

Construction Notice for the Anguin 138 kV Extension No. 5 Transmission Line Project (Phase 2)



PUCO Case No. 25-0446-EL-BNR

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

Submitted by:
Ohio Power Company

April 23, 2025

**CONSTRUCTION NOTICE FOR THE ANGUIN 138 kV EXTENSION No. 5 TRANSMISSION LINE PROJECT
(PHASE 2)**

CONSTRUCTION NOTICE

Ohio Power Company

Anguin 138 kV Extension No. 5 Transmission Line Project (Phase 2)

4906-6-05 Accelerated Application Requirements

Ohio Power Company (the Company) provides the following information to the Ohio Power Siting Board (OPSB) in accordance with the accelerated application requirements of Ohio Administrative Code Section 4906-6-05.

4906-6-05(B) General Information

B(1) Project Description

Provide the name of the project and applicant's reference number, names and reference number(s) of resulting circuits, a brief description of the project, and why the project meets the requirements for a letter of notification or construction notice application.

The Company is proposing the Anguin 138 kV Extension No. 5 Transmission Line Project (Phase 2) (the "Project"), located within the City of New Albany in Plain Township, Franklin County and Jersey Township, Licking County, Ohio. The Project involves construction of an approximately 0.3-mile new 138kV transmission line from the previously approved Anguin 138kV Extension No.5 Transmission Line (approved in Case No. 23-1133-EL-BNR) to the new customer delivery point (NBY-7A). The Project will use steel monopole structures within a 100-foot right-of-way (ROW), located entirely on customer property. The location of the Project is shown on **Maps 1 and 2** in **Appendix A**.

The Project meets the requirements for a Construction Notice (CN) as defined by Item 1(d)(i) of Appendix A to Ohio Administrative Code Section 4906-1-01, *Application Requirement Matrix for Electric Power Transmission Lines*:

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

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

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

The Project has been assigned PUCO Case No. 25-0446-EL-BNR.

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B(2) Statement of Need

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

An existing customer near the Company's Anguin Station (approved in Case No. 19-0040-EL-BLN) has requested an additional 138 kV delivery point, NBY-7A, to serve a new facility requiring an aggregate of 96 MW of additional load in New Albany, Ohio. Two previous delivery points, NBY-5A and NBY-6A, were served from the Company's Anguin Station from the Anguin 138kV Extension No.5 Transmission Line Project (approved in Case No. 23-1133-EL-BNR). This application concerns facilities required to meet the customer's request for the NBY7A delivery. The Company will be required to construct a greenfield, approximately 0.3-mile double circuit 138 kV transmission line, on customer property that extends from the customer's step-down station (NBY6A) to connect to the customer's new delivery point, NBY7A.

The customer has requested an in-service date of August 1, 2025, for NBY-7A. 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 Project components of NBY-7A were presented and reviewed with stakeholders at the July 21, 2023, and January 17, 2025 PJM SRRTEP meetings, as seen in **Appendix B**. The Project was not included in the Company's 2024 Long Term Forecast Report, as the solution was not known at the time of filing.

B(3) Project Location

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

The location of the Project in relation to existing transmission lines and substations is shown on **Figure 1**, in **Appendix A**.

B(4) Alternatives Considered

Describe the alternatives considered and reasons why the proposed location or route is best suited for the proposed facility, including but not be limited to, impacts associated with socioeconomic, ecological, construction, or engineering aspects of the project.

The Project is located on customer property. Based on the customer's proposed development and existing facilities in the area, the proposed location of the Anguin 138 kV Extension No. 5 Transmission Line (Phase 2) is the most suitable location for the Project. Other alternatives would require impacting neighboring properties, as opposed to remaining primarily on the customer's property. The Project is located entirely on recently developed land, which will require no tree clearing. The Project will not require impacts to any delineated wetlands or streams. The location of the Project minimizes impacts to the community and the environment, while considering the engineering and construction needs of the

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customer. The Project represents the most suitable location and most appropriate solution for meeting the Company's and customer's needs.

B(5) Public Information Program

Describe its public information program to inform affected property owners and residents 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

Provide an anticipated construction schedule and proposed in-service date of the project.

Construction of the Project is planned to begin in May 2025 with an anticipated in-service date of August 2025.

B(7) Area Map

Provide a map of at least 1:24,000 scale clearly depicting the facility and proposed limits of disturbance with clearly marked streets, roads, and highways, and an aerial image.

Figure 1, in Appendix A, identifies the location of the Project area on a United States Geological Survey 1:24,000-scale on New Albany's quadrangle map. **Appendix A, Figure 2** displays the Project components provided by Google Earth Imagery from April 2025.

B(8) Property Agreements

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

A list of properties required for the Project are provided in **Table 1**, below. The Company has entered into a right of entry agreement with the customer.

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Table 1 – Property Agreements

Property Parcel Number	Agreement Type	Easement or Option Obtained (Yes/No)
094-106896-00.000	Customer Owned	Yes
222-004984-00.000	Customer Owned	Yes

The easement form exhibit provided in **Appendix C** represents the minimum rights the Company would require in order to construct, operate, and maintain these facilities.

B(9) Technical Features

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.

The transmission line is estimated to include the following:

- Voltage: 138kV
- Conductors: Double Circuit, 795 kcmil 26/7 ACSS (Drake)
- Static Wire: (1) 96 ct OPGW and (1) 7#8 Alumoweld
- Insulators: Polymer
- ROW Width: 100 feet
- Structure Type: One (1) 2-pole steel self-supporting dead-end structures on concrete pier foundations, and two (2) mono-pole steel direct embedded tangent structures.

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 cost estimate for the Project, which is comprised of applicable tangible and capital costs, is approximately \$908,000 using a Class 4 estimate. Per the Ohio retail tariff, the Customer is responsible for 40% of the cost of the Project. The remainder of the Project cost, pursuant to the PJM Open Access

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Transmission Tariff (“OATT”), will be recovered in the Company’s Federal Energy Regulatory Commission (“FERC”) formula rate (Attachment H-14 to the PJM OATT) and allocated to the AEP Zone.

B(10) Social and Ecological Impacts

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

B(10)(a) Land Use

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

The Project is located completely within City of New Albany and crosses the border between Plain Township, Franklin County and Jersey Township, Licking County, Ohio. Field observations indicate the Project area is comprised of active or developed commercial lands from the customer and majority of the site exists on paved surfaces. There are no parks, churches, cemeteries, wildlife management areas, or nature preserve lands within 1,000 feet of the Project. No tree clearing is required as no woodlots were identified within the Project area.

B(10)(b) Agricultural Land

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 Project Area has undergone significant land use changes over the past several years, from heavy agriculture to light commercial and industrial use. The current Project Area within the customer site is completely urbanized and lacks any agricultural uses.

Based on data received from the Licking County Auditor’s office on March 11, 2025 and the Franklin County Auditor’s office on March 31, 2025, there are no agricultural district parcels within the potential disturbance area of the Project

B(10)(c) Archaeological and Cultural Resources

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

The Company’s consultant completed Phase I Archaeological and Phase I History/Architectural surveys for the Project, which involved subsurface testing and visual inspection in April 2025. The Company’s consultant did not identify any archaeological sites or historic structures. The Company’s consultant recommends finding no adverse effect on cultural resources for the Project and recommends that no

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further cultural resource work is necessary for the Project. The results of the coordination with the State Historic Preservation Office will be provided to OPSB once it has been received.

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

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

A summary of anticipated permits and authorizations for the Project is provided in the **Table 2**, below. There are no other known local, state, or federal requirements that must be met prior to commencement of the Project.

Table 2 – Anticipated Permits

Permit/Authorization/Coordination	Agency	Date
Storm Water Pollution Prevention Plan	Ohio Environmental Protection Agency	Not Required; Project activities less than 1-acre.
	Licking and Franklin Counties	
Notice Criteria	Federal Aviation Administration	Not Required
Road Use Maintenance Agreement	Licking and Franklin Counties	Not Required
Clean Water Act Section 404/401	United States Army Corps of Engineers	Not Required
	Ohio Environmental Protection Agency	
Archaeology/Architectural	Ohio Historic Preservation Office	Coordination submitted 4/17/2025. Pending response
Threatened and Endangered Species	United States Fish and Wildlife Service	Consultation Pending Initial Response 8/1/2023. Re-Cord Letters Sent 4/11/2025
Threatened and Endangered Species	Ohio Department of Natural Resources	Consultation Pending Initial Response 9/1/2023. Re-Cord Letters Sent 4/11/2025
Highway Crossing	Ohio Department of Transportation	Not Required
Section 10 River Crossing	United States Army Corps of Engineers	Not Required
Floodplain	Licking and Franklin Counties	Not Required

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

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

As part of the Anguin 138kV Extension No.5 Transmission Line Project (PUC: 23-1133-EL-BNR), the portion subject to this filing was included in the coordination letters submitted on August 1, 2024 to the 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. ODNR and USFWS provided responses on September 1 and August 11, 2023, respectively. Copies of the agencies' response are presented in **Appendix D**.

Due to the length of time from the initial coordination, re-coordination letters for this Project were submitted to USFWS and ODNR on April 11, 2025 and pending agency response. A species review for each of these species and potential impacts from the Project were evaluated using the 2023 response. **Table 3**, in **Appendix E** lists the federal and state threatened or endangered species in the Project area.

Based on the nature of the proposed Project activities and industrial or paved landscape of the surrounding vicinity, construction impacts to protected species are not anticipated.

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 conducted a wetland and stream delineation survey in the Project study area on August 15, 2024 and prepared an Ecological Survey Report in April 2025, which is provided in **Appendix D**. Due to changes from the customer development, the Project area was converted to complete industrial development or paved areas. As a result, no wetlands, streams, or ponds were identified in the Project Survey Area. The Project construction activities are not expected to result in discharge of fill due to the lack of delineated features within the Project area.

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

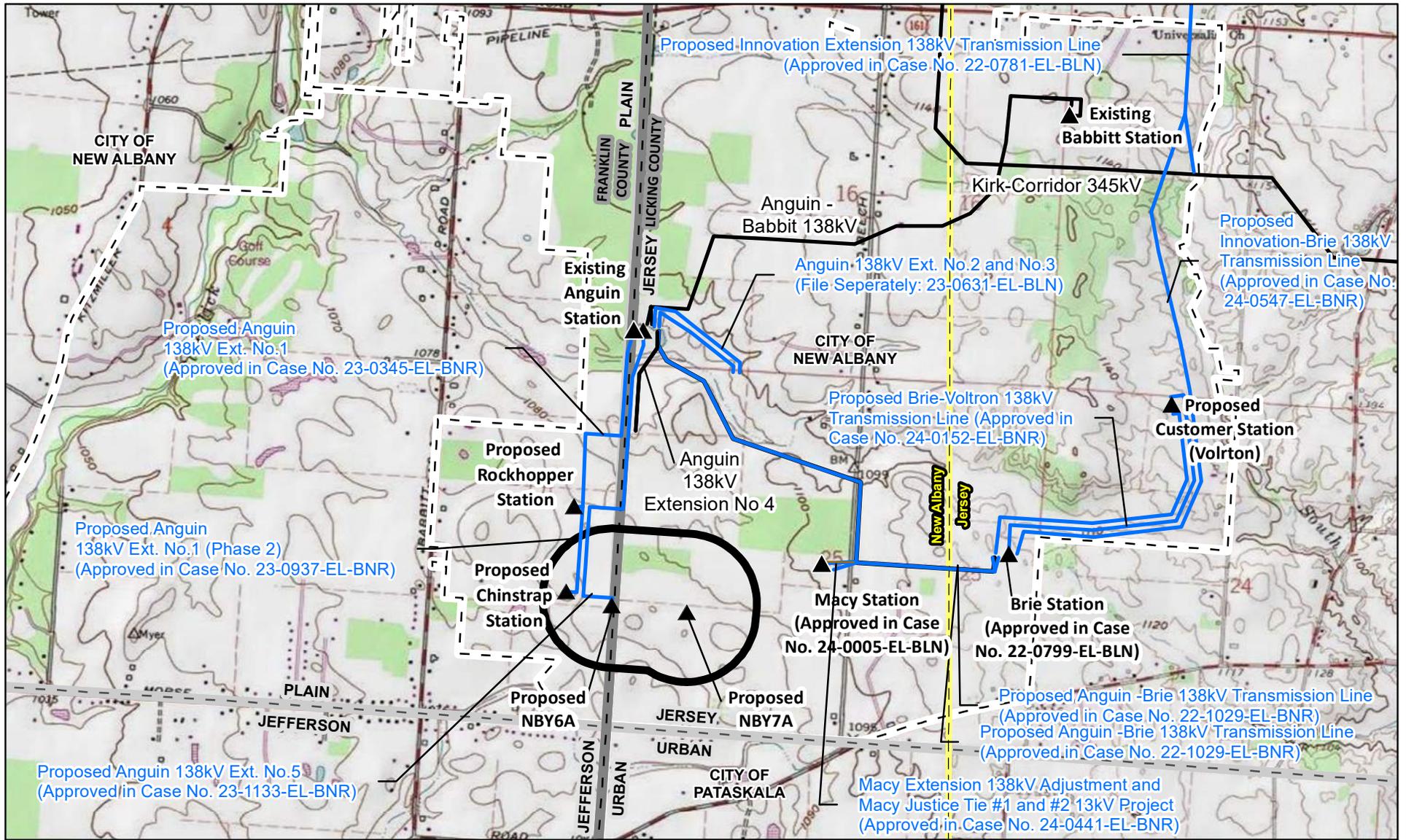
The FEMA Flood Insurance Rate Map (“FIRM”) was reviewed to identify any floodplains/flood hazard areas that have been mapped within the Project Area (specifically, map number 39089Co267H, 39049Co217K). Based on this mapping, there are no FEMA-designated 100-year floodplains or floodways crossed by the project.

B(10)(g) Unusual Conditions

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

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

Appendix A Project Maps



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

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

Coordinate System and Datum: NAD 83 State Plane Ohio South, Feet

April 16, 2025

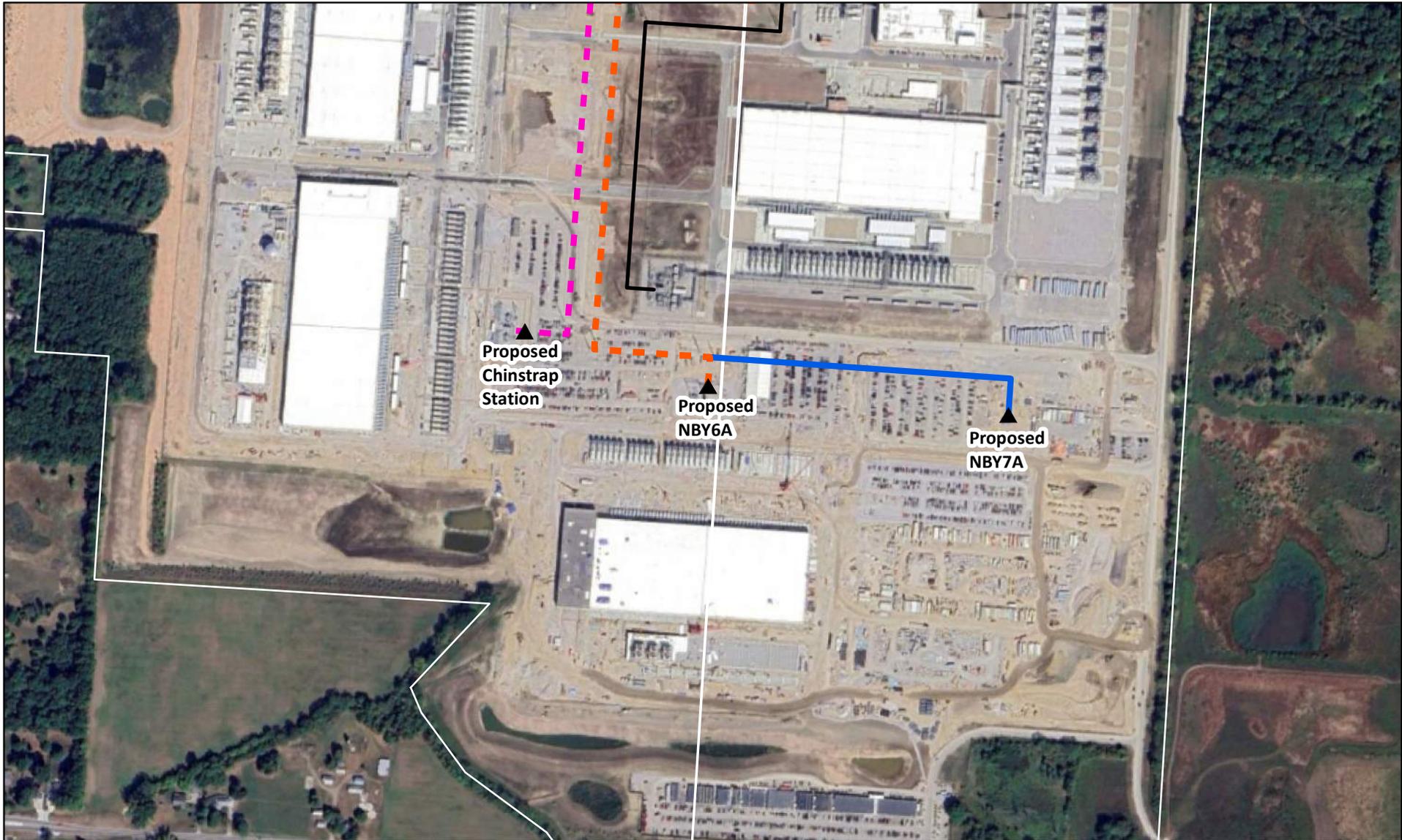


**FIGURE 1
TOPOGRAPHIC OVERVIEW**

An AEP Company

Construction Notice
Anguin 138 kV Extension No. 5
Transmission Line Project (Phase 2)

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



- ▲ Proposed Station
- Anguin 138kV Extension No 5 (NYBA7A)
- Proposed Anguin 138kV Ext. No.5 (Approved in Case No. 23-1133-EL-BNR)
- Proposed Anguin 138kV Extension No. 1 (Approved: Case No. 22-1029-EL-BLN)
- Existing Transmission Line
- ▭ Parcel Boundary

Data Sources: AEP & Google Earth, 2025

Coordinate System and Datum:
NAD 83 State Plane
Ohio South, Feet

April 16, 2025



**FIGURE 2
AERIAL MAP**

Construction Notice
Anguin 138 kV Extension No. 5
Transmission Line Project (Phase 2)


 An AEP Company

0 500 1,000
 Feet

Appendix B PJM Solution and Long Term Forecast Report

Need Number: AEP-2023-OH068

Process Stage: Solution Meeting SRRTEP-W - 01/17/2025

Previously Presented: Need Meeting 07/21/2023

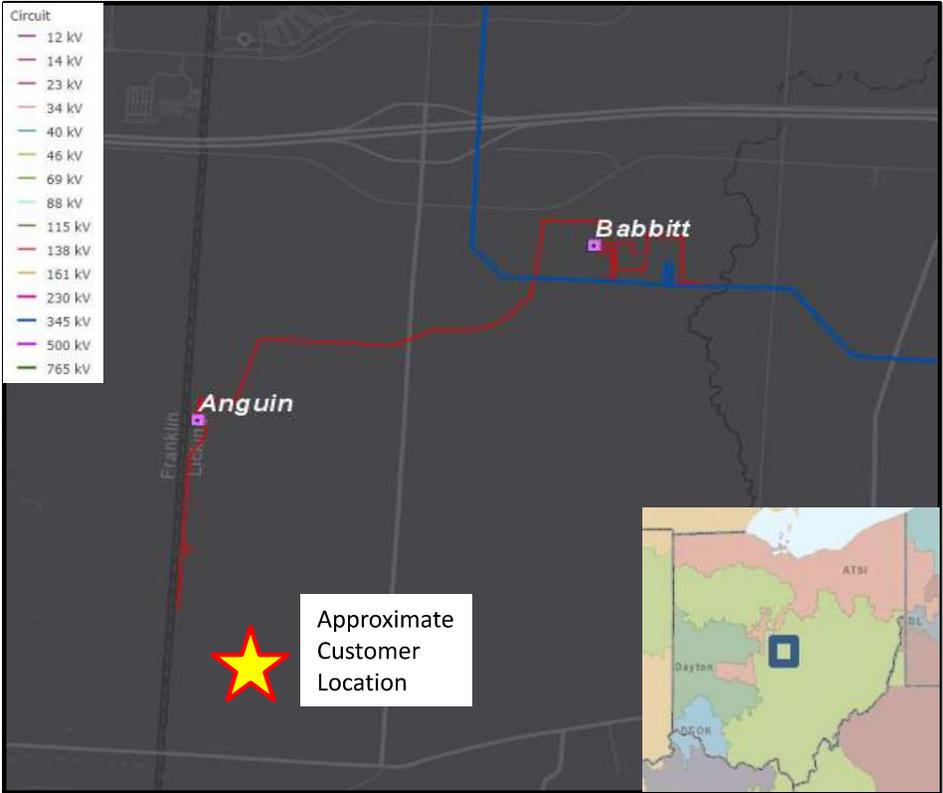
Project Driver: Customer Service

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 96 MW. This will bring the total load for the customer’s site to 646 MW. The customer has indicated the possibility to ultimately go to 720 MW at the site.
- Customer requested in-service date of 01/31/2025.





AEP Transmission Zone M-3 Process Anguin, OH/NBY-7A, OH

Need Number: AEP-2023-OH068

Process Stage: Solution Meeting SRRTEP-W - 1/17/2025

Proposed Solution:

NBY-7 138 kV Extension: In order to serve the customer's new delivery referred to as NBY-7, a new double circuit line extension will be constructed by tapping into the existing radial line to the customer's NBY6 station fed from AEP's Anguin station and extending it to the customer's new NBY-7 station on their site. This will involve about ~0.25 miles of double circuit line utilizing ACSS Drake 795 (26/7) conductor (SE 360 MV) that will terminate into the customer's NBY-7 station. Estimated Cost: \$0.6 M

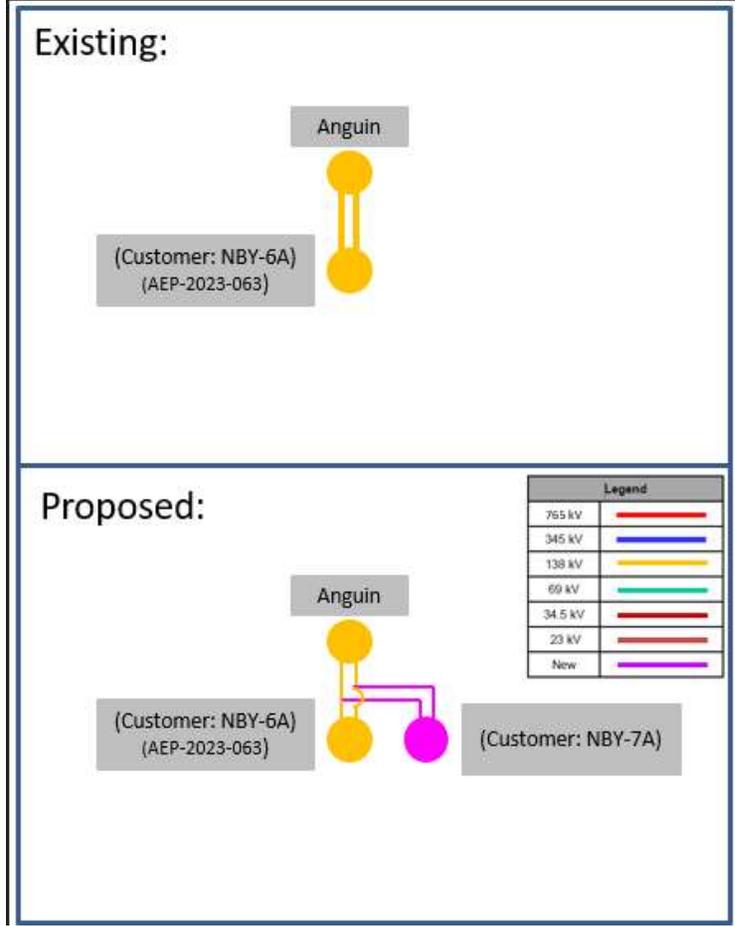
Transmission Cost Estimate: \$0.6 M

Alternatives Considered:

Given the location of the request, no other cost-effective transmission alternatives to meet the customer's requested service were identified

Projected In-Service: 8/1/2025

Project Status: Engineering



Appendix C Easement Form

Line Name: Anguin 138kV Extension No. 5 Transmission Line

Line No.: TLN160:00514

Easement No.: 2

EASEMENT AND RIGHT OF WAY

On this ____ day of _____, 2024, in consideration of Ten and NO/100 Dollars (\$10.00), and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and the covenants hereinafter set forth, **Montauk Innovations, LLC, a Delaware limited liability company**, whose address is 2801 Centerville Rd., First Floor, PMB 811, Wilmington, DE 19808 ("Grantor"), whether one or more persons, hereby grants, sells, conveys, and warrants to **Ohio Power Company** an Ohio corporation whose principal business address is 1 Riverside Plaza, Columbus, Ohio 43215 ("AEP"), its successors, assigns, lessees and tenants, a permanent easement and right of way ("Easement"), for electric 138kV transmission, distribution, and communication lines and appurtenant equipment and fixtures, being, in, on, over, under, through and across the following described lands of the Grantor, situated in the City of New Albany, County of Franklin and also the County of Licking, a 220.090 acre tract of landing being a part of Lots 2 and 3, Quarter Township 4, Township 2, Range 16, United States Military Lands, State of Ohio.

Grantor(s) claims title by Limited Warranty Deed, Instrument Number 201812130026436 recorded December 13, 2018, in the Licking County Recorder's Office and by Limited Warranty Deed, Instrument Number 201812130168698, recorded December 13, 2018, in the Franklin County Recorder's Office.

Auditor/Key/Tax Number: 094-106896-00.000 (Licking County) and 222-004984-00 (Franklin County)

The Easement Area is more fully described and depicted on Exhibit "A", a copy of which is attached hereto and made a part hereof ("Easement Area").

GRANTOR FURTHER GRANTS AEP THE FOLLOWING RIGHTS:

The right, now or in the future, to construct, reconstruct, operate, maintain, alter, improve, extend, inspect, patrol, protect, repair, remove, replace, upgrade and relocate within the Easement Area, poles, towers, and structures, made of wood, metal, concrete or other materials, and cross-arms, guys, anchors, grounding systems, and all other appurtenant equipment and fixtures, and to string conductors, wires and cables; together with the right to add to said facilities from time to time, and the right to do anything necessary, useful or convenient for the enjoyment of the Easement herein granted. The right, in AEP's discretion, now or in the future, to cut down, trim, remove, and otherwise control, using herbicides or tree growth regulators or other means, any and all trees, overhanging

branches, vegetation or brush situated within the Easement Area. AEP shall also have the right to cut down, trim or remove trees situated on lands of Grantor which adjoin the Easement Area when in AEP's reasonable judgment those trees may endanger the safety of, or interfere with the construction, operation or maintenance of AEP's facilities or ingress or egress to, from or along the Easement Area.

Except in the event of an emergency which would make compliance with such procedures impossible or impracticable, AEP shall provide three (3) days advance notice (or immediately in situations where there is an imminent threat of harm to persons or property, blockage or impairment of the Easement Area, the Grantor shall grant AEP access to any portion of the Easement Area within that area secured by the Grantor's security fencing (the area inside the secured fencing, the "Secured Area") so that AEP may perform inspections, installations, modifications, maintenance and repairs of AEP's facilities and exercise its rights under the Easement Agreement. AEP shall comply with the Grantor's security protocols in place at the time of inspection. Such access shall be coordinated with Grantor at a mutually convenient time and Grantor shall have the right to be present at all times. In the event of an emergency, AEP will inform Grantor of such access as soon as is practicable under the circumstances.

THIS GRANT IS SUBJECT TO THE FOLLOWING CONDITIONS:

The Grantor reserves the rights to make any use of the Easement Area which is not inconsistent with the rights herein conveyed to AEP, and which does not interfere with the use of said Easement Area by the AEP for the purposes named. By way of example only, and subject to the preceding sentence, such uses may include: (i) constructing and maintaining roadways and parking lots within said Easement Area along with rights of ingress and egress; (ii) constructing trails, sidewalks and shared use paths within the Easement Area; (iii) planting shrubs within the Easement Area; (iv) installing within the Easement Area, utilities that are generally perpendicular to the Easement Area and provide for the required vertical separation between the facilities and the proposed utility lines; (v) constructing fencing along the Easement Area, generally perpendicular to the Easement Area so long as (A) AEP shall, at all times, have adequate access to Easement Area to inspect, maintain, repair and replace the facilities (as determined by AEP); and (B) such fencing is at least three (3) feet from the facilities, horizontally, and maintain vertical clearance requirements; and (vi) the right to cultivate annual crops and pasture.

In no event, however, shall Grantor, its heirs, successors and assigns plant or cultivate any trees or place, construct, install, erect or permit any temporary or permanent building, structure, vertical improvement or similar obstruction including but not limited to, storage tanks, billboards, sheds, dumpsters, water impoundments, above ground irrigation systems, swimming pools or wells, or permit any alteration of the ground elevation, over, or within the Easement Area. AEP may, at Grantor's cost, remove any structure or obstruction if placed within the Easement Area, and may re-grade any alterations of the ground elevation within the Easement Area.

AEP, at its own expense, shall restore as nearly as possible to their original condition all lands or premises included within or abutting the said Easement Area which are disturbed by the construction and maintenance of said facilities. Such restoration shall include the backfilling of trenches, the restoration of fences, the reseeded or resodding of lawns or pasture areas, and the replacement of structures and other facilities located outside of the Easement.

The failure of AEP to exercise any of the rights granted herein, or the removal of any facilities from the Easement, shall not be deemed to constitute an abandonment or waiver of the rights granted herein.

This instrument contains the complete agreement, expressed or implied between the parties herein and shall inure to the benefit of and be binding on their respective successors, assigns, heirs, executors, administrators, lessees, tenants, and licensees.

This Easement may be executed in counterparts, each of which shall be deemed an original, but all of which, taken together, shall constitute one and the same instrument.

Any remaining space on this page left intentionally blank. See next page for signature.

IN WITNESS WHEREOF, the Grantor has executed this Easement effective the day, month and year first above written.

GRANTOR

Montauk Innovations, LLC, a Delaware limited liability company

By: _____
Its: Authorized Signer

State of §
 §
County of §

The foregoing instrument was acknowledged before me this _____ day of _____, 2024, by _____, authorized signer of Montauk Innovations, LLC, a Delaware limited liability company, for and on behalf of the company.

Notary Public
Print Name: _____
My Commission Expires:

This Instrument Prepared by Thomas G. St. Pierre, Associate General Counsel - Real Estate, American Electric Power Service Corporation, 1 Riverside Plaza, Columbus, OH 43215 for and on behalf of Ohio Power Company, a unit of American Electric Power.

When Recorded Return to: American Electric Power - Transmission Right of Way, 8600 Smiths Mill Road, New Albany, OH 43054

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: 23-0898; Anguin 138kV Extension No.5 Transmission Line Project

Project: The proposed project involves building a 0.97-mile greenfield double circuit 138 kV transmission line from the existing Anguin Station to the future proposed customer station (Penguin NBY7A).

Location: The proposed project is located in Plain Township of Franklin County, and Jersey Township of Licking 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 ≥ 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.

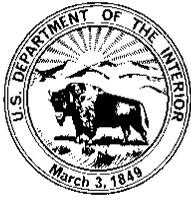
Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.

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 11, 2023

Project Code: 2023-0110261

Dear Mr. Joshua Holmes:

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

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

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

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

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

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

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

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

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

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

Sincerely,

A handwritten signature in blue ink, appearing to read "Patrice Ashfield". The signature is fluid and cursive, with the first name "Patrice" written in a larger, more prominent script than the last name "Ashfield".

Patrice Ashfield
Field Office Supervisor

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

Appendix E Ecological Survey Report

ANGUIN EXT. 138KV TRANSMISSION LINE NO. 5 (PHASE 2) PROJECT

FRANKLIN AND LICKING COUNTIES, 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 1900
Cincinnati, Ohio 45202

Project #: 60745629

April 2025

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APPENDIX A	Desktop Assessment for Winter Bat Habitat
APPENDIX B	Habitat Photographic Record
APPENDIX C	Agency Correspondence
APPENDIX D	2024 Joint Guidance for Bat Surveys and Tree Clearing

1.0 INTRODUCTION

American Electric Power Ohio Transmission Company (AEP Ohio Transco) is proposing to build the Anguin 138 kV Extension No. 5 Transmission Line (Phase 2) Project (Project) within the City of New Albany in Plain Township, Franklin County, and Jersey Township in Licking County, Ohio (OH). The Project involves the construction of an approximately 0.3-mile new 138kV transmission line from the existing Anguin 138kV Extension No. 5 Transmission to a new customer delivery point (NBY7A). The survey area associated with this Ecological Report is located within the New Albany, United States Geological Survey (USGS), 7.5-minute topographical quadrangle as displayed on the Project Overview (**Figure 1**).

The purpose of this ecological assessment was to assess the presence of wetlands and possible “waters of the United States” (WOTUS) that occur within the proposed Project Survey 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 as well as threatened and endangered species habitat present within the proposed Project Survey Area to avoid or minimize impacts during construction activities.

2.0 METHODOLOGY

The initial site investigation was completed for the Project Area on August 15, 2023. Since the initial site investigation, the customer completed additional work activities resulting in the Project area being converted to industrial landscape composed of buildings and pavements. Due to these active disturbances and developed landscapes, the presence of wetlands, streams, habitats, and other water bodies is not likely to be present within the Project area. In lieu of additional site confirmations, AECOM utilized additional desktop sources including Google Earth Imagery, digital United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey data, United States 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 to document the absence of 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 Arc Geographic Information System (GIS) 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) (Regional Supplement) (USACE, 2010).

During field survey activities, AECOM utilized the routine on-site delineation method described in the 1987 manual and the 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, 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. In some cases, different wetland Cowardin classifications will be adjacent to each other, forming a wetland "complex."

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. Wetlands are rated as either a Category 1, Category 2, or Category 3 wetland, with the former being the least pristine and the latter being the most pristine.

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 based on whether it may be ineligible for coverage under the OEPA’s 401 Water Quality Certification (WQC) for USACE Nationwide Permits (NWP) (OEPA, 2017). Mapping provided by the OEPA illustrates the eligibility of streams in the area to fall under a USACE NWP for 401 certifications, or if an individual state WQC needs to be applied for with the OEPA. 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 WQC for the Nationwide Permits if all other general and regional special terms and conditions are met.

Ineligible: Activities affecting high quality streams and undesignated streams draining directly to high quality streams, as represented in the map, must undergo an individual 401 WQC review process through the OEPA and do not fall under a USACE NWP.

Possibly Eligible: Additional field screening procedures are required for streams in the watershed to determine appropriate eligibility. Activities affecting undesignated streams within those Hydrologic Unit Code 12 watersheds that do not directly but eventually drain into high quality waters, might be eligible for coverage under the OEPA’s 401 WQC for USACE NWPs 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 a threatened and endangered species review and utilized desktop resources to review potential habitat within the Project 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.

Land uses within the Project Area were assigned a general classification based upon the principal land characteristics and vegetative cover as observed on aerial imagery from 2024 and 2025.

AECOM conducted a desktop assessment of the Project Area and a quarter-mile buffer around it to identify potentially occurring winter bat hibernaculum that may be present near the Project (**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

AECOM conducted a field visit on August 15, 2023, while active construction was beginning on-site for a customer development. A desktop assessment utilizing Google Earth Imagery from September 12, 2024 (Google Earth, 2024) depicts the Project Survey Area consists entirely of roads, buildings, an electrical substation, and paved parking areas. Based on this assessment, AECOM confirmed no wetlands, streams, or pond features are currently within the Project Area due to complete urbanization of the landscape.

3.1 WETLAND DESKTOP ASSESSMENT

3.1.1 SOILS EVALUATION

According to the USDA/NRCS Web Soil Survey, six soil map units are mapped within the Project Survey Area (USDA NRCS, 2024a and 2024b). Of these, one was identified as hydric soil, and five 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 AREA

Soil Series	Map Unit Symbol	Map Unit Description	Topographic Setting	Hydric	Hydric Component (%)
Franklin County, Ohio					
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	Ground moraines, End moraines	Yes*	Condit 4% Marengo 3%
Licking County, Ohio					
Bennington	BeA	Bennington silt loam, 0 to 2 percent slopes	Ground moraines	Yes*	Condit 5% Pewamo 3%
	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	Ground moraines, End moraines	Yes*	Condit 4% Marengo 3%
Pewamo	Pe	Pewamo silty clay loam, low carbonate till, 0 to 2 percent slopes	Depressions and Toe slopes	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 contains no mapped wetlands. The locations of the NWI mapped wetlands in the Project vicinity are shown on **Figure 2**.

3.1.3 DELINEATED WETLANDS

No wetlands were identified within the Project area due to the presence of industrial development, buildings, and pavement areas as shown on **Figures 2, 3, and 5**.

3.2 STREAM DESKTOP ASSESSMENT

No streams were identified within the Project area due to the presence of industrial development, buildings, and pavement areas as shown on **Figures 2, 3, and 5**.

3.2.2 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 one watershed, Headwaters of Blacklick Creek (HUC-12 050600011503) that is designated as Possibly Eligible under the 401 WQC. OEPA stream eligibility mapping within the Project vicinity is provided on **Figure 4**.

3.2.3 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 Area (FEMA, 2007 and 2008).

3.3 PONDS

No ponds were identified within the Project Area due to the presence of industrial development, buildings, and pavement areas as shown on **Figures 2, 3, and 5**.

3.4 UPLAND DRAINAGE FEATURES

No UDFs were identified within the Project Area due to the presence of industrial development, buildings, and pavement areas as shown on **Figures 2, 3, and 5**.

3.5 VEGETATIVE COMMUNITIES

AECOM conducted a general habitat desktop assessment in conjunction with the stream and wetland desktop assessment. The vegetative community present within the Project Area is comprised entirely of industrial lands or pavement areas, as described in **Table 2**. Vegetative communities are depicted visually on updated aerial photography in **Figure 5**. A representative photograph of the urban landscape from the site assessment in 2023 is provided as **Appendix B**.

TABLE 2 - VEGETATIVE COMMUNITIES WITHIN THE PROJECT AREA

Vegetative Community	Description	Approximate Acreage Within the Project Survey Area	Approximate Percentage Within the Project Survey Area
Urban Land	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.	6.0	100%
Totals:		6.0	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 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 RTE species.

Responses were received from the USFWS on August 11, 2023, and from the ODNR on September 1, 2023. According to the response letter received from the USFWS, two federally endangered and one federally proposed bat species were identified within range of the Project area. 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 C. 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 Survey Area are provided as **Appendix B**.

AECOM submitted updated consultation letters to USFWS and ODNR on April 11, 2025. Responses from both agencies are pending; an addendum report will be provided to incorporate the updated responses upon receipt.

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 mine 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 (2024 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 (2024 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 mine 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 (2024 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 (2024 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 mine 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 (2024 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 (2024 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 mine 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 (2024 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 (2024 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	No perennial streams.	March 15 – June 30	Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact this species.	None.
Iowa darter (<i>Etheostoma exile</i>)	Endangered	None	Perennial Streams	No perennial streams.	March 15 – June 30	Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact this species.	No
Lake chubsucker (<i>Erimyzon sucetta</i>)	Threatened	None	Perennial Streams	No perennial streams.	March 15 – June 30	Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact this species.	No
Northern brook lamprey (<i>Ichthyomyzon fossor</i>)	Endangered	None	Perennial Streams	No perennial streams.	March 15 – June 30	Due to the location, and that there is no in-water work proposed in a perennial stream, 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
Paddlefish (<i>Polyodon spathula</i>)	Threatened	None	Perennial Streams	No perennial streams.	March 15 – June 30	Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact this species.	No
Popeye shiner (<i>Notropis ariommus</i>)	Endangered	None	Perennial Streams	No perennial streams.	March 15 – June 30	Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact this species.	No
Shortnose gar (<i>Lepisosteus platostomus</i>)	Endangered	None	Perennial Streams	No perennial streams.	March 15 – June 30	Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact this species.	No
Spotted darter (<i>Etheostoma maculatum</i>)	Endangered	None	Perennial Streams	No perennial streams.	March 15 – June 30	Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact this species.	No
Tonguetied minnow (<i>Exoglossum laurae</i>)	Endangered	None	Perennial Streams	No perennial streams.	March 15 – June 30	Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact this 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

Common Name (Scientific Name)	State Status	Federal Status	Typical Habitat	Habitat Observed	Avoidance Dates	Agency Comments	Potential Impacts
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
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>Simpsonia 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>Megalania 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 hudsonius</i>)	Endangered	None	This species hunts over grasslands and nests can be found in large marshes and grasslands.	The potential for nesting habitat for the Northern Harrier was absent based on field/desktop review of the project area. The absence of habitat was due to the extensive disturbance to the surrounding area where grading and other construction activities are taking place as well as fragmented habitat thus lacking contiguous habitat.	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

*2024 Joint Guidance – Refers to the 2024 ODNR DOW and USFWS Joint Guidance for Bat Surveys and Tree Clearing, a copy of the guidance is provided within **Appendix D** of this report.

Protected Species Agency Summary –

Based on general observations during the ecological survey, no forested habitat is present within the Project Survey Area, and thus no tree clearing is proposed as part of the Project. If tree clearing were to become part of the Project scope of work, the ODNR/USFWS 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, little brown 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 2024 Ohio ODNR DOW and USFWS Joint Guidance for Bat Surveys and Tree Clearing (2024 Joint Guidance; **Appendix D**) 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 finds 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

AECOM conducted a field visit on August 15, 2023, while active construction was beginning on-site for a customer development. A desktop assessment utilizing Google Earth Imagery from September 12, 2024 (Google Earth, 2024) depicts the Project Survey Area consists entirely of roads, buildings, an electrical substation, and paved parking areas. Based on this assessment, AECOM confirmed no wetlands, streams, or pond features are currently within the Project Area due to complete urbanization of the landscape.

The reported results of the desktop assessment conducted by AECOM on this Project are limited to the areas within the Project Survey Area provided in **Figures 2 and 3**. Areas that fall outside of the Project Area were not evaluated as part of the desktop assessment and are 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 Area, four bat species were identified as not having summer roosting habitat and no potential hibernacula was identified within the Project Area. If tree clearing is identified as being required as part of this Project, the ODNR and USFWS recommends completing seasonal tree clearing activities between October 1 to March 31.

The desktop assessment 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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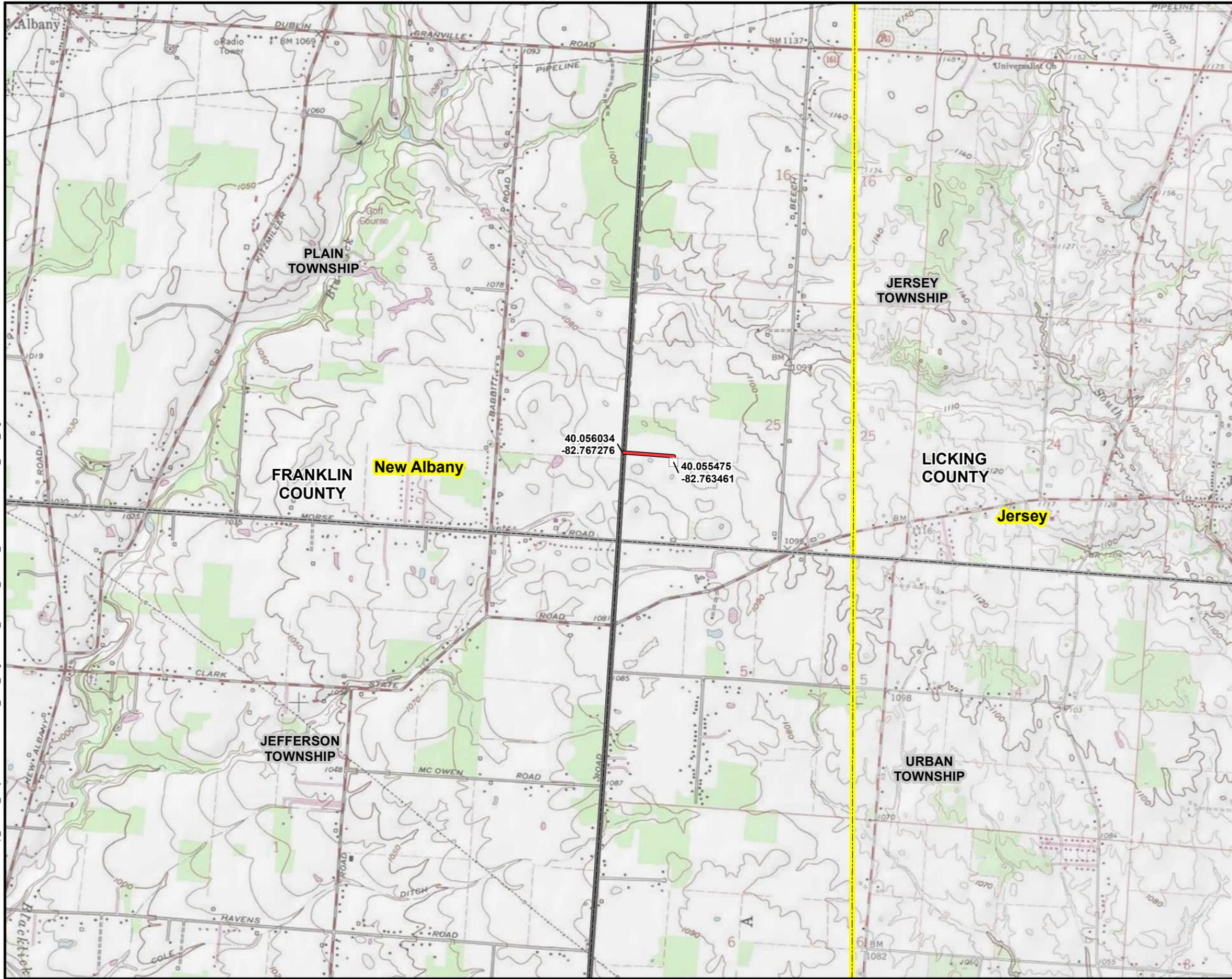
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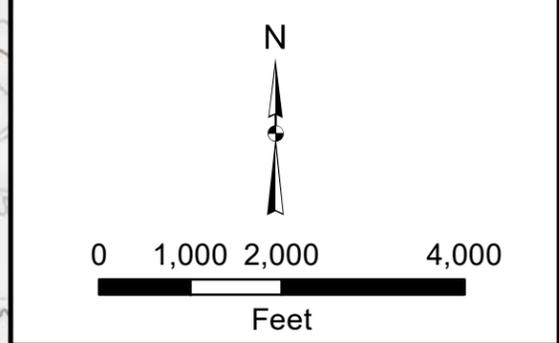
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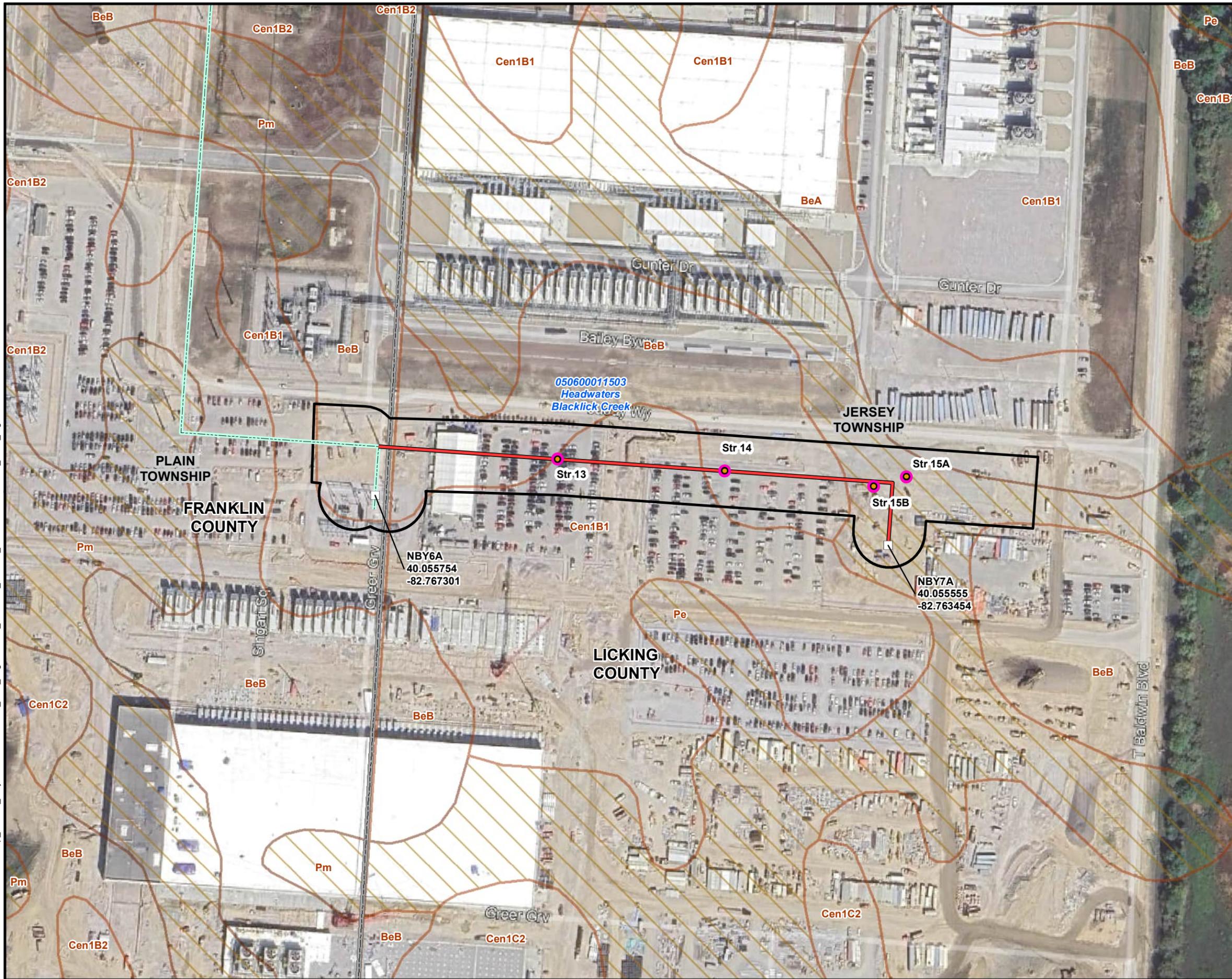


- ### Legend
- Station
 - Anguin 138kV Extension No 5 (Phase 2)
 - Ohio USGS 7.5' Topographic Quadrangle
 - Township Boundary
 - County Boundary



Anguin Ext. 138kV Transmission Line No.5 (Phase 2) Project

FIGURE 1	
PROJECT OVERVIEW	
DATE: 4/15/2025	1 INCH = 2,000 FEET
CREATED BY: CJT	CHECKED BY: JK
JOB NO.: 60713340	AECOM

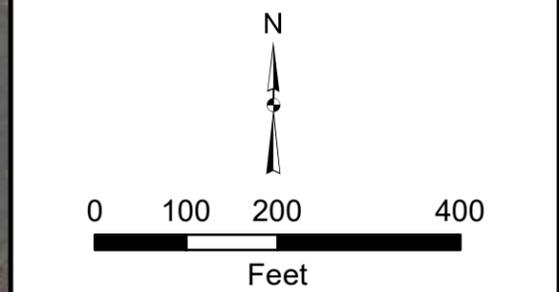


Legend

- Station
- Structure Location
- Existing Anguin 138kV Extension No 5
- Anguin 138kV Extension No 5 (Phase 2)
- ▭ Project Survey Area
- ▭ HUC 12 (USGS)
- ▭ Township Boundary
- ▭ County Boundary
- ▭ SSURGO Soil Map Unit (NRCS)
- ▭ Hydric SSURGO Soil Map Unit (NRCS)

Soil Map Unit Description

- BeA: Bennington silt loam, 0 to 2 percent slopes
- 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
- Pe: Pewamo silty clay loam, low carbonate till, 0 to 2 percent slopes
- Pm: Pewamo silty clay loam, low carbonate till, 0 to 2 percent slopes



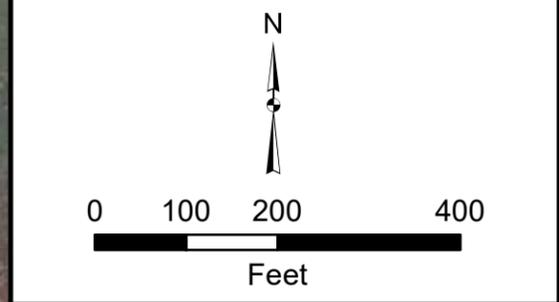
AMERICAN ELECTRIC POWER
 Anguin Ext. 138kV Transmission Line No.5 (Phase 2) Project

FIGURE 2	
SOIL MAP AND NATIONAL WETLANDS INVENTORY MAP	
DATE: 4/15/2025	1 INCH = 200 FEET
CREATED BY: CJT	CHECKED BY: JK
JOB NO.: 60713340	AECOM



Legend

- Station
- Structure Location
- Existing Anguin 138kV Extension No 5
- Anguin 138kV Extension No 5 (Phase 2)
- Contour (2ft)
- Project Survey Area
- Township Boundary
- County Boundary



Anguin Ext. 138kV Transmission Line No.5 (Phase 2) Project

FIGURE 3 WETLAND DELINEATION AND STREAM ASSESSMENT MAP	
DATE: 4/15/2025	1 INCH = 200 FEET
CREATED BY: CJT	CHECKED BY: JH
JOB NO.: 60713340	AECOM

Date Saved: 4/15/2025
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Legend

- Anguin 138kV Extension No 5 (Phase 2)
- Station
- NHD Stream (USGS)
- Project Survey Area

OEPA Eligibility:

- Eligible
- Possibly Eligible

N

0 500 1,000 2,000
Feet

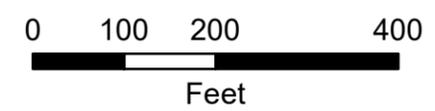
 Anguin Ext. 138kV Transmission Line No.5 (Phase 2) Project

FIGURE 4 STREAM ELIGIBILITY MAP	
DATE: 4/15/2025	1 INCH = 1,000 FEET
CREATED BY: CJT	CHECKED BY: JK
JOB NO.: 60713340	AECOM



Legend

- Structure Location
- Station
- Photograph Location
- Existing Anguin 138kV Extension No 5
- Anguin 138kV Extension No 5 (Phase 2)
- Project Survey Area
- Township Boundary
- County Boundary
- Vegetative Community Type**
- Urban



AMERICAN ELECTRIC POWER
 Anguin Ext. 138kV Transmission Line No.5 (Phase 2) Project

FIGURE 5
 VEGETATIVE COMMUNITIES ASSESSMENT MAP

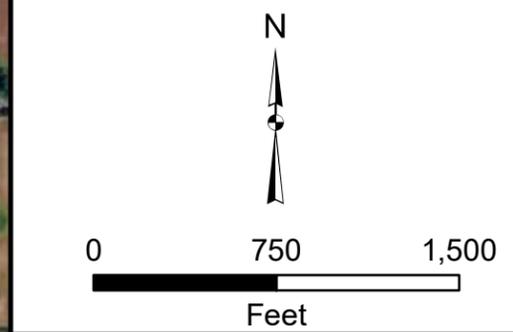
DATE: 4/15/2025	1 INCH = 200 FEET
CREATED BY: CJT	CHECKED BY: JK
JOB NO.: 60713340	AECOM

APPENDIX A
DESKTOP ASSESSMENT FOR WINTER BAT HABITAT

No mining activities, karst features, and/or sink holes are within the extent of the map frame. The closest feature is 2.89 miles northwest of the project area.



- Legend**
-  Anguin 138kV Extension No 5 (NB7A)
 -  Quarter Mile Review Boundary
 -  Ohio USGS 7.5' Topographic Quadrangle
 -  County Boundary



 Anguin Ext. 138kV Transmission Line No.5 (Phase 2) Project

APPENDIX A DESKTOP ASSESSMENT FOR WINTER BAT HABITAT	
DATE: 4/15/2025	1 INCH = 750 FEET
CREATED BY: CJT	CHECKED BY: JK
JOB NO.: 60745629	AECOM

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APPENDIX B
HABITAT PHOTOGRAPHIC RECORD

Client Name: AEP	Site Location: Anguin Ext. 138kV Transmission Line No. 5 (Phase 2) Project	Project No. 60745629
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PH-01
Date: August 15, 2023
Description: Urban Area Facing West The Project Area has undergone further construction and complete conversion to urban land since the date of this photograph.



APPENDIX C
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: 23-0898; Anguin 138kV Extension No.5 Transmission Line Project

Project: The proposed project involves building a 0.97-mile greenfield double circuit 138 kV transmission line from the existing Anguin Station to the future proposed customer station (Penguin NBY7A).

Location: The proposed project is located in Plain Township of Franklin County, and Jersey Township of Licking 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.

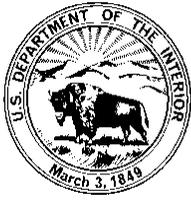
Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.

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 11, 2023

Project Code: 2023-0110261

Dear Mr. Joshua Holmes:

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

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

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

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

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

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

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

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

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

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

Sincerely,

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

Patrice Ashfield
Field Office Supervisor

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

APPENDIX D

2024 JOINT GUIDANCE FOR BAT SURVEYS AND TREE CLEARING



OHIO DIVISION OF WILDLIFE AND U.S. FISH AND WILDLIFE SERVICE (OH-FIELD OFFICE) JOINT GUIDANCE FOR BAT SURVEYS AND TREE CLEARING MAY 2024

This document has been updated with new state guidance for the 2024 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 2024). This protocol may also be used for the tricolored bat (*Perimyotis subflavus*) which is state endangered and proposed to be federally endangered. **With minor modifications referenced below**, it can also be used in Ohio for the 2024 field season and includes surveying for the state-listed little brown bat (*Myotis lucifugus*).

According to the updated federal range-wide guidelines, presence/probable absence net surveys for northern long-eared bats or federally-proposed tricolored 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 or tricolored bat, following the northern long-eared/tricolored bat level of effort will qualify as a presence/ probable absence survey for the three species. However, if a project area is eligible for a presence/absence survey for the three species, following the Indiana bat level of effort will not qualify the survey for a northern long-eared bat or tricolored bat presence/probable absence survey. Please note that the USFWS Range-wide Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines (March 2024) 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 ODNR-DOW.

Due to the reclassification of the northern long-eared bat to federally endangered on March 31, 2023, the 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 the optional Northern Long-eared Bat Rangewide Determination Key (Dkey). **The Dkey cannot be used to replace consultation with ODNR-DOW.** Project proponents should coordinate directly with the ODNR-DOW for project technical assistance for all federally listed species, including the Indiana bat and northern long-eared bat. **OHFO discourages the use of the Dkey for Ohio projects.** Contacting OHFO directly (ohio@fws.gov) for technical assistance for both the northern long-eared bat and Indiana bat is the more efficient process.

The tricolored bat is listed as endangered by ODNR-DOW and has been officially proposed for federal listing as endangered. The USFWS is scheduled to publish a final rule on the tricolored bat's status by the end of September 2024. Therefore, in addition to coordinating with ODNR-DOW regarding the tricolored bat, we recommend that project proponents also coordinate with the OHFO. The USFWS Range-wide Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines (March 2024) 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 highest minimum 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 2024 season. Surveys should follow guidelines laid out in the USFWS Range-wide Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines (March 2024) with the following exceptions:

- Ohio survey dates are June 1 – August 15
- 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 highest minimum 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.**

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

² State listing as endangered effective July 1, 2020

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.

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 (2024). All presence/absence combined mist-net and acoustic surveys conducted for state listed bat species should follow the highest minimum 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 three sizes of bands—2.4 mm, 2.9 mm, and 4.2 mm. The 2.4 mm split metal bat ring made of aluminum alloy is suitable for banding tricolored bats. 2.9 mm bands are suitable for Indiana, northern long-eared, and little brown bats. The larger 4.2 mm band is suitable for silver-haired (*Lasionycteris 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 and 2.9 mm sized bands.
NOTE: While ODNR-DOW obtains 2.9 mm bands per new 2024 USFWS guidelines, banding of endangered *Myotis* species should not be done until 2.9 mm bands are received. Please watch for updates from the Wildlife Permits email and request 2.9 mm bands when they become available.
- 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, northern long-eared bat, and/or tricolored 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 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 2024 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>) 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 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) –

- Both the DOW and 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.
 - Within 3 miles of known or potential tricolored bat hibernacula
- Only ODNR-DOW should be contacted if a project occurs within 5 miles of known or potential little brown bat hibernacula.

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 - Nov 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 for Indiana bat, but can be applied to other bat species.

Step 2: Conduct, a presence/absence survey following current ODNR-DOW guidelines, where applicable.

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 of an Indiana bat or little brown bat capture or 3 miles of a northern long-eared bat and/or tricolored bat capture if a roost is not located.
- Recommendation of no summer tree cutting, or limited cutting following guidelines detailed below, within a minimum of 2.5 miles of an Indiana bat or little brown bat roost or 1.5 miles of a northern long-eared bat and/or tricolored bat roost tree if located.
- Recommended tree clearing dates within capture record buffers are October 1 – March 31

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 little brown bats: Limited tree cutting in summer may be permitted after consultation with ODNR-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 \geq 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: follow highest minimum detector nights as outlined in the federal guidance for northern long-eared bat and tricolored bat.

Northern Long-eared Bat and Tricolored 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 10 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)

Indiana Bat Level of Effort:

Linear projects: a minimum of 2 detector nights per km (0.6 miles) of suitable summer habitat

Non-linear projects: a minimum of 6 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 6 detector nights has been completed over the course of at least 2 calendar nights (may be consecutive). For example:

- 3 detectors for 2 nights each (can sample the same location or move within the site)
- 2 detectors for 3 nights each (can sample the same location or move within the site)
- 1 detector for 6 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 highest minimum net nights as outlined in the federal guidance for the northern long-eared bat and tricolored 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 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.

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 mm, 2.9 mm, 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.

NOTE: While ODNR-DOW obtains 2.9 mm bands per new 2024 USFWS guidelines, banding of endangered *Myotis* species should not be done until 2.9 mm bands are received. Please watch for updates from the Wildlife Permits email and request 2.9 mm bands when they become available.