

PUCO Case No. 23-0836-EL-BLN

Submitted to:

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

Submitted by: Ohio Power Company

Letter of Notification

Ohio Power Company

Huntley 138 kV Extension Cut-in, Scherers Switch, and Scherers Switch-Alexander 138 kV Transmission Line Project

4906-6-05

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

4906-6-5(B) General Information

B(1) Project Description

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

The Company proposes to construct the Huntley 138 kV Extension Cut-in, Scherers Switch, and Scherers Switch-Alexander 138 kV Transmission Line Project (the "Project") in the City of Columbus, Franklin County, Ohio. A new customer has requested service near the intersection of Alta View Boulevard and Scherers Court. In order to provide service to the customer, the Company proposes to cut into the existing Huntley Extension 138 kV Transmission Line, install the new Scherers 138 kV Switch and install approximately 0.3 mile of greenfield transmission line (Scherers Switch-Aleander 138 kV Transmission Line), which will connect to the customer's non-jurisdictional step down station. The Project will require both supplemental and new right-of-way ("ROW"). The location of the Project is shown on Figure 1 and Figure 2 in Appendix A.

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

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

1

- (d) Line(s) primarily need to attract or meet the requirements of a specific customer or customers, as follows:
 - ii. Any portion of the line is on property owned by someone other than the specific customer or applicant.

The Project has been assigned PUCO Case No. 23-0836-EL-BLN.

B(2) Statement of Need

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

In order to serve the customer, the Company will install the proposed Scherers Switch off the existing Huntley Extension 138 kV line. From the new switch approximately 0.3 mile of greenfield single circuit 138 kV line will be constructed by the Company to a customer-owned station on their site. The customer has requested an in-service date of June 1, 2024 for permanent transmission service at the site.

Failure to move forward with the proposed project will result in Ohio Power Company's inability to serve the customer, thereby jeopardizing the customer's plans in the area (40 MW peak).

The need and solution for the customer driven supplemental project was presented and reviewed with stakeholders during the January 21, 2022 and April 22, 2022 PJM SRRTEP meeting and assigned PJM identifier s2789. This Project was included in the Company's 2023 supplemental Long-Term Forecast Report on page 1 (see Appendix B).

B(3) Project Location

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

The location of the Project in relation to existing transmission line and proposed relocation is shown in Figure 1 of Appendix A.

B(4) Alternatives Considered

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

The Company conducted an alternatives analysis within the Project Study Area. Five general corridors between Worthington Woods Road and I-270 were considered. The Company concluded that the proposed cut-in, switch location and transmission line route are the most feasible and appropriate solution for the Project. The goal of selecting a suitable route for the Project was to minimize impacts on land use and natural and cultural resources while avoiding circuitous routes, significantly higher costs, and non-standard design requirements. The selection of the proposed solution was based on siting decisions made throughout the process, the knowledge of subject matter experts from the Company and the Company's consultant, and a comparative analysis of potential impacts. The proposed solution was selected because it offers preferred construction access with no impacted ecological or cultural resources, or land use concerns. It involves willing landowners, is shorter in length than other alternatives and allows for a 100-

foot ROW, without encroachments. Finally, the proposed solution is short, efficient, direct, and represents the most suitable location and most appropriate option for meeting the Company and customer's needs in the area.

B(5) Public Information Program

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

The Company will inform affected property owners and tenants about this Project through several different mediums. Within seven days of filing this LON, the Company will issue a public notice in a newspaper of general circulation in the Project area. The notice will comply with all requirements of Ohio Revised Code ("OAC") Section 4906-6-08(A)(1-6). Further, the Company will mail a letter, via first class mail, to affected landowners, tenants, contiguous owners and any other landowner the Company may approach for an easement necessary for the construction, operation, or maintenance of the Project. The letter will comply with all requirements of OAC Section 4906-6-08(B). The Company maintains a website (http://aeptransmission.com/ohio/) which provides the public access to an electronic copy of this LON and the public notice for this LON. An electronic copy of the LON will be served to the public library in each political subdivision for this Project. The Company retains ROW land agents that discuss Project timelines, construction and restoration activities and convey information to affected owners and tenants throughout the Project.

B(6) Construction Schedule

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

Construction of the Project is planned to begin in December 2023, and the anticipated in-service date will be June 2024.

B(7) Area Map

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

Figure 1 in Appendix A provides the proposed Project area on a map of 1:24,000-scale (1 inch equals 2,000 feet), showing the Project on the United States Geological Survey (USGS) 7.5-minute topographic map of the Northwest Columbus, Ohio quadrangle. Figure 2 in Appendix A shows the Project Area on recent aerial photography, dated 2022, as provided by ESRI World Imagery at a scale of 1:6,000 scale (1 inch equals 500 feet).

To visit the Project site from Columbus, Ohio, take I-71 North to I-270 West (Exit 119). Continue for 2.2 miles and take Exit 23 to merge onto U.S. 23 North toward Delaware. After 0.3 mile, turn right onto East

Campus View Boulevard. Continue for 0.8 mile before turning right onto Alta View Boulevard. The customer property will be on the left (East) with the customer station located approximately 0.1 mile south of Campus View Boulevard. Continue another 0.1 mile and turn right on Scherers Court to reach the Scherers Switch location at the approximate address of 525 Scherers Court, Columbus, Ohio 43085 at latitude 40.11652, longitude -83.00346.

B(8) Property Agreements

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

The Project is located on five parcels. New ROW will be required on each of these parcels. No other property easements, options, or land use agreements are necessary to construct the Project or operate the cut-in, switch, and transmission line.

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

Property Parcel Number	Agreement Type	Easement/ Option Obtained (Yes/No)
610-210595	Exclusive Easement for Switch/ New and Supplemental ROW	No
610-238442	New and Supplemental ROW	No
610-230663	New ROW	No
610-289523	New ROW	No
610-207094	New ROW	No

The form easement in Appendix C represents the easement rights the Company would seek if condemnation proceedings were necessary to construct, operate, and maintain these facilities. The Company does not anticipate the need for condemnation proceedings in this Project.

B(9) Technical Features

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

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

Line Asset Name: Huntley Extension 138 kV Ownership: Ohio Power Company

Voltage: 138 kV

Conductors: 795 kcmil 26/7 Strands DRAKE ACSR (new)

636 ACSR 26/7 GROSBEAK (existing)

Static Wire: 144 ct OPGW Fiber

Insulators: Polymer ROW Width: 100 feet

Structure Type: (2) Two steel monopole dead ends

(2) Two wood horizontal post

Line Asset Name: Scherers Switch
Ownership: Ohio Power Company

Voltage: 138 kV

Conductors: 795 kcmil 26/7 Strands DRAKE ACSR

Static Wire: 144 ct OPGW Fiber

Insulators: Polymer ROW Width: 100 feet

Structure Type: (1) One steel monopole dead end

Line Asset Name: Scherers Switch-Alexander 138 kV

Ownership: Ohio Power Company

Voltage: 138 kV

Conductors: 795 kcmil 26/7 Strands DRAKE ACSR

Static Wire: 144 ct OPGW Fiber

Insulators: Polymer ROW Width: 100 feet

Structure Type: (2) Two steel monopole dead ends

(1) One steel suspension monopole

B(9)(b) Electric and Magnetic Fields

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

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

B(9)(c) Project Cost

The estimated capital cost of the project.

The capital cost estimate for the proposed Project, which is comprised of applicable tangible and capital costs, is approximately \$3,320,000 using a Class 3 estimate. The costs for this Project will be recovered through Ohio Power Company's FERC formula rate (Attachment H-14 to the PJM OATT) and allocated to the AEP Zone pursuant to the PJM OATT.

B(10) Social and Economic Impacts

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

B(10)(a) Land Use Characteristics

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

Aerial photography of the Project vicinity is provided as Figure 2 in Appendix A. The Project is located in the City of Columbus, Franklin County, Ohio. Land use in the Project area consists of urban development including commercial buildings on the properties crossed. The closest residences are approximately 600 feet to the north and east. Minimal tree clearing for the Project is anticipated to be limited to small landscaping species along streets.

B(10)(b) Agricultural Land Information

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

No agricultural land is located within the Project footprint or adjacent properties. On August 1, 2023, the Franklin County Auditor indicated that the properties crossed by the Project are not identified as Agricultural District Land parcels.

B(10)(c) Archaeological and Cultural Resources

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

The Company's consultant completed a Cultural Resource Management Investigation of the three parts of the Project in June 2023. No cultural resources were identified. The Ohio Historic Preservation Office ("SHPO") concurred that no additional archaeological survey is necessary and the Project as proposed will have no effect on historic properties. Coordination responses from SHPO are provided in Appendix C.

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

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

A Notice of Intent will be filed with the Ohio Environmental Protection Agency for authorization of construction storm water discharges under General Permit OHCDooooo6. The Company will implement and maintain best management practices as outlined in the Project-specific Storm Water Pollution Prevention Plan ("SWPPP") to minimize erosion control sediment to protect surface water quality during storm events.

One palustrine emergent (PEM) wetland was delineated west of the proposed Huntley 138 kV Extension Cut-in location. This wetland is expected to be avoided during construction. No other streams or wetlands are located in the proposed work areas (see Appendix D). Therefore, the Project will not require a Clean Water Act Section 404 Permit from the U.S. Army Corps of Engineers or a Section 401 Water Quality Certification from the OEPA.

The FEMA Flood Insurance Rate Map was reviewed to identify any floodplains/flood hazard areas that have been mapped within the Project Area (specifically, map number **39049C0157K**). Based on this mapping, no mapped FEMA floodplains are located in the Project Area. Therefore, no floodplain permit will be required for this Project.

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

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

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

As part of the ecological study completed for the Project, a coordination letter was submitted to the USFWS Ohio Ecological Services Field Office seeking technical assistance on the Project for potential impacts to threatened or endangered species. The May 27, 2022 response letter from the USFWS (see Appendix C) indicated that the Indiana bat and northern long-eared bat occur throughout Ohio. Seasonal tree clearing will be required for the minimal foraging bat habitat trees identified. The Company will adhere to seasonal tree clearing requirements or coordinate with the appropriate agencies. Due to the Project type, size, and location, USFWS does not anticipate adverse effects to any other federally endangered, threatened, proposed, or candidate species.

A coordination letter was submitted to the Ohio Department of Natural Resources ("ODNR") Division of Wildlife ("DOW") Ohio Natural Heritage Program ("ONHP") and the ODNR - Office of Real Estate in seeking an environmental review of the proposed Project for potential impacts on state-listed and federally listed threatened or endangered species. Correspondence from ODNR's DOW/OHNP and the ODNR - Office of Real Estate was received on June 14, 2022 (see Appendix C).

According to the ODNR-DOW, the Project is within the range of the Indiana bat, northern long-eared bat, little brown bat, and tricolored bat. The ODNR recommends cutting between October 1 and March 31, if necessary. No winter hibernacula were observed within the Project Area and no potential hibernaculum were identified within 0.25 mile of the Project Area based on review of karst and mining GIS data as well as topographic quadrangle maps and aerial photography. Seasonal tree clearing will be required for the minimal foraging bat habitat trees identified. The Company will adhere to seasonal tree clearing requirements or coordinate with the appropriate agencies.

The ODNR-DOW indicated that the Project is within the range of 15 federally or state listed mussel and 10 federally or state listed fish species. Due to no in-water work and no perennial streams in the Project area, these species are not anticipated to be impacted by the Project.

The ODNR-DOW indicated that the Project is within the range of the American bittern, lark sparrow, least bittern, black-crowned night heron, sandhill crane, northern harrier, and upland sandpiper, state endangered or threatened birds. Based on the ecological survey, no habitat for these species was identified. No impacts to these species are 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 ODNR-DOW response indicated that unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, state nature preserves, state or national parks, state or national forests, or other protected natural areas were not identified within the Project Area (see Appendix C).

FEMA Flood Insurance Rate Maps were consulted to identify any floodplains/flood hazard areas that have been mapped in the Project Area (specifically, map number **39049Co157K**). Based on these maps, no mapped FEMA floodplains are located in the Project area.

Wetland and stream delineation field surveys were completed within the Project area by the Company's consultant in July 2022. One palustrine emergent (PEM) wetland was delineated west of the proposed

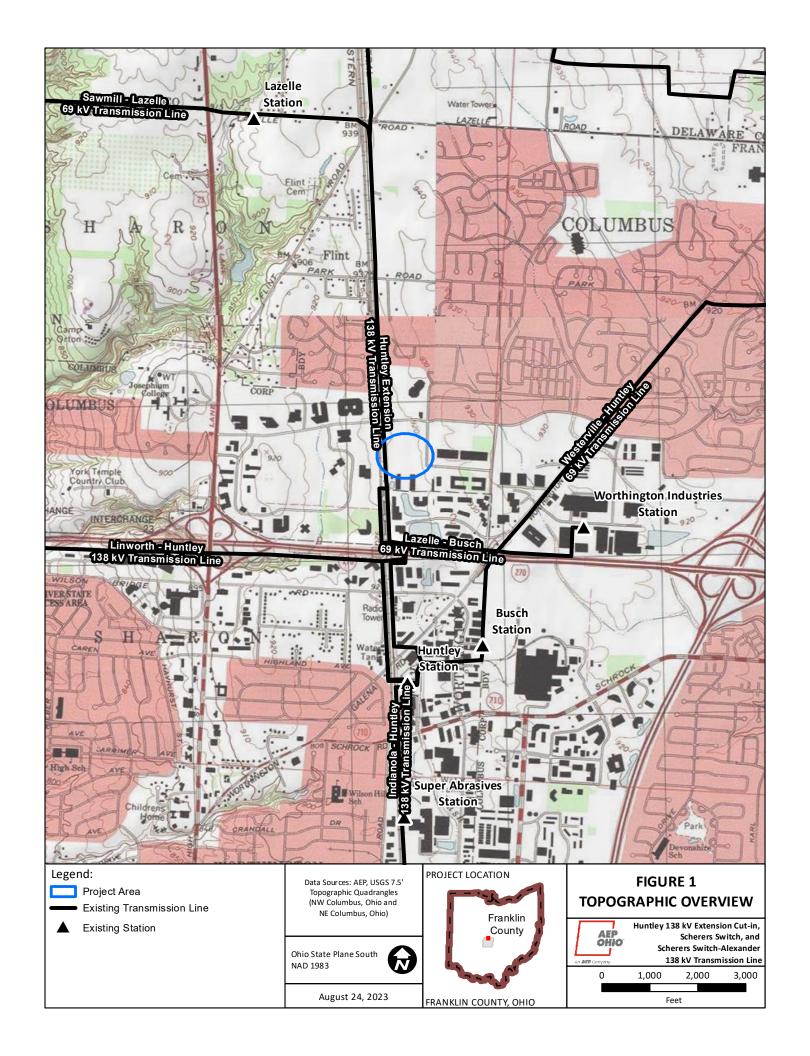
Huntley 138 kV Extension Cut-in location. This wetland is expected to be avoided during construction. No other streams or wetlands are located in the proposed work areas (see Figure 2 in Appendix D).

B(10)(g) Unusual Conditions

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

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

Appendix A Project Maps





Appendix B PJM Slides and Long Term Forecast Report



AEP Transmission Zone M-3 Process Worthington, OH

Need Number: AEP-2022-OH001

Process Stage: Submission of Supplemental Project for inclusion in the Local Plan 10/11/2022

Previously Presented: Solution Meeting 4/22/2022 Needs Meeting 1/21/2022

Supplemental Project Driver: Customer Service

Specific Assumption Reference:

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

Problem Statement:

Customer Service:

A customer has requested transmission service at a site North of AEP's existing Huntley station in Worthington, OH.

- The customer has indicated a demand of 40 MW at the site.
- They are seeking an in service date of 4/1/2023 for their permanent transmission service.

Model: 2026 RTEP





Need Number: AEP-2022-OH001

Process Stage: Submission of Supplemental Project for inclusion in the Local Plan

10/11/2022

Solution:

 Scherers Switch 138kV: Install a new 2000 A three-way Phase Over Phase switch with SCADA automation on the Huntley – Greif through path and install a bypass for maintenance. Estimated Cost: \$0.800M (s2789.1)

Greif – Huntley 138kV line: Tap the existing Greif-Huntley 138kV circuit by installing structures to carry the 69 kV underbuild Lazelle-Busch circuit and maintain separation from the new Scherers Switch as well as install dead end poles and centerline poles on each direction of the new switch.
 Estimated Cost: \$1.113M (s2789.2)

Cologix Extension 138kV: Construct ~0.24 miles of single circuit 138kV radial transmission line from Scherers Switch to the new Cologix Customer Station. Estimated Cost: \$0.795M (s2789.3)

Total Estimated Transmission Cost: \$2.708M

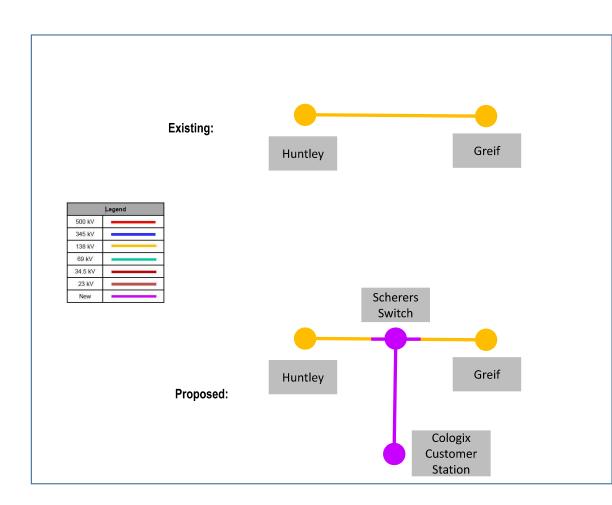
Projected In-Service: 4/1/2024

Supplemental Project ID: s2789.1-.3

Project Status: Scoping

Model: 2026 RTEP

AEP Transmission Zone M-3 Process Worthington, OH



AEP Local Plan - 2022

PUCO Form FE-T9 Supplement: AEP Ohio

Specifications of Planned Transmission Lines

		Carrollton - East Dover 69kV (s2784
1	LINE NAME AND NUMBER:	TP2021237)
		Carrollton - East Dover INTERMEDIATE
		STATION - Zoarville, Merrick, & Attwood
2	POINTS OF ORIGIN AND TERMINATION	Switch
	RIGHTS-OF-WAY: LENGTH / WIDTH /	32.3 miles, 60 ft, 1 circuit (~7.0 Miles of
3	CIRCUITS	greenfield line)
4	VOLTAGE: DESIGN / OPERATE	69 kV / 69 kV
5	APPLICATION FOR CERTIFICATE:	2022
6	CONSTRUCTION:	2025
7	CAPITAL INVESTMENT:	\$16.47 M
8	PLANNED SUBSTATION:	N/A
9	SUPPORTING STRUCTURES:	Steel
10	PARTICIPATION WITH OTHER UTILITIES	N/A
	PURPOSE OF THE PLANNED	
11	TRANSMISSION LINE	Rebuild aging infrastructure
	CONSEQUENCES OF LINE	
	CONSTRUCTION DEFERMENT OR	Potential for increased transmission line
12	TERMINATION	outages
	MISCELLANEOUS:	
1	LINE NAME AND NUMBER:	Greif - Huntley 138 kV (s2789 DP21C0023)
		Greif - Huntley INTERMEDIATE STATION -
2	POINTS OF ORIGIN AND TERMINATION	Scherers Switch
	RIGHTS-OF-WAY: LENGTH / WIDTH /	40.0 11 /400.51/4 1 11/.04 11 5 11
3	CIRCUITS	10.3 miles/ 100 ft / 1 circuit (~0.1 miles of work)
4	VOLTAGE: DESIGN / OPERATE	138 kV / 138 kV
5	APPLICATION FOR CERTIFICATE:	2023
6	CONSTRUCTION:	2024
7	CAPITAL INVESTMENT:	\$1.113M
8	PLANNED SUBSTATION:	Scherers Switch
9	SUPPORTING STRUCTURES:	Steel
10	PARTICIPATION WITH OTHER UTILITIES	N/A
	PURPOSE OF THE PLANNED	Service to new customer
11	TRANSMISSION LINE	OCTAINE TO LIEW COSTOLLIE
	CONSEQUENCES OF LINE	
12	CONSTRUCTION DEFERMENT OR TERMINATION	Unable to serve new customer
	MISCELLANEOUS:	
		Scherers Switch - Cologix 138 kV (s2789
1	LINE NAME AND NUMBER:	DP21C0023)
		Scherers Switch - Cologix INTERMEDIATE
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2	POINTS OF ORIGIN AND TERMINATION	STATION - N/A

PUCO Form FE-T9 Supplement: AEP Ohio

Specifications of Planned Transmission Lines

3 CIRCUITS 4 VOLTAGE: DESIGN / OPERATE 5 APPLICATION FOR CERTIFICATE: 6 CONSTRUCTION: 7 CAPITAL INVESTMENT: 9 SUPPORTING STRUCTURES: 10 PARTICIPATION WITH OTHER UTILITIES PURPOSE OF THE PLANNED 11 TRANSMISSION LINE CONSEQUENCES OF LINE CONSTRUCTION 2 POINTS OF ORIGIN AND TERMINATION RIGHTS-OF-WAY: LENGTH / WIDTH / CONSTRUCTION FOR CERTIFICATE: 5 APPLICATION FOR CERTIFICATE: CONSEQUENCES OF LINE CONSTRUCTION: CONSTRUCTION OF CERMINATION RIGHTS-OF-WAY: LENGTH / WIDTH / CONSTRUCTION FOR CERTIFICATE: CONSTRUCTION: CONSEQUENCES OF LINE CONSTRUCTION: CONSTRUCTION: CONSTRUCTION: CONSTRUCTION: CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR 1 TRANSMISSION LINE CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR 1 TRANSMISSION LINE CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR CONSEQUENCES OF LINE CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR CONSEQUENCES OF LINE CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR CONSEQUENCES OF LINE CONSEQUENCES OF		RIGHTS-OF-WAY: LENGTH / WIDTH /	
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Appendix C Form Easement

Line Name: Scherers Switch – Alexander (T)

Line No.: TLN160:00425

Easement No.:

EASEMENT AND RIGHT OF WAY

(Exclusive and Non-Exclusive)

On this day of receipt and sufficiency of which is hereby ack [landowner name and marital status], who	knowledge	ed, and the coven	ants hereinafte	er set forth,
("Grantor"), whether one or more persons, he Ohio Transmission Company, Inc., an Ohio coprincipal business address is 1 Riverside Plaza and affiliates, a permanent easement and transmission line, not to exceed 138 kV, for dipurposes related to the transmission of electric under, through and across the following descriptions.	nereby gra orporation, Columburight of istribution icity (the	ants, sells, conve , a unit of Americ us, Ohio 43215 (" way ("Easemen purposes, and fo "Transmission L	ys, and warrant an Electric Pow AEP"), and its t'') for a sing or internal commine"), being, ir	wer, whose successors de electric munication n, on, over,
County of, and Township of ("Grantor's Property")	 1.	and being	a part of <u>[a</u>	bbreviated
Contingent provision: [Spouse of Grantor, if an rights in regard to the Easement.		erein for the purp	ose of releasing	g all dower
Grantor claims title by <u>[name of vesting first grantor]</u> , recorded on at Recorder's Office.				
Auditor/Key/Tax Number: <u>[Tax Parcel N</u>	Number]			
The Easement Area, which may include both	ı Non-Ex	clusive and Excl	usive Easemen	t Areas, is

The Easement Area, which may include both Non-Exclusive and Exclusive Easement Areas, is more fully described and depicted on Exhibit "A", a copy of which is attached hereto and made a part hereof (the Exclusive and Non-Exclusive Easement Areas are together referred to as the "Easement Area" unless otherwise specified).

The Exclusive Easement Area shall be described and depicted on Exhibit "A" as "Exclusive Easement Area." Grantor conveys all rights reasonably necessary for the use and enjoyment of the Exclusive Easement Area. AEP may grade or fill the Exclusive Easement Area as is reasonably necessary for the Transmission Line and related facilities to be located therein, may fence and otherwise restrict access to the Exclusive Easement Area as reasonably necessary for safety and security of such Transmission Line and related facilities, the public, or to comply with applicable laws, regulations, or administrative requirements, and may otherwise exercise exclusive control of the Exclusive Easement Area.

GRANTOR FURTHER GRANTS AEP THE FOLLOWING RIGHTS WITH RESPECT TO BOTH THE EXCLUSIVE AND NON-EXLUSIVE PORTIONS OF THE EASEMENT AREA:

The right, now or in the future, to construct, reconstruct, operate, maintain, alter, improve, inspect, patrol, protect, repair, remove, replace, upgrade and relocate within the Easement Area, structures and appurtenant equipment necessary for the Transmission Line.

The right, in AEP's discretion, now or in the future, to cut down, trim or remove, and otherwise control, 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 Grantor's Property which adjoin the Easement Area within the Tree Protection Zone when in the reasonable opinion of AEP those trees are dead, dying, diseased, leaning, or structurally defective and 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. The Tree Protection Zone extends eighty feet on all sides of the Easement Area depicted in Exhibit A.

AEP shall also have the right of reasonable ingress and egress over, across and upon the Easement Area only, unless additional access routes are depicted in the attached Exhibit A. Provided, however, that in the event access over, across and upon the Easement Area – and access routes, if any, shown in Exhibit A – shall become blocked or otherwise rendered unsafe or hazardous for use, AEP may temporarily access the Easement Area from other points across Grantor's Property, so long as that access is both reasonable and limited to the duration of the interference or safety hazard. AEP shall return the access area to its preexisting condition or pay damages to Grantor.

AEP shall also have the right to use temporary workspaces and temporary access roads outside the Easement Area as shown on Exhibit "A" in connection with its initial construction of the Transmission Line. AEP may shift the location of such temporary workspaces up to twenty (20) feet in any direction, and also shift the location of such temporary access roads up to twenty (20) feet in any direction, as field conditions or other requirements dictate. Upon completion of the overall Transmission Line project, but in no event later than two (2) years following the start of construction on Grantor's Property, AEP shall remove its equipment from all temporary workspaces and temporary access roads outside the Easement Area, and AEP's temporary rights outside of the Easement Area shall automatically cease, terminate and revert to Grantor. AEP shall return any such areas to their preexisting condition or pay damages to Grantor as soon as practicable.

THIS GRANT IS SUBJECT TO THE FOLLOWING CONDITIONS:

Within the Non-Exclusive Easement Area Grantor reserves the right to cultivate annual crops, pasture, construct fences (provided gates are installed that adequately provide AEP the access rights conveyed herein) and roads or otherwise use Grantor's Property encumbered by this Easement in any way not inconsistent with the rights herein granted. In no event, however, shall Grantor, its heirs, successors, affiliates and assigns plant or cultivate any trees or place, construct, install, erect or permit any temporary or permanent building, structure, improvement or obstruction including but not limited to, storage tanks, billboards, signs, sheds, dumpsters, light poles, 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 agrees to repair or pay Grantor for actual damages sustained by Grantor to crops, fences, gates, irrigation and drainage systems, drives, or lawns that are permitted herein, when such damages arise out of AEP's exercise of the rights herein granted.

Pursuant to O.R.C. 163.02, Grantor possesses a right of repurchase pursuant to section 163.211 of the Revised Code if AEP decides not to use the property for the purpose stated in the appropriation petition and Grantor provides timely notice of a desire to repurchase.

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, affiliates, heirs, executors, and administrators.

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(s) for signature(s).

IN WITNESS WHEREOF, said Grantor hereunto set their hand(s) and seal(s) as of the last date set forth below.

GRANTOR

SIGNATURE BLOCK FOR A BUSINESS ENTITY / TRUST:

	[name of entity/trust & kind of business association identified]	
State of Ohio §	By: Print name: Its Authorized Signer	
\$ County of Licking \$	S:	
This instrument was acknowledge by	ed before me on this day of, 202, the [title] of name of, on behalf of, on behalf of, on behalf of, on behalf of	
	Notary	
SIGNATURE BLOCK FOR AN I	NDIVIDUAL:	
	[Typed name of individual]	
State of Ohio § S County of Licking § S	S:	
County of Licking §		
This instrument was acknowledge 202_ by[name of individual	ed before me on this day of	
	Notary	

This instrument prepared by Marland Turner, American Electric Power Service Corporation, 1 Riverside Plaza, Columbus, OH 43215 for and on behalf of AEP Ohio Transmission Company, Inc., a unit of American Electric Power.

When recorded return to: American Electric Power – Transmission Right of Way, 8600 Smith's Mill Road, New Albany, OH 43054.

Appendix D Agency Coordination



In reply, refer to 2023-FRA-58332

July 3, 2023

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

RE: Greif-Huntley 138kV Transmission Line Tie-in Project, Sharon Township, Franklin County, Ohio

Dear Mr. Weller:

This letter is in response to the correspondence received June 21, 2023 regarding the proposed Greif-Huntley 138kV Transmission Line Tie-in Project, Sharon Township, Franklin County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code and the Ohio Power Siting Board rules for siting this project (OAC 4906-5). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The following comments pertain to the *Phase I Cultural Resource Management Investigations for the Greif-Huntley 138kV Transmission Line Tie-in Project in Sharon Township, Franklin County, Ohio* by Ryan J. Weller and Scott McIntosh (Weller & Associates, Inc. 2023).

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

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

Sincerely,

Krista Horrocks, Project Reviews Manager

Resource Protection and Review

RPR Serial No: 1098788



In reply, refer to 2023-FRA-58330

July 3, 2023

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

RE: Scherers Switch Installation Project, Sharon Township, Franklin County, Ohio

Dear Mr. Weller:

This letter is in response to the correspondence received June 20, 2023 regarding the proposed Scherers Switch Installation Project, Sharon Township, Franklin County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code and the Ohio Power Siting Board rules for siting this project (OAC 4906-5). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The following comments pertain to the *Phase I Cultural Resource Management Investigations for the .1 ha (.23 ac)* Scherers Switch Installation Project in Sharon Township, Franklin County, Ohio by Ryan J. Weller and Scott McIntosh (Weller & Associates, Inc. 2023).

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

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

Sincerely,

Krista Horrocks, Project Reviews Manager

Resource Protection and Review

RPR Serial No: 1098786



In reply, refer to 2023-FRA-58331

July 3, 2023

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

RE: Scherers Switch-Cologix 138kV Installation Project, Sharon Township, Franklin County, Ohio

Dear Mr. Weller:

This letter is in response to the correspondence received June 20, 2023 regarding the proposed Scherers Switch-Cologix 138kV Installation Project, Sharon Township, Franklin County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code and the Ohio Power Siting Board rules for siting this project (OAC 4906-5). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The following comments pertain to the *Phase I Cultural Resource Management Investigations for the .39 km (.24 mi)* Scherers Switch-Cologix 138kV Installation Project in Sharon Township, Franklin County, Ohio by Ryan J. Weller and Scott McIntosh (Weller & Associates, Inc. 2023).

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

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

Sincerely,

Krista Horrocks, Project Reviews Manager

Resource Protection and Review

RPR Serial No: 1098787



Office of Real Estate John Kessler, Chief 2045 Morse Road – Bldg. E-2

MARY MERTZ, DIRECTOR

Columbus, OH 43229 Phone: (614) 265-6621 Fax: (614) 267-4764

June 14, 2022

Mattew Teitt Stantec 1500 Lake Shore Drive, Suite 100 Columbus OH 43204

Re: 22-0547; AEP Scherers Switch and Line Extension

Project: The proposed project involves the partial removal and extension of the existing Greif-Huntley 138 kV Line, new installation of Scherers Switch, and new construction of the Scherers-Cologix 138 kV Line.

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

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

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

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

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

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

The entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these species of bats

predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, these species are also dependent on the forest structure surrounding roost trees. If trees are present within the project area, and trees must be cut, the DOW recommends cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH ≥ 20 if possible. If trees are present within the project area, and trees must be cut during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 through August 15, prior to any cutting. Mist net and acoustic surveys should be conducted in accordance with the most recent version of the "OHIO DIVISION OF WILDLIFE GUIDANCE FOR BAT SURVEYS AND TREE CLEARING". If state listed bats are documented, DOW recommends cutting only occur from October 1 through March 31. However, limited summer tree cutting may be acceptable after consultation with the DOW (contact Eileen Wyza at Eileen.Wyza@dnr.ohio.gov).

The DOW also recommends that a desktop habitat assessment is conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the project area. Direction on how to conduct habitat assessments can be found in the current USFWS "Range-wide Indiana Bat 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 (Megalonaias nervosa)

Ohio pigtoe (*Pleurobema cordatum*)

State Threatened

black sandshell (Ligumia recta)

pondhorn (*Uniomerus tetralasmus*)

fawnsfoot (*Truncilla donaciformis*)

threehorn wartyback (Obliquaria reflexa)

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

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

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*)
Tippecanoe darter (*Etheostoma tippecanoe*)
paddlefish (*Polyodon spathula*)

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

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

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

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

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

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

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

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

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

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

The <u>local floodplain administrator</u> 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 U.S. Fish and Wildlife Service Ecological Services Office 4625 Morse Road, Suite 104 Columbus, Ohio 43230 (614) 416-8993 / Fax (614) 416-8994



Project Code # 2022-0041784

Dear Mr. Teitt,

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

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

Seasonal Tree Clearing for Federally Listed Bat Species: Should the proposed project site contain trees ≥3 inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, we recommend removal of any trees ≥3 inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule (see http://www.fws.gov/midwest/endangered/mammals/nleb/index.html), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is

recommended where Indiana bats are assumed present.

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

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

Stream and Wetland Avoidance: Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus 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, Acting Environmental Services Administrator, at (614) 265-6387 or at mike.pettegrew@dnr.state.oh.us.

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

Sincerely,



Patrice M. Ashfield Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW

Appendix E Ecological Survey Report



Scherers Switch and 138 kV Transmission Line Project Franklin County, Ohio

Ecological **Survey** Report

Prepared for:

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

Prepared by:

Stantec Consulting Services Inc. 1500 Lake Shore Drive, Suite 100 Columbus, OH 43204

July 25, 2022

Sign-off Sheet

This document entitled Scherers Switch and 138 kV Transmission Line Project Ecological Survey Report was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of AEP Ohio Transmission Company, Inc. (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by

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Charlie alla

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Reviewed by .

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Matthew Teitt

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Introduction July 25, 2022

1.0 INTRODUCTION

AEP Ohio Transmission Company, Inc. (AEP) is proposing to remove and rebuild structures along the existing Greif-Huntley 138 kilovolt (kV) Transmission Line and install a new 138 kV switch and new 138 kV Transmission line in Franklin County, Ohio. The Scherers Switch and 138 kV Transmission Line Project (the Project) is located northeast of the city of Worthington and west of the city of Westerville. The Project will include three components. The first, titled Huntley Extension 138 KV Line, involves the removal and rebuild of an approximately 0.2-mile portion of the existing Grief-Huntley 138 kV Transmission Line. The second, titled Scherers Switch involves installing a new 138 kV switch, and the third, titled Scherers Switch-Cologix 138 kV Line Install, involves installing a new approximately 0.2-mile 138 kV transmission line (ROW; Figure 1, Appendix B). A 50-foot survey corridor along the existing and proposed transmission lines, which totaled approximately 4.40-acre study area (the Project area), was surveyed for wetlands, waterbodies, open water features, upland drainage features, and potential threatened, endangered, and rare species habitat by Stantec Consulting Services Inc. (Stantec) biologists on May 10 and July 6, 2022 (Figure 2, Appendix B). The approximate locations of features located up to 50 feet outside of the Project area were also recorded during the field surveys, where landowner access was permitted. However, no data forms were collected on features that did not extend into the Project area. These features are shown on the Figure 2 maps in Appendix B as "approximate" wetlands, streams (waterways), open waters, and upland drainage features.

Methods July 25, 2022

2.0 METHODS

2.1 WETLAND DELINEATION

Prior to completing the field surveys, a desktop review of the Project area was conducted using U.S. Geological Survey (USGS) topographic maps, National Wetlands Inventory (NWI) maps, U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey data, and aerial imagery mapping. Stantec completed a wetland delineation study in accordance with the Corps of Engineers Wetlands Delineation Manual (USACE Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0; USACE 2012). Wetland categories were classified using the Ohio Rapid Assessment Method (ORAM) for Wetlands Version 5.0 (Mack 2001).

2.2 STREAM DELINEATION

Streams that demonstrated a continuously defined channel (bed and bank), ordinary high water mark (OHWM), and the disturbance of terrestrial vegetation were delineated within the Project area, per the protocols outlined in the USACE's Guidance on Ordinary High Water Mark Identification (Regulatory Guidance Letter, No. 05-05; USACE 2005). Delineated streams were classified as ephemeral, intermittent, or perennial per definitions in the 22250 Federal Register/Vol. 85, No. 77 (effective June 22, 2020; USACE 2020). Functional assessment of streams within the Project area was based on completion of the Ohio Environmental Protection Agency's (OEPA) Headwater Habitat Evaluation Index (HHEI; OEPA 2018) and/or Qualitative Habitat Evaluation Index (QHEI; OEPA 2006). The centerline and/or the OHWM locations of each waterway were identified and surveyed using a handheld sub-meter accuracy global positioning system (GPS) unit and mapped with GIS software. Additionally, the locations of upland drainage features (which lacked a continuously defined bed and bank/OHWM) identified within the Project area were also recorded with a sub-meter accuracy GPS unit during the field surveys.

2.3 RARE SPECIES

Prior to conducting the field surveys, Stantec contacted the Ohio Department of Natural Resources (ODNR) and the U.S. Fish and Wildlife Service (USFWS) for information regarding rare, threatened, or endangered species and their habitats of concern within the vicinity of the Project area (Appendix E). To assess potential impacts to rare, threatened, or endangered species, Stantec scientists conducted a pedestrian reconnaissance of the Project area, collected information on existing habitats within the Project area, and assessed the potential for these habitats to be used by these species.

3.0 RESULTS

3.1 TERRESTRIAL HABITAT

Stantec completed field surveys within the Project area on May 10 and July 6, 2022, for potentially suitable habitats for threatened and endangered species. Figure 3 (Appendix B) shows the land cover, vegetation communities, and any identified rare, threatened, or endangered species habitats observed within the Project area during the habitat assessment surveys. Representative photographs of the vegetation communities/habitats identified within the Project area are included in Appendix D-2 of this report (photo locations are shown on Figure 3 in Appendix B. Information regarding the vegetation communities/habitats identified within the Project area is provided in Table 1.

Table 1. Vegetation Communities and Land Cover Found within the Scherers Switch and 138 kV Transmission Line Project Area, Franklin County, Ohio

Vegetation Communities and Land Cover Types within the Project Area	Degree of Human-Related Ecological Disturbance	Unique, Rare, or High Quality?	Approximate Acreage Within Project Area
Scrub Shrub	Intermediate Disturbance (dominated by plants that typify a stable phase of a native community that persists under some disturbance). Dominant plant species included Kentucky bluegrass (Poa pratensis), common dandelion (Taraxacum officinale), multiflora rose (Rosa multiflora), poison hemlock (Conium maculatum), wintercress (Barbarea vulgaris), and giant foxtail (Setaria faberi).	No	0.76
Palustrine Emergent Wetland	Intermediate Disturbance (dominated by plants that typify a stable phase of a native community that persists under some disturbance). Dominant plant species included reed canary grass (Phalaris arundinacea), and garden yellow-rocket (Barbarea vulgaris).	No	0.06
Industrial	Extreme Disturbance/Ruderal Community (free of vegetation or dominated by opportunistic invaders, planted non-native species, and native highly tolerant taxa).	No	0.79
Maintained Lawn	Moderate to Extreme Disturbance/Ruderal Community (dominated by opportunistic invaders, planted non-native	No	1.57

Vegetation Communities and Land Cover Types within the Project Area	Degree of Human-Related Ecological Disturbance	Unique, Rare, or High Quality?	Approximate Acreage Within Project Area
	species, and/or native highly tolerant taxa, and structures). Dominant plant species include silver maple (Acer saccharinum), common dandelion, Kentucky bluegrass, scotch pine (Pinus sylvestris), and blue spruce (Picea pungens).		
Existing Roadway	Extreme Disturbance/ Ruderal Community (free of vegetation or dominated by opportunistic invaders, planted non-native species, and native highly tolerant taxa).	No	1.00
Old Field	Intermediate disturbance (dominated by plants that typify a stable phase of a native community that persists under some disturbance). Dominant species included common reed (Phragmites australis).	No	0.22
		TOTAL	4.40

3.2 WETLANDS

Stantec completed field surveys for wetlands within the Project area on May 10 and July 6, 2022. The Project Area contained one (1) National Wetland Inventory (NWI) feature, however access to the feature was inhibited during the field surveys due to a fenced industrial area. Stantec identified one (1) wetland located within the Project area. An additional wetland determination sample point was collected during the field surveys in a suspect area which did not meet all three criteria to be classified as a wetland. Figure 2 (appendix B) shows the location of the wetland identified by Stantec within the Project area. Representative wetland photographs are included in Appendix D-1 of this report (photo locations are depicted on Figure 2, Appendix B). Completed wetland determination and ORAM data forms are included in Appendix C. Information regarding the wetland resources within the Project area and proposed impacts is summarized in Table 2 and Appendix A.

SCHERERS SWITCH AND 138 KV TRANSMISSION LINE PROJECT ECOLOGICAL SURVEY REPORT

Table 2. Summary of Wetland Resources Found within the Scherers Switch and 138 kV Transmission Line Project Area, Franklin County, Ohio

		Location					С	RAM ⁵	Nearest	Existing	Proposed		Proposed	d Impacts
Wetland ID	Latitude	Longitude	Photo Location ¹	Isolated?2	Habitat Type ^{3,4}	Delineated Area (acre)	Score	Category	Proposed Structure Number	Structure Number in Wetland	Structure Number in Wetland	Structure Installation Method	Temporary Matting Area (acre)	Permanent Impact Area (acre)
Wetland 1	40.11678	-83.003695	2	No	PEM	0.06	21	1	N/A	None	N/A	N/A	TBD	TBD
	Total:					0.06	Total: TBD			TBD				

¹ Appendix B - Figure 2 and Appendix D – Photo log D-1

Table 3. Summary of NWI Disposition Found within the Scherers Switch and 138 kV Transmission Line Project Area, Franklin County, Ohio

NWI Code	NWI Description	Figure 2 Page Number	Related Field Inventoried Resource	Comments
PUBGx	Palustrine, Unconsolidated Bottom, Intermittently Exposed, Excavated	1	Approximate Open Water	Feature was located within a fenced industrial area.

² Pending USACE jurisdictional review

³ Habitat type based on Cowardin et al. (1979).

⁴ PEM = Palustrine Emergent Wetland

⁵ ORAM Score and Category are based on the Ohio Rapid Assessment Method for Wetland v. 5.0 (Mack 2001).

3.3 STREAMS

No streams were identified within the Project area during the field surveys on May 10 and July 6, 2022. The Project area does not contain any National Hydrography Data (NHD) features or U.S. Geological Survey (USGS) named streams.

3.4 OPEN WATERS

One approximate open water feature (i.e., ponds) was identified within the Project area during the field surveys completed on May 10 and July 6, 2022. Access to the stormwater pond was inhibited due to a fenced industrial area. Therefore, the approximate open water feature was delineated via aerial imagery (Figure 2, Appendix B).

3.5 RARE, THREATENED, OR ENDANGERED SPECIES HABITAT

Table 3. Summary of Potential Federally and Ohio State-Listed Species Found within the Scherers Switch and 138 kV Transmission Line Project Area, Franklin County, Ohio

Common/Scientific Names	*State Listed Status	*Federally Listed Status	Typical Habitat	Habitat Observed	Agency Comment** (Appendix E)	Potential Impacts and Avoidance Dates
Indiana bat/ Myotis sodalis	E	E	The Indiana bat is likely distributed over the entire State of Ohio, though not uniformly. This species generally forages in openings and edge habitats within upland and floodplain forest, but they also forage over old fields and pastures (Brack et al. 2010). Natural roost structures include trees (live or dead) with exfoliating bark, and exposure to solar radiation. Other important factors for roost trees include relative location to other trees, a permanent water source and foraging areas. Dead trees are preferred as maternity roosts; however, live trees are often used as secondary roosts depending on microclimate conditions (USFWS 2007, USFWS 2020b). Roosts have also occasionally been found to consist of cracks and hollows in trees, utility poles, buildings, and bat boxes. Primarily use caves for hibernacula, although are also known to hibernate in abandoned underground mines (Brack et al. 2010).	No potentially suitable winter hibernacula or summer roost habitat was observed within the Project area. However, suitable summer foraging habitat was observed within the Project area.	ODNR – This Project lies within the range of the Indiana bat. Therefore, ODNR DOW recommends that habitat be conserved wherever possible. If suitable habitat occurs within the Project area and trees need to be cut, the ODNR DOW recommends cutting occur between October 1 and March 31. If trees must be cut during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 – August 15, prior to any cutting. In addition, the DOW recommends a desktop habitat assessment, followed by a field assessment if needed, to determine if there are potential hibernacula present within the Project area. USFWS - The Indiana bat occurs throughout the State of Ohio. Should the Project contain trees ≥ 3 inches dbh, USFWS recommends avoiding tree removal wherever possible. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, USFWS recommends removal of any trees ≥3 inches dbh only occur between October 1 and March 31. If implementation of season tree cutting recommendations is not possible, a summer presence/absence mist net survey may be conducted between June 1 and August 15.	No potential suitable winter hibernacula or summer roost was observed in the Project area. However, suitable summer foraging habitat was observed within the Project area. AEP will determine if any tree clearing is necessary in areas containing suitable summer foraging habitat and will proceed in accordance with agency requirements. Avoidance Dates: April 1 through September 30
Northern Long-eared Bat/ Myotis septentrionalis	E	T	The northern long-eared bat is found throughout Ohio. This species generally forages in forested habitat and openings in forested habitat and utilizes cracks, cavities, and loose bark within live and dead trees, as well as buildings as roosting habitat (Brack et al. 2010; USFWS 2020a). The species utilizes caves and abandoned mines as winter hibernacula. Various sized caves are used providing they have a constant temperature, high humidity, and little to no air current (Brack et al. 2010).	No potentially suitable winter hibernacula or summer roost habitat was observed within the Project area. However, suitable summer foraging habitat was observed within the Project area.	ODNR – This Project lies within the range of the northern long-eared bat. Therefore, ODNR DOW recommends that habitat be conserved wherever possible. If suitable habitat occurs within the Project area and trees need to be cut, the ODNR DOW recommends cutting occur between October 1 and March 31. If trees must be cut during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 – August 15, prior to any cutting. In addition, the DOW recommends a desktop habitat assessment, followed by a field assessment if needed, to determine if there are potential hibernacula present within the Project area. USFWS - The northern long-eared bat occurs throughout the State of Ohio. Should the Project contain trees ≥ 3 inches dbh, USFWS recommends avoiding tree removal wherever possible. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, USFWS recommends removal of any trees ≥3 inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to northern long-eared bats. Incidental take of northern	No potential suitable winter hibernacula or summer roost was observed in the Project area. However, suitable summer foraging habitat was observed within the Project area. AEP will determine if any tree clearing is necessary in areas containing suitable summer foraging habitat and will proceed in accordance with agency requirements. Avoidance Dates: April 1 through September 30

Common/Scientific Names	*State Listed Status	*Federally Listed Status	Typical Habitat	Habitat Observed	Agency Comment** (Appendix E)	Potential Impacts and Avoidance Dates
					long-eared bats from most tree clearing is exempted by a 4(d) rule.	
Little Brown Bat/ Myotis lucifugus	E	N/A	This bat uses a wide range of habitats and man-made structures for roosting, including buildings and attics. Less frequently, they use hollows of trees. Winter hibernation sites typically consist of caves, tunnels, abandoned mines. Foraging habitat for this species generally occurs over water, along the edges of lakes and stream or in woodlands near waterbodies (NatureServe 2022).	No potentially suitable winter hibernacula or summer roost habitat was observed within the Project area. However, suitable summer foraging habitat was observed within the Project area.	ODNR – This Project lies within the range of the little brown bat. Therefore, ODNR DOW recommends that habitat be conserved wherever possible. If suitable habitat occurs within the Project area and trees need to be cut, the ODNR DOW recommends cutting occur between October 1 and March 31. If trees must be cut during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 – August 15, prior to any cutting. In addition, the DOW recommends a desktop habitat assessment, followed by a field assessment if needed, to determine if there are potential hibernacula present within the Project area. USFWS - No comments received.	No potential suitable winter hibernacula or summer roost was observed in the Project area. However, suitable summer foraging habitat was observed within the Project area. AEP will determine if any tree clearing is necessary in areas containing suitable summer foraging habitat and will proceed in accordance with agency requirements. Avoidance Dates: April 1 through September 30
Tricolored Bat/ Perimyotis subflavus	E	N/A	This species is found throughout Ohio and is associated with forested landscapes, foraging near trees and along waterways. Maternity and summer roosts usually occur in dead or live tree foliage, or in the south, in clumps of Spanish moss. Maternity colonies may also use tree cavities or man-made structures, such as buildings or bridges. Caves, mines, and rock crevices may be used as night roosts between foraging (NatureServe 2022).	No potentially suitable winter hibernacula or summer roost habitat was observed within the Project area. However, suitable summer foraging habitat was observed within the Project area.	ODNR – This Project lies within the range of the tricolored bat. Therefore, ODNR DOW recommends that habitat be conserved wherever possible. If suitable habitat occurs within the Project area and trees need to be cut, the ODNR DOW recommends cutting occur between October 1 and March 31. If trees must be cut during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 – August 15, prior to any cutting. In addition, the DOW recommends a desktop habitat assessment, followed by a field assessment if needed, to determine if there are potential hibernacula present within the Project area. USFWS - No comments received.	No potential suitable winter hibernacula or summer roost was observed in the Project area. However, suitable summer foraging habitat was observed within the Project area. AEP will determine if any tree clearing is necessary in areas containing suitable summer foraging habitat and will proceed in accordance with agency requirements. Avoidance Dates: April 1 through September 30
Clubshell/ Pleurobema clava	E	E	This is a species of small to medium-sized rivers and streams; generally found in clean, coarse sand and gravel in runs, often just downstream of a riffle, and cannot tolerate mud or slackwater conditions (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR - Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species. USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no in- water work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.
Rayed Bean/ Villosa fabalis	E	E	Habitat includes gravel or sandy substrate, especially in areas of thick roots of aquatic plants, increase substrate stability (NatureServe 2020, Parmalee and Bogan 1998). Rayed bean can be associated with shoal or riffle areas, and in shallow, wave-washed areas of glacial lakes. It is generally found in smaller, headwater creeks, but sometimes in larger rivers and open-water bodies. It can occur in shallow riffles or in lakes with water depths up to four feet. It has been found in riffles, generally in vegetation, and deeply buried in sand and gravel bound together by roots (Parmalee and Bogan 1998).	No suitable habitat was observed within the Project area.	ODNR - Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species. USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no in- water work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.
Northern Riffleshell/ Epioblasma torulosa rangiana	E	E	This species inhabits riffles in small to large streams with swift current and a substrate of firmly packed fine gravel and sand (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR - Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species.	No suitable habitat was observed within the Project area. In addition, no in- water work is proposed to occur by

Common/Scientific Names	*State Listed Status	*Federally Listed Status	Typical Habitat	Habitat Observed	Agency Comment** (Appendix E)	Potential Impacts and Avoidance Dates
					USFWS - No comments received.	AEP. Therefore, no impacts to this species are anticipated.
Purple Cat's Paw/ Epioblasma obliquata obliquata	E	E	Found in Lake Erie tributaries, Ohio River tributaries, and headwater and small inland streams (ODNR Division of Wildlife 2022b).	No suitable habitat was observed within the Project area.	ODNR - Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species. USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no in- water work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.
Snuffbox/ Epioblasma triquetra	E	E	Occurs in medium-sized streams to large rivers generally on mud, rocky, gravel, or sand substrates in flowing water. Often deeply buried in substrate and overlooked by collectors (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR - Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species. USFWS - No comments received.USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no inwater work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.
Rabbitsfoot/ Quadrula cylindrica cylindrica	T	Т	The typical habitat for this species is small to medium rivers with moderate to swift currents, and in smaller streams it inhabits bars or gravel and cobble close to the fast current. Found in medium to large rivers in sand and gravel shoals (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR - Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species. USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no inwater work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.
Pocketbook/ Lampsilis ovata	E	N/A	Very generalized in habitat preference, adapting well to both impoundment situations as well as free-flowing, shallow rivers. Usually found in moderate to strong current, it can survive in standing water. The most suitable substrate consists of a mixture of gravel and coarse sand mixed with some silt or mud (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR - Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species. USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no in- water work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.
Pondhorn/ Uniomerus tetralasmus	T	N/A	This species typically inhabits the quiet or slow-moving, shallow waters of sloughs, borrow pits, ponds, ditches, and meandering streams. It is tolerant to poor water conditions and can be found well buried in a substrate of fine silt and/or mud (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR - Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species. USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no inwater work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.
Black Sandshell/ Ligumia recta	T	N/A	Typically found in medium-sized to large rivers in locations with strong current and substrates of coarse sand and gravel with cobbles in water depths from several inches to six feet or more (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR - Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species. USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no inwater work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.

Common/Scientific Names	*State Listed Status	*Federally Listed Status	Typical Habitat	Habitat Observed	Agency Comment** (Appendix E)	Potential Impacts and Avoidance Dates
Elephant-ear/ Elliptio crassidens crassidens	E	N/A	An inhabitant of channels in large creeks to rivers with moderate to swift currents, primarily on sand and limestone or rock substrates (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR - Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species. USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no in- water work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.
Long-solid/ Fusconaia maculata maculata	E	N/A	This mussel is found in the gravel substrates of shoals and riffles of large rivers, as well as impounded areas (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR - Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species. USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no in- water work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.
Ohio Pigtoe/ Pleurobema cordatum	E	N/A	This mussel prefers strong currents of large rivers with substrates of sand and gravel, though is somewhat tolerant of lentic systems (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR - Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species. USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no in- water work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.
Washboard/ Megalonaias nervosa	E	N/A	This species is typically a large river species, living in the main channel and in some of the overbank areas of reservoirs, but in some instances, it may also become established in medium-sized and even small rivers. It is found in areas with a slow current with muddy to coarse gravel substrates (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR - Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species. USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no in- water work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.
Fawnsfoot/ Truncilla donaciformis	Т	N/A	This species occurs in both large and medium-sized rivers at normal depths varying from less than three feet up to 15 to 18 feet in big rivers such as the Tennessee. A substrate of either sand or mud is suitable and although it is typically found in moderate current, it can adapt to a lake or embayment environment lacking current (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR - Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species. USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no in- water work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.

Common/Scientific Names	*State Listed Status	*Federally Listed Status	Typical Habitat	Habitat Observed	Agency Comment** (Appendix E)	Potential Impacts and Avoidance Dates
Threehorn Wartyback/ Obliquaria reflexa	Т	N/A	This species is typical of the large rivers where there is moderately strong current and a stable substrate composed of gravel, sand, and mud (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR - Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species. USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no in- water work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.
Goldeye/ Hiodon alosoides	E	N/A	Habitat includes quiet turbid water of medium to large lowland rivers, small lakes, ponds, fringe wetlands and muddy shallows of larger lakes. Occurs in shallow firmbottomed sites in river pools or backwaters or over gravel shoals in tributary streams (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR - The ODNR DOW recommends that no in-water work happen in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species. USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no in- water work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.
Popeye Shiner/ Notropis ariommus	E	N/A	Habitat includes warm, relatively clear flowing waters of large creeks and small to medium rivers; these shiners are closely associated with gravel substrate; typically they occur in runs, backwaters near appreciable current, and the head of pools (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR - The ODNR DOW recommends that no in-water work happen in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species. USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no in- water work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.
Shortnose Gar/ Lepisosteus platostomus	E	N/A	Habitat includes large weedy lakes and reservoirs, backwaters and quiet pools of medium to large rivers, stagnant ponds, sloughs, canals, brackish waters of coastal inlets, occasionally coastal marine waters, often near vegetation or close to submerged or overhanging objects by day. Young tend to occupy shallows, larger individuals in deeper water. Spawning occurs over weed beds of shallow waters in rivers, usually in grass and weeds in shoal water in lakes; or near stone piles of railroad bridges, in nests of smallmouth bass, or over gravel bars (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR - The ODNR DOW recommends that no in-water work happen in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species. USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no in- water work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.
Paddlefish/ Polydon spathula	Т	N/A	Habitat includes slow-flowing water of large and medium- sized rivers, river-margin lakes, channels, oxbows, backwaters, impoundments with access to spawning areas. This fish prefers depths greater than 1.5 m; it seeks deeper water in late fall and winter. Individuals may congregate near human-made structures that create eddies and reduce current velocity (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR - The ODNR DOW recommends that no in-water work happen in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species. USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no in- water work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.

Common/Scientific Names	*State Listed Status	*Federally Listed Status	Typical Habitat	Habitat Observed	Agency Comment** (Appendix E)	Potential Impacts and Avoidance Dates
Tippecanoe Darter/ Etheostoma tippecanoe	T	N/A	This fish prefers medium to large streams in the Ohio River drainage system and are found in riffles of moderate current with substrate of gravel or cobble sized rocks (ODNR Division of Wildlife 2022).	No suitable habitat was observed within the Project area.	ODNR - The ODNR DOW recommends that no in-water work happen in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.	No suitable habitat was observed within the Project area. In addition, no inwater work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.
Northern Brook Lamprey/ Ichthyomyzon fossor	E	N/A	Adult lampreys are found in clear brooks with fast flowing water and sand or gravel bottoms. Juveniles are found in slow moving water buried in soft substrate in medium to large streams (ODNR Division of Wildlife 2022).	No suitable habitat was observed within the Project area.	USFWS - No comments received. ODNR - The ODNR DOW recommends that no in-water work happen in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.	No suitable habitat was observed within the Project area. In addition, no inwater work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.
Tonguetied Minnow/ Exoglssum laurae	E	N/A	Habitat for this fish includes rocky pools and runs of cool to warm water. They prefer clear creeks and small to medium sized rivers of moderate gradient with unsilted bottoms of gravel, cobble, and/or boulder. Spawning occurs in gravel nests in slow to moderate current (NatureServe 2022).	No suitable habitat was observed within the Project area.	USFWS - No comments received. ODNR - The ODNR DOW recommends that no in-water work happen in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.	No suitable habitat was observed within the Project area. In addition, no inwater work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.
Spotted Darter/ Etheostoma maculatum	E	N/A	This fish is found in medium sized rivers and streams. They are typically found in areas of swift current at the top or bottom end of a riffle where there are many very large boulders or flat slabs or rock. They spend most of their time hiding under the upstream edge of these large rocks with their heads sticking out watching for food (ODNR Division of Wildlife 2022b).	No suitable habitat was observed within the Project area.	USFWS - No comments received. ODNR - The ODNR DOW recommends that no in-water work happen in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species. USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no in- water work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.
lowa Darter/ Estheostoma exile	E	N/A	This fish is found in natural lakes and very sluggish streams or marshes with dense to moderate aquatic vegetation and clear waters often over a sandy substrate. Species are known to occur in Portage Lakes and other smaller natural lakes in both west central and northeast Ohio (ODNR Division of Wildlife 2022b).	No suitable habitat was observed within the Project area.	ODNR - The ODNR DOW recommends that no in-water work happen in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species. USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no in- water work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.
Lake Chubsucker/ Erimyzon sucetta	Т	N/A	This fish is found in natural lakes and very sluggish streams or marshes with dense aquatic vegetation and clear waters primarily found in glacially formed natural lakes often referred to as pothole or kettle lakes. This species is found in the group of lakes between Bellefontaine and Urbana, and three slow moving stream systems that have interconnected wetland complexes which include Killbuck Marsh, the upper Cuyahoga River, and the Black Fork of Symmes Creek including Jackson Lake ODNR Division of Wildlife 2022b).	No suitable habitat was observed within the Project area.	ODNR - The ODNR DOW recommends that no in-water work happen in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species. USFWS - No comments received.	No suitable habitat was observed within the Project area. In addition, no in- water work is proposed to occur by AEP. Therefore, no impacts to this species are anticipated.

Common/Scientific Names	*State Listed Status	*Federally Listed Status	Typical Habitat	Habitat Observed	Agency Comment** (Appendix E)	Potential Impacts and Avoidance Dates
American Bittern/ Botaurus lentiginosus	E	N/A	Typically found in primarily large freshwater and (less often) brackish marshes, including lake and pond edges where cattails, sedges, or bulrushes are plentiful and marshes where there are patches of open water and aquatic bed vegetation. Nest primarily in inland freshwater wetlands, sometimes in tidal marshes or in sparsely vegetated wetlands or dry grassy uplands (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR – If bogs, large wet meadows, and dense shrubby swamps will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to July 31. If this type of habitat will not be impacted, the Project is not likely to impact this species. USFWS - No comments received.	No suitable habitat was observed within the Project area. Therefore, no impacts are anticipated. Avoidance Dates: May 1 through July 31
Black-Crowned Night- heron/ Nycticorax nycticorax	Т	N/A	Typically found in marshes, swamps, wooded streams, mangroves, shores of lakes, ponds, lagoons, salt water, brackish and freshwater situations. Roost by day in mangroves or swampy woodland. Nest usually with other heron species (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR – If small trees, saplings, shrubs, near bodies of water and wetlands will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, the Project is not likely to impact this species. USFWS - No comments received.	No suitable habitat was observed within the Project area. Therefore, no impacts are anticipated. Avoidance Dates: May 1 through July 31
Lark sparrow/ Chondestes grammacus	E	N/A	Breeding habitat includes various open situations with scattered bushes and trees: shortgrass, mixed-grass, and tallgrass prairie with a shrub component and sparse litter; parkland; sandhills; barrens; oldfields; cultivated fields; shrub thickets; woodland edges; orchards; parks; riparian areas; brushy pastures; overgrazed pastures; and savanna. Nests are either on the ground or close to the ground located in sparse ground cover (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR – If grassland habitat with scattered shrub layers will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this habitat will not be impacted, the Project is not likely to impact this species. USFWS - No comments received.	No suitable habitat was observed within the Project area. Therefore, no impacts are anticipated. Avoidance Dates: May 1 through July 31
Northern Harrier/ Circus hudsonis	E	N/A	Breeds in wide-open habitats ranging from Arctic tundra to prairie grasses to fields and marshes. Nests are concealed on the ground in grasses or wetland vegetation (All About Birds 2022).	No suitable habitat was observed within the Project area.	ODNR - If large marshes or grassland 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. USFWS - No Comment	No suitable habitat was observed within the Project area. Therefore, this Project is not likely to impact this species. Avoidance Dates: April 15 through July 31
Least Bittern/ Ixobrychus exilis	Т	N/A	Occurs in tall emergent vegetation in marshes, primarily freshwater, less commonly in coastal brackish marshes and mangrove swamps. Prefers marshes with scattered bushes or other woody growth (NatureServe 2022).	No suitable habitat was observed within the Project area.	ODNR - This secretive marsh species prefers dense emergent wetlands with thick stands of cattails, sedges, sawgrass or other semiaquatic vegetation interspersed with woody vegetation and open water. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 through July 31. If this type of habitat will not be impacted, this project is not likely to impact this species. USFWS - No comments received.	No suitable habitat was observed within the Project area. Therefore, this Project is not likely to impact this species. Avoidance Dates: May 1 through July 31
Upland Sandpiper/ Bartramia longicauda	E	N/A	The upland sandpiper breed in grasslands, pastures, and unkempt agricultural land with a mosaic of old fields and crop lands, and sometimes the grassy expanses of airports (ODNR Division of Wildlife 2022b).	No suitable habitat was observed within the Project area.	ODNR - Nesting upland sandpipers utilize dry grasslands	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated. Avoidance Dates: April 15 through July 31

Common/Scientific Names	*State Listed Status	*Federally Listed Status	Typical Habitat	Habitat Observed	Agency Comment** (Appendix E)	Potential Impacts and Avoidance Dates
					type of habitat will not be impacted, this project is not likely to impact this species. USFWS - No comments received.	
Sandhill Crane/ Grus canadensis	Т	N/A	Sandhill cranes are primarily a wetland dependent species. They will utilize agricultural fields for their wintering grounds. However, they roost in shallow, standing water or moist bottomlands. They require rather large tracts of wet meadows, shallow march or bog for breeding and nesting. Sandhill cranes are seasonal residents (ODNR Division of Wildlife 2020b).	No suitable habitat was observed within the Project area.	I FOOLING A PATHOLISMOD TRACT OF WOLLMOSHOW SHAILOW	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated. Avoidance Dates: May 1 through July 31

^{*}Status key: E=Endangered; T=Threatened; PT=Potentially Threatened; SC=Species of Concern

^{**}The information is based on the literature review response information from ODNR and USFWS and is study area/project specific.

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4.0 CONCLUSIONS AND RECOMMENDATIONS

Stantec conducted a wetland and waterbodies delineation and a preliminary habitat assessment for threatened and endangered species within the Project area on May 10 and July 6, 2022. During the field surveys, one (1) PEM wetland totaling approximately 0.06 acre was delineated within the Project area. No streams were identified within the Project area.

The information provided by Stantec regarding wetland and stream boundaries is based on an analysis of the wetland and upland conditions present within the Project Area at the time of the field work. The delineations were performed by experienced and qualified professionals using regulatory agency-accepted practices and sound professional judgment.

An ODNR Ohio Natural Heritage Program data request and environmental review request letter was sent to the ODNR Office of Real Estate on May 20, 2022. The ODNR Office of Real Estate response letter dated June 14, 2022, stated that the entire state of Ohio is within the range of the Indiana bat, northern long-eared bat, little brown bat, and the tricolored bat. If trees are present within the Project area, and trees must be cut, the Division of Wildlife (DOW) recommends cutting only occur from October 1 − March 31, conserving trees with loose, shaggy bark and/or crevices holes, or cavities as well as trees with diameter at breast height (dbh) ≥ 20 inches if possible. If trees are present within the Project area and trees must be cut during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 through August 15, prior to any cutting.

The DOW also recommends that a desktop habitat assessment, followed by a field assessment if needed, to determine if there are potential hibernaculum(a) present within 0.25 miles of the Project area. Stantec completed a habitat desktop assessment in accordance with the 2022 Range-wide Indiana Bat and Northern Long-eared Bat Survey Guidelines (USFWS 2022) utilizing available ODNR websites, including data on known abandoned or active mines (ODNR 2022d) and locations of known or suspected karst geology (ODNR 2022c). The desktop assessment did not identify any mines or karst features within a 0.25-mile buffer of the Project area (Figure 4). No potential hibernacula or roosting habitat were observed within the Project area during the field surveys; however, potentially suitable summer foraging was observed within the Project area. AEP will determine if any tree clearing is necessary in areas containing suitable summer foraging habitat and will proceed in accordance with agency requirements.

According to the ODNR response letter, the Project is within the range of the federally-listed endangered purple cat's paw, clubshell, northern riffleshell, rayed bean, and snuffbox, federally-listed threatened rabbitsfoot, state-listed endangered long-solid, elephant-ear, pocketbook, washboard, and Ohio pigtoe, and the state-listed threatened fawnsfoot, black sandshell, pondhorn, and threehorn wartyback. 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 or other mussel species.

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According to the ODNR response letter, the Project is within the range of the state-listed endangered goldeye, northern brook lamprey, spotted darter, tonguetied minnow, popeye shiner, shortnose gar, lowa darter and the state-listed threatened paddlefish, lake chubsucker, and Tippecanoe darter. The ODNR DOW recommends no in-water work in perennial streams from March 15 to June 30 to reduce impacts to indigenous aquatic species and their habitat. 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 or other mussel species.

The Project is within the range of the state-listed endangered American bittern and lark sparrow, and state-listed threatened least bittern and black-crowned night-heron. If their nesting habitat will be impacted, construction should be avoided in preferred habitat during the species nesting period of May 1 through July 31. If nesting habitat will not be impacted, this Project in not likely to impact these species. None of the listed bird species preferred nesting habitats were observed within the Project area, therefore, this Project is not likely to impact these species.

The Project is within the range of the state-listed threatened sandhill crane. If their nesting habitat will be impacted, construction should be avoided in preferred habitat during the species nesting period of April 1 through August 31. If nesting habitat will not be impacted, this Project in not likely to impact these species. None of the preferred nesting habitats of the sandhill crane were observed within the Project area, therefore, this Project is not likely to impact this species.

The Project is within the range of the state-listed endangered northern harrier and upland sandpiper. If their nesting habitat will be impacted, construction should be avoided in preferred habitat during the species nesting period of April 15 through July 31. If nesting habitat will not be impacted, this Project in not likely to impact these species. None of the preferred nesting habitats of the northern harrier or upland sandpiper was observed within the Project area, therefore, this Project is not likely to impact these species.

A technical assistance request letter was also submitted to the USFWS on May 20, 2022. The USFWS response letter dated May 27, 2022, recommends that the proposed Project avoid and minimize impacts to all wetland habitats to the maximum extent possible and natural buffers around streams and wetlands should be preserved to enhance beneficial functions.

According to the USFWS response letter, the entire State of Ohio lies within the range of the federally endangered Indiana bat and federally threatened northern long-eared bat. Therefore, USFWS recommends that trees ≥ 3 inches dbh be saved wherever possible and any tree removal that is unavoidable should only occur between October 1 and March 31 to avoid adverse effects to these species. If implementation of this seasonal tree cutting recommendation is not possible, a summer presence/absence mist net survey may be conducted between June 1 and August 15 for Indiana bats.

No potential hibernacula or roosting habitat were observed within the Project area during the field surveys; however, potentially suitable summer foraging habitat was observed within the Project area. AEP will determine if any tree clearing is necessary in areas containing suitable foraging habitat and will proceed in accordance with agency requirements.

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The USFWS also stated that due to the Project type, size, and location they do not anticipate adverse effects to any other federally endangered, threatened, or proposed species (Appendix E).

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5.0 REFERENCES

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APPENDICES

Appendix A WETLAND IMPACT TABLES

Table 1. Summary of Wetland Resources Found within the Scherers Switch and 138 kV Transmission Line Project Area, Franklin County, Ohio

	Location						ORAM ⁵		Nearest	Existing	Proposed		Proposed Impacts	
Wetland ID	Latitude	Longitude	Photo Location ¹	Isolated? ²	Habitat Type ^{3,4}	Delineated Area (acre)	Score	Category	Proposed Structure Number	Structure Number in Wetland	Structure Number in Wetland	Structure Installation Method	Temporary Matting Area (acre)	Permanent Impact Area (acre)
Wetland 1	40.11678	-83.003695	2	No	PEM	0.06	21	1	N/A	None	N/A	N/A	TBD	TBD
Total:					0.06	Total:				TBD	TBD			

¹ Appendix B - Figure 2 and Appendix D – Photo log D-1

Table 2. Summary of NWI Disposition Found within the Scherers Switch and 138 kV Transmission Line Project Area, Franklin County, Ohio

NWI Code	NWI Description	Figure 2 Page Number	Related Field Inventoried Resource	Comments
PUBGx	Palustrine, Unconsolidated Bottom, Intermittently Exposed, Excavated	1	Approximate Open Water	Feature was located within a fenced industrial area.

² Pending USACE jurisdictional review

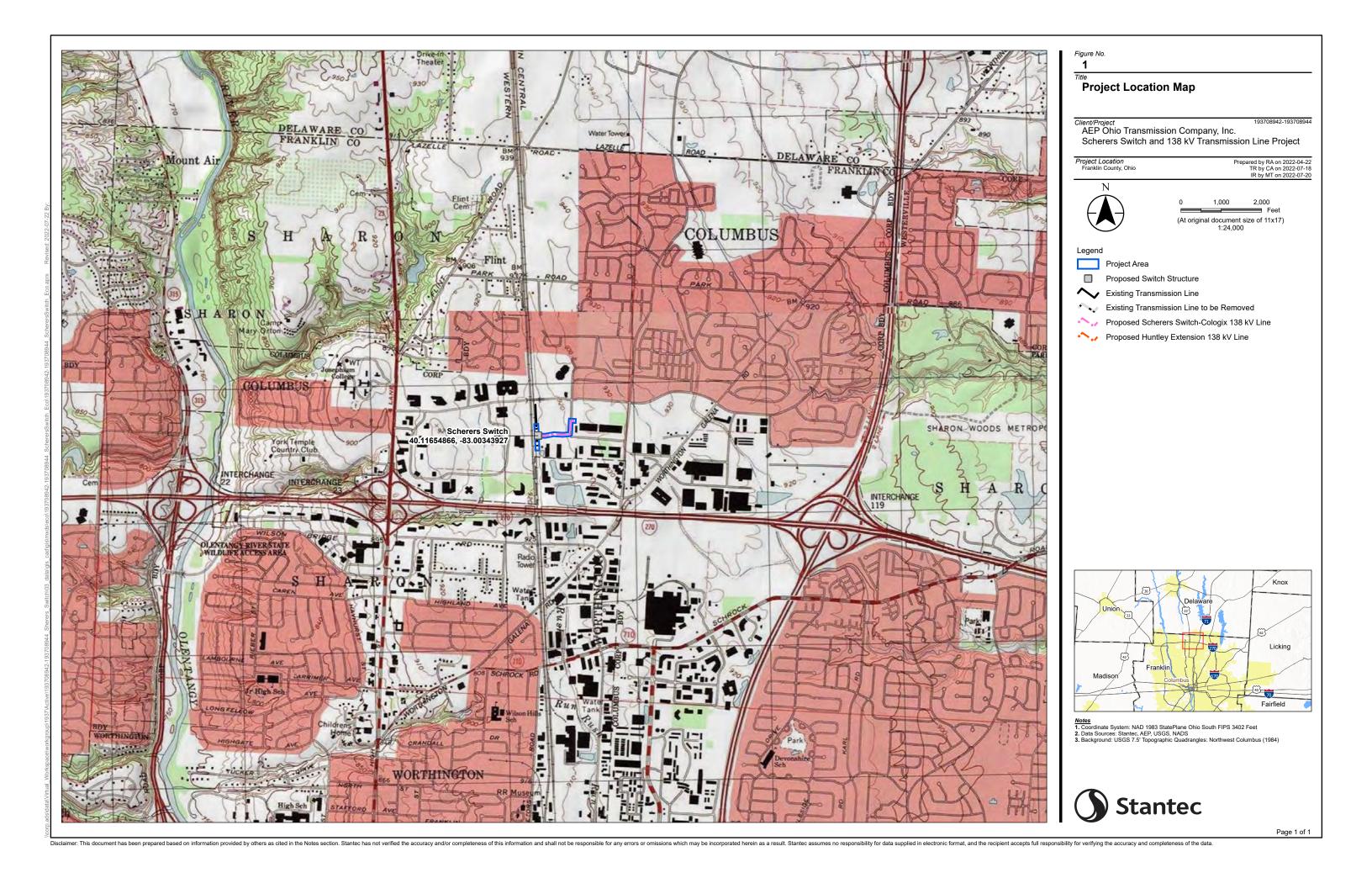
³ Habitat type based on Cowardin et al. (1979).

⁴ PEM = Palustrine Emergent Wetland

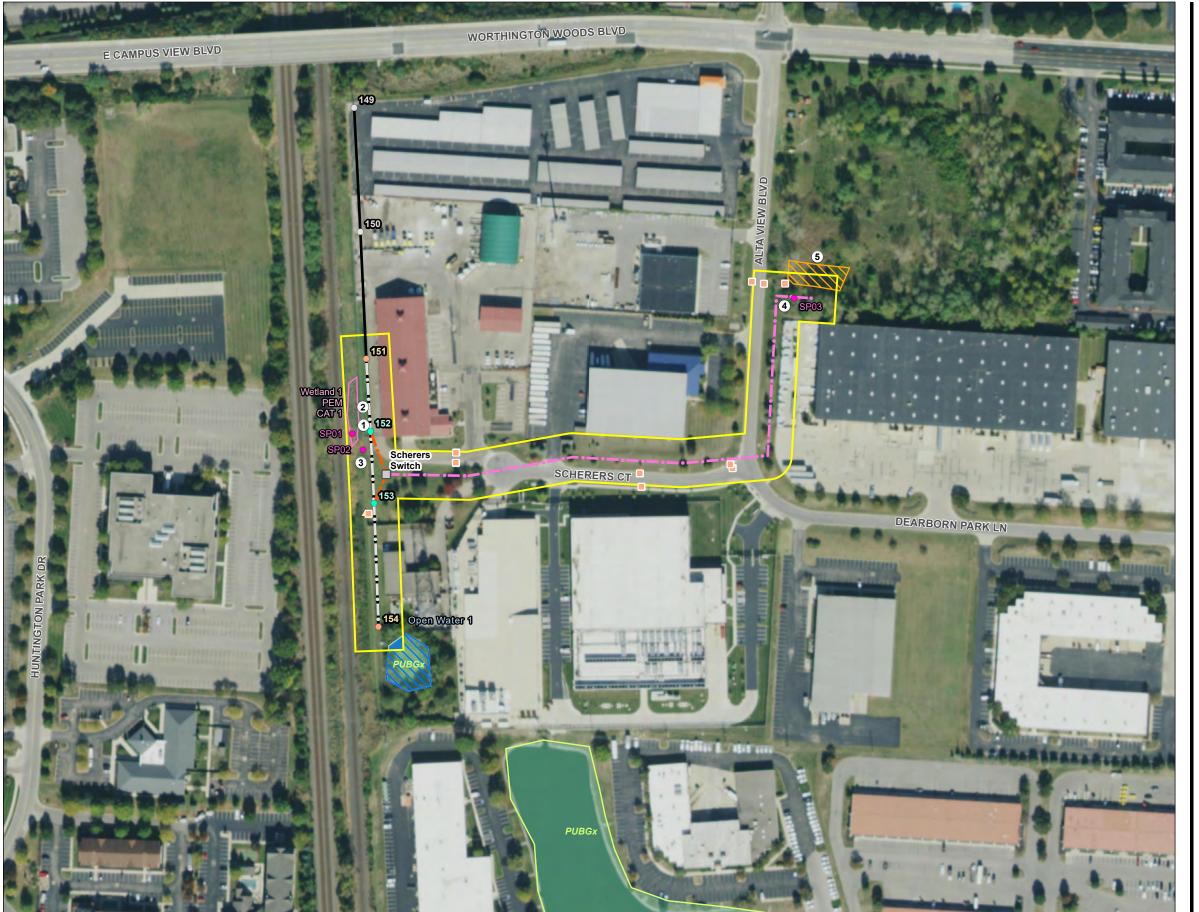
⁵ ORAM Score and Category are based on the Ohio Rapid Assessment Method for Wetland v. 5.0 (Mack 2001).

Appendix B FIGURES

B.1 PROJECT LOCATION MAP



B.2 WETLAND AND WATERBODY DELINEATION MAP



Wetland and Waterbody Delineation Map

Client/Project
AEP Ohio Transmission Company, Inc. Scherers Switch and 138 kV Transmission Line Project

Project Location
Franklin County, Ohio

Prepared by RA on 2022-04-22 TR by CA on 2022-07-18 IR by MT on 2022-07-20



(At original document size of 11x17) 1:2.400

Approximate Open Water

Field Delineated Wetland

Floodway

National Wetlands

Inventory Feature FEMA Flood Hazard Area*

100-year Floodplain

Project Area

Proposed Switch Structure

Existing Structure

Existing Structure to be Replaced

Existing Structure to be

Existing Transmission

Existing Transmission Line to be Removed

Proposed Scherers Switch-Cologix 138 kV

Proposed Huntley Extension 138 kV Line

Photo Location

Existing Culvert

Existing Storm Drain

Wetland Determination Sample Point

Existing Sediment Basin Field Delineated Open

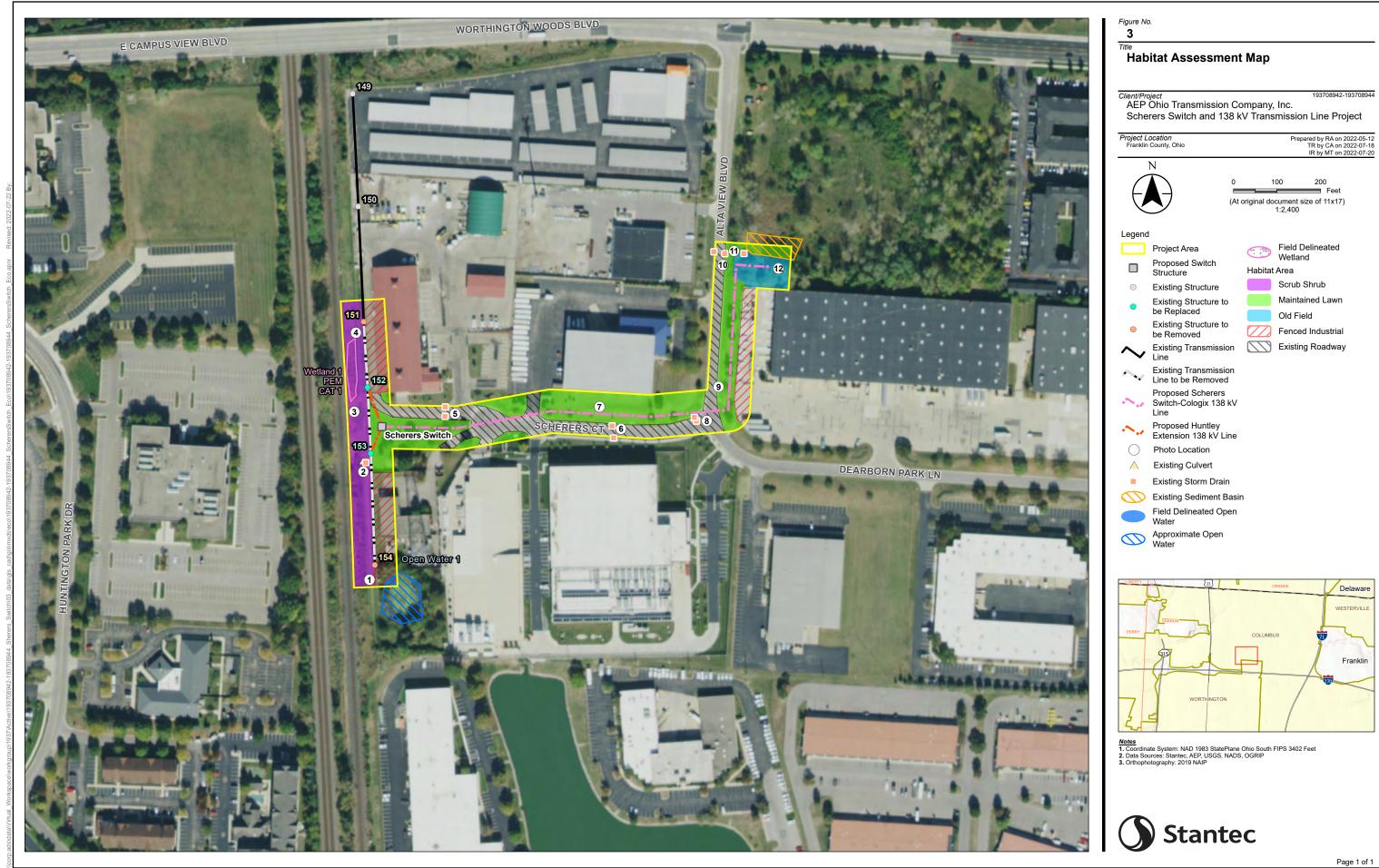
*No features within data frame



Notes
1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources: Stantec, AEP, USGS, USFWS, FEMA, NADS, OGRIP
3. Orthophotography: 2019 NAIP



B.3 HABITAT ASSESSMENT MAP

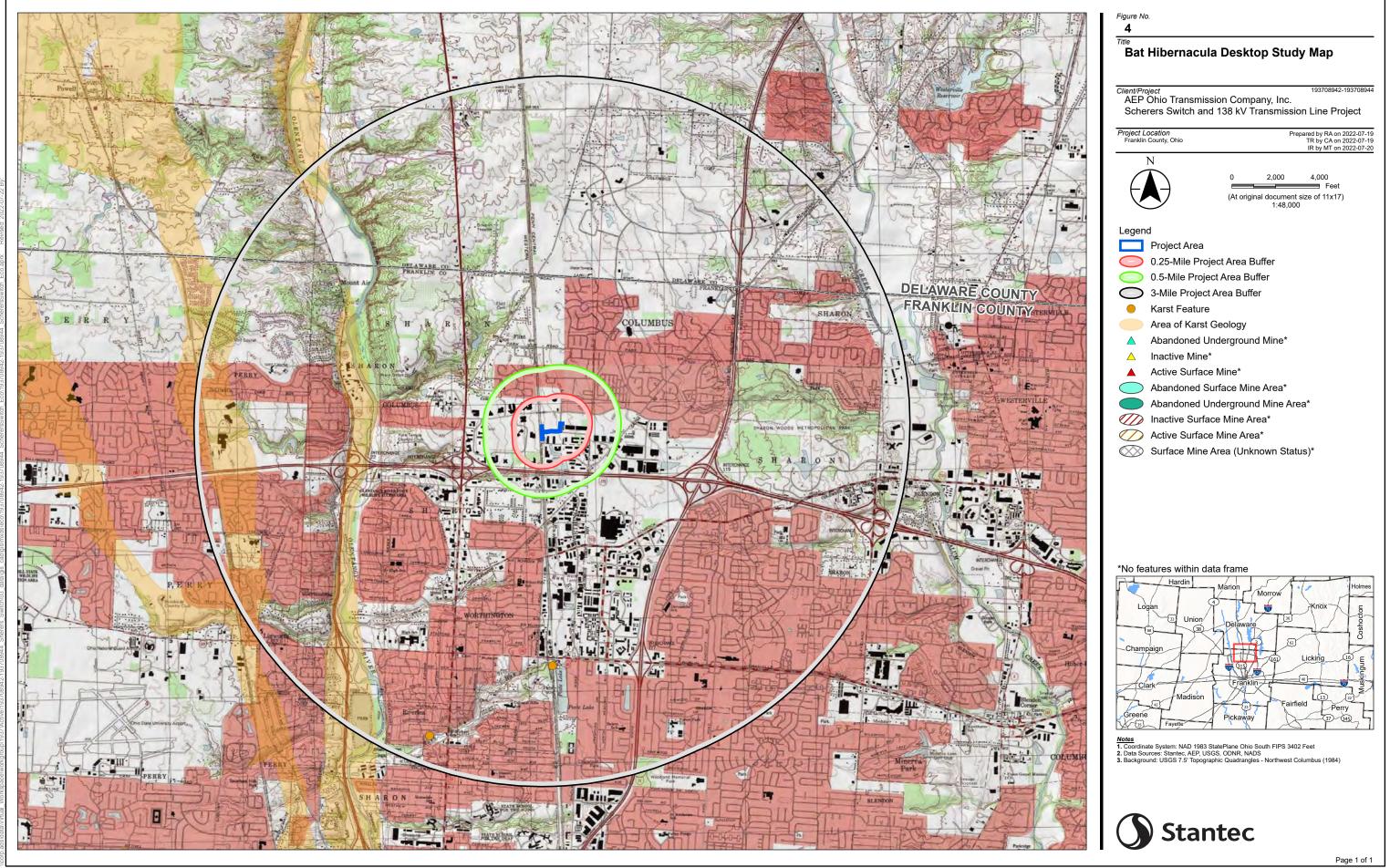


Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

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Franklin

B.4 BAT HIBERNACULA DESKTOP STUDY MAP



Appendix C FIELD COLLECTED DATA FORMS

C.1 WETLAND DETERMINATION FORMS

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Scherers Switch and 138 kV Transmis	sion Line Proj	ect City	y/County: Fra	nklin	Sampl	ling Date:	05/10/2022
Applicant/Owner: AEP Ohio Transmission Compa	ny, Inc.			State:	Ohio Sampl	ling Point:	SP01
Investigator(s): T. Gillette, S. Heitzenrater			Section, T	ownship, Range:	T2N, R18V	v, SNW	
Landform (hillside, terrace, etc.): Depression	!	Local relief	 (concave, conv	rex, none): Co	ncave	Slope	e %: 0
Subregion (LRR or MLRA):	at: 40.11678		Lon	g: -83.003695		Datum:	WGS84
Soil Map Unit Name: Pewamo silty clay loam, low	carbonate till,	0 to 2 perc	ent slopes	NWI classific	cation: N/A		
Are climatic / hydrologic conditions on the site typical for	or this time of y	ear?	Yes X	(No	(If no, explain	in Remarks	.)
Are Vegetation N, Soil N, or Hydrology	No_significant	ly disturbed	? Are "No	mal Circumstance	es" present?	Yes_X	No
Are Vegetation N , Soil N , or Hydrology	No_naturally p	oroblematic?	(If neede	ed, explain any ans	swers in Remar	rks.)	
SUMMARY OF FINDINGS – Attach site map s	showing samp	ling point l	ocations, trans	sects, important t	features, etc.		
Hydrophytic Vegetation Present? Yes	X No						
	X No	"	s the Sampled vithin a Wetlar		s X No		
1 1	X No	, v	vitillii a vvetiai	iu: ie:	5 <u>/</u> NO		
Remarks: (Explain alternative procedures here or in a	separate repo	ort.)					
VECETATION Lies ecientific names of n	lanta						
VEGETATION – Use scientific names of p	Absolute	Dominan	t Indicator				
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	% Cover	Species		Dominance Te	st worksheet:		
1			<u> </u>	Number of Don	ninant Species		
2				That Are OBL,			(A)
3				Total Number of	of Dominant		
4				Species Across		3	(B)
5			<u> </u>	Percent of Dom	ninant Snecies		
Sapling/Shrub Stratum (Plot size: 15 ft)		= Total Co	ver	That Are OBL,	•	c: <u>66</u>	(A/B)
1				Prevalence Inc	dex worksheet	t:	
2.				Total % C	Cover of:	Multipl	y by:
3				OBL species		x 1 =	
4				FACW species		x 2 =	
5				FAC species		x 3 =	
Herb Stratum (Plot size: 5 ft)	=	= Total Cove	er	FACU species		x 4 =	
	40	Yes	FACU	UPL species		x 5 =	
Cirsium arvense Phalaris arundinacea	-		FACW	Column Totals:	·	(A)	(B)
3. Barbarea vulgaris				Prevaler	nce Index = B/A	\ =	
4.				Hydrophytic V	egetation Indi	cators:	
5				1 - Rapid	Test for Hydro	phytic Veget	ation
6				X 2 - Domin	nance Test is >5	50%	
7				3 - Preval	lence Index is ≤	≤3.0¹	
8				4 - Morph	ological Adapta	ations¹	
9				(Provide suppo	orting data in Remar	ks or on a separ	,
10				1	itic Hydrophytic	ŭ	` ' '
Woody Vine Stratum (Plot size: 30 ft)	100=	= Total Cove	er	¹ Indicators of hydric s disturbed or problema		rology must be p	oresent, unless
1							
2.				Hydrophytic Vegetation			
		= Total Cove		Present?	Yes X	No	
Remarks: (Include photo numbers here or on a seg				1			
	,						

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SOIL Sampling Point: SP01

Profile Desc	ription: (Describe to	the dep	th needed to docu	ment th	e indicat	tor or co	onfirm the absence of	f indicators.)
Depth	Matrix		Redo	x Featur	res			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-19	10YR 3/2	95	10YR 5/4	5	С	М	Silty Clay Loam	
¹Type: C=C	oncentration, D=Depl	etion. RN	M=Reduced Matrix.	MS=Mas	sked San	d Grains	s. ² Location: PL=I	Pore Lining, M=Matrix.
Hydric Soil		•	,					for Problematic Hydric Soils ³ :
Histosol (11)		Sandy Gleyed M	latriy (S4)	١		Coast Pr	rairie Redox (A16)
	pedon (A2)		Sandy Redox (S		,			nganese Masses (F12)
Black Hist			Stripped Matrix					ent Material (F21)
	Sulfide (A4)		Dark Surface (S				· · · · · · · · · · · · · · · · · · ·	allow Dark Surface (F22)
	_ayers (A5)		Loamy Mucky M	•	1)			xplain in Remarks)
2 cm Muc			Loamy Gleyed N					, plan in remaine,
 	Below Dark Surface (A11	1)	X Depleted Matrix		,			
	k Surface (A12)	,	Redox Dark Sur					
	cky Mineral (S1)		Depleted Dark S		7)			
	ky Peat or Peat (S3)		Redox Depressi	-	,			
Restrictive I	ayer (if observed):							
Type:	gravel							
Depth (ir	iches): 19						Hydric Soil Prese	ent? Yes ^X No
Remarks:	,							
	0)/							
HYDROLO								
	drology Indicators:						Secondary Ind	icators (minimum of two required)
Primary India	cators (minimum of on	<u>ie is requ</u>	iired; check all that	apply)			Surface S	Soil Cracks (B6)
X Surface W	,		Water-Stained	Leaves (F	B9)		Drainage	Patterns (B10)
	r Table (A2)		Aquatic Fauna	(B13)			Dry-Seas	on Water Table (C2)
X Saturation	` ,		True Aquatic F	Plants (B14	4)		Crayfish I	Burrows (C8)
Water Mar			Hydrogen Sulf	,	,		Saturation	n Visible on Aerial Imagery (C9)
	Deposits (B2)		Oxidized Rhiz		_	oots (C3)		or Stressed Plants (D1)
Drift Depo			Presence of R				X Geomorp	hic Position (D2)
	or Crust (B4)		Recent Iron R			s (C6)	FAC-Neu	tral Test (D5)
Thin Muck Surface (C7)								
	Visible on Aerial Imagery (egetated Concave Surface)	` '	Gauge or Wel					
Field Obser		(D0)	Other (Explain	in Remar	ks)			
Surface Wat		X	No De	epth (inc	hes):	1		
Water Table		- \ /		epth (inc	′ —	10		
Saturation P				epth (inc		19		Processia V V V
(includes cap				, ,	′—		Wetland Hydrology	Present? Yes X No
	corded Data (stream o	gauge, m	nonitoring well, aeria	l photos	, previous	s inspec	tions), if available:	
Remarks:								
. tomanto.								

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Scherers Switch and 138 kV Transm	ssion Line Project	City/County: Fra	anklin	Sampling Date: 07/06	3/2022
Applicant/Owner: AEP Ohio Transmission Compar	ny, Inc.		State: Ohio	Sampling Point:	SP02
Investigator(s): S. Heitzenrater, Z. True		Section,	Township, Range: T2N,	R18W, SNW	
Landform (hillside, terrace, etc.): Side slope	Local re	elief (concave, con	/ex, none): Convex	Slope %:	1
Subregion (LRR or MLRA):	t: 40.116688	Lor	ng: -83.003612	Datum: WGS	S84
Soil Map Unit Name: Pewamo silty clay loam, low	·		<u> </u>	N/A	
Are climatic / hydrologic conditions on the site typical for			No (If no, e		
Are Vegetation N , Soil N , or Hydrology	No significantly distu		 rmal Circumstances" prese		
Are Vegetation N , Soil N , or Hydrology	No naturally problem	atic? (If need	ed, explain any answers in	Remarks.)	
SUMMARY OF FINDINGS – Attach site map s			sects, important features	, etc.	
	(No			<u> </u>	
	No X	Is the Sampled within a Wetlan		No. Y	
l ·	No X	within a wetiai	iur res	No X	
Remarks: (Explain alternative procedures here or in a	separate report.)				
Significant rain from previous night					
VECETATION Lies esignific nomes of all					
VEGETATION – Use scientific names of pl		inant Indicator			
Tree Stratum (Plot size: 30 ft)	% Cover Spe		Dominance Test work	sheet:	
1			Number of Dominant Sp	nocios	
2			That Are OBL, FACW, of		(A)
3			Total Number of Domin	ant	_
4			Species Across All Stra		(B)
5			Percent of Dominant Sp		_
Sapling/Shrub Stratum (Plot size: 15 ft)	= Tota	l Cover	That Are OBL, FACW, of		(A/B)
1			Prevalence Index worl	ksheet:	
2.			Total % Cover of:	Multiply by:	
3.			OBL species	x 1 =	
4			FACW species	x 2 =	
5			FAC species	x 3 =	
5 ft)	= Total	Cover	FACU species	x 4 =	
Herb Stratum (Plot size: 5 ft)	90 Ye	es FAC	UPL species	x 5 =	
Poa pratensis Taraxacum officinale			Column Totals:	(A)	(B)
Cirsium arvense		o FACU	Prevalence Index		
4.		U TACU	Hydrophytic Vegetation	on Indicators:	
5				Hydrophytic Vegetation	
6.			X 2 - Dominance Te		
7.			3 - Prevalence Ind		
8			4 - Morphological		
9			(Provide supporting data i	in Remarks or on a separate she	eet)
10			Problematic Hydro	ophytic Vegetation¹ (Exp	lain)
00.6	100 = Total	Cover	¹ Indicators of hydric soil and wet disturbed or problematic.	land hydrology must be present,	, unless
Woody Vine Stratum (Plot size: 30 ft)			distance of problematic.		
1			Hydrophytic		
2			Vegetation Present? Yes	X No	
Developed the short of the shor	= Total	Covei			
Remarks: (Include photo numbers here or on a sep	arate Sileet.)				

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SOIL Sampling Point: SP02

Profile Desc	ription: (Describe	to the dep	oth needed to docu	ment th	e indica	tor or c	onfirm the absence of	of indicators.)		
Depth	Matrix			x Featur						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-7	10YR 4/4	100		0			Clay Loam			
7-21	10YR 4/4	100		0			Clay Loam	Mixed fill		
		· <u></u>								
		· ——								
		·								
		pletion, RI	M=Reduced Matrix,	MS=Mas	sked San	d Grains		Pore Lining, M		.:1-3.
Hydric Soil I	ndicators:						indicators	for Problemat	ic Hyaric Sc	olis":
Histosol (A	•		Sandy Gleyed M					Prairie Redox (A16	•	
	pedon (A2)		Sandy Redox (S	•				anganese Masses		
Black Hist	• •		Stripped Matrix (erent Material (F21	-	
	Sulfide (A4)		Dark Surface (S	-	,			hallow Dark Surfac		
	Layers (A5)		Loamy Mucky M				Other (Explain in Remark	S)	
2 cm Muc	к (А10) Below Dark Surface (A	11)	Loamy Gleyed M)					
	k Surface (A12)	11)	Depleted Matrix Redox Dark Surf							
	icky Mineral (S1)		Depleted Dark S		7)					
· ·	ky Peat or Peat (S3)		Redox Depression	-	′)					
	_ayer (if observed):	!	NOGOX BOPTOGON	3110 (1 0)						
Type: N/										
	nches): N/A						Hydric Soil Pres	ent? V	es l	No X
Remarks:							1 Hydrid Com 1 103			
rtomanto.										
HYDROLO	GV									
	drology Indicators:									
l _			uired; check all that	apply)			-	dicators (minimum	n of two require	<u>ed)</u>
Surface W	•		Water-Stained		30)			Soil Cracks (B6)		
	r Table (A2)		Aquatic Fauna		59)			e Patterns (B10)	20)	
Saturation			True Aquatic F		1)			ason Water Table (C n Burrows (C8)	,2)	
Water Mar			Hydrogen Sulf	-	•		· -	on Visible on Aerial	Imagery (C9)	
	Deposits (B2)		Oxidized Rhize		-	oots (C3)	·	or Stressed Plants		
Drift Depos	sits (B3)		Presence of R		_	. ,	' <u></u>	phic Position (D2)	(- ')	
Algal Mat o	or Crust (B4)		Recent Iron Re	eduction in	Tilled Soil	ls (C6)	' <u></u>	eutral Test (D5)		
Iron Depos	sits (B5)		Thin Muck Sur	face (C7)						
Inundation	Visible on Aerial Imager	y (B7)	Gauge or Well	Data (D9))					
Sparsely V	egetated Concave Surfa	ce (B8)	Other (Explain	in Remarl	ks)					
Field Obser										
Surface Wat				pth (incl						
Water Table				pth (incl						
Saturation P		es	No X De	epth (incl	nes):		Wetland Hydrology	y Present?	Yes	NoX
(includes car Describe Re		n gauge in	nonitoring well, aeria	l photos	. previou	s inspec	tions), if available			
	Bata (otrodii	. ggc, 11		. p. 10100	, _F . 5 1154	opou	, available.			
Remarks:										

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Scherers Switch and 138 kV Transmi	ssion Line Project	City/County:	Franklin	Sampling Date: 05/10/2022
Applicant/Owner: AEP Ohio Transmission Compa	ny, Inc.		State: Ohio	Sampling Point: SP03
Investigator(s): T. Gillette, S. Heitzenrater		Section	n, Township, Range: <u>T2N</u>	, R18W, SNW
Landform (hillside, terrace, etc.): Depression	Local	relief (concave, co	onvex, none): Concave	Slope %: 0
Subregion (LRR or MLRA):	at: 40.117569	[_ong: <u>-83.000408</u>	Datum: WGS84
Soil Map Unit Name: Pewamo silty clay loam, low	carbonate till, 0 to	2 percent slopes	NWI classification:	N/A
Are climatic / hydrologic conditions on the site typical f	or this time of year?	Yes	No (If no,	explain in Remarks.)
Are Vegetation $\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	No significantly dis	turbed? Are "	Normal Circumstances" prese	ent? Yes X No
Are Vegetation $\begin{tabular}{c c} N \end{tabular}$, Soil $\begin{tabular}{c c} N \end{tabular}$, or Hydrology	No naturally proble	ematic? (If ne	eded, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach site map s	showing sampling p	point locations, tr	ansects, important features	s, etc.
Hydrophytic Vegetation Present? Yes	X_ No	Is the Samp	lad Araa	
Hydric Soil Present? Yes	No X	within a Wet		No X
,	X No			
Remarks: (Explain alternative procedures here or in a	ı separate report.)			
VEGETATION – Use scientific names of p	lants.			
Ţ	Absolute Do	minant Indicato		
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)		<u>secies</u> <u>Status</u>	Dominance Test work	sheet:
1			Number of Dominant S	
2			That Are OBL, FACW,	or FAC: 1 (A)
3.			Total Number of Domin	nant
4. 5.			Species Across All Stra	ata: <u>1 (</u> B)
o	= To	tal Cover	Percent of Dominant S	•
Sapling/Shrub Stratum (Plot size: 15 ft)			That Are OBL, FACW,	
1			Prevalence Index wor Total % Cover of:	
2			_	wanpy by.
3				x 1 =
5.				x 2 =
5		al Cover	FAC species	
Herb Stratum (Plot size: 5 ft)		ar 00ver	FACU species	x 4 =
Phragmites australis	100	Yes FACW	UPL species	x5=
2	.		Column Totals:	(A)(B)
3	<u> </u>		Prevalence Inde	<u> </u>
4			Hydrophytic Vegetation	
5			_ ·	Hydrophytic Vegetation
6.				
7. 8.				
9.			4 - Morphological (Provide supporting data	Adaptations ¹ in Remarks or on a separate sheet)
10.			— Problematic Hydro	ophytic Vegetation¹ (Explain)
	100 = Tota	al Cover		etland hydrology must be present, unless
Woody Vine Stratum (Plot size: 30 ft)			disturbed or problematic.	
1	· 		1 ' ' '	
2			_ Vegetation Present? Yes	, X No
		al Cover	110001111 169	
Remarks: (Include photo numbers here or on a ser	parate sneet.)			

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SOIL Sampling Point: SP03

Profile Description: (Describe to the de	epth needed to docu	ment th	e indicat	or or co	onfirm the absence of	indicators.)
Depth Matrix		x Featur				
(inches) Color (moist) %	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-21 10YR 2/1 100					Silty Clay Loam	
	·					
<u> </u>						
¹ Type: C=Concentration, D=Depletion, F	RM=Reduced Matrix,	MS=Ma	sked San	d Grains		Pore Lining, M=Matrix.
Hydric Soil Indicators:					Indicators for	or Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Gleyed M	latrix (S4))		Coast Pra	airie Redox (A16)
Histic Epipedon (A2)	Sandy Redox (S	5)			Iron-Man	ganese Masses (F12)
Black Histic (A3)	Stripped Matrix	(S6)			Red Pare	ent Material (F21)
Hydrogen Sulfide (A4)	Dark Surface (S	7)			Very Sha	llow Dark Surface (F22)
Stratified Layers (A5)	Loamy Mucky M	-	•		Other (Ex	xplain in Remarks)
2 cm Muck (A10)	Loamy Gleyed N	//atrix (F2)			
Depleted Below Dark Surface (A11)	Depleted Matrix					
Thick Dark Surface (A12)	Redox Dark Sur		_,			
Sandy Mucky Mineral (S1)	Depleted Dark S	-	7)			
5 cm Mucky Peat or Peat (S3) Restrictive Layer (if observed):	Redox Depressi	ons (F8)			1	
Type: N/A						
						nt? Yes No X
Depth (inches): N/A					Hydric Soil Preser	nt? Yes No _^_
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:					Secondary Indi	cators (minimum of two required)
Primary Indicators (minimum of one is red	quired; check all that	apply)			Surface S	oil Cracks (B6)
X Surface Water (A1)	X Water-Stained	Leaves (I	39)		Drainage I	Patterns (B10)
High Water Table (A2)	Aquatic Fauna	(B13)			Dry-Seaso	on Water Table (C2)
X Saturation (A3)	True Aquatic I	Plants (B1	4)		Crayfish B	Burrows (C8)
Water Marks (B1)	Hydrogen Sulf	ide Odor (C1)		Saturation	Visible on Aerial Imagery (C9)
Sediment Deposits (B2)	Oxidized Rhiz	ospheres (on Living Ro	oots (C3)		r Stressed Plants (D1)
Drift Deposits (B3) Presence of Reduced Iron (C4)				nic Position (D2)		
Algal Mat or Crust (B4)	Recent Iron R		n Tilled Soil:	s (C6)	FAC-Neut	ral Test (D5)
Iron Deposits (B5)	Thin Muck Su					
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	Gauge or Wel					
Field Observations:	Other (Explain	ın Remar	KS)			
Surface Water Present Yes X	No De	epth (inc	hes):	6		
Water Table Present Yes		· epth (inc	· —			
Saturation Present Yes X		epth (inc		21	Wotland Usednalass	Procent2 Vec V No
(includes capillary fringe)		•	<i>'</i> —		Wetland Hydrology	Present? Yes X No
Describe Recorded Data (stream gauge,	monitoring well, aeria	l photos	, previous	s inspec	tions), if available:	
Remarks:						

Appendices July 25, 2022

C.2 ORAM FORMS

	Ohio Rapid Assessment Metho 10 Page Form for Wetland Cat	
Version 5.0	Background Information Scoring Boundary Worksheet	
, 0121011	Narrative Rating	Ohio EPA, Division of Surface Water
	Field Form Quantitative Rating ORAM Summary Worksheet	Final: February 1, 2001
	Wetland Categorization Worksheet	

Instructions

The investigator is *STRONGLY URGED* to read the Manual for Using the Ohio Rapid Assessment Method for Wetlands for further elaboration and discussion of the questions below prior to using the rating forms.

The Narrative Rating is designed to categorize a wetland or to provide alerts to the Rater based on the presence or possible presence of threatened or endangered species. The presence or proximity of such species is often an indicator of the quality and lack of disturbance of the wetland being evaluated. In addition, it is designed to categorize certain wetlands as very low quality (Category 1) or very high quality (Category 3) regardless of the wetland's score on the Quantitative Rating. In addition, the Narrative Rating also alerts the investigator that a particular wetland *may* be a Category 3 wetland, again, regardless of the wetland's score on the Quantitative Rating.

It is *VERY IMPORTANT* to properly and thoroughly answer each of the questions in the ORAM in order to properly categorize a wetland. To *properly* answer all the questions, the boundaries of the wetland being assessed must be correctly identified. Refer to Scoring Boundary worksheet and the User's Manual for a discussion of how to determine the "scoring boundaries." In some instances, the scoring boundaries may differ from the "jurisdictional boundaries."

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories. The most recent version of this document is posted on Ohio EPA's Division of Surface Water web page at: http://www.epa.ohio.gov/dsw/wetlands/WetlandEcologySection.aspx

Background Information

Name: Samantha Heitzenrater

Date:

7/6/2022

Affiliation:

Stantec

Address:

1500 Lake Shore Drive, Columbus, OH 43204

Phone Number:

614-607-2458

e-mail address:

samantha.heitzenrater@stantec.com

Name of Wetland: Wetland 1

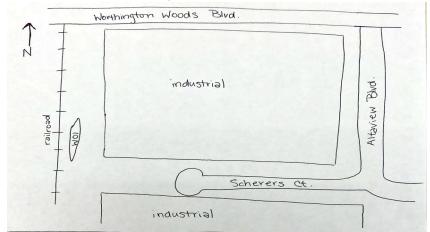
Vegetation Communit(ies):

PFM

HGM Class(es):

depression

Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.



Lat/Long or UTM Coordinate 40.11678, -83.003695	
USGS Quad Name NW Columbus	
County Franklin	
Township Sharon Township	
Section and Subsection 2N 18W	
Hydrologic Unit Code 050600011102	
Site Visit 7/6/2022	
National Wetland Inventory Map No	
Ohio Wetland Inventory Map No	
Soil Survey Franklin County Soil Survey	
Delineation report/map Wetland and Waterbody Delineation Report	

Name of Wetland: Wetland 1 Wetland Size (acres, hectares): 0.06 acres ${\bf Sketch: Include\ north\ arrow,\ relationship\ with\ other\ surface\ waters,\ vegetation\ zones,\ etc.}$ industrial MOI SPO .SP02 Scherers Court industrial Comments, Narrative Discussion, Justification of Category Changes: Final score: 21 Category: 1

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

Samantha Heitzenrater Scherers Switch and 138 kV Transmission 7/6/2022 Steps in properly establishing scoring boundaries done? not applicable Step 1 Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc. Identify the locations where there is physical evidence that hydrology Step 2 changes rapidly. Such evidence includes both natural and humaninduced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland. Step 3 Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary. Step 4 Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes. Step 5 In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately. Step 6 Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

Scherers Switch and 138 kV Transmissic

Samantha Heitzenrater

7/6/2022

#	Question	Circle one	
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	NO So to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain	YES	NO X
	an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	Wetland is a Category 3 wetland.	Go to Question 3
		Go to Question 3	
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland	Go to Question 4
		Go to Question 4	
4	Significant Breeding or Concentration Area. Does the wetland	YES YES	NO V
	contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	Wetland is a Category 3 wetland	Go to Question 5
		Go to Question 5	
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea, Lythrum salicaria</i> , or <i>Phragmites australis</i> , or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses,	YES	NO X
	particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	Wetland is a Category 3 wetland	Go to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that	Go to Question 7	NO NO
-	is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	Wetland is a Category 3 wetland Go to Question 8a	Go to Question 8a
8a	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics:	YES	NO X
	overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100	Wetland is a Category 3 wetland.	Go to Question 8b
	years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	Go to Question 8b	

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricta
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherodes
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumii
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellita
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwellii
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrewsii
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum		Helianthus grosseserratus
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicata
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflora
	Parnassia glauca	Schechzeria palustris		Lythrum alatum
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianum
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceum
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutans
	Salix candida	Vaccinium oxycoccos		Spartina pectinata
	Salix myricoides	Woodwardia virginica		Solidago riddellii
	Salix serissima	Xyris difformis		
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

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

Site: Scherers Switch and 138 kV Transmissi Rater(s): Samantha Heitzenrater **Date:** 7/6/2022 Metric 1. Wetland Area (size). 0 0 max 6 pts Select one size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts) 10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1.2 to <4ha) (3 pts) 0.3 to <3 acres (0.12 to <1.2ha) (2pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) ✓ <0.1 acres (0.04ha) (0 pts) Metric 2. Upland buffers and surrounding land use. 1 max 14 pts. subtotal 2a. Calculate average buffer width. Select only one and assign score. Do not double check. WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7) MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4) NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1) VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0) Intensity of surrounding land use. Select one or double check and average. VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7) LOW. Old field (>10 years), shrub land, young second growth forest. (5) MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3) ✓ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1) Metric 3. Hydrology. 8 max 30 pts. subtotal Sources of Water. Score all that apply. Connectivity. Score all that apply. High pH groundwater (5) 100 year floodplain (1) Other groundwater (3) Between stream/lake and other human use (1) Precipitation (1) Part of wetland/upland (e.g. forest), complex (1) Seasonal/Intermittent surface water (3) Part of riparian or upland corridor (1) Perennial surface water (lake or stream) (5) 3d. Duration inundation/saturation. Score one or dbl check. 3c. Maximum water depth. Select only one and assign score. Semi- to permanently inundated/saturated (4) Regularly inundated/saturated (3) >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2) Seasonally inundated (2) Seasonally saturated in upper 30cm (12in) (1) <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic regime. Score one or double check and average. None or none apparent (12) Check all disturbances observed Recovered (7) ditch point source (nonstormwater) Recovering (3) tile filling/grading Recent or no recovery (1) dike road bed/RR track weir dredging stormwater input Metric 4. Habitat Alteration and Development. 22 15 max 20 pts. subtotal 4a. Substrate disturbance. Score one or double check and average. None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1) Habitat development. Select only one and assign score. 4h Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) ✓ Poor to fair (2) Poor (1) Habitat alteration. Score one or double check and average. None or none apparent (9) Check all disturbances observed Recovered (6) mowina shrub/sapling removal Recovering (3) grazing herbaceous/aquatic bed removal Recent or no recovery (1) clearcutting sedimentation selective cutting dredging 22 woody debris removal farming toxic pollutants nutrient enrichment last revised 1 February 2001 jjm

Site: S	cherers	Switch and 138 kV Transmiss Ra	ater(s): Samant	ha Heitzenrater	Date: 7/6/2022
Su	22 Ibtotal first pa	ge	, ,		
0	22	Metric 5. Special Wet	lands.		
max 10 pts.	subtotal	Check all that apply and score as indicat Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wet Lake Erie coastal/tributary wet Lake Plain Sand Prairies (Oak Relict Wet Prairies (10) Known occurrence state/feder: Significant migratory songbird/ Category 1 Wetland. See Que	land-unrestricted hydrole land-restricted hydrole Openings) (10) al threatened or enda water fowl habitat or u	ogy (5) ingered species (10) usage (10)	
-1	21	Metric 6. Plant comm	unities, inte	erspersion, microto	pography.
max 20 pts.	subtotal	6a. Wetland Vegetation Communities.	Vegetation (Community Cover Scale	
		Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.24	
		Aquatic bed	1	Present and either comprises sma	all part of wetland's
		1 Emergent		vegetation and is of moderate qu	uality, or comprises a
		Shrub		significant part but is of low qual	-
		Forest	2	Present and either comprises sign	
		Mudflats		vegetation and is of moderate qu	uality or comprises a small
		Open water		part and is of high quality	
		Other	3	Present and comprises significant	part, or more, of wetland's
		6b. horizontal (plan view) Interspersion.		vegetation and is of high quality	
		Select only one.			
		High (5)		escription of Vegetation Quality	
		Moderate (2)	low	Low spp diversity and/or predomir	
		Moderate (3) Moderately low (2)	mod	disturbance tolerant native spec Native spp are dominant component	
		✓ Low (1)	mou	although nonnative and/or distur	•
		None (0)		can also be present, and specie	
		6c. Coverage of invasive plants. Refer		moderately high, but generally w	•
		to Table 1 ORAM long form for list. Add		threatened or endangered spp	vio presence of fare
		or deduct points for coverage	high	A predominance of native species	with nonnative spp
		Extensive >75% cover (-5)	9	and/or disturbance tolerant nativ	
		✓ Moderate 25-75% cover (-3)		absent, and high spp diversity a	
		Sparse 5-25% cover (-1)		the presence of rare, threatened	
		Nearly absent <5% cover (0)			
		Absent (1)	Mudflat and	Open Water Class Quality	
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
		Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 ac	res)
		0 Vegetated hummucks/tussuck	s 2	Moderate 1 to <4ha (2.47 to 9.88	acres)
		0 Coarse woody debris >15cm (6in) 3	High 4ha (9.88 acres) or more	
		0 Standing dead >25cm (10in) d	bh		
		Amphibian breeding pools		raphy Cover Scale	
			0	Absent	
			1	Present very small amounts or if n	nore common
				of marginal quality	
			2	Present in moderate amounts, but quality or in small amounts of high	
			3	Present in moderate or greater an	
			-	and of highest quality	
21			-		

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

Scherers Switch and 138 kV Transmissic

Samantha Heitzenrater

7/6/2022

		circle answer or insert	Result
		score	Result
Narrative Rating	Question 1 Critical Habitat	NO	If yes, Category 3.
	Question 2. Threatened or Endangered Species	NO	If yes, Category 3.
	Question 3. High Quality Natural Wetland	NO	If yes, Category 3.
	Question 4. Significant bird habitat	NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	NO	If yes, Category 1.
	Question 6. Bogs	NO	If yes, Category 3.
	Question 7. Fens	NO	If yes, Category 3.
	Question 8a. Old Growth Forest	NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	NO	If yes, Category 3
	Question 11. Relict Wet Prairies	NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
, and the second	Metric 2. Buffers and surrounding land use	1	
	Metric 3. Hydrology	7	
	Metric 4. Habitat	14	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-1	
	TOTAL SCORE	21	Category based on score breakpoints Category 1

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	Wetland is categorized as a Category 3 wetland	NO X	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	Wetland should be evaluated for possible Category 3 status	NO X	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	Wetland is categorized as a Category 1 wetland	NO X	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold <i>(including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO X	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Final Category					
Choose one	Category 1	Category 2	Category 3		
Category 1					

End of Ohio Rapid Assessment Method for Wetlands.

Appendices July 25, 2022

Appendix D REPRESENTATIVE PHOTOGRAPHS

D.1 WETLAND AND WATERBODY PHOTOGRAPHS





Photo Location 1. View of wetland determination sample point SP01, PEM in Wetland 1. Photograph taken facing north.



Photo Location 1. View of wetland determination sample point SP01 soil profile.





Photo Location 2. View of Wetland 1. Photograph taken facing north.



Photo Location 2. View of Wetland 1. Photograph taken facing east.





Photo Location 2. View of Wetland 1. Photograph taken facing south.



Photo Location 2. View of Wetland 1. Photograph taken facing west.





Photo Location 3. View of wetland determination sample point SP02, upland. Photograph taken facing south.



Photo Location 3. View of wetland determination sample point SP02 soil profile.





Photo Location 4. View of wetland determination sample point SP03, upland. Photograph taken facing southeast.



Photo Location 4. View of wetland determination sample point SP03 soil profile.





Photo Location 5. View of sediment basin. Photograph taken facing southeast.



Photo Location 5. View of sediment basin. Photograph taken facing southwest.

Appendices July 25, 2022

D.2 HABITAT PHOTOGRAPHS





Photo Location 1. View of scrub shrub habitat. Photograph taken facing west.



Photo Location 1. View of scrub shrub and industrial habitat. Photograph taken facing north.





Photo Location 1. View of fenced industrial habitat, with pond NWI. Photograph taken facing east.



Photo Location 2. View of storm drain and culvert. Photograph taken facing south.





Photo Location 2. View of storm drain and culvert.



Photo Location 3. View of existing roadway and maintained lawn habitat. Photograph taken facing east.





Photo Location 3. View of scrub shrub and fenced industrial habitat. Photograph taken facing north.



Photo Location 3. View of scrub shrub, maintained lawn, and industrial habitat. Photograph taken facing south.





Photo Location 4. View of scrub shrub habitat. Photograph taken facing south.



Photo Location 5. View of storm drain. Photograph taken facing north.





Photo Location 5. View of storm drain. Photograph taken facing south.



Photo Location 6. View of storm drain. Photograph taken facing north.





Photo Location 6. View of storm drain. Photograph taken facing south.



Photo Location 7. View of existing roadway and maintained lawn habitat. Photograph taken facing east.





Photo Location 7. View of existing roadway and maintained lawn habitat. Photograph taken facing west.



Photo Location 8. View of storm drains. Photograph taken facing northwest.





Photo Location 9. View of existing roadway, maintained lawn, and industrial habitat. Photograph taken facing north.



Photo Location 9. View of maintained lawn and industrial habitat. Photograph taken facing east.





Photo Location 9. View of existing roadway, maintained lawn, and industrial habitat. Photograph taken facing south.



Photo Location 9. View of existing roadway, maintained lawn, and industrial habitat. Photograph taken facing west.





Photo Location 10. View of storm drain. Photograph taken facing east.



Photo Location 10. View of storm drain. Photograph taken facing west.





Photo Location 11. View of storm drain with inlet protection. Photograph taken facing west.



Photo Location 12. View of old field area. Photograph taken facing east.





Photo Location 12. View of old field area. Photograph taken facing west.

Appendices July 25, 2022

Appendix E AGENCY CORRESPONDENCE



Office of Real Estate John Kessler, Chief 2045 Morse Road – Bldg. E-2

MARY MERTZ, DIRECTOR

Columbus, OH 43229 Phone: (614) 265-6621 Fax: (614) 267-4764

June 14, 2022

Mattew Teitt Stantec 1500 Lake Shore Drive, Suite 100 Columbus OH 43204

Re: 22-0547; AEP Scherers Switch and Line Extension

Project: The proposed project involves the partial removal and extension of the existing Greif-Huntley 138 kV Line, new installation of Scherers Switch, and new construction of the Scherers-Cologix 138 kV Line.

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

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

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

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

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

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

The entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these species of bats

predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, these species are also dependent on the forest structure surrounding roost trees. If trees are present within the project area, and trees must be cut, the DOW recommends cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH ≥ 20 if possible. If trees are present within the project area, and trees must be cut during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 through August 15, prior to any cutting. Mist net and acoustic surveys should be conducted in accordance with the most recent version of the "OHIO DIVISION OF WILDLIFE GUIDANCE FOR BAT SURVEYS AND TREE CLEARING". If state listed bats are documented, DOW recommends cutting only occur from October 1 through March 31. However, limited summer tree cutting may be acceptable after consultation with the DOW (contact Eileen Wyza at Eileen.Wyza@dnr.ohio.gov).

The DOW also recommends that a desktop habitat assessment is conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the project area. Direction on how to conduct habitat assessments can be found in the current USFWS "Range-wide Indiana Bat 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 (Megalonaias nervosa)

Ohio pigtoe (*Pleurobema cordatum*)

State Threatened

black sandshell (Ligumia recta)

pondhorn (*Uniomerus tetralasmus*)

fawnsfoot (*Truncilla donaciformis*)

threehorn wartyback (Obliquaria reflexa)

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

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

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*)
Tippecanoe darter (*Etheostoma tippecanoe*)
paddlefish (*Polyodon spathula*)

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

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

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

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

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

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

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

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

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

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

The <u>local floodplain administrator</u> 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 U.S. Fish and Wildlife Service Ecological Services Office 4625 Morse Road, Suite 104 Columbus, Ohio 43230 (614) 416-8993 / Fax (614) 416-8994



Project Code # 2022-0041784

Dear Mr. Teitt,

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

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

Seasonal Tree Clearing for Federally Listed Bat Species: Should the proposed project site contain trees ≥3 inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, we recommend removal of any trees ≥3 inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule (see http://www.fws.gov/midwest/endangered/mammals/nleb/index.html), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is

recommended where Indiana bats are assumed present.

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

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

Stream and Wetland Avoidance: Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus 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, Acting Environmental Services Administrator, at (614) 265-6387 or at mike.pettegrew@dnr.state.oh.us.

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

Sincerely,



Patrice M. Ashfield Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW

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

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in

Case No(s). 23-0836-EL-BLN

Summary: Letter of Notification Huntley 138 kV Extension Cut-in, Scherers Switch, and Scherers SwitchAlexander 138kV Transmission Line Project electronically filed by Hector Garcia-Santana on behalf of Ohio Power Company.