AMERICAN TRANSMISSION SYSTEMS, INCORPORATED
A FIRSTENERGY COMPANY

CONSTRUCTION NOTICE

Hanna-Highland 345 kV Transmission Line Loop to Trumbull Substation Project

Case No. 24-0440 -EL-BNR

May 20, 2024

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

CONSTRUCTION NOTICE
Hanna-Highland 345 kV Transmission Line
Loop to Trumbull Substation Project

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

4906-6-05: ACCELERATED APPLICATION REQUIREMENTS

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

Name of Project: Hanna-Highland 345 kV Transmission Line Loop to Trumbull Substation Project ("Project")

Reference Number: 1022

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

American Transmission Systems, Incorporated ("ATSI"), a FirstEnergy company, is proposing to construct an approximately 500-foot long 345 kV transmission line loop from the existing Hanna-Highland 345 kV Transmission Line to the new Trumbull Substation, a 3-breaker ringbus switchyard, which is currently under construction by Clean Energy Future-Trumbull LLC. Once the substation construction is complete, ownership will be transferred to ATSI. The proposed 345 kV loop will require the removal of one (1) existing structure and the addition of two (2) proposed new structures. One (1) double circuit three pole steel deadend loop structure will be installed along the existing centerline. One (1) new double circuit steel suspension tangent structure will be installed in between the Trumbull Substation and the existing Hanna-Highland 345 kV Transmission Line to complete the loop.

The general location of the Project is shown in Exhibit 1, a partial copy of the United States Geologic Survey Topographic Map, Trumbull County, OH, Quad Map. Exhibit 2 is a

partial copy of ESRI aerial imagery showing the Project area. The general layout is shown in Exhibit 3. The Project is located in the Village of Lordstown, Trumbull County, Ohio.

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

The Project meets the requirements for a Construction Notice because the Project is within the types of projects defined by Items (1)(d)(i) of the Application Requirement Matrix for Electric Power Transmission Lines, Appendix A of OAC Rule 4906-1-02. Item (1)(d)(i) states:

> *(1) New construction, extension, or relocation of single or multiple circuit electric power transmission line(s), or upgrading existing transmission or distribution line(s) for operating at a higher transmission voltage, as follows:*
>
> > *(d) Line(s) primarily needed to attract or meet the requirements of a specific customer or customers, as follows:*
> >
> > > *(i) The line is completely on property owned by the specific customer or the applicant.*

The proposed Project is within the requirements of Item (1)(d)(i) because the proposed 345 kV transmission line loop is wholly located on the property of the customer Clean Energy Future-Trumbull, LLC.

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

This Project is needed to accommodate Clean Energy Future-Trumbull, LLC's Trumbull Energy Center's Electrical Interconnection ("TEC Project"), which was approved by the OPSB in Case No. 23-0757-EL-BLN[1] on August 23, 2023.

[1] The TEC Project was subject of two additional OPSB cases, Case No. 17-0818-EL-BLN and Case No. 22-697-EL-BLN.

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. 2024 Long-Term Forecast Report ("LTFR"). This map was submitted to the Public Utilities Commission of Ohio ("PUCO") in Case No. 24-0504-EL-FOR under Rule 4901:5-5:04 (C)(2)(b) of the Ohio Administrative Code. This map is incorporated by reference only. The Project is included on page 39 in the 2024 LTFR. The general location and layout of the project area is shown in Exhibits 1 and 2. The general layout is shown in Exhibit 3.

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

No alternatives were considered for this Project as there were no other viable transmission solutions. The Hanna-Highland 345 kV Transmission Line offers the most direct and economical solution with the least environmental impacts, for a transmission connection to Trumbull Substation.

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

ATSI's manager of External Affairs will advise local officials of the features and the status of the proposed Project, as necessary. ATSI has also established a Project website, through which a copy of this Construction Notice application can be accessed: https://www.firstenergycorp.com/about/transmission_projects/ohio.html. During all phases of this Project, the public may ask questions, submit comments or contact ATSI through the transmission projects hotline at 1-888-311-4737 or via email at: transmissionprojects@firstenergycorp.com.

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

Construction for this Project is expected to begin as early as August 17, 2024, and completed by December 2024.

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

Exhibit 1 and 2 depict the general location of the Project. Exhibit 1 provides a partial copy of the United States Geologic Survey, Trumbull County, OH, Quad Map. Exhibit 2 is a copy of ESRI aerial imagery of the Project area.

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

The Project is located wholly within property of Clean Energy Future-Trumbull, LLC. (parcel numbers 45-025651 and 45-025800). The parcels will be transferred to ATSI upon completion of the substation and proposed 345 kV transmission line loop. No new easements will be required for the 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:	345 kV
Conductors:	954 kcmil 48/7 ACSR
Static Wire:	7#8 Alumoweld
Insulators:	Porcelain and Glass
ROW Width:	150 ft and fee owned.
Structure Types:	Exhibit 4: 345 kV Double Circuit Steel Suspension Tangent Structure (Str. 41526a) Exhibit 5: 345 kV Double Circuit Steel Deadend Dreamcatcher Loop Structure (Str. 41526)

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

There are no occupied residences or institutions within 100 feet from the proposed transmission line centerline and therefore no Electric and Magnetic Field ("EMF") calculations are required by this subsection.

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

The estimated cost for the proposed Project is $8,786,000.00. These costs are fully reimbursable from the customer.

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

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

The Project is located in the Village of Lordstown, Trumbull County, Ohio. The Project area is on existing right of way in an area of partial industrial use and an area that is partially wooded.

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

Agricultural land is not present within the Project's disturbance area.

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

As part of the investigation for this Construction Notice, TRC submitted a request to the Ohio State Historic Preservation Office to review and provide comments on the project area on January 29, 2024. On February 5, 2024, the Ohio State Historic Preservation Office ("SHPO") replied to the request, attached as Exhibit 6. SHPO concluded that no historic properties, districts, or archaeological sites are located within or adjacent to the affected project area (APE). 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 to 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. A map of the surveyed APE is also attached as part of Exhibit 6.

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

Table 5 shows the list of government agency requirements for the Project.

Table 5. List of Government Agency Requirements.

Agency	Documents
Pre-construction Notification	United States Army Corp of Engineers

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

As part of the investigation, FirstEnergy hired TRC to conduct the necessary environmental 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 Study Area. The ODNR's Office of Real Estate's response on February 14, 2024, indicated that there are no records of state and/or federally listed plants, animals within one mile of the Project Study Area. Records did indicate a unique ecological feature (Great Blue Heron Rookery) within one mile of the Project Study Area, but there will be no impacts to the rookery. Additionally, the Project is within the range of 10 state and/or federally listed plants or animal species. A copy of ODNR's Office of Real Estate's response is included as Exhibit 7. A list of all endangered, threatened, and rare species, as identified by ODNR, within the range of the Project is provided in Table 5.

As part of the investigation, TRC also 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 Study Area. A copy of USFWS's Ecological Review response, dated January 23, 2024, is included as Exhibit 8. The response indicated that the proposed Project is in the range of the Indiana bat, northern long-eared bat, and tricolored bat. Seasonal tree clearing is recommended by USFWS to avoid any adverse effects to Indiana bats and northern long-eared bats. In addition, the Project is within the range of the eastern massasauga. Upon further discussions with USFWS, including providing a previously completed presence/absence survey within the Project Study Area; USFWS determined that due to the absence of crayfish burrows in the wetland area, it does not appear that this habitat is suitable for the eastern massasauga and no additional surveys relative to the eastern massasauga are recommended at this time.

Table 5. List of Endangered, Threatened, and Rare Species within range of Project Study Area

Common Name	Scientific Name	State Listed Status	Federal Listed Status	Affected Habitat
Birds				
Northern Harrier	*Circus hudsonius*	Endangered	N/A	Large marshes and grasslands.
Fish				
Northern brook lamprey	*Ichthyomyzon fossor*	Endangered	N/A	Freshwater perennial streams.
Mountain brook lamprey	*Ichthyomyzon greeleyi*	Endangered	N/A	Freshwater perennial streams.
Mammals				
Indiana Bat	*Myotis sodalis*	Endangered	Endangered	Trees and forests.
Little Brown Bat	*Myotis lucifugus*	Endangered	N/A	Trees and forests.
Northern Long-eared Bat	*Myotis septentrionalis*	Endangered	Endangered	Trees and forests.
Tricolored Bat	*Perimyotis subflavus*	Endangered	N/A	Trees and forests.
Reptiles				
Eastern Massasauga	*Sistrurus catenatus*	Endangered	Threatened	Upland and wetland habitat depending on the season. Massasaugas hibernate in low wet areas, primarily in crayfish burrows. In the summer, upland open areas adjoining wetlands.
Spottle Turtle	*Clemmys guttata*	Threatened	N/A	Fens, bogs and marshes, wet prairies, meadows, and pond edges.
Amphibians				
Eastern Hellbender	*Cryptobrachus alleganiensis alleganiensis*	Endangered	Species of Concern	Perennial streams with large flat rocks.

Correspondence also indicated that the Project is within the range of the Indiana bat, a state endangered and federally endangered species; the northern long-eared bat, a state endangered and federally endangered species; the little brown bat, a state endangered species; and the tricolored bat (*Perimyotis subflavus*), a state endangered species. As proposed, minor tree clearing is anticipated within the Project Study Area and will occur within the USFWS recommended tree clearing dates (October 1 – March 31). Construction in already existing ROW and previously cleared areas will begin in August 2024. No tree clearing will take place until after October 1, 2024. Therefore, the Project is not likely to impact these bat species.

The Project is within the range of the northern brook lamprey *(Ichthyomyzon fossor),* a state endangered fish; and the mountain brook lamprey (*Ichthyomyzon greeleyi*), a state endangered fish. Since no in-water work is proposed in any perennial stream, the Project will not impact these or other aquatic species.

The response from ODNR, Division of Wildlife indicated that the Project is within the range of the spotted turtle (*Clemmys guttata*), a state threatened species. This species prefers fens, bogs, and other wetland features, including small streams. Due to the location, the type of habitat within the Project Study Area, and the type of work proposed, the Project is not likely to impact this species.

The Project is within the range of the eastern massasauga (*Sistrurus catenatus*), a state endangered and a federally threatened snake species. The eastern massasauga uses a range of habitats including wet prairies, fens, and other wetlands, as well as drier upland habitat. Due to the location, the type of habitat within the Project Study Area, and the type of work proposed, this Project is not likely to impact this species. Further, as noted above, USFWS determined that due to the absence of crayfish burrows in the wetland area, it does not appear that this habitat is suitable for the eastern massasauga

The Project is within the range of the eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*), a state endangered species and a federal species of concern. This long-lived, entirely aquatic salamander inhabits perennial streams with large flat rocks. Due to the location, and because there is no in-water work proposed in any perennial stream of sufficient size to provide suitable habitat, this Project will not impact this species.

The Project is within the range of the northern harrier (*Circus hudsonius),* a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. Due to this habitat type being avoided during construction, this Project is not likely to impact this species.

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

TRC performed field investigations to identify and delineate wetlands and waterbodies located within the approximate 4.32-acre Project Study Area, in January 2024, attached as Exhibit 9. During field investigations, a total of one (1) wetland was identified and labeled as W-EVN-1. No other regulated water resources were identified. Wetland W-EVN-1 will be temporarily disturbed during the placement of timber matting for access to existing structures within the Project Study Area. Minor permanent impacts are also proposed to Wetland W-EVN-1 due to the installation of new transmission line structure. To access the existing structure (Tower 41526) on the transmission line for removal and replacement, a total of approximately 0.314-acre of Wetland W-EVN-1 will be temporarily disturbed by the placement of timber matting. Timber matting will be placed over the wetland, for ease of access, during the removal of Tower 41526 and construction of the new transmission line structure. All timber matting will be removed upon completion of construction and wetlands restored to preexisting conditions (**Exhibit 9, Attachment C**, Figures). In order to install the new transmission line structure, 0.004-acre of Wetland W-EVN-1 will be permanently impacted. A Pre-Construction Notification (PCN) package in support of a Nationwide Permit 57 – Electric Utility Line and Telecommunications Activities (NWP 57) application for FirstEnergy's Hanna-Highland 345kV Interconnect Project (Project) was approved by USACE's Pittsburgh District for this Project on March 18, 2024, attached as Exhibit 10.

During the field investigation, TRC did not observe the presence of any of the ODNR listed species due to the highly maintained nature of the utility right-of-way. A review of the National Conservation Easement Database (www.conservationeasement.us) revealed no conservation easements are located within 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 is being sent concurrently with docketing to the following officials in the Village of Lordstown, Trumbull County, Ohio. A copy will also be provided to the Trumbull County Public Library for public review/reference.

Trumbull County

Denny Malloy
Trumbull County Commissioner
2162 Wilmar Dr
Cortland, OH 44410

Mauro Cantalamessa
Trumbull County Commissioner
391 Broadway Ave SE
Warren, Ohio 44484

Niki Frenchko
Trumbull County Commissioner
170 Kenilworth Ave SE
Warren, Ohio 44483

Randy Smith
Trumbull County Engineer
2792 Hoffman CIR NE
Warren, Ohio 44483

Trumbull County Soil and Water
Conservation District
520 W. Main St. Suite 3
Cortland, Ohio 44410

Village of Lordstown

Mayor Jackie Woodward
Village of Lordstown
1455 Salt Spring Road
Warren, Ohio 44481

Lamar Liming
Village of Lordstown
Council Member
3726 Austintown Warren Rd
Warren, Ohio 44440

Robert Bond
Village of Lordstown
Council President
5092 Highland Ave SW
Warren, Ohio 44481

Howard Sheely III
Village of Lordstown
Council Member
2442 Ernest Lyntz RD SW
Warren, Ohio 44481

Terry Campbell
Village of Lordstown
Council Member
2977 Pond Ln SW
Warren, Ohio 44481

Jamie Moseley
Village of Lordstown
Council Member
3538 Goldner LN SW
Warren, Ohio 44481

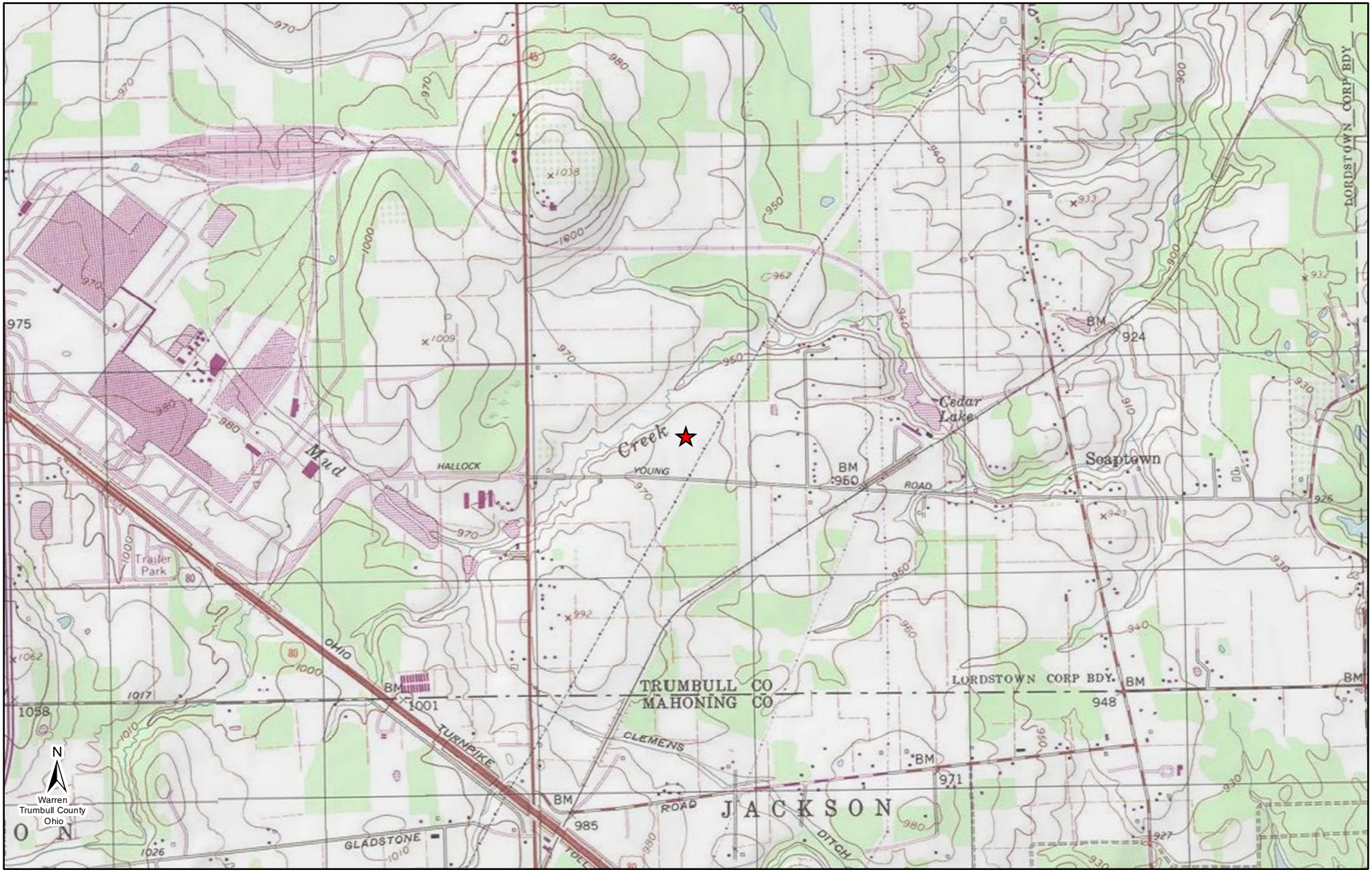
William Blank
Village of Lordstown
Clerk of Council
2210 Carson Salt Springs Rd
Warren, Ohio 44481

Library

James Wilkins, Executive Director
Trumbull County Public Library
Lordstown Branch
1471 Salt Springs Rd.
Lordstown, OH 44481

Per OAC Rule 4906-6-07(B), an exemplar copy of notice letters sent to local government officials and to the library have been included with this application as proof of compliance with requirements of OAC Rules 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 OAC Rule 4906-6-07(B), which requires ATSI to provide the Board with proof of compliance for OAC Rule 4906-6-07(A)(3).



LEGEND:

★ Project Area

0 1,000 2,000 4,000

Feet

Reference:
USGS Topographical Overlay

Coordinate System:
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WKID: 3734 Authority: EPSG

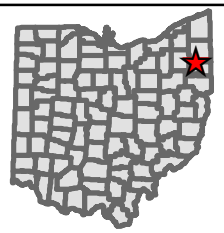
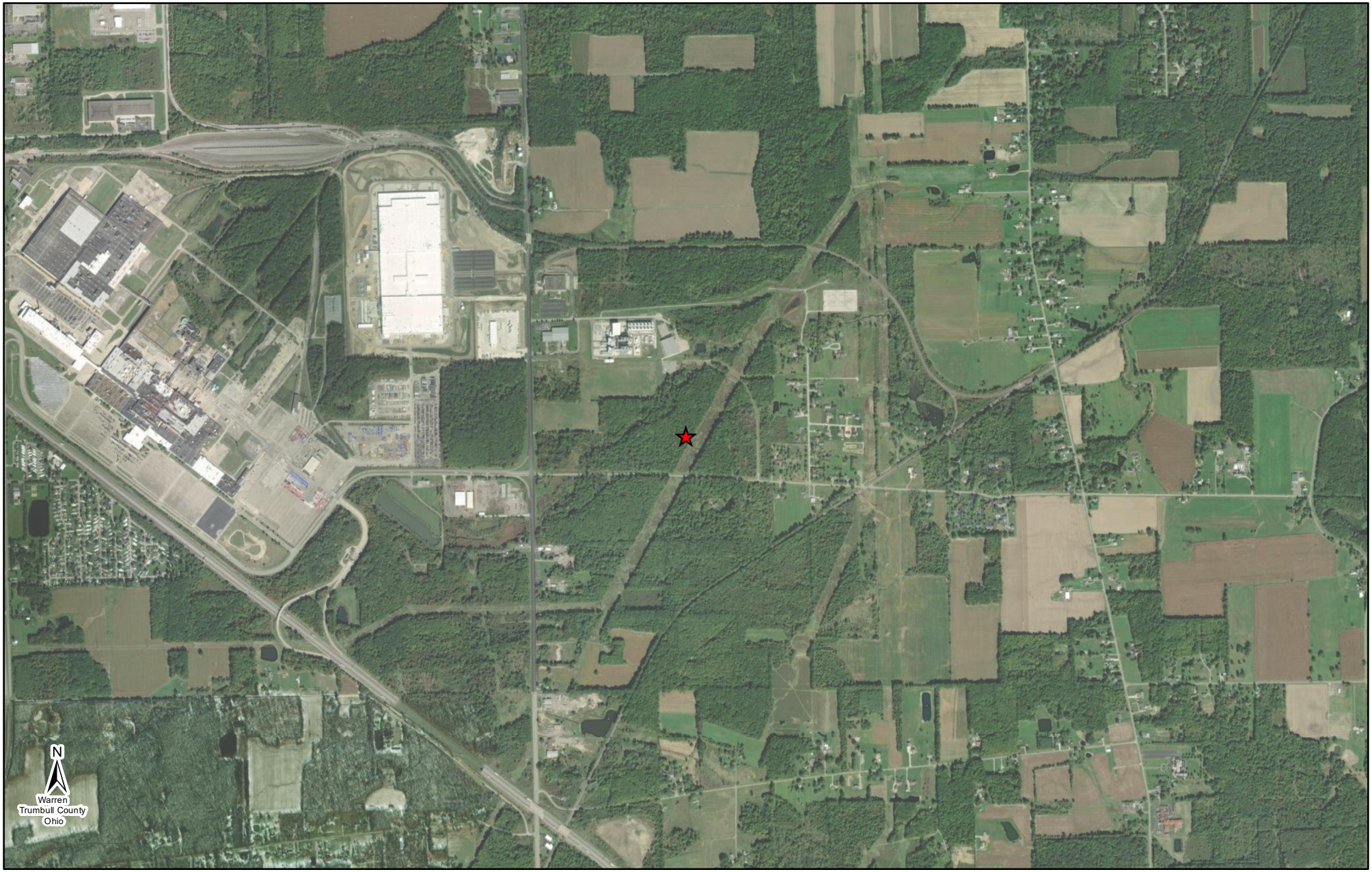


EXHIBIT 1

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

Hannah-Highland 345 kV
Transmission Line Loop to Trumbull Substation



LEGEND:

★ Project Area

0 1,000 2,000 4,000

Feet

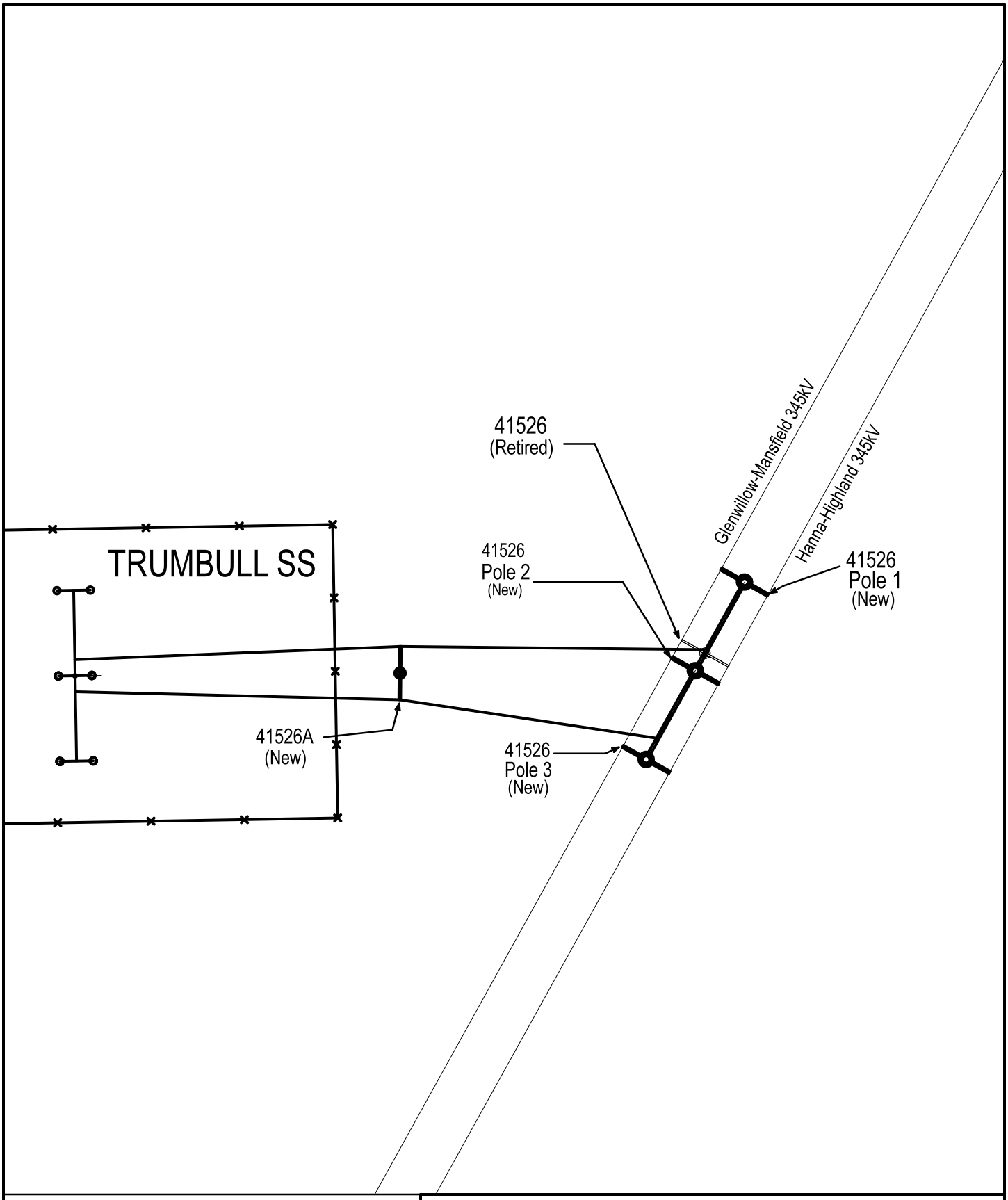
Reference:
USGS Topographical Overlay

Coordinate System:
NAD_1983_StatePlane_Ohio_North_FIPS_3401_Feet
WKID: 3734 Authority: EPSG

EXHIBIT 2

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

Hannah-Highland 345 kV
Transmission Line Loop to Trumbull Substation



ATSI®
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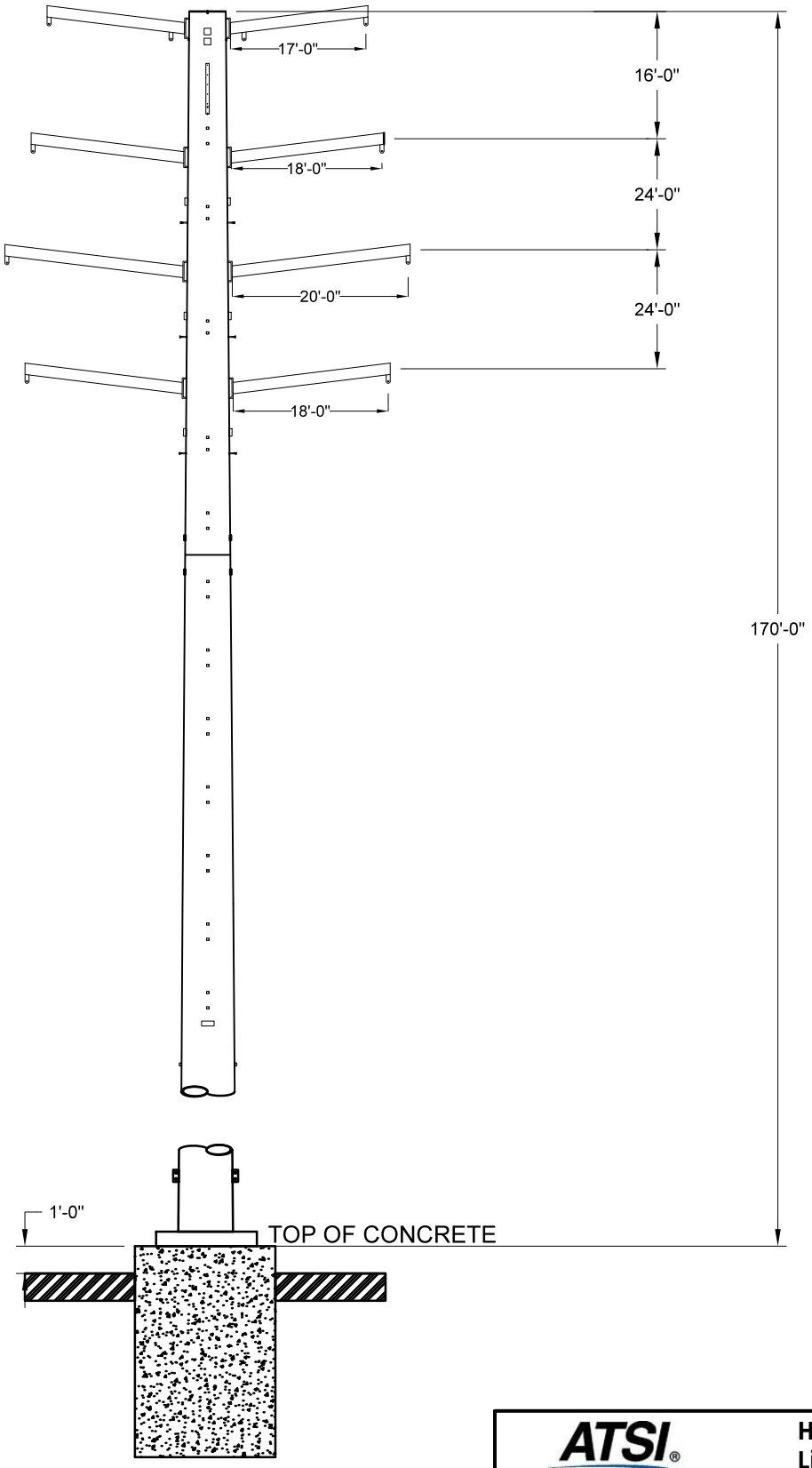
a subsidiary of FirstEnergy Corp.

Hanna-Highland 345 kV Transmission Line Loop to Trumbull Substation Project

345kV GENERAL LAYOUT

EXHIBIT 3



ELEVATION VIEW

*NOT TO SCALE

ATSI®
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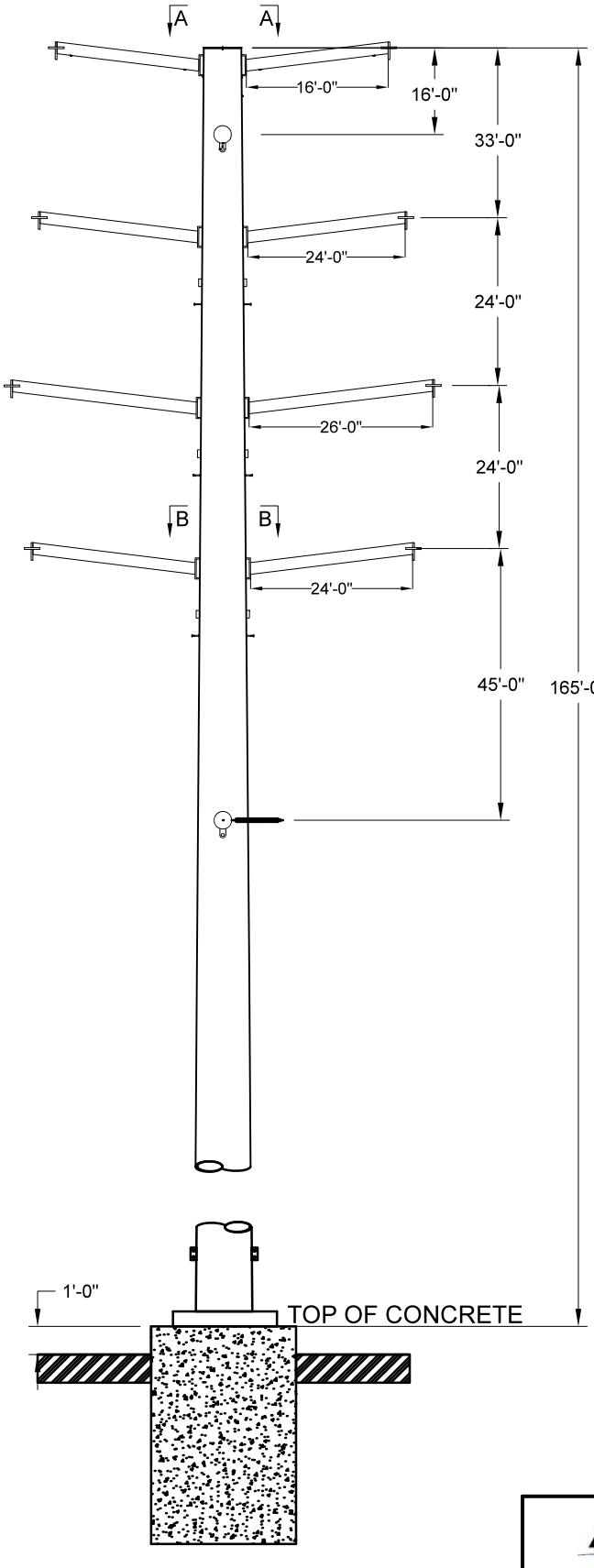
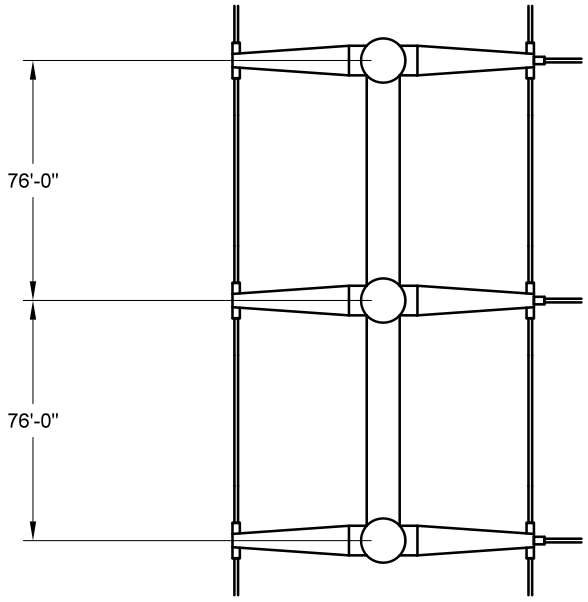
Hanna-Highland 345 kV Transmission Line Loop to Trumbull Substation Project

345kV DOUBLE CIRCUIT STEEL
SUSPENSION TANGENT STRUCTURE

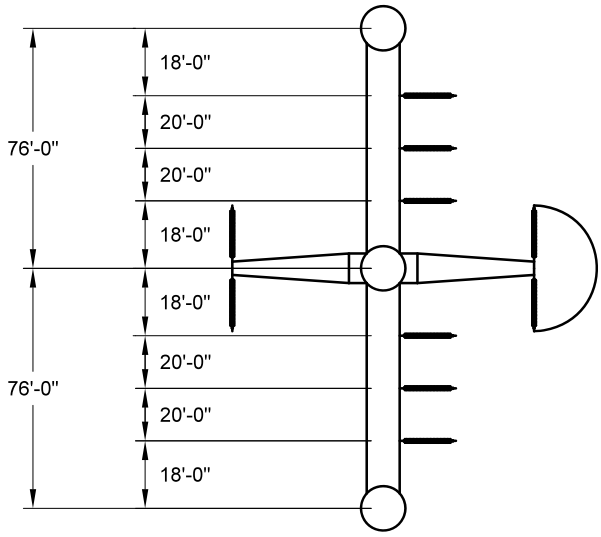
Exhibit 4



ELEVATION VIEW



SECTION A-A



SECTION B-B

*NOT TO SCALE

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

Hanna-Highland 345 kV Transmission Line Loop to Trumbull Substation Project

345kV DOUBLE CIRCUIT STEEL DEADEND DREAMCATCHER LOOP STRUCTURE

Exhibit 5

Exhibit 6

In reply refer to:
2024-TRU-60285

February 5, 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: Hanna-Highland 345kV Interconnect Project, Lordstown, Trumbull County, Ohio

Dear Mr. McKissick:

This letter is in response to correspondence received on January 29, 2024 regarding the above referenced project in Trumbull 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 project will require a Nationwide Permit 57 from the U.S. Army Corps of Engineers (Corps). The Corps is the lead federal agency for the undertaking.

The project will involve the replacement of Tower 41526 with three (3) new transmission towers in order to connect to the existing Hanna-Highland 345kV transmission line. The direct Area of Potential Effect (APE), which totals approximately 4.32-acres, will utilize the existing gravel access drive. Based on information submitted by you, which included a Project Summary Form, no historic properties, districts, or archaeological sites are located within or adjacent to the APE. However, the entire APE is within a previously surveyed area. This survey, completed in 2017, did not locate any cultural resources near the APE. 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,

Stephen M. Biehl

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

RPR Serial No. 1101605

"Please be advised that this is a Section 106 decision. This review decision may not extend to other SHPO programs."

OHIO HISTORIC PRESERVATION OFFICE:
RESOURCE PROTECTION AND REVIEW

Section 106 Review - Project Summary Form

Submitted on 1/26/2024

OHIO HISTORIC PRESERVATION OFFICE:
RESOURCE PROTECTION AND REVIEW

Section 106 Review - Project Summary Form

For projects requiring a license from the Federal Communications Commission, please use FCC Forms 620 or 621. DO NOT USE THIS FORM.

SECTION 1: GENERAL PROJECT INFORMATION

All contact information provided must include the name, address and phone number of the person listed. Email addresses should also be included, if available. Please refer to the Instructions or contact an OHPO reviewer (mailto:Section106@ohiohistory.org) if you need help completing this Form. Unless otherwise requested, we will contact the person submitting this Form with questions or comments about this project.

Date: 01/26/2024

Name/Affiliation of person submitting form: Justin McKissick/TRC Companies

Mailing Address: 317 E Carson Street, Suite 113, Pittsburgh, PA 15219

Phone/Fax/Email: 412-660-7937/jmckissick@trccompanies.com

A. Project Info:

1. This Form provides information about:
   New Project Submittal:
   YES NO

   Additional information relating to previously submitted project:
   YES NO

   OHPO/RPR Serial Number from previous submission:

2. Project Name (if applicable): **Hanna-Highland 345kV Interconnect Project**

3. Internal tracking or reference number used by Federal Agency, consultant, and/or applicant to identify this project (if applicable): **429847.0081.0000**

B. Project Address or vicinity: **Project will be approximately 0.5 miles (mi) east-northeast of the intersection of Hallock Young Road and Tod Avenue SW (41.145105, -80.847838) (Figure 1).**

C. City/Township: **Village of Lordstown**

D. County: **Trumbull County**

E. Federal Agency and Agency Contact. *If you do not know the federal agency involved in your project, please contact the party asking you to apply for Section 106 Review, not OHPO, for this information*. *HUD Entitlement Communities acting under delegated environmental review authority should list their own contact information.*
The project will involve a Pre-Construction Notification (PCN) under a Nationwide Permit 57 (NWP 57)

F. Type of Federal Assistance. *List all known federal sources of federal funding, approvals, and permits to avoid repeated reviews.*
N/A

G. State Agency and Contact Person (if applicable):
N/A

H. Type of State Assistance:
N/A

I. Is this project being submitted at the direction of a state agency **solely** under Ohio Revised Code 149.53 or at the direction of a State Agency? *Answering yes to this question means that you are sure that no federal funding, permits or approvals will be used for any part of your project, and that you are seeking comments only under ORC 149.53.*

YES NO

J. Public Involvement- Describe how the public has been/will be informed about this project and its potential to affect historic properties. Please summarize how they will have an opportunity to provide comments about any effects to historic properties. (This step is required for all projects under 36 CFR § 800.2):
N/A

K. Please list other consulting parties that you have contacted/will contact about this project, such as Indian Tribes, Certified Local Governments, local officials, property owners, or preservation groups. (See 36 CFR § 800.2 for more information about involving other consulting parties). Please summarize how they will have an opportunity to provide comments:
Property Owners have been notified of the proposed Project.

SECTION 2: PROJECT DESCRIPTION AND AREA OF POTENTIAL EFFECTS (APE)

Provide a description of your project, its site, and geographical information. You will also describe your project's Area of Potential Effects (APE). Please refer to the Instructions or contact an OHPO reviewer if you need help with developing the APE or completing this form.

The proposed Project involves the replacement of Tower 41526 with three (3) new transmission towers for a new customer interconnect to the existing Hanna-Highland 345 kV transmission line, utilizing the existing gravel construction drive for access. The proposed Project Study Area, which measures approximately 4.32 acres (ac), will contain the Limits of Disturbance (LOD) and corresponds to the Area of Potential Effects (APE), which have not been finalized. The Project Study Area occurs within a combination of existing, maintained utility right-of-way (ROW) and wooded areas (Figure 2) based on aerial images; however, currently a facility is under construction within the Study Area.

For challenging projects, provide as much information as possible in all sections, and then check the box in Section 5.A. to ask OHPO to offer preliminary comments or make recommendations about how to proceed with your project consultation. This is recommended if your project involves effects to significant historic properties or if there may be challenging procedural issues related to your project. Please note that providing information to complete all Sections will still be required and that asking OHPO for preliminary comments may tend to delay completion of the review process for some projects.

A. Does this project involve any Ground-Disturbing activity: YES NO
(If **Yes**, you must complete all of Section 2.A. If **No**, proceed directly to Section 2. B.)

1. General description of width, length and depth of proposed ground disturbing activity:

The proposed ground disturbance will be associated only with replacement clearing of trees and the construction of the three (3) new transmission towers. The Project will utilize existing gravel construction drive for access.

2. Narrative description of previous land use and past ground disturbances, if known:

Prior to the nineteenth century, the landscape was likely a combination of agricultural, open pastures, or wooded landscapes. The Study Area was under ownership of several individuals throughout the nineteenth and into the twentieth century. No buildings are mapped in the Study Area on any of the historic maps.

3. Narrative description of current land use and conditions:

Currently, the Study Area is within an existing, maintained overhead utility corridor and forested areas, surrounded by industrial and residential properties based on aerial imagery (Figure 2). However, the majority of the eastern portion of the Study Area has been delineated as a wetland within the existing/disturbed overhead utility corridor (Attachment 1, Photos 1 through 4). The western portion of the Study Area is presently undergoing construction of the facility to which the new transmission towers are required to connect the facility to the power grid (Attachment 1, Photos 5 through 8). Therefore, the entire Study Area has been previously impacted.

4. Does the landowner know of any archaeological resources found on the property? YES NO If yes, please describe:

B. Submit the exact project site location on a USGS 7.5-minute topographic quadrangle map

for all projects. Map sections, photocopies of map sections, and online versions of USGS maps are acceptable as long as the location is clearly marked. Show the project's Area of Potential Effects (APE). It should be clearly distinguished from other features shown on the map:

1. USGS Quad Map Name: **Warren, OH, 7.5-minute series**

2. Township/City/Village Name: **Village of Lordstown, Trumbull County**

C. Provide a street-level map indicating the location of the project site; road names must be identified and legible. Your map must show the exact location of the boundaries for the project site. Show the project's Area of Potential Effects (APE). It should be clearly distinguished from other features shown on the map:

D. Provide a verbal description of the APE, including a discussion of how the APE will include areas with the potential for direct and indirect effects from the project. Explain the steps taken to identify the project's APE, and your justification for the specific boundaries chosen:

The Study Area for the proposed Project measures 4.32 ac. Within the Study Area, the LOD, which correspond to the APE, have not yet been finalized but will include all permanent and temporary impacts to the landscape in order to replace Tower 41526 with three (3) new transmission towers. The indirect APE includes a one (1)-mi radius surrounding the proposed project. A one (1)-mi radius will take into consideration potential visual impacts to above-ground historic properties, if present, that are located in the proposed project vicinity.

Provide a detailed description of the project. This is a critical part of your submission. Your description should be prepared for a cold reader who may not be an expert in this type of project. The information provided must help support your analysis of effects to historic properties, not other types of project impacts. Do not simply include copies of environmental documents or other types of specialized project reports. If there are multiple project alternatives, you should include information about all alternatives that are still under active consideration:

This proposed Project involves the replacement of Tower 41526 with three (3) new transmission towers for a new customer interconnect to the existing Hanna-Highland 345 kV transmission line, utilizing the existing gravel construction drive for access. The Study Area measures 4.32 ac and will include the areas in which all permanent and temporary impacts of the proposed Project. Based on the aerial images, the Study Area is within a combination of an existing, maintained utility ROW and forested landscape (Figure 2); however, there is currently construction activities for a new facility undergoing within the western portion of the Study Area. Additionally, a large wetland has been identified within the eastern portion of the Study Area within the existing/disturbed overhead utility corridor (Attachment 1, Photos 1 through 8). Any crossing of the wetland necessary for construction activities of the Project will utilize timber matting to minimize surface disturbance.

SECTION 3: IDENTIFICATION OF HISTORIC PROPERTIES

Describe whether there are historic properties located within your project APE. To make that determination, use information generated from your own Background Research and Field Survey. Then choose one of the following options to report your findings. Please refer to the Instructions and/or contact an OHPO reviewer if you are unsure about how to identify historic properties for your project.

If you read the Instructions and you're still confused as to which reporting option best fits your project, or you are not sure if your project needs a survey, you may choose to skip this section, but provide as much supporting documentation as possible in all other Sections, then check the box in Section 5.A. to request preliminary comments from OHPO. After reviewing the information provided, OHPO will then offer comments as to which reporting option is best suited to document historic properties for your project. Please note that providing information to complete this Section will still be required and that asking OHPO for preliminary comments may tend to delay completion of the review process for some projects.

A desktop literature and archives review for the proposed Project was conducted to determine whether previously recorded cultural resources are located within, adjacent to, or within a one (1)-mi radius of the Study Area. This included a file review of data requested from the Ohio History Connection, a review of historic atlases and United States Geological Survey (USGS) topographic quadrangles, and a review of 2023 Google Earth imagery. These sources provided information regarding the location of previously conducted archeological surveys and recorded archeological sites, cemeteries, properties currently listed or eligible for listing on the National Register of Historic Places (NRHP), and possible undocumented, historic structures (of 45 years or greater) identified on historic maps that may be impacted by the proposed Project.

The file review revealed there are no historic properties (buildings, structures, sites, districts, and/or objects listed or eligible for listing in the NRHP) mapped within one (1)-mi of the proposed Project (Figure 3). There are 20 above-ground historic resources that have not yet been formally evaluated for NRHP eligibility mapped within one (1)-mi of the proposed project, the nearest of which is situated 0.35 mi to the southeast, 0.41 mi to the northeast, and 0.55 mi to the southwest. There are no Ohio Genealogical Society (OGS) Cemeteries mapped within one (1)-mi of the Study Area.

There have been nine (9) archaeological surveys conducted within one (1)-mi of the proposed project. Of these, the entire Study Area is situated within one (1) of the surveys, A *Phase I Archaeological Investigations for the Approximately 55.9 ha (138 ac) Trumbull Energy Facility*, which was performed in 2017 by Weller & Associates. No archaeological sites were recorded within the Study Area or immediate vicinity. There are 12 archaeological sites recorded within one (1)-mi of the proposed Project. The sites include eight (8) prehistoric sites with unknown cultural affiliations and four (4) historic sites that date to the nineteenth and twentieth centuries.

A review of the modern aerials indicates that the eastern portion of the Study Area is situated within existing utility corridor ROW and is likely disturbed, while the western portion is within a forested area. A review of available historic maps was also conducted to determine the presence of historic structures (45 years of age or older) and other possible historic features within or adjacent to the Study Area that may be impacted by the proposed Project. The 1856 the region had been settled with buildings situated along the established transportation routes in the region (Attachment 1, Image 1). Hallock Young Road was present, and a dwelling attributed to *P. Shively* is mapped northeast of the Study Area. A sawmill is also mapped to the northeast along Mud Creek. Lordstown had been established to the north and was the largest town in the area. In 1874, the Study Area is mapped on a parcel attributed to *John & Sam Gifford* (Attachment 1, Image 2). No buildings are mapped in the vicinity of the Study Area. Lordstown continued to grow as the population of the region increased. In 1899, the landscape remained relatively the same (Attachment 1, Image 3). The parcel with the Study Area changed ownership again, now being attributed to *S.R. Chryst.*

The Pennsylvania Railroad is mapped for the first time to the southeast. The 1908 USGS map shows a similar, rural landscape with widely spaced buildings along roadways. The Pennsylvania System (Alliance Branch) Railroad line is still in operation southeast of the Study Area. The Village of Lordstown appears to have remained the same size, showing no indications of expansion at the turn of the century. The 1956 USGS shows a similar landscape with moderate regional growth (Attachment 1, Image 5). The existing overhead utility corridor is shown for the first time on mapping. The area surrounding Lordstown shows signs of growth with several new buildings. Additionally, the Ohio Turnpike was constructed to the southwest. Modern aerials show a relatively rural landscape with the Study Area within a wooded landscape surrounded by residential, commercial, and industrial properties. A recent site visit detailed the disturbance associated with the current construction activities within the Study Area and the former construction of the existing overhead utility corridor (Attachment 1, Photos 1 through 8).

Recording the Results of Background Research and Field Survey:

A. **Summary of discussions and/or consultation with OHPO** about this project that demonstrates how the Agency Official and OHPO have agreed that no Field Survey was necessary for this project (typically due to extreme ground disturbance or other special circumstances). Please **attach copies** of emails/correspondence that document this agreement. You must explain how the project's potential to affect both archaeological and historic resources were considered.

B. **A table that includes the minimum information** listed in the OHPO Section 106 Documentation Table (which is generally equivalent to the information found on an inventory form). This information must be printed and mailed with the Project Summary Form. To provide sufficient information to complete this Section, you must also include summary observations from your field survey, background research and eligibility determinations for each property that was evaluated in the project APE.

C. **OHI (Ohio Historic Inventory) or OAI (Ohio Archaeological Inventory) forms**- New or updated inventory forms may be prepared using the OHI pdf form with data population capabilities, the Internet IForm, or typed on archival quality inventory forms. To provide sufficient information to complete this Section, you must include summary observations from your field survey and background research. You must also include eligibility determinations for each property that was evaluated in the project APE.

D. **A historic or archaeological survey report** prepared by a qualified consultant that meets professional standards. The survey report should meet the Secretary of the Interior's Standards and Guidelines for Identification and OHPO Archaeological Guidelines. You may also include new inventory forms with your survey or update previous inventory forms. To complete this section, your survey report must include summary observations from your field survey, background research and eligibility determinations for each property that was evaluated within the APE.

E. **Project Findings**. Based on the conclusions you reached in completing Section 3, please choose one finding for your project. There are (mark one):
   Historic Properties Present in the APE:
   No Historic Properties Present in the APE:

SECTION 4: SUPPORTING DOCUMENTATION

This information must be provided for all projects.

A. Photographs must be keyed to a street-level map and should be included as

attachments to this application. Please label all forms, tables and CDs with the date of your submission and project name, as identified in Section 1. You must present enough documentation to clearly show existing conditions at your project site and convey details about the buildings, structures or sites that are described in your submission. Faxed or photocopied photographs are not acceptable. See Instructions for more info about photo submissions or 36 CFR § 800.11 for federal documentation standards.

1. Provide photos of the entire project site and take photos to/from historic properties from/towards your project site to support your determination of effect in Section 5. **SEE ATTACHMENT 1, Photos 1 through 8.**
2. Provide current photos of all buildings/structures/sites described.

B. Project plan, specifications, site drawings and any other media presentation that conveys detailed information about your project and its potential to affect historic properties. **N/A**

C. Copies or summaries of any comments provided by consulting parties or the public. **N/A**

SECTION 5: DETERMINATION OF EFFECT

A. **Request Preliminary Comments.** For challenging projects, provide as much information as possible in previous sections and ask OHPO to offer preliminary comments or make recommendations about how to proceed with your project consultation. This is recommended if your project involves effects to significant historic properties, if the public has concerns about your project's potential to affect historic properties, or if there may be challenging procedural issues related to your project. Please be aware that providing information in all Sections will still be required and that asking OHPO for preliminary comments may tend to delay completion of the review process for some projects.

1. We request preliminary comments from OHPO about this project:
   YES NO

2. Please specify as clearly as possible the particular issues that you would like OHPO to examine for your project (for example- help with developing an APE, addressing the concerns of consulting parties, survey methodology, etc.):
   It is the purpose of this submission to inform OHPO of the proposed project and seek guidance as to additional studies, if any, should be completed.

B. **Determination of Effect.** If you believe that you have gathered enough information to conclude the Section 106 process, you may be ready to make a determination of effect and ask OHPO for concurrence, while considering public comments. Please select and mark one of the following determinations, then explain the basis for your decision on an attached sheet of paper:

No historic properties will be affected based on 36 CFR § 800.4(d) (1). Please explain how you made this determination:

No Adverse Effect [36 CFR § 800.5(b)] on historic properties. This finding cannot be used if there are no historic properties present in your project APE. Please explain why the Criteria of Adverse Effect, [36 CFR Part 800.5(a) (1)], were found not to be applicable for your project:

Adverse Effect [36 CFR § 800.5(d) (2)] on historic properties. Please explain why the criteria of adverse effect, [36 CFR Part 800.5(a) (1)], were found to be applicable to your project. You may also include an explanation of how

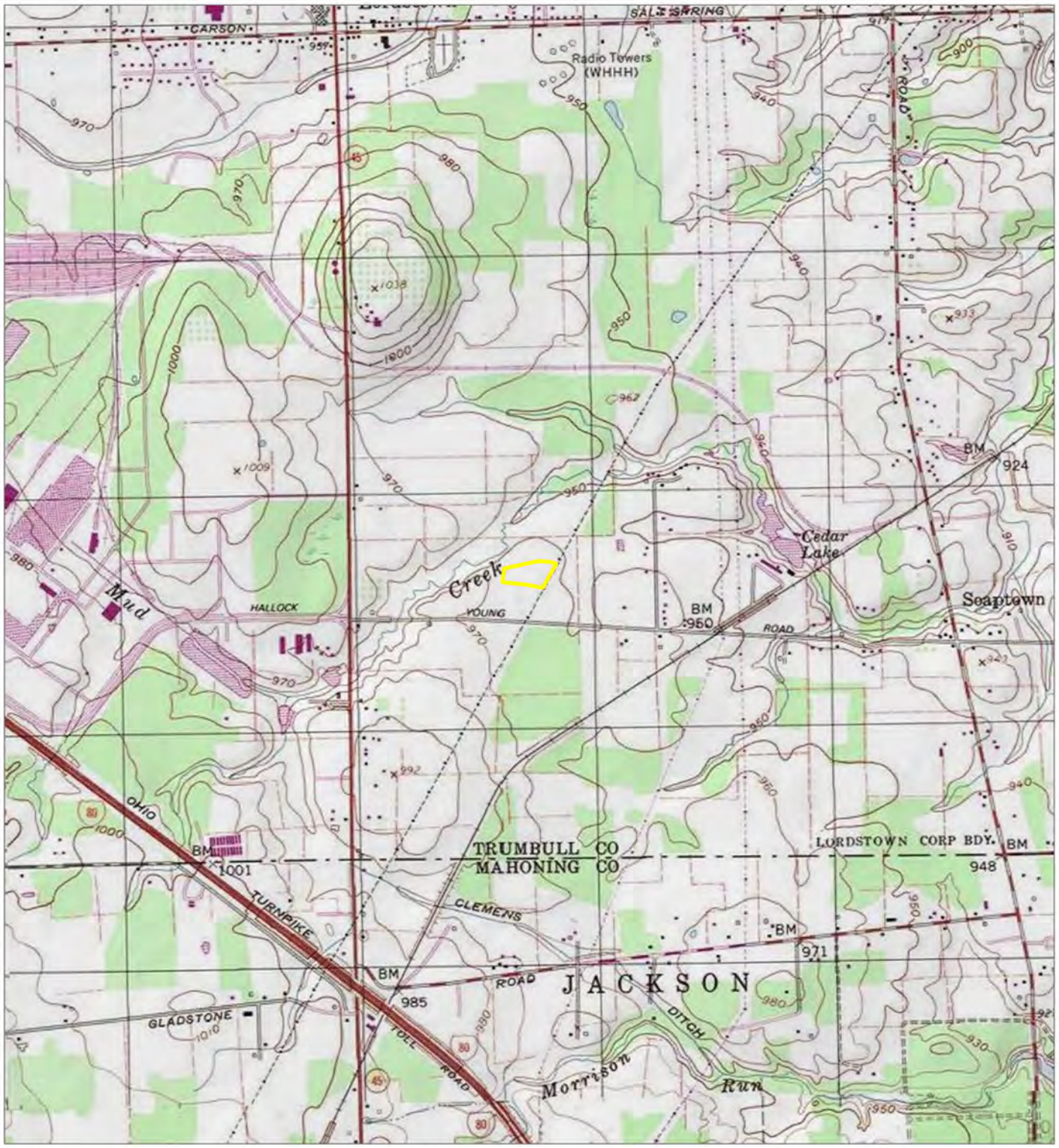
these adverse effects might be avoided, reduced or mitigated:

Please print and mail completed form and supporting documentation to:

State Historic Preservation Office
Resource Protection and Review Department
800 E. 17th Avenue
Columbus, OH 43211-2474

FIGURE 1

PROJECT LOCATION MAP



PROJECT STUDY AREA

BASE MAP: USA TOPO MAPS MAP SERVICE , WARREN QUAD

0 1,000 2,000

FEET

1:24,000 1" = 2,000'

PROJECT:

FIRSTENERGY

HANNA-HIGHLAND 345KV INTERCONNECT PROJECT

TRUMBULL COUNTY, OH

TITLE:

PROJECT LOCATION MAP

DRAWN BY:	M. OPEL	PROJ. NO.:	429847.0081
CHECKED BY:	J. MCKISSICK		
APPROVED BY:	B. FALKINBURG		**FIGURE 1**
DATE:	JANUARY 2024		

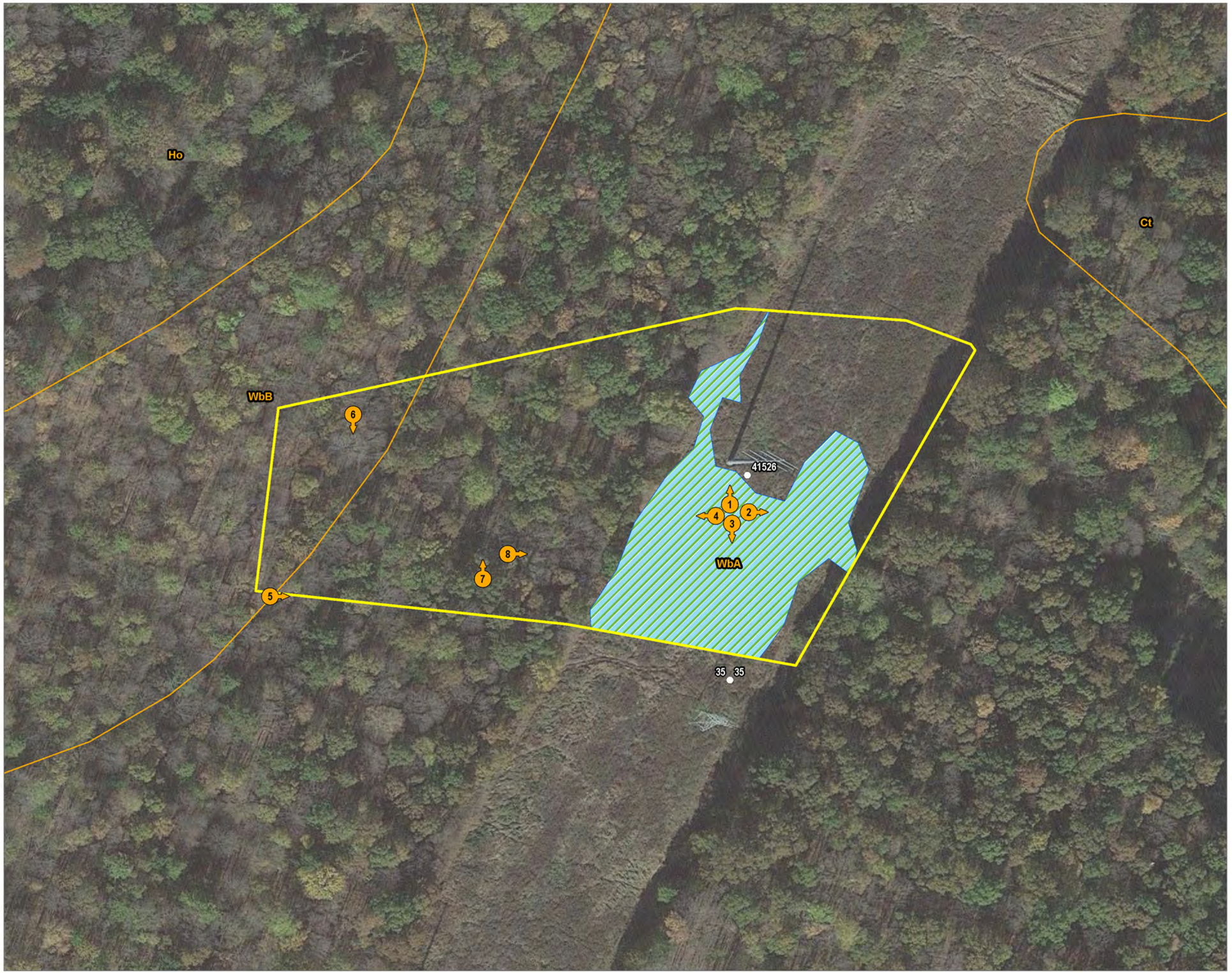
TRC

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

FILE: 106FORM

FIGURE 2

AERIAL BASEMAP with PHOTOGRAPHS



PROJECT STUDY AREA
EXISTING STRUCTURE
SOIL MAP UNITS
DELINEATED WETLAND
PHOTO LOCATION

BASE MAP: GOOGLE MAPS.

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
FIRSTENERGY
HANNA-HIGHLAND 345KV INTERCONNECT PROJECT
TRUMBULL COUNTY, OH

TITLE:
AERIAL BASEMAP WITH PHOTO LOCATIONS

DRAWN BY:	M. OPEL	PROJ. NO.:	429847.0081
CHECKED BY:	J. MCKISSICK		
APPROVED BY:	B. FALKINBURG		FIGURE 2
DATE:	JANUARY 2024		

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

FILE: 106Form.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet; Map Rotation: 0
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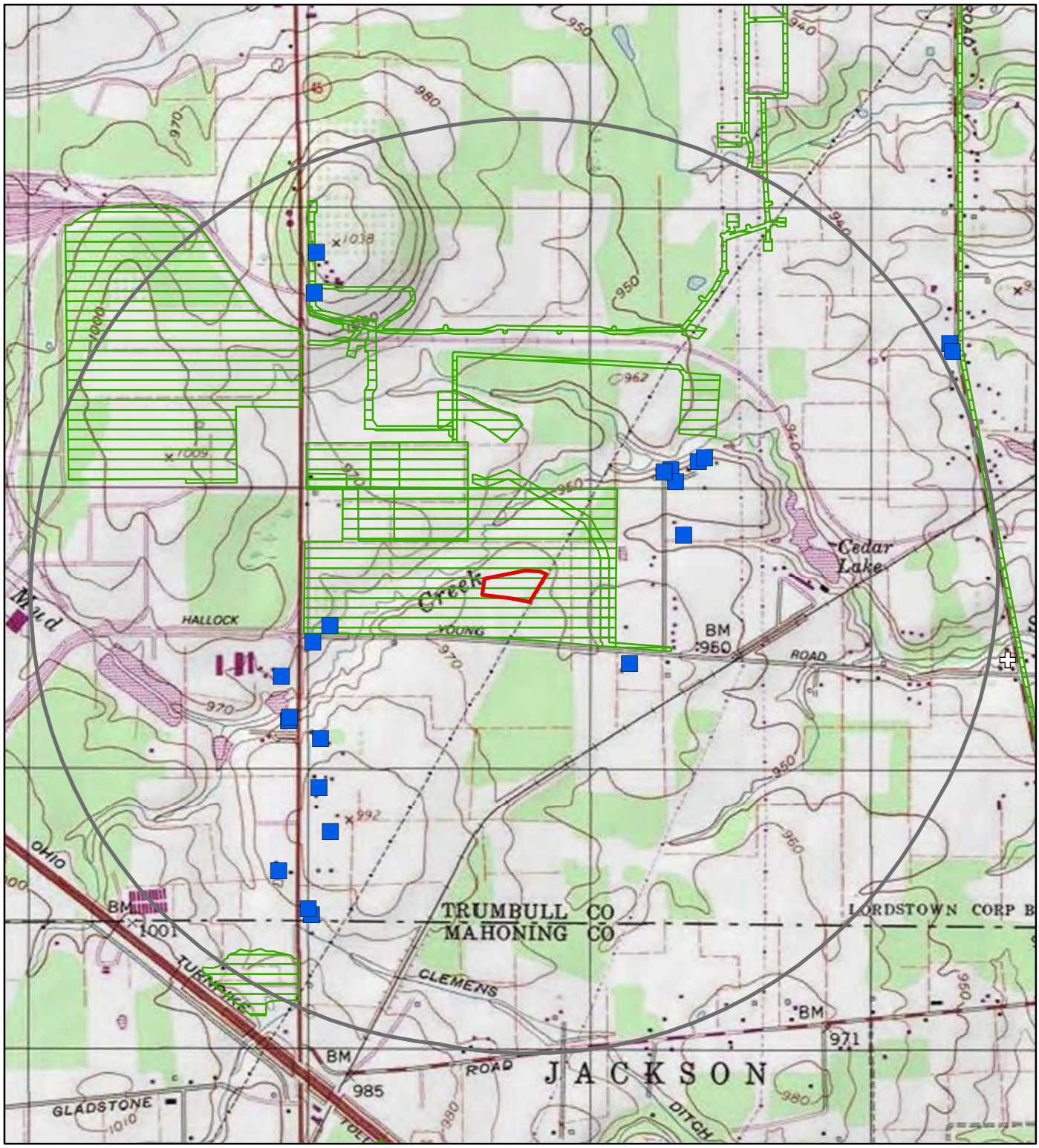
FIGURE 3

OHC DATABASE RESULTS MAP



BASE MAP FROM WARREN, OH 7.5-MINUTE SERIES TOPOGRAPHICAL MAP

N

1 " = 1,667 ' 0 500 1,000

1:20,000 FEET

TRC

317 E. Carson Street
Suite 113
Pittsburgh, PA 15219

TRC - GIS

PROJECT:

Hanna-Highland 345kV Interconnect Project

TITLE:

OHPO DATABASE SEARCH RESULTS

DRAWN BY:	JUSTIN MCKISSICK
CHECKED BY:	CURTIS BIONDICH
APPROVED BY:	CURTIS BIONDICH
DATE:	JANUARY 2024
PROJ. NO.:	429847.0081.0000
FILE:	Hanna-Highland.mxd

Figure 3

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ATTACHMENT 1

PHOTOGRAPHS

PHOTOGRAPHIC RECORD

Hanna-Highland 345kV Interconnect Project

Client Name:	Site Location:	Project No.
FirstEnergy	Village of Lordstown, Trumbull County, Ohio	429847.0081.0000

Photo No. 1.	
Photo Date: 1/11/2024	
Description: General overview of the Study Area within the existing overhead utility corridor, facing north.	

Photo No. 2.	
Photo Date: 1/11/2024	
Description: General overview of the Study Area within the existing overhead utility corridor, facing east.	

Client Name:	Site Location:	Project No.
FirstEnergy	Village of Lordstown, Trumbull County, Ohio	429847.0081.0000

Photo No. 3. **Photo Date:** 1/11/2024 **Description:** General overview of the Study Area within the existing overhead utility corridor, facing south.	

Photo No. 4. **Photo Date:** 1/11/2024 **Description:** General overview of the Study Area within the existing overhead utility corridor, facing west.	

Client Name:	Site Location:	Project No.
FirstEnergy	Village of Lordstown, Trumbull County, Ohio	429847.0081.0000

Photo No. 5.	
Photo Date: 1/11/2024	
Description: Representative photo from the southwestern corner of the Study Area, facing east.	

Photo No. 6.	
Photo Date: 1/11/2024	
Description: Representative photo from the northwestern corner of the Study Area, facing south.	

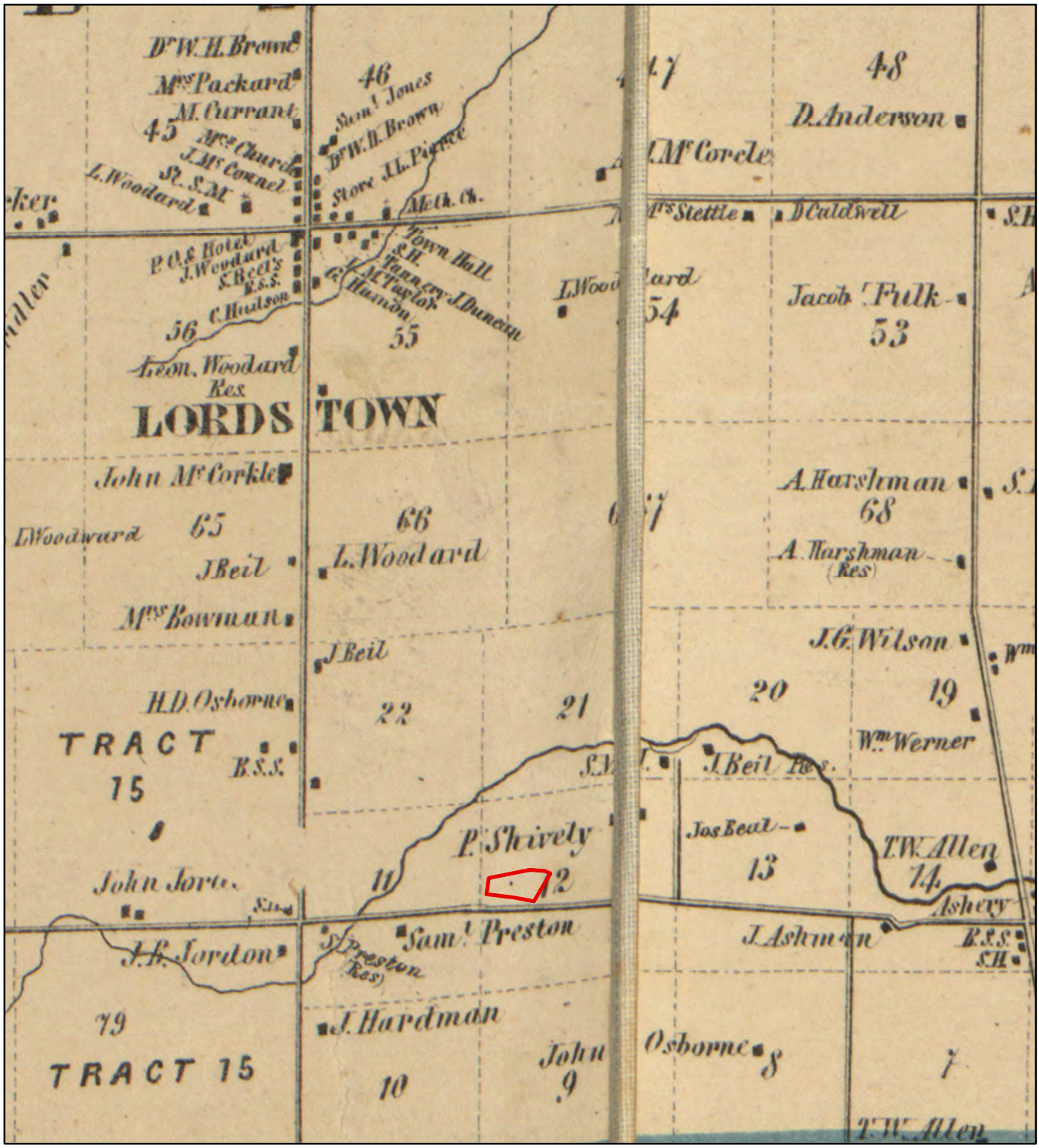
Client Name:	Site Location:	Project No.
FirstEnergy	Village of Lordstown, Trumbull County, Ohio	429847.0081.0000

Photo No. 7. **Photo Date:** 1/11/2024 **Description:** Representative photo from the southern boundary of the Study Area, facing north.	

Photo No. 8. **Photo Date:** 1/11/2024 **Description:** Representative photo of the center of the Study Area, facing east, showing current tree clearing west of the existing utility corridor.	

ATTACHMENT 2

HISTORIC MAPS



BASE MAP FROM MAP of TRUMBULL COUNTY, OHIO

*IMAGE OVERLAY IS APPROXIMATE.

N

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1:20,000 FEET

TRC

317 E. Carson Street
Suite 113
Pittsburgh, PA 15219

TRC - GIS

PROJECT:

Hanna-Highland 345kV Interconnect Project

TITLE:

Study Area circa 1856 (Browne)

DRAWN BY:	JUSTIN MCKISSICK
CHECKED BY:	CURTIS BIONDICH
APPROVED BY:	CURTIS BIONDICH
DATE:	JANUARY 2024
PROJ. NO.:	429847.0081.0000
FILE:	Hanna-Highland.mxd

Attachment 2 - Image 1

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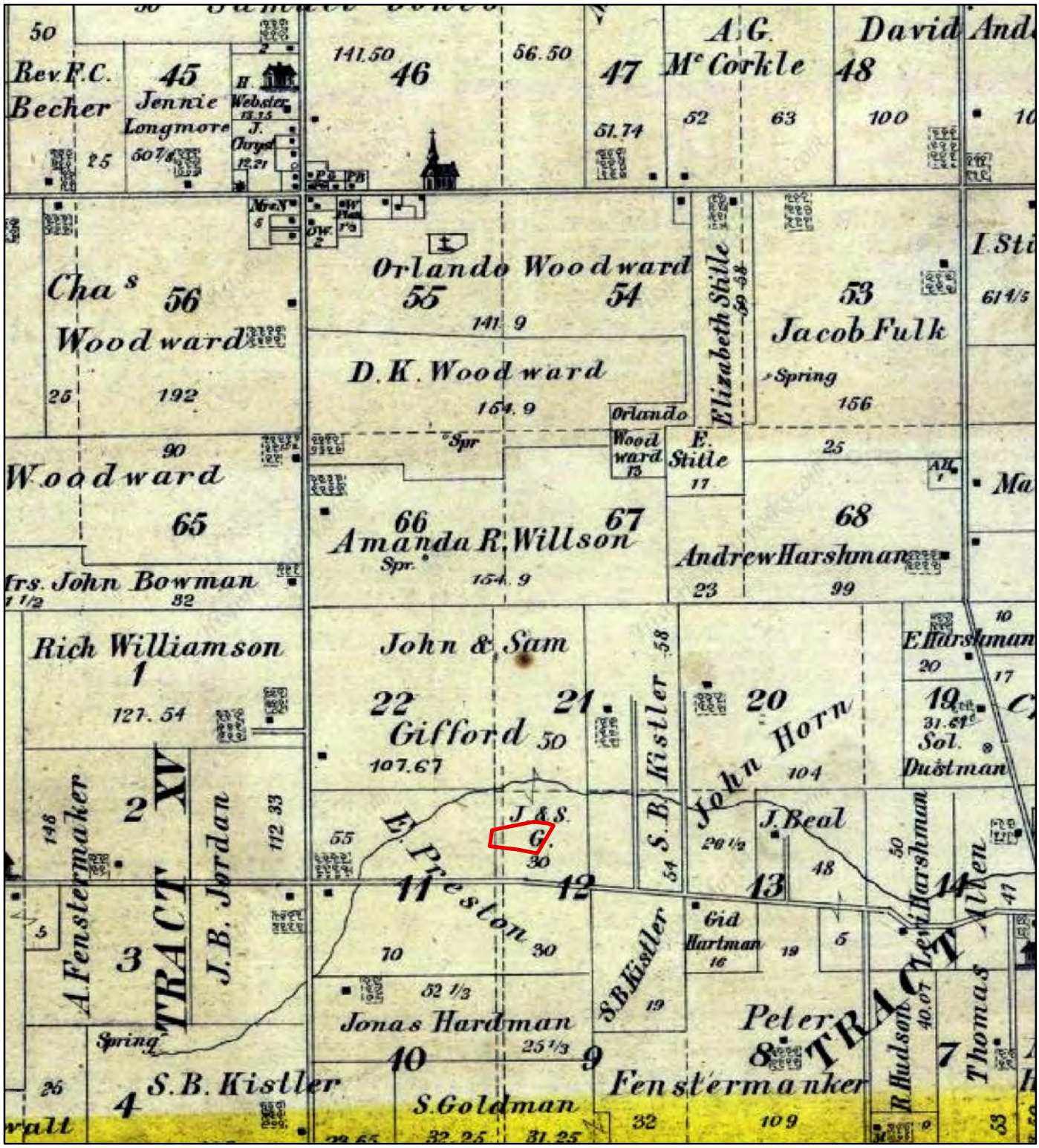

BASE MAP FROM COMBINATION ATLAS MAP of TRUMBULL COUNTY, OHIO

*IMAGE OVERLAY IS APPROXIMATE.

N

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1:20,000 FEET

TRC

317 E. Carson Street
Suite 113
Pittsburgh, PA 15219

TRC - GIS

PROJECT:

Hanna-Highland 345kV Interconnect Project

TITLE:

Study Area circa 1874 (Everts)

DRAWN BY:	JUSTIN MCKISSICK
CHECKED BY:	CURTIS BIONDICH
APPROVED BY:	CURTIS BIONDICH
DATE:	JANUARY 2024
PROJ. NO.:	429847.0081.0000
FILE:	Hanna-Highland.mxd

Attachment 2 - Image 2

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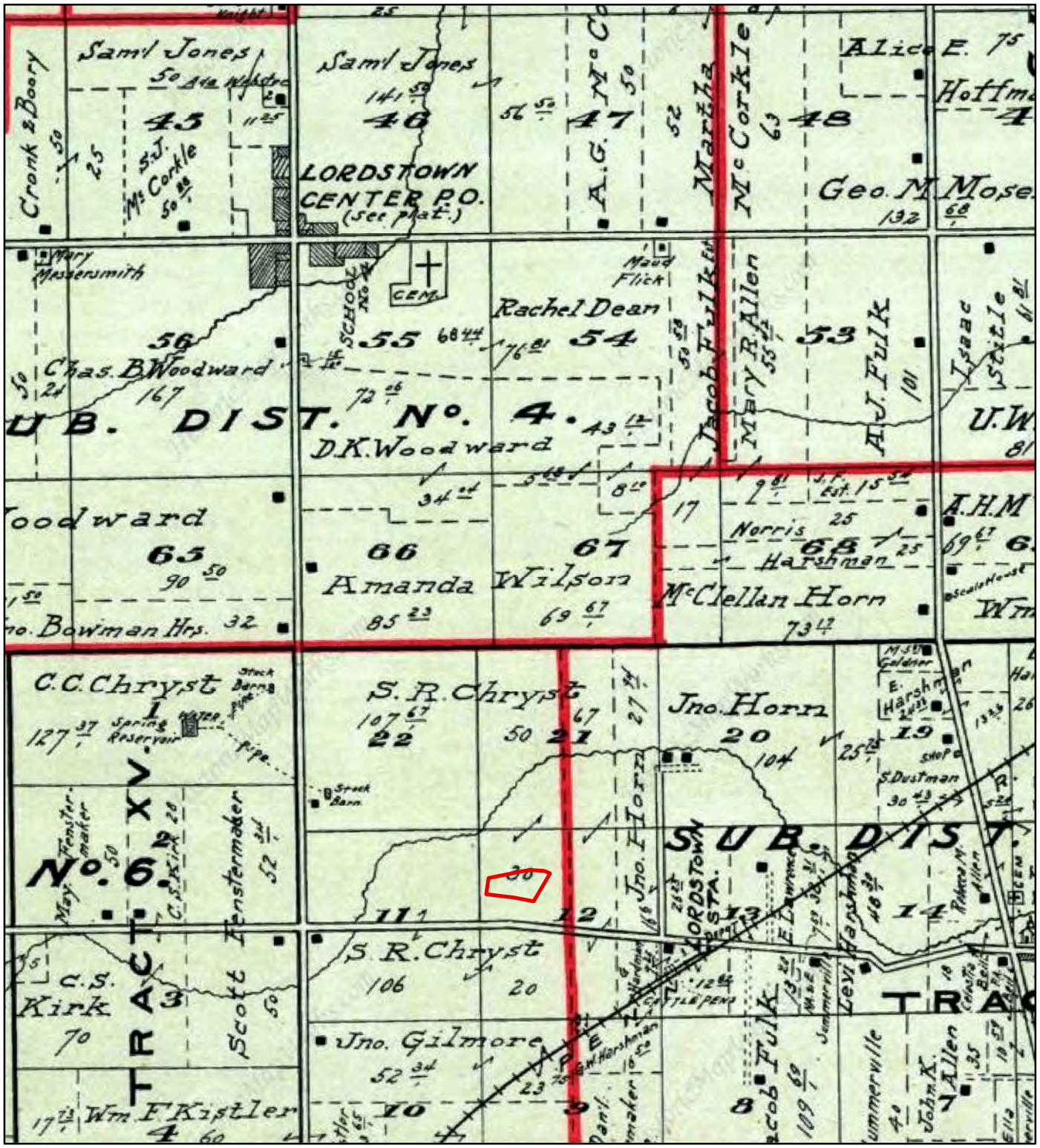

BASE MAP FROM ATLAS and DIRECTORY of TRUMBULL COUNTY, OHIO

*IMAGE OVERLAY IS APPROXIMATE.

N

1 " = 1,667 ' 0 500 1,000

1:20,000 FEET

TRC

317 E. Carson Street
Suite 113
Pittsburgh, PA 15219

TRC - GIS

PROJECT:

Hanna-Highland 345kV Interconnect Project

TITLE:

Study Area circa 1899 (American Atlas Co.)

DRAWN BY:	JUSTIN MCKISSICK
CHECKED BY:	CURTIS BIONDICH
APPROVED BY:	CURTIS BIONDICH
DATE:	JANUARY 2024
PROJ. NO.:	429847.0081.0000
FILE:	Hanna-Highland.mxd

Attachment 2 - Image 3

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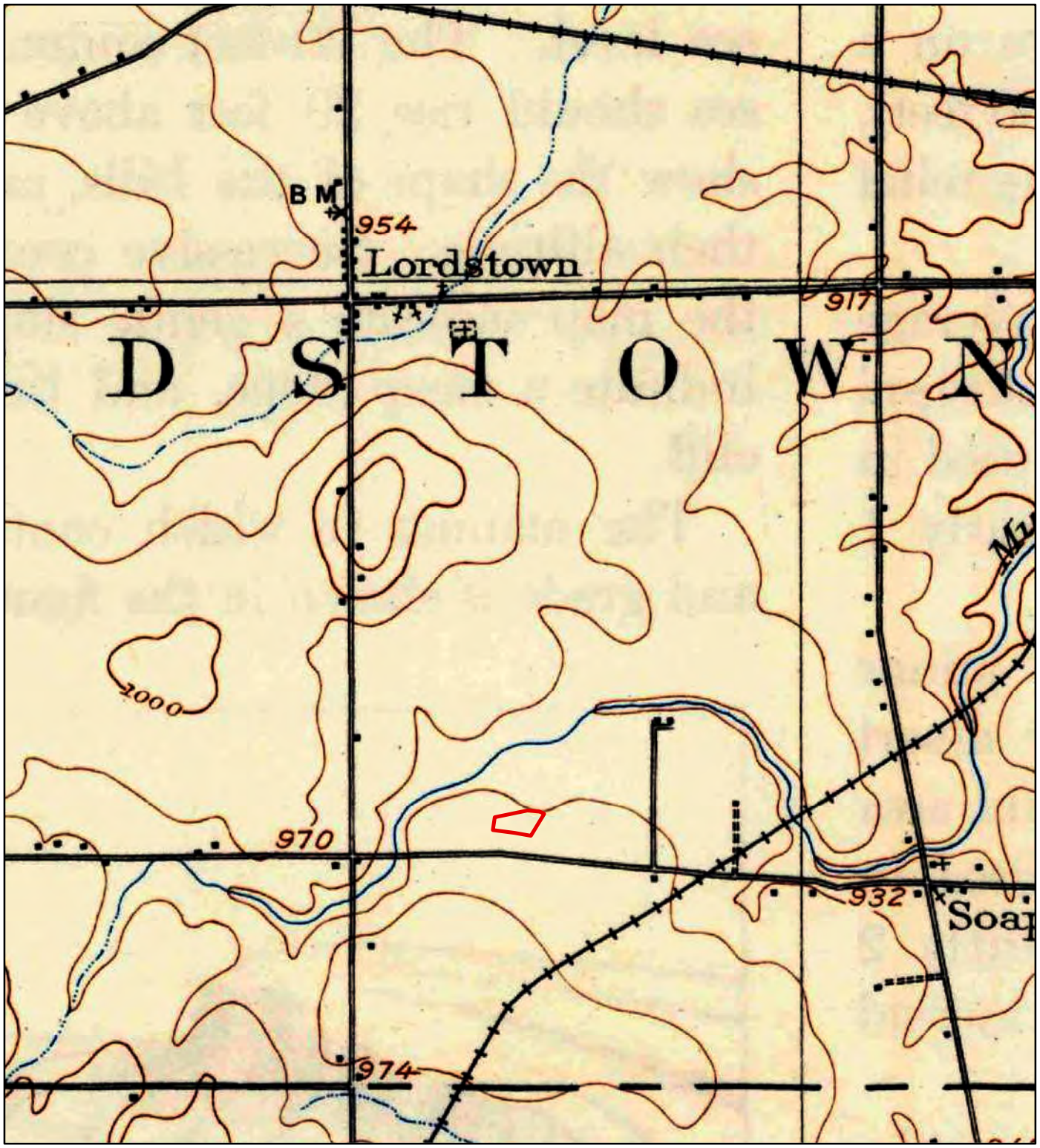

BASE MAP FROM WARREN, OH 15-MINUTE SERIES TOPOGRAPHICAL MAP

*IMAGE OVERLAY IS APPROXIMATE.

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TRC

317 E. Carson Street
Suite 113
Pittsburgh, PA 15219

TRC - GIS

PROJECT:

Hanna-Highland 345kV Interconnect Project

TITLE:

Study Area circa 1908 (USGS)

DRAWN BY:	JUSTIN MCKISSICK
CHECKED BY:	CURTIS BIONDICH
APPROVED BY:	CURTIS BIONDICH
DATE:	JANUARY 2024
PROJ. NO.:	429847.0081.0000
FILE:	Hanna-Highland.mxd

Attachment 2 - Image 4

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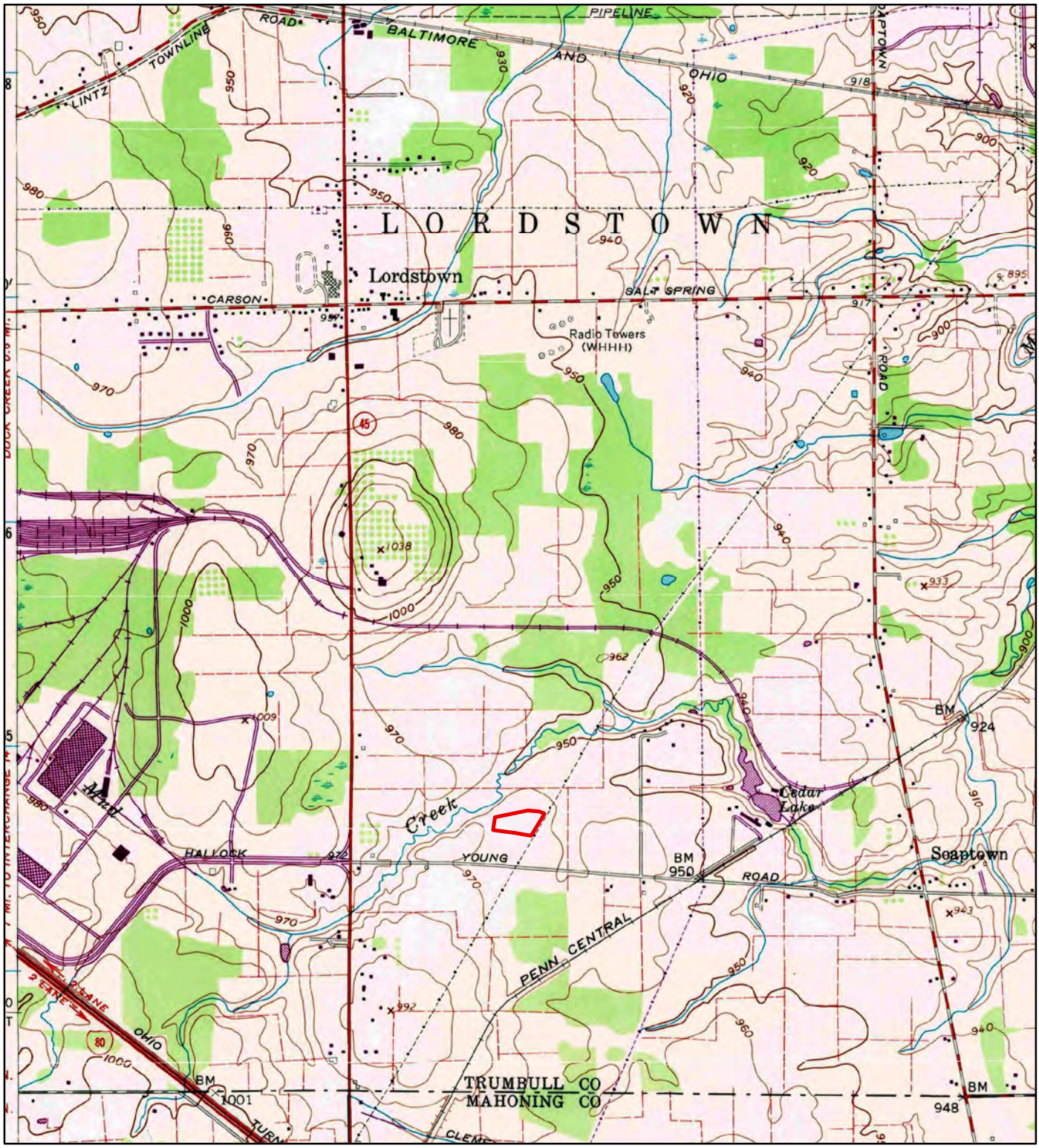

BASE MAP FROM WARREN, OH 7.5-MINUTE SERIES TOPOGRAPHICAL MAP

*IMAGE OVERLAY IS APPROXIMATE.

N

1 " = 2,083 ' 0 500 1,000

1:25,000 FEET

TRC

317 E. Carson Street
Suite 113
Pittsburgh, PA 15219

TRC - GIS

PROJECT:

Hanna-Highland 345kV Interconnect Project

TITLE:

Study Area circa 1956(USGS)

DRAWN BY:	JUSTIN MCKISSICK
CHECKED BY:	CURTIS BIONDICH
APPROVED BY:	CURTIS BIONDICH
DATE:	JANUARY 2024
PROJ. NO.:	429847.0081.0000
FILE:	Hanna-Highland.mxd

Attachment 2 - Image 5

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Exhibit 7

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

February 14, 2024

Emma Given
TRC Companies, Inc.
1382 West 9th Street, Suite 400
Cleveland, Ohio 44113

Re: 24-0070_ Hanna-Highland 345kV Interconnect

Project: The proposed project involves the replacement of tower 41526 with three new transmission towers for a new customer interconnect to the existing Hanna-Highland 345 kV transmission line, utilizing the existing gravel construction drive for access.

Location: The proposed project is located in the Village of Lordstown, Trumbull 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: A review of the Ohio Natural Heritage Database indicates there are no records of state or federally listed plants or animals within one mile of the project area. Records for other unique ecological features within a mile of the project are as follows:

Great Blue Heron Rookery

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 feature listed above is not recorded within one half-mile 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 northern brook lamprey *(Ichthyomyzon fossor*), a state endangered fish, and the mountain brook lamprey (*Ichthyomyzon greeleyi*), a state endangered fish. The DOW recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.

The project is within the range of the eastern massasauga (*Sistrurus catenatus*), a state endangered and a federally threatened snake species. The eastern massasauga uses a range of habitats including wet prairies, fens, and other wetlands, as well as drier upland habitat. 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 eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*), a state endangered species and a federal species of concern. This long-lived, entirely aquatic salamander inhabits perennial streams with large flat rocks. In-water work in hellbender streams can reduce availability of large cover rocks and can destroy hellbender nests and/or kill adults and juveniles. The contribution of additional sediment to hellbender streams can smother large cover rocks and gravel/cobble substrate (used by juveniles), making them unsuitable for refuge and nesting. Projects that contribute to altered flow regimes (e.g., by increasing areas of impervious surfaces or modifying the floodplain) can also adversely affect hellbender habitat. Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size to provide suitable habitat, this project is not likely to impact this species.

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

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

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

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project.

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 8

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

January 23, 2024

Project Code: 2024-0036554

Dear Emma Given:

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

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

Federally Proposed Species: On September 14, 2022, the Service proposed to list the tricolored bat (*Perimyotis subflavus*) as endangered under the ESA. The bat faces extinction due to the impacts of white-nose syndrome, a deadly disease affecting cave-dwelling bats across the continent. During spring, summer, and fall, this species roosts primarily among leaf clusters of live or recently dead trees, emerging at dusk to hunt for insects over waterways and forest edges. While white-nose syndrome is by far the most serious threat to the tricolored bat, other threats now have an increased significance due to the dramatic decline in the species' population. These threats include disturbance to bats in roosting, foraging, commuting, and over-wintering habitats. Mortality due to collision with wind turbines, especially during migration, has also been documented across their range. Conservation measures for the Indiana bat and northern long-eared bat will also help to conserve the tricolored bat.

Seasonal Tree Clearing for Federally Listed Bat Species: Should the proposed project site contain trees ≥3 inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, we recommend removal of any trees ≥3 inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats.

If implementation of this seasonal tree cutting recommendation is not possible, a summer presence/absence survey may be conducted for Indiana bats and northern long-eared bats. If Indiana bats and northern long-eared bats are not detected during the survey, then tree clearing may occur at any time of the year. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Ohio Field Office. Surveyors must have a valid federal permit. Please note that in Ohio summer mist net surveys may only be conducted between June 1 and August 15.

Federally Threatened and Endangered Species: The project is in the range of the threatened eastern massasauga (*Sistrurus catenatus*), a small, docile rattlesnake. Several factors have contributed to the decline of the species including habitat loss and fragmentation, indiscriminate killing, collection, gene pool contamination and incompatible land use practices.

Eastern massasaugas use both upland and wetland habitat and these habitats differ by season. During the winter, massasaugas hibernate in low wet areas, primarily in crayfish burrows, but may use other structures. Presence of a water table near the surface is important for a suitable hibernaculum. In the summer, massasaugas use drier, open areas that contain a mix of grasses and forbs such as goldenrods and other prairie plants that may be intermixed with trees or shrubs. Adjoining lowland and upland habitat with variable elevations between are critical for the species to travel back and forth seasonally. Should the proposed project area contain any of the habitat types or features described above, we recommend that a habitat assessment be conducted to determine if suitable habitat for the species exists within the vicinity of the proposed site. Please note that habitat assessments should only be conducted by a herpetologist permitted by the Ohio Division of Wildlife to conduct eastern massasauga surveys (list attached) due to variable habitat types and the cryptic nature of the species. Any habitat assessments or surveys should be coordinated with this office

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

Stream and Wetland Avoidance: Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus is it important to conserve the functions and values of the remaining wetlands in Ohio (https://epa.ohio.gov/portals/47/facts/ohio_wetlands.pdf). We recommend avoiding and minimizing project impacts to all wetland habitats (e.g., forests, streams, vernal pools) to the maximum extent possible in order to benefit water quality and fish and wildlife

habitat. Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the U.S. Army Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. Disturbed areas should be mulched and revegetated with native plant species. In addition, prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

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

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

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,

Scott Hicks

Scott Hicks
Acting Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW
Eileen Wyza, ODNR-DOW

Exhibit 9

Surface Water Delineation Report

Hanna-Highland 345kV Interconnect Project

January 17, 2024

Village of Lordstown, Trumbull County, Ohio

Prepared For:

FirstEnergy Corporation
341 White Pond Drive, Building B3
Akron, Ohio 44320

Prepared By:
TRC Companies, Inc.
1382 West Ninth Street, Suite 400
Cleveland, Ohio 44113

TRC Project Number: 429847.0081.0000

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TABLES

APPENDICES

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
FirstEnergy	FirstEnergy Corporation
GIS	Geographic Information Systems
GPS	Global Positioning System
HHEI	Headwater Habitat Evaluation Index
HUC	Hydrologic Unit Code
NHD	National Hydrography Dataset
NWI	National Wetlands Inventory
NWP	Nationwide Permit
OAC	Ohio Administrative Code
OBL	Obligate Wetland
OEPA	Ohio Environmental Protection Agency
OHWM	Ordinary High Water Mark
ORAM	Ohio Rapid Assessment Method
PCN	Pre-Construction Notification
Project	Hanna-Highland 345kV Interconnect Project
Project Study Area	4.32-acres, located in the Village of Lordstown, Trumbull County, Ohio
QHEI	Qualitative Habitat Evaluation Index
Redox	Redoximorphic Concentrations
Regional Supplement	Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)
Report	Surface Water Delineation Report
TNM	The National Map
TRC	TRC Companies, Inc.
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
WQC	Water Quality Certification

1.0 Introduction

On behalf of FirstEnergy Corporation (FirstEnergy), TRC Companies, Inc. (TRC) performed a surface water delineation for Hanna-Highland 345kV Interconnect Project (Project). The proposed Project Study Area is approximately 4.32-acres, located in the Village of Lordstown, Trumbull County, Ohio. The proposed Project involves the replacement of Tower 41526 with two (2) new transmission towers for a new customer interconnect to the existing Hanna-Highland 345 kV transmission line, utilizing the existing gravel construction drive for access. On behalf of FirstEnergy, TRC has prepared this Surface Water Delineation Report (Report) for the Project. A Site Location Map of the Project Study Area can be found in **Appendix A, Figure 1.**

On January 11th, 2024, 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 Project Study Area is located at the following approximate centroid coordinates: 41.145080, -80.848445; located in the Village of Lordstown, Trumbull County, Ohio. The Project Study Area occurs within maintained utility right-of-way, surrounded by industrial and residential land use and forested landcover. **Appendix A, Figure 1** and **Figure 2,** provides 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:

i. Evidence of wetland hydrology;
ii. Presence of hydric soils; and
iii. Predominance of hydrophytic vegetation as defined by *The National Wetland Plant List: 2020 Wetland Ratings* (USACE, 2020).

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, 2018) 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: 2020 wetland ratings* (USACE, 2020). There are five 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 January 11th, 2024. 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 (USEPA, USACE, 2007).

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 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 Juniper Systems Geode 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 System (GIS) 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 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 (OHWM) 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) (Ohio EPA, 2006) and/or the Headwater Habitat Evaluation Index (HHEI) (Ohio EPA, 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 v 4.19.1: Ohio (USGS, 2021).

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 Pittsburgh District.

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 approximately 4.32-acres located in the Village of Lordstown, Trumbull County, Ohio; within the Mud Creek watershed (12-Digit Hydrologic Unit Code [HUC]: 050301030602) (USGS, 2022).

The Project Study Area is shown on the Warren, Ohio (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 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
WbA	Wadsworth silt loam, 0 to 2 percent slopes	Non-Hydric W/ Hydric Inclusions	3.90	90.3%
WbB	Wadsworth silt loam, 2 to 6 percent slopes	Non-Hydric W/ Hydric Inclusions	0.42	9.7%
		TOTAL	**4.32**	**100%**

Notes:
Accessed online January 2024 at: http://websoilsurvey.sc.egov.usda.gov.

There are no United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) features mapped 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 (TNM) 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 are no NHD streams mapped within the Project Study Area (**Appendix A, Figure 4**).

According to Federal Emergency Management Agency Flood Insurance Rate Map (39155C0388D (eff. 6/18/2010), the proposed Project is not located within a regulated 100-year floodplain (**Appendix A, Figure 4**) (FEMA, 2021).

3.2 Surface Water Resource Field Delineations

TRC performed the field investigation on January 11th, 2024. Weather conditions were normal for the season, with temperatures ranging between 33 degrees to 38 degrees Fahrenheit, and partly cloudy skies. 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, one (1) wetland was 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 and wetland functional assessments were completed for the delineated wetland using the ORAM (**Appendix C**). The delineated wetland within the Project Study Area is 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	38.5	Cat. 2	0.97
					Total	**0.97**

[1] TRC resource identification.
[2]Cowardin Wetland Classification (approximation based upon field identification and delineation) (Cowardin, Carter, Golet, & LaRoe, 1979): PEM – Palustrine Emergent.
[3]Connection to a jurisdictional waterway: Isolated, Abutting, or Adjacent as determined by TRC; subject to USACE verification. Wetland connection is pending an update from OEPA and USACE based on the EPA vs. Sackett case.
[4]Jurisdiction status is based upon field observations and mapping review of apparent connectivity or adjacency of the resource to Waters of the United States and the assumption that a preliminary jurisdictional determination process will be utilized for the project.
[5]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.
[6]Area is rounded to nearest 0.01-acre, based upon GPS data.

3.2.2 Waterbodies

During the field investigations, no waterbodies were delineated within the Project Study Area. Representative photographs of the Project Study Area are provided in **Appendix B.**

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 (NWP) 57 – Electric Utility Line and Telecommunications Activities. Current regulations allow temporary impacts to jurisdictional resources under a Nationwide Permit 57. Nationwide Permit Regional General Conditions were reviewed regarding this Project. This Project is located in the Village of Lordstown, Trumbull County, Ohio, which is within the USACE Pittsburgh Regulatory District. All townships in Trumbull County are listed in Appendix 1 to Regional General Condition 5(a) (Endangered Species and Threatened Species), therefore triggering the need for a Section 404 Pre-Construction Notification (PCN). A PCN will be required due to the Project being listed in Appendix 1 and because proposed wetland impacts exceed the threshold of NWP 57.

Additionally, the Project is located within an "Eligible" area according to Ohio EPA's Stream Eligibility for Nationwide Permit Program (OEPA, 2017) and therefore is eligible for coverage under the OEPA 401 Water Quality Certification (WQC) for Nationwide Permits **(Appendix A, Figure 6)**.

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 WQC, 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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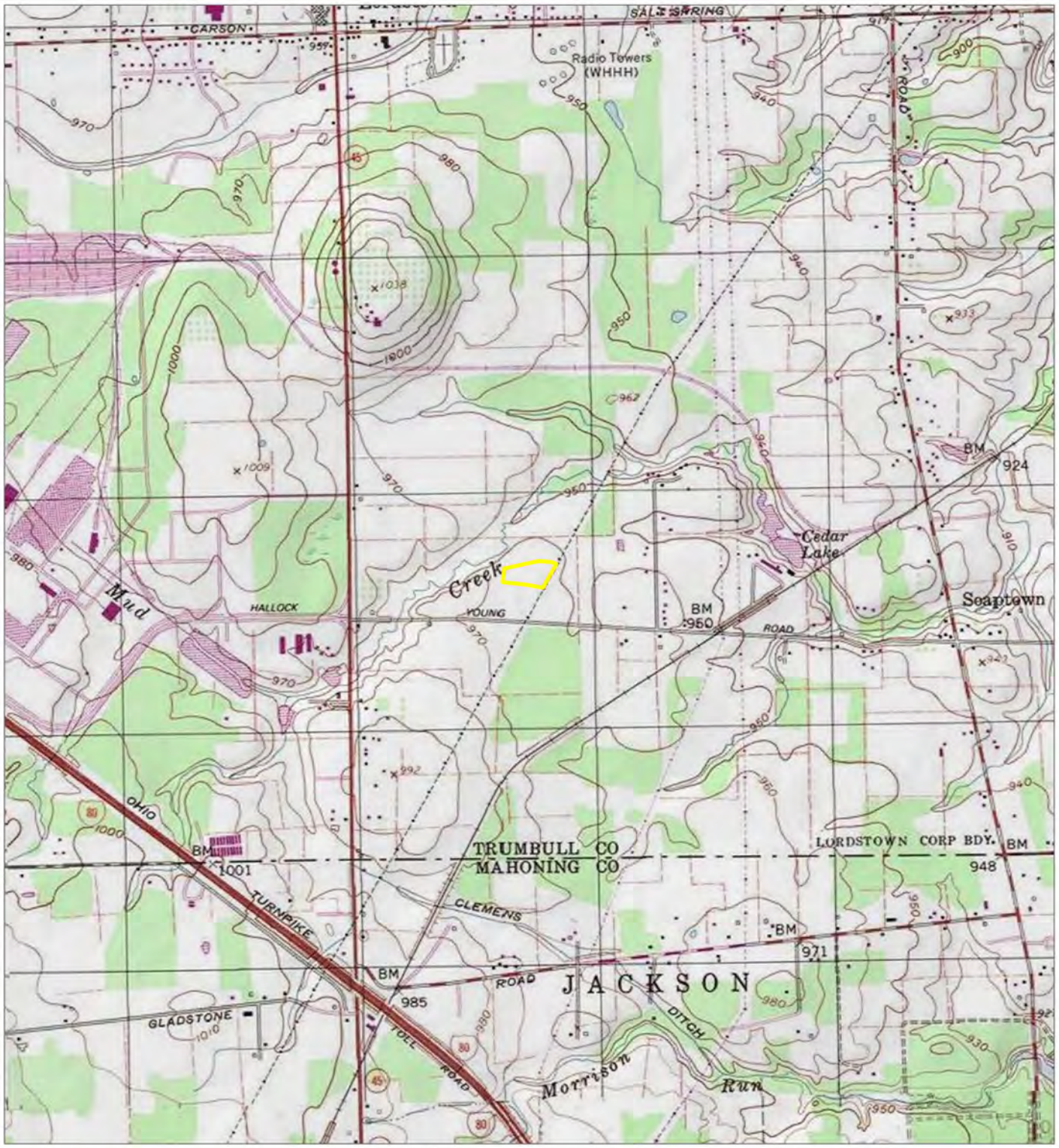
Appendix A

Figures



PROJECT STUDY AREA

BASE MAP: USA TOPO MAPS MAP SERVICE , WARREN QUAD

0 1,000 2,000

FEET

1:24,000 1" = 2,000'

PROJECT:

FIRSTENERGY

HANNA-HIGHLAND 345KV INTERCONNECT PROJECT

TRUMBULL COUNTY, OH

TITLE:

SITE LOCATION MAP

DRAWN BY:	M. OPEL	PROJ. NO.:	429847.0081
CHECKED BY:	E. GIVEN		
APPROVED BY:	B. FALKINBURG		**FIGURE 1**
DATE:	JANUARY 2024		

TRC

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

FILE: WDR

PROJECT STUDY AREA

EXISTING STRUCTURE

BASE MAP: GOOGLE MAPS.

1:1,200
1" = 100'

0 100 200 FEET

PROJECT: FIRSTENERGY
HANNA-HIGHLAND 345KV INTERCONNECT PROJECT
TRUMBULL COUNTY, OH

TITLE: **AERIAL MAP**

DRAWN BY:	M. OPEL	PROJ. NO.:	429847.0081
CHECKED BY:	M. MOLNAR		
APPROVED BY:	B. FALKINBURG		**FIGURE 2**
DATE:	JANUARY 2024		

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

FILE: WDR.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet - Map Rotation: 0
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PROJECT STUDY AREA
EXISTING STRUCTURE
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.

1:1,200
1" = 100'
0 100 200 FEET

PROJECT: FIRSTENERGY
HANNA-HIGHLAND 345KV INTERCONNECT PROJECT
TRUMBULL COUNTY, OH

TITLE: SOILS MAP

DRAWN BY:	M. OPEL	PROJ. NO.:	429847.0081
CHECKED BY:	E. GIVEN	FIGURE 3	
APPROVED BY:	B. FALKINBURG		
DATE:	JANUARY 2024		

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

FILE: WDR.aprx

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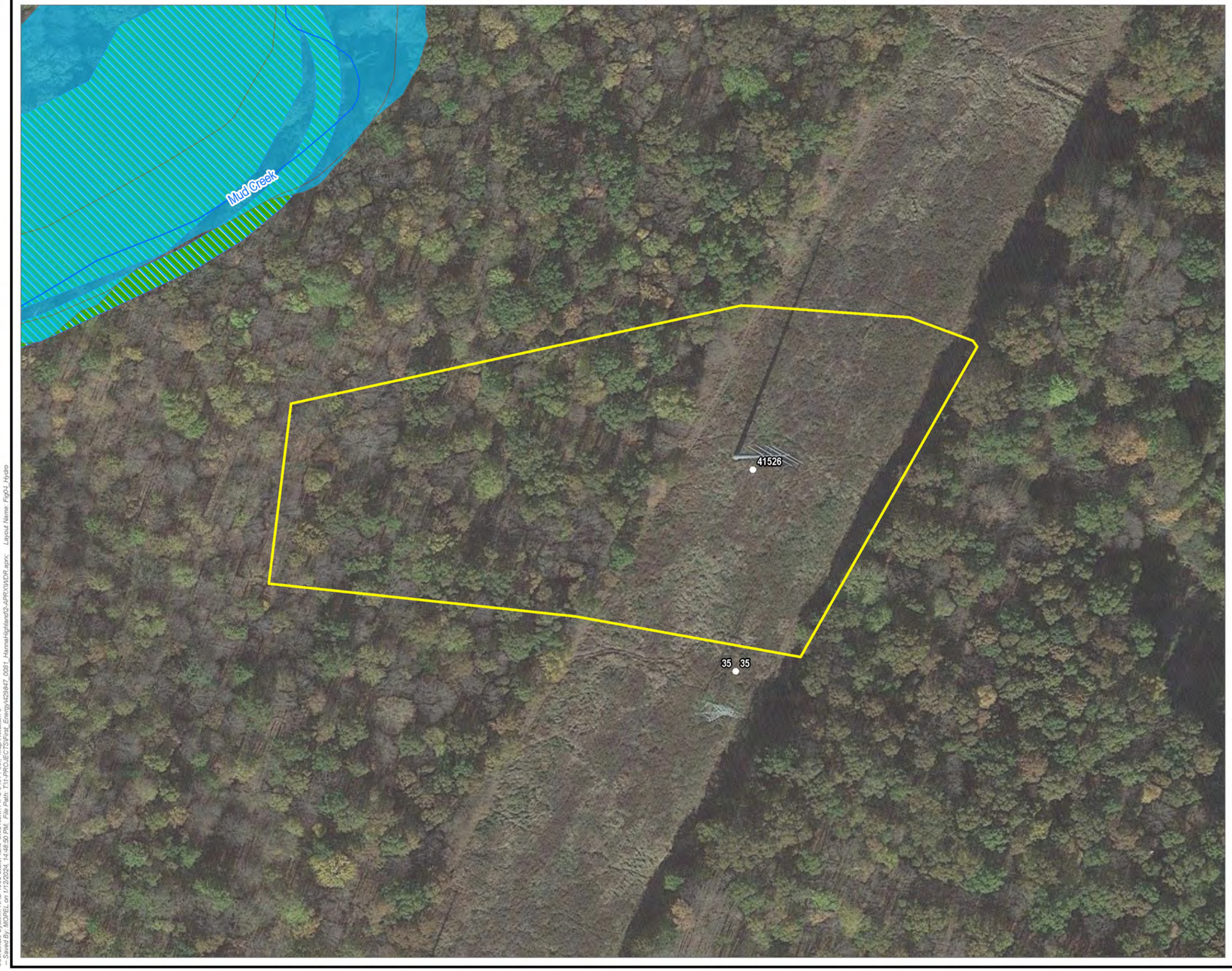

PROJECT STUDY AREA
EXISTING STRUCTURE
NATIONAL HYDROGRAPHY DATASET (NHD) STREAM
NATIONAL WETLANDS INVENTORY (NWI) FEATURE
100-YEAR FLOOD ZONE

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).

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
FIRSTENERGY
HANNA-HIGHLAND 345KV INTERCONNECT PROJECT
TRUMBULL COUNTY, OH

TITLE:
NHD, NWI AND FEMA FLOODPLAIN MAP

DRAWN BY:	M. OPEL	PROJ. NO.:	429847.0081
CHECKED BY:	E. GIVEN		
APPROVED BY:	B. FALKINBURG		FIGURE 4
DATE:	JANUARY 2024		

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

FILE: WDR.aprx

Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 Feet - Map Rotation: 0
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PROJECT STUDY AREA
EXISTING STRUCTURE
PEM WETLAND
WETLAND CONTINUES
WETLAND DATA POINT
UPLAND DATA POINT

BASE MAP: GOOGLE MAPS.
DATA SOURCES: TRC WETLAND DELINEATION COMPLETED JANUARY 11, 2024.

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
FIRSTENERGY
HANNA-HIGHLAND 345KV INTERCONNECT PROJECT
TRUMBULL COUNTY, OH

TITLE:
DELINEATED RESOURCES MAP

DRAWN BY:	M. OPEL	PROJ. NO.:	429847.0081
CHECKED BY:	E. GIVEN		
APPROVED BY:	B. FALKINBURG		**FIGURE 5**
DATE:	JANUARY 2024		

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

FILE: WDR.aprx

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

1:60,000
1" = 5,000'

0 5,000 10,000 FEET

PROJECT:	FIRSTENERGY HANNA-HIGHLAND 345KV INTERCONNECT PROJECT TRUMBULL COUNTY, OH
TITLE:	NATIONWIDE PERMITS STREAM ELIGIBILITY MAP
DRAWN BY: M. OPEL	PROJ. NO.: 429847.0081
CHECKED BY: E. GIVEN	FIGURE 6
APPROVED BY: B. FALKINBURG	
DATE: JANUARY 2024	

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

FILE: WDR.aprx

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

Photographic Record

PHOTOGRAPHIC RECORD

Hanna-Highland 345kV Interconnect Project

Client Name:	Site Location:	Project No.
FirstEnergy	Village of Lordstown, Trumbull County, Ohio	429847.0081.0000

Photo No. 1. **Photo Date:** 1/11/2024 **Description:** Wetland W-EVN-1 (PEM), view looking north.	

Photo No. 2. **Photo Date:** 1/11/2024 **Description:** Wetland W-EVN-1 (PEM), view looking east.	

Client Name:	Site Location:	Project No.
FirstEnergy	Village of Lordstown, Trumbull County, Ohio	429847.0081.0000

Photo No. 3. **Photo Date:** 1/11/2024 **Description:** Wetland W-EVN-1 (PEM), view looking south.	

Photo No. 4. **Photo Date:** 1/11/2024 **Description:** Wetland W-EVN-1 (PEM), view looking west.	

Client Name:	Site Location:	Project No.
FirstEnergy	Village of Lordstown, Trumbull County, Ohio	429847.0081.0000

Photo No. 5.	
Photo Date: 1/11/2024	
Description: Representative photo from the southwestern corner of the Project Study Area, facing east.	

Photo No. 6.	
Photo Date: 1/11/2024	
Description: Representative photo from the northwestern corner of the Project Study Area, facing south.	

Client Name:	Site Location:	Project No.
FirstEnergy	Village of Lordstown, Trumbull County, Ohio	429847.0081.0000

Photo No. 7. **Photo Date:** 1/11/2024 **Description:** Representative photo from the southern boundary of the Project Study Area, facing north.	

Photo No. 8. **Photo Date:** 1/11/2024 **Description:** Representative photo of the center of the Project Study Area, facing east, showing current tree clearing west of the existing right-of-way (ROW).	

Client Name:	Site Location:	Project No.
FirstEnergy	Village of Lordstown, Trumbull County, Ohio	429847.0081.0000

Photo No. 9.	
Photo Date: 1/11/2024	
Description: Representative photo of the center of the Project Study Area, facing south, showing current tree clearing west of the existing ROW.	

Photo No. 10.	
Photo Date: 1/11/2024	
Description: Representative photo of the center of the Project Study Area, facing north, showing upland forest habitat corridor to the west of the existing ROW.	

Appendix C

Data Forms

USACE Wetland Determination Data Forms – Northcentral and Northeast Region

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Hanna-Highland 345kV Interconnect City/County: Lordstown, Trumbull County Sampling Date: 2024-1-11
Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EVN-01_PEM-1
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 139 of LRR R Lat: 41.1450733167 Long: -80.8479501333 Datum: WGS84
Soil Map Unit Name: Wadsworth silt loam, 0 to 2 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: W-EVN-01

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

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): 1
Water Table Present? Yes _____ No ✘ Depth (inches): _____
Saturation Present? (includes capillary fringe) Yes _____ No ✘ Depth (inches): _____

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-01_PEM-1

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
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. *Scirpus cyperinus*	30	Yes	OBL
2. *Phalaris arundinacea*	25	Yes	FACW
3. *Solidago rugosa*	20	Yes	FAC
4. *Symphyotrichum lateriflorum*	20	Yes	FAC
5. *Juncus effusus*	15	No	OBL
6. *Rubus allegheniensis*	10	No	FACU
7.			
8.			
9.			
10.			
11.			
12.			
	120	= 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: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	45	x 1 =	45
FACW species	25	x 2 =	50
FAC species	40	x 3 =	120
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	120 (A)		255 (B)

Prevalence Index = B/A = 2.1

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.

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.

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 to 7	10YR 6/1	95	10YR 7/6	5	C	PL	Silty Clay	
7 to 20	10YR 6/1	70	10YR 5/8	30	C	M/PL	Clay	

[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:

- ___ 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 Soils[3]:

- ___ 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)

[3]Indicators 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: Hanna-Highland 345kV Interconnect City/County: Lordstown, Trumbull County Sampling Date: 2024-1-11
Applicant/Owner: FirstEnergy State: OH Sampling Point: W-EVN-01_UPL-1
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): MLRA 139 of LRR R Lat: 41.1452111 Long: -80.8483681 Datum: WGS84
Soil Map Unit Name: Wadsworth silt loam, 0 to 2 percent slopes NWI Classification:
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: ____

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

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? (includes capillary fringe) Yes ____ No ✘ Depth (inches): ____

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: W-EVN-01_UPL-1

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharinum*	50	Yes	FACW
2. *Quercus palustris*	40	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	90	= 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. *Cyperus esculentus*	5	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	5	= 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: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

✘ 1 - Rapid Test for Hydrophytic Vegetation

✘ 2 - Dominance Test is >50%

__ 3 - Prevalence Index is ≤3.0[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** ✘ **No** __

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

The criterion for hydrophytic vegetation is met.

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 to 7	10YR 7/6	100					Clay	
7 to 20	10YR 7/4	95	10YR 6/8	5	C	M/PL	Clay	

[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:

- __ 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 Soils[3]:

- __ 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)

[3]Indicators 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 not met.

OEPA ORAM Data Form

Background Information

Name: Erin Van Nort
Date: 01/11/2024
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 and PFO
HGM Class(es): Depression (I)
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. See Report

Lat/Long or UTM Coordinate	41.145077, -80.847985
USGS Quad Name	Warren
County	Trumbull
Township	N/A
Section and Subsection	N/A
Hydrologic Unit Code	050301030602
Site Visit	01/11/2024
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):	5.0

Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.

See Report

Comments, Narrative Discussion, Justification of Category Changes:

Final score : 38.5	**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 *Phalaris arundinacea, Lythrum salicaria,* or *Phragmites australis*, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	(NO) Go to Question 6
6	**Bogs.** Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly *Sphagnum* spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	(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	0ak Opening species	wet prairie species
Lythrum salicaria	*Zygadenus elegans var. glaucus*	*Calla palustris*	*Carex cryptolepis*	*Calamagrostis canadensis*
Myriophyllum spicatum	*Cacalia plantaginea*	*Carex atlantica var. capillacea*	*Carex lasiocarpa*	*Calamogrostis stricta*
Najas minor	*Carex flava*	*Carex echinata*	*Carex stricta*	*Carex atherodes*
Phalaris arundinacea	*Carex sterilis*	*Carex oligosperma*	*Cladium mariscoides*	*Carex buxbaumii*
Phragmites australis	*Carex stricta*	*Carex trisperma*	*Calamagrostis stricta*	*Carex pellita*
Potamogeton crispus	*Deschampsia caespitosa*	*Chamaedaphne calyculata*	*Calamagrostis canadensis*	*Carex sartwellii*
Ranunculus ficaria	*Eleocharis rostellata*	*Decodon verticillatus*	*Quercus palustris*	*Gentiana andrewsii*
Rhamnus frangula	*Eriophorum viridicarinatum*	*Eriophorum virginicum*		*Helianthus grosseserratus*
Typha angustifolia	*Gentianopsis spp.*	*Larix laricina*		*Liatris spicata*
Typha xglauca	*Lobelia kalmii*	*Nemopanthus mucronatus*		*Lysimachia quadriflora*
	Parnassia glauca	*Schechzeria palustris*		*Lythrum alatum*
	Potentilla fruticosa	*Sphagnum spp.*		*Pycnanthemum virginianum*
	Rhamnus alnifolia	*Vaccinium macrocarpon*		*Silphium terebinthinaceum*
	Rhynchospora capillacea	*Vaccinium corymbosum*		*Sorghastrum nutans*
	Salix candida	*Vaccinium oxycoccos*		*Spartina pectinata*
	Salix myricoides	*Woodwardia virginica*		*Solidago riddellii*
	Salix serissima	*Xyris difformis*		
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

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

Site: FirstEnergy, Hanna-Highland 345k…	**Rater(s):** Erin Van Nort, Erin Van Nort	**Date:** 2024-01-11

RESOURCE ID: W-EVN-01
TYPE: PEM, PF0 (off-site)

Metric 1. Wetland Area (size).

3 (max 6 pts.) | 3 (subtotal)

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)
- [X] 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)

Metric 2. Upland buffers and surrounding land use.

7 (max 14 pts.) | 10 (subtotal)

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)
- [X] 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)
- [X] MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- [ ] HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

Metric 3. Hydrology.

15.5 (max 30 pts.) | 25.5 (subtotal)

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [X] Precipitation (1)
- [ ] Seasonal/Intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [ ] 100 year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [X] Part of wetland/upland (e.g. forest), complex (1)
- [ ] Part of riparian or upland corridor (1)

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)
- [X] <0.4m (<15.7in) (1)

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

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

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- [X] None or none apparent (12)
- [X] Recovered (7)
- [ ] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [ ] ditch
- [ ] tile
- [ ] dike
- [ ] weir
- [ ] stormwater input
- [ ] point source (nonstormwater)
- [X] filling/grading
- [X] road bed/RR track
- [ ] dredging
- [ ] other: _____

Metric 4. Habitat Alteration and Development.

13 (max 20 pts.) | 38.5 (subtotal)

4a. Substrate disturbance. Score one or double check and average.

- [X] 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)
- [X] Fair (3)
- [ ] Poor to fair (2)
- [ ] Poor (1)

4c. Habitat alteration. Score one or double check and average.

- [ ] None or none apparent (9)
- [X] Recovered (6)
- [ ] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [X] mowing
- [ ] grazing
- [ ] clearcutting
- [X] selective cutting
- [ ] woody debris removal
- [ ] toxic pollutants
- [ ] shrub/sapling removal
- [ ] herbaceous/aquatic bed removal
- [ ] sedimentation
- [ ] dredging
- [ ] farming
- [ ] nutrient enrichment

38.5
subtotal this page

last revised 1 February 2001 jjm

Site: FirstEnergy, Hanna-Highland 345k...	Rater(s): Erin Van Nort, Erin Van Nort	Date: 2024-01-11

38.5 subtotal first page

0 / 38.5 Metric 5. Special Wetlands.

max 10 pts. / subtotal

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 / 38.5 Metric 6. Plant communities, interspersion, microtopography.

max 20 pts. / subtotal

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [ ] Aquatic bed
- [1] Emergent
- [0] Shrub
- [1] Forest
- [ ] Mudflats
- [ ] Open water
- [ ] Other: _____

6b. Horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [ ] Moderately high (4)
- [ ] Moderate (3)
- [ ] Moderately low (2)
- [X] Low (1)
- [ ] None (0)

Invasives present:
reed canary grass

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

- [ ] Extensive >75% cover (-5)
- [X] 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 hummucks/tussucks
- [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

38.5 **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 (NO)	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES (NO)	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES (NO)	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES (NO)	If yes, Category 1.
	Question 6. Bogs	YES (NO)	If yes, Category 3.
	Question 7. Fens	YES (NO)	If yes, Category 3.
	Question 8a. Old Growth Forest	YES (NO)	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES (NO)	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO)	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	3	
	Metric 2. Buffers and surrounding land use	7	
	Metric 3. Hydrology	15.5	
	Metric 4. Habitat	13	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	0	
	TOTAL SCORE	38.5	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	(NO)	Is quantitative rating score *less* than the Category 2 scoring threshold (*excluding* gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been 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	(NO)	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(NO)	Is quantitative rating score *greater* than the Category 2 scoring threshold *(including* any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	(YES) Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the *"gray zone"* for Category 1 or 2 or Category 2 or 3 wetlands?	YES Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	(NO)	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit *moderate OR superior* hydrologic OR habitat, OR recreational functions AND the wetland was *not* categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	(NO) Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, 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	(Category 2)	Category 3

End of Ohio Rapid Assessment Method for Wetlands.

DEPARTMENT OF THE ARMY
PITTSBURGH DISTRICT, CORPS OF ENGINEERS
WILLIAM S. MOORHEAD FEDERAL BUILDING
1000 LIBERTY AVENUE
PITTSBURGH, PA 15222-4186

March 18, 2024

Regulatory Division
LRP-2024-76

FirstEnergy Corporation
c/o Auggie Ruggiero
341 White Pond Drive
Akron, OH 44320

Dear Mr. Ruggiero:

I refer to your Department of the Army permit application, received in this office on February 7, 2024, regarding your proposal to permanently impact 0.004 acre of wetland to remove an existing transmission tower and install three new transmission towers and temporarily impact 0.314 acre of wetland to install a temporary timber mat crossing (Hanna-Highland 345kV Interconnect Project) in the Village of Lordstown, Trumbull County, Ohio.

Activities associated with projects of this type are authorized by Nationwide Permit (NWP) No. 57, Electric Utility Line and Telecommunications Activities. Water quality certification is waived as published in Public Notice CELRP 21-14 on March 8, 2021.

This project has been verified to comply with all applicable regional conditions. These NWPs were published in the January 13, 2021 issue of the Federal Register.

This NWP was previously issued by the Corps of Engineers, for purposes of Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act.

For a list of conditions which must be followed for the NWP to be valid, refer to:

https://www.lrp.usace.army.mil/Portals/72/SPN%2021-14%20State%20of%20Ohio.pdf

Special Conditions:

1. The project site lies within the range of the Indiana bat (*Myotis sodalis*), and the northern long-eared bat (*Myotis septentrionalis*), which are federally-listed endangered species. Several factors have contributed to the two species decline, including habitat loss, fragmentation of habitat and the disease White

Nose Syndrome. During winter, the two bat species hibernate in caves and abandoned mines. Suitable summer habitat for the Indiana bats and the northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥3 inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat. The permittee will preserve wooded/forested habitats exhibiting any of the characteristics listed above wherever possible. Should suitable habitat be present that cannot be saved during construction activities, any trees ≥3 inches dbh will only be cut between October 1 and March 31.

Adherence to these conditions will permit you to proceed with the proposed project. Please note, the enclosed Compliance Certification Form must be signed and returned to this office upon completion of the proposed work.

The verification of this NWP is valid until March 14, 2026, unless the NWPs are modified, suspended, or revoked. If project specifications are changed or work has not been initiated before March 14, 2026, please contact this office for further verification.

The verification of this NWP will not relieve you of the responsibility to obtain any other required state, local, or Federal authorizations.

If you have any questions, please contact Michael D. Engelhardt by phone at (412) 395-7141 or email at michael.d.engelhardt@usace.army.mil. Please complete our customer survey online and provide us with feedback at https://regulatory.ops.usace.army.mil/customer-service-survey/.

Sincerely,

//SIGNED//

Tyler J. Bintrim
Chief, North Branch
Regulatory Division

Enclosure

cc:
OH EPA
Soil and Conservation District

Compliance Certification Form

PERMIT NO: LRP-2024-76

NAME OF PERMITTEE: FirstEnergy Corporation

DATE OF ISSUANCE: March 18, 2024

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

U.S. Army Corps of Engineers
Pittsburgh District
Regulatory Division, Room 2200
William S. Moorhead Federal Building
1000 Liberty Avenue
Pittsburgh, PA 15222-4186

Please note that your permitted activity is subject to compliance inspection by a U.S. Army Corps of Engineers Representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

_____
Signature of Permittee