| AMERICAN TRANSMISSION SYSTEMS, INCORPORATED  
| A FIRSTENERGY COMPANY  
|  
| CONSTRUCTION NOTICE  
|  
| HANNA-SHALERSVILLE 138 kV TRANSMISSION LINE STRUCTURE #12191 REPLACEMENT PROJECT  
|  
| OPSB CASE NO.: 16-1703-EL-BNR  
|  
| August 31, 2016  
|  
| American Transmission Systems, Incorporated  
| 76 South Main Street  
| Akron, Ohio 44308  
|
CONSTRUCTION NOTICE
HANNA-SHALERSVILLE 138 kV TRANSMISSION LINE
STRUCTURE #12191 REPLACEMENT PROJECT

The following information is being provided in accordance with Ohio Administrative Code (OAC) Chapter 4906-6 for the application and review of Accelerated Certificate Applications. Based upon the requirements found in Appendix A to OAC Rule 4906-1-01, this Project qualifies for submittal to the Ohio Power Siting Board (“Board”) as a Construction Notice application.

4906-6-05: ACCELERATED APPLICATION REQUIREMENTS

4906-6-05: Name and Reference Number

Name of Project: Hanna-Shalersville 138 kV Transmission Line Structure #12191 Replacement Project (“Project”).

2015 LTFR Reference: This Project is not included in FirstEnergy Corp. 2015 Long Term Forecast Report submitted to the Public Utility Commission of Ohio (“PUCO”) in Case Number 15-0649-EL-FOR.

4906-6-05 (B)(1): Brief Description of the Project

American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, proposes to replace structure #12191 on the existing Hanna-Shalersville 138kV Transmission Line. Structure #12191 is a single wood pole structure that ATSI proposes to replace with a 2-pole wood structure.

The structure replacement is necessary to accommodate the construction of the Campbellsport-Sumner 69 kV line, which will occupy the same structures as the Hanna-Shalersville 138 kV Transmission Line. The Campbellsport-Sumner 69 kV line originates at ATSI’s existing Campbellsport Substation in Portage County, extends 5.7 miles, and connects to the existing Sumner Substation in Portage County. The new 69 kV transmission line will utilize an open arm of the existing structures of the Hanna-Shalersville 138 kV Transmission Line for 3.8 miles. Structure #12191 is located...
approximately 0.1 miles northeast of the intersection of Cleveland East Liverpool Road and the Portage Hike and Bike Trail. ATSI is seeking authorization from OPSB for the replacement of this single 138 kV structure in this application.

In addition, Hanna-Shalersville 138 kV Structure #12229, located 3.8 miles to the southeast of Structure #12191, will also be replaced to accommodate the construction of the Campbellsport-Sumner 69 kV line. The proposed Structure #12229 replacement will be filed concurrently with this application in OPSB Case Number 16-1704-EL-BNR.

The general location of the proposed Project is shown in Exhibits 1 and 2. Exhibit 1 is a location map excerpt of the United States Geologic Survey, Portage County, Ohio, Quad Maps ID number 41081-B2. Exhibit 2 provides the project location via aerial imagery, Digital Orthophoto Quarter Quads (“DOQQ”). The general layout of the proposed Project is shown in Exhibit 3.

The Project is located in an existing maintained transmission right-of-way corridor in the City of Ravenna, Portage County, Ohio. The new transmission structure will be owned and operated by ATSI.

**4906-6-05 (B)(1): Construction Notice Requirement**

The Project meets the requirements for a Construction Notice because the Project is within the types of projects defined by Item (2)(a) of the Application Requirement Matrix for Electric Power Transmission Lines, Appendix A of OAC Rule 4906-1-01. These item states:

(2) Adding new circuits on existing structures designed for multiple circuit use, replacing conductors on existing structures with larger or bundled conductors, adding structures to an existing transmission line, or replacing structures with a different type of structure, for a distance of:

(b) Two miles or less.
The proposed Project is within the requirements of Item (2)(a) as it involves the replacement of a transmission line structure with a different type of structure, at a distance less than 2 miles in length. The Project will be located on property owned by ATSI within existing right-of-way and no new right-of-way will be required.

**4906-6-05 (B)(2): Need for the Project**

The proposed replacement of Structure #12191 is necessary to accommodate the construction of a new Campbellsport-Sumner 69 kV line utilizing the open structure position on the Hanna-Shalersville 138 kV transmission line. The Campbellsport-Sumner 69 kV line project will network two radial transmission lines, reducing area load loss under contingency conditions by 32 Megawatts (“MW”) and will help ensure safe and reliable service to the area.

**4906-6-05 (B)(3): Location of the Project Relative to Existing or Proposed Lines**

The location of the Project relative to existing or proposed lines is shown in the ATSI Transmission Network Map, included as part of the confidential portion of the FirstEnergy Corp. 2015 Long-Term Forecast Report. This map was submitted to the PUCO in Case No. 15-0649-EL-FOR under Rule 4901:5-5:04 (C) of the Ohio Administrative Code. The map is incorporated by reference only. This map depicts ATSI’s 345 kV and 138 kV transmission lines and transmission substations including the Hanna-Shalersville 138 kV Transmission Line. The Project area is located approximately 4 1/4 inches (11” x 17” printed version) from the right edge of the map and 3 1/2 inches (11” x 17” printed version) from the top of the map. The general location and layout of the Project area is shown in Exhibits 1 and 2.

**4906-6-05 (B)(4): Alternatives Considered**

The Project, as proposed, is within existing right-of-way and involves replacing one structure with a single new structure in approximately the same location. Based on the minimal likely impact of the Project, no other alternative with fewer impacts exists and therefore no other alternatives were considered.
ATSI’s and Ohio Edison’s (“OE”) manager of External Affairs will advise local officials of the features and the status of the proposed Project as necessary.

Construction on the project is expected to begin as early as November 30, 2016 and be completed by June 1, 2017.

Exhibit 1 and 2 depict the general location of the Project. Exhibit 1 provides a partial copy of the United States Geological Survey, Portage County, Ohio quadrangle map (Quad Order ID 41081-B2). Exhibit 2 provides a partial copy of aerial imagery, DOQQ.

The Project will be located on existing easements and right-of-way owned by ATSI. No new easements or right-of-way will need to be acquired.

The Transmission Line will have the following characteristics:

- **Voltage:** 138 kV/69 kV
- **Conductors:**
  - Existing 138 kV – 795 kcmil 36/1 ACSR
  - New 69 kV – 795 kcmil 36/1 ACSR
- **Static wire:**
  - Existing – to remain 7#8 alumoweld
- **Insulators:**
  - New - 138 kV polymer horizontal post
- **New Structure:** 2-Pole Wood Structure (Exhibit 4)
4906-6-05 (B)(9)(b): Calculated Electric and Magnetic Field
The closest occupied residence or institution is approximately 325 feet from the transmission line centerline. As this distance is greater than the 100 feet, Electric and Magnetic Field (“EMF”) calculations have not been estimated.

4906-6-05 (B)(9)(c): Estimated Cost
The estimated capital cost for the proposed Project is approximately: $32,000.

4906-6-05 (B)(10): SOCIAL AND ECOLOGICAL IMPACTS

4906-6-05 (B)(10)(a): Land Uses
The Project is located in the City of Ravenna in Portage County, Ohio. There are various land uses in the Project area, with the primary land uses being general commercial and residential uses. Based on the U.S. Bureau of Census estimates from 2010, the City of Ravenna had a population of 11,724. As the proposed Project involves replacement of the existing transmission structure, no changes or impacts to the current land use is anticipated.

4906-6-05 (B)(10)(b): Agricultural Land
Agricultural land use does not exist within the Project limits.

4906-6-05 (B)(10)(c): Archaeological or Cultural Resources
A search of Ohio Historic Preservation Office (“OHPO”) National Register of Historic Places (“NRHP”) online database was conducted to identify the existence of any significant archeological or cultural resource sites within 0.5 miles of the Project Area. A map of the results of the search is shown in Exhibits 6. The OHPO database includes all Ohio listings on the NRHP, including districts, sites, building, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. The results of the search indicate that there are no Listed NRHP properties and no SHPO eligible property identified within 0.5 miles of the Project potential disturbance area.
The OHPO database also includes listing of the Ohio Archaeological Inventory ("OAI"), the Ohio Historic Inventory ("OHI"), previous cultural resource surveys, and the Ohio Genealogical Society ("OGS") cemetery inventory. The results of the search indicate that no listed OAI listed archaeological resources or OHI listed structural resources were identified within 0.5 miles of the Project potential disturbance area.

One (1) previous archaeological resource survey was conducted within 0.5 miles of the Project Area. The previous cultural resource survey is shown in Table 1.

Table 1. Previous Cultural Resource Survey

<table>
<thead>
<tr>
<th>Year</th>
<th>Name</th>
<th>County</th>
<th>Municipality</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>An Intensive Survey of a Proposed Transmission Line in Rootstown, Ravenna, Shalersville, and Streetsboro Township, Portage County, Ohio</td>
<td>Portage</td>
<td>Rootstown, Ravenna, Shalersville, Streetsboro</td>
</tr>
</tbody>
</table>

There are no OAI sites located within 0.5 miles of the Project’s potential disturbance area.

As the proposed Project involves replacing one existing transmission structure with a single structure in approximately the same location, no changes or impacts to archaeological and cultural resources are anticipated.

4906-6-05 (B)(10)(d): Local, State and Federal Government Requirements

There is no known local, or federal requirements that must be met prior to the commencement of construction on the proposed Project except those listed below. Table 2 is a list of known government agency requirements and the filing status of each at the time of filing of this application.

Table 2. Government Agency Requirements

<table>
<thead>
<tr>
<th>Agency</th>
<th>Agency requirement</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ohio EPA</td>
<td>State of Ohio General NPDES Permit For Construction Storm Water Discharge</td>
<td>To be Submitted</td>
</tr>
<tr>
<td>ODOT</td>
<td>Highway Occupancy Permit - approximately 1 permit</td>
<td>To be Submitted</td>
</tr>
</tbody>
</table>
As part of the investigation, ATSI submitted a request to the Ohio Department of Natural Resources-Division of Wildlife (“ODNR”) on March 8, 2016, to research the presence of any endangered, threatened, or rare species within one (1) mile of the Project area. A copy of ODNR’s Environmental Review response is included as Exhibit 6. The ODNR’s response on April 14, 2016, indicated that they have records of eight (8) endangered, two (2) threatened, one (1) potentially threatened, and one (1) of concern state listed species within one mile of the identified Project area. Of the state listed species, one (1) is listed as a species of concern federally.

A request was submitted to the US Fish and Wildlife Service (“USFWS”) for an ecological review on March 8, 2016, to research the presence of any endangered, threatened, or rare species within one (1) mile of the Project area. A copy of USFWS’s Ecological Review response is included as Exhibit 8. The USFWS’s response on April 1, 2016 indicated that based on the Project type and limited impacts, they do not anticipate any impacts to federally protected species.

Both the responses from the ODNR and USFWS indicated that the Project is within the range of the Indiana Bat (*Myotis sodalis*). USFWS also indicated that the Project is within the range of the Northern Long-Eared Bat (*Myotis septentrionalis*). Because no tree clearing is necessary to support the Project, no adverse impacts to these species are anticipated.

The response from ODNR indicated that the Project is within the range of the sharp ridged pocketbook (*Lampsilis ovata*), a state endangered mussel. No in-water work is proposed for the Project, therefore no impacts are anticipated for the species.

The response from ODNR indicated that 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. Since no in-water work is proposed for the Project, no impacts are anticipated for these species.
The response from ODNR indicated that the Project is within the range of the eastern massasauga (*Sistrurus catenatus*), a state endangered and federal candidate snake species, and smooth greensnake (*Opheodrys vernalis*), a state endangered species. The ODNR also indicated that the Project is within the range of the spotted turtle (*Clemmis guttata*), a state threatened species. The Project limits are being evaluated by a State approved herpetologist, and recommendations will be provided to avoid adversely affecting these species, if necessary. The findings and recommendations of the herpetologist will be provided to ODNR for concurrence.

The response from ODNR indicated that the Project is within the range of the northern harrier (*Circus cyaneus*), 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. The scope of the proposed construction is not anticipated to impact habitat suitable for this species.

The response from ODNR indicated that the Project is within the range of the American bittern (*Botaurus lentiginosus*), a state endangered bird. This species prefers nesting in solitary marshes among coarse vegetation. The scope of the proposed construction is not anticipated to impact habitat suitable to this species.

The response from ODNR indicated that the Project is within the range of the black bear (*Ursus americanus*), a state endangered species. Due to the mobility of this species, the Project is not likely to impact this species.

**4906-6-05 (B)(10)(f): Areas of Ecological Concern**

As part of the investigation, ATSI submitted a request to the ODNR on March 8, 2016, to research the presence of any unique ecological sites, geological features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks or forest, national wildlife refuges, or other protected natural areas within one (1) mile of the Project area using ODNR’s Natural Heritage Database. A copy of the ODNR’s Environmental Review response is included as Exhibit 7.
The ODNR’s response on April 14, 2016 indicated that there are two (2) local parks, two (2) wildlife areas and one (1) lake identified within one (1) mile of the construction area of the Project. The wildlife area, Great Blue Heron Rookery, is located approximately one (1) mile away from the Project. Due to the distance away from the Project area, no impacts to the Great Blue Heron Rookery are expected. The two (2) local parks are the West Branch State Park and Dix Park. The West Branch State Park is managed by ODNR Division of Parks and Recreation, and Dix Park is managed by Portage Park District. No impacts are expected to the West Branch State Park and Dix Park since they are both located approximately one (1) mile away from the Project at its closest points.

ATSI hired AECOM to conduct a wetland delineation and stream assessment of the Project area. A copy of this report is provided as Appendix A. No wetlands or streams were identified within the proposed work limits or associated construction access areas, and no impacts to either are expected.

**4906-6-05(B)(10)(g): Other Information**

Construction and operation of the proposed Project will be in accordance with the requirements specified in the latest revision of the National Electrical Safety Code as adopted by the PUCO and will meet all applicable safety standards established by the Occupational Safety and Health Administration.

No other or unusual conditions are expected that will result in significant environmental, social, health or safety impacts.

**4906-6-07: Documentation of Construction Notice Transmittal and Availability for Public Review**

This Construction Notice is being provided concurrently to the following officials in the City of Ravenna and Portage County, Ohio.
Portage County

Commissioner
Maureen T. Frederick
Portage County Commissioner
Portage County Administration Building, 7th Floor
449 S. Meridian Street
Ravenna, OH 44266

Commissioner Vicki A. Kline
Portage County Commissioner
Portage County Administration Building, 7th Floor
449 S. Meridian Street
Ravenna, OH 44266

Commissioner Kathleen Chandler
Portage County Commissioner
Portage County Administration Building, 7th Floor
449 S. Meridian Street
Ravenna, OH 44266

Portage County Commissioner
Portage County Administration Building, 7th Floor
449 S. Meridian Street
Ravenna, OH 44266

City of Ravenna

Mr. Frank Seman
Mayor, City of Ravenna
210 Park Way Drive
Ravenna, OH 44266

Mr. Joe Bica
Council President,
City of Ravenna
380 Linden Street
Ravenna, OH 44266

Mr. Robert Finney, P.E., Manager
City of Ravenna Engineer Office
530 N. Freedom Street
Ravenna, OH 44266

Mr. Don Kainrad
City of Ravenna Service Director
210 Park Way Drive
Ravenna, OH 44266

Library

Mr. Brian C. Hare, Director
Reed Memorial Library
167 E Main Street
Ravenna, OH 44266

Copies of the transmittal letters to these officials have been included with this Construction Notice to the Ohio Power Sitting Board, and are being provided to meet the requirement of OAC 4906-6-07 (B) as proof of compliance with the notice requirement to local officials in OAC 4906-6-07 (A)(1) and to libraries at OAC 4906-6-07 (A)(2).
Information is posted at [www.firstenergycorp.com/about/transmission_project/ohio.html](http://www.firstenergycorp.com/about/transmission_project/ohio.html) on how to request an electronic or paper copy of this Construction Notice. The link to the website is being provided to meet the requirement of OAC 4906-6-07 (B) and to provide the Board with proof of compliance with the notice requirements in OAC 4906-6-07 (A)(3).
This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

**Legend**
- NR Listings
  - Listed
  - National Historic Landmark
  - Delisted
- NR Determinations of Eligibility
- Archaeological Sites
- Historic Structures
- Historic Bridges
- Historic Tax Credit Projects
- OGS Cemeteries
- Dams
- UTM Zone Split
- NR Boundaries
- Phase 1
- Phase 2
- Phase 3
- Historic Previously Surveyed
- Highways

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Datum: [Datum]
Projection: WGS_1984_Web_Mercator_Auxiliary_Sphere
April 14, 2016

Beth Wilburn  
AECOM  
525 Vine Street, Suite 1800  
Cincinnati, Ohio 45202

Re: 16-169; Campbellsport-Sumner 69 kV Overhead Electric Transmission Line Project

**Project:** The proposed project involves the construction of a 69 kV transmission line that will originate from the existing Campbellsport Substation to the southeast of the city of Ravenna. The endpoint is fixed at an existing 69 kV transmission line dead end structure.

**Location:** The proposed project is located in Ravenna, Rootstown, and Edinburg Townships and the city of Ravenna, Portage 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:

- Pale straw sedge (*Carex albolutescens*), P  
- Handsome sedge (*Carex formosa*), E, FSC  
- Green spike-rush (*Eleocharis flavescens*), T  
- Robbins’ spike-rush (*Eleocharis robbinsii*), E  
- White-buttons (*Eriocaulon aquaticum*), E  
- Water avens (*Geum rivale*), P  
- American water milfoil (*Myriophyllum sibiricum*), E  
- White-stemmed pondweed (*Potamogeton praelongus*), E  
- Flat-stemmed pondweed (*Potamogeton zosteriformis*), T  
- Swaying-rush (*Schoenoplectus subterminalis*), E  
- Torrey’s bulrush (*Schoenoplectus torreyi*), E  
- Submergent marsh plant community  
- Iowa darter (*Etheostoma exile*), E  
- Sharp-shinned hawk (*Accipiter striatus*), SC
Great blue heron rookery
West Branch State Park – ODNR Division of Parks & Recreation
Camp Ravenna Joint Military Training Center – Ohio Army National Guard
Dix Park – Portage Park District
Jennings Woods – Kent State University
Crystal Lake – City of Ravenna
Crystal Lake – The Nature Conservancy
Crystal Lake Addition Conservation Site

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. 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.

A Conservation Site is an area deemed by the Natural Heritage Database to be a high quality natural area not currently under formal protection. It may, for example, harbor one or more rare species, be an outstanding example of a plant community or have geologically significant features, etc. These sites may be in private ownership and our listing of them does not imply permission for access.

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; A = species recently added to state inventory, status not yet determined; X = presumed extirpated in Ohio; FE = federal endangered, FT = federal threatened, FSC = federal species of concern, FC = federal candidate species.

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

The DOW recommends that impacts to 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 sharp-ridged pocketbook (*Lampsilis ovata*), a state endangered mussel, and the eastern pondmussel (*Ligumia nasuta*), a state endangered mussel. This project must not have an impact on freshwater native mussels at the project site. This applies to both listed and non-listed species. Per the Ohio Mussel Survey Protocol (2015), all Group 2, 3, and 4 streams (Appendix A) require a mussel survey. Per the Ohio Mussel Survey Protocol, Group 1 streams (Appendix A) and unlisted streams with a watershed of 10 square miles or larger above the point of impact should be assessed using the Reconnaissance Survey for Unionid Mussels (Appendix B) to determine if mussels are present. Mussel surveys may be recommended for these streams as well. This is further explained within the Ohio Mussel Survey Protocol. Therefore, if in-water work is planned in any stream that meets any of the above criteria, the DOW recommends the applicant provide information to indicate no mussel impacts will occur. If this is not possible, the DOW recommends a professional malacologist conduct a mussel survey in the project area. If mussels that cannot be avoided are found in the project area, as a last resort, the DOW recommends a professional malacologist collect and relocate the mussels to suitable and similar habitat upstream of the project site. Mussel surveys and any subsequent mussel relocation should be done in accordance with the Ohio Mussel Survey Protocol. The Ohio Mussel Survey Protocol (2015) can be found at:


The project is within the range of the Iowa darter (*Etheostoma exile*), a state endangered fish, the mountain brook lamprey (*Ichthyomyzon greeleyi*), a state endangered fish, and the lake chubsucker (*Erimyzon sugetta*), a state threatened fish. The DOW recommends no in-water work from April 15 to June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed, the project is not likely to impact these or other aquatic species.

The project is within the range of the eastern massasauga (*Sistrurus catenatus*), a state endangered and a federal candidate snake species. The eastern massasauga uses a range of habitats including wet prairies, fens, and other wetlands, as well as drier upland habitat. Due to the location, this project is not likely to impact this species.

The project is within the range of the smooth greensnake (*Opheodrys vernalis*), a state endangered species. This species is primarily a prairie inhabitant, but also found in marshy meadows and roadside ditches. If wet prairie habitats are proposed to be impacted by the development of this project, the DOW recommends that a habitat suitability survey be conducted to determine if suitable smooth greensnake habitat is present at the project site. If suitable habitat is found to be present at the project site, the DOW recommends that a presence/absence survey be conducted, or an avoidance/minimization plan be developed by a DOW approved herpetologist. The DOW recommends that habitat suitability surveys, and presence/absence surveys be conducted by one of the herpetologists from the provided “Approved Herpetologists” list.

The project is within the range of the spotted turtle (*Clemmys guttata*), a state threatened species. This species prefers fens, bogs and marshes, but also is known to inhabit wet prairies, meadows, pond edges, wet woods, and the shallow sluggish waters of small streams and ditches. If wetlands are to be impacted by the development of this project, the DOW recommends that a
habitat suitability survey be conducted to determine if suitable spotted turtle habitat is present at the project site. If suitable habitat is found to be present at the project site; the DOW recommends that a presence/absence survey be conducted, or an avoidance/minimization plan be developed by a DOW approved herpetologist. The DOW recommends that habitat suitability surveys, and presence/absence surveys be conducted by one of the herpetologists from the provided “Approved Herpetologists” list.

The project is within the range of the northern harrier (*Circus cyaneus*), 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 May 15 to August 1. If this habitat will not be impacted, 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 to July 31. If this type of habitat will not be impacted, the project is not likely to impact this species.

The project is within the range of the 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 to 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 bear (*Ursus americanus*), a state endangered species. Due to the mobility of this species, 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.

ODNR appreciates the opportunity to provide these comments. Please contact John Kessler at (614) 265-6621 if you have questions about these comments or need additional information.

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ODNR Office of Real Estate  
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Columbus, Ohio 43229-6693  
John.Kessler@dnr.state.oh.us
Approved Herpetologist

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Kristin,

Good news, USFWS concurred that based on the Campbellsport-Sumner project type and limited impacts, there should be no impacts to federally protected species!

Take care!

Matthew D. Thomayer  
Senior Ecologist/Project Manager  
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From: susan_zimmermann@fws.gov [mailto:susan_zimmermann@fws.gov] On Behalf Of Ohio, FW3  
Sent: Friday, April 01, 2016 10:42 AM  
To: Wilburn, Beth; Thomayer, Matt  
Subject: Campbellsport-Sumner 69 kV Overhead Electric Transmission Line, Portage Co.

TAILS# 03E15000-2016-TA-0868

Dear Ms. Wilburn,

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 Indiana bats and northern long-eared bats, 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,

Dan Everson
Field Supervisor
CAMPBELLSPORT-SUMNER 69 KV ELECTRIC TRANSMISSION LINE PROJECT

WETLAND DELINEATION AND STREAM ASSESSMENT REPORT FOR STRUCTURE 12191.

Prepared for:
American Transmission Systems, Inc.
a FirstEnergy Company
76 South Main Street
Akron, Ohio 44308

ATSI

AECOM

525 Vine Street, Suite 1800
Cincinnati, Ohio 45202

August 2016
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<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>DBH</td>
<td>Diameter at Breast Height</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
</tr>
<tr>
<td>FAC</td>
<td>Facultative</td>
</tr>
<tr>
<td>FACU</td>
<td>Facultative upland</td>
</tr>
<tr>
<td>FACW</td>
<td>Facultative wetland</td>
</tr>
<tr>
<td>GPS</td>
<td>Global Positioning System</td>
</tr>
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<td>Headwater Habitat Evaluation Index</td>
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<td>IBI</td>
<td>Index of Biotic Integrity</td>
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<td>NWI</td>
<td>National Wetlands Inventory</td>
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<td>OBL</td>
<td>Obligate wetland</td>
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<td>OHWM</td>
<td>Ordinary high water mark</td>
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<td>ORAM</td>
<td>Ohio Rapid Assessment Method</td>
</tr>
<tr>
<td>PEM</td>
<td>Palustrine emergent</td>
</tr>
<tr>
<td>PFO</td>
<td>Palustrine forested</td>
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<tr>
<td>PHWH</td>
<td>Primary Headwater Habitat</td>
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<td>PSS</td>
<td>Palustrine scrub/shrub</td>
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<td>Qualitative Habitat Evaluation Index</td>
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<tr>
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<td>Right-of-way</td>
</tr>
<tr>
<td>UPL</td>
<td>Upland</td>
</tr>
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<tr>
<td>USGS</td>
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1.0 INTRODUCTION

American Transmission Systems, Inc. (ATSI), a FirstEnergy Company (FirstEnergy) is proposing to build the Campbellsport-Sumner 69kV Electric Transmission Line (Project) extending from the Campbellsport substation and ranging northwest for approximately six miles to Sumner substation near Ravenna, Ohio. ATSI has requested that AECOM prepare a separate Wetland Delineation and Stream Assessment Report for the access road and work areas leading to and immediately surrounding structure 12191 in supplement to the comprehensive report for the afore mentioned Project. The proposed Project and structure 12191 are illustrated on Figure 1.

Land uses crossed by the Project survey corridor 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. General land use types in the vicinity of the proposed Project include: residential lots, agricultural fields, old fields, industrial lots, wetlands, wooded lots, and maintained transmission line right-of-way (ROW). Maintained transmission line ROW and residential lots are the dominant land use in the vicinity of the Project. The access leading to structure 12191 is an existing asphalt drive and concrete parking lot. The area directly surrounding structure 12191 is maintained transmission line ROW.

2.0 METHODOLOGY

The purpose of the field survey was to assess whether wetlands and other “waters of the U.S.” exist along the construction access to structure 12191 or in the work areas directly surrounding the structure. Prior to conducting field surveys, digital and published county 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 as an exercise to identify the occurrence and location of potential wetland areas.

AECOM ecologists conducted wetland delineations and stream assessments within the Project survey corridor during April 19-21, 2016. On June 14-15, and August 10-11, 2016, AECOM ecologists walked the Project work limits beyond the 60-foot wide ROW to conduct a wetland delineation and stream assessment. During the field survey, the physical boundaries of observed water features were recorded using sub-decimeter accurate Trimble Global Positioning System (GPS) units. The GPS data was imported into ArcMap GIS software, where the data was then reviewed and edited for accuracy.
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)* (Regional Supplement) (USACE, 2012). The *Regional Supplement* was released in January 2012 by the USACE 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 give way 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 identifying the vegetation communities, soils identification, a geomorphologic assessment of hydrology, 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 ten, 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 Portage County that in an average year, this period lasts from April 17 to November 1, or 198 days. In the Project area, five percent of the growing season equates to approximately ten 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), facultative (FAC), facultative upland (FACU), and/or upland (UPL) was assigned to each plant species based on the U.S. Army Corps of Engineers *2014 National Wetland Plant List: Northcentral and Northeast Region*, which encompasses the area of the Project. An area is determined to have hydrophytic vegetation when, under normal circumstances, 50 percent or more 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 more than 50 percent 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). Typically, wetlands in this region are generally classified as freshwater, Palustrine systems, which include non-tidal wetlands dominated by trees, shrubs, emergents, mosses, or lichens. However, no wetlands were identified within the immediate vicinity of structure 12191.

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 Section 401 of the Clean Water Act. 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 ORAM v. 5.0 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 or 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 waters of the U.S. upstream to the highest reaches of the tributary streams. In addition, the Federal Water Pollution Control Act of 1972 and its 1977 and 1987 amendments require 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).

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 Field Evaluation Manual for Ohio’s Primary Headwater Habitat Streams, Version 3 (Davic, 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 square mile, 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 square miles) versus larger streams (L are those with a watershed area greater than 20 square miles). 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 mi² (259 ha), and a maximum depth of water pools equal to or less than 15.75 inches (40 cm)” (Davic, 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 (Davic, 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” (Davic, 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" (Davic, 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).

### 3.0 RESULTS

No wetlands or streams were identified within the vicinity of structure 12191 or associated construction access.

### 3.1 WETLAND DELINEATION

#### 3.1.1 Preliminary Soils Evaluation

Soils in each wetland were observed and documented as part of the delineation methodology. According to the USDA/NRCS Web Soil Surveys of Portage County, Ohio (NRCS 2016), and the NRCS Hydric Soils Lists of Ohio, two soil series are mapped in the immediate vicinity of structure 12191 within the Project survey corridor (NRCS 2016). Both soil series contain soil map units that are listed with hydric components. Three soil series are mapped along the
construction access to structure 12191, beyond the Project survey corridor. Two of the three soil series contain soil map units that are listed with hydric components. Tables 1A and 1B provide a detailed overview of all soil series along the construction access and within the immediate vicinity of structure 12191. Figure 2 shows soil map units along the construction access and within the immediate vicinity of structure 12191.

3.1.2 National Wetland Inventory Map Review

National Wetland Inventory (NWI) 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. The USFWS website 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 maps of the Ravenna, Ohio quadrangle, no mapped NWI wetland exist along the construction access or within the immediate vicinity of structure 12191. The closest mapped NWI wetland is approximately 470 feet northwest of the construction access entrance for structure 12191 and is classified as palustrine scrub-shrub, broad-leaved deciduous/emergent, broad-leaved, seasonally flooded (PSS1/EM1C) (USFWS, 2016). The location of the mapped NWI wetland is shown on Figure 2.

3.1.3 Delineated Wetlands

No wetlands were identified along the construction access or within the immediate vicinity of structure 12191.

3.2 STREAM CROSSINGS

No streams were identified along the construction access or within the immediate vicinity of structure 12191.

3.3 PONDS

No ponds were identified along the construction access or within the immediate vicinity of structure 12191.
4.0 SUMMARY

The ecological survey of the construction access and area immediately surrounding structure 12191 did not identify any wetlands, streams, ponds or any other jurisdictional water features.

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


Rankin, Edward T. 2006. *Methods for Assessing Habitat in Flowing Waters: Using the Qualitative Habitat Evaluation Index (QHEI)*. Ohio EPA Ecological Assessment Section, Division of Surface Water, Columbus, Ohio.


### TABLE 1A
SOIL MAP UNITS AND DESCRIPTIONS WITHIN THE CAMBELLSPORT-SUMNER 69 kV TRANSMISSION LINE PROJECT SURVEY CORRIDOR

<table>
<thead>
<tr>
<th>Soil Series</th>
<th>Symbol</th>
<th>Map Unit Description</th>
<th>Topographic Setting</th>
<th>Hydric</th>
<th>Hydric Component (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadice</td>
<td>Ca</td>
<td>Canadice silt loam</td>
<td>Depressions</td>
<td>Hydric</td>
<td>100% Canadice</td>
</tr>
<tr>
<td>Fitchville</td>
<td>FcB</td>
<td>Fitchville silt loam, 2 to 6 percent slopes</td>
<td>Terraces</td>
<td>Hydric</td>
<td>10% Sebring</td>
</tr>
</tbody>
</table>

NOTES:
(1) Data sources include:
*N/A=Not Available*
### TABLE 1B
SOIL MAP UNITS AND DESCRIPTIONS BEYOND THE CAMBELLSPORT-SUMNER 69 kV ELECTRIC TRANSMISSION LINE REBUILD PROJECT SURVEY CORRIDOR

<table>
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<tr>
<th>Soil Series</th>
<th>Symbol</th>
<th>Map Unit Description</th>
<th>Topographic Setting</th>
<th>Hydric</th>
<th>Hydric Component (%)</th>
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<tr>
<td>Canadice</td>
<td>Ca</td>
<td>Canadice silt loam</td>
<td>Depressions</td>
<td>Hydric</td>
<td>100% Canadice</td>
</tr>
<tr>
<td>Fitchville</td>
<td>FcB</td>
<td>Fitchville silt loam, 2 to 6 percent slopes</td>
<td>Terraces</td>
<td>Hydric</td>
<td>10% Sebring</td>
</tr>
<tr>
<td>Wooster</td>
<td>WuC2</td>
<td>Wooster silt loam, 6 to 12 percent slopes, moderately eroded</td>
<td>Till plains</td>
<td>Not Hydric</td>
<td>None</td>
</tr>
</tbody>
</table>

**NOTES:**
(1) Data sources include:
*N/A=Not Available*
Figure 2

Source: BMCD, ESRI, FEMA, NWI, NHD, Bing Map Hybrid

Legend

Structure 12191
Survey Corridor
Off ROW Survey Area
Soil Map Unit
Soil Map Unit (off ROW)
NWI Wetland

Campbellsport-Sumner 69kV
Structure 12191
Soil Map Unit and National Wetland Inventory Map
Figure 2

Issued: August 24, 2016

URS Path: J:\Project\F\FirstEnergy\60447461 FE-ETF Program\Data\GIS\Campbellsport-Sumner\Structure 12191\NWI\Plymouth Map})