 Sample Point: SP34

EGETATION ree Stratum (Pl	(Species identified in all upper lot size: 10 meter radius)	o and Homeles	- pooloo.)			
	Species Name	_	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC:1(A)
3.			-			
4.			-			Total Number of Dominant Species Across All Strata:1(B)
5.			-			B () () () () () () () () () (
6. 7.						Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7. 8.					-	Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp. 22 x 1 = 22
10.		Total Cover =	0			FACW spp. 43 X 2 = 86
			· ·			FAC spp. 0 x 3 = 0
olina/Shrub Str	ratum (Plot size: 5 meter radius)					FACU spp. 0 x 4 = 0
1.	(_			UPL spp. 0 x 5 = 0
2.			_			··· <u> </u>
3.						Total 65 (A) 108 (B)
4.						· · · · · · · · · · · · · · · · · · ·
5.						Prevalence Index = B/A = 1.662
6.						
7.						
8.						Hydrophytic Vegetation Indicators:
9.						
10.						
		Total Cover =	0			✓ Yes ☐ No Prevalence Index is ≤ 3.0 *
						☐ Yes ☑ No Morphological Adaptations (Explain) *
rb Stratum (Pl	ot size: 2 meter radius)					☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Typha latifolia		8	N	OBL	* Indicators of hydric soil and wetland hydrology must be
2.	Juncus effusus		10	N	OBL	present, unless disturbed or problematic.
3.	Scirpus cyperinus		4	N	OBL	
4.	Phalaris arundinacea		35	Υ	FACW	Definitions of Vegetation Strata:
5.	Epilobium ciliatum		8	N	FACW	_
6					-	Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.			-			neight (DBH), regardless of neight.
8.						A H Washington Land to B DDU and an about a CO
9.				-	-	Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.			-			
11.			-		-	Herb - All herbaceous (non-woody) plants, regardless of size, and
12.	 		-			Woody plants less than 3.28 ft. tall.
13.						··
14.	-					Mandy Visco All woods vince greater than 2.29 ft in height
15.		Tatal Cause				Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	65			
adu Mir - Oʻ	tum (Diet eizer 40t ")					
ody Vine Stra	tum (Plot size: 10 meter radius)					
2.						
3.						Hydrophytic Vocatation Present Voc D. No.
4.	 					Hydrophytic Vegetation Present ☑ Yes ☐ No
<u>4.</u> 5.	 					
J.		Total Cover =	0			
		I OTAL COVEL -	U			

Additional Remarks:			



Are Vegetation Are Vegetation SUMMARY OF Hydrophytic Ve Wetland Hydrol Remarks:	AEP Ohio Malea Cas Sb-Sebring Hillslope 2-4 drologic cone , Soil , Soil , TINDINGS getation Pre	Latitude: Latitude: ditions on the site ty or Hydrology□ sig or Hydrology□ nat	nt slopes 40.746846 oical for thinificantly d	Investi Loc Loc s time of yesisturbed?	☑ No	NW Convex -81.41654 explain in rer	/I/WWI Classification: 43 marks) Are normal circumsta	Datum: ✓ Yes □ ances present ─ No Hydric Soils	Present?	Date: County: State: Wetland ID: Section: Township: Range: Within A Wetlan	02/14/23 Stark Ohio N/A SP35 UPL		
Wetland Hydrology Indicators (Check here if indicators are not present): Primary:											atterns .ines Water Table ows sible on Aerial Imagery ressed Plants Position tard phic Relief		
Field Observations: Surface Water Present?													
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS													
Map Unit Name		Sb-Sebring silt loan											
Top	Bottom	the depth needed to document the inc	icator or confirm the	Matrix	i.) (Type: C=Con	centration, D=De		-Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Redox Features Texture					
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Туре	Location	(e.g. clay, sand, loam)		
0 0	18	1	10YR	4/2	80	7.5YR	5/6	20	C	M	, , , , ,		
		·									clay loam, fill material		
											-		
		-											
		-											
		-											
		-		-			 						
NDCC Usedet -	Call Field !	ndicators (check he		 oro ora :1): 🗆	<u></u>	la di con		matic Soils ¹	<u></u>		
	A2 - Histic Epipedon A3 - Black Histic A4 - Hydrogen Sulfide A5 - Stratified Layers A11 - Depleted Below Dark Surface A12 - Thick Dark Surface S1 - Sandy Muck Mineral S4 - Sandy Gleyed Matrix S5 - Sandy Redox S6 - Stripped Matrix			9	□ S9 - Thin Dark Surface (LRR R, MLRA 1498) □ S11 - High Chroma Sands □ F1 - Loamy Mucky Mineral (LRR K, L) □ F2 - Loamy Gleyed Matrix □ F3 - Depleted Matrix □ F6 - Redox Dark Surface □ F7 - Depleted Dark Surface				A10 - 2 cm Muck (LRR K, L, MLRA 149B) A16 - Coast Prairie Redox (LRR K, L, R) S3 - 5 cm Mucky Peat of Peat (LRR K, L, R) S7 - Dark Surface (LRR K, L, M) S8 - Polyyalue Below Surface (LRR K, L) F12 - Iron-Manganese Masses (LRR K, L, R) F19 - Piedmont Floodplain Soils (MLRA 149B) F21 - Red Parent Material TA6 - Mesic Spodic (MLRA 144A, 145, 149B) TF12 - Very Shallow Dark Surface Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.				
Restrictive Layer	Type:			Depth:				Hydric Soil I		V	Yes □ No		
(If Observed) Remarks:	Recently graded, fill material						,			.55 = 110			



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Project/Site: South Canton-Torrey 138 kV Line Rebuild Project Wetland ID: N/A Sample Point: SP35

VEGETATION	(Species identified in all uppercase a	are non-native sp	ecies.)			
	ot size: 10 meter radius)					
	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.						
4.						Total Number of Dominant Species Across All Strata:1(B)
5.			-	-		D (A/D)
6.						Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7. 8.	<u></u>					Prevalence Index Worksheet
9.	_ 					Total % Cover of: Multiply by:
10.						OBL spp. 0 x 1 = 0
10.		tal Cover =	0			FACW spp. 0 x 2 = 0
	10	tai oovei –	O			FAC spp. 0 x 3 = 0
Sapling/Shrub Str	ratum (Plot size: 5 meter radius)					FACU spp. 89 x 4 = 356
1.						UPL spp. 7 x 5 = 35
2.						··· <u></u>
3.						Total 96 (A) 391 (B)
4.						<u> </u>
5.						Prevalence Index = B/A = 4.073
6.						
7.			-			
8.						Hydrophytic Vegetation Indicators:
9.			-			☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.	 T	4-1-0				☐ Yes ☑ No Dominance Test is > 50%
	IO	tal Cover =	0			Yes ☑ No Prevalence Index is ≤ 3.0 *
						☐ Yes ☑ No Morphological Adaptations (Explain) *
	ot size: 2 meter radius)		9	N	FACU	☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1. 2.	Symphyotrichum pilosum Setaria faberi		80	Y	FACU	* Indicators of hydric soil and wetland hydrology must be
3.	Datura stramonium		2	N	UPL	present, unless disturbed or problematic.
4.	Xanthium strumarium		5	N	UPL	Definitions of Vegetation Strata:
5.						Deminions of Vegetation Ottata.
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.						height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft.
10.						tall.
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size, and
13.			-	-		woody plants less than 3.28 ft. tall.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
	Tot	tal Cover =	96			
	tum (Plot size: 10 meter radius)					
1.				-		
2.			-	-		
3.						Hydrophytic Vegetation Present □ Yes ☑ No
4.						
5.	Tot	tal Cover =	0			
Remarks:	10	iai Covel –	U			
ixemaiks.						

Additional Remarks:			

Background Information

Name: Malea Casey	
Date:	
12 2 2 Affiliation:	
Stantec Consulting Services, Inc.	
Address: 10200 Alliance Road, Svite 300 Cincinnati, OH	46242
Phone Number: (513) 526-4084	
e-mail address: malea.casey@stantec.com	
Name of Wetland: Wetland 14	
Vegetation Communit(ies): ₽EM	
HGM Class(es): Depressional	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.	
Electrical Substation Sylventing Street Street Sylventing Street Street Sylventing Street Str	
>culv-	er-
Lat/Long or UTM Coordinate 40.721541, -81.412516	
USGS Quad Name CANTON WEST	
STARK COUNTY	
Township TION ROW	4: 17
Section and Subsection	
Hydrologic Unit Code 050400010505	
Site Visit (2/2//22)	
National Wetland Inventory Map	
Ohio Wetland Inventory Map	
Soil Survey MSD-MUSKINGUM SIT LOAM, 12-1018	
Delineation report/map	part
see Ecological Resources Inventory Ry	

Name of Wetland: Net	land 14
Wetland Size (acres, hecta	res): 0.007 acres
Sketch: Include north arroy	v, relationship with other surface waters, vegetation zones, etc.
Forested	Mowed L Shedring N Shedring
	Proposed Access Road
Commente Negretive Disc	ussion, Justification of Category Changes:
Final score: 27	Category: 1

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	✓	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and humaninduced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	J	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	2*
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	/	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		V
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	/	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature and by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has	YES	NO
	been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has	Wetland should be evaluated for possible Category 3 status	Go to Question 2
	had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain	YES	(NO)
	an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	Wetland is a Category 3 wetland.	Go to Question 3
		Go to Question 3	
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	(NO)
		Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	
4	Significant Breeding or Concentration Area. Does the wetland	YES	NO)
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of	YES	(NO)
	vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria</i> , or <i>Phragmites australis</i> , or 2) an acidic pond created or excavated on mined lands that has little or	Wetland is a Category 1 wetland	Go to Question 6
	no vegetation?	Go to Question 6	
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses,	YES	(NO)
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	Wetland is a Category 3 wetland	Go to Question 7
	Cover of invasive species (see Table 1) is 120%:	Go to Question 7	
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	(NO)
	is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	Wetland is a Category 3 wetland	Go to Question 8a
	invasive species listed in rabie 1 is 120 //.	Go to Question 8a	
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO)
	forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

8b	Mature forested wetlands. Is the wetland a forested wetland with	YES	(NO)
UU	50% or more of the cover of upper forest canopy consisting of		
	deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible	Go to Question 9a
		Category 3 status.	
		Go to Question 9a	
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this	YES	(NO)
	elevation, or along a tributary to Lake Erie that is accessible to fish?	Go to Question 9b	Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is	YES	NO
	partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	
9с	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland	YES	NO
	border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	Go to Question 9d	Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	NO
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category	Go to Question 9e
		3 wetland	
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES	NO
	too an haire plant opened within the regulation communities.	Wetland should be	Go to Question 10
		evaluated for possible Category 3 status	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in	Go to Question 10 YES	NO
	Lucas, Fulton, Henry, or Wood Counties and can the wetland be		
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within	Wetland is a Category 3 wetland.	Go to Question 11
	several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be	Go to Question 11	
	present). The Ohio Department of Natural Resources Division of	Go to Question 11	
	Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.		
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES	(NO)
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union	Wetland should be	Complete
	Counties), Sandusky Plains (Wyandot, Crawford, and Marion	evaluated for possible	Quantitative
	Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Category 3 status	Rating
	Montgomery, Van Wert etc.).	Complete Quantitative	
		Rating	

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricta
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherodes
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumii
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellita
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwellii
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrewsii
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum	_	Helianthus grosseserratus
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicata
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflora
	Parnassia glauca	Schechzeria palustris		Lythrum alatum
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianum
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceum
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutans
	Salix candida	Vaccinium oxycoccos		Spartina pectinata
	Salix myricoides	Woodwardia virginica		Solidago riddellii
	Salix serissima	Xyris difformis		
	Solidago ohioensis	3 33		
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

Site:	WeH	al	nd 1	4		R	ater(s):	MC, KF	3, (1		Date: 12/	2/22
0	0	М	etric	: 1.	Wetland	Are	a (size	e).					
max 6 pts.	subtotal	Sel	ect one	size cl	ass and assign so	ore.							
			2	50 aci	es (>20.2ha) (6 p 50 acres (10.1 to 25 acres (4 to <10	ts) <20.2h							
					acres (1,2 to <4	, ,	. ,						
				.1 to <	3 acres (0.12 to < 0.3 acres (0.04 to	<0.12							
	T	lsa.			res (0.04ha) (0 pt			al =					
max 14 pts.	Subtotal				_						land use.		
max 14 pts.	Subtotal	za.			rage buffer width Buffers average (
			N	MEDIU	M. Buffers averag	ge 25n	n to <50m (82 to <164ft) ar	round	wetlar	nd perimeter (4) and perimeter (1)		
			\square	ERY I	IARROW. Buffer	s aver	age <10m	(<32ft) around v	wetlan	id peri	meter (0)		
		2b.			rrounding land us OW. 2nd growth								
			L	OW.	Old field (>10 year	rs), sh	rub land, yo	oung second gr	owth f	forest.	(5)		
	-	_	H	10DE1 IIGH.	WATELY HIGH. R Urban, industrial,	esidei open j	ntial, fenced pasture, rov	d pasture, park, w cropping, min	conso ing, c	ervatic onstru	on tillage, new fallo ction. (1)	w field. (3)	
9	13	M	etric	3.	Hydrolog	у.		., -			, ,		
max 30 pts.	subtotal	З а.			ater. Score all the	at app	ly.		3b.	Conn	ectivity. Score all t		
					l groundwater (5) roundwater (3)					-	100 year floodplai Between stream/la		man use (1)
			P	recipit	ation (1)	_	. (6)				Part of wetland/up	oland (e.g. forest),	, complex (1)
					al/Intermittent sur al surface water (5)	3d.	Durat	Part of riparian or on inundation/satu		
		3c.	Maximu	ım wa	er depth. Select						Semi- to permane	ently inundated/sa	
				0.7 (2. .4 to 0	'.6in) (3) 7m (15.7 to 27.6i	n) (2)					Regularly inundate Seasonally inundate		
		2.	X <	0.4m (<15.7in) (1)		erson o				Seasonally satura	ited in upper 30cm	n (12in) (1)
		se.			to natural hydrolo none apparent (*	100	CHARLES .	turbances obse		k and	average.		7
			R	ecove	red (7)	' ² ' Ĕ	ditch	sturbances obse	erveu		point source (nons	stormwater)	
					ring (3) or no recovery (1)	. III	tile dike				filling/grading road bed/RR track	4	
				COCIII	or no recovery (1)		weir				dredging		
		1				L		ater input			other		
10	23				Habitat A					pm	ent.		
max 20 pts.	subtotal	4a.			urbance. Score o none apparent (4		double che	ck and average	€.				
			R	ecove	red (3)	,							
			K R	ecove ecent	ring (2) or no recovery (1)								
		4b.	Habitat	devel	pment. Select or	nly one	and assig	n score.					
				xceller ery go									
			G	ood (5) `´								
				loderai air (3)	ely good (4)								
			P	oor to	fair (2)								
		4c.		oor (1) alterat	ion. Score one o	doub	le check ar	nd average.					
			□ N	one or	none apparent (9			turbances obse	erved				1
				ecovei	ed (6) ing (3)		× mowing	•			shrub/sapling rem		
5					ing (3) or no recovery (1)		grazīng clearcu				herbaceous/aquat sedimentation	ic bed removal	
	12		6		, , ,		selectiv	e cutting			dredging		
	20							debris removal ollutants			farming nutrient enrichmer	nt	
	btotal this pa	-	01 ii										
last revised	i rebrual	y ZU	o i jjm										

Site: Wetland 14 Rate	r(s): M()	KB, CC Date: 2/2/22
subtotal first page Metric 5. Special Wetla max 10 pts. subtotal Check all that apply and score as indicated.	nds.	
Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetland Lake Erie coastal/tributary wetland Lake Plain Sand Prairies (Oak Ope Relict Wet Prairies (10) Known occurrence state/federal th Significant migratory songbird/wate Category 1 Wetland. See Questio	l-restricted hydro enings) (10) reatened or enda er fowl habitat or n 1 Qualitative R	angered species (10) usage (10) ating (-10)
4 27 Metric 6. Plant commun	nities, int	erspersion, microtopography.
max 20 pts, subtotal 6a. Wetland Vegetation Communities.	Vegetation	Community Cover Scale
Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
Aquatic bed Emergent Shrub	1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
	2	Present and either comprises significant part of wetland's
Forest Mudflats Open water	2	vegetation and is of moderate quality or comprises a small part and is of high quality
Other 6b. horizontal (plan view) Interspersion.	3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality
Select only one. High (5)	Narrative D	escription of Vegetation Quality
Moderately high(4)	low	Low spp diversity and/or predominance of nonnative or
Moderate (3)		disturbance tolerant native species
Moderately low (2)	mod	Native spp are dominant component of the vegetation,
Low (1)		although nonnative and/or disturbance tolerant native spp
None (0)		can also be present, and species diversity moderate to
6c. Coverage of invasive plants. Refer		moderately high, but generally w/o presence of rare
to Table 1 ORAM long form for list, Add		threatened or endangered spp
or deduct points for coverage	high	A predominance of native species, with nonnative spp
Extensive >75% cover (-5)		and/or disturbance tolerant native spp absent or virtually
Moderate 25-75% cover (-3) Sparse 5-25% cover (-1)		absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp
Nearly absent <5% cover (0)	-	the processes of fare, throatened, or an adigates app
Absent (1)	Mudflat and	Open Water Class Quality
6d. Microtopography	0	Absent <0.1ha (0.247 acres)
Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 acres)
Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88 acres)
Coarse woody debris >15cm (6in)	3	High 4ha (9.88 acres) or more
Standing dead >25cm (10in) dbh		and the state of t
Amphibian breeding pools		raphy Cover Scale
	0	Absent Present you small amounts or if more common
	1	Present very small amounts or if more common of marginal quality
	2	Present in moderate amounts, but not of highest
	2	quality or in small amounts of highest quality
	3	Present in moderate or greater amounts
		and of highest quality

27

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO)	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES (NO)	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES (NO)	If yes, Category 1.
	Question 6. Bogs	YES (NO)	If yes, Category 3.
	Question 7. Fens	YES (NO)	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO)	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
	Metric 2. Buffers and surrounding land use	4	
	Metric 3. Hydrology	9	
	Metric 4. Habitat	10	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	4	
	TOTAL SCORE	27	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

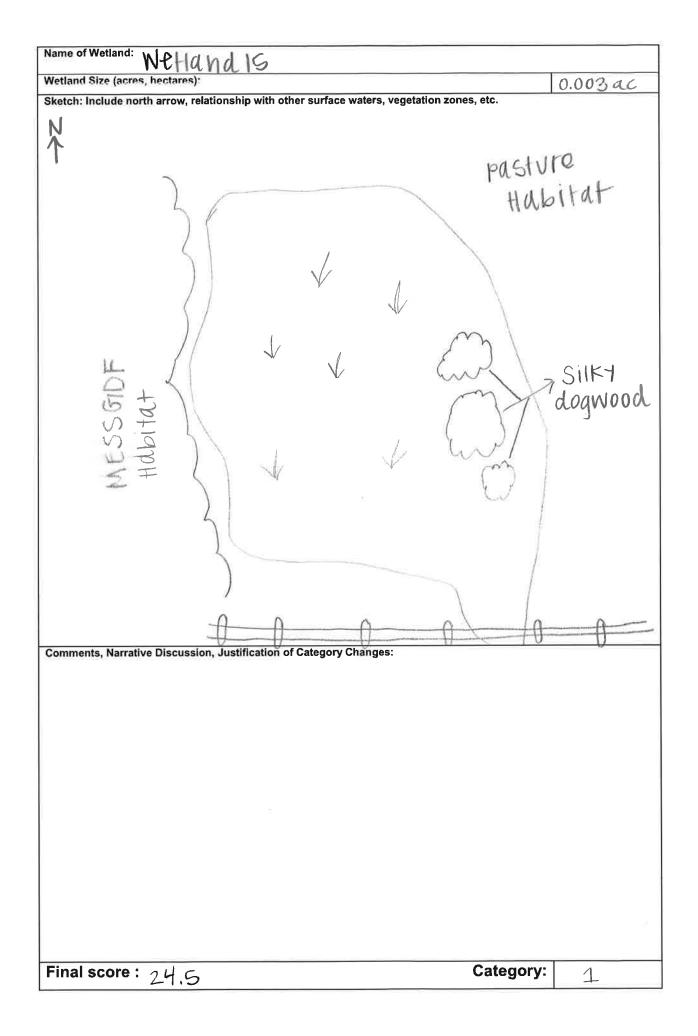
Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO)	Is quantitative rating score less than the Category 2 scoring threshold (excluding gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(NO)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No, 5	YES Wetland is categorized as a Category 1 wetland	NO)	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	(NO)	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorlzed as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, loca or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

	Fin	al Category	
Choose one	(Category 1))	Category 2	Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Malea Casey
Date: 02/14/23
Affiliation: Stantec Consulting Services, Inc.
Address: 10200 Alliance Road, Svite 300
Dhone Number
(513)526-4094 e-mail address:
malea caseya stantec.com
Name of Wetland: Wetland 15
Vegetation Communit(les):
HGM Class(es): Depressional
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
Forested Wetland
5 wetland 16 C
The state of the s
Weffared
stream 8
on e
Lat/Long or UTM Coordinate 40.7472561-81.415270
USGS Quad Name BOIIVAY, OH
County Stark COUNTY
Township W/a
Section and Subsection
Hydrologic Unit Code 0504000 0505
Site Visit 02/14/23
National Wetland Inventory Map N/a
Ohio Wetland Inventory Map N/A
Soil Survey
Sb: Sebring Silt loam, 0 to 2 per cent slopes Delineation report/map
see Ecological Resources Report



Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	1	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	1	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	1	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	1	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		X
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	√	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature and by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

		0.1	
#	Question	Circle one	
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has	YES	NO .
	been designated by the U.S. Fish and Wildlife Service as "critical	Wetland should be evaluated for possible	Go to Question 2
	habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or	Category 3 status	
	threatened species which can be found in Ohio, the Indiana Bat has		
	had critical habitat designated (50 CFR 17.95(a)) and the piping plover	Go to Question 2	===
2	has had critical habitat proposed (65 FR 41812 July 6, 2000). Threatened or Endangered Species. Is the wetland known to contain	YES (NO
2	an individual of, or documented occurrences of federal or state-listed	123	NO
	threatened or endangered plant or animal species?	Wetland is a Category 3 wetland.	Go to Question 3
		Go to Question 3	
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES	NO)
	Watara Francisco de a migri quant, wasana	Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	
4	Significant Breeding or Concentration Area. Does the wetland	YES	(NO)
	contain documented regionally significant breeding or nonbreeding	Wetland is a Cotogony	Go to Question 5
	waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre)	YES (NO
	in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover)	Wetland is a Category	Go to Question 6
	by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or	1 wetland	
	2) an acidic pond created or excavated on mined lands that has little or		E 107_2
^	no vegetation?	Go to Question 6	(NO)
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses,	YES	NO
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30%	Wetland is a Category	Go to Question 7
	cover, 4) at least one species from Table 1 is present, and 5) the	3 wetland	
	cover of invasive species (see Table 1) is <25%?	Go to Question 7	
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	(NO)
<u>-</u>	is saturated during most of the year, primarily by a discharge of free		
	flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0)	Wetland is a Category	Go to Question 8a
	and with one or more plant species listed in Table 1 and the cover of	3 wetland	
	invasive species listed in Table 1 is <25%?	Go to Question 8a	-
8a	"Old Growth Forest." Is the wetland a forested wetland and is the	YES	NO
	forest characterized by, but not limited to, the following characteristics:		- Andrews
	overstory canopy trees of great age (exceeding at least 50% of a	Wetland is a Category	Go to Question 8b
	projected maximum attainable age for a species); little or no evidence	3 wetland.	
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of	Go to Question 8b	
	canopy trees interspersed with canopy gaps; and significant numbers	CO to woodion ob	
	of standing dead snags and downed logs?		

8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this	YES	(NO)
9b	elevation, or along a tributary to Lake Erie that is accessible to fish? Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Go to Question 9b YES Wetland should be evaluated for possible Category 3 status Go to Question 10	Go to Question 10 Go to Question 9c
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES Wetland is a Category 3 wetland Go to Question 10	Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10	NO Go to Question 10
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES Wetland is a Category 3 wetland. Go to Question 11	NO Go to Question 11
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	NO Complete Quantitative Rating

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricta
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherodes
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumii
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellita
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwellii
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrewsii
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum		Helianthus grosseserratus
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicata
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflora
	Parnassia glauca	Schechzeria palustris		Lythrum alatum
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianum
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceum
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutans
	Salix candida	Vaccinium oxycoccos		Spartina pectinata
	Salix myricoides	Woodwardia virginica		Solidago riddellii
	Salix serissima	Xyris difformis		
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: WT	and 15 Rater(s): MC, MD Date: $62[14]202$
0 0	Metric 1. Wetland Area (size).
max 6 pts. subtoti	Select one size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts) 10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1.2 to <4ha) (3 pts) 0.3 to <3 acres (0.12 to <1.2ha) (2pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) <0.1 acres (0.04ha) (0 pts)
4 4	Metric 2. Upland buffers and surrounding land use.
max 14 pts. subtota	2a. Calculate average buffer width. Select only one and assign score. Do not double check. WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7) MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4) NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1) VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0) Intensity of surrounding land use. Select one or double check and average. VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7) LOW. Old field (>10 years), shrub land, young second growth forest. (5) MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3) HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)
8 12	Metric 3. Hydrology.
max 30 pts. subtota	3a. Sources of Water. Score all that apply. High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5) 3c. Maximum water depth. Select only one and assign score. >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) Seasonally nundated (2) Seasonally nundated (2) Seasonally saturated in upper 30cm (12in) (1) 3e. Modifications to natural hydrologic regime. Score one or double check and average.
	None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1) Check all disturbances observed point source (nonstormwater) filling/grading road bed/RR track dredging other
5.5 17	Metric 4. Habitat Alteration and Development.
max 20 pts. subtota	4a. Substrate disturbance. Score one or double check and average. None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1)
	4b. Habitat development. Select only one and assign score. Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) Poor (1)
	4c. Habitat alteration. Score one or double check and average. None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1) Recovery (1) Recovering (3) Recent or no recovery (1)
subtotal this	selective cutting woody debris removal farming toxic pollutants dredging farming nutrient enrichment
last revised 1 Febr	ry 2001 jjm

Site: \	Netlo	ndl	5	Rater(s): MCI	MD	Date: 2/14/23
si	17.5						, ,
0	17.5	í	ric 5. Special V	Netland	s.		
max.10 pts.	subtotal	Check a	Ill that apply and score as in Bog (10) Fen (10) Old growth forest (10) Mature forested wetland Lake Erie coastal/tributar Lake Erie coastal/tributar Lake Plain Sand Prairies Relict Wet Prairies (10) Known occurrence state/ Significant migratory sone Category 1 Wetland. See	(5) y wetland-unr y wetland-res (Oak Opening federal threate gbird/water fo	tricted hydro gs) (10) ened or enda wl habitat or	angered species (10) usage (10)	
7	24.5	Metr	ric 6. Plant cor	mmuniti	ies, int	erspersion, microto	pography.
max 20 pts.	subtotal	6a. Wet	tland Vegetation Communit	ies.	Vegetation	Community Cover Scale	
			I present using 0 to 3 scale		0	Absent or comprises <0.1ha (0.24	171 acres) contiguous area
			Aquatic bed		1	Present and either comprises small	
			Emergent			vegetation and is of moderate of	uality, or comprises a
		1	Shrub			significant part but is of low qua	lity
			Forest		2	Present and either comprises sign	nificant part of wetland's
			Mudflats			vegetation and is of moderate q	uality or comprises a small
			Open water			part and is of high quality	
			Other		3	Present and comprises significant	t part, or more, of wetland's
		6b. horiz	zontal (plan view) Intersper	sion.		vegetation and is of high quality	
		Select or		13		1 3	
			High (5)		Narrative D	escription of Vegetation Quality	
			Moderately high(4)	3	low	Low spp diversity and/or predomi	nance of nonnative or
			Moderate (3)		1011	disturbance tolerant native spec	
			Moderately low (2)	34	mod	Native spp are dominant compone	
		-	Low (1)		11100	although nonnative and/or distu	
			None (0)			can also be present, and specie	•
		6c Cov	erage of invasive plants. R	efer		moderately high, but generally w	•
			1 ORAM long form for list.			threatened or endangered spp	Wo presence of rare
			t points for coverage	11	high	A predominance of native species	with nonnative con
		0. 0000	Extensive >75% cover (-5	5)	ı ııgı ı	and/or disturbance tolerant nativ	
			Moderate 25-75% cover (•		absent, and high spp diversity a	
			Sparse 5-25% cover (-1)	(-3)		the presence of rare, threatened	•
		-	Nearly absent <5% cover	· (n)		the presence of fare, threatened	1, or endangered spp
		.1	Absent (1)	• •	Mudflat and	Open Water Class Quality	
		6d Micr	otopography.		0	Absent <0.1ha (0.247 acres)	
			present using 0 to 3 scale.		1	Low 0.1 to <1ha (0.247 acres)	2500)
		JCOIE AII	Vegetated hummucks/tus		2	Moderate 1 to <4ha (2.47 to 9.88	
		1	Coarse woody debris >15		3	High 4ha (9.88 acres) or more	acres)
		-	-			riigh 4na (9.86 acres) or more	
		-	Standing dead >25cm (10		Microtono	ranhy Cover Seels	
			Amphibian breeding pools	s .		raphy Cover Scale Absent	
					0		
					(10)	Present very small amounts or if r	nore common
				55		of marginal quality	44 -6 hi-h4
					2	Present in moderate amounts, bu	_
				1		quality or in small amounts of hi	
	i				3	Present in moderate or greater an	iounts
	i					and of highest quality	

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO)	If yes, Category 3.
	Question 2, Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3
	Question 5. Category 1 Wetlands	YES (NO	If yes, Category 1.
	Question 6. Bogs	YES (NO)	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES (NO)	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO)	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
	Metric 2. Buffers and surrounding land use	4	
	Metric 3. Hydrology	8	
	Metric 4. Habitat	0,6	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	7	
	TOTAL SCORE	24.5	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one	_	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	(NO)	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(NO	categorized by the ORAM Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(NO)	Is quantitative rating score greater than the Category 2 scoring threshold (including any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	(NO)	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, loca or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

	Fin	al Category	
Choose one	(Category 1)	Category 2	Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Malea casey
Date: 02/14/2023
Affiliation: Stantec Consulting Services, Inc.
Address: 10200 Alliance Road, Svite 300
Phone Number: (513) 526 - 4084
e-mail address: Malea. casey @ stantec. com
Name of Wetland: Mondand II.
Vegetation Communit(ies): PEM
HGM Class(es): Depressional
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. Forested Wetland Wetland Stream
Lat/Long or UTM Coordinate
USGS Quad Name BOLIVAY, OH
County Stark county
Township W/A
Section and Subsection N/a
Hydrologic Unit Code 050400010505
Site Visit 02/14/2023
National Wetland Inventory Map N/a Ohis Wetland Inventory Map
Ohio Wetland Inventory Map
Soil Survey Sb: Sebring silt loam, 0 to 2 percent Slopes
See Ecological Resources Report

Name of Wetland: Wetland 16	
Wetland Size (acres, hectares): Sketch: Include north arrow, relationship with other surface waters, vegetation z	0.001
. 1	ones, etc.
A Forested	$\sim \sim \sim$
TOT COST OF	
	(Wetland
4000	lapprox)
construction weth	and 16
Weth	alloci
CV V K	
CAMC HOUGH AND	E. C.
site dirt road	
	construction
	011001101
	site
ind	
meriana	
/ 1/7	
Letter of the second of the se	
Comments, Narrative Discussion, Justification of Category Changes:	
Final score : 12	Category:

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	/	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	<i></i>	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	/	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	✓	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		X
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	\	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	NO Go to Question 2
	has had critical habitat proposed (65 FR 41812 July 6, 2000).		
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3	Go to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland Go to Question 4	NO Go to Question 4
4	Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	NO Go to Question 5
ī	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	NO Go to Question 6
3	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	NO Go to Question 7
	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	NO Go to Question 8
Ва	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	NO Go to Question 8

8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally	YES Wetland should be	NO)
	diameters greater than 45cm (17.7in) dbh?	evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at	YES	NO)
	an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	Go to Question 9b	Go to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES	NO \
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Calegory 5 status	
2-		Go to Question 10	
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland	YES	NO
	border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These	Go to Question 9d	Go to Question 10
	include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.		ω.
9d	Does the wetland have a predominance of native species within its	YES /	NO
	vegetation communities, although non-native or disturbance tolerant	l	
	native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES	NO)
		Wetland should be	Go to Question 10
		evaluated for possible Category 3 status	
		Category 5 status	
40	Laber Division Count Devicion (Code Countries)	Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be	YES	NO
	characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within	Wetland is a Category 3 wetland.	Go to Question 11
	several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be	Go to Question 11	
	present). The Ohio Department of Natural Resources Division of		
	Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.		
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES	NO
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union	Wetland should be	Complete
	Counties), Sandusky Plains (Wyandot, Crawford, and Marion	evaluated for possible	Quantitative
	Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties),	Category 3 status	Rating
	and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	Complete Quantitative	
	,	Rating	

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricta
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherodes
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumi
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellita
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwelli
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrewsi
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum		Helianthus grosseserratus
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicata
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflora
<i>,</i> , ,	Parnassia glauca	Schechzeria palustris		Lythrum alatun
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianun
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceun
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutan
	Salix candida	Vaccinium oxycoccos		Spartina pectinate
	Salix myricoides	Woodwardia virginica		Solidago riddelli
	Salix serissima	Xyris difformis		
	Solidago ohioensis	33		
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: Wetle	anc	1 16	Rater(s): MC, MD		Date: 02/14/23
0 0	Me	etric 1. Wetland A	rea (size).		•
max 6 pts. subtotal	ار Sele	ect one size class and assign score	<u>a</u>		
]	>50 acres (>20.2ha) (6 pts)			
	-	25 to <50 acres (10.1 to <20 10 to <25 acres (4 to <10.1h			
		3 to <10 acres (1.2 to <4ha)			
	1	0.3 to <3 acres (0.12 to <1.2	2ha) (2pts)		
		0.1 to <0.3 acres (0.04 to <0 < <0.1 acres (0.04ha) (0 pts)).12ha) (1 pt)		
	TMO		fore and surround	ing land use	
2 2	J .		ffers and surround		
max 14 pts, subtotal	2a. (elect only one and assign score. En (164ft) or more around wetland pe		
	İ		25m to <50m (82 to <164ft) around		
	Ţ	NARROW. Buffers average	10m to <25m (32ft to <82ft) aroun	d wetland perimeter (1)	
	2h I	VERY NARROW. Buffers a	verage <10m (<32ft) around wetlar Select one or double check and a	id perimeter (0)	
		VERY LOW. 2nd growth or	older forest, prairie, savannah, wild	llife area, etc. (7)	
	- [shrub land, young second growth		
	-		dential, fenced pasture, park, cons en pasture, row cropping, mining, c		w field. (3)
	Mo	etric 3. Hydrology.		onstruction. (1)	
5 7	IVIC	file 3. Trydrology.	•		
max 30 pts. subtotal	ار ع	Sources of Water. Score all that a	annly 3h	Connectivity, Score all	that apply
,]	High pH groundwater (5)	appriy.	100 year floodpla	
		Other groundwater (3)		Between stream/I	ake and other human use (1)
	-	Precipitation (1) Seasonal/Intermittent surface	e water (3)		pland (e.g. forest), complex (1) upland corridor (1)
	- 1	Perennial surface water (lake	1 1		upland comdor (1) uration. Score one or dbl check
	3c. N	Maximum water depth. Select onl		Semi- to permane	ently inundated/saturated (4)
	-	>0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) ((2)	Regularly inundate Seasonally inundate	
		<0.4m (<15.7in) (1)	(2)		ated (2) ated in upper 30cm (12in) (1)
			regime. Score one or double ched		
			Check all disturbances observed		
	-	Recovered (7) Recovering (3)	ditch	point source (non:	stormwater)
	+	Recent or no recovery (1)	tile	filling/grading road bed/RR track	
	_	, (,,	weir	dredging	
			stormwater input	other	
3 10	Me	etric 4. Habitat Alt	eration and Develo	pment.	
max 20 pts. subtotal	ے 4a. <u>ع</u>	Substrate disturbance. Score one	or double check and average.		
	-	None or none apparent (4)			
	H	Recovered (3) Recovering (2)			
	t	Recent or no recovery (1)			
	4b. F	labitat development. Select only	one and assign score.		
	-	Excellent (7) Very good (6)			
		Good (5)			
		Moderately good (4)			
	H	Fair (3) Poor to fair (2)			
		Poor (1)			
	4c. H	labitat alteration. Score one or do	buble check and average.		
		None or none apparent (9)	Check all disturbances observed		
	H	Recovered (6) Recovering (3)	mowing grazing	shrub/sapling rem	
	_	Recent or no recovery (1)	clearcutting	sedimentation	io pen icinoval
#10.7925an	"	erite eesti	selective cutting	dredging	
10			woody debris removal toxic pollutants	farming nutrient enrichmer	nt
subtotal this pa	ige		toxic politicalits	noment ennommer	ı.
last revised 1 Februa	ry 2001	1 jjm			

Site: ∖	Netlo	ind 16	Rater(s): MC	MD Date: 02/14/2	2
sı ()	ubtotal first pa	Metric 5. Special	Wetlands.		
max 10 pts.	subtotal	J Check all that apply and score as	indicated.		
		Bog (10) Fen (10) Old growth forest (10) Mature forested wetland Lake Erie coastal/tributa Lake Erie coastal/tributa Lake Plain Sand Prairie Relict Wet Prairies (10) Known occurrence state Significant migratory so Category 1 Wetland. S	d (5) ary wetland-unrestricted hydro ary wetland-restricted hydro s (Oak Openings) (10) a/federal threatened or enda ngbird/water fowl habitat or ee Question 1 Qualitative R	angered species (10) usage (10) ating (-10)	
2	12	Metric 6. Plant co	mmunities, int	erspersion, microtopography.	
max 20 pts.	subtotal	6a. Wetland Vegetation Commun		Community Cover Scale	_
		Score all present using 0 to 3 scal		Absent or comprises <0.1ha (0.2471 acres) contiguous area	_
		Aquatic bed Emergent	: <u>1</u>	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a	
		Shrub		significant part but is of low quality	
		Forest	2	Present and either comprises significant part of wetland's	_
		Mudflats		vegetation and is of moderate quality or comprises a small	
		Open water		part and is of high quality	
		Other	3	Present and comprises significant part, or more, of wetland's	
		6b. horizontal (plan view) Interspe	ersion.	vegetation and is of high quality	_
		Select only one. High (5)	Narrative D	escription of Vegetation Quality	
		Moderately high(4)	low	Low spp diversity and/or predominance of nonnative or	_
		Moderate (3)		disturbance tolerant native species	
		Moderately low (2)	mod	Native spp are dominant component of the vegetation,	
		X Low (1)		although nonnative and/or disturbance tolerant native spp	
		None (0) 6c. Coverage of invasive plants.	Refer	can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare	
		to Table 1 ORAM long form for lis		threatened or endangered spp	
		or deduct points for coverage	high	A predominance of native species, with nonnative spp	
		Extensive >75% cover (,	and/or disturbance tolerant native spp absent or virtually	
		Moderate 25-75% cove	• •	absent, and high spp diversity and often, but not always,	
		Sparse 5-25% cover (-1 X Nearly absent <5% cov		the presence of rare, threatened, or endangered spp	_
		Absent (1)		I Open Water Class Quality	
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
		Score all present using 0 to 3 scale		Low 0.1 to <1ha (0.247 to 2.47 acres)	
		Vegetated hummucks/ti		Moderate 1 to <4ha (2.47 to 9.88 acres)	
		Coarse woody debris > Standing dead >25cm (High 4ha (9.88 acres) or more	
		Amphibian breeding po		raphy Cover Scale	
			0	Absent	
			1	Present very small amounts or if more common of marginal quality	
			2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality	
			3	Present in moderate or greater amounts	
	1			and of highest quality	

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES (NO)	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES (NO)	If yes, Category 3.
	Question 7. Fens	YES MO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES MO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES MO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES (NO)	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (O)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (10)	If yes, Category 3
	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
_	Metric 2. Buffers and surrounding land use	2	
	Metric 3. Hydrology	5	
	Metric 4. Habitat	3	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	2	
	TOTAL SCORE	12	Category based on score breakpoints Category 1

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one	Property and March	Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(NO)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(NO)	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (including any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	(NO)	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons of information for this determination should be provided.

Choose one	Category 1	Category 2	Category 3

End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name:
malea casey
Date: 02/14/23
Affiliation: Stantec consulting services, inc.
Address:
Phone Number:
(513) 526-4084
e-mail address: Malea, casey @ stantec.com
Name of Wetland: Wetland 17
Vegetation Communit(ies):
HGM Class(es): Depression au
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.
Forested 3 methand
Welland 16 Welland 16
WEHAND TO
stream 8
Latti ann ar LTM Coordinate
Lat/Long or UTM Coordinate 40.746716,-81.416728
USGS Quad Name BOIIVAR, OH
County Stark County
Township
Section and Subsection W/A
Hydrologic Unit Code 0504000 10505
Site Visit 02/14/12-3
National Wetland Inventory Map W/A
Ohio Wetland Inventory Map
Soil Survey Sb: Sebring sit loam, 0 to 2 percent slopes
Delineation report/map See Ecological Resources Report

Name of Wetland: Wetland 17	
Wetland Size (acres, hectares):	0.004ac
Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.	
Construction dirt road Co	instruction site
Comments, Narrative Discussion, Justification of Category Changes:	
Final score : 18.5 Category:	1

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	V	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	J	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	J	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	J	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		*
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	7	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	
		YES	NO
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or	Wetland should be evaluated for possible Category 3 status	Go to Question 2
	threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	Go to Question 2	
2	Threatened or Endangered Species. Is the wetland known to contain	YES	(NO)
an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?		Wetland is a Category 3 wetland.	Go to Question 3
		Go to Question 3	
3	Documented High Quality Wetland. Is the wetland on record in	YES	(NO)
	Natural Heritage Database as a high quality wetland?	Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	\wedge
4	Significant Breeding or Concentration Area. Does the wetland	YES	NO'
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of	YES	(NO)
	vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria,</i> or <i>Phragmites australis</i> , or	Wetland is a Category 1 wetland	Go to Question 6
	2) an acidic pond created or excavated on mined lands that has little or no vegetation?	Go to Question 6	6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no	YES	(NO)
	significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30%	Wetland is a Category	Go to Question 7
	cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	3 wetland	
	cover of invasive species (see Table 1) is 12370:	Go to Question 7	6
<u>7</u>	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	YES	NO)
	is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0)	Wetland is a Category	Go to Question 8a
	and with one or more plant species listed in Table 1 and the cover of	3 wetland	Co to Question of
	invasive species listed in Table 1 is <25%?		
_		Go to Question 8a YES	NO
8a	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics:	TES	
	overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence	Wetland is a Category 3 wetland.	Go to Question 8t
	of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of	Go to Question 8b	
	canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?		

8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of	YES	(NO)
	deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	Go to Question 9a
		Go to Question 9a	
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at	YES	(NO)
	an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	Go to Question 9b	Go to Question 10
9b	Does the wetland's hydrology result from measures designed to	YES YES	NO DUESTION TO
	prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	Wetland should be evaluated for possible Category 3 status	Go to Question 9c
		Go to Question 10	_
9c	Are Lake Erie water levels the wetland's primary hydrological influence,	YES	(NO)
	i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	Go to Question 9d	Go to Question 10
9d	Does the wetland have a predominance of native species within its	YES	(NO)
	vegetation communities, although non-native or disturbance tolerant native species can also be present?	Wetland is a Category 3 wetland	Go to Question 9e
		Go to Question 10	
9е	Does the wetland have a predominance of non-native or disturbance	YES	(NO)
	tolerant native plant species within its vegetation communities?	Wetland should be	Go to Question 10
		evaluated for possible	00 10 00001077 10
		Category 3 status	
		Go to Question 10	
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in	YES	(NO)
	Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the	Wetland is a Category 3 wetland.	Go to Question 11
	gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	Go to Question 11	
11	Relict Wet Prairies. Is the wetland a relict wet prairie community	YES	(NO)
	dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union	Wetland should be	Complete
	Counties), Sandusky Plains (Wyandot, Crawford, and Marion	evaluated for possible	Complete Quantitative
	Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami,	Category 3 status	Rating
	Montgomery, Van Wert etc.).	Complete Quantitative Rating	

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricta
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherodes
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumi
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellita
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwelli
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrewsi
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum		Helianthus grosseserratus
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicato
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflora
<i>,</i> , , ,	Parnassia glauca	Schechzeria palustris		Lythrum alatun
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianun
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceun
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutan
	Salix candida	Vaccinium oxycoccos		Spartina pectinata
	Salix myricoides	Woodwardia virginica		Solidago riddelli
	Salix serissima	Xyris difformis		
	Solidago ohioensis	y		
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: Wetle	and 17	Rater(s): MC, MD	Date: 02/14/23
0 0	Metric 1. Wetland	Area (size).	
max 6 pts. subtotal	Select one size class and assign scores (>20.2ha) (6 pts 25 to <50 acres (10.1 to < 10 to <25 acres (4 to <10. 3 to <10 acres (1.2 to <4h 0.3 to <3 acres (0.12 to < 0.1 to <0.3 acres (0.04 to <0.1 acres (0.04ha) (0 pts	s) 20.2ha) (5 pts) 1ha) (4 pts) a) (3 pts) 2ha) (2pts) <0.12ha) (1 pt)	
2 2	Metric 2. Upland bu	uffers and surroundi	ng land use.
max 14 pts. subtotal	WIDE. Buffers average 50 MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers 2b. Intensity of surrounding land use VERY LOW. 2nd growth of LOW. Old field (>10 years MODERATELY HIGH. Re	Select only one and assign score. Dom (164ft) or more around wetland per 25m to <50m (82 to <164ft) around ge 10m to <25m (32ft to <82ft) around average <10m (<32ft) around wetlands. Select one or double check and average for older forest, prairie, savannah, wild s), shrub land, young second growth firstidential, fenced pasture, park, consequent pasture, row cropping, mining, consequent savansaver.	erimeter (7) wetland perimeter (4) d wetland perimeter (1) d perimeter (0) verage. life area, etc. (7) orest. (5) ervation tillage, new fallow field. (3)
9 10	Metric 3. Hydrology	- I	, ,
max 30 pts. subtotal		ace water (3) ake or stream) (5) 3d. nly one and assign score.) (2)	Connectivity. Score all that apply. 100 year floodplain (1) Between stream/lake and other human use (1) Part of wetland/upland (e.g. forest), complex (1) Part of riparian or upland corridor (1) Duration inundation/saturation. Score one or dbl check Semi- to permanently inundated/saturated (4) Regularly inundated/saturated (3) Seasonally inundated (2) Seasonally saturated in upper 30cm (12in) (1) k and average.
	None or none apparent (12) Recovered (7) Recovering (3) Recent or no recovery (1)	Check all disturbances observed ditch tile dike weir stormwater input	point source (nonstormwater) filling/grading road bed/RR track dredging other
5.5 15.5	Metric 4. Habitat Al	teration and Develo	pment.
	4a. Substrate disturbance. Score or None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select on Excellent (7) Very good (6) Good (5)	•	
	Moderately good (4) Fair (3) Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or	double check and average.	
ubtotal this pag last revised 1 February	None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)	Dougle-CPST	shrub/sapling removal herbaceous/aquatic bed removal sedimentation dredging farming nutrient enrichment

Site:	Wetl	and	17	Rater(s)	: MC, 1	MD	Date: 02/14/23
O max 10 pts.	15.6 subtotal first pa	Met	ric 5. Special V		s.		
			Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (Lake Erie coastal/tributan Lake Erie coastal/tributan Lake Plain Sand Prairies Relict Wet Prairies (10) Known occurrence state/t Significant migratory song Category 1 Wetland. See	(5) y wetland-unre y wetland-rest (Oak Opening federal threate gbird/water fov e Question 1 C	ricted hydrold s) (10) ned or endar vi habitat or u Qualitative Ra	nggy (5) ngered species (10) sage (10) ting (-10)	
3	18.5	Met	ric 6. Plant cor			erspersion, microto	pography.
max 20 pts.	subtotal	6a. We	tland Vegetation Communiti	ies.	Vegetation C	ommunity Cover Scale	
		Score a	Aquatic bed Emergent Shrub	· ia	1	Absent or comprises <0.1ha (0.24 Present and either comprises small vegetation and is of moderate questions are significant part but is of low quality.	all part of wetland's uality, or comprises a
			Forest Mudflats Open water		2	Present and either comprises sign vegetation and is of moderate q part and is of high quality	nificant part of wetland's uality or comprises a small
			Other rizontal (plan view) Intersper	sion.	3	Present and comprises significant vegetation and is of high quality	
		Select	only one.		Narrativo Do	scription of Vegetation Quality	
			High (5) Moderately high(4) Moderate (3)	a•	low	Low spp diversity and/or predomin disturbance tolerant native spec	ies
			Moderately low (2) Low (1) None (0) verage of invasive plants. Re 1 ORAM long form for list.		mod	Native spp are dominant compone although nonnative and/or distu can also be present, and specie moderately high, but generally was threatened or endangered spp	rbance tolerant native spp es diversity moderate to w/o presence of rare
			ct points for coverage Extensive >75% cover (-5 Moderate 25-75% cover (Sparse 5-25% cover (-1)	5) (-3)	high	A predominance of native species and/or disturbance tolerant native absent, and high spp diversity a the presence of rare, threatened	s, with nonnative spp we spp absent or virtually and often, but not always,
		2	Nearly absent <5% cover Absent (1)		Mudflat and	Open Water Class Quality Absent <0.1ha (0.247 acres)	
			crotopography. all present using 0 to 3 scale	-03	1	Low 0.1 to <1ha (0.247 to 2.47 ac	resl
		30016	Vegetated hummucks/tus	.00	2	Moderate 1 to <4ha (2.47 to 9.88	
		-	Coarse woody debris >15		3	High 4ha (9.88 acres) or more	
			Standing dead >25cm (10		_	Inches and Acres and Agreement	
			Amphibian breeding pool	•	Microtopogr	aphy Cover Scale	
				0.	0	Absent	
				id s 63	1	Present very small amounts or if r of marginal quality	
				1.5	2	Present in moderate amounts, bu quality or in small amounts of hi	_
	7			3. e	3	Present in moderate or greater ar	nounts

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO)	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES (NO)	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES NO	If yes, Category 1.
	Question 6. Bogs	YES NO	If yes, Category 3.
	Question 7. Fens	YES NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES (NO)	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
,	Question 9b. Lake Erie Wetlands - Restricted	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
*	Question 10. Oak Openings	YES NO	If yes, Category 3
:	Question 11. Relict Wet Prairies	YES NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
_	Metric 2. Buffers and surrounding land use	2	
	Metric 3. Hydrology	8	
	Metric 4. Habitat	9.5	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	3	
	TOTAL SCORE	18.5	Category based on score breakpoints

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO	Is quantitative rating score less than the Category 2 scoring threshold (excluding gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	(NO)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NØ	Is quantitative rating score greater than the Category 2 scoring threshold (including any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	YES Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	(NO)	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	NO Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, loca or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons of information for this determination should be provided.

	Fin	al Category	
Choose one	Category)1	Category 2	Category 3

End of Ohio Rapid Assessment Method for Wetlands.





Photograph Location 1. Representative view of new field habitat within the Project area.

Photograph taken facing northeast.



Photograph Location 2. Representative view of existing gravel access road in mixed early successional/second growth deciduous forest habitat within the Project area. Photograph taken facing east.





Photograph Location 3. Representative view of old field habitat and gas pipeline right-of-way within the Project area. Photograph taken facing south.



Photograph Location 4. Representative view of existing gravel road within the Project area.

Photograph taken facing east.





Photograph Location 5. Representative view of residential lawn within the Project area.

Photograph taken facing east.



Photograph Location 6. Representative view of agricultural field within the Project area.

Photograph taken facing north.





Photograph Location 7. Representative view of industrial land within the Project area. Photograph taken facing northeast.



Photograph Location 8. Representative view of pasture habitat within the Project area.

Photograph taken facing northeast.





Photograph Location 9. Representative view of pasture habitat within the Project area.

Photograph taken facing east.



Photograph Location 10. Representative view of industrial land within the Project area.

Photograph taken facing west.