

Construction Notice Biers Run-Circleville 138 kV Cut-In (Westfall Station) Project



An **AEP** Company

BOUNDLESS ENERGYSM

PUCO Case No. 22-1009-EL-BNR

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

Submitted by:
AEP Ohio Transmission Company, Inc.

November 7, 2022

Construction Notice for Biers Run-Circleville 138 kV Cut-In (Westfall Station) Project

Construction Notice

AEP Ohio Transmission Company, Inc. Biers Run-Circleville 138 kV Cut-In (Westfall Station)

4906-6-05

AEP Ohio Transmission Company, Inc. (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 Construction Notice.

The Company has identified the need to construct the Biers Run-Circleville 138 kV Cut-In (Westfall Station) Project (the “Project”), located in the southeast corner of the intersection of Hickory Bend Road and Westfall Road in Wayne Township, Pickaway County, Ohio. The Project consists of constructing a new 0.1-mile transmission line cut-in to the proposed Westfall Station (approved in Case No. 22-0253-EL-BLN) to provide electricity to a wholesale customer, South Central Power Company (“South Central”). A 138 kV transmission tie line between Westfall Station and South Central’s station will also be filed with OPSB under separate cover. The location of the Project is shown on Figure 1 and Figure 2 in Appendix A.

The Project meets the requirements for a Construction Notice because it is within the types of projects defined by item 1a 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:*
 - a. Line(s) not greater than 0.2 miles in length.*

The Project has been assigned PUCO Case No. 22-1009-EL-BNR.

B(2) Statement of Need

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

A neighboring electrical system, South Central, is interconnected to the Company’s West Lancaster Station at 69 kV. South Central has requested that the Company provide 138 kV service to a new delivery point named “Westfall” located in Circleville, Ohio. South Central has requested a new 138 kV delivery from the

Construction Notice for Biers Run-Circleville 138 kV Cut-In (Westfall Station) Project

Company into their 69 kV network in order to address reliability concerns related to the limited number of sources to their existing system. The scope of this project entails tapping the Company's Biers Run – Circleville 138 kV circuit and installing a greenfield 138 kV three-breaker ring bus station, Westfall Station. From the Westfall Station, a single circuit 138 kV line will be built to South Central's non-jurisdictional substation. Loading at the proposed delivery point is projected to be 42.5 MW in 2022 and a growth rate of 2% per year. South Central has requested an in-service date of March 31, 2023.

Failure to move forward with the proposed project will result in the inability to address South Central's concerns about exposure on their 69 kV transmission line and minimize system impacts during contingency.

The need and solution for the entire project was presented and reviewed with stakeholders at the December 2020 and July 2021 PJM SRRTEP meetings, see Appendix B. The project was subsequently assigned PJM supplemental number s2579. The project is included in the Company's LTFR on page 196 - FE - T10 Summary of proposed substations (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 and proposed transmission lines and substation is shown in Figure 1 of Appendix A.

B(4) Alternatives Considered

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

The layouts of the customer's property, customer station, and Westfall Station create engineering constraints for the Project due to the limited area of the overall property. The restricted space resulted in a south-facing bay for the proposed station resulting in a preferred south entrance by the proposed transmission line cut-in. The proposed alignment is the only feasible alternative without major cost increases and schedule delays due to an increase in the number of structures required, types of structures, and material procurement delays associated with these additional structures. The selected Westfall Station site and transmission line interconnections are located on land most recently used for agriculture but has been zoned for industrial use. While one stream will be spanned, the proposed Project will result in no impacts to wetlands, streams, or known cultural resource areas eligible for the National Register of Historic Places (NRHP). The necessary easements for the Project have already been acquired. Therefore, this alternative represents the most suitable location and is the most appropriate solution for meeting the Company and South Central's needs in the area.

Construction Notice for Biers Run-Circleville 138 kV Cut-In (Westfall Station) Project

B(5) Public Information Program

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

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

B(6) Construction Schedule

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

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

B(7) Area Map

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

Figure 1 in Appendix A provides the proposed Project area on a map of 1:24,000-scale (1 inch equals 2,000 feet), showing the Project on the United States Geological Survey (USGS) 7.5-minute topographic map of the Williamsport, Ohio quadrangle. Figure 2 in Appendix A shows the Project Area on recent aerial photography, dated 2019, as provided by Pickaway County GIS website at a scale of 1:2,400 scale (1 inch equals 200 feet).

To visit the Project site from Columbus, Ohio, take I-70 West to exit #104 for Frank Road toward OH-104. Merge onto Frank Road and turn right onto OH-104. Travel south on OH-104 for approximately 26.5 miles. Turn right on Hickory Bend Road and travel west for approximately 0.3 mile. The property is on the right (south), at latitude 39.552349°, longitude -83.016238°.

B(8) Property Agreements

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

The proposed Westfall Station is located on one parcel, Parcel Number P33-0-001-00-096-02, which is owned by the South Central Power Company. The Company currently has entered into a right of entry agreement with the customer and is in discussion with the customer to purchase the property for the station. The remaining portion of the transmission line cut-in extends onto Parcel Number P33-0-010-00-096-00. A supplemental easement has been secured for that portion of the Project. Once the purchase of the station property is completed, no other property easements, options, or land use agreements are necessary to construct the Project. The transfer of the station property to the Company is anticipated prior to the start of construction.

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.

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:	Biers Run-Circleville 138 kV
Ownership:	AEP Ohio Transmission Company, Inc.
Voltage:	138 kV
Conductors:	(3) 1590 KCMIL 54/19 ACSR FALCON CONDUCTOR
Static Wire:	7#8 Alumoweld
Insulators:	Polymer
ROW Width:	100 feet
Structure Type:	(2) Single Circuit, Monopole Deadend, custom concrete pier foundation & (1) single circuit, direct-embed guyed steel structure

B(9)(b) Electric and Magnetic Fields

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

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

B(9)(c) Project Cost

The estimated capital cost of the project.

The capital cost estimate for the proposed Project, which is comprised of applicable tangible and capital costs, is approximately \$650,000 using a Class 4 estimate. Pursuant to the PJM OATT, the costs for this Project will be recovered in the AEP Ohio Transmission Company Inc.'s FERC formula rate (Attachment H-20 to the PJM OATT) and allocated to the AEP Zone.

B(10) Social and Economic Impacts

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

B(10)(a) Land Use Characteristics

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

An aerial photograph of the Project vicinity is provided as Figure 2 in Appendix A. The Project is located in Wayne Township, Pickaway County, Ohio. Land use in the Project Area consists of agricultural fields, wooded areas, and scattered residences. The Project site is part of an area within Wayne Township that is currently fallow but was formerly used for agriculture. The closest residence is approximately 500 feet from the Project.

B(10)(b) Agricultural Land Information

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

The Westfall Station property is currently fallow but formerly used for agriculture, most recently in production with row crops. A portion of the property crossed to the south is also used for agriculture. The Pickaway County Auditor provided a list of parcels registered as Agricultural District Land on October 25, 2022. The property crossed to the south of the Westfall Station is registered as an Agricultural District Land parcel. Approximately 0.4 acre of Agricultural District Land is proposed within transmission right-of-

Construction Notice for Biers Run-Circleville 138 kV Cut-In (Westfall Station) Project

way. One new structure is proposed on the existing centerline at the edge the field of the Agricultural District Land parcel. The small footprint of this structure is the only conversion of agricultural land that will occur.

B(10)(c) Archaeological and Cultural Resources

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

The Company's consultant completed a Phase I Archaeological Investigation of the Project Area. Ohio Archaeological Inventory (OAI) #33PI1250 was previously identified in 2014 and recommended as not eligible for listing in the NRHP. Therefore, it was not re-identified during the current survey. No new archaeological sites were identified. One previously surveyed architectural resource (PIC0071713) and one newly identified property 50 years of age or older were identified within the Area of Potential Effects (APE). The Company's consultant recommended, and the Ohio Historic Preservation Office ("SHPO") agreed, that the newly identified property is not eligible for listing in the NRHP. The PIC0071713 property has previously been determined eligible for listing in the NRHP; however, visibility of the new station should not impact the significance or integrity of the historic property in a way that would alter its NRHP eligibility. Therefore, SHPO concurred that the project should have no adverse effect on historic properties and no further coordination is necessary unless the project changes or additional resources are discovered during implementation of the project. Correspondences with the SHPO is provided in Appendix C.

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

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

A Notice of Intent will be filed with the Ohio Environmental Protection Agency for authorization of construction storm water discharges under General Permit OHCD000005. 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 stream and no wetlands are located in the Project Area (see Appendix D). No impacts to the stream are proposed. Therefore, the Project will not require a Clean Water Act Section 404 Permit from the U.S. Army Corps of Engineers with Section 401 Water Quality Certification from the Ohio Environmental Protection Agency (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 **39129C0300J**). Based on this mapping, no mapped FEMA floodplains are located in the Project Area. Therefore, no floodplain permit will be required for this Project

Construction Notice for Biers Run-Circleville 138 kV Cut-In (Westfall Station) 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 June 28, 2021 response letter from the USFWS (see Appendix C) indicated that seasonal tree clearing would be required if bat habitat trees were identified. Tree clearing will be limited to a narrow stream crossing south of the proposed Westfall Station. Trees will be cleared between October 1 and March 31. Due to the Project type, size, and location, USFWS does not anticipate adverse effects to any federally endangered, threatened, proposed, or candidate species.

A coordination letter was submitted to the Ohio Department of Natural Resources (“ODNR”) Division of Wildlife (“DOW”) Ohio Natural Heritage Program (“ONHP”) and the ODNR - Office of Real Estate seeking an environmental review of the proposed Project for potential impacts on state-listed and federally-listed threatened or endangered species. Correspondence from ODNR’s DOW/OHNP and the ODNR – Office of Real Estate was received on July 16, 2021 (see Appendix B).

According to the ODNR-DOW, the Project 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, and the little brown bat (*Myotis lucifugus*), a state endangered species. ODNR also commented that the Project is in the vicinity of records for the northern long-eared bat, little brown bat, and tricolored bat (*Perimyotis subflavus*), a state endangered species. Due to the record of these species in the vicinity of the Project and related buffer area, additional summer surveys would not constitute presence/absence in the area. The ODNR recommends cutting between October 1 and March 31. If cutting must occur during summer months, the ODNR recommends additional coordination with ODNR. Tree clearing will be limited to a narrow stream crossing south of the proposed Westfall Station. Trees will be cleared between October 1 and March 31.

The ODNR-DOW indicated that the Project is within the range of 12 fish species and 19 mussel species. Due to no in-water work and habitat, these species are not anticipated to be impacted by the Project. In addition, the ODNR lists the project in the range of the lark sparrow (*Chondestes grammacus*), northern harrier (*Circus hudsonis*), and upland sandpiper (*Bartramia longicauda*), which are state endangered birds, and the least bittern (*Ixobrychus exilis*) and sandhill crane (*Grus canadensis*), which are state threatened birds. Based on the ecological survey, habitat for these species is not located in the Project Area, therefore no impacts to these avian 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 no areas of ecological concern in or near the Project Area.

Correspondence received from the USFWS indicated no federal wilderness areas, wildlife refuges, or designated critical habitat in the Project vicinity (see Appendix B).

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 **39129C0300J**). Based on these maps, no mapped FEMA floodplains are located in the Project area.

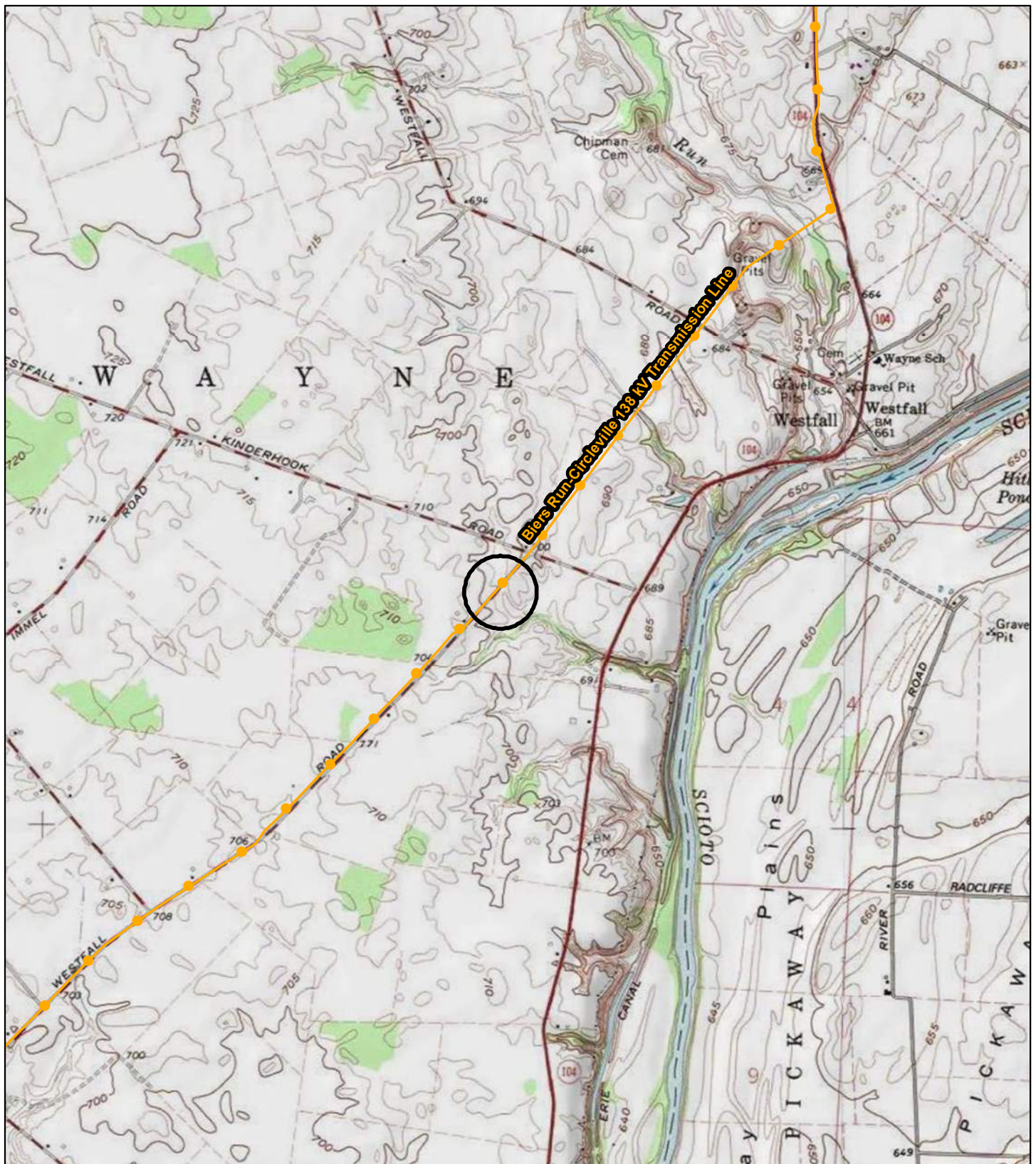
Wetland and stream delineation field surveys were completed within the Project area by the Company's consultant in August 2021. One intermittent stream, and no wetlands, were identified within in the Project Area (see Figure 2 in Appendix C).

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



 Project

 Existing Transmission Line (138 kV)

Data Sources: AEP, USGS 7.5'
Topographic Quadrangles
(Williamsport, Ohio and
Circleville, Ohio)

Ohio State Plane South
NAD 1983

October 26, 2022

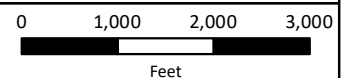
PROJECT LOCATION

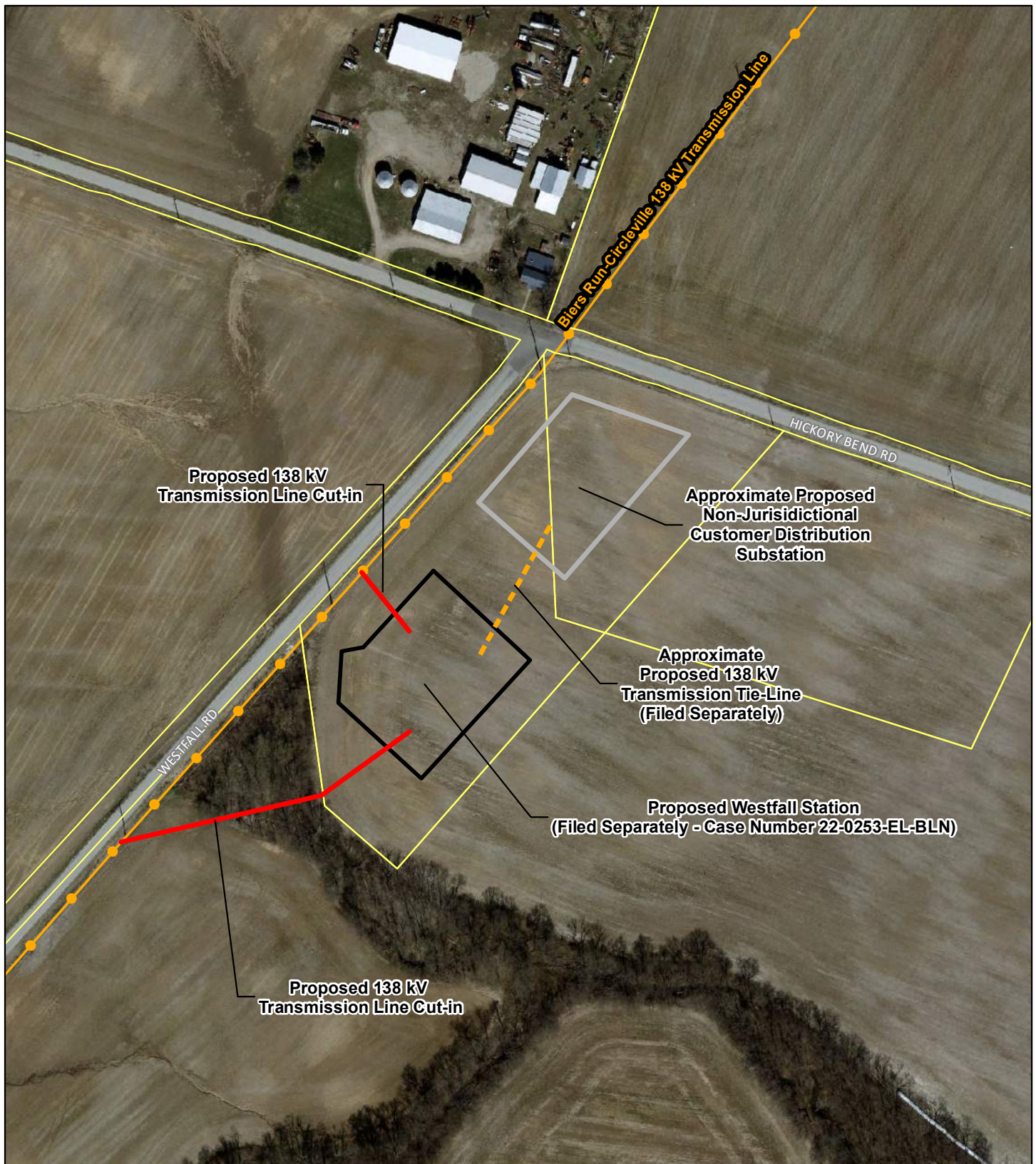


PICKAWAY COUNTY, OHIO

FIGURE 1
TOPOGRAPHIC OVERVIEW

**Biers Run-Circleville
138 kV Cut-in
(Westfall Station)**





Legend:

- Proposed 138 kV Cut-in
- - - Proposed 138 kV Tie Line (Filed Separately)
- Proposed Westfall Station Fence (Filed Separately)
- Existing Transmission Line (138 kV)
- Proposed Non-Jurisdictional Customer Distribution Substation
- Parcel Boundary

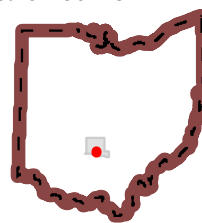
Data Sources:
Ohio Statewide Imagery
Program (OSIP) (2019)

Ohio State Plane South
NAD 1983



October 26, 2022

PROJECT LOCATION

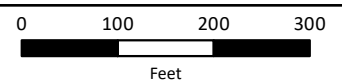


PICKAWAY COUNTY, OHIO

**FIGURE 2
PROJECT AERIAL MAP**



**Biers Run-Circleville
138 kV Cut-in
(Westfall Station)**



Appendix B Long Term Forecast Report and PJM Solution

PUCO Form FE-T10
AEP Ohio
Summary of Proposed Substations

Westfall (S2579 TP2020174)	138 kV	T	2022 - 2023	Biers Run - Westfall 138kV	P	Approx. 4
Westfall (S2579 TP2020174)	138 kV	T	2022 - 2023	Circleville - Westfall 138kV	P	Approx. 4
Rader Road (B3273 TP2020017)	138 kV	D	2023 - 2024	East Leipsic - New Liberty 138kV	P	1.52
Wildcat (AC1-089 TP2018096)	138 kV	T	2022	Wildcat - Willowbrook Solar (IPP) 138kV	E	0.47
Fazeysburg (AD1-015 TP2020089)	138 kV	T	2022 - 2023	Fazeysburg – Ohio Central 138 kV	P	Approx. 4
Fazeysburg (AD1-015 TP2020089)	138 kV	T	2022 - 2023	Fazeysburg - Reform 138 kV	P	Approx. 4
Fazeysburg (AD1-015 TP2020089)	138 kV	T	2022 - 2023	Fazeysburg - Muskingum Solar (IPP) 138 kV	P	Approx. 4
Lockwood Road (AF1-063 TP2020269)	138 kV	T	2022 - 2023		E	TBD
Lockwood Road (AF1-063 TP2020269)	138 kV	T	2022 - 2023	Richland (FE) – Lockwood Road 138kV	E	TBD
Lockwood Road (AF1-063 TP2020269)	138 kV	T	2022 - 2023	Lockwood – Cepheus (IPP) 138kV	E	TBD
Elk (AC1-194 TP2019174)	138 kV	D	2022	Corwin - Elk 138kV	E	TBD
Elk (AC1-194 TP2019174)	138 kV	D	2022	Elk - Lemaster 138kV	E	TBD
Elk (AC1-194 TP2019174)	138 kV	D	2022	Elk - Vinton 138kV	E	TBD

AEP Transmission Zone M-3 Process Westfall Delivery Point

Need Number: AEP-2020-OH049

Process Stage: Solutions Meeting 07/16/2021

Previously Presented: Needs Meeting 12/18/2020

Project Driver:

Equipment Material/Condition/Performance/Risk

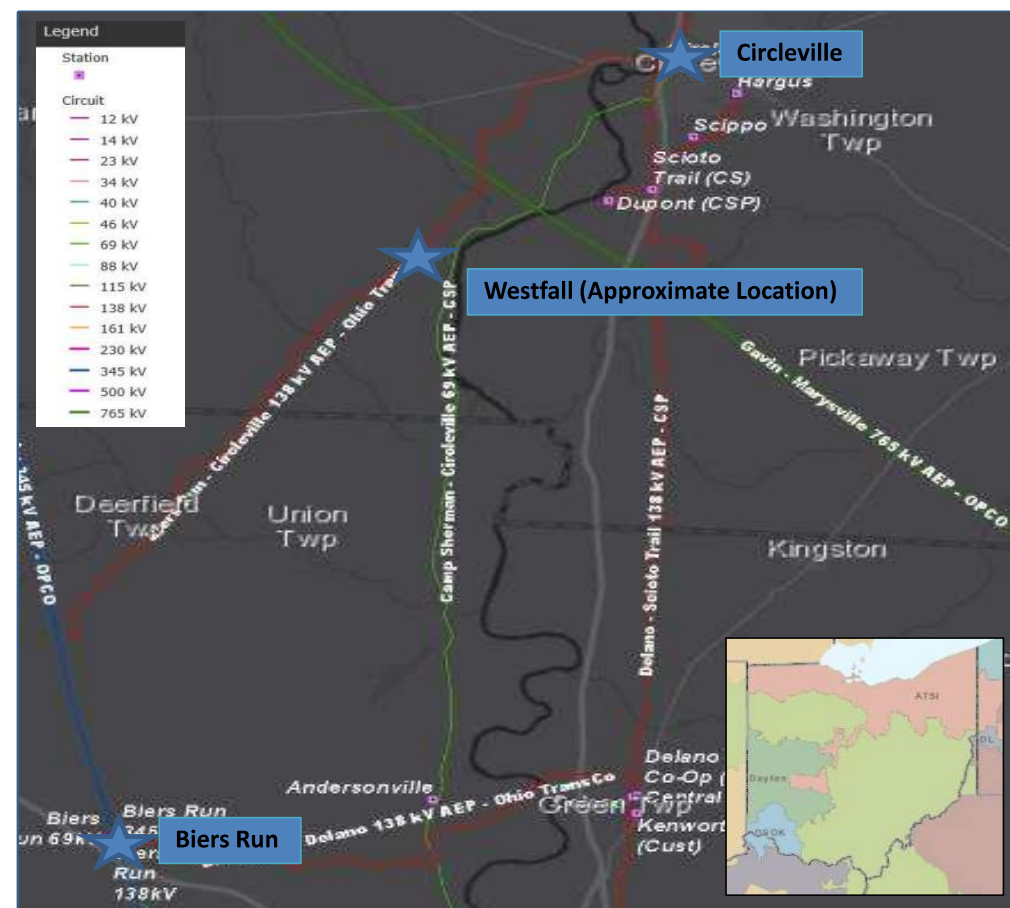
Specific Assumption Reference:

AEP Guidelines for Transmission Owner Identified Needs

Problem Statement:

Westfall Delivery Point (SCP) 138kV:

- Buckeye Power Inc., on behalf of South Central Power Company, has requested transmission service in Wayne Township, Pickaway County, Ohio.
- SCP currently has a radial 69 kV line served out of AEP's West Lancaster Station with a load of approximately 42.5 MW in 2022 and growth at a rate of 2% per year.
- South Central Power Company would like a new transmission delivery point on the on the other end of this long 69 kV radial line (44 miles of exposure; 5 delivery points).
- Service is requested by March 2022.





AEP Transmission Zone M-3 Process Westfall Delivery Point

Need Number: AEP-2020-OH049

Process Stage: Solutions Meeting 7/16/21

Proposed Solution:

Westfall 138 kV Station: Build a new greenfield 138 kV three breaker ring configured station. The three breakers installed will be 138kV 40kA 3000A. 138 kV revenue metering equipment will be installed.

Estimated Cost: \$5.316 M

Westfall-Westfall (SCP) Customer 138 kV: Install a 0.02 mile 138 kV single circuit line between Westfall and Westfall (SCP) customer station. **Estimated Cost: \$0.116 M**

Biers Run-Circleville 138kV: Tap the existing Biers Run-Circleville 138kV line, removing 0.1 miles and adding 2 dead-end structures in order to cut the line into the new AEP Westfall station. Extend the telecom fiber into Westfall station for relaying / communication. **Estimated Cost: \$1.005 M**

Circleville 138 kV Station: Update remote end relay settings and telecom electronics. **Estimated Cost: \$0.04 M**

Lutz 138 kV Station: Update remote end relay settings and telecom electronics. **Estimated Cost: \$0.04 M**

Total Estimated Transmission Cost: \$6.517 M

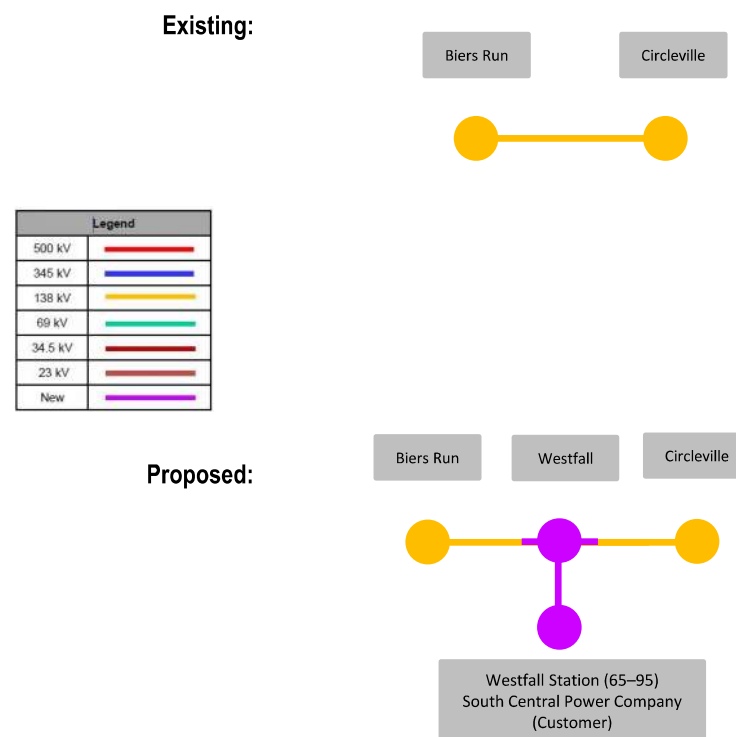
Alternatives Considered:

Considering the location of the requested customer delivery point, no other viable alternates were considered.

Projected In-Service: 3/1/2023

Project Status: Scoping

Model: 2025 RTEP



Appendix C Agency Coordination



In reply, refer to
2021-PIC-52237

September 14, 2021

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

RE: Westfall Station Project, Wayne Township, Pickaway County, Ohio

Dear Mr. Weller:

This letter is in response to the correspondence received August 16, 2021 regarding the proposed Westfall Station Project, Wayne Township, Pickaway County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code and the Ohio Power Siting Board rules for siting this project (OAC 4906-5). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The following comments pertain to the *Phase I Archaeological Investigations for the Approximately 3.4 ha (8.5 ac) Westfall Station Project in Wayne Township, Pickaway County, Ohio* by Ryan J. Weller (Weller & Associates, Inc., 2021).

A literature review, visual inspection, and surface collection was completed as part of the investigations. One (1) previously identified archaeological site is located within the project area. Ohio Archaeological Inventory (OAI)# 33PI1250 was previously identified in 2014 as part of the Biers Run-Circleville 138kV Transmission Line Rebuild Project (2014-ROS-27022). The site was previously recommended not eligible for listing in the National Register of Historic Places (NRHP) and was not reidentified during this survey. No new archaeological sites were identified during survey. Our office agrees no further archaeological survey is necessary.

The following comments pertain to the *History/Architecture Investigations for the Approximately 3.4 ha (8.5 ac) Westfall Station Project in Wayne Township, Pickaway County, Ohio* by Scott McIntosh (Weller & Associates, Inc., 2021).

A literature review and field survey were completed as part of the investigations. One (1) previously surveyed architectural resource (PIC0071713) and one newly identified property 50 years of age or older were identified within the Area of Potential Effects (APE). The PIC0071713 property has previously been determined eligible for listing in the NRHP under Criterion C. It is Weller's recommendation that the newly identified property is not eligible for listing in the NRHP. Our office agrees with Weller's recommendation of eligibility.

While the project will be visible from the OHI PIC0071713 resource, visibility of the new station should not impact the significance or integrity of the historic property in a way that would alter its NRHP eligibility. Therefore, our office concurs that the work as proposed should have no adverse effect on historic properties.

Based on the information provided, we agree that the project as proposed will have no adverse 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, or Joy Williams at jwilliams@ohiohistory.org. Thank you for your cooperation.

Sincerely,

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

Krista Horrocks, Project Reviews Manager
Resource Protection and Review

RPR Serial No: 1089682-1089683

Scott Denham

From: Ohio, FW3 <ohio@fws.gov>
Sent: Monday, June 28, 2021 11:16 AM
To: Josh Holmes
Cc: nathan.reardon@dnr.state.oh.us; Parsons, Kate; Grant S Stuller; Michael Wellman
Subject: AEP Westfall Delivery Point Project, Wayne Township, Pickaway County, Ohio

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

TAILS# 03E15000-2021-TA-1593

Dear Mr. Holmes,

The U.S Fish and Wildlife Service (Service) has received your recent correspondence requesting information about the subject proposal. We offer the following comments and recommendations to assist you in minimizing and avoiding adverse impacts to threatened 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,

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

Patrice Ashfield
Field Office Supervisor
cc: Nathan Reardon, ODNR-DOW
Kate Parsons, ODNR-DOW



Ohio Department of Natural Resources

MIKE DeWINE, GOVERNOR

MARY MERTZ, DIRECTOR

Office of Real Estate

John Kessler, Chief

2045 Morse Road – Bldg. E-2

Columbus, OH 43229

Phone: (614) 265-6621

Fax: (614) 267-4764

July 16, 2021

Josh Holmes

Environmental Solutions & Innovations, Inc.

1341 Old Freedom Road, Suite 202

Cranberry Township, PA 16066

Re: 21-0568; AEP Westfall Delivery Point Project

Project: AEP proposes to construct a new substation (Westfall Delivery Point Station) and tap into the adjacent transmission line.

Location: The proposed project is located in the Wayne Township, Pickaway County, Ohio.

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

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

Pale umbrella-sedge (*Cyperus acuminatus*), P

Burhead (*Echinodorus berteroi*), T

Butterfly (*Ellipsaria lineolata*), E

Long-solid (*Fusconaia subrotunda*), E

Black Sandshell (*Ligumia recta*), T

Clubshell (*Pleurobema clava*), E, FE

Ohio pigtoe (*Pleurobema cordatum*), E

Pyramid pigtoe (*Pleurobema rubrum*), E

Round pigtoe (*Pleurobema sintoxia*), SC

Fawnsfoot (*Truncilla donaciformis*), T

Tippecanoe darter (*Etheostoma tippecanoe*), T

Circleville Canal Wildlife Area – ODNR Division of Wildlife

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

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

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

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

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

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

In addition, the entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these 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”. <https://ohiodnr.gov/static/documents/wildlife/wildlife-management/Bat+Survey+Guidelines.pdf>

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

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

Federally Endangered

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

Federally Threatened

rabbitsfoot (*Quadrula cylindrica cylindrica*)

State Endangered

butterfly (*Ellipsaria lineolata*)
ebonyshell (*Fusconaia ebenus*)
elephant-ear (*Elliptio crassidens*)
long-solid (*Fusconaia maculata maculata*)
Ohio pigtoe (*Pleurobema cordatum*)
pyramid pigtoe (*Pleurobema rubrum*)
sharp-ridged pocketbook (*Lampsilis ovata*)
washboard (*Megaloniaias nervosa*)

State Threatened

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

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

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

Federally Endangered

Scioto madtom (*Noturus trautmani*)

State Endangered

bigeye shiner (*Notropis boops*)
goldeye (*Hiodon alosoides*)
northern brook lamprey (*Ichthyomyzon fossor*)
northern madtom (*Noturus stigmosus*)
shortnose gar (*Lepisosteus platostomus*)
spotted darter (*Etheostoma maculatum*)
shovelnose sturgeon (*Scaphirhynchus platyrhynchus*)

State Threatened

blue sucker (*Cycleptus elongatus*)
lake chubsucker (*Erimyzon sucetta*)
paddlefish (*Polyodon spathula*)

Tippecanoe darter (*Etheostoma tippecanoe*)

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 lark sparrow (*Chondestes grammacus*), a state endangered bird. This sparrow nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. In the Oak Openings area west of Toledo, lark sparrows occupy open grass and shrubby fields along sandy beach ridges. These summer residents normally migrate out of Ohio shortly after their young fledge or leave the nest. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 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 U.S. Fish & Wildlife Service.

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

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

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

ODNR appreciates the opportunity to provide these comments. Please contact Sarah Tebbe, Environmental Specialist, at Sarah.Tebbe@dnr.ohio.gov if you have questions about these comments or need additional information.

Mike Pettegrew
Environmental Services Administrator (Acting)

Appendix D Ecological Survey Report

ECOLOGICAL SURVEY REPORT
FOR THE
WESTFALL STATION TR 380 INSTALL PROJECT
WAYNE TOWNSHIP
PICKAWAY COUNTY, OHIO

11 August 2021

Prepared for:



American Electric Power
8600 Smith Mill Road
New Albany, OH 43054

Prepared by:



Environmental Solutions & Innovations, Inc.

4525 Este Avenue
Cincinnati, Ohio 45232
Phone: (513) 451-1777
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Ravenna, OH • Indianapolis, IN • Orlando, FL • Springfield, MO • Pittsburgh, PA • Teays Valley, WV

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION.....	1
2.0 METHODS	1
2.1 Desktop Evaluation	1
2.2 Threatened and Endangered Species	1
2.3 Aquatic Resource Delineations	1
3.0 RESULTS	2
3.1 Desktop Evaluation	2
3.2 Threatened and Endangered Species	2
3.2.1 Topography and Drainage	2
3.2.2 Soil Survey	2
3.2.3 National Wetlands Inventory	2
3.2.4 Aerial Imagery	3
3.3 Aquatic Resource Delineations	3
4.0 CONCLUSION	3
5.0 LITERATURE CITED.....	3

Appendices

Appendix A: Figures
Appendix B: Agency Correspondence
Appendix C: RTE Table
Appendix D: Soil Report
Appendix E: Wetland and Stream Tables
Appendix F: Site Photos
Appendix G: Wetland and Stream Datasheets

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1.0 Introduction

American Electric Power (AEP) retained Environmental Solutions & Innovations, Inc. (ESI) to perform an ecological survey for the Westfall Station TR 380 Install Project in Wayne Township, Pickaway County, Ohio within the project's proposed Area of Investigation (AOI; Appendix A, Figure 1 and Figure 2). ESI completed a field review of the AOI on 18 June 2021. This report outlines review of published resource materials, existing site conditions, agency coordination, and results of the field investigation.

2.0 Methods

2.1 Desktop Evaluation

Prior to visiting the site, available topographic, aerial, soils, flood, and National Wetlands Inventory (NWI) mapping is reviewed to determine onsite areas that may contain aquatic resources. State stream designations, as well as navigability and other criteria that would determine agency jurisdiction are also reviewed.

2.2 Threatened and Endangered Species

To assist with Endangered Species Act (ESA), Bald and Golden Eagle Protection Act (BGEPA), and Migratory Bird Treaty Act (MBTA) compliance, a project review was requested, and a response was received 8 June 2021 from U.S. Fish and Wildlife Service (USFWS) Ohio Field Office. To identify potential conflicts with state-listed species and appropriately complete ORAMs, a request was submitted and a response from Ohio Department of Natural Resources (ODNR) was received on 16 July 2021 (Appendix B).

2.3 Aquatic Resource Delineations

Wetland delineation procedures follow the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region ERDC/EL TR-10-16, Version 2.0 (USACE 2010) and the 1987 Corps of Engineers Wetland Delineation Manual (USACE 1987). The federally regulated Ordinary High Water Mark (OHWM) of streams is delineated using the USACE Regulatory Guidance Letter 05-05 – Guidance on Ordinary High Water Mark Identification. Each stream is categorized in regard to its flow regime as perennial, intermittent, or ephemeral, as defined by the USACE. Delineated aquatic resources are classified according to the Classification of Wetland and Deepwater Habitats of the United States (Cowardin et al. 1979). Each wetland identified is evaluated consistent with the Ohio Rapid Assessment Method (ORAM,

Version 5.0), developed by the Ohio Environmental Protection Agency (OEPA). Streams with drainage areas less than one square mile are evaluated using the Field evaluation manual for Ohio's primary headwater habitat streams (OEPA 2012). Aquatic resource boundaries and sample points are surveyed using a GPS with sub-meter accuracy.

3.0 Results

3.1 Desktop Evaluation

3.2 Threatened and Endangered Species

Suitable habitat exists within the AOI for state and federal listed bat species with agency-recommended tree clearing dates of 1 October to 31 March, if required. The project is within the range of multiple a state threatened and endangered birds. Construction should be avoided in these bird species habitats during their nesting periods, 15 April to 31 July. To reduce impacts to indigenous aquatic species and habitat, the ODNR Division of Wildlife (DOW) recommends avoiding in-water work in perennial streams from 15 March to 30 June. A summary table of rare, threatened, and endangered species potentially occurring within the AOI is provided in Appendix C.

3.2.1 Topography and Drainage

The project appears on the Williamsport, Ohio U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map (Appendix A, Figure 1). The AOI consists of rolling hills ranging from approximately 685 feet to 705 feet. The site drains to Scioto River.

3.2.2 Soil Survey

The Natural Resources Conservation Service (NRCS) maps four soil series considered hydric or partially hydric within the AOI. The NRCS soil map and hydric soils list is provided in Appendix D.

3.2.3 National Wetlands Inventory

No NWI mapped wetlands were identified within the AOI. Note that NWI maps are derived from aerial photo interpretation and are suitable for general planning purposes only; they typically do not show all the wetland or watercourse resources within any given area.

3.2.4 Aerial Imagery

Aerial mapping from 1994 through 2021 shows the site as dominated by agricultural fields and small upland woodlots. Aerial representation of the site is provided in Appendix A, Figure 2.

3.3 Aquatic Resource Delineations

One stream segment was identified and delineated within the AOI. The delineated stream is summarized in Appendix E. Representative photographs of the stream and upland habitat are provided in Appendix F. Field data sheets for upland sample points and HHEI forms are provided in Appendix G. The aquatic resource delineation map is provided as Appendix A, Figure 2.

4.0 Conclusion

Desktop review and field investigations, completed on 18 June 2021, identified one stream segment within the AOI. Temporary or permanent impacts to these resources may require permits from the USACE and or OEPA.

Threatened and endangered species review identified seasonal tree clearing. In the event construction cannot adhere to these schedules, further coordination, surveys, and/or waivers must be coordinated.

5.0 Literature Cited

- Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. FWSOBS 79/31, December 1079. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.
- OEPA. 2012. Field evaluation manual for Ohio's primary headwater streams, Version 3.0. Ohio Environmental Protection Agency, Division of Surface Water, Columbus, Ohio. 117 pp.
- USACE. 1987. Corps of Engineers Wetlands Delineation Manual. Final Report. Wetlands Research Program Technical Report Y-87-1 (on-line edition), Waterways Experiment Station, Environmental Laboratory, Vicksburg, Mississippi. 143 pp.

USACE. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region ERDC/EL TR-10-16 (Version 2.0). U.S. Army Engineer Research and Development Center, Vicksburg, Mississippi. 154 pp



APPENDIX A FIGURES

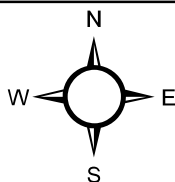
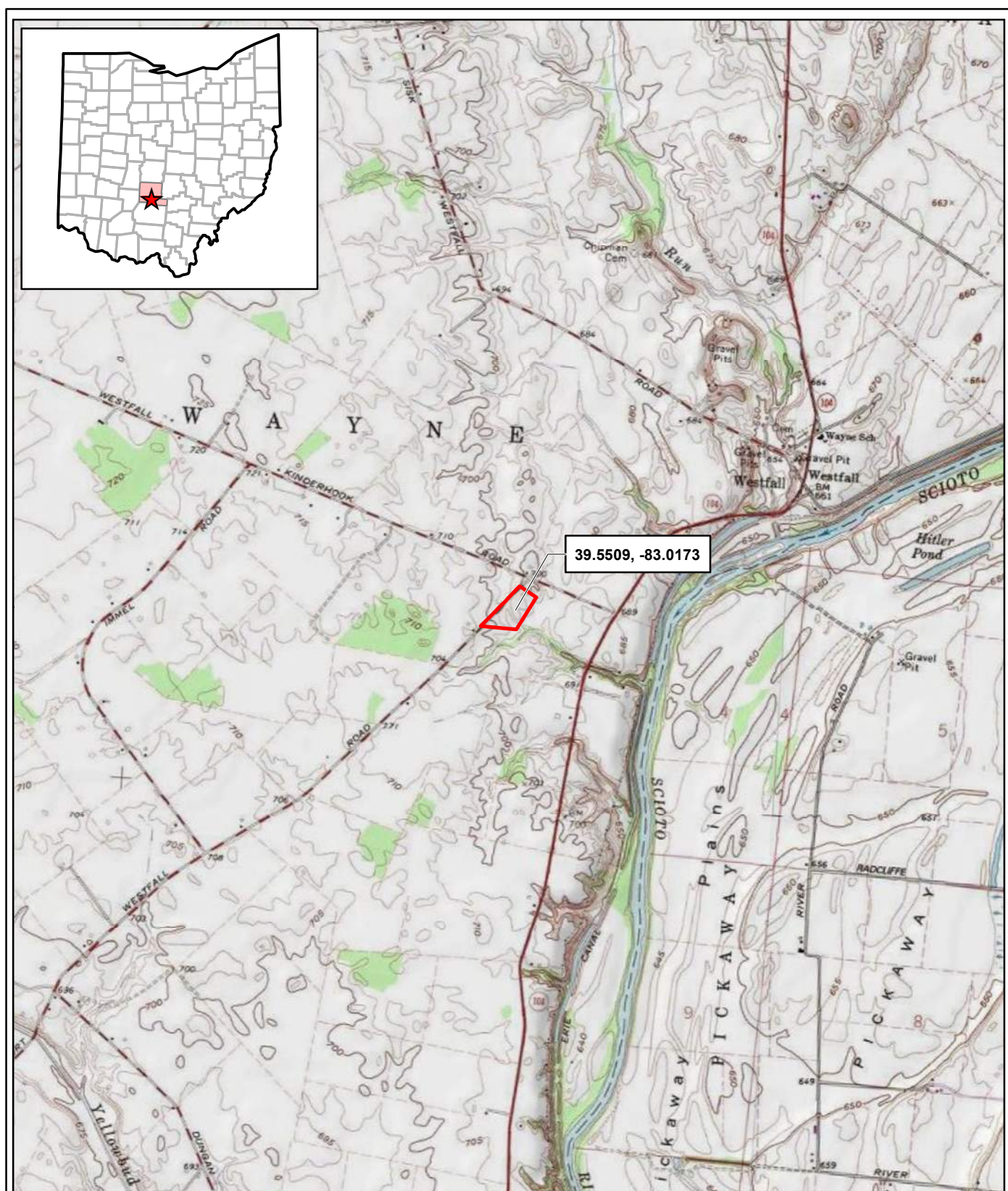



Figure 1. Location of the AEP Westfall Station TR 380 Install Project, Pickaway County, Ohio.

Project No.
1719

0 0.4 0.8
 Mile
 Base Map: USGS Topographic Map



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& INNOVATIONS, INC.**

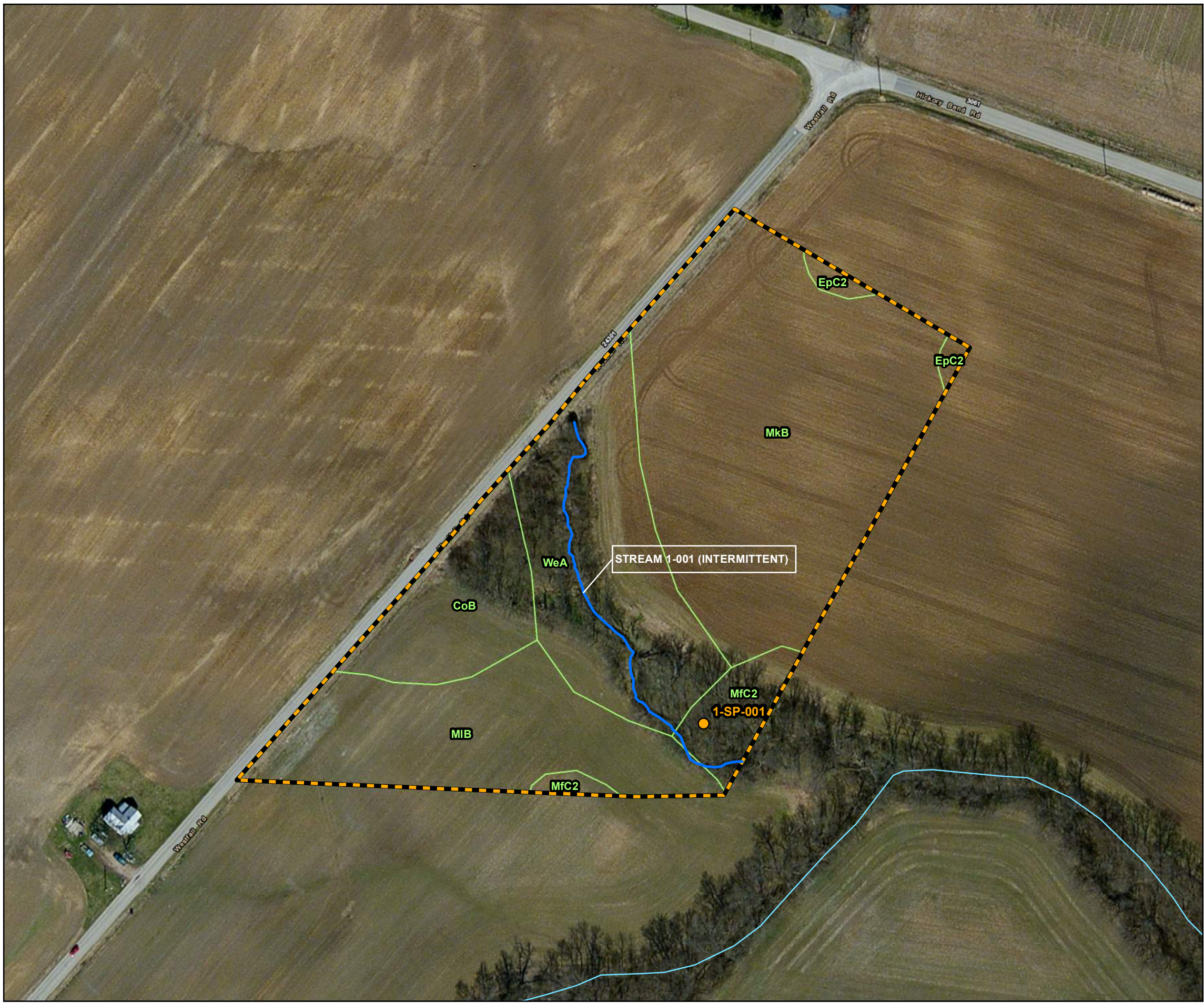
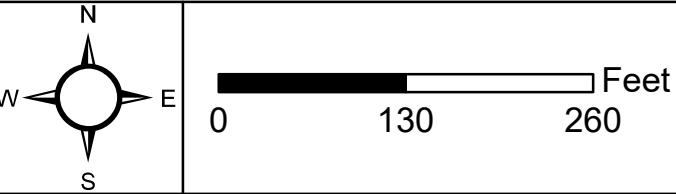


Figure 2. Aquatic resources delineation on the AEP Westfall Station TR 380 Install Project, Pickaway County, Ohio.

- Field - Delineated Stream Centerline
- National Hydrography Dataset (NHD) Stream
- Area of Investigation (AOI)
- Soils
- Sample Point**
 - Upland



Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



**ENVIRONMENTAL SOLUTIONS
& INNOVATIONS, INC.**
Project No. 1719

APPENDIX B
AGENCY CORRESPONDENCE

Scott Denham

From: Ohio, FW3 <ohio@fws.gov>
Sent: Monday, June 28, 2021 11:16 AM
To: Josh Holmes
Cc: nathan.reardon@dnr.state.oh.us; Parsons, Kate; Grant S Stuller; Michael Wellman
Subject: AEP Westfall Delivery Point Project, Wayne Township, Pickaway County, Ohio

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

TAILS# 03E15000-2021-TA-1593

Dear Mr. Holmes,

The U.S Fish and Wildlife Service (Service) has received your recent correspondence requesting information about the subject proposal. We offer the following comments and recommendations to assist you in minimizing and avoiding adverse impacts to threatened 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.

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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,

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

Patrice Ashfield
Field Office Supervisor
cc: Nathan Reardon, ODNR-DOW
Kate Parsons, ODNR-DOW



Ohio Department of Natural Resources

MIKE DeWINE, GOVERNOR

MARY MERTZ, DIRECTOR

Office of Real Estate

John Kessler, Chief

2045 Morse Road – Bldg. E-2

Columbus, OH 43229

Phone: (614) 265-6621

Fax: (614) 267-4764

July 16, 2021

Josh Holmes
Environmental Solutions & Innovations, Inc.
1341 Old Freedom Road, Suite 202
Cranberry Township, PA 16066

Re: 21-0568; AEP Westfall Delivery Point Project

Project: AEP proposes to construct a new substation (Westfall Delivery Point Station) and tap into the adjacent transmission line.

Location: The proposed project is located in the Wayne Township, Pickaway County, Ohio.

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

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

Pale umbrella-sedge (*Cyperus acuminatus*), P
Burhead (*Echinodorus berteroi*), T
Butterfly (*Ellipsaria lineolata*), E
Long-solid (*Fusconaia subrotunda*), E
Black Sandshell (*Ligumia recta*), T
Clubshell (*Pleurobema clava*), E, FE
Ohio pigtoe (*Pleurobema cordatum*), E
Pyramid pigtoe (*Pleurobema rubrum*), E
Round pigtoe (*Pleurobema sintoxia*), SC
Fawnsfoot (*Truncilla donaciformis*), T
Tippecanoe darter (*Etheostoma tippecanoe*), T
Circleville Canal Wildlife Area – ODNR Division of Wildlife

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

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

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

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

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

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

In addition, the entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these 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”. <https://ohiodnr.gov/static/documents/wildlife/wildlife-management/Bat+Survey+Guidelines.pdf>

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

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

Federally Endangered

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

Federally Threatened

rabbitsfoot (*Quadrula cylindrica cylindrica*)

State Endangered

butterfly (*Ellipsaria lineolata*)
ebonyshell (*Fusconaia ebenus*)
elephant-ear (*Elliptio crassidens*)
long-solid (*Fusconaia maculata maculata*)
Ohio pigtoe (*Pleurobema cordatum*)
pyramid pigtoe (*Pleurobema rubrum*)
sharp-ridged pocketbook (*Lampsilis ovata*)
washboard (*Megaloniaias nervosa*)

State Threatened

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

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

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

Federally Endangered

Scioto madtom (*Noturus trautmani*)

State Endangered

bigeye shiner (*Notropis boops*)
goldeye (*Hiodon alosoides*)
northern brook lamprey (*Ichthyomyzon fossor*)
northern madtom (*Noturus stigmosus*)
shortnose gar (*Lepisosteus platostomus*)
spotted darter (*Etheostoma maculatum*)
shovelnose sturgeon (*Scaphirhynchus platyrhynchus*)

State Threatened

blue sucker (*Cycleptus elongatus*)
lake chubsucker (*Erimyzon sucetta*)
paddlefish (*Polyodon spathula*)

Tippecanoe darter (*Etheostoma tippecanoe*)

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 lark sparrow (*Chondestes grammacus*), a state endangered bird. This sparrow nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. In the Oak Openings area west of Toledo, lark sparrows occupy open grass and shrubby fields along sandy beach ridges. These summer residents normally migrate out of Ohio shortly after their young fledge or leave the nest. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 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 U.S. Fish & Wildlife Service.

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

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

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

ODNR appreciates the opportunity to provide these comments. Please contact Sarah Tebbe, Environmental Specialist, at Sarah.Tebbe@dnr.ohio.gov if you have questions about these comments or need additional information.

Mike Pettegrew
Environmental Services Administrator (Acting)

APPENDIX C
RTE TABLE

ECOLOGICAL RESOURCES INVENTORY REPORT, WESTFALL DELIVERY POINT PROJECT, PICKAWAY COUNTY, OHIO

Results
July 16, 2021

RARE, THREATENED, OR ENDANGERED SPECIES HABITAT

Summary of Potential Ohio State-Listed Species within the Westfall Delivery Point Project Area, Pickaway County, Ohio

Common Name	Scientific Name	State Listing	Known to Occur Within County?	Known Within One Mile of Project Area?	Habitat Preference	Habitat Observed in Project Area?	ODNR Comments/Recommendations
Birds							
Least Bittern	<i>Ixobrychus exilis</i>	T	Yes	No	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.	No	If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.
Northern Harrier	<i>Circus hudsonis</i>	E	Yes	No	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.	No	If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 to July 31. If this habitat will not be impacted, this project is not likely to impact this species.
Sandhill Crane	<i>Grus canadensis</i>	E	Yes	No	Sandhill cranes are primarily a wetland-dependent species. They utilize 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.	No	If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 to August 31. If this type of habitat will not be impacted, this project is not likely to impact this species.
Lark Sparrow	<i>Chondestes grammacus</i>	E	Yes	No	This sparrow nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. In the Oak Openings area west of Toledo, lark sparrows occupy open grass and shrubby fields along sandy beach ridges. These summer residents normally migrate out of Ohio shortly after their young fledge or leave the nest.	No	If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.
Upland Sandpiper	<i>Bartamia longicauda</i>	E	No	No	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).	No	If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.
Fish							
Scioto Madtom	<i>Noturus trautmani</i>	E	Yes	No	Perennial Streams	No	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.
Bigeye Shiner	<i>Notropis boops</i>	E	Yes	No	Perennial Streams	No	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.
Goldeye	<i>Hiodon alosoides</i>	E	Yes	No	Perennial Streams	No	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.
Northern Brook Lamprey	<i>Ichthyomyzon fossor</i>	E	Yes	No	Perennial Streams	No	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.
Northern Madtom	<i>Noturus stigosis</i>	E	Yes	No	Perennial Streams	No	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.

ECOLOGICAL RESOURCES INVENTORY REPORT, WESTFALL DELIVERY POINT PROJECT, PICKAWAY COUNTY, OHIO

Results

July 16, 2021

Summary of Potential Federally-Listed Species within the Westfall Delivery Point Project Area, Pickaway County, Ohio

Common Name	Scientific Name	State Listing	Known to Occur Within County?	Known Within One Mile of Project Area?	Habitat Preference	Habitat Observed in Project Area?	ODNR Comments/Recommendations
Fish							
Spotted Darter	<i>Etheostoma maculatum</i>	E	Yes	No	Perennial Streams	No	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.
Shovelnose Sturgeon	<i>Scaphirhynchus platyrhynchus</i>	E	Yes	No	Perennial Streams	No	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.
Blue Sucker	<i>Cycleptus elonatus</i>	T	Yes	No	Perennial Streams	No	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.
Paddlefish	<i>Polyodon spathula</i>	T	Yes	No	Perennial Streams	No	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.
Tippecanoe Darter	<i>Etheostoma tippecanoe</i>	T	Yes	Yes	Perennial Streams	No	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.
Lake Chub Sucker	<i>Etheostoma maculatum</i>	T	Yes	No	Habitat includes ponds, lakes, oxbows, sloughs, swamps, impoundments, quiet pools of creeks and small rivers, and similar waters of little or no flow that are clear and have bottoms of sand or silt mixed with organic debris; aquatic vegetation usually is present (Lee et al. 1980, Page and Burr 1991).	No	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.
Mussels							
Clubshell	<i>Pleurobema clava</i>	E	Yes	Yes	Habitat includes flowing areas with soft or firmly packed substrates of fine to coarse gravel.	No	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 this species.
Fanshell	<i>Cyprogenia stegaria</i>	E	Yes	No	Habitat includes flowing areas with soft or firmly packed substrates of fine to coarse gravel.	No	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 this species.
Northern Riffleshell	<i>Epioblasma torulosa rangiana</i>	E	No	No	Habitat includes flowing areas with soft or firmly packed substrates of fine to coarse gravel.	No	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 this species.
Purple Cat's Paw	<i>Epioblasma o. obliquata</i>	E	Yes	No	Habitat includes flowing areas with soft or firmly packed substrates of fine to coarse gravel.	No	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 this species.
Rayed Bean	<i>Villosa fabalis</i>	E	Yes	No	Habitat includes flowing areas with soft or firmly packed substrates of fine to coarse gravel.	No	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 this species.
Snuffbox	<i>Epioblasma triquetra</i>	E	Yes	No	Habitat includes flowing areas with soft or firmly packed substrates of fine to coarse gravel.	No	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 this species.
Rabbitsfoot	<i>Quadrula cylindrica cylindrica</i>	T	Yes	No	Habitat includes flowing areas with soft or firmly packed substrates of fine to coarse gravel.	No	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 this species.

Results
July 16, 2021

Common Name	Scientific Name	State Listing ¹	Known to Occur Within County? ²	Known Within One Mile of Project Area? ²	Habitat Preference	Habitat Observed in Project Area?	ODNR Comments/Recommendations
Mussels							
Butterfly	<i>Ellipsaria lineolata</i>	E	Yes	Yes	Habitat includes flowing areas with soft or firmly packed substrates of fine to coarse gravel.	No	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 this species.
Ebonyshell	<i>Fusconaia ebenus</i>	E	Yes	No	Habitat includes flowing areas with soft or firmly packed substrates of fine to coarse gravel.	No	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 this species.
Elephant-Ear	<i>Elliptio crassidens</i>	E	Yes	No	Habitat includes flowing areas with soft or firmly packed substrates of fine to coarse gravel.	No	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 this species.
Long-Solid	<i>Fusconaia maculata maculata</i>	E	Yes	Yes	Habitat includes flowing areas with soft or firmly packed substrates of fine to coarse gravel.	No	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 this species.
Ohio Pigtoe	<i>Pleurobema cordatum</i>	E	Yes	Yes	Habitat includes flowing areas with soft or firmly packed substrates of fine to coarse gravel.	No	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 this species.
Pyramid Pigtoe	<i>Pleurobema rbrum</i>	E	Yes	Yes	Habitat includes flowing areas with soft or firmly packed substrates of fine to coarse gravel.	No	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 this species.
Sharp-Ridged Pocketbook	<i>Lampsilis ovata</i>	E	No	No	Habitat includes flowing areas with soft or firmly packed substrates of fine to coarse gravel.	No	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 this species.
Washboard	<i>Megalaniais nervosa</i>	E	Yes	No	Habitat includes flowing areas with soft or firmly packed substrates of fine to coarse gravel.	No	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 this species.
Black Sandshell	<i>Ligumia recta</i>	T	Yes	Yes	Habitat includes flowing areas with soft or firmly packed substrates of fine to coarse gravel.	No	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 this species.
Fawnfoot	<i>Truncilla donaciformis</i>	T	Yes	Yes	Habitat includes flowing areas with soft or firmly packed substrates of fine to coarse gravel.	No	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 this species.
Pondhorn	<i>Unio merus tetralasmus</i>	T	Yes	No	Habitat includes flowing areas with soft or firmly packed substrates of fine to coarse gravel.	No	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 this species.
Threehorn Wartyback	<i>Obliquaria reflexa</i>	T	Yes	No	Habitat includes flowing areas with soft or firmly packed substrates of fine to coarse gravel.	No	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 this species.
Mammals							
Indiana Bat	<i>Myotis sodalis</i>	E	Yes	No	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 2007a; USFWS 2017). 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).	Yes	If suitable habitat occurs within the project area, the DOW recommends trees be conserved. If suitable habitat occurs within the project area and trees must be cut, the DOW recommends cutting occur between October 1 and March 31. If suitable trees must be cut during summer months, the DOW recommends a mist net or acoustic survey be conducted between June 1 and August 15, prior to any cutting. If no tree removal is proposed, this project is not likely to impact this species
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	E	Yes	No	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 2016). 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).	Yes	If suitable habitat occurs within the project area, the DOW recommends trees be conserved. If suitable habitat occurs within the project area and trees must be cut, the DOW recommends cutting occur between October 1 and March 31. If no tree removal is proposed, this project is not likely to impact this species
Little Brown Bat	<i>Myotis lucifugus</i>	E	Yes	No	Tricolored bats are associated with forested landscapes, often in open woods. They can also be found over water and adjacent to water edges	Yes	If suitable habitat occurs within the project area, the DOW recommends trees be conserved. If suitable habitat occurs within the project area and trees must be cut, the DOW recommends cutting occur between October 1 and March 31. If no tree removal is proposed, this project is not likely to impact this species
Tri-colored Bat	<i>Myotis sodalis</i>	E	Yes	No	Little brown bats are not territorial—they live in colonies numbering in the hundreds of thousands of individuals. Colonies aggregate at nesting sites called roosts. There are several different types of roosts that serve different purposes—day and night roosts provide habitat for bats when they are sleeping or resting. Hibernacula are a type of roost that is occupied in the winter months. Little brown bats choose buildings, caves, trees, rocks, and wood piles as roost sites. They may migrate hundreds of miles to get from their summer habitats to hibernacula.	Yes	If suitable habitat occurs within the project area, the DOW recommends trees be conserved. If suitable habitat occurs within the project area and trees must be cut, the DOW recommends cutting occur between October 1 and March 31. If no tree removal is proposed, this project is not likely to impact this species

E=Endangered; T=Threatened
¹According to Ohio Department of Natural Resources, State Listed Wildlife Species by County (ODNR 2018a).
²According to Ohio Natural Heritage Program (Appendix B).

Summary of Potential Federally-Listed Species within the Westfall Delivery Point Project Area, Pickaway County, Ohio

²According to USFWS (2018).

APPENDIX D
SOIL REPORT



Hydric Rating by Map Unit—Pickaway County, Ohio (AOI_20210601)









MAP LEGEND

Area of Interest (AOI)







Area of Interest (AOI)

Soils







Soil Rating Polygons

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available


Soil Rating Lines

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available






Soil Rating Points

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available


Water Features

-  Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

-  Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Pickaway County, Ohio
Survey Area Data: Version 21, Jun 11, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 5, 2012—Mar 4, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CoB	Corwin silt loam, 2 to 6 percent slopes	5	0.9	10.1%
EpC2	Eldean-Kendallville loams, 6 to 12 percent slopes, eroded	0	0.1	1.1%
MfC2	Miamian silt loam, 6 to 12 percent slopes, eroded	0	0.4	4.6%
MkB	Miamian-Kendallville silt loams, 2 to 6 percent slopes	5	3.7	43.2%
MIB	Miamian-Lewisburg silt loams, 2 to 6 percent slopes	5	1.7	19.7%
WeA	Wea silt loam, 0 to 2 percent slopes	2	1.8	21.2%
Totals for Area of Interest			8.5	100.0%

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

APPENDIX E
STREAM TABLE

**Westfall Station TR 380 Install Project
STREAM TABLE**

8/11/2021

Stream ID	Location		Stream Type	Stream Name	Delineated Length (feet)	Bankfull Width (feet)	OHWM Width (feet)	Field Evaluation			Ohio EPA 401 Eligibility
	Latitude	Longitude						Method	Score	Category / Rating / OAC Designation	
1-001	39.55148	-83.01766	Intermittent	UNT to Scioto River	604	7	4	HHEI	44	Class II	Eligible
Total:					604						

**APPENDIX F
SITE PHOTOS**

Environmental Solutions & Innovations
Photo Documentation

Client/Site Name:

AEP Westfall Station TR 380 Install

Site Location:

Pickaway Co., OH

Project #:

1719



1-SP-001 (North)



1-SP-001 (East)



1-SP-001 (South)



1-SP-001 (West)

Environmental Solutions & Innovations
Photo Documentation

Client/Site Name:

AEP Westfall Station TR 380 Install

Site Location:

Pickaway Co., OH

Project #:

1719



Stream 1-001 (Upstream)



Stream 1-001 (Downstream)



Stream 1-001 (Substrate)

APPENDIX G
WETLAND AND STREAM DATASHEETS

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: AEP Westfall Station TR 380 Install City/County: Circleville/ Pickaway Sampling Date: 2021-06-18
 Applicant/Owner: AEP State: Ohio Sampling Point: 1-SP-001
 Investigator(s): E. Wilson Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Upland, Swale Local relief (concave, convex, none): Concave
 Slope (%): 1 Lat: 39.550401 Long: -83.017052 Datum: WGS 84
 Soil Map Unit Name: MfC2 NWI classification: None

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

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

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: General upland sample point alongside stream 1-001. This representative sample point is to describe the general area.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>17</u> (A/B)														
1. <u>Gleditsia triacanthos</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
2. <u>Juglans nigra</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
3. <u>Fraxinus pennsylvanica</u>	<u>5</u>		<u>FACW</u>															
4. _____				Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>30</u></td> <td>x 2 = <u>60</u></td> </tr> <tr> <td>FAC species <u>15</u></td> <td>x 3 = <u>45</u></td> </tr> <tr> <td>FACU species <u>80</u></td> <td>x 4 = <u>320</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>125</u> (A)</td> <td><u>425</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.4</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>30</u>	x 2 = <u>60</u>	FAC species <u>15</u>	x 3 = <u>45</u>	FACU species <u>80</u>	x 4 = <u>320</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>125</u> (A)	<u>425</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>30</u>	x 2 = <u>60</u>																	
FAC species <u>15</u>	x 3 = <u>45</u>																	
FACU species <u>80</u>	x 4 = <u>320</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>125</u> (A)	<u>425</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>) 1. <u>Gleditsia triacanthos</u> <u>15</u> <input checked="" type="checkbox"/> <u>FACU</u> 2. <u>Lonicera maackii</u> <u>10</u> <input checked="" type="checkbox"/> <u>NI</u> 3. <u>Celtis occidentalis</u> <u>5</u> <u>FAC</u> 4. <u>Fraxinus pennsylvanica</u> <u>5</u> <u>FACW</u> 5. _____ <u>35%</u> = Total Cover																		
Herb Stratum (Plot size: <u>5 ft r</u>) 1. <u>Parthenocissus quinquefolia</u> <u>30</u> <input checked="" type="checkbox"/> <u>FACU</u> 2. <u>Elymus virginicus</u> <u>20</u> <input checked="" type="checkbox"/> <u>FACW</u> 3. <u>Sanicula odorata</u> <u>10</u> <u>FAC</u> 4. <u>Maianthemum racemosum</u> <u>5</u> <u>FACU</u> 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ <u>65%</u> = Total Cover																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>) 1. _____ 2. _____ _____ = Total Cover																		

Remarks: (Include photo numbers here or on a separate sheet.)
 Upland sample point to describe the area. Some hydrophytic vegetation present but dominated but UPL and FACU plant species.

SOIL

Sampling Point: 1-SP-001

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 20	10YR 5/4	100					Loamy Sand	Upland sample point. No hydric soils present.
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: <u>N/A</u> Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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Remarks:

Upland sample point. No hydric soils present.

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology indicators present. Upland sample point.



Headwater Habitat Evaluation Index Field Form

HHEI Score (sum of metrics 1+2+3)

44

SITE NAME/LOCATION 1719 AEP Westfall Station
 SITE NUMBER 1-001 RIVER BASIN Scioto River RIVER CODE — DRAINAGE AREA (mi²) 0.14
 LENGTH OF STREAM REACH (ft) 200 LAT 39.550751029° LONG -83.01749893° RIVER MILE —
 DATE 10/18/2021 SCORER F. Wilson COMMENTS Recent/current rainfall @ time of survey.

NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instructions

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

1. SUBSTRATE (Estimate percent of every type present). Check ONLY two predominant substrate TYPE boxes. (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B				HHEI Metric Points Substrate Max = 40 <div style="border: 1px solid black; padding: 5px; text-align: center;">14</div> A + B
TYPE	PERCENT	TYPE	PERCENT	
<input type="checkbox"/> BLDG SLABS [16 pts] <input type="checkbox"/> BOULDER (>256 mm) [16 pts] <input type="checkbox"/> BEDROCK [16 pts] <input type="checkbox"/> COBBLE (65-256 mm) [12 pts] <input checked="" type="checkbox"/> GRAVEL (2-64 mm) [9 pts] <input type="checkbox"/> SAND (<2 mm) [6 pts]	_____ _____ _____ <u>35</u> <u>10</u>	<input type="checkbox"/> SILT [3 pt] <input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts] <input type="checkbox"/> FINE DETRITUS [3 pts] <input checked="" type="checkbox"/> CLAY or HARDPAN [0 pt] <input type="checkbox"/> MUCK [0 pts] <input type="checkbox"/> ARTIFICIAL [3 pts]	<u>10</u> _____ <u>5</u> <u>40</u> _____	
Total of Percentages of Bldg Slabs, Boulder, Cobble, Bedrock <u>0</u> (A)		(B)		
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: <u>9</u> TOTAL NUMBER OF SUBSTRATE TYPES: <u>5</u>				
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box):				Pool Depth Max = 30 <div style="border: 1px solid black; padding: 5px; text-align: center;">15</div>
<input type="checkbox"/> > 30 centimeters [20 pts] <input checked="" type="checkbox"/> 5 cm - 10 cm [15 pts] <input type="checkbox"/> > 22.5 - 30 cm [30 pts] <input type="checkbox"/> < 5 cm [5 pts] <input type="checkbox"/> > 10 - 22.5 cm [25 pts] <input type="checkbox"/> NO WATER OR MOIST CHANNEL [0 pts]				
COMMENTS <u>Recent rainfall</u> MAXIMUM POOL DEPTH (centimeters): <u>7.6</u>				
3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check ONLY one box):				Bankfull Width Max = 30 <div style="border: 1px solid black; padding: 5px; text-align: center;">15</div>
<input type="checkbox"/> > 4.0 meters (> 13') [30 pts] <input checked="" type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] <input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] <input type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts] <input type="checkbox"/> > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]				
COMMENTS <u>High erosion due to field tile</u> AVERAGE BANKFULL WIDTH (meters): <u>1.37</u>				

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY *NOTE: River Left (L) and Right (R) as looking downstream*

RIPARIAN WIDTH (Per Bank)		FLOODPLAIN QUALITY (Most Predominant per Bank)	
L	R	L	R
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

COMMENTS N/A

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

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

COMMENTS Current/recent rainfall @ time of survey.

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

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

STREAM GRADIENT ESTIMATE

<input checked="" type="checkbox"/> Flat (0.5 ft/100 ft)	<input type="checkbox"/> Flat to Moderate	<input type="checkbox"/> Moderate (2 ft/100 ft)	<input type="checkbox"/> Moderate to Severe	<input type="checkbox"/> Severe (10 ft/100 ft)
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ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? ☐ Yes ☒ No QHEI Score _____ (If Yes, Attach Completed QHEI form)

DOWNSTREAM DESIGNATED USE(S)

☒ WWH Name: Scioto River Distance from Evaluated Stream 0.160 mi
☐ CWH Name: _____ Distance from Evaluated Stream _____
☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.

USGS Quadrangle Name: Williamsport NRCS Soil Map Page: - NRCS Soil Map Stream Order: -
 County: Pickaway Township/City: Wayne / Circleville

MISCELLANEOUS

Base Flow Conditions? (Y/N): N Date of last precipitation: - Quantity: -
 Photo-documentation Notes: Upstream, Downstream + Substrate
 Elevated Turbidity? (Y/N): N Canopy (% open): -
 Were samples collected for water chemistry? (Y/N): N Lab Sample # or ID (attach results): -
 Field Measures: Temp (°C) - Dissolved Oxygen (mg/l) - pH (S.U.) - Conductivity (umhos/cm) -
 Is the sampling reach representative of the stream (Y/N) N If not, explain: N/A
 Additional comments/description of pollution impacts: N/A

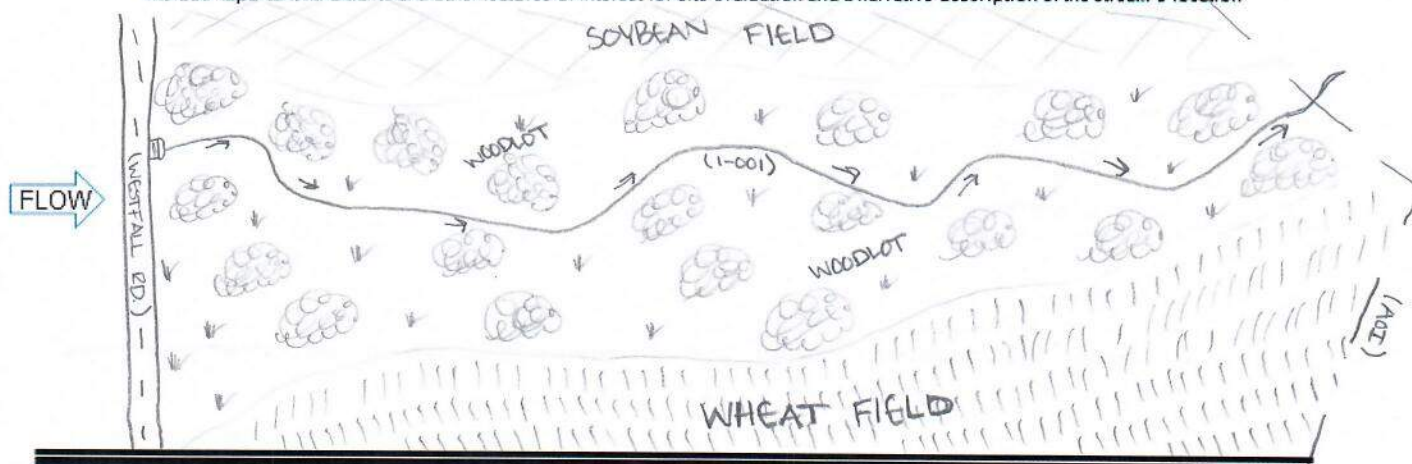
BIOLOGICAL OBSERVATIONS

(Record all observations below)

Fish Observed? (Y/N) N Species observed (if known): N/A
 Frogs or Tadpoles Observed? (Y/N) N Species observed (if known): N/A
 Salamanders Observed? (Y/N) N Species observed (if known): N/A
 Aquatic Macroinvertebrates Observed? (Y/N) N Species observed (if known): N/A
 Comments Regarding Biology: N/A

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)

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



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

11/7/2022 5:21:33 PM

in

Case No(s). 22-1009-EL-BNR

Summary: Notice Construction Notice electronically filed by Hector Garcia-Santana
on behalf of AEP Ohio Transmission Company, Inc.