AMERICAN TRANSMISSION SYSTEMS, INCORPORATED
A FIRSTENERGY COMPANY

CONSTRUCTION NOTICE

EMILY-FOX Q-14 138 kV TRANSMISSION LINE RELCOATION PROJECT

OPSB CASE NO.: 17-1151-EL-BNR

May 11, 2017

American Transmission Systems, Incorporated
76 South Main Street
Akron, Ohio 44308

CONSTRUCTION NOTICE
EMLY-FOX Q-14 138 kV TRANSMISSION LINE
RELOCATION PROJECT

The following information is being provided in accordance with the procedures in the 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:	Emily-Fox Q-14 138 kV Transmission Line Relocation Project ("Project").
2017 LTFR Reference:	This Project is not included in the FirstEnergy Corp. 2017 Long Term Forecast Report submitted to the Public Utility Commission of Ohio ("PUCO") in Case Number 17-0903-EL-FOR.

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

In this Project, American Transmission Systems, Incorporated ("ATSI") a FirstEnergy company, is proposing to relocate two (2) structures on the Emily-Fox Q-14 138 kV Transmission Line approximately 20 – 40 feet south of their current location. In addition, three (3) existing span guy stub poles on the Emily-Fox Q-14 138 kV Transmission Line will be relocated approximately 20 – 25 feet from their current location. All structures are being relocated for the City of North Royalton's State Route 82/Royalton Road Widening between W 130th Street and York Road Project.

The general location of the Project is shown in Exhibit 1, a partial copy of the United States Geologic Survey, Cuyahoga County OH, Quad Map, ID number o41081c6. Exhibit 2 is a partial copy of Bing aerial imagery of the Project area. The Project is

located at approximately 750 feet (0.14 miles) west of the intersection of York Road and Royalton Road (SR 82). The general layout is shown in Exhibit 3. The Project will be located in the City of North Royalton, Cuyahoga County, Ohio.

4906-6-05 (B)(1): Letter of Notification Requirement

The Project meets the requirements for a Construction Notice because the Project is within the types of projects defined by Item (5) of the Application Requirement Matrix for Electric Power Transmission Lines, Appendix A of OAC Rule 4906-1-01. This item states:

> *(5) Replacement or relocation of an electric power transmission line and associated facilities where the project is required by publicly funded entities and is located on or adjacent to right-of-way or land owned by the public entity requiring the project.*

The proposed Project involves the relocation of transmission structures as requested by the City of North Royalton for the State Route 82/Royalton Road Widening between W 130th Street and York Road Project. The Project is located in both public right-of-way and right-of-way adjacent to the public right-of-way.

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

The Project is needed because the City of North Royalton is widening State Route 82/Royalton Road between W 130th Street and York Road. Locations of two (2) existing transmission structures and three (3) stub pole structure would be located within the proposed roadway and therefore will need to be relocated to accommodate the road widening.

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. 2017 Long-Term Forecast Report. This map was submitted to the PUCO in Case No. 17-0903-EL-FOR under Rule 4901:5-5:04 (C)(2)(b) of the Ohio Administrative Code. The map is incorporated by reference only. This map shows ATSI's 345 kV and 138 kV transmission lines and transmission substations including the Emily-Fox Q-14 138 kV Transmission Line. The project area is located approximately 8 ¾ inches (11" x 17" printed version) from the left edge of the map and 2 ¾ 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 through 3.

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

The general area of the Project was carefully reviewed to identify potential routes for the Project that are constructible, minimize potential impacts to the extent practical, and meet the needs of the Project. No major alternatives to the proposed route and design were considered for the Project, as the road widening only requires the relocation of existing structures and a minor change in the overall alignment of the transmission line.

4906-6-05 (B)(5): Public Information Program

ATSI's manager of External Affairs will advise local officials of features and the status of the proposed Transmission Line Project as necessary. ATSI will maintain a copy of this Letter of Notification on FirstEnergy's website. Letters will be sent to affected property owners at least 7 days before construction begins on the project informing them of the Project's start and a proposed timeframe of construction and restoration activities.

4906-6-05 (B)(6): Construction Schedule

The construction schedule for this Project is expected to begin as early as September 5, 2017 and be completed by December 31, 2017.

4906-6-05 (B)(7): Area Map

Exhibit 1 depicts the general location of the Project. This Exhibit provides a partial copy of the United States Geological Survey, Cuyahoga County OH, quadrangle map (Quad

Order ID o41081c6). Exhibit 2 provides a partial copy of Bing aerial imagery of the project area.

4906-6-05 (B)(8): Property Owner List

The Project is located on new right-of-way and in public right-of-way. New right-of-way will be required on three (3) parcels and two (2) parcels will require guying rights only. Table 1 contains a list of property owners affected by the project.

Table 1: Property Owner List

Parcel Number	Property Owner	Property Address	Easement Status
483-26-001	Stevens Painton Corporation	14470 York Rd, North Royalton, OH 44133	Right-of-Way To Be Obtained
483-26-007	Three-A Sac Self-Storage Limited Partnership	9033 Royalton Rd, North Royalton, OH 44133	Right-of-Way To Be Obtained
483-26-002	EGZ Properties, LLC	9925 Royalton Rd, North Royalton, OH 44133	Right-of-Way To Be Obtained
483-24-002	Axios Investments 1, LLC	10139 Royalton Rd, North Royalton, OH 44133	Guying Rights To Be Obtained
483-24-005	Royalton Business Park	Royal Rd, North Royalton, OH 44133	Guying Rights To Be Obtained

4906-6-05 (B)(9): TECHNICAL FEATURES OF THE PROJECT

4906-6-05 (B)(9)(a): Operating Characteristics

The transmission line construction will have the following characteristics:

Voltage: 138 kV

Conductors: 1192.5 kcmil 36/1 ACSR

Static Wire: 7#8 Alumoweld

Insulators: Polymer

ROW Width:	60 feet
Land Requirements:	Guying rights are needed on two (2) properties outside of the right-of-way. The rights are necessary to allow for the installation of stub poles with guy wires extending out no more than 25 feet in any direction from the specified Stub Pole location.
Structure Types:	Exhibit 4: Single circuit, wood pole, 40-90 degree angle deadend structure. One (1) structure is needed. Exhibit 5: Single circuit, wood pole, tangent structure. One (1) structure is needed. Exhibit 6: Wood stub pole structure. Three (3) structures are needed.

4906-6-05 (B)(9)(b): Electric and Magnetic Fields

The closest occupied residence or institution is approximately 75 feet from the proposed transmission line centerline therefore Electric and Magnetic Field ("EMF") calculations are required.

4906-6-05 (B)(9)(b)(i): Calculated Electric and Magnetic Fields Strength Levels

Table 2 itemizes the line loading of the Emily-Fox Q-14 138 kV Transmission Line. The normal line loading represents FirstEnergy's peak system load for the transmission lines. The emergency line loading represents the maximum line loading under contingency operation. The winter rating is based on the continuous maximum conductor rating ("MCR") of the circuits for the single conductors per phase and an ambient temperature of 0 °C (32 °F), wind speed of 1.3 miles per hour, and a circuit design operating temperature of 100 °C (212 °F).

Table 2: Transmission Line Loading

Line Name	Normal Loading Amps	Emergency Loading Amps	Winter Rating Amps
Emily-Fox Q-14 138 kV Transmission Line	109	316	1183

Tables 3 through 5 provide an approximation of the magnetic and electric fields strengths of the Emily-Fox Q-14 138 kV Transmission Line for three different structural configurations found in the project. The configurations are Angle Structure to Angle Structure, Angle Structure to Tangent Structure, and Tangent Structure to Tangent Structure. All configurations are calculated in a 60-foot right-of-way. The calculations provide an approximation of the electric and magnetic fields levels based on specific assumptions utilizing the EPRI EMF Workstation 2009 program software. This program software assumes the input transmission line configuration is located on flat terrain. Also, a balanced, three-phase circuit loading is assumed for the transmission circuit. The model utilizes the normal, emergency, and winter rating of the transmission lines.

Table 3: EMF Calculations for Emily-Fox Q-14 138 kV Transmission Line

Emily-Fox Q-14 138 kV Transmission Line, Angle Structure to Angle Structure		Electric Field (kV/m)	Magnetic Field (mG)
Normal Loading	Under Lowest Conductors	2.34	17.61
	At Right-of-Way Edges	0.19 / 2.5	6.72 / 7.75
Emergency Loading	Under Lowest Conductors	2.34	51.06
	At Right-of-Way Edges	0.19 / 2.5	19.47 / 22.5
Winter Rating	Under Lowest Conductors	2.34	191.17
	At Right-of-Way Edges	0.19 / 2.5	72.9 / 84.5

Table 4: EMF Calculations for Emily-Fox Q-14 138 kV Transmission Line

Emily-Fox Q-14 138 kV Transmission Line, Angle Structure to Tangent Structure		Electric Field (kV/m)	Magnetic Field (mG)
Normal Loading	Under Lowest Conductors	1.86	14.55
	At Right-of-Way Edges	0.26 / 0.41	5.6 / 6.65
Emergency Loading	Under Lowest Conductors	1.86	42.18
	At Right-of-Way Edges	0.26 / 0.41	16.24 / 19.25
Winter Rating	Under Lowest Conductors	1.86	157.9
	At Right-of-Way Edges	0.26 / 0.41	60.79 / 71.5

Table 5: EMF Calculations for Emily-Fox Q-14 138 kV Transmission Line

Emily-Fox Q-14 138 kV Transmission Line, Tangent Structure to Tangent Structure		Electric Field (kV/m)	Magnetic Field (mG)
Normal Loading	Under Lowest Conductors	1.59	13.29
	At Right-of-Way Edges	0.48 / 0.52	5.32 / 6.15
Emergency Loading	Under Lowest Conductors	1.59	38.54
	At Right-of-Way Edges	0.48 / 0.52	15.42 / 17.55
Winter Rating	Under Lowest Conductors	1.59	144.28
	At Right-of-Way Edges	0.48 / 0.52	57.71 / 66.5

4906-6-05 (B)(9)(b)(ii): Alternative Design Consideration for Electric and Magnetic Fields

The strength of EMFs can potentially be reduced by installing the transmission line conductors in a compact configuration and for multiple circuit transmission lines, by selecting conductor phasing that reduces the field strengths. ATSI designs its facilities according to the requirements of the NESC. The pole heights and configuration were chosen based on NESC specifications, engineering parameters, and cost. ATSI's typical

practice, as proposed in this Project, is to install 138 kV transmission lines primarily on wood pole tangent structures supported on horizontal post insulators in a delta configuration, and on wood pole angle structures supported on horizontal post insulations in a vertical configuration. This is a compact design that reduces EMF field strengths in comparison to other installations. It should be noted that because the Project only involves the relocation of structures, the Project is not expected to have an impact on existing EMF strength.

4906-6-05 (B)(9)(c): Estimated Cost

The estimated capital cost for the proposed project is approximately $111,807.

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 North Royalton, Cuyahoga County Ohio. The main land use around the Project is general industrial and public right-of-way for State Route 82/Royalton Road.

4906-6-05 (B)(10)(b): Agricultural Land

Agricultural land does not exist within the Project's disturbance area.

4906-6-05 (B)(10)(c): Archaeological or Cultural Resources

As part of the investigation, a search of the Ohio Historic Preservation Office ("OHPO") online database was conducted to identify the existence of any significant archeological or cultural resource sites within 0.5 miles of the Project Area. The results of the search are shown in Exhibit 7, and in Tables 6, 7 and 8. The specific location of any archeological resources are excluded from the map and are instead only listed in Table 6.

The OHPO database includes all Ohio listings on the National Register of Historic Places ("NRHP"), including districts, sites, buildings, structures, and objects that are significant

in American history, architecture, archeology, engineering, and culture. The results of the search indicate that no listed NRHP sites and no NRHP eligible sites were 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. Three (3) OAI listed archeological resources have been previously inventoried within 0.5 miles of the Project area and are shown in Table 6. One (1) OHI listed structural resource is located within 0.5 miles of the Project area and is shown in Table 7. One (1) previous cultural resource survey was conducted within 0.5 miles of the Project area and is shown in Table 8. No OGS cemeteries are located within 0.5 miles of the Project area.

Table 6. List of OAI Listed Archeological Resources

OAI Number	Affiliation	Description	County	Quad Name
CU0111	Prehistoric	Unknown Prehistoric	Cuyahoga	Berea
CU0114	Prehistoric	Unknown Archaic	Cuyahoga	Berea
CU0188	Prehistoric	Unknown Prehistoric	Cuyahoga	Berea

Table 7. List of OHI Listed Structural Resources

OAI Number	Present Name	Historic Use	County	Municipality
CUY0167418	Life House/ Saunders House	Single Dwelling	Cuyahoga	North Royalton

Table 8. List of Previous Cultural & Historic Resource Survey

Year	Name	County	Municipality
1978	Historic and Archaeological Resources of the Urban County Block Grant Communities in Cuyahoga County	Cuyahoga	North Royalton

Based upon the results of the OHPO online database the closest OAI listed resource is approximately 0.06 miles from the eastern edge of the project area and one OHI listed resource is approximately 0.37 miles from the western edge of project area. The entire Project was covered by the 1978 Historic and Archaeological Resources of the Urban County Block Grant Communities in Cuyahoga County Survey.

Due to the industrial and commercial development in the area, the fact the area was previously surveyed and the lack of known OAI or OHI within or near the project area, and the Project is limited to the addition of a few structures along an existing transmission line, few or no impacts are expected to the archeological and cultural resources from the proposed Project.

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

Table 9 shows the list of government agency requirements and the filing status at the time of filing.

Table 9. List of Government Agency Requirements to be Secured Prior to Construction

Agency	Permit Requirement	Status
Ohio EPA	General NPDES Construction Strom Water Permit	Will be Filed

4906-6-05 (B)(10)(e): Endangered, Threatened, and Rare Species Investigation

ATSI submitted a request to the Ohio Department of Natural Resources ("ODNR") Office of Real Estate to conduct an Environmental Review on March 22, 2017. As part of the Environmental Review, the ODNR Office of Real Estate conducted a search of the ODNR Division of Wildlife's Natural Heritage Database to research the presence of any endangered, threatened, or rare species within one (1) mile of the Project area. The ODNR's Office of Real Estate's response on May 3, 2017 indicated that three (3) state & federally endangered species, three (3) state endangered species, and four (4) state threatened species are within the Project area. A copy of ODNR's Office of Real Estate's response is included as Exhibit 8.

ATSI also submitted a request to the US Fish and Wildlife Service ("USFWS") for an Ecological Review on March 22, 2017, 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 9. The USFW's response on March 28, 2017 indicated that they have records of one (1) federally endangered species and one (1) federally threatened species within the Project area. A list of all endangered, threatened, and rare species, as identified by ODNR and USFWS, is provided in Table 10.

Table 10. List of Endangered, Threatened, and Rare Species.

List of Endangered, Threatened, and Rare Species				
Common Name	**Scientific Name**	**Federal Listed Status**	**State Listed Status**	**Affected Habitat**
Indiana Bat	*Myotis sodalis*	Endangered	Endangered	Trees & Forest
Northern Long-Ear Bat	*Myotis septentrionalis*	Threatened	Threatened	Trees & Forest
Channel Darter	*Percina copelandi*	N/A	Threatened	Water & Perennial Streams

Table 10: List of Endangered, Threatened, and Rare Species				
Common Name	**Scientific Name**	**Federal Listed Status**	**State Listed Status**	**Affected Habitat**
Bigmouth Shiner	*Notropis dorsalis*	N/A	Threatened	Water & Perennial Streams
Blanding's Turtle	*Emydoidea blandingii*	N/A	Threatened	Lakes, Ponds, Streams, & Wetlands
Spotted Turtle	*Clemmys guttata*	N/A	Threatened	Marshes, Bogs, Wet Prairies, & Pond Edges
Piping Plover	*Charadrius melodus*	Endangered	Endangered	Stopover Habitat
Kirtland's Warbler	*Setophaga kirtlandii*	Endangered	Endangered	Stopover Habitat
King Rail	*Rallus elegans*	N/A	Endangered	Marshes
Upland Sandpiper	*Bartramia longicauda*	N/A	Endangered	Grasslands, Pastures
Black Bear	*Ursus americanus*	N/A	Endangered	Forest

The response from USFWS indicated the Project is within the range of the Indiana Bat (*Myotis sodalis*), a federal and state endangered species, and the Northern Long-Eared Bat (*Myotis septentrionalis*), a federal and state threatened species. The response from the ODNR indicates that the Project is within the vicinity of known records of the Indiana Bat. These species utilize trees exclusively during the summer months and caves and/or mines in the winter months. No impacts to these species are expected since no tree clearing is proposed for the Project and no mines or caves are located within the vicinity of the Project area.

The response from ODNR indicated that the Project area is within the range of the Channel Darter (*Percina copelandi*), Bigmouth Shiner (*Notropis dorsalis*), Blanding's Turtle (*Emydoidea blandingii*), and the Spotted Turtle (*Clemmys guttata*). No impacts to

these species are expected due to the Project's location and because no work is proposed in streams or wetlands.

The response from ODNR indicated that the Project area is within the range of the Piping Plover (*Charadrius melodus*) and the Kirtland's Warbler (*Setophaga kirtlandii*). This species utilizes stopover habitat as they migrate through the state and do not nest within the state. No impacts to these species are expected.

The response from ODNR indicated that the Project area is within the range of the King Rail (*Rallus elegans*). This species nests in deep bowls of grass hidden in marsh vegetation. No impacts are expected to this species due to the Project's location and because no work is proposed in marshland.

The response from ODNR indicated that the Project area is within the range of the Upland Sandpiper (*Bartramia longicauda*). Nesting Upland Sandpipers are restricted primarily to extensive, open tracts of short grassland habitat ideally exceeding 200 acres. Upland Sandpipers use grassy areas of low vegetation height for feeding and brood rearing which may include actively grazed pastures, recently burned fields, harvested crops, and recently hayed sites. No impacts to the Upland Sandpiper are expected as potential habitat for this species is not located within the Project Area.

The response from ODNR indicated that the Project area is within the range of the Black Bear (*Ursus americanus*). No impacts are expected due to the mobility of the species as is stated in the response from the ODNR.

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

ATSI submitted a request to the Ohio Department of Natural Resources ("ODNR") Office of Real Estate to conduct an Environmental Review on March 22, 2017. The ODNR Office of Real Estate researched 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. The ODNR's Office of Real Estate's response on May 3, 2017 indicated that they have two (2) records of the aforementioned areas within one (1) mile of the identified project area.

The wildlife areas are the Cleveland Metroparks' Brecksville Reservation and Mill Stream Run Reservation. The closest one, the Mill Stream Run Reservation, is located approximately 0.85 miles away from the project. Due to the distance from the Project area there are no expected impacts to the Cleveland Metroparks.

ATSI conducted a wetland and stream assessment of the Project area. The investigation focused on an approximately 3.3-acre study area around the proposed Project centerline, access roads, and additional workspace areas. One (1) isolated forested area was identified south of State Route 82/Royalton Road containing one (1) emergent wetland and one (1) associated perennial stream. The stream is an unnamed tributary of the East Branch of the Rocky River. Both identified features are approximately 100 feet away from the anticipated work limits in the Project Area and are not expected to be impacted by the Project. A copy of the Wetland and Stream Assessment is provided as Exhibit 10.

The Project work limits do not encroach on any regulated flood plains based on a review of online FEMA Flood Insurance Rate Mapping.

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 Electric 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 Letter of Notification Transmittal and Availability for Public Review

This Construction Notice application is being provided concurrently with its docketing with the Board to the following officials in the City of North Royalton, Cuyahoga County, Ohio.

Cuyahoga County

Mr. Armond Budish, Executive
Cuyahoga County
Office of County Executive
2079 East Ninth Street
Cleveland, OH 44115

Mr. Dan Brady, President
Cuyahoga County Council
2079 East Ninth Street - 8th Floor
Cleveland, OH 44115

Mr. Pernel Jones, Jr., Vice-President
Cuyahoga County Council
2079 East Ninth Street - 8th Floor
Cleveland, OH 44115

Mr. Michael J. Gallagher, District 5
Cuyahoga County Council
2079 East Ninth Street - 8th Floor
Cleveland, OH 44115

Mr. Glenn Coyne, FAICP
Executive Director
Cuyahoga County Planning Comm.
2079 East 9th Street, Suite 5-300
Cleveland, Ohio 44115

North Royalton

The Honorable Robert A. Stefanik
Mayor City of North Royalton
14600 State Road
North Royalton, OH 44133

Mr. Larry Antoskiewicz, President
North Royalton Council
14600 State Road
North Royalton, OH 44133

Mr. Daniel Langshaw, Ward 3
North Royalton Council
14600 State Road
North Royalton, OH 44133

Ms. Cheryl Hannan, Ward 5
North Royalton Council
14600 State Road
North Royalton, OH 44133

Mr. Timothy Miller, Vice Chair
North Royalton Planning Comm.
11545 Royalton Road
North Royalton, OH 44133

Mr. Mark A Schmitzer, P.E.
North Royalton City Engineer
11545 Royalton Road
North Royalton, OH 44133

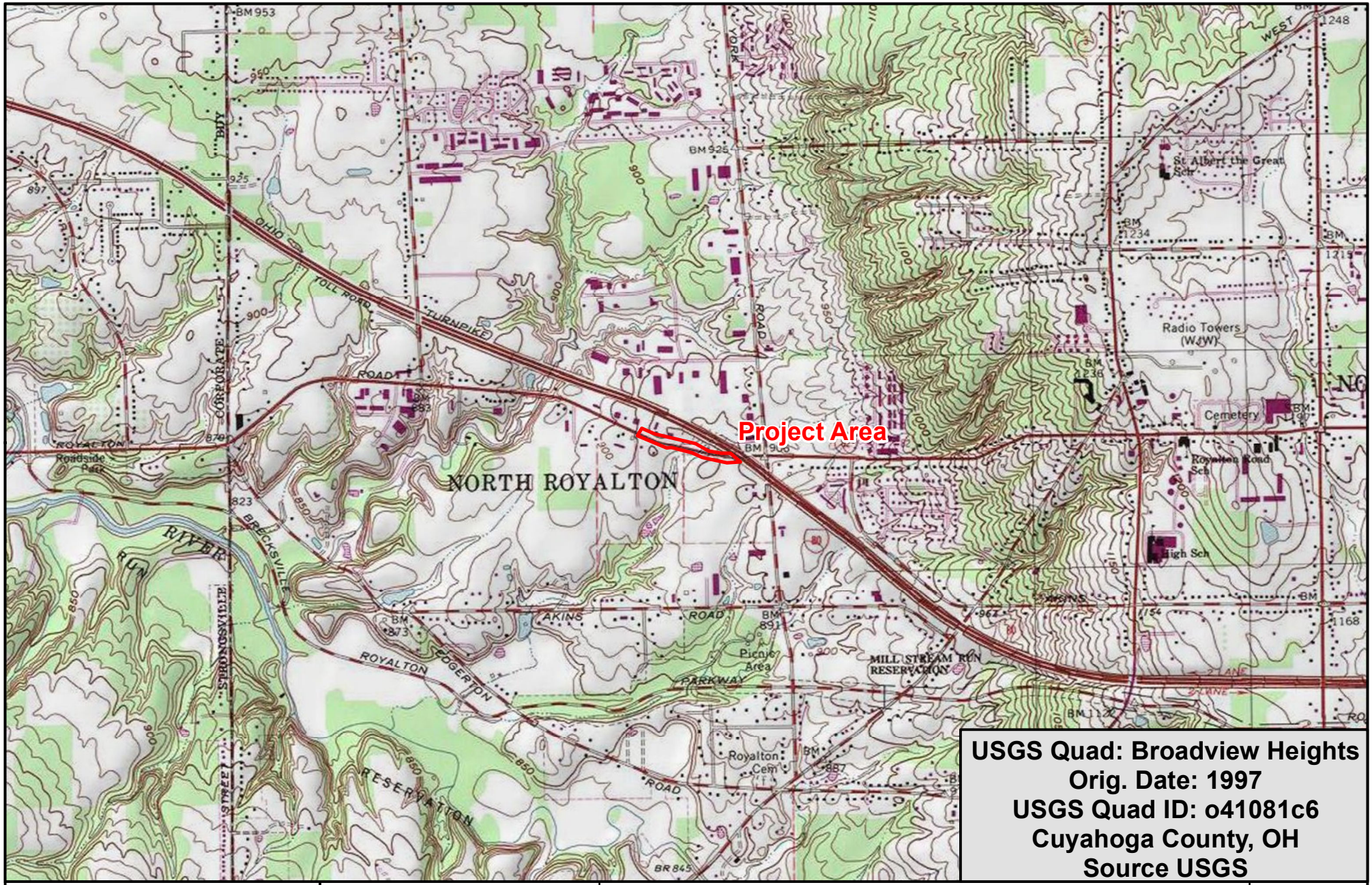
Ms. Diane Veverka, Secretary
North Royalton Planning Comm.
11545 Royalton Road
North Royalton, OH 44133

Library

Ms. Jeanne Cilenti, Manager
North Royalton Branch
Cuyahoga County Public Library
5071 Wallings Rd
North Royalton, OH 44133

Copies of the transmittal letters to these officials have been included with the transmittal letter submitting this Construction Notice to the Board, and are being provided to meet the requirement of OAC Rule 4906-6-07 (B) to provide the Board with proof of compliance with the notice requirement to local officials in OAC Rule 4906-6-07 (A)(1) and to libraries in OAC Rule 4906-6-07 (A)(2).

Information is posted on www.firstenergycorp.com/about/transmission_project/ohio.html on how to request an electronic or paper copy of this Construction Notice. The link to website is being provided to meet the requirement of OAC Rule 4906-6-07 (B) and to provide the Board with proof of compliance with the notice requirements in OAC Rule 4906-6-07 (A)(3).



USGS Quad: Broadview Heights
Orig. Date: 1997
USGS Quad ID: o41081c6
Cuyahoga County, OH
Source USGS

0 1,200 2,400 3,600 Feet

1:24,000

Exhibit 1

Emily-Fox Q-14 138kV Transmission Line Relocation Project

N

FirstEnergy

Created on 5/1/2017

0 1,200 2,400 3,600 Feet

1:24,000

Exhibit 2

Emily-Fox Q-14 138kV Transmission Line Relocation Project

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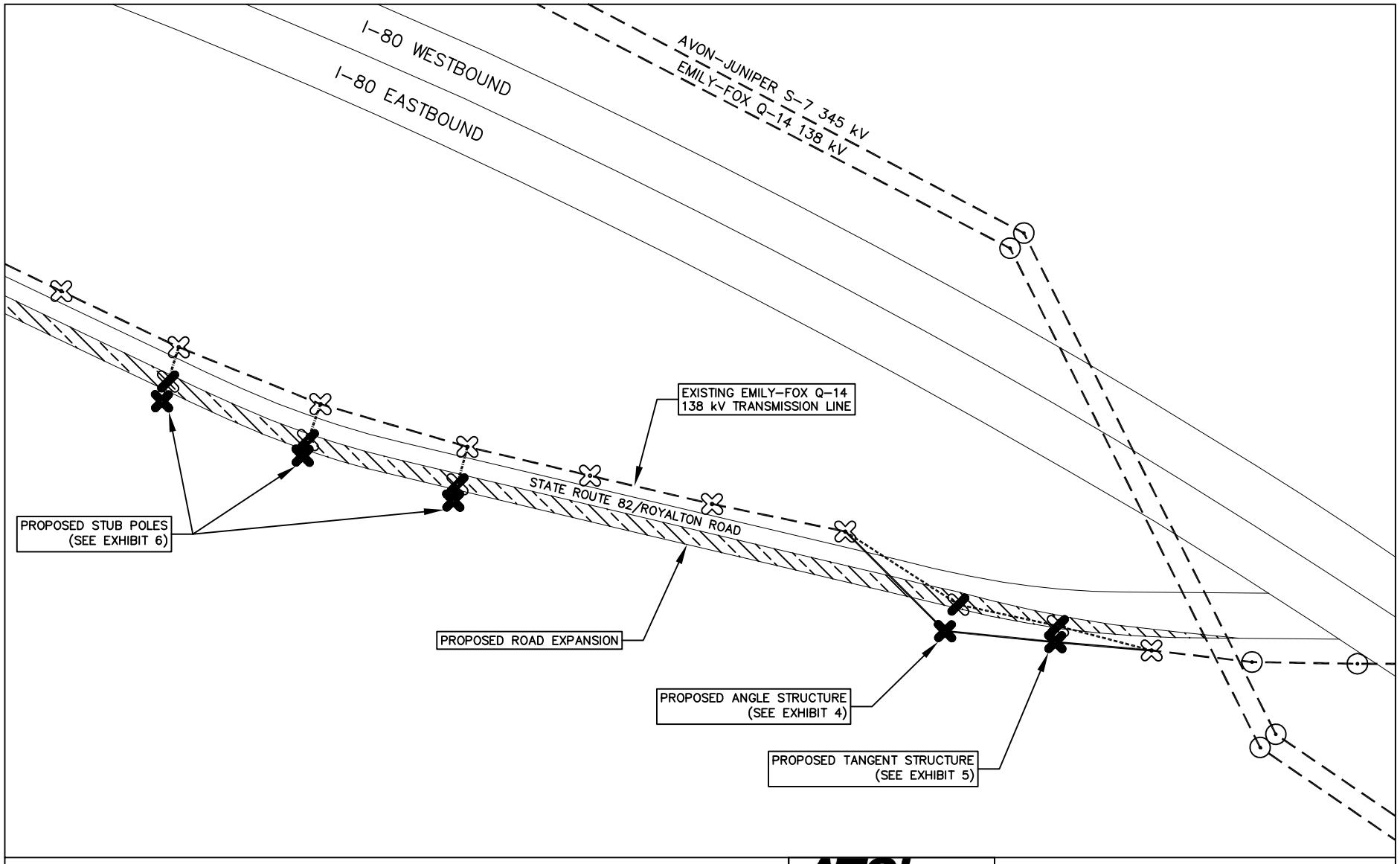
FirstEnergy

Created on 5/1/2017



LEGEND

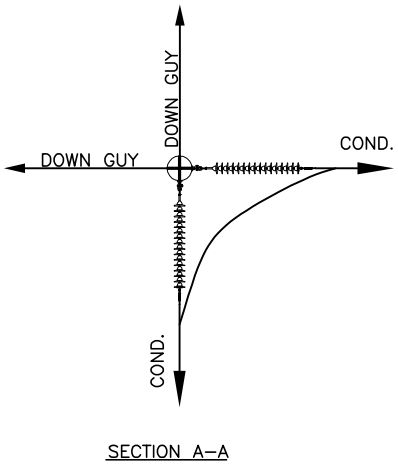
- EXISTING CONDUCTOR
- PROPOSED CONDUCTOR
- CONDUCTOR TO BE REMOVED
- PROPOSED SPAN GUY
- PROPOSED ROAD EXPANSION
- EXISTING 1-POLE WOOD STRUCTURE
- EXISTING 1-POLE WOOD TO BE REMOVED
- NEW 1-POLE WOOD STRUCTURE
- EXISTING 1-POLE STEEL STRUCTURE
- EXISTING 2-POLE STEEL STRUCTURE

ATSI®
American Transmission Systems, Inc
a subsidiary of FirstEnergy Corp.

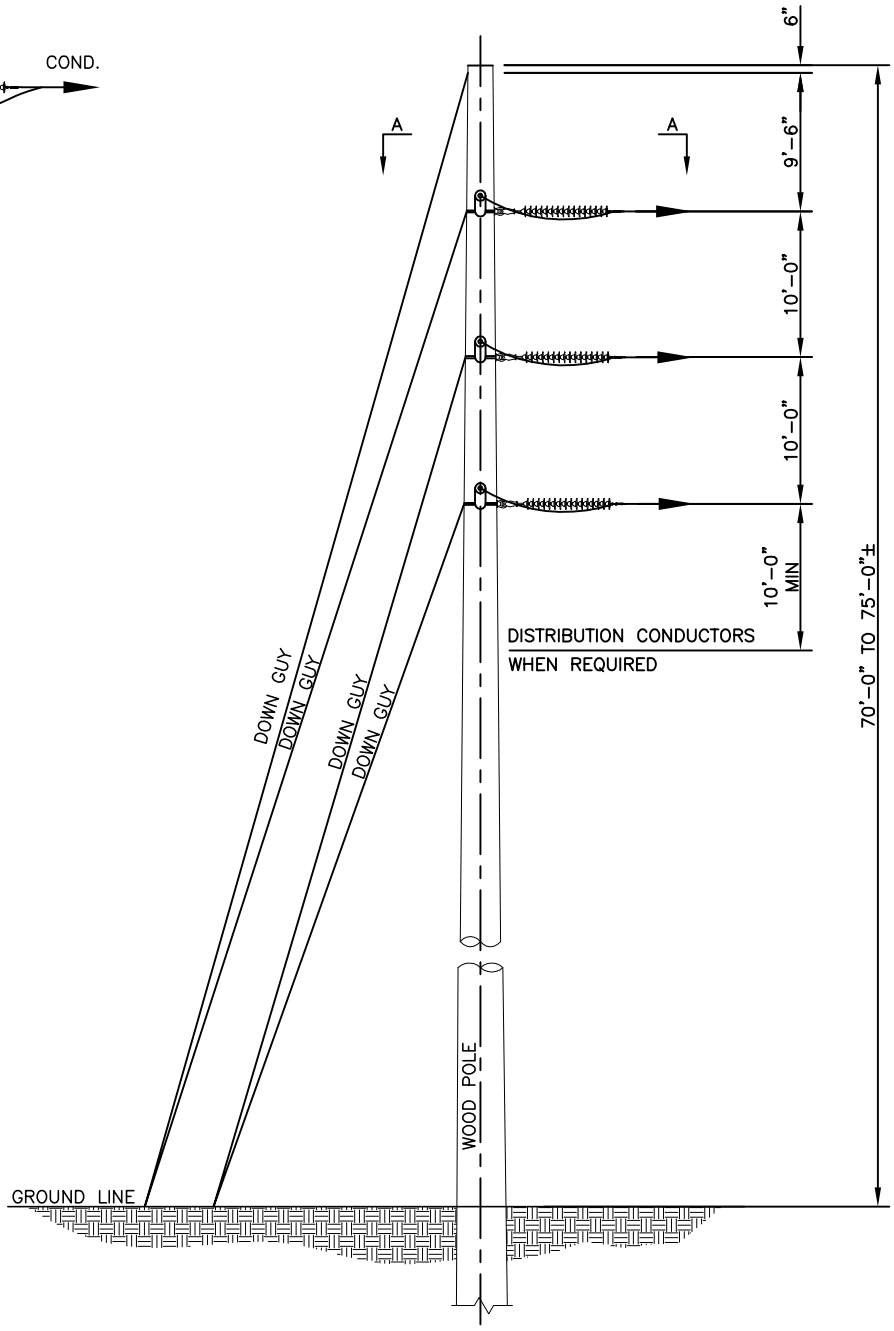
GENERAL LAYOUT

EMILY-FOX Q-14 138 kV TRANSMISSION LINE RELOCATION PROJECT

EXHIBIT 3



SECTION A–A



NOT TO SCALE

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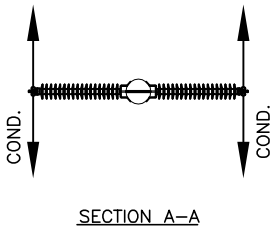
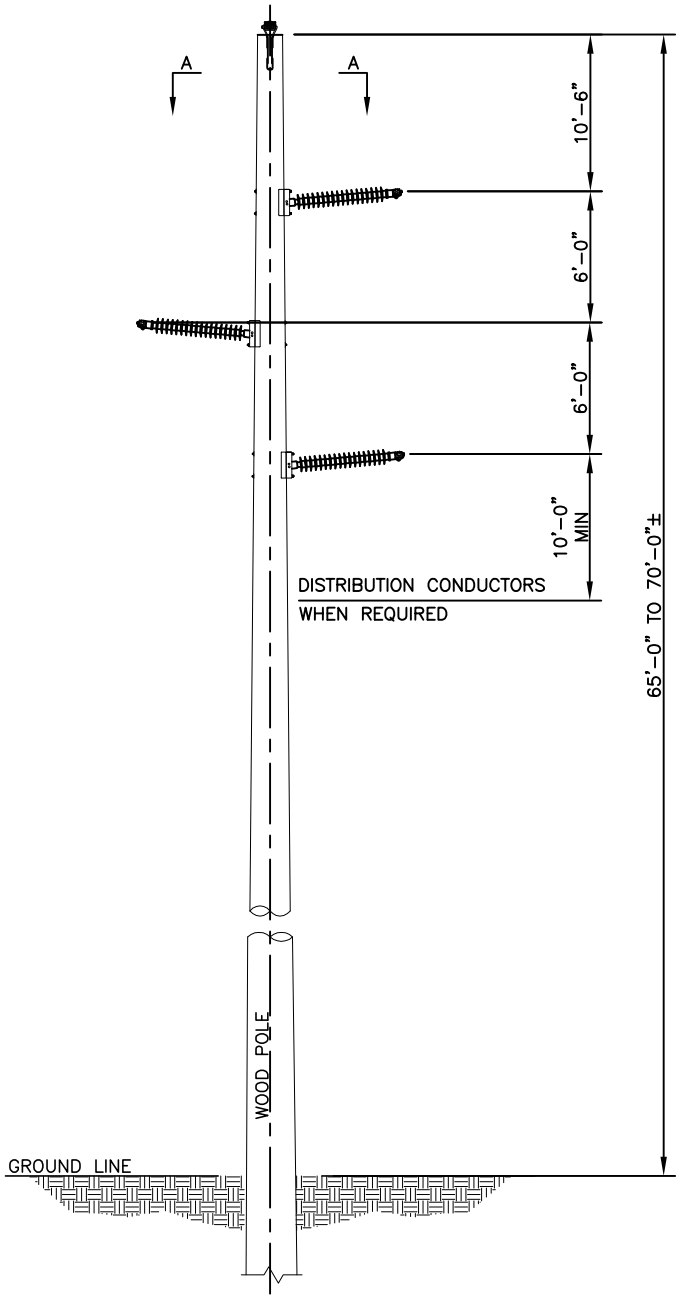
EMILY–FOX Q–14 138 kV
TRANSMISSION LINE RELOCATION
PROJECT

SINGLE CIRCUIT, WOOD POLE 40–90
DEGREES ANGLE DEADEND STRUCTURE

EXHIBIT 4



SECTION A–A



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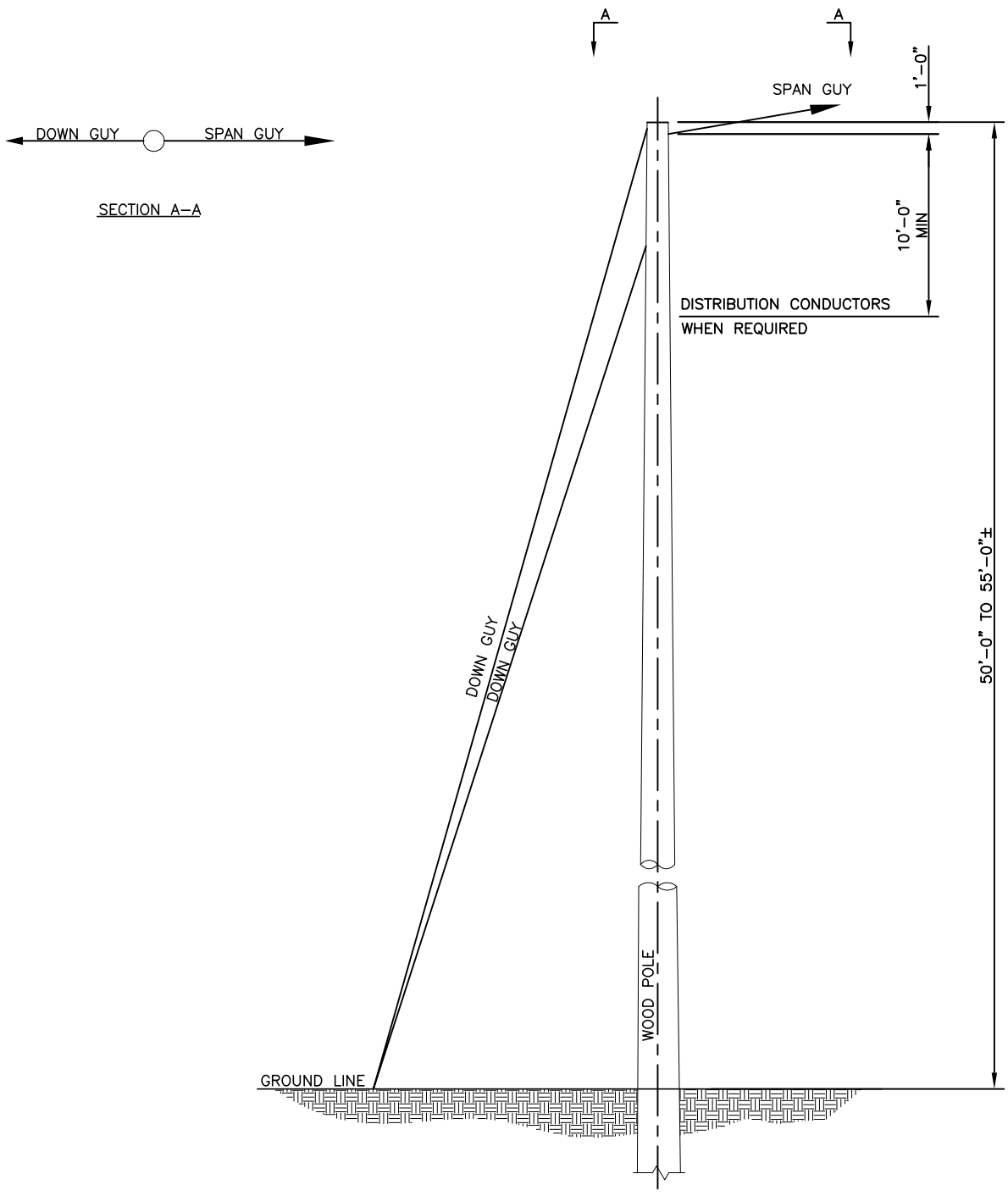
EMILY–FOX Q–14 138 kV
TRANSMISSION LINE RELOCATION
PROJECT

SINGLE CIRCUIT, WOOD POLE TANGENT
STRUCTURE

EXHIBIT 5

NOT TO SCALE



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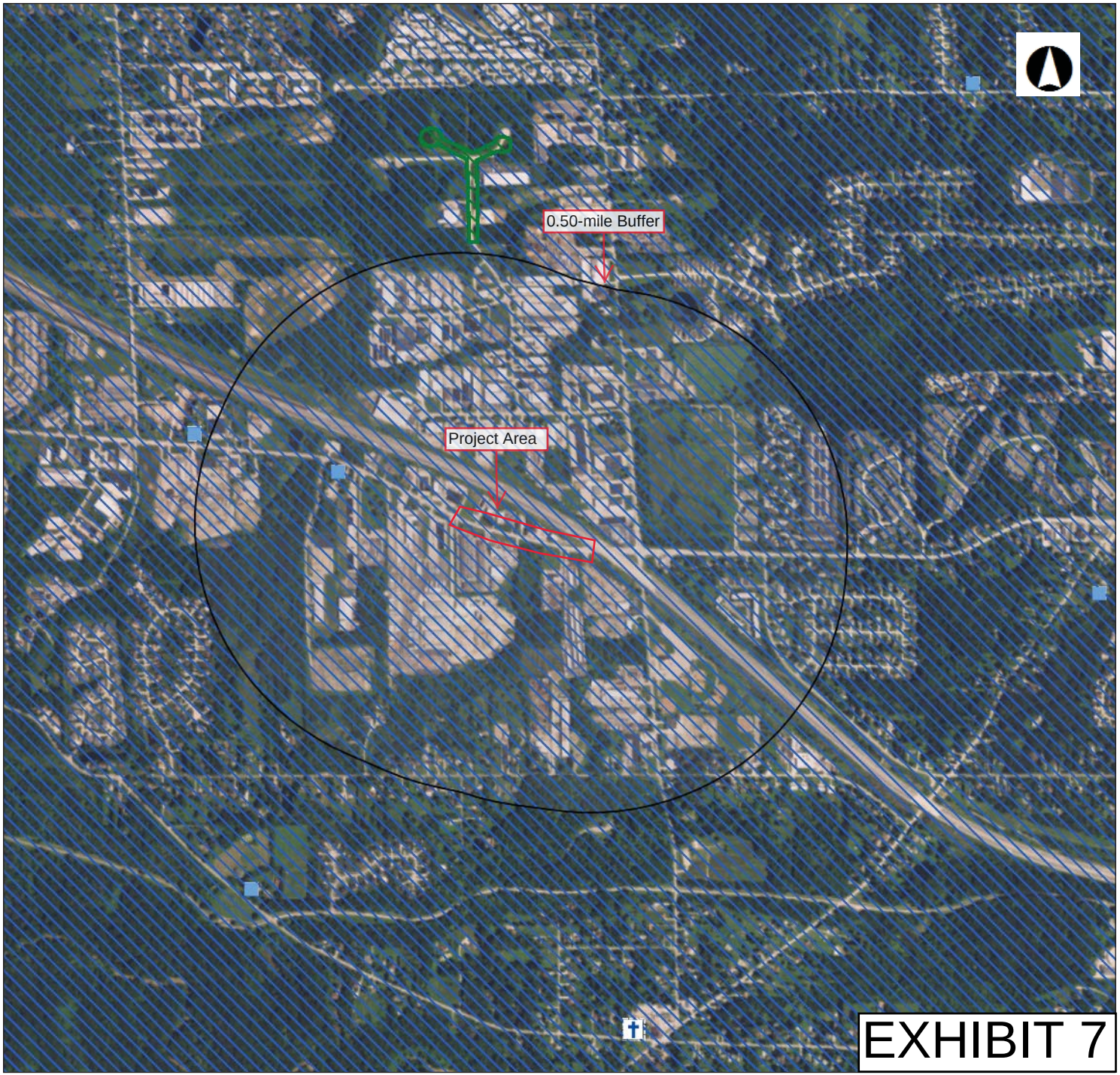
EMILY–FOX Q–14 138 kV
TRANSMISSION LINE RELOCATION
PROJECT

WOOD POLE STUB STRUCTURE

NOT TO SCALE

EXHIBIT 6



Ohio Historic Preservation Office

Legend

- NR Listings
  - Listed
  - National Historic Landmark
  - Delisted
- NR Determinations of Eligibi
- Historic Structures
- Historic Bridges
- OGS Cemeteries
  - Confident
  - Not Confident
- OHC Sites
- NR Boundaries
- Phase1
- Phase2
- Phase3
- Historic Previously Surveyed

0 0.30 0.61 Miles

1: 24,000

Copyright/Disclaimer

Datum: [Datum]

Projection: WGS_1984_Web_Mercator_Auxiliary_Sphere

EXHIBIT 8

Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR JAMES ZEHRINGER, DIRECTOR

Office of Real Estate
Paul R. Baldridge, Chief
2045 Morse Road – Bldg. E-2
Columbus, OH 43229
Phone: (614) 265-6649
Fax: (614) 267-4764

May 3, 2017

William Beutler
FirstEnergy
76 South Main Street
Akron, Ohio 44308

Re: 17-248; Emily-Fox 138 kV Transmission Line Relocation for the OH-82/ Royalton Road Expansion Project

Project: The proposed project involves the relocation of two (2) transmission line poles and three (3) stub poles of the Emily-Fox 138 kV Transmission Line to the south of its current location for the expansion of OH-82/Royalton Road.

Location: The proposed project is located in the City of North Royalton, Cuyahoga 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 record at or within a one-mile radius of the project area:

Brecksville Reservation – Cleveland Metroparks
Mill Stream Run Reservation – Cleveland Metroparks

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.

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 vicinity of one or more records for the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species. Presence of the Indiana bat has been established in the area, and therefore additional summer surveys would not constitute presence/absence in the area. 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 no tree removal is proposed, this project is not likely to impact this species.

The project is within the range of the channel darter (*Percina copelandi*), a state threatened fish, and the bigmouth shiner (*Notropis dorsalis*), a state threatened fish. The DOW recommends no in-water work from April 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.

The project is within the range of the Blanding's turtle (*Emydoidea blandingii*), a state threatened species. This species inhabits marshes, ponds, lakes, streams, wet meadows, and swampy forests. Although essentially aquatic, the Blanding's turtle will travel over land as it moves from one wetland to the next. Due to the location, the type of habitat present at the project site, and within the vicinity of the project area, and the type of work proposed, this project is not likely to impact this species.

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. Due to the location, the habitat at the project site and within the vicinity of the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the piping plover (*Charadrius melodus*), a state endangered and federally endangered bird, and the Kirtland's warbler (*Setophaga kirtlandii*), a state endangered and federally endangered bird. These species do not nest in the state but do utilize stopover habitat as they migrate through the region. Due to the location, and the type of work proposed, this project is not likely to impact these species.

The project is within the range of the king rail (*Rallus elegans*), a state endangered bird. Nests for this species are deep bowls constructed out of grass and usually hidden very well in marsh

vegetation. Due to the location, the habitat at the project site and within the vicinity of the project area, and the type of work proposed, this 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). Due to the location, the habitat at the project site and within the vicinity of the project area, and the type of work proposed, 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, the 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 John Kessler at (614) 265-6621 if you have questions about these comments or need additional information.

John Kessler
ODNR Office of Real Estate
2045 Morse Road, Building E-2
Columbus, Ohio 43229-6693
John.Kessler@dnr.state.oh.us

EXHIBIT 9

From: susan_zimmermann@fws.gov
To: Beutler, William R
Cc: nathan.reardon@dnr.state.oh.us; kate.parsons@dnr.state.oh.us
Subject: *EXTERNAL* Emily-Fox 138 kV Transmission Line Relocation, OH-82/Royalton Project, Cuyahoga
Date: Tuesday, March 28, 2017 2:17:55 PM
Attachments: Capture of Dan.PNG

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# 03E15000-2017-TA-1006

Dear Mr. Beutler,

We have received your recent correspondence requesting information about the subject proposal. There are no federal wilderness areas, wildlife refuges or designated critical habitat within the vicinity of the project area. The following comments and recommendations will assist you in fulfilling the requirements for consultation under section 7 of the Endangered Species Act of 1973, as amended (ESA).

The U.S. Fish and Wildlife Service (Service) recommends that proposed developments avoid and minimize water quality impacts and impacts to high quality fish and wildlife habitat (e.g., forests, streams, wetlands). Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. All disturbed areas should be mulched and revegetated with native plant species. Prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

FEDERALLY LISTED SPECIES COMMENTS: All projects in the State of Ohio lie within the range of the federally endangered **Indiana bat** (*Myotis sodalis*) and the federally threatened **northern long-eared bat** (*Myotis septentrionalis*). In Ohio, presence of the Indiana bat and northern long-eared bat is assumed wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and 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 other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves and abandoned mines.

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

If implementation of this seasonal tree cutting recommendation is not possible, summer surveys may be conducted to document the presence or probable absence of Indiana bats within the project area during the summer. If a summer survey documents probable absence of Indiana bats, the 4(d) rule for the northern long-eared bat could be applied. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Endangered Species Coordinator for this office. Surveyors must have a valid federal permit. Please note that summer surveys may only be conducted between June 1 and August 15.

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 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.

Due to the project type, size, and location, we do not anticipate adverse effects to any other 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 Service should be initiated to assess any potential impacts.

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 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

cc: Nathan Reardon, ODNR-DOW

Kate Parsons, ODNR-DOW

Emily-Fox Q-14 138 kV Transmission Line Relocation Project
Case Number 17-1151-EL-BNR

Date: May 11, 2017

Exhibit 10
Wetland & Waters Assessment

Date: April 20, 2017

TO: William R. Beutler – Engineer III
Energy Delivery Transmission and Substation Design

FROM: Auggie Ruggiero – Staff Scientist
Environmental Energy Delivery Support

SUBJECT:

Wetland and Waters Assessment
Emily-Fox 138 kV Transmission Line Relocation Project

INTRODUCTION

On February 13, 2017, an area along an existing electric transmission line alongside State Route 82 in North Royalton, Ohio was investigated for the presence of wetland characteristics and/or evidence of other areas deemed "waters of the U.S." Areas that exhibit hydric soils, wetland hydrology, and a dominance of hydrophytic vegetation were considered to be a wetland. Areas that display these three characteristics are subject to regulations pursuant to Section 404 of the Clean Water Act or Ohio's isolated wetland laws. Other areas deemed "waters of the U.S." potentially include streams or bodies of open water which may also be subject to Section 404 regulations.

METHODS

Wetlands within the project area were identified and their boundaries estimated using the procedures outlined in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region Version 2.0* (*Regional Supplement*) (U.S. Army Corps of Engineers, 2011).

The project area was also screened for the presence of areas that meet the criteria for "other waters of the U.S." These areas consist of ephemeral, intermittent, and perennial streams, as well as open water habitats such as ponds. Site drainage was determined by secondary source information and in the field using current regulatory guidance. Drainage channels that exhibited

"bed and bank" and an ordinary high water mark in the channel were identified and delineated as jurisdictional streams. Drainage channels that did not exhibit an ordinary high water mark were regarded as drainageways.

FIELD INVESTIGATION/RESULTS

The majority of the Project Area is developed with commercial and industrial uses. Vegetation within the project area consists predominantly of herbaceous vegetation. One isolated forested area was identified south of State Route 82. One emergent wetland associated with a perennial stream was identified within this forested area. The perennial stream is an unnamed tributary of the East Branch of the Rocky River.

Although peripheral to the Project Area, any proposed construction activities within the wetland area or stream are subject to regulations pursuant to Section 404 of the Clean Water Act.

REFERENCES

Lichvar, R.W. and Kartesz, J.T. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (June, 2012).

U.S. Army Corps of Engineers. 2011. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)*, ed. J. S. Wakeley, R. W. Lichvar, C. V. Noble, and J. F. Berkowitz. ERDC/EL TR-12-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

United States Department of Agriculture, Natural Resources Conservation Service. 2010. Field Indicators of Hydric Soils in the United States, Version 7.0. L.M. Vasilas, G.W. Hurt, and C.V. Noble (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.

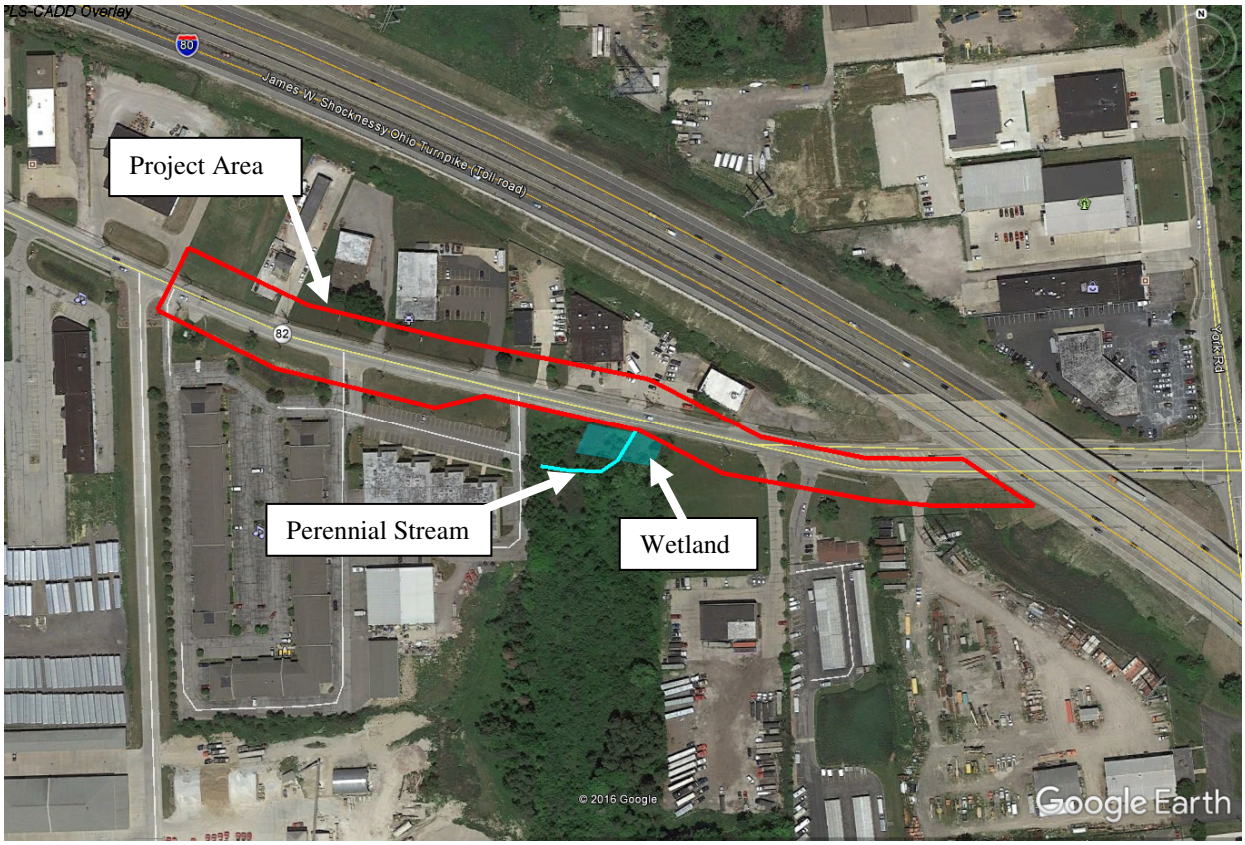


Figure 1

Aerial of the Project Area showing water resources.