

March 31, 2015

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

Construction Notice
Avon-Beaver No.1 and No.2 345 kV Transmission Line Extensions
to Lake Avenue Substation Project
Case No. 15-0288-EL-BNR

Dear Ms. McNeal:

American Transmission System Incorporated ("ATSI"), a FirstEnergy company, is electronically filing the enclosed Construction Notice for the above captioned Project. In this Project, ATSI is proposing to extend a loop from the existing Avon-Beaver No.1 and No.2 345 kV lines approximately 0.06 mile each to the proposed Lake Avenue Substation, creating Avon-Lake Avenue No.1 and No.2 and Beaver-Lake Avenue No.1 and No.2 345kV circuits. As a part of the project, five (5) new steel poles will be installed for the transmission line extensions. The Project area is located in City of Elyria, Lorain County, Ohio.

Please be advised of the following:

- | | |
|---------------------------------------|---|
| a) Name and address of the applicant: | American Transmission Systems, Incorporated
76 South Main Street
Akron, Ohio 44308 |
| b) Name of proposed facilities: | Avon-Beaver No.1 and No.2 345 kV Transmission Line Extensions to Lake Avenue Substation Project |
| c) Location of proposed facilities: | The Project area is located in City of Elyria, Lorain County, Ohio. |
| d) Description of proposed Project: | The Project involves constructing a loop from the Avon-Beaver No.1 and No.2 345 kV lines approximately 0.06 mile each to the new Lake Avenue substation, creating Avon-Lake Avenue No.1 and No.2 and Beaver-Lake Avenue No.1 and No.2 345 kV circuits. As a part of the project, five (5) new steel poles will be installed for the transmission line extensions. |

e) Applicant's
representative: Nataliya Bryksenkova, Engineer
Energy Delivery Transmission Engineering
FirstEnergy Service Company
76 South Main Street
Akron, Ohio 44308

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 Elyria, Lorain County, Ohio are enclosed for your file.

Should the Ohio Power Siting Board desire further information or discussion of this submittal, please contact me at (330) 761-4473.

Sincerely,



Nataliya Bryksenkova
Engineer
Energy Delivery Transmission and
Substation Design
FirstEnergy Service Company

Attachments

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

CONSTRUCTION NOTICE

**AVON-BEAYER No.1 AND No.2 345 kV TRANSMISSION
LINE EXTENSIONS TO LAKE AVENUE SUBSTATION
PROJECT**

OPSB CASE No.: 15-0288-EL-BNR

March 31, 2015

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

CONSTRUCTION NOTICE
AVON-BEAVER No.1 AND No.2 345 kV TRANSMISSION LINE EXTENSIONS
TO LAKE AVENUE SUBSTATION PROJECT

The following information is being provided in accordance with the procedures delineated in Ohio Administrative Code Rule 4906-11-02: Construction Notice Requirements of the Rules of the Ohio Power Siting Board (“Board”).

4906-11-02 (B): General Information

4906-11-02 (B) (1): Name and Reference Number

Name of Project: Avon-Beaver No.1 and No.2 345 kV Transmission Line
Extensions to Lake Avenue Substation Project
 (“Project”)

4906-11-02 (B) (2) a: Brief Description of Project

In the Avon-Beaver No.1 and No.2 345 kV Transmission Line Extensions to Lake Avenue Substation Project (“Project”), American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy Company, is proposing to construct two new 345 kilovolt (“kV”) transmission line extensions to the proposed Preferred Site of the Lake Avenue Substation. The Lake Avenue Substation Project is described in a separate application for a Certificate of Environmental Compatibility and Public Need (“Certificate”) in Case No. 14-2162-EL-BSB.

As proposed, the installation of the Lake Avenue Substation will occur concurrently with two other projects, the first being an extension of two loops from the existing Black River-Johnson No.1 and No.2 138 kV transmission lines to the proposed substation. These additional loops will be submitted for Board consideration in a separate Letter of Notification (“LON”) submittal to the Board in Case No. 15-0289-EL-BLN. The second associated project is a reconductor and structure replacement on a segment of the Black River-Johnson No.2 138 kV transmission line. The reconductor and structure replacement project will be

included in a separate Letter of Notification (“LON”) application submitted to the Board in Case No. 15-0464-EL-BLN.

This Project is more specifically described as follows:

The proposed Project would extend two loops from the existing Avon-Beaver No.1 and No.2 345 kV transmission lines approximately 320 feet (0.06 mile) to the proposed Preferred Site of the Lake Avenue Substation, creating Avon-Lake Avenue No.1 and No.2 345 kV circuits and Beaver-Lake Avenue No.1 and No.2 345 kV circuits. As a part of the Project, five (5) new steel poles would be installed for the transmission line extensions.

The general location of the Project is shown in Exhibit 1, which is a partial copy of the United States Geologic Survey, Summit County Ohio Quad Map, ID number 41082-D2. The general layout is shown in Exhibit 2. The typical 345 kV transmission line structure associated with the Project is provided in Exhibit 3. This Project is located within the City of Elyria in Lorain County, Ohio.

4906-11-02 (B) (2) b: Construction Notice Requirements

The proposed Project meets the requirements for a Construction Notice because the Project falls within the scope of Item (1)(a) of the Interim Application Requirement Matrix for Electric Power Transmission Lines in Appendix A of Rule 4906-1-01 of the Ohio Administrative Code, which requires the filing of a Construction Notice. Item (1)(a) states:

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

(a) Line(s) three hundred kilovolts (kV) and above, and not greater than 0.1 mile in length.

The proposed Project extends the Avon-Beaver No.1 and No.2 345 kV transmission lines approximately 0.06 mile to the proposed Lake Avenue Substation.

4906-11-02 (B) (3): Need for the Project

Industrial and commercial customers in the Project area have been adding new equipment to their manufacturing processes, which has increased the total system load. Specifically, in late 2014 Republic Steel added a new electric arc furnace to its facilities in Lorain, Ohio. The arc furnace and associated equipment added 110 MW of new load. Prior to the addition of the new arc furnace and associated equipment the existing combined peak load for Republic Steel's and USS KOBEL's operations was 105 MW. The addition of 110 MW of Republic Steel's new load raises the total peak load from these two industrial customers to 215 MW. Due to the electrical characteristics associated with this new load, there was an increased need to satisfy power quality requirements through the addition of a new substation and associated transmission line projects.

The need for the proposed Lake Avenue Substation is described in the Certificate application that was filed under Case No. 14-2162-EL-BSB. Construction and operation of the proposed Lake Avenue Substation and associated 345 kV and 138 kV transmission line extensions would improve the local power quality under the North American Electric Reliability Corporation ("NERC") Category B (single element) with local generation unavailable. These projects also significantly reduce loading on the Black River-Beaver 138 kV Transmission Line, the Henrietta-Johnson 69 kV Transmission Line, and the Avon Substation 345/138 kV transformers. In total, the Project, if constructed in conjunction with the other improvements related to the construction of the new Lake Avenue Substation will improve overall electric system reliability, reduce potential flicker, and increase available capacity in the Lorain area.

4906-11-02 (B) (4): Construction Schedule

Construction on the Project is expected to begin as early as October 1, 2015 and be completed by May 31, 2016.

4906-11-02 (B) (5): Estimated Costs

The following are the estimated capital costs by Federal Energy Regulatory Commission (“FERC”) Accounts for the proposed Project:

<u>Account</u>	<u>Cost</u>
350 Land Rights	\$ 6,000
355 Poles and Fixtures	\$ 2,204,000
356 Overhead Conductors and Devices	\$ 390,000
359 ROW Clearing, Road, & Trails	\$ 10,000
<hr/>	
Total	\$ 2,610,000

4906-11-02 (B) (6): Operating Characteristics

The existing Avon-Beaver No.1 and No.2 lines operate at 345 kV. The new transmission line extensions would also be designed and constructed for 345 kV operation. The 345 kV transmission line extensions would have the following characteristics:

Voltage:	345 kV
Conductors:	954 kcmil ACSR 48/7 (twin-bundled)
Static wire:	7#8 Alumoweld
Insulators:	345kV Porcelain Bells
Structure Types:	Single Steel Pole – Dead End Structure (Exhibit 3)

4906-11-02 (B) (7): Area Map

Exhibit 1 depicts the general location of the Project. Exhibit 2 shows the proposed preferred Lake Avenue Substation location, general location for the 345 kV transmission line extensions and existing 345 kV transmission line locations.

To locate and view the Project from the Columbus, Ohio area, travel north on Interstate-71 (I-71), take Exit 196, and turn north on OH-301. Continue on OH-301 for approximately 28 miles, then turn southwest (left) on Oberlin Elyria Road and continue for approximately 1,400 feet. Turn west (right) on Russia Road and continue for 550 feet, and then turn north (right) on W. River Road S. Travel

north on W. River Road S. for approximately 2.5 miles, then veer north (left) onto Lorain Boulevard (OH-57) for approximately 2.6 miles to Beechwood Drive. Turn west (left) onto Beechwood Drive, then take another immediate left (south) on Beechwood Drive; this road becomes Schaden Road as it turns back to the west. Follow Schaden Drive west for approximately 2,600 feet, then turn north (right) onto Freedom Court. The Lake Avenue Substation site and beginning of this Project can be viewed from the north end of Freedom Court, which is a dead end street.

4906-11-02 (B) (8): Property Owner List

The two 345 kV transmission line extensions would start and end on property owned by FirstEnergy or its subsidiaries. The two 345 kV transmission line extensions would exit the Lake Avenue Substation and extend northward approximately 250 feet across a narrow strip of land currently owned by Norfolk and Western Railroad Company (“NW”). These 345 kV extensions would terminate on ATSI-owned property where the existing Avon-Beaver No.1 and No.2 345 kV transmission lines are located.

An agreement would be needed from NW for crossing over the narrow strip of land immediately north of the Substation parcel with the 345 kV transmission line extensions as shown in the following table.

Parcel Number	Property Owner	Easement Status
0622016501001	Norfolk & Western RR	Agreement to be obtained

4906-11-02 (C): Documentation of Construction Notice Transmittal

This Construction Notice is being provided concurrently to the following officials of the City of Elyria, Elyria Township, and Lorain County.

City of Elyria

Ms. Holly C. Brinda, MPA
Mayor, City of Elyria
131 Court Street
Elyria, Ohio 44035

Mr. Forrest L. Bullocks
Clerk of Council, City of Elyria
131 Court Street
Elyria, Ohio 44035

Mr. Michael Lotko
Council President, City of Elyria
131 Court Street
Elyria, Ohio 44035

Ms. Ashley Scott
City Planner
City of Elyria
131 Court Street
Elyria, Ohio 44035

Mr. Timothy Ujvari, P.E., P.S.
City Engineer
City of Elyria,
131 Court Street, 3rd Floor
Elyria, Ohio 44035

Lorain County

Ms. Lori Kokoski
President, Lorain County Board
of Commissioners
226 Middle Avenue, 4th Floor
Elyria, OH 44035

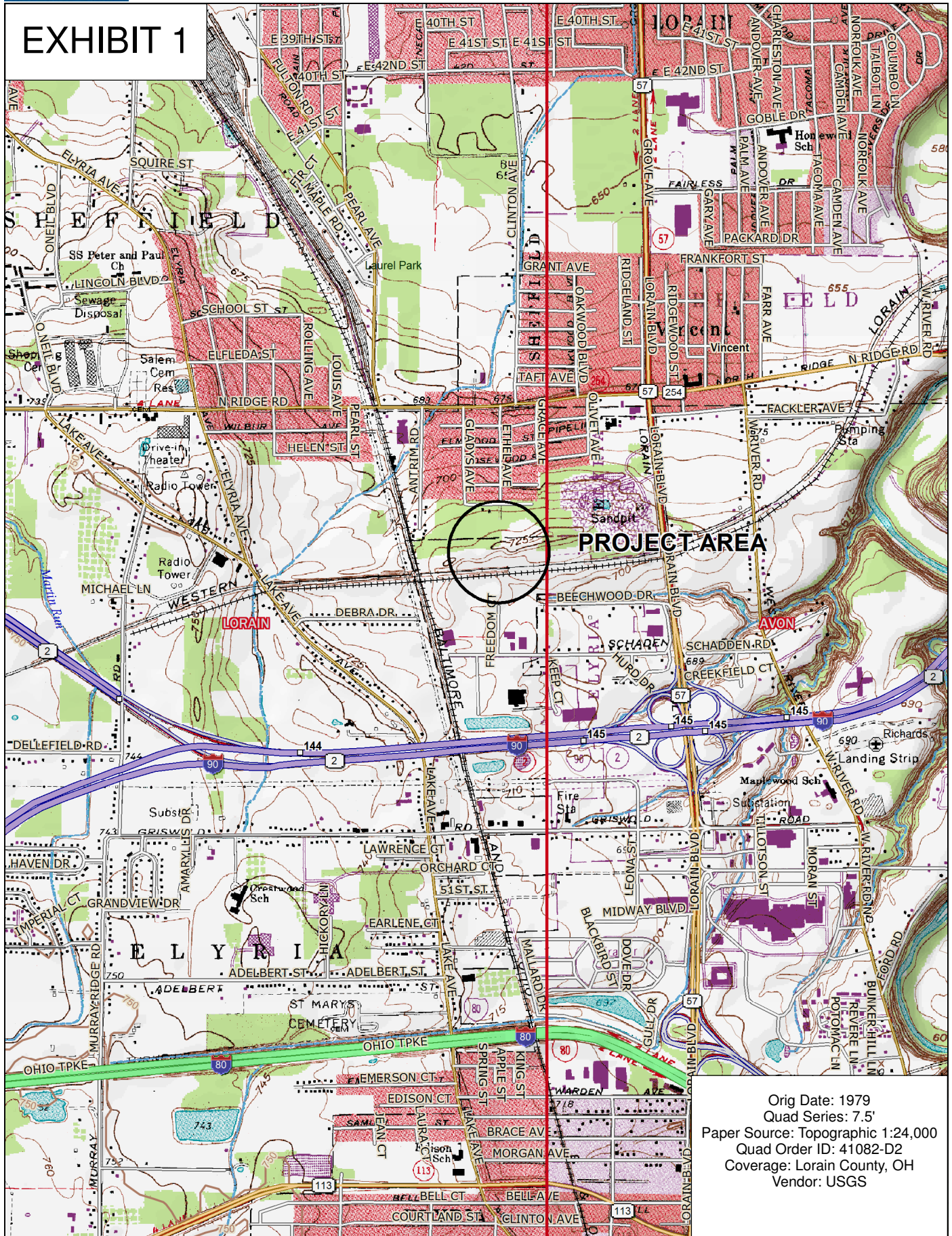
Mr. Don Romancak, Director
Lorain County Community
Development Department
226 Middle Avenue, 5th Floor
Elyria, OH 44035

Mr. James Cordes
Lorain County Administrator
226 Middle Avenue, 4th Floor
Elyria, OH 44035

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

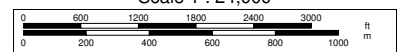
Copies of the transmittal letters to these officials have been included with the transmittal letter submitting this Construction Notice to the Board.

EXHIBIT 1



Orig Date: 1979
 Quad Series: 7.5'
 Paper Source: Topographic 1:24,000
 Quad Order ID: 41082-D2
 Coverage: Lorain County, OH
 Vendor: USGS

Scale 1 : 24,000

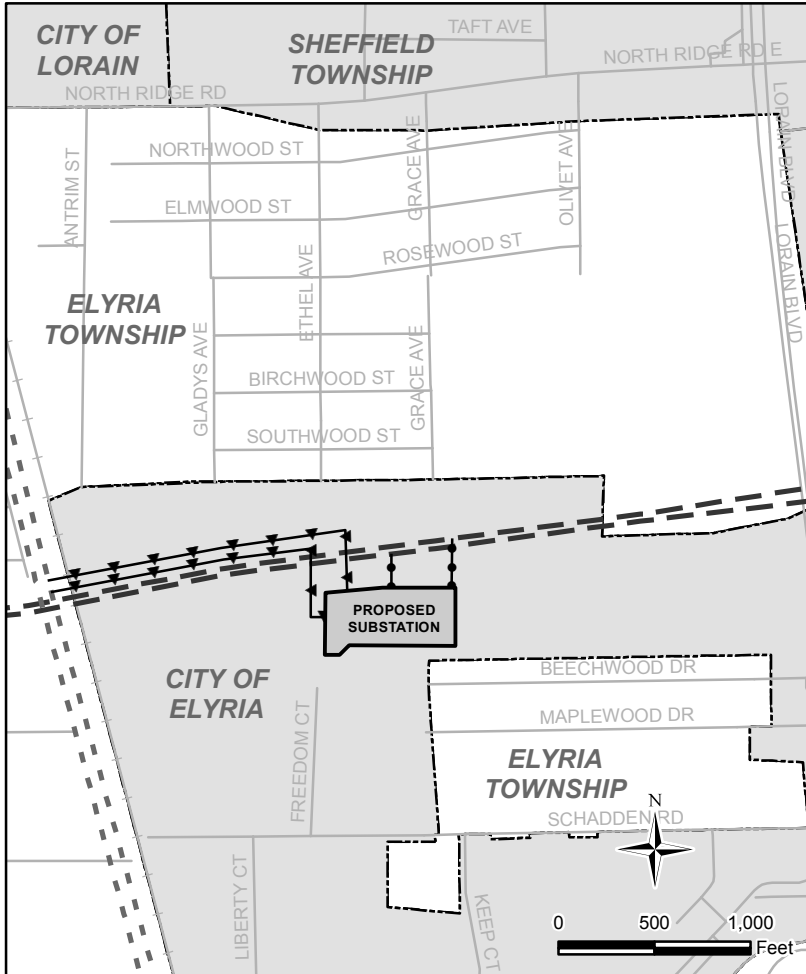


Data use subject to license.

© DeLorme. Topo North America™ 10.

www.delorme.com





PROJECT LOCATION



LORAIN COUNTY, OH









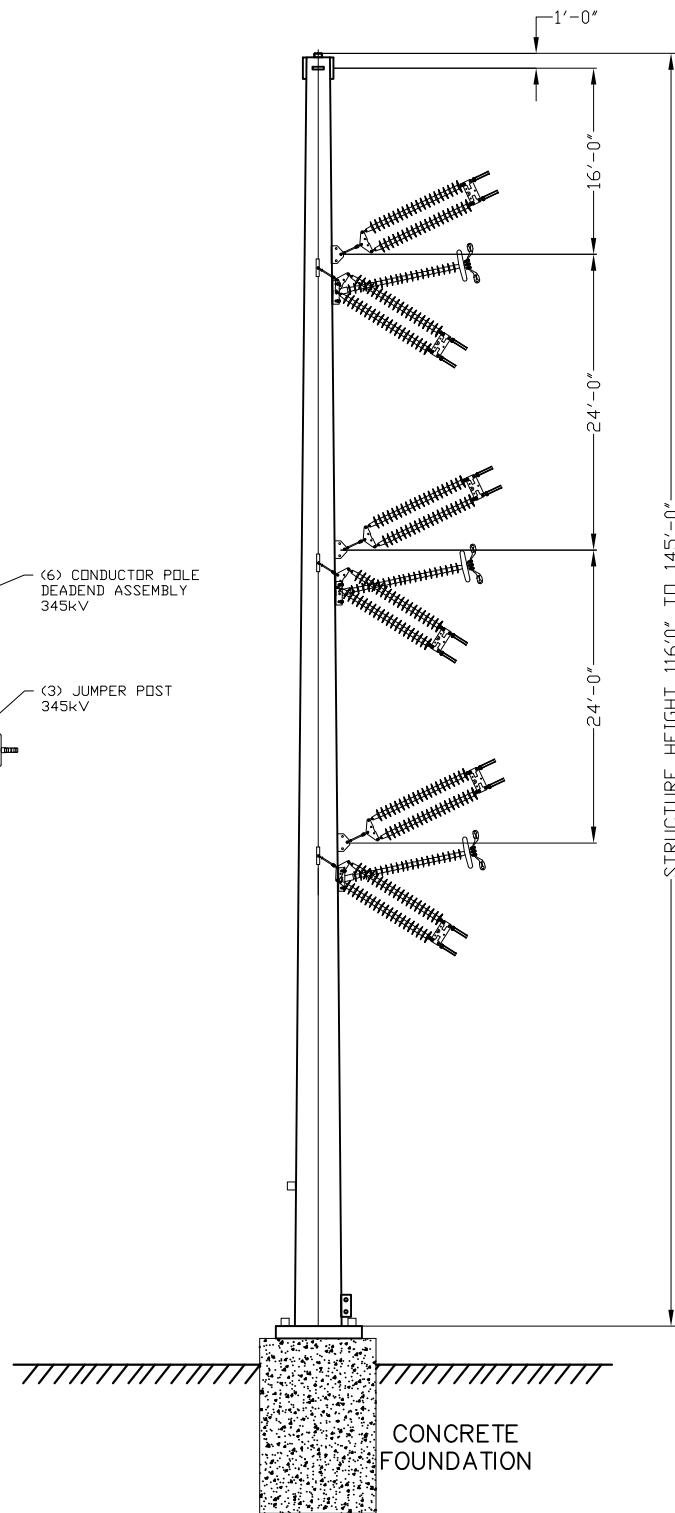
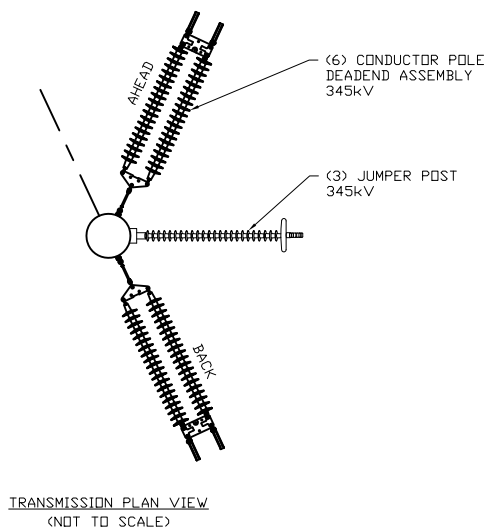
-  Proposed Preferred Site of the Lake Avenue Substation
-  Existing 138kV Line
-  Existing 345kV Line
-  Proposed 138kV Line Extensions (under separate filing)
-  Proposed 345kV Line Extensions
-  Road
-  Railroad
-  City

Exhibit 2



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

AVON-BEAVER No.1 & No.2 345kV
TRANSMISSION LINE EXTENSIONS TO
LAKE AVENUE SUBSTATION PROJECT

345 kV STEEL STRUCTURE

EXHIBIT 3

NOT TO SCALE

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

3/31/2015 4:10:04 PM

in

Case No(s). 15-0288-EL-BNR

Summary: Notification of Construction (Construction Notice) for the Avon-Beaver No 1 and No 2 345 kv Transmission Line Extensions to Lake Avenue Substation electronically filed by Mr. Robert J Schmidt on behalf of American Transmission Systems Inc.