

Construction Notice for Shawtown Switch – Hancock Wood Co-Op 138kV Transmission Line Project



Case No. 20-365-EL-BNR

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

Submitted by:
AEP Ohio Transmission Company, Inc.

February 21, 2020

**CONSTRUCTION NOTICE FOR THE SHAWTOWN SWITCH- HANCOCK WOOD CO-OP 138 kV
Transmission Line Project**

CONSTRUCTION NOTICE

AEP Ohio Transmission Company, Inc.'s Shawtown Switch – Hancock Wood Co-Op 138kV

4906-6-05

AEP Ohio Transmission Company, Inc. (“AEP Ohio Transco” or the “Company”) provides the following information to the Ohio Power Siting Board (“OPSB”) pursuant to 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 Construction Notice.

AEP Ohio Transco is proposing the Shawtown Switch-Hancock Wood Co-Op 138 kV Transmission Line Project (“Project”), located in Pleasant Township, Hancock County, Ohio. The Project involves tapping the existing 34.5kV Leipsic – McComb line with a new 138kV switch structure and connecting to a new customer station by installing 0.03 miles of 2-span 138kV line at the customer’s request.

Figures 1 and 2 show the proposed alignment of the transmission line extension and new switch location.

The Project meets the requirements for a Construction Notice (“CN”) because it is within the types of projects defined by Item (1)(a) of Appendix A to O.A.C. 4906-1-01 *Application Requirement Matrix for Electric Power Transmission Lines*:

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

(a) Line(s) not greater than 0.2 miles in length.

The PUCO Case Number for this Project is 20-365-EL-BNR.

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B(2) Statement of Need

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

This Project is customer-driven. The customer is currently served via a temporary single switch along the existing 34.5kV Leipsic – McCombl line. The customer has requested a replacement of the existing delivery point adjacent to their new station. The new 138 kV switch is necessary to serve the load at the customer's station and to provide for future upgrades in the surrounding area.

The Project's need and solution were submitted to the PJM Subregional RTEP Committee during October 2019 and December 2019 meetings (see Appendix C). The PJM supplemental number is s2162

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.

Figure 2 shows the location of the Project in relation to existing transmission lines and distribution stations.

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.

No viable cost-effective transmission alternatives were identified. Due to the Project being located entirely within parcels owned by the customer, as well as the Project's proximity to the customer station and the existing 34.5 kV line, the Project minimally impacts adjacent landowners, and there are no expected socioeconomic or ecological impacts associated with the Project.

B(5) Public Information Program

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

The Project will be located on an existing AEP Ohio Transco station parcel and an adjacent customer property. AEP Ohio Transco has worked closely with surrounding property owners during the development of the Project and maintains a website (<http://aeptransmission.com/ohio/>) on which an electronic copy of this CN is available. A paper copy of the CN will be served to the public library in each political subdivision affected by this Project.

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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 the second quarter of 2020, and the anticipated in-service date is September 2020.

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.

Figures 1 and 2 provide the proposed Project area on a map of 1:24,000-scale and 1:12,000-scale, respectively. Figure 1 shows the project area on the United States Geologic Service (USGS) 7.5-minute topographic maps of the McComb (1974) quadrangle. Figure 2 shows the Project area on recent aerial photography, as provided by World Imagery through ESRI (dated March 2018).

To visit the Project location from Columbus, take I-70 West to exit 93 to merge onto I-270 N and travel on I-270 N for approximately 9 miles. Then take exit 17B to merge onto OH-161 W/US-33 W and continue for approximately 47 miles. Exit onto OH-117 W toward OH-366/Huntsville/Lima and then merge onto OH-117 W and continue for approximately 9 miles. Turn right onto OH-235 N and then in approximately 500 feet turn left to stay on OH-235 N for approximately 9 miles. Turn left onto Township Road 104 and travel approximately 1 mile before turning right onto County Line Road/S Hardin Road. Travel for approximately 10 miles then continue onto County Line Road/S Hardin Road for approximately 7 miles before the road name changes to County Highway 16/Rd 1. In approximately 13 miles turn right onto Township Road 103 and the Project location is on the south side of the road in approximately 0.5 miles. The parcel mapped across the street from the Project location is listed under the address of 488 Township Road 103, McComb, OH 45858. The Project location is mapped at a latitude of 41.109098 and longitude of -83.871036 decimal degrees.

B(8) Property Agreements

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

The Project will require an exclusive easement from the customer for Parcel No. 4000001001187 for the new switch pole structure. This easements is estimated to be acquired in the second quarter of 2020.

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.

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Present information under the following parameters:

The transmission line construction will include the following:

Voltage: 138kV
 Conductors: (3) 795 KCM ACSR 26/7 “Drake” SW
 Static Wire: (1) 7#8 Alumoweld
 Insulators: Polymer
 ROW Width: 50 Feet
 Structure Types: Single circuit, steel switch pole structure. One structure is needed

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.

B(9)(b)(i) Calculated Electric and Magnetic Field Strength Levels

i) Calculated Electric and Magnetic Field Levels

Three loading conditions were examined: (1) Normal Maximum Loading, (2) Emergency Loading, and (3) Winter Normal Conductor Rating consistent with the OPSB requirements. Normal Maximum Loading represents the peak flow expected with all system facilities in service; daily/hourly flows fluctuate below this level. Emergency loading is the maximum current flow during unusual (contingency) conditions, which exist only for short periods of time. Winter normal (WN) conductor rating represents the maximum current flow that a line, including its terminal equipment, can carry during winter conditions. It is not anticipated that either circuit of this line would operate at its WN rating in the foreseeable future.

EMF levels were computed one meter above ground under the line and at the ROW edges (50/50 feet, left/right, of centerline).

Our results, calculated using EPRI’s EMF Workstation 2015 software are summarized below.

Shawtown Switch - Hancock Wood Co-op 138 kV				
Condition	Circuit Load (A)	Ground Clearance (feet)	Electric Field (kV/m)*	Magnetic Field (mG)*
(1) Normal Max. Loading[^]	10.67	38.5	0.11/0.88/0.11	0.25/0.68/0.25
(2) Emergency Line Loading^{^^}	10.7	37	0.12/1.28/0.12	0.33/0.97/0.33
(3) Winter Conductor Rating^{^^^}	422.55	38.5	00.11/0.88/0.11	10.08/26.89/10.08

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*EMF levels (left ROW edge/maximum/right ROW edge) computed one meter above ground at the point of minimum ground clearance, assuming balanced phase currents and 1.0 P.U. Voltages. ROW width is 50 feet (left) and 50 feet (right) of centerline, respectively.

^Peak line flow expected with all system facilities in service.

^^Maximum flow during a critical system contingency, same as normal maximum loading since it only feeds the Distribution load.

^^^Maximum continuous flow that the line, including its terminal equipment, can withstand during winter conditions.

For power-frequency EMF, IEEE Standard C95.6TM-2002 recommends the following limits:

	General Public -----	Controlled Environment -----
Electric Field Limit (kV/m)	5.0	20.0
Magnetic Field Limit (mG)	9040	27,100

The above EMF levels are well within the limits specified in IEEE Standard C95.6TM-2002. Those limits have been established to "prevent harmful effects in human beings exposed to electromagnetic fields in the frequency

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 \$1,800,000.

B(10) Social and Economic Impacts

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

B(10)(a) Operating 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.

The Project is within Pleasant Township in Hancock County, Ohio. The 0.03 mile long transmission line to the new switch structure is within AEP Ohio Transco ROW and will require one new exclusive easement. The land use in the vicinity of the Project is a mix of primarily residential and agricultural. No tree clearing is anticipated to be required for the Project. There are no parks, schools, churches, cemeteries, wildlife management areas, or nature preserve lands within 1,000 feet of the centerline of the Project.

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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 Project is not expected to impact Agricultural District Land. The Hancock County auditor has been contacted regarding agricultural district lands in Pleasant Township. The proposed switch is adjacent to an existing 34.5 kV transmission line. New infrastructure will be limited to the 0.03-mile long 138 kV line extension connecting the proposed switch to an existing customer station on the north side of Township Road 103. Impacts to agricultural land are expected to be minimal.

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 Phase I Cultural Resource Management Investigation was completed on October 9th, 2019 by AEP Ohio Transco's consultant. A copy of this report can be found under Appendix B.

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.

Once final design of the project is complete, including identification of access roads, a Notice of Intent will be filed with the Ohio Environmental Protection Agency for authorization of construction storm water discharges under General Permit OHC000004, if disturbance exceeds one acre. An overhead road crossing permit will be required for the crossing of Township Road 103. There are no other known local, state, or federal requirements that must be met prior to commencement of the proposed Project.

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

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

AEP Ohio Transco's consultant prepared a Threatened and Endangered Species Report. The consultant coordinated with the USFWS and ODNR regarding special status species in the vicinity of the Project. No impacts to threatened or endangered species are expected. A copy of the coordination for the Project is included in the Wetland Delineation and Stream Assessment Report included as Appendix A.

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.

AEP Ohio Transco's consultant prepared a Wetland Delineation and Stream Assessment Report. No impacts to wetlands or streams are anticipated. A copy of the Wetland Delineation and Stream Assessment Report for the Project is included as Appendix A.

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.

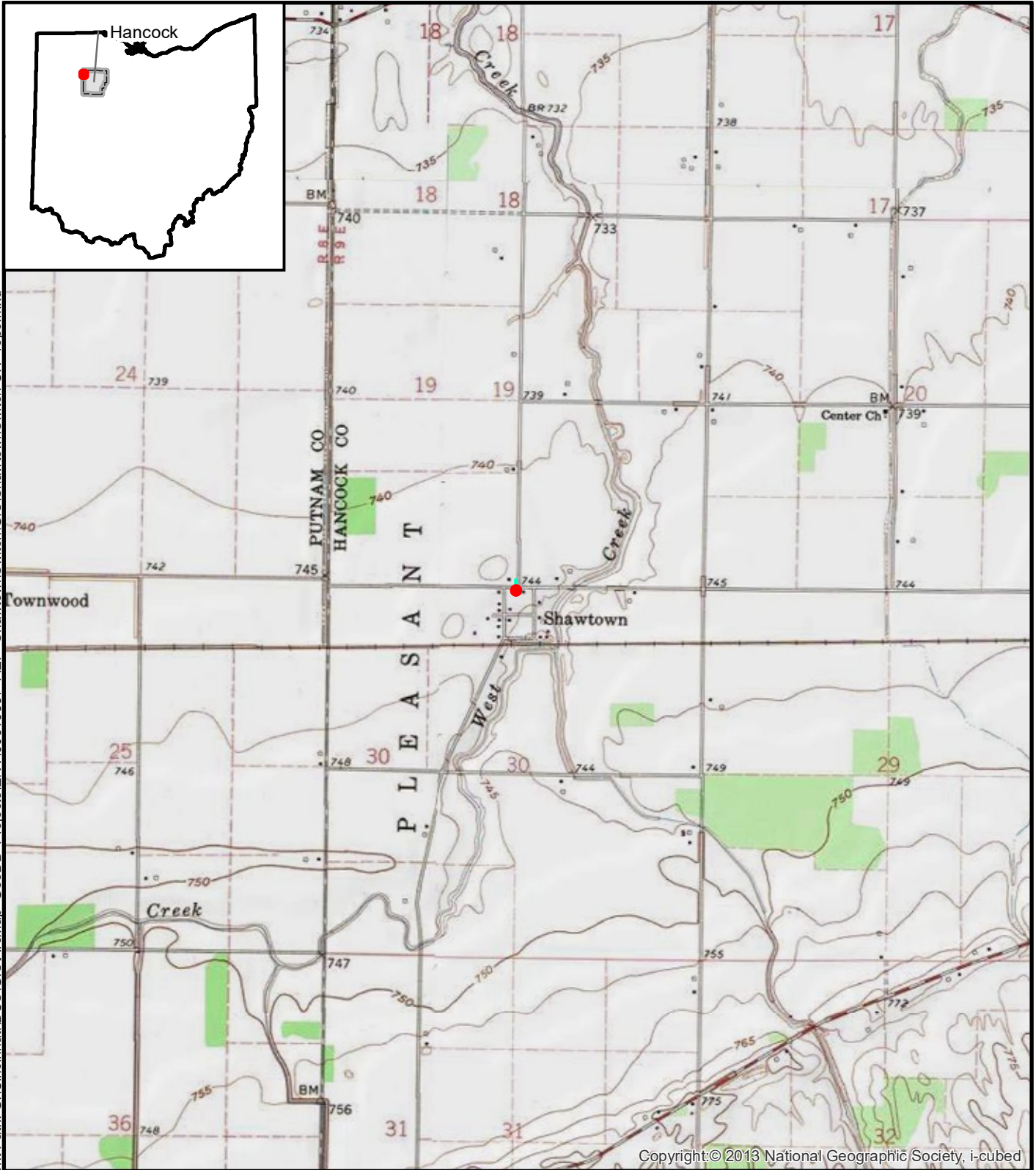
To the best of AEP Ohio Transco's knowledge, no unusual conditions exist that would result in significant environmental, social, health, or safety impacts.

APPENDIX A



Figure 1

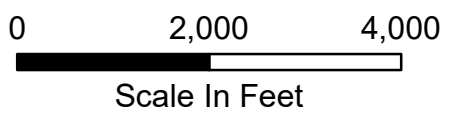
Figure 2

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LEGEND:
 Shawtown Switch
 138 kV Line

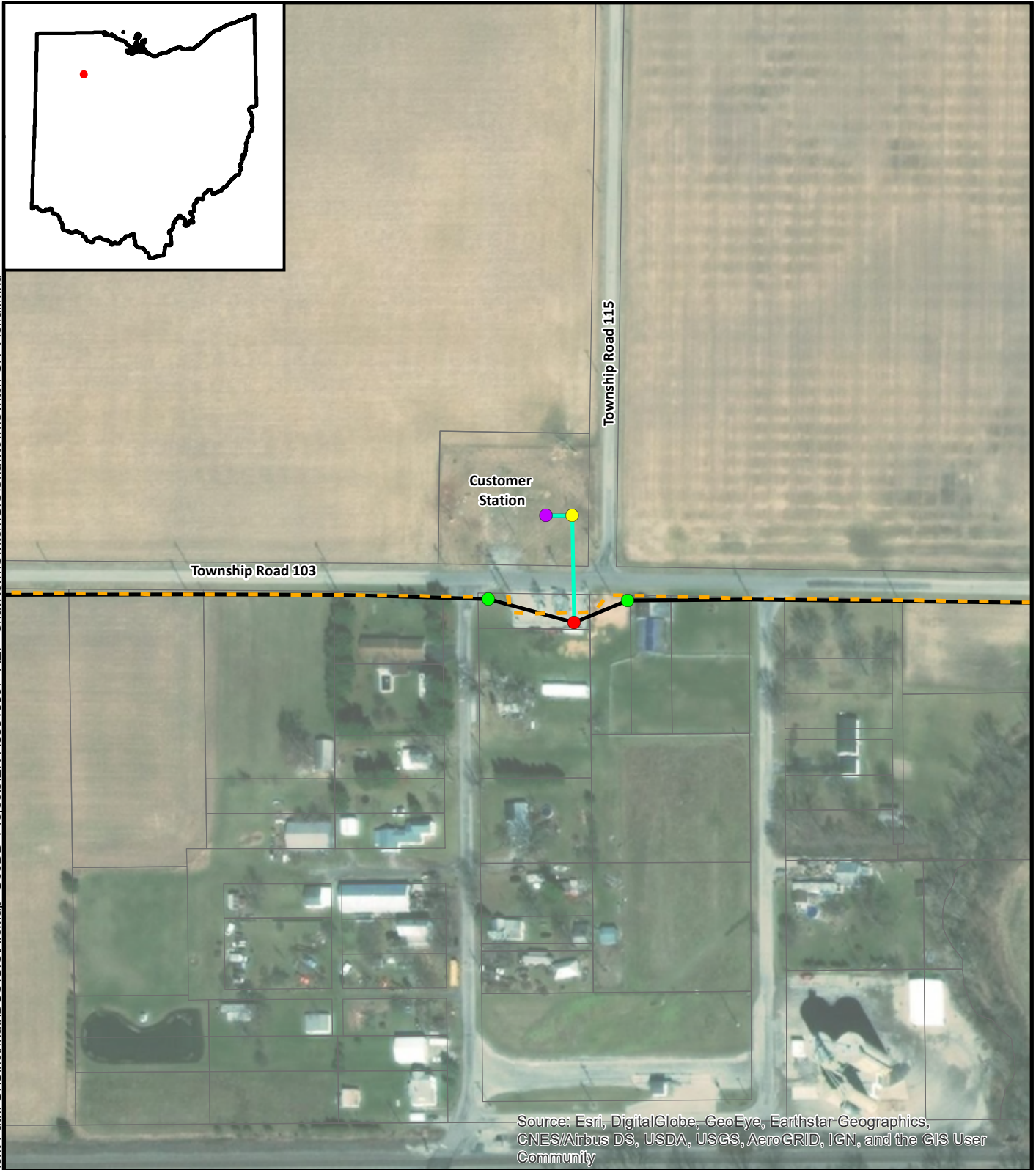


AEP OHIO TRANSMISSION COMPANY *Shawtown Switch Project*

**FIGURE 1
 PROJECT OVERVIEW**

DATE: 1/8/2020	SCALE: 1:24,000
CREATED BY: BAW	CHECKED BY: AG
JOB NO. 60616397	AECOM

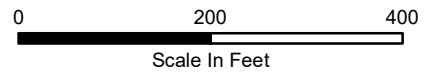
Date Saved: 1/31/2020 Document Path: G:\Cincinnati\DCS\GIS\ArcMap_GeoDB_Projects\ENVI60616397_AEP_ShawtownSwitch\GIS\ShawtownSwitch-CN_Aerial.mxd



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

LEGEND:

- Proposed Structure Locations**
- Shawtown Switch 138 kV Switch Pole
 - Structure - 138kV Steel Pole
 - Structure - 34.5 kV Steel Pole
 - Termination Point into Station
 - Proposed 34.5 kV Line
 - Proposed 138 kV Line
 - Existing Line
 - Parcel Boundary



Shawtown Switch Project	
<p>FIGURE 2 AERIAL PHOTOGRAPHY OF THE PROJECT VICINITY</p>	
DATE: 1/31/2020	SCALE: 1:2,400
CREATED BY: BAW	CHECKED BY: AG
JOB NO. 60616397	

Appendix B Wetland Delineation and Stream Assessment Report

SHAWTOWN SWITCH PROJECT, HANCOCK COUNTY, OHIO

WETLAND DELINEATION AND STREAM ASSESSMENT REPORT

Prepared for:

American Electric Power Ohio Transmission Company
700 Morrison Road
Gahanna, Ohio 45230



Prepared by:



525 Vine Street, Suite 1800
Cincinnati, Ohio 45202

Project #: 60616397

October 2019

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LIST OF ACRONYMS and ABBREVIATIONS

AECOM	AECOM Technical Services, Inc.
AEP Ohio Transco	American Electric Power Ohio Transmission Company
DBH	Diameter at Breast Height
DOW	Division of Wildlife
DWR	Division of Water Resources
FAC	Facultative
FACU	Facultative upland
FACW	Facultative wetland
GIS	Geographic Information System
GPS	Global Positioning System
HHEI	Headwater Habitat Evaluation Index
IBI	Index of Biotic Integrity
IPaC	Information for Planning and Consultation
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OBL	Obligate wetland
ODNR	Ohio Department of Natural Resources
OEPA	Ohio Environmental Protection Agency
OHWM	Ordinary high water mark
ONHD	Ohio Natural Heritage Database
ORAM	Ohio Rapid Assessment Method
PEM	Palustrine emergent
PFO	Palustrine forested
PSS	Palustrine scrub/shrub
PUB	Palustrine unconsolidated bottom
PHWH	Primary Headwater Habitat
QHEI	Qualitative Habitat Evaluation Index
ROW	Right-of-way
UPL	Upland
U.S.	United States
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WOTUS	Waters of the United States

1.0 INTRODUCTION

American Electric Power Ohio Transmission Company (AEP Ohio Transco) is proposing to install a new 138 kV switch and approximately 0.1 mile of new 138 kV transmission tie line (Project) in Hancock County, Ohio. A customer has upgraded and relocated their station (Shawtown Station) from the south side of Township Road 103 to the north side of Township Road 103. The proposed switch will be installed at the old station location with the tie line extending north to the recently constructed station. Ohio Transco requested that AECOM Technical Services, Inc. (AECOM) conduct a wetland delineation and stream assessment within the approximately 1.3-acre area (Project survey area). The proposed Project location is illustrated on Figure 1.

The purpose of the field survey was to assess whether wetlands and other “waters of the United States (U.S.)”(WOTUS) exist within the Project survey area. Secondly, land uses were 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 potentially present within the Project survey area to avoid or minimize impacts to during construction activities.

2.0 METHODOLOGY

Prior to conducting field surveys, digital and published county U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil surveys, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps, and U.S. Geological Survey (USGS) 7.5-minute topographic maps were reviewed to identify the occurrence and location of potential wetland areas.

In October 2019, AECOM ecologists walked the Project survey area to conduct a wetland delineation and stream assessment. During the field survey, the physical boundaries of observed water features were recorded using sub-meter capable EOS Arrow Global Navigation Satellite System (GNSS) receiver in conjunction with ArcCollector application on iPad tablets. The GNSS data was imported into ArcMap Geographic Information System (GIS) software, where the data was then reviewed and edited for accuracy. Land uses observed within the Project survey area were assigned a general classification based upon the principal land characteristics of the location as observed through aerial photography review and observations during the field surveys.

2.1 WETLAND DELINEATION

The Project survey area 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) (Regional Supplement)* (USACE, 2012). The *Regional Supplement* was

released by the USACE in January 2012 to address regional wetland characteristics and improve the accuracy and efficiency of wetland delineation procedures. The *1987 Manual* and *Regional Supplement* define wetlands as areas that have positive evidence of three environmental parameters: hydric soils, wetland hydrology, and hydrophytic vegetation. Wetland boundaries are placed where one or more of these parameters transition to upland characteristics.

Since quantitative data were not available for any of the identified wetlands, AECOM utilized the routine delineation method described in the *1987 Manual* and *Regional Supplement* that consisted of a pedestrian site reconnaissance, including soils identification, geomorphologic assessment of hydrology, identification of vegetative communities, and notation of disturbance. The methodology used to examine each parameter is described in the following sections.

2.1.1 SOILS

Soils were examined for hydric soil characteristics using a spade shovel to extract soil samples. A *Munsell Soil Color Chart* (Kollmorgen Corporation, 2010) was used to identify the hue, value, and chroma of the matrix and mottles of the soils. Generally, mottled soils with a matrix chroma of two or less, or unmottled soils with a matrix chroma of one or less are considered to exhibit hydric soil characteristics (Environmental Laboratory, 1987). In sandy soils, mottled soils with a matrix chroma of three or less, or unmottled soils with a matrix chroma of two or less are considered to be hydric soils.

2.1.2 HYDROLOGY

The *1987 Manual* requires that an area be inundated or saturated to the surface for an absolute minimum of five percent of the growing season (areas saturated between five percent and 12.5 percent of the growing season may or may not be wetlands, while areas saturated over 12.5 percent of the growing season fulfill the hydrology requirements for wetlands). The *Regional Supplement* states that the growing season dates are determined through onsite observations of the following indicators of biological activity in a given year: (1) above-ground growth and development of vascular plants, and/or (2) soil temperature (12-in. depth) is 41 degree Fahrenheit (°F) or higher as an indicator of soil microbial activity. Therefore, the beginning of the growing season in a given year is indicated by whichever condition occurs earlier, and the end of the growing season by whichever persists later.

The *Regional Supplement* also states that if onsite data gathering is not practical, the growing season can be approximated by the number of days between the average (five years out of 10, or 50 percent probability) date of the last and first 28° F air temperature in the spring and fall, respectively. The National Weather Service WETS data obtained from the NRCS National Water and Climate Center reveals for Hancock County that in an average year, this period lasts from April 11 to October 31, or 203 days. In the Project area, five percent of the growing season equates to approximately 10 days.

The soils and ground surface were examined for evidence of wetland hydrology in lieu of detailed hydrological data. This is an acceptable approach according to the *1987 Manual* and the *Regional Supplement*. Evidence indicating wetland hydrology typically includes primary indicators such as surface water, saturation, water marks, drift deposits, water-stained leaves, sediment deposits and oxidized rhizospheres on living roots; and secondary indicators such as drainage patterns, geomorphic position, micro-topographic relief, and a positive Facultative (FAC)-neutral test (USACE, 2012).

2.1.3 VEGETATION

Dominant vegetation was visually assessed for each stratum (tree, sapling/shrub, herb and woody vine) and an indicator status of obligate wetland (OBL), facultative wetland (FACW), FAC, facultative upland (FACU), and/or upland (UPL) was assigned to each plant species based on the U.S. Army Corps of Engineers *2016 National Wetland Plant List: Northcentral and Northeast Region* (Lichvar et al, 2016), which encompasses the Project survey area. An area is determined to have hydrophytic vegetation when, under normal circumstances, more than 50 percent of the composition of the dominant species are OBL, FACW and/or FAC species. Vegetation of an area was determined to be non-hydrophytic when 50 percent or more of the composition of the dominant species was FACU and/or UPL species. In addition to the dominance test, the FAC-Neutral test and prevalence tests are used to determine if a wetland has a predominance of hydrophytic vegetation. Recent USACE guidance indicates that to the extent possible, the hydrophytic vegetation decision should be based on the plant community that is normally present during the wet portion of the growing season in a normal rainfall year (USACE, 2012).

2.1.4 WETLAND CLASSIFICATIONS

Wetlands were classified based on the naming convention found in *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al, 1979). There are five main classes of wetlands and deepwater habitats. They include: marine, estuarine, riverine, lacustrine, and palustrine. Marine and estuarine wetlands are not found in this area of the U.S. Freshwater, Palustrine systems, which includes non-tidal wetlands dominated by trees, shrubs, or emergent vegetation, are potential wetland types which may be identified within the Project area. The possible palustrine wetland classification types are as follows:

PEM – Palustrine emergent wetlands are characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants.

PSS – Palustrine scrub/shrub wetlands are characterized by woody vegetation that is less than three inches diameter at breast height (DBH), and greater than 3.28 feet tall. The woody angiosperms (i.e. small trees or shrubs) in this broad leaved deciduous community have relatively wide, flat leaves that are shed annually during the cold or dry season.

PFO – Palustrine forested wetlands are characterized by woody vegetation that is three inches or more DBH, regardless of total height. These wetlands generally include an overstory of broad-leaved and needle-leaved trees, an understory or young saplings and shrubs, and an herbaceous layer.

PUB – Palustrine unconsolidated bottom wetlands includes all open water wetlands and deepwater habitats with at least 25 percent cover of particles smaller than stones, and a vegetative cover less than 30 percent. Palustrine open water wetlands are characterized by the lack of large stable surfaces for plant and animal attachment.

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 is listed.

2.1.5 OHIO RAPID ASSESSMENT METHOD v. 5.0

The Ohio Environmental Protection Agency (OEPA) *Ohio Rapid Assessment Method for Wetlands v. 5.0* (ORAM) was developed to determine the relative ecological quality and level of disturbance of a particular wetland in order to meet requirements under the Clean Water Act Section 401 Certification. Wetlands are scored on the basis of hydrology, upland buffer, habitat alteration, special wetland communities, and vegetation communities. Each of these subject areas is further divided into subcategories under the ORAM resulting in a score that describes the wetland using a range from 0 (low quality and high disturbance) to 100 (high quality and low disturbance). Wetlands scored from 0 to 29.9 are grouped into "Category 1", 30 to 59.9 are "Category 2" and 60 to 100 are "Category 3." Transitional zones exist between "Categories 1 and 2" from 30 to 34.9 and between "Categories 2 and 3" from 60 to 64.9. However, according to the OEPA, if the wetland score falls into the transitional range, it must be given the higher Category unless scientific data can prove it should be in a lower Category (Mack, 2001).

Category 1 Wetlands

Category 1 wetlands support minimal wildlife habitat, hydrological and recreational functions, and do not provide for or contain critical habitats for threatened or endangered species. In addition, Category 1 wetlands are often hydrologically isolated and have some or all of the following characteristics: low species diversity, no significant habitat for wildlife use, limited potential to achieve wetland functions, and/or a predominance of non-native species. These limited quality wetlands are considered to be a resource that has been severely degraded or has a limited potential for restoration or is of low ecological functionality.

Category 2 Wetlands

Category 2 wetlands "...support moderate wildlife habitat, or hydrological or recreational functions," and as wetlands which are "...dominated by native species but generally without the presence of, or habitat for, rare, threatened or endangered species; and wetlands which are degraded but have a reasonable potential for reestablishing lost wetland functions." Category 2 wetlands constitute the broad middle category of "good" quality wetlands, and can be considered a functioning, diverse, healthy water resource that has ecological integrity and human value. Some Category 2 wetlands are lacking in human disturbance and considered to be naturally of moderate quality; others may have been Category 3 wetlands in the past, but have been degraded to Category 2 status.

Category 3 Wetlands

Wetlands that are assigned to Category 3 have "...superior habitat, or superior hydrological or recreational functions." They are typified by high levels of diversity, a high proportion of native species, and/or high functional values. Category 3 wetlands include wetlands which contain or provide habitat for threatened or endangered species, are high quality mature forested wetlands, vernal pools, bogs, fens, or which are scarce regionally and/or statewide. A wetland may be a Category 3 wetland because it exhibits one or all of the above characteristics. For example, a forested wetland located in the flood plain of a river may exhibit "superior" hydrologic functions (e.g., flood retention, nutrient removal), but not contain mature trees or high levels of plant species diversity.

2.2 STREAM CROSSINGS

Regulatory activities under the Clean Water Act provide authority for states to issue water quality standards and "designated uses" to all WOTUS upstream to the highest reaches of the tributary streams. In addition, the Clean Water Act requires knowledge of the potential fish or biological communities that can be supported in a stream or river, including upstream headwaters. 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). Currently, WOTUS in Ohio are regulated under the 2015 Clean Water Rule.

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 Evaluation Manual for Ohio's Primary Headwater Habitat Streams* (OEPA, 2012).

2.2.1 OEPA QUALITATIVE HABITAT EVALUATION INDEX

The Qualitative Habitat Evaluation Index (QHEI) is designed to provide a rapid determination of habitat features that correspond to those physical factors that most affect fish communities and which are generally important to other aquatic life (e.g., macroinvertebrates). The quantitative measure of habitat used to calibrate the QHEI score are Indices (or Index) of Biotic Integrity (IBI) for fish. In most instances the QHEI is sufficient to give an indication of habitat quality, and the intensive quantitative analysis used to measure the IBI is not necessary. It is the IBI, rather than the QHEI, that is directly correlated with the aquatic life use designation for a particular surface water.

The QHEI method is generally considered appropriate for waterbodies with drainage basins greater than one mile², if natural pools are greater than 40 cm, or if the water feature is shown as blue-line waterways on USGS 7.5-minute topographic quadrangle maps. In order to convey general stream habitat quality to the regulated public, the OEPA has assigned narrative ratings to QHEI scores. The ranges vary slightly for headwater streams (H are those with a watershed area less than or equal to 20 mile²) versus larger streams (L are those with a watershed area greater than 20 mile²). The Narrative Rating System includes: Very Poor (<30 H and L), Poor (30 to 42 H, 30 to 44 L), Fair (43 to 54 H, 45 to 59 L), Good (55 to 69 H, 60 to 74 L) and Excellent (70+ H, 75+ L).

2.2.2 OEPA PRIMARY HEADWATER HABITAT EVALUATION INDEX

Headwater streams are typically considered to be first-order and second-order streams, meaning streams that have no upstream tributaries (or "branches") and those that have only first-order tributaries, respectively. The stream order concept can be problematic when used to define headwater streams because stream-order designations vary depending upon the accuracy and resolution of the stream delineation. Headwater streams are generally not shown on USGS 7.5-minute topographic quadrangles and are sometimes difficult to distinguish on aerial photographs. Nevertheless, headwater streams are now recognized as useful monitoring units due to their abundance, widespread spatial scale and landscape position (Fritz et al, 2006). Impacts to headwater streams can have a cascading effect on the downstream water quality and habitat value. The headwater habitat evaluation index (HHEI) is a rapid field assessment method for physical habitat that can be used to appraise the biological potential of most Primary Headwater Habitat (PHWH) streams. The HHEI was developed using many of the same techniques as used for QHEI, but has criteria specifically designed for headwater habitats. To use HHEI, the stream must have a "defined bed and bank, with either continuous or periodically flowing water, with watershed area less than or equal to 1.0 mile², and a maximum depth of water pools equal to or less than 15.75 inches" (OEPA, 2012).

Headwater streams are scored on the basis of channel substrate composition, bankfull width, and maximum pool depth. Assessments result in a score (0 to 100) that is converted to a specific PHWH stream class. Streams that are scored from 0 to 29.9 are typically grouped into "Class 1 PHWH Streams", 30 to 69.9 are

"Class 2 PHWH Streams", and 70 to 100 are "Class 3 PHWH Streams". Technically, a stream can score relatively high, but actually belong in a lower class, and vice-versa. According to the OEPA, if the stream score falls into a class and the scorer feels that based on site observations that score does not reflect the actual stream class, a decision-making flow chart can be used to determine appropriate PHWH stream class using the HHEI protocol (OEPA, 2012). Evidence of anthropogenic alterations to the natural channel will result in a "Modified" qualifier for the stream.

Class 1 PHWH Streams: Class 1 PHWH Streams are those that have "normally dry channels with little or no aquatic life present" (OEPA, 2012). These waterways are usually ephemeral, with water present for short periods of time due to infiltration from snowmelts or rainwater runoff.

Class 2 PHWH Streams: Class 2 PHWH Streams are equivalent to "warm-water habitat" streams. This stream class has a "moderately diverse community of warm-water adapted native fauna either present seasonally or on an annual basis" (OEPA, 2012). These species communities are composed of vertebrates (fish and salamanders) and/or benthic macroinvertebrates that are considered pioneering, headwater temporary, and/or temperature facultative species.

Class 3 PHWH Streams: Class 3 PHWH Streams usually have perennial water flow with cool-cold water adapted native fauna. The community of Class 3 PHWH Streams is comprised of vertebrates (either cold water adapted species of headwater fish and or obligate aquatic species of salamanders, with larval stages present), and/or a diverse community of benthic cool water adapted macroinvertebrates present in the stream continuously (on an annual basis).

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 area. The first phase of the review involved a review of online lists of federally and state-listed species. In addition to the review of available lists, AECOM submitted a request to Ohio Department of Natural Resources (ODNR) Office of Real Estate – Environmental Review Section soliciting comments on the Project. AECOM also submitted a coordination letter to the USFWS soliciting technical assistance on the Project. To date, AECOM has not received a response from the agencies; however, 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 the second phase of assessing rare, threatened, and endangered species. Land uses observed by the Project survey area were assigned a general classification based upon the principal land characteristics of the location as observed through aerial photography review and observations during the field surveys.

3.0 RESULTS

AECOM did not identify any wetlands, streams, or ponds within the Project survey area. One upland data point was recorded at the Project survey area boundary. The results of the field survey are discussed in detail in the following sections.

3.1 WETLAND DELINEATION

3.1.1 Preliminary Soils Evaluation

Soils in the Project area were observed and documented as part of the delineation methodology. According to the USDA NRCS Web Soil Survey of Hancock County, Ohio (USDA NRCS, 2017), and the USDA NRCS Hydric Soils Lists of Ohio, one soil series is mapped within the Project survey area (USDA NRCS 2017). The soil map unit within this soil series is listed as not hydric. Table 1 provides a detailed overview of the soil series and soil map unit within the Project survey area. The soil map unit located within the Project survey area is shown on Figure 2.

**TABLE 1
SOIL MAP UNITS AND DESCRIPTIONS WITHIN THE SHAWTOWN SWITCH PROJECT SURVEY AREA**

Soil Series	Symbol	Map Unit Description	Topographic Setting	Hydric	Hydric Component (%)
Nappanee	NpA	Nappanee silty clay loam, 0 to 2 percent slopes	Flats on lake plains, rises on lake plains	No	Hoytville (10%)

(1) Data sources include: USDA, NRCS. Web Soil Survey. Available online at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

(2) USDA, NRCS. October 2019. National Hydric Soils List by State. Available online at: <http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/>

3.1.2 National Wetland Inventory Map Review

National Wetland Inventory wetlands are areas of potential wetland that have been identified from USFWS aerial photograph interpretation which have typically not been field verified. Forested and heavy scrub/shrub wetlands are often not shown on NWI maps as foliage effectively hides the visual signature that indicates the presence of standing water and moist soils from an aerial view. In addition, small wetlands are typically not identified due to the scale of the aerial photography. The USFWS website (U.S. Fish and Wildlife Service, 2019) states that the NWI maps are not intended or designed for jurisdictional wetland identification or location. As a result, NWI maps do not show all the wetlands found in a particular area nor do they necessarily provide accurate wetland boundaries. NWI maps are useful for providing indications of potential wetland areas, which are often supported by soil mapping and hydrologic predictions, based upon topographical analysis using USGS topographic maps.

According to the NWI map of the McComb, Ohio quadrangle, the Project survey area does not contain any mapped NWI wetlands (Figure 2).

3.1.3 Delineated Wetlands

AECOM did not identify any wetlands within the Project survey area, however, one upland data point was recorded. The location of this upland point is shown on Figure 3 and Figure 4. The completed USACE form is provided in Appendix A.

3.2 STREAM CROSSINGS

AECOM did not identify any streams within the Project survey area.

3.3 PONDS

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

3.4 VEGETATIVE COMMUNITIES WITHIN THE PROJECT SURVEY AREA

AECOM field ecologists conducted a general habitat survey in conjunction with the stream and wetland field surveys in October 2019. The Project survey area contained agricultural land, old field, landscaped, and urban vegetative communities. Habitat descriptions applicable to the Project and details on the expected impacts of construction are provided below. Vegetated land cover can be seen from aerial imagery provided on Figure 4.

**TABLE 2
VEGETATIVE COMMUNITIES WITHIN THE SHAWTOWN SWITCH PROJECT SURVEY AREA**

Vegetative Community	Description	Approximate Acreage Within the Project Survey Area	Approximate Percentage within the Project Survey Area
Agricultural Land	Agricultural lands consisting of soybean and corn fields were present along the Project survey area. The agricultural land contained row crops and is not used for pasture or hay fields.	0.10	8%
Landscaped Area	Landscaped area, including residential properties, were observed within the Project area. These areas are frequently mowed grasses and forbs.	0.21	16%
Old Field	Herbaceous cover existed alongside roads, field borders, and abandoned fields within the Project area 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 areas and adjacent areas are infrequently mowed areas of grasses, forbs, and occasional shrubs.	0.71	54%
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.	0.30	22%
Totals:		1.32	100%

3.5 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 area. A summary of the agency coordination is provided below. Table 5 provides a list of protected species that may occur within the Project area. Species were identified from the USFWS IPaC review and ODNR county list.

**TABLE 5
ODNR AND USFWS LISTED SPECIES WITHIN THE PROJECT SURVEY AREA**

Common Name (Scientific Name)	State Status	Federal Status	Habitat Description	Potential Habitat Observed in the Project Survey Area	Impact Assessment	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 critical to the evaluation of a particular tree stand. An open subcanopy zone, under a moderately dense canopy, is important to allow maneuvering while catching insect prey.	No	No potentially suitable habitat is present within the Project area (woodlands).	No ODNR-DOW comments at this time. The IPaC states that the Project area is outside of the critical habitat for this species.
Northern long-eared bat (<i>Myotis septentrionalis</i>)	Threatened	Threatened	Winter 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 northern long-eared bats. 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 critical to the evaluation of a particular tree stand. An open subcanopy zone, under a moderately dense canopy, is important to allow maneuvering while catching insect prey. Northern long-eared bats have also been found, albeit rarely, roosting in structures like barns and sheds.	No	No potentially suitable habitat is present within the Project area (woodlands).	No ODNR-DOW comments at this time. The IPaC states that there are no critical habitats within the Project area.
Mussels						

**TABLE 5
ODNR AND USFWS LISTED SPECIES WITHIN THE PROJECT SURVEY AREA**

Common Name (Scientific Name)	State Status	Federal Status	Habitat Description	Potential Habitat Observed in the Project Survey Area	Impact Assessment	Agency Comments
Clubshell (<i>Pleurobema clava</i>)	Endangered	Endangered	This mussel species is found in coarse sand and gravel areas of runs and riffles within streams and small rivers	No	No potentially suitable habitat is present within the Project area (Streams).	No ODNR-DOW comments at this time. The IPaC states that there are no critical habitats within the Project area.
Rayed bean (<i>Villosa fabalis</i>)	Endangered	Endangered	This mussel species is found in smaller, headwater creeks, but are sometimes found in large rivers	No	No potentially suitable habitat is present within the Project area (Streams).	

ODNR Coordination –

On October 11, 2019, AECOM sent a letter to the ODNR Office of Real Estate Environmental Review Section requesting comments on the Project based on an inter-disciplinary review. AECOM also requested comments from the Ohio Natural Heritage Database (ONHD), Division of Wildlife (DOW), and the Division of Water Resources (DWR) regarding their respective regulatory authorities. To date, AECOM has not received a response from the agency.

USFWS Coordination –

Coordination with the USFWS was initiated via the IPaC online tool during the planning stages to obtain a list of federally protected species that may occur within the vicinity of the Project. The IPaC indicated that there are four threatened or endangered species that potentially occur within the vicinity of the Project. No critical habitat was identified within the vicinity of the Project.

The IPaC stated that the Project is within the range of two federally listed bat species: Indiana bat (*Myotis sodalis*), endangered; and the Northern long-eared bat (*Myotis septentrionalis*), threatened.

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 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 diameter at breast height (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 another 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 and abandoned mines.

No trees or caves were identified within the Project area. Therefore, suitable habitat for the listed bat species was not present and the Project will have no effect on the species.

The IPaC stated that the Project is within the range of two federally listed mussel species: clubshell (*Pleurobema clava*), endangered; and the rayed bean (*Villosa fabalis*); endangered. No potentially suitable habitat was observed within the Project survey area during the field survey. Therefore, the Project will have no effect on the species. A copy of the IPaC Official Species list for the Project is provided in Appendix B.

On October 11, 2019, AECOM sent a letter to the USFWS Ohio Ecological Office requesting comments regarding the Project. To date, AECOM has not received a response from the agency.

4.0 SUMMARY

The ecological survey of the Project area did not identify any wetlands, streams, or ponds. One upland data point was recorded.

Regarding state and/or federally listed threatened and endangered species that may occur within the Project vicinity, four protected species were listed by the ODNR and USFWS including: Indiana bat, northern long-eared bat, clubshell, and rayed bean. As the Project area did not contain any trees/caves or streams, no suitable habitat for the listed bat and mussel species, respectively, was observed therefore, the Project will not impact these species.

The reported results of the ecological survey conducted by AECOM on this Project are limited to the areas within the Project survey boundary provided in Figures 1, 2, and 3. Areas that fall outside of the Project survey boundary 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 area 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.

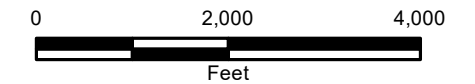
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LEGEND:

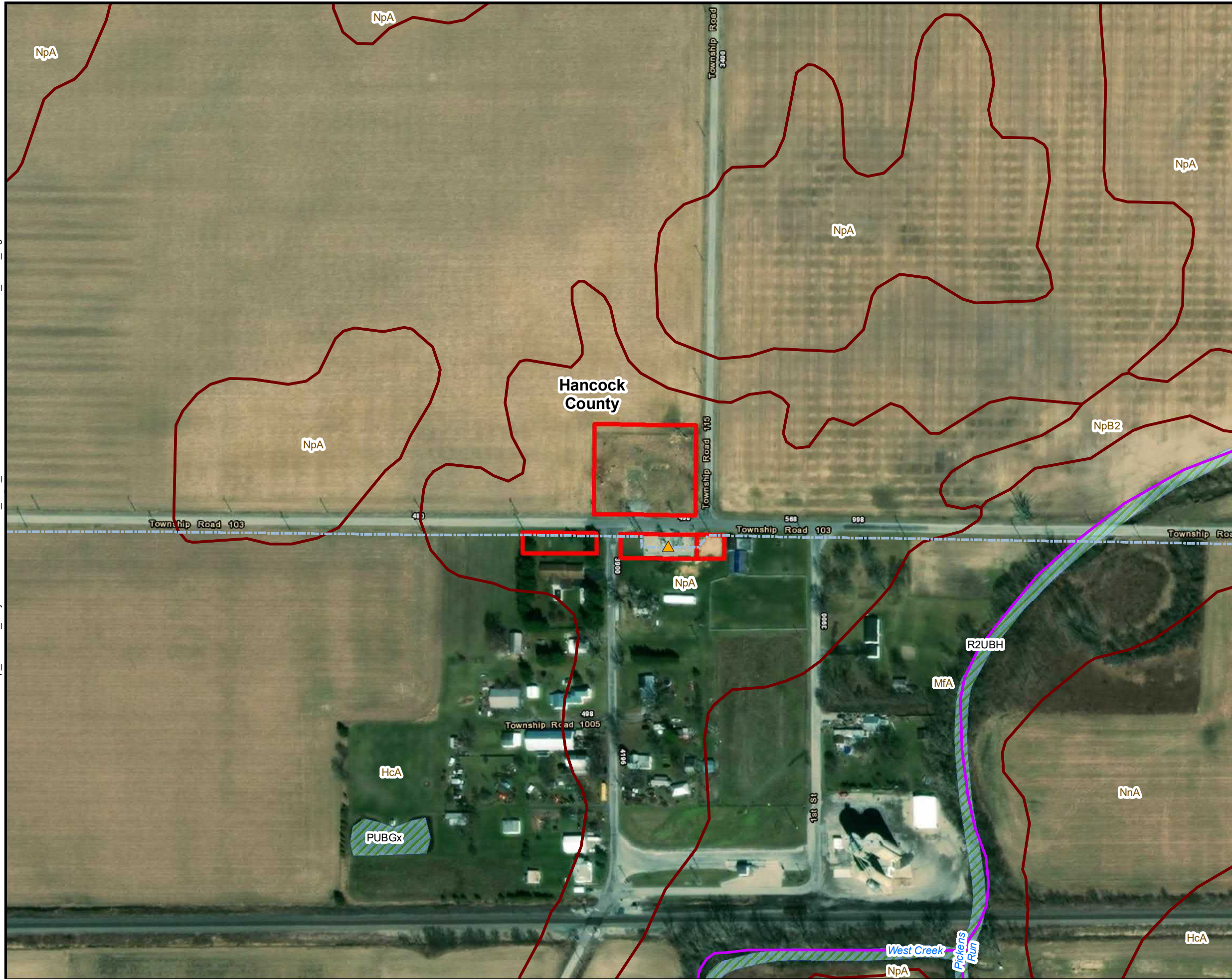
- Station
- County
- 7.5" USGS Topographical Quadrangle
- Project Survey Area
- WBDHU12
- 100-yr Flood Zone



BASE MAP SOURCE:
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AEP OHIO TRANSMISSION COMPANY Shawtown Switch Project

FIGURE 1
OVERVIEW MAP

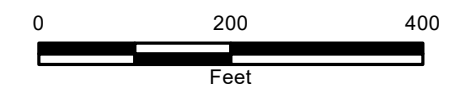


LEGEND:

- Station
- Existing Transmission Line
- Project Survey
- NHD Stream
- NWI Wetland
- 100-yr Flood Zone
- Soil Map Unit

Soil Map Unit Symbol

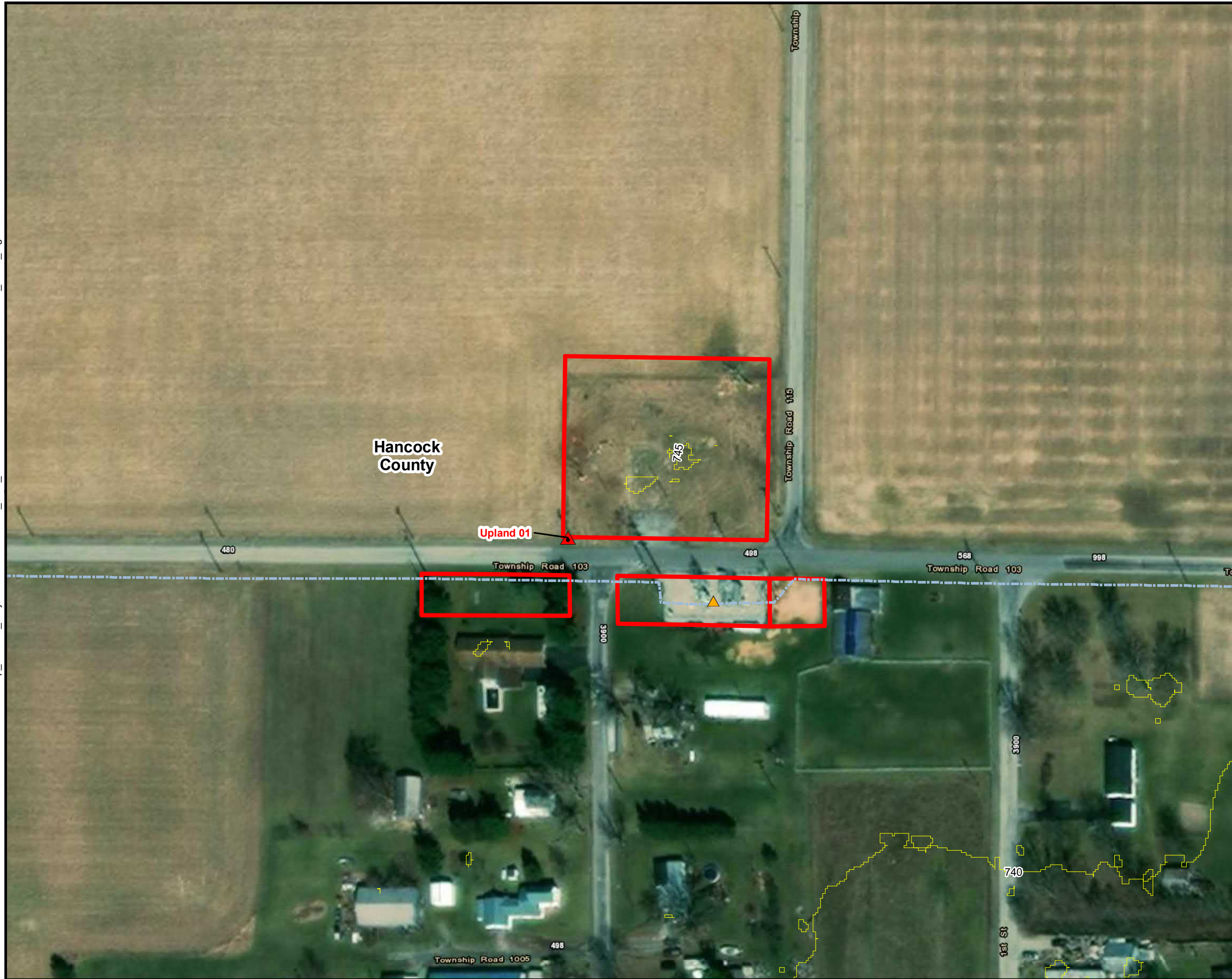
- HcA, Hoytville silty clay loam, 0 to 1 percent slopes
- MfA, Mermill clay loam, 0 to 1 percent slopes
- NnA, Nappanee loam, 0 to 2 percent slopes
- NpA, Nappanee silty clay loam, 0 to 2 percent slopes
- NpB2, Nappanee silty clay loam, 2 to 6 percent slopes, eroded








BASE MAP SOURCE:
Esri, HERE, Garmin, © OpenStreetMap contributors

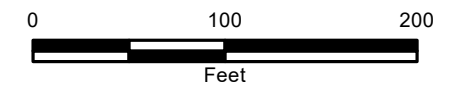
AEP OHIO TRANSMISSION COMPANY Shawtown Switch Project

FIGURE 2
SOIL MAP UNIT AND
NATIONAL WETLAND INVENTORY MAP



LEGEND:

-  Station
-  Existing Transmission Line
-  5-ft Contour
-  Project Survey
-  Upland Data Point

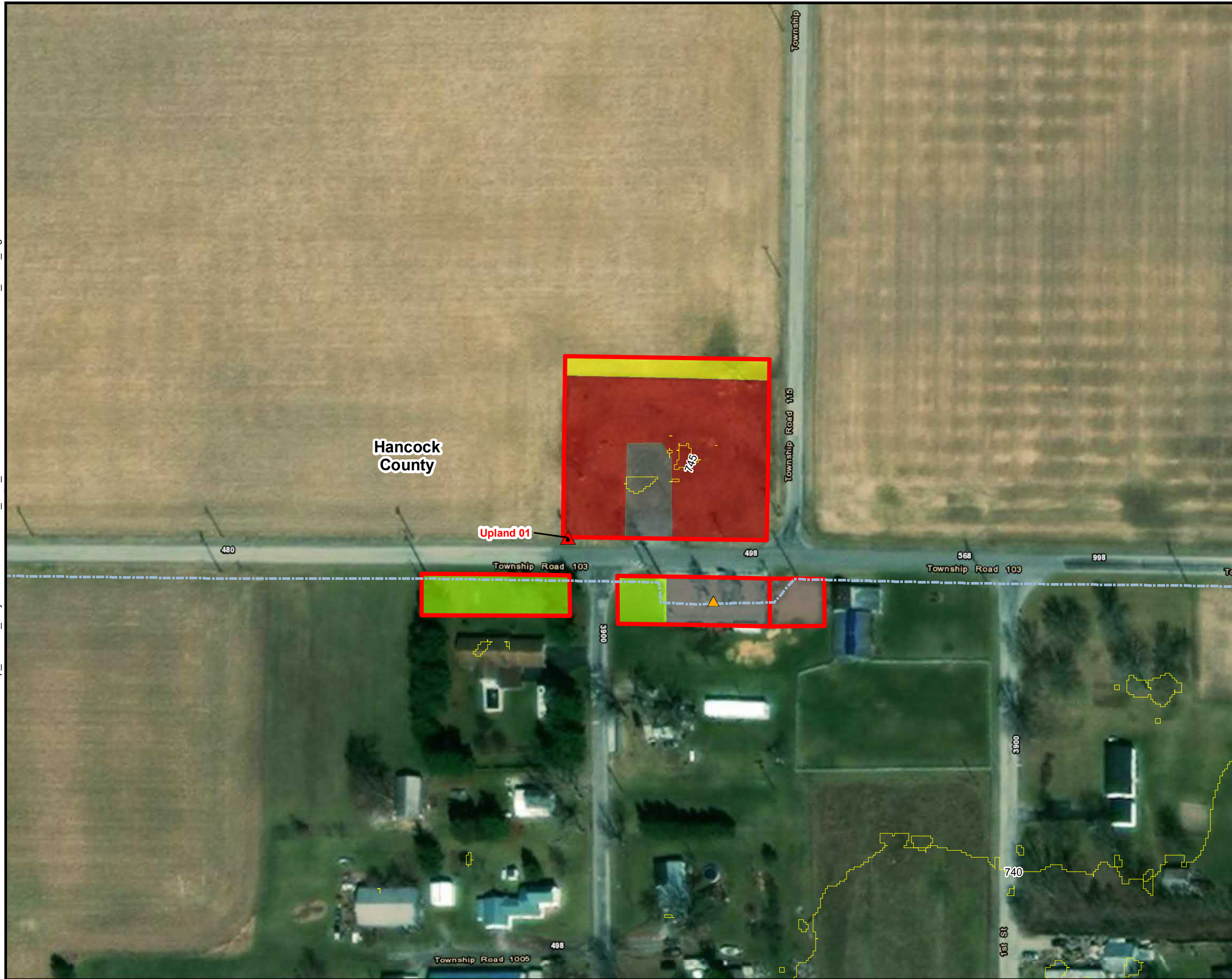


BASE MAP SOURCE:
Esri, HERE, Garmin, © OpenStreetMap contributors



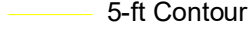



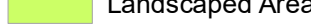




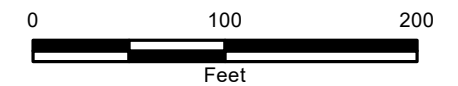
Shawtown Switch Project

FIGURE 3
WETLAND DELINEATION AND
STREAM ASSESSMENT MAP



LEGEND:

-  Station
-  Existing Transmission Line
-  5-ft Contour
-  Project Survey Area
-  Upland Data Point
-  Agricultural Land
-  Landscaped Area
-  Old Field
-  Urban



BASE MAP SOURCE:
Esri, HERE, Garmin, © OpenStreetMap contributors

FIGURE 4
VEGETATION COMMUNITIES MAP

APPENDIX A

U.S. ARMY CORPS OF ENGINEERS UPLAND FORM

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Shawtown Switch City/County: Hancock County Sampling Date: 11-Oct-19
 Applicant/Owner: AEP Ohio Transmission Company State: OH Sampling Point: UPL-MRK-001
 Investigator(s): M.R.Kline, T.Ciskowski Section, Township, Range: S. 19 T. 2N R. 9E
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): flat Slope: 0.5 % / 0.3 °
 Subregion (LRR or MLRA): MLRA 99 Lat.: 41.109314 Long.: -83.871726 Datum: Nad83
 Soil Map Unit Name: NpA; Nappanee silty clay loam, 0 to 2 percent slopes NWI classification: NA

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: (Explain alternative procedures here or in a separate report.) Upland data point collected for site characterization. Surrounding land use is residential, agriculture, and active sub station construction. Area is significantly disturbed by active construction within the study area and plowed corn fields at the edge of the study area.	

Hydrology

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (minimum of 2 required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: NA	
Remarks: No source of hydrology observed.	

VEGETATION - Use scientific names of plants

Sampling Point: **UPL-MRK-001**

Tree Stratum (Plot size: <u>None</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	0	<input type="checkbox"/>	_____	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____	0	<input type="checkbox"/>	_____	
3. _____	0	<input type="checkbox"/>	_____	
4. _____	0	<input type="checkbox"/>	_____	
5. _____	0	<input type="checkbox"/>	_____	
6. _____	0	<input type="checkbox"/>	_____	
7. _____	0	<input type="checkbox"/>	_____	
Sapling/Shrub Stratum (Plot size: <u>None</u>)				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>100</u> x 5 = <u>500</u> Column Totals: <u>100</u> (A) <u>500</u> (B) Prevalence Index = B/A = <u>5.000</u>
= Total Cover				
1. _____	0	<input type="checkbox"/>	_____	
2. _____	0	<input type="checkbox"/>	_____	
3. _____	0	<input type="checkbox"/>	_____	
4. _____	0	<input type="checkbox"/>	_____	
5. _____	0	<input type="checkbox"/>	_____	
6. _____	0	<input type="checkbox"/>	_____	
7. _____	0	<input type="checkbox"/>	_____	
= Total Cover				
Herb Stratum (Plot size: <u>5' radius</u>)				Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> Dominance Test is > 50% <input type="checkbox"/> Prevalence Index is ≤ 3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Zea mays</u>	100	<input checked="" type="checkbox"/>	UPL	
2. _____	0	<input type="checkbox"/>	_____	
3. _____	0	<input type="checkbox"/>	_____	
4. _____	0	<input type="checkbox"/>	_____	
5. _____	0	<input type="checkbox"/>	_____	
6. _____	0	<input type="checkbox"/>	_____	
7. _____	0	<input type="checkbox"/>	_____	
8. _____	0	<input type="checkbox"/>	_____	
9. _____	0	<input type="checkbox"/>	_____	
10. _____	0	<input type="checkbox"/>	_____	
11. _____	0	<input type="checkbox"/>	_____	
12. _____	0	<input type="checkbox"/>	_____	
= Total Cover				
Woody Vine Stratum (Plot size: <u>None</u>)				Definitions of Vegetation Strata: Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall.. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in height.
= Total Cover				
1. _____	0	<input type="checkbox"/>	_____	
2. _____	0	<input type="checkbox"/>	_____	
3. _____	0	<input type="checkbox"/>	_____	
4. _____	0	<input type="checkbox"/>	_____	
= Total Cover				
Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>				

Remarks: (Include photo numbers here or on a separate sheet.)
 No vegetation within study are where active construction is taking place. Planted corn fields surround the edge of the study area.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

APPENDIX B
IPaC SPECIES LIST



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Ohio Ecological Services Field Office
4625 Morse Road, Suite 104
Columbus, OH 43230-8355
Phone: (614) 416-8993 Fax: (614) 416-8994

In Reply Refer To:
Consultation Code: 03E15000-2020-SLI-0071
Event Code: 03E15000-2020-E-00086
Project Name: Shawtown Switch

October 15, 2019

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <http://www.fws.gov/migratorybirds/RegulationsandPolicies.html>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/BirdHazards.html>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <http://www.fws.gov/migratorybirds/AboutUS.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Ohio Ecological Services Field Office

4625 Morse Road, Suite 104

Columbus, OH 43230-8355

(614) 416-8993

Project Summary

Consultation Code: 03E15000-2020-SLI-0071

Event Code: 03E15000-2020-E-00086

Project Name: Shawtown Switch

Project Type: POWER GENERATION

Project Description: AEP is proposing to install a new 138 kV switch and approximately 0.1 mile of new 138 kV transmission tie line in Hancock County, Ohio. The switch will be installed at the existing AEP facility with the tie line extending across Township Road 103 to a recently constructed customer station.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/41.10913749515107N83.87114141385263W>



Counties: Hancock, OH

Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> ▪ Incidental take of the northern long-eared bat is not prohibited at this location. Federal action agencies may conclude consultation using the streamlined process described at https://www.fws.gov/midwest/endangered/mammals/nleb/s7.html Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Clams

NAME	STATUS
Clubshell <i>Pleurobema clava</i> Population: Wherever found; Except where listed as Experimental Populations No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3789	Endangered
Rayed Bean <i>Villosa fabalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5862	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Appendix C Agency Coordination Letters



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

November 25, 2019

Jason Tucker
AECOM
525 Vine Street
Cincinnati, Ohio 45202

Re: 19-886; Shawtown Switch Project

Project: The proposed project involves installing a new 138 kV switch and approximately 0.1 mile of new 138 kV transmission tie line all of which are located within previously disturbed areas

Location: The proposed project is located in Pleasant Township, Hancock 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 no records at or within a one-mile radius of the project area.

A review of the Ohio Natural Heritage Database indicates there are no other records of state endangered or threatened plants or animals within the project area. There are also no records of state potentially threatened plants, special interest or species of concern animals, or any federally listed species. In addition, we are unaware of any unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, state nature preserves, state or national parks, state or national forests, national wildlife refuges, or other protected natural areas within the project area. The review was performed on the project area you specified in your request as well as an additional one-mile radius. Records searched date from 1980.

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

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

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

The project is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species. The following species of trees have relatively high value as potential Indiana bat roost trees to include: shagbark hickory (*Carya ovata*), shellbark hickory (*Carya laciniosa*), bitternut hickory (*Carya cordiformis*), black ash (*Fraxinus nigra*), green ash (*Fraxinus pennsylvanica*), white ash (*Fraxinus americana*), shingle oak (*Quercus imbricaria*), northern red oak (*Quercus rubra*), slippery elm (*Ulmus rubra*), American elm (*Ulmus americana*), eastern cottonwood (*Populus deltoides*), silver maple (*Acer saccharinum*), sassafras (*Sassafras albidum*), post oak (*Quercus stellata*), and white oak (*Quercus alba*). Indiana bat roost trees consists of trees that include dead and dying trees with exfoliating bark, crevices, or cavities in upland areas or riparian corridors and living trees with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. However, Indiana bats are also dependent on the forest structure surrounding roost trees. If suitable habitat occurs within the project area, the DOW recommends trees be conserved. If suitable habitat occurs within the project area and trees must be cut, the DOW recommends cutting occur between October 1 and March 31. If suitable trees must be cut during the summer months, the DOW recommends a net survey be conducted between June 1 and August 15, prior to any cutting. Net surveys should incorporate either nine net nights per square 0.5 kilometer of project area, or four net nights per kilometer for linear projects. If no tree removal is proposed, this project is not likely to impact this species.

The project is within the range of the clubshell (*Pleurobema clava*), a state and federally endangered mussel, the rayed bean (*Villosa fabalis*), a state endangered and federal endangered mussel species, the purple lilliput (*Toxolasma lividus*), a state endangered mussel, the pondhorn (*Unio merus tetralasmus*), a state threatened mussel, and the black sandshell (*Ligumia recta*), a state threatened 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 these species.

The project is within the range of the western banded killifish (*Fundulus diaphanus menona*), a state endangered fish. 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.

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

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

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

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

ODNR appreciates the opportunity to provide these comments. Please contact Sarah Tebbe, Environmental Specialist, at (614) 265-6397 or Sarah.Tebbe@dnr.state.oh.us if you have questions about these comments or need additional information.

Mike Pettegrew
Environmental Services Administrator (Acting)



In reply, refer to
2019-HAN-46559

November 5, 2019

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

RE: Shawtown Switch Project, Pleasant Township, Hancock County, Ohio

Dear Mr. Weller:

This letter is in response to the correspondence received on October 11, 2019 regarding the proposed Shawtown Switch Project, Pleasant Township, Hancock County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code and the Ohio Power Siting Board rules for siting this project (OAC 4906-4). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

The following comments pertain to the *Phase I Archaeological Investigations for the Approximately .5 ha (1.2 ac) Shawtown Switch Project in Pleasant Township, Hancock County, Ohio* by Weller & Associates, Inc. (2019).

A literature review, visual inspection, shovel probe, and shovel test unit excavation was completed as part of the investigations. No previously identified archaeological sites are located within the project area. No archaeological sites were identified during this survey. Based on the information provided, our office agrees with your determination and no further archaeological work is necessary.

The following comments pertain to the *History/Architecture Investigations for the Approximately .5 ha (1.2 ac) Shawtown Switch Project in Pleasant Township, Hancock County, Ohio* by Weller & Associates, Inc. (2019).

A literature review and field survey were completed as part of the investigations. Five properties fifty years of age or older were identified within the project area and/or 1,000' study area that may have a direct line of sight to the project. It is Weller's recommendation that the identified properties are not eligible for inclusion in the National Register of Historic Places due to historical and architectural insignificance. Our office agrees with Weller's recommendations of eligibility.

Based on the information provided, we agree the project will not affect historic properties. No further coordination with this office is necessary, unless the project changes or unless new or additional historic properties are discovered during implementation of this project. In such a situation, this office should be contacted. If you have any questions, please contact me at (614) 298-2022, or by e-mail at khorricks@ohiohistory.org, or Joy Williams at jwilliams@ohiohistory.org. Thank you for your cooperation.

Sincerely,

A handwritten signature in blue ink, appearing to read "Krista Horrocks", is written over a blue circular stamp.

Krista Horrocks, Project Reviews Manager
Resource Protection and Review

cc: Pattarin Jarupan, AEP (pjarupan@aep.com)

RPR Serial No: 1081092-1081093

Tucker, Jason

From: susan_zimmermann@fws.gov on behalf of Ohio, FW3 <ohio@fws.gov>
Sent: Wednesday, October 30, 2019 11:54 AM
To: Tucker, Jason
Subject: AEP Shawtown Switch, 138 kV Line Replacement, Hancock Co.



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# 03E15000-2020-TA-0071

Dear Mr. Tucker,

We have received your recent correspondence regarding potential impacts to federally listed species in the vicinity of the above referenced project. There are no federal wilderness areas, wildlife refuges or designated critical habitat within the vicinity of the project area. We recommend that proposed activities minimize water quality impacts, including fill in streams and wetlands. Best management practices should be utilized to minimize erosion and sedimentation.

FEDERALLY LISTED, PROPOSED, AND CANDIDATE SPECIES COMMENTS: Due to the project type, size, location, and the 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 the federally listed endangered Indiana bat (*Myotis sodalis*) and threatened northern long-eared bat (*Myotis septentrionalis*), we do not anticipate adverse effects to any federally endangered, threatened, proposed or candidate species. Should the project design change, or during the term of this action, 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, consultation with the U.S. Fish and Wildlife Service (Service) should be initiated to assess any potential impacts.

If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), no tree clearing should occur on any portion of the project area until consultation under section 7 of the Endangered Species Act (ESA), between the Service and the federal action agency, is completed. We recommend that 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.

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.), ESA, and are consistent with the intent of the National Environmental Policy Act of 1969 and the Service's Mitigation Policy. This letter provides technical assistance only and does not serve as a completed section 7 consultation document. We recommend that the project be coordinated with the Ohio Department of Natural Resources due to the potential for the project to affect state listed species and/or state lands. Contact John Kessler, Environmental Services Administrator, at (614) 265-6621 or at john.kessler@dnr.state.oh.us.

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

Sincerely,

A handwritten signature in blue ink, appearing to read "Patrice M. Ashfield".

Patrice M. Ashfield,
Field Office Supervisor