

# Construction Notice Fostoria-East Lima 138 kV Hard Tap Project



An **AEP** Company

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*BOUNDLESS ENERGY*<sup>SM</sup>

PUCO Case No. 22- 1134-EL-BNR

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

Submitted by:  
Ohio Power Company

December 19, 2022

## Construction Notice for Fostoria-East Lima 138 kV Hard Tap Project

### Construction Notice

#### Ohio Power Company Fostoria-East Lima 138 kV Hard Tap Project

**4906-6-05**

Ohio Power Company (the “Company”) provides the following information to the Ohio Power Siting Board (“OPSB”) pursuant to Ohio Administrative Code Section 4906-6-05.

#### **4906-6-05(B) General Information**

##### **B(1) Project Description**

**The name of the project and applicant's reference number, names and reference number(s) of resulting circuits, a brief description of the project, and why the project meets the requirements for a Construction Notice.**

The Company has identified the need to construct the Fostoria-East Lima 138 kV Hard Tap Project (the “Project”) in the Allen Township, Hancock County, Ohio. The Project involves constructing radial service from the Fostoria–East Lima 138 kV Transmission Line, specifically the northern Ebersole-North Findlay 138 kV circuit, to a new customer point of interconnection (POI). The location of the Project, customer’s property, and point of interconnection are shown on Figure 1 and Figure 2 in Appendix A.

The Project meets the requirements for a Construction Notice because it is within the types of projects defined by item 1(d)(i) of Ohio Administrative Code Section 4906-1-01 Appendix A of the Application Requirement Matrix For Electric Power Transmission Lines:

- (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 operation 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 Project has been assigned PUCO Case No. 22-1134-EL-BNR.

##### **B(2) Statement of Need**

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

A customer has requested 30MVA of service to support growth at its site over the next 3 years. To meet the customer’s needs, the Company will be required to install a hard tap structure on the Fostoria – East Lima 138 kV Transmission Line, specifically the northern Ebersole - North Findlay 138 kV circuit. From this hard tap structure, one span of radial line will be extended to the POI. The POI will be a customer-owned structure outside of the customer-owned station.

## **Construction Notice for Fostoria-East Lima 138 kV Hard Tap Project**

Failure to move forward with the proposed Project will result in the inability to serve the customer's load expectation and jeopardize the customer's plans. The work to be constructed under this Project is the work required to serve the initial 30MVA load. The customer has communicated an ultimate load at the site of 150MW. Additional solutions will be required to serve the increased load and will be taken through the PJM process and filed with the OPSB.

The need was presented and reviewed with stakeholders at the September 16, 2022, PJM SRRTEP Western Meeting. The solution was presented in the PJM SRRTEP Western Meeting on December 16, 2022 (See Appendix B).

### **B(3) Project Location**

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

The location of the Project in relation to existing transmission lines and substation is shown in Figure 1 of Appendix A.

### **B(4) Alternatives Considered**

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

The Project is located on customer property and based on the customer's proposed development and existing facilities in the area. The proposed location of the line interconnection is the most suitable location for the Project. Other alternatives would require impacting neighboring properties, as opposed to remaining entirely on the customer's property, and would add additional transmission length to the Project without any additional benefit. The transmission line interconnection is located within the specific customer property on land already occupied by the customer. The proposed Project will result in no impacts to wetlands, streams, or known cultural resource areas eligible for the National Register of Historic Places (NRHP). No tree clearing is anticipated. Therefore, this alternative represents the most suitable location and is the most appropriate solution for meeting the Company and specific customer's needs in the area.

### **B(5) Public Information Program**

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

The Company maintains a website (<http://aeptransmission.com/ohio/>) on which an electronic copy of this CN is available. A letter including project and filing details will be sent to officials and each property owner and affected tenant within the planned site or contiguous to the planned site within seven days of filing. An electronic copy of the CN will be served to the public library in each political subdivision affected by this Project.

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### **B(6) Construction Schedule**

**The applicant shall provide an anticipated construction schedule and proposed in-service date of the project.**

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

### **B(7) Area Map**

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

Figure 1 in Appendix A provides the proposed Project area on a map of 1:24,000-scale (1 inch equals 2,000 feet), showing the Project on the United States Geological Survey (USGS) 7.5-minute topographic map of the Findlay, Ohio quadrangle. Figure 2 in Appendix A shows the Project Area on recent aerial photography, dated 2021, as provided by ESRI World Imagery at a scale of 1:2,400 scale (1 inch equals 200 feet).

To visit the Project site from Columbus, Ohio, take U.S. 23 North for approximately 66 miles to State Highway 15. Continue on State Highway 15 for approximately 16.7 miles. Take the ramp on the right for I-75 North. Continue on I-75 for 4.4 miles to Exit 161 for county Road 99. Run right onto County Road 99. Continue on County Road 99 for 1.0 mile before turning left onto Distribution Drive and then immediately right onto Township Road 99. After 0.2 mile, the driveway to the customer property is on the left (north) at the approximate address of 12666 Township Road 99, Findlay, Ohio 45840. The Project location is approximately 800 feet north of Township Road 99 at latitude 41.089864, longitude -83.636071.

### **B(8) Property Agreements**

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

The customer will provide the Company with a supplemental easement on Parcel 020001011628 along the Fostoria-East Lima 138 kV line in order to establish and maintain the new service between the transmission line and the POI.

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### **B(9) Technical Features**

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

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

Line Asset Name:	Fostoria-East Lima 138 kV Transmission Line
Ownership:	Ohio Power Company
Voltage:	138 kV
Conductors:	(3) 397.5 kcmil 30/7 ACSR Lark
Static Wire:	(1) 159 kmcil 12/7 ACSR Guinea
Insulators:	Polymer
ROW Width:	50 feet
Structure Type:	(1) double circuit, Braced 2-Pole, Wood Structure

#### **B(9)(b) Electric and Magnetic Fields**

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

No occupied residences or institutions are located within 100 feet of the Project.

#### **B(9)(c) Project Cost**

**The estimated capital cost of the project.**

The capital cost estimate for the proposed Project, which is comprised of applicable tangible and capital costs, is approximately \$700,000 based on a Class 4 estimate. The costs of this Project will be fully recovered through reimbursement by the customer.

### **B(10) Social and Ecological Impacts**

**The applicant shall describe the social and ecological impacts of the project:**

#### **B(10)(a) Land Use Characteristics**

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

An aerial photograph of the Project vicinity is provided as Figure 2 in Appendix A. The Project is located in Allen Township, Hancock County, Ohio. Land use in the Project Area is a mix of commercial/industrial and agricultural near the City of Findlay municipal boundary. A recreational trail is adjacent to the west of the

## Construction Notice for Fostoria-East Lima 138 kV Hard Tap Project

customer property with a park to the northwest. The closest residence is approximately 700 feet from the Project. No tree clearing is anticipated for the Project.

### **B(10)(b) Agricultural Land Information**

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

Multiple wind turbines are situated on the customer property, with the majority of the parcel covered in turf grass including the Project work areas. Adjacent areas to the east are used for agriculture, most recently for row crops. The Hancock County Auditor checked the customer property and adjacent parcels for listing on the Agricultural District Land program on November 7, 2022. These properties were not identified as Agricultural District Land parcels. No impacts to agricultural land uses or Agricultural District Land are anticipated for the Project.

### **B(10)(c) Archaeological and Cultural Resources**

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

The Company's consultant completed a Phase I Cultural Resource Management Literature Review of the Project Area. The entirety of the current Project corridor has been the subject of a previous investigation that was conducted for a longer and encompassing transmission line rebuild project. The previous investigation did not result in the identification of any significant cultural resources. No further investigation was considered to be necessary by the consultant. The Ohio State Historic Preservation Office ("SHPO") agreed that the Project will not impact any cultural resources eligible for listing on the NRHP and no additional coordination is necessary prior to construction. A copy of the August 8, 2022 concurrence letter from SHPO for the larger project is provided in Appendix C.

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

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

A Notice of Intent may be filed with the Ohio Environmental Protection Agency for authorization of construction storm water discharges under General Permit OHC000005 for the Project if land disturbance exceeds one acre. The Company will also coordinate storm water permitting needs with the Allen Township and Hancock County as required. The Company will implement and maintain best management practices as outlined in the Project-specific Storm Water Pollution Prevention Plan ("SWPPP") to minimize erosion control sediment to protect surface water quality during storm events.

## Construction Notice for Fostoria-East Lima 138 kV Hard Tap Project

No streams or wetlands are located in the Project Area (see Appendix D). Therefore, the Project will not require a Clean Water Act Section 404 Permit from the U.S. Army Corps of Engineers or a Section 401 Water Quality Certification from the OEPA.

The FEMA Flood Insurance Rate Map was reviewed to identify any floodplains/flood hazard areas that have been mapped within the Project Area (specifically, map number **39063C0209E**). Based on this mapping, no mapped FEMA floodplains are located in the Project Area. Therefore, no floodplain permit will be required for this Project

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

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

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

As part of the ecological study completed for the Project, a coordination letter was submitted to the USFWS Ohio Ecological Services Field Office seeking technical assistance on the Project for potential impacts to threatened or endangered species. The November 14, 2022 response letter from the USFWS (see Appendix C) indicated that due to the Project type, size, and location, USFWS does not anticipate adverse effects to any federally endangered, threatened, proposed, or candidate species.

A coordination letter was submitted to the Ohio Department of Natural Resources (“ODNR”) Division of Wildlife (“DOW”) Ohio Natural Heritage Program (“ONHP”) and the ODNR - Office of Real Estate seeking an environmental review of the proposed Project for potential impacts on state-listed and federally-listed threatened or endangered species. Correspondence from ODNR’s DOW/ONHP and the ODNR – Office of Real Estate was received on November 30, 2022 (see Appendix C).

According to the ODNR-DOW, the Project is within the range of the Indiana bat, northern long-eared bat, little brown bat, and tricolored bat. ODNR recommends cutting between October 1 and March 31. No winter hibernacula were observed within the Project Area, and no tree clearing is anticipated for the Project. Therefore, no impacts are anticipated to the above listed bats and no additional coordination with ODNR regarding bat species is required.

The ODNR-DOW indicated that the Project is within the range of five mussel species and one fish species. Due to no in-water work and habitat, these species are not anticipated to be impacted by the Project.

The Project is within the range of Kirtland’s snake according to ODNR-DOW. Due to the location, type of habitat, and type of work proposed, ODNR-DOW stated that the Project is not likely to impact this species.

**B(10)(f) Areas of Ecological Concern**

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

Correspondence received from the USFWS indicated that there are no federal wilderness areas, wildlife refuges, or designated critical habitat in the Project vicinity. Similarly, the ODNR ONHP identified no unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, state nature preserves, state or national parks, state or national forests, national wildlife refuges, or other protected natural areas within one mile of the Project (see Appendix D).

FEMA Flood Insurance Rate Maps were consulted to identify any floodplains/flood hazard areas that have been mapped in the Project Area (specifically, map number **39063C0209E**). Based on these maps, no mapped FEMA floodplains are located in the Project area.

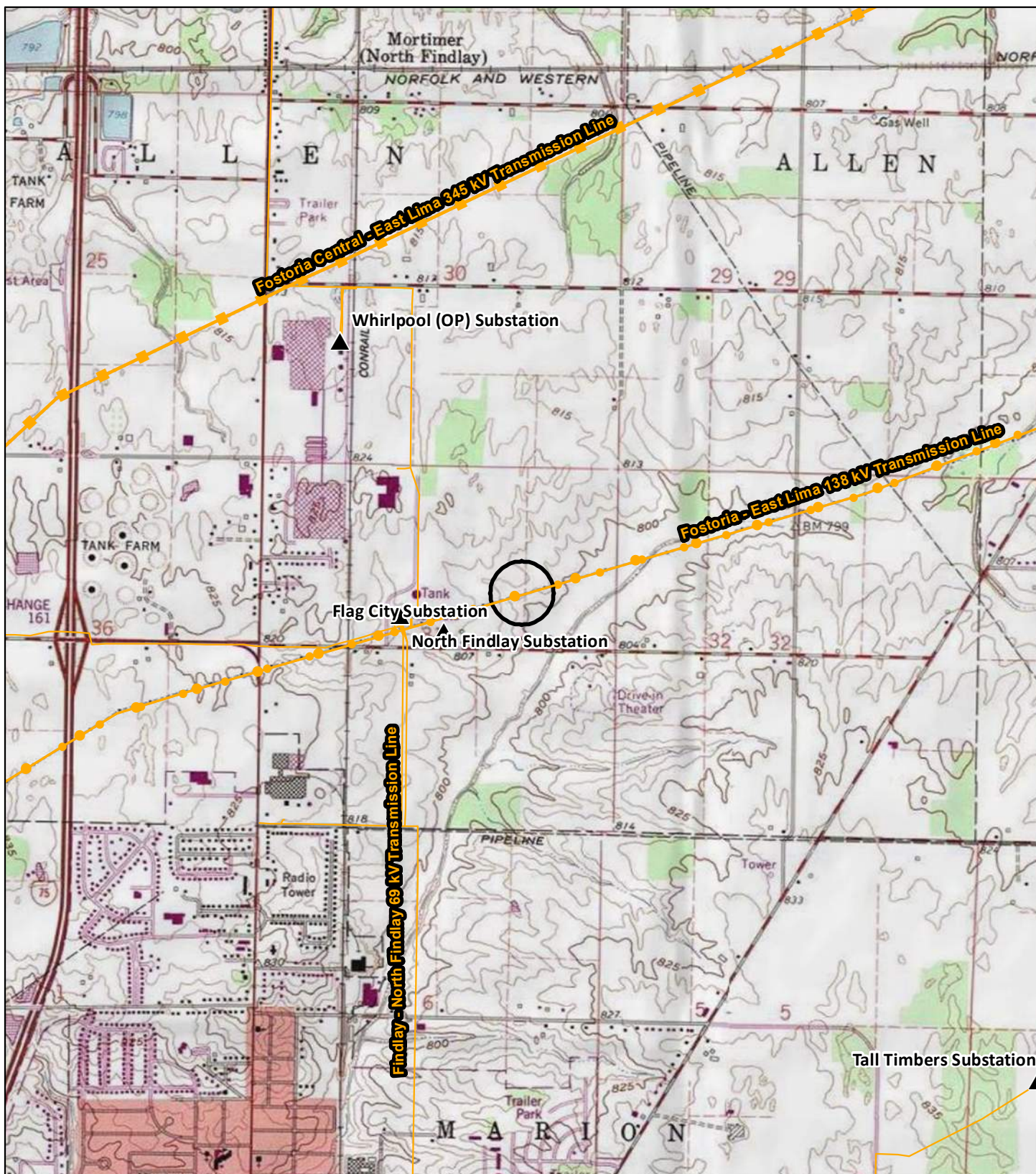
Wetland and stream delineation field surveys were completed within the Project area by the Company's consultant in November 2022. No wetlands or streams were identified within the Project Area (see Figure 6 in Appendix D).

**B(10)(g) Unusual Conditions**

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

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

## **Appendix A Project Maps**



#### Legend:

- Project Area
- Existing Transmission Line (69 kV or lower)
- Existing Transmission Line (138 kV)
- Existing Transmission Line (345 kV)
- Existing Substation

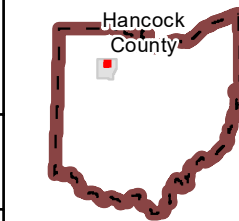
Data Sources: AEP, USGS 7.5' Topographic Quadrangles (Findlay and Arcadia, Ohio)

Ohio State Plane North NAD 1983

December 06, 2022



#### PROJECT LOCATION

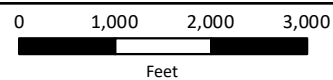


HANCOCK COUNTY, OHIO

#### FIGURE 1 TOPOGRAPHIC OVERVIEW



Fostoria-East Lima  
138 kV Hard Tap Project





#### Legend:

- Proposed Transmission Line
- Existing Transmission Line (138 kV)
- Parcel Boundary

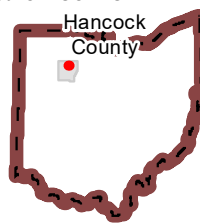
Data Sources: AEP,  
ESRI World Imagery

Ohio State Plane North  
NAD 1983



December 06, 2022

#### PROJECT LOCATION

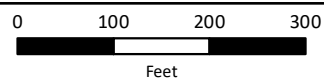


HANCOCK COUNTY, OHIO

## FIGURE 2 PROJECT AERIAL MAP



Fostoria-East Lima  
138 kV Hard Tap Project



## Appendix B PJM Solution

# AEP Transmission Zone M-3 Process Findlay, Ohio

**Need Number:** AEP-2022-OH065

**Process Stage:** Solutions Meeting 12/16/2022

**Previously presented:** Need Meeting 9/16/2022

**Supplemental Project Driver:**

Customer Service

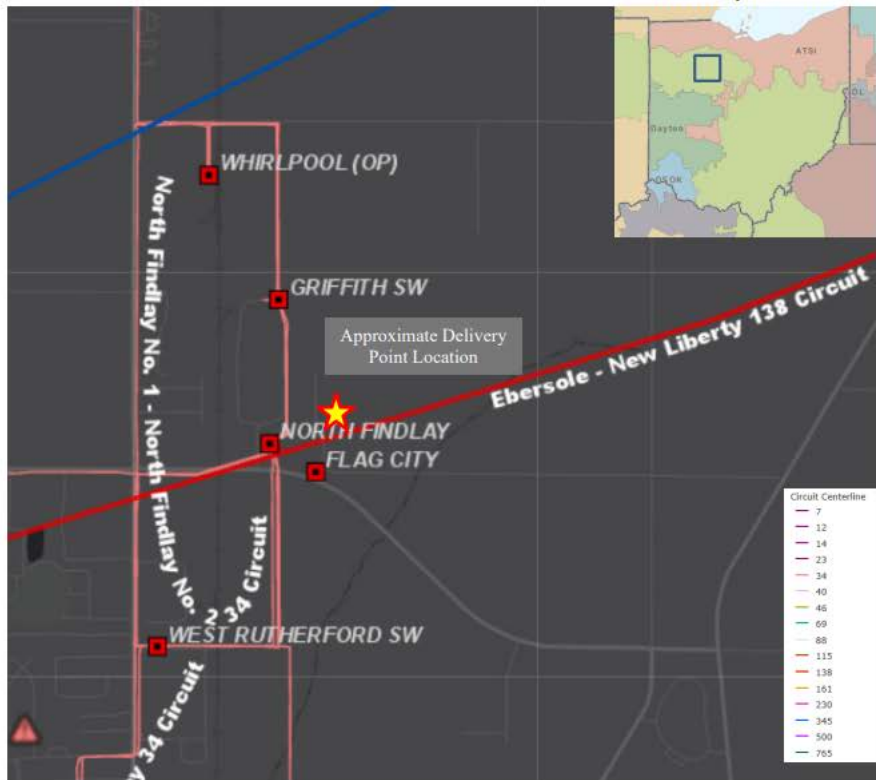
**Specific Assumption Reference:**

AEP Guidelines for Transmission Owner Identified Needs (AEP Assumptions slide 12)

**Problem Statement:**

Customer Service:

- A customer has requested transmission service at a site east of AEP's North Findlay site in Findlay, Ohio
- The customer has indicated an initial temporary load of 30MVA.
- The customer has requested an ISD of 12/23/2022



**Need Number:** AEP-2022-OH065

**Process Stage:** Solutions Meeting 12/16/2022

### Proposed Solution:

- Install a hard tap on the North Findlay - Ebersol circuit near the customer's station. Install in-line dead ends to support sectionalizing around this hard tap. From the Hard tap structure install one span of radial 138kV line to the customer's station.

**Total Estimated Transmission Cost: \$0 (This work is fully reimbursable)**

### Alternatives Considered:

Due the accelerated in service date and temporary nature of the this load a hard tap is the most cost-effective temporary service plan.

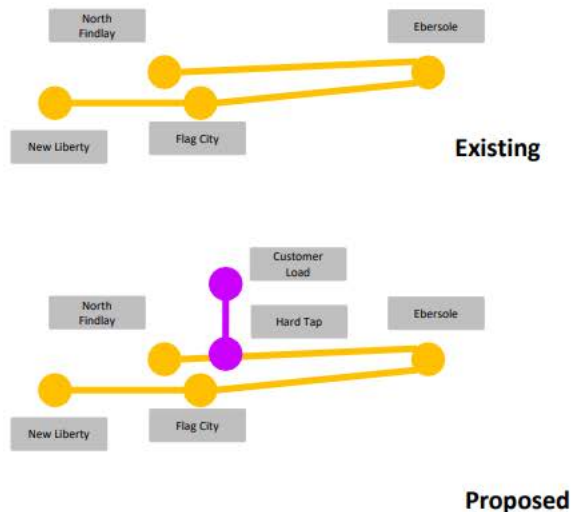
**Model:** PJM 2027 RTEP case

**Projected In-Service:** 03/17/2023

**Project Status:** Scoping

Legend	
500 kV	
345 kV	
138 kV	
69 kV	
34.5 kV	
23 kV	
New	

## AEP Transmission Zone M-3 Process North Findlay Customer Temp Service



## **Appendix C Agency Coordination**



In reply, refer to  
2022-HAN-55324

August 8, 2022

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

**RE: New Liberty-Ebersole 138kV Rebuild Project, Liberty, Allen, and Cass Townships, Hancock County, Ohio**

Dear Mr. Weller:

This letter is in response to the correspondence received July 13, 2022 regarding the proposed New Liberty-Ebersole 138kV Rebuild Project, Liberty, Allen, and Cass Townships, Hancock County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code and the Ohio Power Siting Board rules for siting this project (OAC 4906-5). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The following comments pertain to the *Phase I Archaeological Investigations for the 10.6 km (6.59 mi) New Liberty-Ebersole 138kV Rebuild Project in Liberty, Allen, and Cass Townships, Hancock County, Ohio* by Ryan J. Weller (Weller & Associates, Inc. 2022).

A literature review, visual inspection, surface collection, and shovel test probe was completed as part of the investigations. One (1) previously identified archaeological site is located within the project area, Ohio Archaeological Inventory (OAI) #33HK0790. The site was not reidentified during survey and was previously determined not eligible for listing in the National Register of Historic Places (NRHP). Two (2) new archaeological site were identified during survey, OAI#33HK1049 and 33HK1050. The sites are recommended not eligible for listing in the NRHP. Our office agrees with this recommendation and no additional archeological investigation is needed.

The following comments pertain to the *History/Architecture Investigations for the 10.6 km (6.59 mi) New Liberty-Ebersole 138kV Rebuild Project in Liberty, Allen, and Cass Townships, Hancock County, Ohio* by Scott McIntosh (Weller & Associates, Inc. 2022).

A literature review and field survey were completed as part of the investigations. A total of thirty-five (35) extant properties fifty years of age or older were identified within the Area of Potential Effects (APE). It is Weller's recommendation that these properties are not eligible for listing in the NRHP. Our office agrees with Weller's recommendations regarding eligibility.

Based on the information provided, we agree that the project as proposed will have no effect on historic properties. No further coordination with this office is necessary, unless the project changes or unless new or additional historic properties are discovered during implementation of this project. In such a situation, this office should be contacted. Our office requests Weller & Associates, Inc. complete the OAI forms for OAI#33HK1049 and 33HK1050 as soon as possible. Please notify our office when that form have been completed. If you have any questions, please contact me at (614) 298-2022, or by e-mail at [khorricks@ohiohistory.org](mailto:khorricks@ohiohistory.org), or Joy Williams at [jwilliams@ohiohistory.org](mailto:jwilliams@ohiohistory.org). Thank you for your cooperation.

Sincerely,

A handwritten signature in blue ink, appearing to read "Krista Horrocks".

Krista Horrocks, Project Reviews Manager  
Resource Protection and Review

RPR Serial No: 1094137-1094138

# 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



November 14, 2022

Project Code: 2023-0014159

Reference: AEP North Findlay Crypto, Findlay, Hancock County, Ohio

Dear Mr. Moody:

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

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

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

Sincerely,

Patrice Ashfield  
Field Office Supervisor



# Ohio Department of Natural Resources

MIKE DeWINE, GOVERNOR

MARY MERTZ, DIRECTOR

## Office of Real Estate

*John Kessler, Chief*

2045 Morse Road – Bldg. E-2

Columbus, OH 43229

Phone: (614) 265-6621

Fax: (614) 267-4764

November 30, 2022

Olivia Speckman  
V3 Companies  
619 North Pennsylvania Street  
Indianapolis, IN 46204

**Re:** 22-1097; AEP North Findlay Crypto

**Project:** The proposed project involves approximately 0.57 mile of existing transmission line located northeast of the intersection of County Road 99 and County Road 212 and extending northeast.

**Location:** The proposed project is located in Allen Township, Hancock 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 specified project area. Records searched date from 1980.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area.

**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 threatened species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these 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  $\geq 20$  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](mailto:Eileen.Wyza@dnr.ohio.gov)).

The DOW also recommends that a desktop habitat assessment is conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the project area. Direction on how to conduct habitat assessments can be found in the current USFWS "[RANGE-WIDE INDIANA BAT & NORTHERN LONG-EARED BAT SURVEY GUIDELINES](#)." If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Eileen Wyza for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

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

Federally Endangered

clubshell (*Pleurobema clava*)

rayed bean (*Villosa fabalis*)

State Endangered

purple lilliput (*Toxolasma lividum*)

State Threatened

pondhorn (*Unio merus tetralasmus*)

Salamander Mussel (*Simpsonaias ambigua*)

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

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

The project is within the range of the Kirtland's snake (*Clonophis kirtlandii*), a state threatened species. This secretive species prefers wet meadows and other wetlands. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

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

**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](mailto:mike.pettegrew@dnr.ohio.gov) if you have questions about these comments or need additional information.

Mike Pettegrew  
Environmental Services Administrator

## **Appendix D Ecological Report**

# **NORTH FINDLAY CRYPTO ECOLOGICAL REPORT**



## **PROJECT SITE:**

**Northeast of County Road 99 and County Road 212**  
Hancock County, Ohio

## **PREPARED FOR:**

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



## **PREPARED BY:**

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## EXECUTIVE SUMMARY

V3 Companies, Ltd. (V3) performed an ecological survey and report for the proposed North Findlay Crypto Project located northeast of the intersection of County Road 99 and County Road 212 in Findlay, Hancock County, Ohio (SITE), on 2 November 2022. V3 reached the following conclusions based on review of available and reasonably ascertainable federal, state, and local resources, and a SITE inspection conducted on the date referenced above.

- One stream, Howard Run, was identified within the SITE area. The stream would likely qualify as a federally jurisdictional “Water of the U.S.” subject to U.S. Army Corps of Engineers (USACE) and Ohio Environmental Protection Agency (OEPA) authority.
- Two stormwater basins and one swale were identified within the SITE area.
- No wetlands, drainage features, or other potential “Waters of the U.S.” were observed on-SITE.
- An official species list obtained from the U.S. Fish and Wildlife Service (USFWS) Information Planning and Consultation (IPaC) website indicated that the SITE is within the ranges of the federally endangered Indiana bat (*Myotis sodalis*), the federally threatened northern long-eared bat (*Myotis septentrionalis*), as well as the tricolored bat (*Perimyotis subflavus*), and the monarch butterfly (*Danaus plexippus*), candidates for listing under the Endangered Species Act. The USFWS response letter stated that due to the project, type, size, and location, the agency does not anticipate adverse effects to federally endangered, threatened, or proposed species or proposed or designated critical habitat. V3 did not observe potential bat habitat trees on-SITE at the time of the SITE reconnaissance.
- A review of the Ohio Natural Heritage Database with the Ohio Department of Natural Resources (ODNR) indicates no records of state or federally listed plants or animals within one mile of the project area. The ODNR Division of Fish and Wildlife stated that the project is within range of 11 threatened or endangered species. The Division of Fish and Wildlife stated that the project is not likely to impact these species and provided recommendations to avoid and minimize impacts to these species and their habitats (**Appendix A**).



# CHAPTER 1 INTRODUCTION

This report has been prepared solely in accordance with an agreement between American Electric Power (“CLIENT”) and V3 Companies (“V3”), Ltd.

The services performed by V3 have been conducted in a manner consistent with the level of quality and skill generally exercised by members of its profession and consulting practices relating to this type of engagement.

This report is solely for the use of CLIENT and was prepared based upon an understanding of CLIENT’s specific objective(s) and based upon information obtained by V3 in furtherance of CLIENT’s specific objective(s). Any reliance of this report by third parties shall be at such third party’s sole risk as this report may not contain, or be based upon, sufficient information for purposes of other parties, for their objectives, or for other uses. This report shall only be presented in full and may not be used to support any other objectives than those for CLIENT as set out in the report, except where written approval and consent are expressly provided by CLIENT and V3.

## 1.1 INTRODUCTION

The purpose of this investigation was to conduct an ecological survey and report of the SITE to evaluate potential land development permitting requirements regarding natural resources. In this report, V3 provides a detailed description of the information reviewed and collected as part of the scope of work for this project. V3 summarizes the jurisdictional framework applicable to this project, provides a desktop review of relevant and publicly available documents, and details information collected during the SITE reconnaissance including a wetlands determination, an evaluation of the potential presence of other natural resources within the SITE boundary, and a discussion of endangered, threatened, and rare (ETR) species and habitat. The Conclusions section summarizes V3’s findings, addresses potential areas of concern and permitting, regulatory, and other relevant issues.

The SITE is located northeast of the intersection of County Road 99 and County Road 212 in Findlay, Hancock County, Ohio (**Figure 1**).



## CHAPTER 2 JURISDICTIONAL RESOURCES

### 2.1 U.S. ARMY CORPS OF ENGINEERS

Through the Clean Water Act (CWA) of 1972, Section 404, the U.S. Army Corps of Engineers (USACE) maintains authority over “Waters of the U.S.” as defined in 33 Code of Federal Regulations (CFR) §328.3. A detailed discussion of “Waters of the U.S.” can be referenced in **Section 2.1.1** of this report.

The USACE must issue a Section 404 permit before any fill or dredging activities can be conducted within a “Water of the U.S.,” including federally jurisdictional wetlands. There are three types of USACE Section 404 permits: nationwide permits (NWP), individual permits (IPs), and regional general permits (RGPs). The OEPA must also issue a Section 401 Water Quality Certification (WQC) concurrently with the Section 404 permit(s) unless certain conditions are met (**Section 2.3.1**). Section 401 WQC from the OEPA is discussed in more detail in **Section 2.3.1** of this report.

- Nationwide Permits (NWP) are for proposed stream impacts of 300 linear feet (LF) or less, and/or proposed wetland impacts of 0.50 acre or less. Only certain types of projects, as outlined in USACE guidance,<sup>1</sup> are eligible for the NWP. The NWP streamlines the permit process for smaller, repetitive, low impact projects.
- Individual Permits (IP) are for proposed stream impacts of 300 LF or more, and/or proposed wetland impacts of 0.50 acre or more. The review process for the IP may take up to one year due to the higher level of scrutiny by the regulatory agencies.
- Regional General Permits (RGP) are for projects that have minimal individual and cumulative impacts on aquatic resources, but which not qualify for the NWP. The USACE Huntington District issues four types of RGPs, three of which are issued only in West Virginia, and one of which is issued only in Ohio. The Ohio RGP is issued only for projects associated with the State of Ohio Department of Transportation.

USACE guidelines require stream and wetland characterizations for all drainage features and wetlands proposed to be impacted. Permit applications must contain extensive detail of the proposed impact sites, the proposed mitigation sites, and information regarding the construction and monitoring of the mitigation sites.

Impacts to USACE jurisdictional wetlands or other “Waters of the U.S.” require in-kind mitigation. The USACE and the OEPA prefer the mitigation to be on-site, but may allow off-site mitigation in some cases due to constraints.

#### 2.1.1 *Waters of the U.S.*

Executive Order 13990<sup>2</sup> was issued 20 January 2021. This executive order directs federal agencies, including the U.S. Environmental Protection Agency (USEPA) and the USACE, to review the Navigable Waters Protection Rule (NWPR) of 2020. To comply with Executive Order 13990, the USEPA and the USACE announced their intent to revise the definition of “Waters of the U.S.” used since the NWPR was issued.

<sup>1</sup> USACE, Nationwide Permits for the State of Ohio, USACE Huntington District. Public notice in reply to Public Notice No. LRH-2016-00006-OH, Huntington, WV: USACE, Huntington District, 2017. Accessed online, July 2020. Available: <https://epa.ohio.gov/Portals/35/401/2017%20Nationwide%20Permits%20for%20Ohio.pdf>

<sup>2</sup> 86 Federal Register (FR) 7,037



On 31 August 2021, while the agencies were still developing a revised definition of “Waters of the U.S.,” the U.S. District Court for the District of Arizona issued an order to vacate the NWPR. This order was the outcome of the 2021 *Pascua Yaqui Tribe v. U.S. Environmental Protection Agency* case.

In response to this court order, on 9 June 2021, the USEPA announced that, until further notice, it would recognize only the definition of “Waters of the U.S.” found in the pre-2015 regulatory regime. The pre-2015 regulatory regime uses the 1986 definition of “Waters of the U.S.” Under this<sup>3</sup> definition, “Waters of the U.S.” includes:

- The territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide
- Tributaries
- Lakes and ponds, and impoundments of jurisdictional waters
- Adjacent wetlands, as defined in 40 CFR § 120.2(3)(i)

The pre-2015 regulatory regime also uses guidance established in the *Rapanos/Carabell*<sup>4, 5</sup> U.S. Supreme Court cases. Wetlands with a “significant nexus” to a traditional navigable water, non-navigable/non-permanent tributary, and/or relatively permanent non-navigable tributary are “Waters of the U.S.” subject to federal authority. Surveyors can determine the presence of a “significant nexus” by assessing hydrological factors, especially those related to hydrologic connectivity with a tributary, or ecological factors such as aquatic habitat provision, pollution treatment, and flood storage.<sup>6</sup>

### 2.1.2 Wetlands

Wetlands offer a variety of functions and values that may include, but are not limited to, groundwater recharge/discharge, flood flow alteration, sediment/toxicant retention, and fish and wildlife habitat. Because of the perceived functions and values of wetlands, USACE developed the Wetlands Delineation Manual, (*1987 Manual*)<sup>7</sup> to identify wetlands.

Wetlands are defined in the *1987 Manual* as, “Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”<sup>2</sup> The *1987 Manual* outlines the protocol for distinguishing wetland areas from “upland” areas. Wetland areas are delineated according to three primary criteria: vegetation, soil, and hydrology. An area is determined to qualify as a wetland if it meets the following “general diagnostic environmental characteristics:”

- Hydrophytic vegetation
- Hydrology
- Hydric Soil

<sup>3</sup> 40 CFR § 120.2(1)

<sup>4</sup> U.S. Supreme Court (USSC). 2006. *Rapanos v United States*, 04-1034.

<sup>5</sup> USSC. 2004. *Carabell v United States Army Corps of Engineers*, 03-1700

<sup>6</sup> U.S. Environmental Protection Agency (USEPA), *Clean Water Act Jurisdiction Following the U.S. Supreme Court’s Decision in Rapanos v. United States & Carabell v. United States*, by BH Grumbles and JP Woodley, Jr. United States: USEPA, 2008.

<sup>7</sup> USACE. Waterways Experiment Station. Wetlands Research Program. “Corps of Engineers Wetlands Delineation Manual.” Vicksburg, MS: Environmental Laboratory, 1987



### Hydrophytic Vegetation

The *1987 Manual* defines hydrophytic vegetation as, "...the sum total of macrophytic plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanently or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present..."

The USFWS and the National Wetland Plant List Panel developed the following categories to establish the relative probability of species occurring within the ranges between upland and wetland. The list was updated by USACE with cooperation with other federal agencies in 2016. The following list is the categories for plant species:

- ***Obligate Wetland Plants*** (OBL) – Probability of >99% occurrence in wetlands with a 1% probability of occurrence in upland areas.
- ***Facultative Wetland Plants*** (FACW) – Probability of 67% - 99% occurrence in wetlands with a 1% - 33% probability of occurrence in upland areas.
- ***Facultative Plants*** (FAC) - Probability of 34% - 66% occurrence in either wetlands or upland areas.
- ***Facultative Upland Plants*** (FACU) - Probability of 67% - 99% occurrence in upland areas with a 1% - 33% probability of occurrence in wetland areas.
- ***Obligate Upland Plants*** (UPL) - Probability of >99% occurrence in upland areas with a 1% probability of occurrence in wetland areas.

The hydrophytic vegetation criterion is met if greater than 50% of dominant species are FAC, FACW, or OBL.

### Hydrology

Areas which are inundated or saturated to the surface for a significant time during the growing season will typically exhibit characteristics of wetland hydrology. Careful examination of the site conditions is needed to adequately identify wetland areas. The anaerobic and reducing conditions in inundated or saturated soils influence the plant community and may favor a dominance of hydrophytic species. It should be noted that the *1987 Manual* further defines the growing season and methodology for determining evidence of hydrology.

There are two types of hydrologic indicators: primary and secondary. Primary indicators of hydrology are discussed in the *1987 Manual* and include, but are not limited to, inundation, and saturation within the upper 12 inches of soil, water marks, drift lines, sediment deposits, and drainage patterns. Secondary indicators include, but are not limited to, oxidized root channels, water-stained leaves, local soil survey data, FAC-Neutral test, etc. One primary or two secondary indicators are required to meet this criterion.

### Hydric Soil

"A hydric soil is formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part."<sup>8</sup> All organic soils (except Folists) are considered hydric, while mineral soils must be carefully examined to qualify as hydric. There are several indicators that suggest a soil is hydric. An inspection of the soil profile to a minimum depth of 16 inches below ground surface is required in order to make this determination. The soil data used is the horizon of soil immediately below the A-horizon, or at 10 inches below the soil surface. Hydric soils

<sup>8</sup> U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS). *Hydric Soils Technical Note 1. Proper Use of Hydric Soil Terminology*. Accessed January 2018. <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/use/hydric/>



may be present in an upland position; however, there may be insufficient evidence of hydrology or vegetation for the area to qualify as wetland.

### 2.1.3 Regional Supplement Manuals

A series of regional supplements<sup>9</sup> to the 1987 manual are developed by the Army Engineer Research and Development Center (ERDC) to be more specific to regionally geographical conditions. Each supplement manual is developed to account for regional differences in climate, geology, soils, hydrology, plant and animal communities, etc. The intent of the regional supplements is to update the 1987 Manual with current information and technology rather than change the definition or manner that wetlands were delineated. The procedure for completing a wetland delineation is to use a combination of the 1987 Manual and the correct regional supplement manual.

**Table 1: Summary of Replacement Sections, 1987 Manual for the Midwest Region**

Item	Replaced Portions of the 1987 Manual	Replacement Guidance
Hydrophytic Vegetation Indicators	Paragraph 35, all subparts, and all reference to specific indicators in Part IV.	Chapter 2
Hydric Soil Indicators	Paragraphs 44 and 45, all subparts, and all references to specific indicators in Part IV.	Chapter 3
Wetland Hydrology Indicators	Paragraph 49(b), all subparts, and all references to specific indicators in Part IV.	Chapter 4
Growing Season Definition	Glossary	Chapter 4, Growing Season; Glossary
Hydrology Standard for Highly Disturbed or Problematic Wetland Situations	Paragraph 48, including Table 5 and the accompanying User note in the online version of the Manual.	Chapter 5, Wetlands that Periodically Lack Indicators of Wetland Hydrology, Procedure item 3(f).

Regional Supplement Manuals will continue to be developed and revised electronically with the improvement of technology and procedures.

## 2.2 UNITED STATES FISH AND WILDLIFE SERVICE

The Endangered Species Act (ESA) of 1973 intends to conserve the habitats of federally endangered or threatened species and to assist in the recovery of species listed. The USFWS is the regulating authority for this act and works with the states to provide additional conservation measures. The USFWS<sup>10</sup> defines two classifications of protected species, endangered and threatened. An endangered species is an organism that is in danger of extinction throughout all or a significant portion of its range. A threatened species is an organism that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. All species of plants and animals are eligible for listing.

Any activity that may incidentally harm federally threatened or endangered species is prohibited by the ESA. For proposed development areas that contain listed species, private landowners may create a Habitat Conservation Plan to minimize the impact on the listed species. This plan should include the protection of breeding, foraging, and shelter requirements for the listed species. The USFWS may then grant an Incidental Take Permit for the project. In the event that any person knowingly violates any provision of the Act or Permit, the person may be assessed penalties.

<sup>9</sup> U. S. Army Corps of Engineers. 2008. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)*. ERDC/EL TR-12-9. Vicksburg, MS: U.S. Army Engineer Research and Development Center

<sup>10</sup> U.S. Fish and Wildlife Service (USFWS). Endangered Species Program. *ESA Basics*. Arlington, VA: USFWS, 2004. Accessed January 2018. [https://www.fws.gov/endangered/esa-library/pdf/ESA\\_basics.pdf](https://www.fws.gov/endangered/esa-library/pdf/ESA_basics.pdf)



Projects that involve federal funding or permitting on a site where endangered or threatened species are known to occur or where significant habitat is present will require an alternatives analysis and extensive documentation of agency coordination.

## 2.3 OHIO ENVIRONMENTAL PROTECTION AGENCY

The OEPA is responsible for administering Section 401 of the CWA (Ohio Administrative Code [OAC] 3745-32), classifying wetlands and determining mitigation ratios in accordance with the Wetland Anti-Degradation Rule (OAC 3745-1-51 through OAC 3745-1-54), and issuing permits for impacts to isolated wetlands (Ohio Revised Code [ORC] 6111.02 through ORC 6111.029). OEPA also administers Permit No. OHC000005 as part of the NPDES permit program for stormwater runoff at construction sites.

### 2.3.1 Section 401 Water Quality Certification

If impacts to “Waters of the U.S.” are considered under a USACE NWP, the OEPA authorizes a Section 401 WQC if certain conditions are met. These conditions are described in the NWP guidance for the State of Ohio.<sup>11</sup> If impacts to “Waters of the U.S.” are considered under a USACE IP, then a Section 401 WQC from the OEPA is always required.

The OEPA Section 401 WQC process requires an alternatives analysis that consists of a review of off-site alternatives, a preferred on-site plan, a minimal degradation plan, and a non-degradation plan. The OEPA reviews these alternatives for biological and water quality impacts and for social and economic benefits. The OEPA may, at their discretion, choose the minimal degradation plan, so the minimal degradation plan should be a feasible, developable alternative. The review process for this type of permit may take up to one year due to the higher level of regulatory review and due to the public notice process.

As outlined in OAC 3745-1-54(D)(1), applicants for a Section 401 WQC from the OEPA must demonstrate:

- Avoidance – There must be no practicable alternative with less impact as determined through an off-site and on-site alternative analysis. For Category 3 Wetlands, the OEPA presumes that less-damaging alternatives are available unless it is clearly demonstrated that they are not.
- Minimization – Steps must be taken to minimize impacts on the wetland ecosystem. Direct and indirect impacts are considered.
- That the lowering of water quality is necessary to accommodate important social and economic development in the area in which the water body is located.
- That storm water and water quality controls will be installed in accordance with OAC 3745-1-50(D)(2).
- That the wetland is not scarce regionally or statewide, or if the wetland is scarce, that the project will cause only a short-term disturbance of water quality that will not cause long-term detrimental effects.
- Compensatory Mitigation – The designated use of the wetland must be replaced in accordance with the established mitigation ratios.

For projects involving impacts to Category 3 wetlands (**Section 2.3.3**), the applicant must also demonstrate a “public need.” As per OAC 3745-1-50(MM), a project has a “public need” if it is “an activity or project that provides important tangible and intangible gains to society, that satisfies the

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<sup>11</sup> USACE, 2017.

expressed or observed needs of the public where accrued benefits significantly outweigh reasonably foreseeable detriments.”

### 2.3.2 Ephemeral Streams in Ohio

As of 21 July 2022, ephemeral streams that do not qualify as federally jurisdictional “Waters of the U.S.” are not recognized as “Waters of the State” in Ohio, as per ORC 6111.01(H). Ephemeral streams that are considered federally jurisdictional are regulated via USACE permits and, where appropriate, via Section 401 WQC from the OEPA.

### 2.3.3 Isolated Wetlands in Ohio

An OEPA permit is required for impacts to isolated wetlands in Ohio, but the type of permit required varies depending on the type of wetland and the extent of impacts proposed.

To determine the appropriate permitting requirements for impacts to isolated wetlands in Ohio, the quality of the impacted wetland(s) must be determined using the Ohio Rapid Assessment Method (ORAM). The ORAM assigns wetlands to Category 1, Category 2, or Category 3, corresponding to wetlands of low, medium, and high quality, respectively (see **Section 2.3.4** for a detailed summary of the ORAM). Once the category of the isolated wetland is determined through an ORAM, the appropriate permit may be determined using **Table 2**. Available OEPA permits include the ESIWGP, the Isolated Wetland General Permit (IWGP) Level 2, and the IWGP Level 3.

Table 2: OEPA Permitting Summary

Wetland Category	Acres of Impact Proposed (acres)	Public Notice Required	Mandatory Public Hearing	Review Period	Type of Permit Required
1 or 2	0.50 or less	No	No	30 days	ESIWGP
1	0.50 or more	Yes	No	90 days	IWGP Level 2
2	0.50 to 3.00	Yes	No	180 days	IWGP Level 2
2	More than 3.00	Yes	No	180 days	IWGP Level 3
3	Any	Yes	Yes	180 days	IWGP Level 3

The OEPA requires compensatory mitigation for all impacts to isolated wetlands in Ohio. The OEPA’s first preference is for mitigation at a wetland mitigation bank within the USACE district where impacts are proposed. If this is not possible, in-lieu fee mitigation through the Ohio Stream and Wetland In Lieu Fee Mitigation Program is preferred. If neither mitigation banking nor in-lieu fee mitigation are possible, off-site permittee-responsible mitigation is preferred.

The ratio of proposed impacts to compensatory mitigation required depends on the type of impacts and mitigation proposed (**Table 3**).

Table 3: Ohio Isolated Wetland Mitigation Ratios

Category of Impacted Wetland	Mitigation Banking and In-Lieu Fee Mitigation Ratio	Permittee-Responsible Mitigation Ratio			
		Category of Replacement Wetland	Permittee-Responsible On-Site Mitigation Ratio	Permittee-Responsible Off-Site Mitigation Ratio	Compensatory Mitigation Location if Off-Site
Category 1	2.0:1	Category 2 or 3	1.5:1	1.5:1	Within the USACE District



Category 2 (Non-Forested)	2.0:1	Category 2 or 3	1.5:1	2:1	Within Watershed
Category 2 (Forested)	2.5:1	Category 2 or 3	2:1	2.5:1	Within Watershed
Category 3 (Non-Forested)	2.5:1	Category 3	2:1	2.5:1	Within Watershed
Category 3 (Forested)	3.0:1	Category 3	2.5:1	3:1	Within Watershed

#### 2.3.4 Ohio Rapid Assessment Method (ORAM)

Under the Ohio Administrative Code 3745-1-54 Wetland anti-degradation rule a “category will be assigned based on the wetland's relative functions and values, sensitivity to disturbance, rarity, and potential to be adequately compensated for by wetland mitigation.” The ORAM can be used to determine the category. Once a category has been established and verified, the type of permit to be submitted and subsequent mitigation requirements will be determined as previously stated.

The categories are:

- Category I – dominated by low diversity, non-native species, minimal or degraded habitat, hydrological, and recreational functions, and is unlikely to support endangered, threatened, or rare species.
- Category II – dominated by native species of moderate quality and diversity, functional hydrologically and recreationally, unlikely to support endangered, threatened, or rare species, minimal habitat disturbance. Sometimes includes category I wetlands that are restorable.
- Category III – superior habitat, hydrological, and recreational functions, highly diversified, likely to support endangered, threatened, or rare species, minimal habitat disturbance.

The point system is intended to cover a wide range of wetland types and situations in order to give the most comprehensive description possible. Some wetlands are automatically considered Category I when they are less than 1 acre in size, hydrologically isolated, and consist principally of common reed (*Phragmites australis*), purple loosestrife (*Lythrum salicaria*), or reed canary grass (*Phalaris arundinacea*). Also, some wetlands may be considered Category III if they are found to be bogs, fens, vernal pools, or high quality mature forested wetlands. The season that the wetland is evaluated may have some effect on the scores, as well as years of drought or flooding. Reassessment or confirmation may be required if a score is near a breakpoint in the Score Calibration.

In addition to the Quantitative Rating, which uses the Scoring forms and site visit to determine category, the Narrative Rating is meant to complete the assessment through a “literature review.” The USFWS and ODNR should be contacted about the presence of endangered, threatened, and rare species, high quality wetland, or significant breeding/non-breeding bird concentration areas documented for the project area.






#### 2.3.4 Qualitative Habitat Evaluation Index (QHEI)

The QHEI was developed by the OEPA as a rapid assessment method for streams with a drainage area greater than 1 square mile. Streams are scored in the field and classified based on substrate, habitat characteristics, channel morphology, and riparian zone quality. Streams are rated on a scale of 100 points; the score is used to assign a general narrative quality rating from very poor to excellent. The



table below is excerpted from the QHEI manual<sup>12</sup> and shows the correspondence between numeric and narrative scores (Table 4).

Table 4: General Narrative Ranges Assigned to QHEI Scores<sup>13</sup>

Ranges vary slightly in headwater ( $\leq 20$ sq mi) vs. larger waters.			
Narrative Rating		QHEI Range	
		Headwaters	Larger Streams
Excellent		$\geq 70$	$\geq 75$
Good		55 to 69	60 to 74
Fair		43 to 54	45 to 59
Poor		30 to 42	30 to 44
Very Poor		$< 30$	$< 30$

### 2.3.5 Primary Headwater Habitat Evaluation Index (HHEI)

The primary headwater streams are quite small, less than 1.0 mi<sup>2</sup> drainage area. Many of them would not show up as blue lines on USGS 1:24,000 quadrangle maps, although almost all of them would be visible and marked on county soil maps. These streams are not often defined or assigned beneficial uses in Ohio water quality standards. The sampling methods, and concurrent biological and habitat indices now used by OEPA to classify waterways for existing water quality (e.g., IBI, ICI, QHEI) are oriented toward larger streams. Because these "index of biotic integrity" assessment systems are watershed size dependent, they often cannot be used to identify the well-being of the native fauna that survive and reproduce in small headwater stream ecosystems.

This primary headwater stream classification methodology outlines a predictable three-tiered protocol that can be used to conduct rapid assessment of headwater stream quality. The lowest level of field effort is a relatively rapid habitat evaluation procedure known as the "Headwater Habitat Evaluation Index" (HHEI). It is based on three physical measurements that have been found to correlate well with biological measures of stream quality. Two levels of biological assessment, one at an order-family level of taxonomic identification, the second to genus species, provide flexibility in reaching a final decision on the appropriate aquatic life use designation needed to classify a primary headwater stream.

### 2.3.6 NPDES General Permit Authorization

If greater than one acre of ground disturbance is proposed, the project will be subject to OEPA General Permit Authorization for Stormwater Discharges Associated with Construction Activity (OEPA Permit No. OHC000005) and the U.S. Environmental Protection Agency (EPA), National Pollutant Discharge Elimination System (NPDES) permit program. A Notice of Intent (NOI) form will need to be submitted to OEPA at least 21 days prior to the start of construction.

<sup>12</sup> Ohio Environmental Protection Agency (OEPA), *Methods for Assessing Habitat in Flowing Waters: Using the Qualitative Habitat Evaluation Index (QHEI)*, State of Ohio Environmental Protection Agency Division of Surface Water, Ecological Assessment Section. OHIO EPA Technical Bulletin EAS/2006-06-01, Groveport, Ohio: State of Ohio, 2006.

<sup>13</sup> OEPA, *Methods for Assessing Habitat in Flowing Waters: Using the Qualitative Habitat Evaluation Index (QHEI)*.

## CHAPTER 3 DESKTOP REVIEW

V3 reviewed applicable, readily available, and accessible historical information for the potential presence of wetlands, “Waters of the U.S.,” and other natural resources.

### 3.1 UNITED STATES GEOLOGICAL SURVEY 7.5-MINUTE QUADRANGLE MAP

A USGS 7.5-Minute Quadrangle map displays contour lines to portray the shape and elevation of the land surface. Quadrangle maps render the three-dimensional changes in elevation of the terrain on a two-dimensional surface. The maps usually portray both manmade and natural topographic features. Although they show lakes, rivers, various surface water drainage trends, vegetation, etc., they typically do not provide the level of detail needed for accurate evaluation of wetlands. However, the existence of these features may suggest the potential presence of wetlands.

The SITE is situated in the Findlay, Ohio, USGS 7.5-Minute Quadrangle Maps. V3 evaluated the topography and concluded that the SITE elevation ranges from approximately 800 to 817 feet above mean sea level. One blue line aquatic feature associated with Howard Run is mapped within the SITE area (**Figure 1**).

### 3.2 NATIONAL WETLANDS INVENTORY MAP

National Wetlands Inventory (NWI) maps were developed to meet a USFWS mandate to map the wetland and deepwater habitats of the U.S. These maps were developed using high altitude aerial photographs and USGS Quadrangle maps as a topographic base. Indicators that exhibited pre-determined wetland characteristics, visible in the photographs, were identified according to a detailed classification system. The NWI map retains some of the detail of the Quadrangle map; however, it is used primarily for demonstration of wetland areas identified by the agency. The maps are accurate to a scale of 1:24,000. In general, the NWI information requires field verification.

NWI data is shown projected over the USGS 7.5-Minute Quadrangle Map in **Figure 2**. One NWI feature, a riverine, intermittent streambed, seasonally flooded (R4SBC) is mapped at the northern end of the SITE area and is associated with Howard Run. The presence of NWI features mapped partially or fully within the SITE area suggests the potential presence of wetlands or other regulated aquatic features on-SITE.

### 3.3 FLOOD INSURANCE RATE MAP

The Federal Emergency Management Agency (FEMA) was developed in 1979 to reform disaster relief and recovery, civil defense, and to prepare and mitigate for natural hazards. The Mitigation Division of FEMA manages the National Flood Insurance Program which provides guidance on how to lessen the impact of disasters on communities through flood insurance, floodplain management, and flood hazard mapping. Proper floodplain management has the ability to minimize the extent of flooding and flood damage and improve stormwater quality by reducing stormwater velocities and erosion. The one percent annual chance flood (100-year flood) boundary must be kept free of encroachment as the national standard for the program.

V3 reviewed National Flood Hazard Zone data for Hancock County, Ohio. No portion of the SITE is situated in an area mapped as floodway (**Figure 3**).



### 3.4 UNITED STATES DEPARTMENT OF AGRICULTURE SOIL SURVEY

V3 reviewed the soils mapped on-SITE in the Natural Resource Conservation Service (NRCS) digital soil survey data for Hancock County, Ohio. This data is projected over aerial photography, illustrating distinct soil map unit boundaries, in **Figure 4**. Three soil units are classified on-SITE.

Table 5 : Soil Units On-SITE

Map Soil Symbol	Description	Hydric Soil
DfA	Del Rey-Blount complex, 0 to 3 percent slopes	No
GsB	Glynwood-Blount-Houcktown complex, 1 to 4 percent slopes	No
PmA	Pewamo silty clay loam, 0 to 1 percent slopes	Yes

One of the soil units mapped within the SITE area, Pewamo silty clay loam, 0 to 1 percent slopes, is considered hydric in Hancock County, Ohio. Soils are considered hydric if more than 50 percent of the soil contains hydric components according to the NRCS Web Soil Survey. The presence of hydric soil units within the SITE area suggests appropriate wetland soils are located on-SITE.

### 3.5 AERIAL MAP

Aerial photography provides a visual overview of the SITE and can provide information to assist in identifying land use practices, terrain, drainage, vegetated areas, wetlands, habitats, etc. Certain features, such as variegated soil patterns, may suggest the presence of wetlands.

V3 reviewed 2021 United States Department of Agriculture (USDA) National Agricultural Imagery Program (NAIP) photograph of the SITE sourced from ESRI basemap World Imagery. The SITE is within a rural setting with agricultural and industrial properties surrounding (**Figure 5**).

### 3.6 ENDANGERED, THREATENED, AND RARE SPECIES EVALUATION

An official species list obtained from the U.S. Fish and Wildlife Service (USFWS) Information Planning and Consultation (IPaC) website indicated that the SITE is within the ranges of the federally endangered Indiana bat (*Myotis sodalis*), the federally threatened northern long-eared bat (*Myotis septentrionalis*), as well as the tricolored bat (*Perimyotis subflavus*) and the monarch butterfly (*Danaus plexippus*), candidates for listing under the Endangered Species Act. The USFWS response letter stated that due to the project, type, size, and location, the agency does not anticipate adverse effects to federally endangered, threatened, or proposed species or proposed or designated critical habitat.

A review of the Ohio Natural Heritage Database with the Ohio Department of Natural Resources (ODNR) indicates no records of state or federally listed plants or animals within one mile of the project area. The ODNR Division of Fish and Wildlife stated that the project is within range of 11 threatened or endangered species. The Division of Fish and Wildlife stated that the project is not likely to impact these species and provided recommendations to avoid and minimize impacts to these species and their habitats (**Appendix A**).

Based on the documentation referenced above, additional correspondence with the agencies does not appear to be warranted at this time. If federal permitting or federal financing will be used in future development, additional coordination may be necessary. Copies of agency correspondence can be referenced in **Appendix A**.

## CHAPTER 4 SITE RECONNAISSANCE

### 4.1 METHODOLOGY

V3 conducted a field investigation at the SITE on 2 November 2022. During this investigation, V3 noted the presumed land use of the SITE and surrounding area, and evaluated the SITE for the potential presence of wetlands, “waters of the U.S.,” and natural resources using the findings of the desktop review and field observations. Photographs were taken during the field investigation and are provided in **Appendix B**.

V3 used the Routine Determination Method (RDM) with an established baseline and transects as described in the *1987 Manual* for typical sites over five acres. V3 recorded data from a number of data points (DP) along the transect as a function of diversity of vegetation, property size, soil types, habitat variability, and other SITE features as deemed appropriate by V3. Where evidence of a wetland was suspected, three wetland criteria were applied to determine if the area in question was representative of a wetland using the methodology set forth by USACE. More specifically, V3 visually examined and recorded the dominant vegetation, recorded soil properties such as texture and color using the Munsell Soil Color Chart (Munsell Color Chart), excavated soil pits, and evaluated the primary and secondary hydrologic indicators as discussed in **Section 2.1.2**.

If all three criteria were met, i.e. vegetation, soil properties, and hydrologic indicators, a second DP was established adjacent to the wetland DP in an area outside of the presumed wetland boundary for the purpose of delineating between the wetland and non-wetland areas. Once delineated, V3 continued the RDM to evaluate the remainder of the SITE.

### 4.2 SITE AND ADJACENT PROPERTY LAND USE

Land use on-SITE is dominated by agricultural land. Adjacent land use consists of industrial properties and agricultural land.

### 4.3 WETLAND SUMMARY

Using the methodology set forth in the *1987 Manual* and the *Midwest Regional Supplement*, V3 identified no wetlands within the SITE area.

### 4.4 DATA POINT SUMMARY

Following is a description of the information collected at each DP during the 2 November 2022 field investigation. Information that was collected at each DP is summarized on the forms provided in **Appendix C**. DP placement is shown in **Figure 6**.

#### DP 1

This DP was collected in the western portion of the SITE. This area did not meet any wetland criteria. Since all three criteria were not met, this area does not qualify as a wetland. The dominant vegetation present consisted of Canadian goldenrod (*Solidago canadensis*, FACU, 70%) and white heath American-aster (*Symphyotrichum ericoides*, FACU, 20%). No indicators of hydric soils were observed. No indicators of wetland hydrology were observed.

#### DP 2

This DP was collected in the eastern portion of the SITE. This area met the hydrophytic vegetation criteria but did not meet any other wetland criteria. Since all three criteria were not met, this area does not qualify as a wetland. The dominant vegetation present consisted of lake sedge (*Carex lacustris*, OBL,



50%), Canadian thistle (*Cirsium arvense*, FACU, 30%) and Canadian goldenrod (FACU, 20%). No indicators of hydric soils were observed. No indicators of wetland hydrology were observed.

#### 4.5 DRAINAGE FEATURES, STREAMS, AND OTHER POTENTIAL “WATERS OF THE U.S.”

One stream, two stormwater basins and one swale were identified during this investigation using the methods described in Chapter 2. The grass swale begins at the southern development and appears to discharge stormwater into the stormwater basins located north of the SITE. Information that V3 collected at the stream on 2 November 2022 is described in the following section. An overall SITE delineation map is included as **Figure 6**. The Primary Headwater Habitat Evaluation Index for the streams is included as **Appendix D**.

##### 4.5.1 Howard Run – ( $\pm$ 500-linear feet Delineated, Perennial)

Howard Run is located at the northeast end of the SITE and consisted of 500 linear feet of perennial stream within the SITE area. The substrate of Howard Run consisted of silt and clay. Howard Run exhibited an OHWM and will likely qualify as federally jurisdictional “Waters of the U.S.” subject to USACE and OEPA authority. Howard Run has an HHEI score of 30 and is classified as a Class II Stream (**Appendix D**).

## CHAPTER 5 CONCLUSIONS

On 2 November 2022, V3 performed an ecological survey and report for the SITE situated in Hancock County, Ohio.

One stream, Howard Run, two stormwater basins, and one swale were identified within the SITE area. No wetlands, drainage features, or other potential “Waters of the U.S.” were observed on-SITE.

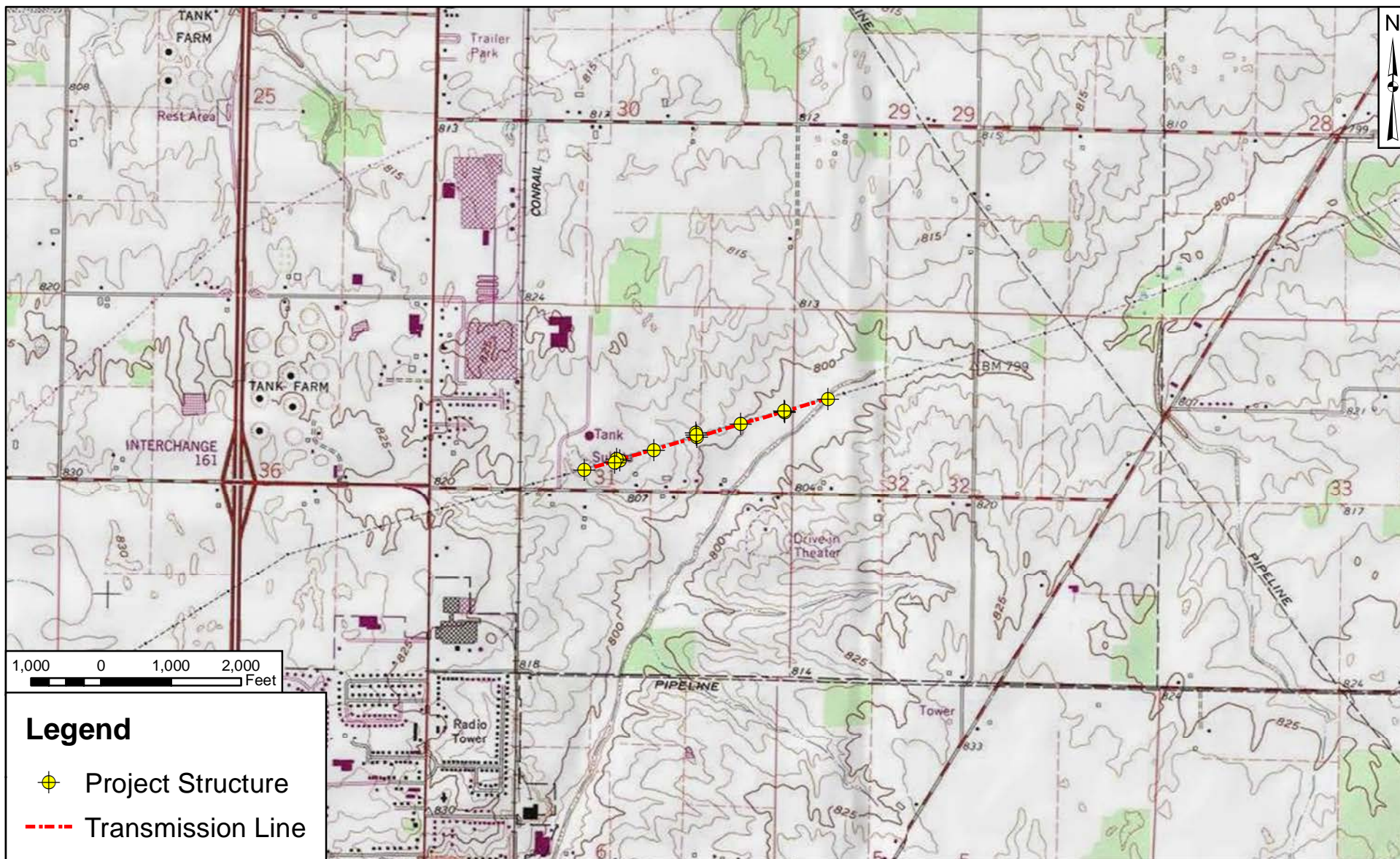
An official species list obtained from the U.S. Fish and Wildlife Service (USFWS) Information Planning and Consultation (IPaC) website indicated that the SITE is within the ranges of the federally endangered Indiana bat, the federally threatened northern long-eared bat, as well as the tricolored bat and the monarch butterfly, candidates for listing under the Endangered Species Act. The USFWS response letter stated that due to the project, type, size, and location, the agency does not anticipate adverse effects to federally endangered, threatened, or proposed species or proposed or designated critical habitat. V3 did not observe potential bat habitat trees on-SITE at the time of the SITE reconnaissance.

A review of the Ohio Natural Heritage Database with the Ohio Department of Natural Resources (ODNR) indicates no records of state or federally listed plants or animals within one mile of the project area. The ODNR Division of Fish and Wildlife stated that the project is within range of 11 threatened or endangered species. The Division of Fish and Wildlife stated that the project is not likely to impact these species and provided recommendations to avoid and minimize impacts to these species and their habitats (**Appendix A**).



Figures





## Legend



Project Structure



Transmission Line



619 N. Pennsylvania Street  
Indianapolis, IN 46204  
317.423.0690 phone  
www.v3co.com

Visio, Vertere, Virtute...

"The Vision To Transform With Excellence"

PROJECT NO.:

210180.094

CREATED BY:

ODS

DATE:

10/21/2022

SCALE:

See Scale Bar

CLIENT:

American Electric Power  
8600 Smiths Mill Road  
New Albany, Ohio 43054

BASE LAYER:

USGS Findlay, Ohio  
Topographic Quadrangle

TITLE:

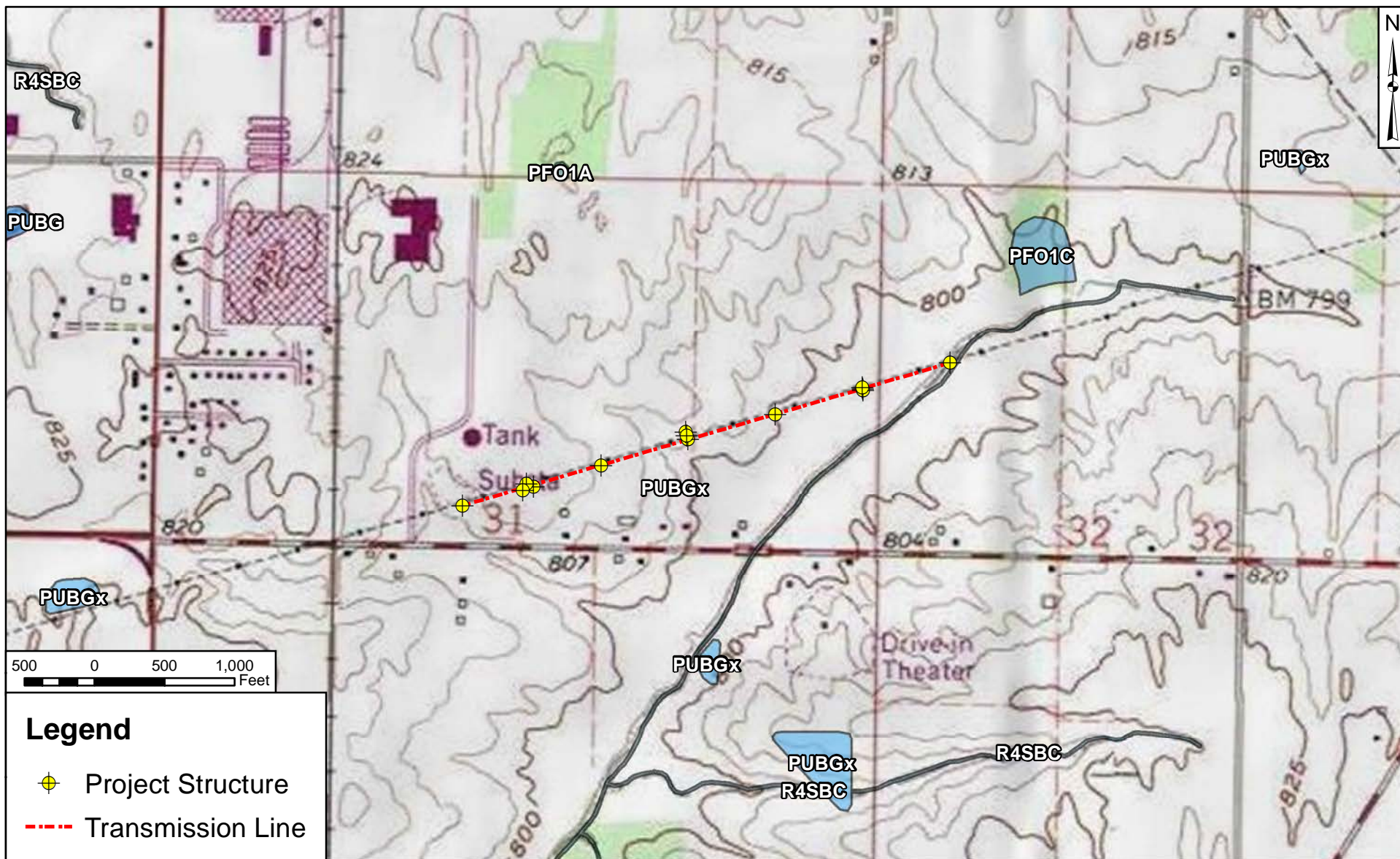
## USGS TOPOGRAPHIC MAP

SITE:

North Findlay Crypto  
Findlay, Hancock County, Ohio

FIGURE:

1



## Legend

-  Project Structure
-  Transmission Line



619 N. Pennsylvania Street  
Indianapolis, IN 46204  
317.423.0690 phone  
www.v3co.com

Visio, Vertere, Virtute...

"The Vision To Transform With Excellence"

PROJECT NO.:

210180.094

CREATED BY:

ODS

DATE:

11/09/2022

SCALE:

See Scale Bar

CLIENT:

American Electric Power  
8600 Smiths Mill Road  
New Albany, Ohio 43054

BASE LAYER:

USGS Findlay, Ohio  
Topographic Quadrangle

TITLE:

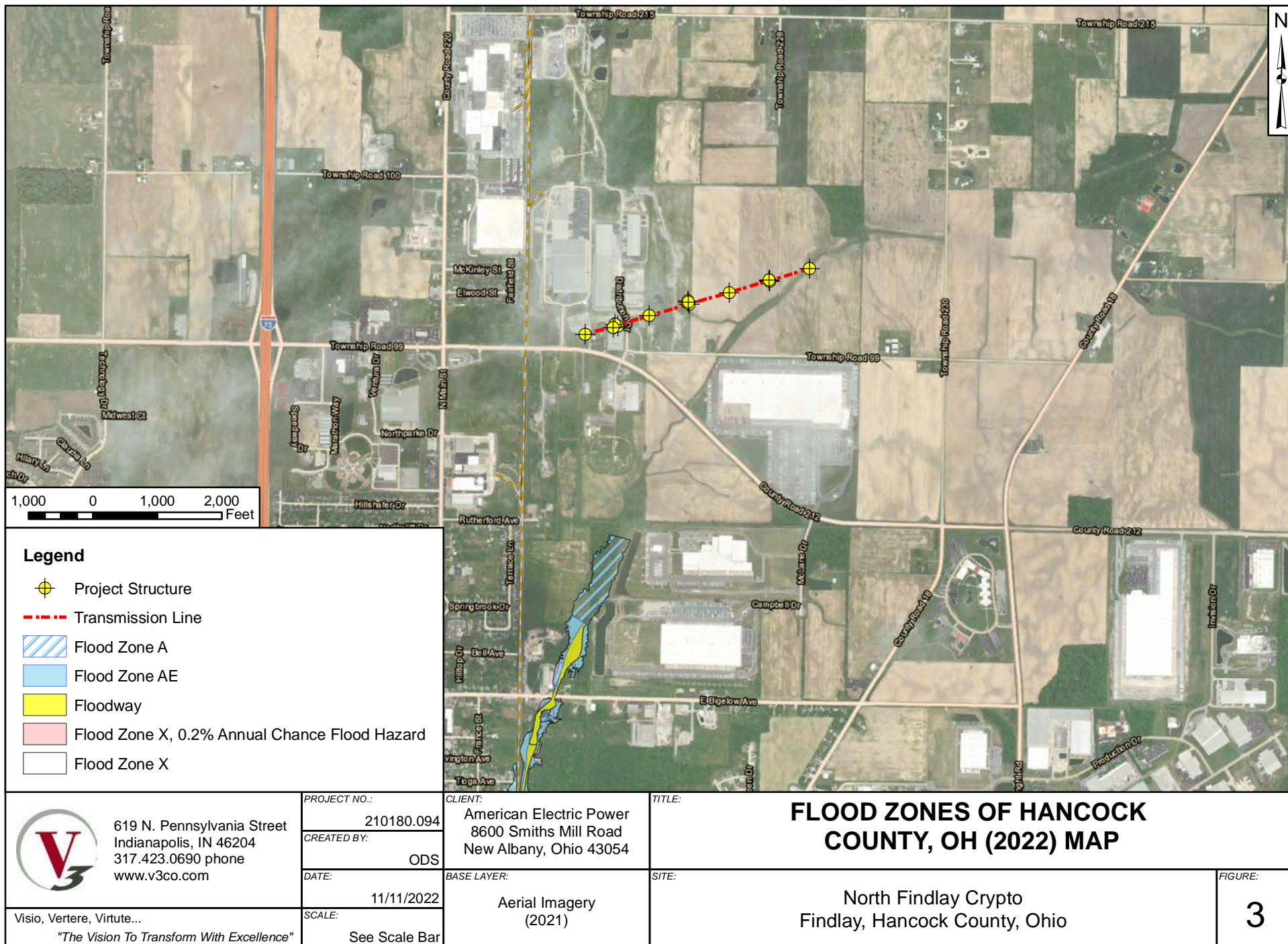
## NATIONAL WETLANDS INVENTORY (NWI) MAP

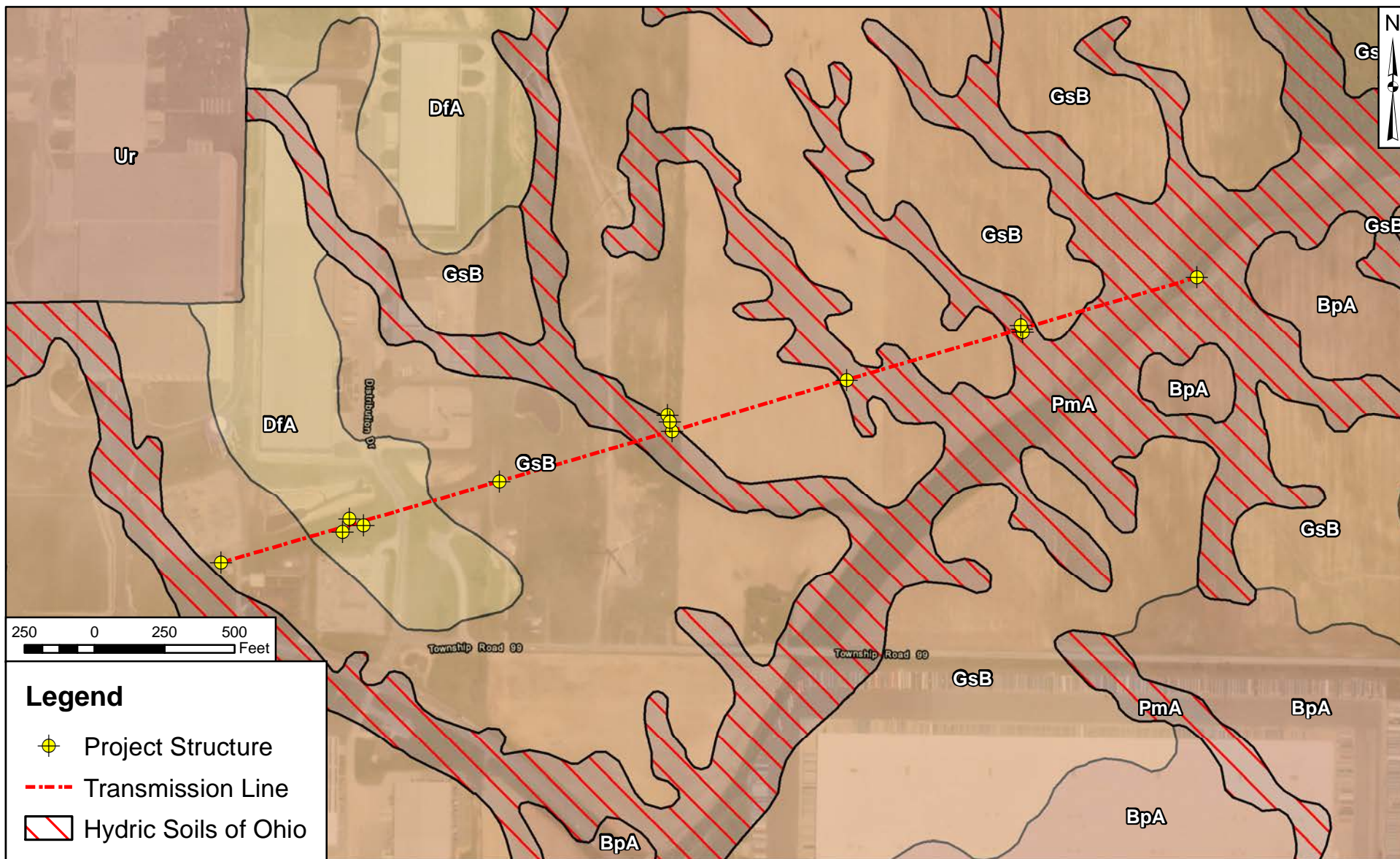
SITE:

North Findlay Crypto  
Findlay, Hancock County, Ohio




FIGURE:

2





## Legend

-  Project Structure
-  Transmission Line
-  Hydric Soils of Ohio



619 N. Pennsylvania Street  
Indianapolis, IN 46204  
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PROJECT NO.:

210180.094

CREATED BY:

ODS

DATE:

11/09/2022

SCALE:

See Scale Bar

CLIENT:

American Electric Power  
8600 Smiths Mill Road  
New Albany, Ohio 43054

BASE LAYER:

Aerial Imagery  
(2021)

TITLE:

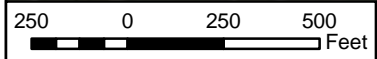
## SOIL SURVEY OF HANCOCK COUNTY, OH (2019) MAP

SITE:

North Findlay Crypto  
Findlay, Hancock County, Ohio

FIGURE:


4

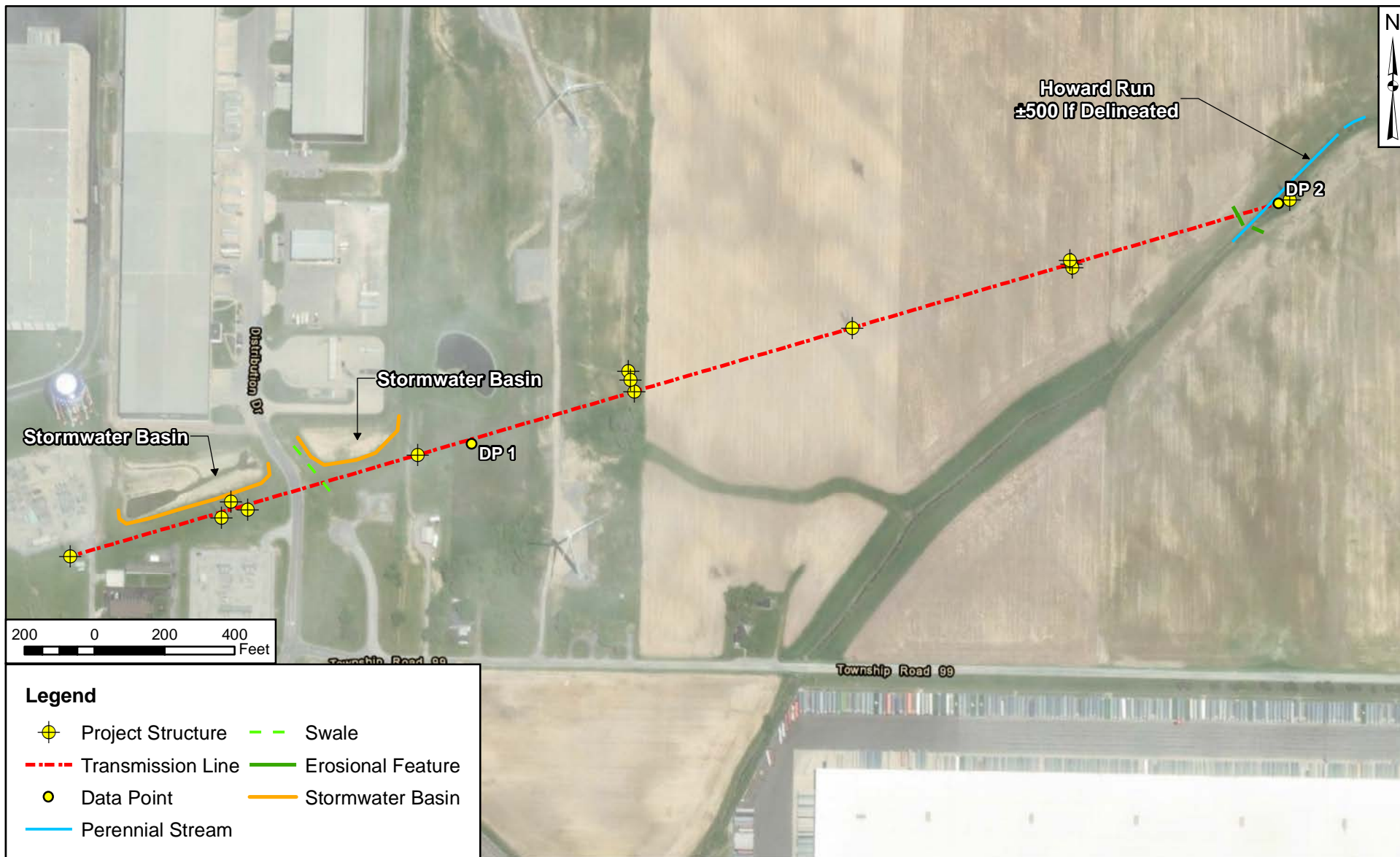


**Legend**

Project Structure


Transmission Line

 <p>619 N. Pennsylvania Street Indianapolis, IN 46204 317.423.0690 phone www.v3co.com</p>	PROJECT NO.: 210180.094	CLIENT: American Electric Power 8600 Smiths Mill Road New Albany, Ohio 43054	TITLE:  <b>AERIAL MAP</b>	
	CREATED BY: ODS			
	DATE: 11/11/2022		SITE:  North Findlay Crypto Findlay, Hancock County, Ohio	
Visio, Vertere, Virtute... "The Vision To Transform With Excellence"	SCALE: See Scale Bar	BASE LAYER:  Aerial Imagery (2021)	FIGURE:  <b>5</b>	



### Legend

- Project Structure
- Transmission Line
- Data Point
- Perennial Stream
- Swale
- Erosional Feature
- Stormwater Basin

 <p>619 N. Pennsylvania Street Indianapolis, IN 46204 317.423.0690 phone www.v3co.com</p>	<p>PROJECT NO.: 210180.094</p>	<p>CLIENT: American Electric Power 8600 Smiths Mill Road New Albany, Ohio 43054</p>	<p>TITLE:  <b>WETLAND DELINEATION MAP</b></p>	
	<p>CREATED BY: ODS</p>			
<p>Visio, Vertere, Virtute... "The Vision To Transform With Excellence"</p>	<p>DATE: 11/11/2022</p>	<p>BASE LAYER: Aerial Imagery (2021)</p>	<p>SITE: North Findlay Crypto Findlay, Hancock County, Ohio</p>	<p>FIGURE:  <b>6</b></p>
	<p>SCALE: See Scale Bar</p>			

## Appendix A

*ETR Species Correspondence Letters*





## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Ohio Ecological Services Field Office

4625 Morse Road, Suite 104

Columbus, OH 43230-8355

Phone: (614) 416-8993 Fax: (614) 416-8994



In Reply Refer To:

Project Code: 2023-0014159

Project Name: North Findlay Crypto

November 09, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

#### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

---

Attachment(s):

- Official Species List

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Ohio Ecological Services Field Office**

4625 Morse Road, Suite 104

Columbus, OH 43230-8355

(614) 416-8993

---

## Project Summary

Project Code: 2023-0014159  
Project Name: North Findlay Crypto  
Project Type: Transmission Line - Maintenance/Modification - Above Ground  
Project Description: The North Findlay Crypto -Temp Service Project along the Fostoria-East Lima 138 kV Transmission Line involves approximately 0.57 mile of existing transmission line located northeast of the intersection of County Road 99 and County Road 212 and extending northeast in Findlay, Hancock County, Ohio.

### Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.0899536,-83.63559515,14z>



Counties: Hancock County, Ohio

---

## Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a>	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> <li>Incidental take of the northern long-eared bat is not prohibited at this location. Federal action agencies may conclude consultation using the streamlined process described at <a href="https://www.fws.gov/midwest/endangered/mammals/nleb/s7.html">https://www.fws.gov/midwest/endangered/mammals/nleb/s7.html</a></li> </ul> Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/10515">https://ecos.fws.gov/ecp/species/10515</a>	Proposed Endangered

## Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

---

## **Critical habitats**

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

## **IPaC User Contact Information**

Agency: V3 Companies

Name: Olivia Speckman

Address: 619 N Pennsylvania Street

City: Indianapolis

State: IN

Zip: 46204

Email: ospeckman@v3co.com

Phone: 3174230690

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# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

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



November 14, 2022

Project Code: 2023-0014159

Reference: AEP North Findlay Crypto, Findlay, Hancock County, Ohio

Dear Mr. Moody:

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

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

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

Sincerely,

Patrice Ashfield  
Field Office Supervisor



# Ohio Department of Natural Resources

MIKE DeWINE, GOVERNOR

MARY MERTZ, DIRECTOR

## Office of Real Estate

*John Kessler, Chief*

2045 Morse Road – Bldg. E-2

Columbus, OH 43229

Phone: (614) 265-6621

Fax: (614) 267-4764

November 30, 2022

Olivia Speckman  
V3 Companies  
619 North Pennsylvania Street  
Indianapolis, IN 46204

**Re:** 22-1097; AEP North Findlay Crypto

**Project:** The proposed project involves approximately 0.57 mile of existing transmission line located northeast of the intersection of County Road 99 and County Road 212 and extending northeast.

**Location:** The proposed project is located in Allen Township, Hancock 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 specified project area. Records searched date from 1980.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area.

**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 threatened species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these 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  $\geq 20$  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](mailto:Eileen.Wyza@dnr.ohio.gov)).

The DOW also recommends that a desktop habitat assessment is conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the project area. Direction on how to conduct habitat assessments can be found in the current USFWS "[RANGE-WIDE INDIANA BAT & NORTHERN LONG-EARED BAT SURVEY GUIDELINES](#)." If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Eileen Wyza for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

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

Federally Endangered

clubshell (*Pleurobema clava*)

rayed bean (*Villosa fabalis*)

State Endangered

purple lilliput (*Toxolasma lividum*)

State Threatened

pondhorn (*Unio merus tetralasmus*)

Salamander Mussel (*Simpsonaias ambigua*)

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

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

The project is within the range of the Kirtland's snake (*Clonophis kirtlandii*), a state threatened species. This secretive species prefers wet meadows and other wetlands. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

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

**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](mailto:mike.pettegrew@dnr.ohio.gov) if you have questions about these comments or need additional information.

Mike Pettegrew  
Environmental Services Administrator

## Appendix B

*SITE Photographs*



**Photo: 1**

Howard Run

**Direction of View:**

Northeast

**Date:**

2 November 2022



**Photo: 2**

Howard Run

**Direction of View:**

Southwest

**Date:**

2 November 2022



**Photo: 3**

Data Point 1

**Direction of View:**

East

**Date:**

2 November 2022



**Photo: 4**

Data Point 2

**Direction of View:**

East

**Date:**

2 November 2022



**Photo: 5**

Stormwater Basin 1

**Direction of View:**

East

**Date:**

2 November 2022



**Photo: 6**

Stormwater Basin 2

**Direction of View:**

East

**Date:**

2 November 2022



**Photo: 7**

Swale

**Direction of View:**

North

**Date:**

2 November 2022



**Photo: 8**

Erosional Feature

**Direction of View:**

Northwest

**Date:**

2 November 2022



## Appendix C

### *Data Forms*



# WETLAND DETERMINATION FORM-MIDWEST REGION

Site: Crypto Findlay City/County: Hancock County Date: 2 Nov 2022 Data Point: DP 1  
 Client: American Electric Power State: OH Section, Township, Range: Sec 31, T 2N, R 11E  
 Investigator(s): N. Houk, L. Vine Landform: Moraines Local Relief: Convex  
 Slope (%): 0-2 Lat: 41.089409 Long: -83.637743 Datum: NAD 83 NWI Class: N/A  
 Soil Map Unit Name: Glynwood-Blount-Houcktown complex, 1 to 4 percent slopes  
 Climatic/hydrologic conditions typical for time of year? Y/N Y  
 Vegetation, Soil or Hydrology significantly disturbed  
 Vegetation, Soil or Hydrology naturally problematic  
 Are Normal Circumstances Present? Yes X No

## SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Yes No X	Is the DP within a Wetland? Yes No X
Hydric Soil Present? Yes No X	
Wetland Hydrology Present? Yes No X	

Remarks: Does not meet all wetland criteria

## VEGETATION

Tree Stratum	Plot size: 30'	Absolute % Cover	Dominant Species	Indicator Status	<b>Dominance Test Worksheet</b> Number of dominant species that are OBL, FACW, or FAC: 0 Total number of dominant species across all strata: 2 Percent of dominant species that are OBL, FACW, or FAC: 0.00 <b>Prevalence Index Worksheet</b> Total % cover of: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 0 x 3 = 0 FACU species 90 x 4 = 360 UPL species 0 x 5 = 0 Total 90 = 360 Prevalence Index: 4.00 <b>Hydrophytic Vegetation Indicators:</b> Rapid Test for Hydrophytic Veg. Dominance Test is >50% Prevalence Index is <3.0* Morphological Adaptations* Problematic Hydrophytic Vegetation* *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic <b>Hydrophytic Vegetation Present?</b> Yes No x
1.					
2.					
3.					
4.					
5.		0	Total Cover		
<b>Shrub Stratum</b>	<b>Plot size: 15'</b>				
1.					
2.					
3.					
4.					
5.		0	Total Cover		
<b>Herb Stratum</b>	<b>Plot size: 5'</b>				
1. <i>Solidago canadensis</i>		70	Y	FACU 4	
2. <i>Symphotrichum ericoides</i>		20	Y	FACU 4	
3.					
4.					
5.					
6.					
7.					
8.		90	Total Cover		
<b>Woody Vine Stratum</b>	<b>Plot size: 5'</b>				
1.					
2.		0	Total Cover		

Remarks:

## SOIL

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

Depth (inches)	Color	Matrix %	Color	%	Type*	Loc**	Texture	Remarks
0-18	10YR 4/2	100					SIL	

\*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Coated Sand grains \*\*Location: PL=Pore Lining, M=Matrix

## Hydric Soil Indicators:

___ Histosol (A1)	___ Sandy Mucky Mineral (S1)	___ Redox Dark Surface (F6)
___ Histic Epipedon (A2)	___ 5cm Mucky Peat or Peat	___ Depleted Dark Surface (F7)
___ Black Histic (A3)	___ Sandy Gleyed Matrix (S4)	___ Redox Depressions (F8)
___ Hydrogen Sulfide (A4)	___ Sandy Redox (S5)	<b>Indicators for Problematic Hydric Soils</b>
___ Stratified Layers (A5)	___ Stripped Matrix (S6)	___ Coast Prairie Redox (A16)
___ 2 cm Muck (A10)	___ Loamy Mucky Mineral (F1)	___ Iron-Manganese Masses (F12)
___ Depleted Below Dark Surface (A11)	___ Loamy Gleyed Matrix (F2)	___ Very Shallow Dark Surface (F12)
___ Thick Dark Surface (A12)	___ Depleted Matrix (F3)	___ Other

Restrictive Layer (if observed): Type:

Depth (Inches):

Hydric Soil Present?

Yes

No

X

Remarks:

## HYDROLOGY

### Wetland Hydrology Indicators:

Primary Indicators (check all that apply)	Secondary Indicators
___ Surface Water (A1)	___ Surface Soil Cracks (B6)
___ High Water Table (A2)	___ Drainage Patterns (B10)
___ Saturation (A3)	___ Dry-Season Water Table (C2)
___ Water Marks (B1)	___ Crayfish Burrows (C8)
___ Sediment Deposits (B2)	___ Saturation Visible on Aerial Imagery (C9)
___ Drift Deposits (B3)	___ Stunted or Stressed Plants (D1)
___ Algal Mat or Crust (B4)	___ Geomorphic Position (D2)
___ Iron Deposits (B5)	___ FAC-Neutral Test (D5)
___ Inundation Visible on Aerial Imagery (B7)	
___ Sparsely Vegetated Concave Surface	
___ Water Stained Leaves (B9)	
___ Aquatic Fauna (B13)	
___ True Aquatic Plants (B14)	
___ Hydrogen Sulfide Odor (C1)	
___ Oxidized Rhizospheres on Living Roots	
___ Presence of Reduced Iron (C4)	
___ Recent Iron Reduction in Tilled Soil (C6)	
___ Thin Muck Surface (C7)	
___ Gauge or Well Data (D9)	
___ Other	
<b>Field Observations:</b> Surface Water Present? Yes No X Depth (inches)	<b>Hydrology Indicators Present?</b> Yes No X
Water Table Present? Yes No X Depth (inches)	
Saturation Present? Yes No X Depth (inches)	

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

# WETLAND DETERMINATION FORM-MIDWEST REGION

Site: Crypto Findlay City/County: Hancock County Date: 2 Nov 2022 Data Point: DP 2  
 Client: American Electric Power State: OH Section, Township, Range: Sec 32, T 2N, R 11E  
 Investigator(s): N. Houk, L. Vine Landform: Till Plains Local Relief: Convex  
 Slope (%): 0-2 Lat: 41.091381 Long: -83.629417 Datum: NAD 83 NWI Class: N/A  
 Soil Map Unit Name: Pewamo silty clay loam, 0 to 1 percent slopes  
 Climatic/hydrologic conditions typical for time of year? Y/N Y  
 Vegetation, Soil or Hydrology significantly disturbed  
 Vegetation, Soil or Hydrology naturally problematic  
 Are Normal Circumstances Present? Yes X No

## SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the DP within a Wetland? Yes No X
Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Remarks: Does not meet all wetland criteria

## VEGETATION

Tree Stratum	Plot size: 30'	Absolute % Cover	Dominant Species	Indicator Status	<b>Dominance Test Worksheet</b> Number of dominant species that are OBL, FACW, or FAC: 1 Total number of dominant species across all strata: 3 Percent of dominant species that are OBL, FACW, or FAC: 33.33 <b>Prevalence Index Worksheet</b> Total % cover of: OBL species 50 x 1 = 50 FACW species 0 x 2 = 0 FAC species 0 x 3 = 0 FACU species 50 x 4 = 200 UPL species 0 x 5 = 0 Total 100 = 250 Prevalence Index: 2.50 <b>Hydrophytic Vegetation Indicators:</b> Rapid Test for Hydrophytic Veg. Dominance Test is >50% x Prevalence Index is <3.0* Morphological Adaptations* Problematic Hydrophytic Vegetation* *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic <b>Hydrophytic Vegetation Present?</b> Yes x No
1. _____					
2. _____					
3. _____					
4. _____					
5. _____		0	Total Cover		
<b>Shrub Stratum</b>	<b>Plot size: 15'</b>				
1. _____					
2. _____					
3. _____					
4. _____					
5. _____		0	Total Cover		
<b>Herb Stratum</b>	<b>Plot size: 5'</b>				
1. <i>Carex lacustris</i>		50	Y	OBL 1	
2. <i>Cirsium arvense</i>		30	Y	FACU 4	
3. <i>Solidago canadensis</i>		20	Y	FACU 4	
4. _____					
5. _____					
6. _____					
7. _____					
8. _____		100	Total Cover		
<b>Woody Vine Stratum</b>	<b>Plot size: 5'</b>				
1. _____					
2. _____					
		0	Total Cover		

Remarks:

## SOIL

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

Depth (inches)	Color	Matrix %	Color	%	Type*	Loc**	Texture	Remarks
0-18	10YR 3/2	100					SiCL	

\*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Coated Sand grains \*\*Location: PL=Pore Lining, M=Matrix

### Hydric Soil Indicators:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> 5cm Mucky Peat or Peat	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Sandy Redox (S5)	<b>Indicators for Problematic Hydric Soils</b>
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Very Shallow Dark Surface (F12)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other

<b>Restrictive Layer (if observed):</b> Type: _____	<b>Hydric Soil Present?</b> Yes No X
Depth (Inches): _____	

## HYDROLOGY

### Wetland Hydrology Indicators:

Primary Indicators (check all that apply)	Secondary Indicators
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface	
<input type="checkbox"/> Water Stained Leaves (B9)	
<input type="checkbox"/> Aquatic Fauna (B13)	
<input type="checkbox"/> True Aquatic Plants (B14)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soil (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Gauge or Well Data (D9)	
<input type="checkbox"/> Other	
<b>Field Observations:</b> Surface Water Present? Yes No X	<b>Hydrology Indicators Present?</b> Yes No X
Water Table Present? Yes No X	
Saturation Present? Yes No X	

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

## Appendix D

### *Primary Headwater Habitat Evaluation Index*





## Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) :

30

SITE NAME/LOCATION **Findlay Crypto - Howard Run**

SITE NUMBER

RIVER BASIN

DRAINAGE AREA (mi<sup>2</sup>) **0.89**LENGTH OF STREAM REACH (ft) **500**LAT. **41.09149**LONG. **-83.62961**

RIVER CODE

RIVER MILE

DATE **11/02/22**SCORER **N. Houk**

COMMENTS

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL  
MODIFICATIONS:☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

1. **SUBSTRATE** (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> BLDR SLABS [16 pts]	<input type="checkbox"/> 0%	<input checked="" type="checkbox"/> SILT [3 pt]	<input checked="" type="checkbox"/> 50%
<input type="checkbox"/> BOULDER (>256 mm) [16 pts]	<input type="checkbox"/> 0%	<input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	<input type="checkbox"/> 0%
<input type="checkbox"/> BEDROCK [16 pt]	<input type="checkbox"/> 0%	<input type="checkbox"/> FINE DETRITUS [3 pts]	<input type="checkbox"/> 0%
<input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	<input type="checkbox"/> 0%	<input checked="" type="checkbox"/> CLAY or HARDPAN [0 pt]	<input checked="" type="checkbox"/> 50%
<input type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	<input type="checkbox"/> 0%	<input type="checkbox"/> MUCK [0 pts]	<input type="checkbox"/> 0%
<input type="checkbox"/> SAND (<2 mm) [6 pts]	<input type="checkbox"/> 0%	<input type="checkbox"/> ARTIFICIAL [3 pts]	<input type="checkbox"/> 0%

Total of Percentages of  
Bldr Slabs, Boulder, Cobble, Bedrock **0.00%**

(A)

Substrate Percentage  
Check **100%**

(B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES:

**3**

TOTAL NUMBER OF SUBSTRATE TYPES:

**2**HHEI  
Metric  
PointsSubstrate  
Max = 40**5**

A + B

2. **Maximum Pool Depth** (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box):

<input type="checkbox"/> > 30 centimeters [20 pts]	<input type="checkbox"/> > 5 cm - 10 cm [15 pts]
<input type="checkbox"/> > 22.5 - 30 cm [30 pts]	<input checked="" type="checkbox"/> < 5 cm [5 pts]
<input type="checkbox"/> > 10 - 22.5 cm [25 pts]	<input type="checkbox"/> NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS

MAXIMUM POOL DEPTH (centimeters):

Pool Depth  
Max = 30**5**

3. **BANK FULL WIDTH** (Measured as the average of 3-4 measurements) (Check ONLY one box):

<input type="checkbox"/> > 4.0 meters (> 13') [30 pts]	<input type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
<input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	<input type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts]
<input checked="" type="checkbox"/> > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	

COMMENTS

AVERAGE BANKFULL WIDTH (meters):

Bankfull  
Width  
Max=30**20**

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY

☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH

FLOODPLAIN QUALITY

L	R	(Per Bank)	L	R	(Most Predominant per Bank)	L	R	
<input type="checkbox"/>	<input type="checkbox"/>	Wide >10m	<input type="checkbox"/>	<input type="checkbox"/>	Mature Forest, Wetland	<input type="checkbox"/>	<input type="checkbox"/>	Conservation Tillage
<input type="checkbox"/>	<input type="checkbox"/>	Moderate 5-10m	<input type="checkbox"/>	<input type="checkbox"/>	Immature Forest, Shrub or Old Field	<input type="checkbox"/>	<input type="checkbox"/>	Urban or Industrial
<input type="checkbox"/>	<input type="checkbox"/>	Narrow <5m	<input type="checkbox"/>	<input type="checkbox"/>	Residential, Park, New Field	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Open Pasture, Row Crop
<input type="checkbox"/>	<input type="checkbox"/>	None	<input type="checkbox"/>	<input type="checkbox"/>	Fenced Pasture	<input type="checkbox"/>	<input type="checkbox"/>	Mining or Construction

COMMENTS

FLOW REGIME (At Time of Evaluation) (Check ONLY one box):

<input type="checkbox"/> Stream Flowing	<input type="checkbox"/> Moist Channel, isolated pools, no flow (Intermittent)
<input type="checkbox"/> Subsurface flow with isolated pools (Interstitial)	<input checked="" type="checkbox"/> Dry channel, no water (Ephemeral)

COMMENTS

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):

<input type="checkbox"/> None	<input checked="" type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input type="checkbox"/> 3.0
<input type="checkbox"/> 0.5	<input type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> >3

STREAM GRADIENT ESTIMATE

☒ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

**ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):**QHEI PERFORMED? - ☐ Yes ☒ No QHEI Score  (If Yes, Attach Completed QHEI Form)**DOWNSTREAM DESIGNATED USE(S)**

☐ WWH Name:  Distance from Evaluated Stream   
☐ CWH Name:  Distance from Evaluated Stream   
☐ EWH Name:  Distance from Evaluated Stream

**MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION**USGS Quadrangle Name: Findlay NRCS Soil Map Page:  NRCS Soil Map Stream Order County: Hancock Township / City: Findlay**MISCELLANEOUS**Base Flow Conditions? (Y/N): Y Date of last precipitation: 10/31/22 Quantity: 0.32Photograph Information: Elevated Turbidity? (Y/N): N Canopy (% open): 0%Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: Field Measures: Temp (°C)  Dissolved Oxygen (mg/l)  pH (S.U.)  Conductivity (µmhos/cm) Is the sampling reach representative of the stream (Y/N) Y If not, please explain: Additional comments/description of pollution impacts: **BIOTIC EVALUATION**Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N  
Frogs or Tadpoles Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N

Comments Regarding Biology: **DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):**

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



**This foregoing document was electronically filed with the Public Utilities  
Commission of Ohio Docketing Information System on**

**12/19/2022 4:54:18 PM**

**in**

**Case No(s). 22-1134-EL-BNR**

Summary: Correspondence Construction Notice electronically filed by Hector  
Garcia-Santana on behalf of Ohio Power Company