

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

CONSTRUCTION NOTICE

**LORDSTOWN-SAMMIS 345 kV LOOP TO
WELLSVILLE SUBSTATION PROJECT**

OPSB CASE NO.: 19-0802-EL-BNR

July 2, 2019

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

CONSTRUCTION NOTICE
LORDSTOWN-SAMMIS 345 kV LOOP TO WELLSVILLE SUBSTATION 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 (“OPSB”) as a Construction Notice application.

4906-6-05: ACCELERATED APPLICATION REQUIREMENTS

4906-6-05: Name and Reference Number

Name of Project: Lordstown-Sammis 345 kV Loop to Wellsville Substation Project (“Project”).

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

In this Project, American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, proposes to extend a loop from the existing Lordstown-Sammis 345 kV Transmission Line approximately 725 feet (0.14 mile) to the new interconnection switchyard for the South Field Energy’s – Wellsville facility, which will be known as the Wellsville Substation. This will create the Lordstown-Wellsville 345 kV and Sammis-Wellsville 345 kV Transmission Lines. The transmission line loop will require installation of two (2) new 3-pole steel deadend structures on concrete foundation and two (2) new 2-pole steel H-Frame tangent structures on concrete foundation.

The Wellsville Substation and the associated 345 kV electrical interconnection is described in South Field Energy’s applications submitted to the Ohio Power Siting Board (“OPSB”), in consolidated Case No. 15-1717-EL-BTX and certified by the OPSB on May 20, 2016. The application in Case No. 15-1717-EL-BTX provides a

description of the switchyard, and the ATSI transmission line extensions to the switchyard. This Project will complete the transmission line loop described in that application, although originally the loop was referred to in that application as the Highland-Sammis 345 kV Transmission Line Extensions to Wellsville Substation Project.

The general location of the Project is shown in Exhibit 1, a partial copy of the United States Geologic Survey, Columbiana County OH, Quad Map. Exhibit 2 is a partial copy of ESRI aerial imagery. The Project is located at 17075 Sines Road, Wellsville, OH 43968. The general layout is shown in Exhibit 3. The Project will be located in the Village of Wellsville, Columbiana County, Ohio.

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

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

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

(d) Line(s) primarily needed to attract or meet the requirements of a specific customer or customers, as follows:

(i) The line is completely on property owned by the specific customer or the applicant.

The proposed Project is within the requirements of Item (1)(d)(i) as the entire length of the transmission line is located on South Field Energy's property.

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

The Project is needed to provide the necessary electric grid connection for the new South Field Energy, LLC 1,000 MW natural gas generating facility (AA1-123). This new generation facility was approved by the OPSB in Case No. 15-1716-EL-BGN on September 22, 2016. South Field Energy, LLC has requested and entered into an interconnection service agreement with PJM Interconnection, LLC (transmission provider) and ATSI (transmission owner). Further, PJM has approved the generation facility and the following RTEP numbers are associated with the new generation facility and associated interconnection facilities: n4694, n4695, n4696, n4697, n5057, n5056 (n4694 is the 3-breaker ring bus and n4695 is tying in the Lordstown-Sammis Transmission 345 kV Transmission Line).

As part of its construction of the South Field Energy Generation facility, South Field Energy is building a new interconnection switchyard, named the Wellsville Substation. This Project proposes the new transmission line loop required to connect the existing Lordstown-Sammis 345 kV Transmission Line to the Wellsville Substation which ultimately provides the South Field Energy Generation facility's connection to the transmission grid. The Wellsville Substation and the 345-kV electrical interconnection are described in South Field Energy's applications submitted to the OPSB for the interconnection facilities, including Case No. 15-1716-EL-BGN, Case No. 15-1717-EL-BTX, and Case No. 19-0638-EL-BGA. This Project is therefore needed to provide the necessary connection for the new South Field Generation Facility to the electric transmission system.

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. 2019 Long-Term Forecast Report ("LTFR"). This map was submitted to the PUCO in Case No. 19-0806-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 Lordstown-Sammis 345 kV Transmission Line. The Project area is located approximately 1 1/4 inches (11" x 17" printed version) from the right edge of the map and 5 1/4 inches (11" x 17" printed version) from the top of the map. The general location and layout of the Project area is shown in Exhibit 1 and 2.

This Project is identified in the FirstEnergy Corp 2019 LTFR Submitted to the Public Utility Commission of Ohio in Case Number 19-0806-EL-FOR as the Welsville-Sammis 345 kV Transmission Line.

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

When the AA1-123 project was first studied at the feasibility phase of the PJM generation queue process, two different interconnection routing options were considered. Option 1 was to connect to the Highland-Sammis 345 kV Transmission Line. Option 2 was to connect to the Boardman-Sammis, Dobbins-Toronto, and Nevada-Toronto 138 kV Transmission Lines. The interconnection customer chose to move forward with Option 1 as their desired point of interconnection to the ATSI transmission system.

In addition, for a 345 kV interconnection the standard connection configuration is a ring bus substation. Therefore, that was the only alternative considered at the substation.

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 Project as necessary. ATSI will maintain the Project website and will continue to work with property owners concerning the proposed Project.

ATSI has also established a project website:

https://www.firstenergycorp.com/about/transmission_projects/ohio.html .

Finally, during all phases of this Project, ATSI will maintain the transmission projects hotline at 1-800-589-2873 or via email at: transmissionprojects@firstenergycorp.com, where the public may ask questions or leave comments on the Project for ATSI.

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

Construction of this Project is expected to begin as early as October 4, 2019 and be completed by May 31, 2020.

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, Columbiana County OH, Quad Map. Exhibit 2 provides a partial copy of ESRI aerial imagery of the project area.

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

The Project is located on existing and new right-of-way. 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
703818416 (41-00083.001)	South Field Energy, LLC	17075 Sines Road Wellsville, OH 43968	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:	345 kV
Conductors:	954 kcmil 48/7 ACSR bundled, two conductors per bundle
Static Wire:	7#8 Alumoweld & SFPOC/SFSJ-J-6641 OPGW
Insulators:	Porcelain
ROW Width:	100 feet
Structure Types:	Exhibit 4: 3-Pole Steel Deadend Structure. Exhibit 5: Steel H-Frame Tangent Structure.

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

The closest occupied residence or institution is approximately 350 feet from the proposed transmission line centerline therefore no Electric and Magnetic Field (“EMF”) calculations are required by this code provision.

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

The estimated capital cost for the ATSI portion of the proposed Project is approximately \$4,690,300 which will be paid by the Customer, South Field Energy.

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

4906-6-05 (B)(10)(a): Land Uses

The Project is located in the Village of Wellsville, Columbiana County, Ohio. The main land use around the Project is agricultural, but which is not enrolled in an agricultural district. Based on the U.S. Bureau of Census estimates, the 2018 population of the Village of Wellsville was 3,446. The 2018 estimated population of Columbiana County was 107,841. No significant changes or impacts to the current land use is anticipated.

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

Agricultural land does not exist within the Project’s disturbance area. The Project limits are within the area currently under development by the customer for a power plant.

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

As part of the investigation, a search of 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 6.

The OHPO database includes all Ohio listings on the National Register of Historic Places (“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 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. Two (2) OAI listed archeological resources have been previously inventoried within 0.5 miles of the Project area and are shown in Table 2. One (1) OHI listed structural resource is located within 0.5 miles of the Project area and is shown in Table 3. Two (2) previous cultural resource surveys were conducted within 0.5 miles of the Project area and are provided in Table 4. No OSG cemeteries are located within 0.5 miles of the Project area.

Table 2. List of OAI Listed Archeological Resources

OAI Number	Affiliation	Description	County	Quad Name
CO0995	Prehistoric	N/A	Columbiana	West Point
CO0993	Historic	N/A	Columbiana	West Point

Table 3. List of OHI Listed Structural Resources

OHI Number	Present Name	Historic Use	County	Municipality
COL0099814	Williams House	Single Dwelling	Columbiana	Madison Township

Table 4. List of Previous Cultural & Historic Resource Survey

Year	Name	County	Municipality
2016	Phase I Cultural Resource Management Investigations for the Proposed 30.42-hectare (75.17-acre) South Field Energy Transmission Line in Madison and Yellow Creek Townships, Columbiana County, Ohio	Columbiana	Wellsville Village
2016	Phase I Archaeological Investigations for the Proposed 15.4-Hectare (38.1-acre) South Field Energy Switchyard Site Located in Madison Township, Columbiana County Ohio	Columbiana	Wellsville Village

The closest OAI is approximately 0.25 miles from the proposed Project. The closest OHI structure is located approximately 0.25 miles from the proposed Project. The proposed loop crosses property associated with a previously surveyed area 20298, which was performed for the South Field Energy Switchyard Site. It is also near previously

surveyed area 20300, which was performed for the South Field Energy Transmission Line. Both Phase I Archaeological Investigations concluded that their respective undertakings would have no effect on any historic properties. No further cultural resource management work was recommended.

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

Table 5 shows the list of government agency requirements and their status at the time of filing.

Table 5. List of Government Agency Requirements to be Secured Prior to Construction

Agency	Permit Requirement	Status
Ohio Environmental Protection Agency (OEPA)	General NPDES Construction Storm Water Permit	Will Be Filed
Columbiana County, Ohio, Soil and Water Conservation District	Storm Water Pollution Prevention Plan (SWP3) – Review Application	Will Be Filed

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

The Project work limits associated with the structure additions are primarily located within an existing maintained transmission line corridor. Areas not within the transmission line corridor that are included in the Project work limits are (1) areas recently used for construction staging for the newly erected substation; (2) areas that consist of herbaceous vegetation; or (3) one area (approximately 1.0 acre) dominated by shrubs and small trees.

The Ohio Department of Natural Resources (ODNR) and U.S. Fish and Wildlife Service (USFWS) rare species lists for Columbiana County, Ohio¹ were consulted in order to determine what listed species have ranges that may encompass the Project Area. The ODNR has listed in Columbiana County one (1) species that is federally, and state listed as endangered, one (1) species that is federally, and state listed as threatened, three (3) species that are state listed as endangered, and six (6) species that are state listed as

¹ <https://www.fws.gov/midwest/endangered/lists/ohio-cty.html>
<http://wildlife.ohiodnr.gov/portals/wildlife/pdfs/species%20and%20habitats/state-listed%20species/columbiana.pdf>

threatened. The USFWS has one (1) species listed that is endangered and one (1) species listed that is threatened both with a range that includes Columbiana County, Ohio. A list of all endangered, threatened, and rare species included in ODNr and USFWS lists for Columbiana County, is provided in Table 6.

Table 6: List of Endangered, Threatened, and Rare Species				
Common Name	Scientific Name	Federal Listed Status	State Listed Status	Affected Habitat
Indiana Bat	<i>Myotis sodalis</i>	Endangered	Endangered	Trees & Forest
Northern Long-Ear Bat	<i>Myotis septentrionalis</i>	Threatened	Threatened	Trees & Forest
Eastern Hellbender	<i>Cryptobranchus alleganiensis alleganiensis</i>	N/A	Endangered	Streams
Black bear	<i>Ursus americanus</i>	N/A	Endangered	Heavily Forested Areas
Regal Fritillary	<i>Speyeria idalia</i>	N/A	Endangered	Prairies and Emergent wetlands
Tippecanoe Darter	<i>Etheostoma tippecanoe</i>	N/A	Threatened	Streams
Channel Darter	<i>Percina copelandi</i>	N/A	Threatened	Streams
River Darter	<i>Percina shumardi</i>	N/A	Threatened	Streams
Riffle Snaketail	<i>Ophiogomphus carolus</i>	N/A	Threatened	Streams
Black Sandshell	<i>Ligumia recta</i>	N/A	Threatened	Streams
Threehorn Wartyback	<i>Obliquaria reflexa</i>	N/A	Threatened	Streams

The construction site will be accessible via existing roads. There is no in-stream work or wetland encroachment proposed with this Project. Tree clearing is necessary to complete the Project and will be conducted after October 1 and before April 1 to avoid affecting any potential listed bat habitat.

Due to the absence of prairies, wetlands and heavily forested areas within the Project Area, effects to habitat utilized by the Regal Fritillary and Black Bear are not anticipated.

The remainder of the species listed on the ODNR response are aquatic and specifically, found in streams. No impacts to these species are expected due to the Project's location and that no work is proposed in streams or wetlands.

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

ATSI conducted a preliminary wetlands determination at the Project area on June 25, 2019. No areas meeting any of the three wetland criteria (i.e., hydrophytic vegetation, hydric soils, or wetland hydrology) are located within the Project Area. As most of the Project area is either a transmission line corridor that is actively maintained or an active construction site, it is unlikely that any other sensitive ecological areas are located within the Project Area.

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 Construction Notice 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 Village of Wellsville, Columbiana County Ohio.

Columbiana County

Commissioner Mike Halleck
President
Columbiana County
Commissioners
105 S. Market Street
Lisbon, OH 44432

Commissioner Jim Hoppel
Vice President
Columbiana County
Commissioners
105 S. Market Street
Lisbon, OH 44432

Commissioner Tim Weigle,
Chairman
Columbiana County
Commissioners
105 S. Market Street
Lisbon, OH 44432

Mr. Bert Dawson, P.E., P.S.
Columbiana County Engineer
235 S. Market Street
Lisbon, OH 44432

Village of Wellsville

The Honorable Nancy Murray
Mayor, Village of Wellsville
Wellsville Village Hall
1200 Main Street
Wellsville, OH 43968

Ms. Hoi Wah Black
Fiscal Officer
1200 Main Street
Wellsville, OH 43968

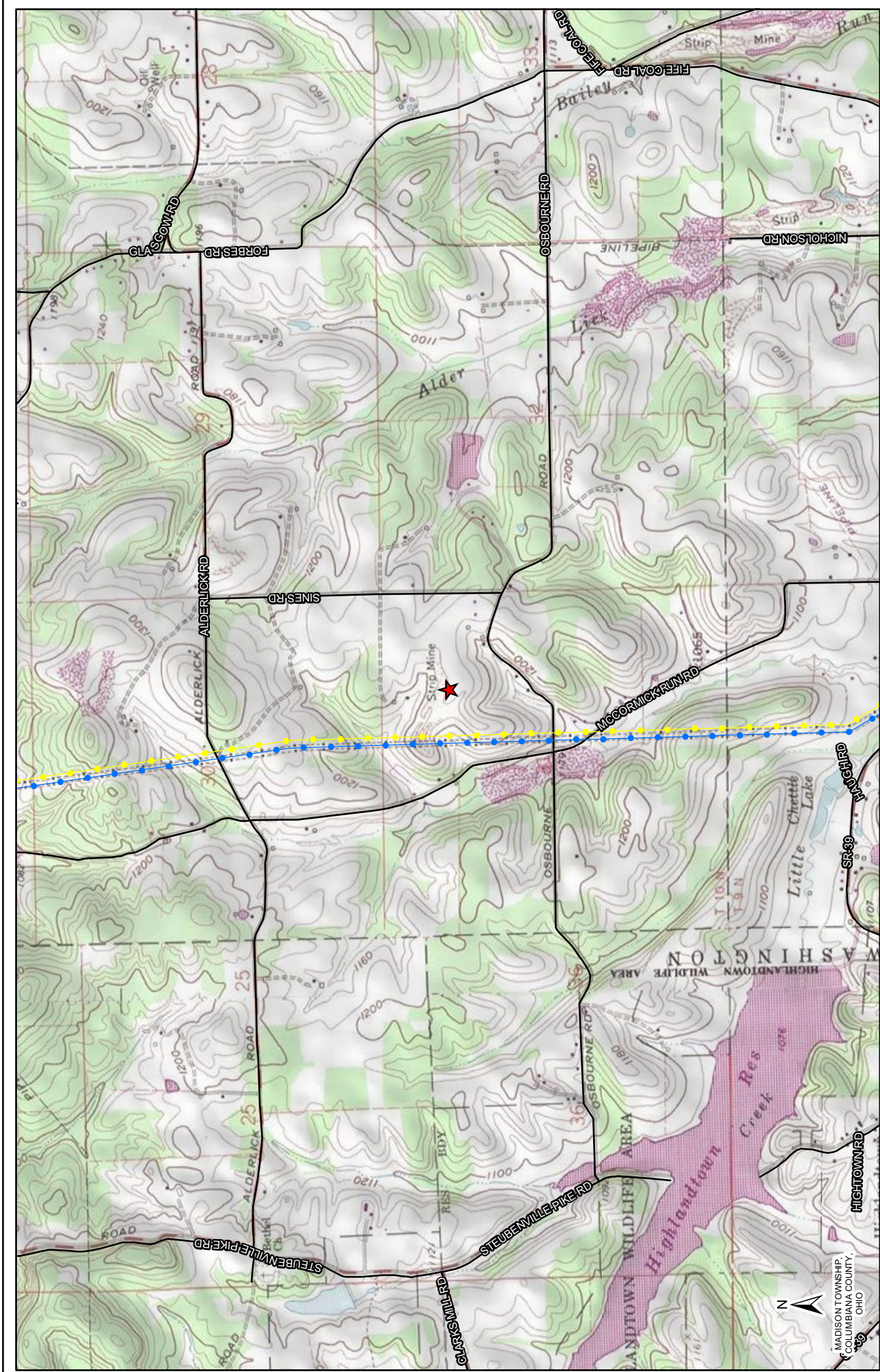
Mr. Jerry Medley, Administrator
Village of Wellsville
Wellsville Village Hall
1200 Main Street
Wellsville, OH 43968

Library

Ms. Tracee Murphy, Director
Village Carnegie Public Library
115 9th Street
Wellsville, OH 43968

Copies of the transmittal letters to these officials have been included with this application as proof of compliance with OAC Rule 4906-6-07 (B) and to provide the OPSB with proof of notice to local officials as required by OAC Rule 4906-6-07 (A)(1) and to libraries per OAC Rule 4906-6-07 (A)(2).

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



LEGEND:

- ★ Project Location
- Lordstown-Sammis 345 kV T-Line
- Sammis-Pidgeon 138 kV T-Line
- Roadway

Reference:
USGS Topographical Overlay; ODOT TMS Road Inventory

Coordinate System:
NAD 1983 StatePlane Ohio North FIPS 3401 Feet
Projection: Lambert Conformal Conic; Units: Foot US

Scale:

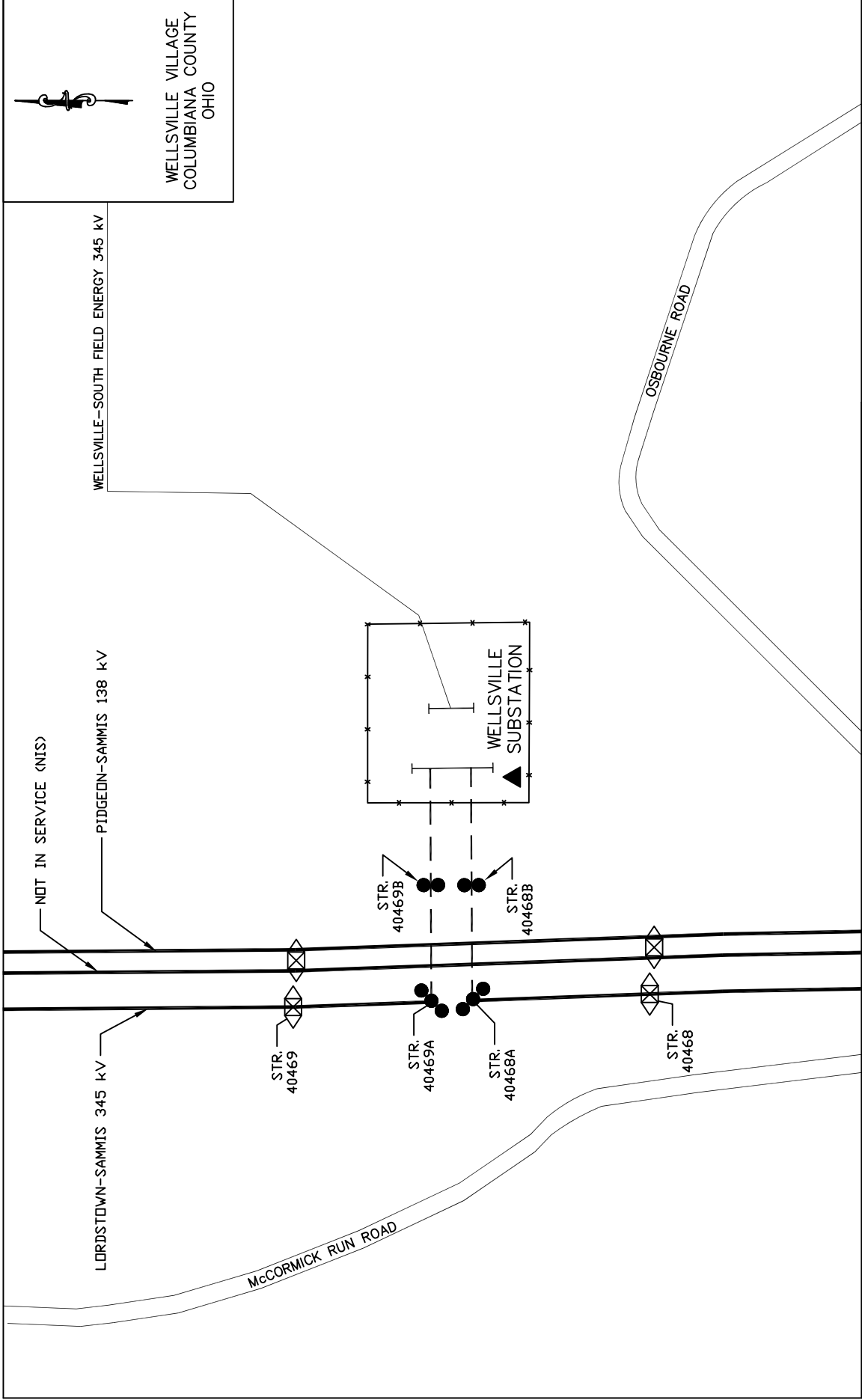
0 1,000 2,000 4,000 Feet

Inset Map:

FirstEnergy

EXHIBIT 1

Lordstown-Sammis 345 kV Loop to Wellsville Substation Project



LEGEND

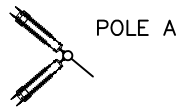
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|----|----------------------------------|-----|-----------------------------|
| — | EXISTING CONDUCTOR | --- | NEW CONDUCTOR |
| ◊ | EXISTING STEEL LATTICE STRUCTURE | ●●● | NEW STEEL 3-POLE STRUCTURE |
| ▲ | CUSTOMER SUBSTATION | ●● | NEW STEEL H-FRAME STRUCTURE |
| —* | SUBSTATION FENCE LINE | — | EXISTING ROADS |



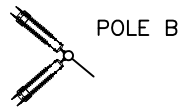
LORDSTOWN-SAMMIS 345 kV LOOP
TO WELLSVILLE SUBSTATION

GENERAL LAYOUT

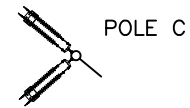
EXHIBIT 3



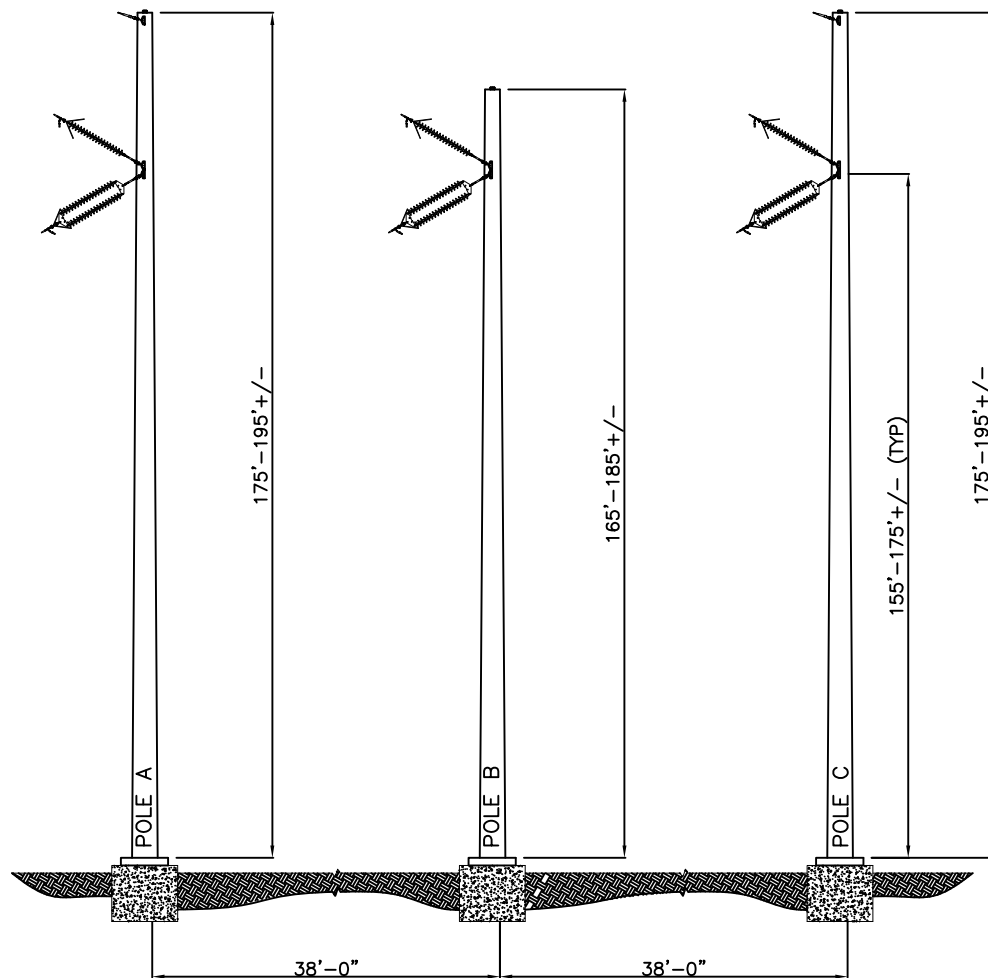
POLE A



POLE B



POLE C

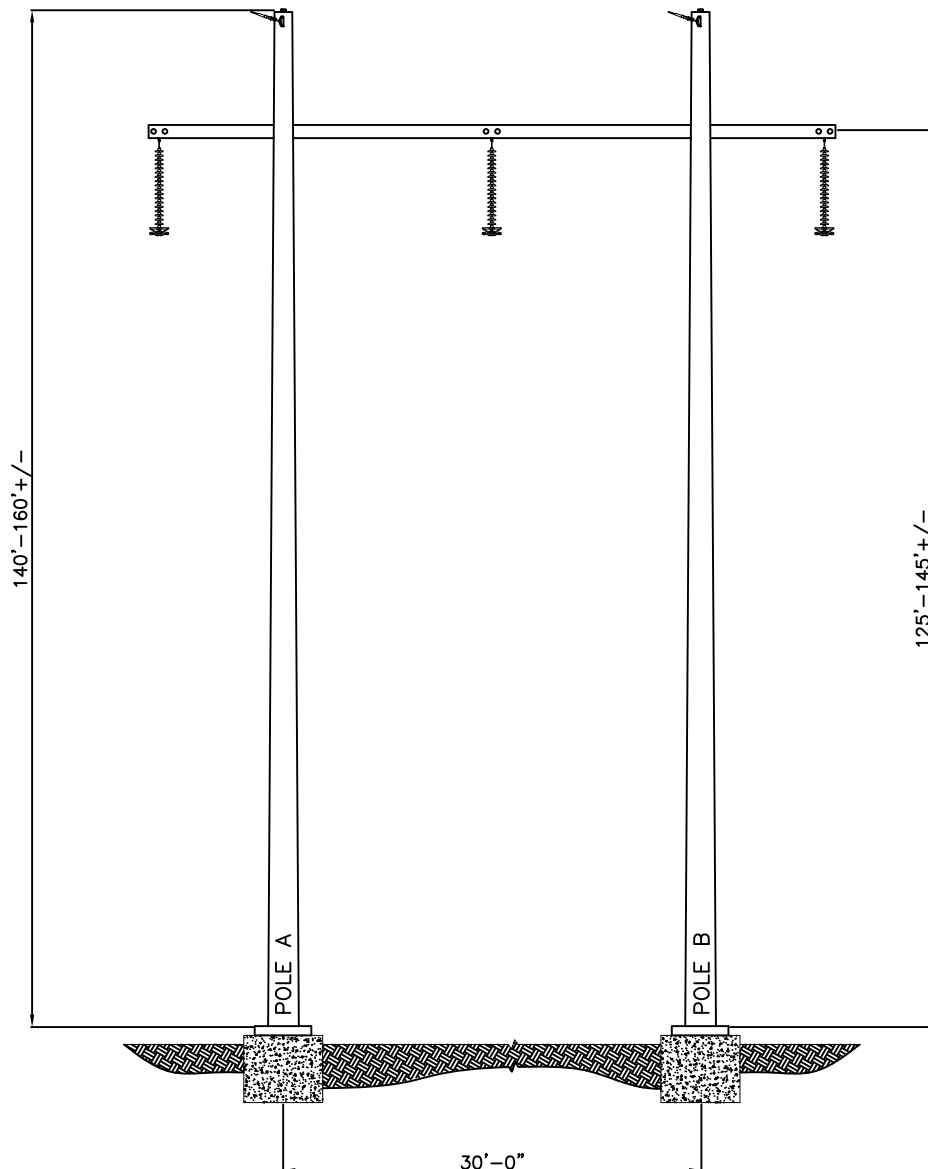
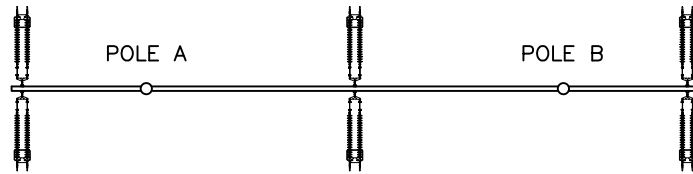


LORDSTOWN-SAMMIS 345 kV
LOOP TO WELLSVILLE SUBSTATION
PROJECT

345 kV 3-POLE STEEL
DEADEND STRUCTURE

EXHIBIT 4

NOT TO SCALE



ATSI[®]

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

LORDSTOWN-SAMMIS 345 kV
LOOP TO WELLSVILLE SUBSTATION
PROJECT

345 kV STEEL H-FRAME
STRAIN STRUCTURE

EXHIBIT 5

NOT TO SCALE



State Historic
Preservation Office

NR Listings

NR Listings

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International Historic Landmark

elisted

NR Determinations of Eligibi

Historic Structures

Historic Bridges

Historic Tax Credit Projects

OGS Cemeteries

Confidential

Not Confirmed

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Dams

UTM 2

NP Boundaries

NK boundaries

Phase1

Phase2

Phase3

Historic Previously Surveyed

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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.

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Projection: WGS_1984_Web_Mercator_Auxiliary_Sphere

