

Construction Notice for the Hartman Farms 138 kV Extension No. 5 and No. 6 Project



An **AEP** Company

BOUNDLESS ENERGY™

PUCO Case No. 21-1057-EL-BNR

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

Submitted by:
Ohio Power Company

October 28, 2021

CONSTRUCTION NOTICE FOR HARTMAN FARMS 138 KV EXTENSION NO. 5 AND NO. 6 PROJECT

CONSTRUCTION NOTICE

Ohio Power Company

Hartman Farms 138 kV Extension No. 5 and No. 6 Project

4906-6-05 Accelerated Application Requirements

Ohio Power Company (“the Company”) provides the following information to the Ohio Power Siting Board (OPSB) in accordance with the accelerated application requirements of 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 Letter of Notification.

The Company is proposing the Hartman Farms 138 kV Extension No. 5 and No. 6 Project (the Project), in Hamilton Township, Franklin County, Ohio. The Project consists of constructing two parallel, approximately 0.3 mile, double-circuit 138 kV transmission lines, utilizing steel monopoles from the proposed Cyprus 138 kV Station (Case No. 21-0786-EL-BLN) to the customer's station. The Project is located on property owned by the customer and will support the customer's new development in the area. The location of the Project is shown on Figure 1 and 2 in Appendix A.

The Project meets the requirements for a Construction Notice (CN) as defined by Item 1 (d) (i) of Appendix A to Ohio Administrative Code Section 4906-1-01, *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 Case No. 21-1057-EL-BNR.

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B(2) Statement of Need

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

A transmission customer requested 138 kV service to a site south of AEP's existing Parsons distribution Station in Lockbourne, Ohio. The initial load is expected to be 100 MW with a projected peak demand of 675 MW as communicated by the customer. The Company will tie into the existing White Road - Canal Street 138 kV circuit (Beatty-Canal Street 138 kV line) and construct approximately 2.3 miles of new double circuit 138 kV line to interconnect the Company's proposed Cyprus Station (Case No. 21-0786-EL-BLN, filed August 3, 2021). Service to the initial customer owned station on the site will be provided by constructing two new approximately 0.3-mile double circuit 138 kV lines, which are the subject of this filing, south from the Company's proposed Cyprus Station. In order to meet the customer's redundancy requirements to the site, one circuit from each double circuit line will provide service to the customer owned station on the site. The second double circuit line will be utilized to provide service to the customer's second station just to the south of the first site, which will begin construction in the near future. The customer requested an in service date (ISD) of July 22, 2022 for the first station.

Failure to move forward with the proposed project will result in Ohio Power Company's inability to serve the customer's load expectations, thereby jeopardizing the customer's plans in the area (675 MW peak).

In addition, building the 2.6 miles of double circuit line into Parsons station (via Cyprus) allows Ohio Power Company to retire the existing 40 kV lines serving Parsons Station today. The Marion-Parsons 40kV double circuit line is approximately 5.2 miles and could not be used to serve the 100 MW of load anticipated by the customer. Upgrading the line on centerline to 138 kV standards is significantly more costly. The line uses 4 lattice structures that were installed in 1972 and the 46 remaining structures were most likely installed in 1926. There are 102 open conditions on 36 unique structures, which relates to 72% of the structures on this line. The Marion-Parsons 40 kV line is the only source to Parsons Station and cannot be taken out of service for basic maintenance or to facilitate future conversion from the obsolete 40 kV system. Therefore, the new 2.6 mile greenfield 138 kV source will provide operational flexibility and efficiency to the area.

The original Parsons 138 kV Conversion project was presented during the November 2, 2017 PJM SRRTEP meeting and subsequently assigned PJM identifier s2342. The need and solution for the customer driven supplemental project was presented and reviewed with stakeholders during the January 15, 2021 and May 21, 2021 PJM SRRTEP meeting and assigned PJM identifier s2526. This Project was included in a supplement to the Company's 2021 Long Term Forecast Report, located on pages 22 and 23 (Table FE-T9, Specifications of Planned Transmission Lines), see Appendix B.

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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 substations is shown on Figure 1, in Appendix A. Figure 2, in Appendix A, identifies the Project components on a 2019 aerial photograph.

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 Hartman Farms 138 kV Extension No. 5 and No. 6 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. The Project is located on undeveloped farmland and will not require impacts to any delineated wetland or streams. The location of the Project minimizes impacts to the community and the environment, while taking into account the engineering and construction needs of the customer. The Project also represents the most suitable location and most appropriate solution for meeting the Company's and customer's needs.

B(5) Public Information Program

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

The Company maintains a website (<http://aeprtransmission.com/ohio/>) on which an electronic copy of this CN is available. An electronic copy of the CN will be served to the public library in each political subdivision affected by this Project. In addition, the Company retains ROW land agents that discuss Project timelines, construction and restoration activities and convey this information to affected owners and tenants.

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 February 2022 with an anticipated in-service date of July 2022.

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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, identifies the location of the Project area on a United States Geological Survey 1:24,000 quadrangle map. Appendix A, Figure 2 displays the Project components on a 2019 aerial photograph.

To visit the eastern endpoint of the Project from downtown Columbus, Ohio, take I-70 W/I-71 S toward I-71S to Cincinnati for 5.5 miles. Take exit 101 for I-270 E for two miles. Take exit 52 to merge onto US-23 S/S High Street/Portsmouth-Columbus Road towards Circleville for one mile. Turn left on Rathmell Road and continue for 0.8 mile. Turn right onto Parsons Road and continue for 0.5 miles. The Project is located to the west of Parsons Road.

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 proposed Project is located on one parcel, Parcel Number 510-180711, which is owned by the customer. The Company currently has entered into a right of entry agreement with the customer and is in discussion with the customer to obtain an easement on the property for the Project. No other property easements, options, or land use agreements are necessary to construct the Project or operate the transmission line.

A list of properties required for the Project are provided in the table below.

Property Parcel Number	Agreement Type	Easement or Option Obtained (Yes/No)
510-180711	New Easement Agreement	No

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.

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The Project is anticipated to include the following:

Hartman Farms Extension No. 5

Voltage: 138kV
Conductors: 795 kcmil 26/7 Strands DRAKE ACSS
Static Wire: (2) 7#8 Alumoweld
Insulators: Polymer
ROW Width: 100 feet
Structure Type: One (1) double circuit, steel two-pole dead ends
Two (2), double circuit, two-pole steel suspension

Hartman Farms Extension No. 6

Voltage: 138kV
Conductors: 795 kcmil 26/7 Strands DRAKE ACSS
Static Wire: (2) 7#8 Alumoweld
Insulators: Polymer
ROW Width: 100 feet
Structure Type: Two (2) double circuit, steel two-pole dead ends
Two (2), double circuit, two-pole steel suspension

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.

B(9)(b)(i) Calculated Electric and Magnetic Field Strength Levels

i) Calculated Electric and Magnetic Field Levels

Not applicable. No occupied residences or institutions are located within 100 feet of the Project.

B(9)(b)(ii) Design Alternatives

A discussion of the applicant's consideration of design alternatives with respect to electric and magnetic fields and their strength levels, including alternate conductor configuration and phasing, tower height, corridor location, and right-of-way width.

Not applicable. No occupied residences or institutions are located within 100 feet of the Project.

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B(9)(b)(ii)(c) Project Cost

The estimated capital cost of the project.

The capital costs estimate for the proposed Project, which is comprised of applicable tangible and capital costs, is approximately \$2.735 million using a Class 4 estimate. Pursuant to the PJM OATT, the costs for this Project will be recovered in the Ohio Power Company's FERC formula rate (Attachment H-14 to the PJM OATT) and allocated to the AEP Zone.

B(10) Social and Economic Impacts

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

B(10)(a) Operating Characteristics

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

The Project is located in Hamilton Township, Franklin County, Ohio. Land use in the Project area is predominantly undeveloped farmland, as classified by the Franklin County Auditor. A residential subdivision is located north of the Project. Hamilton Elementary School, Hamilton Intermediate School, and Hamilton Middle School are located approximately 900-1,750 feet northeast of the eastern endpoint of the Project. One residence is located within 1,000 feet of the Project. There are no parks, churches, cemeteries, wildlife management areas, or nature preserve lands within 1,000 feet of the centerline of the Project.

B(10)(b) Agricultural Land Information

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

No properties registered as agricultural district land are located in the Project area based on email coordination with the Franklin County Auditor's Office on September 28, 2021. The Project occupies 7.3 acres, of that approximately 6.8 acres has historically been used for row crop land, 0.3 acre has been historically successional hardwood woodland habitat, 0.1 acre has been historically grassland habitat, and 0.05 acre exists as low intensity developed land.

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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 Phase I Archaeological and Phase I History/Architectural surveys to be coordinated with the State Historic Preservation Office ("SHPO"). The Company is recommending that the Project will have no adverse effect on historic properties and no further cultural resource work would be necessary. The results of the coordination with SHPO will be provided to OPSB once it has been received.

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

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

A Notice of Intent will be filed with the Ohio Environmental Protection Agency (OEPA) for authorization of construction storm water discharge under NPDES General Permit for Discharges of Storm Water Associated with Construction Activity OHC000005. The Company will also submit a Storm Water Pollution Prevention Plan (SWPPP) to the City of Columbus that adheres to the City's permit requirements. The Company will implement and maintain best management practices as outlined in the Project-specific SWPPP to minimize erosion and sediment to Project surface waters during storm events.

The Project is not located within the Federal Emergency Management Agency (FEMA) 100-year floodplain area. Therefore, no floodplain permitting is expected to be required for the Project. A local stormwater permit will be obtained from the City of Columbus prior to the start of construction.

The Project is located in the City of Columbus Wellfield Protection Boundary. As defined by the City of Columbus-Chapter 1115 Wellfield Protection, the majority of the Project is located in Wellfield Protection Area II (Five year time of travel) and a small portion of the eastern area of the Project is located in Wellfield Protection Area I (1000' from collector well). In compliance with the City of Columbus's Chapter 1115, AEP has initiated coordination with the City's Wellfield Protection Coordinator. In compliance with Chapter 1115 plan notes for construction will be developed, and a Spill Prevention Control and Countermeasures (SPCC) Plan will be prepared. Coordination and approval for the City's wellfield protection aspect of the Project is included in the City's approval of the station grading and stormwater package.

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

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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.

On July 7, 2021, coordination letters were submitted to the United State Fish and Wildlife Service (USFWS) and the Ohio Department of Natural Resources (ODNR) Ohio Natural Heritage Program (ONHP) and Division of Wildlife (DOW), seeking an environmental review of the Project for potential impacts to state and/or federally protected species. ODNR and USFWS provided responses on September 1, 2021 and July 19, 2021, respectively. Copies of the agencies' responses are presented in Appendix C.

The ODNR ONHP did not locate any records at or within a one-mile radius of the Project area.

The ODNR DOW response indicated the Project lies within the range of the following state or federal threatened, endangered, and/or protected freshwater mussel species: the purple cat's paw (*Epioblasma o. obliquata*), the clubshell (*Pleurobema clava*), the northern riffleshell (*Epioblasma torulosa rangiana*), the rayed bean (*Villosa fabalis*), the snuffbox (*Epioblasma triquetra*), the rabbitsfoot (*Quadrula cylindrica cylindrica*), the elephant-ear (*Elliptio crassidens crassidens*), the long solid (*Fusconaia maculate maculate*), the Ohio pigtoe (*Pleurobema cordatum*), the pocketbook (*Lampsilis ovata*), the washboard (*Megaloniaias nervosa*), the black sandshell (*Ligumia recta*), the fawnsfoot (*Truncilla donaciformis*), the pondhorn (*Unio merus tetralasmus*), and the threeshorn wartyback (*Obliquariaia reflexa*). The DOW advised that due to the Project location and that there is no in-water work proposed in a perennial stream, the Project is not likely to impact these mussel species.

The ODNR DOW response indicated the Project lies within the range of the following state or federal threatened, endangered, and/or protected fish species: the Scioto madtom (*Norturus trautmani*), the goldeye (*Hiodon alosoides*), the Iowa darter (*Etheostoma exile*), the popeye shiner (*Notropis ariommus*), the northern brook lamprey (*Ichthyomyzon fossor*), the spotted darter (*Etheostoma maculatum*), the shortnose gar (*Lepisosteus platostomus*), the tonguetied minnow (*Exoglossum laurae*), the lake chubsucker (*Erimyzon sucetta*), the paddlefish (*Polyodon spathula*), and the Tippecanoe darter (*Etheostoma tippecanoe*). The DOW indicated that due to the Project location and that there is no in-water work proposed in a perennial stream, the Project is not likely to impact these fish species.

The ODNR DOW also indicated the Project lies within the range of the following state or federal threatened, endangered, and/or protected bird species: the American bittern (*Botaurus lentiginosus*), the black-crowned night-heron (*Nycticorax nycticorax*), the cattle egret (*Bubulcus ibis*), the lark sparrow (*Chondestes grammacus*), the least bittern (*Ixobrychus exilis*), the northern harrier (*Circus hudsonis*), the sandhill crane (*Grus canadensis*), and the upland sandpiper (*Bartramia longicauda*).

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having ranges within the Project area and recommends that construction be avoided during their various nesting periods if suitable habitat is present within the Project. The Project does not present potentially suitable habitat for the above-listed bird species and therefore no adverse impacts are anticipated for the species.

The ODNR DOW indicated that the entire state of Ohio is within the range of the state and federally endangered Indiana bat (*Myotis sodalis*), the state and federally threatened northern long-eared bat (*Myotis septentrionalis*), the state endangered little brown bat (*Myotis lucifugus*), and the state endangered tri-colored bat (*Perimyotis subflavus*). Furthermore, the DOW indicated that the Project is within the vicinity of records for the little brown bat. The DOW recommends seasonal tree cutting for trees ≥ 3 inches diameter at breast height (dbh) between October 1 and March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees greater than 20 inches dbh if possible, to avoid adverse impacts to these species. 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. Potentially suitable habitat for these bat species may have been provided by forested areas of the Project footprint; however, a desktop assessment conducted prior to the field survey identified no potential hibernacula within a 0.5-mile radius of the Project. No tree clearing is anticipated for the Project.

The USFWS also advised that the federally endangered Indiana bat and the federally threatened northern long-eared bat have ranges within the Project Area. The USFWS recommends seasonal tree clearing (October 1 through March 31) if no caves or abandoned mines are present and trees ≥ 3 inches dbh cannot be avoided. If implementation of seasonal tree cutting is not feasible for the Project, the USFWS recommends a summer presence/absence survey be conducted between June 1 and August 15 in coordination with the Ohio Field Office. The USFWS indicated that due to the project type, size, and location, no other adverse effects to any other federally protected species or designated critical habitat is anticipated. No tree clearing is anticipated for the Project.

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.

On April 7, 2021, the Company's consultant completed a wetland and stream delineation survey of an approximately 89-acre survey area, which encompasses the proposed Project in addition to a larger area (Appendix D). During the April 7, 2021 field survey, no wetlands or streams were identified within the Project survey area. No other areas of ecological concern were identified within the Project area.

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Based on a review of the Protected Areas Database of the United States as well as the Conservation Easement Database, there are no state or national parks, forests, wildlife areas or mapped conservation easements in the vicinity of the Project.

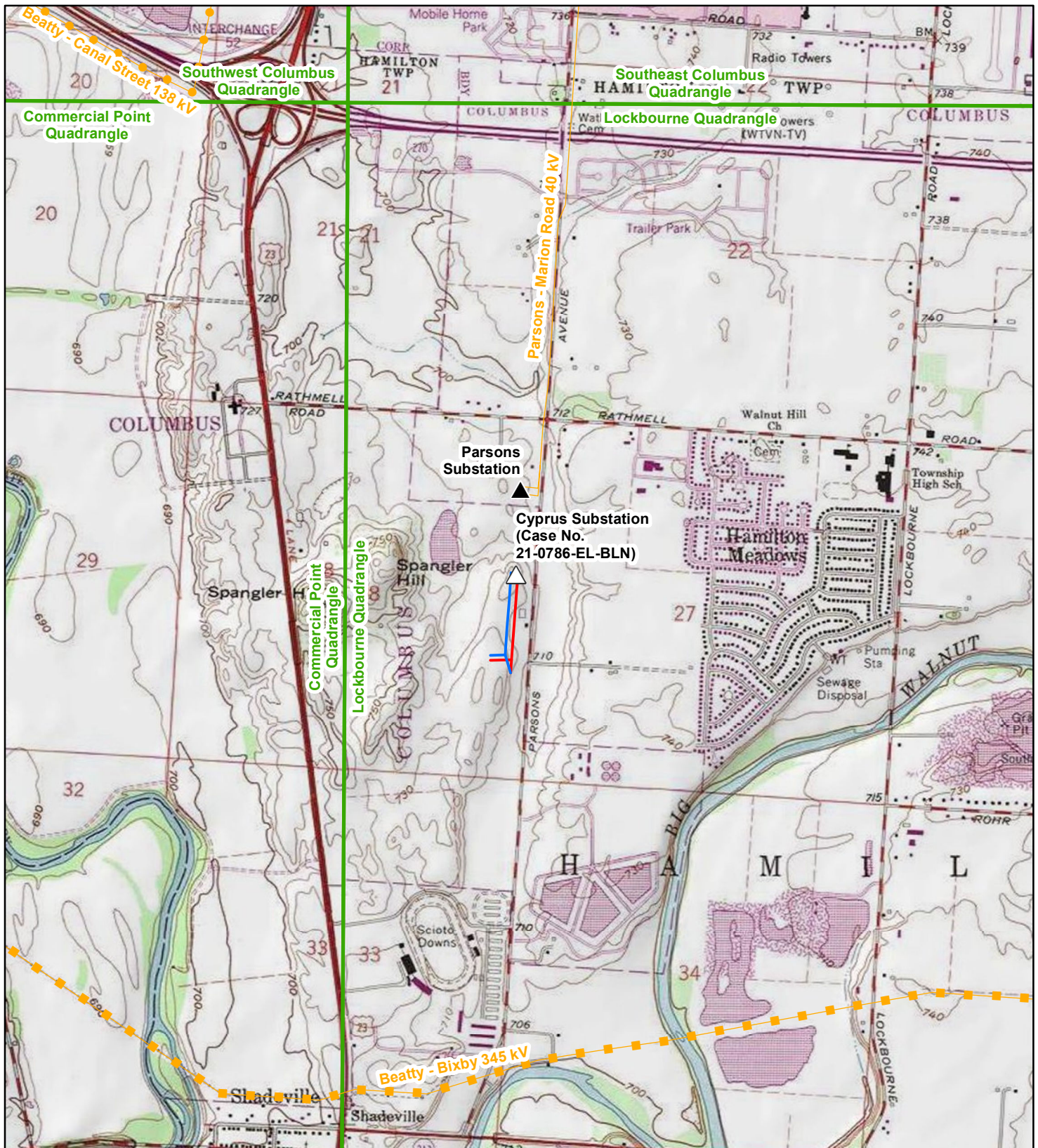
The FEMA Flood Insurance Rate Map (map number 39049C_84 and 39129C_29) was reviewed to check for the presence of floodplains/flood hazard areas within the Project area. No mapped FEMA floodplains are located in the Project area.

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

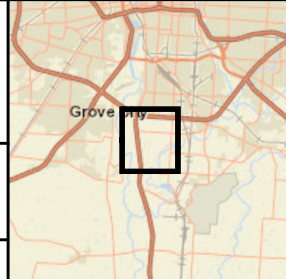


- △ Proposed Substation
- ▲ Existing Substation
- Hartman Farms 138 kV Extension No. 5
- Hartman Farms 138 kV Extension No. 6
- Existing Transmission Line (69 kV and below)
- Existing 138 kV Transmission Line
- Existing 345 kV Transmission Line
- USGS 7.5' Topographic Quad Boundary

Sources:
USGS (2020)

State Plane Ohio
South NAD 83

October 20, 2021









Map 1

Project Area

Hartman Farms 138 kV Extension
No. 5 and No. 6 Project

0 1,000 2,000 3,000 4,000
Feet



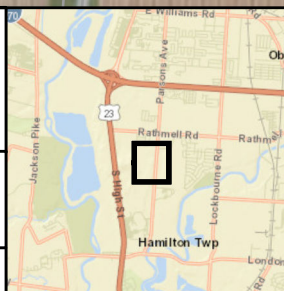
-  Proposed Substation
-  Existing Substation
-  Hartman Farms 138 kV Extension No. 5
-  Hartman Farms 138 kV Extension No. 6
-  Existing Transmission Line (69 kV and below)
-  Parcel Boundary

Sources:
ESRI Imagery (2019)
Franklin County Parcels (2021)

State Plane Ohio
South NAD 83



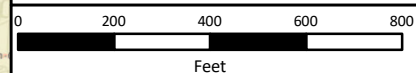
October 20, 2021



Map 2 Aerial Map



Hartman Farms 138 kV Extension
No. 5 and No. 6 Project



Appendix B Long Term Forecast Report and PJM Solution

PUCO FORM FE-T9
AEP OHIO
SPECIFICATIONS OF PLANNED TRANSMISSION LINES

1.	LINE NAME AND NUMBER:	Cyprus - Hartman 1A
2.	POINTS OF ORIGIN AND TERMINATION	Cyprus, Customer station
3.	RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS	0.3 miles , double circuit
4.	VOLTAGE: DESIGN / OPERATE	138kV / 138 kV
5.	APPLICATION FOR CERTIFICATE:	9/7/2021
6.	CONSTRUCTION:	2022
7.	CAPITAL INVESTMENT:	\$0.96M
8.	PLANNED SUBSTATION:	Cyprus
9.	SUPPORTING STRUCTURES:	Steel
10.	PARTICIPATION WITH OTHER UTILITIES	N/A
11.	PURPOSE OF THE PLANNED TRANSMISSION LINE	Line work required to connect Cyprus station to new customer station at site
12.	CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR TERMINATION	Load out of Cyprus is unable to be served.
13.	MISCELLANEOUS:	N/A

PUCO FORM FE-T9
AEP OHIO
SPECIFICATIONS OF PLANNED TRANSMISSION LINES

1.	LINE NAME AND NUMBER:	Cyprus - Hartman 1B
2.	POINTS OF ORIGIN AND TERMINATION	Cyprus, Customer station
3.	RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS	0.3 miles , double circuit
4.	VOLTAGE: DESIGN / OPERATE	138kV / 138 kV
5.	APPLICATION FOR CERTIFICATE:	9/7/2021
6.	CONSTRUCTION:	2022
7.	CAPITAL INVESTMENT:	\$0M (customer reimbursable)
8.	PLANNED SUBSTATION:	Cyprus
9.	SUPPORTING STRUCTURES:	Steel
10.	PARTICIPATION WITH OTHER UTILITIES	N/A
11.	PURPOSE OF THE PLANNED TRANSMISSION LINE	Line work required to connect Cyprus station to new customer station at site
12.	CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR TERMINATION	Load out of Cyprus is unable to be served.
13.	MISCELLANEOUS:	N/A

AEP Transmission Zone M-3 Process Cyprus Station 138 kV

Need Number: AEP-2021-OH002

Process Stage: Solution Meeting 5/21/2021

Previously Presented: Need Meeting 01/15/2021

Supplemental Project Driver:

Customer Service

Specific Assumption Reference:

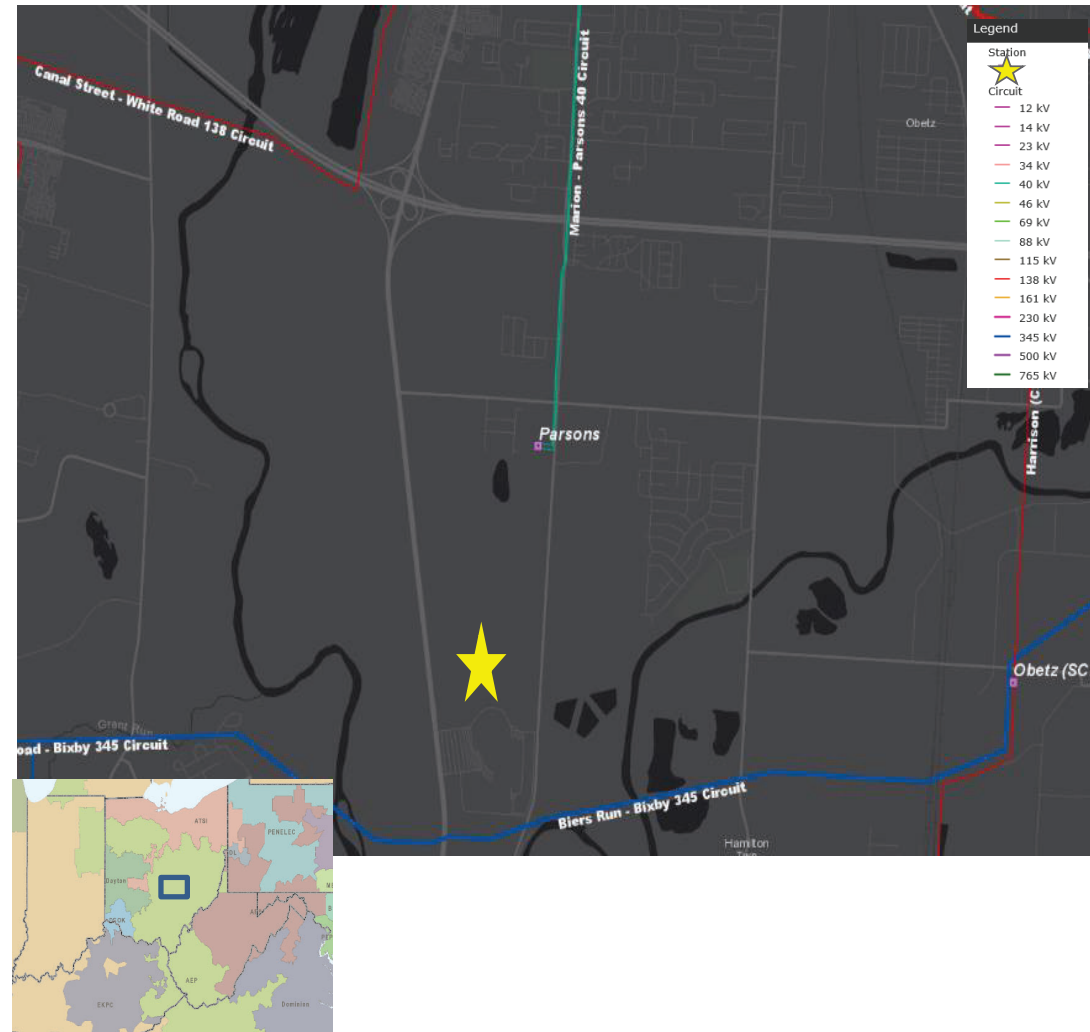
AEP Connection Requirements for the AEP Transmission System (AEP Assumptions Slide 12)

Problem Statement:

Customer Service:

- A customer has requested transmission service just south of AEP's existing Parsons Station in Lockbourne, OH.
- The customer has indicated an initial peak demand of 100 MW with an ultimate capacity of up to 675 MW at the site.

Model: 2025 RTEP





AEP Transmission Zone M-3 Process Cyprus Station 138 kV

Need Number: AEP-2021-OH002

Process Stage: Solutions Meeting 05/21/2021

Proposed Solution:

- Cyprus 138 kV Station:** Establish a greenfield ten-breaker 138kV (63 kA) laid out as breaker and a half station on property provided by the customer south of AEP's Parsons station. Install 138 kV retail metering towards Customer station. **Estimated Cost: \$ 14.22M**
- Cyprus – Cyprus (Customer) 138 kV #1:** Build ~0.3miles of double circuit 138kV line using 795 ACSR conductor. Extend fiber cable & install redundant fiber cable for relaying and communication to the customer station. One circuit will serve customer's first building, second circuit will be partially constructed to be utilized for future second building to customer's redundancy requirements. **Estimated Cost: \$ 0.96M**
- Cyprus – Cyprus (Customer) 138 kV #2:** Build ~0.3miles of double circuit 138kV line using 795 ACSR conductor. Extend fiber cable & install redundant fiber cable for relaying and communication to Customer Station. One circuit will serve customer's first building, second circuit will be partially constructed to be utilized for future second building due to customer's redundancy requirements. **Estimated Cost: \$ 0.0M (Fully Reimbursable)**
- White Road 138 kV:** Upgrade line to fiber relaying and remote end work. **Estimated Cost: \$ 0.46M**
- Canal Street 138 kV:** Upgrade line to fiber relaying and remote end work. **Estimated Cost: \$ 0.53M**

Total Estimated Cost: \$ 16.17M

Ancillary Benefits: The scope of work associated with s2342 establishes the 138 kV lines from Canal Street and White Road to feed Parsons station. This project will tap the new lines to provide service to the customer and then continue on to feed Parsons station as proposed in s2342. AEP will only build the site out to serve the initial 100 MW. Any future load growth and required upgrades will be developed as agreements are signed by the customer to expand their operations. Further, AEP is investigating any potential cost savings by relocating the Parsons station site to be included in the Cyprus construction. Any changes in scope to s2342 that results from this will be re-presented.

Alternatives Considered:

Constructing and operating Cyprus station initially as a ring laid out as a breaker and a half configuration was considered, but not chosen after taking into account the customer's anticipated build out schedule. There would have been approximately \$1M in incremental costs to convert the station from ring to breaker and a half as part of the second build out. In addition to the incremental cost, the conversion would have exposed the customer served out of Cyprus along with the customers served from Parsons to extended periods of radial service during construction due to the required physical layout of the station as an initial ring bus. AEP Ohio has limited to zero ability to pick up the ~3,700 distribution customers out Parsons in the event of an outage of the station.

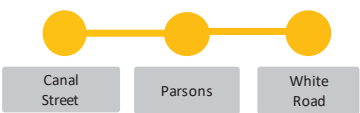
Projected In-Service: 12/1/2022 (07/31/2022 for customer portions)

Project Status: Scoping

Model: RTEP 2025

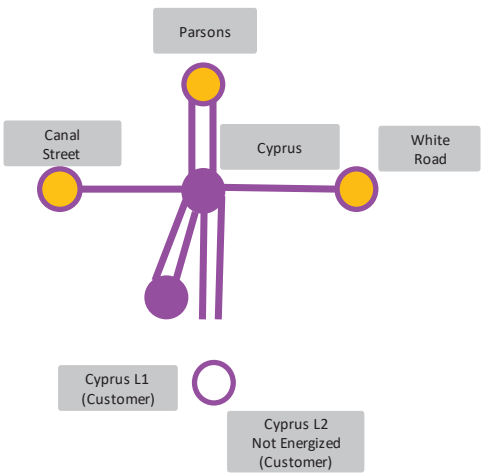
Bubble Diagram

Existing:



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

Proposed:



Appendix C Agency Correspondence



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

September 1, 2021

Phil Renner
WSP USA
312 Elm Street
Suite 2500
Cincinnati, Ohio 45202

Re: 21-0654; Cyprus-Customer 138 kV Transmission Line Project

Project: The proposed project involves the involves construction of the Cyprus-Customer 138 kV Transmission Line.

Location: The proposed project is located in Hamilton Township, Franklin County, Ohio.

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

Natural Heritage Database: The Natural Heritage Database has no records at or within a one-mile radius of the project area.

A review of the Ohio Natural Heritage Database indicates there are no other records of state endangered or threatened plants or animals within the project area. There are also no records of state potentially threatened plants, special interest or species of concern animals, or any federally listed species. In addition, we are unaware of any 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 the project area. The review was performed on the project area you specified in your request as well as an additional one-mile radius. 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. Although all types of plant communities have been surveyed, we only maintain records on the highest quality areas.

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 project is within the vicinity of records for the little brown bat (*Myotis lucifugus*), a state endangered species. Because presence of state endangered bat species has been established in the area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. However, limited summer tree cutting inside this buffer may be acceptable after further consultation with DOW (contact Erin Hazelton at Erin.hazelton@dnr.ohio.gov).

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

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

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

Federally Endangered

purple cat's paw (*Epioblasma o. obliquata*)
clubshell (*Pleurobema clava*)
northern riffleshell (*Epioblasma torulosa rangiana*)
rayed bean (*Villosa fabalis*)
snuffbox (*Epioblasma triquetra*)

Federally Threatened

rabbitsfoot (*Quadrula cylindrica cylindrica*)

State Endangered

elephant-ear (*Elliptio crassidens crassidens*)
Long solid (*Fusconaia maculata maculate*)
Ohio pigtoe (*Pleurobema cordatum*)
pocketbook (*Lampsilis ovata*)
washboard (*Megalonaias nervosa*)

State Threatened

black sandshell (*Ligumia recta*)
fawnsfoot (*Truncilla donaciformis*)
pondhorn (*Unio merus tetralasmus*)
threehorn wartyback (*Obliquaria reflexa*)

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

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

Federally Endangered

Scioto madtom (*Noturus trautmani*)

State Endangered

goldeye (*Hiodon alosoides*)

Iowa darter (*Etheostoma exile*)

popeye shiner (*Notropis ariommus*)

northern brook lamprey (*Ichthyomyzon fossor*)

spotted darter (*Etheostoma maculatum*)

shortnose gar (*Lepisosteus platostomus*)

tonguetied minnow (*Exoglossum laurae*)

State Threatened

lake chubsucker (*Erimyzon sucetta*)

paddlefish (*Polyodon spathula*)

Tippecanoe darter (*Etheostoma tippecanoe*)

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

The project is within the range of the American bittern (*Botaurus lentiginosus*), a state endangered bird. Nesting bitterns prefer large undisturbed wetlands that have scattered small pools amongst dense vegetation. They occasionally occupy bogs, large wet meadows, and dense shrubby swamps. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, the project is not likely to impact this species.

The project is within the range of the black-crowned night-heron (*Nycticorax nycticorax*), a state-threatened bird. Night-herons are so named because they are nocturnal, conducting most of their foraging in the evening hours or at night, and roost in trees near wetlands and waterbodies during the day. Night herons are migratory and are typically found in Ohio from April 1 through December 1 but can be found in more urbanized areas with reliable food sources year-round. Black-crowned night-herons primarily forage in wetlands and other shallow aquatic habitats, and roost in trees nearby. These night-herons nest in small trees, saplings, shrubs, or sometimes on the ground, near bodies of water and wetlands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the cattle egret (*Bubulcus ibis*), a state endangered bird. Cattle egrets are not strictly wetland birds. They often forage in dry pastures and fields. Egrets nest in colonies and will build a nest out of sticks and other materials wherever it can be supported. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 15 through August 15. If no wetland habitat will be impacted, the project is not likely to impact this species.

The project is within the range of the lark sparrow (*Chondestes grammacus*), a state endangered bird. This sparrow nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. These summer residents normally migrate out of Ohio shortly after their young fledge or leave the nest. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the least bittern (*Ixobrychus exilis*), a state threatened bird. This secretive marsh species prefers dense emergent wetlands with thick stands of cattails, sedges, sawgrass or other semiaquatic vegetation interspersed with woody vegetation and open water. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

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

The project is within the range of the sandhill crane (*Grus canadensis*), a state threatened species. Sandhill cranes are primarily a wetland-dependent species. On their wintering grounds, they will utilize agricultural fields; however, they roost in shallow, standing water or moist bottomlands. On breeding grounds they require a rather large tract of wet meadow, shallow marsh, or bog for nesting. If grassland, prairie, or wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 through August 31. If this habitat will not be impacted, this project is not likely to have an impact on this species.

The project is within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird. Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

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

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

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

http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community%20Contact%20List_8_16.pdf

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

Mike Pettegrew
Environmental Services Administrator (Acting)

Renner, Philip

From: Ohio, FW3 <ohio@fws.gov>
Sent: Monday, July 19, 2021 3:36 PM
To: Renner, Philip
Cc: nathan.reardon@dnr.state.oh.us; Parsons, Kate; Thomayer, Matthew; ajtoohey@aep.com
Subject: AEP's Cyprus-Customer 138 kV Transmission Line Project, Franklin County, Ohio

Follow Up Flag: Follow up
Flag Status: Flagged



UNITED STATES DEPARTMENT OF THE INTERIOR
U.S. Fish and Wildlife Service
Ecological Services Office
4625 Morse Road, Suite 104
Columbus, Ohio 43230
(614) 416-8993 / Fax (614) 416-8994



TAILS# 03E15000-2021-TA-1709

Dear Mr. Renner,

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

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

Seasonal Tree Clearing for Federally Listed Bat Species: Should the proposed project site contain trees ≥ 3 inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees ≥ 3 inches dbh cannot be avoided, we recommend removal of any trees ≥ 3 inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule

(see <http://www.fws.gov/midwest/endangered/mammals/nleb/index.html>), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is recommended where Indiana bats are assumed present.

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

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

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

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

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

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

Sincerely,

A handwritten signature in blue ink, appearing to read "Patrice M. Ashfield". The signature is fluid and cursive, with a large initial "P" and a long, sweeping underline.

Patrice M. Ashfield
Field Office Supervisor

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

Appendix D Wetland Delineation Report



CYPRUS EXTENSION 138 KV TRANSMISSION LINE PROJECT ENVIRONMENTAL SURVEY REPORT



PROJECT NO.: LP2043151.101
DATE: OCTOBER 2021

AEP Transmission
8600 Smith's Mill Road
New Albany, OH 43054



An AEP Company

BOUNDLESS ENERGY™

WSP USA
312 ELM STREET, SUITE 2500
CINCINNATI, OH 45202



WSP.COM



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1 INTRODUCTION

On behalf of American Electric Power (AEP) Ohio Transmission Company, Inc. (AEP Ohio Transco), WSP USA (WSP) conducted environmental surveys for the proposed Cyprus Extension 138 kV Transmission Line Project (“Project”), located in Hamilton Township, Franklin County, Ohio. The environmental survey included a wetland and water resource delineation and characterization of potential habitat for state and federally listed species. The wetland delineation was performed to determine whether wetlands and streams are present within the vicinity of the Project that would meet the definition of Waters of the United States (WoUS) or be subject to regulations implemented by the Ohio Environmental Protection Agency (OEPA), and to document their extents and current conditions if present. The wetland delineation was performed by individuals trained in the three-parameter methodology (hydrophytic vegetation, wetland hydrology, and hydric soils) adopted by the U.S. Army Corps of Engineers (USACE) as outlined in the USACE *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)* (USACE, 2010) and in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987).

The report presents the results of the ecological considerations and review of the site’s existing and reasonably foreseeable site conditions at the time of the environmental surveys. The results cannot apply to site changes occurring after the survey which WSP has not had the opportunity to review. During the course of any survey, site conditions may change over time due to human and/or natural causes; as such, the results presented in this report may be invalidated, either wholly or in part, by changes beyond the control of WSP.



2 BACKGROUND INFORMATION

2.1 PROJECT AREA

The Project is located within Hamilton Township, Franklin County, Ohio. The Project Environmental Survey Corridor (ESC) originates at the future location of the proposed Cyprus Substation (39.856100°, -82.991000°), west of Parsons Avenue and heads northwest to the existing Beatty – Canal Street 138 kV Transmission Line (39.875400°, -83.008200°), south of I-270 and west of US (Figure 1, Appendix A). The approximately 78.5-acre ESC is within the Commercial Point, Lockbourne, and Southwest Columbus, Ohio U.S. Geological Survey (USGS) 7.5-minute topographic map quadrangle boundaries. Table 2-1 provides an overview of the project location.

TABLE 2-1: GENERAL PROJECT INFORMATION

COUNTY:	Franklin
TOWNSHIP:	Hamilton
COORDINATES:	Northern Terminus: 39.875400°, -83.008200° Southern Terminus: 39.856100°, -82.991000°
USGS QUADRANGLE:	Commercial Point, Lockbourne, and Southwest Columbus, Ohio
ENVIRONMENTAL SURVEY AREA SIZE (ac.):	78.5
ELEVATION RANGE (ft. above sea level):	705 - 730
8-DIGIT HYDROLOGIC UNIT CODE:	05060001
12-DIGIT HYDROLOGIC UNIT CODE(S) :	05060001-23-03 05060001-23-02
DATE(S) OF SURVEY :	April 7, April 29, and September 17, 2021

2.1.1 DRAINAGE BASINS

All streams in the vicinity of the ESC drain to the Scioto River, a traditionally navigable waterway (TNW). The ESC is located entirely within the Upper Scioto drainage basin, hydrologic unit code (HUC 05060001). The ESC lies within two 12-digit HUCs, as outlined in Table 2-2 (USDA, 2019). The OEPA *401 Water Quality Certification for the Nationwide Permits Web Mapping Application* indicates that field-assessed streams within all 12-digit sub-watersheds are “ineligible”; this indicates that stream impacts within the ESC are eligible for coverage under an Individual Section 401 Water Quality Certification (WQC) for the USACE Nationwide Permits (OEPA, 2020).



TABLE 2-2: 12-DIGIT HUC'S CROSSED BY THE PROJECT

8-DIGIT HUC CODE ¹	8-DIGIT HUC CODE NAME ¹	12-DIGIT HUC CODE ¹	12-DIGIT HUC NAME ¹	OHIO EPA SECTION 401 ELIGIBILITY ²
05060001	Upper Scioto	05060001-23-03	Grant Run-Scioto River	Ineligible
		05060001-23-02	Kian Run-Scioto River	Ineligible

¹Source: USDA, 2019

²Source: OEPA, 2020



3 METHODOLOGY

On April 7, April 29, and September 17, 2021, WSP ecologists traversed the approximately 78.5-acre ESC to conduct a wetland and waters delineation. The physical boundaries of aquatic resources were recorded using a Trimble Global Positioning System (GPS) unit rated for sub-decimeter accuracy. The GPS data was then geo-corrected using Trimble GPS Pathfinder Office software (version 5.60) and reviewed for quality control.

Prior to conducting field surveys, WSP ecologists completed a desktop review by analyzing several federal and state documents for the presence of wetland and streams. This review included Natural Resources Conservation Service (NRCS) soil survey data, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps of Ohio, USGS 7.5-minute topographic maps, and USGS National Hydrography Dataset (NHD) stream and river data as an exercise to identify the occurrence and location of potential wetlands and streams.

3.1 WETLAND AND STREAM DELINEATION

3.1.1 WETLAND DELINEATION

The USACE and the U.S. Environmental Protection Agency (USEPA) define wetlands as areas inundated or saturated by surface water or groundwater 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 (33 CFR, Part 328.3).

Wetlands were delineated according to Section 404 of the Clean Water Act, Technical Report Y-87-1 *Corps of Engineers Wetlands Delineation Manual ('87 Manual)* (Environmental Laboratory, 1987), and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region, (Version 2.0) (Regional Supplement)* (USACE, 2010). Representative data points were collected for wetlands and corresponding, adjacent upland areas. Wetland data was recorded on the USACE *Regional Supplement Wetland Determination Data Forms*.

Wetland vegetation communities were classified according to the *Classification of Wetlands and Deepwater Habitats of the United States*, commonly referred to as the Cowardin Classification System (Cowardin et al., 1979). Wetlands within the ESC were assessed using the OEPA *Ohio Rapid Assessment Method for Wetlands v. 5.0 (ORAM)* to determine the ecological quality and level of disturbance (Mack, 2001).

Limits of federal jurisdiction of wetlands and other waters have been preliminarily determined based on the 2020 *Navigable Waters Protection Rule*. Wetlands and ephemeral streams that do not fall under the jurisdiction of the USACE fall under the regulatory authority of the OEPA. Final determination of jurisdictional status is made by the USACE.

3.1.2 STREAM DELINEATION AND ASSESSMENT

Streams were identified by the presence of a defined bed and bank, and evidence of an ordinary high water mark (OHWM). The OHWM is defined in the USACE *Regulatory Guidance Letter No. 05-05* (USACE, 2005). Generally, the OHWM is identified by a clearly defined, natural line along the stream bank created by fluctuations and flow of water; this may include changes in contours, substrate, vegetation, and debris (USACE, 2005).



Stream assessments were conducted using the methods described in the OEPA's Methods for Assessing Habitat in Flowing Waters: Using OEPA's *Qualitative Habitat Evaluation Index* (Rankin, 2006) and *Field Evaluation Manual for Ohio's Primary Headwater Habitat Streams, Version 3* (Davic, 2012).

3.1.3 PRIOR DELINEATION AND PERMITTING EFFORTS

Prior to WSP's environmental survey, EMHT conducted a wetland delineation encompassing a portion of the ESC to determine the boundaries of wetlands and waterbodies and to determine jurisdiction, according to the United States Army Corps of Engineers (USACE) and the Ohio Environmental Protection Agency (OEPA). Their findings are presented below and included in the results section of this report as well.

A USACE approved jurisdictional determination (LRH-2020-00723-SCR), dated February 17, 2021 indicated that the USACE has no regulatory authority over the ponds and wetlands delineated in the vicinity of the ESC. As a result, these wetlands fall under the regulatory authority of the OEPA.

An Isolated Wetland and Ephemeral Stream General Permit Pre-Activity Notice was submitted to the OEPA on April 9, 2021, for impacts to 0.48 acres of non-forested Category 1 wetlands. Authorization of these activities was received from the OEPA (Ohio EPA ID No. 217304W) on April 21, 2021.

4 RESULTS

WSP ecologists surveyed the Project on April 7, April 29, and September 17, 2021 by walking the approximately 78.5-acre ESC and evaluating for wetlands and other WoUS. WSP identified one wetland, two streams, and one pond within the ESC. The identified wetland and pond correspond to one isolated wetland and one pond previously delineated by EMHT. One additional isolated wetland was identified by EMHT, within the ESC. The identified stream, isolated wetlands, and pond identified within the ESC by EMHT are depicted on the Delineated Features Map (Figure 3, Appendix A).

4.1 DESKTOP REVIEW

4.1.1 SOILS EVALUATION

According to the NRCS Soil Data for Franklin County, Ohio, there are 17 soil map units shown within the ESC, as presented in Table 4-1. The soils observed by WSP ecologists during the reconnaissance of the ESC were consistent with the NRCS soil survey mapping.

TABLE 4-1: SOIL UNITS MAPPED WITHIN THE ESC

SOIL UNIT SYMBOL	SOIL UNIT NAME	PERCENT HYDRIC	HYDRIC RATING ¹	AREA WITHIN ESC (ac.)
Cc	Carlisle muck	95	Predominantly Hydric	0.9
ElB	Eldean silt loam, 2 to 6 percent slopes	0	Non-Hydric	4.0
ElC2	Eldean silt loam, 6 to 12 percent slopes, eroded	0	Non-Hydric	2.3
ElD2	Eldean silt loam, 12 to 18 percent slopes, eroded	0	Non-Hydric	10.7
KeB	Kendallville silt loam, 2 to 6 percent slopes	0	Non-Hydric	1.6
KeC2	Kendallville silt loam, 6 to 12 percent slopes, eroded	0	Non-Hydric	10.7
Mh	Medway silt loam, occasionally flooded	5	Predominantly Non-Hydric	1.9
MkB	Miamian silt loam, 2 to 6 percent slopes	5	Predominantly Non-Hydric	6.4
MID2	Miamian silty clay loam, 12 to 18 percent slopes, eroded	0	Non-Hydric	0.7
Mnl3A	Minster silty clay loam, till substratum, 0 to 1 percent slopes	93	Predominantly Hydric	2.1
OcA	Ockley silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes	0	Non-Hydric	6.1
OcB	Ockley silt loam, Southern Ohio Till Plain, 2 to 6 percent slopes	0	Non-Hydric	17.7
OcC2	Ockley silt loam, 6 to 12 percent slopes, eroded	0	Non-Hydric	1.0
SlA	Sleeth silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes	5	Predominantly Non-Hydric	1.5

**TABLE 4-1: SOIL UNITS MAPPED WITHIN THE ESC**

SOIL UNIT SYMBOL	SOIL UNIT NAME	PERCENT HYDRIC	HYDRIC RATING ¹	AREA WITHIN ESC (ac.)
So	Sloan silt loam, Columbus Lowland, 0 to 2 percent slopes, frequently flooded	85	Predominately Hydric	0.4
Ut	Udorthents-Urban land complex, gently rolling	0	Non-Hydric	1.1
WeB	Wea silt loam, 2 to 6 percent slopes	0	Non-Hydric	9.5
Total Area of Non-Hydric Soils				65.4
Total Area of Predominantly Non-Hydric Soils				9.70
Total Area of Predominantly Hydric Soils				3.40

¹Non-Hydric = 0% hydric soil component; Predominantly Non-Hydric = 1-32%; Partially Hydric =33-65%; Predominantly Hydric = 66-99%; and All Hydric = 100%.
Source: Soil Survey Staff, NRCS. Web Soil Survey.

4.1.2 NATIONAL WETLAND INVENTORY REVIEW

According to the NWI maps of the Commercial Point, Lockbourne, and Southwest Columbus, Ohio quadrangle boundaries, there are two mapped NWI feature within the ESC. The identified NWI features within the ESC, are presented in Table 4-2. Locations of the NWI mapped wetlands are shown on Figure 2 (Appendix A).

TABLE 4-2: NWI FEATURES MAPPED WITHIN THE ESC

NWI CODE	NWI DESCRIPTION	MAP PAGE	ASSOCIATED DELINEATED RESOURCE
L1UBH	Lacustrine Limnetic, Unconsolidated Bottom, Permanently Flooded	Page 2 of 7	No Identified Resource
PUBGx	Palustrine, Unconsolidated Bottom, Intermittently Flooded, Excavated	Page 7 of 7	Pond 1 and Wetland A

Source: USFWS National Wetlands Inventory Map.

4.1.3 FEMA FLOODPLAIN REVIEW

According to Federal Emergency Management Agency (FEMA) National Flood Hazard Layer the 100-year floodplain of the Scioto River crosses the within the ESC. The boundary of the 100-year floodplain, in relation to the ESC is shown on Figure 2 (Appendix A).

4.2 DELINEATED WETLANDS

During environmental surveys of the ESC, the WSP ecologists identified one wetland which corresponded to Wetland A, previously delineated by EMHT. Wetland A is an isolated palustrine forested wetland (PFO) and is partially located within the ESC, as shown on Figure 3, Appendix A. One isolated palustrine emergent wetland (PEM; Wetland C), previously delineated by EMHT, is located within the ESC, as shown on Figure 3, Appendix A. Table 4-3 provides specific wetland habitat types, acreages within the ESC, ORAM category, as well as information regarding



jurisdictional status. USACE wetland determination form indicating a lack of other wetlands on site is provided in Appendix B. Representative photographs of the upland data point were taken and are provided in Appendix D.

An approved Jurisdictional Determination (LRH-2020-00723) was received by EMHT for the larger Cyprus Project from the USACE for the delineated isolated wetland. AEP's customer project-related impacts to Waters of the U.S., have been submitted, reviewed and approved by the USACE and OEPA. The results presented in this report are not construed as a jurisdictional determination, however the approved Jurisdictional Determination (JD) by the USACE can be found in Appendix E.

Additionally, an approved Isolated Wetland General Permit Pre-Activity Notice (PAN) (Ohio EPA ID No.: 217304W) has been received by AEP's customer from OEPA for impacts to isolated Wetland C. The OEPA has reviewed and approved the Pre-Activity Notice for impacts to 0.48 acres of non-forested Category 1 wetlands (this includes Wetland C and other wetlands on the customer's property). The approved Isolated Wetland General Permit Pre-Activity Notice (PAN) by the OEPA can be found in Appendix F.

TABLE 4-3: WETLANDS DELINEATED WITHIN THE ESC

WETLAND ID	LOCATION		COWARDIN CLASS. ¹	DELINEATED AREA ² (acres)	ORAM		HYDROLOGIC CONNECTION	PROXIMAL WATERBODY
	LAT.	LON.			SCORE ³	CATEGORY		
Wetland A	39.856514	-82.993648	PFO	0.50	N/A	2	Isolated	Pond 1 (Non-JD)
Wetland C	39.85652	-82.99245	PEM	0.001	N/A	1	Isolated	N/A
Sum of PEM Wetland Areas				0.001				
Sum of PSS Wetland Areas				0.00				
Sum of PFO Wetland Areas				0.50				
Total Wetland Area				0.501				

¹PEM = palustrine emergent, PSS = palustrine scrub/shrub. PFO = palustrine forested;

²Acreages reflect the area delineated within the ESC and are approximate based on GPS data and are rounded to the nearest 0.001-acre.

³ORAM scores were not provided for wetlands delineated by EMHT.

4.3 STREAMS AND RIVERS

During the environmental survey, the WSP ecologists identified two streams within the ESC. One of the two streams was identified as perennial (Stream BCS-1), and was actively flowing during the April 7, April 29 and September 17, 2021, field investigations. A second stream (Stream BCS-2) was identified as intermittent. Stream BCS-1 was assessed using the QHEI methodology and Stream BCS-2 was assessed using the HHEI methodology. No streams were previously identified within the ESC by EMHT.

Both identified streams appear to be jurisdictional, since they are tributaries to the Scioto River, a Traditionally Navigable Waterway. It is noted that the USACE will make the final determination of jurisdictional status.

Locations of the identified streams within the ESC are shown in Figure 3 (Appendix A). Table 4-4 provides waterbody name, flow regime, stream length within the ESC, field evaluation data and Ohio EPA Section 401 eligibility. Completed OEPA HHEI/QHEI forms are provided in Appendix C. Representative photographs were taken of each stream during the field survey and are provided in Appendix D.

In addition to the jurisdictional streams identified, all swales, ditches, and other surface drainages within the study area were also evaluated for consideration as jurisdictional Waters of the U.S. with respect to the Clean Water Act.



Jurisdictional ditches must meet the definition of tributary, have an OHWM, and flow directly or indirectly through another water to a TNW. Multiple roadside ditches, erosional features, and swales were observed throughout the study area, however, none of the identified ditches or drainages would be considered jurisdictional within the study area. These features were excavated in upland soils to convey upland drainage and had no defined bed and bank or flow regime to constitute a Waters of the U.S. designation. Locations of identified non-jurisdictional drainages identified within the ESC are shown in Figure 3, Appendix A.

TABLE 4-4: STREAMS MAPPED WITHIN THE ESC

STREAM ID	LOCATION		STREAM NAME	STREAM TYPE	DELINEATED LENGTH (FEET)	BANKFULL WIDTH (FEET)	OHWM WIDTH (FEET)	FIELD EVALUATION			OHIO EPA 401 ELIGIBILITY
	LAT	LONG						METHOD	SCORE	CLASS	
Stream BCS-1	39.87587	-83.00911	UNT to Scioto River	Perennial	529	60	8	QHEI	18	Very Poor	Ineligible
Stream BCS-2	39.87675	-83.00782	UNT to Scioto River	Intermittent	98	20	7	HHEI	45	Modified Small Drainage Warmwater Stream	Ineligible

Notes: UNT = unnamed tributary

Lengths are approximate based on GPS data and are rounded to the nearest foot.

4.4 PONDS AND OPEN WATER

During the environmental survey, the WSP ecologist identified one pond which corresponded to Pond 1, previously delineated by EMHT. Pond 1 is partially located within the ESC, as shown on Figure 3, Appendix A. Table 4-5 provides specific acreage within the ESC, location, as well as information regarding jurisdictional status. Representative photographs were taken within the ESC and are provided in Appendix D.

TABLE 4-5: PONDS MAPPED WITHIN THE ESC

STREAM ID	LOCATION		DELINEATED AREA (acres) ¹	WOUS
	LATITUDE	LONGITUDE		
Pond 1	39.85737	-82.99474	2.4	No

¹ Acreages reflect the area delineated within the ESC and are approximate based on GPS data and are rounded to the nearest 0.01-acre.

4.5 VEGETATIVE COMMUNITIES

The WSP ecologists conducted a general habitat survey in conjunction with the stream and wetland field surveys. A variety of woody and herbaceous habitats, as described below in Table 4-6, are present within the ESC. A breakdown of vegetated land cover is provided, overlain on aerial photography in Figure 4 (Appendix A).

**TABLE 4-6: VEGETATIVE COMMUNITIES WITHIN THE ESC**

VEGETATIVE COMMUNITY	DESCRIPTION	ACREAGE WITHIN THE ESC	PERCENTAGE OF ESC
Agricultural Land	Agricultural land primarily consisting of soybean and corn fields were present within the ESC.	30.53	38.89%
Developed, High Intensity	These areas consist of developed residential, industrial, and commercial land uses, including roads, buildings, and parking lots. These areas are generally devoid of significant vegetation.	11.39	14.51%
Developed, Open Space	Developed areas, including residential and commercial properties, were observed within the ESC. These landscaped areas are frequently mowed or maintained grasses and forbs.	25.44	32.41%
Scrub/Shrub	Scrub/shrub habitats represent the successional stage between old field and second growth forest, and often emerge in recently harvested forests responding to the lack of overhead canopy.	7.00	8.91%
Successional Hardwood Woodland ¹	Successional hardwood woodlands were present within the ESC. Dominant woody species within these areas include red maple (<i>Acer rubrum</i>) and shagbark hickory (<i>Carya ovata</i>). These areas were in the process of being cleared at the time of the environmental survey.	1.19	1.51%
Wetlands and Ponds	Wetlands and ponds delineated within the ESC boundaries.	2.95	3.76%
Total		78.5	100.00%

¹Tree clearing was in progress throughout the ESC at the time of the environmental survey.

4.6 THREATENED AND ENDANGERED SPECIES COORDINATION

The first phase of the evaluation involved a review of online lists of federal and state species of concern. In addition to the review of available literature and a request for Environmental Review was submitted to the Ohio Department of Natural Resources (ODNR). A coordination letter was also submitted to the USFWS soliciting comments on the Project. Detailed descriptions of the agency coordination are provided in proceeding sections. Additionally, an environmental review request was previously submitted to the ODNR by EMHT on behalf of their client for a portion of the ESC. The previous ODNR Environmental Review (20-863), was received by EMHT on October 28, 2020. Correspondence from the USFWS and ODNR is included as Appendix G.

4.6.1 USFWS COORDINATION

A request for review was submitted to the USFWS on July 7, 2021. In an email dated July 19, 2021 the USFWS provided comments on the Project with regard to federally-listed threatened and endangered species within the Project



vicinity. The USFWS indicated that there are no federal wildlife refuges, wilderness areas, or critical habitat within the vicinity of the Project. Comments from USFWS regarding protected species are provided in Table 4-7.

4.6.2 ODNR COORDINATION

A request for Environmental Review was submitted to the ODNR on July 7, 2021. The ODNR Environmental Review response, dated September 1, 2021 included comments from the Ohio Natural Heritage Database Program, Division of Wildlife (DOW), and Division of Water Resources. A review of Natural Heritage Database identified records of five state- and/or federally-listed mussel species [Black sandshell (*Ligumia recta*), Threehorn wartyback (*Obliquaria reflexa*), Clubshell (*Pleurobema clava*), Fawnsfoot (*Truncilla donaciformis*), and Deertoe (*Truncilla truncata*)], one state-listed fish species [Tippecanoe darter (*Etheostoma tippecanoe*)], one state-listed bird species [(Lark sparrow (*Chondestes grammacus*)], and one natural area (Scioto Grove Metro Park – Columbus & Franklin Co. Metro Parks). The identified species and natural areas are not located within the Project ESA, and no potential habitat of the aforementioned species was identified. Therefore, impacts to these species or their habitats are not anticipated to occur. However, the ranges of multiple species were within a one-mile radius of the ESA Using this as guidance, WSP has provided observations of threatened and endangered species habitat within the vicinity of the ESC in Table 4-7. The ODNR Environmental Review has been included in Appendix G.

TABLE 4-7. LISTED SPECIES COMMENTED ON BY ODNR AND USFWS

COMMON NAME (SCIENTIFIC NAME)	STATE STATUS	FEDERAL STATUS	HABITAT DESCRIPTION	POTENTIAL HABITAT OBSERVED IN ESC	AGENCY COMMENT	IMPACT ASSESSMENT
Mammals						
Indiana bat (<i>Myotis sodalis</i>)	Endangered	Endangered	Winter hibernacula are provided by caves and mines. Summer roost habitat typically includes live or dead trees with exfoliating bark, crevices, or cavities that can be used for roosting. Open sub-canopy areas and flight corridors are important to allow maneuvering during foraging. Proximity to water sources provides a greater density of insect prey.	No	Due to the project type, size, and location, in addition to the seasonal tree clearing dates (October 1 through March 31), there are no anticipated impacts to the Indiana bat.	Potentially suitable habitat may have been provided by forested areas within the ESC. However, forested areas visible on aerial imagery had been cleared prior to the time of the environmental. No potential hibernacula were identified within 0.5-miles of the ESC.
northern long-eared bat (<i>Myotis septentrionalis</i>)	Threatened	Threatened				
little brown bat (<i>Myotis lucifugus</i>)	Endangered	Not Listed				
tri-colored bat (<i>Perimyotis subflavus</i>)	Endangered	Not Listed				
Birds						
American bittern (<i>Botaurus lentiginosus</i>)	Endangered	Not Listed	Large undisturbed wetlands with scattered small pools and dense vegetation. They occasionally occupy bogs,	No	ODNR has recommended that potential nesting habitat be avoided during the May 1 st	Potentially suitable habitat was not identified within the Project footprint.



TABLE 4-7. LISTED SPECIES COMMENTED ON BY ODNR AND USFWS

COMMON NAME (SCIENTIFIC NAME)	STATE STATUS	FEDERAL STATUS	HABITAT DESCRIPTION	POTENTIAL HABITAT OBSERVED IN ESC	AGENCY COMMENT	IMPACT ASSESSMENT
			large wet meadows, and dense shrubby swamps.		to July 31 st nesting period.	
black-crowned night-heron (<i>Nycticorax nycticorax</i>)	Threatened	Not Listed	Nest in small trees, saplings, shrubs, or sometimes on the ground, near bodies of water and wetlands.	No	ODNR has recommended that potential nesting habitat be avoided during the May 1 st to July 31 st nesting period.	Potentially suitable habitat was not identified within the Project footprint.
upland sandpiper (<i>Bartramia longicauda</i>)	Endangered	Not Listed	Nesting habitat is provided in grasslands, pastures, and old-field areas.	No	ODNR has recommended that potential nesting habitat be avoided during the April 15 th to July 31 st nesting period.	Potentially suitable habitat was not identified within the Project footprint.
cattle egret (<i>Bubulcus ibis</i>)	Endangered	Not Listed	Not strictly wetland birds. They often forage in dry pastures and fields. Egrets nest in colonies and will build a nest out of sticks and other materials wherever it can be supported.	No	ODNR has recommended that potential nesting habitat be avoided during the May 15 th to August 15 th nesting period.	Potentially suitable habitat was not identified within the Project footprint.
lark sparrow (<i>Chondestes grammacus</i>)	Endangered	Not Listed	Nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. In the Oak Openings area west of Toledo, lark sparrows occupy open grass and shrubby fields along sandy beach ridges.	No	ODNR has recommended that potential nesting habitat be avoided during the May 1 st to June 30 th nesting period.	Potentially suitable habitat was not identified within the Project footprint.
least bittern (<i>Ixobrychus exilis</i>)	Threatened	Not Listed	Prefers dense emergent wetlands with thick stands of herbaceous vegetation interspersed with woody vegetation and open water.	No	ODNR has recommended that potential nesting habitat be avoided during the May 1 st to July 31 st nesting period.	Potentially suitable habitat was not identified within the Project footprint.
northern harrier (<i>Circus hudsonis</i>)	Endangered	Not Listed	Nesters are much rarer, although they occasionally breed in large marshes and grasslands. The female builds a nest out of sticks on the ground, often on top of a	No	ODNR has recommended that potential nesting habitat be avoided during the May	Potentially suitable habitat was not identified within the ESC.



TABLE 4-7. LISTED SPECIES COMMENTED ON BY ODNR AND USFWS

COMMON NAME (SCIENTIFIC NAME)	STATE STATUS	FEDERAL STATUS	HABITAT DESCRIPTION	POTENTIAL HABITAT OBSERVED IN ESC	AGENCY COMMENT	IMPACT ASSESSMENT
			mound. Harriers hunt over grasslands.		15 th to August 1 st nesting period.	
sandhill crane (<i>Grus canadensis</i>)	Threatened	Not Listed	wetland-dependent species that roosts in shallow, standing water or moist bottomlands. On breeding grounds, they require a rather large tract of wet meadow, shallow marsh, or bog for nesting.	No	ODNR has recommended that potential nesting habitat be avoided during the April 1 st to September 1 st nesting period.	Potentially suitable habitat was not identified within the ESC.
Mussels						
purple cat's paw (<i>Epioblasma o. obliquata</i>)	Endangered	Endangered	Inhabits large rivers with sandy gravel substrates. It occurs in water of shallow to moderate depth with a swift current.	No	In-water work in streams with a drainage area >5 mi ² at the point of impact will require reconnaissance and/or survey efforts per the Ohio Mussel Survey Protocol.	In-water work is not anticipated; therefore, project is not likely to impact this or other aquatic species.
clubshell (<i>Pleurobema clava</i>)	Endangered	Endangered	Habitat is typically provided by streams and small rivers with well-oxygenated riffles and sand and gravel substrates.	No		
northern riffleshell (<i>Epioblasma torulosa rangiana</i>)	Endangered	Endangered	Habitat is typically provided by large streams and small rivers in firm sand of riffle areas.	No		
rayed bean (<i>Villosa fabalis</i>)	Endangered	Endangered	Habitat is typically provided by smaller, headwater creeks, but they are sometimes found in large rivers.	No		
snuffbox (<i>Epioblasma triquetra</i>)	Endangered	Endangered	Typically found in small to medium-sized creeks and some larger rivers, in areas with a swift current.	No		
rabbitsfoot (<i>Quadrula cylindrica cylindrica</i>)	Threatened	Threatened	Typically, occurs in a variety of flowing water habitats including small to medium-sized streams and some larger navigable rivers. It usually occurs in shallow areas along the bank.	No		



TABLE 4-7. LISTED SPECIES COMMENTED ON BY ODNR AND USFWS

COMMON NAME (SCIENTIFIC NAME)	STATE STATUS	FEDERAL STATUS	HABITAT DESCRIPTION	POTENTIAL HABITAT OBSERVED IN ESC	AGENCY COMMENT	IMPACT ASSESSMENT
elephant-ear (<i>Elliptio crassidens crassidens</i>)	Endangered	Not Listed	Primarily inhabits large rivers in mud, sand or fine gravel.	No	In-water work in streams with a drainage area >5 mi ² at the point of impact will require reconnaissance and/or survey efforts per the Ohio Mussel Survey Protocol.	In-water work is not anticipated; therefore, project is not likely to impact this or other aquatic species.
long solid (<i>Fusconaia maculata maculate</i>)	Endangered	Not Listed	Typically, found in small to large rivers in gravel with a strong current.	No		
Ohio pigtoe (<i>Pleurobema cordatum</i>)	Endangered	Not Listed	Commonly found in strong currents on substrates of sand and gravel.	No		
pocketbook (<i>Lampsilis ovata</i>)	Endangered	Not Listed	Creeks to large rivers with quiet to swift current in gravel, sand and cobble — nearly any substrate except for moving sand.	No		
washboard (<i>Megaloniaia nervosa</i>)	Endangered	Not Listed	Typically, a large river species, inhabiting the main channel areas of a stream. Suitable habitat consists of slow current areas with substrates composed of sand, gravel, or mud.	No		
black sandshell (<i>Ligumia recta</i>)	Threatened	Not Listed	most commonly occupies rivers with strong currents and lakes with a firm substrate of gravel or sand.	No		
fawnsfoot (<i>Truncilla donaciformis</i>)	Threatened	Not Listed	Typically occurs in flowing areas of large rivers in soft or coarse substrate.	No		
pondhorn (<i>Unio merus tetralasmus</i>)	Threatened	Not Listed	This species is typically found in ponds, small creeks, and headwater streams with sand or mud substrates.	No		
threehorn wartyback (<i>Obliquaria reflexa</i>)	Threatened	Not Listed	Typically found in large rivers with moderate current and stable gravel, sand and mud bottoms.	No		



TABLE 4-7. LISTED SPECIES COMMENTED ON BY ODNR AND USFWS

COMMON NAME (SCIENTIFIC NAME)	STATE STATUS	FEDERAL STATUS	HABITAT DESCRIPTION	POTENTIAL HABITAT OBSERVED IN ESC	AGENCY COMMENT	IMPACT ASSESSMENT
Fish						
Scioto madtom (<i>Noturus trautmani</i>)	Endangered	Endangered	Prefers stream riffles of moderate current over gravel bottoms. Water must be of high quality and free of suspended sediments.	No	ODNR has recommended in-water work restriction dates of March 15 th to June 30 th in perennial streams. If not in-water work is proposed in perennial streams, the Project is not likely to impact this species.	No in-water work is proposed in a perennial stream; therefore, project is not likely to impact this or other aquatic species.
goldeye (<i>Hiodon alosoides</i>)	Endangered	Not Listed	It prefers turbid slower-moving waters of lakes and rivers.	No		
Iowa darter (<i>Etheostoma exile</i>)	Endangered	Not Listed	Occurs in clear to lightly turbid water in small cool lakes, bogs, ponds, and in slow-moving waters of small brooks to medium rivers. Primarily associated with submerged vegetation.	No		
popeye shiner (<i>Notropis ariommus</i>)	Endangered	Not Listed	Primarily inhabits slowly or moderately flowing rivers or creeks.	No		
northern brook lamprey (<i>Ichthyomyzon fossor</i>)	Endangered	Not Listed	They are typically found in the headwaters of streams that are moderately warm and clean.	No		
spotted darter (<i>Etheostoma maculatum</i>)	Endangered	Not Listed	Occur in freshwater rivers marked with the presence of boulders and other rocks.	No		
shortnose gar (<i>Lepisosteus platostomus</i>)	Endangered	Not Listed	Habitat includes lakes, swamps, and the calm pools and backwaters of creeks and rivers. They are commonly found near vegetation and submerged logs.	No		



TABLE 4-7. LISTED SPECIES COMMENTED ON BY ODNR AND USFWS

COMMON NAME (SCIENTIFIC NAME)	STATE STATUS	FEDERAL STATUS	HABITAT DESCRIPTION	POTENTIAL HABITAT OBSERVED IN ESC	AGENCY COMMENT	IMPACT ASSESSMENT
tonguetied minnow (<i>Exoglossum laurae</i>)	Endangered	Not Listed	Unable to live in murky waters and requires a clean rock river bottom, typically cool waters within forested banks of large rivers.	No	ODNR has recommended in-water work restriction dates of March 15 th to June 30 th in perennial streams. If not in-water work is proposed in perennial streams, the Project is not likely to impact this species.	No in-water work is proposed in a perennial stream; therefore, project is not likely to impact this or other aquatic species.
lake chubsucker (<i>Erimyzon sucetta</i>)	Threatened	Not Listed	Wetlands, ponds, and floodplain lakes with still water and low turbidity.	No		
paddlefish (<i>Polyodon spathula</i>)	Threatened	Not Listed	Typically found in deep water of large river basins and their tributaries.	No		
tippecanoe darter (<i>Etheostoma tippecanoe</i>)	Threatened	Not Listed	Most commonly in medium to large streams and rivers.	No		



5 SUMMARY

WSP conducted environmental surveys of the Cyprus Extension 138 kV Transmission Line Project on April 7 and 29, and September 17, 2021. One wetland, two streams, and one pond were delineated by WSP within the 78.5-acre ESC. The identified wetland and pond corresponded with the previously delineated features by EMHT. Additionally, one isolated wetland was identified EMHT, which is located partially within the ESC. A previous delineation and permitting effort which encompassed a portion of the ESC was performed by EMHT and included one wetland (Wetland A) and one pond (Pond 1) which lies within the ESC.

An approved Jurisdictional Determination, dated February 17, 2021 indicated the USACE has no regulatory authority over EMHT-delineated wetlands and ponds in the vicinity of the ESC, including Wetland A and Wetland C; as a result, these features fall under the regulatory authority of the OEPA. Approval for an Isolated Wetland and Ephemeral Stream General Permit Pre-Activity Notice as received by EMHT from OEPA on April 21, 2021.

Wetland A is an isolated, Category 2, PFO wetland area measuring 0.50 acres within the ESC. Wetland C is an isolated, Category 1, PEM wetland area measuring 0.001 acres within the ESA. Pond 1 was identified as a non-jurisdictional pond, adjacent to Wetland A, totaling 2.4-acres. One perennial stream (Stream BCS-1) was identified totaling 529 lf within the ESC and was evaluated using the HHEI methodology. Additionally, one intermittent stream (Stream BCS-2) was identified totaling 98 lf within the ESC and was evaluated using the QHEI methodology. The results discussed in this report are confined to the ESC limits described in earlier sections and depicted on Figure 3 (Appendix A).

Based on observations within the ESC during environmental surveys, USFWS comments, and ODNR comments, potential impacts to the Indiana bat and northern long-eared bat are not anticipated if the recommended seasonal clearing dates are utilized. Forested areas that would typically provide potential summer roost habitat for bat species, were located within the ESC, however forested areas had been cleared and/or impacted at the time of the environmental survey and no longer provide potential habitat to bat species during summer months.

WSP performed a desktop review for potential hibernacula within the vicinity of the Project as a result of comments from ODNR relating to state- and federally-listed bat species. Topographic maps did not depict caves, cliffs/ledges, and subsurface mines within a three-mile radius of the ESC. A review of aerial imagery also did not provide evidence of these habitat types. Documented mines or mine openings are not recorded within a three mile buffer of the Project Area. Additionally, no potential hibernacula were identified within the ESC during the field survey. Additional information pertaining to the state- and federally-listed bat species is provided in Table 4-6.

It is anticipated that in-water work is not necessary, therefore no mussel surveys or construction timing windows are necessary related to protected fish species.

Potentially suitable habitat for state and federally listed threatened and endangered bird species was not identified within the ESC since the primary habitat within the ESC was agricultural land and developed open space (approximately 45% and 29%, of the habitat within the ESC, respectively). Agricultural land or developed, routinely maintained open space was not within the habitat description for any of the seven bird species identified in ODNR's response to WSP or EMHT, therefore the Project should not impact protected bird species.

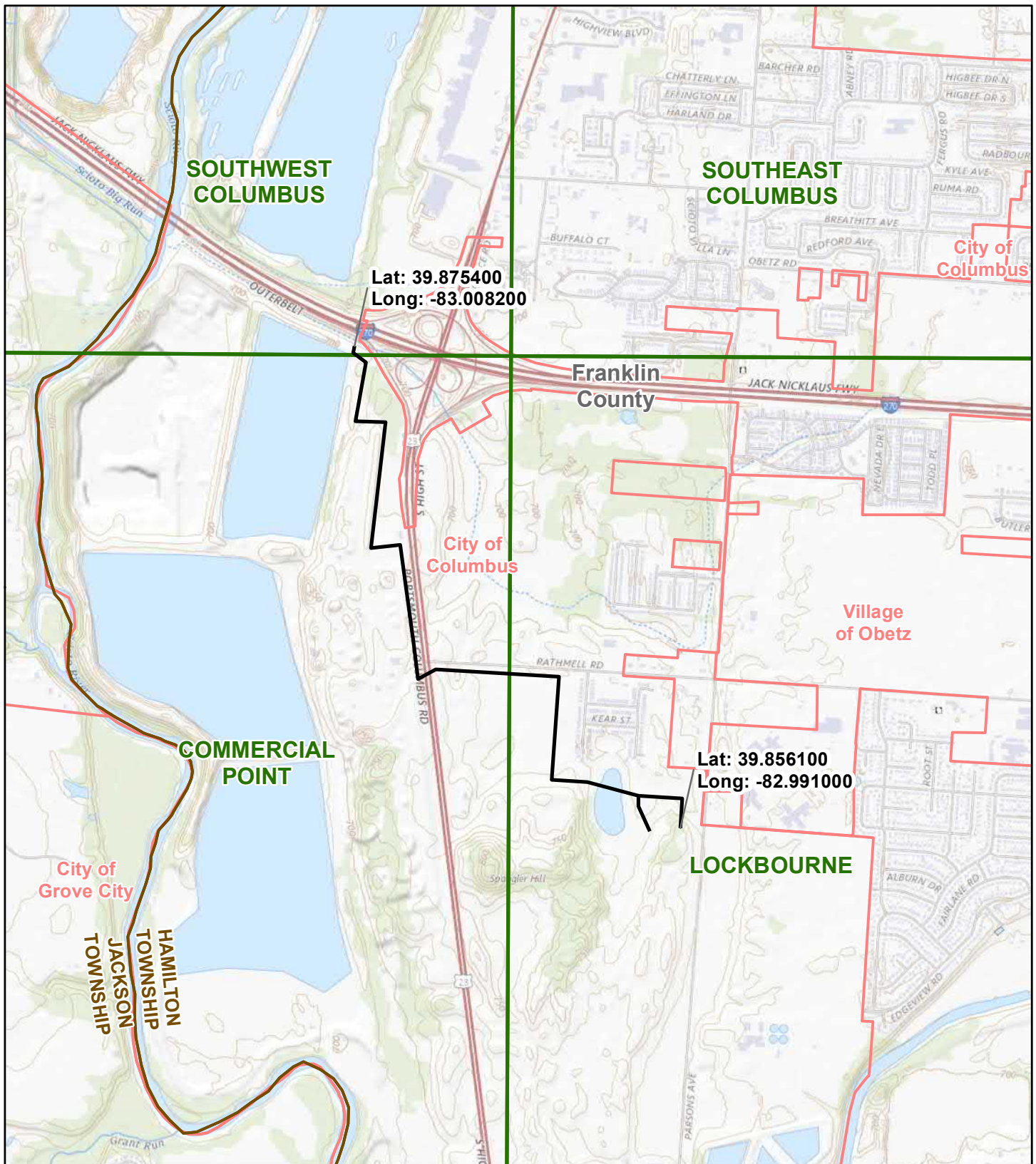


6 REFERENCES

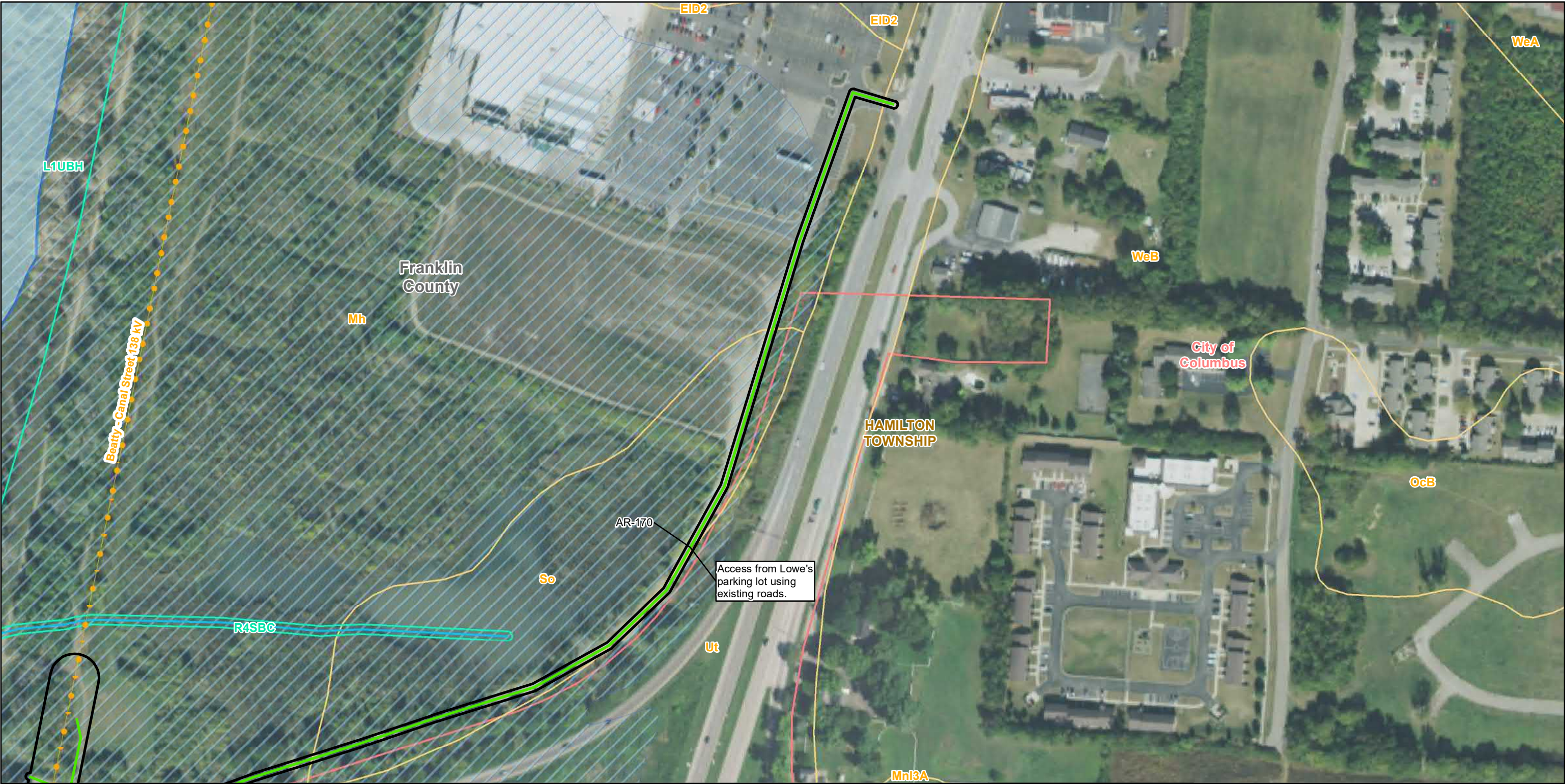
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APPENDIX

A FIGURES



<p>— Cyprus Extension 138kV Transmission Line</p> <p>— USGS 24k Topo Quad Boundary</p> <p>— Municipal Boundary</p> <p>— Township Boundary</p> <p>— County Boundary</p>	<p>Sources: Topo (USGS) Quad Boundaries (USGS)</p> <p>Coordinate System: State Plane Ohio South NAD 1983</p> <p>September 29, 2021</p>		<p>Cyprus Extension 138kV Transmission Line Project</p> <p>Figure 1. Project Location Map</p> <div style="display: flex; align-items: center;"> </div> <div style="display: flex; align-items: center;"> </div>
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▲ Substation

■ Existing Structure

□ Proposed Structure

Cyprus Extension 138kV Transmission Line

Existing Transmission Line

Existing Access Road

NHD Stream

Environmental Survey Corridor

NWI Wetland

NHD Waterbody

Soil Map Unit

FEMA 100-Yr Floodplain

FEMA Floodway

Railroad

Municipal Boundary

Township Boundary

County Boundary

Page 1 of 7

Sources:
2019 NAIP Imagery (USDA)
Wetland (USFWS)
Hydrography (USGS)
Soil Units (USDA)
Floodplains (FEMA)

Coordinate System:
Ohio State Plane South
NAD 1983

October 11, 2021

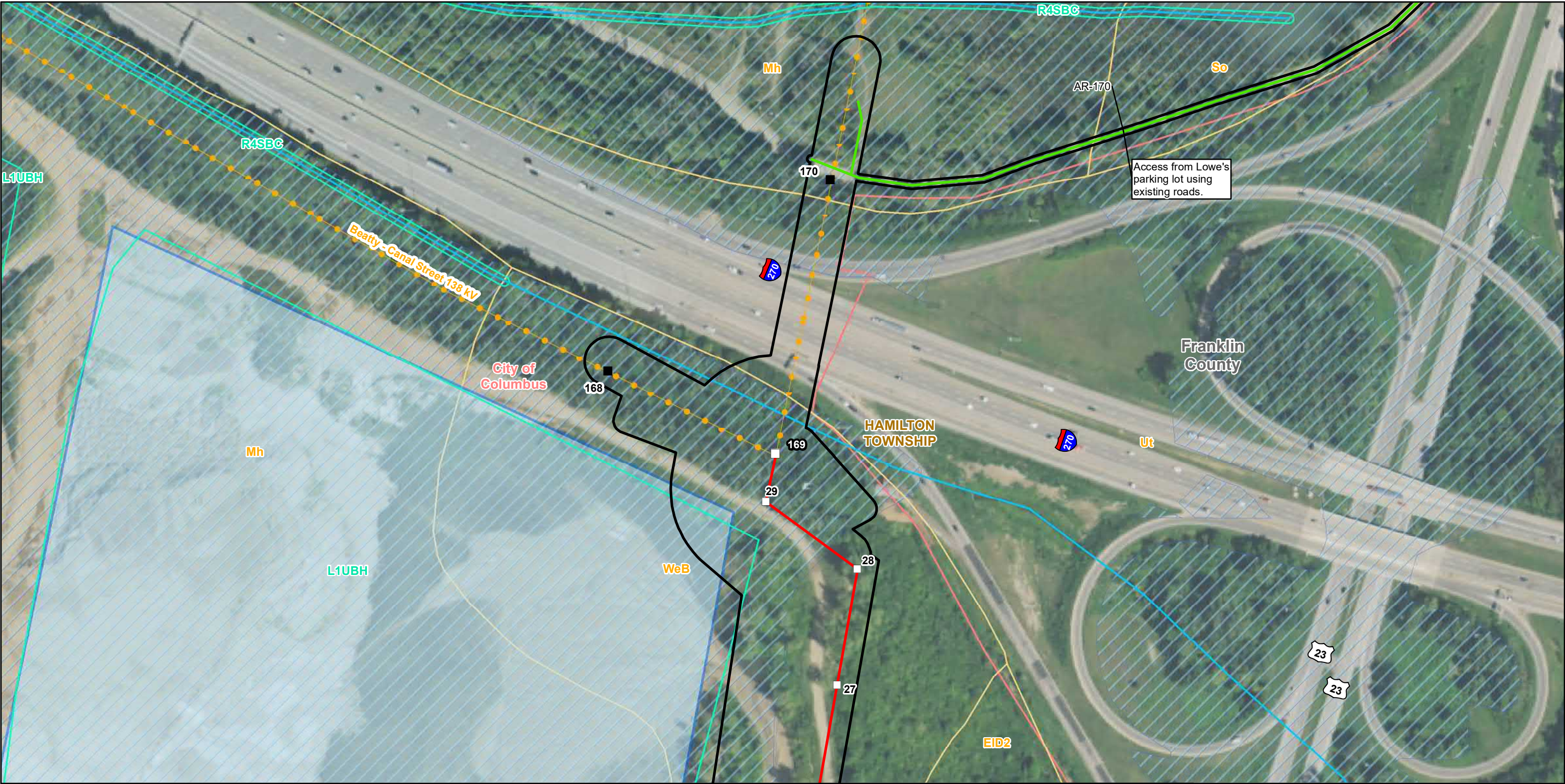
CYPRUS EXTENSION
138KV TRANSMISSION LINE PROJECT
Figure 2. Environmental Basemap

AEP OHIO

wsp

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▲ Substation

■ Existing Structure

□ Proposed Structure

— Cyprus Extension 138kV Transmission Line

● Existing Transmission Line

— Existing Access Road

— NHD Stream

Environmental Survey Corridor

NWI Wetland

NHD Waterbody

Soil Map Unit

FEMA 100-Yr Floodplain

FEMA Floodway

Railroad

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Coordinate System:
Ohio State Plane South
NAD 1983

October 11, 2021

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Franklin County

Parsons Ave

Rathmell Rd

CYPRUS EXTENSION
138KV TRANSMISSION LINE PROJECT

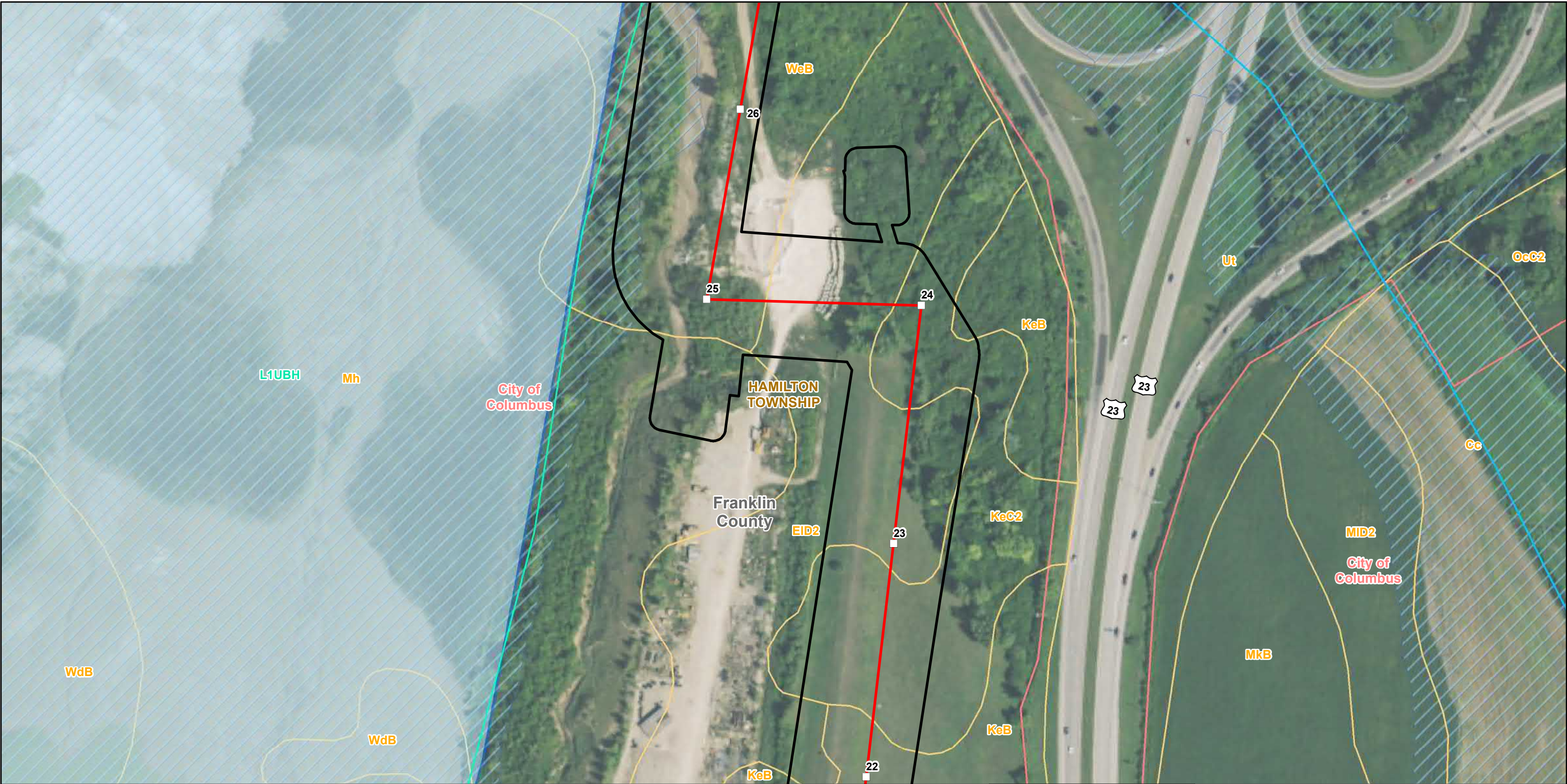
Figure 2. Environmental Basemap

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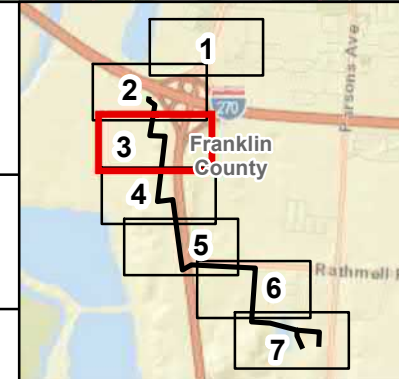
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|--|-------------------------------|--------------------|
| ▲ Substation | Environmental Survey Corridor | Municipal Boundary |
| ■ Existing Structure | NWI Wetland | Township Boundary |
| □ Proposed Structure | NHD Waterbody | County Boundary |
| — Cyprus Extension 138kV Transmission Line | Soil Map Unit | |
| — Existing Transmission Line | FEMA 100-Yr Floodplain | |
| — Existing Access Road | FEMA Floodway | |
| — NHD Stream | Railroad | |

Page 3 of 7

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October 11, 2021



CYPRUS EXTENSION
138KV TRANSMISSION LINE PROJECT
Figure 2. Environmental Basemap



0 200 400 Feet



▲ Substation

■ Existing Structure

□ Proposed Structure

Cyprus Extension 138kV Transmission Line

Existing Transmission Line

Existing Access Road

NHD Stream

Environmental Survey Corridor

NWI Wetland

NHD Waterbody

Soil Map Unit

FEMA 100-Yr Floodplain

FEMA Floodway

Railroad

Municipal Boundary

Township Boundary

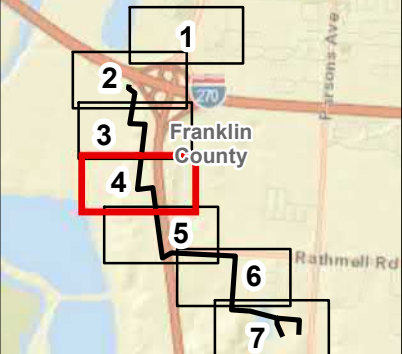
County Boundary

Page 4 of 7

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Hydrography (USGS)
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Ohio State Plane South
NAD 1983

October 11, 2021



CYPRUS EXTENSION
138kV TRANSMISSION LINE PROJECT

Figure 2. Environmental Basemap

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OHIO




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<p>▲ Substation</p> <p>■ Existing Structure</p> <p>□ Proposed Structure</p> <p>— Cyprus Extension 138kV Transmission Line</p> <p>— Existing Transmission Line</p> <p>— Existing Access Road</p> <p>— NHD Stream</p>	<p>□ Environmental Survey Corridor</p> <p>□ NWI Wetland</p> <p>□ NHD Waterbody</p> <p>□ Soil Map Unit</p> <p>□ FEMA 100-Yr Floodplain</p> <p>□ FEMA Floodway</p> <p>— Railroad</p>	<p>□ Municipal Boundary</p> <p>□ Township Boundary</p> <p>□ County Boundary</p>	<p>Page 5 of 7</p> <p>Sources: 2019 NAIP Imagery (USDA) Wetland (USFWS) Hydrography (USGS) Soil Units (USDA) Floodplains (FEMA)</p> <p>Coordinate System: Ohio State Plane South NAD 1983</p> <p>October 11, 2021</p>		<p>CYPRUS EXTENSION 138KV TRANSMISSION LINE PROJECT</p> <p>Figure 2. Environmental Basemap</p> <p> </p> <p> 0 200 400 Feet</p>
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▲ Substation

■ Existing Structure

□ Proposed Structure

Cyprus Extension 138kV Transmission Line

Existing Transmission Line

Existing Access Road

NHD Stream

Environmental Survey Corridor

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NHD Waterbody

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Township Boundary

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Ohio State Plane South
NAD 1983

October 11, 2021

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Franklin County

Rathmell Rd

CYPRUS EXTENSION
138KV TRANSMISSION LINE PROJECT

Figure 2. Environmental Basemap

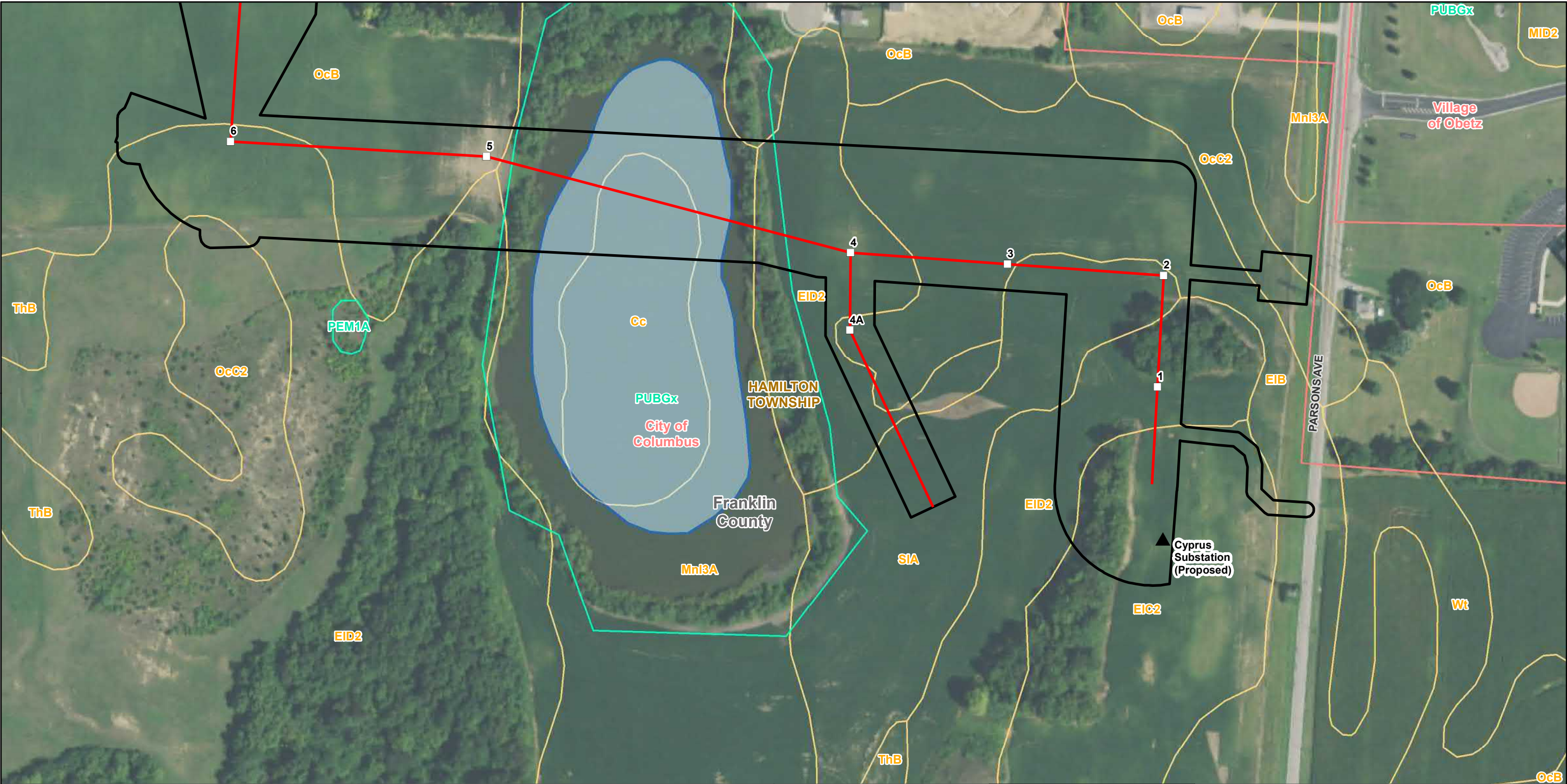
AEP OHIO




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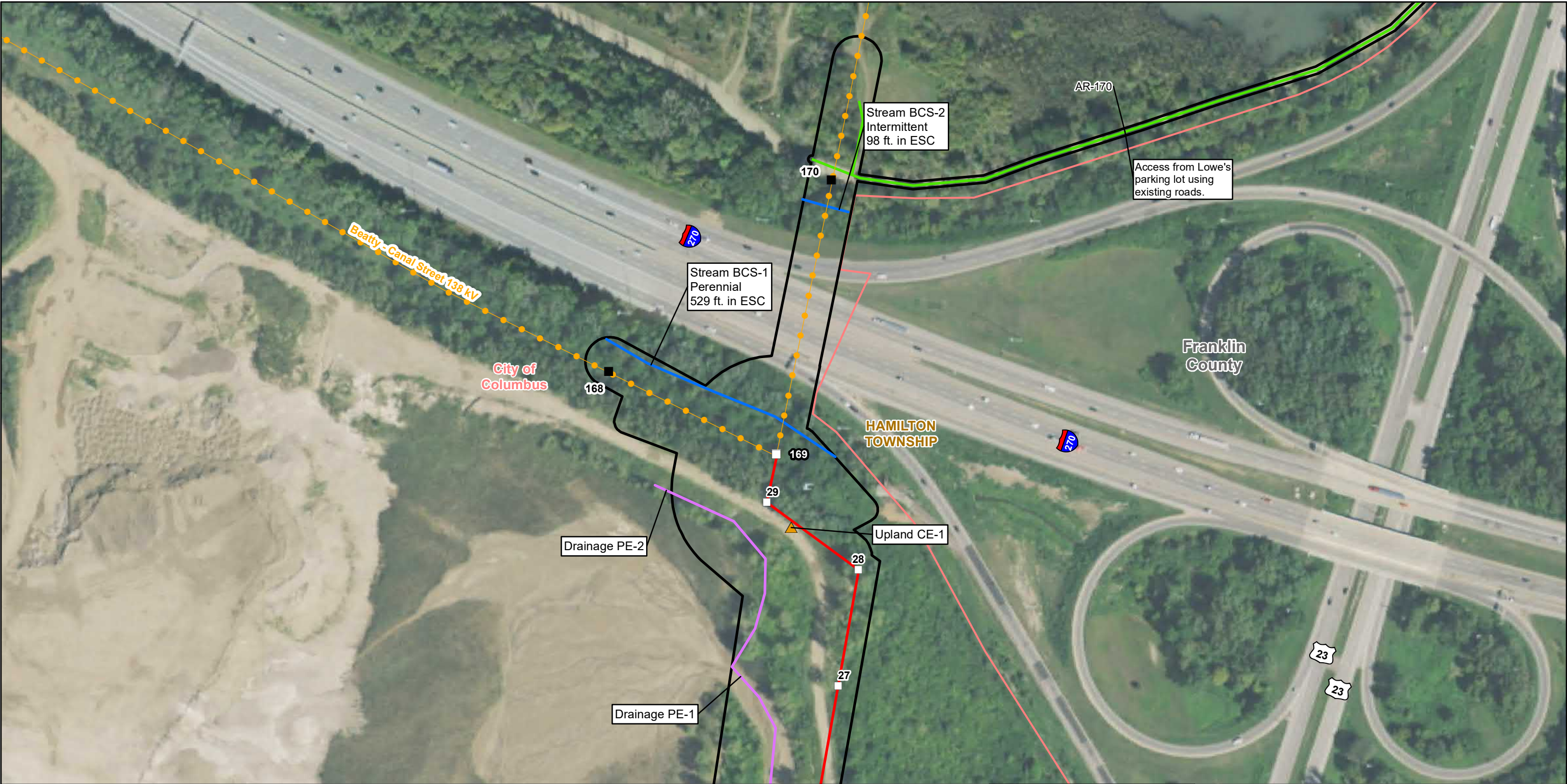
Feet



<p>▲ Substation</p> <p>■ Existing Structure</p> <p>□ Proposed Structure</p> <p>— Cyprus Extension 138kV Transmission Line</p> <p>— Existing Transmission Line</p> <p>— Existing Access Road</p> <p>— NHD Stream</p>	<p>Environmental Survey Corridor</p> <p>NWI Wetland</p> <p>NHD Waterbody</p> <p>Soil Map Unit</p> <p>FEMA 100-Yr Floodplain</p> <p>FEMA Floodway</p> <p>Railroad</p>	<p>Municipal Boundary</p> <p>Township Boundary</p> <p>County Boundary</p>	<p>Page 7 of 7</p> <p>Sources: 2019 NAIP Imagery (USDA) Wetland (USFWS) Hydrography (USGS) Soil Units (USDA) Floodplains (FEMA)</p> <p>Coordinate System: Ohio State Plane South NAD 1983</p> <p>October 11, 2021</p>		<p>CYPRUS EXTENSION 138KV TRANSMISSION LINE PROJECT</p> <p>Figure 2. Environmental Basemap</p> <p> </p> <p> 0 200 400 Feet</p>
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<ul style="list-style-type: none">▲ Substation■ Culvert■ Existing Structure□ Proposed Structure▲ Upland Point● Existing Transmission Line— Existing Access Road	<ul style="list-style-type: none">— Cyprus Extension 138kV Transmission Line— Delineated Non-Jurisdictional Drainage— Delineated Stream□ Environmental Survey Corridor□ EMHT Delineated Pond□ EMHT Delineated Wetland□ Municipal Boundary	<ul style="list-style-type: none">□ Township Boundary□ County Boundary <p>Page 1 of 7</p>	<p>Sources: 2019 NAIP Imagery (USDA)</p> <p>Coordinate System: Ohio State Plane South NAD 1983</p> <p>October 11, 2021</p>		<p>CYPRUS EXTENSION 138KV TRANSMISSION LINE PROJECT</p> <p>Figure 3. Delineated Features</p> <div></div> <div></div>
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▲ Substation

■ Culvert

■ Existing Structure

□ Proposed Structure

▲ Upland Point

— Existing Transmission Line

— Existing Access Road

— Cyprus Extension 138kV Transmission Line

— Delineated Non-Jurisdictional Drainage

— Delineated Stream

□ Environmental Survey Corridor

□ EMHT Delineated Pond

□ EMHT Delineated Wetland

□ Municipal Boundary

□ Township Boundary

□ County Boundary

Page 2 of 7

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2019 NAIP Imagery (USDA)

Coordinate System:
Ohio State Plane South
NAD 1983

October 11, 2021

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Franklin County

Rathmell Rd

CYPRUS EXTENSION
138KV TRANSMISSION LINE PROJECT

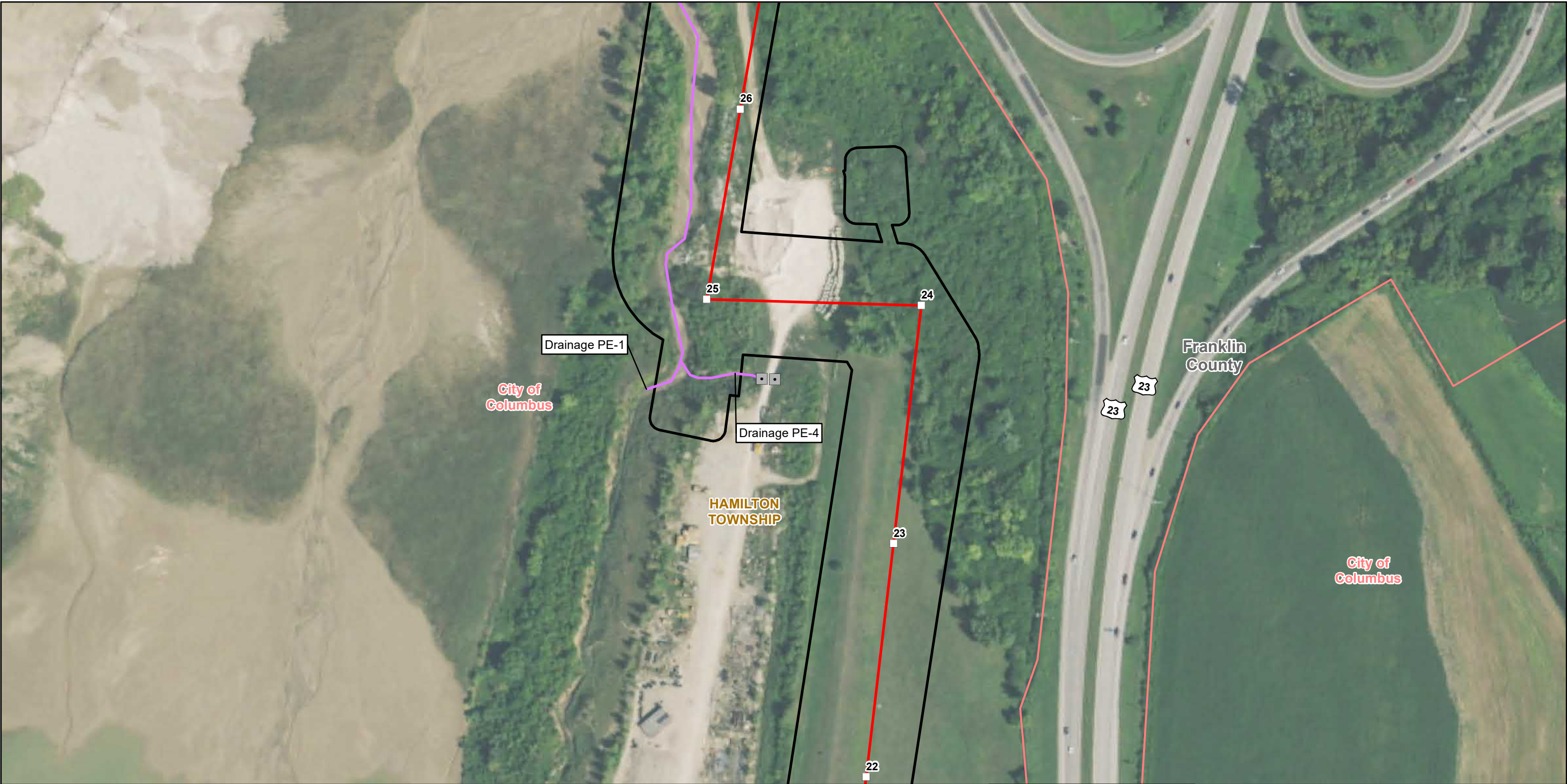
Figure 3. Delineated Features




AEP OHIO

wsp





N

0 200 400 Feet






<p>▲ Substation</p> <p>■ Culvert</p> <p>■ Existing Structure</p> <p>□ Proposed Structure</p> <p>▲ Upland Point</p> <p>— Existing Transmission Line</p> <p>— Existing Access Road</p>	<p>— Cyprus Extension 138kV Transmission Line</p> <p>— Delineated Non-Jurisdictional Drainage</p> <p>— Delineated Stream</p> <p>□ Environmental Survey Corridor</p> <p>□ EMHT Delineated Pond</p> <p>□ EMHT Delineated Wetland</p> <p>□ Municipal Boundary</p>	<p>□ Township Boundary</p> <p>□ County Boundary</p> <p>Page 3 of 7</p>	<p>Sources: 2019 NAIP Imagery (USDA)</p> <p>Coordinate System: Ohio State Plane South NAD 1983</p> <p>October 11, 2021</p>		<p>CYPRUS EXTENSION 138KV TRANSMISSION LINE PROJECT</p> <p>Figure 3. Delineated Features</p> <p> </p> <p> 0 200 400 Feet</p>
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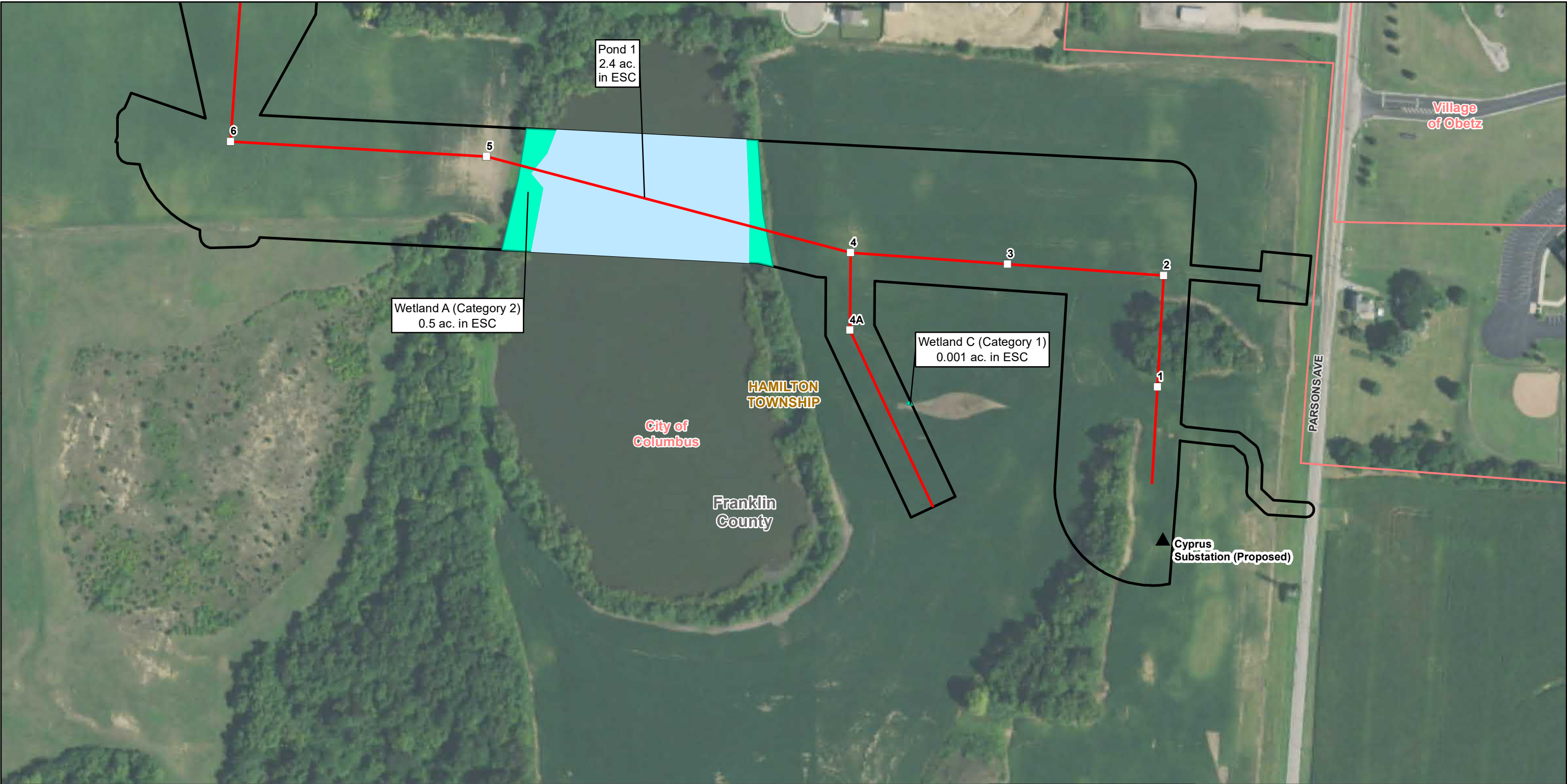
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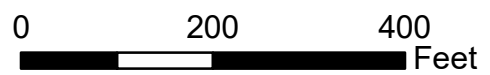



<p>▲ Substation</p> <p>■ Culvert</p> <p>■ Existing Structure</p> <p>□ Proposed Structure</p> <p>▲ Upland Point</p> <p>— Existing Transmission Line</p> <p>— Existing Access Road</p>	<p>— Cyprus Extension 138kV Transmission Line</p> <p>— Delineated Non-Jurisdictional Drainage</p> <p>— Delineated Stream</p> <p>□ Environmental Survey Corridor</p> <p>□ EMHT Delineated Pond</p> <p>□ EMHT Delineated Wetland</p> <p>□ Municipal Boundary</p>	<p>□ Township Boundary</p> <p>□ County Boundary</p>	<p>Page 5 of 7</p>	<p>Sources: 2019 NAIP Imagery (USDA)</p> <p>Coordinate System: Ohio State Plane South NAD 1983</p> <p>October 11, 2021</p>		<p>CYPRUS EXTENSION 138KV TRANSMISSION LINE PROJECT</p> <p>Figure 3. Delineated Features</p> <p> </p> <p> 0 200 400 Feet</p>
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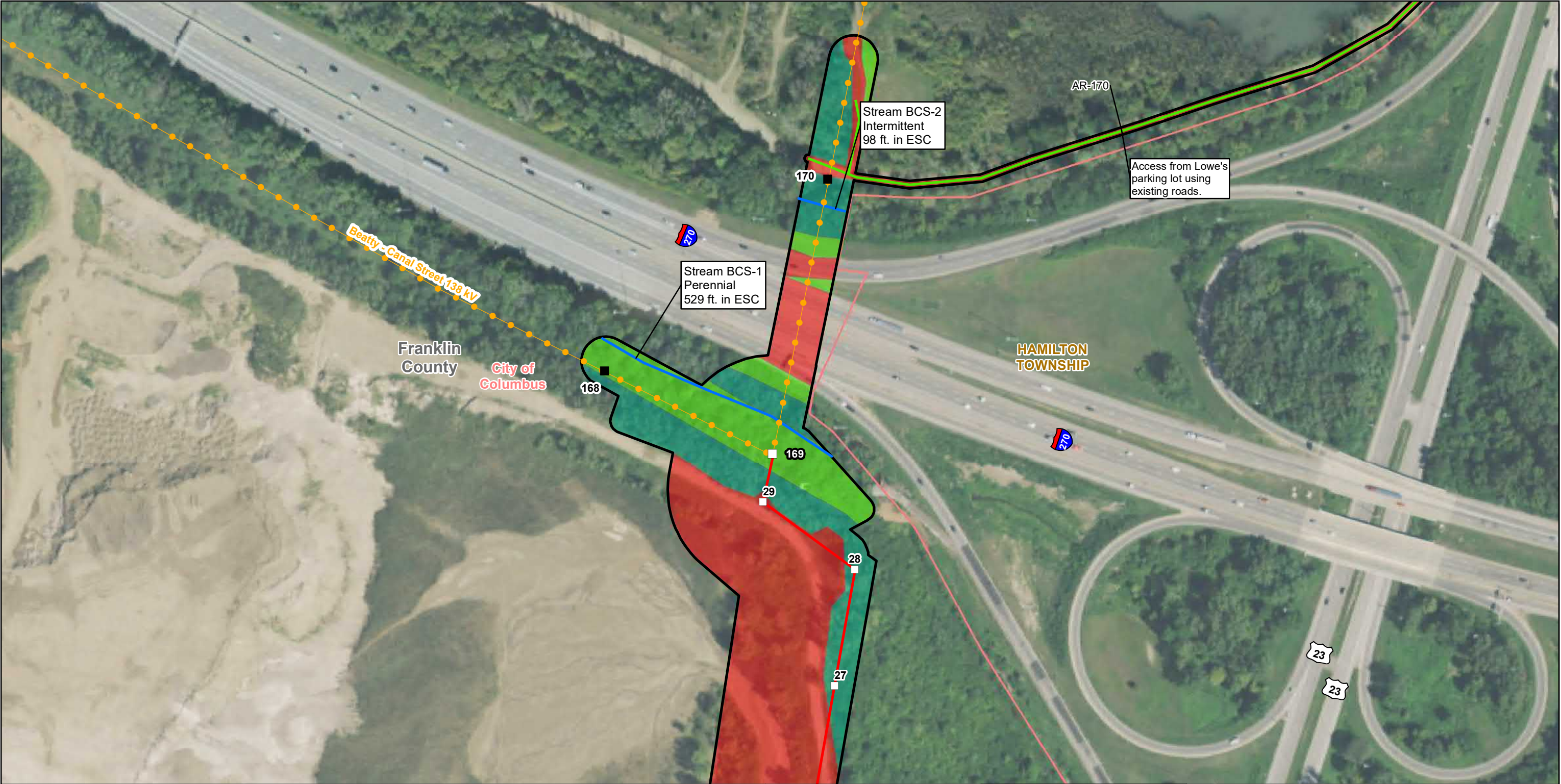
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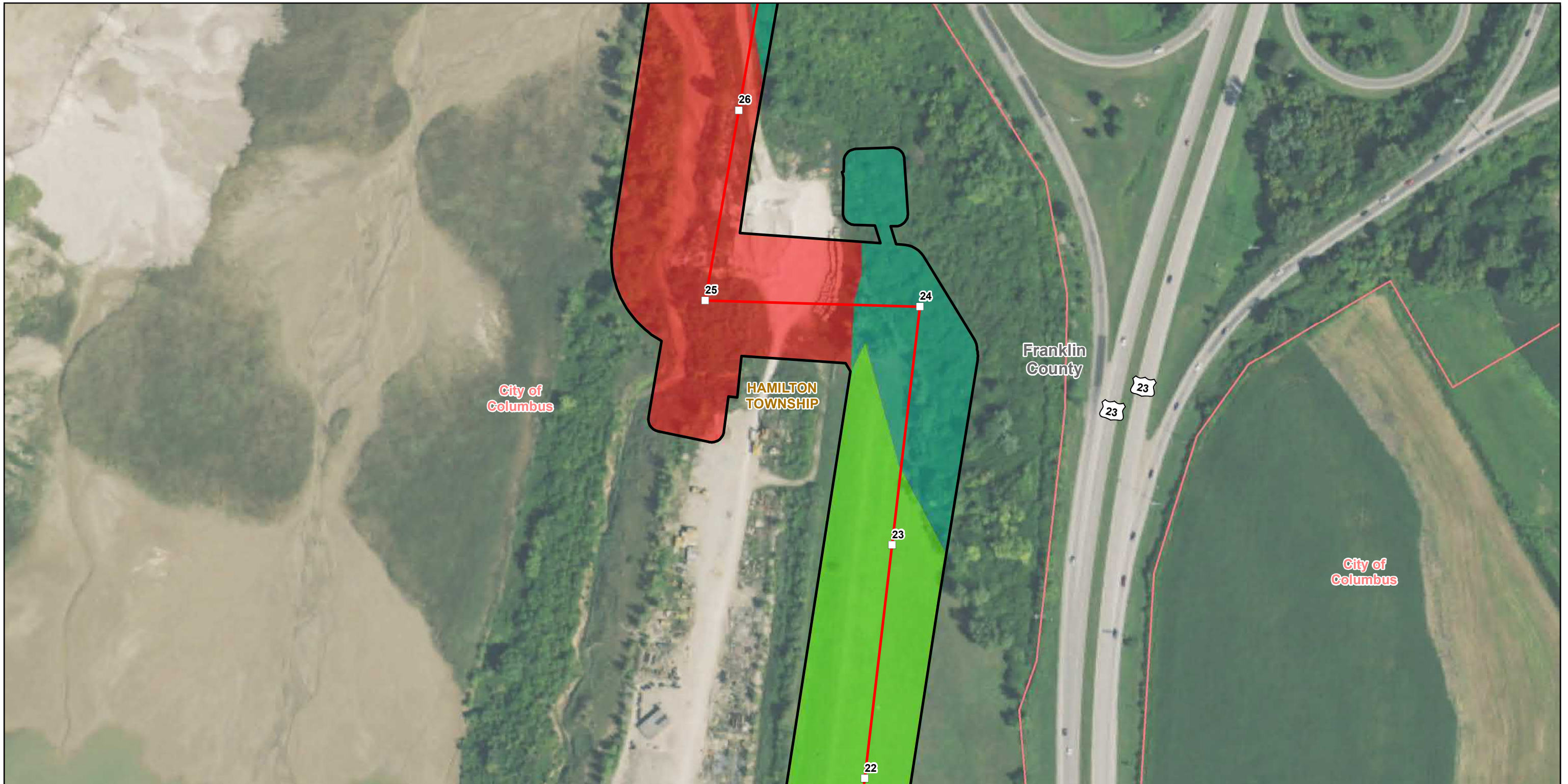
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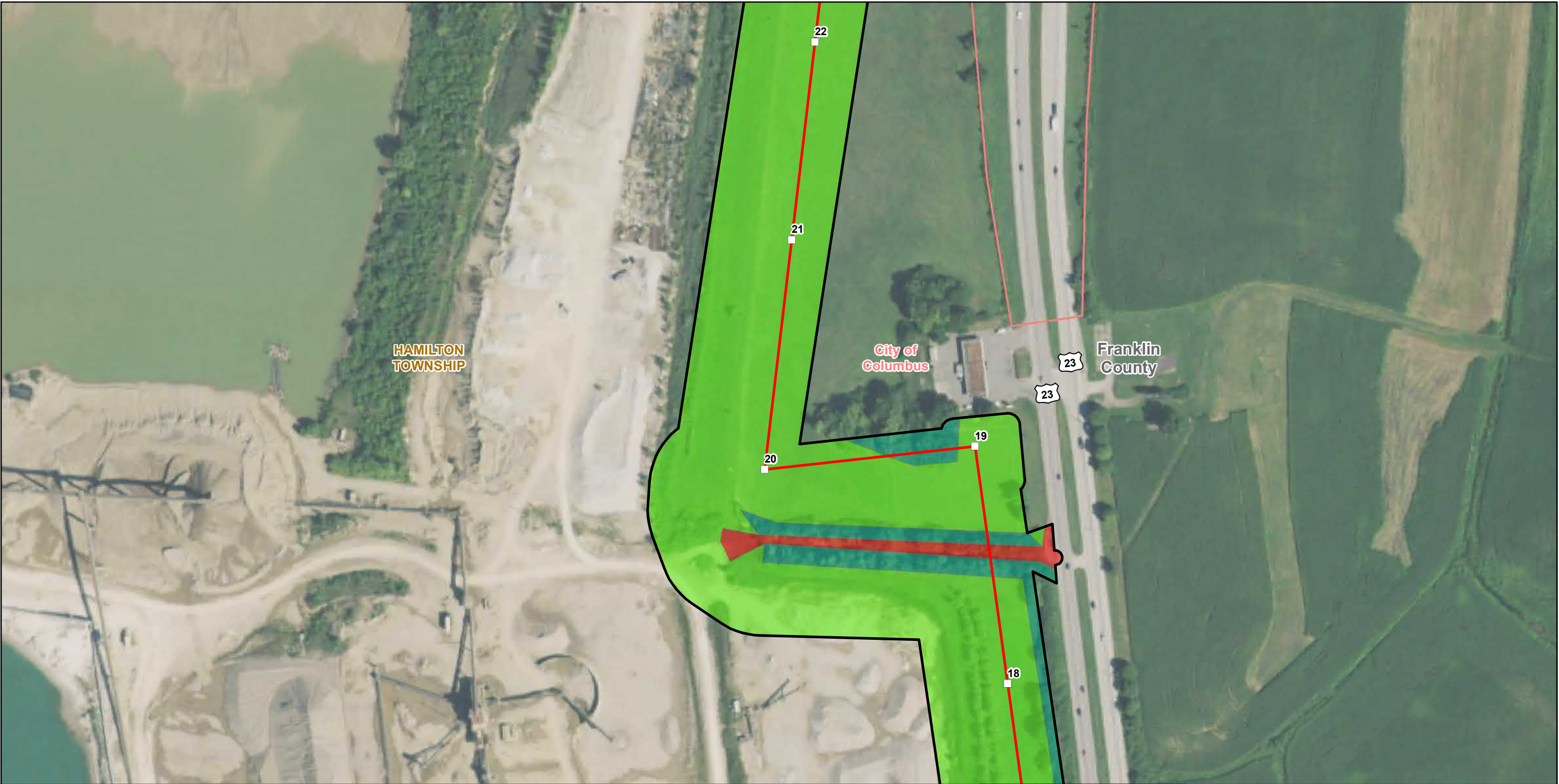
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<p>▲ Substation</p> <p>■ Existing Structure</p> <p>□ Proposed Structure</p> <p>— Existing Transmission Line</p> <p>— Cyprus Extension 138kV Transmission Line</p> <p>— Existing Access Road</p> <p>— Delineated Stream</p>	<p>Environmental Survey Corridor</p> <p>EMHT Delineated Pond</p> <p>EMHT Delineated Wetland</p> <p>Agricultural Land</p> <p>Developed, High Intensity</p> <p>Developed, Open Space</p> <p>Scrub/Shrub</p> <p>Successional Hardwood Woodland</p>	<p>Municipal Boundary</p> <p>Township Boundary</p> <p>County Boundary</p>	<p>Sources: 2019 NAIP Imagery (USDA)</p> <p>Coordinate System: Ohio State Plane South NAD 1983</p> <p>October 11, 2021</p>		<p>CYPRUS EXTENSION 138KV TRANSMISSION LINE PROJECT</p> <p>Figure 4. Vegetation Coverage</p> <p> </p> <p>0 200 400 Feet</p>
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<ul style="list-style-type: none"> ▲ Substation ■ Existing Structure □ Proposed Structure — Existing Transmission Line — Cyprus Extension 138kV Transmission Line — Existing Access Road — Delineated Stream 	<ul style="list-style-type: none"> Environmental Survey Corridor EMHT Delineated Pond EMHT Delineated Wetland Agricultural Land Developed, High Intensity Developed, Open Space Scrub/Shrub Successional Hardwood Woodland 	<ul style="list-style-type: none"> Municipal Boundary Township Boundary County Boundary 	<p>Sources: 2019 NAIP Imagery (USDA)</p> <p>Coordinate System: Ohio State Plane South NAD 1983</p> <p>October 11, 2021</p>		<p align="center">CYPRUS EXTENSION 138KV TRANSMISSION LINE PROJECT</p> <p align="center">Figure 4. Vegetation Coverage</p> <div> </div> <div> </div>
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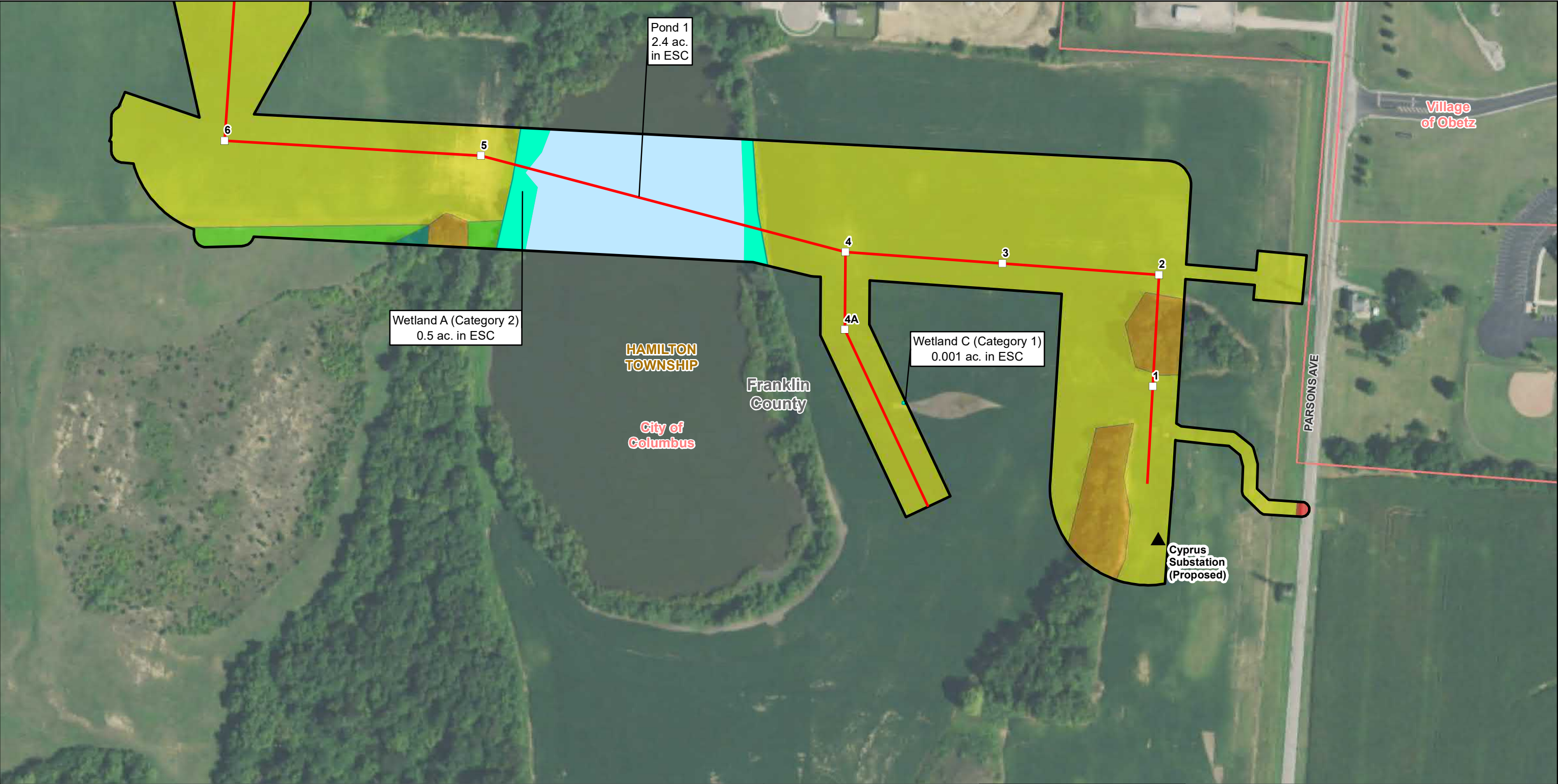
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			Coordinate System: Ohio State Plane South NAD 1983			
			October 11, 2021			0 200 400 Feet



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APPENDIX

B USACE WETLAND DETERMINATION FORMS

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Cyprus Extension 138 kV Transmission Line City/County: Franklin County Sampling Date: 4/29/2021
 Applicant/Owner: AEP State: OH Sampling Point: Upland CE-1
 Investigator(s): P. Renner Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex
 Slope (%): 4 Lat: 39.874956 Long: -83.008083 Datum: NAD83
 Soil Map Unit Name: Wea silt loam, 2 to 6 percent slopes (WeB) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: Non-wetland data point taken in area dominated by common reed. This area is along an existing access road within a quarry that is prone to frequent disturbance.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>r=30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
			=Total Cover	
Sapling/Shrub Stratum	(Plot size: <u>r=15'</u>)			
1.	<u>Lonicera tatarica</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>
2.				
3.				
4.				
5.				
		<u>15</u>	=Total Cover	
Herb Stratum	(Plot size: <u>r=5'</u>)			
1.	<u>Phragmites australis</u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
		<u>25</u>	=Total Cover	
Woody Vine Stratum	(Plot size: <u>r=30'</u>)			
1.				
2.				
			=Total Cover	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>25</u>	x 2 = <u>50</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>15</u>	x 4 = <u>60</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>40</u> (A)	<u>110</u> (B)
Prevalence Index = B/A = <u>2.75</u>	

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

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

Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes _____ No X

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

SOIL

Sampling Point: Upland CE-1

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text" value="0"/>
Water Table Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text" value="0"/>
Saturation Present?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text" value="0"/>
(includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

APPENDIX

C OEPA HHEI/QHEI STREAM DATA FORMS



Primary Headwater Habitat Evaluation Form

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

SITE NAME/LOCATION _____
SITE NUMBER _____ RIVER BASIN _____ DRAINAGE AREA (mi²) _____
LENGTH OF STREAM REACH (ft) _____ LAT. _____ LONG. _____ RIVER CODE _____ RIVER MILE _____
DATE _____ SCORER _____ COMMENTS _____

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PWH 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"/> SILT [3 pt]	_____
<input type="checkbox"/> BOULDER (>256 mm) [16 pts]	_____	<input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	_____
<input type="checkbox"/> BEDROCK [16 pt]	_____	<input type="checkbox"/> FINE DETRITUS [3 pts]	_____
<input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	_____	<input type="checkbox"/> CLAY or HARDPAN [0 pt]	_____
<input type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	_____	<input type="checkbox"/> MUCK [0 pts]	_____
<input type="checkbox"/> SAND (<2 mm) [6 pts]	_____	<input type="checkbox"/> ARTIFICIAL [3 pts]	_____

Total of Percentages of
Bldr Slabs, Boulder, Cobble, Bedrock _____

(A)

Substrate Percentage
Check

(B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES:

TOTAL NUMBER OF SUBSTRATE TYPES:

HHEI Metric Points

Substrate
Max = 40

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 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]

Pool Depth
Max = 30

COMMENTS _____ MAXIMUM POOL DEPTH (centimeters):

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 type="checkbox"/> > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	

Bankfull
Width
Max=30

COMMENTS _____ AVERAGE BANKFULL WIDTH (meters):

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY

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

RIPARIAN WIDTH

L	R	(Per Bank)
<input type="checkbox"/>	<input type="checkbox"/>	Wide >10m
<input type="checkbox"/>	<input type="checkbox"/>	Moderate 5-10m
<input type="checkbox"/>	<input type="checkbox"/>	Narrow <5m
<input type="checkbox"/>	<input type="checkbox"/>	None

COMMENTS _____

FLOODPLAIN QUALITY

L	R	(Most Predominant per Bank)
<input type="checkbox"/>	<input type="checkbox"/>	Mature Forest, Wetland
<input type="checkbox"/>	<input type="checkbox"/>	Immature Forest, Shrub or Old Field
<input type="checkbox"/>	<input type="checkbox"/>	Residential, Park, New Field
<input type="checkbox"/>	<input type="checkbox"/>	Fenced Pasture

L	R	
<input type="checkbox"/>	<input type="checkbox"/>	Conservation Tillage
<input type="checkbox"/>	<input type="checkbox"/>	Urban or Industrial
<input type="checkbox"/>	<input type="checkbox"/>	Open Pasture, Row Crop
<input type="checkbox"/>	<input type="checkbox"/>	Mining or Construction

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 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 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: _____ NRCS Soil Map Page: _____ NRCS Soil Map Stream Order _____

County: _____ Township / City: _____

MISCELLANEOUS

Base Flow Conditions? (Y/N): _____ Date of last precipitation: _____ Quantity: _____

Photograph Information: _____

Elevated Turbidity? (Y/N): _____ Canopy (% open): _____

Were samples collected for water chemistry? (Y/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) _____ If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOTIC EVALUATION

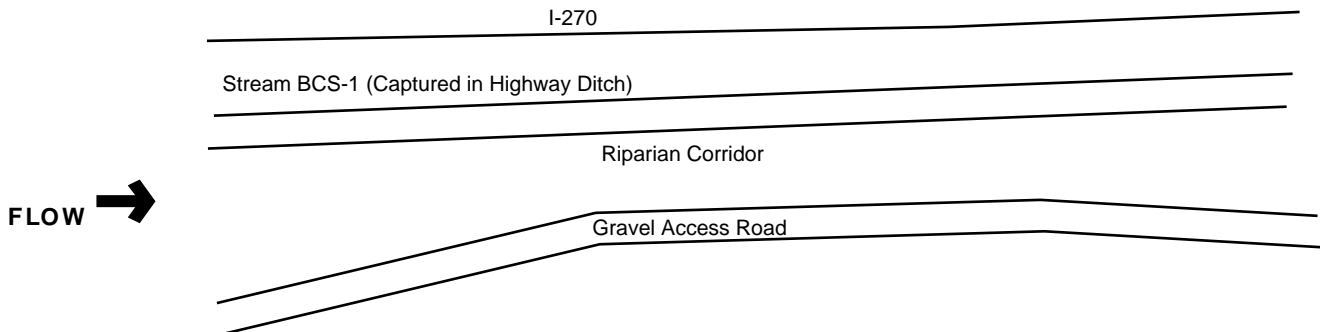
Performed? (Y/N): _____ (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

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



Stream & Location: _____ RM: _____ Date: / /

Scorer's Full Name & Affiliation: _____
River Code: - - - STORET #: - - - Lat./Long.: /8 - - - Office verified location ☐1] SUBSTRATE Check ONLY Two substrate TYPE BOXES;
estimate % or note every type present

Check ONE (Or 2 & average)

BEST TYPES		OTHER TYPES		ORIGIN		QUALITY	
<input type="checkbox"/> BLDR /SLABS [10]	<input type="checkbox"/> POOL	<input type="checkbox"/> HARDPAN [4]	<input type="checkbox"/> POOL	<input type="checkbox"/> LIMESTONE [1]	<input type="checkbox"/> SILT	<input type="checkbox"/> HEAVY [-2]	<div>Substrate</div> <div>Maximum 20</div>
<input type="checkbox"/> BOULDER [9]	<input type="checkbox"/> RIFFLE	<input type="checkbox"/> DETRITUS [3]	<input type="checkbox"/> RIFFLE	<input type="checkbox"/> TILLS [1]	<input type="checkbox"/> SANDSTONE [0]	<input type="checkbox"/> MODERATE [-1]	
<input type="checkbox"/> COBBLE [8]		<input type="checkbox"/> MUCK [2]		<input type="checkbox"/> WETLANDS [0]	<input type="checkbox"/> RIP/RAP [0]	<input type="checkbox"/> NORMAL [0]	
<input type="checkbox"/> GRAVEL [7]		<input type="checkbox"/> SILT [2]		<input type="checkbox"/> HARDPAN [0]	<input type="checkbox"/> LACUSTURINE [0]	<input type="checkbox"/> FREE [1]	
<input type="checkbox"/> SAND [6]		<input type="checkbox"/> ARTIFICIAL [0]		<input type="checkbox"/> SANDSTONE [0]	<input type="checkbox"/> SHALE [-1]	<input type="checkbox"/> EXTENSIVE [-2]	
<input type="checkbox"/> BEDROCK [5]				<input type="checkbox"/> RIP/RAP [0]	<input type="checkbox"/> COAL FINES [-2]	<input type="checkbox"/> MODERATE [-1]	
						<input type="checkbox"/> NORMAL [0]	
						<input type="checkbox"/> NONE [1]	

NUMBER OF BEST TYPES: ☐ 4 or more [2] ☐ 3 or less [0]

Comments _____

2] INSTREAM COVER Indicate presence 0 to 3: 0-Absent; 1-Very small amounts or if more common of marginal quality; 2-Moderate amounts, but not of highest quality or in small amounts of highest quality; 3-Highest quality in moderate or greater amounts (e.g., very large boulders in deep or fast water, large diameter log that is stable, well developed rootwad in deep / fast water, or deep, well-defined, functional pools.

AMOUNT

Check ONE (Or 2 & average)

<input type="checkbox"/> UNDERCUT BANKS [1]	<input type="checkbox"/> POOLS > 70cm [2]	<input type="checkbox"/> OXBOWS, BACKWATERS [1]	<input type="checkbox"/> EXTENSIVE >75% [11]
<input type="checkbox"/> OVERHANGING VEGETATION [1]	<input type="checkbox"/> ROOTWADS [1]	<input type="checkbox"/> AQUATIC MACROPHYTES [1]	<input type="checkbox"/> MODERATE 25-75% [7]
<input type="checkbox"/> SHALLOWS (IN SLOW WATER) [1]	<input type="checkbox"/> BOULDERS [1]	<input type="checkbox"/> LOGS OR WOODY DEBRIS [1]	<input type="checkbox"/> SPARSE 5-<25% [3]
<input type="checkbox"/> ROOTMATS [1]			<input type="checkbox"/> NEARLY ABSENT <5% [1]

Comments _____

Cover Maximum 20

3] CHANNEL MORPHOLOGY Check ONE in each category (Or 2 & average)

SINUOSITY	DEVELOPMENT	CHANNELIZATION	STABILITY
<input type="checkbox"/> HIGH [4]	<input type="checkbox"/> EXCELLENT [7]	<input type="checkbox"/> NONE [6]	<input type="checkbox"/> HIGH [3]
<input type="checkbox"/> MODERATE [3]	<input type="checkbox"/> GOOD [5]	<input type="checkbox"/> RECOVERED [4]	<input type="checkbox"/> MODERATE [2]
<input type="checkbox"/> LOW [2]	<input type="checkbox"/> FAIR [3]	<input type="checkbox"/> RECOVERING [3]	<input type="checkbox"/> LOW [1]
<input type="checkbox"/> NONE [1]	<input type="checkbox"/> POOR [1]	<input type="checkbox"/> RECENT OR NO RECOVERY [1]	

Comments _____

Channel Maximum 20

4] BANK EROSION AND RIPARIAN ZONE Check ONE in each category for EACH BANK (Or 2 per bank & average)

River right looking downstream

EROSION		RIPARIAN WIDTH		FLOOD PLAIN QUALITY		CONSERVATION TILLAGE	
<input type="checkbox"/> NONE / LITTLE [3]	<input type="checkbox"/> WIDE > 50m [4]	<input type="checkbox"/> FOREST, SWAMP [3]	<input type="checkbox"/> CONSERVATION TILLAGE [1]				
<input type="checkbox"/> MODERATE [2]	<input type="checkbox"/> MODERATE 10-50m [3]	<input type="checkbox"/> SHRUB OR OLD FIELD [2]	<input type="checkbox"/> URBAN OR INDUSTRIAL [0]				
<input type="checkbox"/> HEAVY / SEVERE [1]	<input type="checkbox"/> NARROW 5-10m [2]	<input type="checkbox"/> RESIDENTIAL, PARK, NEW FIELD [1]	<input type="checkbox"/> MINING / CONSTRUCTION [0]				
	<input type="checkbox"/> VERY NARROW < 5m [1]	<input type="checkbox"/> FENCED PASTURE [1]					
	<input type="checkbox"/> NONE [0]	<input type="checkbox"/> OPEN PASTURE, ROWCROP [0]					

Comments _____

Indicate predominant land use(s) past 100m riparian. Riparian Maximum 10

5] POOL / GLIDE AND RIFFLE / RUN QUALITY

MAXIMUM DEPTH

Check ONE (ONLY!)

- ☐ > 1m [6]
☐ 0.7-<1m [4]
☐ 0.4-<0.7m [2]
☐ 0.2-<0.4m [1]
☐ < 0.2m [0]

CHANNEL WIDTH

Check ONE (Or 2 & average)

- ☐ POOL WIDTH > RIFFLE WIDTH [2]
☐ POOL WIDTH = RIFFLE WIDTH [1]
☐ POOL WIDTH < RIFFLE WIDTH [0]

CURRENT VELOCITY

Check ALL that apply

- ☐ TORRENTIAL [-1] ☐ SLOW [1]
☐ VERY FAST [1] ☐ INTERSTITIAL [-1]
☐ FAST [1] ☐ INTERMITTENT [-2]
☐ MODERATE [1] ☐ EDDIES [1]

Indicate for reach - pools and riffles.

Recreation Potential

Primary Contact

Secondary Contact

(circle one and comment on back)

Comments _____

Pool /
Current
Maximum
12

Indicate for functional riffles; Best areas must be large enough to support a population of riffle-obligate species:

Check ONE (Or 2 & average).

☐ NO RIFFLE [metric=0]

RIFFLE DEPTH	RUN DEPTH	RIFFLE / RUN SUBSTRATE	RIFFLE / RUN EMBEDDEDNESS
<input type="checkbox"/> BEST AREAS > 10cm [2]	<input type="checkbox"/> MAXIMUM > 50cm [2]	<input type="checkbox"/> STABLE (e.g., Cobble, Boulder) [2]	<input type="checkbox"/> NONE [2]
<input type="checkbox"/> BEST AREAS 5-10cm [1]	<input type="checkbox"/> MAXIMUM < 50cm [1]	<input type="checkbox"/> MOD. STABLE (e.g., Large Gravel) [1]	<input type="checkbox"/> LOW [1]
<input type="checkbox"/> BEST AREAS < 5cm [metric=0]		<input type="checkbox"/> UNSTABLE (e.g., Fine Gravel, Sand) [0]	<input type="checkbox"/> MODERATE [0]
			<input type="checkbox"/> EXTENSIVE [-1]

Comments _____

Riffle / Run Maximum 8

6] GRADIENT

DRAINAGE AREA

ft/mi
mi²

- ☐ VERY LOW - LOW [2-4]
☐ MODERATE [6-10]
☐ HIGH - VERY HIGH [10-6]

%POOL:

%GLIDE:

%RUN:

%RIFFLE:

Gradient
Maximum
10

A/ SAMPLED REACH

Check ALL that apply

METHOD

- ☐ BOAT
☐ WADE
☐ L. LINE
☐ OTHER

STAGE

- 1st-sample pass- 2nd
☐ HIGH ☐
☐ UP ☐
☐ NORMAL ☐
☐ LOW ☐
☐ DRY ☐

DISTANCE

- ☐ 0.5 Km
☐ 0.2 Km
☐ 0.15 Km
☐ 0.12 Km
☐ OTHER

meters

CANOPY

- ☐ > 85%- OPEN
☐ 55%-<85%
☐ 30%-<55%
☐ 10%-<30%
☐ <10%- CLOSED

CLARITY

- 1st --sample pass-- 2nd
☐ < 20 cm ☐
☐ 20-<40 cm ☐
☐ 40-70 cm ☐
☐ > 70 cm/ CTB ☐
☐ SECCHI DEPTH ☐

- 1st _____ cm
pass
2nd _____ cm

C/ RECREATION

AREA DEPTH
POOL: ☐ >100ft² ☐ >3ft

B/ AESTHETICS

- ☐ NUISANCE ALGAE
☐ INVASIVE MACROPHYTES
☐ EXCESS TURBIDITY
☐ DISCOLORATION
☐ FOAM / SCUM
☐ OIL SHEEN
☐ TRASH / LITTER
☐ NUISANCE ODOR
☐ SLUDGE DEPOSITS
☐ CSOs/SSOs/OUTFALLS

D/ MAINTENANCE

- PUBLIC / PRIVATE / BOTH / NA
ACTIVE / HISTORIC / BOTH / NA
YOUNG-SUCCESSION-OLD
SPRAY / SNAG / REMOVED
MODIFIED / DIPPED OUT / NA
LEVEED / ONE SIDED
RELOCATED / CUTOFFS
MOVING-BEDLOAD-STABLE
ARMOURED / SLUMPS
ISLANDS / SCOURED
IMPOUNDED / DESICCATED
FLOOD CONTROL / DRAINAGE

Circle some & COMMENT

E/ ISSUES

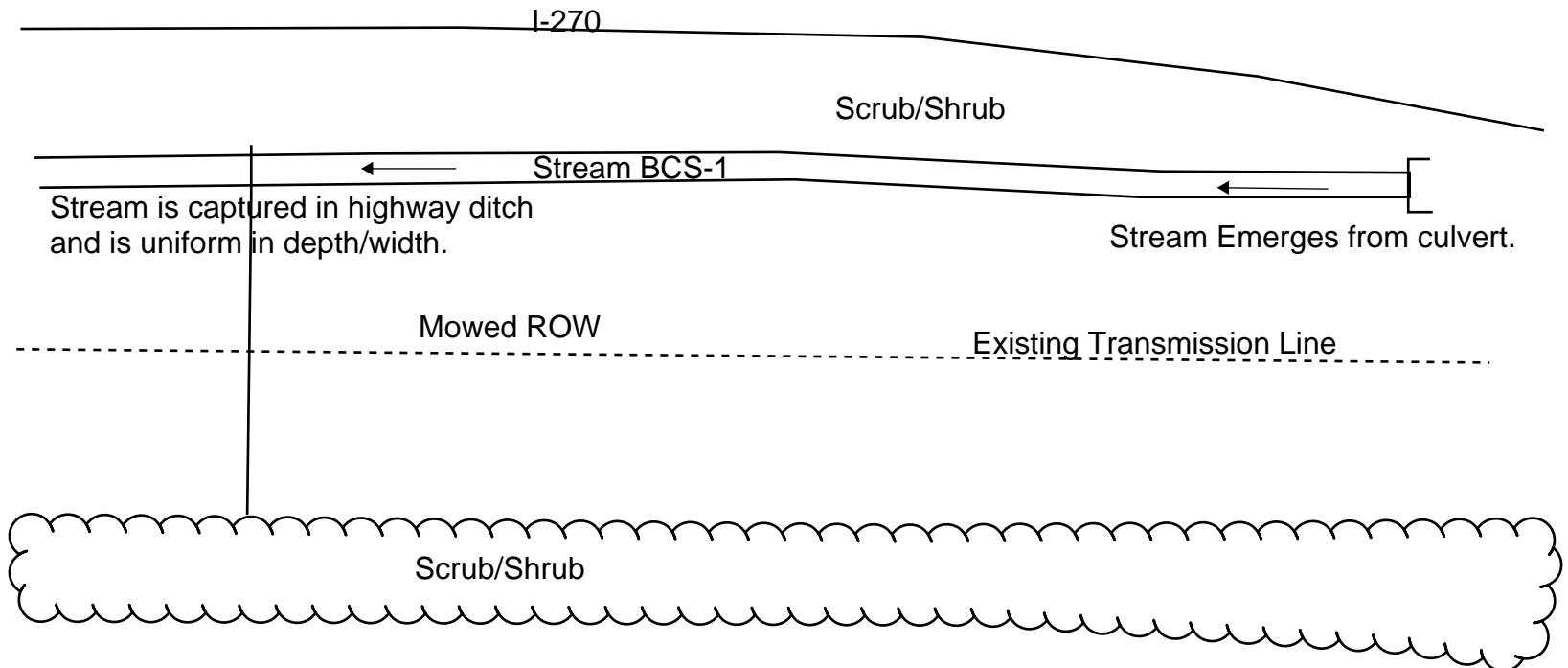
- WWTP / CSO / NPDES / INDUSTRY
HARDENED / URBAN / DIRT&GRIME
CONTAMINATED / LANDFILL
BMPs-CONSTRUCTION-SEDIMENT
LOGGING / IRRIGATION / COOLING
BANK / EROSION / SURFACE
FALSE BANK / MANURE / LAGOON
WASH H₂O / TILE / H₂O TABLE
ACID / MINE / QUARRY / FLOW
NATURAL / WETLAND / STAGNANT
PARK / GOLF / LAWN / HOME
ATMOSPHERE / DATA PAUCITY

F/ MEASUREMENTS

- \bar{x} width
 \bar{x} depth
max. depth
 \bar{x} bankfull width
bankfull \bar{x} depth
W/D ratio
bankfull max. depth
floodprone x² width
entrench. ratio

Legacy Tree:

Stream Drawing:



APPENDIX

D REPRESENTATIVE PHOTOGRAPHS

PHOTOGRAPH 1



Wetland A (PFO) facing north on April 7, 2021.

PHOTOGRAPH 2



Wetland A (PFO) facing south on April 7, 2021.

PHOTOGRAPH 3



Upland CE-1 facing Northwest on April 29, 2021.

PHOTOGRAPH 4



Upland CE-1 facing south on April 29, 2021.

PHOTOGRAPH 5



Stream BCS-1 (Perennial) facing upstream on April 29, 2021.

PHOTOGRAPH 6



Stream BCS-1 (Perennial) facing downstream on April 29, 2021.

PHOTOGRAPH 7



Stream BCS-1 (Perennial) substrate on April 29, 2021

PHOTOGRAPH 8



Stream BCS-2 (Perennial) facing upstream on April 29, 2021.

PHOTOGRAPH 9



Stream BCS-2 (Perennial) facing downstream on April 29, 2021.

PHOTOGRAPH 10



Stream BCS-2 (Perennial) substrate on April 29, 2021.

PHOTOGRAPH 11



Pond 1 facing east on April 7, 2021.

APPENDIX

E APPROVED JURISDICTIONAL DETERMINATION



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, HUNTINGTON DISTRICT
502 8TH STREET
HUNTINGTON, WV 25701

February 17, 2021

Regulatory Division
North Branch
LRH-2020-00723-SCR

APPROVED JURISDICTIONAL DETERMINATION

Mr. Phil Peters
Jacobs Engineering
155 Grand Ave, 8th Floor
Oakland, California 94612

Dear Mr. Peters:

I refer the reports titled [REDACTED] *Investigation of Waters of the United States* (Delineation Report), received on September 18, 2020, and the *Addendum to [REDACTED] Investigation of Waters of the U.S. (LRH-2020-00723)* (Addendum Report), received on January 29, 2021, submitted on your behalf by the EMH&T Engineers, Surveyors, Planners, Scientists (EMH&T). You have requested an approved jurisdictional determination (AJD) for a 495-acre subject property referred to as [REDACTED]. The Delineation Report and Addendum Report contain information concerning potential waters of the United States (U.S.) on a 495-acre subject property. The subject property is located east of U.S. Route 23 and west of Parsons Avenue, between Rathmell Road and Scioto Downs, in the City of Columbus, Franklin County, Ohio (39.852977°N, 82.996154°W). The AJD request has been assigned the following file number: LRH-2020-00723-SCR. Please reference this file number on all future correspondence related to this case.

The U.S. Army Corps of Engineers' (Corps) authority to regulate waters of the U.S. is based on the definitions and limits of jurisdiction contained in 33 CFR 328, including the amendment to 33 CFR 328.3 (85 Federal Register 22250), and 33 CFR 329. Section 404 of the Clean Water Act (Section 404) requires a Department of the Army (DA) permit be obtained prior to the discharge of dredged or fill material into waters of the U.S., including wetlands. Section 10 of the Rivers and Harbors Act of 1899 requires a DA permit be obtained for any work in, on, over or under navigable water.

The Navigable Waters Protection Rule, which became effective on June 22, 2020, was followed in this verification of Section 404 jurisdiction for the features located within the geographic boundary under review for the AJD. Four (4) aquatic resources were delineated within the 495-acre AJD boundary as depicted on the enclosed maps titled *Exhibit 6: [REDACTED] Delineation Map*.

Based on the information provided and other information available to us, it has been determined that:

- Pond 1, (10.8 acres), does not flow to an (a)(1) water, is an artificial (manmade) feature constructed entirely in uplands, is not an impoundment of a (a)(1)-(a)(3) water, and is not considered a water of the U.S.; and
- Wetland A (4.2 acres), Wetland B (0.34 acre), and Wetland C (0.14 acre) are not “adjacent” to a paragraph (a)(1), (2), or (3) water per 33 CFR 328.3(c)(1)(i)-(iv) and are not waters of the U.S.

The aforementioned features are depicted on the enclosed map titled *Exhibit 6: [REDACTED] Delineation Map* and are described in the enclosed Table. 1. Pond 1 and Wetlands A, B, and C are not jurisdictional waters of the U.S. and are not subject to regulation under Section 404. However, you should contact the Ohio Environmental Protection Agency, Division of Surface Water, at (614) 664-2001 to determine state permit requirements.

This jurisdictional verification is valid for a period of five (5) years from the date of this letter unless new information warrants revision of the delineation prior to the expiration date. This letter contains an AJD for the subject site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the Great Lakes and Ohio River (LRD) Division Office at the following address:

Appeal Review Officer
U.S. Army Corps of Engineers
Great Lakes and Ohio River Division
550 Main Street, Room 10-714
Cincinnati, OH 45202-3222
TEL (513) 684-2699; FAX (513) 684-2460

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the LRD Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by **April 17, 2021**. **It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter.**

The determination included herein has been conducted to identify the location and extent of the aquatic resource boundaries and/or the jurisdictional status of aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This AJD may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are U.S. Department of Agriculture (USDA) program participants, or

anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center, prior to starting work.

If you have any questions concerning the above information, please contact Ms. Audrey Richter of the Energy Resource Branch at (618) 202-0492 or by email at Audrey.M.Richter@usace.army.mil.

Sincerely,

A handwritten signature in black ink, appearing to read "Teresa Spagna".

Teresa Spagna
Chief, North Branch

Enclosure(s)

Table 1: Non-jurisdictional Aquatic Resources Within the AJD Review Area for the Jacobs Engineering - [REDACTED] – LRH-2020-00723-SCR.				
Aquatic Resource	Latitude & Longitude		Pond or Wetland Area (acre)	Regulatory Authority
Pond 1	39.85737	-82.99474	10.8	None; excluded under (b)(8)
Wetland A	39.856514	-82.993648	4.2	None; excluded under (b)(1) non-adjacent wetland
Wetland B	39.854189	-82.994111	0.34	None; excluded under (b)(1) non-adjacent wetland
Wetland C	39.856524	-82.992446	0.14	None; excluded under (b)(1) non-adjacent wetland



Legend

- Study Area
- Ponds
- Wetlands
- Wetland Point
- Upland Point

EMH&T
 Engineers • Surveyors • Planners • Scientists
 5500 New Albany Road, Columbus, OH 43054
 Phone: 614.775.4500 Toll Free: 888.775.3648
 emht.com

CITY OF COLUMBUS, FRANKLIN COUNTY, OHIO

**Delineation Map
Exhibit 6**

SCALE: 1" = 1,000'



Source: Franklin County, 2019



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REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE**

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 2/17/2021

ORM Number: LRH-2020-00723-SCR

Associated JDs: N/A

Review Area Location¹: State/Territory: Ohio City: Columbus County/Parish/Borough: Franklin

Center Coordinates of Review Area: Latitude 39.852977 Longitude -82.996154

II. FINDINGS

A. Summary: Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.

- ☐ The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A
- ☐ There are "navigable waters of the United States" within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
- ☐ There are "waters of the United States" within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
- ☒ There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)²

§ 10 Name	§ 10 Size	§ 10 Criteria	Rationale for § 10 Determination
N/A.	N/A.	N/A.	N/A.

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters): ³				
(a)(1) Name	(a)(1) Size	(a)(1) Criteria	Rationale for (a)(1) Determination	
N/A.	N/A.	N/A.	N/A.	N/A.

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size	(a)(2) Criteria	Rationale for (a)(2) Determination	
N/A.	N/A.	N/A.	N/A.	N/A.

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):				
(a)(3) Name	(a)(3) Size	(a)(3) Criteria	Rationale for (a)(3) Determination	
N/A.	N/A.	N/A.	N/A.	N/A.

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size	(a)(4) Criteria	Rationale for (a)(4) Determination	
N/A.	N/A.	N/A.	N/A.	N/A.

¹ Map(s)/figure(s) are attached to the AJD provided to the requestor.

² If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

³ A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.



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D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)). ⁴				
Exclusion Name	Exclusion Size		Exclusion ⁵	Rationale for Exclusion Determination
Pond 1	10.8	acre(s)	(b)(8) Artificial lake/pond constructed or excavated in upland or a non-jurisdictional water, so long as the artificial lake or pond is not an impoundment of a jurisdictional water that meets (c)(6).	Pond 1 does not flow to an (a)(1) water, is an artificial (manmade) feature constructed entirely in uplands, and is not an impoundment of a (a)(1)-(a)(3) water. Pond 1 is not subject to regulation under Section 404. Refer to Section III C. for an assessment of the (b)(8) exclusion.
Wetland A	4.2	acre(s)	(b)(1) Non-adjacent wetland.	The subject wetland, Wetland A, has been determined to not be “adjacent” to a paragraph (a)(1), (2), or (3) water (33 CFR 328.3(c)(1)(i)-(iv)). Refer to Section 111 C. for an assessment of each adjacency criteria.
Wetland B	0.34	acre(s)	(b)(1) Non-adjacent wetland	The subject wetland, Wetland B, has been determined to not be “adjacent” to a paragraph (a)(1), (2), or (3) water (33 CFR 328.3(c)(1)(i)-(iv)). Refer to Section 111 C. for an assessment of each adjacency criteria.
Wetland C	0.14	acre(s)	(b)(1) Non-adjacent wetland	The subject wetland, Wetland C, has been determined to not be “adjacent” to a paragraph (a)(1), (2), or (3) water (33 CFR 328.3(c)(1)(i)-(iv)). Refer to Section 111 C. for an assessment of each adjacency criteria.

III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

☒ Information submitted by, or on behalf of, the applicant/consultant: [REDACTED] Investigation of Waters of the United States, Jacobs Engineering Group, Inc., (2020 Delineation Report) prepared by EMH&T on 19 March 2020, revised on 11 September 2020, and received on 18 September 2020. Information outlined in the Corps’ email correspondence sent to EMH&T dated 3 November 2020, 12 November 2020, and 20 November 2020 with EMH&T responses provided on 5 November 2020, 16

⁴ Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



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November 2020, and 24 November 2020, respectively. The Corps "Jurisdictional Determination Field Visit" Letter dated 22 January 2021 and the Corps' email correspondence dated 26 January 2021. The "Addendum to [REDACTED] Investigation of Waters of the U.S. (LRH-2020-00723)" Report dated and received on 29 January 2021.

This information is sufficient for purposes of this AJD.

Rationale: The information provided, as outlined in Section III.A, accurately reflects the district's conclusion on the aquatic resources within the geographic boundary of the AJD Review Area.

- ☐ Data sheets prepared by the Corps: N/A
- ☒ Photographs: Aerial and Other: Exhibit 7 – "[REDACTED] 1955 Historical Aerial," Site Photographs 1-9 provided in the 2020 Delineation Report.
- ☐ Corps site visit(s) conducted on: N/A
- ☐ Previous Jurisdictional Determinations (AJDs or PJDs): N/A
- ☒ Antecedent Precipitation Tool: provide detailed discussion in Section III.B.
- ☒ USDA NRCS Soil Survey: Exhibit 3A – "[REDACTED] Web Soil Survey of Franklin County" and Exhibit 3B – "[REDACTED] Historical Soil Survey of Franklin County" provided in the 2020 Delineation Report.
- ☒ USFWS NWI maps: Exhibit 5 – "[REDACTED] National Wetland Inventory Map" provided in the 2020 Delineation Report.
- ☒ USGS topographic maps: Exhibit 2 – "[REDACTED] USGS Topographic Map" provided in the 2020 Delineation Report; 1940, 1943, 1951, 1956, 1957, 1966, 1975, 1985, 1995, 2013, and 2016 USGS topographic maps accessed from Historic Aerials

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	National Hydrography Dataset (NHD) accessed November 2020 and January 2021; Huntington District Regulatory Viewer.
USDA Sources	Other than the Web Soil Survey Report listed above, no other USDA sources were used.
NOAA Sources	N/A.
USACE Sources	Huntington District Regulatory Viewer – Lidar Aerial Imagery (3DEP Elevation Hillshade, National Agricultural Imagery Program (NAIP) Imagery, and NAIP Imagery – Colored Infrared) – accessed November 2020 and January 2021.
State/Local/Tribal Sources	N/A.
Other Sources	Historic Aerial Imagery (1953, 1954, 1957, 1963, 1965, 1971, 1983, 1994) accessed November 2020 and "Recent" Aerial Imagery (July 2019, Sept 2019, Apr 2020, June 2020, and Oct 2020) – accessed November 2020 and January 2021.
Other Sources	Exhibit 4 – "[REDACTED] Flood Insurance Rate Map" provided in the 2020 Delineation Report 2020.
Other Sources	N/A.

- B. Typical year assessment(s):** A typical year occurs over a rolling thirty year period and includes the analysis of precipitation and other climatic variables to establish a normal period range (seasonally or annually) for a specific geographic region where the aquatic resource occurs. Two (2) point-in-time data sources dated 5 March 2020 and 25 April 2020, with a corresponding antecedent precipitation tool (APT) report, are included in the evaluation for the excluded features listed in Section II D. According to the



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APT report for 5 March 2020, wetter than normal conditions were observed during the WebWIMP wet season with a Palmer Drought Severity Index (PDSI) Value of moderate wetness. According to the APT report for 25 April 2020, normal conditions were observed during the WebWIMP wet season with a PDSI Value of moderate wetness. The 30-day rolling total for precipitation was within the 30-year wet range for the 5 March 2020 APT data point and the 25 April 2020 data point was in the 30-year normal range. Under normal conditions, the wetlands did not meet the definition of an adjacent wetland.

Wetlands A, B and C do not abut a water identified in 33 CFR 328.3(a)(1), (2), or (3), are not inundated by flooding from a water identified in 33 CFR 328.3(a)(1), (2), or (3) in a typical year, are not physically separated from a water identified in 33 CFR 328.3(a)(1), (2), or (3) only by a natural berm, bank, dune, or similar natural feature, and are not physically separated from a water identified in 33 CFR 328.3(a)(1), (2), or (3) only by an artificial dike, barrier, or similar artificial structure.

Pond 1 and Wetland A, B and C do not meet the definition of waters of the United States as identified in 33 CFR 328.3(a)(1) or (2). Refer also to Section III C. for details.

C. Additional comments to support AJD:

The subject pond, Pond 1, has been determined to be an artificial pond that was constructed or excavated in uplands and is not an impoundment of a jurisdictional water that meets paragraph (c)(6). Based on a review of remote sensing resources (historical aerial imagery and historical USGS topographic maps) and the delineation report, there is no evidence the subject pond contributes surface water flow to a water identified in paragraph (a)(1) in a typical year either directly or indirectly through one or more waters identified in paragraphs (a)(2)-(4). There is no evidence of a potential (a)(1)-(3) water observed within the vicinity of the subject pond. The subject pond persists in a depression on the landscape and is entirely surrounded by uplands on all sides. The delineation report indicates the subject pond is an excavated feature documented in NWI mapping as a PUBGx. No evidence of an impoundment of a jurisdictional water meeting the conditions of paragraph (c)(6) was documented in the delineation report or observed in remote sensing resources.

The subject wetlands, Wetlands A, B, and C, have been determined to not be "adjacent" to a paragraph (a)(1), (2), or (3) water (33 CFR 328.3(c)(1)(i)-(iv)). Each adjacency criteria is assessed below:

■ (i) The subject wetlands do not abut a paragraph (a)(1), (2), or (3) water as evidenced by the submitted wetland delineation report and a review of remote sensing resources. The subject wetlands persist in a depression on the landscape and are entirely surrounded by uplands on all sides. No (a)(1)-(3) waters were observed within the immediate vicinity of the perimeter of the subject wetlands or the AJD boundary, therefore, the subject wetlands are not abutting a paragraph (a)(1)-(3) water.

■ (ii) No evidence of inundation by flooding from a paragraph (a)(1), (2), or (3) water was documented in the delineation report. Based on remote sensing, no potential (a)(1)-(3) waters were observed within the immediate vicinity of the subject wetlands. Based on a review of mapping resources and aerial photographs, the nearest potential mapped (a)(1)-(3) water is a tributary approximately 3,000+ feet north of the subject parcel. Additionally, the subject parcel is located outside of the Federal Emergency Management Agency 500-year floodplain. The Delineation Report and remote sensing resources do not indicate the subject wetlands are prone to being inundated by flooding from a paragraph (a)(1)-(3) water, the subject wetlands have been determined to not meet adjacency criteria (ii).



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- (iii) The subject wetlands persist in depressions on the landscape and are entirely surrounded by uplands on all sides. The subject wetlands are not separated from a paragraph (a)(1)-(3) water only by a natural berm, bank, dune, or similar natural feature and therefore, do not meet adjacency criteria (iii).

- (iv) The subject wetlands persist in depressions on the landscape and are entirely surrounded by uplands on all sides. Based on remote sensing resources and the Delineation Report, there were no artificial dikes, barriers, or similar artificial structures documented around the perimeter of the subject wetlands nor were there any artificial features (e.g., culverts) documented within or stemming from the subject wetlands. The subject wetlands are not separated from a paragraph (a)(1)-(3) water by an artificial dike, barrier, or similar artificial structure and therefore, do not meet adjacency criteria (iv).

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Jacobs Engineering- Project Cyprus		File Number: LRH-2020-00723	Date: 2/17/2020
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A	
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B	
	PERMIT DENIAL	C	
X	APPROVED JURISDICTIONAL DETERMINATION	D	
	PRELIMINARY JURISDICTIONAL DETERMINATION	E	

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at

http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Michael Hatten, Chief, Regulatory Division, 304-399-5710
Teresa Spagna, Chief, North Branch, 304-399-5210
Lee Robinette, Chief, Energy Resource Branch, 304-399-5610
Susan Porter, Chief, South/Transportation Branch, 304-399-5710
Address: U.S. Army Corps of Engineers
Regulatory Division
502 8th Street
Huntington, WV 25701

If you only have questions regarding the appeal process you may also contact:

Appeal Review Officer
U.S. Army Corps of Engineers
Great Lakes and Ohio River Division
550 Main Street, Room 10-714
Cincinnati, OH 45202-3222
TEL (513) 684-2699; FAX (513) 684-2460

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.

Date:

Telephone number:

APPENDIX

F ISOLATED WETLAND GENERAL ACTIVITIY PERMIT



Mike DeWine, Governor
Jon Husted, Lt. Governor
Laurie A. Stevenson, Director

Re: [REDACTED]
Permit - Intermediate
Correspondence
401 Wetlands
Franklin
DSW401217304W

April 21, 2021

Magellan Enterprises C/O Rob Milligan
5500 New Albany Road
Columbus, Ohio 43054
rmilligan@emht.com

Subject: Complete Isolated Wetland and Ephemeral Stream General Permit Pre-Activity Notice
[REDACTED]
Ohio EPA ID No. 217304W

Dear Mr. Milligan:

On April 9, 2021, the Ohio Environmental Protection Agency (Ohio EPA) received a pre-activity notice (PAN) for coverage under the OHIO GENERAL PERMIT FOR FILLING CATEGORY 1 AND CATEGORY 2 ISOLATED WETLANDS AND EPHEMERAL STREAMS (general permit). In the PAN, you requested to impact 0.48 acres of non-forested Category 1 wetlands for the purpose of constructing phase 1 of a data center development located east of US 23 and west of Parsons Avenue between Rathmell Road and Scioto Downs in Franklin County (39.852977, -82.996154). After an administrative review of the PAN, it was determined to be complete on April 21, 2021. As compensatory mitigation for the aforementioned impacts the applicant will purchase 1 acre of wetland Credits from the Red Stone Farm Mitigation Bank.

Ohio EPA has reviewed your request and has determined that it is complete and meets the PAN requirements for coverage under the general permit.

Please familiarize yourself with the general permit (see link below). It contains requirements and prohibitions with which you must comply.

[OHIO GENERAL PERMIT FOR FILLING CATEGORY 1 AND 2 ISOLATED WETLANDS AND EPHEMERAL STREAMS](#)

If your project also requires a Section 404 permit from the U.S. Army Corps of Engineers and a Section 401 water quality certification from Ohio EPA for jurisdictional waters, a

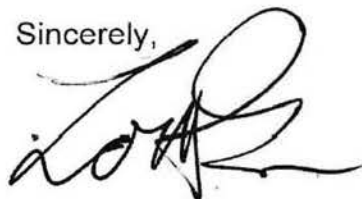
Level 2 or 3 Isolated Wetland Permit from Ohio EPA, or other authorization from Ohio EPA for non-jurisdictional waters, no impacts associated with this General Permit for Filling Isolated Wetlands and Ephemeral Streams can begin until appropriate authorizations are first obtained. Once these additional authorizations are obtained, you may proceed with the above referenced project.

Additionally, please be aware that as per ORC §6111.022(E) and Part VII of the general permit, the proposed filling of the isolated wetland(s) and/or ephemeral stream(s) must be completed by April 21, 2023. If you do not complete the filling within this time, you must submit a new pre-activity notice to Ohio EPA.

You may find a copy of Ohio EPA's rules and laws online at <http://www.epa.ohio.gov/dsw/dswrules.aspx>. Information regarding Ohio's Section 401 and Isolated Wetlands Permitting programs is also available online at <http://www.epa.ohio.gov/dsw/401/permitting.aspx>.

If you have any questions, please contact me at 614-914-4243 or via email at Thomas.Babb@epa.ohio.gov.

Sincerely,



Thomas Babb
Mitigation Coordinator
401/Wetlands/Mitigation Section

cc: Andrea Kilbourne, Andrea.Kilbourne@epa.ohio.gov, Ohio EPA, DSW, Mitigation Coordinator
Jeff Boyles, Jeffrey.Boyles@epa.ohio.gov, 401/Wetlands/Mitigation Section Supervisor, Ohio EPA
Wes Barnett, wes.barnett@usace.army.mil, Department of the Army, Huntington District, Corps of Engineers
Drausin Wulsin, dfwulsin@gmail.com, Wulsin Land Partnership
Patrick Hoyng, phoyng@emht.com, EMH&T
DSW File

APPENDIX

G AGENCY COORDINATION



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

September 1, 2021

Phil Renner
WSP USA
312 Elm Street
Suite 2500
Cincinnati, Ohio 45202

Re: 21-0652; Cyprus Extension 138 kV Transmission Line Project

Project: The proposed project involves the extension of the existing Cyprus 138 kV transmission line.

Location: The proposed project is located in Hamilton Township, Franklin County, Ohio.

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

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

Black sandshell (*Ligumia recta*), T
Threehorn wartyback (*Obliquaria reflexa*), T
Clubshell (*Pleurobema clava*), E, FE
Fawnsfoot (*Truncilla donaciformis*), T
Deertoe (*Truncilla truncata*), SC
Tippecanoe darter (*Etheostoma tippecanoe*), T
Lark sparrow (*Chondestes grammacus*), E
Scioto Grove Metro Park – Columbus & Franklin Co. Metro Parks

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

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

rare species or unique features are absent from that area. Although all types of plant communities have been surveyed, we only maintain records on the highest quality areas.

Statuses are defined as: E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; SI = state special interest; U = state status under review; X = presumed extirpated in Ohio; FE = federal endangered, and FT = federal threatened.

Fish and Wildlife: The Division of Wildlife (DOW) has the following comments.

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

The project is within the vicinity of records for the little brown bat (*Myotis lucifugus*), a state endangered species. Because presence of state endangered bat species has been established in the area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. However, limited summer tree cutting inside this buffer may be acceptable after further consultation with DOW (contact Erin Hazelton at Erin.hazelton@dnr.ohio.gov).

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

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

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

Federally Endangered

purple cat's paw (*Epioblasma o. obliquata*)
clubshell (*Pleurobema clava*)

northern riffleshell (*Epioblasma torulosa rangiana*)
rayed bean (*Villosa fabalis*)
snuffbox (*Epioblasma triquetra*)

Federally Threatened

rabbitsfoot (*Quadrula cylindrica*)

State Endangered

elephant-ear (*Elliptio crassidens crassidens*)
Long solid (*Fusconaia maculata maculate*)
Ohio pigtoe (*Pleurobema cordatum*)
pocketbook (*Lampsilis ovata*)
washboard (*Megalonaias nervosa*)

State Threatened

black sandshell (*Ligumia recta*)
fawnsfoot (*Truncilla donaciformis*)
pondhorn (*Unio merus tetralasmus*)
threehorn wartyback (*Obliquaria reflexa*)

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

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

Federally Endangered

Scioto madtom (*Noturus trautmani*)

State Endangered

goldeye (*Hiodon alosoides*)
Iowa darter (*Etheostoma exile*)
popeye shiner (*Notropis ariommus*)
northern brook lamprey (*Ichthyomyzon fossor*)
spotted darter (*Etheostoma maculatum*)
shortnose gar (*Lepisosteus platostomus*)
tonguetied minnow (*Exoglossum laurae*)

State Threatened

lake chubsucker (*Erimyzon sucetta*)
paddlefish (*Polyodon spathula*)
Tippecanoe darter (*Etheostoma tippecanoe*)

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

The project is within the range of the American bittern (*Botaurus lentiginosus*), a state endangered bird. Nesting bitterns prefer large undisturbed wetlands that have scattered small pools amongst dense vegetation. They occasionally occupy bogs, large wet meadows, and dense shrubby swamps. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, the project is not likely to impact this species.

The project is within the range of the black-crowned night-heron (*Nycticorax nycticorax*), a state-threatened bird. Night-herons are so named because they are nocturnal, conducting most of their foraging in the evening hours or at night, and roost in trees near wetlands and waterbodies during the day. Night herons are migratory and are typically found in Ohio from April 1 through December 1 but can be found in more urbanized areas with reliable food sources year-round. Black-crowned night-herons primarily forage in wetlands and other shallow aquatic habitats, and roost in trees nearby. These night-herons nest in small trees, saplings, shrubs, or sometimes on the ground, near bodies of water and wetlands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the cattle egret (*Bubulcus ibis*), a state endangered bird. Cattle egrets are not strictly wetland birds. They often forage in dry pastures and fields. Egrets nest in colonies and will build a nest out of sticks and other materials wherever it can be supported. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 15 through August 15. If no wetland habitat will be impacted, the project is not likely to impact this species.

The project is within the range of the lark sparrow (*Chondestes grammacus*), a state endangered bird. This sparrow nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. These summer residents normally migrate out of Ohio shortly after their young fledge or leave the nest. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the least bittern (*Ixobrychus exilis*), a state threatened bird. This secretive marsh species prefers dense emergent wetlands with thick stands of cattails, sedges, sawgrass or other semiaquatic vegetation interspersed with woody vegetation and open water. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

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

The project is within the range of the sandhill crane (*Grus canadensis*), a state threatened species. Sandhill cranes are primarily a wetland-dependent species. On their wintering grounds, they will utilize agricultural fields; however, they roost in shallow, standing water or moist bottomlands. On breeding grounds they require a rather large tract of wet meadow, shallow marsh, or bog for nesting. If grassland, prairie, or wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 through August 31. If this habitat will not be impacted, this project is not likely to have an impact on this species.

The project is within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird. Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

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

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

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

http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community%20Contact%20List_8_16.pdf

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

Mike Pettegrew
Environmental Services Administrator (Acting)

Renner, Philip

From: Ohio, FW3 <ohio@fws.gov>
Sent: Monday, July 19, 2021 3:33 PM
To: Renner, Philip
Cc: nathan.reardon@dnr.state.oh.us; Parsons, Kate
Subject: AEP's Cyprus Extension 138 kV Transmission Line Project, Franklin County, Ohio

Follow Up Flag: Follow up
Flag Status: Flagged



UNITED STATES DEPARTMENT OF THE INTERIOR
U.S. Fish and Wildlife Service
Ecological Services Office
4625 Morse Road, Suite 104
Columbus, Ohio 43230
(614) 416-8993 / Fax (614) 416-8994



TAILS# 03E15000-2021-TA-1707

Dear Mr. Renner,

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

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

Seasonal Tree Clearing for Federally Listed Bat Species: Should the proposed project site contain trees ≥ 3 inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees ≥ 3 inches dbh cannot be avoided, we recommend removal of any trees ≥ 3 inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule

(see <http://www.fws.gov/midwest/endangered/mammals/nleb/index.html>), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is recommended where Indiana bats are assumed present.

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

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

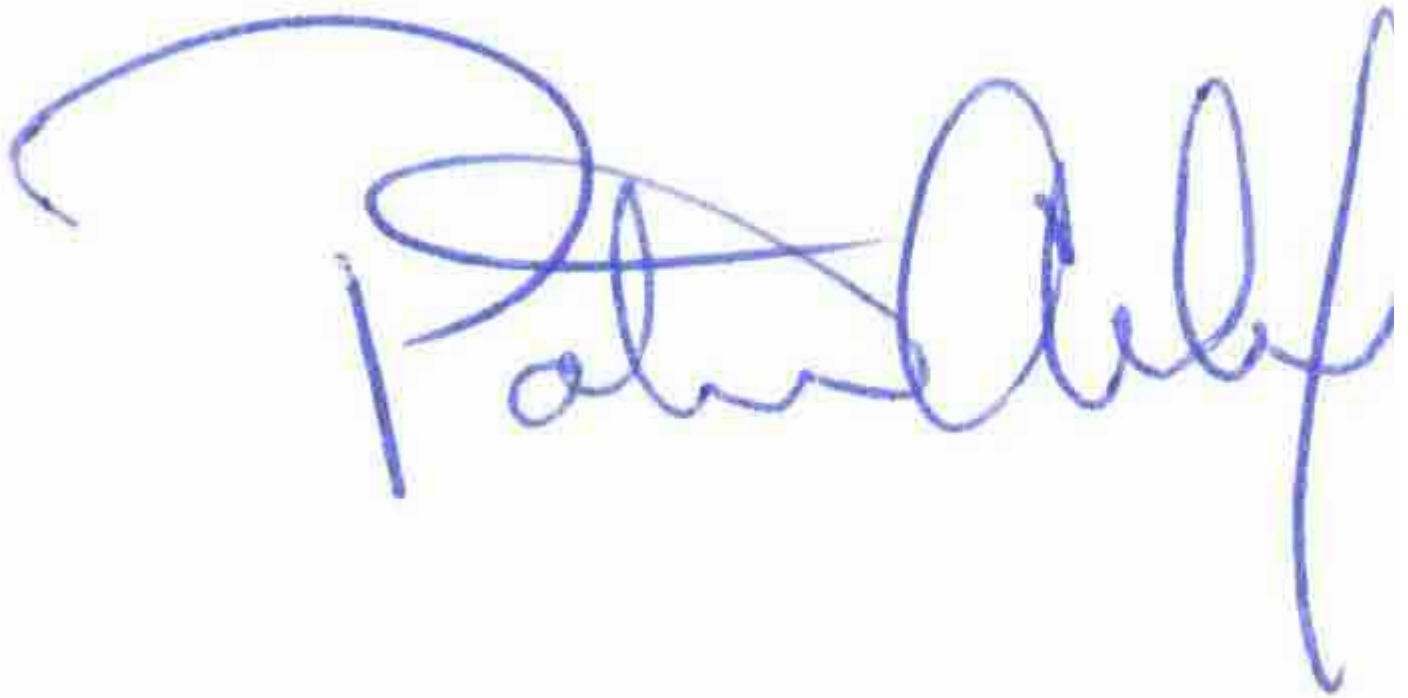
Stream and Wetland Avoidance: Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus it is important to conserve the functions and values of the remaining wetlands in Ohio (https://epa.ohio.gov/portals/47/facts/ohio_wetlands.pdf). We recommend avoiding and minimizing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

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

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

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

Sincerely,

A handwritten signature in blue ink, appearing to read "Patrice M. Ashfield". The signature is fluid and cursive, with a large initial "P" and a long, sweeping underline.

Patrice M. Ashfield
Field Office Supervisor

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



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

October 28, 2020

Brian Lombard
EMH&T
5500 New Albany Road
Columbus, Ohio 43054

Re: 20-863; Project Cyprus

Project: The proposed project involves the construction of an industrial development.

Location: The proposed project is located in the City of Columbus, Franklin County, Ohio.

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

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

Tippecanoe darter (*Etheostoma Tippecanoe*), T
Black sandshell (*Ligumia recta*), T
Washboard (*Megaloniaias nervosa*), E
Round pigtoe (*Pleurobema sintoxia*), SC
Rabbitsfoot (*Theliderma cylindrica*), E, FT
Fawnsfoot (*Truncilla donaciformis*), T
Deertoe (*Truncilla truncata*), SC
Scioto Grove Metro Park – Columbus & Franklin Co. Metro Parks

The review was performed on the project area you specified in your request as well as an additional one-mile radius. Records searched date from 1980. This information is provided to inform you of features present within your project area and vicinity.

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

Statuses are defined as: E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; SI = state special interest; A = species recently added to state inventory, status not yet determined; X = presumed extirpated in Ohio; FE = federal endangered, FT = federal threatened, FSC = federal species of concern, FC = federal candidate species

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 project is within the vicinity of records for the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. Because presence of state endangered bat species has been established in the area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. However, limited summer tree cutting inside this buffer may be acceptable after further consultation with DOW (contact Sarah Stankavich, sarah.stankavich@dnr.state.oh.us).

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

The DOW also recommends that a desktop habitat assessment, followed by a field assessment if needed, is conducted to determine if there are potential hibernaculum(a) present within the project area. Information about how to conduct habitat assessments can be found in the current USFWS “Range-wide Indiana Bat Survey Guidelines.” If a habitat assessment finds that potential hibernacula are present within 0.25 miles of the project area, please send this information to Sarah Stankavich, sarah.stankavich@dnr.state.oh.us 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 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

purple cat’s paw (*Epioblasma o. obliquata*)

clubshell (*Pleurobema clava*)

northern riffleshell (*Epioblasma torulosa rangiana*)

rayed bean (*Villosa fabalis*)

snuffbox (*Epioblasma triquetra*)

Federally Threatened

rabbitsfoot (*Quadrula cylindrica cylindrica*)

State Endangered

long solid (*Fusconaia maculata maculate*)

Ohio pigtoe (*Pleurobema cordatum*)

pocketbook (*Lampsilis ovata*)

washboard (*Megaloniaias nervosa*)

elephant-ear (*Elliptio crassidens crassidens*)

State Threatened

black sandshell (*Ligumia recta*)

threehorn wartyback (*Obliquaria reflexa*)

pondhorn (*Unio merus tetralasmus*)

fawnsfoot (*Truncilla donaciformis*)

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 following listed fish species.

Federally Endangered

Scioto madtom (*Noturus trautmani*)

State Endangered

goldeye (*Hiodon alosoides*)

Iowa darter (*Etheostoma exile*)

popeye shiner (*Notropis ariommus*)

northern brook lamprey (*Ichthyomyzon fossor*)

spotted darter (*Etheostoma maculatum*)

shortnose gar (*Lepisosteus platostomus*)

tonguetied minnow (*Exoglossum laurae*)

State Threatened

lake chubsucker (*Erimyzon sucetta*)

paddlefish (*Polyodon spathula*)

Tippecanoe darter (*Etheostoma tippecanoe*)

The DOW recommends no in-water work in perennial streams from April 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.

The project is within the range of the American bittern (*Botaurus lentiginosus*), a state endangered bird. Nesting bitterns prefer large undisturbed wetlands that have scattered small pools amongst dense vegetation. They occasionally occupy bogs, large wet meadows, and dense shrubby swamps. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to July 31. If this type of habitat will not be impacted, the project is not likely to impact this species.

The project is within the range of the black-crowned night-heron (*Nycticorax nycticorax*), a state-threatened bird. Night-herons are so named because they are nocturnal, conducting most of their foraging in the evening hours or at night, and roost in trees near wetlands and waterbodies during the day. Night herons are migratory and are typically found in Ohio from April 1 through

December 1 but can be found in more urbanized areas with reliable food sources year-round. Black-crowned night-herons primarily forage in wetlands and other shallow aquatic habitats, and roost in trees nearby. These night-herons nest in small trees, saplings, shrubs, or sometimes on the ground, near bodies of water and wetlands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the cattle egret (*Bubulcus ibis*), a state endangered bird. Cattle egrets are not strictly wetland birds. They often forage in dry pastures and fields. Egrets nest in colonies and will build a nest out of sticks and other materials wherever it can be supported. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 15 to August 15. If no wetland habitat will be impacted, the project is not likely to impact this species.

The project is within the range of the lark sparrow (*Chondestes grammacus*), a state endangered bird. This sparrow nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. In the Oak Openings area west of Toledo, lark sparrows occupy open grass and shrubby fields along sandy beach ridges. These summer residents normally migrate out of Ohio shortly after their young fledge or leave the nest. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to June 30. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the least bittern (*Ixobrychus exilis*), a state threatened bird. This secretive marsh species prefers dense emergent wetlands with thick stands of cattails, sedges, sawgrass or other semiaquatic vegetation interspersed with woody vegetation and open water. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the northern harrier (*Circus hudsonis*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 15 to August 1. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the sandhill crane (*Grus canadensis*), a state threatened species. Sandhill cranes are primarily a wetland-dependent species. On their wintering grounds, they will utilize agricultural fields; however, they roost in shallow, standing water or moist bottomlands. On breeding grounds they require a rather large tract of wet meadow, shallow marsh, or bog for nesting. If grassland, prairie, or wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 to September 1. If this habitat will not be impacted, this project is not likely to have an impact on this species.

The project is within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird. Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

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

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

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

http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community%20Contact%20List_8_16.pdf

ODNR appreciates the opportunity to provide these comments. Please contact Sarah Tebbe, Environmental Specialist, at (614) 265-6397 or Sarah.Tebbe@dnr.state.oh.us if you have questions about these comments or need additional information.

Mike Pettegrew
Environmental Services Administrator (Acting)

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

10/28/2021 3:19:35 PM

in

Case No(s). 21-1057-EL-BNR

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