

Case No. 22-1087-EL-BLN

Part 1 of 3

Letter of Notification Salt Creek – Holmesville 138 kV Transmission Line Project



An **AEP** Company

*BOUNDLESS ENERGY*SM

PUCO Case No. 22-1087-EL-BLN

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

Submitted by:
Ohio Power Company

December 13, 2022

Letter of Notification

Ohio Power Company, Inc.
Salt Creek – Holmesville 138 kV Transmission Line Project

4906-6-05

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

4906-6-05(B) General Information

B(1) Project Description

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

The Company proposes the Salt Creek-Holmesville 138 kilovolt (kV) Transmission Line Project (the “Project”) in Prairie Township, Holmes County, Ohio. The Project is necessitated by a request from Buckeye Power, Inc., on behalf of Holmes Wayne Electric Cooperative (HWN), for a new delivery point on the South Coshocton-Wooster 138 kV Transmission Line. The Project involves the construction of an approximately 0.8-mile greenfield 138 kV transmission line to connect to the proposed non-jurisdictional, distribution stepdown Holmesville Station. The Project will utilize new easements and will require a 100-foot right-of-way (“ROW”). Associated with the Project, a cut-in to the existing South Coshocton-Wooster 138 kV Transmission Line and installation of a new three-way phase-over-phase (PoP) switch (the “Salt Creek Switch”) will be required and filed with OPSB under a separate cover (Case No. 22-1086-EL-BNR).

The proposed Project location is illustrated in Figure 1 and 2 in Appendix A.

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

The Project has been assigned PUCO Case No. 22-1087-EL-BLN.

B(2) Statement of Need

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

Letter of Notification for Salt Creek – Holmesville 138 kV Transmission Line Project

Buckeye Power, Inc. on behalf of HWN, requested the Company provide a new 138 kV delivery point along the South Coshocton-Wooster 138 kV Transmission Line, specifically the eastern Wooster-West Millersburg 138 kV circuit, by mid-2023 to serve their new, non-jurisdictional Holmesville Station. The proposed HWN delivery point will have an expected peak demand of 4.4 MW and be used to serve growing commercial and light industrial load in the area. The delivery point will also be used to off-load HWN's existing Moreland Station, which has capacity concerns during peak periods. In order to install the new Salt Creek three-way switch and serve the HWN's customer, it is necessary to modify the existing South Coshocton – Wooster 138-kV Transmission Line. One structure to the north of the proposed Salt Creek Switch and one to the south will need to be replaced, due to design changes associated with the new switch placement and to meet necessary clearances.

Failure to move forward with the proposed project will result in the inability to serve the wholesale customer's load expectations as well as failing to address the capacity concerns experienced by the customer at their existing station in the area.

The need and solution for the entire customer project were presented and reviewed with stakeholders at the March 2021 and September 2021 PJM SRTEP meetings, respectively. The Project was subsequently assigned PJM supplemental number s2641. This Project was included in the Company's 2022 Long Term Forecast Report, and is located on page 104 and 120, see Appendix B.

B(3) Project Location

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

The Project is located in Holmes County, Ohio. Figure 1 in Appendix A shows the location of the Project area in relation to the existing utility infrastructure in the area.

B(4) Alternatives Considered

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

The Company considered two switch locations and three greenfield route options. The selected switch location reduces tree clearing, access road length, and was preferred by the property owner. The selected greenfield route reduces impacts to undeveloped land for future land development, follows the roadside to reduce access road impacts, and environmental impacts, and was preferred by the property owner along the Project.

The preferred location of the Project was dictated by existing infrastructure, the proposed placement of the Holmesville Station, minimizing impacts to property owners by locating the Project along road ROW, and minimizes impacts to the environment by avoiding tree clearing and impacts to streams and wetlands to the extent practicable. The preferred location of the Project minimizes impacts to the community and the

environment, and represents the most suitable location and most appropriate solution for meeting the Company's needs.

Socioeconomic, land use, and ecological information is presented in Section B(10).

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.

Within seven days of filing this LON, the Company will issue a public notice in a newspaper of general circulation in the Project area. The notice will comply with all requirements under O.A.C. Section 4906-6-08(A)(1-6). Further, the Company mailed a letter, via first class mail, to affected landowners, tenants, contiguous owners, and any other landowner the Company approached for an easement necessary for the construction, operation, or maintenance of the facility. The letter complies with all the requirements of O.A.C. Section 4906-6-08(B). The Company also maintains a website (<http://aeptransmission.com/ohio/>) which provides the public access to an electronic copy of this LON and the public notice for this LON. A paper copy of the LON will be served to the public library in each political subdivision affected by this proposed Project. Lastly, The Company retains ROW land agents who 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 July 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), and provides the relevant locations of the Salt Creek-Holmesville 138 kV transmission line on the United States Geological Survey (USGS) 7.5-minute topographic map of the Holmesville quadrangle. Figure 2 in Appendix A show the Project area on ESRI World Imagery at a scale of 1:6,000-scale (1-inch equals 500 feet). The ESRI World Imagery is dated May 2021.

To visit the Project site from Columbus, Ohio, take I-71 North for approximately 68.4 miles. Take Exit 176 to merge onto U.S. 30 East toward Wooster. Follow U.S. 30 East for approximately 25.4 miles. Exit onto Ohio State Route 302 East/Madison Avenue and follow for approximately 1 mile, and then bear right onto Ohio State Route 83 South. Remain on Ohio State Route 83 South for approximately 10 miles. The approximate address of the Project site is 8231 OH-83, Holmesville, Ohio 44633, at latitude 40.641390, longitude -81.933032.

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.

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

Parcel ID	Agreement Type	Easement Agreement Obtained (Yes/No)
1700370000	New Easement Agreement	Yes
17001940006	New Easement Agreement	No

B(9) Technical Features

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

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

The transmission line is anticipated to include the following:

Voltage: 138kV
Conductors: Three (3) 795 Kcm DRAKE ACSR (26/7)
Static Wire: One (1) 7#8 Alumoweld
Insulators: Polymer
ROW Width: 100 feet
Structure Type: Two (2) Single circuit, monopole steel dead-end structures with drilled shaft concrete foundations
One (1) single circuit, monopole steel running corner structure with drilled shaft concrete foundation
Four (4) single circuit, monopole steel-braced post structures with direct embedded foundations

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 \$1.3 million using a Class 4 estimates. Pursuant to the PJM OATT, the costs for this Project will be recovered in the Ohio Power Company's FERC formula rate (Attachment H-14 to the PJM OATT) and allocated to the AEP Zone.

B(10) Social and Ecological 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. The Project location and vicinity have historically been primarily agricultural land with scattered woodlots. The Project is mapped within Prairie Township in Holmes County. The Project vicinity is currently rural in nature, and is comprised primarily of open agricultural fields, forested land, scattered residences, and some industrial operations. One church, the Freedom Road Apostolic Church, is located approximately 0.1 miles south of the proposed line, on the opposite side of Ohio State Route 83. A portion of the existing South Coshocton-Wooster 138 kV transmission line is located approximately 0.1 miles away from the Killbuck Marsh Wildlife Area, a designated Ohio State Wildlife Area, that is managed by the Ohio Division of Natural Resources (ODNR)-Division of Wildlife (DOW).

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 Holmes County Auditor maintains an online database of agricultural district land in Prairie Township. Holmes County was consulted on October 22, 2022, and there were no parcels within the Project ROW identified as agricultural district lands. Construction of the Project primarily follows parallel to Ohio State Route 83. As the Project would follow existing linear infrastructure, agricultural land uses in the Project area would be minimally impacted by only the footprint of the structures.

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.

A cultural resource survey and report were conducted by the Company’s consultant for the Project in November 2022. The Company’s consultant indicated in the Phase I Archaeological Investigations report that two previously unrecorded archaeological sites (33HS0384 and 33HS0385) were identified during the November 2022 investigations. Coordination with the State Historic Preservation Office (“SHPO”) was completed on December 9, 2022 and the OHPO concurred with Weller’s assessment that the two OAI sites identified by the project (OAI #33HS0384 and 33HS0385) were recommended for avoidance or Phase II investigations. The Company will continue coordination with the SHPO in order to complete Phase II work on both sites, prior to construction and following completion of coordination with the SHPO.

The Company’s consultant also conducted a history/architecture investigation and indicated in the corresponding report that a total of seven resources older than fifty years of age were identified within the survey area. One resource is listed in the National Register of Historic Places (NRHP) (Ref. 85001342). None of the remaining resources were recommended as eligible for NRHP listing. SHPO concurred that the Project would not impact the significance or integrity of the NRHP-listed resource in a way that would alter its National Register Status and the Project should have no impact on aboveground historic resources. Coordination with the State Historic Preservation Office (“SHPO”) was completed on December 9, 2022 and the OHPO concurred with Weller’s assessment that there are no adverse effect on above ground historic properties.

Correspondence from the SHPO was received on December 9, 2022 (Appendix C). The SHPO recommended Phase II archaeological work be completed on the impacted portion of archaeology sites 33HS0384 and 33HS0385.

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 also coordinate storm water permitting needs with local government agencies, as necessary. The Company will implement and maintain best management practices as outlined in the Project-specific Storm Water Pollution Prevention Plan (SWPPP) to minimize erosion control sediment to protect surface water quality during storm events.

An Ohio Department of Transportation (ODOT) aerial crossing permit will be required for the crossing of State Route 83.

Letter of Notification for Salt Creek – Holmesville 138 kV Transmission Line 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.

The United States Fish and Wildlife Service (USFWS) and ODNR-DOW were contacted to identify the federally and state-listed threatened and endangered species known to occur in Holmes County, respectively. In November 2021, coordination letters were sent to USFWS and ODNR-DOW soliciting responses. Separate letters were sent for each element of the Project, although the species identified are the same.

A response was received from the USFWS on December 2, 2021. The USFWS advised that the Project area occurs within the range of the federally endangered Indiana bat (*Myotis sodalis*) and federally threatened northern long-eared bat (*Myotis septentrionalis*). The USFWS proposed implementation of seasonal tree cutting (clearing of trees ≥ 3 inches diameter at breast height between October 1 and March 31) to avoid impacts to Indiana bats and northern long-eared bats, if suitable habitat occurs within the Project area. If seasonal tree cutting is implemented, adverse impacts to these species are not likely. If seasonal tree cutting is not possible, USFWS requests that a mist net survey be conducted between June 1 and August 15, prior to cutting. No tree clearing is anticipated for the Project.

A response were received from the ODNR-DOW on December 20, 2021. The ODNR-DOW advised that the Project area occurs within the range of the state and federally endangered Indiana bat, the state endangered and federally threatened northern long-eared bat, the state endangered little brown bat (*Myotis lucifugus*), and the state endangered tricolored bat (*Perimyotis subflavus*). Presence of these bat species has been established in the Project area and summer tree clearing is not recommended. If trees must be cut during the summer months, ODNR-DOW recommends performing a mist net or acoustic survey between June 1 and August 15, in accordance with agency guidance for bat surveys and tree clearing. If state-listed bats are documented, ODNR-DOW recommends tree cutting between October 1 and March 31; however, the ODNR-DOW may accept limited tree cutting inside after further coordination. No tree clearing is anticipated for the Project.

The ODNR-DOW also recommends that a desktop habitat assessment be conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the Project area. If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the Project area, further coordination with ODNR-DOW is required. If potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance. If no tree cutting or subsurface impacts to a hibernaculum are proposed, the Project is not likely to impact these species. Desktop review in accordance with the Ohio Division of Wildlife and the U.S. Fish and

Letter of Notification for Salt Creek – Holmesville 138 kV Transmission Line Project

Wildlife Service (OH-Field Office) Joint Guidance for Bat Surveys and Tree Clearing, dated May 2022, identified no documents underground or surface mines and no mine entrances/openings within one-quarter mile of the project area. No tree clearing or subsurface disturbances are proposed as part of the Project.

The ODNR-DOW advised that the Project area occurs within the range of the state endangered snuffbox (*Epioblasma triquetra*), a mussel species. Due to the location of the Project, and that there is no in-water work proposed in a perennial stream, the Project is not anticipated to impact this species.

The ODNR-DOW advised that the Project area occurs within the range of the state endangered Iowa darter (*Etheostoma exile*) and the state threatened lake chubsucker (*Erimyzon sucetta*), both state-listed fish species. Due to the location, and that there is no in-water work proposed in a perennial stream, the Project is not anticipated to impact these species.

The ODNR-DOW advised that the Project is within the range of the eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*), a state endangered species and a federal species of concern. Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size to provide suitable habitat, the Project is not anticipated to impact this species.

The ODNR-DOW advised that the Project is within the range of the American bittern (*Botaurus lentiginosus*), a state endangered bird; black tern (*Chlidonias niger*), a state endangered bird; northern harrier (*Circus cyaneus*), a state endangered bird; sandhill crane (*Grus canadensis*), a state threatened bird; trumpeter swan (*Cygnus buccinator*), a state threatened bird; and upland sandpiper (*Bartramia longicauda*), a state endangered bird. On February 3, 2022, the Company's consultant surveyed the Project area to identify potential habitat for sensitive species as identified in the ODNR correspondence located in Appendix C. No potentially suitable habitat was identified within the Project survey corridor, and impacts to these state-listed bird species are not anticipated.

Additional details regarding species are provided in the agency correspondence letters and in the Wetland Delineation and Stream Assessment Report, see Appendix C and Appendix D.

B(10)(f) Areas of Ecological Concern

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

The Company's consultant prepared a Wetland Delineation and Stream Assessment Report, see Appendix D. The ecological survey of the Project identified one wetland and no streams or ponds within the survey corridor. The wetland identified was classified as a palustrine emergent wetland. No temporary or permanent impact to the wetland is anticipated.

Letter of Notification for Salt Creek – Holmesville 138 kV Transmission Line Project

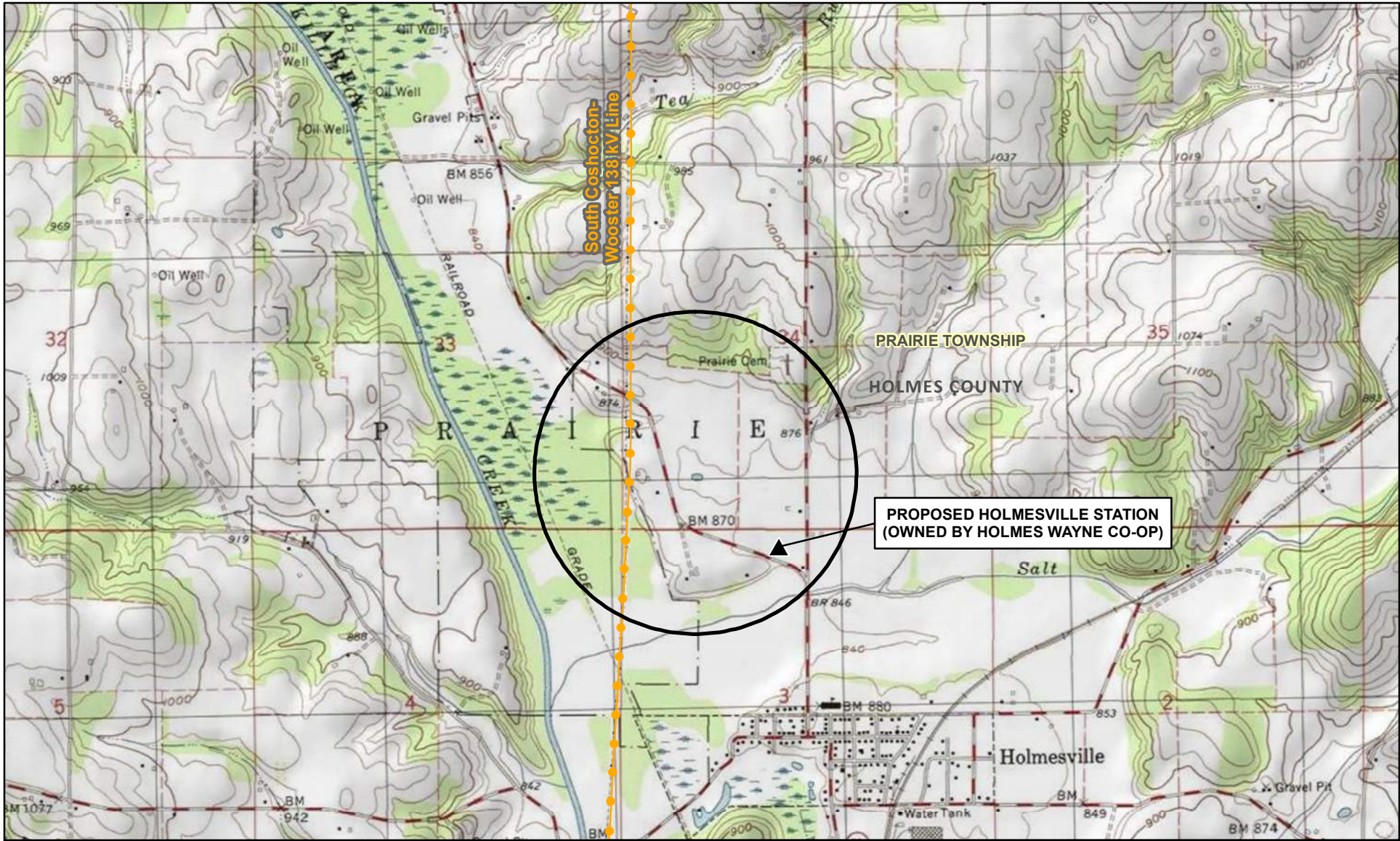
A copy of the Wetland Delineation and Stream Assessment Report for the Project is included as Appendix D.

B(10)(g) Unusual Conditions

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

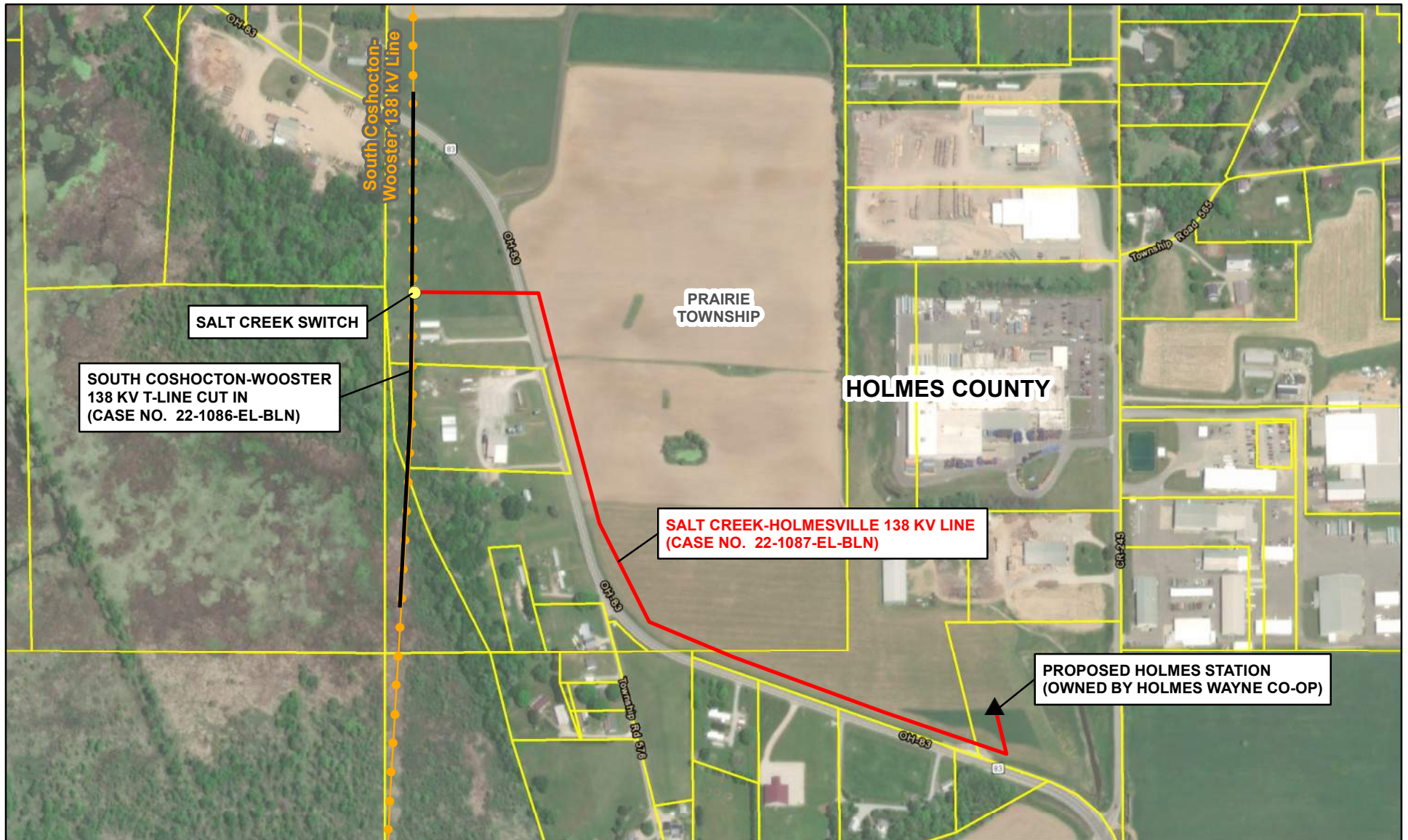
To the best of the Company's, no unusual conditions exist that would result in significant environmental, social, health, or safety impacts.

Appendix A Project Figures



<p>Legend</p> <ul style="list-style-type: none"> ▲ Proposed Station —●— Existing Transmission Line (138-kV) ▭ Project Area 	<p>Data Sources: AEP (2022), ESRI (2013), PowerMap (2010) USGS 7.5 Topographic Quadrangle (Holmesville)</p>		<p>FIGURE 1 TOPOGRAPHIC OVERVIEW</p>
	<p>Coordinate System: State Plane Ohio North NAD 83</p>	<p>AEP OHIO AEP BOUNDLESS ENERGY</p> <p>Salt Creek-Holmesville 138-kV Transmission Line Project</p> <p>0 1,000 2,000 3,000 4,000 Feet</p>	

November 29, 2022



Legend

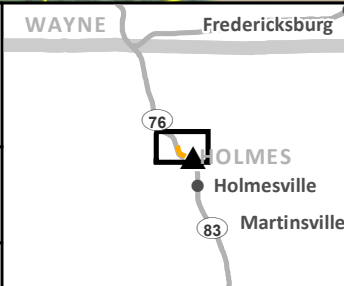
- ▲ Proposed Station
- Proposed Switch
- Salt Creek-Holmesville 138 kV Line (Case No. 22-1087-EL-BLN)
- South Coshocton-Wooster 138 kV Transmission line Cut-in and Salt Creek Switch (Case No. 22-1086-EL-BLN)
- Existing Transmission Line (138-kV)
- Parcel Boundary

Data Sources: AEP (2022),
 ESRI (2013), PowerMap (2010)
 USGS 7.5 Topographic Quadrangle
 (Holmesville)

Coordinate System:
 State Plane Ohio North
 NAD 83



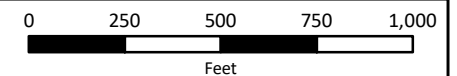
November 29, 2022



**FIGURE 2
 AERIAL MAP**



Salt Creek-Holmesville 138-kV
 Transmission Line Project



Appendix B PJM Submittal and Long Term Forecast Report

PUCO Form FE-T9:
AEP Ohio
Specifications of Planned Transmission Lines

1.	LINE NAME AND NUMBER:	Salt Creek Extension (Wooster - West Millersburg 138kV) S2641 TP2021035
2.	POINTS OF ORIGIN AND TERMINATION	Salt Creek Switch - Holmes Wayne Coop Holmesville Station INTERMEDIATE STATION - N/A
3.	RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS	0.75 mi / 100ft / 1 circuit (of new construction)
4.	VOLTAGE: DESIGN / OPERATE	138 kV / 138 kV
5.	APPLICATION FOR CERTIFICATE:	2022
6.	CONSTRUCTION:	2022 - 2023
7.	CAPITAL INVESTMENT:	\$1.4M
8.	PLANNED SUBSTATION:	Salt Creek Switch
9.	SUPPORTING STRUCTURES:	Steel
10.	PARTICIPATION WITH OTHER UTILITIES	N/A
11.	PURPOSE OF THE PLANNED TRANSMISSION LINE	New 138 kV extension to serve co-op transmission delivery point
12.	CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR TERMINATION	Unable to provide requested service to customer
13.	MISCELLANEOUS:	

PUCO Form FE-T9:
AEP Ohio
Specifications of Planned Transmission Lines

1.	LINE NAME AND NUMBER:	Wooster - West Millersburg 138kV (S2641 TP2021035)
2.	POINTS OF ORIGIN AND TERMINATION	Wooster - West Millersburg INTERMEDIATE STATION - Salt Creek Switch
3.	RIGHTS-OF-WAY: LENGTH / WIDTH / CIRCUITS	10.5 mi / 100ft / 1 circuit (0.1 mi of line work)
4.	VOLTAGE: DESIGN / OPERATE	138 kV / 138 kV
5.	APPLICATION FOR CERTIFICATE:	2022
6.	CONSTRUCTION:	2022 - 2023
7.	CAPITAL INVESTMENT:	\$0.2M
8.	PLANNED SUBSTATION:	Salt Creek Switch
9.	SUPPORTING STRUCTURES:	Steel
10.	PARTICIPATION WITH OTHER UTILITIES	N/A
11.	PURPOSE OF THE PLANNED TRANSMISSION LINE	Reconfiguring the existing West Millersburg – Wooster 138kV circuit to add in Salt Fork Switch.
12.	CONSEQUENCES OF LINE CONSTRUCTION DEFERMENT OR TERMINATION	Unable to provide requested service to customer
13.	MISCELLANEOUS:	



AEP Transmission Zone M-3 Process Holmesville, Ohio

Need Number: AEP-2021-OH012

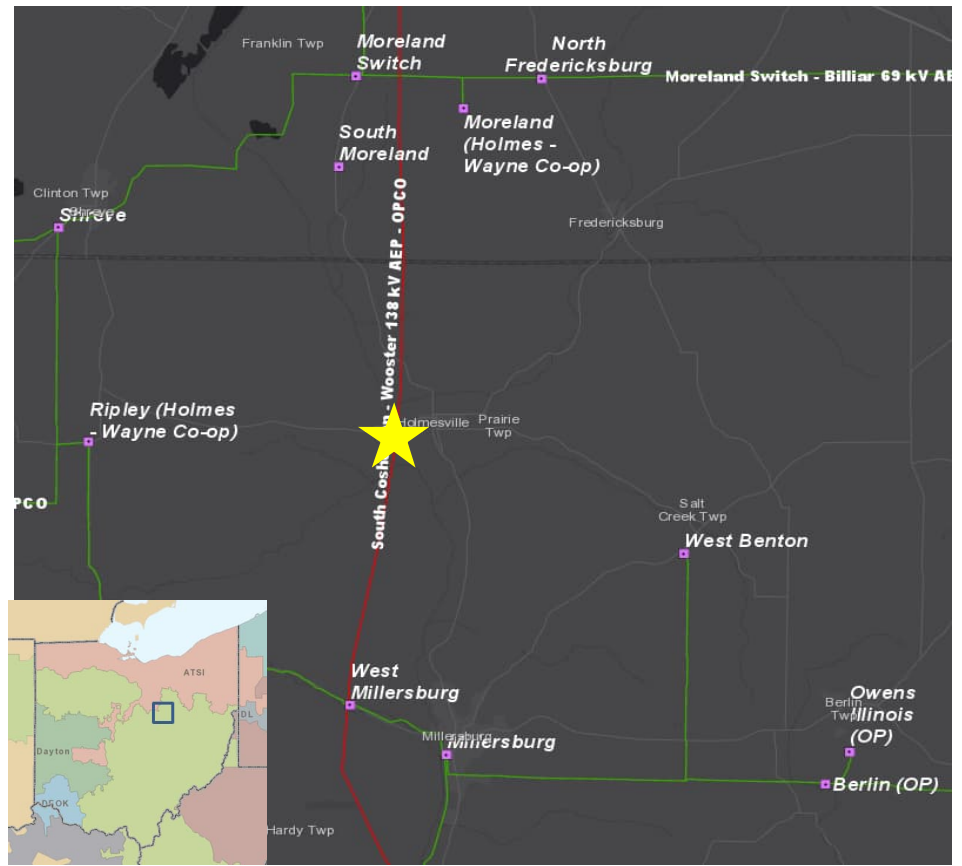
Process Stage: Need Meeting 3/19/2021

Supplemental Project Driver:
Customer Service

Specific Assumption Reference:
AEP Guidelines for Transmission Owner Identified Needs (AEP Assumptions slide 12)

Problem Statement:

- Buckeye is requesting, on behalf of Holmes- Wayne Electric co-op, a new 138kV delivery point on the West Millersburg- Wooster 138kV Circuit by August 2023. Anticipated load is 4.4 MW.





AEP Transmission Zone M-3 Process Holmesville, Ohio

Need Number: AEP-2021-OH012

Process Stage: Solutions Meeting 9/17/2021

Previously Presented: Needs Meeting 3/19/2021

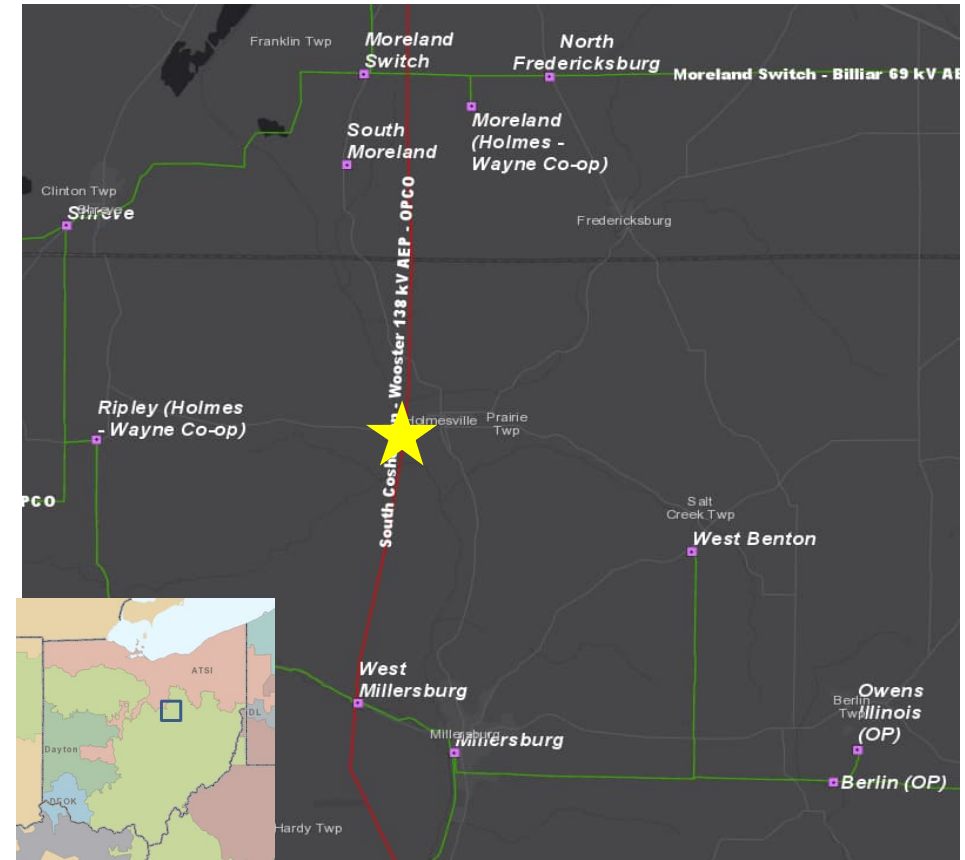
Supplemental Project Driver: Customer Service

Specific Assumption Reference:
AEP Guidelines for Transmission Owner Identified Needs (AEP Assumptions slide 8)

Problem Statement:

- Buckeye Power is requesting on behalf of Holmes- Wayne Electric co-op for a new 138kV delivery point on the West Millersburg- Wooster 138kV Circuit by August 2023. Anticipated load is 4.4 MW.

Model: PJM 2025 RTEP Series Cases





AEP Transmission Zone M-3 Process Seneca County, Ohio

Need Number: AEP-2021-OH012

Process Stage: Solutions Meeting 9/17/2021

Proposed Solution:

- Reconfiguring the existing West Millersburg – Wooster 138kV circuit to add in Salt Fork Switch. \$0.2 M
- Install a new 138kV three- way phase over phase switch named Salt Fork Switch. \$0.87 M
- Construct ~ 0.75 miles of new 138 kV line between Salt Fork Switch and Holmesville delivery point using 556 ACSR conductor. \$1.4 M
- Install new customer metering at Holmesville for Holmes Wayne Cooperative. \$0.009 M

Cost estimate: \$2.48 M

Ancillary Benefits:

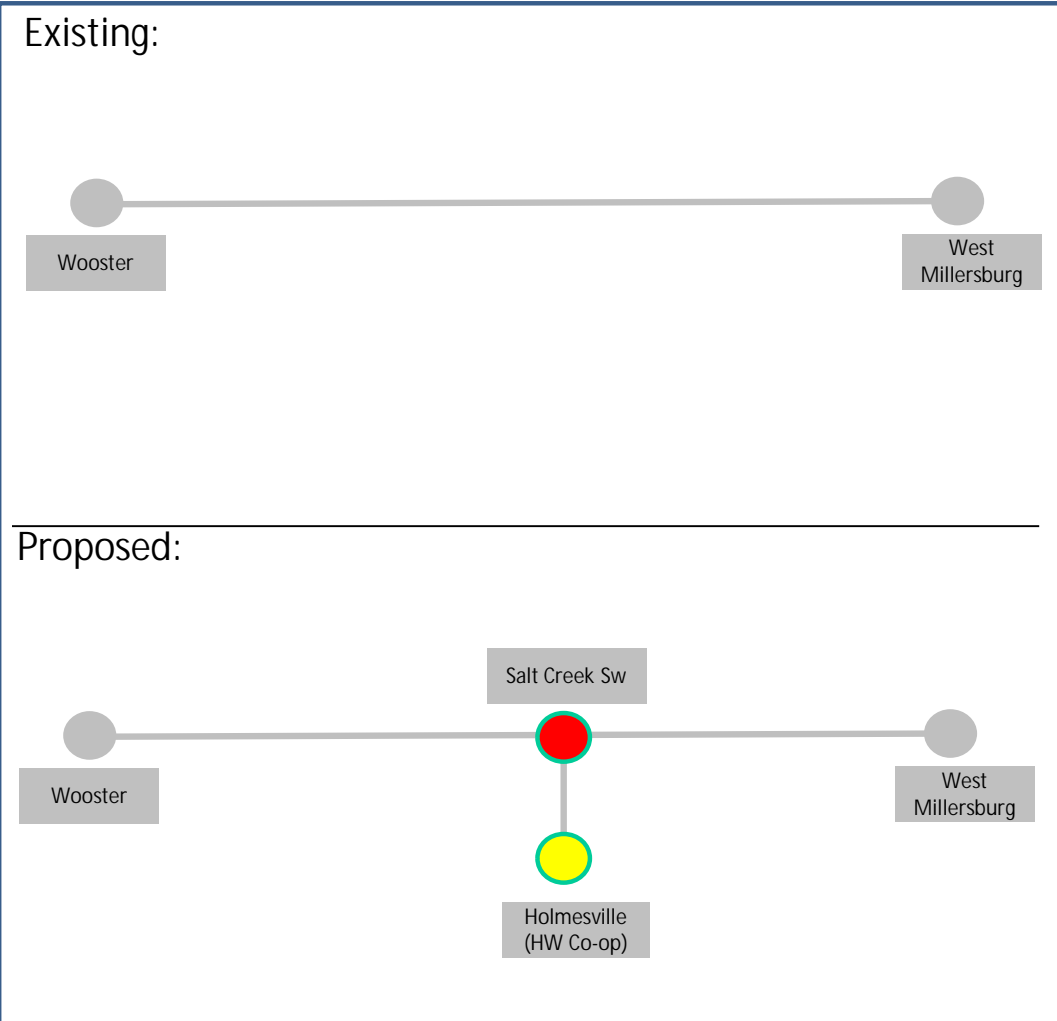
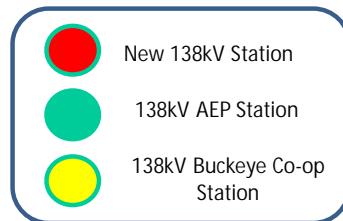
Provides Holmes- Wayne Electric Cooperative the ability to have supplementary service to the growing community and load demands as well as help to aid the loads currently served out of the Moreland delivery point.

Alternatives Considered:

N/A

Projected In-Service: 7/31/2023

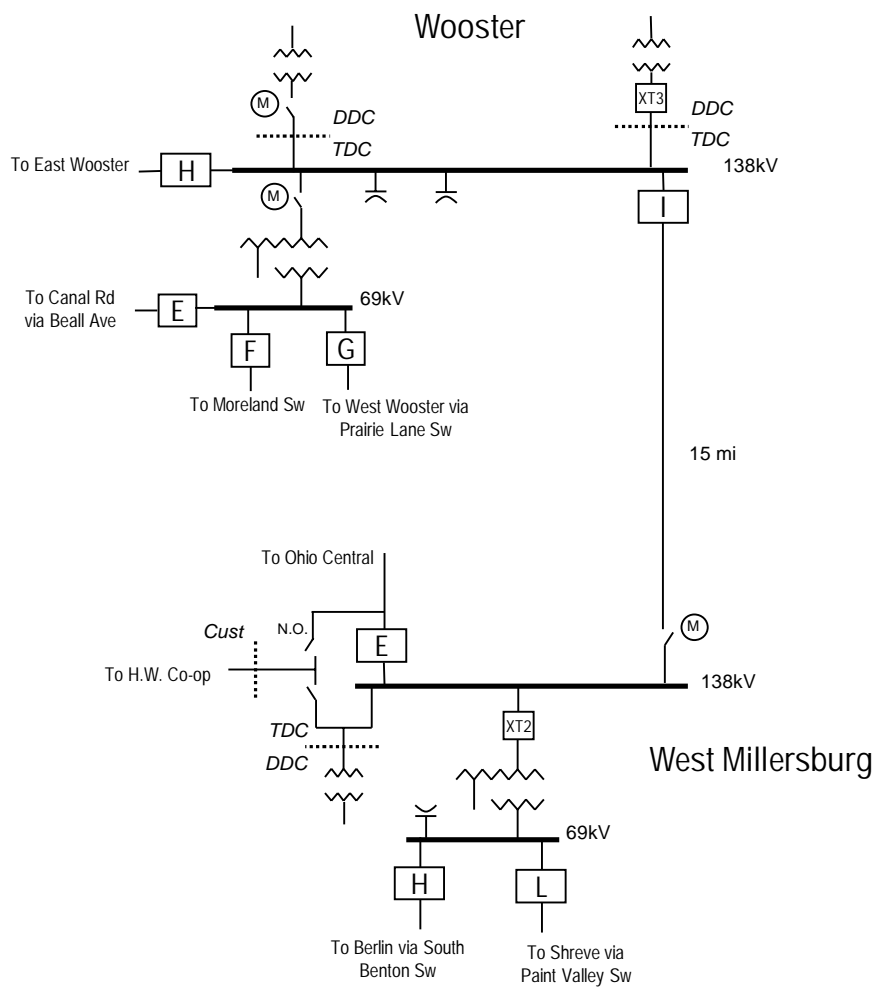
Project Status: Engineering





Master Project System Electrical Diagram (Existing)

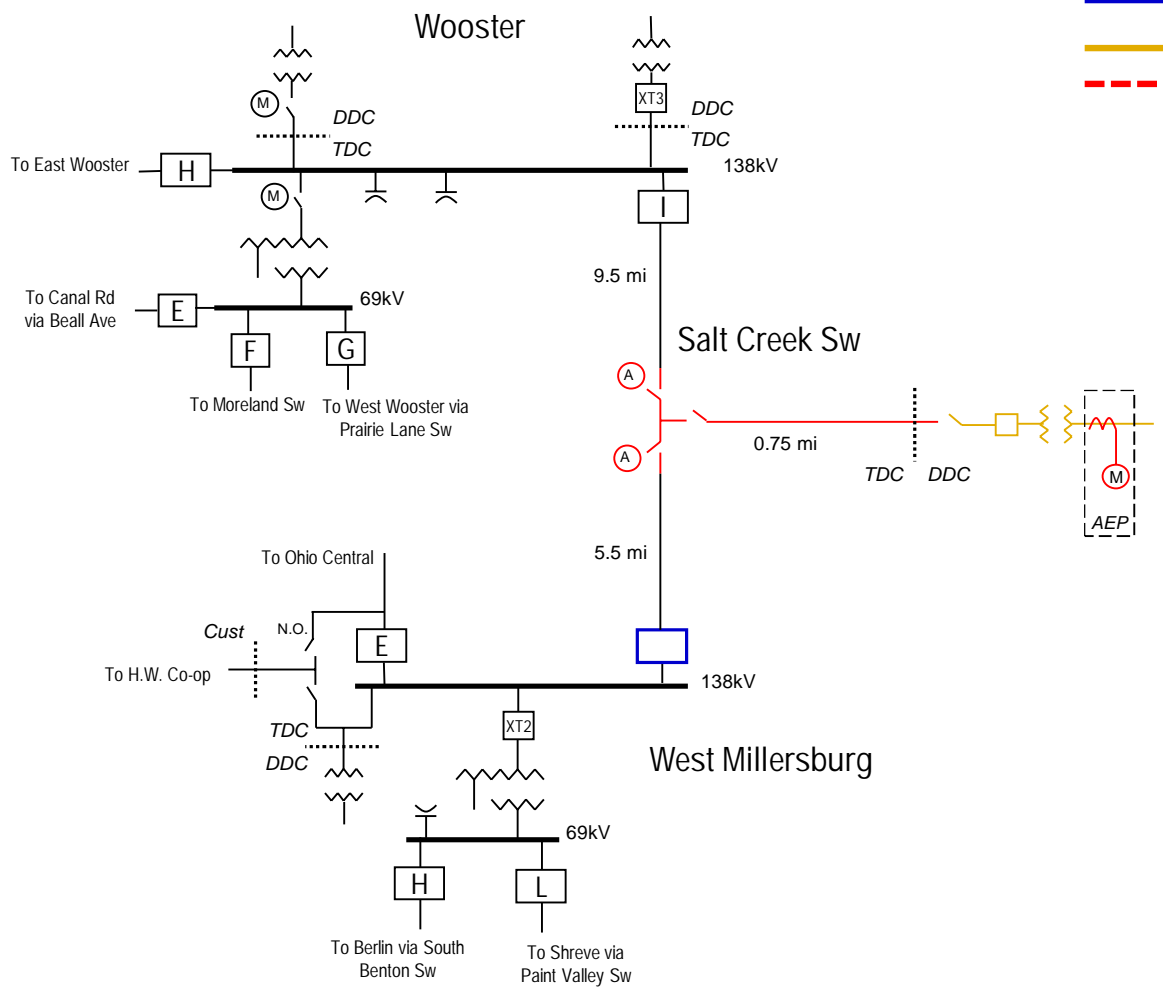
- Existing
- Proposed
- Related Projects
- - - Future Projects





Master Project System Electrical Diagram (Proposed)

- Existing
- Proposed
- TP-2020-009
- HW Co-op Build
- - - Future Projects



Appendix C Agency Coordination

Cooper, Brian

From: Ohio, FW3 <ohio@fws.gov>
Sent: Thursday, December 02, 2021 11:40 AM
To: Cooper, Brian
Cc: nathan.reardon@dnr.state.oh.us; Parsons, Kate; ajtoohey@aep.com; McKnight, Carol
Subject: [EXTERNAL] AEP - Salt Creek - Holmesville 138-kV Line Project, Holmes County, Ohio



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# 03E15000-2022-TA-0349

Dear Mr. Cooper,

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/nleeb/index.html>), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is recommended where Indiana bats are assumed present.

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

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

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

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

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

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

Sincerely,



Patrice Ashfield
Field Office Supervisor

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



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

November 23, 2021

Attention: Ms. Patrice Ashfield
U.S. Fish & Wildlife Service
Ohio Ecological Field Office
4525 Morse Road, Suite 104
Columbus, Ohio 43230

Via email: ohio@fws.gov

Reference: Request for Technical Assistance
Salt Creek - Holmesville 138-kV Line Project
Holmes County, Ohio

Dear Ms. Ashfield:

AEP Ohio Transmission Company, Inc. (AEP), is formally requesting that the United States Fish and Wildlife Service (USFWS) complete a review for the proposed Salt Creek - Holmesville 138-kV Line Project (Project) in Holmes County, Ohio. The Project is located within the Holmesville, Ohio U.S. Geologic Survey 7.5' topographical quadrangle and is shown on the attached Project Overview Map (Figure 1).

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

Sincerely,

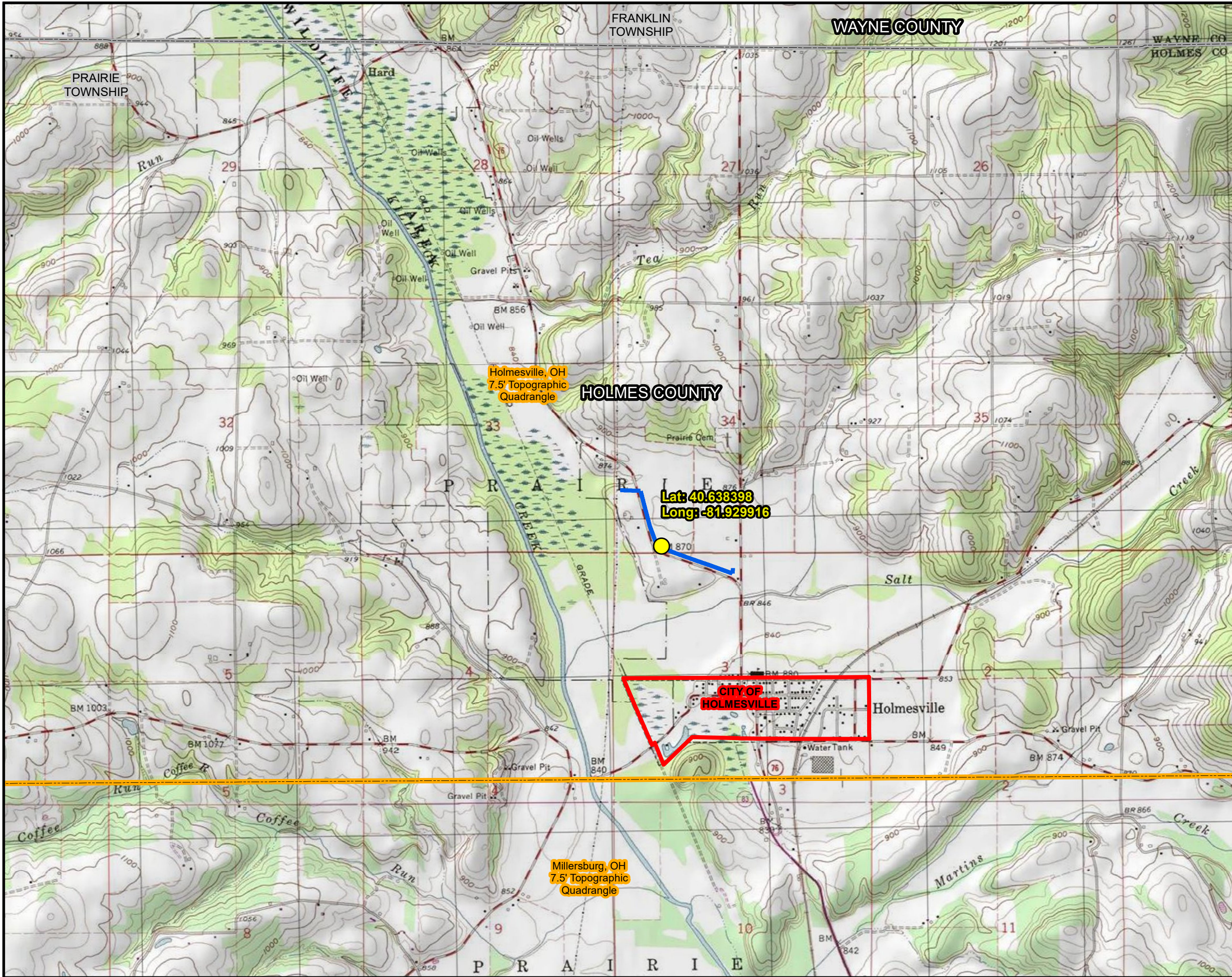
Environmental Project Manager
Phone: (717-304-0578)
brian.cooper@aecom.com

Attachments: Figure 1 – Project Location Map
Electronic Shapefiles (.shp)







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

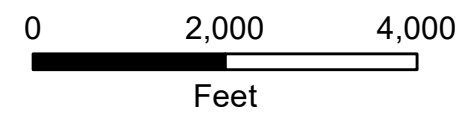
Document Path: L:\DCS\Projects\ENV\60661200_AEP_ScoshWooster_Env\900_CAD_GIS\920_929_GIS_Graphics\AEP_SaltCreekHolmesville.mxd

Date Saved: 11/10/2021



Legend

-  Project Midpoint
-  Salt Creek - Holmesville 138-kV Line
-  City or Town Boundary
-  Township Boundary
-  7.5' Topographic Quadrangle Boundary
-  County Boundary



BASE MAP SOURCE:
ArcGIS Online, USA Topo Maps



Salt Creek-Holmesville
138 kV Line

**FIGURE 1
PROJECT OVERVIEW**

DATE: 11/10/2021	1 inch = 2,000 feet
CREATED BY: TCC	CHECKED BY: BC
Job No. 60661200	AECOM



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

December 20, 2021

Brian Cooper
AECOM
715 Washington Boulevard
Williamsport, PA 17701

Re: 21-1071; AEP - Salt Creek-Holmesville 138-kV Line Project

Project: The proposed project involves the installation of a 138-kV transmission line.

Location: The proposed project is located in Prairie Township, Holmes County, Ohio.

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

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

American sweet-flag (*Acorus americanus*), P
Great St. John's-wort (*Hypericum ascyron* ssp. *pyramidatum*), T
Northern adder's-tongue (*Ophioglossum pusillum*), T
Prairie fringed orchid (*Platanthera leucophaea*), T, FT
Buttonbush shrub swamp plant community
Mixed emergent marsh plant community
Lake chubsucker (*Erimyzon sucetta*), T
Sandhill crane (*Antigone canadensis*), T
Barn owl (*Tyto alba*), T
Killbuck Marsh 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 entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally threatened species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these species of bats predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, these species are also dependent on the forest structure surrounding roost trees. If trees are present within the project area, and trees must be cut, the DOW recommends cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH ≥ 20 if possible. If trees are present within the project area, and trees must be cut during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 through August 15, prior to any cutting. Mist net and acoustic surveys should be conducted in accordance with the most recent version of the “OHIO DIVISION OF WILDLIFE GUIDANCE FOR BAT SURVEYS AND TREE CLEARING”. If state listed bats are documented, DOW recommends cutting only occur from October 1 through March 31. However, limited summer tree cutting may be acceptable after consultation with the DOW (contact Erin Hazelton at Erin.hazelton@dnr.ohio.gov).

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

The project is within the range of the snuffbox (*Epioblasma triquetra*), a state endangered and federally endangered mussel. Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact this species.

The project is within the range of the Iowa darter (*Etheostoma exile*), a state endangered fish, and the lake chubsucker (*Erimyzon sucetta*) a state threatened fish. 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 eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*), a state endangered species and a federal species of concern. This long-lived, entirely aquatic salamander inhabits perennial streams with large flat rocks. In-water work in hellbender streams can reduce availability of large cover rocks and can destroy hellbender nests and/or kill adults and juveniles. The contribution of additional sediment to hellbender streams can smother large cover rocks and gravel/cobble substrate (used by juveniles), making them unsuitable for refuge and nesting. Projects that contribute to altered flow regimes (e.g., by increasing areas of impervious surfaces or modifying the floodplain) can also adversely affect hellbender habitat. Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact this species.

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

The project is within the range of the black tern (*Chlidonias niger*), a state endangered bird. The black tern prefers large, undisturbed inland marshes with fairly dense vegetation and pockets of open water. They nest in various kinds of marsh vegetation, but cattail marshes are generally favored. Nests are built on top of muskrat houses or on top of floating vegetation. If this type of habitat will be impacted, construction should be avoided in this habitat from April 1 through June 30 to reduce impacts to this species. If no wetland habitat will be impacted, the 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 trumpeter swan (*Cygnus buccinator*), a state threatened bird. Trumpeter swans prefer large marshes and lakes ranging in size from 40 to 150 acres. They like shallow wetlands one to three feet deep with a diverse mix of plenty of emergent and submergent 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 April 15 through June 15. If this habitat will not be impacted, this project is not likely to have an impact on this species.

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

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

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

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

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

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

Mike Pettegrew
Environmental Services Administrator (Acting)



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

November 23, 2021

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

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

Reference: Request for Technical Assistance, Salt Creek - Holmesville 138-kV Line
Project,
Holmes County, Ohio

Dear Mr. Pettegrew:

AEP Ohio Transmission Company, Inc. (AEP), is formally requesting that the Ohio Department of Natural Resources (ODNR) complete a review for the proposed Salt Creek - Holmesville 138-kV Line Project (Project) Holmes County, Ohio. The Project is located within the Holmesville, Ohio U.S. Geologic Survey 7.5' topographical quadrangle and is shown on the attached Project Overview Map (Figure 1).

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

Sincerely,

Brian Cooper

Phone: (717-304-0578)
brian.cooper@aecom.com

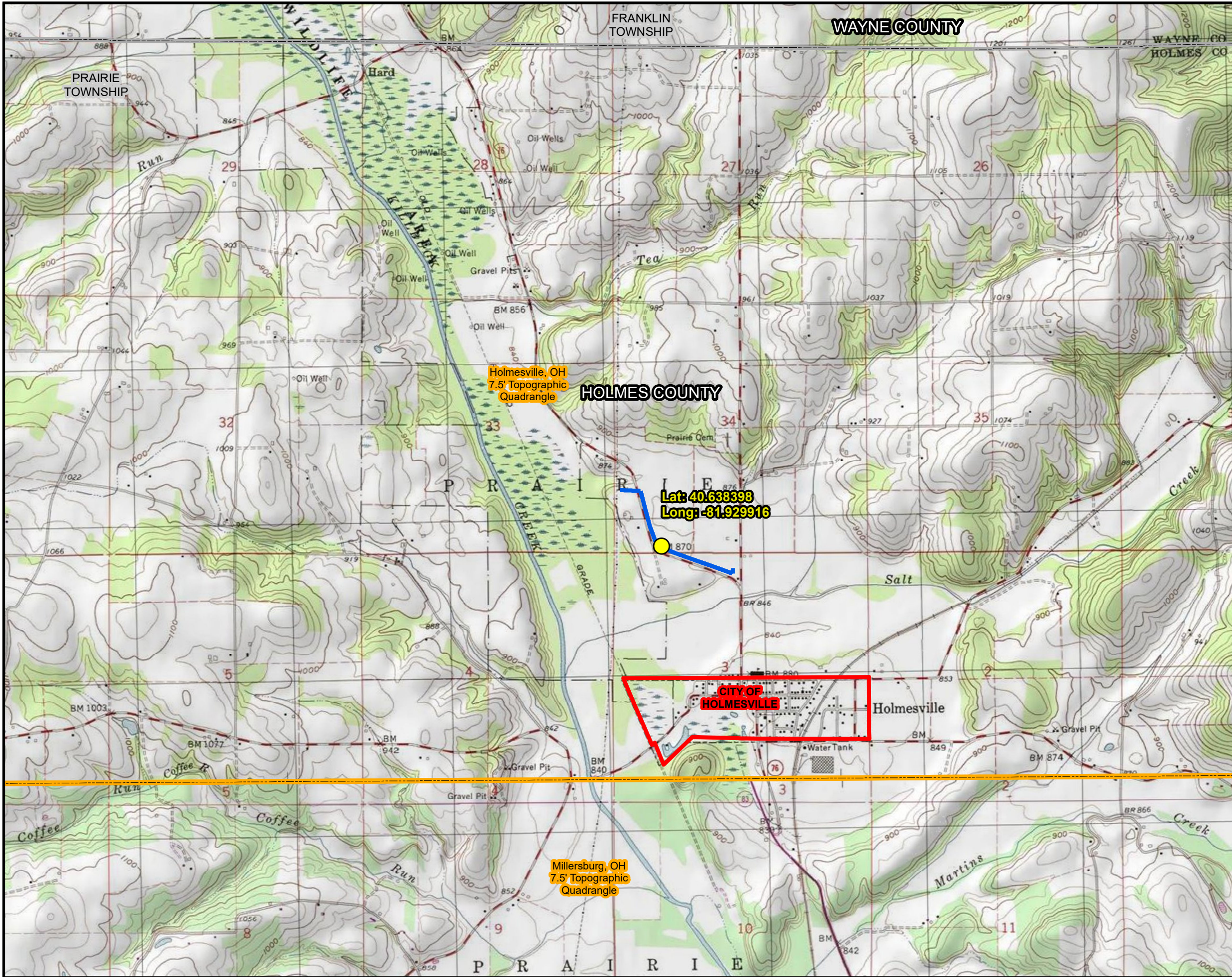
Attachments: Figure 1 – Project Location Map
Electronic Shapefiles (.shp)

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







BOUNDLESS ENERGY™

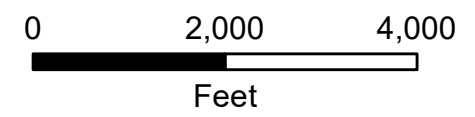
Document Path: L:\DCS\Projects\ENV\60661200_AEP_ScoshWooster_Env\900_CAD_GIS\920_929_GIS_Graphics\AEP_SaltCreekHolmesville.mxd

Date Saved: 11/10/2021



Legend

-  Project Midpoint
-  Salt Creek - Holmesville 138-kV Line
-  City or Town Boundary
-  Township Boundary
-  7.5' Topographic Quadrangle Boundary
-  County Boundary



BASE MAP SOURCE:
ArcGIS Online, USA Topo Maps



Salt Creek-Holmesville
138 kV Line

**FIGURE 1
PROJECT OVERVIEW**

DATE: 11/10/2021	1 inch = 2,000 feet
CREATED BY: TCC	CHECKED BY: BC
Job No. 60661200	AECOM



In reply, refer to
2022-HOL-56371

December 9, 2022

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

RE: Wooster-West Millersburg Project (Salt Creek Switch/South Coshocton-Wooster 138kV Cut-in/Salt Creek-Holmesville 138k Greenfield Line), Prairie Township, Holmes County, Ohio

Dear Mr. Weller:

This letter is in response to the correspondence received November 11, 2022 regarding the proposed Wooster-West Millersburg Project (Salt Creek Switch/South Coshocton-Wooster 138kV Cut-in/Salt Creek-Holmesville 138k Greenfield Line), Prairie Township, Holmes 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 Wooster-West Millersburg Project (Salt Creek Switch/South Coshocton-Wooster 138kV Cut-in/Salt Creek-Holmesville 138k Greenfield Line) in Prairie Township, Holmes County, Ohio* by Ryan J. Weller (Weller & Associates, Inc. 2022).

A literature review, visual inspection, surface collection, and shovel test unit excavation was completed as part of the investigations. No previously identified archaeological sites are located within the project area. Two (2) new archaeological sites were identified during survey, Ohio Archaeological Inventory (OAI) #33HS0384 and 33HS0385. Both sites are recommended for avoidance or Phase II Archaeological Assessment. Our office agrees with this recommendations.

The following comments pertain to the *History/Architecture Investigations for the Wooster-West Millersburg Project (Salt Creek Switch/South Coshocton-Wooster 138kV Cut-in/Salt Creek-Holmesville 138k Greenfield Line) in Prairie Township, Holmes County, Ohio* by Scott McIntosh (Weller & Associates, Inc. 2022).

A literature review and field survey were completed as part of the investigations. A total of seven (7) resources 50 years of age or older were identified within the Area of Potential Effects (APE). One (1) resource is listed in the National Register of Historic Places (NRHP) (Ref. 85001343). None of the remaining resources are recommended eligible for NRHP listing. Our office agrees with Weller's recommendations regarding eligibility. While the project area may be visible from the NRHP-listed resource, visibility of the project will not impact the significance or integrity of the property in a way that would alter its National Register status. Therefore, our office concurs that the work as proposed should have no adverse effect on aboveground historic properties.

To summarize, our office recommends avoidance or additional investigations for OAI#33HS0384 and 33HS0385. Our office would also appreciate the timely completion of the OAI forms. Please contact our office when the forms are complete. Our office looks forward to additional coordination for the Wooster-West Millersburg Project (Salt Creek Switch/South Coshocton-Wooster 138kV Cut-in/Salt Creek-Holmesville 138k Greenfield Line). If you have any questions, please contact me at (614) 298-2022, or by e-mail at khorricks@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: 1095696, 1095697

Appendix D Wetland Delineation and Stream Assessment Report

WOOSTER-WEST MILLERSBURG 138 KV SWITCH AND TRANSMISSION LINE PROJECT HOLMES COUNTY, OHIO

ECOLOGICAL REPORT

Prepared for:

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



Prepared by:

AECOM

525 Vine Street, Suite 1800
Cincinnati, Ohio 45202

Project #: 60661172, 60661200 & 60661802

April 2022, Revised November 2022

TABLE OF CONTENTS

2.0 METHODOLOGY..... 4

2.1 WETLAND DELINEATION 4

2.1.1 WETLAND CLASSIFICATION..... 5

2.1.2 WETLAND ASSESSMENT 5

2.2 STREAM ASSESSMENT 5

2.2.1 OEPA PRIMARY HEADWATER HABITAT ASSESSMENT 6

2.2.2 OEPA 401 WATER QUALITY CERTIFICATION FOR NATIONWIDE PERMIT ELIGIBILITY 6

2.2.3 UPLAND DRAINAGE FEATURES 7

2.3 RARE, THREATENED, AND ENDANGERED SPECIES..... 7

3.0 RESULTS 8

3.1 WETLAND DELINEATION 8

3.1.1 PRELIMINARY SOILS EVALUATION 8

3.1.2 NATIONAL WETLAND INVENTORY MAP REVIEW 8

3.1.3 DELINEATED WETLANDS..... 9

3.1.4 DELINEATED WETLANDS ASSESSMENT 9

3.2 STREAM DELINEATION..... 11

3.2.1 OEPA STREAM ELIGIBILITY..... 11

3.3 FEMA 100 YEAR FLOODPLAINS 11

3.4 PONDS 11

3.5 VEGETATIVE COMMUNITIES WITHIN THE PROJECT SURVEY CORRIDOR..... 11

3.6 RARE, THREATENED AND ENDANGERED SPECIES AGENCY COORDINATION..... 12

4.0 SUMMARY 20

5.0 REFERENCES 22

TABLES (in-text)

TABLE 1-SOIL MAP UNITS AND DESCRIPTIONS WITHIN THE SOUTH COSHOCTON – WOOSTER 138 KV CUT IN PROJECT SURVEY CORRIDOR.....	8
TABLE 2-SUMMARY OF DELINEATED WETLANDS WITHIN THE SOUTH COSHOCTON – WOOSTER 138 KV CUT IN PROJECT SURVEY CORRIDOR.....	10
TABLE 3-VEGETATIVE COMMUNITIES WITHIN THE SOUTH COSHOCTON – WOOSTER 138 KV CUT IN PROJECT SURVEY CORRIDOR.....	12
TABLE 4- ODNR AND USFWS LISTED SPECIES WITHIN THE SOUTH COSHOCTON – WOOSTER 138 KV CUT IN PROJECT SURVEY CORRIDOR.....	14

FIGURES**Number**

FIGURE 1	Overview Map
FIGURE 2	Soil Map Unit and National Wetland Inventory Map
FIGURE 3	Wetland Delineation and Stream Assessment Map
FIGURE 4	Stream Eligibility Map
FIGURE 5	Vegetation Communities Map

APPENDICES**Number**

APPENDIX A	U.S Army Corps of Engineers Wetland Determination Data Forms / OEPA Wetland ORAM Forms / Delineated Features Photographs (combined per wetland and shown in numerical order)
APPENDIX B	Habitat Photographic Record
APPENDIX C	Agency Correspondence
APPENDIX D	Desktop Assessment for Winter Bat Habitat

1.0 INTRODUCTION

American Electric Power Ohio Transmission Company (AEP Ohio Transco) is proposing to construct a new delivery point on the Wooster-West Millersburg 138-kV circuit in Holmes County, OH. The proposed project includes 3 construction components; a new 3-way switch (Salt Creek Switch) toward Wooster and West Millersburg, an approximately 0.2-mile cut into the South Coshocton-Wooster 138-kV asset for the new switch install (South Coshocton – Wooster 138 kV T-line Cut In), and approximately 0.75-mile greenfield 138-kV transmission line build leading to the new delivery point (Salt Creek – Holmesville 138 kV Line). The proposed Project location is illustrated on Figure 1.

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

2.0 METHODOLOGY

The field survey was conducted over a 100-foot survey corridor consisting of a 50-foot buffer on each side of the transmission centerline, composing a Project survey corridor of approximately 10.6 acres. Prior to conducting field surveys, digital U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey data, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) data, and U.S. Geological Survey (USGS) National Hydrography Dataset (NHD), FEMA 100-year floodplain data (FEMA), and USGS 7.5-minute topographic maps were reviewed as an exercise to identify the occurrence and location of potential wetland areas.

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

2.1 WETLAND DELINEATION

The Project survey corridor was evaluated according to the procedures outlined in the U.S. Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual (*1987 Manual*) (Environmental Laboratory, 1987)

and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0) (NCNE Regional Supplement)* (USACE, 2012).

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

Additionally, USACE Data forms and representative photographs were also taken to represent upland communities where desktop review indicated the potential presence of an aquatic feature based on aerial imagery, two or less wetland criteria were observed, and/or an absence of an aquatic features was observed for areas mapped as an NWI and/or NHD feature.

2.1.1 WETLAND CLASSIFICATION

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

2.1.2 WETLAND ASSESSMENT

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

2.2 STREAM ASSESSMENT

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

2.2.1 OEPA PRIMARY HEADWATER HABITAT ASSESSMENT

Stream assessments were conducted using the methods described in the OEPA's *Methods for Assessing Habitat in Flowing Waters: Using OEPA's Qualitative Habitat Evaluation Index* (Rankin, 2006) and in the OEPA's *Field Methods for Evaluating Primary Headwater Streams in Ohio* (OEPA, 2018). Streams associated with watershed area less than or equal to 1.0 mi² (259ha), and a maximum depth of water pools equal to or less than 15.75 inches were evaluated utilizing the HHEI methodology and all other streams assessed as QHEI. Flow regime (ephemeral, intermittent, perennial) was determined by the appropriate stream assessment score per OEPA manuals (OEPA, 2018) and by AECOM's professional judgment.

Streams assessed in the Project survey corridor were reviewed for existing OEPA Aquatic Life Use Designations per OEPA's Water Quality Standards (OAC Chapter 3745-1). Those without an existing use designation were assigned a provisional aquatic life use designation based upon habitat assessment results (Rankin, 1989; OEPA 2018).

2.2.2 OEPA 401 WATER QUALITY CERTIFICATION FOR NATIONWIDE PERMIT ELIGIBILITY

The OEPA has designated each watershed in the state on the basis of whether it may be ineligible for coverage under Ohio EPA's 401 Water Quality Certification for Nationwide Permits. Mapping provided by OEPA illustrate the eligibility of streams in the area for a nationwide 401 permit. Three categories are identified: eligible, ineligible, and possibly eligible with additional field screening required. Impacts to streams within each watershed would then have eligibility for 401 Water Quality Certification determined by the watershed category. The three categories are defined as:

Eligible: Streams within the watershed are eligible for coverage under Ohio EPA's water quality certification for the nationwide permits if all other general and regional special terms and conditions are met.

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

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

2.2.3 UPLAND DRAINAGE FEATURES

An upland drainage feature (UDF) is a non-jurisdictional drainage that does not meet the criteria of either a jurisdictional stream or a wetland. A UDF generally lacks an OWHM (USACE, 2005), and are equivalent to a swale or an erosional feature as described by the USACE: “generally shallow features in the landscape that may convey water across upland areas during and following storm events. Swales usually occur on nearly flat slopes and typically have grass or other low-lying vegetation throughout the swale” (USACE, 2007).

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

In addition, UDF’s (including swales, ditches, and other erosional features) are generally not “waters of the U.S.” except in certain circumstances, such as relocated streams.

2.3 RARE, THREATENED, AND ENDANGERED SPECIES

AECOM conducted a rare, threatened, and endangered species review and general field habitat surveys within the Project survey corridor. AECOM submitted requests to Ohio Department of Natural Resources (ODNR) Office of Real Estate – Environmental Review Section and the United States Fish and Wildlife Service (USFWS) Ohio Ecological Services Field Office soliciting comments on the proposed Project. Since responses from these agencies have not been received at this time, AECOM used the USFWS Information for Planning and Consultation (IPaC) tool to acquire a list of federally listed species that may be present in or near the Project survey corridor and a response letter from ODNR regarding a nearby project (Salt Creek-Holmesville 138kV Line Project – December 20, 2021). The results of the IPaC investigation and ODNR’s response to a nearby project are included in this report in Table 4 (Appendix D). Agency-identified species information and available species-specific information was reviewed to identify the various habitat types that listed species are known to inhabit.

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

AECOM conducted a desktop assessment of the Project survey corridor and a quarter-mile buffer around it to identify potentially occurring winter bat hibernaculum that may be present near the Project which is

located in Appendix D. This assessment was conducted by reviewing data on mining activity and karst geology from the ODNR Division of Mineral Resources and United States Geological Survey websites.

3.0 RESULTS

On February 3, 2022, AECOM ecologists walked the Project survey corridor to conduct the wetland delineation, stream assessment and habitat survey. Within the Project survey corridor, AECOM delineated two (2) wetlands. No streams or ponds were delineated. The delineated features are discussed in detail in the following sections.

3.1 WETLAND DELINEATION

3.1.1 PRELIMINARY SOILS EVALUATION

Soils in delineated wetlands were observed and documented as part of the delineation methodology. According to the USDA/NRCS Web Soil Survey, 4 soil series are mapped within the Project survey corridor, inclusive of mapped soil units (USDA NRCS 2022a and 2022b). Of these, three (3) soil map units are identified as hydric, comprising approximately 7.4% of the mapped unit areas. Table 1 below provides a detailed overview of all soil series and soil map units present within the Project survey corridor. Soil map units located in the Project survey corridor and vicinity are shown on Figure 2.

TABLE 1 - SOIL MAP UNITS AND DESCRIPTIONS WITHIN THE SOUTH COSHOCTON – WOOSTER 138 KV CUT IN PROJECT SURVEY CORRIDOR

Soil Series	Map Unit Symbol	Map Unit Description	Topographic Setting	Hydric	Hydric Component (%)
Bogart	BtA	Bogart silt loam, 0 to 2 percent slopes	Terraces	No	Fitchville (5%)
Chili	CnB	Chili loam, 2 to 6 percent slopes	Terraces	No	Fitchville (5%)
	CnC2	Chili loam, 6 to 12 percent slopes, eroded	Terraces	No	Fitchville (5%)
	CnD2	Chili loam, 12 to 18 percent slopes, eroded	Terraces	No	N/A
	CnE	Chili loam, 18 to 25 percent slopes	Terraces	No	N/A
Melvin	Md	Melvin silt loam, 0 to 3 percent slopes, frequently flooded	Flood plains	Yes	Melvin (85%) Orrville (5%)
	Mg	Melvin silt loam, frequently ponded, 0 to 3 percent slopes	Flood plains	Yes	Melvin (90%)
Orrville	Or	Orrville silt loam, 0 to 3 percent slopes, occasionally flooded	Flood plains	Yes	Orrville (5%) Melvin (5%) Lobdell (5%)

NA = Not Applicable or Not Available

3.1.2 NATIONAL WETLAND INVENTORY MAP REVIEW

According to NWI data covering the Project location, the Project survey corridor contains no mapped NWI wetlands. The locations of NWI mapped wetlands in the Project vicinity are shown on Figure 2.

3.1.3 DELINEATED WETLANDS

During the field survey, AECOM identified two (2) wetlands within the Project survey corridor. Both are classified as palustrine emergent (PEM) wetlands. AECOM has given each wetland within the Project survey corridor a provisional determination of jurisdiction (non-isolated, i.e., WOTUS). AECOM assessments are provisional, as final jurisdictional status can only be determined by the USACE. The locations and approximate extent of the wetlands identified within the Project survey corridor are shown on Figure 3. Details for each delineated wetland in the survey corridor are provided in Table 2. Completed USACE data forms and photographs of each wetland are provided in Appendix A.

3.1.4 DELINEATED WETLANDS ASSESSMENT

Within the Project survey corridor, the 2 delineated wetlands were assessed as follows:

- 1 - Category 1 Wetland, and
- 1 - Category 2 Wetland

Individual wetland assessment results (ORAM score) are provided in Table 2. Wetland assessment ORAM forms are provided in Appendix A.

Category 1 Wetlands

One (1) Category 1 wetland was delineated within the Project survey corridor having a combined total area of approximately 0.7 acres. The size of the delineated wetland in the Project survey corridor is approximately 0.31 acres.

Category 2 Wetlands

One (1) Category 2 wetland was delineated within the Project survey corridor with a total area of approximately 0.5 acre. The size of the delineated wetland in the Project survey corridor is approximately 0.21 acre.

TABLE 2 – SUMMARY OF DELINEATED WETLANDS WITHIN THE SOUTH COSHOCTON – WOOSTER 138 KV CUT IN PROJECT SURVEY CORRIDOR

Wetland ID	Location		Isolated?	Habitat Type	Delineated Area (acre)	ORAM		Nearest Structure # (Existing / Proposed)	Existing Structure # in Wetland	Proposed Structure # in Wetland	Structure Installation Method	Proposed Impacts	
	Latitude	Longitude				Score	Category					Temporary Matting Area (acre)	Permanent Impact Area (acre)
Wetland 01	40.63699	-81.92461	No	PEM	0.21	26	1	7 (proposed)	None	None	N/A	None	None
Wetland 02	40.64232	-81.93306	No	PEM	0.31	36	2	188 (proposed)	None	None	N/A	None	None
Total:					0.52							0.000	0.000

3.2 STREAM DELINEATION

During the field survey, AECOM did not delineate any streams within the Project survey corridor.

3.2.1 OEPA STREAM ELIGIBILITY

OEPA stream eligibility for 401 Water Quality Certification mapping was reviewed for the Project. The Project occurs across two watersheds designated by 401 WQC eligibility. These watersheds include Tea Run-Killbuck Creek (HUC12: 050400030607) and Salt Creek (HUC12: 050400030606). Both watersheds are listed as “eligible”. OEPA stream eligibility mapping for the Project vicinity, is provided on Figure 4.

3.3 FEMA 100 YEAR FLOODPLAINS

FEMA designated 100-year floodplains are mapped in and around the Project survey corridor (FEMA, 2011). The mapped floodplain from Salt Creek is near the southeast end of the Project survey corridor. Mapped floodplains are presented in Figure 2.

3.4 PONDS

No ponds were observed within the Project survey corridor.

3.5 VEGETATIVE COMMUNITIES WITHIN THE PROJECT SURVEY CORRIDOR

AECOM ecologists conducted a general habitat survey in conjunction with the stream and wetland field surveys. A variety of woody and herbaceous lands, as described in Table 3 below, are present within the Project survey corridor, including old field, scrub-shrub, agricultural land, pasture/hay fields, residential landscaped areas, stream/wetland areas, and urban areas. Habitat descriptions applicable to the Project are provided below. Vegetative communities are depicted visually on aerial photography in Figure 5.

TABLE 3- VEGETATIVE COMMUNITIES WITHIN THE SOUTH COSHOCTON – WOOSTER 138 KV CUT IN PROJECT SURVEY CORRIDOR

Vegetative Community	Description	Approximate Acreage Within the Project Survey Corridor	Approximate Percentage Within the Project Survey Corridor
Agricultural	Agricultural lands being utilized for row-crop production and associated activities, typically devoid of vegetation outside of the target crop and opportunistic/invasive species.	5.29	49.7%
Landscaped Areas	Landscaped areas, including residential properties and commercial properties, were observed within the Project vicinity. These landscaped areas within the Project survey corridor and adjacent areas are frequently mowed grasses and forbs.	0.25	2.3%
Old Field	Herbaceous cover exists alongside roads, field borders, and abandoned fields within the survey corridor of the Project in the form of successional old-field communities. These communities are the earliest stages of recolonization by plants following disturbance. This community type is typically short-lived, giving way progressively to shrub and forest communities unless periodically re-disturbed, in which case they remain as old fields. The old-field areas within the study corridors and adjacent areas are infrequently mowed areas of grasses, forbs, and occasional shrubs.	1.67	15.7%
Scrub-Shrub	Scrub-shrub habitats represent the successional stage between old-field and second growth forest, and often emerge in recently harvested forests responding to the lightness of the remaining canopy. Dominant species consist of herbaceous communities similar to that of old field habitat with a few woody species, to a community dominated by forest herbs and woody species.	0.27	2.5%
Streams/Wetlands	Streams and wetlands were observed both within and beyond the survey corridor for the Project.	0.52	4.9%
Successional Hardwood Woodlands	Successional mixed hardwood woodlands are present along the Project survey corridor. Woody species dominating these areas ranged between 2-6" DBH and included red elm (<i>Ulmus rubra</i>), white ash (<i>Fraxinus americana</i>), black maple (<i>Acer negundo</i>), black cherry (<i>Prunus serotina</i>), and quaking aspen (<i>Populus tremuloides</i>). The dominant shrub-layer species included Morrow's honeysuckle (<i>Lonicera morrowii</i>), black cherry (<i>Prunus serotina</i>), multiflora rose (<i>Rosa multiflora</i>) and blackberry (<i>Rubus occidentalis</i>).	0.27	2.5%
Urban	Urban areas are areas developed with residential and commercial land uses, including roads, buildings and parking lots. These areas are generally devoid of significant woody and herbaceous vegetation.	2.38	22.4%
Totals:		10.65	100%

3.6 RARE, THREATENED AND ENDANGERED SPECIES AGENCY COORDINATION

Protected Species Agency Consultation

AECOM conducted a rare, threatened, and endangered species review for areas within the Project survey corridor. Correspondence letters from the USFWS and ODNR are included in Appendix D. Table 4 provides a list of species of concern identified by the ODNR Division of Wildlife (DOW) and USFWS as potentially occurring within the vicinity of the Project and provides a brief synopsis for each species based on the field findings and agency remarks.

TABLE 4- ODNR AND USFWS LISTED SPECIES WITHIN THE PROJECT SURVEY CORRIDOR

Common Name (Scientific Name)	State Status	Federal Status	Habitat Description	Potential Habitat Observed in the Project Survey Corridor	Potential Impacts and Avoidance Dates	Agency Comments
Mammals						
Indiana bat (<i>Myotis sodalis</i>)	Endangered	Endangered	Winter Indiana bat hibernacula include caves and mines, while summer habitat typically includes tree species exhibiting exfoliating bark or cavities that can be used for roosting. The 8- to 10-inch diameter size classes of several species of hickory (<i>Carya</i> spp.), oak (<i>Quercus</i> spp.), ash (<i>Fraxinus</i> spp.), birch (<i>Betula</i> spp.), and elm (<i>Ulmus</i> spp.) have been found to be utilized by the Indiana bat. These tree species and many others may be used when dead, if there are adequately sized patches of loosely-adhering bark or open cavities. The structural configuration of forest stands favored for roosting includes a mixture of loose-barked trees with 60 to 80 percent canopy closure and a low-density sub-canopy (less than 30 percent between about 6 feet high and the base canopy). The suitability of roosting habitat for foraging or the proximity to suitable foraging habitat is important to the suitability of a particular tree stand. An open subcanopy zone, under a moderately dense canopy, allows maneuvering while catching insect prey.	Yes - Within the Project survey corridor, areas of young successional forest were identified which appear to be potentially suitable summer roosting and foraging habitat.	ODNR-DOW commented If suitable habitat occurs within the project area, the DOW recommends trees be conserved. If trees must be cut, the DOW recommends cutting occur between October 1 and March 31. USFWS commented that if no caves or abandoned mines are present and tree removal is unavoidable, it is recommended that removal of any trees ≥3 inches dbh only occur between October 1 and March 31.	Potentially suitable habitat is present within the Project area. If tree removal is unavoidable, it is recommended that any cutting of trees ≥5 inches DBH occur between October 1 and March 31.
Northern long-eared bat (<i>Myotis septentrionalis</i>)	Endangered	Threatened	Suitable summer habitat for northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥3 inches dbh that have any exfoliating bark, cracks, crevices, hollows and/or cavities), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) 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, northern long-eared bats hibernate in caves and abandoned mines.	Yes - Within the Project survey corridor, areas of young successional forest were identified which appear to be potentially suitable summer roosting and foraging habitat.	USFWS commented that if no caves or abandoned mines are present and tree removal is unavoidable, it is recommended that removal of any trees ≥3 inches dbh only occur between October 1 and March 31. ODNR did not comment on this species	Potentially suitable habitat is present within the Project area. If tree removal is unavoidable, it is recommended that any cutting of trees ≥3 inches DBH occur between October 1 and March 31.

TABLE 4- ODNR AND USFWS LISTED SPECIES WITHIN THE PROJECT SURVEY CORRIDOR

Common Name (Scientific Name)	State Status	Federal Status	Habitat Description	Potential Habitat Observed in the Project Survey Corridor	Potential Impacts and Avoidance Dates	Agency Comments
Little brown bat (<i>Myotis lucifugus</i>)	Endangered	None	During the spring and summer (April 1 through September 30), these bat species predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves.	Yes - Within the Project survey corridor, areas of young successional forest were identified which appear to be potentially suitable summer roosting habitat.	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.	Potentially suitable habitat is present within the Project area. If tree removal is unavoidable, it is recommended that any cutting of trees ≥3 inches DBH occur between October 1 and March 31.
Tricolored bat (<i>Perimyotis subflavus</i>)	Endangered	None	During the spring and summer (April 1 through September 30), these bat species predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves.	Yes - Within the Project survey corridor, areas of young successional forest were identified which appear to be potentially suitable summer roosting habitat.	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.	Potentially suitable habitat is present within the Project area. If tree removal is unavoidable, it is recommended that any cutting of trees ≥3 inches DBH occur between October 1 and March 31.
Birds						
Northern harrier (<i>Circus hudsonis</i>)	Endangered	None	A common migrant and winter species. Nesters are much rarer, though they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies, building a nest out of stick on the ground, often on top of a mound. Harriers hunt over grasslands.	No- within the Project survey corridor, no large areas of marsh or grassland were identified.	No potentially suitable habitat was observed within the Project survey corridor.	ODNR stated that if this type of habitat will be impacted, construction should be avoided during the species' nesting period between May 15 to August 1.

TABLE 4- ODNR AND USFWS LISTED SPECIES WITHIN THE PROJECT SURVEY CORRIDOR

Common Name (Scientific Name)	State Status	Federal Status	Habitat Description	Potential Habitat Observed in the Project Survey Corridor	Potential Impacts and Avoidance Dates	Agency Comments
Trumpeter swan (<i>Cygnus buccinator</i>)	Threatened	None	Trumpeter swans prefer large marshes and lakes ranging in size from 40 to 150 acres. They like shallow wetlands one to three feet deep with a diverse mix of plenty of emergent and submergent vegetation and open water.	No - within the Project survey corridor, areas were not identified that may provide potentially suitable habitat	No potentially suitable habitat (wetlands with 1-3 feet of standing water) were observed within the Project survey corridor.	ODNR stated that if this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 to June 15. If this habitat will not be impacted, the Project is not likely to impact this species.
American bittern (<i>Botaurus lentiginosus</i>)	Endangered	None	Nesting bitterns prefer large undisturbed wetlands that have scattered small pools amongst dense vegetation; occasionally occupying bogs, wet meadows or densely vegetated swamps.	No – wetland areas within the Project survey corridor are either disturbed or have no standing water, and therefore do not provide suitable habitat	No potentially suitable habitat (undisturbed wetland with surface pools) was observed within the Project survey corridor.	ODNR stated that if this type of habitat will be impacted, construction should be avoided in the habitat during the species' nesting period of May 1 through July 31.
Black tern (<i>Chlidonias niger</i>)	Endangered	None	The black tern prefers large, undisturbed marshes with dense vegetative structure and pockets of open water, favoring cattail marshes.	No – wetland areas within the Project survey corridor are either disturbed or have no standing water, and therefore do not provide suitable habitat	No potentially suitable habitat (undisturbed wetland with surface pools) was observed within the Project survey corridor.	ODNR stated that if this type of habitat will be impacted, construction should be avoided in the habitat during the species' nesting period of April 1 through June 30..
Sandhill crane (<i>Grus canadensis</i>)	Threatened	None	Sandhill cranes are primarily a wetland-dependent species. Wintering grounds utilize agricultural fields, while roosting in shallow or standing water. Breeding grounds require large sections of wet meadow, shallow marshes or bogs for nesting.	No – wetland habitat areas identified within the Project survey corridor are not suitable as nesting grounds.	No potentially suitable nesting habitat was observed within the Project survey corridor.	ODNR stated that potential nesting habitat will be impacted, construction should be avoided in the habitat during the species' nesting period of April 1 through August 30.

TABLE 4- ODNR AND USFWS LISTED SPECIES WITHIN THE PROJECT SURVEY CORRIDOR

Common Name (Scientific Name)	State Status	Federal Status	Habitat Description	Potential Habitat Observed in the Project Survey Corridor	Potential Impacts and Avoidance Dates	Agency Comments
Upland sandpiper (<i>Bartramia longicauda</i>)	Endangered	None	During the nesting season, sandpipers will utilize dry grassland areas including seeded grasslands, grazed and ungrazed pasture, hayfields and CRP grasslands.	No – small areas of pastureland are present but no contiguous grasslands greater than 5 acres. Most habitat within the survey corridor is agricultural row crop and road shoulder.	No potentially suitable nesting habitat was observed within the Project survey corridor.	ODNR stated that if potential nesting habitat will be impacted, construction should be avoided in the habitat during the species' nesting period of April 15 through July 31.
Mussels						
Snuffbox (<i>Epioblasma triquetra</i>)	Endangered	Endangered	Prefers medium to large rivers with gravel riffles.	No-there were no streams or sufficient aquatic habitat identified within the Project survey corridor.	No potentially suitable habitat within the Project survey corridor and no in-stream work proposed.	Due to location and no in-water work proposed, the project is not likely to impact this species.
Fish						
Iowa darter (<i>Etheostoma exile</i>)	Endangered	None	This species is typically found in lakes or slow-moving streams with dense aquatic vegetation. Most commonly located in glacially formed natural lakes.	No-there were no streams or sufficient aquatic habitat identified within the Project survey corridor.	No potentially suitable habitat within the Project survey corridor and no in-stream work proposed.	The DOW recommends no in-water work in perennial streams from March 15-June 30 to reduce impacts to indigenous aquatic species and their associated habitat. Due to location and no in-water work proposed, the project is not likely to impact this species.

TABLE 4- ODNR AND USFWS LISTED SPECIES WITHIN THE PROJECT SURVEY CORRIDOR

Common Name (Scientific Name)	State Status	Federal Status	Habitat Description	Potential Habitat Observed in the Project Survey Corridor	Potential Impacts and Avoidance Dates	Agency Comments
Lake chubsucker (<i>Erimyzon sucetta</i>)	Threatened	None	This species is typically found in lakes or slow-moving streams with dense aquatic vegetation. Most commonly located in glacially formed natural lakes.	No-there were no streams or sufficient aquatic habitat identified within the Project survey corridor.	No potentially suitable habitat was identified within the Project survey corridor and no in-stream work proposed.	The DOW recommends no in-water work in perennial streams from March 15-June 30 to reduce impacts to indigenous aquatic species and their associated habitat. Due to location and no in-water work proposed, the project is not likely to impact this species.
Reptiles						
Eastern hellbender (<i>Cryptobranchus alleganiensis alleganiensis</i>)	Endangered	Species of Concern	The hellbender is an aquatic species that inhabits perennial streams with large flat rocks. Generally inhabits swiftly moving water rather than slow water with muddy banks.	No-there were no streams or sufficient aquatic habitat identified within the Project survey corridor.	No potentially suitable habitat was identified within the Project survey corridor and no in-stream work proposed.	The DOW recommends no in-water work in perennial streams from March 15-June 30 to reduce impacts to indigenous aquatic species and their associated habitat. Due to location and no in-water work proposed, the project is not likely to impact this species.

ODNR Coordination –

Coordination with the ODNR was initiated during the planning stages of the Project to obtain records of protected species located in the vicinity of the Project. Each of the three Project components was reviewed separately, and responses from the ODNR Office of Real Estate Environmental Review were received on December 20, 2021, December 28, 2021, and April 1, 2022. The ODNR Office of Real Estate Environmental Review Section replied to a request for records of protected species within one mile of the Project site. The Ohio Natural Heritage Database (ONHD) review found records of eight (8) state-protected species and three (3) state protected resource areas at or within a one-mile radius of the Project survey corridor. The state listed species are as follows: American sweet-flag, great St. John's-wort, northern adder's-tongue, prairie fringed orchid, sandhill crane, lake chubsucker, cerulean warbler, and barn owl. The two state protected resource areas are a buttonbush shrub swamp plant community, mixed emergent marsh plant community, and Killbuck Marsh Wildlife Area.

The ODNR recommended 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. In addition, the DOW listed multiple state-listed species with known ranges crossed by the Project survey corridor, including:

- Four mammal species: Indiana bat, northern long-eared bat, little brown bat and tricolored bat;
- One mussel species: snuffbox;
- Two fish species: Iowa darter: lake chubsucker;
- One salamander species: Eastern hellbender;
- Six bird species: American bittern, black tern, northern harrier, sandhill crane, trumpeter swan and upland sandpiper.

Potentially suitable habitat for the four bats was identified in the Project survey corridor. These areas consist of woody vegetation with dbh measurements ranging from two (2) to six (6) inches. The DOW recommended that if suitable habitat occurs within the Project area, trees be conserved or cut between October 1 and March 31. If trees must be cut during the summer months, the DOW recommends a net survey be conducted between June 1 and August 15, prior to any cutting. No tree clearing is anticipated for the project. Therefore, no impact to these bat species is anticipated.

The DOW also recommended that a desktop habitat assessment be conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the Project area. This desktop habitat assessment was performed and is contained in Appendix D. The habitat assessment did not result in locating potential hibernaculum(a) within 0.25 mile of the Project survey corridor.

The DOW noted that the Project is within the range of the northern harrier, a state endangered bird. ODNR-DOW has previously indicated that the potential habitat ground cover types that are smaller than two acres in size do not constitute adequate nesting habitat for the northern harrier. The Project survey corridor does not contain suitable northern harrier nesting habitat. Agricultural land (corn, soybean and row crop cultivation), commercial/residential landscaped areas, and urban areas are frequently mechanically maintained and do not provide suitable grassland habitat for nesting. Certain old field habitats located within the existing ROW which were surrounded by wooded areas and not contiguous to other larger grassland habitats would not be considered suitable habitat for the northern harrier.

The DOW noted that the Project is within the range of the trumpeter swan, a state threatened bird. ODNR-DOW state that the species prefer large marshes and lakes ranging in size from 40 to 150 acres. During field surveys, no wetlands were identified that are greater than or equal to 40 acres. Therefore, no wetlands in the Project survey corridor appear to provide suitable habitat for the species.

The DOW noted that the Project is within the range of the American bittern and the black tern, both state endangered birds. ODNR-DOW state that these species prefer large undisturbed wetland and marsh areas for nesting. During the field surveys, no undisturbed wetlands with significant surface water were observed. Therefore, no wetlands in the Project survey corridor appear to provide suitable habitat for the species.

The DOW noted that the Project is within the range of the sandhill crane, a state threatened species. ODNR-DOW stated that the sandhill crane roosts within shallow, standing water or moist bottomlands. However, the wetlands identified within the Project area are too small to be considered habitat for breeding or nesting sandhill cranes. Further, the tree line along the western edge of the Project screens the Project actions from any sandhill cranes that could be breeding or nesting in the nearby Killbuck Marsh wetlands. Lastly, no wetlands will be impacted by construction by the Project.

The DOW noted that the Project is within the range of the upland sandpiper, a state endangered species. ODNR-DOW stated that the upland sandpiper nests within dry grassland and hayfields. Although the Project crosses one small pasture and there are some hayfields nearby, the Project is primarily located within active agricultural production along the shoulder of a highway. Furthermore, none of the hayfield or pasture areas within the survey corridor form contiguous grassland habitats greater than five acres. Therefore, no suitable habitat was identified within the Project survey corridor.

Several aquatic species were identified to have overlapping ranges with the Project survey corridor including the snuffbox, Iowa darter, lake chubsucker, and Eastern hellbender. Due to the location of the project and the absence of in-water work, no potentially suitable habitat was identified or at risk for disturbance.

USFWS Coordination –

Coordination with the USFWS was also initiated during the planning stages of the Project to obtain technical assistance regarding federally listed species that may occur within the vicinity of each Project facility. In their responses, the USFWS noted that the Project lies within the range of the federally endangered Indiana bat and the federally threatened northern long-eared bat. Potentially suitable habitat for these species was identified in the Project survey corridor. USFWS recommends that trees ≥ 3 inches dbh, be saved wherever possible. If no caves or abandoned mines are present and trees ≥ 3 inches cannot be avoided, USFWS recommends that tree removal occur between October 1 and March 31 to avoid adverse effects to Indiana bats and northern long-eared bats during the brood-rearing months. No tree clearing is anticipated for the project. Therefore, no impact to these bat species is anticipated.

4.0 SUMMARY

The ecological survey of the Project survey corridor identified a total of two (2) wetlands, no streams and no ponds. The wetlands within the Project survey corridor included two palustrine emergent (PEM) wetlands. One wetland was identified as a Category 1 wetland and one was identified as a Category 2 wetland. No Category 3 wetlands were identified within the Project survey corridor. Both wetlands have been provisionally classified as jurisdictional WOTUS.

Fourteen state and/or federal listed threatened or endangered species were reported by the ODNR or the USFWS as possibly occurring within the Project vicinity. These species included four mammals: Indiana bat, northern long-eared bat, little brown bat and tricolored bat; one mussel: snuffbox; two fish: Iowa darter and lake chubsucker; one salamander: Eastern hellbender; and six birds: American bittern, black tern, northern harrier, sandhill crane, trumpeter swan and upland sandpiper.

Based on general observations during the ecology survey, part of the Project survey corridor contained potential summer habitat for the various bat species. USFWS and ODNR commented that if no caves or abandoned mines are present and tree removal is unavoidable, it is recommended that removal of any trees ≥ 3 inches dbh only occur between October 1 and March 31 to avoid adverse effects to Indiana bats and northern long-eared bats during the brood-rearing months. No tree clearing is anticipated for the project. Therefore, no impact to these bat species is anticipated.

The ODNR noted that the Project is within the range of the northern harrier, a state endangered species. During the field surveys, no large marshes or grassland habitats suitable for nesting were observed. Therefore, no suitable nesting habitat for the species is present within the Project survey corridor.

The ODNR noted that the Project is within the range of the trumpeter swan, a state threatened bird. During field surveys, no wetlands were identified that are greater than or equal to 40 acres with 1-3 feet of standing water. Therefore, no suitable habitat for the species is present within the Project survey corridor.

ODNR-DOW noted that the Project is within the range of the American bittern and the black tern. Both state endangered birds prefer large undisturbed wetland and marsh areas for nesting. During the field surveys, no undisturbed wetlands with significant surface water were observed. No wetlands in the Project survey corridor appear to provide suitable habitat for the species. Therefore, this Project is not likely to adversely affect these species.

ODNR-DOW noted that the range of the sandhill crane covers the Project survey corridor, and that this species nests within shallow standing water and moist bottomland, and breeds with large tracts of wet meadow, shallow marsh, or bogs. No standing water or large wetlands were identified within the Project survey corridor. Therefore, no suitable nesting or breeding habitat for the species is present within the Project survey corridor.

ODNR-DOW noted that the upland sandpiper's range covers the Project survey corridor and that this species nests within dry grasslands. Only small, fragmented areas of grassland (small pasture and small hayfield) are present within the Project survey corridor. No large, contiguous grasslands are present, and the Project survey corridor is mostly highly disturbed row crops, business properties, residences, and road shoulder. Therefore, no suitable habitat for this species is present within the Project survey corridor.

Several aquatic species were noted by ODNR-DOW for having overlapping ranges with the Project survey corridor including the snuffbox, Iowa darter, lake chubsucker, and Eastern hellbender. Due to the location of the project and the absence of in-water work, no potentially suitable habitat was identified or at risk for disturbance.

The reported results of the ecological survey conducted by AECOM on this Project are limited to the areas within the Project survey corridor provided in Figure 3: Wetland Delineation and Stream Assessment Map. Areas that fall outside of the Project survey corridor were not evaluated in the field and are not included in the reporting of this survey.

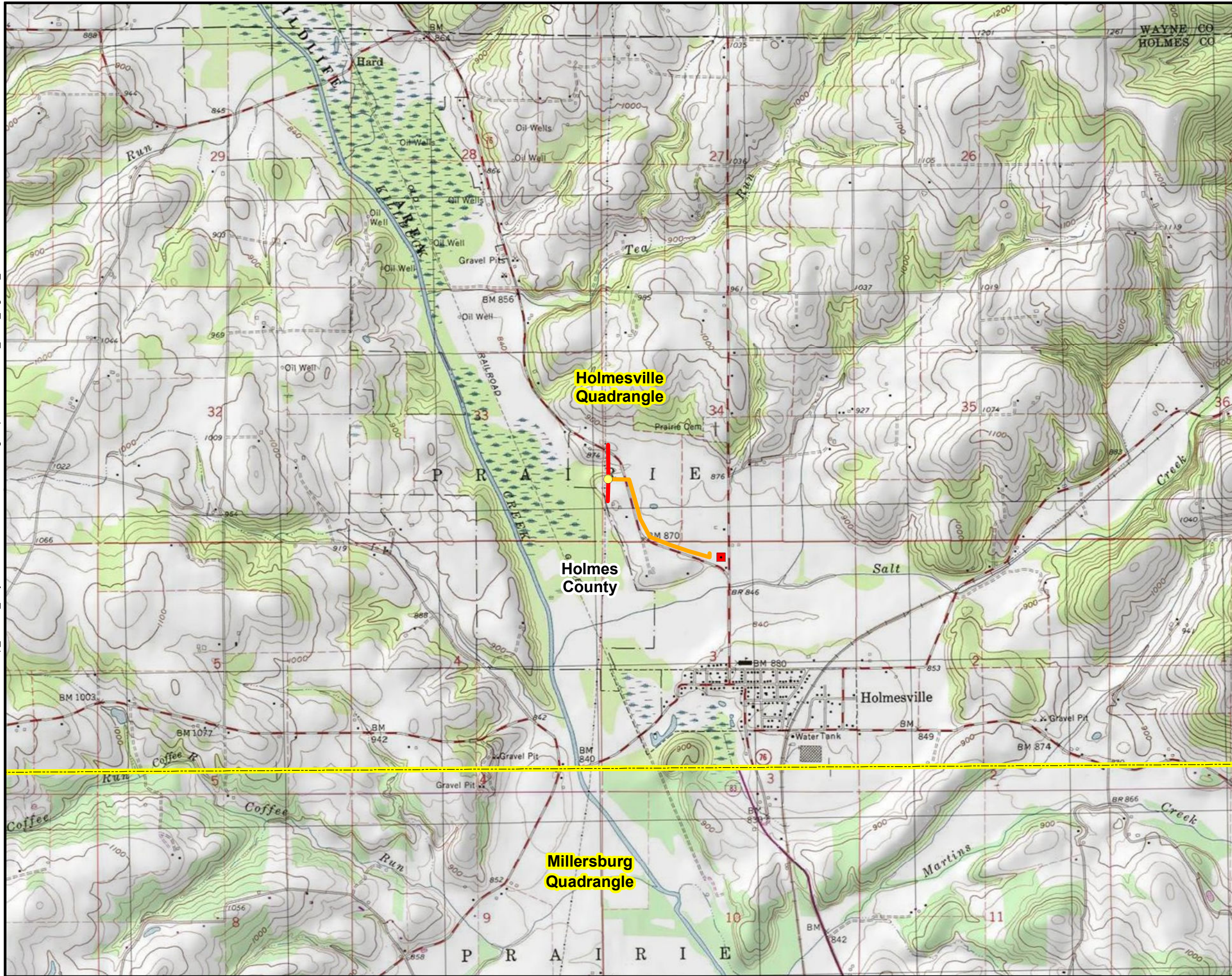
The information contained in this wetland delineation report is for a study corridor that may be much larger than the actual Project limits-of-disturbance; therefore, lengths and acreages listed in this report may not constitute the actual impacts of the Project defined in subsequent permit applications. If necessary, a separate report that identifies the actual Project impacts will be provided with agency submittals.

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

5.0 REFERENCES

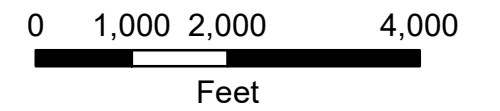
- Cowardin, L.M., V. Carter, F.C. Golet and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. Office of Biological Services, U.S. Fish and Wildlife Service, Washington, D.C.
- Environmental Laboratory. 1987. *U.S. Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station: Vicksburg, Mississippi.
- Federal Emergency Management Agency (FEMA). 2011. National Flood Hazard Layer, Holmes County, Ohio. <https://msc.fema.gov/portal/home>. Published August 16, 2011.
- Kollmorgen Corporation. 2010. Munsell Soil Color Charts. Baltimore, Maryland.
- U.S. Army Corps of Engineers. 2018. *National Wetland Plant List*, version 3.3. Engineer Research and Development Center. Cold Regions Research and Engineering Laboratory, Hanover, NH. http://wetland_plants.usace.army.mil/
- Mack, John J. 2001. *Ohio Rapid Assessment Method for Wetlands v. 5.0, User's Manual and Scoring Forms*. OEPA Technical Report WET/2001-1. Ohio Environmental Protection Agency, Division of Surface Water, 401/Wetland Ecology Unit, Columbus, Ohio.
- Ohio Department of Transportation. 2014. Roadway Ditch Characterization Flowchart. From: Ecological Manual, April 2014. Office of Environmental Services.
- Ohio Environmental Protection Agency (OEPA). 2017. Section 401 Water Quality Certification for the 2017 Nationwide Permits. Appendix D Stream Eligibility Determination Process. Effective March 17, 2017. Ohio Environmental Protection Agency, Division of Surface Water, 401 Water Quality Certification and Isolated Wetland Permitting Section, Columbus, Ohio.
- OEPA. 2017. 401 Water Quality Certification for the Nationwide Permits Stream Eligibility Web Map (2017 Reissuance). <https://data-oepa.opendata.arcgis.com/datasets/401-water-quality-certification-for-nationwide-permits>
- OEPA, 2018. *Field Methods for Evaluating Primary Headwater Streams in Ohio*. Version 4.0. Ohio EPA Division of Surface Water, Columbus, Ohio. 129 pp.
- Rankin, Edward T. 1989. *The Qualitative Habitat Evaluation Index (QHEI): Rationale, Methods, and Application*. Ohio EPA Ecological Assessment Section, Division of Surface Water, Columbus, Ohio.
- Rankin, Edward T. 2006. *Methods for Assessing Habitat in Flowing Waters: Using the Qualitative Habitat Evaluation Index (QHEI)*. OEPA Ecological Assessment Section, Division of Surface Water, Columbus, Ohio.
- U.S. Army Corps of Engineers. 2005. Regulatory Guidance Letter No. 05-05: Guidance on Ordinary High Water Mark Identification.
- U.S. Army Corps of Engineers. 2012. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Northcentral and Northeast Region (Version 2.0)*, ed. J. S. Wakeley, R. W. Lichvar, J. F. Berkowitz, and C. V. Noble. ERDC/EL TR-12-9. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

- U.S. Army Corps of Engineers. 2020. *National Wetland Plant List*, version 3.5. Engineer Research and Development Center. Cold Regions Research and Engineering Laboratory, Hanover, NH. http://wetland_plants.usace.army.mil/
- U.S. Department of Agriculture, Natural Resources Conservation Service. 2021a. National Hydric Soils List. <http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/>. Accessed February, 2022.
- U.S. Department of Agriculture, Natural Resources Conservation Service. 2021b. Web Soil Survey (GIS Shapefile). <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>. Accessed February, 2022.
- U.S. Fish and Wildlife Service. 2018. National Wetlands Inventory Geodatabase for Ohio. Available online at <http://www.fws.gov/wetlands/Data/Mapper.html>. Accessed February, 2022.
- U.S. Geological Survey. 2016. National Hydrography Dataset, Ohio Statewide Geodatabase. Published August 2016. Earth Science Information Center, USGS, Reston, VA.
- ESRI, 2020. World Imagery obtained from Earthstar Geographics (TerraColor NextGen) imagery.
- Ohio Department of Natural Resources. 2020a. Division of Mineral Resources and Geological Survey, Mines of Ohio Interactive Map access at <https://gis.ohiodnr.gov/MapView/?config=OhioMines> on February 21, 2022.
- Ohio Department of Natural Resources. 2020b. Division of Geological Survey, Karst Interactive Map access at https://gis.ohiodnr.gov/website/dgs/karst_interactivemap/ on February 21, 2022.
- U.S. Geological Survey, 2019. USGS US Topo 7.5-minute maps for Holmesville, OH 2019: USGS - National Geospatial Technical Operations Center (NGTOC).



Legend

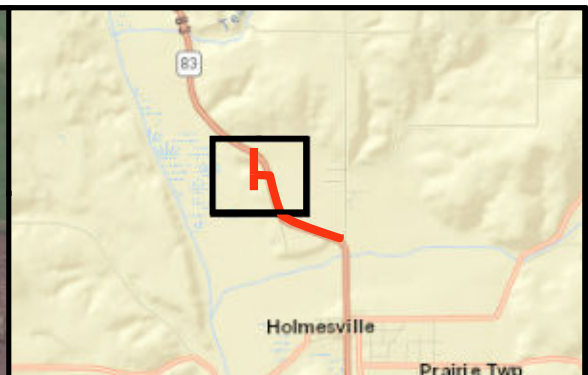
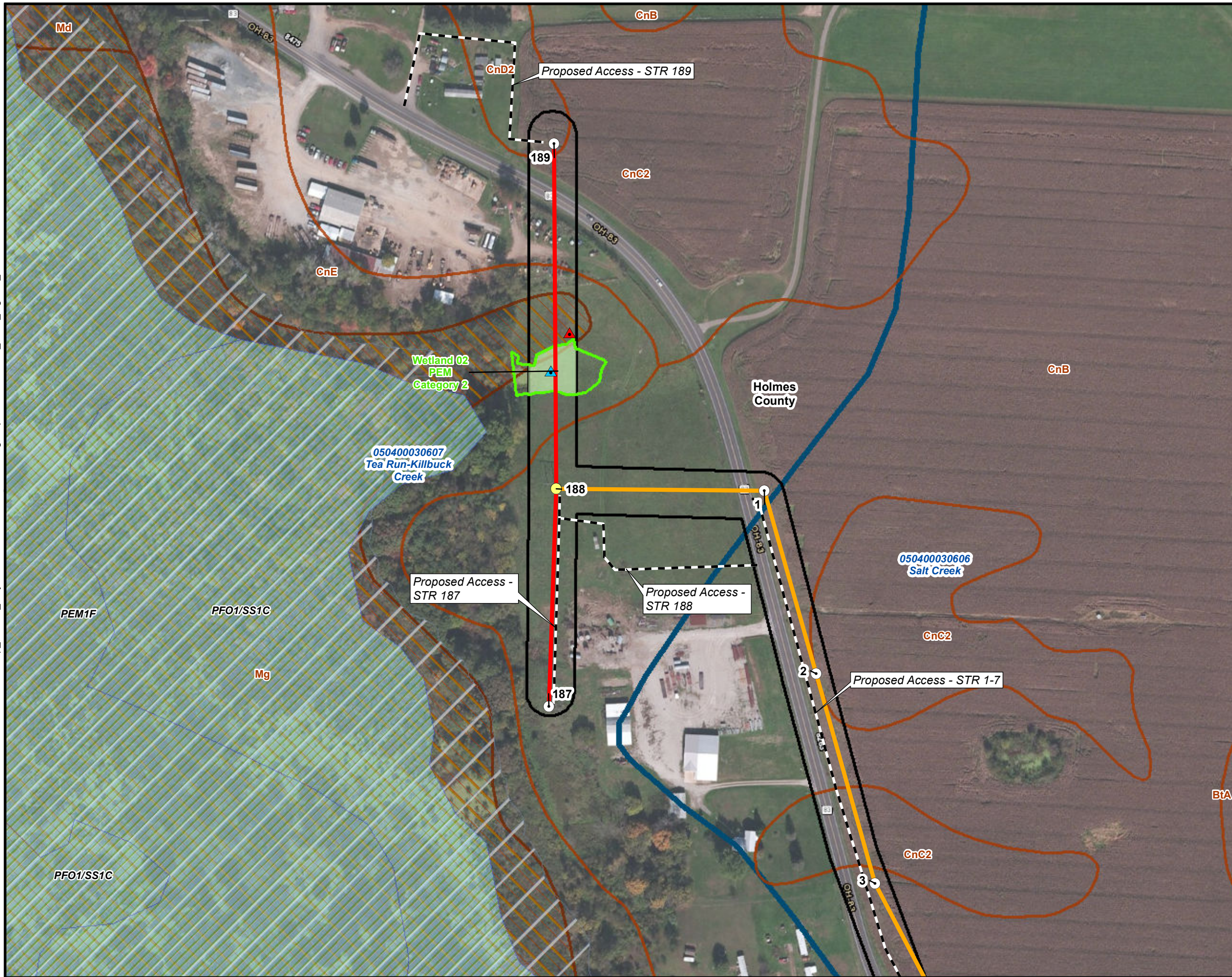
- Holmesville Delivery Point
- Salt Creek Switch
- South Coshocton-Wooster 138 kV T-line Cut In
- Salt Creek-Holmesville 138 kV Line
- Ohio USGS 7.5 Topographic Quadrangle
- County



Wooster-West Millersburg 138 kV Switch and Transmission Line Project

FIGURE 1
PROJECT OVERVIEW

DATE: 4/5/2022	1 INCH = 2,000 FEET
CREATED BY: PMH	CHECKED BY: BC
JOB NO. 60661200	AECOM

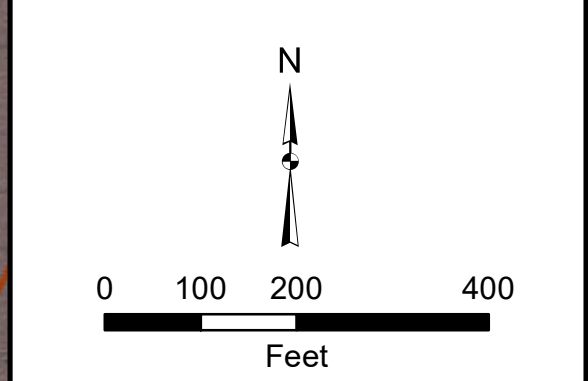


Legend

- Salt Creek Switch
- Proposed Structure Locations
- ▲ Wetland Data Point
- ▲ Upland Data Point
- Proposed Access Route
- South Coshocton-Wooster 138 kV T-line Cut In
- Salt Creek-Holmesville 138 kV Line
- Delineated PEM Wetland
- Approximate PEM Wetland
- Project Survey Corridor
- NWI Wetland (USFWS)
- 100-Year Floodplain (FEMA)
- HUC 12 (USGS)
- County
- SSURGO Soil Map Unit (NRCS)
- Hydric SSURGO Soil Map Unit (NRCS)

Soil Map Unit Description

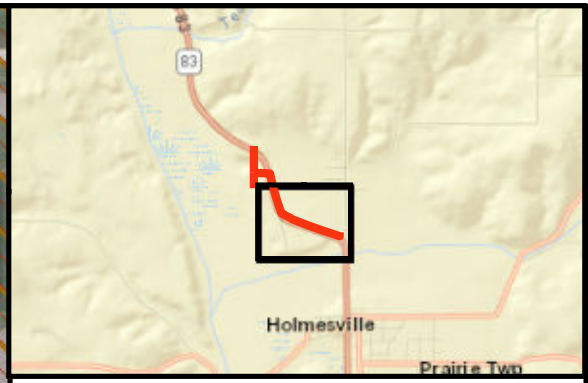
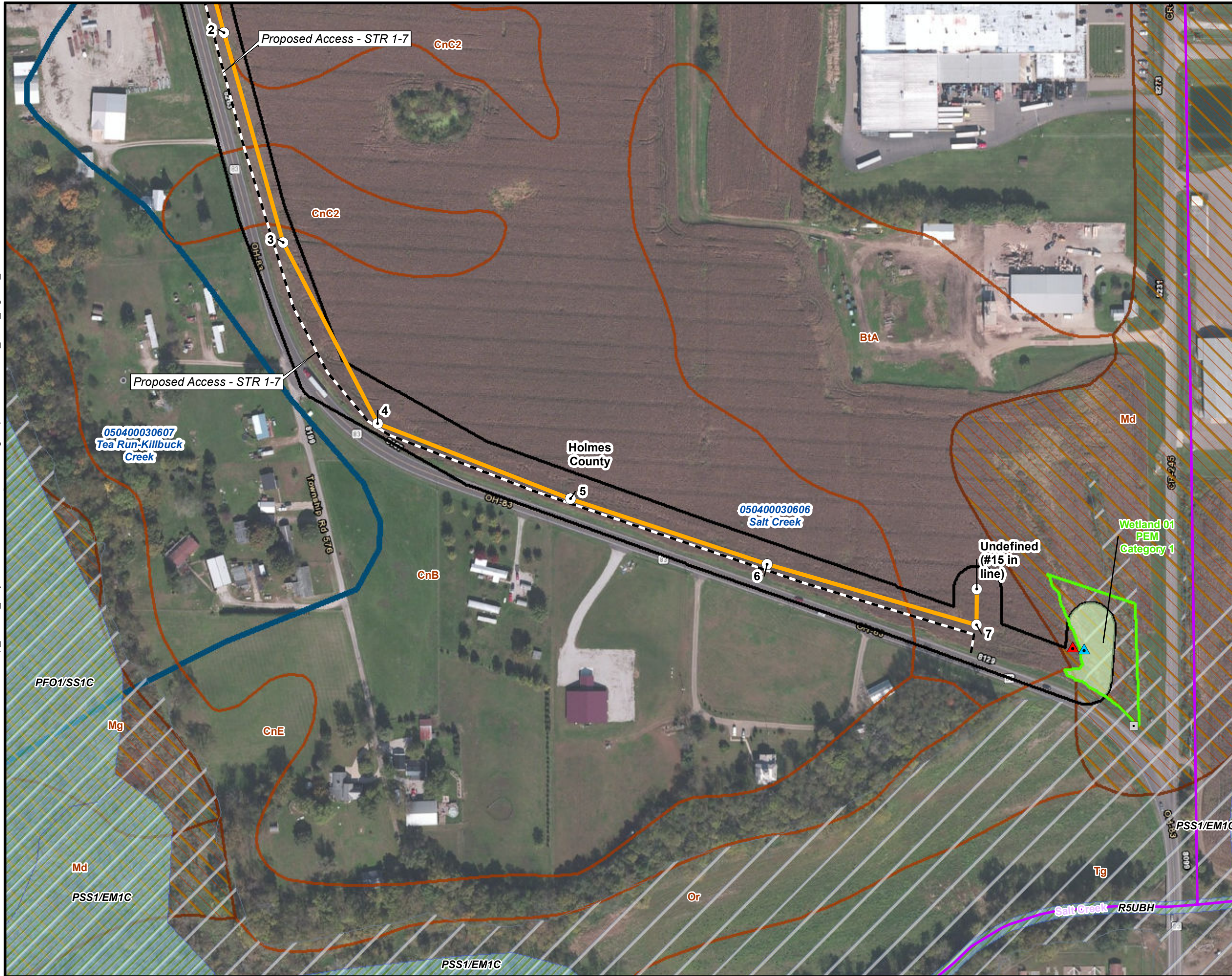
BtA, Bogart silt loam, 0 to 2 percent slopes
 CnB, Chili loam, 2 to 6 percent slopes
 CnC2, Chili loam, 6 to 12 percent slopes, eroded
 CnD2, Chili loam, 12 to 18 percent slopes, eroded
 CnE, Chili loam, 18 to 25 percent slopes
 Md, Melvin silt loam, frequently flooded
 Mg, Melvin silt loam, ponded



AEP Wooster-West Millersburg 138 kV Switch and Transmission Line Project

FIGURE 2A
 SOIL MAP UNIT AND
 NATIONAL WETLAND INVENTORY MAP

DATE: 4/5/2022	1 INCH = 200 FEET
CREATED BY: PMH	CHECKED BY: BC
JOB NO. 60661200	AECOM



Legend

- Proposed Structure Locations
- Culvert
- ▲ Wetland Data Point
- ▲ Upland Data Point
- - - Proposed Access Route
- Salt Creek-Holmesville 138 kV Line
- NHD Stream (USGS)
- Delineated PEM Wetland
- Approximate PEM Wetland
- ▭ Project Survey Corridor
- ▨ NWI Wetland (USFWS)
- ▭ 100-Year Floodplain (FEMA)
- ▭ HUC 12 (USGS)
- ▭ County
- ▭ SSURGO Soil Map Unit (NRCS)
- ▭ Hydric SSURGO Soil Map Unit (NRCS)

Soil Map Unit Description

- BtA, Bogart silt loam, 0 to 2 percent slopes
- CnB, Chili loam, 2 to 6 percent slopes
- CnC2, Chili loam, 6 to 12 percent slopes, eroded
- CnE, Chili loam, 18 to 25 percent slopes
- Md, Melvin silt loam, frequently flooded
- Mg, Melvin silt loam, ponded
- Or, Orrville silt loam, occasionally flooded
- Tg, Tioga loam, occasionally flooded

N

0 100 200 400

Feet

AEP Wooster-West Millersburg 138 kV Switch and Transmission Line Project

FIGURE 2B
SOIL MAP UNIT AND
NATIONAL WETLAND INVENTORY MAP

DATE: 4/5/2022	1 INCH = 200 FEET
CREATED BY: PMH	CHECKED BY: BC
JOB NO. 60661200	AECOM



Legend

- Salt Creek Switch
- Photo Location
- Proposed Structure Locations
- ▲ Wetland Data Point
- ▲ Upland Data Point
- Proposed Access Route
- South Coshocton-Wooster 138 kV T-line Cut In
- Salt Creek-Holmesville 138 kV Line
- Contour (5-Ft)
- Delineated PEM Wetland
- Approximate PEM Wetland
- 100-Year Floodplain (FEMA)
- Project Survey Corridor
- County

N

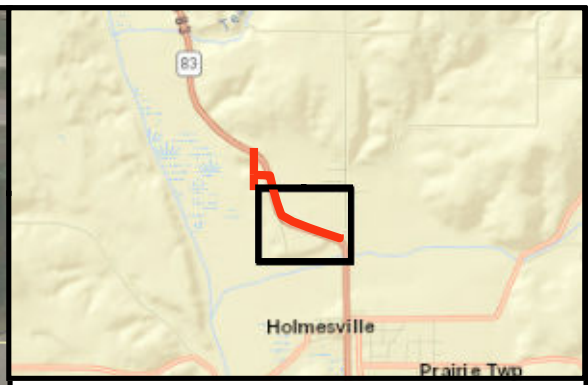
0 100 200 400

Feet

AEP Wooster-West Millersburg 138 kV Switch and Transmission Line Project

**FIGURE 3A
WETLAND DELINEATION AND
STREAM ASSESSMENT MAP**

DATE: 4/5/2022	1 INCH = 200 FEET
CREATED BY: PMH	CHECKED BY:
JOB NO. 60661200	AECOM



Legend

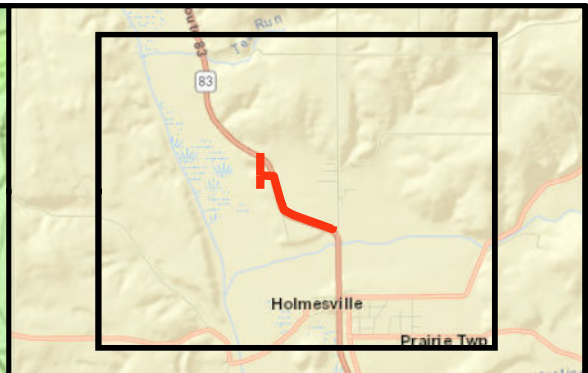
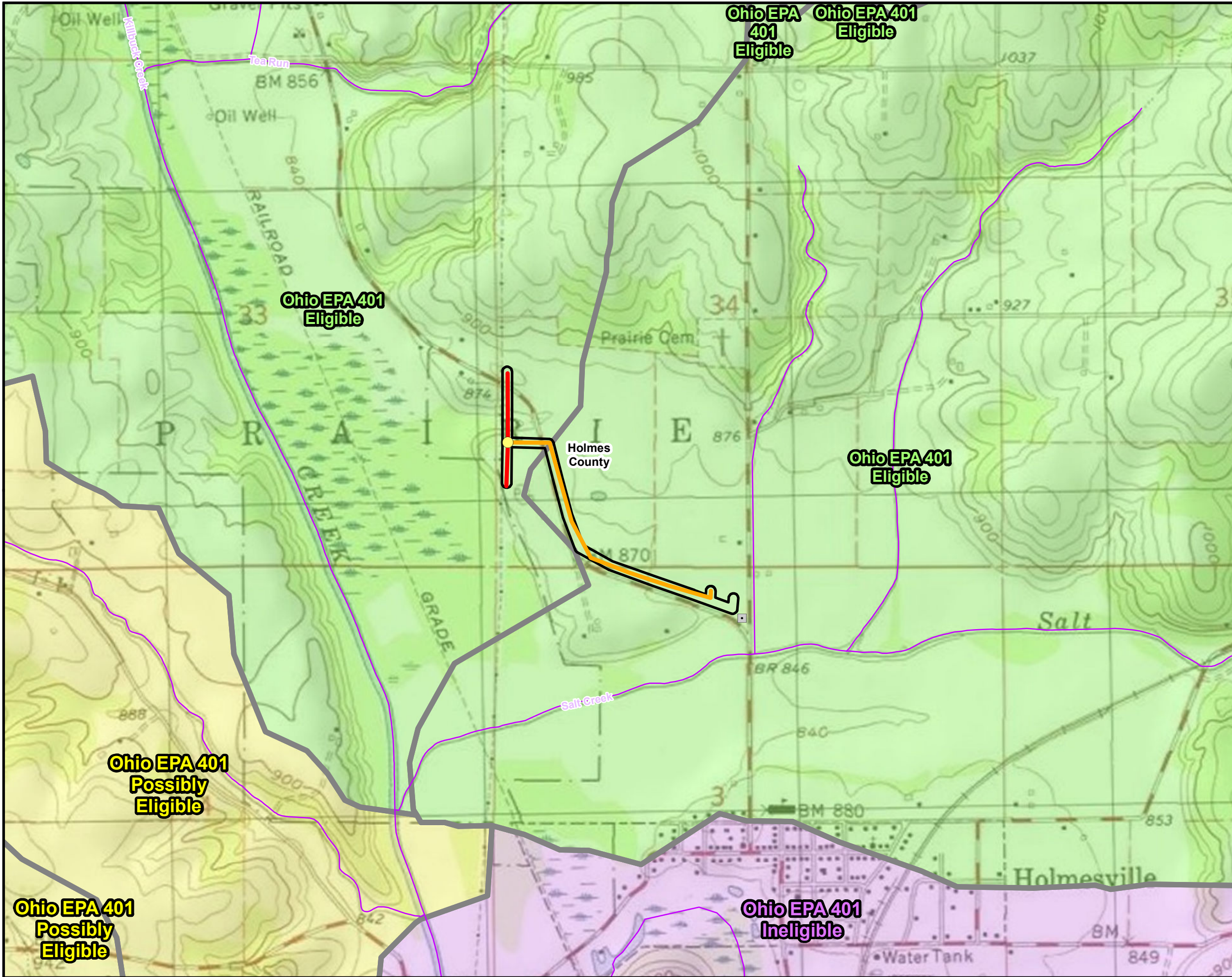
- ◉ Photo Location
- ◉ Proposed Structure Locations
- ◻ Culvert
- ▲ Wetland Data Point
- ▲ Upland Data Point
- - - Proposed Access Route
- NHD Stream (USGS)
- Salt Creek-Holmesville 138 kV Line
- Contour (5-Ft)
- ▭ Delineated PEM Wetland
- ▭ Approximate PEM Wetland
- ▭ 100-Year Floodplain (FEMA)
- ▭ Project Survey Corridor
- ▭ County

N
0 100 200 400
Feet

AEP Wooster-West Millersburg 138 kV
Switch and Transmission Line Project

**FIGURE 3B
WETLAND DELINEATION AND
STREAM ASSESSMENT MAP**

DATE: 4/5/2022	1 INCH = 200 FEET
CREATED BY: PMH	CHECKED BY:
JOB NO. 60661200	AECOM

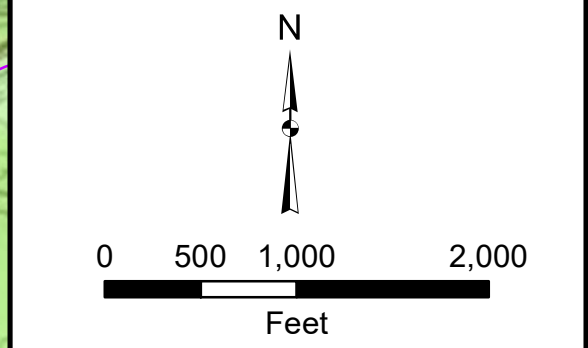


Legend

- Salt Creek Switch
- Culvert
- South Coshocton-Wooster 138 kV T-line Cut In
- Salt Creek-Holmesville 138 kV Line
- NHD Stream (USGS)
- Project Survey Corridor
- County

OEPA Stream Eligibility:

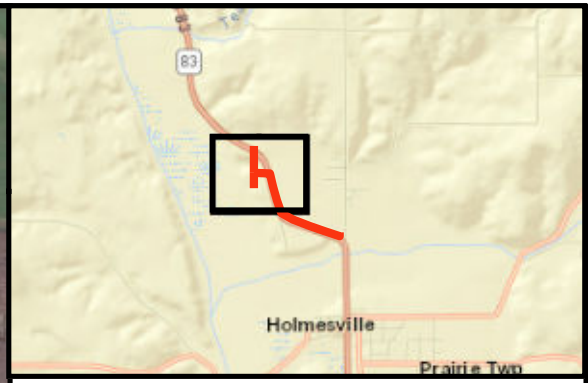
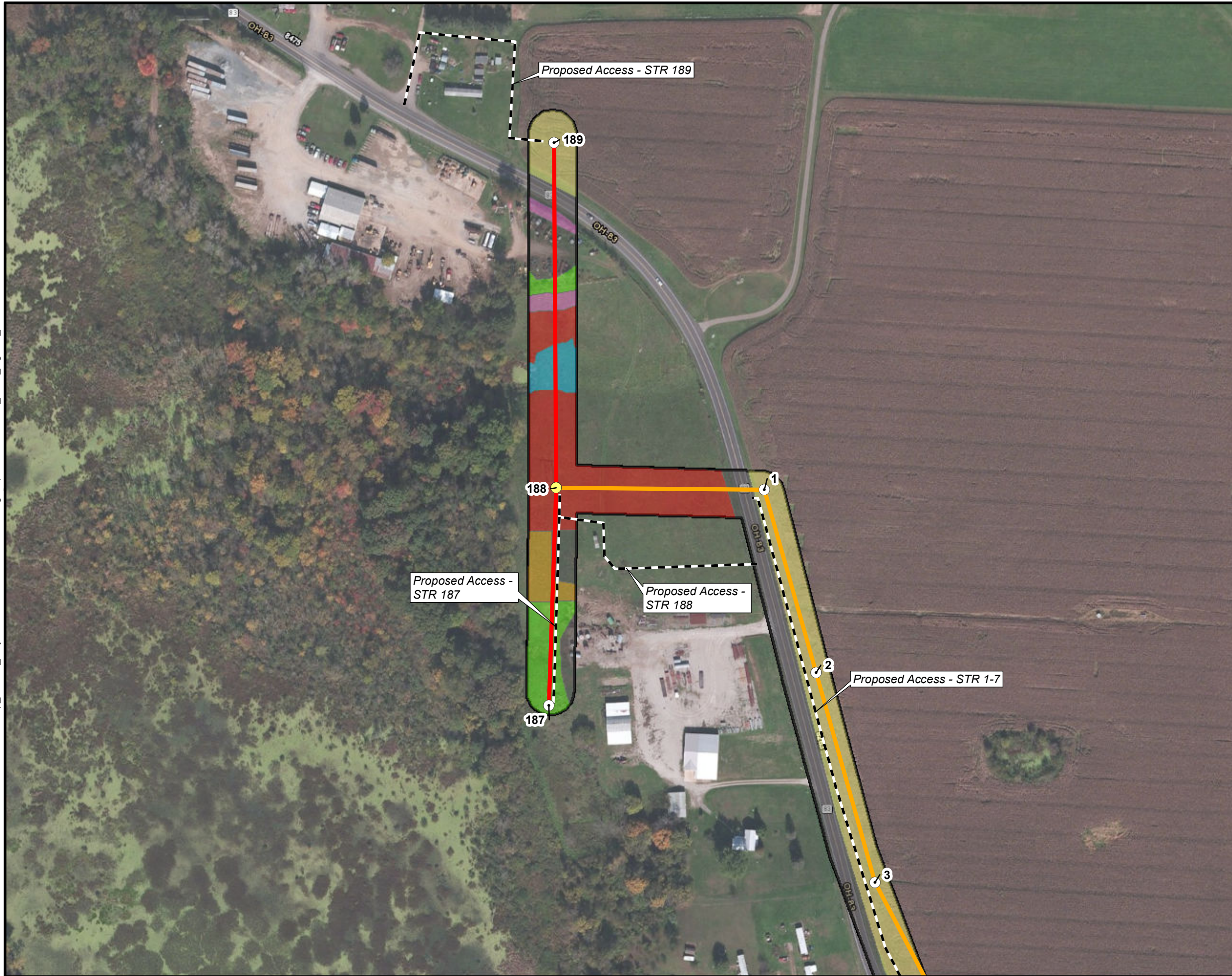
- Eligible
- Ineligible
- Possibly Eligible



AEP Wooster-West Millersburg 138 kV Switch and Transmission Line Project

FIGURE 4
STREAM ELIGIBILITY MAP

DATE: 4/5/2022	1 INCH = 1,000 FEET
CREATED BY: PMH	CHECKED BY: BC
JOB NO. 60661200	AECOM



Legend

- Salt Creek Switch
- Proposed Structure Locations
- - - Proposed Access Route
- South Coshocton-Wooster 138 kV T-line Cut In
- Salt Creek-Holmesville 138 kV Line
- Project Survey Corridor

Vegetation Community Type

- Agriculture
- Forest
- Maintained Lawn
- Old Field
- Scrub Shrub
- Stream/Wetland
- Urban

N

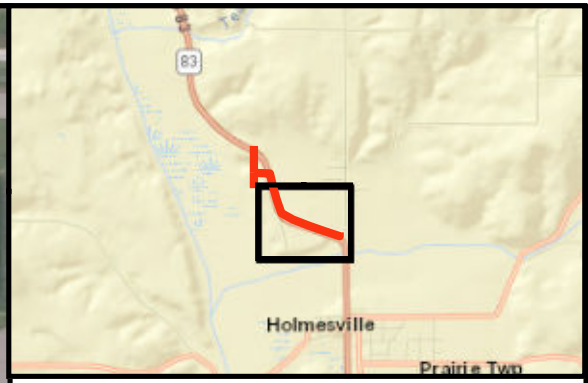
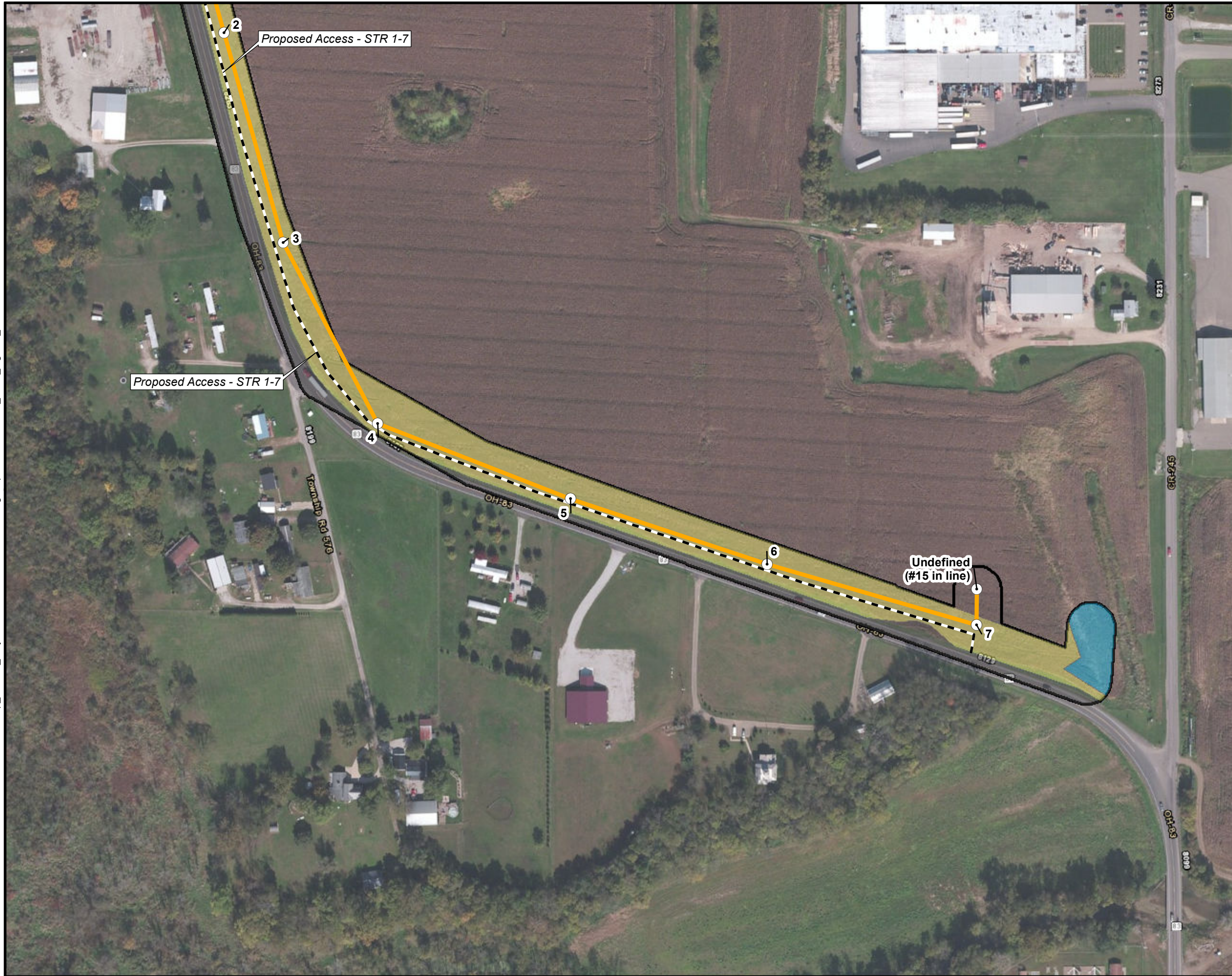
0 100 200 400

Feet

AEP Wooster-West Millersburg 138 kV Switch and Transmission Line Project

**FIGURE 5A
VEGETATIVE COMMUNITIES
ASSESSMENT MAP**

DATE: 4/5/2022	1 INCH = 200 FEET
CREATED BY: PMH	CHECKED BY: BC
JOB NO. 60661200	AECOM



Legend

- Proposed Structure Locations
- - - Proposed Access Route
- Salt Creek-Holmesville 138 kV Line
- ▭ Project Survey Corridor

Vegetation Community Type

- Agriculture
- Stream/Wetland
- Urban

N

0 100 200 400
Feet

Wooster-West Millersburg 138 kV Switch and Transmission Line Project	
FIGURE 5B VEGETATIVE COMMUNITIES ASSESSMENT MAP	
DATE: 4/5/2022	1 INCH = 200 FEET
CREATED BY: PMH	CHECKED BY: BC
JOB NO. 60661200	AECOM