AMERICAN TRANSMISSION SYSTEMS, INCORPORATED
A FIRSTENERGY COMPANY

LETTER OF NOTIFICATION

MELISSA SUBSTATION AND 138 kV TRANSMISSION LINES PROJECT
OPSB CASE NO.: 26-0877-EL-BLN

November 2, 2026

American Transmission Systems, Incorporated
341 White Pond Drive
Akron, OH 44320-1119

LETTER OF NOTIFICATION
MELISSA SUBSTATION AND 138 kV TRANSMISSION LINE CONNECTIONS PROJECT
OPSB CASE No. 26-0877-EL-BLN

The following information is being provided in accordance with the procedures in the Ohio Administrative Code ("Adm.Code") Chapter 4906-6 for the application and review of Accelerated Certificate Applications. Based upon the requirements found in Appendix A to Adm.Code 4906-1-01, this Project qualifies for submittal to the Ohio Power Siting Board ("OPSB") as a Letter of Notification application.

4906-6-05: ACCELERATED APPLICATION REQUIREMENTS

4906-6-05: Name

Name of Project: Melissa Substation and 138 kV Transmission Line Connections ("Project")

Reference Number: 1347 (Melissa Substation)
2110 (East Springfield-London 138 kV Transmission Line)
3215-1 (East Springfield-North Titus 138 kV Transmission Line)

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

In this Project, American Transmission Systems, Incorporated ("ATSI") and Ohio Edison Company, FirstEnergy companies (collectively, "Applicants"), propose to construct the new 138 kV Melissa Substation, and associated transmission line connections. The Project will be comprised of the following components:

- Construction of the Melissa Substation, an approximately 144,000 square feet substation comprised of 11-breaker (future 12) breaker-and-a-half substation occupying approximately 144,000 square feet.
- Re-routing an approximately 0.3-mile-long section of the existing double circuit East Springfield-London 138 kV and East Springfield-North Titus 138 kV Transmission Lines between new Structures No. 5719 and No. 5720 and looping it into the new

Melissa Substation. The re-route will be constructed on five (5) new structures (Nos. 5719, 5719A, 5719B, 5719C and 5720), shown in **Exhibit 3**, creating the new East Springfield-Melissa No.1 and East Springfield-Melissa No.2 138 kV Transmission Lines Loop, Melissa-North Titus 138 kV Transmission Line, and London-Melissa 138 kV Transmission Line**.** These new structures will be double-circuit steel monopoles as shown in **Exhibit 6.** Existing lattice tower Structure No. 5718 will also be replaced with a new double-circuit steel monopole shown **in Exhibit 6**. The existing conductor, 477 kcmil 26/7 ACSR, will be transferred to new Structures No. 5718 and 5719. New 795 kcmil 26/7 ACSR conductor will be installed between new Structure No. 5719 and the proposed Melissa Substation, and between the proposed Melissa Substation and new Structure No. 5720.

- Extension of two (2) approximately 0.5-mile long 138 kV feeds from the proposed Melissa Substation to the existing 5C Data Center USA, Inc. ("Customer")-owned Benjamin Substation, shown in **Exhibit 3**. The new 138 kV feeds will be named Benjamin-Melissa No.1 138 kV and Benjamin-Melissa No. 2 138 kV Transmission Lines and will be constructed on seven (7) new double-circuit steel structures shown in **Exhibits 6 through 8.** These new transmission lines will consist of 795 kcmil 26/7 ACSR conductor installed between the proposed Melissa Substation and existing Benjamin Substation. New static wire 7#8 Alumoweld and SFPOC SFSJ-J-6641 OPGW will be installed between the proposed Melissa Substation and existing Benjamin Substation.

The Project is in the city of Springfield and Springfield Township, Clark County Ohio. The general location of the Project is shown in **Exhibit 1**, a partial copy of the United States Geologic Survey, Clark County, OH, Quad Map. **Exhibit 2** provides a partial copy of ESRI aerial imagery of the Project area. The general layout is shown in **Exhibits 3** and **3A**.

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

The Project meets the requirements for a Letter of Notification because the Project is within the types of projects defined by Items (1)(d)(ii), (2)(a) and (3) of the Application

Requirement Matrix for Electric Power Transmission Lines, Appendix A of Adm.Code 4906-1-01. These items state:

(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 operation 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:

(ii) Any portion of the line is on property owned by someone other than the specific customer or applicant.

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

(a) two miles or less,

and;

(3) Constructing a new electric power transmission substation.

The proposed Project is within the requirements of Item 1(d)(2) because it involves relocation of lines primarily to meet the requirements of a specific customer. The proposed Project is within the scope of Item (2)(a) because it involves building of approximately 0.8-mile of new transmission lines, and within the requirements of Item (3) because it involves construction of a ring bus that falls within the definition of constructing new electric power transmission station.

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

Melissa Substation is a 138 kV station to serve as a retail service delivery point to the Customer. The 138 kV station will serve approximately 200 Megawatts ("MW") of customer load.

The proposed Project includes building an eleven breaker, breaker-and-a-half 138 kV switching station, and the looping of the East Springfield–North Titus 138 kV and the East Springfield–London 138 kV Transmission Lines into the switching station via new 138 kV line extensions. The existing Customer station is currently configured as a tap connection off the East Springfield–North Titus 138 kV Transmission Line (**Figure 1 below)** where the customer load is fed radially from a single connection point on the transmission line. The breaker-and-a-half switching station (**Figure 2,** *infra page 6*) will provide an additional 138 kV source to serve the customer's final load and provide a more resilient configuration to limit service interruptions due to the loss of a single transmission element. The asset ownership is delineated on **Figure 2.**

The Project is needed to: (i) serve a customer load, (ii) reduce the number of area-wide power disruptions to residential and commercial customers due to transmission single line outages, (iii) improve the reliability of the transmission and the local distribution network by upgrading the delivery point with a redundant bus and protection scheme, (iv) eliminate the simultaneous outages of multiple transmission facilities in the area, and (v) minimize single-source radial load concerns.

ATSI considered the use of advanced technology on the proposed Project. Dual SFPOC SFSJ-J-6641 OPGW will be installed between Melissa Substation and Benjamin Substation. OPGW enables remote power system monitoring, relay protection, and network communications through high-speed data transmission. It provides real-time data exchange for system protection schemes and SCADA, improving system reliability and operational flexibility. OPGW offers a reliable communication path with minimal maintenance. It enables

critical power functions like remote monitoring, fault detection, and real-time data communication.

The Project is a Supplemental project that has been through the PJM Open Access Transmission Tariff ("OATT") Attachment M-3 process for Supplemental projects. As required by the Attachment M-3 process, the need for the proposed Project was presented at the PJM Subregional RTEP Committee - Western meeting on June 14, 2024, and the solution was presented at the subsequent meeting on July 19, 2024. Upon completion of the M-3 process, PJM assigned the Upgrade ID number s3524.2 to the Project. The PJM SRRTEP-Western presentation slides are included as **Exhibit 4** and provide additional details of the Project drivers.

The Melissa Substation will split the existing East Springfield North Titus 138 kV and the East Springfield–London 138 kV Transmission Lines into four 138 kV lines: the East Springfield–Melissa 138 kV #1 Transmission Line, the East Springfield–Melissa 138 kV #2 Line, the London–Melissa 138 kV Transmission Line, and the Melissa–North Titus 138 kV Transmission Line. The installation of 138 kV capacitor banks at the Melissa Substation will provide voltage support for the surrounding transmission system.

ATSI's transmission planning is based on deterministic criteria, and not probabilistic criteria. In other words, ATSI transmission planning assessments result in recommendations to reinforce the transmission system based on an adverse planning event occurring and not based on the probability of the event occurring. ATSI cannot know or predict when a failure or fault will occur.

The proposed Project to build a breaker-and-a-half substation configuration, as shown in **Figure 2**, will significantly reduce the likelihood of simultaneous outages of multiple facilities at Melissa Substation via a bus fault, or breaker failure condition, which would result in the direct loss of electric service, as well as increase reliability and operational flexibility of the transmission system. The breaker-and-a-half configuration at Melissa Substation will limit outages to a single transmission line outage in the event of a line fault

or breaker failure operation. This configuration also limits the loss of transmission elements (transmission lines and capacitor banks) at Melissa Substation to a maximum loss of two elements in the event of a breaker failure operation or bus fault.

In the last five years, there has been one unscheduled or emergency forced outage on the East Springfield–London 138 kV Transmission Lines. See **Table 1** below for additional details. The outage lasted approximately 12 seconds and was caused by a weather event. No customers were affected by the outage.

Table 1. Reliability outage history for East Springfield – London 138 kV Line

Outage Start	Outage Restored	Duration	Outage Type	Cause Category	Cause	Customers Impacted
02/03/2022	02/03/2022	12 seconds	Unscheduled	Weather, excluding lighting	Galloping Conductors	0

The construction of the Melissa Substation as a 138 kV breaker-and-a-half scheme with four 138 kV transmission line sources will provide redundancy, eliminate the single contingency risk associated with alternative substation configurations and prevent exposure to serving a large load radially in the event of system faults or maintenance. Note that the proposed substation project is not needed to address a NERC, PJM, or ATSI Planning Criteria violation and is not part of a larger project. The Project is a supplemental project driven by the ATSI Reliability Enhancement methodology based on the existing system configuration and its impact on the reliability of electric service to the residents and businesses of the area.

The Project will make the power system in the area more resilient and reliable. The new breaker-and-a-half configuration of the Melissa Substation will greatly reduce the potential for widespread outages in the area.

FIGURE 1

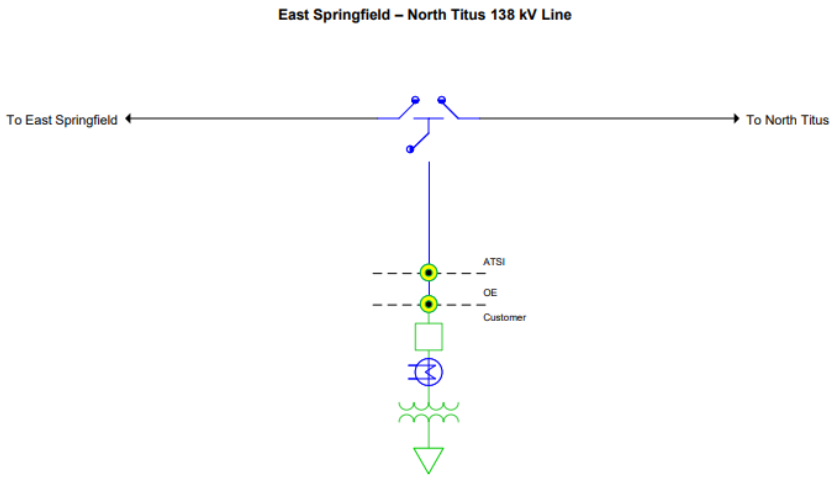
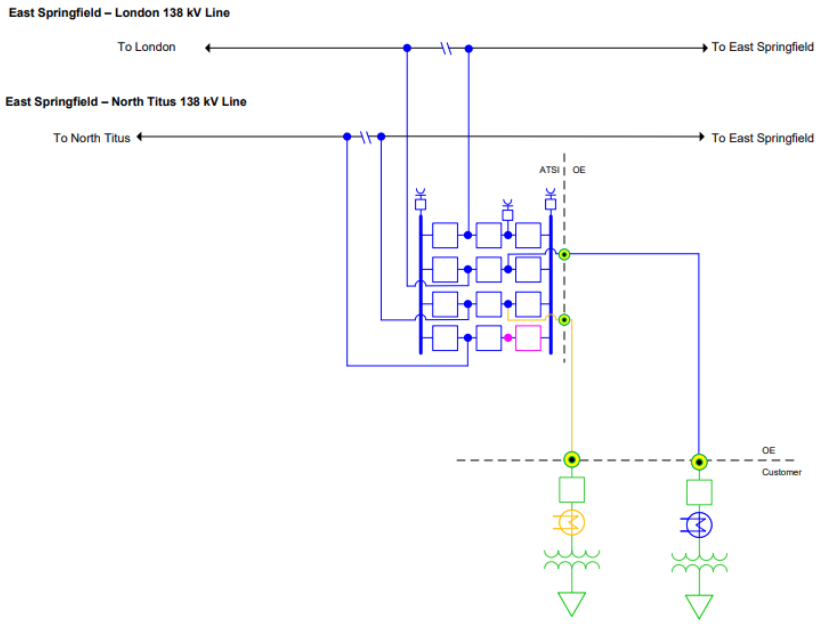


FIGURE 2



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. 2026 Long-Term Forecast Report. This map was submitted to the PUCO in Case No. 26-0504-EL-FOR under Adm.Code 4901:5-5:04 (C)(2)(b). The map is incorporated by reference only. The Project is included in ATSI's LTFR filed in 2026 on page 60. The general location and layout of the Project area is shown in **Exhibits 1 and 2**. The Project layout is shown in **Exhibit 3**.

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

No alternatives were considered for this Project as there were no other viable transmission solutions. Looping the East Springfield–North Titus 138 kV and East Springfield–London 138 kV Transmission Lines into a new switching station offers the most direct and economical solution with the least environmental impacts, to serve the customer's proposed load.

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

ATSI will publish notice of the Project in the Springfield News-Sun within 7 days of filing this Letter of Notification application. The notice will comply with Adm.Code 4906-6-08(A)(1)-(6). In addition to the public notice, ATSI will mail letters in accordance with Adm.Code 4906-6-08(B) explaining the Project to affected property owners and tenants within and contiguous to the planned Project area. ATSI has also established a Project website:
https://www.firstenergycorp.com/about/transmission_projects/ohio.html.

ATSI's Local Engagement Specialist will advise local officials of features and the status of the proposed Project, as necessary.

Finally, during all phases of this Project, ATSI will maintain the transmission projects hotline at 1-888-311-4737 and respond to questions submitted via email at:

transmissionprojects@firstenergycorp.com. The public may use either the hotline or email to ask questions or leave comments on the Project for ATSI.

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

The construction schedule for this Project is expected to begin as early as February 2, 2027, and be completed by December 31, 2027.

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 Geologic Survey, Clark County OH, Quad Map. **Exhibit 2** is a 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 parcels listed in **Exhibit 5**.
ROW is being amended for a portion of the existing transmission line work, and new ROW is being acquired from CMHO1 Holdings LP on their fee owned property

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:	477 kcmil 26/7 ACSR (Existing) 795 kcmil 26/7 ACSR (New)
Static Wire:	134.6 kcmil 12/7 ACSR (Existing) 7#8 Alumoweld (New) SFPOC SFSJ-J-6641 OPGW (New)
Insulators:	Glass/Polymer
ROW Width:	100’-200’ (Existing and New 138 kV Transmission Corridor)
Structure Types:	**Exhibit 6**: 138 kV Steel Monopole Double Circuit Deadend on Concrete Foundation (Qty. 9)

Exhibit 7: 138 kV Steel Monopole Double Circuit Tangent on Concrete Foundation (Qty. 2)

Exhibit 8: 138 kV Steel Monopole Double Circuit Deadend Direct Embed (Qty. 2)

The equipment and facilities described below will be located within the fenced area of the proposed substation once construction is complete.

Materials:

Circuit Breakers: Qty. 11 - 138 kV
GOAB disconnect switch: Qty. 25 - 138 kV
MOAB disconnect switches: Qty. 6 - 138 kV
3-Phase CCVTs: Qty. 9 sets - 138 kV
Cap Switchers: Qty. 3 - 138 kV
3-Phase Free-Standing CT's: Qty. 3 sets – 138 kV
31.7MVAR Capacitor banks: Qty. 3 – 138 kV
Surge Arresters: Qty. 21 - 138 kV
Dead End Structures: Qty. 5 - 138 kV
SSVT: Qty. 1 - 138 kV
58' by 22' Electrical Control House: Qty. 1
One lot of associated substation steel structures
One Lot of rigid bus, conductors, and connectors
One Lot of High Security fence

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

There are no occupied residences within 100 feet of the Project and therefore no Electric and Magnetic Field ("EMF") calculations are required by this code provision.

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

The estimated cost for the proposed Project is $24,360,000. These costs will be allocated between ATSI, Ohio Edison, and the Customer. Although not statutorily required for approval, at the request of OPSB Staff, the estimated cost is a Class 3 estimate and Applicants confirm that ATSI's costs will be captured and allocated via FERC formula rates for the ATSI Transmission Zone, Attachment H-21 in the PJM OATT.

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

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

The Project is in the city of Springfield and Springfield Township, Clark County, Ohio. The Project area is in farmland zoned land. Other than the area of the proposed substation, no significant changes or impacts to the current or future land use are anticipated. New ROW is needed for the transmission line work, and property has been obtained for the substation. Easements are being obtained for the new 0.6-mile transmission line.

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

Agricultural land (primarily cultivated cropland) exists within the Project's Area of Potential Effect ("APE"), though none of the parcels are designated as Agricultural District.

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

As part of the investigation for this Letter of Notification application, GAI Consultants requested database information from the Ohio State Historic Preservation Office ("SHPO") to identify the presence of previously recorded significant historic properties, including above-ground historic resources and/or archeological sites, mapped within one (1)-mile (mi) of the Project Study Area (Area of Potential Effect or "APE"). The records indicated that there are five previously recorded historic architectural resources, seven archaeological resources, four Phase I archaeological surveys, and one above ground survey within the 0.8-kilometer (km) (0.50-mile) research area. A Section 106 review was submitted to SHPO, and a response included as **Exhibit 9** was received on August 26, 2025. According to the submission, the APE is partially overlapped by previous cultural resource surveys. Three previously recorded archaeological sites are present, two of which were previously determined not eligible for the National Register of Historic Places ("NRHP"). The third site, 33CL598, was determined to be potentially eligible. The SHPO recommended a Phase I archeological survey for the portions of the APE that fall outside of the previously

surveyed areas. They also recommended that site 33CL598 be revisited, tested, and re-evaluated to determine if the Project will have an adverse effect. They also stated that the proposed Project will have no visual impacts to historic properties or on unrecorded structures 50 years of age or older. The Phase 1 archaeological survey was conducted by GAI, and report was submitted to SHPO on May 20, 2026. SHPO concurred on June 17, 2026, agreeing that as proposed, the Project will have no effect on historic properties. No further coordination is required for this Project unless the scope of work changes or archaeological remains are discovered during the Project. Correspondence with the SHPO is provided in **Exhibit 9**.

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

No additional government agency authorizations or permits are required for this Project.

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

GAI Consultants submitted a request to the Ohio Department of Natural Resources ("ODNR") to conduct an Environmental Review of the Project area. As part of the Environmental Review, the ODNR Office of Real Estate conducted a search of the ODNR Division of Wildlife's ("DOW") 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 response on August 21, 2025, indicated that the Project is within the range of two (2) listed bat species, two (2) mussel species and two (2) fish species. A copy of ODNR's response is included as **Exhibit 10**. A list of all endangered, threatened, and rare species, as identified by ODNR, within the range of the Project is provided in **Table 2**.

Table 2. ODNR List of Endangered, Threatened, and Rare Species

Common Name	Scientific Name	Federal and State Listing Status	Agency Comments
Indiana bat	*Myotis sodalis*	Federally and State Endangered	Forested habitat is located within the Project area. Seasonal tree clearing between October 1 and March 31 is recommended. No
Northern long-eared bat	*Myotis septenrionalis*	Federally and State Endangered	

Common Name	Scientific Name	Federal and State Listing Status	Agency Comments
Little brown bat	*Myotis lucifugus*	State Endangered	potential hibernaculum for the identified bat species were documented within the Project area therefore impacts to these species are unlikely.
Tricolored bat	*Perimyotis subflavus*	State Endangered	
Rayed bean	*Villosa fabalis*	Federally and State Endangered	ODNR indicated that the Project is not likely to impact these species due to there being no proposed work within a perennial stream.
Snuffbox	*Epioblasma triquetra*	Federally and State Endangered	
Iowa darter	*Etheostoma exile*	State Endangered	
Tonguetied minnow	*Exoglossum laurae*	State Threatened	
Eastern massasauga	*Sistrurus catenatus*	State Endangered and Federally Threatened	ODNR stated, due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.
Kirtland's snake	*Clonophis kirtlandii*	State Threatened	ODNR stated, due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.
Spotted turtle	*Clemmys guttata*	State Threatened	ODNR stated, due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

With respect to the mussel and fish species, ODNR indicated that the Project will not impact these species due to there being no proposed work within a perennial stream. The Natural Heritage Database identified three state potentially threatened plant species and a

prairie fen plant community. Field review did not identify suitable habitat for these plant species.

The response from ODNR, DOW indicated the Project is within the range of the vicinity of records for the federally and state listed endangered Indiana bat (*Myotis sodalis*), the northern long-eared bat (*Myotis septenrionalis*), which is federally listed as threatened and state listed as endangered, and little brown bat (*Myotis lucifugus*) and tricolored bat (*Perimyotis subflavus*), which are both state listed as endangered. These bat species predominantly roost in trees behind loose, exfoliating bark, in crevices, and cavities, or in the leaves. These species are dependent on the forest structure surrounding the roost trees. The DOW recommended a desktop bat hibernaculum assessment be completed for the Project, which GAI completed and submitted to ODNR for concurrence. ODNR responded on September 23, 2024, **Exhibit 10A**, concurring that no caves, cliffs, or mine openings occur in the Project Area. Therefore, the Project is not likely to impact hibernating bats. No tree cutting or subsurface impacts to a hibernaculum are proposed; therefore, this Project is not likely to impact these species.

In addition, GAI Consultants submitted a request to the United States Fish and Wildlife Service ("USFWS") for an Ecological Review to research the presence of any endangered, threatened, rare, or designated species within one (1) mile of the Project Study Area. A copy of USFWS's response, dated August 7, 2025, is included as **Exhibit 11**. The response stated that the federally endangered Indiana bat and northern long-eared bat may be present in the vicinity of the Project and recommended removal of trees greater than or equal to three inches in diameter at breast height only occur between October 1 and March 31. No potential hibernaculum for the identified bat species was documented within the Project study area, therefore impacts to these species are unlikely.

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

GAI Consultants conducted a wetland and stream delineation of the Project area on May 29, 2025, and May 4, 2026. No wetlands were identified within the Project area. One stream

was identified within the Project area. A summary of the wetland and waterbody delineation results is included in **Exhibit 12**.

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

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

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

4906-6-07: Documentation of Letter of Notification Transmittal and Availability for Public Review

This Letter of Notification application is being provided concurrently to the following public officials from the city of Springfield, Springfield Township and Clark County:

Clark County

Commissioner Sasha Rittenhouse
Clark County Commissioners
Board of County Commissioners
3130 East Main Street
Springfield, OH 45503
srittenhouse@clarkcountyohio.gov

Commissioner Charles Patterson
Clark County Commissioners
Board of County Commissioners
3130 East Main Street
Springfield, OH 45503
capatterson@clarkcountyohio.gov

Jennifer Hutchinson
Calrk County Administrator
Board of County Commissioners
3130 East Main Street
Springfield, OH 45503
jhutchinson@clarkcountyohio.gov

Mark Scholl, Chairperson
Clark County Planning Commission
3130 East Main Street
Springfield, OH 45503
communitydevelopment@clarkcountyohio.gov

Johnathan A. Burr, P.E., P.S
Clark County Engineer
4075 Laybourne Road
Springfield, OH 45505
jburr@clarkcountyohio.gov

Mr. Chris Simpson, District Director
Clark County Soil and Water
Conservation District
3130 East National Road
Springfield, OH 45505
csimpson@clarkcountyohio.gov

City of Springfield

Mr. Rob Rue, Mayor
City of Springfield
76 East High Street
Springfield, OH 45502
rrue@springfieldohio.gov

Mr. Bryan Heck, City Manager
City of Springfield
76 East High Street
Springfield, OH 45502
bheck@springfieldohio.gov

Ms. Vaidehe Agwan, Planner
City of Springfield
76 East High Street
Springfield, OH 45502
vagwan@springfieldohio.gov

Mr. Adam Lipp, Treasurer
City of Springfield
76 East High Street
Springfield, OH 45502
alipp@springfieldohio.gov

Springfield Township

Mr. Tim Foley, Trustee
Springfield Township
2777 Springfield Xenia Road
Springfield, OH 45506
tfoley@spfldtwp.org

Ms. John Roeder, Trustee
Springfield Township
2777 Springfield Xenia Road
Springfield, OH 45506
jroeder@spfldtwp.org

Mr. Dan Detrick, Trustee
Springfield Township
2777 Springfield Xenia Road
Springfield, OH 45506
ddetrick@spfldtwp.org

Ms. Beverly Pollock, Fiscal Officer
Springfield Township
2777 Springfield Xenia Road
Springfield, OH 45506
bpollock@spfldtwp.org

Library

Dr. Karlos L. Marshall,
Library Director
Clark County Public Library
201 South Fountain Avenue
Springfield, OH 45506
kmarshall@ccplohio.org

Per Adm.Code 4906-6-07(B), exemplar copies of the notice letters sent to local government officials and to the library have been included with this application as proof of compliance with requirements of Adm.Code 4906-6-07(A)(1) and 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 Letter of Notification application. The link to this website is being provided in accordance with Adm.Code 4906-6-07(B), which requires ATSI to provide the OPSB with proof of compliance with Adm.Code 4906-6-07(A)(3) within seven days of filing the application.

N

SPRINGFIELD TOWNSHIP
CLARK COUNTY
OHIO

LEGEND:

★ Project Location

0 1,000 2,000 4,000

Feet

Reference:

USGS Topographical Overlay, ODOT

Coordinate System:

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



EXHIBIT 1

[redacted]

138 kV Service to Melissa Substation Project



SPRINGFIELD TOWNSHIP
CLARK COUNTY
OHIO

LEGEND:

Project Location

0 1,000 2,000 4,000

Feet

Reference:

ESRI Imagery, ODOT

Coordinate System:

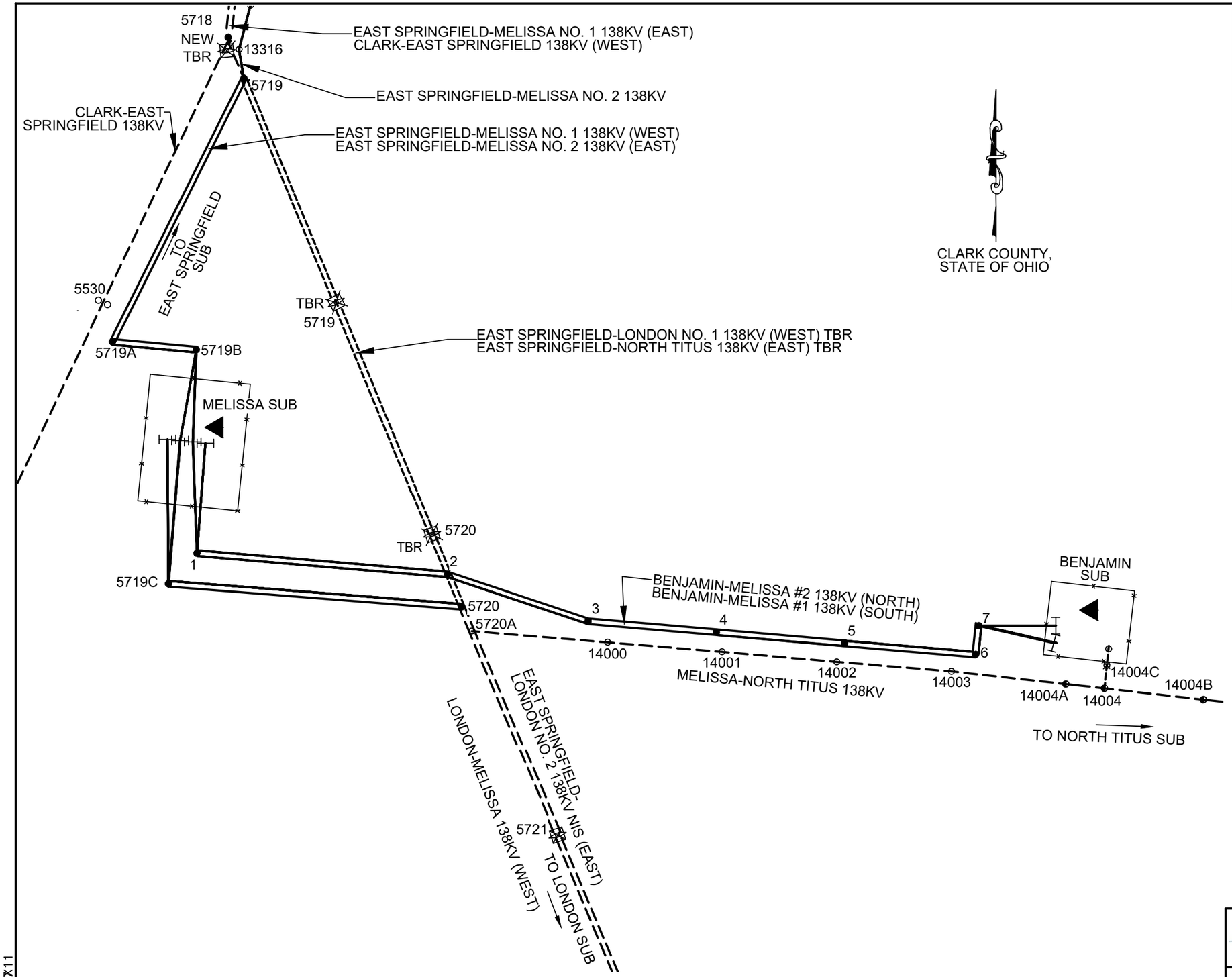
NAD 1983 StatePlane Ohio North FIPS 3401 Feet
Projection: Lambert Conformal Conic; Units: Foot US



EXHIBIT 2

[redacted]

138 kV Service to Melissa Substation Project



PAPER SIZE: 17X11

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

MELISSA SUBSTATION
AND 138 kV TRANSMISSION LINES PROJECT

GENERAL LAYOUT

EXHIBIT 3

CLARK COUNTY,
STATE OF OHIO



SCALE: NTS

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

MELISSA SUBSTATION
AND 138 kV TRANSMISSION LINES PROJECT

MELISSA SUBSTATION GENERAL LAYOUT

EXHIBIT 3A

EXHIBIT 4

ATSI Transmission Zone M-3 Process
East Springfield 138 kV Customer Connection

Need Number: ATSI-2024-044
Process Stage: Solution Meeting – 07/19/2024
Previously Presented Need Meeting – 06/14/2024

Supplemental Project Driver(s):
Customer Service

Specific Assumption Reference(s):

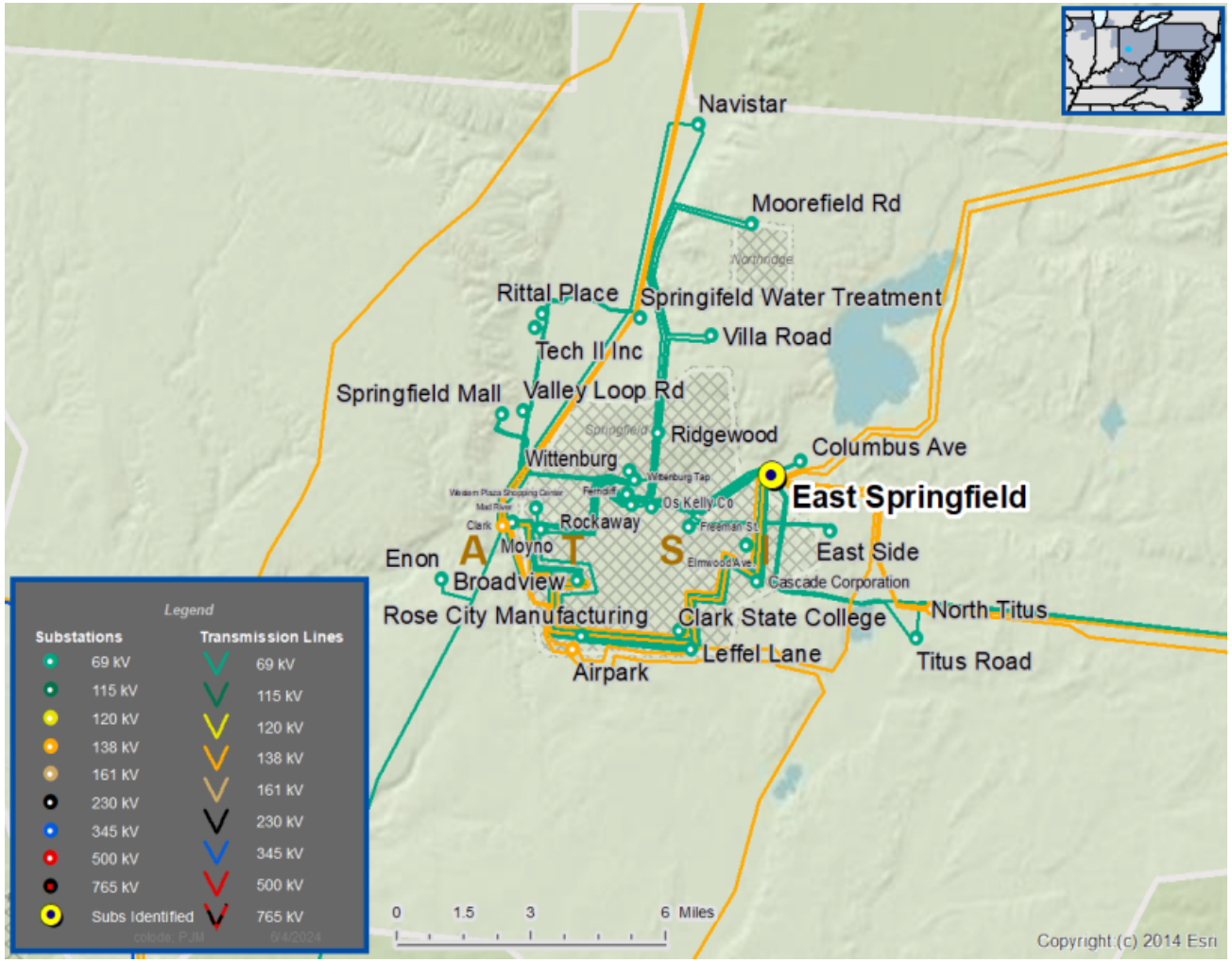
New customer connection request will be evaluated per FirstEnergy's "Requirements for Transmission Connected Facilities" document and "Transmission Planning Criteria" document.

Problem Statement

New Customer Connection – A retail customer has requested a new 138 kV delivery point in the East Springfield area. The anticipated load of the new customer connection is 200 MVA.

Forecasted In-Service Date:

September 25, 2026



ATSI Transmission Zone M-3 Process
East Springfield 138 kV Customer Connection

Need Number: ATSI-2024-044
Process Stage: Solution Meeting 07/19/2024

Proposed Solution:

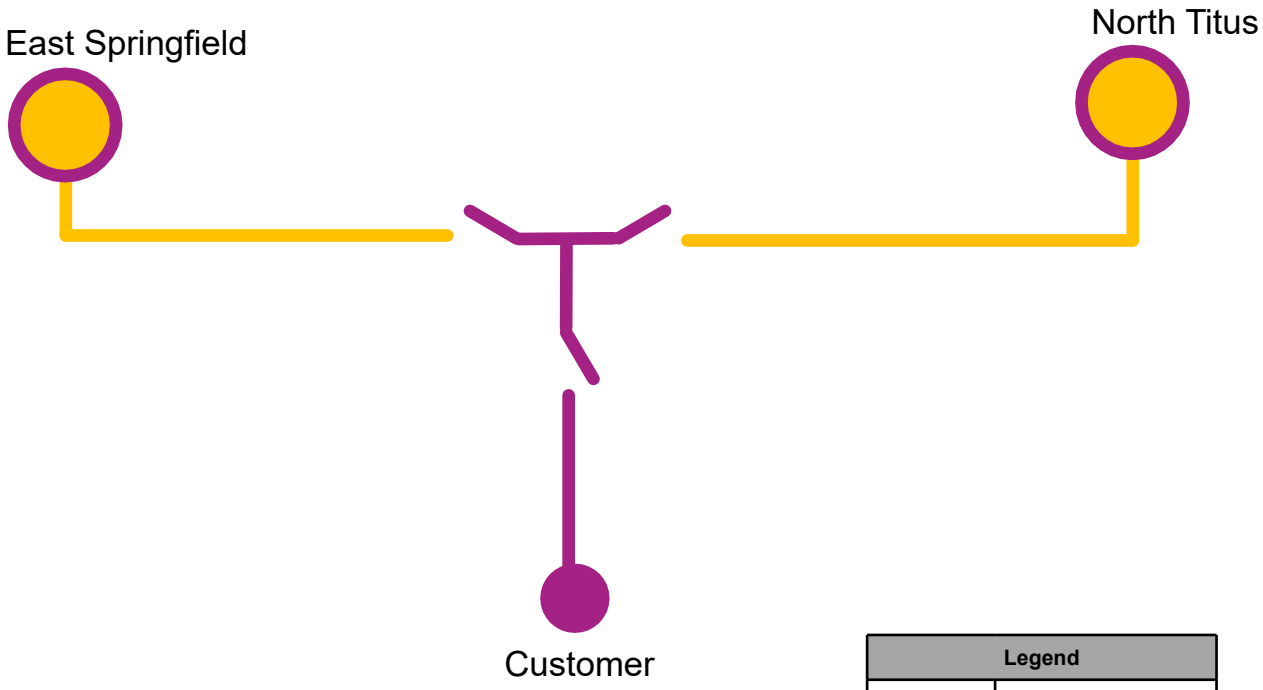
Phase 1: 138 kV Transmission Line Tap

- Install two main-line SCADA controlled switches
- Install one tap-line SCADA controlled switch
- Construct approximately 0.1 miles of 138 kV line extension.
- Adjust relay settings at East Springfield and North Titus substations
- Install revenue metering

Estimated Project Cost: $2.47M
Projected In-Service: 3/1/2025
Status: Engineering
Model: 2023 RTEP model for the 2028 Summer (50/50)

Continued on next slide…

Phase 1: 138 kV Transmission Line Tap



Legend	
500 kV	
345 kV	
138 kV	
69 kV	
34.5 kV	
23 kV	
New	

ATSI Transmission Zone M-3 Process
East Springfield 138 kV Customer Connection

Need Number: ATSI-2024-044
Process Stage: Solution Meeting 07/19/2024

Proposed Solution:

Phase 2: 138 kV Switching Station

- Build a new 11 breaker, breaker and a half, 138 kV substation
- Loop the East Springfield – London 138 kV Line in and out of the new substation
- Remove the tap on the East Springfield – North Titus 138 kV Line and loop the line in and out of the new substation.
- Install three 30 MVAR capacitor banks at the new 138 kV substation.
- Build an additional span of 138 kV line from the new substation to the POI with the customer.
- Install a second set of revenue metering.
- Adjust relay settings at London, North Titus, and East Springfield Substations

Alternatives:

- No reasonable alternatives to meet the customer's request near East Springfield area.

Estimated Project Cost: $23.6M
Projected In-Service: 11/1/2028
Status: Engineering
Model: 2023 RTEP model for the 2028 Summer (50/50)

Total Estimated Project Cost: $26.07M (Phase 1 and Phase 2)

Phase 2: 138 kV Transmission Switching Station

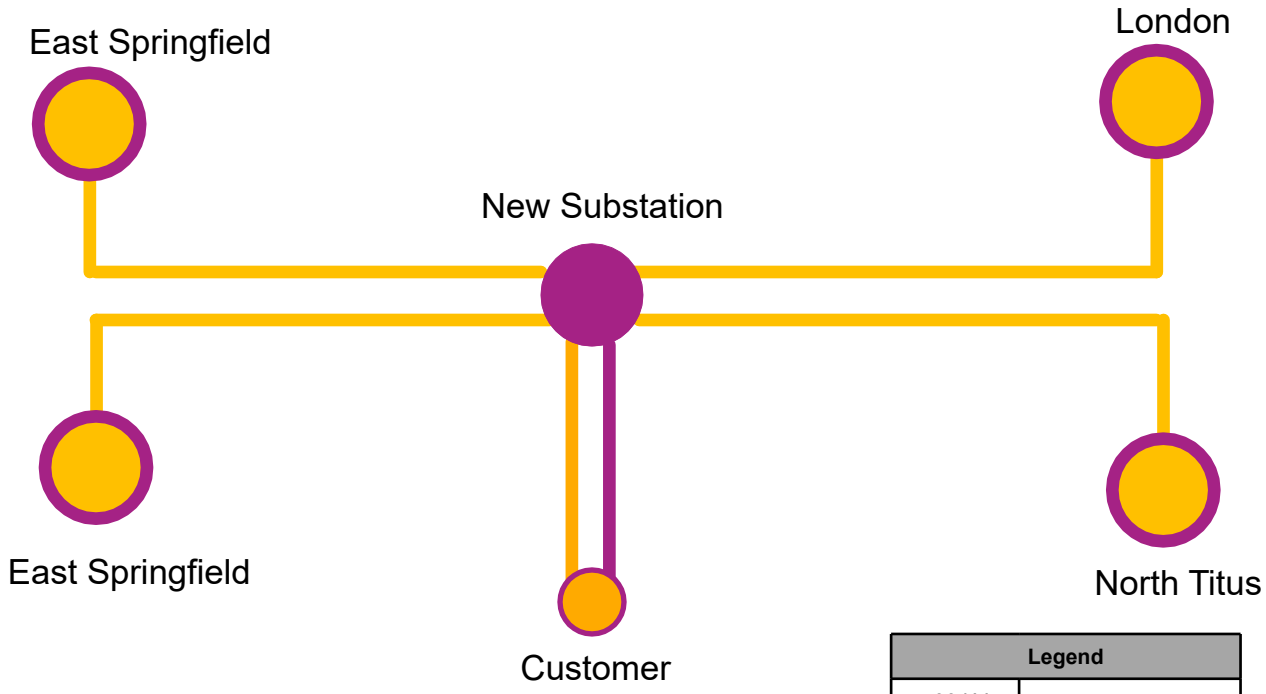
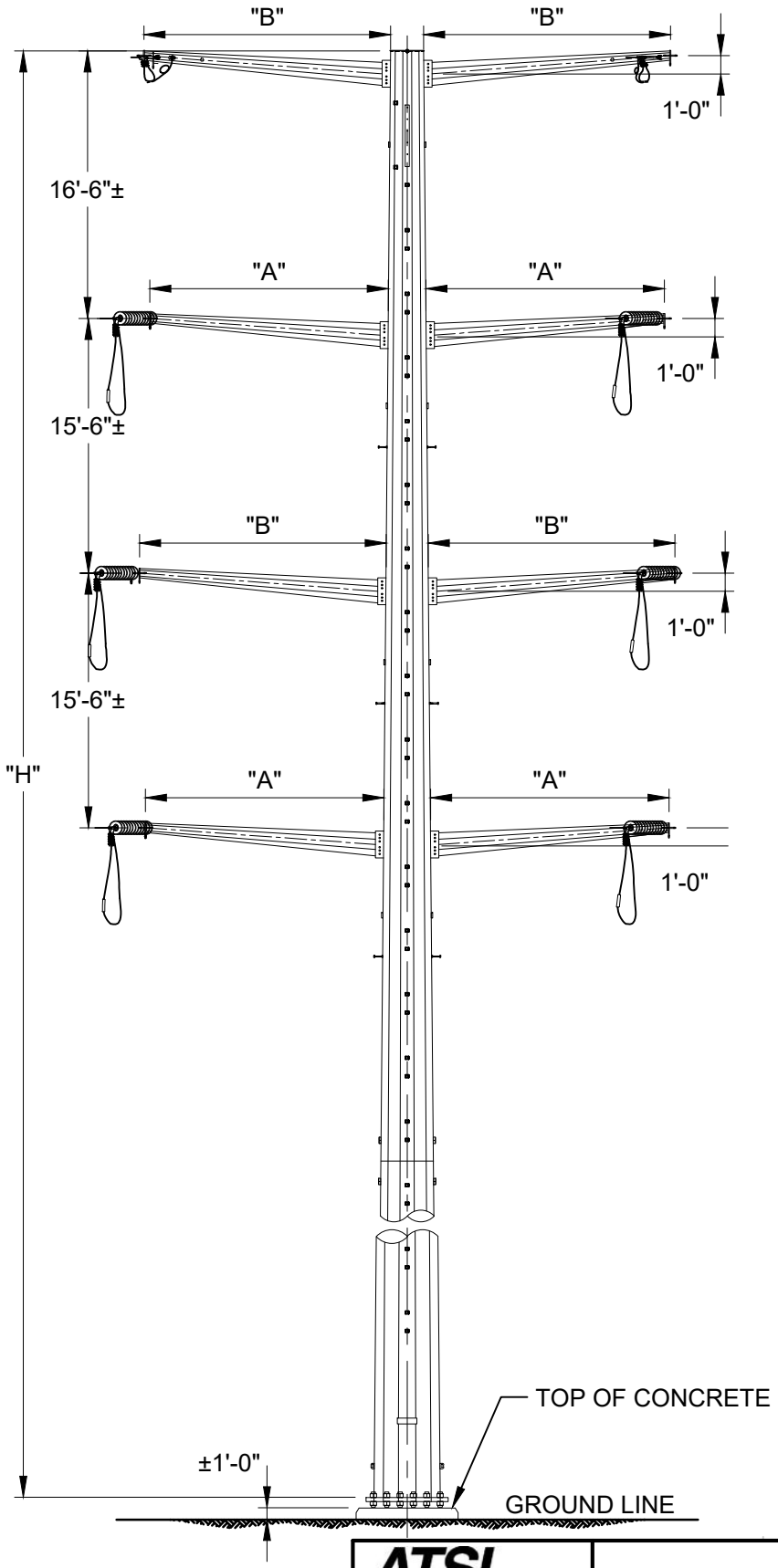


EXHIBIT 5

Melissa Substation and 138 kV Transmission Line Connections Project
Case No. 26-0877-EL-BLN

Parcel Number(s)	Easement Status	Agricultural District (Y/N)	Exp. Year
3000700010102008, 3000700010400013, 3000700010200001, 3000700010300002, 3300700004000071, 3000700010400001	Existing Existing Existing Existing Existing Existing	No No No No No No	N/A N/A N/A N/A N/A N/A
3000700010102010	Existing	Yes	2031
3050700010200006	Existing In Negotiation	No	N/A
3050700011305019	Existing In Negotiation	No	N/A



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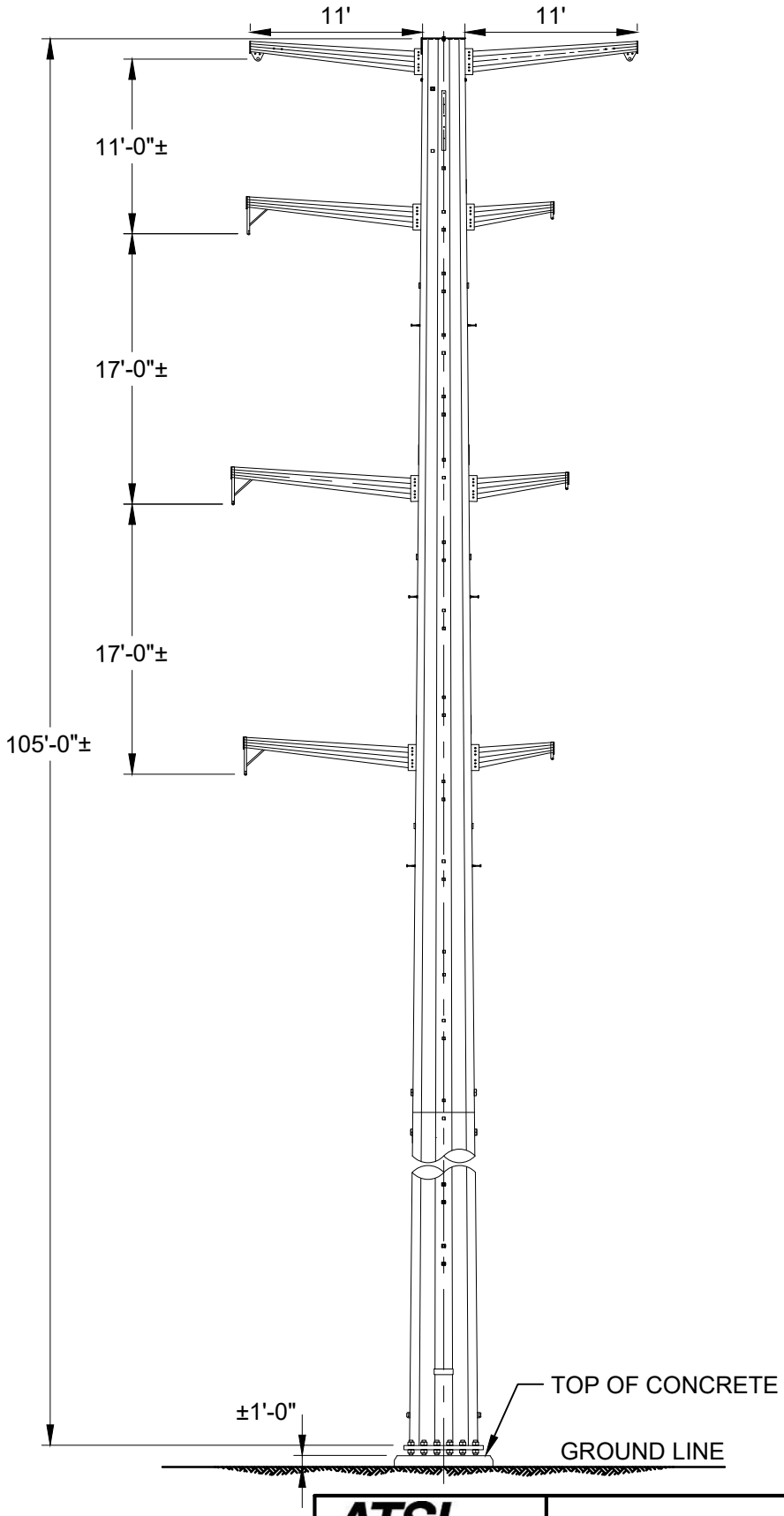
MELISSA SUBSTATION
AND 138 kV TRANSMISSION LINES PROJECT

138 kV DOUBLE CIRCUIT STEEL MONOPOLE
DEADEND STRUCTURE

EXHIBIT 6

PAPER SIZE: 8.5X11

SCALE: NTS



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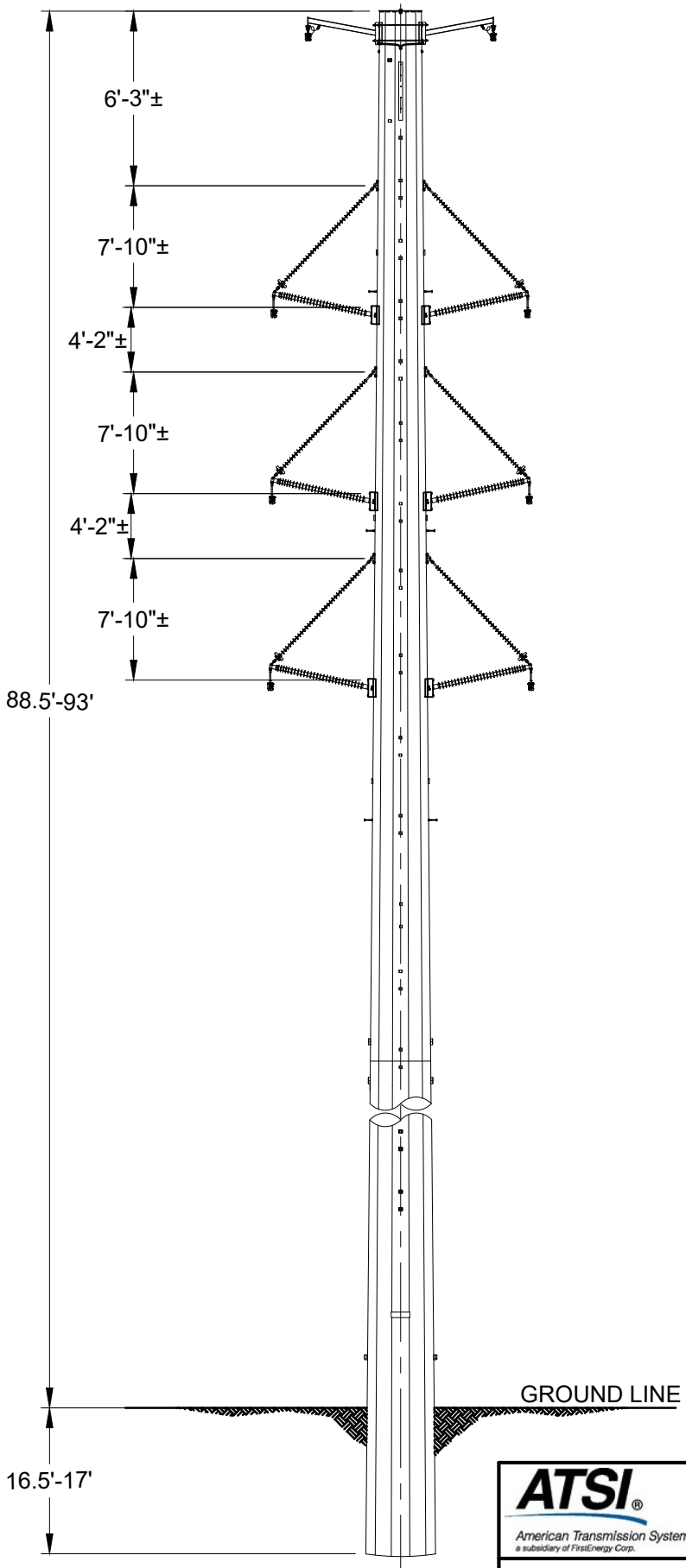
MELISSA SUBSTATION
AND 138 kV TRANSMISSION LINES PROJECT

138 kV DOUBLE CIRCUIT STEEL MONOPOLE
TANGENT STRUCTURE

EXHIBIT 7

PAPER SIZE: 8.5X11

SCALE: NTS



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a subsidiary of FirstEnergy Corp.

MELISSA SUBSTATION
AND 138 kV TRANSMISSION LINES PROJECT

138 kV DOUBLE CIRCUIT STEEL MONOPOLE
TANGENT STRUCTURE

EXHIBIT 8

SCALE: NTS

PAPER SIZE: 8.5X11

EXHIBIT 9

In reply refer to:
2025-CLA-65826

June 17, 2026

Bill Caramana
Senior Project Archaeologist
GAI Consultants
385 E. Waterfront Drive
Homestead, PA 15120
Email: w.caramana@gaiconsultants.com

RE: Section 106 Review – Melissa Substation Project, Clark County, Ohio

Dear Mr. Caramana:

This letter is in response to the receipt on May 20, 2026, of *Phase I Archaeological Investigation, Melissa Substation Project, Clark County, Ohio* (Caramana, 2026). We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code requesting cooperation among state agencies in the preservation of historic properties, Ohio Administrative Code Chapters 4906-4, as administered by the Ohio Power Siting Board (OPSB). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]). The OPSB is the lead agency for the undertaking.

The proposed undertaking involves the construction of a new 345 kV greenfield substation and transmission line/structures to tie the new substation into existing infrastructure. The Area of Potential Effect (APE) has changed since our initial consultation on the project. This was due to the avoidance of a cultural resource that was originally in the APE but has now been avoided by a redesign.

The Phase I survey involved a literature review, visual inspection, and shovel test unit excavations within the defined APE, which totals 6.09-acres. The literature review indicated that a vast majority of the larger APE falls within a previously surveyed area. Therefore, it was determined through consultation with the SHPO that these portions do not need to be resurveyed. The current focused on the un-surveyed portions of the APE and did not identify any archaeological deposits.

After careful review of the report, the SHPO agrees that as proposed, the project will have no effect on historic properties. No further coordination is required for this project unless the scope of work changes or archaeological remains are discovered during the course of the project. In such a situation, this office should be contacted as required by 36 CFR § 800.13. If you have any questions concerning this review, please me by email at sbiehl@ohiohistory.org. Thank you for your cooperation.

Sincerely,

Stephen M. Biehl

Stephen M. Biehl, Project Reviews Manager-Archaeology
Resource Protection and Review, State Historic Preservation Office

RPR Serial No. 1114113

In reply refer to:
2025-CLA-65826

August 26, 2025

Bill Caramana
Senior Project Archaeologist
GAI Consultants
385 E. Waterfront Drive
Homestead, PA 15120
Email: w.caramana@gaiconsultants.com

RE: East Springfield-London 138 kV Service to Melissa Substation Project, Clark County, Ohio

Dear Mr. Caramana:

This letter is in response to the correspondence received on July 25, 2025, regarding the above-referenced project in Clark County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code requesting cooperation among state agencies in the preservation of historic properties, Ohio Administrative Code Chapters 4906-4, as administered by the Ohio Power Siting Board (OPSB). The OPSB is the lead agency for the undertaking.

The proposed undertaking involves the construction of a new 345 kV greenfield substation and transmission line/structures to tie the new substation into existing infrastructure. According to the submission and a check of our records, the Area of Potential Effect (APE) is partially overlapped by previous cultural resource surveys. In addition, three previously recorded archaeological sites are present, two of which were previously determined not eligible for the National Register of Historic Places (NRHP). The third site, 33CL598, was determined to be potentially eligible. GAI Consultants is requesting whether the SHPO recommends further coordination in regard to archaeology. The SHPO recommends a Phase I archeological survey for the portions of the APE that fall outside of the previously surveyed areas. We also recommend that site 33CL598 is revisited, tested, and re-evaluated to determine if the current project will have an adverse effect. The results of the survey will allow for a more informed decision regarding the impact of the project on this resource and any new previously unrecorded resources that may be eligible for listing on the NRHP. GAI Consultants also recommend that based on the current scope of the project, there will be no visual impacts to historic properties or on unrecorded structures 50 years of age or older. The SHPO agrees with this assessment, and therefore no history/architecture survey is warranted for the project. We look forward to further coordination regarding this project. If you have any questions concerning this review, please contact me by email at sbiehl@ohiohistory.org. Thank you for your cooperation.

Sincerely,

Stephen M. Biehl

Stephen M. Biehl, Project Reviews Manager-Archaeology
Resource Protection and Review
State Historic Preservation Office

RPR Serial No. 1110081

EXHIBIT 10

Department of Natural Resources
ohiodnr.gov

Mike DeWine, *Governor*
Jim Tressel, *Lt. Governor*
Mary Mertz, *Director*

Office of Real Estate & Land Management
Tara Paciorek - Chief
2045 Morse Road – E-2
Columbus, Ohio 43229-6693

August 21, 2025

Kristen Vonderwish
GAI Consultants
5399 Lauby Road, Suite 120
North Canton, Ohio 44720

Re: 25-1124_East Springfield-London to Melissa Substation

Project: The proposed project involves the construction of a new 345 kV greenfield substation and associated tap line located within an approximately 60-acre area.

Location: The proposed project is located in Springfield Township, Clark County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state, or federal agency nor relieve the applicant of the obligation to comply with any local, state, or federal laws or regulations.

Natural Heritage Database: The Natural Heritage Database has the following data within one mile of the project area:

Yellow Sedge (*Carex flava*), P
Prairie Rattlesnake-root (*Nabalus racemosus*), P
Blue-leaved Willow (*Salix myricoides*), P
Prairie fen plant community

Conservation status abbreviations are as follows: E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; SI = state special interest; U = state status under review; X = presumed extirpated in Ohio; FE = federally endangered, and FT = federally threatened. Records for high quality plant communities indicate the presence of sites that are in our inventory of the best remaining examples of Ohio's pre-settlement ecosystems.

The review was performed on the specified project area as well as an additional one-mile radius. Records searched date from 1980. Features searched include locations of rare and endangered plants and animals determined to be of value to the conservation of their species, high quality plant communities, animal breeding assemblages, and outstanding geological features.

The species and features listed above are not recorded within the boundaries of the specified project area. However, please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for an area is not a statement that rare species or unique features are absent from that area.

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 entire state of Ohio is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species, the northern long-eared bat (*Myotis septentrionalis*), a state endangered and federally endangered species, the little brown bat (*Myotis lucifugus*), a state endangered species, and the tricolored bat (*Perimyotis subflavus*), a state endangered species. During the spring and summer (April 1 through September 30), these species of bats predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in clusters of dead leaves on tree limbs. However, these species are also dependent on the forest structure surrounding roost trees. If trees are present within the project area, and trees must be cleared, the DOW recommends tree and/or tree limb clearing only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with a Diameter Breast Height (DBH) ≥ 20" if possible. If trees are present within the project area, and trees and/or tree limbs must be cleared during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 through August 15, prior to any clearing. Mist net and acoustic surveys should be conducted in accordance with the most recent version of the OHIO DIVISION OF WILDLIFE AND U.S. FISH AND WILDLIFE SERVICE (OH-FIELD OFFICE) JOINT GUIDANCE FOR BAT SURVEYS. If state-listed bats are documented, DOW recommends tree clearing only occur from October 1 through March 31. However, limited summer tree clearing may be acceptable after consultation with the DOW (contact Eileen Wyza at Eileen.Wyza@dnr.ohio.gov).

For every project, the DOW also recommends that a winter bat habitat assessment is conducted to determine if potential hibernacula are present within the project area. This is to limit possible disturbances that seasonal tree clearing and/or subsurface work (e.g., trenching, blasting, etc.) may cause to hibernating bats. Potential hibernacula include rocky outcroppings, caves, and underground mines. Direction on how to conduct winter habitat assessments can be found in the joint guidance linked above. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile permanent tree clearing buffer around the hibernaculum entrance. Limited summer or winter tree clearing may be acceptable after consultation with the DOW. If a habitat assessment for projects involving subsurface disturbance finds that a potential hibernaculum is present within 5 miles of the project area, please consult with Eileen Wyza for project recommendations. If no tree clearing or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

The project is within the range of the rayed bean (*Villosa fabalis*), a state endangered and federally endangered mussel, and the snuffbox (*Epioblasma triquetra*), a state endangered and federally endangered mussel. Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, this project is not likely to impact these species.

The project is within the range of the Iowa darter *(Etheostoma exile),* a state endangered fish, and the tonguetied minnow (*Exoglossum laurae*), a state threatened fish. The DOW recommends no in-water work in perennial streams from March 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 eastern massasauga (*Sistrurus catenatus*), a state endangered and a federally threatened snake species. The eastern massasauga uses a range of habitats including wet prairies, fens, and other wetlands, as well as drier upland habitat. Due to the location, the type of habitat within 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 Kirtland's snake (*Clonophis kirtlandii*), a state threatened species. This secretive species prefers wet meadows and other wetlands. Due to the location, the type of habitat within 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 is also 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 type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

Due to the potential for impacts to federally listed species, as well as to state-listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.

Water Resources: The Division of Water Resources has not conducted a project specific review and/or comments, however, the guidance provided below should be reviewed by the Environmental Review applicant for applicability on this project and subsequent compliance.

If the subject project is in a floodplain regulated by the Federal Emergency Management Agency (FEMA), the local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals. The FEMA National Flood Hazard Layer (NHFL) Viewer website can be utilized to see if the project is in a FEMA regulated floodplain. If the project is not in a FEMA regulated floodplain, then no further action is required.

Ohio Revised Code (ORC) Section 1521.16 mandates that any owner of a property or a facility that has the capacity of withdrawing 100,000 gallons per day (gpd) of water from groundwater, surface water, or both must register with the Division of Water Resources' Water Withdrawal Facilities Registration (WWFR) Program and report their withdrawals annually.

Additional coordination may be required depending on the location of the withdrawal and consumptive use. Restrictions or permitting may be required for:

- New or increased consumptive use of water averaging 2 million gallons per day (mgd) within 30 days within the Ohio River basin.
- New or increased withdrawal and consumptive water use in the Lake Erie watershed averaging 1 million gallons per day (mgd) or more in 90 days.
- New or increased water withdrawal directly from Lake Erie averaging 2.5 million gallons per day (mgd) or more in 90 days.
- Diversion or movement of water across the Ohio River and Lake Erie basin divide.

If the project does not involve activities that are subject to water withdrawal regulatory requirements as described above, then no further action is required. For more information, visit the Water Inventory & Planning website.
ODNR appreciates the opportunity to provide these comments. Please contact Mike Pettegrew (Environmental Services Administrator) at mike.pettegrew@dnr.ohio.gov if you have questions about these comments or need additional information.

Expiration: *ODNR Environmental Reviews are typically valid for 2 years from the issuance date. If the scope of work, project area, construction limits, and/or anticipated impacts to natural resources have changed significantly from the original project submittal, then a new Environmental Review request should be submitted.*

EXHIBIT 10A

Richard C. Petyk

From: Joshua Noble
Sent: Monday, September 23, 2024 9:51 AM
To: Lawrence Peterson; Kristen L. Vonderwish
Subject: FW: 24-0932: First Energy 5C Data Center

Here is ODNR's concurrence on the hibernacula assessment.

Joshua J. Noble, MS
D 234.203.0767 **M** 330.323.1894

GAI Consultants
ENGINEERING, PLANNING, AND ENVIRONMENTAL CONSULTING SINCE 1958

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From: Mike.Pettegrew@dnr.ohio.gov <Mike.Pettegrew@dnr.ohio.gov>
Sent: Sunday, September 22, 2024 9:33 AM
To: Joshua Noble <J.Noble@gaiconsultants.com>
Subject: FW: 24-0932: First Energy 5C Data Center

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Joshua

See response below. Thanks.

Mike Pettegrew
Environmental Services Administrator
Ohio Department of Natural Resources, Office of Real Estate & Land Management
2045 Morse Road, Building E-2
Columbus, Ohio 43229
Office: (614) 265-6387
mike.pettegrew@dnr.ohio.gov
https://ohiodnr.gov/wps/portal/gov/odnr/discover-and-learn/safety-conservation/about-ODNR/real-estate/environmental-review/

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From: Wyza, Eileen <Eileen.Wyza@dnr.ohio.gov>
Sent: Friday, September 20, 2024 2:16 PM
To: Pettegrew, Mike <Mike.Pettegrew@dnr.ohio.gov>
Cc: Schweitzer, Ann <Ann.Schweitzer@dnr.ohio.gov>
Subject: RE: 24-0932: First Energy 5C Data Center

Hello Mike,

Per review of the desktop survey provided for FirstEnergy's 5C Data Center Project, the Ohio Division of Wildlife concurs with the assessment that no caves, cliffs, or mine openings occur in the project area. Therefore, the project is not likely to impact hibernating bats.

Should any reported conditions change before or during construction, please have the consultant contact me for additional guidance.

Thank you,

Eileen Wyza, Ph.D.
(she/her/hers)
Wildlife Biologist
Ohio Division of Wildlife
Phone: 614-265-6764
Email: Eileen.Wyza@dnr.ohio.gov

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From: Pettegrew, Mike
<Mike.Pettegrew@dnr.ohio.gov>
Sent: Tuesday, September 17, 2024 3:23 PM
To: Wyza, Eileen <Eileen.Wyza@dnr.ohio.gov>
Cc: Schweitzer, Ann <Ann.Schweitzer@dnr.ohio.gov>
Subject: FW: 24-0932: First Energy 5C Data Center

Eileen

For your review and concurrence (or comment). Please let me know and I can relay to the consultant. Thanks!

Mike Pettegrew
Environmental Services Administrator
Ohio Department of Natural Resources, Office of Real Estate & Land Management
2045 Morse Road, Building E-2
Columbus, Ohio 43229
Office: (614) 265-6387
mike.pettegrew@dnr.ohio.gov
https://ohiodnr.gov/wps/portal/gov/odnr/discover-and-learn/safety-conservation/about-ODNR/real-estate/environmental-review/

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From: Joshua Noble <J.Noble@gaiconsultants.com>
Sent: Tuesday, September 17, 2024 1:39 PM
To: Pettegrew, Mike <Mike.Pettegrew@dnr.ohio.gov>
Cc: Lawrence Peterson <L.Peterson@gaiconsultants.com>; Augustine Ruggiero <aruggiero@firstenergycorp.com>
Subject: 24-0932: First Energy 5C Data Center

Good afternoon, Mr. Pettegrew.
On behalf of First Energy, in response to your July 23, 2024, comment letter on the 5C Data Center project, GAI completed a desktop analysis of the Project area for potential hibernacula and completed the ecological field review. No potential hibernacula were identified by the desktop or field reviews. The attached letter provides detail for our assessment, and we are requesting your comments on or concurrence with our findings.

We appreciate your assistance in this matter.

Sincerely,

Joshua J. Noble, MS
Senior Environmental Manager 2 / Associate / Canton Office Leader
GAI Consultants, 5399 Lauby Road, Suite 120, North Canton, OH 44720
T 330.433.2680 **D** 234.203.0767 **M** 330.323.1894
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EXHIBIT 11

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
4625 Morse Road, Suite 104
Columbus, Ohio 43230
(614) 416-8993 / FAX (614) 416-8994

August 7, 2025

Project Code: 2025-0120730

Dear Ms. Vonderwish:

The U.S. Fish and Wildlife Service (Service) has received your recent correspondence requesting information about the subject proposal. We offer the following comments and recommendations to assist you in minimizing and avoiding adverse impacts to threatened, endangered, and proposed species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

Federally Threatened and Endangered Species: The endangered Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*) occur throughout the State of Ohio. The Indiana bat and northern long-eared bat may be found 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 breed that may also include adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, woodlots, fallow fields, and pastures. Roost trees for both species include live and standing dead trees ≥3 inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities. These roost trees may be located in forested habitats as well as linear features such as fencerows, riparian forests, and other wooded corridors. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet of other forested/wooded habitat. Bridges and culverts have also been used as roosts. Additionally, northern long-eared bats have been observed roosting in other human-made structures, such as buildings, barns, 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, rock crevices and abandoned mines.

Seasonal Restrictions for Federally Listed Bat Species: Should the proposed project site contain trees ≥3 inches dbh, we recommend avoiding tree removal 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 removal of any trees ≥3 inches dbh only occur between October 1 and March 31. If bridges or culverts will be impacted, we recommend reviewing Appendix K in the most recent "Range-Wide Indiana Bat & Northern Long-Eared Bat Survey Guidelines" to determine if the bridge/culvert may be suitable roost habitat. We recommend impacts to suitable bridges and culverts only occur from October 1 and March 31. These seasonal restrictions are recommended to avoid adverse effects to Indiana bats and northern long-eared bats.

If implementation of this seasonal restriction on tree cutting and impacting suitable bridge/culvert roosts is not possible, a summer presence/absence survey may be conducted for Indiana bats and northern long-eared bats. If Indiana bats and northern long-eared bats are not detected during the survey, then tree clearing and impacts to bridge/culvert roosts may occur at any time of the year. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Ohio Field Office. Surveyors must have a valid federal permit. Please note that in Ohio summer mist net surveys may only be conducted between June 1 and August 15.

Federally Proposed Species: On September 14, 2022, the Service proposed to list the tricolored bat (*Perimyotis subflavus*) as endangered under the ESA. The bat faces extinction due to the impacts of white-nose syndrome, a deadly disease affecting cave-dwelling bats across the continent. During spring, summer, and fall, this species roosts primarily among leaf clusters of live or recently dead trees, emerging at dusk to hunt for insects over waterways and forest edges. While white-nose syndrome is by far the most serious threat to the tricolored bat, other threats now have an increased significance due to the dramatic decline in the species' population. These threats include disturbance to bats in roosting, foraging, commuting, and over-wintering habitats. Mortality due to collision with wind turbines, especially during migration, has also been documented across their range. Conservation measures for the Indiana bat and northern long-eared bat will also help to conserve the tricolored bat.

On December 12, 2024 the Service proposed to list the monarch butterfly (*Danaus plexippus plexippus*) as threatened under the ESA. Monarch butterflies are found throughout Ohio and some populations migrate vast distances across multiple generations each year. Many monarchs fly between the U.S., Mexico and Canada – a journey of over 3,000 miles. Monarch populations have declined significantly in recent years. Threats include habitat loss – particularly the loss of milkweed, the monarch caterpillar's sole food source – and mortality resulting from pesticide use. The Service recommends the following actions to maintain habitat and avoid impacts to monarchs in Ohio: revegetate disturbed areas with native plant species including nectar-producing plants and milkweed endemic to the area; limit mowing monarch habitat from March 15 to August 31 when monarchs are breeding and from September 1 to October 31 when large numbers of monarchs are migrating; and avoid the use of pesticides and herbicides in and near monarch habitat.

Section 7 Coordination: If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), then 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 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. This letter provides technical assistance only and does not serve as a completed section 7 consultation document.

Stream and Wetland Avoidance: Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus is it important to conserve the functions and values of the remaining wetlands in Ohio (https://epa.ohio.gov/portals/47/facts/ohio_wetlands.pdf). We recommend avoiding and minimizing project impacts to all wetland habitats (e.g., forests, streams, vernal pools) to the maximum extent possible in order to benefit water quality and fish and wildlife habitat. Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the U.S. Army 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. Disturbed areas should be mulched and revegetated with native plant species. In addition, prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat. Should the project design change, or 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, coordination with the Service should be initiated to assess any potential impacts.

Thank you for your efforts to conserve listed species and sensitive habitats in Ohio. We recommend coordinating with the Ohio Department of Natural Resources due to the potential for the proposed project to affect state listed species and/or state lands. Contact Mike Pettegrew, Environmental Services Administrator, at (614) 265-6387 or at mike.pettegrew@dnr.ohio.gov.

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,

Erin Knoll
Field Office Supervisor

cc: Matthew.Stooksbury@dnr.ohio.gov
Eileen.Wyza@dnr.ohio.gov

EXHIBIT 12

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Wetland Delineation and Stream Identification Report

FirstEnergy Corporation
Melissa Substation Project
Clark County, Ohio

GAI Project Number: R240869.00, Task 001
May 2026

Prepared by: GAI Consultants, Inc.
Pittsburgh Office
385 East Waterfront Drive
Homestead, Pennsylvania 15120-5005

Prepared for: FirstEnergy Corporation
341 White Pond Drive
Akron, Ohio 44320-1119

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Figure 2 Resource Location Map
Figure 3 Stream Eligibility Map

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Appendix B Wetland Determination Forms
Appendix C Primary Headwater Habitat Evaluation (HHEI) Data Forms
Appendix D Resume of Staff Conducting the Wetland Delineations

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1.0 Introduction

GAI Consultants, Inc. (GAI), on behalf of FirstEnergy Corporation (FE), completed a wetland delineation and stream identification survey for the Melissa Substation (Project).

The Project is located in Clark County, Ohio (OH) (Figure 1). The proposed Project involves the construction of a new 345 kV greenfield substation and construction of transmission line structures to tie the new substation into existing infrastructure.

This report details the survey of the Project area to determine the existence of jurisdictional aquatic resources. A wetland delineation and stream identification survey were completed on May 29, 2025, and May 4, 2026. The study area consisted of approximately 86 acres.

The Project is located in the following watershed and United States Geological Survey (USGS) Hydrologic Unit 12 Codes (HUCs):

- North Fork Little Miami River HUC No. 050902020102

This report provides a discussion of the methods and results of the wetland delineation and stream identification survey. Photographs of identified stream features are included in Appendix A.

The United States Army Corps of Engineers (USACE) Wetland Determination Forms are provided in Appendix B. Primary Headwater Habitat Evaluation (HHEI) Data Forms are provided in Appendix C. The resumes of the staff conducting the wetland delineations are provided in Appendix D.

1.1 Wetlands

The *1987 USACE Corps of Engineers Wetlands Delineation Manual* (Wetlands Delineation Manual) (USACE, 1987) and the *2012 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0* (Regional Supplement) (USACE, 2012) describe the methods used to identify and delineate wetlands that fall under the jurisdiction of the USACE. This approach recognizes the three parameters of wetland hydrology, hydrophytic vegetation, and hydric soils to identify and delineate wetland boundaries. In accordance with the Wetlands Delineation Manual and Regional Supplement, GAI completed preliminary data gathering and onsite inspections.

1.1.1 Preliminary Data Gathering

The preliminary data gathering was used to compile and review information that may be helpful in identifying wetlands and/or areas that warrant further inspection during the investigation. The preliminary data gathering included a review of the following:

- USGS 7.5-minute topographic mapping for New Moorefield (USGS, 1982a), and Springfield (USGS, 1982b) OH (Figure 1);
- United States Fish and Wildlife Service (USFWS), National Wetlands Inventory (NWI) mapping (USFWS, 2024) (Figure 2);
- Federal Emergency Management Agency (FEMA), National Flood Hazard Layer (FEMA, 2022) (Figure 2); and
- United States Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS, 2024) soil mapping (Figure 2).

Topographic mapping was used to identify mapped streams and the overall shape of the landscape in the Project area to determine potential locations for wetlands, such as floodplains and depressions. NWI mapping was used to determine locations where probable wetlands are located based on infrared photography. Soil mapping was reviewed to determine the location and extent of mapped hydric soils that have a high probability of containing wetlands.

1.1.2 Onsite Inspection

The methodology described in the Regional Supplement identifies areas meeting the definition of a wetland by evaluating three parameters: hydrology, vegetation, and soil. During the on-site inspection, GAI staff traversed the Project study area on foot to determine if any indicators of wetlands were present. When indicators of wetlands were observed, an observation point was established, and a Wetland Determination Data Form (Data Form) was completed to determine if all three wetland indicators were present.

The presence of wetland hydrology was determined by examining the observation point for primary and secondary indicators of wetland hydrology. The presence of any primary indicator signified the presence of wetland hydrology, or the presence of two or more secondary indicators signified the presence of wetland hydrology.

Vegetation was characterized by four different strata. This included trees (woody plants, excluding vines, three inches or more in diameter at breast height [DBH]), saplings/shrubs (woody plants, excluding vines, less than three inches DBH and greater than or equal to 3.28 feet tall), herbs (non-woody plants, regardless of size, and all other plants less than 3.28 feet tall), and woody vines (greater than 3.28 feet tall). In general, trees and woody vines were sampled within a thirty-foot (30') radius, saplings and shrubs were sampled within a fifteen-foot (15') radius, and herbs were sampled within a five-foot (5') radius.

When evaluating an area for the presence of hydrophytes, classification of the indicator status of vegetation was based on *The National Wetland Plant List: 2016 Update of Wetland Ratings* (Lichvar et al., 2016). The list of possible indicator statuses for plants is as follows:

- Obligate Wetland (OBL) - Obligate Wetland plants occur in standing water or in saturated soils.
- Facultative Wetland (FACW) - Facultative Wetland plants nearly always occur in areas of prolonged flooding or require standing water or saturated soils but may on rare occasions occur in non-wetlands.
- Facultative (FAC) - Facultative plants occur in a variety of habitats, including wetland and mesic to xeric non-wetland habitats but often occur in standing water or saturated soils.
- Facultative Upland (FACU) - Facultative Upland plants typically occur in xeric or mesic non-wetland habitats but may frequently occur in standing water or saturated soils.
- Obligate Upland (UPL) - Obligate Upland plants almost never occur in water or saturated soils.

Presence of hydrophytic vegetation was determined by using a Rapid Test, Dominance Test, or Prevalence Index (USACE, 2012). The Rapid Test finds a vegetation community to be hydrophytic if all dominant species are OBL or FACW. Hydrophytic vegetation was considered present based on the Dominance Test if more than 50 percent of dominant species are OBL, FACW, or FAC. The Prevalence Index weighs the total percent of vegetation cover based on the indicator status of each plant. Hydrophytic vegetation was considered present when the Prevalence Index is less than or equal to 3.0.

To determine the presence of hydric soils, soil data was collected by digging a minimum 16-inch soil pit. The soil profile was studied and described, while possible hydric indicators were examined. Soil indicators described in the Wetlands Delineation Manual and Regional Supplement were used to determine the presence of hydric soils. The presence of any of these indicators signified a hydric soil.

If all three parameters, including wetland hydrology, a dominance of hydrophytic vegetation, and hydric soils, were identified at a single observation point, the area was determined to be a wetland. Once a wetland was identified, the boundary was delineated.

Wetland boundaries were determined by looking for locations in which one of the three wetland indicators would transition into an upland characteristic. When the transition was identified, a Data Form was completed in the Upland Area. Wetland boundaries were then marked in the field using pink flagging labeled “WETLAND DELINEATION.” The locations of the flags were recorded using a Global Positioning System (GPS) unit. Each wetland was codified with a unique identifier indicating the feature type and number (e.g., WOH-KLV-001).

Wetlands were then classified using the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al., 1979) as modified for NWI Mapping Convention. This system classifies wetlands based on topographic position and vegetation type. Palustrine system wetlands found within the study area are classified as Palustrine Emergent (PEM), Palustrine Scrub-Shrub (PSS), Palustrine Forested (PFO), or Palustrine Unconsolidated Bottom (PUB) based on aerial coverage of the vegetative community across the extent of the wetland boundary (Cowardin et al., 1979).

1.2 Waterbodies

As with wetlands, Section 404 of the Clean Water Act (CWA) and state regulations protect waterbodies in OH. Generally, waterbodies are defined as environmental features that have defined beds and banks, ordinary high-water mark (OHWM), and contain flowing or standing water for at least a portion of the year.

1.2.1 Preliminary Data Gathering

During the preliminary data gathering, the USGS 7.5-minute topographic mapping was examined for the presence of mapped waterbodies including perennial and intermittent streams. In addition, the topographic mapping was used to identify areas likely to contain unmapped waterbodies including ephemeral streams (USGS, 1982a, 1982b) (Figure 1).

The Ohio Environmental Protection Agency (OEPA) Stream Eligibility Web Map was used to determine eligibility coverage under the 401 Water Quality Certification (WQC) for the 2017 Nationwide Permits (NWPs). Furthermore, the map was used to identify any ineligible areas that may require a Clean Water Act (CWA) Section 401 individual permit from the OEPA should stream impacts occur within the Project area (OEPA, 2017) (Figure 3).

2.2.2 Onsite Inspection

During the onsite inspection, GAI staff traversed the study area, concurrently with the wetland inspection, and waterbodies were identified. Waterbodies were identified based on the morphological and hydrologic characteristics of the channel and the presence of aquatic macroinvertebrates.

When a waterbody was identified, field measurements were collected. The measurements included top of bank width, top of bank depth, pool depth, water depth, OHWM width, and OHWM depth. A detailed description of substrate composition was also recorded. Waterbodies were then delineated using white flagging marked with the GAI stream code (e.g., SOH-KLV-001). The tops-of-bank for streams wider than 10 feet were delineated and the centerline of smaller streams were delineated. The locations of the flags were recorded using a sub-meter capable hand-held GPS unit.

2.0 Results

2.1 Wetlands

2.1.1 Preliminary Data Gathering

A desktop review of available USFWS NWI digital data for the Project identified one previously mapped NWI wetland within the Project Study Area (USFWS, 2024). The wetland (PEM1Ad) was not identified during the field review, instead a soil test pit (STP) was taken to provide data to show that this area qualified as an upland area and not a wetland. This STP was identified as STP-EMB-001.

According to the USDA-NRCS soil mapping, 4 soil mapping units are located within the study area (Figure 2). Soil mapping units with a hydric rating included the following:

- Kokomo silty clay loam, 0 to 2 percent slopes (Ko).

2.1.2 Onsite Inspection

No wetlands were identified or delineated within the Project study area.

2.2 Waterbodies

2.2.1 Preliminary Data Gathering

Desktop review of the available USGS National Hydrography Dataset for the Project revealed one mapped stream segment located within the Project study area (USGS, 2023).

2.2.2 Onsite Inspection

One stream segment was identified and delineated within the Project study area. The stream segment is classified as having an intermittent flow regime. Information on the identified stream segment and its classification can be found in Table 1, and photographs of the identified stream segments are included in Appendix A.

One stormwater erosional feature (SWE) was also identified within the Project study area. The SWE did not appear to meet the criteria of a stream and did not have an OHWM.

3.0 Conclusion

Wetland delineation and waterbody identification field surveys were conducted within the Project study area on May 29, 2025, and May 4, 2026. One stream was identified within the Project study area. A summary of the delineated feature is provided in Table 1, and a map of its location is provided on Figure 2. Stream photographs are provided in Appendix A. Data forms documenting the investigations are provided in Appendix B and C. The resumes of the staff conducting the wetland delineations are provided in Appendix D.

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United States Geological Survey. 1982b. Springfield, Ohio 7.5-Minute Topographic Quadrangle (1:24,000).

TABLES

Table 1

Waterbodies Identified Within the Project Study Area

Stream ID[1]	Location[2]		Stream Type	Stream Name	Delineated Length (feet)[3]	Bankfull Width (feet)[4]	OHWM Width (feet)	Field Evaluation			Ohio EPA 401 Eligibility[8]
	Latitude	Longitude						Method	Score[5, 6]	Category[5] / Rating[6] / OAC Aquatic Life Designation[7]	
SOH-EMB-001	39.912142	-83.735552	Intermittent	UNT to North Fork Miami River	460	3	2	HHEI	35	Class II	Possibly Eligible
				Total	**460**						

Notes:

1 GAI map designation.

2 North American Datum, 1983.

3 Total stream length (in feet) located within the Project study area.

4 Width in feet from tops of stream bank.

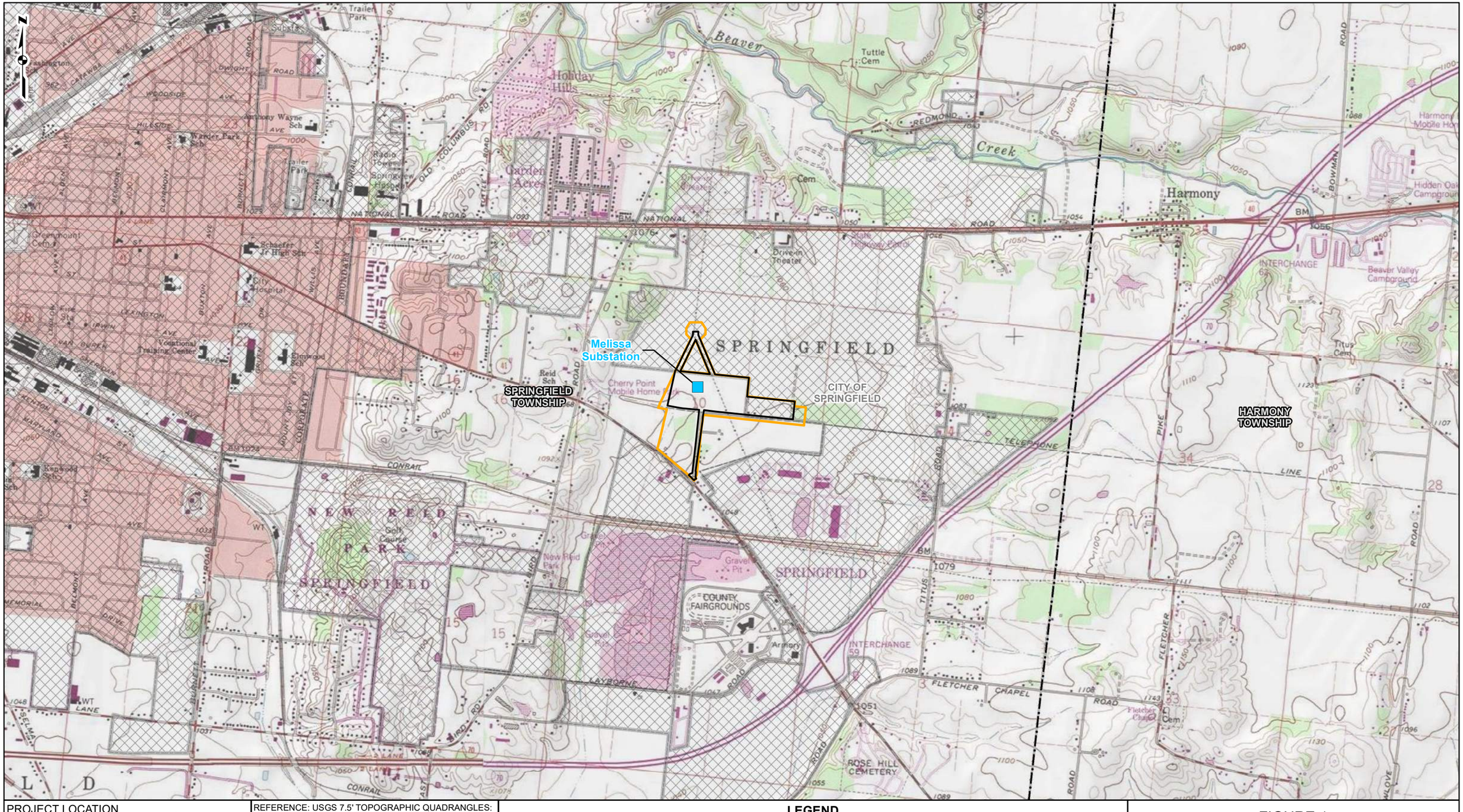
5 Categorization for OEPA Headwater Habitat Evaluation Index (HHEI) Primary Headwater Habitats (PHWH). HHEI Score and comparison to HHEI Flow Chart places streams into six PHWH categories: Rheocrene, Class I (natural channel), Modified Class I (modified channel), Class II (natural channel), Modified Class II (modified channel), Class III. For streams with a Rheocrene designation a biological survey using Level 3 Assessment methods for amphibians and benthic macroinvertebrates was not completed.

6 Narrative rating for headwater streams using the OEPA Qualitative Habitat Evaluation Index (QHEI). Excellent = ≥70; Good = 55 - 60; Fair = 43 - 54; Poor = 30 - 42; Very Poor = <30.

7 As defined by Ohio Administrative Code (OAC) Chapter 3745-1-24 Water Quality Standards for Muskingum River tributaries drainage basin effective May 22, 2017. Water use designations and statewide criteria are defined in OAC 3745-1-07; https://epa.ohio.gov/static/Portals/35/rules/01-all.pdf?ver=Eaa7s8hOK8IRHn1XA8nXDA%3d%3d.

8 As defined by the Clean Water Act Section 401 Water Quality Certification (WQC) conditions for stream eligibility coverage under the 2021 NWP program. Streams located in Possibly Eligible areas are eligible for coverage if the pH is <6.5 or stream flow is ephemeral. Streams located in Possibly Eligible areas are also eligible for coverage if the HHEI score is <50, or if the HHEI score is between 50-69 and substrate composition is <10% coarse types (includes cumulative percentage of bedrock, boulders, boulder slabs, and cobble). Streams located in Possibly Eligible areas are also eligible for coverage if the QHEI score is <50 and the drainage area is <3.0 square miles or the score is <55 and the drainage area is ≥3.0 square miles.

FIGURES



PROJECT LOCATION



CLARK COUNTY, OHIO

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: NEW MOOREFIELD (1982) AND SPRINGFIELD (1982), OHIO, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND USGS, ACCESSED 05/2026.

LEGEND

- Proposed Substation
- Environmental Study Area
- Limit Of Disturbance
- Township Boundary
- Municipal Boundary

0 1,000 2,000 4,000 Feet

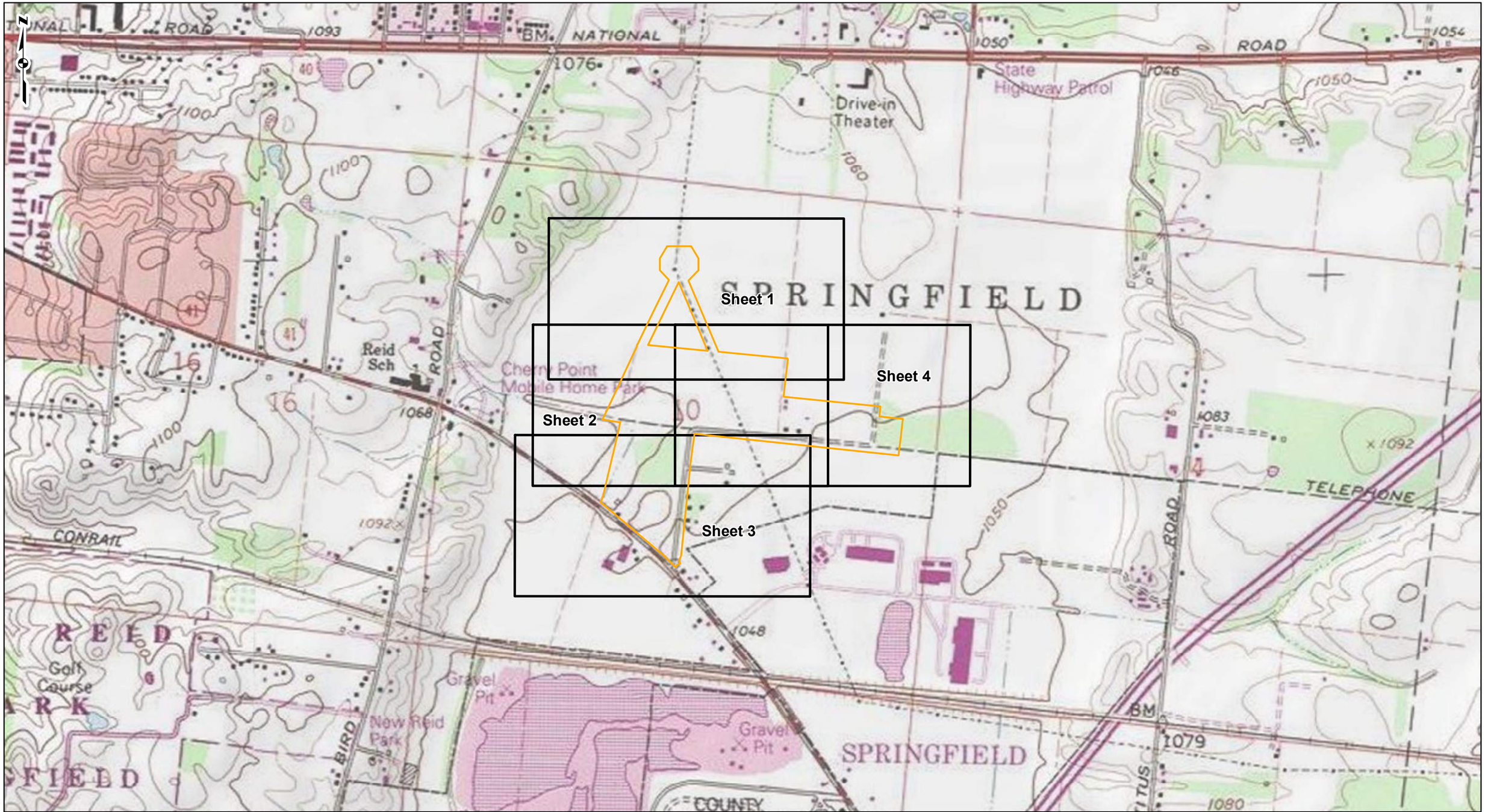
FIGURE 1
PROJECT LOCATION MAP

MELISSA SUBSTATION PROJECT
FIRSTENERGY CORPORATION

gaiconsultants. FirstEnergy

DRAWN BY: MD	DATE: 5/15/2026
CHECKED: JAP	APPROVED:

G:_2024\R240869.00 - GIS\MXD\WDSIR\Melissa_Substation\Fig1_Project_Location_2026_05_13.mxd



PROJECT LOCATION



CLARK COUNTY, OHIO

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: NEW MOOREFIELD (1982) AND SPRINGFIELD (1982), OHIO, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND USGS, ACCESSED 05/2026.

LEGEND

Environmental Study Area

Sheet Index

0 500 1,000 2,000 Feet

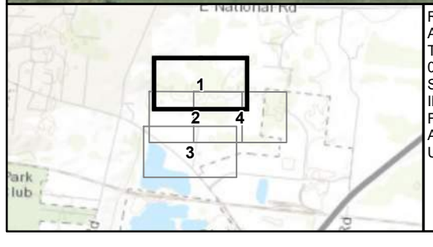
FIGURE 2
RESOURCE LOCATION MAP
SHEET INDEX

MELISSA SUBSTATION PROJECT
FIRSTENERGY CORPORATION

DRAWN BY: MD DATE: 5/15/2026
CHECKED: JAP APPROVED:

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REFERENCE: WORLD IMAGERY, MAXAR (2023), ESRI, ARCGIS ONLINE, ACCESSED 05/2026. WORLD TRANSPORTATION, ESRI, ARCGIS ONLINE, ACCESSED 05/2026. NATIONAL HYDROGRAPHY DATASET (NHD) STREAMS, USGS, 2023. NATIONAL WETLAND INVENTORY (NWI) WETLANDS, USFWS, 2025. FLOODPLAINS, FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), 2025. CONTOUR DATA, DERIVED FROM USGS DEMS, DOWNLOADED 2024.

LEGEND

- Existing Culvert
- Soil Test Pit
- Stormwater Feature
- Stream
- Environmental Study Area
- 2-Ft Contour
- NHD Stream
- NWI Wetland
- 100-Year FEMA Floodplain

0 100 200 400 Feet

FIGURE 2
RESOURCE LOCATION MAP
SHEET 1 OF 4

MELISSA SUBSTATION PROJECT
FIRSTENERGY CORPORATION

DRAWN BY: MD
CHECKED: JAP
DATE: 5/15/2026
APPROVED:

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REFERENCE: WORLD IMAGERY, MAXAR (2023), ESRI, ARCGIS ONLINE, ACCESSED 05/2026. WORLD TRANSPORTATION, ESRI, ARCGIS ONLINE, ACCESSED 05/2026. NATIONAL HYDROGRAPHY DATASET (NHD) STREAMS, USGS, 2023. NATIONAL WETLAND INVENTORY (NWI) WETLANDS, USFWS, 2025. FLOODPLAINS, FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), 2025. CONTOUR DATA, DERIVED FROM USGS DEMS, DOWNLOADED 2024.

LEGEND

- Existing Culvert
- Soil Test Pit
- Stormwater Feature
- Stream
- Environmental Study Area
- 2-Ft Contour
- NHD Stream
- NWI Wetland
- 100-Year FEMA Floodplain

0 100 200 400 Feet

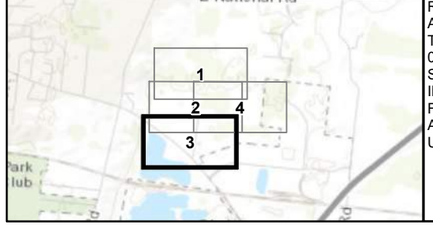
FIGURE 2
RESOURCE LOCATION MAP
SHEET 2 OF 4

MELISSA SUBSTATION PROJECT
FIRSTENERGY CORPORATION

DRAWN BY: MD
DATE: 5/15/2026
CHECKED: JAP
APPROVED:

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REFERENCE: WORLD IMAGERY, MAXAR (2023), ESRI, ARCGIS ONLINE, ACCESSED 05/2026. WORLD TRANSPORTATION, ESRI, ARCGIS ONLINE, ACCESSED 05/2026. NATIONAL HYDROGRAPHY DATASET (NHD) STREAMS, USGS, 2023. NATIONAL WETLAND INVENTORY (NWI) WETLANDS, USFWS, 2025. FLOODPLAINS, FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), 2025. CONTOUR DATA, DERIVED FROM USGS DEMS, DOWNLOADED 2024.

LEGEND

- Existing Culvert
- Soil Test Pit
- Stormwater Feature
- Stream
- Environmental Study Area
- 2-Ft Contour
- NHD Stream
- NWI Wetland
- 100-Year FEMA Floodplain

0 100 200 400 Feet

FIGURE 2
RESOURCE LOCATION MAP
SHEET 3 OF 4

MELISSA SUBSTATION PROJECT
FIRSTENERGY CORPORATION

DRAWN BY: MD
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DATE: 5/15/2026
APPROVED:

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N
1050
1050
1050





REFERENCE: WORLD IMAGERY, MAXAR (2023), ESRI, ARCGIS ONLINE, ACCESSED 05/2026. WORLD TRANSPORTATION, ESRI, ARCGIS ONLINE, ACCESSED 05/2026. NATIONAL HYDROGRAPHY DATASET (NHD) STREAMS, USGS. 2023. AQUATIC LIFE USE STREAMS, OHIO EPA, 2019. SOIL SURVEY GEOGRAPHIC (SSURGO) DATABASE, USDA/NRCS, 2025. STREAM ELIGIBILITY, OHIO EPA, 401 WATER QUALITY CERTIFICATION, 2023.

LEGEND

- Existing Culvert
- Stream
- Environmental Study Area
- NHD Stream
- OH WQS Stream
- Soil Type Boundary

OH EPA Stream Eligibilty:

- Eligible
- Ineligible
- Possibly Eligible

0 300 600 1,200 Feet

FIGURE 3
STREAM ELIGIBILITY MAP

MELISSA SUBSTATION PROJECT
FIRSTENERGY CORPORATION

DRAWN BY: MD
CHECKED: JAP
DATE: 5/15/2026
APPROVED:

G:_2024\R240869.00 - GIS\MXD\WDSIR\Melissa_Substation\Fig3_Stream_Eligibility_2026_05_13.mxd

APPENDIX A
Photographs

gai consultants
transforming ideas into reality



**SOH-EMB-001, Intermittent
Upstream Facing West (05/29/2026)**



**SOH-EMB-001, Intermittent
Downstream Facing East (05/29/2026)**



**SOH-EMB-001, Intermittent
Upstream Facing West (05/29/2025)**



**SOH-EMB-001, Intermittent
Downstream Facing East (05/29/2025)**



**Representative Upland Habitat
(05/29/2025)**



**Representative Upland Habitat
(05/04/2026)**



Representative Upland Habitat
(05/04/2026)



Representative Upland Habitat
(05/04/2026)

APPENDIX B
Wetland Delineation Identification Forms

gai consultants
transforming ideas into reality

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Melissa Substation City/County: Clark Co. Sampling Date: 5/25/2025

Applicant/Owner: First Energy State: OH Sampling Point: TP-01

Investigator(s): LJH, EMB Section, Township, Range: No PLSS

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): none

Slope (%): 0 Lat: 39.911940 Long: -83.734949 Datum: NAD 83

Soil Map Unit Name: Ko: Kokomo silty clay loam, 0 to 2 percent slopes NWI classification: PEM1Ad

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes ____ No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30'r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Malus Coronaria	5	no	UPL
2.			
3.			
4.			
5.			
	5 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15'r)			
1. Absent			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5'r)			
1. Ambrosia trifida	70	Yes	FAC
2. Phalaris arundinacea	60	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	130 = Total Cover		
Woody Vine Stratum (Plot size: 30'r)			
1. Absent			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species 60	x 2 =	120
FAC species 70	x 3 =	210
FACU species	x 4 =	
UPL species 5	x 5 =	25
Column Totals: 135 (A)		355 (B)

Prevalence Index = B/A = 2.63

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ____ 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: TP-01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 5/2	100					CL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Melissa Substation City/County: Clark Co. Sampling Date: 5/25/2025

Applicant/Owner: First Energy State: OH Sampling Point: TP-02

Investigator(s): LJH, EMB Section, Township, Range: No PLSS

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): none

Slope (%): 0 Lat: 39.912003 Long: -83.734532 Datum: NAD 83

Soil Map Unit Name: WrA: Waynetown silt loam, 0 to 2 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes ____ No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30'r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Absent			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15'r)			
1. Absent			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5'r)			
1. Ambrosia trifida	40	Yes	FAC
2. Phalaris arundinacea	40	Yes	FACW
3. Iris versicolor	80	Yes	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	160 = Total Cover		
Woody Vine Stratum (Plot size: 30'r)			
1. Absent			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	80	x 1 =	80
FACW species	40	x 2 =	80
FAC species	40	x 3 =	120
FACU species	____	x 4 =	____
UPL species	____	x 5 =	____
Column Totals:	160 (A)		280 (B)

Prevalence Index = B/A = 1.75

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ____ 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: TP-02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 5/2	100					CL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Melissa Substation City/County: Clark Co. Sampling Date: 5/25/2025

Applicant/Owner: First Energy State: OH Sampling Point: TP-03

Investigator(s): LJH, EMB Section, Township, Range: No PLSS

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): none

Slope (%): 0 Lat: 39.912363 Long: -83.734541 Datum: NAD 83

Soil Map Unit Name: Ko: Kokomo silty clay loam, 0 to 2 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____ No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30'r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Absent			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15'r)			
1. Absent			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5'r)			
1. Absent			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	160 = Total Cover		
Woody Vine Stratum (Plot size: 30'r)			
1. Absent			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

Fallow ag field, no veg

SOIL

Sampling Point: TP-03

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/2	100					CL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No _____ Depth (inches): 2 in

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 1 in

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Melissa Substation City/County: Clark Co. Sampling Date: 5/25/2025

Applicant/Owner: First Energy State: OH Sampling Point: TP-04

Investigator(s): LJH, EMB Section, Township, Range: No PLSS

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): none

Slope (%): 0 Lat: 39.912339 Long: -83.735698 Datum: NAD 83

Soil Map Unit Name: Ko: Kokomo silty clay loam, 0 to 2 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____ No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes ____ No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30'r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Absent			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15'r)			
1. Absent			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5'r)			
1. Ambrosia trifida	20		
2. Zea mays	40		
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	60 = Total Cover		
Woody Vine Stratum (Plot size: 30'r)			
1. Absent			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	____	x 1 =	____
FACW species	____	x 2 =	____
FAC species	20	x 3 =	60
FACU species	____	x 4 =	____
UPL species	40	x 5 =	200
Column Totals:	60 (A)		260 (B)

Prevalence Index = B/A = 4.33

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- ____ 2 - Dominance Test is >50%
- ____ 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

Ag Field

SOIL

Sampling Point: TP-04

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/2	100					CL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Melissa Substation City/County: Clark Co. Sampling Date: 5/25/2025

Applicant/Owner: First Energy State: OH Sampling Point: TP-05

Investigator(s): LJH, EMB Section, Township, Range: No PLSS

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): none

Slope (%): 0 Lat: 39.912217 Long: -83.734992 Datum: NAD 83

Soil Map Unit Name: Ko: Kokomo silty clay loam, 0 to 2 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes ____ No ____
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30'r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Absent			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15'r)			
1. Absent			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5'r)			
1. Ambrosia trifida	10	no	FAC
2. Schoenoplectus tabernaemontani	5	no	OBL
3. Leersia oryzoides	80	yes	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	95 = Total Cover		
Woody Vine Stratum (Plot size: 30'r)			
1. Absent			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	85	x 1 =	85
FACW species		x 2 =	
FAC species	10	x 3 =	30
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	95 (A)		115 (B)

Prevalence Index = B/A = 1.21

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- ____ 2 - Dominance Test is >50%
- ____ 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: TP-05

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 5/2	100	None				CL	No redox present

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 6

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Melissa Substation City/County: Clark Co. Sampling Date: 5/4/2026

Applicant/Owner: First Energy State: OH Sampling Point: STP 001

Investigator(s): KLV, BLG Section, Township, Range: Section 10 Township 5 East, Range 9 North

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None

Slope (%): 0 Lat: 39.911115 Long: -83.734683 Datum: NAD 83

Soil Map Unit Name: WrA: Waynetown silt loam, 0 to 2 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Soil Test Pit (001). Data taken within forested area.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30'r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Prunus serotina	30	Yes	FACU
2. Carya ovata	20	Yes	FACU
3. Liriodendron tulipifera	10	No	FACU
4. Fraxinus americana	10	No	FACU
5.			
	70	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15'r)			
1. Lonicera maacki	40	Yes	FACU
2.			
3.			
4.			
5.			
	40	= Total Cover	
Herb Stratum (Plot size: 5'r)			
1. Toxicodendron radicans	10	Yes	FAC
2. Viola sororia	10	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	20	= Total Cover	
Woody Vine Stratum (Plot size: 30'r)			
1. Absent			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: STP 001

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/3	85					SiLo	
	10YR 4/3	10						
	10YR 4/6	5						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Melissa Substation City/County: Clark Co. Sampling Date: 5/4/2026

Applicant/Owner: First Energy State: OH Sampling Point: STP 002

Investigator(s): KLV, BLG Section, Township, Range: Section 10 Township 5 East, Range 9 North

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None

Slope (%): 0 Lat: 39.911556 Long: -83.735670 Datum: NAD 83

Soil Map Unit Name: Ko: Kokomo silty clay loam, 0 to 2 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____ No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes ____ No X	

Remarks:
Soil Test Pit (002). Data taken within agricultural field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30'r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Absent			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15'r)			
1. Absent			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5'r)			
1. Packera glabella	30	Yes	FACW
2. Lamium purpureum	30	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	60 = Total Cover		
Woody Vine Stratum (Plot size: 30'r)			
1. Absent			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- ____ 2 - Dominance Test is >50%
- ____ 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: STP002

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 4/3	100					SiLo	
2-16	10YR 3/3	100						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Melissa Substation City/County: Clark Co. Sampling Date: 5/4/2026

Applicant/Owner: First Energy State: OH Sampling Point: STP 003

Investigator(s): KLV, BLG Section, Township, Range: Section 10 Township 5 East, Range 9 North

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None

Slope (%): 0 Lat: 39.909333 Long: -83.734675 Datum: NAD 83

Soil Map Unit Name: Ko: Kokomo silty clay loam, 0 to 2 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____ No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes ____ No X	

Remarks:
Soil Test Pit (003). Data taken within agricultural field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30'r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Absent			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15'r)			
1. Absent			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5'r)			
1. Packera glabella	10	No	FACW
2. Lamium purpureum	30	Yes	FACU
3. Cardamine hirsuta	30	Yes	FACU
4. Solidago canadensis	10	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	80 = Total Cover		
Woody Vine Stratum (Plot size: 30'r)			
1. Absent			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: STP003

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/2	100					SiLo	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

APPENDIX C
Primary Headwater Habitat Evaluation Data Form

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Headwater Habitat Evaluation Index Field Form

HHEI Score (sum of metrics 1+2+3) 35

SITE NAME/LOCATION Melissa Substation

SITE NUMBER _____ RIVER BASIN 050902020102 RIVER CODE _____ DRAINAGE AREA (mi²) 0.02

LENGTH OF STREAM REACH (ft) 460.00 LAT 39.912142 LONG -83.735552 RIVER MILE _____

DATE 05/04/2026 SCORER KLV COMMENTS SOH-EMB-001

NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instructions

STREAM CHANNEL MODIFICATIONS: ☑ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type present). Check *ONLY* two predominant substrate *TYPE* boxes. (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B

TYPE		PERCENT	TYPE		PERCENT
☐☐	BLDR SLABS [16 pts]		☑☐	SILT [3 pt]	75
☐☐	BOULDER (>256 mm) [16 pts]		☐☐	LEAF PACK/WOODY DEBRIS [3 pts]	10
☐☐	BEDROCK [16 pts]		☐☐	FINE DETRITUS [3 pts]	
☐☐	COBBLE (65-256 mm) [12 pts]		☐☐	CLAY or HARDPAN [0 pt]	
☐☑	GRAVEL (2-64 mm) [9 pts]	15	☐☐	MUCK [0 pts]	
☐☐	SAND (<2 mm) [6 pts]		☐☐	ARTIFICIAL [3 pts]	

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock 0

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: (A) 12 TOTAL NUMBER OF SUBSTRATE TYPES: (B) 3

HHEI Metric Points

Substrate Max = 40

15

A + B

2. Maximum Pool Depth (*Measure the maximum pool depth within the 61 meter (200 feet)* evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

☐	> 30 centimeters [20 pts]	☐	5 cm - 10 cm [15 pts]
☐	> 22.5 - 30 cm [30 pts]	☐	< 5 cm [5pts]
☐	> 10 - 22.5 cm [25 pts]	☐	NO WATER OR MOIST CHANNEL [0pts]

COMMENTS _____ MAXIMUM POOL DEPTH (centimeters): 5

Pool Depth Max = 30

15

3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check *ONLY* one box):

☐	> 4.0 meters (> 13') [30 pts]	☐	> 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
☐	> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	☐	≤ 1.0 m (≤ 3' 3") [5 pts]
☐	> 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]		

COMMENTS _____ AVERAGE BANKFULL WIDTH (meters) 3'

Bankfull Width Max=30

5

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ★ NOTE: River Left (L) and Right (R) as looking downstream ★

RIPARIAN WIDTH (Per Bank) L	R		FLOODPLAIN QUALITY (Most Predominant per Bank) L	R		L	R	
☐	☐	Wide >10m	☐	☐	Mature Forest, Wetland	☐	☐	Conservation Tillage
☑	☑	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☑	☑	Open Pasture, Row Crop
☐	☐	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS _____

FLOW REGIME (*At Time of Evaluation*) (Check *ONLY* one box):

☑ Stream Flowing ☐ Moist Channel, isolated pools, no flow (intermittent)

☐ Subsurface flow with isolated pools (interstitial) ☐ Dry channel, no water (ephemeral)

COMMENTS _____

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):

☑ None	☐ 1.0	☐ 2.0	☐ 3.0
☐ 0.5	☐ 1.5	☐ 2.5	☐ >3

STREAM GRADIENT ESTIMATE

☑ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI form)

DOWNSTREAM DESIGNATED USE(S)

☑ WWH Name: North Fork Little Miami River Distance from Evaluated Stream 2.5 miles

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.

USGS Quadrangle Name: _____ NRCS Soil Map Page: _____ NRCS Soil Map Stream Order: _____

County: Clark Township/City: Springfield

MISCELLANEOUS

Base Flow Conditions? (Y/N): N Date of last precipitation: _____ Quantity: _____

Photo-documentation Notes: _____

Elevated Turbidity? (Y/N): N Canopy (% open): _____

Were samples collected for water chemistry? (Y/N): N Lab Sample # or ID (attach results): _____

Field Measures: Temp (°C) _____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (umhos/cm) _____

Is the sampling reach representative of the stream (Y/N) Y f not, explain: _____

_____

Additional comments/description of pollution impacts: _____

_____

BIOLOGICAL OBSERVATIONS

(Record all observations below)

Fish Observed? (Y/N) N Species observed (if known): _____

Frogs or Tadpoles Observed? (Y/N) N Species observed (if known): _____

Salamanders Observed? (Y/N) N Species observed (if known): _____

Aquatic Macroinvertebrates Observed? (Y/N) N Species observed (if known): _____

Comments Regarding Biology: _____

_____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



APPENDIX D
Resume of Staff Conducting the Wetland Delineations

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Kristen Vonderwish

Project Environmental Specialist 3

Education

BS, Environment and Natural Resources, 2009, Ohio State University

AAS, Recreation and Wildlife Management, 2005, Hocking College

Skills

Wetland Delineation

Environmental Permitting

Mitigation Monitoring

Forest Resource Management

Aquatic Ecology Studies

Certifications/Training

U.S. Army Corps of Engineers Wetland Delineation Training.

24-hour MSHA Training

10-Hour Occupational Safety and Health Training

Ohio Rapid Assessment for Wetlands Training

OH Department of Transportation Waterway Permits Training

OH Department of Transportation Ecological Training

OH Department of Transportation Categorical Exclusion Training

Industry Experience

GAI Consultants, Inc., 2016-Present

Buckeye Mineral Services, Inc. /Mine Services, Inc., 2010-2016

URS Corporation, 2010

United States Department of Agriculture: U.S. Forest Service, Wayne National Forest, 2009

Professional Summary

Ms. Vonderwish specializes in environmental investigations. She has conducted and led field investigations that included wetland and stream delineations, threatened and endangered species surveys, macroinvertebrate surveys, and mitigation monitoring. She is familiar with current Ohio (OH) and federal regulations including the Section 401 and 404 permitting process (Clean Water Act). She has successfully prepared applications and technical reports for natural resource related projects.

Professional Experience

- Ohio Mitigation Bank Project, located in Guernsey County, Ohio (OH) for a Confidential Client. Conducted biological sampling for the project. GAI is responsible for collecting physical, chemical, and biological data necessary for calculation of Ohio Stream and Wetland Valuation Metric and preparation of the Conceptual Mitigation Plan for approximately 2,000 linear feet of stream within a Mitigation Bank area.
- Performed and led field efforts concerning surface water determinations, delineations, and additional assessments for projects involving surface coal mining, industrial mineral mining, the construction of pipelines, new transmission lines, reconstruction or modification of existing transmission lines, and associated access roads.
- Conducted wetland delineations and vegetation surveys for several constructed compensatory wetland sites in OH to evaluate and report fulfillment of mitigation success criteria.
- Conducted routine (monthly) monitoring of compensatory wetlands and streams in OH to satisfy mitigation monitoring conditions for surface coal mining specific projects. Routine assessments involved water sampling, benthic macroinvertebrate sampling, amphibian surveys, various vegetation surveys, and annual wetland determinations.
- Implemented and performed bi-annual water quality assessments (Sections 404 and 401 compliance) for a proposed surface mine project that included habitat assessments, water quality sampling, fish surveys, and benthic macroinvertebrate surveys following the OH Department of Environmental Protection and U.S. Army Corps of Engineers protocols.
- Prepared Section 404 and 401 Permits (individual permits and nationwide permits) for several surface coal mining projects in Southeastern OH.

- OH stream and wetland classification using the Headwater Habitat Evaluation Index, Qualitative Habitat Evaluation Index, Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers, and the OH Rapid Assessment Method respectively.
- Performed forest stand exams for the United States Forest Service.
- Conducted a timber cruise on a 20,000-acre tract in northeast OH. Determined volume of merchantable timber, species composition, accessibility, and environmental constraints.

Lillian Holmes

Environmental Specialist

Education

BS, Earth and Environmental Sciences – Environmental Science Concentration, 2021, Wright State University (cum laude)

Skills

Groundwater Sampling

Land Surveying

Topographic Mapping

Environmental Permitting

Certifications/Training

OSHA 10-Hour Construction, 2022

FAA Remote Pilot Certification, 2021

Pix 4D Essentials Training

Industry Experience

GAI Consultants, Inc., 2022-Present

Bowser-Morner, Inc., 2021-2022

Professional Summary

Ms. Holmes specializes in environmental services for energy-related construction projects. Her experience includes groundwater sampling, land surveying, topographic mapping, and environmental permitting and licensing. She has experience assisting clients to ensure environmental compliance with federal, state, and local regulatory agencies. Additionally, Ms. Holmes is experienced in both leadership and supporting roles and is able to follow strict deadlines to complete tasks on time and within budget.

Select Project Experience

- Transmission, Distribution, and Storage Improvement Charge (TDSIC) Confidential Client, Indiana. Senior Environmental Specialist. GAI is performing environmental support services for multiple TDSIC Projects. GAI has been providing permitting support for the previous Years 1 and 2, and has established processes, procedures, and templates for this work to provide significant cost efficiency to our client and the TDSIC program. Projects include 15kV Circuit Rebuild Projects, 4kV Conversion Projects, Substation Upgrade Projects, TAP Reliability Improvement Projects, XLPE Cable Replacement Projects, and Transmission Line Static Wire Replacement Projects.
- 138kV Transmission Line Project, Confidential Client, Ohio. GAI is providing environmental support services for the construction of a new substation (approximately 7.5 acres) and the construction of a new double circuit 138kV line from the existing substation to loop in and out of the new substation (approximately two miles). GAI's scope includes providing comprehensive environmental field assessments, including regulated watered determination and/or delineation using United States Army Corps of Engineers (USACE) criteria, stormwater management site assessments, permit applicability assessments, state and local stormwater permitting services, Clean Water Act (CWA) Section 401 and 404 permitting, Wetland and Stream Identification Report (WDSIR), Rare, Threatened, and Endangered (RTE) species consultation, cultural resources consultation, Ohio Power Siting Board (OPSB) Letter of Notification (LON) application, and Project Management.
- Substation Project Compliance Monitoring, Confidential Client, Ohio. Senior Environmental Specialist. GAI is performing environmental compliance monitoring services to assess the project's stormwater pollution protection plan (SWPPP) and other requirements pursuant to the Ohio Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System

(NPDES) Permit and other applicable regulated water permits related to access and actively disturbed construction areas of the project. GAI is also providing environmental monitoring field compliance services.

- 138kV Rebuild/Extension Project, Confidential Client, Ohio. Senior Environmental Specialist. GAI is performing a rebuild/upgrade of a 69kV line to run at 138kV in support of the new substation. In addition, a new 13854 transmission line will be constructed to connect the line upgrade to the new substation.
- Substation Phase I ESA, Confidential Client, Ohio. Senior Environmental Specialist. GAI is performing a Phase I ESA of the site with EDR records review and site reconnaissance with visual observation and document potential RECs per ASTM.GAI conducted interviews and reported a summary of findings.
- SWP3, Confidential Client, Indiana. Senior Environmental Specialist. GAI is performing distribution permitting services.
- SWPPP Services, Confidential Client, Indiana. Senior Environmental Specialist. GAI is performing environmental support services for the project replacement of approximately several wood structures on site. Services include SWPPP Generation including environmental access and erosion control plan (EAECP) and Indiana Construction Stormwater General Permit (CGSP) Permitting along with project management and controls.
- Substation, Confidential Client, Ohio. Senior Environmental Specialist. GAI is performing environmental support services for a proposed substation in Ohio. Services included environmental field assessment at the proposed substation site, regulated waters determination and/or delineation, stormwater management site assessment, SWPPP Generation and OEPA NPDES Permit, Clean Water Act (CWA) Section 401 and 404 Permitting, ETR Species consultation, and project management controls.
- Transmission Storage Facility, Confidential Client, Ohio. Senior Environmental Specialist. GAI is performing geotechnical exploration and civil engineering, environmental support, multi-disciplined engineering, architecture, structural and electrical engineering along with project management for the transmission storage facility.
- Phase I ESA, Confidential Client, Ohio. Senior Environmental Specialist. GAI is performing Phase 1 Environmental Site Assessment services that include records review from Environmental Data Resources (EDR), site reconnaissance and an overall report.
- Environmental Compliance Monitoring Project, Confidential Client, Ohio. GAI is providing environmental compliance monitoring services in compliance with the project's SWPPP and other requirements pursuant to the Ohio EPA NPDES Permit and other applicable regulated waters permits pertaining to access and previously and/or actively disturbed construction areas of the project. GAI is also performing daily precipitation monitoring and conducting post-rain event inspections, as needed, when the project site is recorded to have received more than 0.5 inches of precipitation in a single event.

Professional Experience

- **Environmental Scientist I, Bowser-Morner, Inc., (2021-2022)**
  Assisted clients to ensure compliance with the Ohio EPA, including groundwater monitoring, licensing compliance, topographic mapping and surveying, and environmental permitting. Responsible for the completion of all necessary field work, and communicating with clients and permitting authorities via reports, electronic, and verbal channels.

Elizabeth Bertolini, MBA

Assistant Environmental Specialist 3

Education

MBA, Sustainable Business, 2022, Antioch University

BS, Environmental Science – Water Science, 2017, Ohio State University

Skills

Environmental Permitting

Environmental Compliance Monitoring

Environmental Inspections

Wetland and Stream Delineations

Certifications / Training

SCUBA: Open Water Scuba Diver, 2012

Project Wet & Project Wild, 2018

Leave No Trace Trainer Course, 2018

Mental Health First Aid, Mental Health Association in New York State, 2018

Project Management Course, 2023

Previous Industry Experience

GAI Consultants Inc., 2023-Present

Reynolds and Reynolds, 2020-2023

Centerville-Washington Park District, 2019-2020

New York State Office of Parks, Recreation, and Historic Preservation, 2018

National Park Service: Cape Lookout National Seashore, 2017

Bald Head Island Conservancy, 2016

Professional Summary

Ms. Bertolini is an experienced Environmental Scientist and Educator with a strong background in community engagement and scientific research. Experienced in leveraging skills in written and spoken communication, organization, and project management to drive positive and sustainable impact.

Professional Experience

- Right-of-Way (ROW) Maintenance Environmental Support Services, Confidential Client, Indiana. Senior Environmental Specialist. Provided environmental clearance support for an Environmental Management and Construction Plan (EMCP) and Habitat Conservation Plan (HCP) review and supplemental environmental permitting for ROW maintenance Projects.
- Line Stormwater Pollution Prevention Plan (SWPPP) Compliance Monitoring Support Project, Confidential Client, Indiana. Senior Environmental Specialist. Completed environmental monitoring field compliance forms and weekly communications of schedule and site evaluation.
- Advance Rebuild Project and SWPPP Inspection, Confidential Client, Indiana. Senior Environmental Specialist. Performed Environmental compliance monitoring and reporting and stormwater compliance monitoring for the construction of a Transmission Line in Indiana.
- SWPPP Inspection Project, Confidential Client, Indiana. Senior Environmental Specialist. Provided weekly rainfall event environmental compliance monitoring and inspections in Indiana for the Client.
- Environmental Support Services, Confidential Client, Indiana. Senior Environmental Specialist. Performed SWPPP Preparation, Indiana Department of Environmental Management (IDEM) Construction Stormwater General Permits (CSGP) Permitting, Municipal/ County Erosion Control Permits, Floodplain, and Regulated Drain Permitting for a 138kV Transmission Line.
- Substation Project, Confidential Client, Indiana. Senior Environmental Specialist. Performed an Environmental Line Assessment, generated a SWPPP, and Construction Stormwater General Permitting (CGSP) for an existing transmission line.

- Fiber Connection Project, Confidential Client, Indiana. Senior Environmental Specialist. Performed a wetland and stream delineation and report and generated a SWPPP for a 345kV Transmission Line.

Professional Experience

- Reynolds & Reynolds, Dayton, Ohio. Remote Software Implementation. Managed multi-department projects, ensuring effective communication between customers and company leads. Conducted phone or video conference trainings on Reynolds' software and products, providing troubleshooting support and addressing customer inquiries. Developed training materials and acquired extensive knowledge of software systems, honing customer service management skills for successful implementations.
- Centerville-Washington Park District, Centerville, Ohio. Program Assistant. Directed summer camps, from hiring and training 18 seasonal staff to implementing weekly themes, activities, and guest speakers for over 60 campers each week. Managed day-to-day operations as the head of two Nature Day Camps, supervising a team of 20 counselors while ensuring optimal camper experiences. Demonstrated leadership skills by expertly managing staff and facilitating smooth running of the camps. Contributed directly to the success of the Park District's programming and outreach initiatives in support of the organization's mission.
- New York State Office of Parks, Recreation, and Historic Preservation, Gansevoort, New York. SCA Education Intern. Developed and executed engaging public programs for diverse audiences, including park guests, residents, and schools. Facilitated informative interpretive programs for all age groups, fostering an appreciation for nature and wildlife at the nature center. Demonstrated exceptional animal care skills while creating impactful educational materials for display.
- National Park Service: Cape Lookout National Seashore, North Carolina. SCA Biology Intern. Monitored and collected daily data on sea turtle activity, nests, hatching, and success rates with high accuracy and attention to detail. Developed strong proficiency in independent work and excel skills to endure efficient data entry and management for the team.
- Bald Head Island Conservancy, Bald Head Island, North Carolina. Education Intern. Assisted with programs and outreach, including leading dissection classes, touch tank experiences, and identifying flora and fauna. Gained knowledge of conservation and wildlife biology through white-tailed deer and invasive plant surveys. Developed strong public speaking and interaction skills while adapting to a changing, fast paced schedule.
- The Ohio State University School of Environmental and Natural Resources, Columbus, Ohio. Research with Distinction. Conducted independent research project under the supervision of Dr. Suzanne Gray, titled "A study of the difference in visual morphology between cohorts of Lake Erie emerald shiners exposed to different levels of harmful algal blooms". Experienced the research process from sample extraction and data collection/analysis to peer presentation and review.