

Construction Notice Anguin 138 kV Extension No. 1 (Phase 2) Transmission Line Project



PUCO Case No. 23-0937-EL-BNR

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

Submitted by:
Ohio Power Company

October 16, 2023

Construction Notice for Anguin 138kV Extension No. 1 (Phase 2) Transmission Line Project

Construction Notice

Ohio Power Company Anguin 138kV Extension No. 1 (Phase 2) Transmission Line Project

4906-6-05

Ohio Power Company (the “Company”) provides the following information in accordance with the requirements of Ohio Administrative Code Section 4906-6-05.

4906-6-5(B) General Information

B(1) Project Description

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

The Company is proposing the Anguin 138 kV Extension No. 1 (Phase 2) Transmission Line Project (the “Project”), in Franklin County, Ohio. The Project is located on property owned by the customer and will support the customer’s new development in the area. The Project involves constructing a new greenfield 0.3-mile 138 kV double circuit transmission line on steel monopole structures extending from the previously constructed Anguin 138 kV Extension No. 1 (filed separately as Case No. 23-0343-EL-BNR) to the customer’s proposed step-down 138 kV Chinstrap Station. The Project will require a 100-foot right of way (ROW). The Project will support the customers development in the area.

Figures 1 and Figures 2, included in **Appendix A**, show the location of the Project in relation to the surrounding vicinity.

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

- 1 *New construction, extension, or relocation of single or multiple circuit electric power transmission line(s), or upgrading existing transmission or distribution line(s) for operation at a higher transmission voltage, as follows:*

(d) Line(s) primarily needed to attract or meet the requirements of a specific customer or customers, as follows:

(i) The line is completely on property owned by the specific customer or the applicant.

The Project has been assigned PUCO Case No. 23-0937-EL-BNR.

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B(2) Statement of Need

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

An existing customer near the Company's Anguin Station has requested three new 138 kV delivery points, NBY-5A, NBY-6A & NBY-7A, to serve three new facilities requiring an aggregate of 296 MW of additional load in New Albany, Ohio.

The Company is requesting approval of two separately filed construction notices:

This application concerns facilities required to meet the customer's request for the NBY-5A delivery. The Company will be required to construct a greenfield 0.3-mile double circuit 138 kV transmission line, on customer property, extending from the previously approved Anguin 138 kV Extension No. 1 (case number 23-0343-EL-BNR) to the customer's non-jurisdictional step-down station.

The customer has requested an in-service date of March 31, 2024 for the Project. Failure to move forward with the proposed project will result in the inability to serve the customer's load expectations and thereby jeopardize the customer's plans in the New Albany area.

The need and solution for the NBY-5A component, as well as the need and solution for the upcoming filing, NBY-6A, were presented and reviewed with stakeholders at the April 21, 2023 PJM SRRTEP meeting and May 9, 2023 PJM TEAC meeting, as seen in **Appendix B**. The Project has not been assigned a PJM supplemental number at this time but is expected by the end of 2023. The 2023 Long Term Forecast Report was submitted prior to the solution being identified and presented pursuant to PJM's M-3 process.

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 and proposed transmission lines and substations is shown on **Figure 1**.

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.

Due to the location of the existing Anguin Extension No. 1, the short transmission line extension length, surrounding development, and minimal land use impacts in the Project area, no other alternatives were considered for the Project. Any other alternative would add additional length to the Project without any additional benefit. This proposed route is located within an old field, industrial land (the customer's

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development site), and landscaped areas. Furthermore, there are no known impacts to cultural resource areas, streams, or wetlands. Due to the project being located within active development of the customer site, no forested areas are proposed to be impacted by the Project. Additionally, no residences are located within 1,000 feet of the Project. Therefore, this Project represents the most suitable location and is the most appropriate solution for meeting the Company's and the Customer's needs in the area.

B(5) Public Information Program

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

The Project will be located entirely within Customer owned property, with no additional property owners or tenants affected. The Company maintains a website (<http://aeptransmission.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.

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 anticipated to begin in January 2024, and the anticipated in-service date is March 2024.

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 provides the proposed Project area and existing transmission facilities on a map of 1:24,000-scale (1-inch equals 2,000 feet), showing the Project on a topographic map of the New Albany quadrangle provided by the National Geographic Society. **Figure 2** shows the Project area on recent aerial photography, dated 2021, as provided by the Environmental Systems Research Institute (ESRI), at a scale of 1:2,400 (1-inch equals 200 feet).

To visit the Project site from Columbus, Ohio, take I-670 East for approximately six miles and then merge onto I-270 N toward Cleveland. Continue on I-270 for approximately two miles, then take Exit 30 New Albany/OH 161E. Continue on OH 161E for 7.5 miles and then take the Township Highway 88/Beach Road exit. Turn right onto Beech Road and continue for approximately 1.5 miles. The approximate address of the Project site is 1101 Beech Road SW, at latitude 40.0577°, longitude -82.7689°

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

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facility and a list of the additional properties for which such agreements have not been obtained.

All work activities are proposed on parcel (PIN# 094-106896-00.000), which is currently owned by the customer. The Company has entered into a right of entry agreement with the customer.

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.

Voltage: 138 kV
Conductors: Double Circuit, 795 KCM ACSS 26/7 Strand, DRAKE
Static Wire: (One (1) 7#8 Alumoweld & one (1) 0.646" 96ct OPGW
Insulators: Polymer
ROW Width: 100-foot
Structure Types: One (1) 2-pole steel dead-end structure, and (2) mono-pole steel tangent structures. The dead-end structure is self-supporting on concrete pier foundations, the steel tangent structures will be direct embedded.

B(9)(b) Electric and Magnetic Fields

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

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

B(9)(c) Project Cost

The estimated capital cost of the project.

The capital cost estimate for the proposed Project, which is comprised of applicable tangible and capital costs, is approximately \$950,000 from 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) Land Use Characteristics

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

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An aerial photograph of the Project vicinity is provided as **Figure 2**. The Project location has undergone significant land use changes over the past several years, from heavy agriculture to light commercial and industrial use. The Project is located in the City of New Albany, Plain Township, Franklin County, Ohio. There are no parks, churches, cemeteries, wildlife management areas, or nature preserve lands within 1,000 feet of the Project.

B(10)(b) Agricultural Land Information

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

The Franklin County Auditor provided a list of parcels registered as Agricultural District Land on August 16, 2023 and on September 18, 2023, confirmed that no changes to the previously provided list has occurred. As a result, the Project is not located within lands identified as Agricultural District Land. In addition, the Project does not cross any agricultural land.

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.

Phase I Archaeological investigations and separate History/Architecture Investigations for the Project occurred in August 2023. No archaeological sites or architectural resources of 50 years of age or older were identified within the Area of Potential Effect (APE). On September 15, 2023, the Ohio State Historic Preservation Office (“SHPO”) concurred with the recommendations and stated that the Project will have no effect on historic properties and no further investigations or consultation with SHPO is necessary. Coordination with SHPO is provided as **Appendix C**.

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

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

A Notice of Intent will be filed with the Ohio Environmental Protection Agency for authorization of construction storm water discharges under General Permit OHC000006. The Company will also coordinate storm water permitting needs with local government agencies, as necessary. The Company will implement and maintain best management practices as outlined in the Project-specific Storm Water Pollution Prevention Plan to minimize erosion and control sediment to protect surface water quality during storm events.

The Company’s consultant conducted a stream and wetland delineation within the Project study area. No wetlands, streams, and/or ponds were identified within the Project study area as provided in **Section**

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(10)(f) below. Therefore, no streams and/or wetlands are proposed for disturbances as part of this Project and authorization from the United States Army Corps of Engineers (USACE) is not warranted.

No FEMA regulated floodplains or floodways will be disturbed by the Project as identified in FEMA Map ID# 39049C0217K.

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

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

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

On August 1, 2023, coordination letters were sent to United States 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 for the Project for potential impacts to threatened and endangered species. Responses were received from the USFWS on August 10, 2023, and from the ODNR on September 1, 2023. According to a response letter received from the USFWS, due to the project, type, size, and location, adverse effects to federally endangered, threatened, or proposed species or proposed designated critical habitat is not anticipated. Regarding state threatened and endangered species that may occur within the Project vicinity, 27 species were listed by the ODNR. A species review for each of these species and potential impacts from the Project were evaluated and a summary provided below.

Of the 27 listed species, four bat species northern long-eared bat (*Myotis septentrionalis*), Indiana bat (*Myotis sodalist*), little brown bat (*Myotis lucifugus*), tricolored bat (*Perimyotis subflavus*) were identified as being within range of the Project area and ODNR request adherence to seasonal tree clearing activities (October 1st to March 31). Based on general observations during the ecological survey, the existing landuse is landscape or urban areas and no forested areas were identified within the Project area. Additionally, the Company's consultant completed a desktop review for potential hibernaculum within 0.25 miles of the Project area and no caves, mines, and/or karst features were identified. Results of the desktop habitat assessment has been included within **Appendix E**. As per ODNR/USFWS guidance, further coordination regarding potential hibernaculum is only necessary if the habitat assessment find potential habitat within 0.25 miles of the Project area. Due to absence of tree clearing for the Project, no adverse impacts to the listed bat species are anticipated and further coordination with ODNR and/or USFWS is not warranted.

Additionally, the ODNR identified several aquatic species including fish and mussels within range of the Project area. These species include Goldeye (*Hiodon alosoides*), Iowa darter (*Etheostoma exile*), Lake chubsucker (*Erimyzon sucetta*), Northern brook lamprey (*Ichthyomyzon fossor*), Paddlefish (*Polyodon spathula*), Popeye shiner (*Notropis ariommus*), Shortnose gar (*Lepisosteus platostomus*), Spotted darter (*Etheostoma maculatum*), Tonguetied minnow (*Exoglossum laurae*), Clubshell (*Pleurobema clava*), Elephant-ear (*Elliptio crassidens crassidens*), Long solid (*Fusconaia maculata maculate*), Northern

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riffleshell (*Epioblasma torulosa rangiana*), Ohio pigtoe (*Pleurobema cordatum*), Pocketbook (*Lampsilis ovata*), Pondhorn (*Uniomerus tetralasmus*), Purple cat's paw (*Epioblasma o. obliquata*), Rabbitsfoot (*Quadrula cylindrica cylindrica*), Rayed bean (*Villosa fabalis*), Salamander Mussel (*Simpsonaias ambigua*), Snuffbox (*Epioblasma triquetra*), and Washboard (*Megalonaias nervosa*). Due to the absence of streams within the Project area, no impacts are anticipated to these species and further coordination with the ODNR is not warranted.

Lastly, the ODNR commented that the Project is within range of one bird species, Northern harrier (*Circus hudsonis*). Based on existing site conditions, potential nesting habitat for the Northern Harrier was identified as being absent due to the existing land use being composed of actively disturbed areas or associated with developed urban and landscape areas of the customer development. As per the ODNR initial guidance provided in **Appendix D**, this species is not likely to be impacted by the Project if their habitat will not be impacted. Therefore, no further coordination regarding northern harrier was warranted regarding this Project.

A copy of the agency correspondence is provided in **Appendix D**. Additional information regarding habitat assessments within the Project area is provided within the Wetland Delineation and Stream Assessment Report found in **Appendix E**.

B(10)(f) Areas of Ecological Concern

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

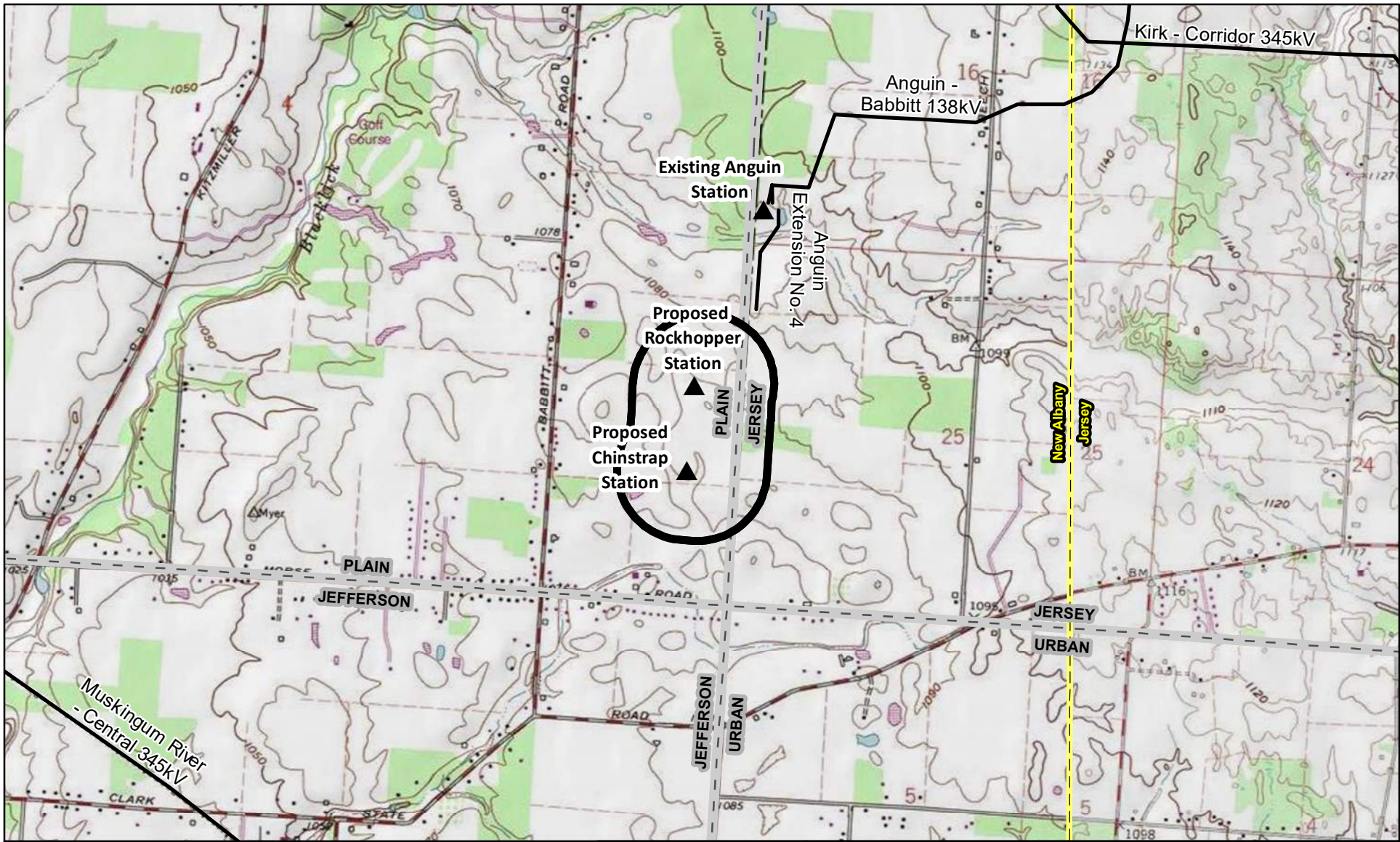
The Company's consultant prepared an ecological survey report which is provided in **Appendix E**. The Project area is located within an active customer development that is absent of streams, wetlands, and ponds as well as national and state forests and parks, floodplains, designated or proposed wilderness areas, national and state wilde scenic rivers, wildlife areas, wildlife reguges, wildlife management areas, and wildlife sancturaries.

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 Figures



- ▲ Station
- Existing Transmission Line
- ▭ Project Area
- - - Township Boundary
- - - US Topographic Lines

Data Sources: AEP, USGS 7.5'
Topographic Quadrangle
(New Albany)

Coordinate System:
State Plane Ohio South
NAD 83

October 13, 2023

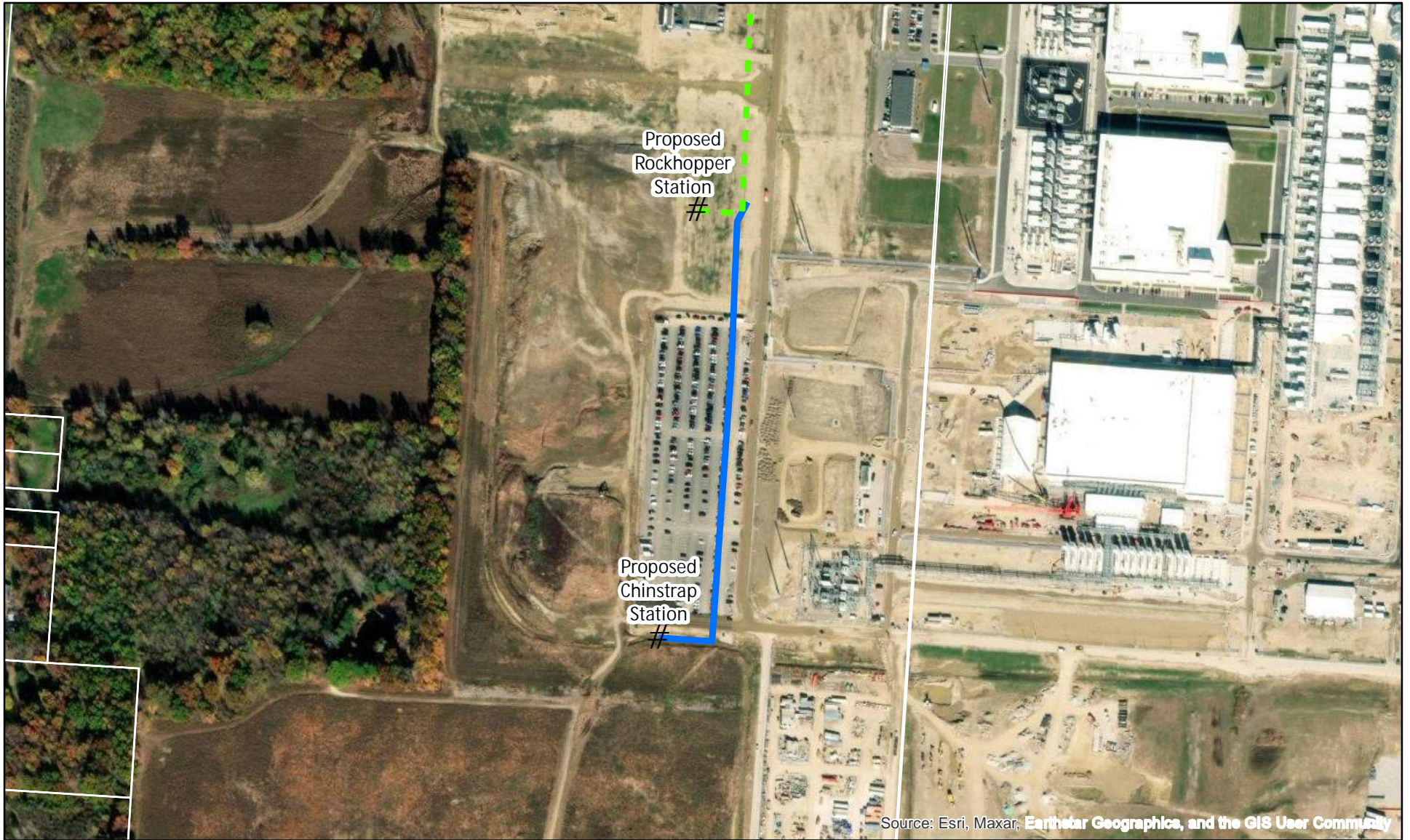


FIGURE 1
TOPOGRAPHIC OVERVIEW

Construction Notice
Anguin 138 kV Extension No. 1 (Phase 2)
Transmission Line Project

AEP OHIO
An AEP Company

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




Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

#	Station
—	Existing Transmission Line
- - -	Proposed Anguin Ext. No.1 Rockhopper 138kV Transmission Line (Filed Separately: 23-0343-EL-BNR)
—	Proposed 138kV Anguin Ext No. 1 Transmission
□	Parcel Boundary

Data Sources: AEP & ESRI Imagery, 2021
Coordinate System: State Plane Ohio South NAD 83
October 16, 2023




**FIGURE 2
AERIAL MAP**



Construction Notification
Anguin 138 kV Extension No. 1 (Phase 2)
Transmission Line Project

0 400 800



Feet

Appendix B PJM Slides

Need Number: AEP-2023-OH052

Process Stage: Solutions Meeting 5/9/2023

Previously Presented: Needs Meeting 4/21/2023

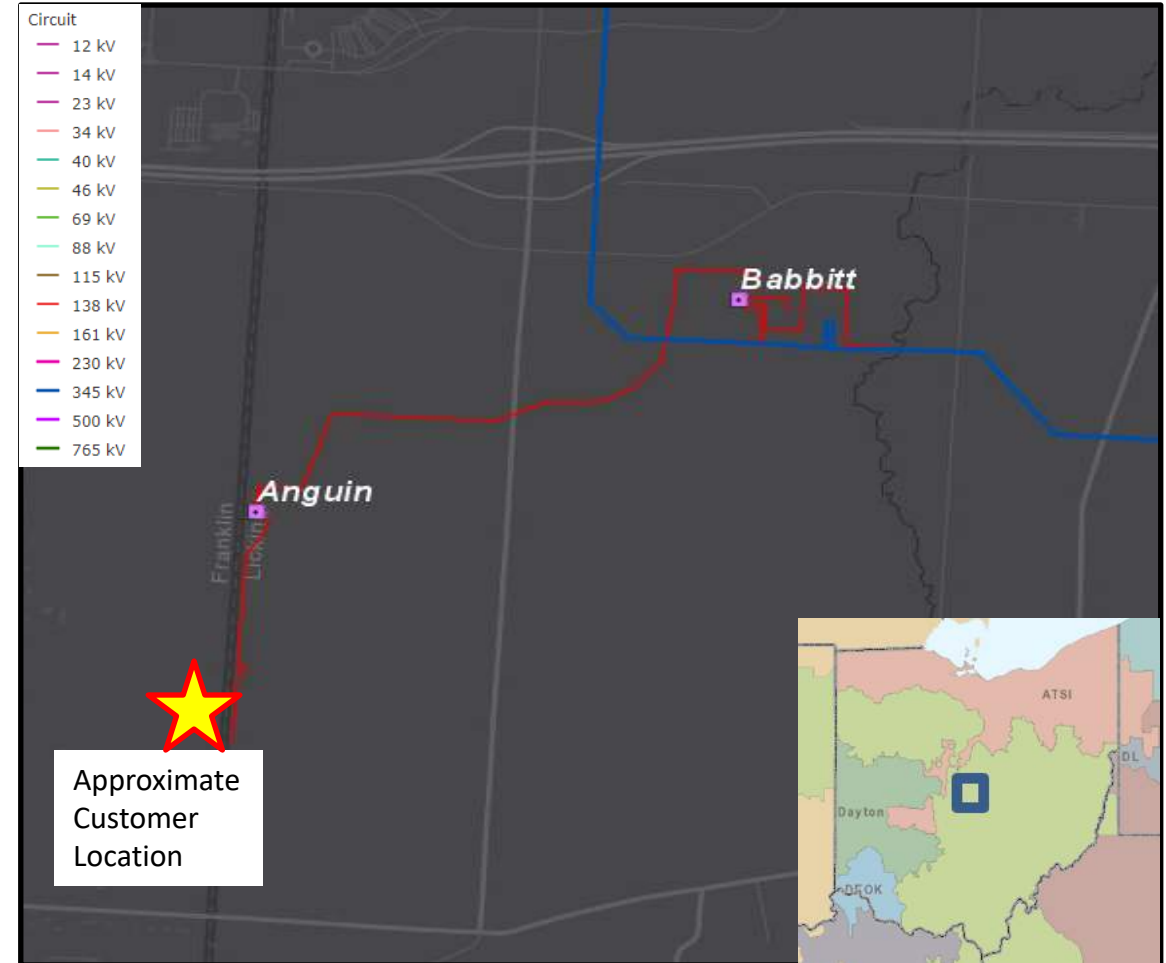
Project Driver: Customer Service

Specific Assumption Reference:

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

Problem Statement:

- An existing customer served out of AEP’s Anguin Station in New Albany, OH, has requested an additional service for a new bulk load addition of 100 MW. This will bring the total load for the customers site to 450 MW with an ultimate capacity of up to 720 MW.
- Customer requested in-service date of 3/31/2024.



Need Number: AEP-2023-OH052

Process Stage: Solutions Meeting 5/9/2023

Proposed Solution (continued):

The following work is all direct connect facilities to physically connect demand to the grid.

- **Anguin – Chinstrap 138 kV:** Extend the 138 kV double circuit line to Rockhopper by ~0.22 miles to the new Chinstrap (customer) station. Cost: **\$1.01 M**

Appendix C SHPO Coordination



In reply, refer to
2023-FRA-59011

September 15, 2023

Ryan Weller
Weller & Associates, Inc.
1395 W. Fifth Ave.
Columbus, OH 43212
rweller@wellercrm.com

RE: Anguin Extension No. 1 Project (BPID P23026004), Plain Township, Franklin County, Ohio

Dear Mr. Weller:

This letter is in response to the correspondence received September 6, 2023 regarding the proposed Anguin Extension No. 1 Project (BPID P23026004), Plain Township, Franklin County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code and the Ohio Power Siting Board rules for siting this project (OAC 4906-4 & 4906-5). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The following comments pertain to the *Phase I Cultural Resource Management Investigations for the .35 km (.22 mi) Anguin Extension No. 1 Project (BPID P23026004) in Plain Township, Franklin County, Ohio* by Ryan J. Weller (Weller & Associates, Inc. 2023).

A literature review and visual inspection was completed as part of the investigations. No previously identified archaeological sites are located in the project area and no new archaeological sites were identified during survey. The project area was found to be completely disturbed. Our office agrees no additional archaeological survey is needed. No architectural resources 50 years of age or older were identified within the Area of Potential Effects (APE).

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

Sincerely,

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

Krista Horrocks, Project Reviews Manager
Resource Protection and Review

RPR Serial No: 1099714

Appendix D Agency Correspondence

United States Department of the Interior



FISH AND WILDLIFE SERVICE

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



August 10, 2023

Project Code: 2023-0110364

Dear Mr. Joshua Holmes:

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

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

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

Sincerely,

Patrice Ashfield
Field Office Supervisor



Ohio Department of Natural Resources

MIKE DEWINE, GOVERNOR

MARY MERTZ, DIRECTOR

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

September 1, 2023

Joshua Holmes
AECOM
707 Grant Street, 5th Floor
Pittsburgh, Pennsylvania 15219

Re: 23-0897; Anguin 138kV Extension No.1 Transmission Line Project

Project: The proposed project involves extending the previously proposed Anguin Extension No.1 (Rockhopper) 138kv transmission line approximately 0.22-mile from the Rockhopper Station to the customer delivery point.

Location: The proposed project is located in Plain 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: A review of the Ohio Natural Heritage Database indicates there are no records of state or federally listed plants or animals within one mile of the specified project area. Records searched date from 1980.

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

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

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

The project is within the vicinity of records for the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally 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 Eileen Wyza at Eileen.Wyza@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 endangered species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these 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 \geq 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 & NORTHERN LONG-EARED BAT SURVEY GUIDELINES](#)." If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Eileen Wyza for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

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

Federally Endangered

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

Federally Threatened

rabbitsfoot (*Quadrula cylindrica cylindrica*)

State Endangered

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

State Threatened

pondhorn (*Unio merus tetralasmus*)
Salamander Mussel (*Simpsonaias ambigua*)

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

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

State Endangered

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

State Threatened

lake chubsucker (*Erimyzon sucetta*)
paddlefish (*Polyodon spathula*)

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

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

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

The [local floodplain administrator](#) should be contacted concerning the possible need for any floodplain permits or approvals for this project.

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

Mike Pettegrew
Environmental Services Administrator

Appendix E Ecological Resources Inventory Report

ANGUIN 138 KV EXTENSION NO. 1 PHASE 2 PROJECT

FRANKLIN COUNTY, OHIO

ECOLOGICAL REPORT

Prepared for:

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



Prepared by:

AECOM

525 Vine Street, Suite 1800
Cincinnati, Ohio 45202

Project #: 60714510

September 2023

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1.0 INTRODUCTION

American Electric Power Ohio Transmission Company (AEP Ohio Transco) is proposing construction of the Anguin 138kV Extension No.1 Transmission Line Phase 2 Project (Project) in Franklin County, Ohio (OH). The project consists of building a new 0.22-mile greenfield 138 kilovolt (kV) transmission line from the Rockhopper Substation to the customer delivery point (Chinstrap Substation) located in Franklin County, OH. The Project survey area is located on the New Albany, OH United States Geological Survey (USGS) 7.5-minute topographical quadrangle as displayed on the Project Overview Map (**Figure 1**).

The purpose of the field survey was to assess the presence of aquatic resources and possible waters of the United States (WOTUS) that occur within the proposed Project area. Secondly, land uses were also recorded to classify and characterize potential habitat for threatened and endangered species. This report will be used to assist AEP Ohio Transco's efforts to identify potential WOTUS and threatened and endangered species habitat present within the proposed Project area to avoid or minimize impacts during construction activities.

2.0 METHODOLOGY

The field survey was completed for a 150-foot-wide Project survey area along the proposed transmission line centerline. The Project survey area is approximately 7.55-acres. Prior to conducting field surveys, digital United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey data, U.S. Fish and Wildlife Service (USFWS), National Wetlands Inventory (NWI) data, USGS National Hydrography Dataset (NHD), Federal Emergency Management Agency (FEMA) 100-year floodplain data, and USGS 7.5-minute topographic maps were reviewed to identify the occurrence and location of potential wetland areas and/or streams.

Field survey activities included recording the physical boundaries of observed water features using sub-meter capable EOS Arrow Global Positioning System (GPS) units in conjunction with the ArcGIS Field Maps application on iPad tablets. The GPS data was imported into ArcMap Geographic Information System (GIS) software, where the data was reviewed, edited for accuracy, and compiled in a format suitable for transfer and use by AEP Ohio Transco. Water features were delineated and assessed based upon the appropriate procedures detailed below. Land uses observed within the Project survey area were assigned a general classification based upon the principal land characteristics and vegetative cover of the location.

2.1 WETLAND DELINEATION

The Project survey area was evaluated according to the procedures outlined in the United States Army Corps of Engineers (USACE) *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)* (USACE, 2010).

During field survey activities AECOM utilized the routine on-site delineation method described in the *1987 Manual and Regional Supplement* that consisted of a pedestrian site reconnaissance, including identifying the vegetative communities, soils identification, a geomorphologic assessment of hydrology, and notation of disturbance. If a wetland was identified, AECOM completed a USACE Wetland Determination Data Form (USACE Data Form) within each unique wetland habitat to serve as a representative of the wetland hydrology, vegetative community, and soil characteristics. Adjacent to each wetland complex, AECOM completed an additional USACE Data Form as a representative of the upland community.

2.1.1 WETLAND CLASSIFICATION

Wetlands identified in the field were classified based on the naming convention found in *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin *et al*, 1979). The unique wetland habitats were classified as palustrine emergent (PEM), palustrine forested (PFO), palustrine unconsolidated bottom (PUB), palustrine scrub-shrub (PSS), or other classifications for some wetlands. Multiple Cowardin classifications may be present where more than one classification's vegetation is dominant (vegetation type covers 30 percent or more of the substrate). Where multiple Cowardin classifications are present, the Cowardin classification of the plants that constitute the uppermost layer of vegetation having 30% or greater coverage is used for the classification.

2.1.2 WETLAND ASSESSMENT

Each delineated wetland was assessed following the Ohio Environmental Protection Agency (OEPA) *Ohio Rapid Assessment Method for Wetlands v. 5.0* (ORAM) (Mack, 2001). Wetland assessments utilized the 10-page ORAM form, providing a final Category rating for each wetland.

2.2 STREAM ASSESSMENT

Streams were identified by the presence of a defined bed and bank, and evidence of an ordinary high-water mark (OHWM). The USACE defines the OHWM as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" (USACE, 2005).

2.2.1 OEPA PRIMARY HEADWATER HABITAT ASSESSMENT

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 (QHEI)* (Rankin, 2006) and in the OEPA's *Field Methods for Evaluating Primary Headwater Streams in Ohio* (OEPA, 2020). Streams associated with watershed area less than or equal to 1.0 square mile (259 hectares), and a maximum depth of water pools equal to or less than 15.75 inches were evaluated utilizing the Headwater Habitat Evaluation

Index (HHEI) methodology and all other streams assessed using the QHEI methodology. Flow regime (ephemeral, intermittent, perennial) was determined by the appropriate stream assessment score per OEPA manuals (OEPA, 2020) and by AECOM's professional opinion.

Streams assessed in the Project survey area were reviewed for existing OEPA Aquatic Life Use Designations per OEPA's Water Quality Standards (OAC Chapter 3745-1). Those without an existing use designation were assigned a provisional aquatic life use designation based upon habitat assessment results (Rankin, 1989; OEPA, 2020).

2.2.2 OEPA 401 WATER QUALITY CERTIFICATION FOR NATIONWIDE PERMIT ELIGIBILITY

The OEPA has designated each watershed in the state on based on whether it may be ineligible for coverage under the OEPA's 401 Water Quality Certification (WQC) for Nationwide Permits (OEPA, 2017). Mapping provided by the OEPA illustrates the eligibility of streams in the area to fall under a Nationwide Permit for 401 certification or if an individual state WQC needs to be applied for. Impacts to streams within each watershed would then have eligibility for 401 WQC determined by the watershed category. The three categories are defined as:

Eligible: Streams within the watershed are eligible for coverage under the OEPA's water quality certification for the Nationwide Permits if all other general and regional special terms and conditions are met.

Ineligible: Projects affecting high quality streams and undesignated streams draining directly to high quality streams, as represented in the map, must undergo an individual 401 Water Quality Certification review process.

Possibly Eligible: Additional field screening procedures are required for streams in the watershed to determine appropriate eligibility. Projects affecting undesignated streams within those HUC12 watersheds that do not directly but eventually drain into high quality waters, might be eligible for coverage under the OEPA's 401 Water Quality Certification for Nationwide Permits depending on the results of a field screening assessment. The procedures for determining individual stream eligibility in this scenario are specified in Appendix D "Stream Eligibility Determination Process" of the OEPA Ohio State Water Quality Certification of the 2017 Nationwide Permit Reauthorization.

2.2.3 UPLAND DRAINAGE FEATURES

An upland drainage feature (UDF) is a non-jurisdictional drainage that does not meet the criteria of either a jurisdictional stream or a wetland. A UDF generally lacks an OHWM (USACE, 2005) and are equivalent to a swale or an erosional feature as described by the USACE: "generally shallow features in the landscape that may convey water across upland areas during and following storm events. Swales usually occur on

nearly flat slopes and typically have grass or other low-lying vegetation throughout the swale” (USACE, 2005).

A roadside ditch may also be documented as a UDF if it meets the “not potentially jurisdictional” characterization as described in the Office of Environmental Services *Roadway Ditch Characterization Flowchart* (Ohio Department of Transportation, 2014). This would include a ditch that originates entirely within the roadway right-of-way, has a seasonal flow regime, was not constructed to drain a wetland, and does not have hydrophytic vegetation extending more than an insignificant amount beyond its original configuration.

In addition, UDF’s (including swales, ditches, and other erosional features) are generally not WOTUS except in certain circumstances, such as relocated streams.

2.3 RARE, THREATENED, AND ENDANGERED SPECIES

AECOM conducted an threatened and endangered species review and general field habitat surveys within the Project survey area. AECOM submitted requests to the Ohio Department of Natural Resources (ODNR) Office of Real Estate – Environmental Review Section and the USFWS Ohio Ecological Services Field Office soliciting comments on the proposed Project. Agency-identified species of concern and available species-specific information was reviewed to identify the various habitat types that listed species are known to inhabit.

AECOM field ecologists conducted a general habitat survey in conjunction with the stream and wetland field surveys as part of assessing potential impacts to threatened and endangered species. Land uses within the Project survey area were assigned a general classification based upon the principal land characteristics and vegetative cover as observed during the field surveys.

AECOM conducted a desktop assessment of the Project survey area and a quarter-mile buffer around it to identify potentially occurring winter bat hibernaculum that may be present near the Project which is located in **Appendix A**. This assessment was conducted by reviewing data on mining activity and karst geology from the ODNR Division of Mineral Resources and USGS websites.

3.0 RESULTS

On August 15, 2023, AECOM ecologists walked the Project survey area to conduct the wetland delineation, stream assessment and habitat survey. Within the Project survey area, AECOM did not identify any wetlands, streams or ponds.

3.1 WETLAND DELINEATION

3.1.1 PRELIMINARY SOILS EVALUATION

According to the USDA/NRCS Web Soil Survey, four soil map units are mapped within the Project survey area (USDA NRCS, 2021a and 2021b). Of these, one was identified as hydric soil, and three were identified as containing hydric inclusions. Soils indicated as hydric inclusions are not predominately hydric soils and hydric soils are more likely to be found in topographic settings. **Table 1** below provides a detailed overview of all soil series and soil map units present within the Project survey area. Soil map units located in the Project survey area and vicinity are shown on **Figure 2**.

TABLE 1 - SOIL MAP UNITS AND DESCRIPTIONS WITHIN THE PROJECT SURVEY AREA

Soil Series	Map Unit Symbol	Map Unit Description	Topographic Setting	Hydric	Hydric Component (%)
Bennington	BeB	Bennington silt loam, 2 to 6 percent slopes	End moraines, ground moraines	Yes*	Condit 3% Pewamo 3%
Centerburg	Cen1B1	Centerburg silt loam, 2 to 6 percent slopes	End moraines, ground moraines	Yes*	Condit 4% Marengo 3%
Centerburg	Cen1B2	Centerburg silt loam, 2 to 6 percent slopes, eroded	Ground moraines, end moraines	Yes*	Condit 4% Marengo 3%
Pewamo	Pm	Pewamo silty clay loam, low carbonate till, 0 to 2 percent slopes	Drainageways, deressions	Yes	Pewamo 85% Condit 9%

NA = Not Applicable or Not Available; Yes* = Hydric inclusion present

3.1.2 NATIONAL WETLAND INVENTORY MAP REVIEW

According to NWI data covering the Project location, the Project survey area does not contain any NWI wetlands. The locations of the NWI mapped wetlands in the Project vicinity are shown on **Figure 2**.

3.1.3 DELINEATED WETLANDS

During the field survey, AECOM did not identify any wetland features within the Project survey area (**Figure 3**).

3.2 STREAM DELINEATION

During the field survey, AECOM did not identify any stream features within the Project survey area (**Figure 3**).

3.2.1 OEPA STREAM ELIGIBILITY

OEPA stream eligibility for 401 Water Quality Certification (WQC) mapping was reviewed for the Project survey area. The Project occurs within the Blacklick Creek River Watershed (HUC-12: 050600011503), which is designated as 401 WQC possibly eligible. No streams were found within the Project survey area and therefore, no stream assessments were completed. OEPA stream eligibility mapping for the Project vicinity, is provided on **Figure 4**. During the field survey, AECOM did not identify any stream features within the Project survey area.

3.2.2 FEMA 100 YEAR FLOODPLAINS

Mapped FEMA designated 100-year floodplains and floodways are displayed on **Figure 2**. No regulated FEMA 100-year floodplains and/or floodways are located within the Project survey area (FEMA, 2008).

3.3 PONDS

During the field survey, AECOM did not identify any ponds within the Project survey area.

3.4 UPLAND DRAINAGE FEATURES

During the field survey, one UDF was identified within the Project survey area, UDF-MRK-003. The extent of the UDF is displayed on **Figures 2 and 3** and photographs are provided within **Appendix B**.

3.5 VEGETATIVE COMMUNITIES

AECOM ecologists conducted a general habitat survey in conjunction with the stream and wetland field surveys. Two vegetative community types, urban and landscaped, were found within the Project survey area as described in **Table 2**, below. Vegetative communities are depicted visually on aerial photography in **Figure 5**. Representative photographs of the vegetative communities in the Project area are provided as **Appendix C**.

Table 2 - VEGETATIVE COMMUNITIES WITHIN THE PROJECT SURVEY AREA

Vegetative Community	Description	Approximate Acreage Within the Project Survey Area	Approximate Percentage Within the Project Survey Area
Landscaped Area	Landscaped areas, including residential properties and commercial properties, were observed within the Project vicinity. These landscaped areas within the Project survey area and adjacent areas are frequently mowed grasses and forbs.	2.96	39.2
Urban	Urban areas are areas developed with residential and commercial land uses, including roads, buildings and parking lots. These areas are generally devoid of significant woody and herbaceous vegetation.	4.59	60.8
Totals:		7.55	100%

3.6 RARE, THREATENED AND ENDANGERED SPECIES AGENCY COORDINATION

Protected Species Agency Consultation –

On August 1, 2023, coordination letters were sent to USFWS and the ODNR OH Natural Heritage Program and Division of Wildlife (DOW), seeking an environmental review for the Project for potential impacts to threatened and endangered species.

Responses were received from the USFWS on August 10, 2023 and ODNR on September 1, 2023. According to a response letter received from the USFWS, due to the project size, type, and location, no adverse effects to threatened and endangered species are anticipated. Regarding state threatened and endangered species that may occur within the Project vicinity, 27 species were listed by the ODNR.

Correspondence letters from the USFWS and ODNR for the Project are included as **Appendix D. Table 3** provides a list of species of concern identified by the agencies as potentially occurring within the vicinity of the Project. Photographs of the habitat within the Project Area survey area are provided as **Appendix C**.

Table 3 - ODNR AND USFWS LISTED SPECIES WITHIN THE PROJECT SURVEY AREA

Common Name (Scientific Name)	State Status	Federal Status	Typical Habitat	Habitat Observed	Avoidance Dates	Agency Comments	Potential Impacts
Mammals							
Indiana Bat (<i>Myotis sodalis</i>)	Endangered	Endangered	<p><u>Summer habitat</u> During spring/summer, bat species roost in trees behind loose, exfoliating bark, in crevices and cavities, or in leaves.</p> <p><u>Hibernaculum(a)</u> During winter, these species hibernate in humid mines, caves, and occasionally.</p>	<p><u>Summer habitat</u> Within the Project survey area, the existing land use is composed of existing commercial/industrial development that lacks the presence of forested areas or suitable bat roosting trees.</p> <p><u>Hibernaculum(a)</u> No Mines openings and/or known caves are located within 0.25 miles of Project area and USFWS did not identify known hibernacula within 5-miles of the Project.</p> <p>Field evaluations did not identify any potential hibernaculum(a) within the Project area (2023 Joint Guidance)*.</p>	April 1 – September 30	<p><u>Summer habitat</u> ODNR and USFWS recommends adherence to Avoidance Dates for Tree Clearing Activities (April 1 – September 30).</p> <p><u>Hibernaculum(a)</u> The ODNR DOW recommends a desktop habitat assessment to be conducted to identify potential hibernacula within 0.25 miles of the Project area. If habitat assessment finds potential hibernaculum within 0.25 miles, a revised seasonal tree clearing restriction (March 15 to November 15) is recommended (2023 Joint Guidance)*. If absence or no tree cutting or subsurface impacts are proposed, the Project is not likely to impact this species.</p>	<p><u>Summer habitat</u> No impact to listed bat species or their habitat is anticipated due to absence of tree clearing activities. If tree clearing is required, it should be completed between October 1 and March 31.</p> <p><u>Hibernaculum(a)</u> No impacts to winter hibernacula were identified due to absence of caves, mines, or portals within 0.25-miles of the Project.</p>
Northern long-eared Bat (<i>Myotis septentrionalis</i>)	Endangered	Endangered	<p><u>Summer habitat</u> During spring/summer, bat species roost in trees behind loose, exfoliating bark, in crevices and cavities, or in leaves.</p> <p><u>Hibernaculum(a)</u> During winter, these species hibernate in humid mines, caves, and occasionally man-made structures.</p>	<p><u>Summer habitat</u> Within the Project survey area, the existing land use is composed of existing commercial/industrial development that lacks the presence of forested areas or suitable bat roosting trees.</p> <p><u>Hibernaculum(a)</u> No Mines openings and/or known caves are located within 0.25 miles of Project area and USFWS did not identify known hibernacula within 5-miles of the Project.</p> <p>Field evaluations did not identify any potential hibernaculum(a) within the Project area (2023 Joint Guidance)*.</p>	April 1 – September 30	<p><u>Summer habitat</u> ODNR and USFWS recommends adherence to Avoidance Dates for Tree Clearing Activities (April 1 – September 30).</p> <p>Additionally, the ODNR indicated that there is a known presence of this species within the Project area and summer surveys would not constitute a presence or absence of this species.</p> <p><u>Hibernaculum(a)</u> The ODNR DOW recommends a desktop habitat assessment to be conducted to identify potential hibernacula within 0.25 miles of the Project area. If habitat assessment finds potential hibernaculum within 0.25 miles, a revised seasonal tree clearing restriction (March 15 to November 15) is recommended (2023 Joint Guidance)*. If absence or no tree cutting or subsurface impacts are proposed, the Project is not likely to impact this species.</p>	<p><u>Summer habitat</u> No impact to listed bat species or their habitat is anticipated due to absence of tree clearing activities. If tree clearing is required, it should be completed between October 1 and March 31.</p> <p>Additional summer surveys would not constitute presence/absence within the Project area for the northern long-eared bat.</p> <p><u>Hibernaculum(a)</u> No impacts to winter hibernacula were identified due to absence of caves, mines, or portals within 0.25-miles of the Project.</p>
Little brown bat (<i>Myotis lucifugus</i>)	Endangered	NA	<p><u>Summer habitat</u> During spring/summer, bat species roost in trees behind loose, exfoliating bark, in crevices and cavities, or in leaves.</p> <p><u>Hibernaculum(a)</u> During winter, these species hibernate in humid mines, caves, and occasionally man-made structures.</p>	<p><u>Summer habitat</u> Within the Project survey area, the existing land use is composed of existing commercial/industrial development that lacks the presence of forested areas or suitable bat roosting trees.</p> <p><u>Hibernaculum(a)</u> No Mines openings and/or known caves are located within 0.25 miles of Project area and USFWS did not identify known hibernacula within 5-miles of the Project.</p> <p>Field evaluations did not identify any potential hibernaculum(a) within the Project area (2023 Joint Guidance)*.</p>	April 1 – September 30	<p><u>Summer habitat</u> ODNR and USFWS recommends adherence to Avoidance Dates for Tree Clearing Activities (April 1 – September 30).</p> <p><u>Hibernaculum(a)</u> The ODNR DOW recommends a desktop habitat assessment to be conducted to identify potential hibernacula within 0.25 miles of the Project area. If habitat assessment finds potential hibernaculum within 0.25 miles, a revised seasonal tree clearing restriction (March 15 to November 15) is recommended (2023 Joint Guidance)*. If absence or no tree cutting or subsurface impacts are proposed, the Project is not likely to impact this species.</p>	<p><u>Summer habitat</u> No impact to listed bat species or their habitat is anticipated due to absence of tree clearing activities. If tree clearing is required, it should be completed between October 1 and March 31.</p> <p><u>Hibernaculum(a)</u> No impacts to winter hibernacula were identified due to absence of caves, mines, or portals within 0.25-miles of the Project.</p>

Common Name (Scientific Name)	State Status	Federal Status	Typical Habitat	Habitat Observed	Avoidance Dates	Agency Comments	Potential Impacts
Tricolored bat (<i>Perimyotis subflavus</i>)	Endangered	Proposed Endangered	<p><u>Summer habitat</u> During spring/summer, bat species roost in trees behind loose, exfoliating bark, in crevices and cavities, or in leaves.</p> <p><u>Hibernaculum(a)</u> During winter, these species hibernate in humid mines, caves, and occasionally man-made structures.</p>	<p><u>Summer habitat</u> Within the Project survey area, the existing land use is composed of existing commercial/industrial development that lacks the presence of forested areas or suitable bat roosting trees.</p> <p><u>Hibernaculum(a)</u> No Mines openings and/or known caves are located within 0.25 miles of Project area and USFWS did not identify known hibernacula within 5-miles of the Project.</p> <p>Field evaluations did not identify any potential hibernaculum(a) within the Project area (2023 Joint Guidance)*.</p>	April 1 – September 30	<p><u>Summer habitat</u> ODNR and USFWS recommends adherence to Avoidance Dates for Tree Clearing Activities (April 1 – September 30).</p> <p><u>Hibernaculum(a)</u> The ODNR DOW recommends a desktop habitat assessment to be conducted to identify potential hibernacula within 0.25 miles of the Project area. If habitat assessment finds potential hibernaculum within 0.25 miles, a revised seasonal tree clearing restriction (March 15 to November 15) is recommended (2023 Joint Guidance)*. If absence or no tree cutting or subsurface impacts are proposed, the Project is not likely to impact this species.</p>	<p><u>Summer habitat</u> No impact to listed bat species or their habitat is anticipated due to absence of tree clearing activities. If tree clearing is required, it should be completed between October 1 and March 31.</p> <p><u>Hibernaculum(a)</u> No impacts to winter hibernacula were identified due to absence of caves, mines, or portals within 0.25-miles of the Project.</p>
Fish							
Goldeye (<i>Hiodon alosoides</i>)	Endangered	None	Perennial Streams or Waterbodies	No rivers present.	March 15 – June 30	The DOW recommends no in water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact this or other aquatic species.	No
Iowa darter (<i>Etheostoma exile</i>)	Endangered	None	Perennial Streams or Waterbodies	No natural lakes present.	March 15 – June 30	The DOW recommends no in water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact this or other aquatic species.	No
Lake chubsucker (<i>Erimyzon sucetta</i>)	Threatened	None	Perennial Streams or Waterbodies	No lakes, ponds, swamps or streams were identified in the Project survey area	March 15 – June 30	The DOW recommends no in water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact this or other aquatic species.	No
Northern brook lamprey (<i>Ichthyomyzon fossor</i>)	Endangered	None	Perennial Streams or Waterbodies	No streams are present but are too small, are of marginal quality and/or lack microhabitat features.	March 15 – June 30	The DOW recommends no in water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact this or other aquatic species.	No
Paddlefish (<i>Polyodon spathula</i>)	Threatened	None	Perennial Streams or Waterbodies	No rivers present.	March 15 – June 30	The DOW recommends no in water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact this or other aquatic species.	No
Popeye shiner (<i>Notropis ariommus</i>)	Endangered	None	Perennial Streams or Waterbodies	No streams are present but are too small, are of marginal quality and/or lack microhabitat features	March 15 – June 30	The DOW recommends no in water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact this or other aquatic species.	No

Common Name (Scientific Name)	State Status	Federal Status	Typical Habitat	Habitat Observed	Avoidance Dates	Agency Comments	Potential Impacts
Shortnose gar (<i>Lepisosteus platostomus</i>)	Endangered	None	Perennial Streams or Waterbodies	No rivers present.	March 15 – June 30	The DOW recommends no in water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact this or other aquatic species.	No
Spotted darter (<i>Etheostoma maculatum</i>)	Endangered	None	Perennial Streams or Waterbodies	No - streams are present but are too small, are of marginal quality and/or lack microhabitat features.	March 15 – June 30	The DOW recommends no in water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact this or other aquatic species.	No
Tonguetied minnow (<i>Exoglossum laurae</i>)	Endangered	None	Perennial Streams or Waterbodies	No – Project is outside the Great Miami and Little Miami River system.	March 15 – June 30	The DOW recommends no in water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact this or other aquatic species.	No
Mussels							
Clubshell (<i>Pleurobema clava</i>)	Endangered	Endangered	Perennial Streams	No perennial stream of sufficient size.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Elephant-ear (<i>Elliptio crassidens crassidens</i>)	Endangered	None	Perennial Streams	No perennial stream of sufficient size.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Long solid (<i>Fusconaia maculata maculate</i>)	Endangered	None	Perennial Streams	No perennial stream of sufficient size.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Northern riffleshell (<i>Epioblasma torulosa rangiana</i>)	Endangered	Endangered	Perennial Streams	No perennial stream of sufficient size.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Ohio pigtoe (<i>Pleurobema cordatum</i>)	Endangered	None	Perennial Streams	No perennial stream of sufficient size.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Pocketbook (<i>Lampsilis ovata</i>)	Endangered	None	Perennial Streams	No perennial stream of sufficient size.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Pondhorn (<i>Unio merus tetralasmus</i>)	Threatened	None	Perennial Streams	No perennial stream of sufficient size.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Purple cat's paw (<i>Epioblasma o. obliquata</i>)	Endangered	Endangered	Perennial Streams	No perennial stream of sufficient size.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Rabbitsfoot (<i>Quadrula cylindrica cylindrica</i>)	Threatened	Threatened	Perennial Streams	No perennial stream of sufficient size.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No

Common Name (Scientific Name)	State Status	Federal Status	Typical Habitat	Habitat Observed	Avoidance Dates	Agency Comments	Potential Impacts
Rayed bean (<i>Villosa fabalis</i>)	Endangered	Endangered	Perennial Streams	No perennial stream of sufficient size.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Salamander Mussel (<i>Simpsonaias ambigua</i>)	Threatened	None	Perennial Streams	No perennial stream of sufficient size.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Snuffbox (<i>Epioblasma triquetra</i>)	Endangered	Endangered	Perennial Streams	No perennial stream of sufficient size.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Washboard (<i>Megaloniaias nervosa</i>)	Endangered	None	Perennial Streams	No perennial stream of sufficient size.	N/A	Due to the location, and there is no in-water work proposed in a perennial stream of sufficient size, this Project is not likely to impact this species.	No
Birds							
Northern harrier (<i>Circus hudsonis</i>)	Endangered	None	This species hunts over grasslands and nests can be found in large marshes and grasslands.	Based on field/desktop review, there is an absence of potential nesting habitat for the Norther Harrier due to existing development within the Project area.	April 15 to July 31	Habitat should be avoided during the bird's nesting period between April 15 through July 31. If habitat will not be impacted, this Project will not likely impact species.	No

*2023 Joint Guidance – Refers to the 2023 ODNR DOW and USFWS Joint Guidance for Bat Surveys and Tree Clearing, a copy of the guidance is provided within this report.

Protected Species Agency Summary –

Based on general observations during the ecological survey, forested clearing is not anticipated as there is no occurrence of forested habitat within the Project survey area. If tree clearing were to become part of the Project scope of work, the ODNR recommends implementations of seasonal tree clearing between October 1 and March 31 to avoid adverse effects to Indiana bat, northern long-eared bat, little brown bat, and tricolored bat. If trees must be cut during the summer months, the ODNR recommends that a mist net survey could be completed for Indiana bat, northern long-eared bat, and the tricolored bat between June 1 and August 15. However, additional summer surveys would not constitute presence/absence within the Project area for the northern long-eared bat. If summer tree clearing is needed, additional coordination would be completed with ODNR/USFWS.

AECOM completed a desktop review for potential hibernaculum in accordance with the 2023 Ohio ODNR DOW and USFWS Joint Guidance for Bat Surveys and Tree Clearing (2023 Joint Guidance; Appendix C) within 0.25 miles of the Project area and no caves, mines, and/or karst features were identified. As per ODNR/USFWS guidance, further coordination regarding potential hibernaculum is only necessary if the habitat assessment find potential habitat within 0.25 miles of the Project area. Therefore, no further coordination was necessary with either the ODNR and/or USFWS regarding the listed bat species. Results of the desktop habitat assessment have been included within **Appendix A**.

No impacts are anticipated for any of the aquatic listed species and no in-water work is proposed as part of the Project or species habitat is present. Additionally, the potential for nesting habitat for the Northern Harrier was absent based on field/desktop review of the Project survey area. The absence of habitat was due to the extensive commercial and industrial development of the property that created a lack of old field, wet meadows, or grass land habitat. Therefore, no further coordination regarding this listed species is necessary for the Project.

4.0 SUMMARY

The ecological survey of the Project survey area did not identify any wetlands, streams, or ponds. The reported results of the ecological survey conducted by AECOM on this Project are limited to the areas within the Project Survey Area provided in **Figure 3**. Areas that fall outside of the Project survey area were not evaluated in the field and not included in the reporting of the survey.

Of the 27 state and/or federal listed threatened or endangered species within range of the Project survey area, four bat species were identified as not having summer roosting habitat and no potential hibernacula was identified within the Project Survey Area. If tree clearing is identified as being required as part of this Project, the ODNR and USFWS recommends to complete seasonal tree clearing activities between October 1 to March 31.

The field survey results presented herein apply to the existing and reasonably foreseeable site conditions at the time of our assessment. They cannot apply to site changes of which AECOM is unaware and has not had the opportunity to review. Changes in the condition of a property may occur with time due to natural processes or human impacts at the project site or on adjacent properties. Changes in applicable standards may also occur as a result of legislation or the expansion of knowledge over time. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond the control of AECOM.

5.0 REFERENCES

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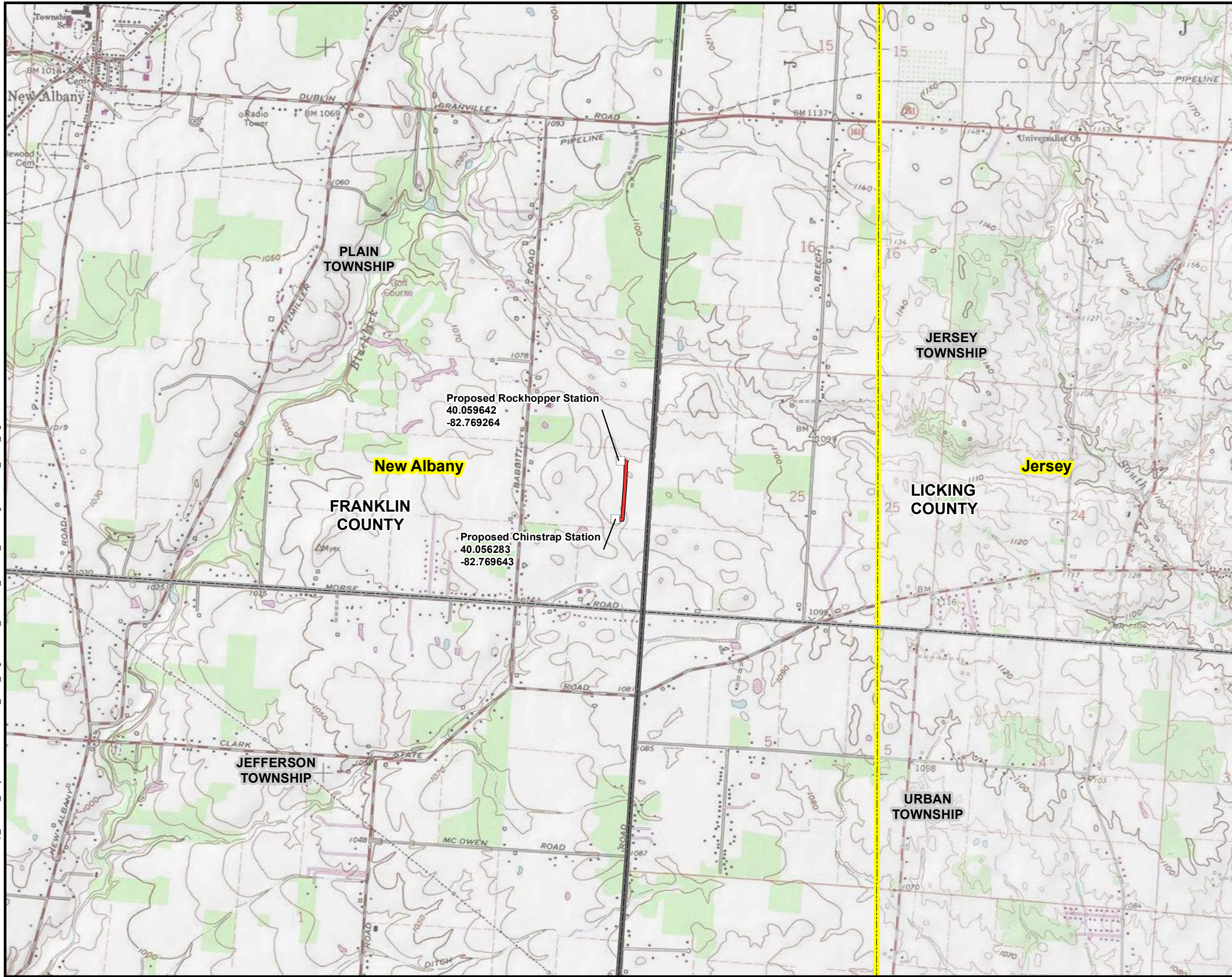
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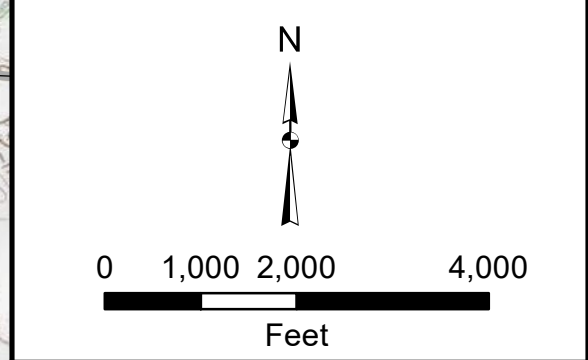
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Legend

-  Station
-  Anguin 138kV Extension No.1 Transmission Line
-  Ohio USGS 7.5' Topographic Quadrangle
-  Township Boundary
-  County Boundary




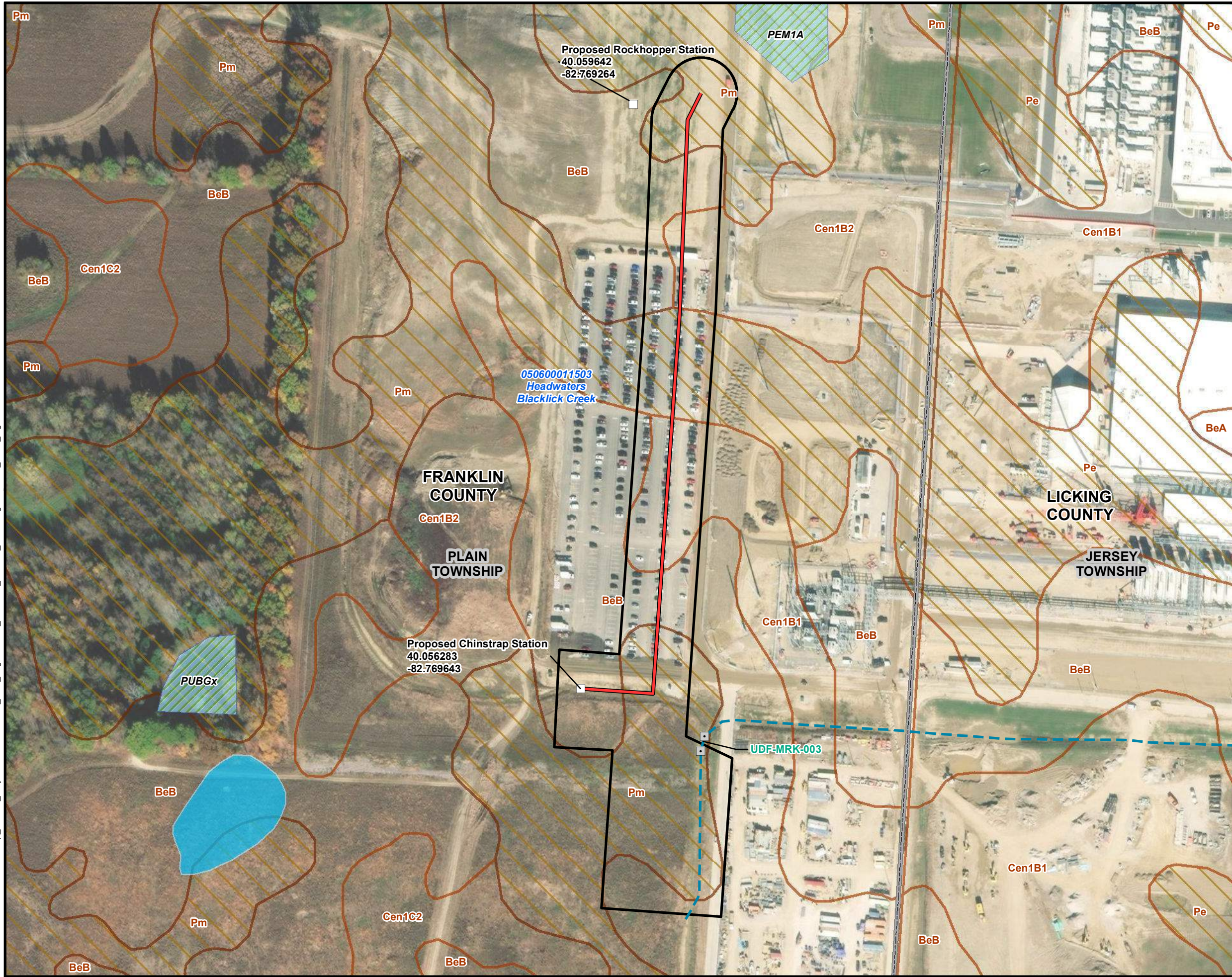
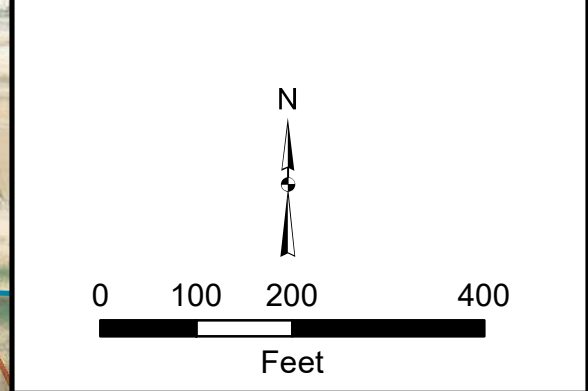
 **Anguin 138kV Extension No. 1 Transmission Line Project**

FIGURE 1 PROJECT OVERVIEW	
DATE: 8/22/2023	1 INCH = 2,000 FEET
CREATED BY: CJT	CHECKED BY: JH
JOB NO.: 60714510	AECOM



- Legend**
- Station
 - Culvert
 - Anguin 138kV Extension No.1 Transmission Line
 - - - Delineated Upland Drainage Feature
 - ▭ Project Survey Area
 - ▨ NWI Wetland (USFWS)
 - ▨ NHD Waterbody (USGS)
 - ▨ HUC 12 (USGS)
 - ▭ Township Boundary
 - ▭ County Boundary
 - ▭ SSURGO Soil Map Unit (NRCS)
 - ▭ Hydric SSURGO Soil Map Unit (NRCS)
- BeB: Bennington silt loam, 2 to 6 percent slopes
 Cen1B1: Centerburg silt loam, 2 to 6 percent slopes
 Cen1B2: Centerburg silt loam, 2 to 6 percent slopes, eroded
 Pm: Pewamo silty clay loam, low carbonate till, 0 to 2 percent slopes

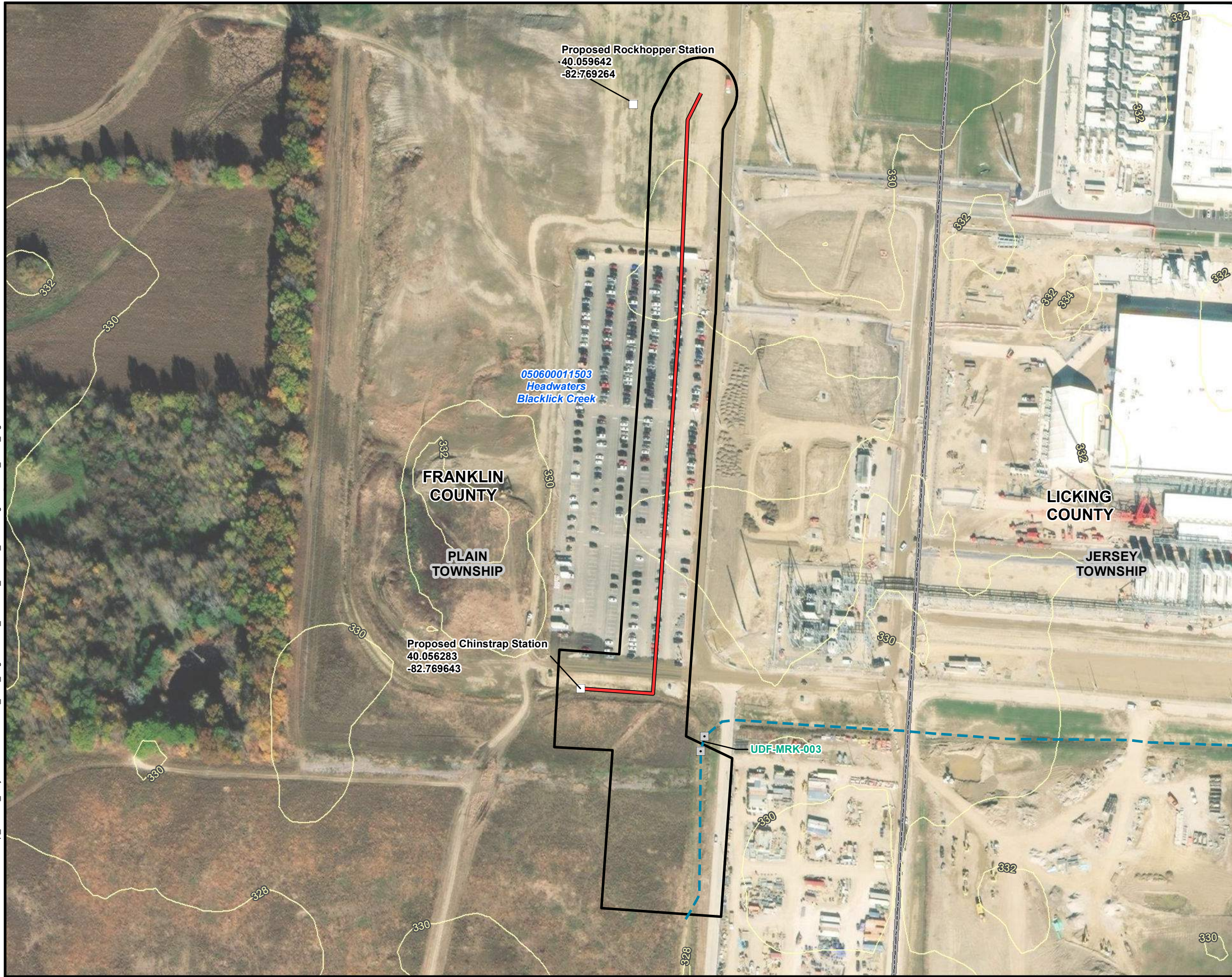


AMERICAN ELECTRIC POWER
 Anguin 138kV Extension No.1
 Transmission Line Project

FIGURE 2
 SOIL MAP AND
 NATIONAL WETLAND INVENTORY MAP

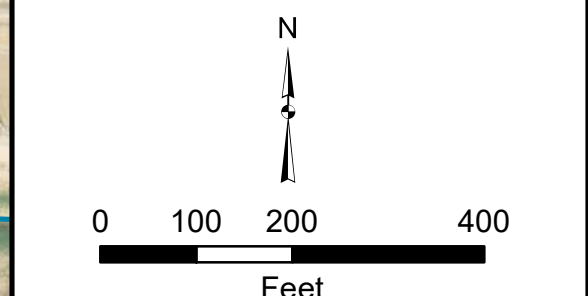
DATE: 9/8/2023	1 INCH = 200 FEET
CREATED BY: CJT	CHECKED BY: JH
JOB NO.: 60714510	AECOM

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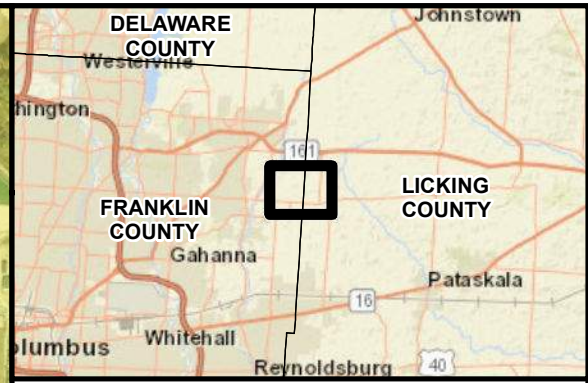
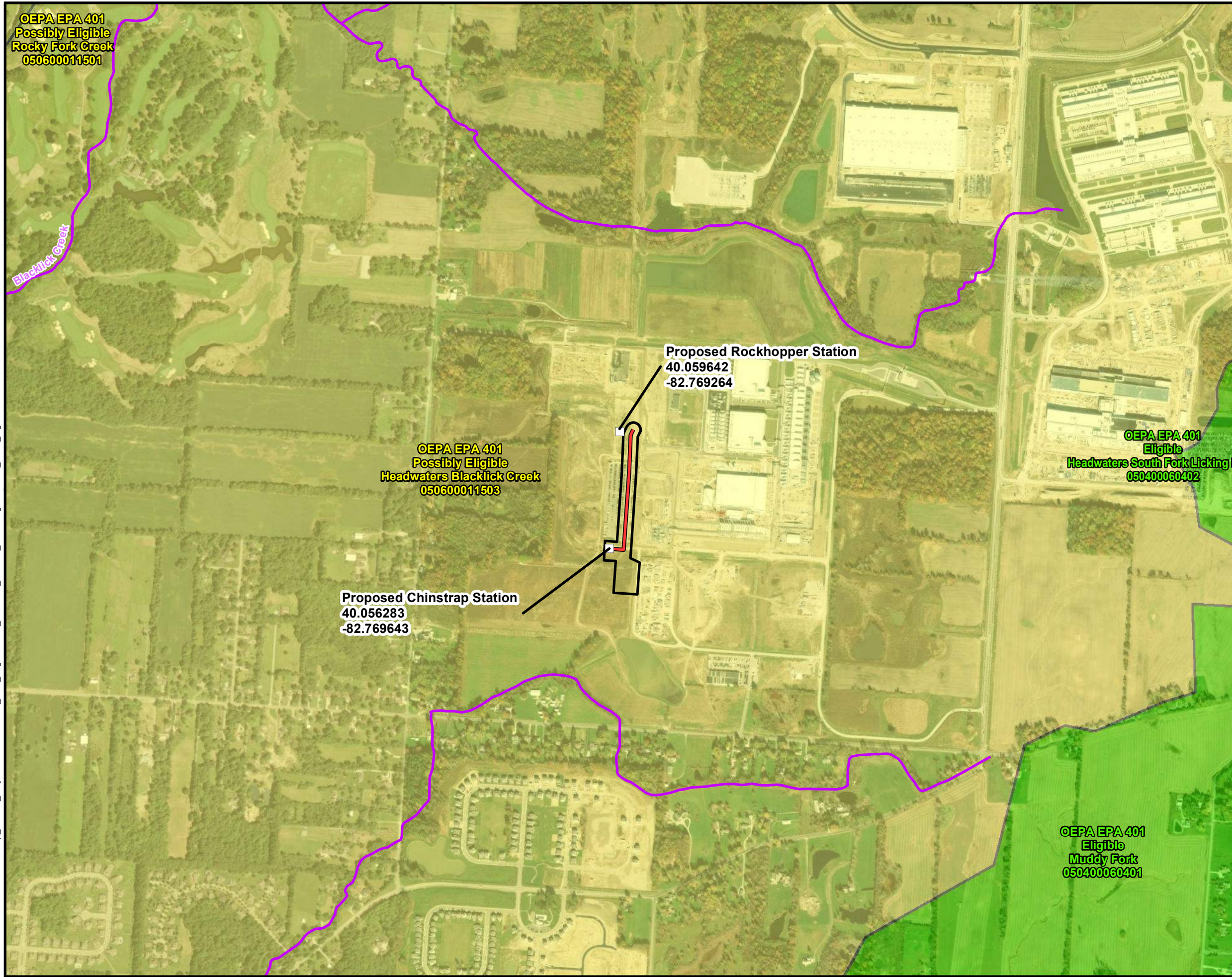
Legend

- Station
- Culvert
- Anguin 138kV Extension No.1 Transmission Line
- - - Delineated Upland Drainage Feature
- Contour (2ft)
- ▭ Project Survey Area
- ▭ HUC 12 (USGS)
- ▭ Township Boundary
- ▭ County Boundary



AMERICAN ELECTRIC POWER
 Anguin 138kV Extension No.1
 Transmission Line Project

FIGURE 3 WETLAND DELINEATION AND STREAM ASSESSMENT MAP	
DATE: 9/8/2023	1 INCH = 200 FEET
CREATED BY: CJT	CHECKED BY: JH
JOB NO.: 60714510	AECOM



Legend

- Station
- Anguin 138kV Extension No. 1 Transmission Line
- NHD Stream (USGS)
- Project Survey Area

OEPA Eligibility:

- Eligible
- Possibly Eligible

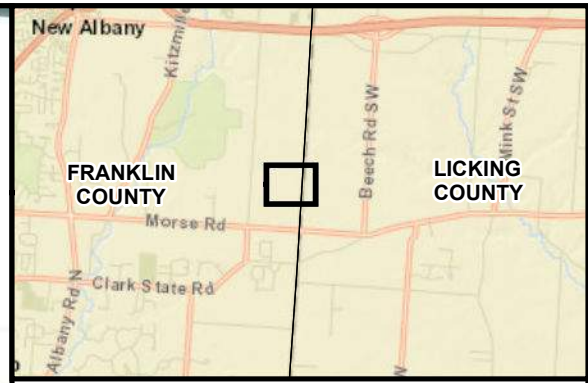
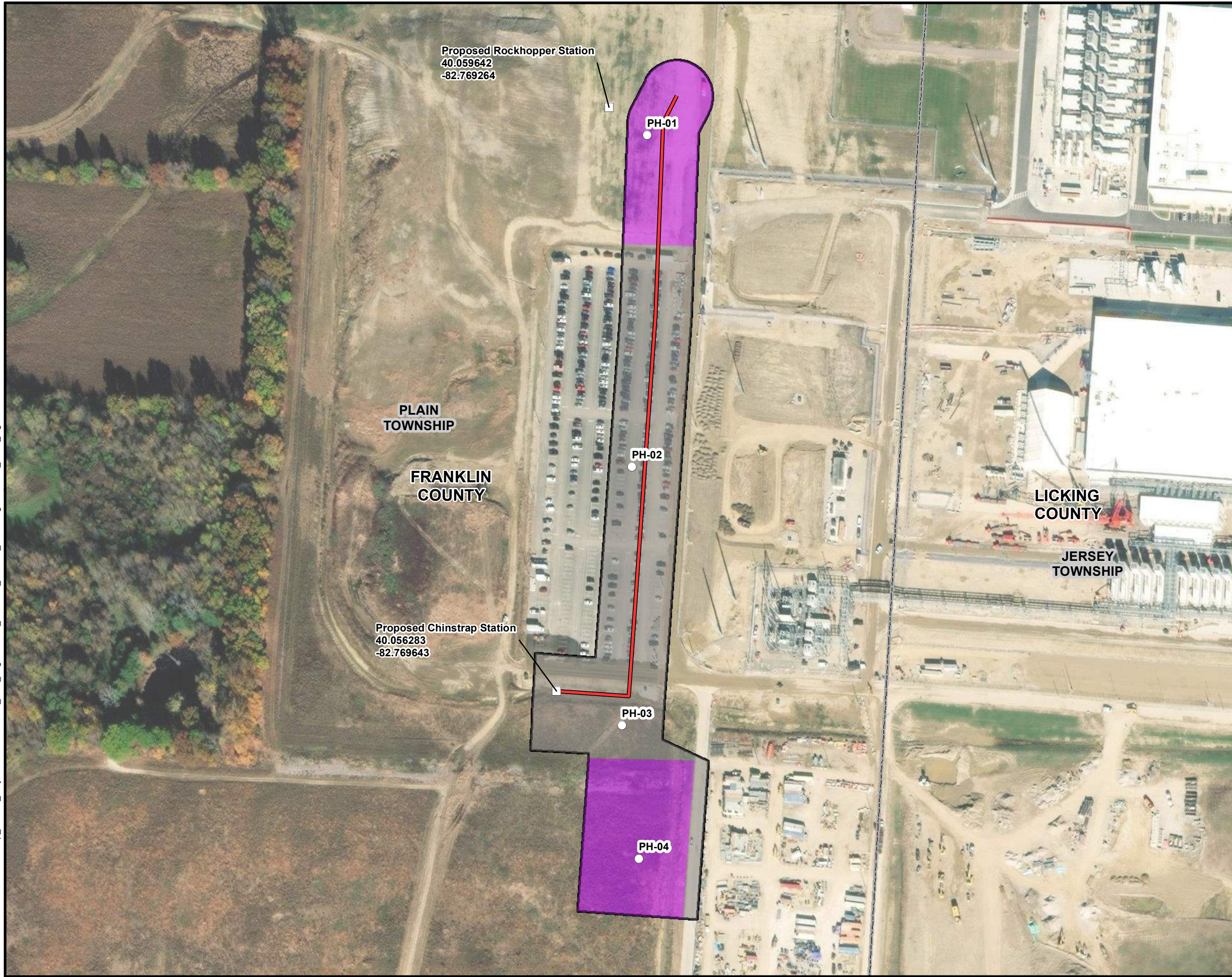
0 500 1,000 2,000
Feet

N

AMERICAN ELECTRIC POWER
Anguin 138kV Extension No.1
Transmission Line Project

FIGURE 4 STREAM ELIGIBILITY MAP	
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CREATED BY: CJT	CHECKED BY: JH
JOB NO.: 60714510	AECOM

Date Saved: 8/22/2023
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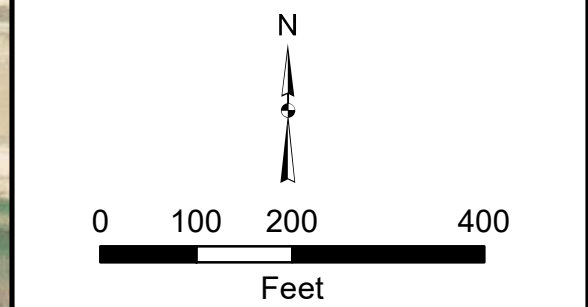


Legend

- Station
- Photograph Location
- Anguin 138kV Extension No. 1 Transmission Line
- ▭ Project Survey Area

Vegetative Community Type

- Urban
- Landscaped



AMERICAN ELECTRIC POWER
 Anguin 138kV Extension No.1
 Transmission Line Project

FIGURE 5 VEGETATIVE COMMUNITIES ASSESSMENT MAP	
DATE: 8/22/2023	1 INCH = 200 FEET
CREATED BY: CJT	CHECKED BY: JH
JOB NO.: 60714510	AECOM

APPENDIX A
DESKTOP ASSESSMENT FOR WINTER BAT HABITAT



American Electric Power
8600 Smith's Mill Road
New Albany, OH 43054;
ajtoohey@aep.com

August 1, 2023

Attention: Mr. John Kessler
Ohio Department of Natural Resources
2045 Morse Road, Building E-2
Columbus, Ohio 43229-6693

Via email: environmentalreviewrequest@dnr.state.oh.us; NHDRequest@dnr.state.oh.us

Reference: Anguin 138kV Extension No.1 Transmission Line Project, Franklin County, Ohio

Dear Mr. Kessler:

AEP Ohio Transmission Company, Inc. (AEP), is formally requesting that the Ohio Department of Natural Resources (ODNR) complete a review for the proposed Anguin 138kV Extension No.1 Transmission Line Project (Project) located in Franklin County, Ohio. The Project consists of building a new 0.22-miles, greenfield 138kV transmission line from the Rockhopper Station to the customer delivery point located in Franklin County, Ohio. The Project study area is located on New Albany, Ohio U.S. Geologic Survey 7.5' topographical quadrangle as displayed on the Project Topographic Overview Map (Figure 1).

AECOM completed a desktop review of publicly available data to identify underground voids which could be potential hibernation sites for overwintering bats (hibernacula) within 0.25-miles of the Project area. The data sources utilized include USGS topographical maps, aerial photography, and ODNR's Division of Mineral Resources and Geological Survey Data for Known Mining Activity and Karst Geology/Sinkholes as shown on Figure 1 and 2. Based on the available desktop resources, there are no underground and historic surface mines as well as karst features located within 0.25-mile of the Project. Therefore, potential hibernacula is not anticipated to occur within range of the Project area

Please provide us with the results of the ODNR's environmental review, including results of the ODNR Natural Heritage Database search, at your earliest convenience. If you have questions or need additional information regarding the Project, please contact me at the phone number or email below. Thank you for your assistance with this request.

Sincerely,

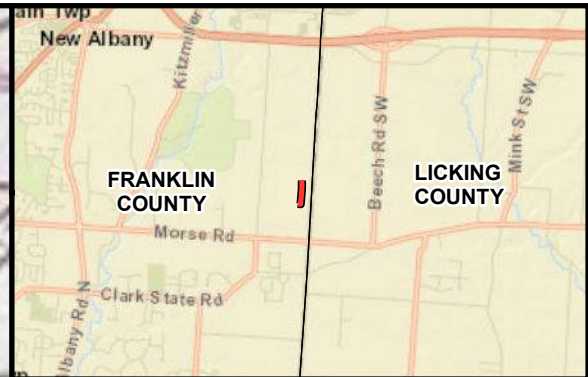
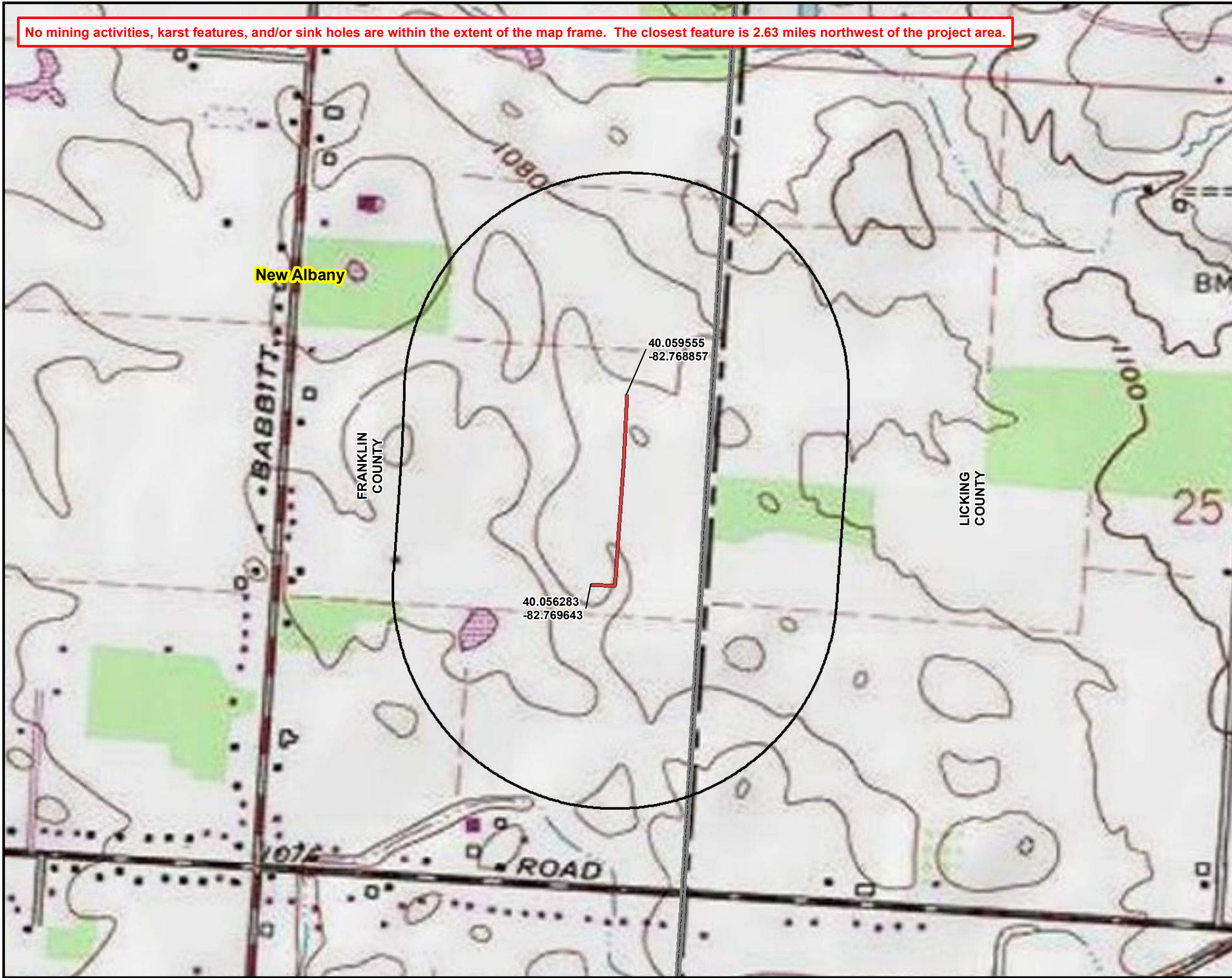
Brian Miller
Project Manager VIII
Phone: (412-667-9172); brian.miller@aecom.com

CC: Amy J. Toohey
Environmental Specialist-Consultant
Phone: (614-565-1480); ajtoohey@aep.com

Attachments: Figure 1 – Topographic Project Overview;
Figure 2 – Aerial Project Overview;
Natural Heritage Data Request Form;
Electronic Shapefiles(.shp)

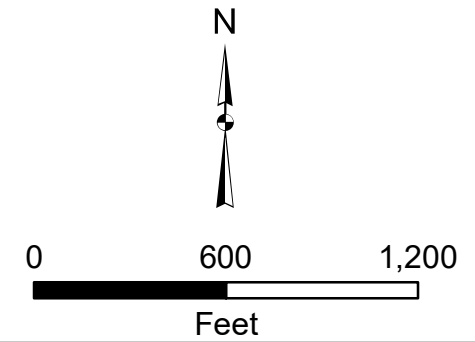
BOUNDLESS ENERGY™

No mining activities, karst features, and/or sink holes are within the extent of the map frame. The closest feature is 2.63 miles northwest of the project area.



Legend

- Anguin 138kV Extension No. 1 Transmission Line
- Quater Mile Review Boundary
- Ohio USGS 7.5' Topographic Quadrangle
- County Boundary

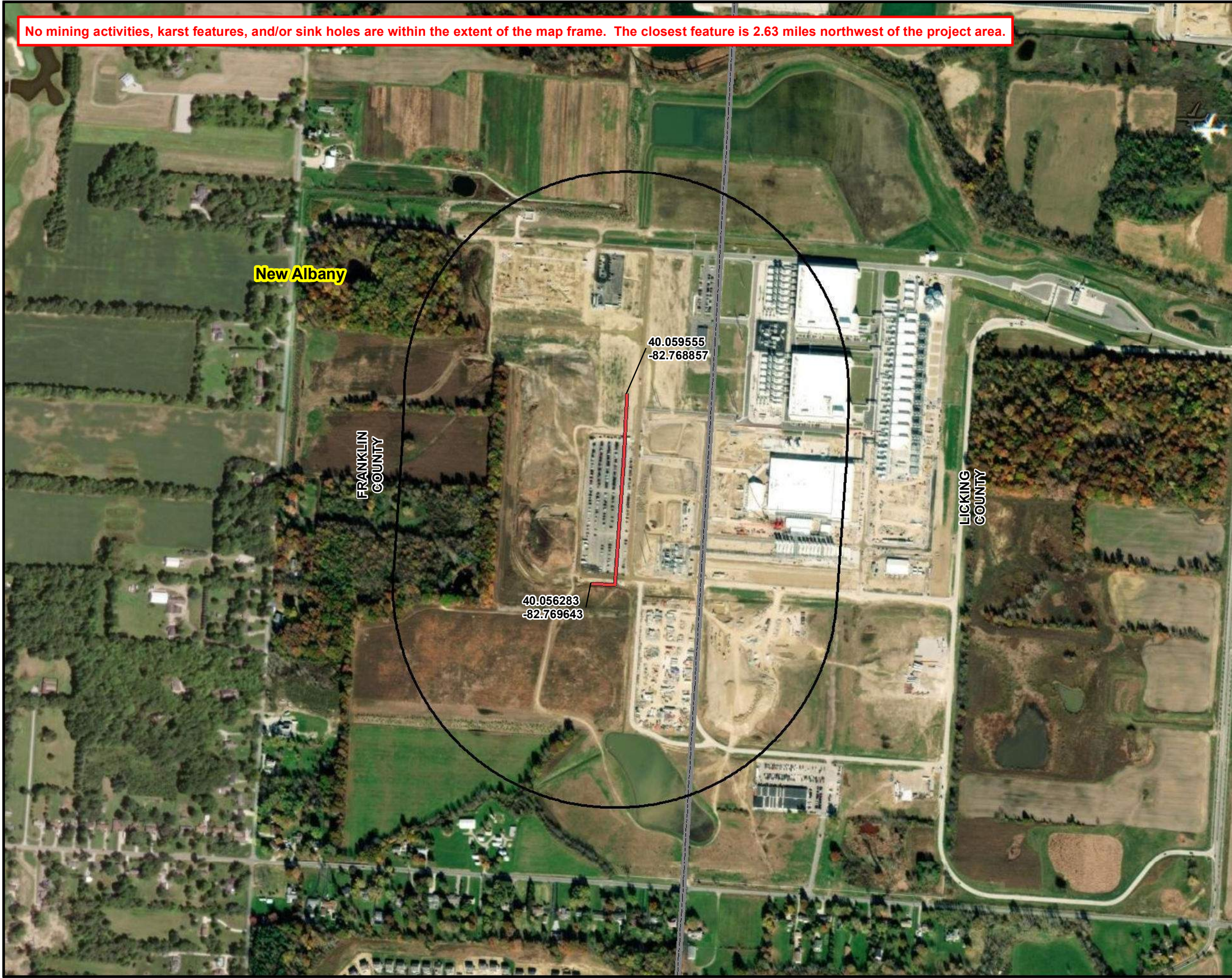


AEP Anguin 138kV Extension No. 1 Transmission Line Project





FIGURE 1
TOPOGRAPHIC PROJECT OVERVIEW

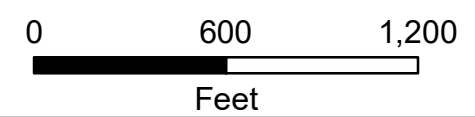
DATE: 7/31/2023	1 INCH = 600 FEET
CREATED BY: CJT	CHECKED BY: JH
JOB NO.: 60713337	AECOM

No mining activities, karst features, and/or sink holes are within the extent of the map frame. The closest feature is 2.63 miles northwest of the project area.



Legend

-  Anguin 138kV Extension No. 1 Transmission Line
-  Quater Mile Review Boundary
-  Ohio USGS 7.5' Topographic Quadrangle
-  County Boundary



Anguin 138kV Extension No. 1
Transmission Line Project

FIGURE 2
AERIAL PROJECT OVERVIEW

DATE: 7/31/2023	1 INCH = 600 FEET
CREATED BY: CJT	CHECKED BY: JH
JOB NO.: 60713337	AECOM

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APPENDIX B

UPLAND DRAINAGE FEATURES PHOTOGRAPHIC RECORD

Client Name: AEP	Site Location: Anguin 138kv Extension No. 1 Transmission Line Project	Project No. 60714510
----------------------------	--	--------------------------------

UDF-MRK-003	
Date: August 15, 2023	
Description: Upland Drainage Feature Facing East	

UDF-MRK-003	
Date: August 15, 2023	
Description: Upland Drainage Feature Facing North	

Client Name: AEP	Site Location: Anguin 138kv Extension No. 1 Transmission Line Project	Project No. 60714510
----------------------------	--	--------------------------------

UDF-MRK-003
Date: August 15, 2023
Description: Upland Drainage Feature Facing South



UDF-MRK-003
Date: August 15, 2023
Description: Upland Drainage Feature Facing West



Client Name: AEP	Site Location: Anguin 138kv Extension No. 1 Transmission Line Project	Project No. 60714510
----------------------------	--	--------------------------------

UDF-MRK-003	
Date: August 15, 2023	
Description: Upland Drainage Feature Soil	

UDF-MRK-003	
Date: August 15, 2023	
Description: Upland Drainage Feature Substrate	

APPENDIX C
HABITAT PHOTOGRAPHIC RECORD

Client Name: AEP	Site Location: Anguin138kV Ext. No. 1 Transmission Line Project	Project No.: 60714510
----------------------------	---	---------------------------------

PH-01
Date: August 15, 2023
Description: Landscaped (areas surrounding the gravel access road) Facing South



PH-02
Date: August 15, 2023
Description: Urban (asphalt parking lot) Facing South



Client Name: AEP	Site Location: Anguin138kV Ext. No. 1 Transmission Line Project	Project No. 60714510
----------------------------	---	--------------------------------

PH-03
Date: August 15, 2023
Description: Urban (asphalt parking lot) Facing West



PH-04
Date: August 15, 2023
Description: Landscaped (areas surrounding the parking lot) Facing North



APPENDIX D
AGENCY CORRESPONDENCE



Ohio Department of Natural Resources

MIKE DEWINE, GOVERNOR

MARY MERTZ, DIRECTOR

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

September 1, 2023

Joshua Holmes
AECOM
707 Grant Street, 5th Floor
Pittsburgh, Pennsylvania 15219

Re: 23-0897; Anguin 138kV Extension No.1 Transmission Line Project

Project: The proposed project involves extending the previously proposed Anguin Extension No.1 (Rockhopper) 138kv transmission line approximately 0.22-mile from the Rockhopper Station to the customer delivery point.

Location: The proposed project is located in Plain 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: A review of the Ohio Natural Heritage Database indicates there are no records of state or federally listed plants or animals within one mile of the specified project area. Records searched date from 1980.

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

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

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

The project is within the vicinity of records for the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally 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 Eileen Wyza at Eileen.Wyza@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 endangered species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these 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 \geq 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 & NORTHERN LONG-EARED BAT SURVEY GUIDELINES](#)." If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Eileen Wyza for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

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

Federally Endangered

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

Federally Threatened

rabbitsfoot (*Quadrula cylindrica cylindrica*)

State Endangered

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

State Threatened

pondhorn (*Unio merus tetralasmus*)
Salamander Mussel (*Simpsonaias ambigua*)

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

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

State Endangered

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

State Threatened

lake chubsucker (*Erimyzon sucetta*)
paddlefish (*Polyodon spathula*)

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

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

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

The [local floodplain administrator](#) should be contacted concerning the possible need for any floodplain permits or approvals for this project.

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

Mike Pettegrew
Environmental Services Administrator

United States Department of the Interior



FISH AND WILDLIFE SERVICE

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



August 10, 2023

Project Code: 2023-0110364

Dear Mr. Joshua Holmes:

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

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

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

Sincerely,

Patrice Ashfield
Field Office Supervisor



OHIO DIVISION OF WILDLIFE AND U.S. FISH AND WILDLIFE SERVICE (OH-FIELD OFFICE) JOINT GUIDANCE FOR BAT SURVEYS AND TREE CLEARING MAY 2023

This document has been updated with new state guidance for the 2023 field season.

This guidance applies to state recommendations only. Contact the USFWS to determine if federal consultation is also necessary to comply with federal law.

Agency Contacts:

ODNR-DOW Permit Coordinator: Wildlife.Permits@dnr.ohio.gov, (614) 265-6315

ODNR-DOW Bat Survey Coordinator: Eileen Wyza, Eileen.Wyza@dnr.ohio.gov, (614) 265-6764

USFWS OHFO Endangered Species: Angela Boyer, angela_boyer@fws.gov, (614) 416-8993, ext.122

Covid-19 Guidance:

Surveyors should follow all covid protocols put in place by their agency. All surveyors should wear masks when handling bats and anyone exhibiting symptoms of covid-19 should not participate in bat surveys.

Ohio Mist-net Surveys:

This document serves as guidance for bat mist netting activities in Ohio and does not supersede any requirements listed on your permits or facility certificate. All permit conditions must be strictly adhered to for permits to be valid and for renewal of permits beyond the existing year.

Due to the presence of White-nose Syndrome (WNS), mist-netting in Ohio must be conducted between June 1 and August 15 unless stated otherwise in your state permit. The ODNR Division of Wildlife (ODNR-DOW) and U.S. Fish and Wildlife Service (USFWS) Ohio Field Office (OHFO) have determined that delaying netting activities until June 1 will provide additional recovery time for bats affected by WNS. For presence/probable absence surveys, netting will not be accepted outside of the June 1 - August 15 timeframe.

To assess project areas for presence or probable absence of the state and federally listed Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*) during summer residency, the USFWS developed the USFWS Range-wide Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines (March 2023). This protocol, **with minor modifications referenced below**, can also be used in Ohio for the 2023 field season and includes surveying for the state-listed little brown bat (*Myotis lucifugus*) and tricolored bat (*Perimyotis subflavus*).

According to the updated federal range-wide guidelines, presence/probable absence net surveys for northern long-eared bats shall incorporate either 10 net nights per square 0.5 kilometer (123 acres) of project area, or four net nights per kilometer for linear projects. Presence/probable absence net surveys for Indiana bats shall incorporate six net nights per square 0.5 kilometer (123 acres) of project area, or two net nights per kilometer for linear

projects. If a project area is eligible for a presence/probable absence survey for both Indiana bats and northern long-eared bats, following the northern long-eared bat level of effort will qualify as a presence/ probable absence survey for both species. However, if a project area is eligible for a presence/absence survey for both species, following the Indiana bat level of effort will not qualify the survey for a northern long-eared bat presence/ probable absence survey. Please note that the USFWS Range-wide Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines (March 2023) requires that a minimum of two (2) biologists (e.g., one permitted and one technician) must be on-site for every four (4) net-sets being operated. Exceptions to on-site minimum staffing levels may be allowed under extenuating circumstances, provided written justification is included in the proposed survey study plan and subsequently approved by the OHFO and ODOW.

Due to the reclassification of the northern long-eared bat on March 31, 2023, the previous northern long-eared bat 4(d) rule has been nullified. There is a new online tool in the USFWS's Information for Planning and Consultation (IPaC) website that allows project proponents to utilize a determination key (Dkey) for the northern long-eared bat. **The Dkey cannot be used to replace consultation with ODNR-DOW.** Project proponents should coordinate directly with the ODNR-DOW and the OHFO for project technical assistance for all federally listed species, including the Indiana bat and northern long-eared bat.

The tricolored bat is listed as endangered by ODNR-DOW. Additionally, the USFWS published a proposed rule to list the tri-colored bat as endangered on September 14, 2022. The USFWS is scheduled to publish a final rule on the tricolored bat's status by the end of September 2023 which could affect future project development. Therefore, in anticipation of this listing we recommend that project proponents coordinate with the OHFO in addition to ODNR-DOW to determine if the project could benefit from formal coordination with USFWS for tricolored bat. The USFWS Range-wide Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines (March 2023) allows presence/absence surveys for the tricolored bat that use the northern long-eared bat level of effort.

Exception for Ohio mist-net surveys: All presence/absence surveys conducted for state listed bat species (Indiana, northern long-eared, little brown, tricolored) should follow the maximum net nights set forth in the federal guidance to be considered valid by ODNR-DOW. Any modifications to this position will be communicated at the time of the site authorization approval.

Ohio Acoustic Surveys:

Acoustic bat surveys for presence/absence will be accepted by ODNR-DOW for the 2023 season. Surveys should follow guidelines laid out in the USFWS Range-wide Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines (March 2023) with the following exceptions:

- Ohio survey dates are June 1 – August 15, 2022
- After conducting automated analyses using one or more of the currently available 'approved' acoustic bat ID programs¹, qualitative analysis (i.e., manual vetting) of any calls recorded from state-endangered species (*M. sodalis*, *M. septentrionalis*², *M. lucifugus*², and *P. subflavus*²) must be completed.
- **All presence/absence acoustic surveys conducted for state listed bat species (Indiana, northern long-eared, little brown, tricolored) should follow the maximum acoustic nights set forth in the federal guidance to be considered valid by ODNR-DOW. Any modifications to this position will be communicated at the time of the site authorization approval.**

At a minimum, for each detector site/night a program considered presence of state-listed bats likely, review all files (including no IDs) from that site/night. If more than one acoustic bat ID program is used, qualitative analysis must also include a comparison of the results of each program by site and night.

¹ <https://www.fws.gov/media/indiana-bat-summer-survey-guidance>

² State listing as endangered effective July 1, 2020

Combined Mist-netting and Acoustic Surveys:

ODNR-DOW will accept the USFWS pilot survey option of combining mist-netting and acoustic surveys for traditional survey sites (e.g., 123-acre area) detailed in Appendix I of the USFWS Range-wide Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines (2023). All presence/absence combined mist-net and acoustic surveys conducted for state listed bat species should follow the maximum level of effort set forth by the federal guidance to be considered valid by ODNR-DOW. Any modifications to this position will be communicated at the time of the site authorization approval.

Before Field Season:

- Anyone surveying bats using mist-nets in the state of Ohio must obtain a federal permit as well as a state scientific collection permit. The federal permit should include both the Indiana bat and the northern long-eared bat.
- Your ODNR-DOW permit consists of two documents: a Scientific Collector (Wild Animal) Permit and an endangered species letter signed by the Chief of the Division of Wildlife (in addition to your federal permit). Both ODNR-DOW documents must be obtained prior to field work and kept with you and any sub-permittees during field work.

During Field Season:

- Prior to initiation of field work (a minimum of two weeks in advance), permittees must provide proposed mist netting plans to USFWS and ODNR-DOW in the form of an e-mail letter to the USFWS OHFO and copy to the ODNR-DOW Bat Survey Coordinator. Plans must be reviewed and approved by USFWS OHFO and ODNR-DOW before ANY surveys take place. Study plans must specify objectives, location details, dates of proposed work, and all other relevant details. **Study plans must also include a USFWS Project Code. Project Codes can only be obtained by requesting an official species list through the USFWS's Information for Planning and Consultation (IPaC) website (<https://ipac.ecosphere.fws.gov/>).** When handling bats, you must strictly adhere to the current WNS Decontamination Protocol (current version can be found at <https://www.whitenosesyndrome.org/topics/decontamination>). Clothing, boots, gear, and equipment should all be thoroughly decontaminated between nights, as well as between netting sites.
- Request bat bands at least two weeks in advance of needing them. Bat bands can be obtained by e-mailing the ODNR-DOW Bat Survey Coordinator with how many bands are needed, current permit number, sizes, and a mailing address. Bands will not be issued until your permits are valid. We have two sizes of bands—2.4 mm and 4.2 mm. The 2.4 mm split metal bat ring made of aluminum alloy is suitable for banding small bats. This band must be placed on all captured Indiana, northern long-eared, little brown, and tricolored bats. The larger 4.2 mm band is suitable for silver-haired (*Lasiurus noctivagans*), big brown (*Eptesicus fuscus*), and hoary (*Lasiurus cinereus*) bats. You must band all Indiana, northern long-eared, little brown, and tricolored bats with ODNR-DOW bands; therefore, you should not be in the field without the 2.4 mm sized band.
- Only individuals who are named on the ODNR-DOW endangered species letter portion of the permit and on the corresponding federal bat permit may conduct and oversee mist-net surveys. Trained assistants may work on permitted bat activities under the direct and on-site supervision of a named permittee. All bat IDs must be verified by a named permittee. If an Indiana bat and/or northern long-eared bat is captured, the permittee shall notify the USFWS and the ODNR-DOW Bat Survey Coordinator referenced above within 48 hours via email. If a little brown bat or tricolored bat is captured, notify the ODNR-DOW Bat Survey Coordinator only within 48 hours via email. Reports of listed bat captures should include specific information such as spatial location of capture, band information, radio-transmitter frequency information, sex, reproductive status, and age of individual.
- For presence/absence surveys, ODNR-DOW requires all female and juvenile state endangered and threatened bat species (Indiana, northern long-eared, little brown, and tricolored bat) be radio-tracked if

caught, in accordance with methods outlined in Appendix D of USFWS 2022 Range-wide Indiana Bat Summer Survey Guidelines.

- If you are taking any biological samples (tissue, fur, blood, etc.), this must be specifically authorized in your state and federal permits and noted in your survey proposal.

After Field Season:

By March 15, you must submit your final ODNR-DOW report(s) from the previous summer. You are not required to fill out the ODNR-DOW Wildlife Diversity Bat Excel Spreadsheet; instead, please forward your USFWS Midwestern US Spreadsheet (found here: <https://www.fws.gov/media/bat-reporting-spreadsheets-2020-2021>) to the ODNR-DOW Bat Survey Coordinator and ODNR-DOW Permit Coordinator and include your state permit number along with an electronic copy of the project report. Electronic summaries emailed during the field season are NOT considered as full compliance of this reporting requirement.

Ohio Environmental Review Recommendations for projects involving disturbance near potential/known bat hibernacula (cliffs, caves, mines) or tree cutting:

Step 1: Coordinate with Ohio Division of Wildlife (DOW) regarding existing records for state-listed endangered bat summer and/or winter occurrence information. Potential hibernacula found during a habitat assessment must address possible suitability for Indiana bats, northern long-eared bats, tricolored bats, and little brown bats.

If project site contains a known bat hibernaculum(a) –

- For state-listed endangered species other than the Indiana bat and northern long-eared bat, a recommendation of 0.25-mile tree cutting buffer around all known entrances to protect existing conditions at the hibernaculum(a). The U.S. Fish and Wildlife Service (USFWS) should be contacted for guidance on projects occurring within 5 miles of known or potential Indiana bat and/or northern long-eared bat hibernacula. If the project involves subsurface disturbance, consultation with DOW is required.
- Limited tree cutting may be permitted within the buffer. Coordinate with DOW.

If a project site does not contain known bat hibernaculum(a)

- Conduct a desktop habitat assessment of the project area. Tools such as the [ODNR Mines of Ohio Viewer](#), [Karst Interactive Map](#), topographic maps, aerial photos, historical records, etc. should be used to determine if there are any potential caves, mines, karst features, rock ledges, or other features that may serve as potential hibernacula.

- If no such features are found, proceed to Step 2.

- If potential hibernacula are found during the desktop assessment:

- Assume bats are using these hibernacula and refrain from clearing trees from March 15-November 15

-Or-

- Conduct a field habitat assessment to determine if a potential hibernaculum(a) is present within the action area. We encourage impacts to ledges and rock outcroppings be avoided. If impacts cannot be avoided, features should be evaluated for potential roosting characteristics such as recesses, overhangs, and crevices.

- **NOTE:** The USFWS Range-wide Indiana Bat Guidelines, Appendix H, contains instructions for completing a habitat assessment, but only includes criteria for Indiana bat hibernacula.

Step 2: When conducted, a presence/absence survey must follow current DOW guidelines.

Step 3: If a state-listed endangered bat is captured or recorded during the survey:

- Recommendation of no summer tree cutting, or limited cutting following guidelines detailed below, within 5 miles (or 2.5 miles for tricolored bats) of the capture site if a roost is not located.
- Recommendation of no summer tree cutting, or limited cutting following guidelines detailed below, within 2.5 miles of a roost tree if located.

If no state-listed endangered bat is captured or recorded during the survey:

- Summer tree cutting may proceed for 5 years before a new survey is needed under state guidance.

Limited summer tree cutting guidance for bats that are only state-listed endangered: Limited tree cutting in summer may be permitted after consultation with DOW, but clearing trees with the following characteristics should be avoided unless they pose a hazard: dead or live trees of any size with loose, shaggy bark; crevices, holes, or cavities; clusters of dead leaves; live trees of any species with DBH ≥ 20 ".

FREQUENTLY ASKED QUESTIONS

When does the ODNR-DOW Bat Survey protocol have to be used?

This protocol should be used anytime Indiana bat, northern long-eared bat, little brown bat, or tricolored bat summer presence/probable absence surveys are conducted in the state of Ohio.

How many detector nights are required for presence/probable absence acoustic surveys?

As described in the current USFWS Range-wide Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines:

Level of effort for all state-listed endangered bat species including Indiana bat and northern long-eared bats: Follow maximum detector nights as outlined in the federal guidance (for northern long-eared bat).

Northern Long-eared Bat Level of Effort:

Linear projects: a minimum of 4 detector nights per km (0.6 miles) of suitable summer habitat

Non-linear projects: a minimum of 14 detector nights per 123 acres (0.5 km²) of suitable summer habitat.

At least 2 detector locations per 123 acre "site" shall be sampled until at least 8 detector nights has been completed over the course of at least 2 calendar nights (may be consecutive). For example:

- 4 detectors for 3 nights and 1 detector for 2 nights each (can sample the same location or move within the site)
- 2 detectors for 7 nights each (can sample the same location or move within the site)
- 1 detector for 14 nights (must sample at least 2 locations and move within the site – we recommend evenly distributing LOE among locations)

Indiana Bat Level of Effort:

Linear projects: a minimum of 4 detector nights per km (0.6 miles) of suitable summer habitat

Non-linear projects: a minimum of 10 detector nights per 123 acres (0.5 km²) of suitable summer habitat.

At least 2 detector locations per 123 acre "site" shall be sampled until at least 8 detector nights has been completed over the course of at least 2 calendar nights (may be consecutive). For example:

- 5 detectors for 2 nights each (can sample the same location or move within the site)
- 2 detectors for 5 nights each (can sample the same location or move within the site)
- 1 detector for 10 nights (must sample at least 2 locations and move within the site – we recommend evenly distributing LOE among locations)

How many net surveys are required for presence/probable absence?

Level of effort for all state-listed endangered bat species including Indiana bat and northern long-eared bats: Follow maximum net nights as outlined in the federal guidance (for northern long-eared bat).

Net surveys for northern long-eared bat presence/probable absence shall incorporate, at a minimum, either 10 net nights per square 0.5 kilometer (123 acres) of project area, or four net nights per kilometer for linear projects. For linear projects, there must be at least one net night of survey on two different nights (minimum of two nights). This does not allow for two net nights on a single night for surveys.

Net surveys for Indiana bat presence/probable absence shall incorporate, at a minimum, either six net nights net nights per square 0.5 kilometer (123 acres) of project area, or two net nights per kilometer for linear projects. For linear projects, there must be at least one net night of survey on two different nights (minimum of two nights). This

does not allow for two net nights on a single night for surveys.

How long are the results of the surveys valid for an assessment of an area?

Mist-net or acoustic surveys documenting probable absence of state-listed endangered bats are valid for five years.

When can acoustic or net surveys occur in Ohio?

In Ohio, acoustic or net surveys may only be conducted from June 1 through August 15 unless indicated otherwise in your state permit. Any surveys outside of the June 1 - August 15 timeframe cannot be used in Ohio to assess the presence/probable absence of state-listed bats.

Can a presence/probable absence survey be conducted within a known Indiana bat and/or northern long-eared bat capture/detection buffer?

Surveys generally cannot be used to document presence/probable absence of state-listed endangered bats where presence of the species has already been confirmed by prior surveys.

What if a project is proposing to clear trees between April 1 and September 30 when bats may be present but no bat records exist in the project area?

Any Ohio project that is not within a known bat record buffer, and tree clearing between April 1 and September 31 is being proposed, may have a presence/probable absence survey conducted between June 1 and August 15 following the range-wide guidance. If a presence/probable absence survey is not performed, presence of listed bats is assumed.

How does take of northern long-eared bats differ from Indiana bats?

Under Ohio law, there is no exemption for take of any listed bat species.

Where do I get bands?

If you need bands, email the ODNR-DOW Bat Survey Coordinator at least two weeks in advance with your current ODNR permit number, how many bands in each size (2.4 and 4.2 mm) you will need this season, and a current address to ship the bands.

Do I have to band every bat?

No, currently this is optional. However, you are required as per your state permit to band all Indiana, northern long-eared, little brown, and tricolored bats.