

**AMERICAN TRANSMISSION SYSTEMS,
INCORPORATED
A FIRSTENERGY COMPANY**

CONSTRUCTION NOTICE

**BAYSHORE-JEEP NO.2 STICKNEY 138 KV
TRANSMISSION LINE STRUCTURE
RELOCATION AND REPLACEMENT PROJECT
OPSB CASE NO.: 25-0558-EL-BNR**

July 24, 2025

**American Transmission Systems, Incorporated
76 South Main Street
Akron, Ohio 44308**

OPSB CASE No. 25-0558-EL-BNR: CONSTRUCTION NOTICE
BAYSHORE-JEEP NO. 2 STICKNEY 138 KV TRANSMISSION LINE
STRUCTURE RELOCATION AND REPLACEMENT PROJECT

The following information is being provided in accordance with Chapter 4906-6 of the Ohio Administrative Code (“Adm.Code”) for the application and review of Accelerated Certificate Applications. Based upon the requirements found in Appendix A to Adm.Code 4906-1-01, this Project qualifies for submittal to the Ohio Power Siting Board (“OPSB”) as a Construction Notice application.

4906-6-05: ACCELERATED APPLICATION REQUIREMENTS

4906-6-05 (B)(1): Name and Reference Number

Name of Project: Bayshore-Jeep No. 2 Stickney 138 kV Transmission Line
Structure Relocation and Replacement Project (“Project”).

Reference Number: 3034

4906-6-05 (B)(1): Brief Description of the Project

In this Project, American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company is proposing to replace and relocate four (4) existing structures and install one (1) new structure on the Bayshore-Jeep No. 2 Stickney 138 kV Transmission Line. Existing structures Nos. 51, 52, 53 and 54, which are common structures for both the Bayshore-Jeep No. 2 Stickney 138 kV Transmission Line and the Ironville-Lapier 69 kV Transmission Line, will be removed and new structures installed at different locations. Structure No. 51 will be relocated approximately 120 feet to the west and along the same centerline as its existing location and be replaced with a single steel monopole on concrete foundation. Structure No. 52 will be relocated approximately 50 feet to the west and along the same centerline as its existing location and be replaced with a Valmont pyramax tower on concrete foundations. Structure No. 53 will be relocated to the inside of the existing Lapier 69 kV Substation and replaced with a Valmont pyramax tower on concrete foundations.

Structure No. 54, currently located inside of the Ironville 69 kV Substation, will be relocated approximately 250 feet to the west and along the same centerline as its existing location and be replaced with a single steel monopole on concrete foundation. New Structure No. 50A, a common structure for both the Bayshore-Jeep No. 2 Stickney 138 kV Transmission Line and the Ironville-Lapier 69 kV Transmission Line, will be a single steel monopole on concrete foundation installed approximately 117 feet northwest of the existing Structure No. 50 and along the same centerline. FAA catenary lighting will be installed on structures 52 and 53. The total Project length is approximately 0.8-mile.

The Project is in the city of Toledo, Lucas County, Ohio. The general location of the Project is shown in Exhibit 1, a partial copy of the United States Geologic Survey, Lucas County OH, Quad Map. Exhibit 2 provides a partial copy of ESRI aerial imagery. The general layout is shown in Exhibit 3.

4906-6-05 (B)(1): Construction Notice Requirement

The Project meets the requirements for a Construction Notice application because the Project is within the types of projects defined by Item (2)(a) of the Application Requirement Matrix for Electric Power Transmission Lines, Appendix A of Adm. Code 4906-1-01. This item 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:

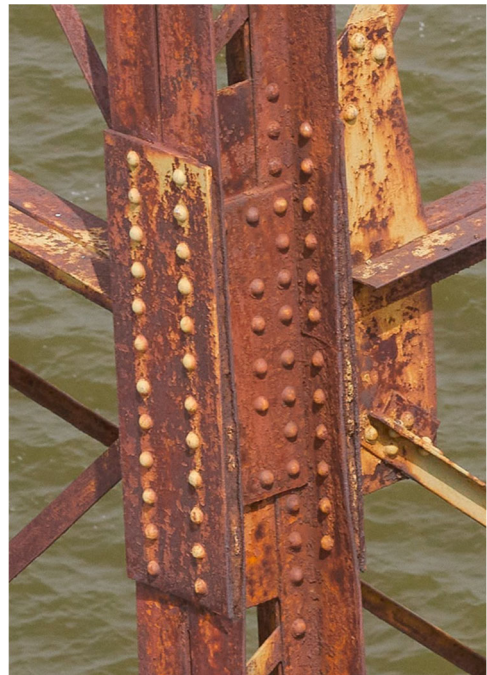
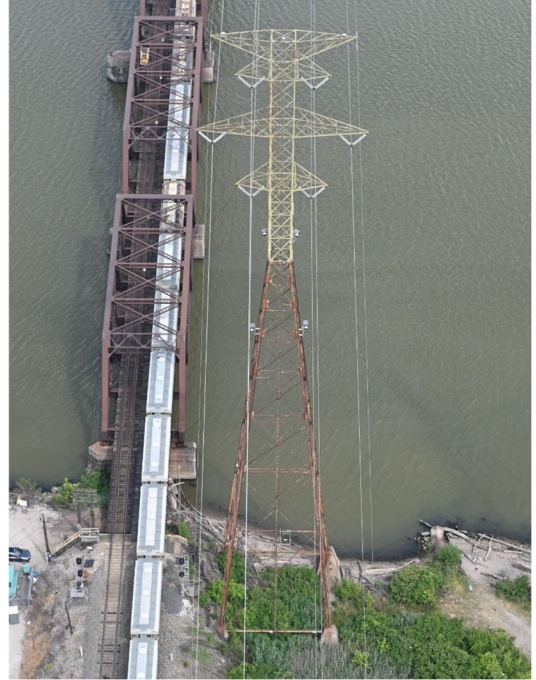
(a) Two miles or less

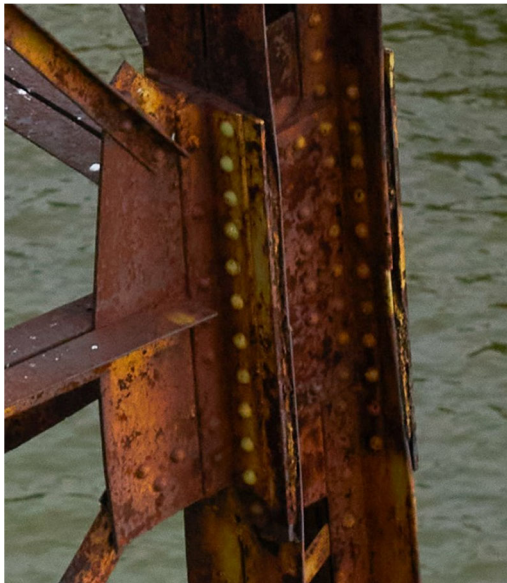
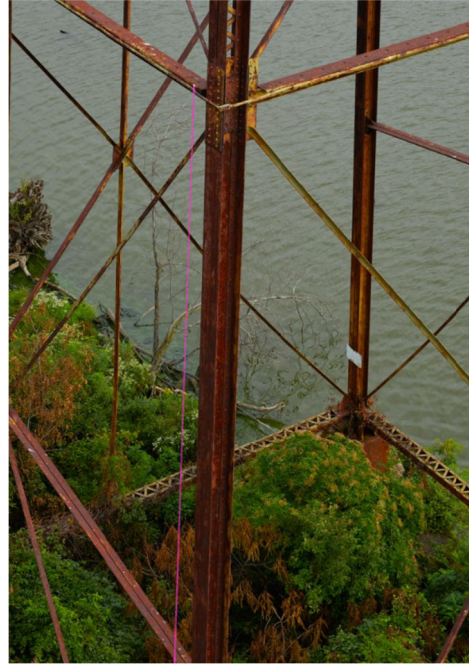
The proposed Project is within the requirements of Item (2)(a) as it involves the replacement and addition of transmission line structures with a different structure type, for a distance less than two miles.

4906-6-05 (B)(2): Need For the Project

The need to replace towers Structure Nos. 51, 52 and 53 on the Bayshore-Jeep No. 2 Stickney 138 kV/Ironville-Lapier 69 kV double circuit transmission line is due to the current condition of the towers. The base sections of all three towers show significant rust and deterioration, as most members have very little coating left. Many of the bolted tower connections are showing signs of pack rust or packout, that will continue to accelerate as these towers age. At least one of the towers (Structure No. 53) has significant holes in a horizontal member caused by extreme rust. The top sections of the towers were replaced in the 1970s. No other members were replaced at that time. The degradation of the structures is shown in the following photographs.







A 2024 iHawk Steelworks drone inspection was completed to confirm the severity of the deterioration on all three towers. Using the National Grid grading system, iHawk ranked all steel members on a scale from 1-6. See Table 1 for grading information. See Table 2 for the tower results. A majority of the members (58%) were graded as 4, confirming that most members are significantly corroded and/or pitted. Around 1% of members were

graded as 5 or 6, suggesting that they may offer lower strength capacity. ATSI did a review of drone photos of these members and determined that emergency action was not required, but that this inspection added further justification for replacement of these towers.

Table 1. National Grid Visual Grading System.

Description	Visual Grade
Fully painted - overcoat and undercoat intact. Fully galvanized - coating intact.	1
Paint coating all over surface - overcoat may not be intact and some very small areas (<1%) of light corrosion may be present. Galvanizing intact except for some very small areas (<1%) of light corrosion.	2
Very light surface corrosion, majority of coating intact.	3
Light pitting - light edge roughening. Loss of greater majority of coating and zinc layers. Corroded surface would dominate surface preparation. Bar assumed to provide original full design strength.	4
Significant pitting - loss of section clearly visible, edges feathered/thinned. Bar is considered to offer reduced structural capacity.	5
Physical damage.	6

Table 2. iHawk SteelWorks drone Inspection Results.

Tower	Number of Members Graded as 1	Number of Members Graded as 2	Number of Members Graded as 3	Number of Members Graded as 4	Number of Members Graded as 5	Number of Members Graded as 6
51	0	70	232	313	1	0
52	0	154	269	395	12	8
53	0	17	146	549	6	2

In addition to the drone inspection, an Osmose foundation inspection was also completed in 2024. This resulted in the need to do some temporary repairs on all three tower foundations to ensure safe operation until replacement. Four legs on tower 51 and three legs on tower 52 were temporarily strengthened in March 2025 using supplemental steel members to ensure the proper load is transferred to the concrete piers. For tower 53, supplemental steel members were bolted or welded to the areas of heavy corrosion to ensure strength is not lost. This repair was completed in June 2025. Any non-load bearing horizontals that have been disconnected from the concrete piers have been reconnected.

Only crucial repairs near ground level were done on these towers. These areas had the most corrosion with pitting and visual holes in multiple members. By temporarily repairing these members, the structural strength will last until replacement.

Addition of Structure No. 50A is required due to a blowout clearance violation with the adjacent structure.

Replacement and relocation of Structure No. 54 is required to deadend the new conductor which spans across the river. New Structure No. 53 (inside Lapier Substation) is a Valmont Pyramax structure and is a suspension tower. This structure is 300' tall and cannot be made a deadend, as it would be required to withstand a heavier load and installed on a larger foundation. Also, because the tower height has increased compared to the existing one, it was not feasible to drop straight into the substation from Structure No. 53, as in the existing layout.

The conductor was upsized due to the proposed structure No. 53 being shifted approximately 800' into the substation. The increase to the span required a larger and stronger conductor to withstand the new span from Structure No. 52 to Structure No. 53.

4906-6-05 (B)(3): Location of the Project Relative to Existing or Proposed Lines

The location of the Project relative to existing or proposed lines is shown in the ATSI Transmission Network Map, included as part of the confidential portion of the FirstEnergy Corp. 2025 Long-Term Forecast Report. This map was submitted to the PUCO in Case No. 25-0504-EL-FOR under Rule 4901:5-5:04 (C)(2)(b) of the Ohio Administrative Code. The map is incorporated by reference only. The Project is not included in ATSI's LTFR filed in 2025, nor was it vetted through the PJM Attachment M-3 process, because the Project does not entail any topology or rating change. The general location and layout of the Project area is shown in Exhibits 1 and 2.

4906-6-05 (B)(4): Alternatives Considered

Possible alternatives considered were steel member replacement and re-coating/repainting the structures. Given the severity of the corrosion, replacing specific steel members on each tower is not a viable solution. This would include replacing over 1000 members on 57-year-old towers with restricted access near the Maumee River. Additionally, to replace some of the key members, temporary supports would be needed, and to install the temporary structures, it is almost impossible given that two of the towers are adjacent to the water. Additionally, painting or re-coating these structures would be insufficient as rust and deterioration has consumed most members. All rust would need to be removed prior to coating, thus making it a non-viable solution, given the amount of rust on each tower.

4906-6-05 (B)(5): Public Information Program

ATSI's manager of External Affairs will advise local officials of features and the status of the proposed Project as necessary. ATSI will maintain a Project website and will continue to work with property owners concerning the proposed Project. The website address is below:

https://www.firstenergycorp.com/about/transmission_projects/ohio.html .

Finally, during all phases of this Project, ATSI will maintain the transmission projects hotline at 1-888-311-4737 or via email at: transmissionprojects@firstenergycorp.com where the public may ask questions or leave comments on the Project for ATSI.

4906-6-05 (B)(6): Construction Schedule

Construction on this Project is expected to begin as early as November 3, 2025, and be completed by December 18, 2026.

4906-6-05 (B)(7): Area Map

Exhibits 1 and 2 depict the general location of the Project. Exhibit 1 provides a partial copy of the United States Geologic Survey, Lucas County, Ohio, Quad Map. Exhibit 2 provides a partial copy of ESRI aerial imagery.

4906-6-05 (B)(8): Property Owner List

The Project is located entirely within existing right-of-way on Parcels ID 1130027, 0804297, 0804257, 1109504, and 0804444 owned by Toledo Edison; 1879784 owned by Buckeye Pipe Line Company, LPA Delaware; and 1107061 owned by Sunoco Partners Real Estate Acquisitions, LLC. No new easements will be required for completion of this Project.

4906-6-05 (B)(9): TECHNICAL FEATURES OF THE PROJECT

4906-6-05 (B)(9)(a): Operating Characteristics

The transmission line construction will have the following characteristics:

Voltage:	138 kV
Conductors:	(3) 739.8 kcmil 24/13 ACAR (Existing 69 kV) (3) 954.0 kcmil 48/7 ACSR (Existing 138 kV) (6) 1033.5 kcmil 54/7 ACSR (New 138 kV from Str. 54 to Lapier Substation)
Static Wire:	(2) 7#8 Alumoweld (Existing and New)
Insulators:	Porcelain
ROW Width:	100 feet
Structure Type:	Exhibit 4: 69 kV/138 kV Double Circuit Tubular Steel Deadend Single Pole Structure (Qty. 2) Exhibit 5: 69 kV/138 kV Double Circuit Valmont Pyramax Suspension Tower Structure (Qty. 2) Exhibit 6: 69 kV/138 kV Double Circuit Tubular Steel Deadend and Loop Single Pole Structure (Qty. 1)

4906-6-05 (B)(9)(b): Electric and Magnetic Fields

There are no occupied residences within 100 feet of the Project and therefore no Electric and Magnetic Field ("EMF") calculations are required by this code provision.

4906-6-05 (B)(9)(c): Estimated Cost

The estimated cost for the proposed Project is \$9,675,000. Although not statutorily required for approval, at the request of OPSB Staff, ATSI confirms that ATSI's costs will be

captured and allocated via FERC formula rates for the ATSI Transmission Zone, Attachment H-21 in the PJM OATT.

4906-6-05 (B)(10): SOCIAL AND ECOLOGICAL IMPACTS

4906-6-05 (B)(10)(a): Land Uses

The Project is located in the city of Toledo, Lucas County, Ohio. The land use within the vicinity of the proposed Project is primarily industrial, with surrounding railroads.

4906-6-05 (B)(10)(b): Agricultural Land

Agricultural land does not exist within the Project's Area of Potential Effect ("APE").

4906-6-05 (B)(10)(c): Archaeological or Cultural Resources

As part of the investigation for this Construction Notice, on May 16, 2024, TRC Companies, Inc. ("TRC") submitted a request to the Ohio Historic Preservation Office ("SHPO") on behalf of ATSI to review and provide comments for the Project Study Area (Area of Potential Effects or APE) with a one (1)-mile search radius. On June 10, 2024, SHPO replied to the request and the response is attached as Exhibit 7. SHPO concurred that the Project, as proposed, will not affect any historic properties or cultural resources. No further coordination is required unless the scope of work changes or new/additional archaeological deposits are discovered during construction.

The OHPO database includes a of catalog all historic properties listed in or eligible for listing in the National Register of Historic Places (NRHP), including districts, sites, building, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. The data revealed one (1) NRHP-listed above-ground historic resource, the Toledo Yacht Club (Ref No.: 76001476), mapped 0.7 mi northeast from the northern portion of the Project Study Area. In addition, there is one (1) NRHP-eligible resource, the Toledo Hot Briquette Iron (HBI) (OHPO ID: 2017LUC40052), recorded 0.65 mi south-southeast of the Project Study Area.

The OHPO database also includes listings on the Ohio Historic Inventory (OHI), the Ohio Archaeological Inventory (OAI), previous cultural resource surveys, and the Ohio Genealogical Society (OGS) cemetery inventory. The data indicates that there are 317 above-ground historic resources recorded within one (1) mi. All of these resources are located west, southwest, and south of the proposed Project Study Area. One (1) resource, the CSX Railroad Bridge (OH No.: LUC0334709), is mapped between the two (2) sections of the Project Study Area.

There have been five (5) official archaeological surveys conducted within one (1)-mi of the Project Study Area, the nearest of which borders the Project Study Area to the southwest. From these surveys and the efforts of local informants, there are 13 archaeological sites recorded within one (1)-mi of the Project Study Area. The sites include four (4) pre-contact sites, eight (8) historic sites, and one (1) multi-component pre-contact and historic site. The nearest of these sites is recorded 0.21 mi southwest of the Project Study Area.

The proposed Project occurs within existing utility right-of-way (ROW), surrounded by industrial land use. The proposed Project Study Area measures approximately 22.28 acres in size and includes areas that will be utilized for access, pull pads, a staging area and laydown areas.

The Limits of Disturbance (LOD), which corresponds to the APE, will be completely within the Project Study Area and will predominantly include all areas in which construction activities associated with the proposed Project will take place. The proposed Project Study Area does not contain forested habitat. Therefore, no tree clearing is anticipated within the Project Study Area. Due to the nature of the Project, jurisdictional resources may be impacted by the proposed Project activities. The permitting under Section 10 of the River and Harbors Act will be obtained for work occurring over a navigable waterway, the Maumee River. Avoidance and minimization will be utilized during construction. If wetlands and streams cannot be avoided, timber matting will be utilized during construction for temporary impacts. A modern aerial review of the APE shows that

the landscape is a combination of industrial and built-up land. The proposed Project is not expected to have any adverse effects on known historic properties.

The Project will not impact the viewshed of any potential historic properties. Additionally, due to prior anthropogenic disturbances, the Project has a low potential to encounter any intact, significant archaeological resources. The Project will have no adverse effect upon any cultural or archaeological resources. The Project ground disturbance is limited to structure replacement. To date, TRC has not conducted any on-site cultural resources surveys.

4906-6-05 (B)(10)(d): Local, State, and Federal Requirements

A right-of-way permit will be required through the city of Toledo Engineer's Office for proposed work within the right-of-way of city roads. Greater than one (1) acre of earth disturbance is expected based on the proposed Project; therefore, the submittal of a Notice of Intent (NOI) application with the Ohio Environmental Protection Agency (EPA) is required for coverage under the general construction stormwater permit (OHC000006). A Storm Water Pollution Prevention Plan (SWPPP) is also required to be submitted for review by the City of Toledo Engineer's Office. The Project proposes development in a 100-year floodplain; therefore, coordination will be required to obtain a Floodplain Development Permit through the city of Toledo Building Department. The Project Study Area is also along a CSX railroad and will require coordination with the railroad company, if access is deemed necessary. All permitting and/or coordination necessary to comply with local, state, and federal agencies with jurisdiction regarding this Project as shown in Table 3 and will be completed prior to the commencement of construction.

Table 3. List of Government Agency Requirements

Agency	Requirement
Ohio EPA	General NPDES Construction Storm Water Permit OHC000006
City of Toledo Engineer's Office	Right of Way Permit SWPPP Review
City of Toledo Building Department	Floodplain Development Permit

ATSI will acquire all necessary permits and approvals, as applicable, for construction of this Project.

4906-6-05 (B)(10)(e): Endangered, Threatened, Rare and Designated Species Investigation

As part of the investigation, ATSI retained TRC to conduct necessary surveys. TRC submitted a request to the Ohio Department of Natural Resources (“ODNR”) Office of Real Estate to conduct an Environmental Review. As part of the Environmental Review, the ODNR Office of Real Estate conducted a search of the ODNR Division of Wildlife’s Natural Heritage Database to research the presence of any endangered, threatened, or rare species within one (1) mile of the Project Area. The ODNR’s Office of Real Estate’s response dated May 29, 2024, indicated that the following record of a state threatened species is located within a one-mile radius of the Project Study Area: Blanding's Turtle (*Emydoidea blandingii*). The Project is also within the range of 18 state and/or federally listed animal species. A copy of ODNR’s Office of Real Estate’s response is included as Exhibit 8. A list of all endangered, threatened, and rare species, as identified by ODNR, within the range of the Project is provided in Table 4.

Table 4. List of Endangered and Threatened Species within range of Project Study Area

Common Name	Scientific Name	Federal Listed Status	State Listed Status	Affected Habitat
Amphibians				
Blue-spotted Salamander	<i>Ambystoma laterale</i>	N/A	Endangered	Moist, deciduous hardwood forests and swampy woodlands.
Mammals				
Indiana Bat	<i>Myotis sodalis</i>	Endangered	Endangered	Trees, forests, caves, and caverns.
Little Brown Bat	<i>Myotis lucifugus</i>	N/A	Endangered	Trees, forests, caves, and caverns.
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	Endangered	Endangered	Trees, forests, caves, and caverns.
Tricolored Bat	<i>Perimyotis subflavus</i>	Proposed Endangered	Endangered	Trees, forests, caves, and caverns.
Mussels				

Eastern Pondmussel	<i>Ligumia nasuta</i>	N/A	Endangered	Perennial streams.
Pondhorn	<i>Uniomerus tetrasmus</i>	N/A	Threatened	Perennial streams.
Rayed Bean	<i>Villosa fabalis</i>	Endangered	N/A	Perennial streams.
Snuffbox	<i>Epioblasma triquetra</i>	Endangered	N/A	Perennial streams.
Fish				
American Eel	<i>Anguilla rostrata</i>	N/A	Threatened	Perennial streams.
Channel Darter	<i>Percina copelandi</i>	N/A	Threatened	Perennial streams.
Cisco	<i>Coregonus artedi</i>	N/A	Endangered	Perennial streams.
Greater Redhorse	<i>Moxostoma valenciennesi</i>	N/A	Threatened	Perennial streams.
Lake Sturgeon	<i>Acipenser fulvescens</i>	N/A	Endangered	Perennial streams.
Western Banded Killifish	<i>Fundulus diaphanous menona</i>	N/A	Endangered	Perennial streams.
Reptiles				
Blanding's Turtle	<i>Emydoidea blandingii</i>	N/A	Threatened	Marshy shorelines, inland streams, and wet meadows.
Kirtland's snake	<i>Clonophis kirtlandii</i>	N/A	Threatened	Wet meadows and other wetlands.
Spotted Turtle	<i>Clemmys guttata</i>	N/A	Threatened	Fens, bogs and marshes, wet prairies, meadows, wet woods and pond edges.

Based on the information received from correspondence with ODNR, the Project is within the range of the federally and state endangered Indiana bat (*Myotis sodalis*), the federally threatened and state endangered northern long-eared bat (*Myotis septentrionalis*), the state endangered little brown bat (*Myotis lucifugus*), and the state endangered tricolored bat (*Perimyotis subflavus*). These bat species predominantly roost in trees behind loose,

exfoliating bark, in crevices, and cavities, or in the leaves. These species are dependent on the forest structure surrounding the roost tress. The DOW recommended a desktop bat hibernaculum assessment be completed for the Project, which TRC completed for ATSI and submitted to ODNR for concurrence on June 17, 2024. ODNR responded on June 26, 2024, attached as Exhibit 8A, concurring that no caves, cliffs, or mine openings occur in the Project Study Area. Additionally, ODNR stated that because the Project does not involve blasting or impacting the bedrock, the Project is not likely to impact hibernating bats that may be present in the nearby underground mines. In assessing compliance with NWP General Condition 18, although not anticipated, if minor tree clearing is needed as a result of this Project, it will take place within the USFWS recommended tree clearing dates (October 1 – March 31); therefore, no impacts to bat species are anticipated as a result of the construction of this Project.

The Project is within the range of the following federally and state listed mussel species: rayed bean (*Villosa fabalis*), snuffbox (*Epioblasma triquetra*), eastern pondmussel (*Ligumia nasuta*), and the pondhorn (*Unio merus tetralasmus*). Due to the location, and that there is no in-water work proposed in a perennial stream, this Project will not impact these species.

The Project is within the range of the of the following state listed fish species: cisco (*Coregonus artedii*), lake sturgeon (*Acipenser fulvescens*), western banded killifish (*Fundulus diaphanus menona*), American eel (*Anguilla rostrata*), channel darter (*Percina copelandi*), and the greater redhorse (*Moxostoma valenciennesi*). Due to the location, and that there is no in-water work proposed in a perennial stream, this Project will not impact these species.

The Project is within the range of the Blanding's turtle (*Emydoidea blandingii*), a state threatened species. This species inhabits marshes, ponds, lakes, streams, wet meadows, and swampy forests. Although essentially aquatic, the Blanding's turtle will travel over land as it moves from one wetland to the next. 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 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 Kirtland's snake (*Clonophis kirtlandii*), a state threatened species. This secretive species prefers wet fields and meadows. 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 blue-spotted salamander (*Ambystoma laterale*), a state endangered species. 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.

As part of the investigation, TRC submitted a request to the US Fish and Wildlife Service ("USFWS") for an Ecological Review to research the presence of any endangered, threatened, rare, or designated species within one (1) mile of the Project Area. A copy of USFWS's Ecological Review response, dated May 15, 2024, is included as Exhibit 9. The response indicated that due to the Project, type, size, and location, USFWS does not anticipate adverse effects to any federally endangered, threatened, or proposed species or proposed or designated critical habitat.

TRC did not observe the presence of any of the ODNR-listed species during the field investigation due to the highly maintained nature of the utility ROW and industrial land use. Therefore, no impacts are anticipated to any of the listed species detailed in the ODNR and USFWS correspondences.

The Project work limits do not include any in-stream activities and although the Project aerially crosses regulated floodplains, no encroachment to regulated flood plains will result from the Project based on a review of online FEMA Flood Insurance Rate Mapping.

4906-6-05 (B)(10)(f): Areas of Ecological Concern

On February 9, 2024, October 2, 2024, February 27, 2025, and April 8, 2025, TRC biologists conducted wetland and waterways delineations for the Ironville-Lapier 69 kV/Bayshore-Jeep No.2 Stickney 138 kV Transmission Line Structure Relocation and Replacement Project. The Project Study Area is approximately 22.28 acres, located in the city of Toledo, Lucas County, Ohio. Five (5) wetland features (W-EVN-1, W-EVN-2, W-EVN-3, W-EVN-4, and W-EVN-5) and one (1) stream (S-EVN-1/the Maumee River) were identified and delineated within the Project Study Area.

The Limits of Disturbance (LOD) for this Project are located entirely within the Project Study Area and will predominately include the replacement of tower structures on the existing Ironville-Lapier 69 kV/Bayshore-Jeep No.2 Stickney 138 kV Transmission Line. As currently proposed, it is TRC's understanding that this Project would fall under Nationwide Permit (NWP) 57 - Electric Utility Line and Telecommunications Activities, with the need for a Section 10 Permit, due to the overhead utility lines spanning a navigable waterway, the Maumee River. NWP 57 (effective February 25, 2022, valid through March 14, 2026), authorizes the installation of poles, lines and the construction of access roads for the construction and maintenance of electric utility lines or telecommunication lines, including overhead lines and substations, in nontidal waters of the United States, provided the activity does not cause the loss of greater than 0.5-acre of waters of the United States. The proposed placement of structure 52 will result in permanent wetland impacts of less than 0.1-acre, which is below the 0.5-acre threshold of NWP 57. This Project is located in the city of Toledo in Lucas County, Ohio, which is within the USACE Buffalo Regulatory District. The Project Study Area consists mainly of an existing utility right-of-way (ROW), surrounded by industrial land use. The surface water delineation report and photographic record are included in Exhibit 10.

A review of the National Conservation Easement Database (www.conservationeasement.us) revealed no conservation easements in the Project Study Area.

4906-6-05(B)(10)(g): Other Information

Construction and operation of the proposed Project will be in accordance with the requirements specified in the latest revision of the National Electrical Safety Code as adopted by the PUCO and will meet all applicable safety standards established by the Occupational Safety and Health Administration.

No other or unusual conditions are expected that will result in significant environmental, social, health or safety impacts.

4906-6-07: Documentation of Construction Notice Transmittal and Availability for Public Review

This Construction Notice application is being provided concurrently with its docketing with the Board to the following officials in the city of Toledo, Lucas County, Ohio.

Lucas County

Commissioner Lisa A. Sobecki
President, Lucas County
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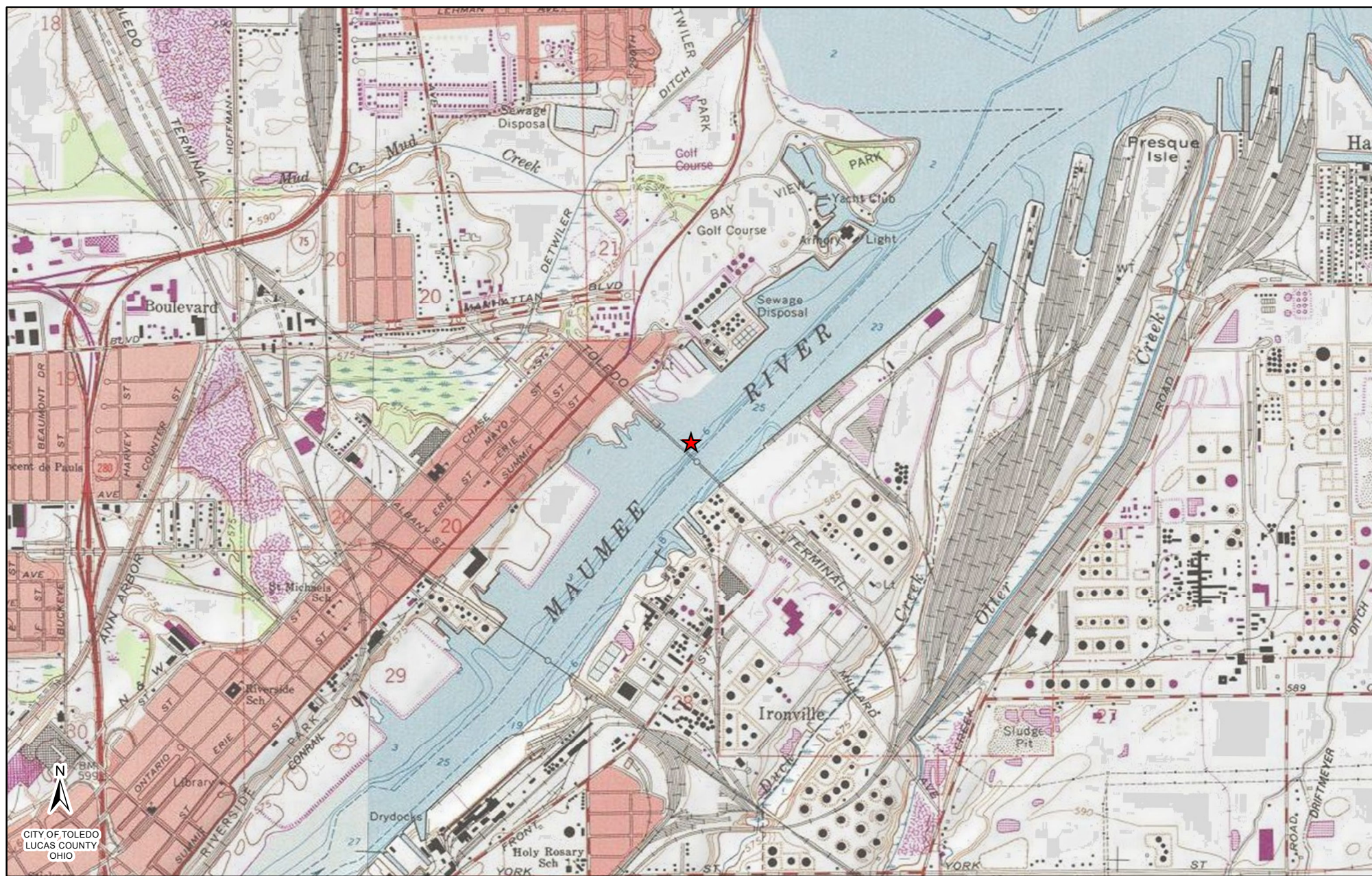
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325 Michigan Street,
Toledo, OH 43604
terwase.ngur@toledolibrary.org

Per Adm.Code 4906-6-07(B), exemplar copies of the notice letters sent to local government officials and to the library have been included with this application as proof of compliance with requirements of Adm.Code 4906-6-07(A)(1) and 4906-6-07(A)(2).

Information is posted at www.firstenergycorp.com/about/transmission_project/ohio.html on how to request an electronic or paper copy of this Construction Notice application. The link to this website is being provided in accordance with Adm.Code 4906-6-07(B), which requires ATSI to provide the OPSB with proof of compliance with Adm.Code 4906-6-07(A)(3).



N
BM
599
CITY OF TOLEDO
LUCAS COUNTY
OHIO

0 1,000 2,000 4,000
Feet

Reference:

USGS Topographical Overlay; ODOT

Coordinate System:

NAD 1983 StatePlane Ohio North FIPS 3401 Feet
Projection: Lambert Conformal Conic; Units: Foot US



EXHIBIT 1

ATSI[®]

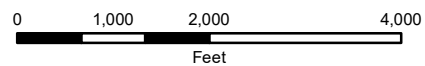
American Transmission Systems, Inc.
a subsidiary of FirstEnergy Corp.

**Bayshore-Jeep No. 2 Stickney 138 kV
Transmission Line Structure
Relocation and Replacement Project**



LEGEND:

★ Project Location



Reference:

ESRI Imagery; ODOT

Coordinate System:

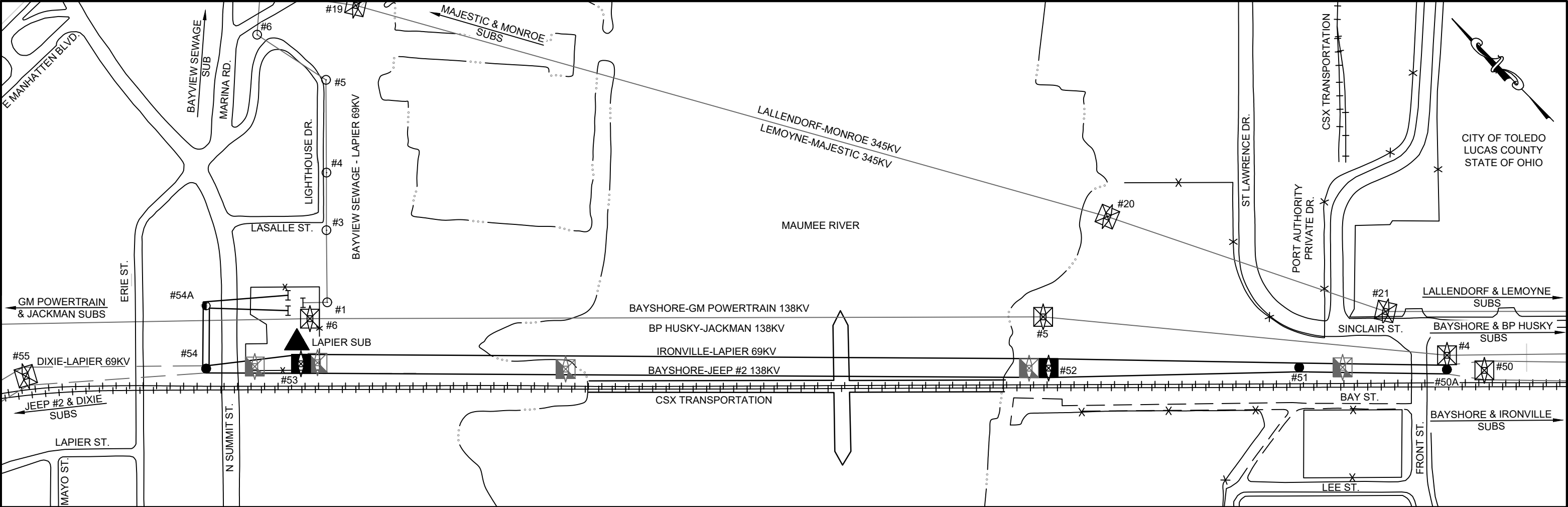
NAD 1983 StatePlane Ohio North FIPS 3401 Feet
Projection: Lambert Conformal Conic; Units: Foot US



EXHIBIT 2



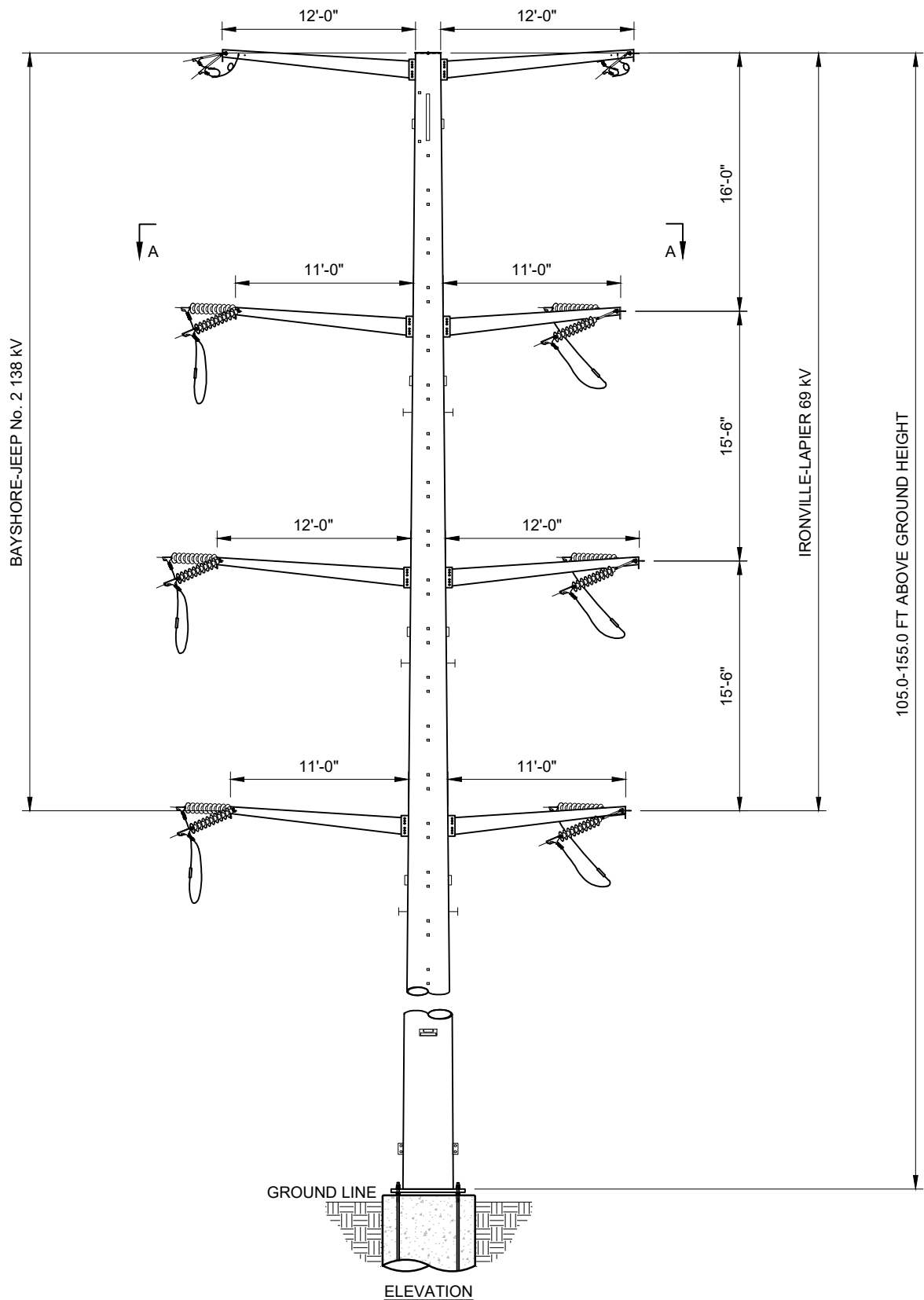
**Bayshore-Jeep No. 2 Stickney 138 kV
Transmission Line Structure
Relocation and Replacement Project**



BAYSHORE-JEEP No. 2 STICKNEY 138 kV
TRANSMISSION LINE STRUCTURE
RELOCATION AND REPLACEMENT PROJECT

GENERAL PROJECT LAYOUT

EXHIBIT 3



ATSI[®]

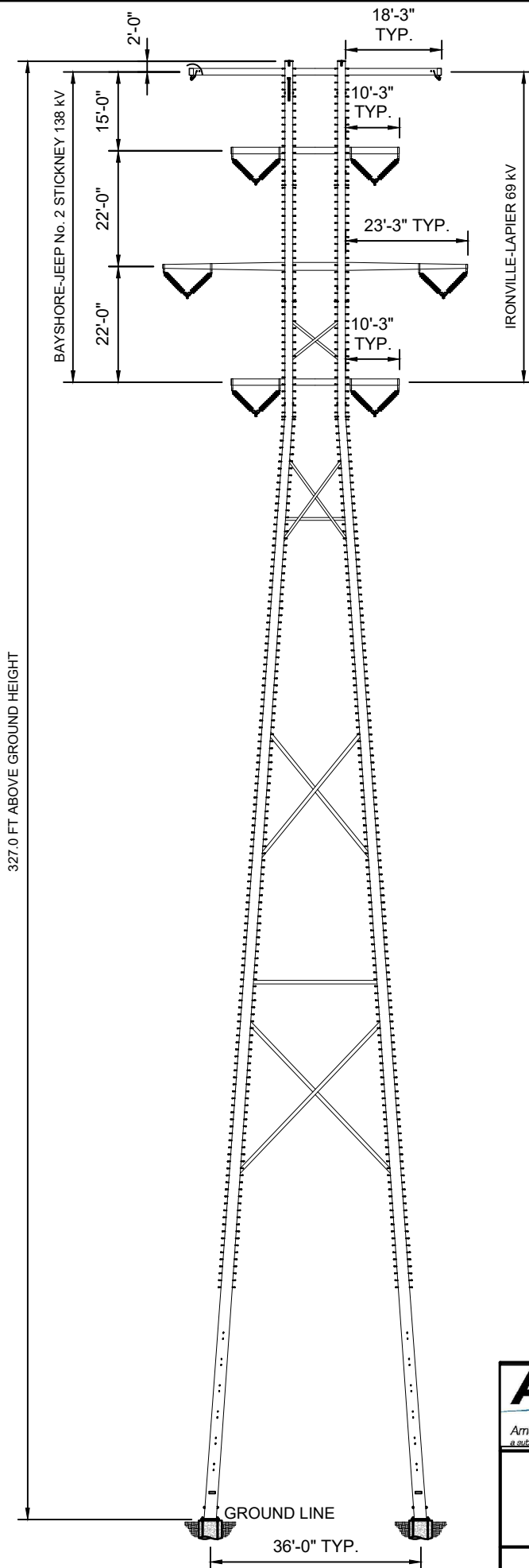
American Transmission Systems, Inc.
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BAYSHORE-JEEP No. 2 STICKNEY 138 kV
TRANSMISSION LINE STRUCTURE
RELOCATION AND REPLACEMENT PROJECT

69 kV/138 kV DOUBLE CIRCUIT TUBULAR STEEL DEADEND
SINGLE POLE STRUCTURE (Nos. 50A & 51)

EXHIBIT 4

SCALE: N.T.S.



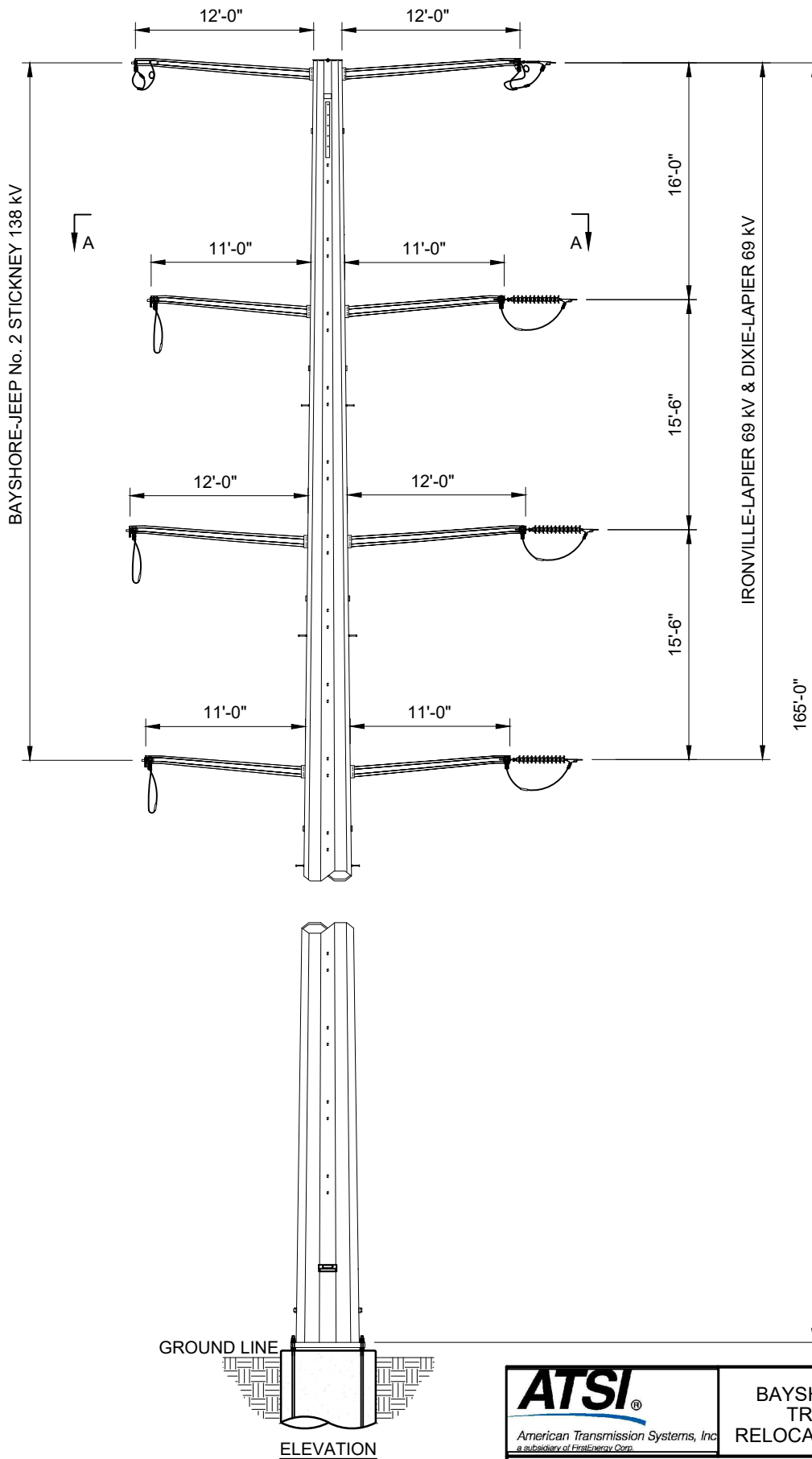
SCALE: N.T.S.

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BAYSHORE-JEEP No. 2 STICKNEY 138 kV
 TRANSMISSION LINE STRUCTURE
 RELOCATION AND REPLACEMENT PROJECT

69 kV/138 kV DOUBLE CIRCUIT VALMONT PYRAMAX
 SUSPENSION TOWER STRUCTURE (No. 52)

EXHIBIT 5



SCALE: N.T.S.

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American Transmission Systems, Inc.
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BAYSHORE-JEEP No. 2 STICKNEY 138 kV
TRANSMISSION LINE STRUCTURE
RELOCATION AND REPLACEMENT PROJECT

69 kV/138 kV DOUBLE CIRCUIT TUBULAR STEEL DEADEND
AND LOOP SINGLE POLE STRUCTURE (No. 54)

EXHIBIT 6



EXHIBIT 7

In reply refer to:
2024-LUC-61334

June 10, 2024

Justin McKissick, MA, RPA
Project Archaeologist/Field Director
TRC Environmental Corporation
317 E Carson Street, Suite 113
Pittsburgh, PA 15219
Email: JMcKissick@trccompanies.com

RE: Section 106 Review: Ironville-Lapier 69kV Tower Structure Replacement Project, City of Toledo,
Lucas County, Ohio

Dear Mr. McKissick:

This letter is in response to the correspondence received on May 16, 2024, regarding the above reference project in Lucas 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 (O.R.C.) and the Ohio Power Siting Board rules for siting this project. 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 proposed project includes the replacement of existing tower structures along the transmission line crossing the Maumee River. Based on information submitted by you, which included a Project Summary Form, no historic properties, districts, or archaeological sites are located within the direct Area of Potential Effect (APE), as defined by you. Several resources fifty years of age or older were identified within the proposed indirect APE. Based on the information submitted, new infrastructure will not exceed existing infrastructure height and no tree clearing is anticipated. Therefore, based on this information, it is the SHPO's opinion that no cultural resource studies are warranted for the project. Furthermore, as proposed, the project will have no effect on historic properties. No further coordination is required for this project unless the scope of work changes or archaeological remains are discovered during the course of the project. In such a situation, this office should be contacted as required by 36 CFR § 800.13. If you have any questions concerning this review, please contact me via email at sbiehl@ohiohistory.org. Thank you for your cooperation.

Sincerely,

A handwritten signature in blue ink that reads "Stephen M. Biehl".

Stephen M. Biehl, Project Reviews Coordinator (archaeology)
Resource Protection and Review
State Historic Preservation Office

RPR Serial No. 1103215



Ohio Department of Natural Resources

MIKE DeWINE, GOVERNOR

MARY MERTZ, DIRECTOR

Office of Real Estate
Tara Paciorek, Chief
2045 Morse Road – Bldg. E-2
Columbus, Ohio 43229
Phone: (614) 265-6661
Fax: (614) 267-4764

May 29, 2024

Jenna Slabe
TRC Companies, Inc.
1382 West 9th Street, Suite 400
Cleveland, Ohio 44113

Re: 24-0655_429847.0073 Ironville-Lapier 69kV Tower Structure Replacement

Project: The proposed project involves the replacement of existing tower structures along the Ironville-Lapier 69kV transmission line crossing the Maumee River.

Location: The proposed project is located in Washington Township, Lucas 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 within one mile of the project area:

Blanding's Turtle (*Emydoidea blandingii*), T

Conservation status abbreviations are as follows: E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; SI = state special interest; U = state status under review; X = presumed extirpated in Ohio; FE = federally endangered, and FT = federally threatened. The review was performed on the specified project area as well as an additional one-mile radius. Records searched date from 1980. Features searched include locations of rare and endangered plants and animals determined to be of value to the conservation of their species, high quality plant communities, animal breeding assemblages, and outstanding geological features.

The species listed above is not recorded within the boundaries of the specified project area. However, please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for an area is not a statement that rare species or unique features are absent from that area.

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 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 endangered 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 species of bats 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. If trees are present within the project area, and trees must be cut, the DOW 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. If trees are present within the project area, and trees must be cut during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 through August 15, prior to any cutting. Mist net and acoustic surveys should be conducted in accordance with the most recent version of the "[OHIO DIVISION OF WILDLIFE GUIDANCE FOR BAT SURVEYS AND TREE CLEARING](#)". If state listed bats are documented, DOW recommends cutting only occur from October 1 through March 31. However, limited summer tree cutting may be acceptable after consultation with the DOW (contact Eileen Wyza at Eileen.Wyza@dnr.ohio.gov).

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 & NORTHERN LONG-EARED 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 Eileen Wyza 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 following listed mussel species.

Federally Endangered

rayed bean (*Villosa fabalis*)

snuffbox (*Epioblasma triquetra*)

State Endangered

eastern pondmussel (*Ligumia nasuta*)

State Threatened

pondhorn (*Unio merus tetralasmus*)

Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact these species.

The project is within the range of the of the following listed fish species.

State Endangered

cisco (*Coregonus artedii*)

lake sturgeon (*Acipenser fulvescens*)

western banded killifish (*Fundulus diaphanus menona*)

State Threatened

American eel (*Anguilla rostrata*)

channel darter (*Percina copelandi*)

greater redhorse (*Moxostoma valenciennesi*)

Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact these species.

The project is within the range of the Blanding's turtle (*Emydoidea blandingii*), a state threatened species. This species inhabits marshes, ponds, lakes, streams, wet meadows, and swampy forests. Although essentially aquatic, the Blanding's turtle will travel over land as it moves from one wetland to the next. 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 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 Kirtland's snake (*Clonophis kirtlandii*), a state threatened species. This secretive species prefers wet fields and meadows. 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 blue-spotted salamander (*Ambystoma laterale*), a state endangered species. 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.

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.

Geological Survey: The Division of Geological Survey has the following comments.

Impacts on Public and Private Water Supplies

The proposed project area is in Washington Township, Lucas County. The construction of this facility is not expected to have significant impacts on public or private well yields. The Groundwater Vulnerability Index for the proposed project area ranges from 108 to 144 (Nelson and Others, 2022), which equates to a moderate to high groundwater vulnerability (OEPA, 2014). The construction of the facility is not expected to pose a significant groundwater contamination risk.

Groundwater Inventory

Groundwater resources are plentiful throughout the project area. Wells developed in the Silurian Greenfield Dolomite bedrock are likely to yield 25 to 100 gallons per minute (Hallfrisch, 1986 and Ohio Department of Natural Resources, Division of Water, Bedrock Aquifer Map, 2000). Wells developed in the unconsolidated material of the Lake Maumee Buried Valley Aquifer, or the Maumee River Buried

Valley Aquifer are likely to yield 5 to 25 gallons per minute (Ohio Department of Natural Resources, Division of Water, Statewide Unconsolidated Aquifer Map, 2000).

ODNR has record of 227 water wells drilled within one mile of the project area. These wells range in depth from 5 to 254 feet, with an average depth of 52 feet. The most common aquifer listed is sand and gravel. Sustainable yields of 1 to 9 gallons per minute were reported for 2 wells within one mile of the project area, with the average sustainable yield being 5 gallons per minute (Ohio Department of Natural Resources, Division of Geological Survey, Ohio Water Wells).

Oil, Gas and Mining

ODNR has record of ten oil and gas wells within one mile of the proposed project area. Five of these wells are listed as storage wells, four are plugged and abandoned, and one is listed as final restoration (Ohio Department of Natural Resources, Division of Oil and Gas, Ohio Oil and Gas Wells Locator).

ODNR has record of two mining operations within one mile of the project area. There is one abandoned underground mine located 0.8 miles southeast of the project area, and there is one surface affected area located 1 mile southeast of the project area. The abandoned underground mine has an unknown extent and is owned by Fenix & Scisson, Inc. The surface affected area is a clay pit owned by Envirosafe Services of Ohio, Inc and its status is listed as released (Ohio Department of Natural Resources, Division of Mineral Resources, Mines of Ohio).

Geohazards

Several small earthquakes have historically been recorded within 15 miles of the site. Details regarding these earthquakes are listed in the chart below (Ohio Department of Natural Resources, Division of Geological Survey, Ohio Earthquake Epicenters):

<u>Date</u>	<u>Magnitude</u>	<u>Distance to Site Boundary</u>	<u>County</u>	<u>Township</u>
December 7, 1983	2.0	1.4 Miles	Lucas	Washington
January 14, 1984	2.6	1.5 Miles	Lucas	Oregon
October 10, 1993	2.0	2.4 miles	Lucas	Washington
October 28, 1926	3.1	4.1 miles	Lucas	Washington
January 18, 1948	2.9	5.7 miles	Lucas	Washington
June 12, 1953	3.5	6.0 miles	Lucas	Washington
October 28, 1926	3.4	7.0 miles	Lucas	Washington

Karst

ODNR has no record of karst features within one mile of the project area. The nearest verified karst location is 19 miles south of the project area. Karst features usually form in areas that are covered by thin or no glacial drift and where the bedrock is limestone or dolomite. Karst formation under the project area is unlikely due to substantial unconsolidated deposits (Ohio Department of Natural Resources, Division of Geological Survey, Ohio Karst).

Drift Thickness and Bedrock Geology

There are thick deposits of drift material below the project area. Drift is thickest on the southeast side of the project area (122 feet), drift is thinnest on the northwest side of the project area (95 feet) (Powers and Swinford, 2004). The uppermost bedrock unit under the project area is Greenfield Dolomite (Ohio Department of Natural Resources, Division of Geological Survey, Bedrock Geology Map of Ohio).

Soils

The project area consists primarily of soils derived from glaciofluvial deposits, and alluvium. Del Rey, Sloan, and Udorthents are the most common soil series found within the boundaries of the project area. These soils have a loam texture and together cover the entire project area. The Sloan soil, which makes up approximately 9 percent of the project area is a hydric soil which is frequently ponded from December to May. Hydric soils produce an anaerobic environment which may speed up the corrosion of certain materials (USDA Web Soil Survey).

Coastal Management: The Office of Coastal Management has the following comment.

The Office of Coastal Management comments that pursuant to the Coastal Zone Management Act of 1972 and its corresponding federal regulations, a U.S. Army Corps of Engineers permit may not be issued in Ohio's designated Coastal Area until a Federal Consistency concurrence is issued by ODNR. For additional information on Federal Consistency reviews, please visit the [Ohio Coastal Management Program Federal Consistency](#) webpage.

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.

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

EXHIBIT 8A

From: Eileen.Wyza@dnr.ohio.gov
To: [Molnar, Maggie](#)
Cc: [Falkinburg, Brad](#); [Slabe, Jenna](#)
Subject: RE: [EXTERNAL] RE: Desktop Hibernacula Assessment: FirstEnergy's Ironville-Lapier 69kV Tower Structure Replacement Project
Date: Wednesday, June 26, 2024 12:50:24 PM
Attachments: [image001.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)
[image008.png](#)
[image011.png](#)
[image003.png](#)
[image010.png](#)

This is an **External** email. Do not click links or open attachments unless you validate the sender and know the content is safe.

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Hi Maggie,

Thank you for that information. Per review of the desktop survey provided for the FirstEnergy's Ironville-Lapier 69kV Tower Structure Replacement Project, the Ohio Division of Wildlife concurs with your assessment that no caves, cliffs, or mine openings occur in the project area. Additionally, because the project does not involve blasting or impacting the bedrock, the project is not likely to impact hibernating bats that may be present in the nearby underground mines.

Should any reported conditions change before or during construction, please contact me for additional guidance.

Thank you,

Eileen Wyza, Ph.D.
(she/her/hers)
Wildlife Biologist
Ohio Division of Wildlife
Phone: 614-265-6764
Email: Eileen.Wyza@dnr.ohio.gov

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From: Molnar, Maggie <MMolnar@trccompanies.com>
Sent: Monday, June 24, 2024 1:16 PM
To: Wyza, Eileen <Eileen.Wyza@dnr.ohio.gov>
Cc: Falkinburg, Brad <BFalkinburg@trccompanies.com>; Slabe, Jenna <JSlabe@trccompanies.com>
Subject: RE: [EXTERNAL] RE: Desktop Hibernacula Assessment: FirstEnergy's Ironville-Lapier 69kV Tower Structure Replacement Project

As currently proposed, no subsurface activity will occur that may impact bedrock. As proposed, the Project plans to replace the existing structure in the same location.

Thank you,
Maggie Molnar, PWS
Ecologist



781 Science Boulevard, Suite 200, Gahanna, Ohio 43230
D 614.423.6342 | C 614.949.2437
[LinkedIn](#) | [Twitter](#) | [Blog](#) | [TRCcompanies.com](#)

Please note that our address has changed.

From: Eileen.Wyza@dnr.ohio.gov <Eileen.Wyza@dnr.ohio.gov>
Sent: Monday, June 17, 2024 11:17 AM
To: Slabe, Jenna <JSlabe@trccompanies.com>
Cc: Falkinburg, Brad <BFalkinburg@trccompanies.com>; Molnar, Maggie <MMolnar@trccompanies.com>
Subject: [EXTERNAL] RE: Desktop Hibernacula Assessment: FirstEnergy's Ironville-Lapier 69kV Tower Structure Replacement Project

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Hello Jenna,

Is any subsurface disturbance planned for this project, particularly where the bedrock may be impacted?

Eileen Wyza, Ph.D.
(she/her/hers)
Wildlife Biologist
Ohio Division of Wildlife
Phone: 614-265-6764
Email: Eileen.Wyza@dnr.ohio.gov

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Please consider the environment before printing this email.

From: Slabe, Jenna <JSlabe@trccompanies.com>

Sent: Monday, June 17, 2024 10:29 AM

To: Wyza, Eileen Eileen.Wyza@dnr.ohio.gov

Cc: Falkinburg, Brad <BFalkinburg@trccompanies.com>; Molnar, Maggie <MMolnar@trccompanies.com>

Subject: Desktop Hibernacula Assessment: FirstEnergy's Ironville-Lapier 69kV Tower Structure Replacement Project

Eileen,

In response to ODNR's DOW recommendations (attached), TRC completed a desktop hibernacula assessment to determine if potential hibernaculum is present within FirstEnergy's proposed Ironville-Lapier 69kV Tower Structure Replacement Project located in the City of Toledo, Lucas County, Ohio.

Please let us know if you have any questions on the provided desktop assessment or require any additional information, thank you!

Jenna Slabe

Ecologist
Planning, Permitting, and Licensing



1382 W 9th St, Suite 400, Cleveland, OH 44113

C 330.998.0481

[LinkedIn](#) | TRCcompanies.com

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United States Department of the Interior



FISH AND WILDLIFE SERVICE

Ecological Services
4625 Morse Road, Suite 104
Columbus, Ohio 43230
(614) 416-8993 / FAX (614) 416-8994



May 15, 2024

Project Code: 2024-0079293

Dear Jenna Slabe:

The U.S. Fish and Wildlife Service (Service) 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 effects to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

Federally Threatened and Endangered Species: Due to the project, type, size, and location, we do not anticipate adverse effects to federally endangered, threatened, or proposed species or proposed or designated critical habitat. If there are any project modifications during the term of this action, or additional information for listed or proposed species or their critical habitat becomes available, or if new information reveals effects of the action that were not previously considered, then please contact us for additional project review.

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.

Sincerely,

Erin Knoll
Field Office Supervisor

Surface Water Delineation Report

Ironville-Lapier 69kV Tower Structure Replacement Project

April 2025

City of Toledo, Lucas County, Ohio

Prepared For:



FirstEnergy Corporation

341 White Pond Drive, Building B3
Akron, Ohio 44320

Prepared By:

TRC Environmental Corporation

1382 West Ninth Street, Suite 400
Cleveland, Ohio 44113

TRC Project Number: 429847.0073.0000



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ACRONYMS AND DEFINITIONS

1987 Manual	United States Army Corps of Engineers 1987 Wetland Delineation Manual
CFR	Code of Federal Regulations
EPA	Environmental Protection Agency
FAC	Facultative
FACU	Facultative Upland
FACW	Facultative Wetland
FEMA	Federal Emergency Management Agency
FirstEnergy	FirstEnergy Corporation
GPS	Global Positioning System
HHEI	Headwater Habitat Evaluation Index
HUC	Hydrologic Unit Code
NHD	National Hydrography Dataset
OAC	Ohio Administrative Code
OBL	Obligate Wetland
OEPA	Ohio Environmental Protection Agency
ORAM	Ohio Rapid Assessment Method
Project	Ironville-Lapier 69kV Tower Structure Replacement Project
Project Study Area	22.28 acres, located in the City of Toledo, Lucas County, Ohio
QHEI	Qualitative Habitat Evaluation Index
Redox	Redoximorphic
Regional Supplement	Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)
Report	Surface Water Delineation Report
TRC	TRC Environmental Corporation
UPL	Obligate Upland
USACE	United States Army Corps of Engineers
USDA-NRCS	United States Department of Agriculture – Natural Resources Conservation Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1.0 Introduction

On behalf of FirstEnergy Corporation (FirstEnergy), TRC Environmental Corporation (TRC) performed a surface water delineation for the Ironville-Lapier 69kV Tower Structure Replacement Project (Project). The Project is 22.28 acres total in size, located in the City of Toledo, Lucas County, Ohio (Project Study Area). The proposed Project involves the replacement of existing tower structures along the Ironville-Lapier 69kV transmission line crossing the Maumee River. TRC conducted the required field investigations and prepared this Surface Water Delineation Report (Report) for the Project. A site location map of the proposed Project Study Area can be found in **Appendix A, Figure 1**.

On February 9, 2024, October 2, 2024, February 27, 2025, and on April 8, 2025, TRC personnel performed field investigations to evaluate and delineate surface water resources (i.e., wetlands and streams) located within the Project Study Area. The delineations were conducted by qualified wetland scientists in accordance with the United States Army Corps of Engineers (USACE) parameters. The objective was to evaluate and delineate potential surface water resources within the Project Study Area, such that the resources could be considered during each phase of the Project. This Report describes the surface water delineation methodology implemented and the existing surface water resources identified within the Project Study Area during field investigations.

The northern Project Study Area limits are located at the following approximate centroid coordinates: 41.687855, -83.487789; and the southern Project Study Area is located the following approximate centroid coordinates: 41.679868, -83.476779 in the City of Toledo, Lucas County, Ohio. The Project Study Area occurs within an existing utility right-of-way and minor forested habitat surrounded by industrial and residential land use. **Appendix A, Figure 1**, and **Figure 2**, provide further information on the location of the proposed Project Study Area.

2.0 Methodology

To complete the surface water delineation and evaluation of the Project Study Area, TRC followed the guidelines and methods outlined by the USACE and Ohio Environmental Protection Agency (OEPA), as described within this section.

2.1 Wetland Parameters

The *USACE 1987 Wetland Delineation Manual (1987 Manual)* (USACE, 1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0) (Regional Supplement)* (USACE, 2012), and the March 6, 1992 guidance memorandum (Williams, 1992) emphasize a three parameter approach to wetland boundary determination in the field. This approach involves the following:

- Evidence of wetland hydrology;
- Presence of hydric soils; and

- Predominance of hydrophytic vegetation as defined by *The National Wetland Plant List: 2022 Wetland Ratings* (USACE, 2023).

Positive indicators of all three parameters are normally present in wetlands and serve to distinguish between both dry land and transitional plant communities.

2.1.1 Hydrology

The *1987 Manual* and *Regional Supplement* provides guidelines for determining the presence of wetland hydrology. Criteria for wetland hydrology are met if the area is inundated or saturated at the soil surface during the growing season for a time sufficient to develop hydric soils and to support hydrophytic vegetation.

2.1.2 Hydric Soils

Hydric soils are defined as soils “that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part of the soil” (Federal Register, 1994). Hydric soil indicators described in the *Field Indicators of Hydric Soils in the United States: A Guide for Identifying and Delineating Hydric Soils Version 8.2* (USDA, NRCS, 2024) were used to identify and document hydric soils as described in the *Regional Supplement*.

2.1.3 Hydrophytic Vegetation

To determine the presence of hydrophytic vegetation, the dominant and non-dominant species in each major vegetative stratum (e.g., tree, shrub/sapling, herbaceous, and woody vine) were identified and recorded.

Plants are placed into indicator status categories depending on their probability of occurring in a wetland in accordance with the USACE’s *The National Wetland Plant List: 2022 wetland ratings* (USACE, 2023). There are five (5) indicator status categories for plants:

1. Obligate wetland plants (OBL): plants that occur almost always (>99%) in wetlands in natural conditions, but which may also occur rarely (<1%) in non-wetlands;
2. Facultative wetland plants (FACW): plants that occur usually (>67-99%) in wetlands but also occur (1-33%) in non-wetlands;
3. Facultative plants (FAC): plants with a similar likelihood (33-67%) of occurring in both wetlands and non-wetlands;
4. Facultative upland plants (FACU): plants that occur sometimes (1-<33%) in wetlands, but occur more often (>67-99%) in non-wetlands; and
5. Obligate upland plants (UPL): plants that occur rarely (<1%) in wetlands but occur almost always (>99%) in non-wetlands under natural conditions.

A prevalence of dominant species that are FAC, FACW, and/or OBL indicates the presence of hydrophytic vegetation.

2.2 USACE Wetland Delineation

Qualified wetland scientists from TRC conducted surface water field investigations on February 9, 2024, October 2, 2024, February 27, 2025, and on April 8, 2025. The surface water field investigations were conducted within the predetermined Project Study Area that was developed in accordance with the Project location information provided by FirstEnergy (**Appendix A, Figure 2**). Surface water delineations were conducted using the Federal Routine Determination Method presented in the *1987 Manual* and *Regional Supplement*, including clarifications and interpretations provided in the March 6, 1992, guidance memorandum, and the USACE and Environmental Protection Agency (EPA) guidance on jurisdictional forms (EPA and USACE, 2007 and USACE, 2008).

Hydrology was determined based on a number of indicators that are divided into two categories, primary and secondary. The *1987 Manual* defines hydrology as present when at least one (1) primary indicator (i.e., surface water, saturation, etc.) or two (2) secondary indicators (i.e., geomorphic position, stunted or stressed plants, etc.) are identified. One (1) primary indicator is sufficient to determine if hydrology is present; however, if these are absent then two (2) or more of the secondary indicators are required to determine hydrology. If other probable hydrologic evidence was found, then this was subsequently documented on the data form.

Soils were examined in the field by using a tile spade, generally to a depth of at least 22 inches below the soil surface, until refusal, or positive hydric soil indicators were met below 22 inches, whichever was shallower. Soil coloration was identified using a *Munsell Soil Color Chart* (Munsell Color Company, 2009). Other characteristics, such as the presence of redoximorphic (Redox) concentrations and depletions and soil texture were also recorded. Redox concentrations and depletions are created when the soil is saturated and has anaerobic conditions (without oxygen gas) which leads to changes in the chemical processes in the soil that produce visible color changes in the soil. Hydric characteristics such as organic soil layers, depleted matrix, gleying, and hydrogen sulfide odor, were noted when observed. Soils at both wetland (if present) and dry land data plot locations were characterized and recorded on the data form.

The presence of hydrophytic vegetation was determined using the procedures described in the *Regional Supplement* and recorded on the data form. Vegetation in both dry land and wetland communities was characterized using a real dominance method, with a radius of 30-feet around the soil sample location for trees and woody vines, 15-foot radius for saplings and shrubs, and a 5-foot radius for herbaceous plants. Plant communities meeting the “50/20” Rule or meeting one (1) of the other indicators set forth in the *1987 Manual*, *Regional Supplement*, and guidance memorandums are considered hydrophytic for the purposes of the wetland classification criteria. In areas where the vegetation was disturbed or not identifiable due to seasonal conditions, soil and hydrology characteristics, and professional judgment/experience were utilized in assessing the primary determining factors for classification as wetlands.

If the soils, hydrology, and vegetation characteristics at a survey point indicated that it was within a wetland, the boundary of the wetland was determined, and the approximate boundary was flagged using wetland flagging and recorded using a handheld Trimble R1 and Juniper Systems Geode, both with sub-meter accuracy. Areas observed to have problematic or difficult situations were delineated utilizing the procedures identified in the *Regional Supplement*, Section 5 – “Difficult Wetland Situations in the Northcentral and Northeast Region.” Data from the Global Positioning System (GPS) survey was downloaded and integrated into a Geographic Information Systems database for the proposed work areas and used to make the accompanying figures. Identified wetlands were classified according to Cowardin et al. (Cowardin, Carter, Golet, & LaRoe, 1979). Photographs are included in **Appendix B**.

2.3 Ohio Environmental Protection Agency’s Ohio Rapid Assessment Method

According to the Ohio Wetland Water Quality Standards, a wetland quality category (Category 1, Category 2, or Category 3) must be assigned for each wetland if a project will require discharge of dredged or fill material into jurisdictional wetlands. In general, Category 1 wetlands are considered to be of “low quality”, Category 2 wetlands are considered to be of “moderate quality” and Category 3 wetlands are considered to be of “high quality.”

The OEPA has developed the Ohio Rapid Assessment Method (ORAM), which can be utilized to evaluate wetland habitat quality based on the apparent functions and values of the wetland resource. The two (2) primary components of the ORAM are the Narrative Rating and the Quantitative Rating. Each delineated wetland resource received a provisional category designation based on the results of the ORAM Narrative and Quantitative Ratings and review of narrative criteria in the Ohio Administrative Code (OAC) 3745-1-54(C) (Mack, 2000).

2.4 USACE Waterbody Identification

During field investigations, other waterbody features including streams, ponds, lakes, etc. were investigated. Streams within the Project Study Area were identified by the presence of an ordinary high-water mark and scoured channel or defined bed and banks. All streams identified in the Project Study Area that were wider than five feet were demarcated via GPS from bank-to-bank. Streams that were less than five feet wide had the centerline demarcated.

Identified streams were evaluated utilizing OEPA approved methods for stream habitat assessment which include the Qualitative Habitat Evaluation Index (QHEI) (OEPA, 2006) and/or the Headwater Habitat Evaluation Index (HHEI) (OEPA, 2020) assessment method. These approved assessment methods provide an empirical, quantified evaluation of streams as required by the State of Ohio for permitting and mitigation purposes. These methods assess stream habitat to provide a qualitative index (or score) to determine the level of compensatory mitigation that may be needed for impacts to waters of the U.S. (i.e., streams).

Use of the QHEI or HHEI assessment method is determined based on the size of the stream’s drainage area and/or the stream’s pool depths. Where coverage was available, the drainage area

was calculated using automated basin characteristics from StreamStats v4.28.0: Ohio (USGS, 2022).

Following OEPA guidance, streams with a drainage area of greater than 1.0 square mile (2.6 square kilometers) or which have pools with maximum depths over 15.8 inches (40.0 centimeters), as determined by measuring pool depth within the stream, were evaluated using the QHEI. Data on these streams were collected on the QHEI form provided by the OEPA. The QHEI is composed of six (6) principal metrics: substrate, instream cover, channel morphology, riparian zone and bank erosion, pool/glide and riffle-run quality, and map gradient. Each metric is scored separately and summed to obtain the total QHEI score. Using the scoring methods associated with these forms, the stream is placed into the following general narrative ranges, dependent on stream size; for smaller streams (≤ 20 sq. mi): Excellent >70 , Good 55-69, Fair 43-54, Poor 30-42, and Very Poor <30 ; for larger streams (>20 sq. mi): Excellent >75 , Good 60-74, Fair 45-59, Poor 30-44, and Very Poor <30 .

The HHEI was utilized to score streams with a drainage area of <1.0 square mile (2.6 square kilometers). Data on these streams were collected on the HHEI forms, provided by the OEPA. Observational data regarding the physical nature of the stream corridor including stream flow, riparian zone land use and buffer width, and channel modification were recorded. Measurements included bankfull width, maximum pool depth and substrate composition.

Streams identified during the course of the investigation were classified as perennial, intermittent, or ephemeral waterways in accordance with the rationale defined by the USACE.

The Project Study Area was also investigated for areas that were considered “open water” by the USACE. According to the USACE an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high-water mark can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of “open waters” may include rivers, lakes, and ponds. Artificial “open water” features may include stormwater retention basins, fish hatchery ponds, drainage tile pump stations, etc.

3.0 Results

3.1 Site Description

The Project Study Area is 22.28 acres total in size, located in the City of Toledo, Lucas County, Ohio and is within the Delaware Creek-Maumee River watershed (12-Digit Hydrologic Unit Code [HUC]: 041000090904), the Detwiler Ditch-Frontal Lake Erie watershed (12-Digit HUC: 041000010309), and the Otter Creek-Frontal Lake Erie watershed (12-Digit HUC: 041000100706) (USGS, 2022).

The Project Study Area is shown on the Oregon, OH (2019) United States Geological Survey (USGS) 7.5-minute series topographic quadrangle (**Appendix A, Figure 1**).

The United States Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS) Web Soil Survey (USDA-NRCS, 2016) was used to identify the soil types contained within the Project Study Area (**Appendix A, Figure 3**). **Table 1** provides a summary of the soils identified within the proposed Project Study Area.

Table 1. Soils Type Summary

Map Unit Symbol	Map Unit Name	Hydric Status	Acres Within Study Area	Percent Cover in Study Area
DcA	Del Rey-Urban land complex, 0 to 3 percent slopes	Non-Hydric w/ Hydric Inclusions	4.75	21.3%
DdA	Del Rey loam, 0 to 3 percent slopes	Non-Hydric w/ Hydric Inclusions	1.48	6.6%
Mu	Muskego muck	Hydric	0.32	1.4%
So	Sloan loam, occasionally flooded	Hydric	2.17	9.7%
Uo	Udorthents, loamy	Non-Hydric	13.56	60.9%
TOTAL			22.28	100.0%
Note: Accessed online April 2025 at: http://websoilsurvey.sc.egov.usda.gov .				

There are two (2) United States Fish and Wildlife Service (USFWS) National Wetlands Inventory features, a freshwater emergent wetland and the Maumee River, which is mapped as R2UBH (Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded), within the Project Study Area (**Appendix A, Figure 4**) (USFWS, 2022).

The USGS National Hydrography Dataset (NHD) (USGS, 2018) Downloadable Data Collection from The National Map (USGS, 2022) is a comprehensive set of digital spatial data that encodes information about naturally occurring and constructed bodies of surface water (e.g., lakes, ponds, and reservoirs), paths through which water flows (e.g., canals, ditches, streams, and rivers) and related entities such as point features (e.g., springs, wells, stream gages, and dams). There is one (1) NHD stream (Maumee River) mapped within the Project Study Area (**Appendix A, Figure 4**).

According to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map panels, 39095C0115F (eff. 2/22/2024) and 39095C0103F (eff. 2/22/2024), a portion of the proposed Project is located within Zone AE, a mapped 100-year floodplain (**Appendix A, Figure 4**) (FEMA, 2024).

3.2 Surface Water Resource Field Delineations

TRC performed field investigations on February 9, 2024, October 2, 2024, February 27, 2025, and on April 8, 2025. Weather conditions were warmer than usual for the season in 2024 and

typical for the season in 2025. Both native and non-native herbaceous vegetation was observed within the Project Study Area. The USACE maintains the final authority that determines jurisdiction; therefore, statements about jurisdiction within this Report are preliminary and subject to final determination by the USACE and OEPA.

3.2.1 Wetlands

During the field investigation, five (5) wetlands, W-EVN-1, W-EVN-2, W-EVN-3, W-EVN-4, and W-EVN-5, were identified and delineated within the Project Study Area. The delineated wetland boundaries and sample points are shown on **Figure 5** in **Appendix A**. Representative photographs of sample points and other areas of interest are provided in **Appendix B**. Data was collected and recorded on the USACE Wetland Determination Data Forms – Northcentral and Northeast Region and a wetland functional assessment was completed for the delineated wetlands using the ORAM (**Appendix C**). The delineated wetlands within the Project Study Area are summarized in **Table 2**.

Table 2. Delineated Wetland Features Summary Table

Resource ID ¹	Cowardin Classification ²	Connection ³	Provisional Jurisdictional Status ⁴	ORAM Score	ORAM Category ⁵	Approximate Delineated Area within Project Study Area ⁶ (acres)
W-EVN-1	PEM	Adjacent	USACE Jurisdictional, Wetland	26.5	Cat. 1	0.392
W-EVN-2	PEM	Adjacent	USACE Jurisdictional, Wetland	16	Cat. 1	0.312
W-EVN-3	PEM	Adjacent	USACE Jurisdictional, Wetland	19.5	Cat. 1	1.486
W-EVN-4	PEM	Adjacent	USACE Jurisdictional, Wetland	26	Cat. 1	0.935
W-EVN-5	PEM/PFO	Adjacent	USACE Jurisdictional, Wetland	32	Cat. 2	0.177
TOTAL						3.302

Table 2. Delineated Wetland Features Summary Table

Resource ID ¹	Cowardin Classification ²	Connection ³	Provisional Jurisdictional Status ⁴	ORAM Score	ORAM Category ⁵	Approximate Delineated Area within Project Study Area ⁶ (acres)
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¹TRC resource identification.

²Cowardin Wetland Classification (approximation based upon field identification and delineation) (Cowardin, Carter, Golet, & LaRoe, 1979): PEM – Palustrine Emergent, PFO – Palustrine Forested.

³Connection to a jurisdictional waterway: Adjacent as determined by TRC; subject to USACE verification. Wetland connection is pending an update from OEPA and USACE based on the Sackett vs. EPA case.

⁴Jurisdiction status is based upon field observations and mapping review of apparent connectivity or adjacency of the resource to Waters of the United States or Waters of the State and the assumption that a preliminary jurisdictional determination process will be utilized for the project.

⁵ORAM Category based on scoring breakpoints from Table 2 of the ORAM v. 5.0 Quantitative Score Calibration; scores falling within a “gray zone” or “modified” category were rounded up.

⁶Area is rounded to nearest 0.001-acre, based upon GPS data.

3.2.2 Waterbodies

During the field investigation, one (1) Section 10 Navigable Water (S-EVN-1, Maumee River) was delineated within the Project Study Area. A detailed summary of the waterbody resource identified is provided in **Table 3** and **Appendix A, Figure 5**. Data points were recorded to provide a characterization of the delineated waterbody resource located within the Project Study Area. Representative photographs of the described waterbody identified within the Project Study Area can be found in **Appendix B**.

Table 3. Delineated Waterbody Resources Summary

Waterbody ID ¹	Resource Name	Flow Regime	OEPA Use Designations ²	Approximate Delineated Area within the Project Study Area ³ Linear Feet (acres)
S-EVN-1	Maumee River	Perennial	Warmwater Habitat, Agricultural Water Supply, Industrial Water Supply, and Primary Contact Recreation	1,200 (0.381)
TOTAL				1,200 (0.381)
Notes: ¹ TRC resource identification. ² Determined by OEPA and listed in the OAC §3745-1-11 Maumee River drainage basin for the Maumee River RM 7.1 (I-75) to confluence with Maumee Bay. ³ Area is rounded to nearest 0.001-acre, based upon GPS data.				

4.0 Permitting Considerations

It is anticipated that due to the nature of the Project, jurisdictional resources may be impacted by the proposed Project activities. As currently proposed, it is TRC's understanding that this Project would fall under Nationwide Permit 57 - Electric Utility Line and Telecommunications Activities, with the need for a Section 10 Permit, due to the overhead utility lines spanning a navigable water, the Maumee River (USACE, 2022). This Project is located in the City of Toledo in Lucas County, Ohio, which is within the USACE Buffalo Regulatory District. The Project location (Washington Township) is listed in Appendix 1 to Regional General Condition 5(a) (Endangered Species and Threatened Species), triggering the need for a Section 404 Pre-Construction Notification.

Additionally, the Project is located within an "Eligible" area according to OEPA's Stream Eligibility for Nationwide Permit Program (OEPA, 2017) (**Appendix A, Figure 6**); however, OEPA's 401 Water Quality Certification for NWP 57 is currently waived. No additional screening procedures are required for the Project regarding compliance with OEPA's 401 Water Quality Certification.

4.1 USACE Verification

The USACE has the authority to determine and/or verify the geographical boundaries of Waters of the United States in accordance with 33 Code of Federal Regulations (CFR) 328 and 33 CFR 329; therefore, the results of this Report are termed "preliminary" until verified and accepted by the USACE. This verification is part of the Jurisdictional Determination process, which is required for approval under Section 404 Clean Water Act, Section 401 Water Quality Certification, and/or isolated wetland permitting process through OEPA. It is the responsibility of any party that intends to discharge dredge or fill material into Waters of the United States to comply with all applicable regulations.

5.0 Limitations

This Report is limited in scope to the specific terms of the Agreement previously entered into between TRC and FirstEnergy. This Report represents the conditions within the Project Study Area identified herein, as of the inspection dates.

Should the Project change from the scope described herein, TRC should be immediately notified such that additional investigations may be conducted to amend the content of the Report herein. Human-induced and/or natural changes within the Project Study Area may occur after the date of this investigation and may result in changes to the presence, extent, and classification of the surface water resources identified within this Report.

6.0 References

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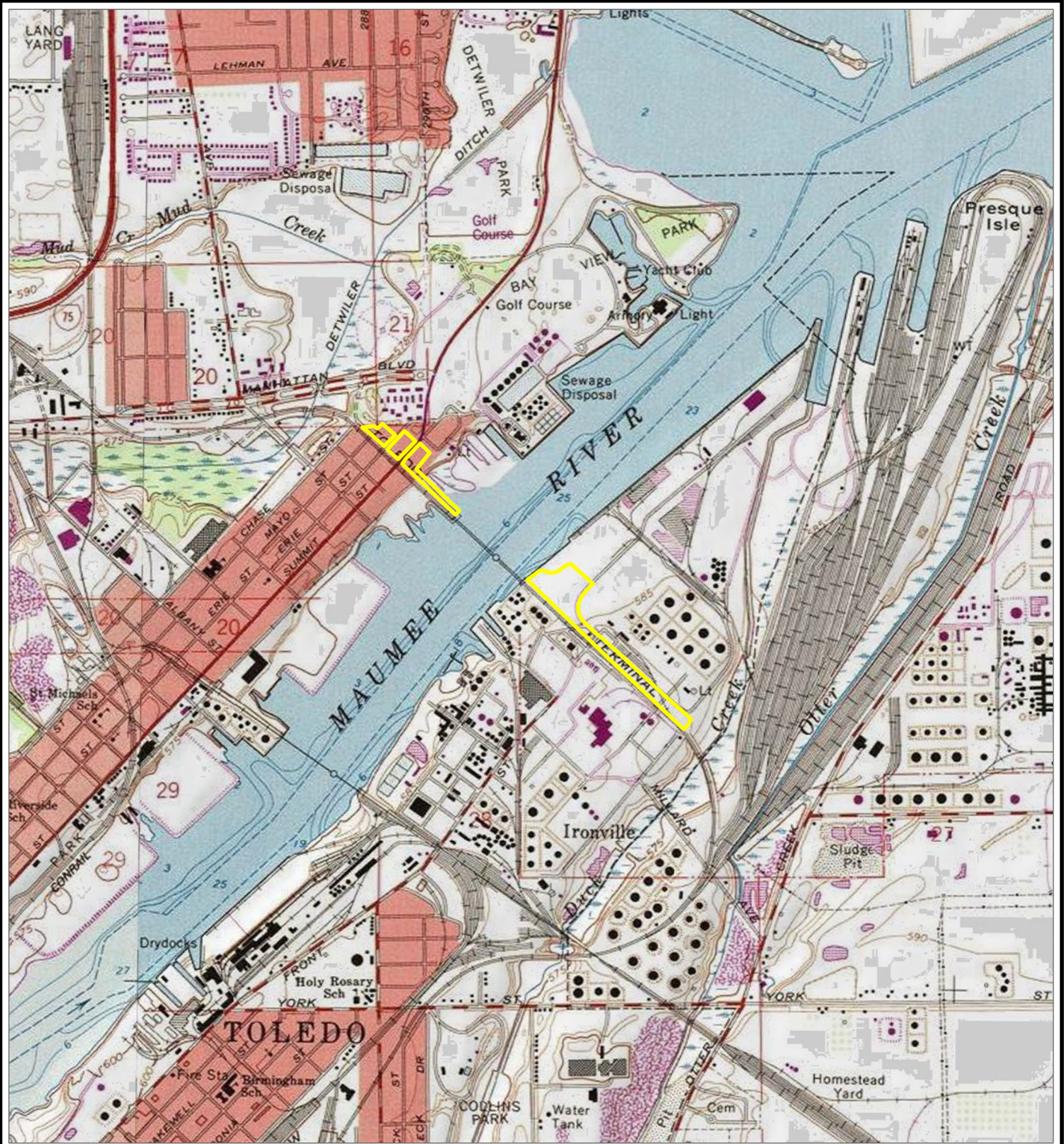
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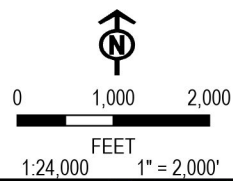
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Appendix A

Figures



 PROJECT STUDY AREA



PROJECT: **FIRSTENERGY - IRONVILLE-LAPIER 69KV
TOWER STRUCTURE REPLACEMENT PROJECT
LUCAS COUNTY, OH**

TITLE: **SITE LOCATION MAP**

DRAWN BY: M. OPEL PROJ. NO.: 429847.0073

CHECKED BY: M. MOLNAR

APPROVED BY: B. FALKINBURG

DATE: APRIL 2025

FIGURE 1



1382 WEST NINTH STREET
SUITE 400
CLEVELAND, OH 44113
PHONE: 216-344-3072

BASE MAP: USA TOPO MAPS MAP SERVICE, OREGON QUAD

FILE: WDRV3




- PROJECT STUDY AREA
- HYDRIC SOIL
- NON-HYDRIC W/ HYDRIC INCLUSIONS SOIL
- NON-HYDRIC SOIL

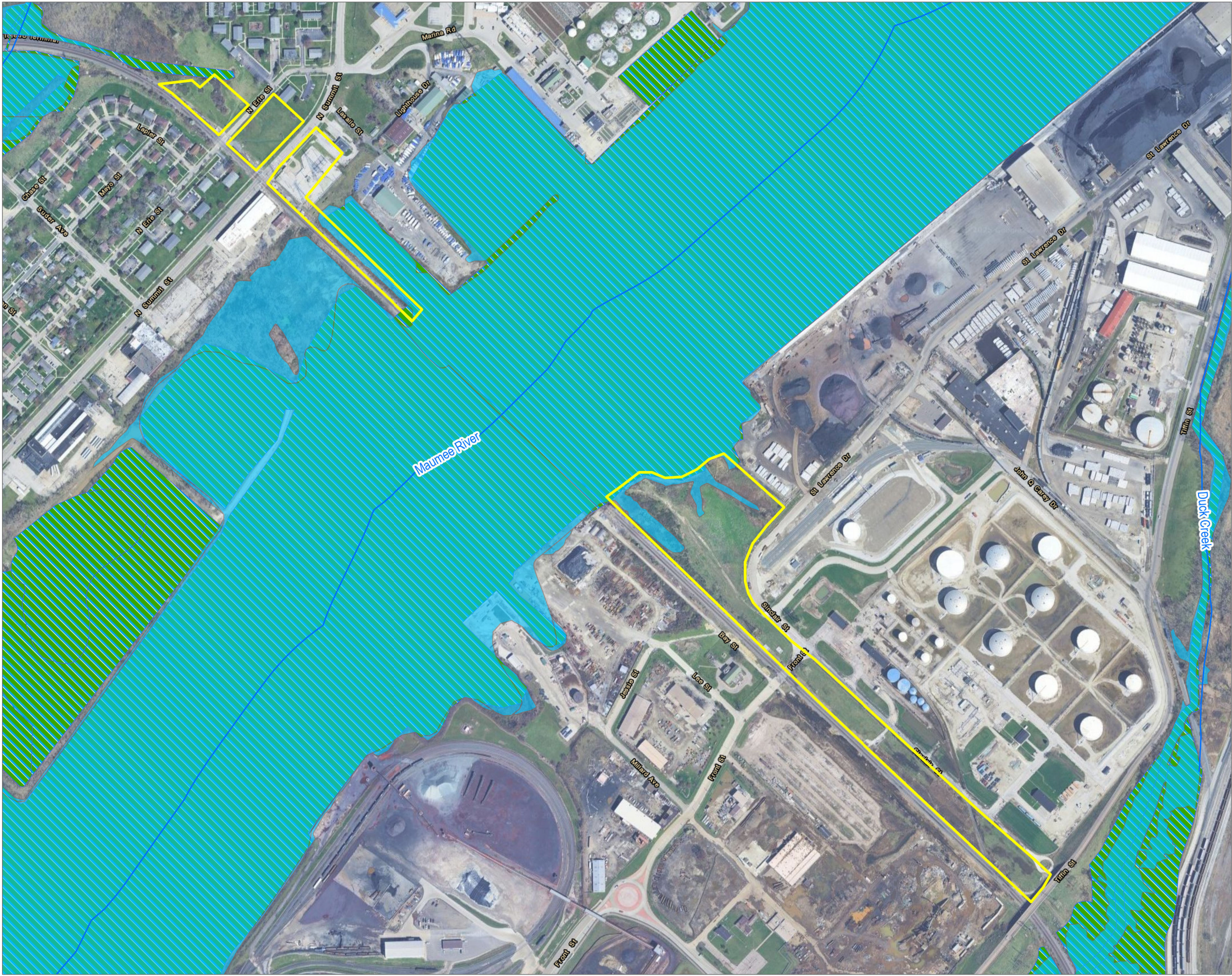
BASE MAP: GOOGLE MAPS.
DATA SOURCES: SOILS DATA ACQUIRED FROM USDA/NRCS SSURGO DATABASE.



1:6,000
1" = 500'
0 500 1,000 FEET

PROJECT: FIRSTENERGY - IRONVILLE-LAPIER 69KV TOWER STRUCTURE REPLACEMENT PROJECT LUCAS COUNTY, OH	
TITLE: SOILS MAP	
DRAWN BY: M. OPEL	PROJ. NO.: 429847.0073
CHECKED BY: M. MOLNAR	FIGURE 3
APPROVED BY: B. FALKINBURG	
DATE: APRIL 2025	
 1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072	
FILE:	WDRv3.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet; Map Rotation: 0
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- PROJECT STUDY AREA
- NATIONAL HYDROGRAPHY DATASET (NHD) STREAM
- NATIONAL WETLANDS INVENTORY (NWI) FEATURE
- 100-YEAR FLOOD ZONE

BASE MAP: GOOGLE MAPS.
DATA SOURCES: WETLAND DATA ACQUIRED FROM U.S. FISH & WILDLIFE SERVICE, NATIONAL WETLANDS INVENTORY (NWI). STREAM DATA ACQUIRED FROM USGS, NATIONAL HYDROGRAPHY DATASET (NHD). FLOOD DATA ACQUIRED FROM FEMA, NATIONAL FLOOD HAZARD LAYER (NFHL).



1:6,000
1" = 500'
0 500 1,000 FEET

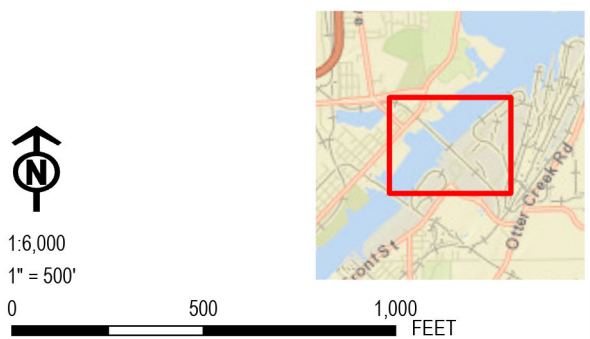
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TITLE: NHD, NWI AND FEMA FLOODPLAIN MAP		
DRAWN BY: M. OPEL	PROJ. NO.: 429847.0073	FIGURE 4
CHECKED BY: M. MOLNAR		
APPROVED BY: B. FALKINBURG		
DATE: APRIL 2025		
		1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072
FILE:	WDRv3.aprx	


Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet; Map Rotation: 0
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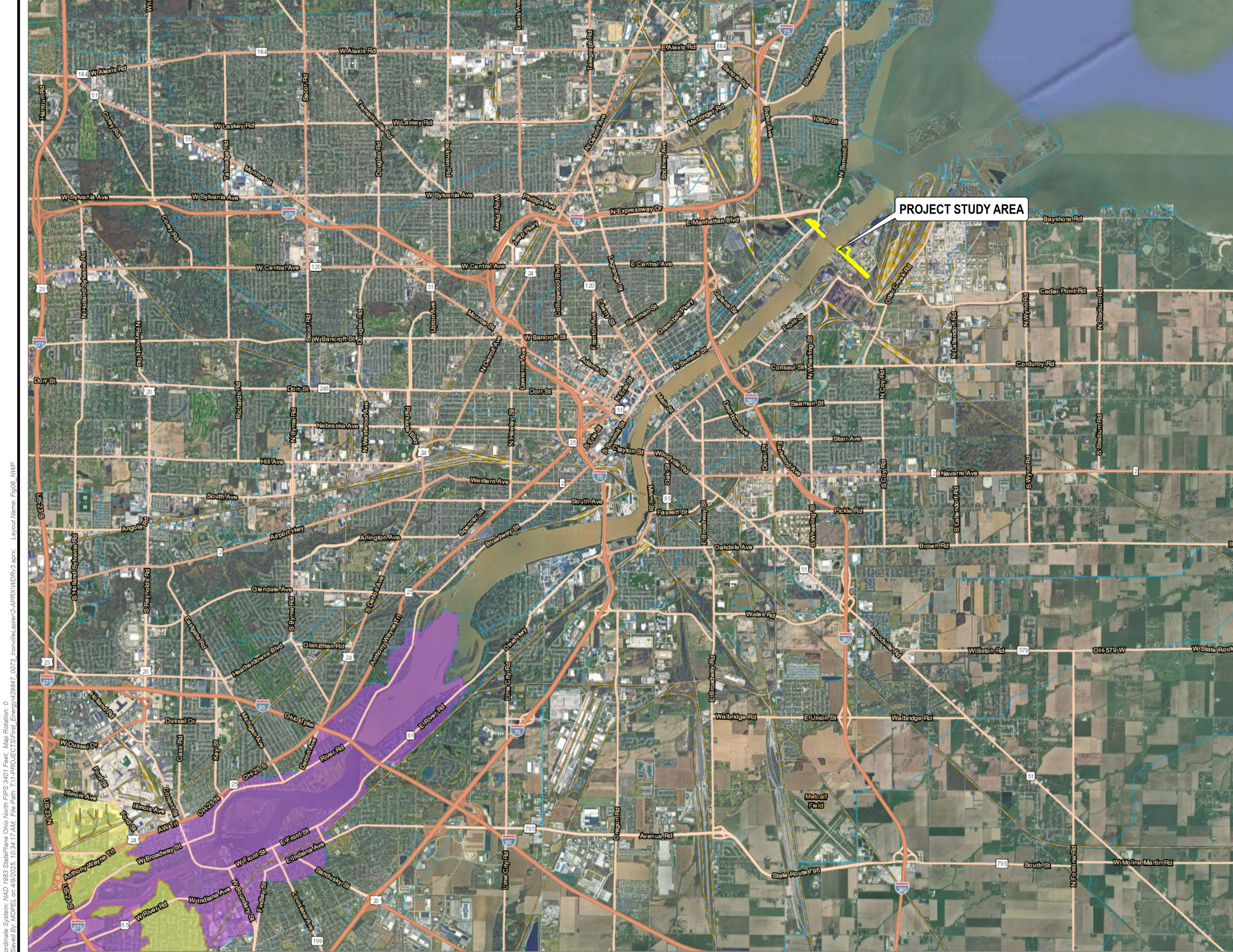


- PROJECT STUDY AREA
- CULVERT
- NON-JURISDICTIONAL DRAINAGE
- PERENNIAL STREAM
- PEM WETLAND
- PFO WETLAND
- WETLAND CONTINUES
- WETLAND DATA POINT
- UPLAND DATA POINT

BASE MAP: GOOGLE MAPS.
DATA SOURCES: TRC WETLAND DELINEATION COMPLETED FEBRUARY 9 & OCTOBER 2, 2024 AND FEBRUARY 27 & APRIL 8, 2025.



PROJECT: FIRSTENERGY - IRONVILLE-LAPIER 69KV TOWER STRUCTURE REPLACEMENT PROJECT LUCAS COUNTY, OH			
TITLE: DELINEATED RESOURCES MAP			
DRAWN BY: M. OPEL		PROJ. NO.: 429847.0073	
CHECKED BY: M. MOLNAR		FIGURE 5	
APPROVED BY: B. FALKINBURG			
DATE: APRIL 2025			
		1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072	
		FILE: WDRv3.aprx	



PROJECT STUDY AREA

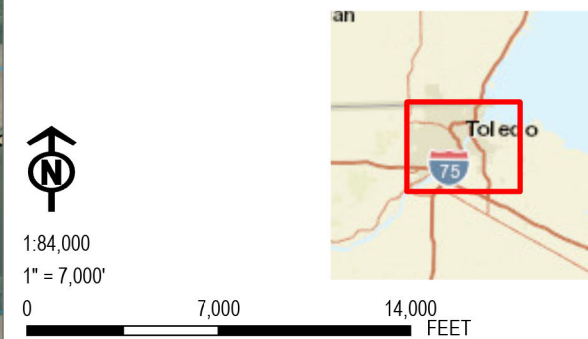
OHIO EPA 401 WATER QUALITY CERTIFICATION FOR
NATIONWIDE PERMIT ELIGIBILITY


INELIGIBLE

POSSIBLY ELIGIBLE

ELIGIBLE

BASE MAP: GOOGLE MAPS.
DATA SOURCES: NATIONWIDE PERMITS STREAM DATA ACQUIRED FROM
THE OHIO EPA.



PROJECT: FIRSTENERGY - IRONVILLE-LAPIER 69KV TOWER STRUCTURE REPLACEMENT PROJECT LUCAS COUNTY, OH		
TITLE: NATIONWIDE PERMITS STREAM ELIGIBILITY MAP		
DRAWN BY: M. OPEL	PROJ. NO.: 429847.0073	
CHECKED BY: M. MOLNAR	FIGURE 6	
APPROVED BY: B. FALKINBURG		
DATE: APRIL 2025		
	1382 WEST NINTH STREET SUITE 400 CLEVELAND, OH 44113 PHONE: 216-344-3072	
FILE:	WDRv3.aprx	

Appendix B

Photographic Record

Client Name: FirstEnergy	Site Location: City of Toledo, Lucas County, Ohio	Project No. 429847.0073.0000
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Photo No. 1.	
Photo Date: 2/9/2024	
Description: Wetland W-EVN-1, facing northwest.	

Photo No. 2.	
Photo Date: 2/9/2024	
Description: Wetland W-EVN-1, facing northeast.	

Client Name: FirstEnergy	Site Location: City of Toledo, Lucas County, Ohio	Project No. 429847.0073.0000
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Photo No. 3.	
Photo Date: 2/9/2024	
Description: Wetland W-EVN-1, facing southeast.	

Photo No. 4.	
Photo Date: 2/9/2024	
Description: Wetland W-EVN-1, facing southwest.	

Client Name: FirstEnergy	Site Location: City of Toledo, Lucas County, Ohio	Project No. 429847.0073.0000
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Photo No. 5.		
Photo Date: 2/9/2024		
Description: Wetland W-EVN-2, facing north.		

Photo No. 6.		
Photo Date: 2/9/2024		
Description: Wetland W-EVN-2, facing east.		

Client Name: FirstEnergy	Site Location: City of Toledo, Lucas County, Ohio	Project No. 429847.0073.0000
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Photo No. 7.		
Photo Date: 2/9/2024		
Description: Wetland W-EVN-2, facing south.		

Photo No. 8.		
Photo Date: 2/9/2024		
Description: Wetland W-EVN-2, facing west.		

Client Name: FirstEnergy	Site Location: City of Toledo, Lucas County, Ohio	Project No. 429847.0073.0000
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Photo No. 9.		
Photo Date: 2/9/2024		
Description: Photo of the Maumee River (S-EVN-1) from the southern extent of the Project Study Area, facing north.		

Photo No. 10.		
Photo Date: 2/9/2024		
Description: Photo of the Maumee River (S-EVN-1) from the northern extent of the Project Study Area, facing east.		

Client Name: FirstEnergy	Site Location: City of Toledo, Lucas County, Ohio	Project No. 429847.0073.0000
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Photo No. 11.		
Photo Date: 2/9/2024		
Description: Representative photo of the Project Study Area north of the Maumee River, facing northwest. Photo depicts overview of Wetland W-EVN-1 and the Maumee River.		

Photo No. 12.		
Photo Date: 2/9/2024		
Description: Representative photo of the Project Study Area north of the Maumee River, facing southeast.		


Client Name: FirstEnergy	Site Location: City of Toledo, Lucas County, Ohio	Project No. 429847.0073.0000
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Photo No. 13.	
Photo Date: 2/9/2024	
Description: Representative photo of the Project Study Area south of the Maumee River, facing northwest.	

Photo No. 14.	
Photo Date: 2/9/2024	
Description: Representative photo of the Project Study Area south of the Maumee River, facing southeast.	

Client Name: FirstEnergy	Site Location: City of Toledo, Lucas County, Ohio	Project No. 429847.0073.0000
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Photo No. 15.	
Photo Date: 3/2/2024	
Description: Wetland W-EVN-3, facing north.	

Photo No. 16.	
Photo Date: 3/2/2024	
Description: Wetland W-EVN-3, facing east.	

Client Name: FirstEnergy	Site Location: City of Toledo, Lucas County, Ohio	Project No. 429847.0073.0000
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Photo No. 17.	
Photo Date: 3/2/2024	
Description: Wetland W-EVN-3, facing south.	

Photo No. 18.	
Photo Date: 3/2/2024	
Description: Wetland W-EVN-3, facing west.	

Client Name: FirstEnergy	Site Location: City of Toledo, Lucas County, Ohio	Project No. 429847.0073.0000
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Photo No. 19.		
Photo Date: 3/2/2024		
Description: Wetland W-EVN-4, facing north.		

Photo No. 20.		
Photo Date: 3/2/2024		
Description: Wetland W-EVN-4, facing east.		

Client Name: FirstEnergy	Site Location: City of Toledo, Lucas County, Ohio	Project No. 429847.0073.0000
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Photo No. 21.

Photo Date:
3/2/2024

Description:

Wetland W-EVN-4,
facing south.



Photo No. 22.

Photo Date:
3/2/2024

Description:

Wetland W-EVN-4,
facing west.



Client Name: FirstEnergy	Site Location: City of Toledo, Lucas County, Ohio	Project No. 429847.0073.0000
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Photo No. 23.		
Photo Date: 3/2/2024		
Description: Representative photo of the Project Study Area south of the Maumee River, facing southeast.		

Photo No. 24.		
Photo Date: 3/2/2024		
Description: Representative photo of the Project Study Area south of Sinclair Street, facing northwest.		

Client Name: FirstEnergy	Site Location: City of Toledo, Lucas County, Ohio	Project No. 429847.0073.0000
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Photo No. 25.	
Photo Date: 2/27/2025	
Description: Representative photo of the Project Study Area north of N Summit Street, facing west.	

Photo No. 26.	
Photo Date: 2/27/2025	
Description: Wetland W-EVN-5 facing north.	

Client Name: FirstEnergy	Site Location: City of Toledo, Lucas County, Ohio	Project No. 429847.0073.0000
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Photo No. 27.		
Photo Date: 2/27/2025		
Description: Wetland W-EVN-5 facing west.		

Photo No. 28.		
Photo Date: 2/27/2025		
Description: Wetland W-EVN-5 facing south.		

Client Name: FirstEnergy	Site Location: City of Toledo, Lucas County, Ohio	Project No. 429847.0073.0000
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Photo No. 29.
Photo Date: 2/27/2025
Description: Wetland W-EVN-5 facing east.



Photo No. 30.
Photo Date: 4/8/2025
Description: Representative photo of the Project Study Area north of N Erie Street, facing south.



Appendix C

Data Forms

**USACE Wetland Determination Data Forms –
Northcentral and Northeast Region**

WETLAND DETERMINATION DATA FORM — Northcentral and Northeast Region

Project/Site: Ironville-Lapier 69kV Tower Structure Replacemer City/County: Toledo, Lucas County Sampling Date: 2024-2-9
Applicant/Owner: FirstEnergy State: OH Sampling Point: U-EVN-1
Investigator(s): Erin Van Nort, Jenna Slabe Section, Township, Range: NA
Landform (hillslope, terrace, etc): Hillslope Local relief (concave, convex, none): None Slope (%): 1 to 3
Subregion (LRR or MLRA): MLRA 99 of LRR L Lat: 41.6861101007 Long: -83.4859081452 Datum: WGS84
Soil Map Unit Name: Del Rey-Urban land complex, 0 to 3 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☒
Hydric Soil Present? Yes ☒ No ☐
Wetland Hydrology Present? Yes ☐ No ☒

Is the Sampled Area within a Wetland? Yes ☐ No ☒

If yes, optional Wetland Site ID: U-EVN-1

Remarks: (Explain alternative procedures here or in a separate report.)

Coverture is UPL. Based on the absence of two of three parameters, this area is an upland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

☐ Surface Water (A1) ☐ Water-Stained Leaves (B9)
☐ High Water Table (A2) ☐ Aquatic Fauna (B13)
☐ Saturation (A3) ☐ Marl Deposits (B15)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Thin Muck Surface (C7)
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Remarks)
☐ Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (minimum of two required)

☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Moss Trim Lines (B16)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ Microtopographic Relief (D4)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):
Water Table Present? Yes ☐ No ☒ Depth (inches):
Saturation Present? Yes ☐ No ☒ Depth (inches):
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The criterion for wetland hydrology is not met.

VEGETATION – Use scientific names of plants.

Sampling Point: U-EVN-1

	Absolute % Cover	Dominant Species?	Indicator Status																																				
Tree Stratum (Plot size: 30 ft radius)				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) Total Number of Dominant Species Across All Strata: 4 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)																																			
1. _____																																							
2. _____																																							
3. _____																																							
4. _____																																							
5. _____																																							
6. _____																																							
7. _____																																							
	0	= Total Cover																																					
Sapling/Shrub Stratum (Plot size: 15 ft radius)				Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 10%;"></th> <th style="width: 10%;">Multiply by:</th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr> <td>OBL species</td> <td style="text-align: center;">0</td> <td>x 1 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;">10</td> <td>x 2 =</td> <td style="text-align: center;">20</td> <td></td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;">0</td> <td>x 3 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>FACU species</td> <td style="text-align: center;">50</td> <td>x 4 =</td> <td style="text-align: center;">200</td> <td></td> </tr> <tr> <td>UPL species</td> <td style="text-align: center;">40</td> <td>x 5 =</td> <td style="text-align: center;">200</td> <td></td> </tr> <tr> <td>Column Totals:</td> <td style="text-align: center;">100</td> <td>(A)</td> <td style="text-align: center;">420</td> <td>(B)</td> </tr> </tbody> </table> Prevalence Index = B/A = 4.2	Total % Cover of:		Multiply by:			OBL species	0	x 1 =	0		FACW species	10	x 2 =	20		FAC species	0	x 3 =	0		FACU species	50	x 4 =	200		UPL species	40	x 5 =	200		Column Totals:	100	(A)	420	(B)
Total % Cover of:		Multiply by:																																					
OBL species	0	x 1 =	0																																				
FACW species	10	x 2 =	20																																				
FAC species	0	x 3 =	0																																				
FACU species	50	x 4 =	200																																				
UPL species	40	x 5 =	200																																				
Column Totals:	100	(A)	420		(B)																																		
1. _____																																							
2. _____																																							
3. _____																																							
4. _____																																							
5. _____																																							
6. _____																																							
7. _____																																							
	0	= Total Cover																																					
Herb Stratum (Plot size: 5 ft radius)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																			
1. <i>Dipsacus fullonum</i>	25	Yes	FACU																																				
2. <i>Symphyotrichum ericoides</i>	25	Yes	FACU																																				
3. <i>Cirsium discolor</i>	15	Yes	UPL																																				
4. <i>Leucanthemum vulgare</i>	15	Yes	UPL																																				
5. <i>Dianthus armeria</i>	10	No	UPL																																				
6. <i>Phalaris arundinacea</i>	10	No	FACW																																				
7. _____																																							
8. _____																																							
9. _____																																							
10. _____																																							
11. _____																																							
12. _____																																							
	100	= Total Cover																																					
Woody Vine Stratum (Plot size: 30 ft radius)				Definitions of Vegetation Strata: Tree — Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub — Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines — All woody vines greater than 3.28 ft in height.																																			
1. _____																																							
2. _____																																							
3. _____																																							
4. _____																																							
	0	= Total Cover																																					
				Hydrophytic Vegetation Present? Yes _____ No X																																			

Remarks: (Include photo numbers here or on a separate sheet.)
 The criterion for hydrophytic vegetation is not met.

SOIL

Sampling Point: U-EVN-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features					
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 to 4	10YR 3/2	95	10YR 4/6	5	C	M	Clay Loam	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators:								
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B)			<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)			Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) <input type="checkbox"/> 5 cm Muck Peat or Peat (S3) (LRR K, L, R) <input type="checkbox"/> Dark Surface (S7) (LRR K, L) <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) <input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B) <input type="checkbox"/> Red Parent Material (F21) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)		
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.								
Restrictive Layer (if present): Type: Fill _____ Depth (inches): 4 _____							Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Remarks: The criterion for hydric soil is met.								

WETLAND DETERMINATION DATA FORM — Northcentral and Northeast Region

Project/Site: Ironville-Lapier 69kV Tower Structure Replacemer City/County: Toledo, Lucas County Sampling Date: 2024-2-9
Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EVN-1
Investigator(s): Erin Van Nort, Jenna Slabe Section, Township, Range: NA
Landform (hillslope, terrace, etc): Channel Local relief (concave, convex, none): None Slope (%): 1 to 3
Subregion (LRR or MLRA): MLRA 99 of LRR L Lat: 41.685447637 Long: -83.4848463257 Datum: WGS84
Soil Map Unit Name: Sloan loam, occasionally flooded NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐
Wetland Hydrology Present? Yes ☒ No ☐

Is the Sampled Area within a Wetland? Yes ☒ No ☐

If yes, optional Wetland Site ID: W-EVN-1

Remarks: (Explain alternative procedures here or in a separate report.)
Covertypes is PEM. Based on the presence of all three parameters, this area is a wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

☒ Surface Water (A1) ☐ Water-Stained Leaves (B9)
☐ High Water Table (A2) ☒ Aquatic Fauna (B13)
☐ Saturation (A3) ☐ Marl Deposits (B15)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☒ Oxidized Rhizospheres along Living Roots (C3)
☒ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Thin Muck Surface (C7)
☒ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Remarks)
☐ Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (minimum of two required)

☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Moss Trim Lines (B16)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ Microtopographic Relief (D4)
☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 2
Water Table Present? Yes ☐ No ☒ Depth (inches):
Saturation Present? Yes ☐ No ☒ Depth (inches):
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The criterion for wetland hydrology is met.

VEGETATION – Use scientific names of plants.

Sampling Point: W-EVN-1

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 ft radius</u>)				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15 ft radius</u>)				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
	0	= Total Cover		
Herb Stratum (Plot size: <u>5 ft radius</u>)				
1.	<u>Phragmites australis</u>	85	Yes	FACW
2.	<u>Verbesina alternifolia</u>	20	No	FACW
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
	105	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft radius</u>)				
1.				
2.				
3.				
4.				
	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>105</u>	x 2 = <u>210</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>105</u> (A)	<u>210</u> (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

☒ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is >50%

☒ 3 - Prevalence Index is ≤3.0¹

☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree — Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub — Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines — All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: (Include photo numbers here or on a separate sheet.)

The criterion for hydrophytic vegetation is met.

SOIL

Sampling Point: W-EVN-1

[illegible]

WETLAND DETERMINATION DATA FORM — Northcentral and Northeast Region

Project/Site: Ironville-Lapier 69kV Tower Structure Replacemer City/County: Toledo, Lucas County Sampling Date: 2024-2-9
Applicant/Owner: FirstEnergy State: OH Sampling Point: U-EVN-2
Investigator(s): Erin Van Nort, Jenna Slabe Section, Township, Range: NA
Landform (hillslope, terrace, etc): Hillslope Local relief (concave, convex, none): Undulating Slope (%): 1 to 3
Subregion (LRR or MLRA): MLRA 99 of LRR L Lat: 41.6820894694 Long: -83.4793825821 Datum: WGS84
Soil Map Unit Name: Udorthents, loamy NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID: <u>U-EVN-2</u>
Remarks: (Explain alternative procedures here or in a separate report.) Covertypes is UPL. Based on the absence of all three parameters, this area is an upland.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: The criterion for wetland hydrology is not met.		

VEGETATION – Use scientific names of plants.

Sampling Point: U-EVN-2

	Absolute % Cover	Dominant Species?	Indicator Status																																									
Tree Stratum (Plot size: 30 ft radius)				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) Total Number of Dominant Species Across All Strata: 4 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)																																								
1. _____																																												
2. _____																																												
3. _____																																												
4. _____																																												
5. _____																																												
6. _____																																												
7. _____																																												
	0	= Total Cover																																										
Sapling/Shrub Stratum (Plot size: 15 ft radius)				Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 10%;"></th> <th style="width: 10%;">Multiply by:</th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr> <td>OBL species</td> <td style="text-align: center;">0</td> <td>x 1 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;">0</td> <td>x 2 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;">0</td> <td>x 3 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>FACU species</td> <td style="text-align: center;">45</td> <td>x 4 =</td> <td style="text-align: center;">180</td> <td></td> </tr> <tr> <td>UPL species</td> <td style="text-align: center;">50</td> <td>x 5 =</td> <td style="text-align: center;">250</td> <td></td> </tr> <tr> <td>Column Totals:</td> <td style="text-align: center;">95</td> <td>(A)</td> <td style="text-align: center;">430</td> <td>(B)</td> </tr> <tr> <td colspan="5" style="text-align: center;">Prevalence Index = B/A = 4.5</td> </tr> </tbody> </table>	Total % Cover of:		Multiply by:			OBL species	0	x 1 =	0		FACW species	0	x 2 =	0		FAC species	0	x 3 =	0		FACU species	45	x 4 =	180		UPL species	50	x 5 =	250		Column Totals:	95	(A)	430	(B)	Prevalence Index = B/A = 4.5				
Total % Cover of:		Multiply by:																																										
OBL species	0	x 1 =	0																																									
FACW species	0	x 2 =	0																																									
FAC species	0	x 3 =	0																																									
FACU species	45	x 4 =	180																																									
UPL species	50	x 5 =	250																																									
Column Totals:	95	(A)	430		(B)																																							
Prevalence Index = B/A = 4.5																																												
1. <i>Rhus copallinum</i>	50	Yes	UPL																																									
2. <i>Cornus florida</i>	30	Yes	FACU																																									
3. _____																																												
4. _____																																												
5. _____																																												
6. _____																																												
7. _____																																												
	80	= Total Cover																																										
Herb Stratum (Plot size: 5 ft radius)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																								
1. <i>Symphytotrichum ericoides</i>	10	Yes	FACU																																									
2. <i>Glechoma hederacea</i>	5	Yes	FACU																																									
3. _____																																												
4. _____																																												
5. _____																																												
6. _____																																												
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8. _____																																												
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10. _____																																												
11. _____																																												
12. _____																																												
	15	= Total Cover																																										
Woody Vine Stratum (Plot size: 30 ft radius)				Definitions of Vegetation Strata: Tree — Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub — Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines — All woody vines greater than 3.28 ft in height.																																								
1. _____																																												
2. _____																																												
3. _____																																												
4. _____																																												
	0	= Total Cover																																										
				Hydrophytic Vegetation Present? Yes _____ No X																																								
Remarks: (Include photo numbers here or on a separate sheet.) The criterion for hydrophytic vegetation is not met.																																												

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 to 6	10YR 2/2	100					Silt Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) **(LRR R, MLRA 149B)**

☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
☐ Loamy Mucky Mineral (F1) **(LRR K, L)**
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
☐ 5 cm Muck Peat or Peat (S3) **(LRR K, L, R)**
☐ Dark Surface (S7) **(LRR K, L)**
☐ Polyvalue Below Surface (S8) **(LRR K, L)**
☐ Thin Dark Surface (S9) **(LRR K, L)**
☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
☐ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: Fill
Depth (inches): 6

Hydric Soil Present? Yes _____ No **X****Remarks:**

The criterion for hydric soil is not met.

WETLAND DETERMINATION DATA FORM — Northcentral and Northeast Region

Project/Site: Ironville-Lapier 69kV Tower Structure Replacemer City/County: Toledo, Lucas County Sampling Date: 2024-2-9
Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EVN-2
Investigator(s): Erin Van Nort, Jenna Slabe Section, Township, Range: NA
Landform (hillslope, terrace, etc): Depression Local relief (concave, convex, none): None Slope (%): 0 to 1
Subregion (LRR or MLRA): MLRA 99 of LRR L Lat: 41.6818787065 Long: -83.479452571 Datum: WGS84
Soil Map Unit Name: Udorthents, loamy NWI Classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed?

Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic?

(If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐
Wetland Hydrology Present? Yes ☒ No ☐

Is the Sampled Area
within a Wetland?

Yes ☒ No ☐

If yes, optional Wetland Site ID: W-EVN-2

Remarks: (Explain alternative procedures here or in a separate report.)

Covertypes is PEM. Based on the presence of all three parameters, this area is a wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

☒ Surface Water (A1) ☐ Water-Stained Leaves (B9)
☐ High Water Table (A2) ☐ Aquatic Fauna (B13)
☐ Saturation (A3) ☐ Marl Deposits (B15)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☒ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Thin Muck Surface (C7)
☐ Inundation Visible on Aerial Imagery (B7) ☐ Other (Explain in Remarks)
☐ Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (minimum of two required)

☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Moss Trim Lines (B16)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☒ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☒ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ Microtopographic Relief (D4)
☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 2
Water Table Present? Yes ☐ No ☒ Depth (inches):
Saturation Present? Yes ☐ No ☒ Depth (inches):
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The criterion for wetland hydrology is met.

VEGETATION – Use scientific names of plants.

Sampling Point: W-EVN-2

	Absolute % Cover	Dominant Species?	Indicator Status																																				
Tree Stratum (Plot size: 30 ft radius)				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)																																			
1. _____																																							
2. _____																																							
3. _____																																							
4. _____																																							
5. _____																																							
6. _____																																							
7. _____																																							
	0	= Total Cover																																					
Sapling/Shrub Stratum (Plot size: 15 ft radius)				Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 10%;"></th> <th style="width: 10%;">Multiply by:</th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr> <td>OBL species</td> <td style="text-align: center;">0</td> <td>x 1 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;">100</td> <td>x 2 =</td> <td style="text-align: center;">200</td> <td></td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;">0</td> <td>x 3 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>FACU species</td> <td style="text-align: center;">0</td> <td>x 4 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>UPL species</td> <td style="text-align: center;">0</td> <td>x 5 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>Column Totals:</td> <td style="text-align: center;">100</td> <td>(A)</td> <td style="text-align: center;">200</td> <td>(B)</td> </tr> </tbody> </table> Prevalence Index = B/A = <u>2</u>	Total % Cover of:		Multiply by:			OBL species	0	x 1 =	0		FACW species	100	x 2 =	200		FAC species	0	x 3 =	0		FACU species	0	x 4 =	0		UPL species	0	x 5 =	0		Column Totals:	100	(A)	200	(B)
Total % Cover of:		Multiply by:																																					
OBL species	0	x 1 =	0																																				
FACW species	100	x 2 =	200																																				
FAC species	0	x 3 =	0																																				
FACU species	0	x 4 =	0																																				
UPL species	0	x 5 =	0																																				
Column Totals:	100	(A)	200		(B)																																		
1. <i>Cornus amomum</i>	25	Yes	FACW																																				
2. _____																																							
3. _____																																							
4. _____																																							
5. _____																																							
6. _____																																							
7. _____																																							
	25	= Total Cover																																					
Herb Stratum (Plot size: 5 ft radius)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																			
1. <i>Phalaris arundinacea</i>	75	Yes	FACW																																				
2. _____																																							
3. _____																																							
4. _____																																							
5. _____																																							
6. _____																																							
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8. _____																																							
9. _____																																							
10. _____																																							
11. _____																																							
12. _____																																							
	75	= Total Cover																																					
Woody Vine Stratum (Plot size: 30 ft radius)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																																			
1. _____																																							
2. _____																																							
3. _____																																							
4. _____																																							
	0	= Total Cover																																					
				Hydrophytic Vegetation Present?																																			
				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																																			
Remarks: (Include photo numbers here or on a separate sheet.) The criterion for hydrophytic vegetation is met.																																							

SOIL

Sampling Point: W-EVN-2

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 to 6	10YR 3/1	80	10YR 6/8	20	C	PL	Silty Clay Loam	
6 to 8	10YR 5/1	100					Silty Clay Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (**LRR R, MLRA 149B**)

☐ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
☐ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
☐ Loamy Mucky Mineral (F1) (**LRR K, L**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☒ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Muck Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: Fill
Depth (inches): 8

Hydric Soil Present? Yes ☒ No ☐**Remarks:**

The criterion for hydric soil is met.

WETLAND DETERMINATION DATA FORM — Northcentral and Northeast Region

Project/Site: Ironville-Lapier 69kV Tower Structure Replacemer City/County: Toledo, Lucas County Sampling Date: 2023-10-2
Applicant/Owner: FirstEnergy State: OH Sampling Point: U-EVN-3
Investigator(s): Erin Van Nort, Emma Given Section, Township, Range: NA
Landform (hillslope, terrace, etc): Foot slope Local relief (concave, convex, none): None Slope (%): 0 to 1
Subregion (LRR or MLRA): MLRA 99 of LRR L Lat: 41.677181 Long: -83.472538 Datum: WGS84
Soil Map Unit Name: Del Rey loam, 0 to 3 percent slopes NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Covertypes is UPL. Based on the absence of two of three parameters, this area is an upland.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: The criterion for wetland hydrology is not met.		

VEGETATION – Use scientific names of plants.

Sampling Point: U-EVN-3

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status																																				
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)																																			
2. _____	_____	_____	_____																																				
3. _____	_____	_____	_____																																				
4. _____	_____	_____	_____																																				
5. _____	_____	_____	_____																																				
6. _____	_____	_____	_____																																				
7. _____	_____	_____	_____																																				
	<u>0</u>	= Total Cover		Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 10%;"></th> <th style="width: 10%;">Multiply by:</th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr> <td>OBL species</td> <td style="text-align: center;"><u>0</u></td> <td>x 1 =</td> <td style="text-align: center;"><u>0</u></td> <td></td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;"><u>70</u></td> <td>x 2 =</td> <td style="text-align: center;"><u>140</u></td> <td></td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;"><u>0</u></td> <td>x 3 =</td> <td style="text-align: center;"><u>0</u></td> <td></td> </tr> <tr> <td>FACU species</td> <td style="text-align: center;"><u>35</u></td> <td>x 4 =</td> <td style="text-align: center;"><u>140</u></td> <td></td> </tr> <tr> <td>UPL species</td> <td style="text-align: center;"><u>0</u></td> <td>x 5 =</td> <td style="text-align: center;"><u>0</u></td> <td></td> </tr> <tr> <td>Column Totals:</td> <td style="text-align: center;"><u>105</u></td> <td>(A)</td> <td style="text-align: center;"><u>280</u></td> <td>(B)</td> </tr> </tbody> </table> Prevalence Index = B/A = <u>2.7</u>	Total % Cover of:		Multiply by:			OBL species	<u>0</u>	x 1 =	<u>0</u>		FACW species	<u>70</u>	x 2 =	<u>140</u>		FAC species	<u>0</u>	x 3 =	<u>0</u>		FACU species	<u>35</u>	x 4 =	<u>140</u>		UPL species	<u>0</u>	x 5 =	<u>0</u>		Column Totals:	<u>105</u>	(A)	<u>280</u>	(B)
Total % Cover of:		Multiply by:																																					
OBL species	<u>0</u>	x 1 =	<u>0</u>																																				
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Column Totals:	<u>105</u>	(A)	<u>280</u>	(B)																																			
Sapling/Shrub Stratum (Plot size: 15 ft radius)																																							
1. _____	_____	_____	_____																																				
2. _____	_____	_____	_____																																				
3. _____	_____	_____	_____																																				
4. _____	_____	_____	_____																																				
5. _____	_____	_____	_____																																				
6. _____	_____	_____	_____																																				
7. _____	_____	_____	_____																																				
	<u>0</u>	= Total Cover																																					
Herb Stratum (Plot size: 5 ft radius)																																							
1. <i>Phragmites australis</i>	70	Yes	FACW																																				
2. <i>Dipsacus laciniatus</i>	20	No	FACU																																				
3. <i>Taraxacum officinale</i>	10	No	FACU																																				
4. <i>Desmodium paniculatum</i>	5	No	FACU																																				
5. _____	_____	_____	_____																																				
6. _____	_____	_____	_____																																				
7. _____	_____	_____	_____																																				
8. _____	_____	_____	_____																																				
9. _____	_____	_____	_____																																				
10. _____	_____	_____	_____																																				
11. _____	_____	_____	_____																																				
12. _____	_____	_____	_____																																				
	<u>105</u>	= Total Cover																																					
Woody Vine Stratum (Plot size: 30 ft radius)																																							
1. _____	_____	_____	_____																																				
2. _____	_____	_____	_____																																				
3. _____	_____	_____	_____																																				
4. _____	_____	_____	_____																																				
	<u>0</u>	= Total Cover																																					
Definitions of Vegetation Strata: Tree — Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub — Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines — All woody vines greater than 3.28 ft in height.																																							
				Hydrophytic Vegetation Present?																																			
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																																							

Remarks: (Include photo numbers here or on a separate sheet.)
 The criterion for hydrophytic vegetation is met.

SOIL

Sampling Point: U-EVN-3

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

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)

- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Muck Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Fill
Depth (inches): 6

Hydric Soil Present? Yes No **X**

Remarks:

The criterion for hydric soil is not met.

WETLAND DETERMINATION DATA FORM — Northcentral and Northeast Region

Project/Site: Ironville-Lapier 69kV Tower Structure Replacemer City/County: Toledo, Lucas County Sampling Date: 2023-5-3
Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EVN-3
Investigator(s): Erin Van Nort, Emma Given Section, Township, Range: NA
Landform (hillslope, terrace, etc): Depression Local relief (concave, convex, none): None Slope (%): 0 to 1
Subregion (LRR or MLRA): MLRA 99 of LRR L Lat: 41.678535 Long: -83.474812 Datum: WGS84
Soil Map Unit Name: Udorthents, loamy NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, optional Wetland Site ID: <u>W-EVN-3</u>
Remarks: (Explain alternative procedures here or in a separate report.) Covertypes is PEM. Based on the presence of all three parameters, this area is a wetland.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>1</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u> </u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: The criterion for wetland hydrology is met.		

VEGETATION – Use scientific names of plants.

Sampling Point: W-EVN-3

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: 30 ft radius)				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
	0	= Total Cover		
Herb Stratum (Plot size: 5 ft radius)				
1.	85	Yes	FACW	
2.	10	No	FACW	
3.	5	No	OBL	
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
	100	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)				
1.				
2.				
3.				
4.				
	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>5</u>	x 1 = <u>5</u>
FACW species <u>95</u>	x 2 = <u>190</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>100</u> (A)	<u>195</u> (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

☒ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No

Remarks: (Include photo numbers here or on a separate sheet.)

The criterion for hydrophytic vegetation is met.

SOIL

Sampling Point: W-EVN-3

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 to 8	N 4/	85	10YR 6/6	15	C	PL	Silty Clay Loam	
8 to 20	10YR 5/1	80	10YR 6/8	20	C	M/PL	Silty Clay Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Iron Monosulfide (A18)
☐ Sandy Mucky Mineral (S1)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (**LRR R, MLRA 149B**)

☐ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
☐ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
☐ Loamy Mucky Mineral (F1) (**LRR K, L**)
☒ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Muck Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: Not present
Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐**Remarks:**

The criterion for hydric soil is met.

WETLAND DETERMINATION DATA FORM — Northcentral and Northeast Region

Project/Site: Ironville-Lapier 69kV Tower Structure Replacemer City/County: Toledo, Lucas County Sampling Date: 2024-10-2
Applicant/Owner: FirstEnergy State: OH Sampling Point: U-EVN-4
Investigator(s): Erin Van Nort, Emma Given Section, Township, Range: NA
Landform (hillslope, terrace, etc): Flat Local relief (concave, convex, none): None Slope (%): 0 to 1
Subregion (LRR or MLRA): _____ Lat: 41.6822635858 Long: -83.4780951646 Datum: WGS84
Soil Map Unit Name: Udorthents, loamy NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Covertypes is UPL. Based on the absence of two of three parameters, this area is an upland.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: The criterion for wetland hydrology is not met.		

VEGETATION – Use scientific names of plants.

Sampling Point: U-EVN-4

	Absolute % Cover	Dominant Species?	Indicator Status																																				
Tree Stratum (Plot size: 30 ft radius)				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)																																			
1. _____																																							
2. _____																																							
3. _____																																							
4. _____																																							
5. _____																																							
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Sapling/Shrub Stratum (Plot size: 15 ft radius)				Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 10%;"></th> <th style="width: 10%;">Multiply by:</th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr> <td>OBL species</td> <td style="text-align: center;">0</td> <td>x 1 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;">25</td> <td>x 2 =</td> <td style="text-align: center;">50</td> <td></td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;">0</td> <td>x 3 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>FACU species</td> <td style="text-align: center;">5</td> <td>x 4 =</td> <td style="text-align: center;">20</td> <td></td> </tr> <tr> <td>UPL species</td> <td style="text-align: center;">0</td> <td>x 5 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>Column Totals:</td> <td style="text-align: center;">30</td> <td>(A)</td> <td style="text-align: center;">70</td> <td>(B)</td> </tr> </tbody> </table> Prevalence Index = B/A = <u>2.3</u>	Total % Cover of:		Multiply by:			OBL species	0	x 1 =	0		FACW species	25	x 2 =	50		FAC species	0	x 3 =	0		FACU species	5	x 4 =	20		UPL species	0	x 5 =	0		Column Totals:	30	(A)	70	(B)
Total % Cover of:		Multiply by:																																					
OBL species	0	x 1 =	0																																				
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1. _____																																							
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4. _____																																							
5. _____																																							
6. _____																																							
7. _____																																							
	0	= Total Cover																																					
Herb Stratum (Plot size: 5 ft radius)				Hydrophytic Vegetation Indicators: X 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																			
1. <i>Phragmites australis</i>	20	Yes	FACW																																				
2. <i>Conium maculatum</i>	5	No	FACW																																				
3. <i>Arctium minus</i>	5	No	FACU																																				
4. _____																																							
5. _____																																							
6. _____																																							
7. _____																																							
8. _____																																							
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10. _____																																							
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12. _____																																							
	30	= Total Cover																																					
Woody Vine Stratum (Plot size: 30 ft radius)				Definitions of Vegetation Strata: Tree — Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub — Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines — All woody vines greater than 3.28 ft in height.																																			
1. _____																																							
2. _____																																							
3. _____																																							
4. _____																																							
	0	= Total Cover																																					
				Hydrophytic Vegetation Present? Yes X No _____																																			
Remarks: (Include photo numbers here or on a separate sheet.) The criterion for hydrophytic vegetation is met.																																							

SOIL

Sampling Point: U-EVN-4

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

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)

- Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- Loamy Mucky Mineral (F1) (**LRR K, L**)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Muck Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Fill
Depth (inches): 7

Hydric Soil Present?	Yes	No	X
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Remarks:

The criterion for hydric soil is not met.

WETLAND DETERMINATION DATA FORM — Northcentral and Northeast Region

Project/Site: Ironville-Lapier 69kV Tower Structure Replacemer City/County: Toledo, Lucas County Sampling Date: 2024-10-2
Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EVN-4
Investigator(s): Erin Van Nort, Emma Given Section, Township, Range: NA
Landform (hillslope, terrace, etc): Flood Plain Local relief (concave, convex, none): Undulating Slope (%): 0 to 1
Subregion (LRR or MLRA): _____ Lat: 41.6827559565 Long: -83.4783004784 Datum: WGS84
Soil Map Unit Name: Udorthents, loamy NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No _____
Hydric Soil Present? Yes ☒ No _____
Wetland Hydrology Present? Yes ☒ No _____

Is the Sampled Area within a Wetland? Yes ☒ No _____

If yes, optional Wetland Site ID: W-EVN-4

Remarks: (Explain alternative procedures here or in a separate report.)
Covertypes is PEM. Based on the presence of all three parameters, this area is a wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Aquatic Fauna (B13)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input checked="" type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Secondary Indicators (minimum of two required)

☐ Surface Soil Cracks (B6)
☒ Drainage Patterns (B10)
☐ Moss Trim Lines (B16)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☒ Microtopographic Relief (D4)
☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
Water Table Present? Yes _____ No ☒ Depth (inches): _____
Saturation Present? Yes ☒ No _____ Depth (inches): 12
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The criterion for wetland hydrology is met.

VEGETATION – Use scientific names of plants.

Sampling Point: W-EVN-4

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 ft radius</u>)				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
	0	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15 ft radius</u>)				
1.	<u>Salix nigra</u>	15	Yes	OBL
2.				
3.				
4.				
5.				
6.				
7.				
	15	= Total Cover		
Herb Stratum (Plot size: <u>5 ft radius</u>)				
1.	<u>Phalaris arundinacea</u>	35	Yes	FACW
2.	<u>Verbesina alternifolia</u>	25	Yes	FAC
3.	<u>Vernonia gigantea</u>	15	Yes	FAC
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
	75	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft radius</u>)				
1.	<u>Vitis riparia</u>	5	Yes	FAC
2.				
3.				
4.				
	5	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:		
OBL species	15	x 1 =	15	
FACW species	35	x 2 =	70	
FAC species	45	x 3 =	135	
FACU species	0	x 4 =	0	
UPL species	0	x 5 =	0	
Column Totals:	95	(A)	220	(B)

Prevalence Index = B/A = 2.3

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree — Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub — Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines — All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No

Remarks: (Include photo numbers here or on a separate sheet.)

The criterion for hydrophytic vegetation is met.

SOIL

Sampling Point: W-EVN-4

[illegible]

WETLAND DETERMINATION DATA FORM — Northcentral and Northeast Region

Project/Site: Ironville-Lapier 69kV Tower Structure Replacemer City/County: Toledo, Lucas County Sampling Date: 2025-2-27
Applicant/Owner: FirstEnergy State: OH Sampling Point: U-EVN-5
Investigator(s): Erin Van Nort, Leah Cavanaugh Section, Township, Range: NA
Landform (hillslope, terrace, etc): Flat Local relief (concave, convex, none): None Slope (%): 0 to 1
Subregion (LRR or MLRA): MLRA 99 of LRR L Lat: 41.6879407131 Long: -83.4879553142 Datum: WGS84
Soil Map Unit Name: Muskego muck NWI Classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Covertypes is UPL. Based on the absence of all three parameters, this area is an upland.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: The criterion for wetland hydrology is not met.		

VEGETATION – Use scientific names of plants.

Sampling Point: U-EVN-5

	Absolute % Cover	Dominant Species?	Indicator Status																																				
Tree Stratum (Plot size: 30 ft radius)				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) Total Number of Dominant Species Across All Strata: 3 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)																																			
1. _____																																							
2. _____																																							
3. _____																																							
4. _____																																							
5. _____																																							
6. _____																																							
7. _____																																							
	0	= Total Cover																																					
Sapling/Shrub Stratum (Plot size: 15 ft radius)				Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 10%;"></th> <th style="width: 10%;">Multiply by:</th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr> <td>OBL species</td> <td style="text-align: center;">0</td> <td>x 1 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;">0</td> <td>x 2 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;">0</td> <td>x 3 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>FACU species</td> <td style="text-align: center;">80</td> <td>x 4 =</td> <td style="text-align: center;">320</td> <td></td> </tr> <tr> <td>UPL species</td> <td style="text-align: center;">20</td> <td>x 5 =</td> <td style="text-align: center;">100</td> <td></td> </tr> <tr> <td>Column Totals:</td> <td style="text-align: center;">100</td> <td>(A)</td> <td style="text-align: center;">420</td> <td>(B)</td> </tr> </tbody> </table> Prevalence Index = B/A = 4.2	Total % Cover of:		Multiply by:			OBL species	0	x 1 =	0		FACW species	0	x 2 =	0		FAC species	0	x 3 =	0		FACU species	80	x 4 =	320		UPL species	20	x 5 =	100		Column Totals:	100	(A)	420	(B)
Total % Cover of:		Multiply by:																																					
OBL species	0	x 1 =	0																																				
FACW species	0	x 2 =	0																																				
FAC species	0	x 3 =	0																																				
FACU species	80	x 4 =	320																																				
UPL species	20	x 5 =	100																																				
Column Totals:	100	(A)	420		(B)																																		
1. _____																																							
2. _____																																							
3. _____																																							
4. _____																																							
5. _____																																							
6. _____																																							
7. _____																																							
	0	= Total Cover																																					
Herb Stratum (Plot size: 5 ft radius)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																			
1. <i>Poa annua</i>	40	Yes	FACU																																				
2. <i>Phleum pratense</i>	30	Yes	FACU																																				
3. <i>Daucus carota</i>	20	Yes	UPL																																				
4. <i>Symphyotrichum ericoides</i>	10	No	FACU																																				
5. _____																																							
6. _____																																							
7. _____																																							
8. _____																																							
9. _____																																							
10. _____																																							
11. _____																																							
12. _____																																							
	100	= Total Cover																																					
Woody Vine Stratum (Plot size: 30 ft radius)				Definitions of Vegetation Strata: Tree — Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub — Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines — All woody vines greater than 3.28 ft in height.																																			
1. _____																																							
2. _____																																							
3. _____																																							
4. _____																																							
	0	= Total Cover																																					
				Hydrophytic Vegetation Present? Yes _____ No X																																			
Remarks: (Include photo numbers here or on a separate sheet.) The criterion for hydrophytic vegetation is not met.																																							

SOIL

Sampling Point: U-EVN-5

[illegible]

WETLAND DETERMINATION DATA FORM — Northcentral and Northeast Region

Project/Site: Ironville-Lapier 69kV Tower Structure Replacemer City/County: Toledo, Lucas County Sampling Date: 2025-2-27
Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EVN-5
Investigator(s): Erin Van Nort, Leah Cavanaugh Section, Township, Range: 21 9S 8E
Landform (hillslope, terrace, etc): Depression Local relief (concave, convex, none): None Slope (%): 0 to 1
Subregion (LRR or MLRA): MLRA 99 of LRR L Lat: 41.6881109555 Long: -83.4879578394 Datum: WGS84
Soil Map Unit Name: Muskego muck NWI Classification: PEM1A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐ , Soil ☐ , or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, optional Wetland Site ID: <u>W-EVN-5</u>
Remarks: (Explain alternative procedures here or in a separate report.) Covertypes is PEM. Based on the presence of all three parameters, this area is a wetland.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>1</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u> </u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: The criterion for wetland hydrology is met.		

VEGETATION – Use scientific names of plants.

Sampling Point: W-EVN-5

	Absolute % Cover	Dominant Species?	Indicator Status																																											
Tree Stratum (Plot size: <u>30 ft radius</u>)																																														
1.																																														
2.																																														
3.																																														
4.																																														
5.																																														
6.																																														
7.																																														
	<u>0</u>	= Total Cover																																												
Sapling/Shrub Stratum (Plot size: <u>15 ft radius</u>)																																														
1.	<u>Cornus amomum</u>	20	Yes	FACW																																										
2.																																														
3.																																														
4.																																														
5.																																														
6.																																														
7.																																														
	<u>20</u>	= Total Cover																																												
Herb Stratum (Plot size: <u>5 ft radius</u>)																																														
1.	<u>Phalaris arundinacea</u>	50	Yes	FACW																																										
2.	<u>Apocynum cannabinum</u>	15	No	FAC																																										
3.	<u>Phragmites australis</u>	15	No	FACW																																										
4.																																														
5.																																														
6.																																														
7.																																														
8.																																														
9.																																														
10.																																														
11.																																														
12.																																														
	<u>80</u>	= Total Cover																																												
Woody Vine Stratum (Plot size: <u>30 ft radius</u>)																																														
1.																																														
2.																																														
3.																																														
4.																																														
	<u>0</u>	= Total Cover																																												
Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)																																														
Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="width: 10%;">Total % Cover of:</th> <th style="width: 10%;"></th> <th style="width: 10%;">Multiply by:</th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr> <td>OBL species</td> <td style="text-align: center;"><u>0</u></td> <td style="text-align: center;">x 1 =</td> <td style="text-align: center;"><u>0</u></td> <td></td> <td></td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;"><u>85</u></td> <td style="text-align: center;">x 2 =</td> <td style="text-align: center;"><u>170</u></td> <td></td> <td></td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;"><u>15</u></td> <td style="text-align: center;">x 3 =</td> <td style="text-align: center;"><u>45</u></td> <td></td> <td></td> </tr> <tr> <td>FACU species</td> <td style="text-align: center;"><u>0</u></td> <td style="text-align: center;">x 4 =</td> <td style="text-align: center;"><u>0</u></td> <td></td> <td></td> </tr> <tr> <td>UPL species</td> <td style="text-align: center;"><u>0</u></td> <td style="text-align: center;">x 5 =</td> <td style="text-align: center;"><u>0</u></td> <td></td> <td></td> </tr> <tr> <td>Column Totals:</td> <td style="text-align: center;"><u>100</u></td> <td style="text-align: center;">(A)</td> <td style="text-align: center;"><u>215</u></td> <td style="text-align: center;">(B)</td> <td></td> </tr> </tbody> </table> Prevalence Index = B/A = <u>2.2</u>						Total % Cover of:		Multiply by:			OBL species	<u>0</u>	x 1 =	<u>0</u>			FACW species	<u>85</u>	x 2 =	<u>170</u>			FAC species	<u>15</u>	x 3 =	<u>45</u>			FACU species	<u>0</u>	x 4 =	<u>0</u>			UPL species	<u>0</u>	x 5 =	<u>0</u>			Column Totals:	<u>100</u>	(A)	<u>215</u>	(B)	
	Total % Cover of:		Multiply by:																																											
OBL species	<u>0</u>	x 1 =	<u>0</u>																																											
FACW species	<u>85</u>	x 2 =	<u>170</u>																																											
FAC species	<u>15</u>	x 3 =	<u>45</u>																																											
FACU species	<u>0</u>	x 4 =	<u>0</u>																																											
UPL species	<u>0</u>	x 5 =	<u>0</u>																																											
Column Totals:	<u>100</u>	(A)	<u>215</u>	(B)																																										
Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																														
Definitions of Vegetation Strata: Tree — Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub — Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines — All woody vines greater than 3.28 ft in height.																																														
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																																														
Remarks: (Include photo numbers here or on a separate sheet.) The criterion for hydrophytic vegetation is met.																																														

SOIL

Sampling Point: W-EVN-5

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

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)

- Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- Loamy Mucky Mineral (F1) (**LRR K, L**)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- X** Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Muck Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Fill
Depth (inches): 6

Hydric Soil Present? Yes ☒ No ☐

Remarks:

The criterion for hydric soil is met.

OEPA ORAM Data Forms

Background Information

Name: Erin Van Nort	
Date: 02/09/2024	
Affiliation: TRC Companies, Inc.	
Address: 1382 West Ninth Street, Suite 400	
Phone Number: 216-347-3342	
e-mail address: EVanNort@TRCcompanies.com	
Name of Wetland: W-EVN-1	
Vegetation Communit(ies): PEM	
HGM Class(es): Riverine	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. See Report	
Lat/Long or UTM Coordinate	41.685509, -83.484870
USGS Quad Name	Oregon
County	Lucas
Township	N/A
Section and Subsection	N/A
Hydrologic Unit Code	041000090904
Site Visit	02/09/2024
National Wetland Inventory Map	See Report
Ohio Wetland Inventory Map	See Report
Soil Survey	See Report
Delineation report/map	See Report

Name of Wetland: W-EVN-1	
Wetland Size (acres, hectares):	~1 ac (0.405 ha)
Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Report	
Comments, Narrative Discussion, Justification of Category Changes:	
Final score : 26.5	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.	X	
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.	X	
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.	X	
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.	X	
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.	X	

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 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	NO 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	NO 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 <i>Phalaris arundinacea</i> , <i>Lythrum salicaria</i> , or <i>Phragmites australis</i> , 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	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 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	NO 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 Go to Question 10	NO 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	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	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	Oak Opening species	wet prairie species
<i>Lythrum salicaria</i>	<i>Zygadenus elegans</i> var. <i>glaucus</i>	<i>Calla palustris</i>	<i>Carex cryptolepis</i>	<i>Calamagrostis canadensis</i>
<i>Myriophyllum spicatum</i>	<i>Cacalia plantaginea</i>	<i>Carex atlantica</i> var. <i>capillacea</i>	<i>Carex lasiocarpa</i>	<i>Calamagrostis stricta</i>
<i>Najas minor</i>	<i>Carex flava</i>	<i>Carex echinata</i>	<i>Carex stricta</i>	<i>Carex atherodes</i>
<i>Phalaris arundinacea</i>	<i>Carex sterilis</i>	<i>Carex oligosperma</i>	<i>Cladium mariscoides</i>	<i>Carex buxbaumii</i>
<i>Phragmites australis</i>	<i>Carex stricta</i>	<i>Carex trisperma</i>	<i>Calamagrostis stricta</i>	<i>Carex pellita</i>
<i>Potamogeton crispus</i>	<i>Deschampsia caespitosa</i>	<i>Chamaedaphne calyculata</i>	<i>Calamagrostis canadensis</i>	<i>Carex sartwellii</i>
<i>Ranunculus ficaria</i>	<i>Eleocharis rostellata</i>	<i>Decodon verticillatus</i>	<i>Quercus palustris</i>	<i>Gentiana andrewsii</i>
<i>Rhamnus frangula</i>	<i>Eriophorum viridicarinatum</i>	<i>Eriophorum virginicum</i>		<i>Helianthus grosseserratus</i>
<i>Typha angustifolia</i>	<i>Gentianopsis</i> spp.	<i>Larix laricina</i>		<i>Liatris spicata</i>
<i>Typha xglauca</i>	<i>Lobelia kalmii</i>	<i>Nemopanthus mucronatus</i>		<i>Lysimachia quadriflora</i>
	<i>Parnassia glauca</i>	<i>Scheuchzeria palustris</i>		<i>Lythrum alatum</i>
	<i>Potentilla fruticosa</i>	<i>Sphagnum</i> spp.		<i>Pycnanthemum virginianum</i>
	<i>Rhamnus alnifolia</i>	<i>Vaccinium macrocarpon</i>		<i>Silphium terebinthinaceum</i>
	<i>Rhynchospora capillacea</i>	<i>Vaccinium corymbosum</i>		<i>Sorghastrum nutans</i>
	<i>Salix candida</i>	<i>Vaccinium oxycoccos</i>		<i>Spartina pectinata</i>
	<i>Salix myricoides</i>	<i>Woodwardia virginica</i>		<i>Solidago riddellii</i>
	<i>Salix serissima</i>	<i>Xyris difformis</i>		
	<i>Solidago ohioensis</i>			
	<i>Tofieldia glutinosa</i>			
	<i>Triglochin maritimum</i>			
	<i>Triglochin palustre</i>			

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

Site: FirstEnergy, Ironville-Lapier 69kV Tower Structure Replacement **Rater(s):** Erin Van Nort, Jenna Slabe **Date:** 2024-02-09

2

2

max 6 pts. subtotal

Metric 1. Wetland Area (size).

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)

1

3

max 14 pts. subtotal

Metric 2. Upland buffers and surrounding land use.

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)

2b. 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)

16

19

max 30 pts. subtotal

Metric 3. Hydrology.

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 m (>27.6 in) (3)
☐ 0.4 to 0.7 m (15.7 to 27.6 in) (2)
☒ <0.4 m (<15.7 in) (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)

3b. 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)

3d. 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)

Check all disturbances observed

- | | |
|--|--|
| <input type="checkbox"/> ditch | <input checked="" type="checkbox"/> point source (nonstormwater) |
| <input type="checkbox"/> tile | <input type="checkbox"/> filling/grading |
| <input type="checkbox"/> dike | <input checked="" type="checkbox"/> road bed/RR track |
| <input type="checkbox"/> weir | <input checked="" type="checkbox"/> dredging |
| <input checked="" type="checkbox"/> stormwater input | <input type="checkbox"/> other |

7.5

26.5

max 20 pts. subtotal

Metric 4. Habitat Alteration and Development.

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)

Check all disturbances observed

- | | |
|---|---|
| <input type="checkbox"/> mowing | <input type="checkbox"/> shrub/sapling removal |
| <input type="checkbox"/> grazing | <input type="checkbox"/> herbaceous/aquatic bed removal |
| <input type="checkbox"/> clearcutting | <input checked="" type="checkbox"/> sedimentation |
| <input type="checkbox"/> selective cutting | <input type="checkbox"/> dredging |
| <input type="checkbox"/> woody debris removal | <input type="checkbox"/> farming |
| <input type="checkbox"/> toxic pollutants | <input type="checkbox"/> nutrient enrichment |

26.5

subtotal this page

Site: FirstEnergy, Ironville-Lapier 69kV Tower Structure Replacement **Rater(s):** Erin Van Nort, Jenna Slabe **Date:** 2024-02-09

26.5

subtotal first page

0 26.5

max 10 pts. subtotal

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)

0 26.5

max 20 pts. subtotal

Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic Bed
☐ 1 Emergent
☐ 0 Shrub
☐ Forest
☐ 0 Mudflats
☐ Open water
☐ Other _____

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
☐ Moderately high (4)
☐ Moderate (3)
☐ Moderately low (2)
☒ Low (1)
☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☒ Extensive >75% cover (-5)
☐ Moderate 25-75% cover (-3)
☐ Sparse 5-25% cover (-1)
☐ Nearly absent <5% cover (0)
☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
☐ 3 Coarse woody debris >15cm (6in)
☐ 0 Standing dead >25cm (10in) dbh
☐ 0 Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
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 vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	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
high	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

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography 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 and of highest quality

26.5

CATEGORY 1**End of Quantitative Rating. Complete Categorization Worksheets.**

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	<input checked="" type="radio"/> 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-categorized 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	<input checked="" type="radio"/> 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	<input checked="" type="radio"/> 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?	<input checked="" type="radio"/> 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	<input checked="" type="radio"/> 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 <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> 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	<input checked="" type="radio"/> 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, 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 or information for this determination should be provided.

Final Category

Choose one	<input checked="" type="radio"/> Category 1	<input type="radio"/> Category 2	<input type="radio"/> Category 3
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End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Erin Van Nort	
Date: 02/09/2024	
Affiliation: TRC Companies, Inc.	
Address: 1382 West Ninth Street, Suite 400	
Phone Number: 216-347-3342	
e-mail address: EVanNort@TRCcompanies.com	
Name of Wetland: W-EVN-2	
Vegetation Communit(ies): PEM	
HGM Class(es): Depression (I)	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. See Report	
Lat/Long or UTM Coordinate	41.681891, -83.479424
USGS Quad Name	Oregon
County	Lucas
Township	N/A
Section and Subsection	N/A
Hydrologic Unit Code	041000090904
Site Visit	02/09/2024
National Wetland Inventory Map	See Report
Ohio Wetland Inventory Map	See Report
Soil Survey	See Report
Delineation report/map	See Report

Name of Wetland: W-EVN-2	
Wetland Size (acres, hectares):	~0.34 ac (0.138 ha)
Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Report	
Comments, Narrative Discussion, Justification of Category Changes:	
Final score : 16	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.	X	
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.	X	
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.	X	
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.	X	
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.	X	

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 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	NO 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	NO 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 <i>Phalaris arundinacea</i> , <i>Lythrum salicaria</i> , or <i>Phragmites australis</i> , 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	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 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	NO 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 Go to Question 10	NO 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	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	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	Oak Opening species	wet prairie species
<i>Lythrum salicaria</i>	<i>Zygadenus elegans</i> var. <i>glaucus</i>	<i>Calla palustris</i>	<i>Carex cryptolepis</i>	<i>Calamagrostis canadensis</i>
<i>Myriophyllum spicatum</i>	<i>Cacalia plantaginea</i>	<i>Carex atlantica</i> var. <i>capillacea</i>	<i>Carex lasiocarpa</i>	<i>Calamagrostis stricta</i>
<i>Najas minor</i>	<i>Carex flava</i>	<i>Carex echinata</i>	<i>Carex stricta</i>	<i>Carex atherodes</i>
<i>Phalaris arundinacea</i>	<i>Carex sterilis</i>	<i>Carex oligosperma</i>	<i>Cladium mariscoides</i>	<i>Carex buxbaumii</i>
<i>Phragmites australis</i>	<i>Carex stricta</i>	<i>Carex trisperma</i>	<i>Calamagrostis stricta</i>	<i>Carex pellita</i>
<i>Potamogeton crispus</i>	<i>Deschampsia caespitosa</i>	<i>Chamaedaphne calyculata</i>	<i>Calamagrostis canadensis</i>	<i>Carex sartwellii</i>
<i>Ranunculus ficaria</i>	<i>Eleocharis rostellata</i>	<i>Decodon verticillatus</i>	<i>Quercus palustris</i>	<i>Gentiana andrewsii</i>
<i>Rhamnus frangula</i>	<i>Eriophorum viridicarinatum</i>	<i>Eriophorum virginicum</i>		<i>Helianthus grosseserratus</i>
<i>Typha angustifolia</i>	<i>Gentianopsis</i> spp.	<i>Larix laricina</i>		<i>Liatris spicata</i>
<i>Typha xglauca</i>	<i>Lobelia kalmii</i>	<i>Nemopanthus mucronatus</i>		<i>Lysimachia quadriflora</i>
	<i>Parnassia glauca</i>	<i>Scheuchzeria palustris</i>		<i>Lythrum alatum</i>
	<i>Potentilla fruticosa</i>	<i>Sphagnum</i> spp.		<i>Pycnanthemum virginianum</i>
	<i>Rhamnus alnifolia</i>	<i>Vaccinium macrocarpon</i>		<i>Silphium terebinthinaceum</i>
	<i>Rhynchospora capillacea</i>	<i>Vaccinium corymbosum</i>		<i>Sorghastrum nutans</i>
	<i>Salix candida</i>	<i>Vaccinium oxycoccos</i>		<i>Spartina pectinata</i>
	<i>Salix myricoides</i>	<i>Woodwardia virginica</i>		<i>Solidago riddellii</i>
	<i>Salix serissima</i>	<i>Xyris difformis</i>		
	<i>Solidago ohioensis</i>			
	<i>Tofieldia glutinosa</i>			
	<i>Triglochin maritimum</i>			
	<i>Triglochin palustre</i>			

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

Site: FirstEnergy, Ironville-Lapier 69kV T... **Rater(s):** Erin Van Nort, Jenna Slabe **Date:** 2024-02-09

2	2
max 6 pts.	subtotal

Metric 1. Wetland Area (size).

RESOURCE ID: W-EVN-02

TYPE: PEM

Continues Offsite? yes

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)

1	3
max 14 pts.	subtotal

Metric 2. Upland buffers and surrounding land use.

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)

2b. 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)

9	12
max 30 pts.	subtotal

Metric 3. Hydrology.

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)
- ☒ <0.4m (<15.7in) (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)

3b. 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)

3d. Duration inundation/saturation. Score one/dbl check avg.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☒ Seasonally inundated (2)
- ☐ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> ditch	<input checked="" type="checkbox"/> point source (nonstormwater)
<input type="checkbox"/> tile	<input checked="" type="checkbox"/> filling/grading
<input type="checkbox"/> dike	<input type="checkbox"/> road bed/RR track
<input type="checkbox"/> weir	<input type="checkbox"/> dredging
<input checked="" type="checkbox"/> stormwater input	<input type="checkbox"/> other: _____

6	18
max 20 pts.	subtotal

Metric 4. Habitat Alteration and Development.

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)

Check all disturbances observed	
<input type="checkbox"/> mowing	<input checked="" type="checkbox"/> shrub/sapling removal
<input type="checkbox"/> grazing	<input type="checkbox"/> herbaceous/aquatic bed removal
<input type="checkbox"/> clearcutting	<input type="checkbox"/> sedimentation
<input type="checkbox"/> selective cutting	<input type="checkbox"/> dredging
<input type="checkbox"/> woody debris removal	<input type="checkbox"/> farming
<input type="checkbox"/> toxic pollutants	<input type="checkbox"/> nutrient enrichment

18

subtotal this page

Site: FirstEnergy, Ironville-Lapier 69kV T... **Rater(s):** Erin Van Nort, Jenna Slabe **Date:** 2024-02-09

18

subtotal first page

0

18

max 10 pts.

subtotal

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)

-2

16

max 20 pts.

subtotal

Metric 6. Plant communities, interspersions, microtopography.**6a. Wetland Vegetation Communities.**

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
☒ 1 Emergent
☐ Shrub
☐ Forest
☐ Mudflats
☐ Open water
☐ Other: _____

6b. Horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
☐ Moderately high (4)
☐ Moderate (3)
☐ Moderately low (2)
☒ Low (1)
☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage**Invasives present:**

hybrid
cattail, phragmites, reed
canary grass

- ☒ Extensive >75% cover (-5)
☐ Moderate 25-75% cover (-3)
☐ Sparse 5-25% cover (-1)
☐ Nearly absent <5% cover (0)
☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- Vegetated hummocks/tussocks
 Coarse woody debris >15cm (6in)
 Standing dead >25cm (10in) dbh
 Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
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 vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	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
high	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

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography 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 and of highest quality

16

Category 1**End of Quantitative Rating. Complete Categorization Worksheets.**

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	<input checked="" type="radio"/> 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-categorized 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	<input checked="" type="radio"/> 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	<input checked="" type="radio"/> 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?	<input checked="" type="radio"/> 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	<input checked="" type="radio"/> 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 <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> 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	<input checked="" type="radio"/> 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, 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 or information for this determination should be provided.

Final Category

Choose one	<input checked="" type="radio"/> Category 1	<input type="radio"/> Category 2	<input type="radio"/> Category 3
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End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Erin Van Nort	
Date: 10/02/2024	
Affiliation: TRC Companies, Inc.	
Address: 1382 West Ninth Street, Suite 400	
Phone Number: 216-347-3342	
e-mail address: EVanNort@TRCcompanies.com	
Name of Wetland: W-EVN-3	
Vegetation Communit(ies): PEM	
HGM Class(es): Depression	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. See Report	
Lat/Long or UTM Coordinate	41.678076, -83.474044
USGS Quad Name	Oregon
County	Lucas
Township	N/A
Section and Subsection	N/A
Hydrologic Unit Code	041000090904
Site Visit	10/02/2024
National Wetland Inventory Map	See Report
Ohio Wetland Inventory Map	See Report
Soil Survey	See Report
Delineation report/map	See Report

Name of Wetland: W-EVN-3	
Wetland Size (acres, hectares):	~1.5 acres (0.6 ha)
Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Report	
Comments, Narrative Discussion, Justification of Category Changes:	
Final score : 19.5	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.	X	
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.	X	
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.	X	
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.	X	
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.	X	

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 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	NO 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	NO 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 <i>Phalaris arundinacea</i> , <i>Lythrum salicaria</i> , or <i>Phragmites australis</i> , 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	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 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	NO 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 Go to Question 10	NO 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	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	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	Oak Opening species	wet prairie species
<i>Lythrum salicaria</i>	<i>Zygadenus elegans</i> var. <i>glaucus</i>	<i>Calla palustris</i>	<i>Carex cryptolepis</i>	<i>Calamagrostis canadensis</i>
<i>Myriophyllum spicatum</i>	<i>Cacalia plantaginea</i>	<i>Carex atlantica</i> var. <i>capillacea</i>	<i>Carex lasiocarpa</i>	<i>Calamagrostis stricta</i>
<i>Najas minor</i>	<i>Carex flava</i>	<i>Carex echinata</i>	<i>Carex stricta</i>	<i>Carex atherodes</i>
<i>Phalaris arundinacea</i>	<i>Carex sterilis</i>	<i>Carex oligosperma</i>	<i>Cladium mariscoides</i>	<i>Carex buxbaumii</i>
<i>Phragmites australis</i>	<i>Carex stricta</i>	<i>Carex trisperma</i>	<i>Calamagrostis stricta</i>	<i>Carex pellita</i>
<i>Potamogeton crispus</i>	<i>Deschampsia caespitosa</i>	<i>Chamaedaphne calyculata</i>	<i>Calamagrostis canadensis</i>	<i>Carex sartwellii</i>
<i>Ranunculus ficaria</i>	<i>Eleocharis rostellata</i>	<i>Decodon verticillatus</i>	<i>Quercus palustris</i>	<i>Gentiana andrewsii</i>
<i>Rhamnus frangula</i>	<i>Eriophorum viridicarinatum</i>	<i>Eriophorum virginicum</i>		<i>Helianthus grosseserratus</i>
<i>Typha angustifolia</i>	<i>Gentianopsis</i> spp.	<i>Larix laricina</i>		<i>Liatris spicata</i>
<i>Typha xglauca</i>	<i>Lobelia kalmii</i>	<i>Nemopanthus mucronatus</i>		<i>Lysimachia quadriflora</i>
	<i>Parnassia glauca</i>	<i>Scheuchzeria palustris</i>		<i>Lythrum alatum</i>
	<i>Potentilla fruticosa</i>	<i>Sphagnum</i> spp.		<i>Pycnanthemum virginianum</i>
	<i>Rhamnus alnifolia</i>	<i>Vaccinium macrocarpon</i>		<i>Silphium terebinthinaceum</i>
	<i>Rhynchospora capillacea</i>	<i>Vaccinium corymbosum</i>		<i>Sorghastrum nutans</i>
	<i>Salix candida</i>	<i>Vaccinium oxycoccos</i>		<i>Spartina pectinata</i>
	<i>Salix myricoides</i>	<i>Woodwardia virginica</i>		<i>Solidago riddellii</i>
	<i>Salix serissima</i>	<i>Xyris difformis</i>		
	<i>Solidago ohioensis</i>			
	<i>Tofieldia glutinosa</i>			
	<i>Triglochin maritimum</i>			
	<i>Triglochin palustre</i>			

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

Site: FirstEnergy, Ironville-Lapier 69kV Tower Structure Replacement **Rater(s):** Erin Van Nort, Emma Given **Date:** 2024-10-02**2****2**

max 6 pts. subtotal

Metric 1. Wetland Area (size).

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)

1**3**

max 14 pts. subtotal

Metric 2. Upland buffers and surrounding land use.

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)

2b. 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)

11**14**

max 30 pts. subtotal

Metric 3. Hydrology.

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 m (>27.6 in) (3)
☐ 0.4 to 0.7 m (15.7 to 27.6 in) (2)
☒ <0.4 m (<15.7 in) (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)

3b. 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)

3d. 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)

Check all disturbances observed

- | | |
|--|---|
| <input type="checkbox"/> ditch | <input type="checkbox"/> point source (nonstormwater) |
| <input type="checkbox"/> tile | <input checked="" type="checkbox"/> filling/grading |
| <input type="checkbox"/> dike | <input checked="" type="checkbox"/> road bed/RR track |
| <input type="checkbox"/> weir | <input type="checkbox"/> dredging |
| <input checked="" type="checkbox"/> stormwater input | <input type="checkbox"/> other |

9.5**23.5**

max 20 pts. subtotal

Metric 4. Habitat Alteration and Development.

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)

Check all disturbances observed

- | | |
|---|---|
| <input checked="" type="checkbox"/> mowing | <input checked="" type="checkbox"/> shrub/sapling removal |
| <input type="checkbox"/> grazing | <input type="checkbox"/> herbaceous/aquatic bed removal |
| <input type="checkbox"/> clearcutting | <input type="checkbox"/> sedimentation |
| <input type="checkbox"/> selective cutting | <input type="checkbox"/> dredging |
| <input type="checkbox"/> woody debris removal | <input type="checkbox"/> farming |
| <input type="checkbox"/> toxic pollutants | <input type="checkbox"/> nutrient enrichment |

23.5

subtotal this page

Site: FirstEnergy, Ironville-Lapier 69kV Tower Structure Replacement **Rater(s):** Erin Van Nort, Emma Given **Date:** 2024-10-02

23.5

subtotal first page

0 23.5

max 10 pts. subtotal

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)

-4 19.5

max 20 pts. subtotal

Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic Bed
☐ 1 Emergent
☐ Shrub
☐ Forest
☐ Mudflats
☐ Open water
☐ Other _____

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
☐ Moderately high (4)
☐ Moderate (3)
☐ Moderately low (2)
☐ Low (1)
☒ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☒ Extensive >75% cover (-5)
☐ Moderate 25-75% cover (-3)
☐ Sparse 5-25% cover (-1)
☐ Nearly absent <5% cover (0)
☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
☐ 0 Coarse woody debris >15cm (6in)
☐ 0 Standing dead >25cm (10in) dbh
☐ 0 Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
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 vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	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
high	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

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography 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 and of highest quality

19.5

CATEGORY 1**End of Quantitative Rating. Complete Categorization Worksheets.**

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1. Critical Habitat	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES <input checked="" type="radio"/> NO	If yes, Category 1.
	Question 6. Bogs	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 7. Fens	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES <input checked="" type="radio"/> NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES <input checked="" type="radio"/> NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES <input checked="" type="radio"/> NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES <input checked="" type="radio"/> NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES <input checked="" type="radio"/> NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES <input checked="" type="radio"/> 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	1	
	Metric 3. Hydrology	11	
	Metric 4. Habitat	9.5	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersions, microtopography	-4	
	TOTAL SCORE	19.5	Category based on score breakpoints 1

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	<input checked="" type="radio"/> 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-categorized 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	<input checked="" type="radio"/> 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	<input checked="" type="radio"/> 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?	<input checked="" type="radio"/> 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	<input checked="" type="radio"/> 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 <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> 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	<input checked="" type="radio"/> 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, 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 or information for this determination should be provided.

Final Category

Choose one	<input checked="" type="radio"/> Category 1	<input type="radio"/> Category 2	<input type="radio"/> Category 3
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End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Erin Van Nort	
Date: 10/02/2024	
Affiliation: TRC Companies, Inc.	
Address: 1382 West Ninth Street, Suite 400	
Phone Number: 216-347-3342	
e-mail address: EVanNort@TRCcompanies.com	
Name of Wetland: W-EVN-4	
Vegetation Communit(ies): PEM	
HGM Class(es): Riverine	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. See Report	
Lat/Long or UTM Coordinate	41.682587 -83.478197
USGS Quad Name	Oregon
County	Lucas
Township	N/A
Section and Subsection	N/A
Hydrologic Unit Code	041000090904
Site Visit	10/02/2024
National Wetland Inventory Map	See Report
Ohio Wetland Inventory Map	See Report
Soil Survey	See Report
Delineation report/map	See Report

Name of Wetland: W-EVN-4	
Wetland Size (acres, hectares):	~1.0 acre (0.4 ha)
Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Report	
Comments, Narrative Discussion, Justification of Category Changes:	
Final score : 26	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.	X	
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.	X	
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.	X	
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.	X	
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.	X	

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 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	NO 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	NO 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 <i>Phalaris arundinacea</i> , <i>Lythrum salicaria</i> , or <i>Phragmites australis</i> , 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	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 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	NO 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 Go to Question 10	NO 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	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	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	Oak Opening species	wet prairie species
<i>Lythrum salicaria</i>	<i>Zygadenus elegans</i> var. <i>glaucus</i>	<i>Calla palustris</i>	<i>Carex cryptolepis</i>	<i>Calamagrostis canadensis</i>
<i>Myriophyllum spicatum</i>	<i>Cacalia plantaginea</i>	<i>Carex atlantica</i> var. <i>capillacea</i>	<i>Carex lasiocarpa</i>	<i>Calamagrostis stricta</i>
<i>Najas minor</i>	<i>Carex flava</i>	<i>Carex echinata</i>	<i>Carex stricta</i>	<i>Carex atherodes</i>
<i>Phalaris arundinacea</i>	<i>Carex sterilis</i>	<i>Carex oligosperma</i>	<i>Cladium mariscoides</i>	<i>Carex buxbaumii</i>
<i>Phragmites australis</i>	<i>Carex stricta</i>	<i>Carex trisperma</i>	<i>Calamagrostis stricta</i>	<i>Carex pellita</i>
<i>Potamogeton crispus</i>	<i>Deschampsia caespitosa</i>	<i>Chamaedaphne calyculata</i>	<i>Calamagrostis canadensis</i>	<i>Carex sartwellii</i>
<i>Ranunculus ficaria</i>	<i>Eleocharis rostellata</i>	<i>Decodon verticillatus</i>	<i>Quercus palustris</i>	<i>Gentiana andrewsii</i>
<i>Rhamnus frangula</i>	<i>Eriophorum viridicarinatum</i>	<i>Eriophorum virginicum</i>		<i>Helianthus grosseserratus</i>
<i>Typha angustifolia</i>	<i>Gentianopsis</i> spp.	<i>Larix laricina</i>		<i>Liatris spicata</i>
<i>Typha xglauca</i>	<i>Lobelia kalmii</i>	<i>Nemopanthus mucronatus</i>		<i>Lysimachia quadriflora</i>
	<i>Parnassia glauca</i>	<i>Scheuchzeria palustris</i>		<i>Lythrum alatum</i>
	<i>Potentilla fruticosa</i>	<i>Sphagnum</i> spp.		<i>Pycnanthemum virginianum</i>
	<i>Rhamnus alnifolia</i>	<i>Vaccinium macrocarpon</i>		<i>Silphium terebinthinaceum</i>
	<i>Rhynchospora capillacea</i>	<i>Vaccinium corymbosum</i>		<i>Sorghastrum nutans</i>
	<i>Salix candida</i>	<i>Vaccinium oxycoccos</i>		<i>Spartina pectinata</i>
	<i>Salix myricoides</i>	<i>Woodwardia virginica</i>		<i>Solidago riddellii</i>
	<i>Salix serissima</i>	<i>Xyris difformis</i>		
	<i>Solidago ohioensis</i>			
	<i>Tofieldia glutinosa</i>			
	<i>Triglochin maritimum</i>			
	<i>Triglochin palustre</i>			

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

Site: FirstEnergy, Ironville-Lapier 69kV Tower Structure Replacement **Rater(s):** Erin Van Nort, Emma Given **Date:** 2024-10-02

2	2
max 6 pts.	subtotal

Metric 1. Wetland Area (size).

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)

1	3
max 14 pts.	subtotal

Metric 2. Upland buffers and surrounding land use.

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)

2b. 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)

15	18
max 30 pts.	subtotal

Metric 3. Hydrology.

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 m (>27.6 in) (3)
☐ 0.4 to 0.7 m (15.7 to 27.6 in) (2)
☒ <0.4 m (<15.7 in) (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)

3b. 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)

3d. 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)

Check all disturbances observed

- | | |
|---|---|
| <input type="checkbox"/> ditch | <input type="checkbox"/> point source (nonstormwater) |
| <input type="checkbox"/> tile | <input checked="" type="checkbox"/> filling/grading |
| <input type="checkbox"/> dike | <input type="checkbox"/> road bed/RR track |
| <input type="checkbox"/> weir | <input type="checkbox"/> dredging |
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> other |

8	26
max 20 pts.	subtotal

Metric 4. Habitat Alteration and Development.

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)

Check all disturbances observed

- | | |
|---|---|
| <input checked="" type="checkbox"/> mowing | <input type="checkbox"/> shrub/sapling removal |
| <input type="checkbox"/> grazing | <input type="checkbox"/> herbaceous/aquatic bed removal |
| <input type="checkbox"/> clearcutting | <input type="checkbox"/> sedimentation |
| <input checked="" type="checkbox"/> selective cutting | <input type="checkbox"/> dredging |
| <input type="checkbox"/> woody debris removal | <input type="checkbox"/> farming |
| <input type="checkbox"/> toxic pollutants | <input type="checkbox"/> nutrient enrichment |

26
subtotal this page

Site: FirstEnergy, Ironville-Lapier 69kV Tower Structure Replacement **Rater(s):** Erin Van Nort, Emma Given **Date:** 2024-10-02

26

subtotal first page

0 26

max 10 pts. subtotal

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)

0 26

max 20 pts. subtotal

Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic Bed
☐ 1 Emergent
☐ 0 Shrub
☐ Forest
☐ Mudflats
☐ Open water
☐ Other _____

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
☐ Moderately high (4)
☐ Moderate (3)
☒ Moderately low (2)
☐ Low (1)
☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☒ Extensive >75% cover (-5)
☐ Moderate 25-75% cover (-3)
☐ Sparse 5-25% cover (-1)
☐ Nearly absent <5% cover (0)
☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
☐ 1 Coarse woody debris >15cm (6in)
☐ 1 Standing dead >25cm (10in) dbh
☐ 0 Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
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 vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	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
high	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

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography 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 and of highest quality

26

CATEGORY 1**End of Quantitative Rating. Complete Categorization Worksheets.**

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1. Critical Habitat	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES <input checked="" type="radio"/> NO	If yes, Category 1.
	Question 6. Bogs	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 7. Fens	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES <input checked="" type="radio"/> NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES <input checked="" type="radio"/> NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES <input checked="" type="radio"/> NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES <input checked="" type="radio"/> NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES <input checked="" type="radio"/> NO	If yes, Category 3
Question 11. Relict Wet Prairies	YES <input checked="" type="radio"/> 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	1	
	Metric 3. Hydrology	15	
	Metric 4. Habitat	8	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersions, microtopography	0	
	TOTAL SCORE	26	Category based on score breakpoints 1

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	<input checked="" type="radio"/> 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-categorized 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	<input checked="" type="radio"/> 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	<input checked="" type="radio"/> 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?	<input checked="" type="radio"/> 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	<input checked="" type="radio"/> 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 <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> 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	<input checked="" type="radio"/> 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, 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 or information for this determination should be provided.

Final Category

Choose one	<input checked="" type="radio"/> Category 1	<input type="radio"/> Category 2	<input type="radio"/> Category 3
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End of Ohio Rapid Assessment Method for Wetlands.

Background Information

Name: Erin Van Nort	
Date: 02/27/2025	
Affiliation: TRC Companies, Inc.	
Address: 1382 West Ninth Street, Suite 400	
Phone Number: 216-347-3342	
e-mail address: EVanNort@TRCcompanies.com	
Name of Wetland: W-EVN-5	
Vegetation Communit(ies): PEM/PFO/PSS	
HGM Class(es): Depression	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. See Report	
Lat/Long or UTM Coordinate	41.687867, -83.487739
USGS Quad Name	Oregon
County	Lucas
Township	N/A
Section and Subsection	N/A
Hydrologic Unit Code	041000010309
Site Visit	02/27/2025
National Wetland Inventory Map	See Report
Ohio Wetland Inventory Map	See Report
Soil Survey	See Report
Delineation report/map	See Report

Name of Wetland: W-EVN-5	
Wetland Size (acres, hectares):	~3.5 acre (1.4 ha)
Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc. See Report	
Comments, Narrative Discussion, Justification of Category Changes: ORAM Category based on scoring breakpoints from Table 2 of the ORAM v 5.0 Quantitative Score Calibration; scores falling within a "gray zone" or "modified" category were rounded up.	
Final score : 32	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.	X	
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.	X	
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.	X	
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.	X	
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.	X	

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 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	NO 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	NO 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 <i>Phalaris arundinacea</i> , <i>Lythrum salicaria</i> , or <i>Phragmites australis</i> , 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	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 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	NO 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 Go to Question 10	NO 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	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	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	Oak Opening species	wet prairie species
<i>Lythrum salicaria</i>	<i>Zygadenus elegans</i> var. <i>glaucus</i>	<i>Calla palustris</i>	<i>Carex cryptolepis</i>	<i>Calamagrostis canadensis</i>
<i>Myriophyllum spicatum</i>	<i>Cacalia plantaginea</i>	<i>Carex atlantica</i> var. <i>capillacea</i>	<i>Carex lasiocarpa</i>	<i>Calamagrostis stricta</i>
<i>Najas minor</i>	<i>Carex flava</i>	<i>Carex echinata</i>	<i>Carex stricta</i>	<i>Carex atherodes</i>
<i>Phalaris arundinacea</i>	<i>Carex sterilis</i>	<i>Carex oligosperma</i>	<i>Cladium mariscoides</i>	<i>Carex buxbaumii</i>
<i>Phragmites australis</i>	<i>Carex stricta</i>	<i>Carex trisperma</i>	<i>Calamagrostis stricta</i>	<i>Carex pellita</i>
<i>Potamogeton crispus</i>	<i>Deschampsia caespitosa</i>	<i>Chamaedaphne calyculata</i>	<i>Calamagrostis canadensis</i>	<i>Carex sartwellii</i>
<i>Ranunculus ficaria</i>	<i>Eleocharis rostellata</i>	<i>Decodon verticillatus</i>	<i>Quercus palustris</i>	<i>Gentiana andrewsii</i>
<i>Rhamnus frangula</i>	<i>Eriophorum viridicarinatum</i>	<i>Eriophorum virginicum</i>		<i>Helianthus grosseserratus</i>
<i>Typha angustifolia</i>	<i>Gentianopsis</i> spp.	<i>Larix laricina</i>		<i>Liatris spicata</i>
<i>Typha xglauca</i>	<i>Lobelia kalmii</i>	<i>Nemopanthus mucronatus</i>		<i>Lysimachia quadriflora</i>
	<i>Parnassia glauca</i>	<i>Scheuchzeria palustris</i>		<i>Lythrum alatum</i>
	<i>Potentilla fruticosa</i>	<i>Sphagnum</i> spp.		<i>Pycnanthemum virginianum</i>
	<i>Rhamnus alnifolia</i>	<i>Vaccinium macrocarpon</i>		<i>Silphium terebinthinaceum</i>
	<i>Rhynchospora capillacea</i>	<i>Vaccinium corymbosum</i>		<i>Sorghastrum nutans</i>
	<i>Salix candida</i>	<i>Vaccinium oxycoccos</i>		<i>Spartina pectinata</i>
	<i>Salix myricoides</i>	<i>Woodwardia virginica</i>		<i>Solidago riddellii</i>
	<i>Salix serissima</i>	<i>Xyris difformis</i>		
	<i>Solidago ohioensis</i>			
	<i>Tofieldia glutinosa</i>			
	<i>Triglochin maritimum</i>			
	<i>Triglochin palustre</i>			

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

Site: FirstEnergy, Ironville-Lapier 69kV Tower Structure... **Rater(s):** Erin Van Nort, Leah Cavanaugh **Date:** 2025-02-27

3	3
max 6 pts.	subtotal

Metric 1. Wetland Area (size).

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)

3	6
max 14 pts.	subtotal

Metric 2. Upland buffers and surrounding land use.

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)

2b. 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)

16	22
max 30 pts.	subtotal

Metric 3. Hydrology.

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 m (>27.6 in) (3)
☒ 0.4 to 0.7 m (15.7 to 27.6 in) (2)
☐ <0.4 m (<15.7 in) (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)

3b. 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)

3d. 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)

Check all disturbances observed

- | | |
|--|---|
| <input type="checkbox"/> ditch | <input type="checkbox"/> point source (nonstormwater) |
| <input type="checkbox"/> tile | <input checked="" type="checkbox"/> filling/grading |
| <input type="checkbox"/> dike | <input checked="" type="checkbox"/> road bed/RR track |
| <input type="checkbox"/> weir | <input checked="" type="checkbox"/> dredging |
| <input checked="" type="checkbox"/> stormwater input | <input type="checkbox"/> other |

8	30
max 20 pts.	subtotal

Metric 4. Habitat Alteration and Development.

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)

Check all disturbances observed

- | | |
|---|---|
| <input checked="" type="checkbox"/> mowing | <input type="checkbox"/> shrub/sapling removal |
| <input type="checkbox"/> grazing | <input type="checkbox"/> herbaceous/aquatic bed removal |
| <input type="checkbox"/> clearcutting | <input checked="" type="checkbox"/> sedimentation |
| <input checked="" type="checkbox"/> selective cutting | <input type="checkbox"/> dredging |
| <input type="checkbox"/> woody debris removal | <input type="checkbox"/> farming |
| <input type="checkbox"/> toxic pollutants | <input type="checkbox"/> nutrient enrichment |

30
subtotal this page

Site: FirstEnergy, Ironville-Lapier 69kV Tower Structure... **Rater(s):** Erin Van Nort, Leah Cavanaugh **Date:** 2025-02-27

30

subtotal first page

0 30

max 10 pts. subtotal

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)

2 32

max 20 pts. subtotal

Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic Bed
- ☐ Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high (4)
- ☒ Moderate (3)
- ☐ Moderately low (2)
- ☐ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☒ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ Vegetated hummocks/tussucks
- ☐ Coarse woody debris >15cm (6in)
- ☐ Standing dead >25cm (10in) dbh
- ☐ Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
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 vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	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
high	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

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography 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 and of highest quality

32

CATEGORY 2

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1. Critical Habitat	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 4. Significant bird habitat	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES <input checked="" type="radio"/> NO	If yes, Category 1.
	Question 6. Bogs	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 7. Fens	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 8a. Old Growth Forest	YES <input checked="" type="radio"/> NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES <input checked="" type="radio"/> NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES <input checked="" type="radio"/> NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES <input checked="" type="radio"/> NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES <input checked="" type="radio"/> NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES <input checked="" type="radio"/> NO	If yes, Category 3
	Question 11. Relict Wet Prairies	YES <input checked="" type="radio"/> NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	3	
	Metric 2. Buffers and surrounding land use	3	
	Metric 3. Hydrology	16	
	Metric 4. Habitat	8	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersions, microtopography	2	
	TOTAL SCORE	32	Category based on score breakpoints 2

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	<input checked="" type="radio"/> 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-categorized 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	<input checked="" type="radio"/> 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	<input checked="" type="radio"/> 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?	YES Wetland is assigned to the appropriate category based on the scoring range	<input checked="" type="radio"/> 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?	<input checked="" type="radio"/> 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 <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> 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	<input checked="" type="radio"/> 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, 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 or information for this determination should be provided.

Final Category

Choose one	Category 1	<input checked="" type="radio"/> Category 2	Category 3
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End of Ohio Rapid Assessment Method for Wetlands.