

September 16, 2015

Ms. Barcy F. McNeal
Docketing Division
The Public Utilities Commission of Ohio
180 East Broad Street
Columbus, OH 43215-3793

Letter of Notification
Black River-Lorain 138 kV Transmission Line
Loop to Charleston Substation Project
Case No. 15-1121-EL-BLN

Dear Ms. McNeal:

In accordance with Rule 4906-1-11, American Transmission Systems, Incorporated ("ATSI") transmits one (1) original and eleven (11) copies of the enclosed Letter of Notification for the above captioned project. In this project, ATSI is proposing to extend the existing Black River-Lorain 138 kV Transmission Line as a loop approximately 0.5 mile (2,700 feet) in and out of the proposed Charleston Substation. The Project is located in the City of Lorain, Lorain County, Ohio.

Please be advised of the following:

a) Name and address of the applicants:

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

b) Name of proposed facilities:

Black River-Lorain 138 kV Transmission Line
Loop to Charleston Substation Project

c) Location of proposed facilities:

The Project area is located in new right-of-way, extending from the Black River-Lorain 138 kV Transmission Line towards the Charleston Substation in the City of Lorain, Lorain County, Ohio.

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d) Description of proposed facilities:

The Project involves extend the existing ATSI-owned Black River-Lorain 138 kV Transmission Line as a loop approximately 0.5 mile (2,700 feet) into and out of the proposed Charleston Substation. The Project is located in the City of Lorain, Lorain County, Ohio.

e) Applicant's representative:

Jessica Thacker
Supervisor
Energy Delivery Transmission and Substation Design
FirstEnergy Service Company
76 South Main Street
Akron, OH 44308-1890

We have provided a copy of the Letter of Notification by certified mail, with return receipt requested, to each official of the political subdivisions immediately affected by the proposed project as listed in the attached Exhibit 1. Copies of the transmittal letters addressed to the local government representatives of the City of Lorain and Lorain County are enclosed for your file.

After docketing this filing, please return one time-stamped copy of the Letter of Notification for our records to us in the enclosed envelope. Should staff of the Ohio Power Siting Board desire further information or discussion of this submittal, please contact me at (330) 384-5955.

Sincerely,



Jessica Thacker
Supervisor
Energy Delivery Transmission and Substation Design
FirstEnergy Service Company

Attachments

**AMERICAN TRANSMISSION SYSTEMS, INCORPORATED
A FIRSTENERGY COMPANY**

LETTER OF NOTIFICATION

**BLACK RIVER-LORAIN 138 kV TRANSMISSION LINE
LOOP TO CHARLESTON SUBSTATION PROJECT**

OPSB CASE NO.: 15-1121-EL-BLN

September 16, 2015

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

**LETTER OF NOTIFICATION
BLACK RIVER-LORAIN 138 kV TRANSMISSION LINE
LOOP TO CHARLESTON SUBSTATION PROJECT**

The following information is being provided in accordance with the procedures found in Ohio Administrative Code Rule 4906-11-01: Letter of Notification Requirements of the Rules of the Ohio Power Siting Board.

4906-11-01 (B): LETTER OF NOTIFICATION REQUIREMENTS

4906-11-01 (B) (1) a: Name and Reference Number

Name of Project: Black River-Lorain 138 kV Transmission Line Loop to Charleston Substation 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 in Case Number 15-0649-EL-FOR.

4906-11-01 (B) (1) b: Brief Description of Project

In this Project, American Transmission Systems, Incorporated ("ATSI"), a FirstEnergy company, is proposing to extend the existing Black River-Lorain 138 kV Transmission Line as a loop approximately 0.5 mile (2,700 feet) into and out of the new Charleston Substation to create the Black River-Charleston and Charleston-Lorain 138 kV Transmission Line circuits.

As part of the Project, four (4) new double-circuit corner deadend two-pole structures, and nine (9) new double-circuit tangent structures, and one (1) new double-circuit pull off two-pole structure will be installed. Exhibit 1 shows the General Location of the Project. The general layout of the Project is shown in Exhibit 2. The proposed structures are shown in Exhibits 3, 4, and 5. The Project is located in the City of Lorain, Lorain County, OH.

4906-11-01 (B) (1) c: Why the Project Meets the Requirements for a Letter of Notification

The Project meets the requirements for a Letter of Notification because the Project is within the types of projects defined by Item (1)(d) of the Interim Application Requirement Matrix for Electric Power Transmission Lines in the Finding and Order issued on September 4, 2012, as subsequently modified on December 17, 2012, in Case No. 12-1981-GE-BRO which modified Appendix A of Rule 4906-1-01 of the Ohio Administrative Code. This item states:

(1) Rerouting or extension or new construction of single or multiple circuit electric power transmission line(s) as follows:

(d) Line(s) one hundred twenty-five kV and above, but less than three hundred kV, and greater than 0.2 miles in length but not greater than two miles in length.

The proposed Project includes extending the existing Black River-Lorain 138 kV Transmission Line approximately 0.5 mile (2,700 feet) in and out of the Charleston Substation and adding fourteen structures.

4906-11-01 (B) (2): Need for the Project

The United States Steel Corporation is currently provided electrical service from a neighboring customer's substation. The company has requested a separate transmission service connection from FirstEnergy / ATSI to provide a new 138kV transmission service connection for its projected 35MW of load; including their own distribution-level substation. This project is being proposed to accommodate this transmission service request.

4906-11-01 (B) (3): Location Relative to Existing or Proposed Lines

The location of the Project relative to existing or proposed transmission lines is shown in the FirstEnergy System Facilities map, included as the last page of Chapter 3 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 shows ATSI's 345 kV and 138 kV transmission lines and transmission substations, including the location of the Black River-Lorain 138 kV transmission line. The project area is located approximately 2 ½ inches (11 by 17 inch printed version) from the right edge of the map and 7 inches (11 by 17 inch printed version) from the top of the map. The general location and layout of the Project is shown on Exhibits 1 and 2.

4906-11-01 (B) (4): Alternatives Considered

No alternatives were considered for the Project.

4906-11-01 (B) (5): Construction Schedule

Construction on the project is expected to begin as early as February 1, 2016 and be completed by September 30, 2016.

4906-11-01 (B) (6): Area Map

Exhibit 1 depicts the general location of the Project. This exhibit provides a partial copy of the United States Geological Survey, Avon, Ohio Quad, Map ID 41082-D1. To locate and view the project site from the Columbus, Ohio area, travel north on Interstate 71 for approximately 87 miles. Take exit 196 for OH-301 towards W Salem. Turn left onto OH-301 N, and travel approximately 7 miles. Turn left onto OH-301 N/US-224 W and travel approximately 59 feet until turning right at the first cross-street to continue on OH-301 N. Continue on traveling for approximately 15 miles. At the traffic circle, take the 2nd exit to continue on OH-301 N/Center Street. Continue traveling for approximately 6 miles. Continue onto Lagrange Road for approximately one mile. Keep left toward Oberlin Elyria Road, then turn left onto Oberlin Elyria Road, and continue for approximately .3 mile. Turn right onto Russia Road, then at the first cross street (after approximately .1 mile), turn right onto W River Road South. Continue traveling for approximately 2.5 miles. Take a slight left onto Lorain Boulevard, and continue for approximately 3.5 miles. Continue onto Grove Avenue,

and travel for approximately 1 mile. Turn right onto Homewood Drive, and continue for less than a half mile. Turn left onto E 38th Street, then turn left at the 1st cross-street after less than a half mile, Tacoma Avenue. The Black River-Lorain 138 kV Transmission Line crosses east-west over Tacoma Avenue. The loop will start at this location and continue north where the line crosses over Tacoma Avenue.

4906-11-01 (B) (7): Property Owner List

A portion of the Project is located on new right-of-way. A list of property owners where new easements have been or will be acquired is below:

Parcel Number(s)	Property Owner	Easement Status
03-00-081-115-001, 03-00-081-113-023, 03-00-081-113-022, 03-00-081-113-021, 03-00-081-113-020, 03-00-081-113-019, 03-00-081-113-018, 03-00-081-113-017, 03-00-081-113-016, 03-00-018-113-015, 03-00-083-101-033	Lorain County Metro Parks	To be obtained
03-00-081-113-025, 03-00-082-113-019, 03-00-083-101-032, 03-00-083-101-041, 03-00-083-101-032, 03-00-083-101-041	City of Lorain	To be obtained
03-00-081-113-012	Michael C. Adkins & Dawn M. Hawes Adkins	To be obtained
03-00-018-113-011	Linda B. Wannamaker	To be obtained
03-00-081-113-010	Eric Glynn	To be obtained

03-00-081-113-009, 03-00-081-113-008	Raymond C & Angela S. Dutro, Trustees	To be obtained
03-00-081-113-007	Marsha Ralich	To be obtained
03-00-081-113-006	Florence M. Brooks	To be obtained
03-00-081-113-005	Randy L. Barron & Melinda S. Shenker	To be obtained
03-00-081-113-004	Sherlie R. Tanner & Laura Tanner	To be obtained
03-00-081-113-003	William H. Duncan	To be obtained
03-00-081-113-002	Nora Staley	To be obtained
03-00-081-113-001	Evelyn K. Curry	To be obtained
03-00-082-114-009	Alexandra Kordeleski	To be obtained
03-00-082-114-008	Toni M. Fields	To be obtained
03-00-082-11-007	Lawrence J. Casper, Trustee	To be obtained
03-00-082-114-006	Rhonda K. & Dale Zimmerman	To be obtained
03-00-082-114-005	South Lorain Community Development Corp.	To be obtained
03-00-082-114-004, 03-00-082-114-003	Deborah A. Vrabel	To be obtained
03-00-082-114-002	Jason Orellano	To be obtained
03-00-082-114-001	James M. Maloy	To be obtained
03-00-082-113-018, 03-00-082-113-020	Herbert Peters	To be obtained
03-00-082-113-002	Jerome & Carolyn M. Anderson	To be obtained

4906-11-01 (C): TECHNICAL FEATURES OF THE PROJECT

4906-11-01 (C) (1): Operating Characteristics

The transmission line construction will have the following characteristics:

Voltage: 138 kV

Conductors: 795 kmil ACSS

Static wire: 7 # 8 Alumoweld

Insulators: Polymer

Structure Types: Exhibit 3: Double-Circuit, Two Pole Corner Deadend Structure

Exhibit 4: Double-Circuit, Single Pole Tangent Structure

Exhibit 5: Double-Circuit, Two Pole Pull Off Structure

4906-11-01 (C) (2) a: Calculated Electric and Magnetic Fields

The following table itemizes the line loading of the Black River-Lorain 138 kV Transmission Line Loop to Charleston Substation Project. 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 ratings (MCR) of the circuits for the single conductors per phase 336 kcmil 18/1 ACSR conductors and an ambient temperature of zero degrees centigrade (32 deg. F), wind speed of 1.3 miles per hour, and a circuit design operating temperature of 100 degrees centigrade (212 deg. F).

Line Name	Normal Loading Amps	Emergency Loading Amps	Winter Rating Amps
Black River-Charleston 138 kV Transmission Line	495	1940	1880
Charleston-Lorain 138 kV Transmission Line	495	1940	1880

The following calculations provide an approximation of the magnetic and electric fields strengths of the Black River-Charleston and Charleston-Lorain 138 kV Transmission Line circuits in the right-of-way. The calculations provide an approximation of the electric and magnetic field 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.

EMF CALCULATIONS		Electric Field kV/meter	Magnet Field mGauss
Normal Loading	Under Lowest Conductors	0.96	6.35
	At Right-of-Way Edges	0.56	4.11/4.55
Emergency Loading	Under Lowest Conductors	0.96	25.09
	At Right-of-Way Edges	0.56	14.59/19.10
Winter Rating	Under Lowest Conductors	0.96	24.31
	At Right-of-Way Edges	0.56	14.14/18.50

4906-11-01 (C) (2) b: EMF Discussion

Background Information

Electric and magnetic fields (EMFs) are naturally occurring in the environment and can be found in the Earth's interior and in the human body. EMFs are generated essentially anywhere where there is a flow of electricity, including electrical appliances and power equipment. Electric fields are associated with the voltage of the source; magnetic fields are associated with the flow of current in a wire. The strength of these fields decreases rapidly with distance from the source. EMFs associated with electricity use are not disruptive to cells like x-rays or ultraviolet rays from the sun. EMF fields are thought to be too weak to break molecules or chemical bonds in cells. Scientists have conducted extensive research over the past two decades to determine whether EMFs are associated with adverse health effects, and although the research and debate of this issue continues, at this time there is no firm basis to conclude that EMFs cause adverse health effects. A number of independent scientific panels have reviewed the research and have stated that there is no basis to conclude that EMFs cause adverse health effects nor has it been shown that levels in everyday life are harmful.

Recent Developments

As a part of the National Energy Policy Act of 1992, the Electric and Magnetic Fields Research and Public Information Dissemination (EMF RAPID) program was initiated within the five-year effort under the National EMF Research Program. The

culmination of this five-year effort resulted in a final RAPID Working Group report, which was released for public review in August 1998. The Director of the National Institute of Environmental Health Sciences (NIEHS) then prepared a final report to Congress after receiving public comments. The NIEHS' Director's final report, released to Congress on May 4, 1999, concluded that extremely low frequency electric and magnetic fields (ELF-EMF) exposure cannot be recognized at this time as entirely safe because of weak scientific evidence that exposure may pose a leukemia hazard. The Director further stated that the conclusion of this report was insufficient to warrant aggressive regulatory concern.

Sources for Additional Information

The following websites sponsored by federal agencies or other organizations provide additional information on EMF:

- Centers for Disease Control/National Institute for Occupational Safety and Health: <http://www.cdc.gov/niosh/topics/emf/>
- National Institute of Environmental Health Sciences (NIEHS) EMF Rapid Program: <http://www.niehs.nih.gov/health/topics/agents/emf/>

4906-11-01 (C) (3): Estimated Costs

The following are the estimated capital costs by FERC Accounts for the proposed project:

<u>Account</u>	<u>Cost</u>
350 Land Rights, Engineering, etc.	\$ 2,050,000
355 Poles and Fixtures	\$ 260,000
356 Overhead Conductors & Devices	\$ 390,000
<hr/>	
Total	\$ 2,700,600

4906-11-01 D: SOCIOECONOMIC DATA

4906-11-01 (D) (1): Land Use

The Project is located in the City of Lorain, Lorain County, Ohio. The various land uses along the route of the line are residential, park land, vacant land, and industrial. Based on the U.S. Bureau of Census estimates, the 2014 population of the City of

Lorain was 63,710. The 2014 population of Lorain County was 304,216. As the proposed Project involves extending the existing transmission line as a loop through vacant land parcels, no significant changes or impacts to the current land use is anticipated.

4906-11-01 (D) (2): Agricultural Land

Agricultural land use does not exist through Project right-of-way.

4906-11-01 (D) (3): Archaeological or Cultural Resources

As part of ATSI's investigation of the project site, a search of Ohio Historic Preservation Office (OHPO) National Register of Historic Places on-line database was conducted and did identify the existence of one historic site within one mile of the project area. This historic site is located northeast of the Project, on the opposing side of a heavy industrial site. Due to the magnitude of disturbed land between the Project and the historic site, no impacts are anticipated to the historic site. The OHPO database includes all Ohio listings on the National Register of Historic Places, including districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture.

4906-11-01 (D) (4) a: Documentation of Letter of Notification Transmittal

This Letter of Notification is being provided concurrently to the following officials of the City of Lorain and Lorain County, Ohio.

Lorain County

Mr. Ted Kalo
President
Lorain County Commissioners
226 Middle Avenue, Fourth Floor
Elyria, OH 44035

Ms. Lori Kokoski
Vice President
Lorain County Commissioners
226 Middle Avenue, Fourth Floor
Elyria, OH 44035

Mr. Donald Romancak
Community Development Director
Lorain County
226 Middle Avenue, Fifth Floor
Elyria, OH 44035

Mr. Tom Williams
Lorain County Commissioners
226 Middle Avenue, Fourth Floor
Elyria, OH 44035

Mr. Ken Carney, P.E., P.S.
Lorain County Engineer
247 Hadaway Street
Elyria, OH 44035

City of Lorain

Mr. Chase Ritenauer
Mayor of Lorain
200 West Erie Avenue
Lorain, OH 44052

Mr. Dale Vandersommen, P.E.
City of Lorain Engineer
200 West Erie Avenue
Lorain, OH 44052

Mr. Joel Arrendondo
City Council, President
607 Allison Avenue
Lorain, OH 44052

Ms. Nancy Greer
Clerk of Council
200 West Erie Avenue
Lorain, OH 44052

Mr. Leon Mason
City Building, Housing, and Planning
Director
200 West Erie Avenue
Lorain, OH 44052

Copies of the transmittal letters to these officials have been included with the transmittal letter submitting this Letter of Notification to the Ohio Power Siting Board.

4906-11-01 (D) (4) b: 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.

4906-11-01 (D) 5: Current or Pending Litigation

There is no known current or pending litigation involving this project.

4906-11-01 (D) 6: Local, State, and Federal Requirements

There are no known local, state, or federal requirements that must be met prior to commencement of construction of the proposed transmission line project.

4906-11-01 (E): ENVIRONMENTAL DATA

4906-11-01 (E) (1): Endangered, Threatened, and Rare Species Investigation

As part of the investigation, a request was submitted to the Ohio Department of Natural Resources-Division of Wildlife (ODNR) on April 30, 2015, to research the presence of any endangered, threatened, or rare species within the project area. The ODNR's April 30, 2015 response, attached as Exhibit No. 6 indicated that they have identified one record of a rare or endangered species within one mile identified project area. This species, *Thuja occidentalis* (Arborvitae) is considered potentially threatened. Because this potentially threatened species is located outside the proposed Project work limits, the proposed Project will not affect this species.

4906-11-01 (E) (2): Areas of Ecological Concern

As part of the investigation, a request was submitted to the Ohio Department of Natural Resources-Division of Wildlife (ODNR) on April 30, 2015, to research the presence of any unique ecological sites, geological features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks or forests, national wildlife refuges, or other protected natural areas within the project area. The ODNR's April 30, 2015 response, attached as Exhibit No. 6, indicated that there are two records of the aforementioned "areas" within one mile of the identified project area. These two areas are Lorain County MetroPark Reservations: French Creek Reservation and the Black River Reservation. ATSI will coordinate Lorain County MetroParks officials to comply with any applicable park restrictions and regulations.

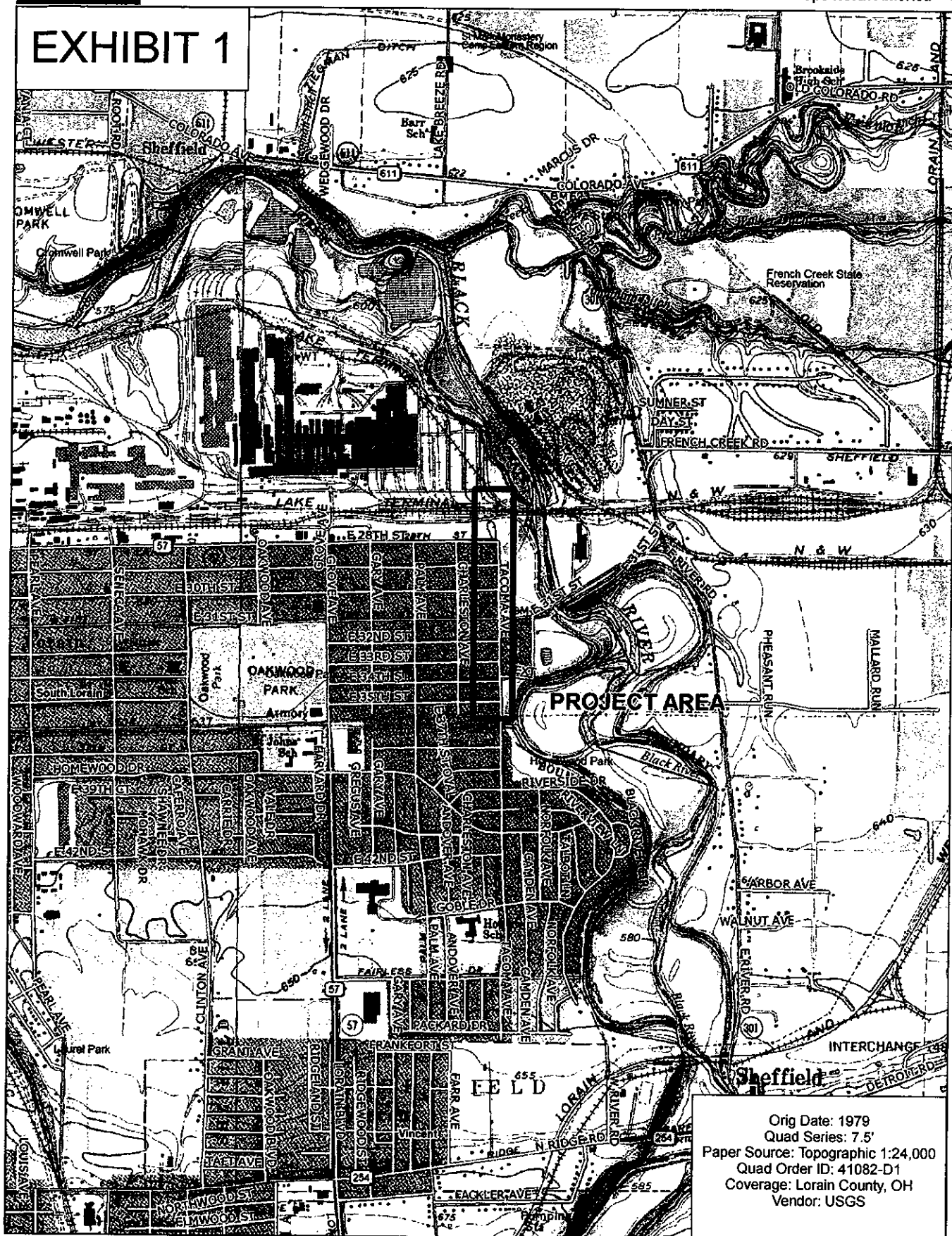
It is anticipated that construction activities will be performed from existing paved areas, and any existing wetland or streams will not be encroached upon. If alternate

construction access is deemed necessary, documents will be provided to the OPSB for review and approval. If it is required, wetland and stream delineations will be performed and all necessary permitting will be obtained.

4906-11-01 (E) (3): Additional 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 Public Utilities Commission of Ohio (PUCO) and will meet all applicable safety standards established by the Occupational Safety and Health Administration.

EXHIBIT 1

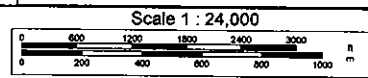


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 Vendor: USGS

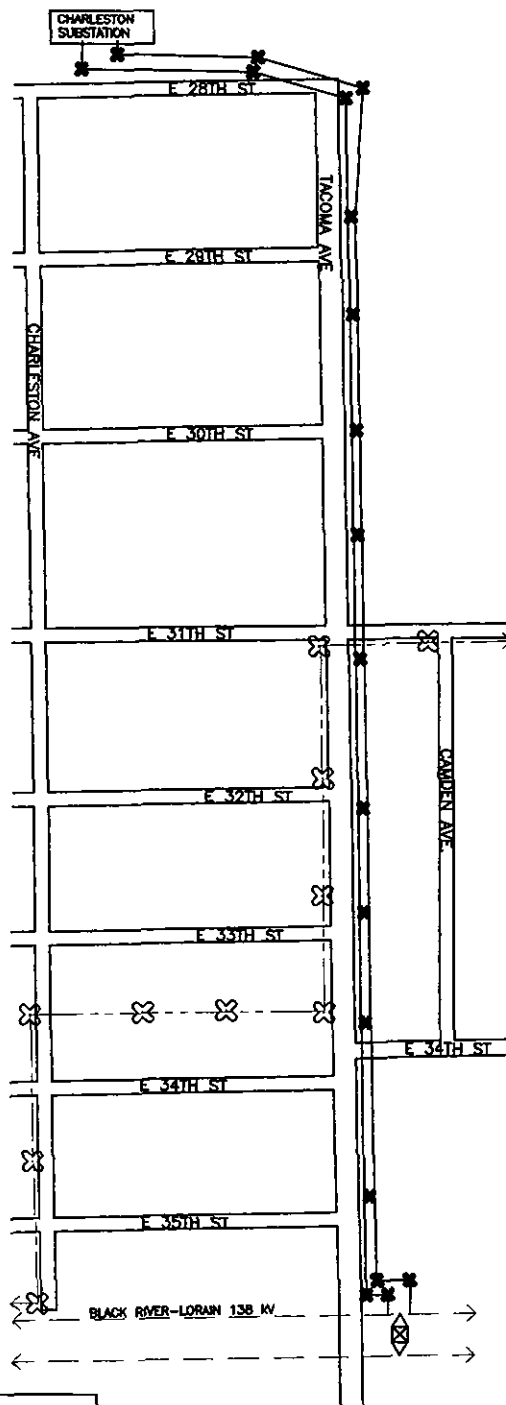
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Scale 1 : 24,000
 1" = 2,000.0 ft Data Zoom 13-0



CITY OF LORAIN
LORAIN COUNTY
STATE OF OHIO

LEGEND

-  EXISTING TOWER
-  PROPOSED WOOD STRUCTURE
-  EXISTING DISTRIBUTION STRUCTURE
-  PROPOSED TRANSMISSION LINE
-  EXISTING TRANSMISSION LINE TO REMAIN
-  EXISTING DISTRIBUTION LINE TO REMAIN

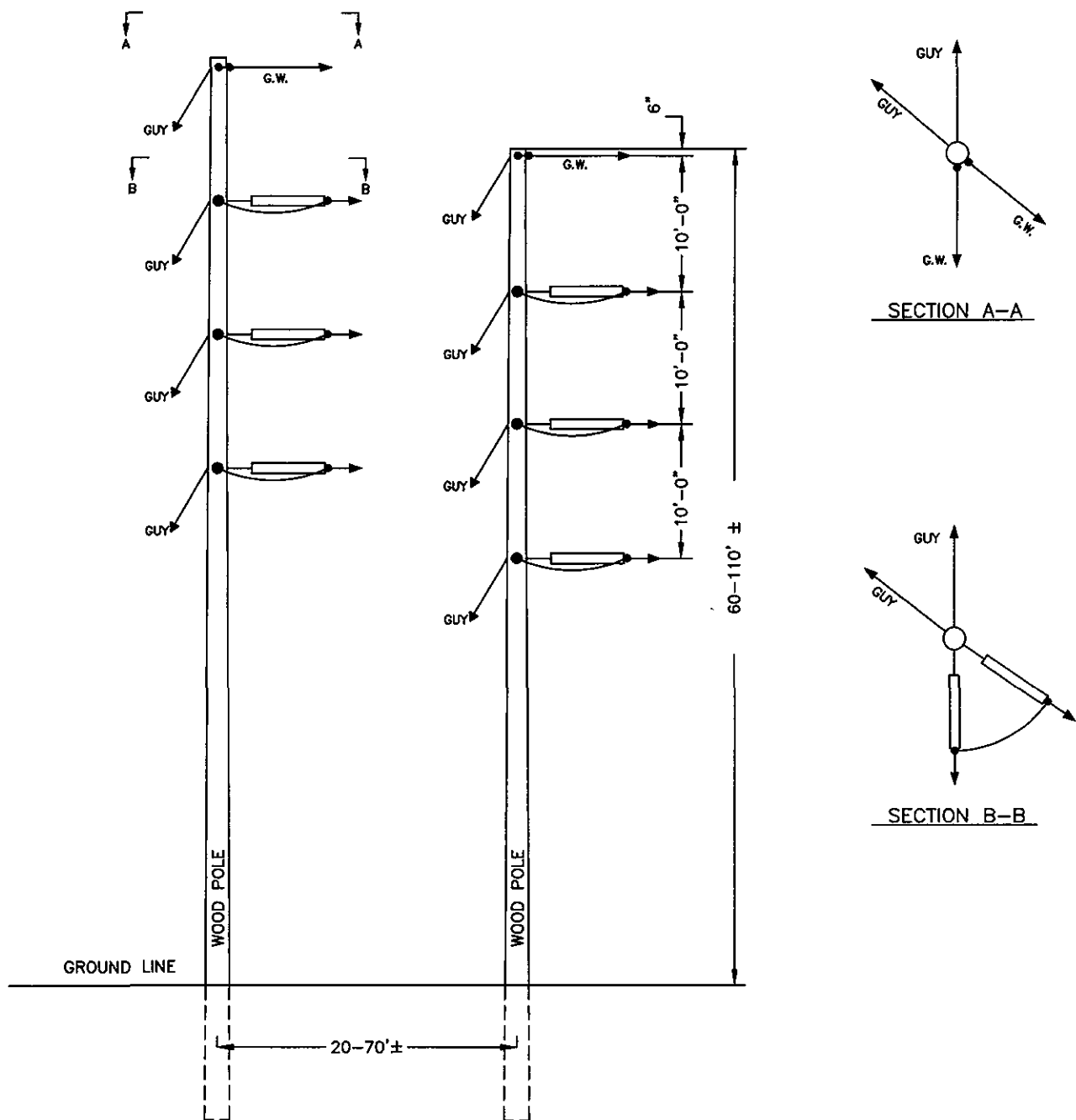
ATSI[®]

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

BLACK RIVER-LORAIN 138 kV
TRANSMISSION LINE LOOP TO
CHARLESTON SUBSTATION

GENERAL LAYOUT

EXHIBIT 2



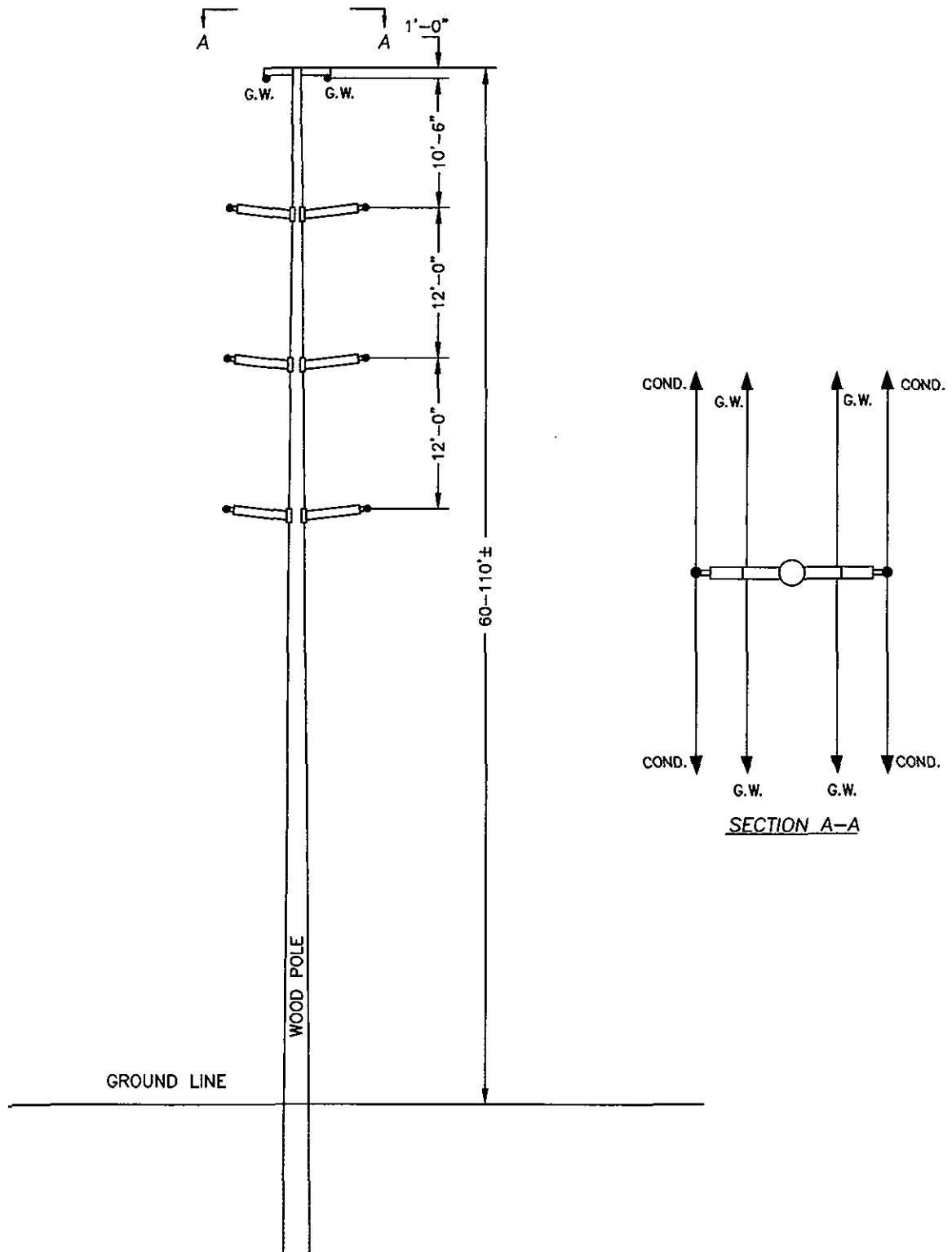
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BLACK RIVER-LORAIN 138 kV
LINE LOOP TO CHARLESTON
SUBSTATION PROJECT

138 kV DOUBLE-CIRCUIT TWO POLE
CORNER DEADEND STRUCTURE

EXHIBIT 3



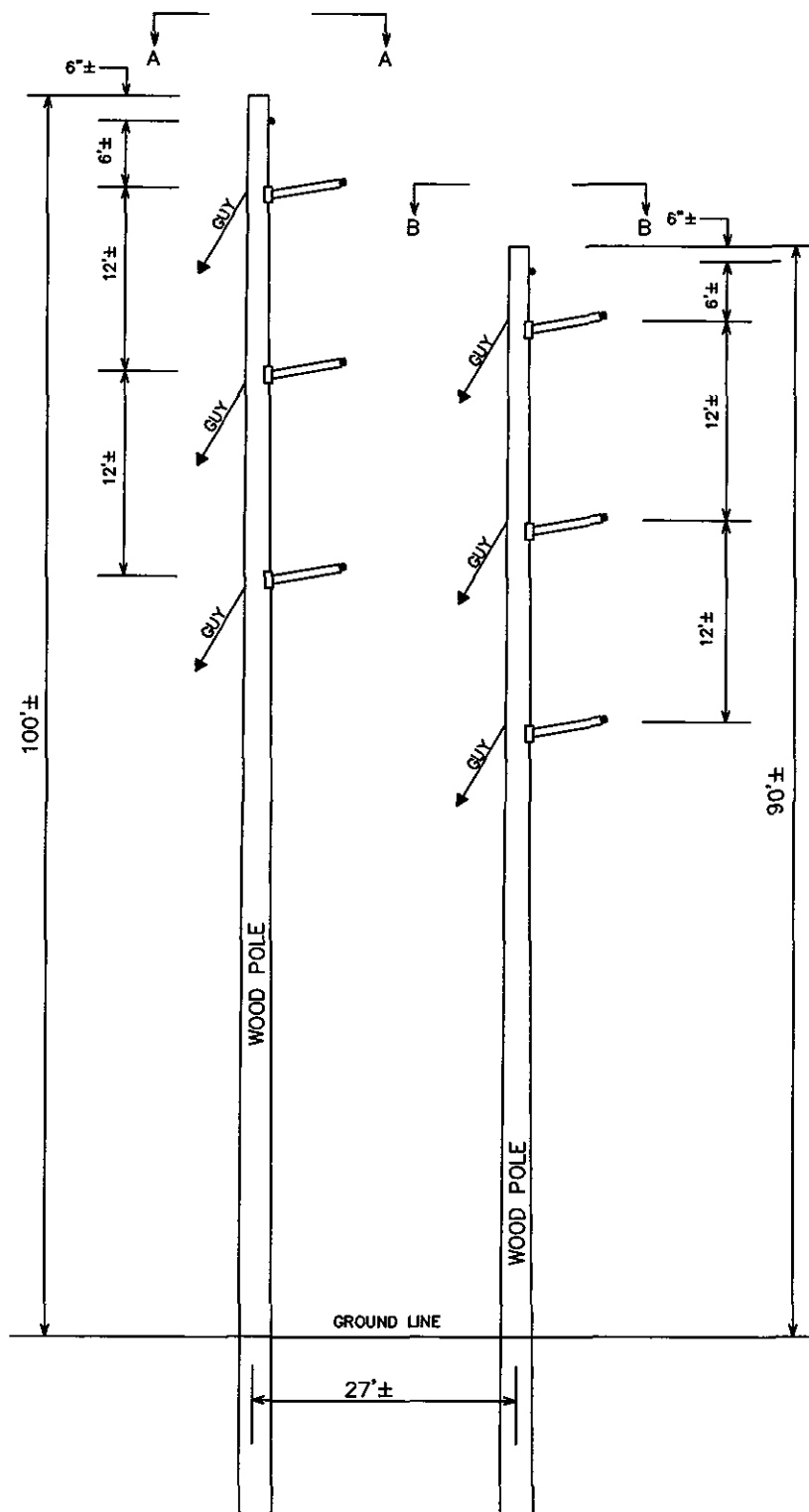
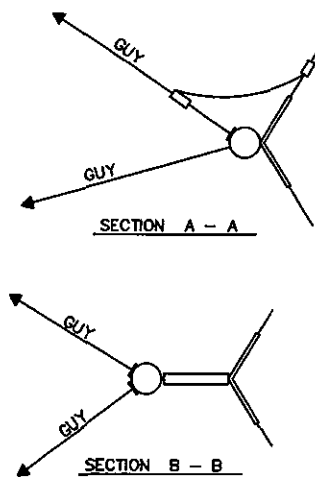
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BLACK RIVER-LORAIN 138 kV
LINE LOOP TO CHARLESTON
SUBSTATION PROJECT

138 kV DOUBLE-CIRCUIT SINGLE
POLE TANGENT STRUCTURE

EXHIBIT 4



ATSI®

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

BLACK RIVER-LORAIN 138 kV
LINE LOOP TO CHARLESTON
SUBSTATION PROJECT

138 kV DOUBLE-CIRCUIT TWO POLE
PULL OFF STRUCTURE

EXHIBIT 5



Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR

JAMES ZEHRINGER, DIRECTOR

Ohio Division of Wildlife

Scott Zody, Chief

2045 Morse Rd., Bldg. G
Columbus, OH 43229-6693

Phone: (614) 265-6300

April 30, 2015

Janice Arch
First Energy Corp.
76 S. Main St.
Akron, OH 44308

Dear Ms. Arch,

I have reviewed the Natural Heritage Database for the Black River – Lorain 138 kV Loop to Ring Bus project area, including a one mile radius, in Lorain, Lorain County, Ohio. The numbers/letters on the list below correspond to the areas marked on the accompanying map. Common name, scientific name and status are given for each species.

- A. French Creek Reservation – Lorain Co. Metro Parks
- B. Black River Reservation – Lorain Co. Metro Parks
- 1. *Thuja occidentalis* – Arbor Vitae, potentially threatened

We are unaware of any unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks or forests or national wildlife refuges, parks or forests within a one mile radius of the project area.

Our inventory program has not completely surveyed Ohio and relies on information supplied by many individuals and organizations. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. This letter only represents a review of rare species and natural features data within the Ohio Natural Heritage Database. It does not fulfill coordination under the National Environmental Policy Act (NEPA) or the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and does 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.

Please contact me at 614-265-6818 if I can be of further assistance.

Sincerely,

Debbie Woischke
Ohio Natural Heritage Program

Black River-Lorain 138 kV Loop to Ring Bus Project

