

**LETTER OF NOTIFICATION
FOR THE
THE DAYTON POWER AND LIGHT COMPANY
D/B/A AES OHIO
AIRPORT - MIAMI 138KV PROJECT
PUCO CASE No. 21-0973-EL-BLN**

**Submitted to:
The Ohio Power Siting Board
Pursuant to Ohio Administrative Code
Section 4906-6-05**

**Submitted by:
The Dayton Power and Light Company d/b/a AES Ohio
1900 Dryden Road
Moraine, Ohio 45439**



December 2021

4906-6-05: APPLICATION REQUIREMENTS

The Dayton Power and Light Company d/b/a AES Ohio (AES Ohio) provides the following information to the Ohio Power Siting Board (OPSB) pursuant to Ohio Administrative Code (OAC) Section 4906-6-05.

4906-6-05: GENERAL INFORMATION**4906-6-05(B)(1): PROJECT NAME AND DESCRIPTION**

The name of the project and applicant's reference number, names and reference number(s) of resulting circuits, a brief description of the project, and why the project meets the requirements for a Construction Notice.

AES Ohio is planning to construct a new 138 kilovolt (kV) line extension to the Airport Substation which will improve the capacity and reliability of the electric system serving the growing load center around the Dayton Airport. This new project plays a pivotal role providing service to both existing and new electric customers in this region. To meet the needs of customers in this developing region, both AES Ohio and Pioneer Electric Cooperative will need to make upgrades to the electric system. The Project will tap into the existing West Milton-Miami 138kV line and extend a new 138kV line to the Airport Substation.

The Project meets the requirements for a Letter of Notification (LON) because it is within the types of projects defined by OAC Rule 4906-1-01, Appendix A (Application Requirement Matrix for Electric Power Transmission Lines), Item (1)(b), which states the following:

- (2) 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:

- (b) Line(s) greater than 0.2 miles in length but not greater than two miles in length.

The proposed Project is within the requirements of Item (2)(a) because the transmission line is approximately 1.2-mile in length.

The Project has been assigned PUCO Case No. 21-0973-EL-BLN.

4906-6-05 (B)(2): NEED FOR THE PROJECT

If the proposed project is an electric power transmission line or gas or natural gas transmission line, a statement explaining the need for the proposed facility.

This project will tap the existing West Milton to Miami 138 kV line and build a new 1.2-mile 138 kV line extension to the new AES Ohio Airport Substation. The new Airport Substation will be in proximity to the growing load center near the Dayton Airport and will provide a critical source for load in this area.

4906-6-05 (B)(3): PROJECT LOCATION

The applicant shall provide the location of the project in relation to existing or proposed lines and substations shown on an area system map of sufficient scale and size to show existing and proposed transmission facilities in the Project area.

The Project is located at latitude 39.934603 °N, longitude 84.228045 °W in Monroe Township, Miami County, Ohio. A site map of the proposed Project area is provided as Figure 1, included as part of the map are as follows:

- Aerial view of the proposed Project area showing the proposed Airport-Miami 138kV line (Figure 1).
- Aerial view of the proposed Project area showing the existing West Milton-Miami 138kV line (Figure 1).

To reach the Project from the Columbus, Ohio area head west on I-70 W towards Dayton. After approximately 65 miles, take exit 33 to merge on I-75 N toward Toledo. After 2.4 miles, take exit 64 for Northwoods Blvd. Turn left onto Northwoods Blvd and travel for 0.6 mile and turn right onto N Dixie Dr. Proceed for 1.5 miles and turn left onto Lightner Road. After 1.5 mile, turn right onto Peters Rd. Travel about 0.6 miles to enter the Project area. The Project will run along Peters Road and along Ginghamburg-Frederick Rd.

4906-6-05 (B)(4): ALTERNATIVES CONSIDERED

The applicant shall describe the alternatives considered and reasons why the proposed location or route is best suited for the proposed facility. The discussion shall include, but not be limited to, impacts associated with socioeconomic, ecological, construction, or engineering aspects of the project.

This project will tap the existing West Milton to Miami 138 kV line and build a new 1.2-mile 138 kV line extension to a new AES Ohio substation. Due to this, no additional alternatives were considered as the Project as planned represents the most suitable and least-impactful alternative. Assessments of impacts to existing socioeconomic, ecological, and land use conditions are further discussed in Section 4906-6-05 B (10).

4906-6-05 (B)(5): PUBLIC INFORMATION PROGRAM

The applicant shall describe its public information program to inform affected property owners and tenants of the nature of the project and the proposed timeframe for project construction and restoration activities.

Construction of the Project will negotiate easements as needed with affected landowners. AES Ohio will send a letter describing the proposed facility to each property owner adjacent to the Project area. A list of property owners contiguous to the Project area are included as Attachment A. AES Ohio maintains a website (<https://www.aes-ohio.com/miami-airport-138kv-extension-project>) that provides the public information about the Project and how to request a copy of the LON. A copy of the LON will be served on the chief executive officer of the county and township, and the head of pertinent public agencies with the duty of protecting the environment or of planning land use in the area where the Project is located. A copy of the LON will also be served to the Tipp City Public Library and the Troy-Miami County Public Library.

4906-6-05 (B)(6): CONSTRUCTION SCHEDULE

The applicant shall provide an anticipated construction schedule and proposed in-service date of the project.

AES Ohio intends to commence construction activities on or around March 1, 2022 and anticipates that construction activities will be completed on or around December 31, 2022.

4906-6-05 (B)(7): AREA MAP

The applicant shall provide a map of at least 1:24,000 scale clearly depicting the facility with clearly marked streets, roads, and highways, and an aerial image.

An area map of the proposed Project is provided as Figure 2.

4906-6-05 (B)(8): PROPERTY AGREEMENTS

The applicant shall provide a list of properties for which the applicant has obtained easements, options, and/or land use agreements necessary to construct and operate the facility and a list of the additional properties for which such agreements have not been obtained.

A portion of the Project is located on AES Ohio owned property. As for the remaining parcels, AES Ohio has secured easements with the entities listed in Attachment A.

4906-6-05 (B)(9): TECHNICAL FEATURES

The applicant shall describe the following information regarding the technical features of the project:

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

The applicant shall provide operating characteristics, estimated number and types of structures required, and right-of-way and/or land requirements.

The equipment and facilities to be installed within the Project will include the following:

Voltage:	138 kV
Conductors:	Twin Bundled 1024 30 x 7 ACAR
Static Wire:	48-Fiber AlumaCore Optical Ground Wire
Insulators:	Polymer
ROW Width:	40 Feet
Structure Types:	(25) single pole direct embed structure (3) Single pole foundational self-supporting poles

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

For electric power transmission lines that are within one hundred feet of an occupied residence or institution, the production of electric and magnetic fields during the operation of the proposed electric power transmission line.

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

Electric and magnetic field calculations were performed using the 2D EMF calculations module in the PLS-CADD program (Attachment B). Electric fields are calculated assuming phase-to-phase voltages at 105% of the rated line voltage, or 145kV for the 138kV circuit. All cross sections considered had maximum electric field values between 0.5 and 0.61kV/m, as all sections considered had very similar geometry (Table 1).

Table 1. Calculated Electric and Magnetic Field Strength Levels

Model		Electric Field	Magnetic Field (mG)			
Cross Section	Description		Summer Line Normal	Summer Line Emergency	Winter Conductor Normal	Winter Conductor Emergency
1	138kV Transmission Circuit, Vertical	105% Nominal Voltage (EAoS/MAX /EAoS) 0.073/0.527/0.058	47.545 – E edge	52.011 – E edge	82.765 – E edge	92.489 – E edge
			96.653 – MAX	105.732 – MAX	168.252 – MAX	188.019 – MAX

Table 1. Calculated Electric and Magnetic Field Strength Levels

Model		Electric Field	Magnetic Field (mG)			
Cross Section	Description	105% Nominal Voltage (EAoS/MAX/EAoS)	Summer Line Normal	Summer Line Emergency	Winter Conductor Normal	Winter Conductor Emergency
			36.618 – W edge	40.058 – W edge	63.745 – W edge	71.234 – W edge
2	138kV Circuit, Vertical, with 3- phase 12kV underbuild	0.083/0.547/0.048	46.852 – E Edge	51.507 – E Edge	81.178 – E Edge	90.656 – E Edge
			112.39 – MAX	128.427 – MAX	172.738 – MAX	195.345 – MAX
			41.6 – W Edge	46.507 – W Edge	67.73 – W Edge	76.259 – W Edge
3	138kV Transmission Circuit, Vertical	0.095/0.579/0.043	47.952 – S Edge	52.485 – S Edge	83.502 – S Edge	93.281 – S Edge
			98.021 – MAX	107.287 – MAX	170.692 – MAX	190.681 – MAX
			36.752 – N Edge	40.226 – N Edge	63.999 – N Edge	71.494 – N Edge
4	138kV Circuit, Vertical, with 3-phase 12kV underbuild	0.106/0.609/0.029	47.168 – S Edge	51.875 – S Edge	81.697 – S Edge	91.232 – S Edge
			128.609 – MAX	149.775 – MAX	182.614 – MAX	208.668 – MAX

Table 1. Calculated Electric and Magnetic Field Strength Levels

Model		Electric Field	Magnetic Field (mG)			
Cross Section	Description	105% Nominal Voltage (EAoS/MAX/EAoS)	Summer Line Normal	Summer Line Emergency	Winter Conductor Normal	Winter Conductor Emergency
			42.53 – N Edge	47.648 – N Edge	68.686 – N Edge	77.42 – N Edge

Electric and magnetic field results summary listing of the calculated rms field magnitudes, electric fields in kV/m and magnetic fields in units of milligauss (mg) at each edge of study area (EAoS) and maximum beneath line.

For all cross sections, the electric field strength is greater on the road side of the poles (east side in Sections 1 and 2, and south in Sections 3 and 4). All calculated electric field values for all cross sections are well below maximum permissible exposure limits of 5kV/m for general public exposure as per Table 4 in IEEE Standard C95.6-2002 for 60Hz AC. Similarly, all calculated magnetic field values for all cross sections across the area of study are well below maximum permissible exposure limits of 0.904mT (9,040mG) for general public exposure as per Table 2 in IEEE Standard C95.6-2002 for 60Hz AC.

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

AES designs its transmission line facilities according to National Electrical Safety Code specifications, engineering parameters and cost. AES proposes to install the 138 kV transmission line with all three phases offset toward the road in order to place the line as far away from residential structures as possible.

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

The estimated capital cost of the project.

The estimated transmission capital cost for the Project is \$4,500,000.

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

The applicant shall describe the social and ecological impacts of the project:

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

Provide a brief, general description of land use within the vicinity of the proposed project, including a list of municipalities, townships, and counties affected.

The proposed Project is located in Monroe Township, Miami County, Ohio. The proposed Project work is located on parcels of land that parallel road right-of-way (ROW). The land use at

the Project area includes residential and agricultural land. The proposed Project will not impact existing land uses or future land uses at the proposed site other than the area immediately adjacent to the structure foundations.

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

Provide the acreage and a general description of all agricultural land, and separately all agricultural district land, existing at least sixty days prior to submission of the application within the potential disturbance area of the project.

The proposed Project will temporarily impact approximately 1.3 acres of active agricultural land. According to the Miami County Auditor's Website, accessed on November 15, 2021, the Project crosses 7 parcels, or approximately 3 acres, with portions registered as agricultural district land. One of these parcels includes the parcel owned by AES Ohio for the construction of the Airport Substation. Once construction has been completed, it is anticipated that agricultural practices will resume within the 40-foot ROW, except for in the area immediately adjacent to the structure foundations.

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

Provide a description of the applicant's investigation concerning the presence or absence of significant archaeological or cultural resources that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.

Based on the current Project description, an Ohio Historic Preservation Office (OHPO) cultural resources consultation letter (Attachment C) for the Project was submitted by Arcadis, U.S., Inc. (Arcadis) on November 1, 2021. OHPO concurrence was received on November 29, 2021, stating that the OHPO concurs that the proposed project will no effect to any historic properties and no further work is necessary (Attachment C). The consultation letter considered both direct and indirect effects when developing the Area of Potential Effect (APE) for the Project. The direct APE is limited to the Project impacts associated with the ground disturbance that include the 40-foot-wide new ROW. The Project does involve the construction of new transmission line adjacent to an existing roadway and transmission line ROW. The new transmission/distribution line will be constructed in place of an existing distribution line within the new ROW but will have taller transmission line poles ranging from 79 to 83.5 feet above ground level, approximately 30 feet taller than the existing distribution line poles. To account for visual impacts, the viewshed (or indirect APE) was evaluated using a 0.5-mile buffer around the direct APE.

Background research was conducted using the OHPO online mapping database to locate previously recorded cultural resources and investigations within a 1-mile radius of the Project APE. Information collected included archaeological sites, architectural and historical resources, Determination of Eligibility (DOE) files, National Register of Historic Places (NRHP) properties, National Historic Landmarks, historic cemeteries, historic bridges and previous cultural resources surveys. Historic-era mapping and aerial imagery available for the Project area was also reviewed.

Results of the background research identified one prehistoric archaeological site and two cultural resources investigations within 1-mile of the Project. A cemetery was also mapped within 1-mile of the Project but was determined to be mapped incorrectly. None of these known cultural resources or surveys are within the Project APE. The identified archaeological site (33MY0803) is located approximately 0.98 mile to the southwest of the direct APE.

The background records check did not document any known cultural resources within the Project APE. A review of historic-era mapping indicates that Miami County, especially Monroe Township, contained a low frequency of prehistoric sites and none of those were within the vicinity of the Project APE. Historically, the Project area was rural with a few structures located to the west of Peters Road and north of Ginghamburg-Frederick Road. These structures are no longer extant with the exception of one church dating to 1948. There was another residence dating to 1969 that was evaluated as part of the new Airport Substation project by Arcadis under a separate cover. This residence was recommended by Arcadis as not eligible for listing in the NRHP. In a concurrence letter related to the new Airport substation the OHPO agreed that this residence does not meet the criteria for NRHP listing.

The Project APE is considered to contain a low probability of identifying historic properties based on the following:

- There are no known cultural resources within the overall Project APE;
- Many of the historic-era farms and other structures shown on the historic mapping have been demolished, altered, or in-filled with new residential construction and no longer retain integrity of setting;
- Most of the properties within the Project APE that are 45 years old or older are within the viewshed of existing transmission line towners or other non-historic visual intrusions;
- Most of the properties within the Project APE that are 45 years old or older were constructed post-1965 and are individual residences or church properties that would not have setting as a qualifying characteristic of their potential NRHP eligibility;
- The entire direct APE is adjacent to a previously disturbed road and transmission line ROW.

Based on the results in the OHPO consultation letter, which was submitted on November 1, 2021, it is anticipated that the Project should not adversely affect historic properties within the direct or indirect APE (Attachment C). OHPO concurrence was received on November 29, 2021, stating that the OHPO concurs that the proposed project will no effect to any historic properties and no further work is necessary (Attachment C).

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

Provide a list of the local, state, and federal governmental agencies known to have requirements that must be met in connection with the construction of the project, and a list of documents that have been or are being filed with those agencies in connection with siting and constructing the project.

A summary of anticipated environmental permits and authorizations for the Project is provided below in Table 2. No other government agency requirements are known at the time of this filing.

Table 2. Airport - Miami 138kV Project Anticipated Environmental Permits

Agency	Approval/Clearance/Authorization	Comments
U.S. Fish and Wildlife Service (USFWS)	Federally Listed Endangered Species Review	A USFWS Information, Planning and Conservation System (IPaC) database review for the Project was completed on November 12, 2021 (Attachment D).
Ohio Department of Natural Resources (ODNR) Office of Real Estate	Environmental Review (State T&E Species Consultation and Clearance)	A request for consultation was submitted to ODNR on October 22, 2021, for information related to the potential presence of endangered, threatened, and rare species within a 1-mile radius of the Project area (Attachment E). A response from ODNR was received on November 12, 2021 (Attachment E).
Ohio Historic Preservation Office (OHPO)	Cultural and Architectural Resources Review	A cultural resources consultation letter was submitted to the OHPO on November 1, 2021 (Attachment C). An OHPO response was received on November 29, 2021 (Attachment C).
Ohio Environmental Protection Agency (OEPA)	Stormwater General Permit for Discharges of Storm Water Associated with Construction Activity (OHC000005) Notice of Intent (NOI)	The total area of disturbance for the proposed Project is greater than one acre. Therefore, coverage under OHC000005 is required. The NOI will be submitted 21 days prior to the start of construction.

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

Provide a description of the applicant's investigation concerning the presence or absence of federal and state designated species (including endangered species, threatened species, rare species, species proposed for listing, species under review for listing, and species of special interest) that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.

The USFWS IPaC tool was completed on November 12, 2021, to determine if known occurrences of rare, threatened, or endangered species (T&E species) or their critical habitats are present within the Project area or its vicinity (Attachment D). The results of the IPaC are included as Table 2. An on-site habitat assessment was conducted during the wetland delineation survey on October 1, 2021 of the Project area and West Milton – Airport 138kV Line Project (a separate project). Documented site conditions were used to evaluate the Project area for the occurrence of potential habitat for the T&E species identified by the IPaC.

An ODNR environmental review request was submitted on October 22, 2021 (Attachment E). A response from the ODNR was received on November 12, 2021 (Attachment E). The ODNR response indicated that no records of State listed species were present within one-mile of the Project area. The Project was also noted by ODNR as being within the range of several state and/or federally listed bat species, including the Indiana bat (*Myotis sodalis*), northern long-eared bat (*Myotis septentrionalis*), little brown bat (*Myotis lucifugus*), tricolored bat (*Perimyotis subflavus*). Winter tree clearing is proposed, and no caves or mines are in the Project's vicinity, therefore no impacts to these bat species are anticipated. The ODNR also listed the Project as being within the range of several state and/or federally listed species, including the club shell (*Pleurobema clava*), rayed bean (*Villosa fabalis*), snuffbox (*Epioblasma triquetra*), and the Iowa darter (*Etheostoma exile*). However, ODNR indicated that the species were not likely be impacted due to the location, lack of habitat, and type of work proposed.

Table 3, below, includes the federally and state-listed endangered or threatened species provided by the USFWS. Based on proposed Project impacts and construction timing and the lack of suitable habitat, state or federally listed species are not anticipated to be affected by the Project.

Table 3. Rare, Threatened and Endangered Species Occurrence

Common Name	Species Name	Federal Status	State Status	Potential Impacts
Indiana bat	<i>Myotis sodalis</i>	Endangered	Endangered	No critical habitat was identified for the Indiana bat and Northern long-eared bat within the Project area. No caves or mines are located within the Project area. Limited tree clearing is proposed for the Project; however, it is assumed that this will be completed between October 1 and March 31 (i.e., winter clearing). Therefore, no effects to the Indiana bat and Northern long-eared bat are anticipated.
Northern long-eared bat	<i>Myotis septentrionalis</i>	Threatened	Endangered	
Little brown bat	<i>Myotis lucifugus</i>	—	Endangered	
Tricolored bat	<i>Perimyotis subflavus</i>	—	Endangered	
Club shell (mussel)	<i>Pleurobema clava</i>	Endangered	Endangered	There are no perennial stream impacts associated with the Project. Therefore, no effects to the Club Shell are anticipated.
Rayed Bean (mussel)	<i>Villosa fabalis</i>	Endangered	Endangered	There are no perennial stream impacts associated with the Project. Therefore, no effects to the Rayed Bean are anticipated.
Snuffbox (mussel)	<i>Epioblasma triquetra</i>	Endangered	Endangered	There are no perennial stream impacts associated with the Project. Therefore, no effects to the Snuffbox are anticipated.
Monarch Butterfly	<i>Danaus plexippus</i>	Candidate	—	Suitable habitat was not observed within the Project area, therefore no effects to the Monarch Butterfly are anticipated.
Iowa darter (fish)	<i>Etheostoma exile</i>	—	Endangered	There are no perennial stream impacts associated with the Project. Therefore, no effects to the Iowa darter are anticipated.

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

Provide a description of the applicant's investigation concerning the presence or absence of areas of ecological concern (including national and state forests and parks, floodplains, wetlands, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, and wildlife sanctuaries) that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.

An ecological site assessment was conducted on October 1, 2021. The land use at the Project area is a mix of residential, industrial (utility ROW), and agricultural land. The Project area is surrounded by rural residential areas and agricultural fields. Vegetative communities at the Project area consist of agricultural field, upland woods present as fencerows, and maintained lawn.

There are no national, state, or local parks or forests, designated or proposed wilderness areas, national or state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, or wildlife sanctuaries located within the Project area. There are also no Federal Emergency Management Agency (FEMA) designated floodplains.

A wetland and waterbody delineation survey was conducted on October 1, 2021 of the Project area and West Milton – Airport 138kV Line Project (a separate project) (see Attachment F). The delineation survey did not identify any streams or wetlands within the Project area.

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

Provide any known additional information that will describe any unusual conditions resulting in significant environmental, social, health, or safety impacts.

To the best of AES Ohio's knowledge, no unusual conditions exist that would result in significant environmental, social, health, or safety impacts.

**4906-6-07: DOCUMENTATION OF LETTER OF NOTIFICATION APPLICATION
TRANSMITTAL AND AVAILABILITY FOR PUBLIC REVIEW**

A copy of this LON has been provided, concurrently with this OPSB filing, to the departments and officials of Miami County and Monroe Township listed below. A copy of this LON has been provided to the library listed below for public viewing.

Miami County

Mr. Gregory A. Simmons
Miami County Commissioner (President)
Safety Building
201 W. Main St.
Troy, OH 45373

Mr. Ted S. Mercer
Miami County Commissioner (Vice President)
Safety Building
201 W. Main St.
Troy, OH 45373

Mr. Wade H. Westfall
Miami County Commissioner (Member)
Safety Building
201 W. Main St.
Troy, OH 45373

Mr. Paul P. Huelskamp, P.E., P.S.
Miami County Engineer
2100 N. County Rd. 25A
Troy, OH 45373

Rob England
Miami County Chief Building Official
510 W. Water Street
Suite 120
Troy, OH 45373

Dan Suerdieck
Miami County Planning and Zoning Manager
510 W. Water Street
Suite 120
Troy, OH 45373

Miami Soil and Water Conservation District
1330 N County Rd 25A; Ste. C
Troy, Ohio 45373

Monroe Township

Mr. L. Anthony Becker
Monroe Township Fiscal Officer
4 E. Main Street
Tipp City, OH 45371

Mr. Martin E. English
Monroe Township Trustee
4 E. Main Street
Tipp City, OH 45371

Mr. Philip G. Cox
Monroe Township Trustee
4 E. Main Street
Tipp City, OH 45371

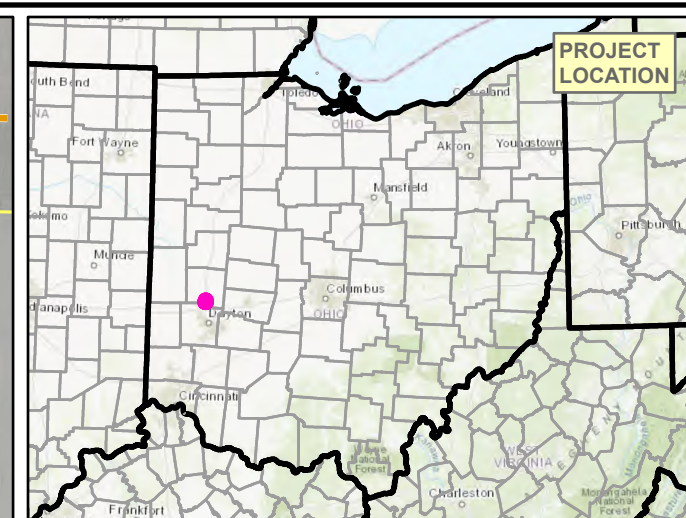
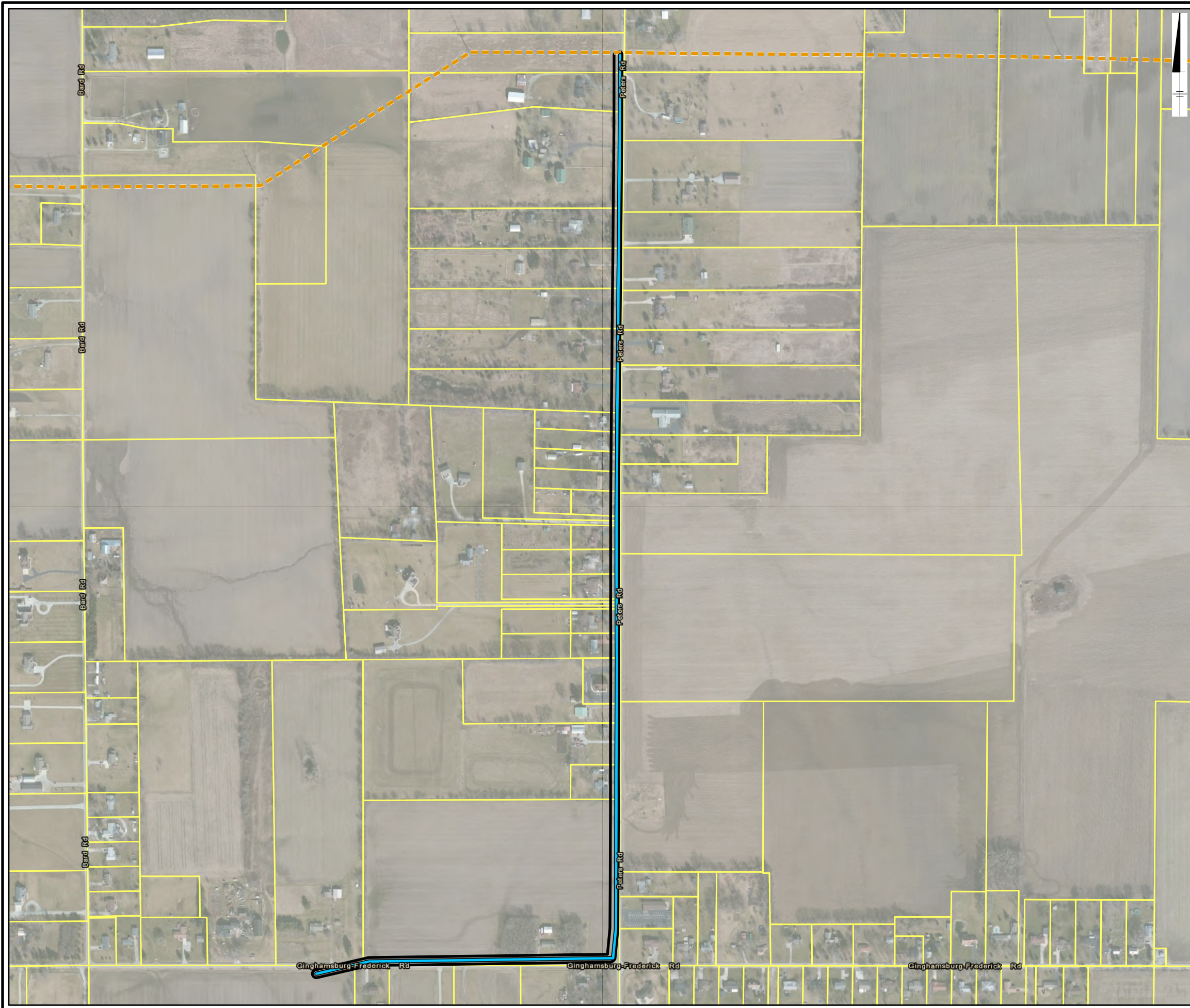
Mr. Gregory L. Sieftring
Monroe Township Trustee
4 E. Main Street
Tipp City, OH 45371

Libraries

Tipp City Public Library
11 E. Main St.
Tipp City, OH 45371

Troy-Miami County Public Library
419 W. Main St.
Troy, Ohio 45373

Figures



- Legend**
- Proposed Airport - Miami 138kV Transmission Line
 - Existing West Milton - Miami 138kV Transmission Line
 - Project Site
 - Parcel Boundary



NOTE:
1. 2017 IMAGERY OBTAINED FROM ESRI IMAGE SERVICE.

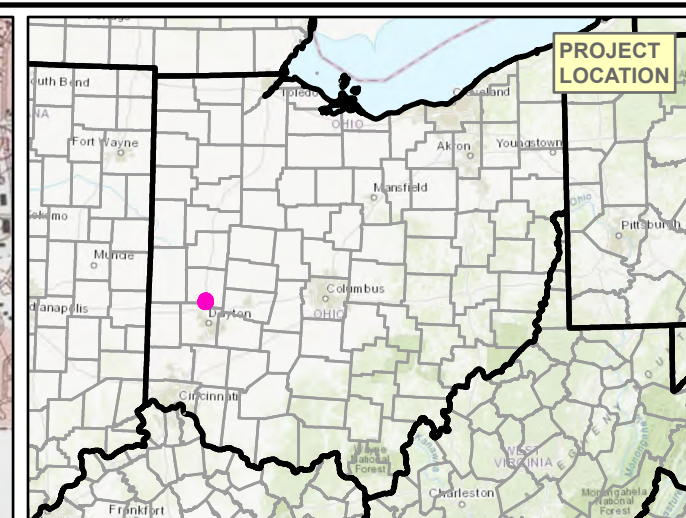
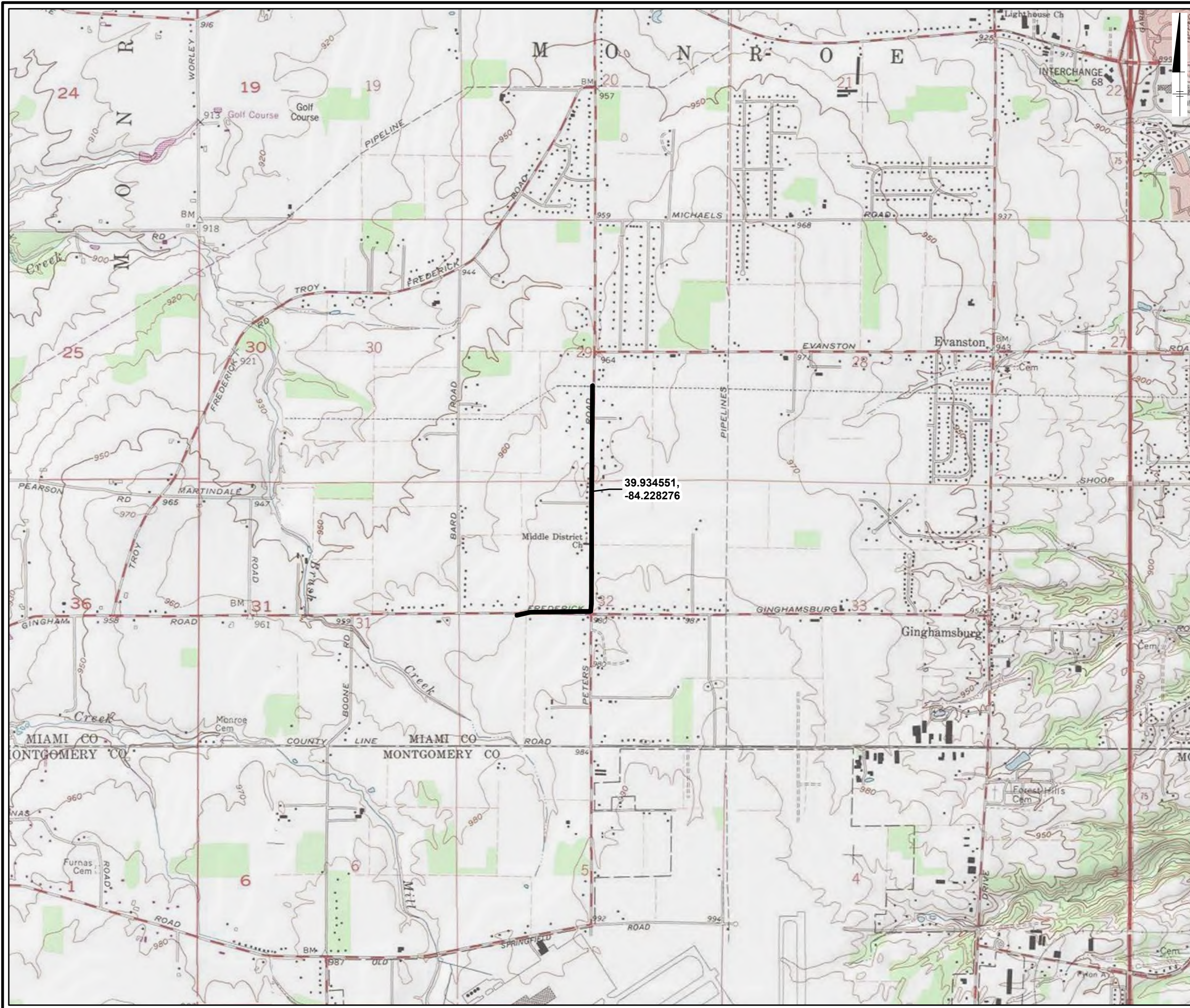
THE AES CORPORATION
AIRPORT - MIAMI 138KV LINE
MIAMI COUNTY, OHIO

PROJECT SITE



FIGURE
1

City: CN Div/Group: EPP Created By: M.Vazquez Last Saved By: A.Wolf
T:\EPP\AES\OH\Airport_T_Line_Siting\Maps\CN\CN_OPSB.aprx 11/11/2021 8:11 AM



Legend
Project Site

0 2,000 4,000 Feet
GRAPHIC SCALE

NOTE:
1. USGS TOPOGRAPHIC QUADRANGLE TIPP CITY, OHIO OBTAINED FROM ESRI IMAGE SERVICE. PHOTO PUBLISHED 1982.

THE AES CORPORATION
AIRPORT - MIAMI 138KV LINE
MIAMI COUNTY, OHIO

PROJECT AREA



FIGURE
2

Attachment A
Public Notification to Contiguous Landowners

Property Owners Contiguous to the Project

Parcel ID	Parcel Address	Owner Name	Owner Address
G12043800	James D. Ashburn II & Sherry L. Ashburn	Peters Rd Tipp City OH 45371	6670 Peters Rd S Tipp City OH 45371
G12043900	James D. Ashburn II & Sherry L. Ashburn	6670 Peters Rd S Tipp City OH 45371	6670 Peters Rd S Tipp City OH 45371
G12044000	Jerry M. Folk (Tod) & Polly P. Thomas (Tod)	6730 Peters Rd S Tipp City OH 45371	6730 Peters Rd S Tipp City OH 45371
G12044100	U S Bank Trustee	6800 Peters Rd S Tipp City OH 45371	6800 Peters Rd S Tipp City OH 45371
G12044200	Jason E. & Courtney D. Driver	6840 Peters Rd S Tipp City OH 45371	6840 Peters Rd S Tipp City OH 45371
G12044300	Devonne S. Daniel (Tod)	6880 Peters Rd S Tipp City OH 45371	6880 Peters Rd S Tipp City OH 45371
G12044400	Bradley Edward Lupton	6925 Peters Rd S Tipp City OH 45371	6925 Peters Rd S Tipp City OH 45371
G12044500	Ralph C. & Patricia G. Marshall	6960 Peters Rd S Tipp City OH 45371	6960 Peters Rd S Tipp City OH 45371
G12044700	Lee A & Joy E Cornelius (Tod)	6990 Peters Rd S Tipp City OH 45371	6990 Peters Rd S Tipp City OH 45371
G12049300	Darrell & Delores J. Stephens	7010 Peters Rd S Tipp City OH 45371	7010 Peters Rd S Tipp City OH 45371
G12049400	Robbie C. & Pamela R. Johnson	7030 Peters Rd S Tipp City OH 45371	7030 Peters Rd S Tipp City OH 45371
G12049500	Matthew K. & Ceana Hollon	7040 Peters Rd S Tipp City OH 45371	7040 Peters Rd S Tipp City OH 45371
G12049600	M. E. & K. Irene Brokschmidt	7070 Peters Rd S Tipp City OH 45371	7070 Peters Rd S Tipp City OH 45371
G12049700	Ernest Kiser	7162 Peters Rd S Tipp City OH 45371	7162 Peters Rd S Tipp City OH 45371
G12049740	David W. & Carmella W. Ballard	7088 Peters Rd S Tipp City OH 45371	7088 Peters Rd S Tipp City OH 45371
G12049770	John & Kimberly A. Cottrell	7170 Peters Rd S Tipp City OH 45371	7170 Peters Rd S Tipp City OH 45371
G12049780	Howard Neal Maybury	7076 Peters Rd Tipp City OH 45371	7076 Peters Rd Tipp City OH 45371
G12049790	Brian E. & Kimberly S. Garber	7166 Peters Rd S Tipp City OH 45371	7166 Peters Rd S Tipp City OH 45371
G12050100	Robert J Barckert	1777 Gingham Fred Rd W Tipp City OH 45371	1777 Gingham Fred Rd W Tipp City OH 45371

Property Owners Contiguous to the Project

Parcel ID	Parcel Address	Owner Name	Owner Address
G12050200	Middle District Church Of The Brethren	7270 Peters Rd S Tipp City OH 45371	7270 Peters Rd S Tipp City OH 45371
G12050400	Conran L. & Janet L. Huelsman	7290 Peters Rd S Tipp City OH 45371	7290 Peters Rd S Tipp City OH 45371
G12050500	Robert Lee. & Janet Marie Whittaker	7340 Peters Rd S Tipp City OH 45371	7340 Peters Rd S Tipp City OH 45371
G12050600	Roberta A. Weaver	1615 Gingham Fred Rd W Tipp City OH 45371	1615 Gingham Fred Rd W Tipp City OH 45371
G12050700	The Dayton Power & Light Company	Gingham Fred Rd W	1900 Dryden Rd Moraine, OH 45439
G12051100	Joshua T. Rowland	1740 Gingham Fred Rd W	1740 Gingham Fred Rd W
G12080468	Clair R. & Judith A. Tipton	7100 Peters Rd S Tipp City OH 45371	7100 Peters Rd S Tipp City OH 45371
G12080469	Lon A. & Christine L. Peters	7120 Peters Rd S Tipp City OH 45371	7120 Peters Rd S Tipp City OH 45371
G12080470	John R. Brown (Tod)	7150 Peters Rd S Tipp City OH 45371	7150 Peters Rd S Tipp City OH 45371
G12080471	Charles R. & Nina S. Arndts	7180 Peters Rd S Tipp City OH 45371	7180 Peters Rd S Tipp City OH 45371
G12080472	Jeffrey Turner	7200 Peters Rd S Tipp City OH 45371	7200 Peters Rd S Tipp City OH 45371
G12250035	German Baptist Church	7240 Peters Rd S Tipp City OH 45371	7240 Peters Rd S Tipp City OH 45371

Attachment B
EMF Study



DAYTON, OHIO
AIRPORT SUBSTATION 138KV TRANSMISSION PROJECT
MIAMI – AIRPORT CIRCUIT 13852
PETERS RD. LINE EXTENSION

EMF Report

November 29, 2021
Revision 1

Submitted by:



ENERCON SERVICES, INC.
500 TownPark Lane ♦ Kennesaw, GA 30144
Telephone: (770) 919-1931 ♦ Facsimile: (770) 919-1932



Responsible Engineer: Mitchell Mosher, P.E.
Date: November 29, 2021

Peer Review: Dan Slaven
Date: November 29, 2021

QAQC Review: Alana Stuart
Date: November 29, 2021

PROJECT DESCRIPTION

AES Ohio intends to construct a new Airport Substation in Monroe Township, Miami County, Ohio, on the southeast corner of Ginghamburg-Frederick Road and Bard Road. AES Ohio intends to construct two (2) new single circuit 138kV transmission line extensions to split an existing 138kV circuit in order connect its proposed substation. The existing 138kV circuit is located approximately 1.25 miles north of the substation site. The existing transmission line that will be split is configured as a double circuit 345kV/138kV line with a common static wire. The 138kV circuit is designated as 13807 and runs between AES Ohio's West Milton and Miami Substations.

AES Ohio plans to construct a 138kV line extension along Peters Road in Miami County from a cut-in location west of existing double circuit structure #517618 to the new Airport substation. The new 138kV transmission line extension will be constructed with vertical framing, and the new circuit will be TL13852 Miami - Airport. This report will detail the electric field and magnetic field effects of selected sections of the proposed line along Peters and Ginghamburg-Frederick Road.

Electric and Magnetic Fields

In accordance with Ohio Power Siting Board (OPSB) requirements specified in OAC 4906-5-07(A)(2), the following report discusses the analysis of electric and magnetic fields (EMF) associated with the proposed transmission line project.

EMF magnitudes were calculated at five representative cross-sections of the proposed transmission line design. These representative cross sections were:

- **Cross-Section 1:** 138kV single circuit, representative cross-section along Peters Road. Transmission Only. Considering 100ft wide Area of Study (AoS). **Figure 1.**
- **Cross-Section 2:** 138kV single circuit with 3-phase 12kV underbuild on crossarm, representative cross-section along Peters Road. Considering 100ft wide Area of Study (AoS). **Figure 2.**
- **Cross-Section 3:** 138kV single circuit, representative cross-section along Ginghamburg-Frederick Road. Transmission Only. Considering 100ft wide Area of Study (AoS). **Figure 3.**
- **Cross-Section 4:** 138kV single circuit with 3-phase 12kV underbuild on crossarm, representative cross-section along Ginghamburg-Frederick Road. Considering 100ft wide Area of Study (AoS). **Figure 4.**

The 138kV transmission phase conductors will be comprised of two (2) bundle 1024.5 MCM 30x7 stranding ACAR cables in all cross sections. The phase conductors are modelled as 1.165" diameter and are arranged in a vertical bundle with bundle spacing of 18". The shield cable in all sections will be a 0.565" diameter fiber-optic core ground wire (OPGW). Future 3-phase 12.47kV distribution underbuild in Cross-Sections 2 & 4 will utilize 0.814" diameter 477 kcmil "Pelican" ACSR phase conductor and a 0.563" diameter 4/0 AWG stranded "Penguin" ACSR neutral conductor.

Transmission phasing arrangement is known, but the three-phase distribution underbuild is future planned construction and phasing arrangement is not known at this time. For this study, distribution phase arrangement, where it is present, was taken as the arrangement that produces the greatest electric and magnetic field values. This phasing is shown in **Figures 1 – 4.**

Figures 1 – 4 show the representative cross sections analyzed and the phasing configuration for all circuits.

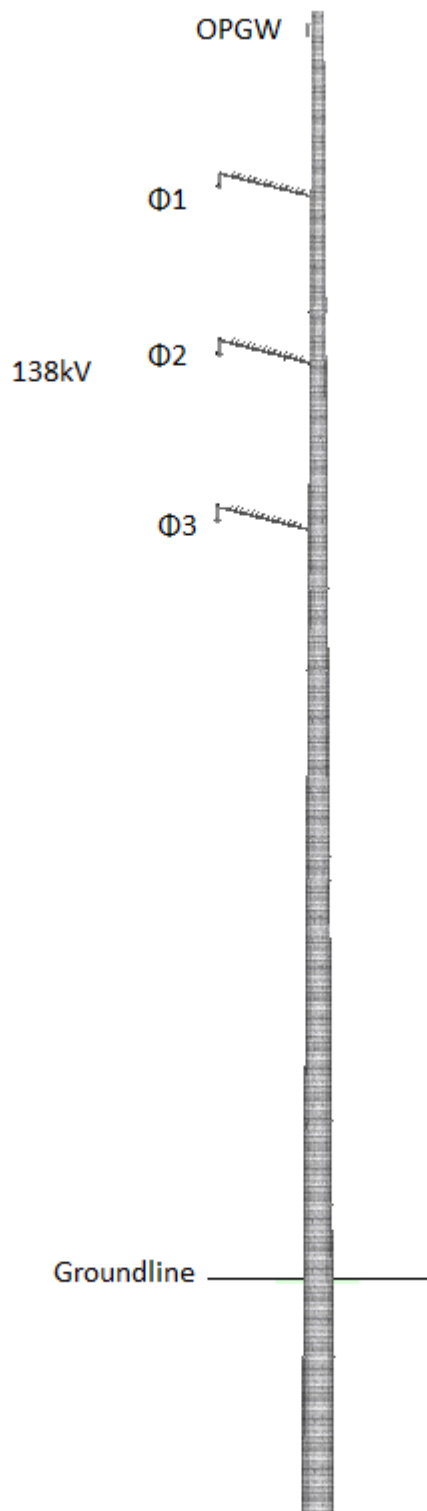


Figure 1 – Typical cross-section model used for EMF calculations for Section 1. Looking south down line. Area of Study 50ft either side of pole centerline.

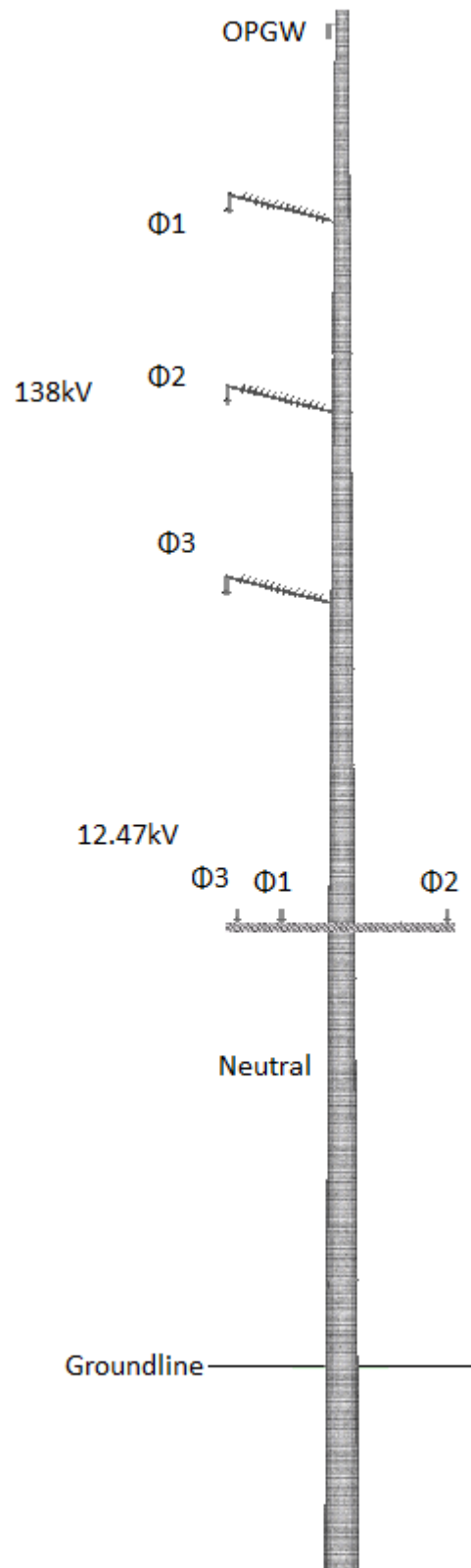


Figure 2 – Typical cross-section model used for EMF calculations for Section 2. Looking south down line. Area of Study 50ft either side of pole centerline.

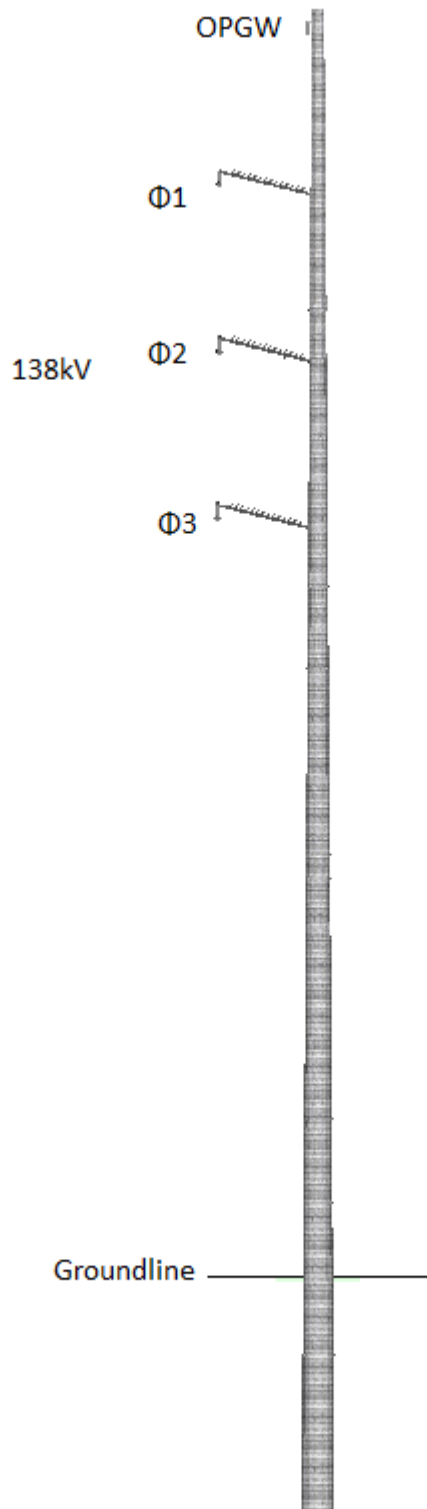


Figure 3 – Typical cross-section model used for EMF calculations for Section 3. Looking west down line. Area of Study 50ft either side of pole centerline.

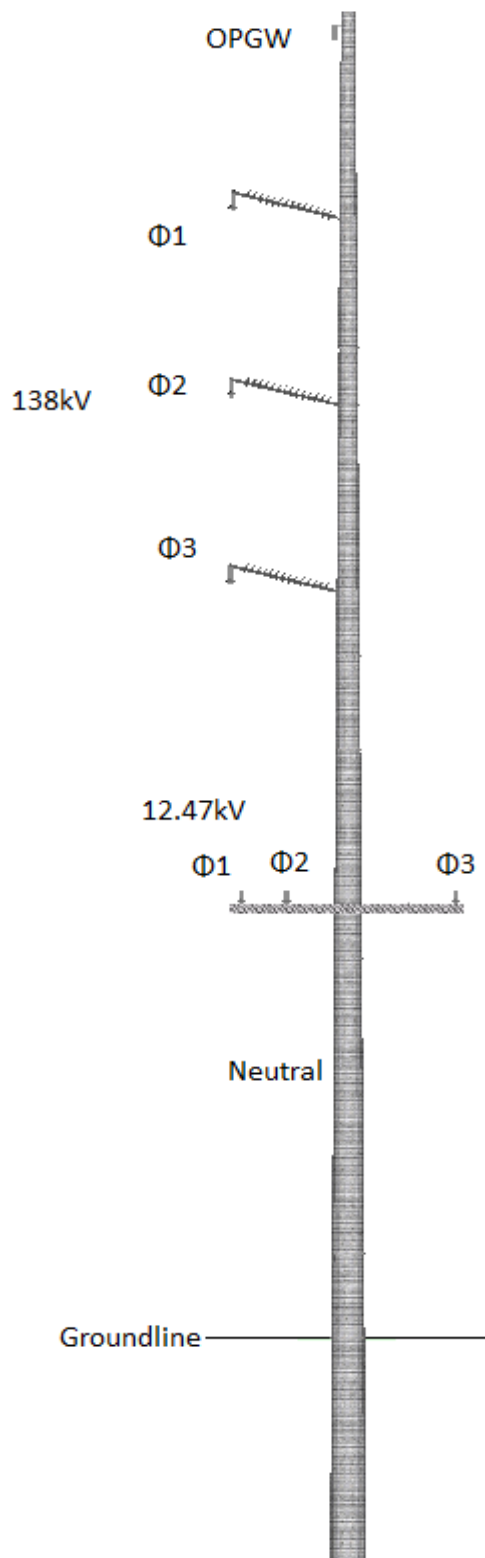


Figure 4 – Typical cross-section model used for EMF calculations for Section 4. Looking west down line. Area of Study 50ft either side of pole centerline.

Calculated Electric and Magnetic Field Strength Levels

Calculations in this report were performed using the 2D EMF calculations module in the PLS-CADD program. PLS-CADD is the industry standard 3D line modelling software for overhead power lines. The 2D EMF calculations module in PLS-CADD is based on the Electric Power Research Institute (EPRI) **Red Book, 2nd Edition** method and utilizes exact electric and magnetic field solutions for two-dimensional cross-section models that assume infinite straight-line conductors at a constant height. The mid-span sag height for each cross section is used for the calculations to arrive at estimates of worst-case field magnitudes, as electric and magnetic field magnitudes generally decrease with an increase in conductor height from the ground.

Tables 1 & 2 lists the coordinates for each of the phase conductors, shield wires, and neutral as modelled in the representative cross-sections. Coordinates for phases with bundled conductor are to the geometric mean of the bundle. Dimensions are in feet with horizontal (x) values relative to the pole center line and conductor heights (z) relative to ground level for the section based on conductor sag at maximum operating temperature.

Cross Section 1									
Circuit	Voltage	$\phi 1$		$\phi 2$		$\phi 3$		Shield	
		x(ft)	z(ft)	x(ft)	z(ft)	x(ft)	z(ft)	x(ft)	z(ft)
13852	138kV	-5.8	59.03	-5.86	49.03	-5.94	39.03		
	OPGW (0kV)							-0.67	72.2
Cross Section 2									
Circuit	Voltage	$\phi 1$		$\phi 2$		$\phi 3$		Shield	
		x(ft)	z(ft)	x(ft)	z(ft)	x(ft)	z(ft)	x(ft)	z(ft)
13852	138kV	-5.8	59.03	-5.86	49.03	-5.94	39.03		
	OPGW (0kV)							-0.67	72.2
Underbuild	12.47kV	-3.17	27.43	5.5	27.43	-5.5	27.43		
	Neutral (0kV)							0	21.55

Table 1 – Conductor geometry for Cross-Sections 1 & 2.

Cross Section 3									
Circuit	Voltage	$\phi 1$		$\phi 2$		$\phi 3$		Shield	
		x(ft)	z(ft)	x(ft)	z(ft)	x(ft)	z(ft)	x(ft)	z(ft)
13852	138kV	-5.88	58.74	-5.93	48.74	-6.02	38.73		
	OPGW (0kV)							-0.69	72.95
Cross Section 4									
Circuit	Voltage	$\phi 1$		$\phi 2$		$\phi 3$		Shield	
		x(ft)	z(ft)	x(ft)	z(ft)	x(ft)	z(ft)	x(ft)	z(ft)
13852	138kV	-5.88	58.74	-5.93	48.74	-6.02	38.73		
	OPGW (0kV)							-0.69	72.95
Underbuild	12.47kV	-3.17	23.84	5.5	23.84	-5.5	23.84		
	Neutral (0kV)							0	20.03

Table 2 - Conductor geometry for Cross Sections 3 & 4.

Electric and magnetic field magnitudes are calculated for each of the cross-sections at two-foot intervals along paths crossing beneath the line at a height of 3.28ft (1m) above ground level. For the purpose of the EMF calculations, the Area of Study for all Cross Sections was 50ft to either side of pole centerline. Results are reported across the width of the Area of Study.

Electric Field Strength Results

Electric fields are calculated assuming phase-to-phase voltages at 105% of the rated line voltage, or 145kV for the 138kV circuit. The distribution underbuild was analyzed using 15kV phase-to-phase voltage. The transmission phase angles are taken as 120° apart. The 12.47kV distribution system is stepped down from transmission voltage via delta-wye connected transformers, and thus the 12.47kV phase angles are assumed to be behind the transmission circuit by 30°.

The largest electric fields occur in Cross-Section 4 with a maximum of 0.609 kV/m approximately 14ft south of pole centerline. Electric field strength is typically a function of transmission conductor height above ground, and Cross Sections 3 & 4 are where the 138kV conductors are the lowest. The values in Sections 2 and 4 are slightly higher than Sections 1 and 3 where the underbuild circuit is considered. All cross sections considered had maximum electric field values between 0.5 and 0.61kV/m, as all sections considered had very similar geometry.

For all cross sections, the electric field strength is greater on the road side of the poles. (East side in Sections 1 & 2, and south in Sections 3 & 4.) This is due to the vertical framing arrangement of the transmission circuit with all three phases offset toward the road on line posts.

All calculated electric field values for all cross sections are well below maximum permissible exposure limits of 5kV/m for general public exposure as per Table 4 in IEEE Standard C95.6-2002 for 60Hz AC.

Figure 6 shows the electric field values across the Area of Study for each of the cross-sections considered.

Electric and magnetic field calculation results are summarized in **Table 4** on the following page.

Table 4 – Electric and magnetic field results summary listing of the calculated rms field magnitudes, electric fields in kV/m and magnetic fields in units of milligauss (mG) at each edge of study area (EAoS) and maximum beneath line.

Model		Electric Field (kV/m)	Magnetic Field (mG)			
Cross Section	Description	105% Nominal Voltage (EAoS/MAX/EAoS)	Summer Line Normal	Summer Line Emergency	Winter Conductor Normal	Winter Conductor Emergency
1	138kV Transmission Circuit, Vertical	0.073/0.527/0.058	47.545 – E edge	52.011 – E edge	82.765 – E edge	92.489 – E edge
			96.653 – MAX	105.732 – MAX	168.252 – MAX	188.019 – MAX
			36.618 – W edge	40.058 – W edge	63.745 – W edge	71.234 – W edge
2	138kV Circuit, Vertical, with 3-phase 12kV underbuild	0.083/0.547/0.048	46.852 – E Edge	51.507 – E Edge	81.178 – E Edge	90.656 – E Edge
			112.39 – MAX	128.427 – MAX	172.738 – MAX	195.345 – MAX
			41.6 – W Edge	46.507 – W Edge	67.73 – W Edge	76.259 – W Edge
3	138kV Transmission Circuit, Vertical	0.095/0.579/0.043	47.952 – S Edge	52.485 – S Edge	83.502 – S Edge	93.281 – S Edge
			98.021 – MAX	107.287 – MAX	170.692 – MAX	190.681 – MAX
			36.752 – N Edge	40.226 – N Edge	63.999 – N Edge	71.494 – N Edge
4	138kV Circuit, Vertical, with 3-phase 12kV underbuild	0.106/0.609/0.029	47.168 – S Edge	51.875 – S Edge	81.697 – S Edge	91.232 – S Edge
			128.609 – MAX	149.775 – MAX	182.614 – MAX	208.668 – MAX
			42.53 – N Edge	47.648 – N Edge	68.686 – N Edge	77.42 – N Edge

Magnetic Field Strength Results

Magnetic field calculations were performed for the cross-sections considered under four electrical load scenarios: Summer Line Normal Rating, Summer Emergency Line Rating, Winter Normal Conductor Rating, and Winter Emergency Conductor Rating. The ampacity values for each electrical load scenario were provided by AES Ohio for the 138kV transmission circuit and 3-phase 12kV circuit.

The power flow ratings for these scenarios are listed in **Table 5**. Balanced three-phase currents are assumed for all calculations.

Load Condition	138kV Circuit		3-phase 12.47kV Circuit	
	MVA	3-Φ Amps	MVA	3-Φ Amps
Summer Normal Line Rating	402 MVA	1,682	14.5 MVA	671
Summer Emergency Line Rating	440 MVA	1,841	17.8 MVA	822
Winter Normal Conductor Rating	700 MVA	2,929	14.5 MVA	671
Winter Emergency Conductor Rating	782 MVA	3,272	17.8 MVA	822

Table 5 – Electrical Load ratings and cable ampacities.

Again, the largest values for magnetic field strength were found in Cross-Section 4 where the conductors were closest to the ground, with a maximum value of 208.668mG for the highest electrical loading occurring near pole centerline.

Magnetic field strength in cross-sections 2 and 4 were somewhat greater than in cross-sections 1 and 3 when considering the 12.47kV underbuild circuits as well as the transmission circuit. Magnetic field strength increased as electrical load increased and as conductor height above ground decreased.

All calculated magnetic field values for all cross sections are well below maximum permissible exposure limits of 0.904mT (9,040mG) for general public exposure as per Table 2 in IEEE Standard C95.6-2002 for 60Hz AC.

Figures 7 - 10 plot the magnetic field strengths across the Area of Study for the various cross sections and electrical loads. Negative offset values are east of pole centerline in Cross Sections 1 & 2 with positive values west. Negative offset values are south of pole centerline for Cross Sections 3 & 4 with positive offsets north.

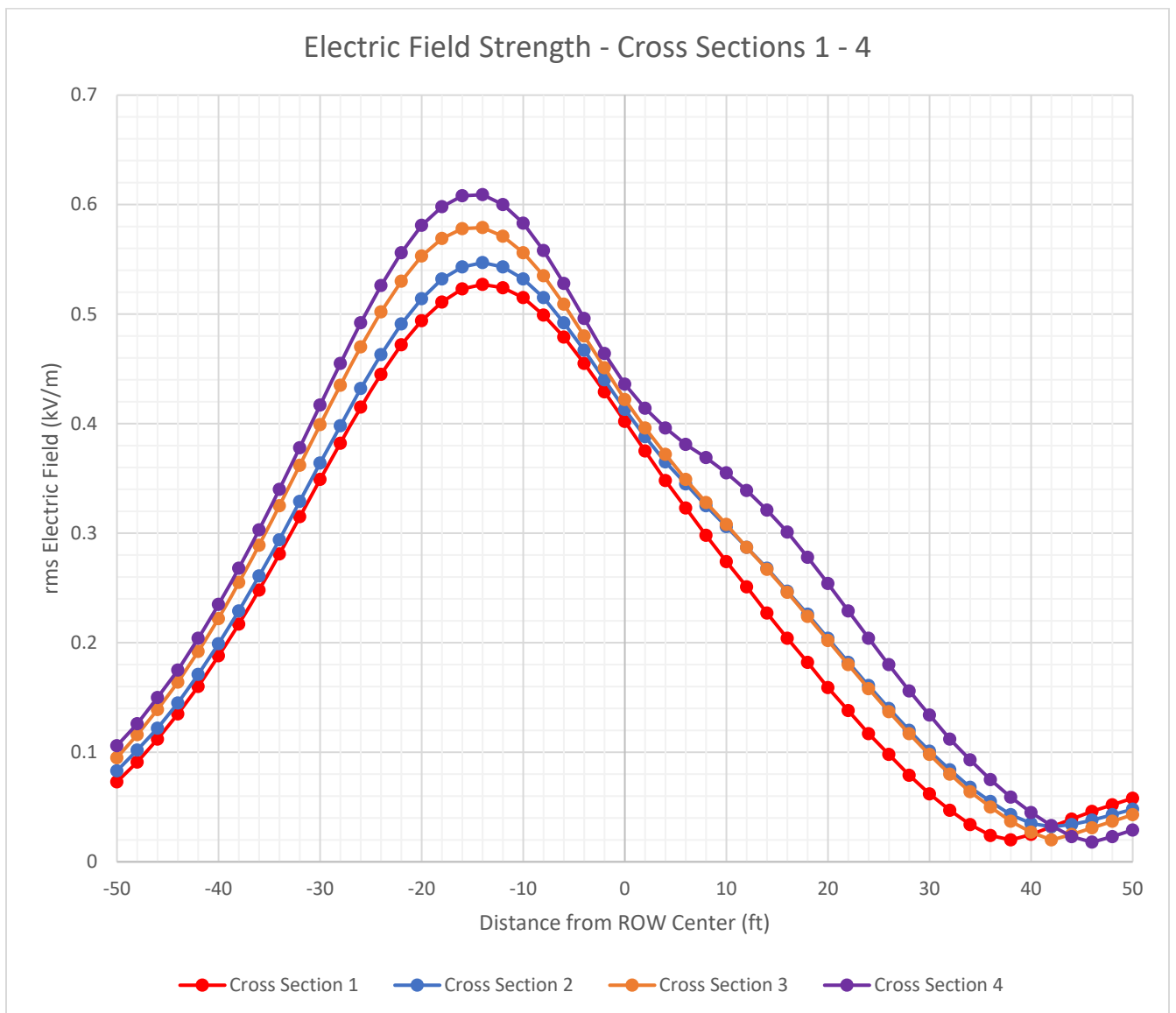


Figure 6 – Electric field strength for Cross Sections 1-4.

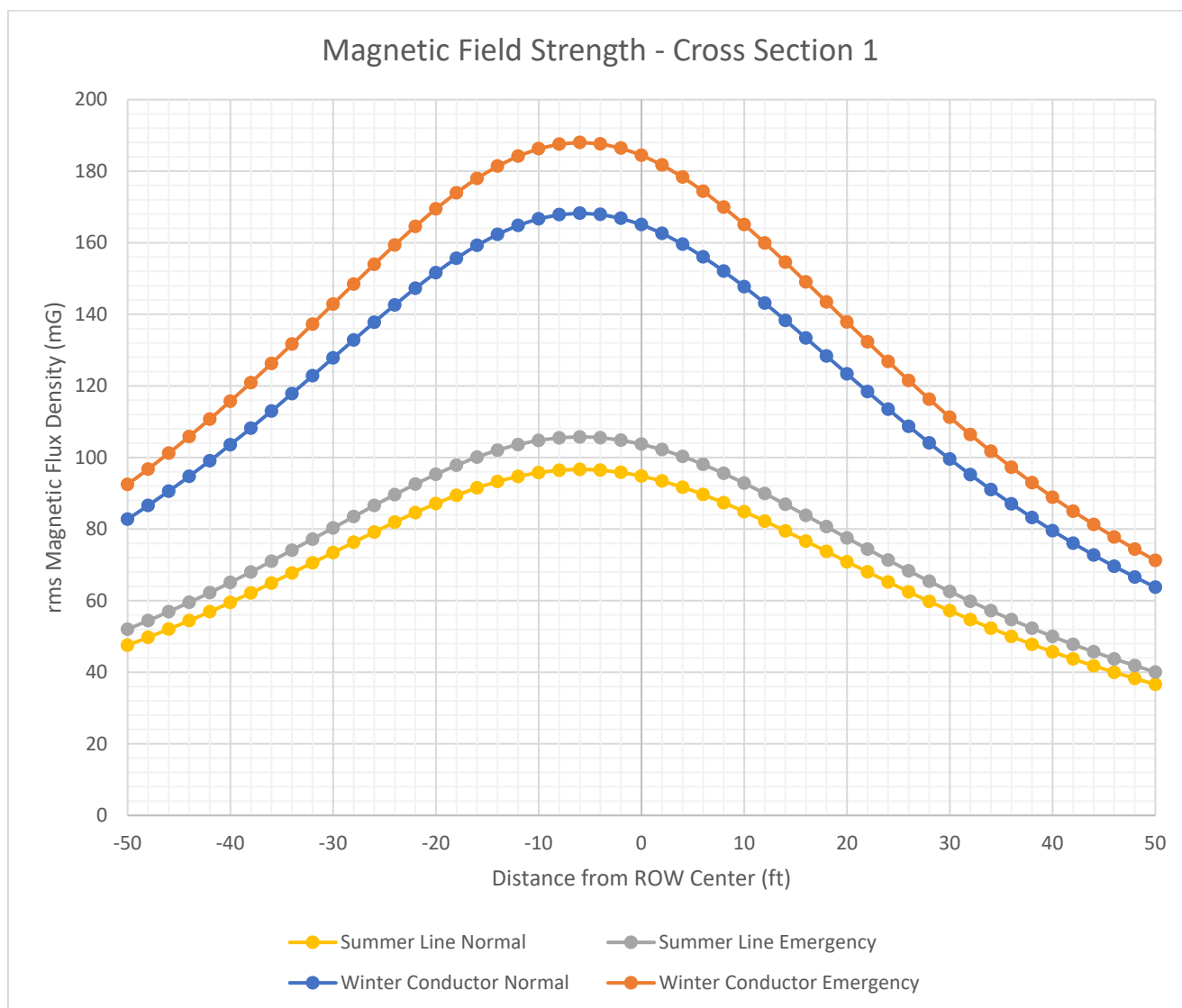


Figure 7 – Magnetic field strengths at Cross-Section 1 for Electrical Load cases considered.

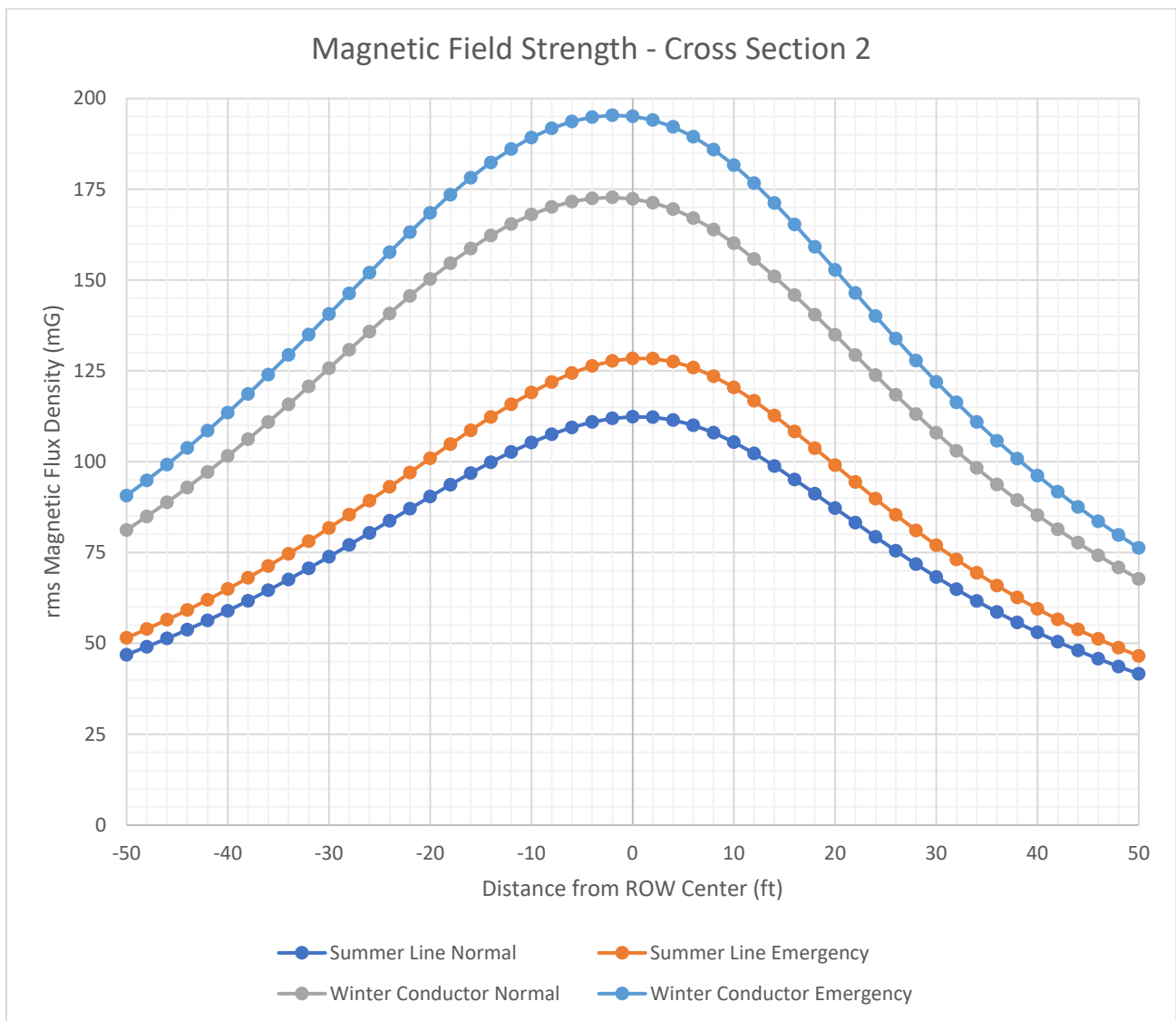


Figure 8 – Magnetic field strengths at Cross-Section 2 for Electrical Load cases considered.

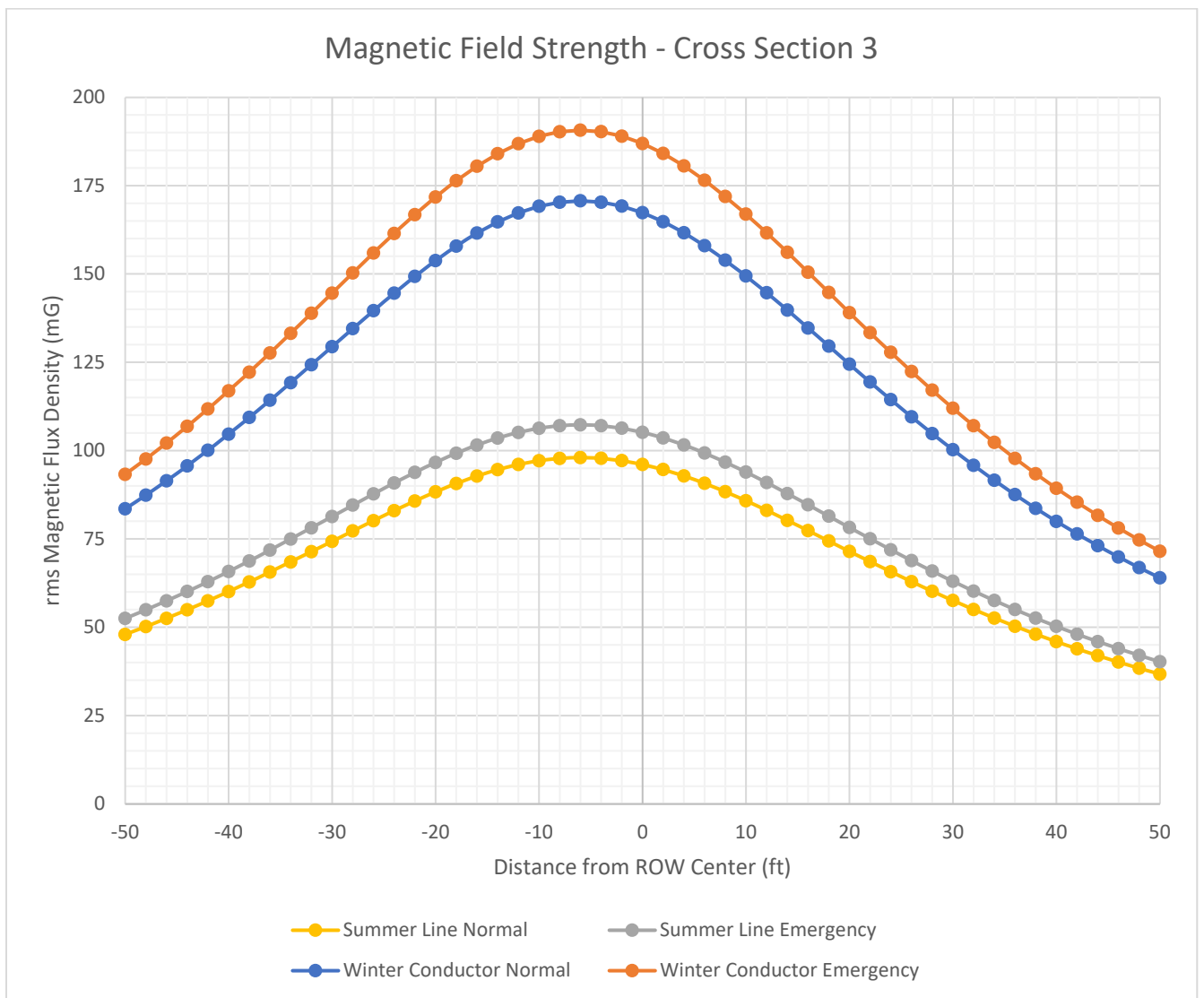


Figure 9 – Magnetic field strengths at Cross-Section 3 for Electrical Load cases considered.

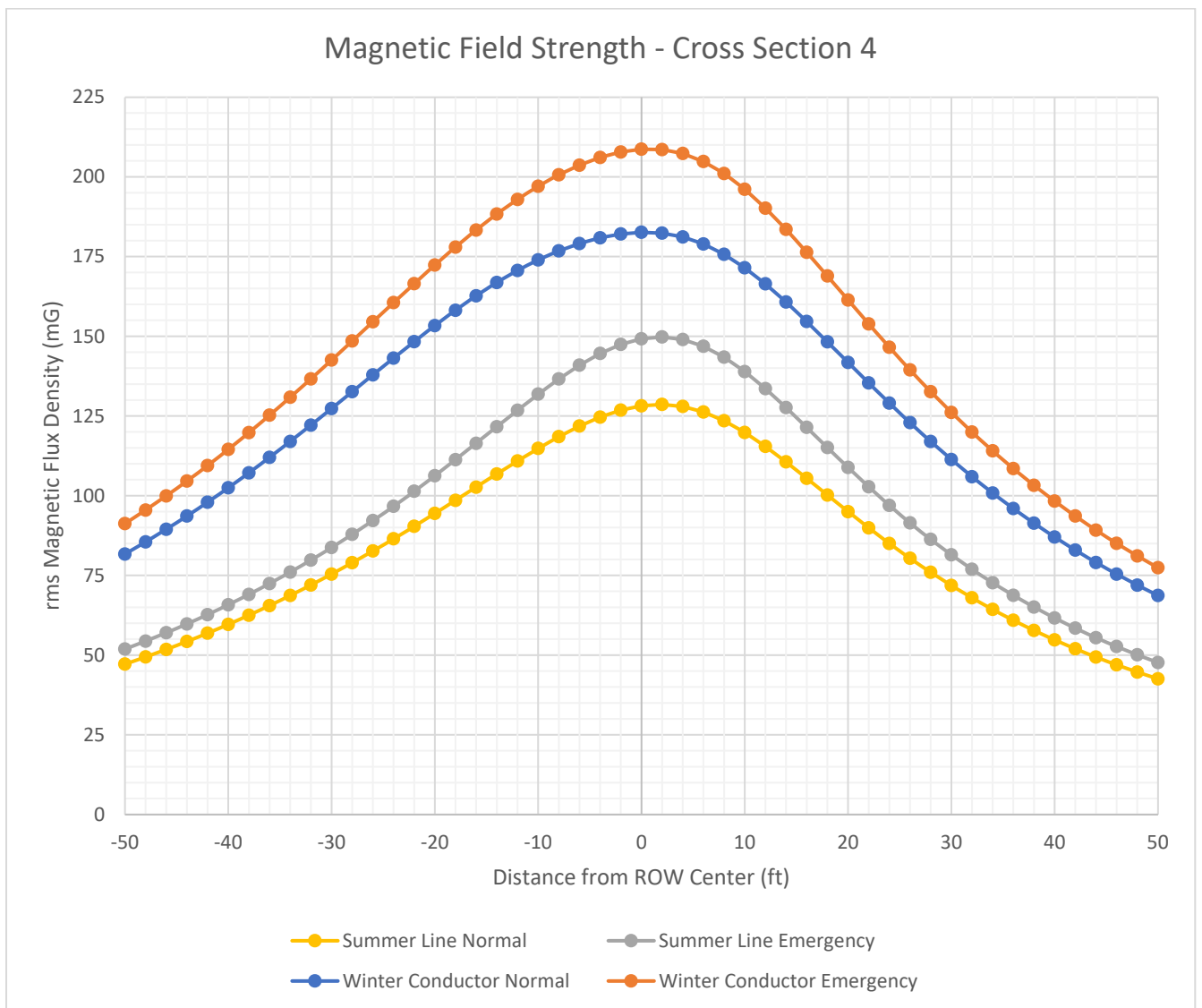


Figure 10 – Magnetic field strengths at Cross-Section 4 for Electrical Load cases considered.

Attachment C
Cultural Resources OHPO Consultation and OHPO Concurrence

Baiocchi, Tegan

From: Baiocchi, Tegan
Sent: Monday, November 1, 2021 4:11 PM
To: section106@ohiohistory.org
Cc: Haag, Crista
Subject: Section 106 Review: West Milton to Airport and Airport to Miami 138kV Transmission Line Projects, Miami County
Attachments: Airport to Miami OHPO Letter.pdf; West Milton to Airport OHPO letter.pdf; DirectAPE_AES_AirportRoutes_20211028.zip

Good afternoon –



Arcadis would like to submit the attached letters on behalf of the Dayton Power and Light Company (DP&L) for review. The project falls under the jurisdiction of the Ohio Power Siting Board.

Thank you!
Tegan

Tegan Baiocchi
Architectural Historian
Arcadis U.S., Inc.
111 W Berry Street, Suite 211 | Fort Wayne, IN | 46802 | USA
T +1 260 204 5521
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Department Head
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Ohio Historic Preservation
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Columbus, Ohio 43211

Arcadis U.S., Inc.
4665 Cornell Road
Suite 200
Cincinnati Ohio 45241
Tel 513 860 8700
Fax 513 860 8701
www.arcadis.com

Subject:
The Dayton Power and Light Company
Airport to Miami 138kV Transmission Line Project
Monroe Township, Miami County, Ohio

Date:
October 28, 2021

Contact:
Crista Haag

Dear Ms. Welling:

Arcadis U.S., Inc. (Arcadis) is submitting this letter on behalf of The Dayton Power and Light Company (DP&L) doing business as “AES Ohio”, an AES Corporation company, for the Airport to Miami 138kV Transmission Line Project (Project) located in Monroe Township, Miami County, Ohio (Figure 1). AES OHIO is planning to construct a new 1.1-mile 138kV line extension to improve the capacity and reliability of the electric system serving the growing load center around the Dayton Airport. Project activities will consist of constructing transmission poles and/or replacing existing poles, electric wires, and hardware within a new right of way (ROW) along Peters Road and Ginghamburg-Frederick Road. This new line will be connected to an existing 138kV line and to a new substation¹. The Project falls under jurisdiction of the Ohio Power Siting Board (OPSB) and subsequently, Ohio Revised Code, Sections 149.52-149.54.

Phone:
(513) 985-8012

Email:
crista.haag@arcadis.com

AREA OF POTENTIAL EFFECT

Arcadis considered both direct and indirect effects when developing the Area of Potential Effect (APE) for the Project (Figure 2). The direct APE is limited to the Project impacts associated with the ground disturbance that include the 1.1-mile long, 40-foot wide new ROW totaling 5.3 acres. The Project does involve the construction of new transmission line adjacent to an existing roadway and

¹ The new substation is a separate project (OHPO # 2021-MIA-52368). Arcadis is conducting the cultural resources consultation for that project as well (Haag et al. 2021).

transmission line ROW. The new transmission/distribution line will be constructed in place of an existing distribution line within the new ROW, but will have taller transmission line poles ranging from 79 to 83.5 feet above ground level, approximately 30 feet taller than the existing distribution line poles. To account for visual impacts, the viewshed (or indirect APE) was evaluated using a 0.5-mile buffer around the direct APE.

PREVIOUSLY RECORDED CULTURAL RESOURCES AND SURVEYS

Arcadis conducted background research for the Project using the OHPO online mapping database to locate previously recorded cultural resources and investigations within a one-mile radius of the Project. Information collected included archaeological sites, architectural and historical resources, Determination of Eligibility files, National Register of Historic Places (NRHP) properties, National Historic Landmarks, historic cemeteries, historic bridges, and previous cultural resources surveys.

Results of the background research identified one prehistoric archaeological site and two cultural resources investigations within one mile of the Project (Figure 3). A cemetery was also mapped within one mile of the Project, but was determined to be mapped incorrectly. None of these known cultural resources or surveys are within the Project APE. The identified archaeological site (33MY0803) is located approximately 0.98 mile to the southwest of the direct APE.

In addition to the OHPO records check, Arcadis also reviewed historic-era mapping available for the Project area. The table below (Table 1) lists the resources that were examined.

Table 1. List of Historic-Era Mapping Reviewed for the Project

Date	Publisher	Historic Map Title
1858	S.H. Matthews	<i>Ohio, Miami County, 1858</i>
1871	C.O. Titus	<i>Ohio, Miami County, 1871</i>
1875	L.H. Everts and Company	<i>Illustrated Historical Atlas of Miami County</i>
1894	Rerick Brothers	<i>The County of Miami Ohio</i>
1914	William C. Mills, Fred J. Heer	<i>Archeological Atlas of Ohio</i>
1935-2016	Unites States Geographical Survey	<i>Topographic Maps</i>

The Mills and Heer (1914) atlas documents prehistoric sites within Ohio, especially the location of no longer extant mounds, village sites, and earthworks. According to Mills and Heer (1914), Miami County contains 96 archaeological sites including 22 mounds, 35 village sites, and 15 earthwork enclosures. Monroe Township contains relatively few sites, including one village site and three burials. Prehistoric settlement appears to have occurred more to the east and west of the Project along large established

waterways (Little Miami River and Stillwater Creek) as evidenced by several recorded village sites (Figure 4; Mills and Heer 1914).

The earliest historic-era mapping from 1858 depicts a primarily rural landscape with large tracts of land (Figure 5). Property owners within the Project APE include “Mich. Sweet, and Tho. Macy.” The 1871 atlas did not depict landowners but did show localized settlements in nearby Fredericks town and Tippecanoe City (Figure 6). In 1875 and 1894, the property owners continue to change within the Project APE. In 1875, along Ginghamburg Frederick Road, the larger previous parcel was divided into smaller plots. The owners listed in these smaller plots was not legible on the 1875 atlas. The larger parcel along Peters Road was owned by “Neal” and in 1894, they are “Wm Kearns, D.A. Smith, and G. Baptist Church (Figures 7 and 8).” The 1894 atlas also illustrates two buildings on the west side of Peters Road and two north of Ginghamburg Frederick Road. These buildings no longer appear to be extant within the indirect APE. For example, the church currently on the west side of Peters Road was constructed in 1948 and likely replaced the church illustrated in the 1894 atlas (Miami County Auditor 2021; Photograph 1). In 1911, one of the buildings north of Ginghamburg Frederick Road is gone (Figure 9). From the topographic mapping, the Project area remains relatively rural throughout the early 20th century. By 1956, the Dayton Municipal Airport is visible and beginning to expand northward toward the Project by the 1970s. Modern residential development begins to appear along County Line Road and Fredericktown-Ginghamburg Road from the 1970s into the early 1990s. A recent survey by Haag et al. (2021) identified a residence south of Ginghamburg Frederick Road within the indirect APE that was constructed during this timeframe in 1969 (Photograph 2). Present land use within the Project APE is active agricultural land and domestic residences.

In reviewing the overall area within the indirect APE, the historic USGS topographical maps indicate that the area was sparsely populated, consisting mostly of large farm properties, until the late 1960s to the mid-1970s. The 1955 Tipp City quad map shows that while there are some clusters of residences near the intersection of Peters and Ginghamburg-Frederick Roads and the intersection of Peters and Evanston Roads, the majority of the Project APE consisted of isolated properties (Figure 10). By 1965, increased residential development had taken place along Peters Road, including the construction of a linear residential subdivision just west of Peters Road between Evanston and Michaels Roads (Figure 11). By 1973 and 1982, significant infill of modern residential development occurred along Peters Road, and had spread to Bard Road and Ginghamburg Frederick Road to the west (Figures 12 and 13). Residential development has continued to the present day within the Project APE, particularly within the northern portion of the Project, and many of the historic-era farms and their buildings have been demolished and replaced with modern homes and outbuildings or have undergone significant alterations.

CONCLUSIONS AND RECOMMENDATIONS

The Project involves the construction of a new 1.1-mile 138kV line extension that will be connected to an existing 138kV line and to a new substation (the new substation is a separate project). The Project footprint totaling 5.3 acres is defined as the direct APE. The direct APE is level and situated adjacent to an existing road and transmission line ROW (Photographs 3 to 6). The indirect APE includes a 0.5-mile buffer around the direct APE.

The background records check did not document any known cultural resources within the Project APE. A review of historic-era mapping indicates that Miami County, especially Monroe Township, contained a low frequency of prehistoric sites and none of those were within the vicinity of the Project APE. Historically, the Project area was rural with a few structures located to the west of Peters Road and north of Ginghamburg Frederick Road. These structures are no longer extant with the exception of one church dating to 1948 (see Photograph 1). There was another residence dating to 1969 that was evaluated as part of the new substation project by Haag et al. (2021). This residence was recommended as not eligible for listing in the NRHP. Please note that Haag et al. (2021) is still in review by the OHPO.

The Project APE is considered to contain a low to moderate probability of identifying historic properties, based on the following:

- There are no known cultural resources within the overall Project APE;
- Many of the historic-era farms and other structures shown on the historic mapping have been demolished, altered, or in-filled with new residential construction and no longer retain integrity of setting;
- Most of the properties within the Project APE that are 45 years old or older are within the viewshed of existing transmission line towers or other non-historic visual intrusions; and
- Most of the properties within the Project APE that are 45 years old or older were constructed post-1965 and are individual residences or church properties that would not have setting as a qualifying characteristic of their potential NRHP eligibility; and
- The entire direct APE is adjacent to a previously disturbed road and transmission line ROW.

Based on the results in this letter, there is a low probability that the Project will adversely affect historic properties within the direct or indirect APE. Arcadis respectfully requests that your office review the information provided and advise on the need for additional cultural resources work (if any). If you have any questions concerning this Project, please feel free to contact me at (513) 985-8012 or crista.haag@arcadis.com.

Sincerely,

Arcadis U.S., Inc.



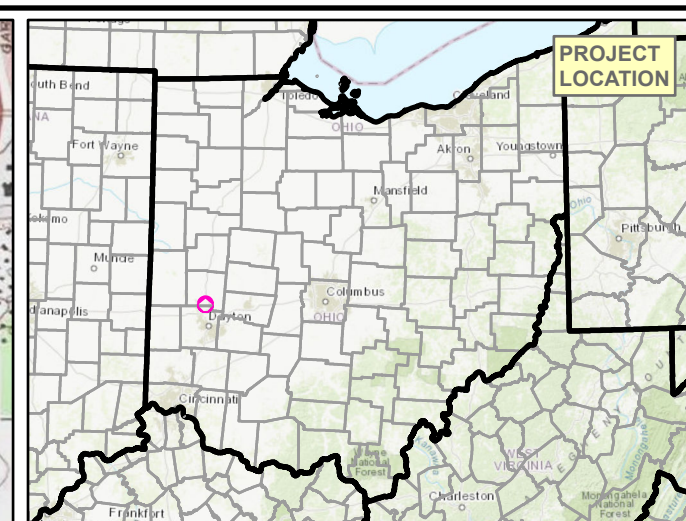
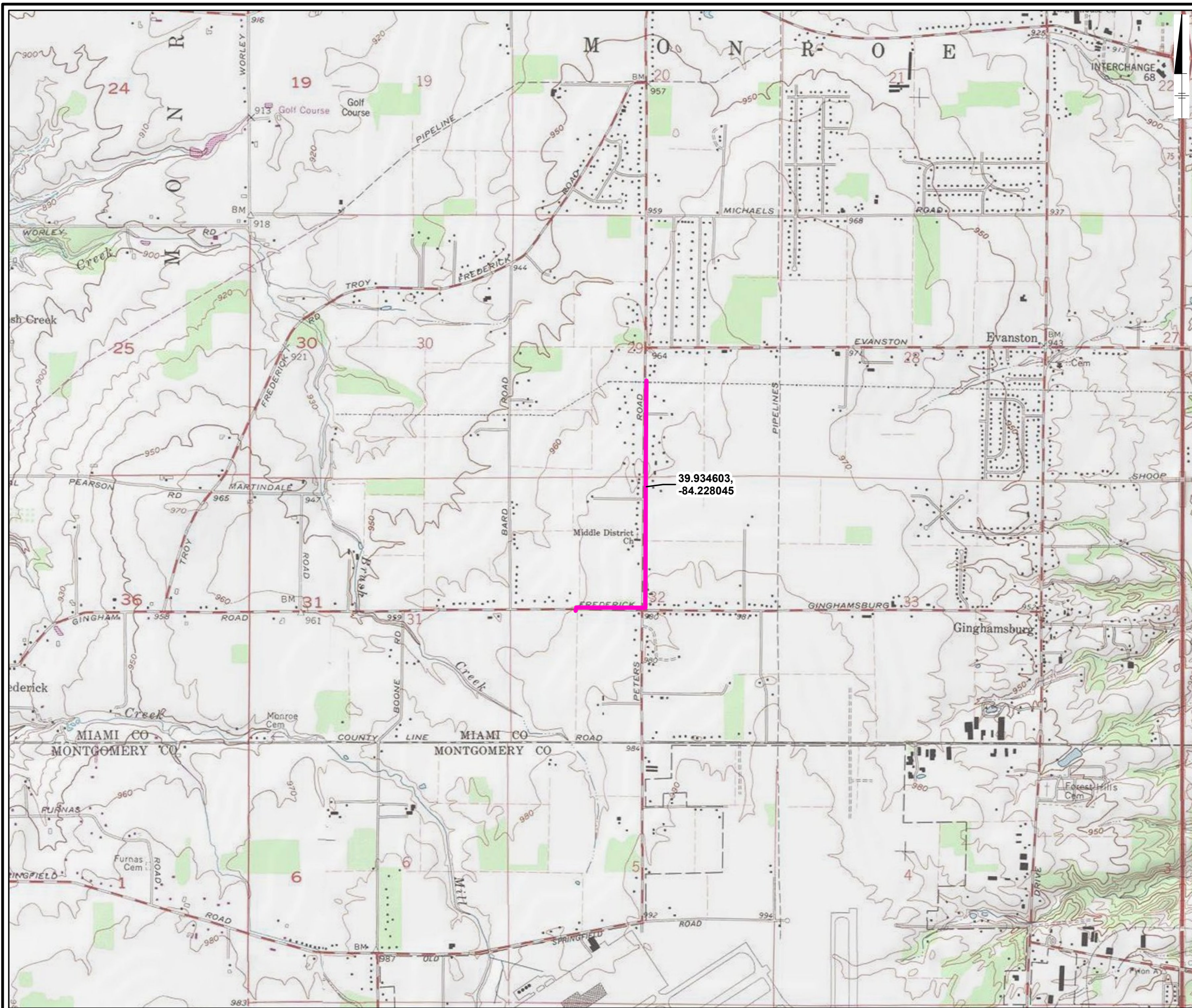
Crista M. Haag, MA
Principal Investigator

REFERENCES

Haag, Crista M., Chris Goodrich, and Tegan Baiocchi. 2021. *Phase I Cultural Resources Survey for the Dayton Airport Substation Project, Monroe Township, Miami County, Ohio*. Prepared by Arcadis. Prepared for AES OHIO. Lead Agency: OPSA. OHPO # 2021-MIA-52368.

Miami County Auditor. 2021. *Miami County Auditor's Website*. <https://www.miamicountyauditor.org/> [Date accessed 10/14/2021].

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Legend
Project

0 1,500 3,000
Feet

GRAPHIC SCALE

0 500 1,000
Meters

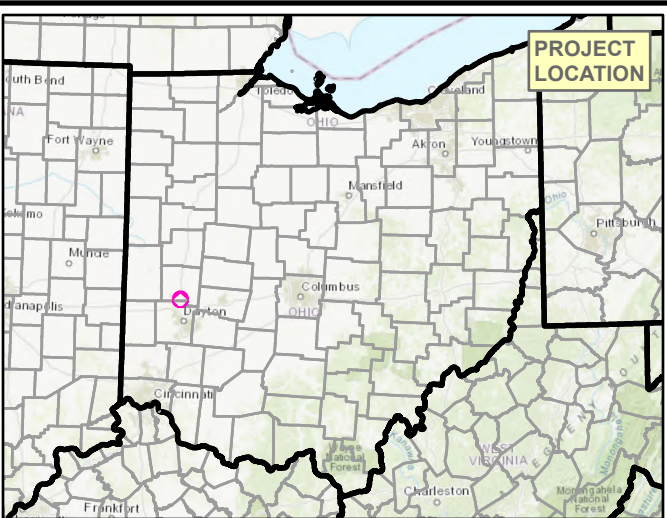
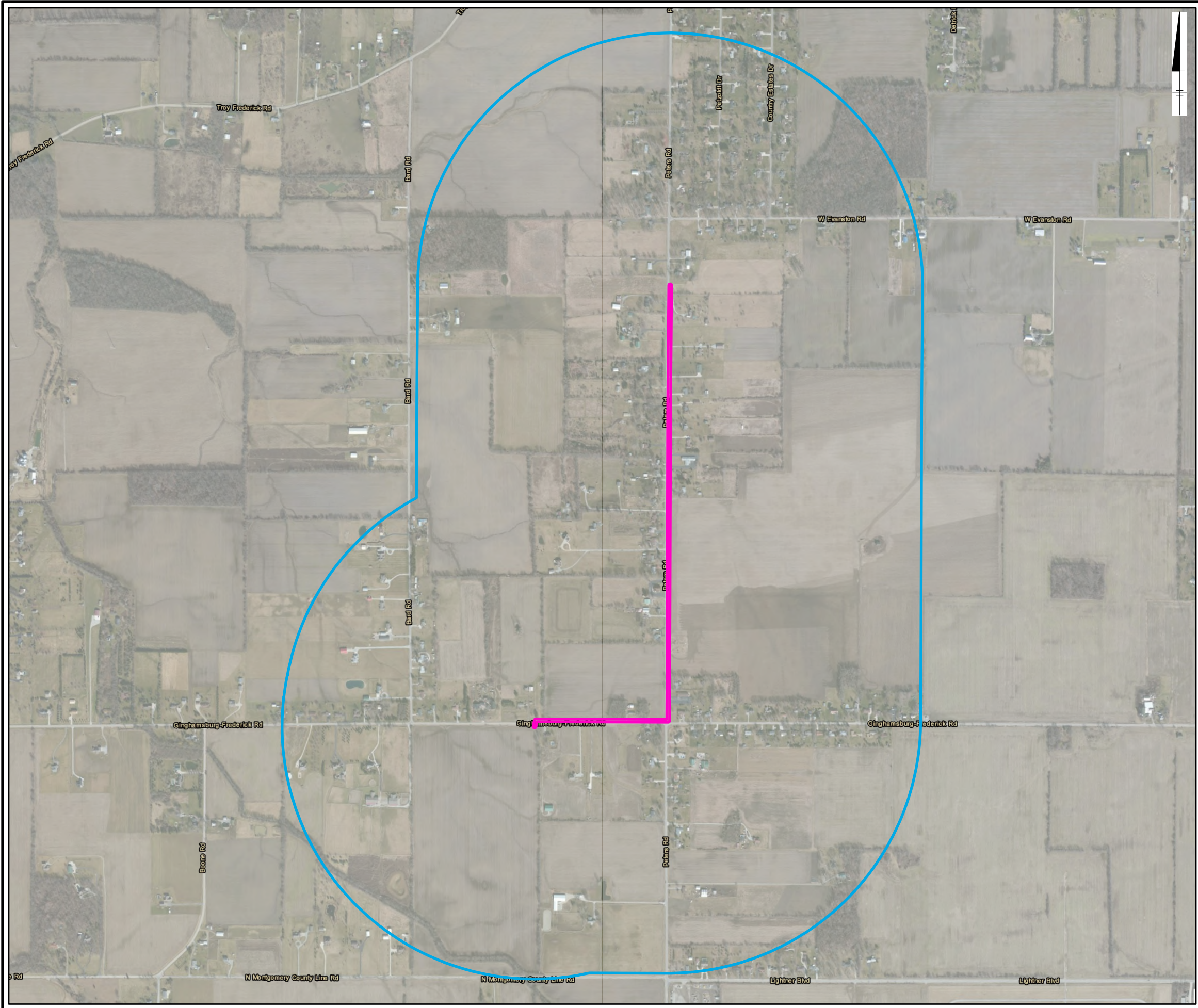
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NOTE:
1. USGS TOPOGRAPHIC QUADRANGLE TIPP CITY, OHIO OBTAINED FROM ESRI IMAGE SERVICE. PHOTO PUBLISHED 1982.

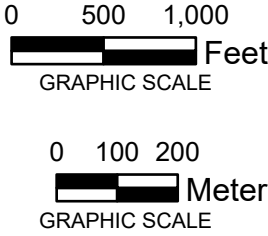
THE AES CORPORATION
AIRPORT - MIAMI 138KV
DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

PROJECT OVERVIEW

City: CIN Div/Group: EPP Created By: MVazquez Last Saved By: AVolf
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Legend
Indirect APE
Direct APE



NOTE:
1. 2017 AERIAL IMAGERY OBTAINED FROM ESRI IMAGE SERVICE.

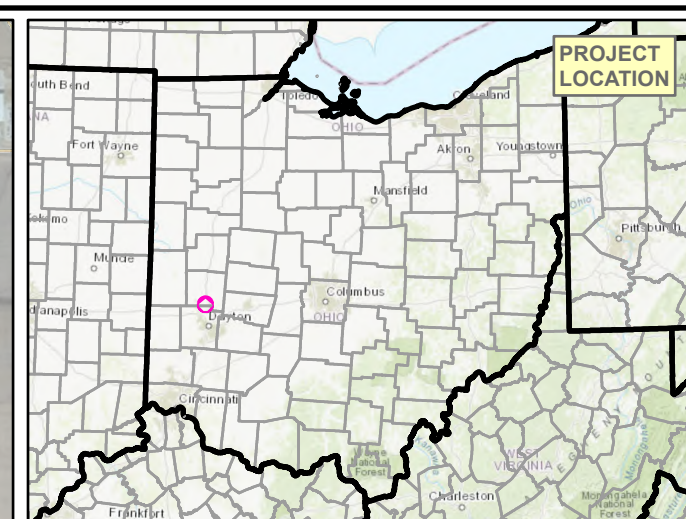
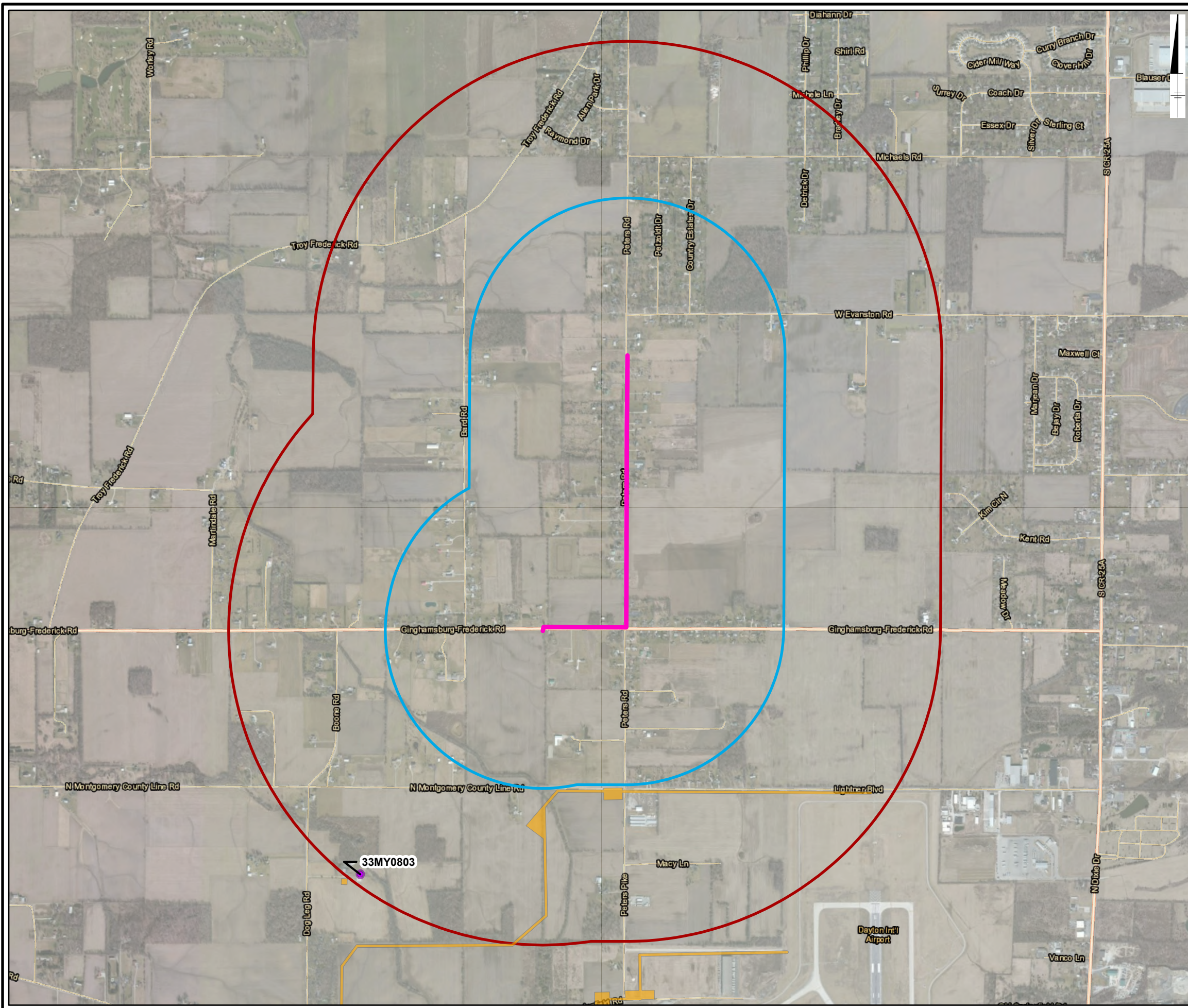
THE AES CORPORATION
AIRPORT - MIAMI 138KV
DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

PROJECT OVERVIEW

aes ARCADIS

FIGURE
2

City: CIN Div/Group: EPP Created By: MVazquez Last Saved By: AVolf
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Legend

- Archaeological Site
- OAI Site Boundary
- Previous Phase 1 Survey
- Indirect APE
- Direct APE
- 1 Mile Study Area

0 1,000 2,000
Feet
GRAPHIC SCALE

0 250 500
Meters
GRAPHIC SCALE

NOTE:
1. 2017 AERIAL IMAGERY OBTAINED FROM ESRI IMAGE SERVICE.

THE AES CORPORATION
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DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

**PREVIOUSLY IDENTIFIED
CULTURAL RESOURCES**

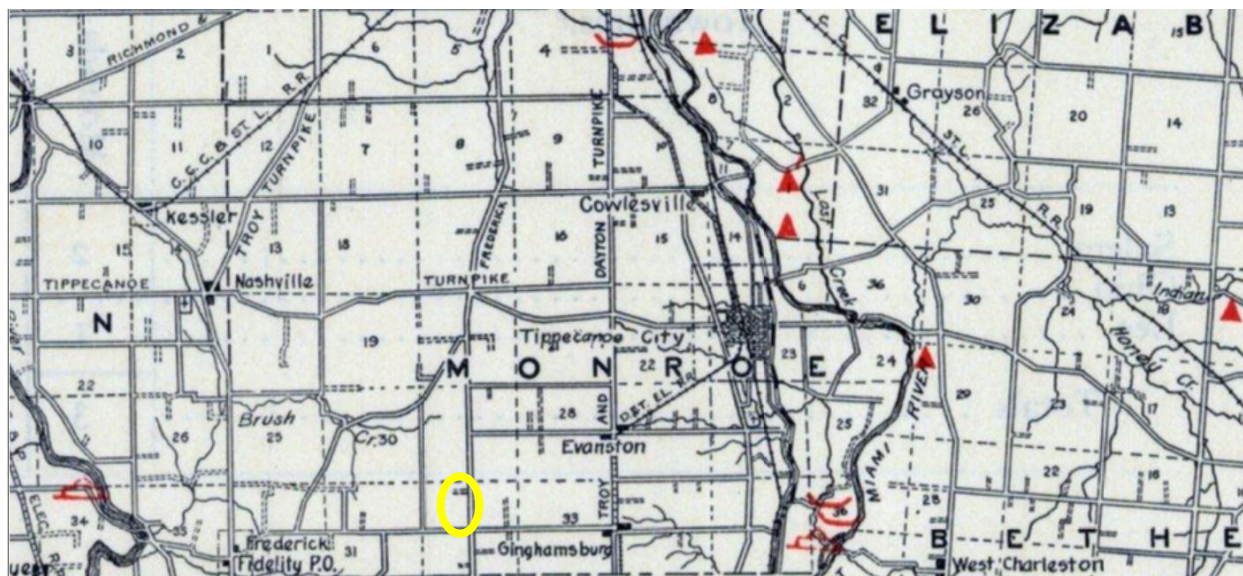


Figure 4. Mills (1914) atlas depicting Project Area (in yellow).

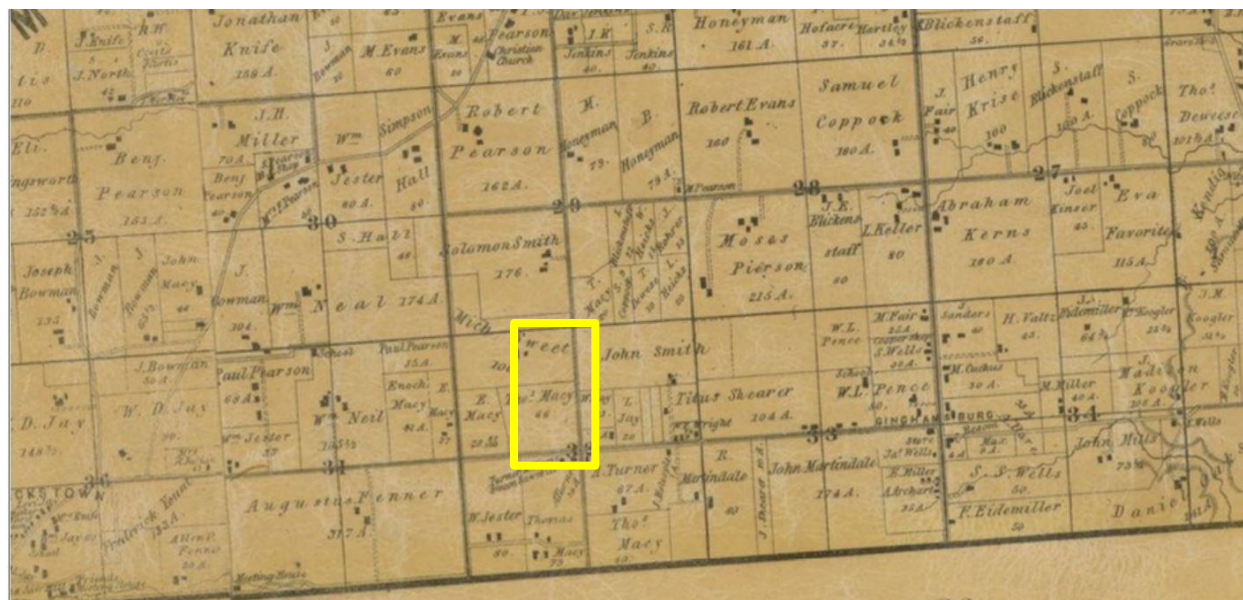


Figure 5. Miami County 1858 Mapping depicting Project Area (in yellow).

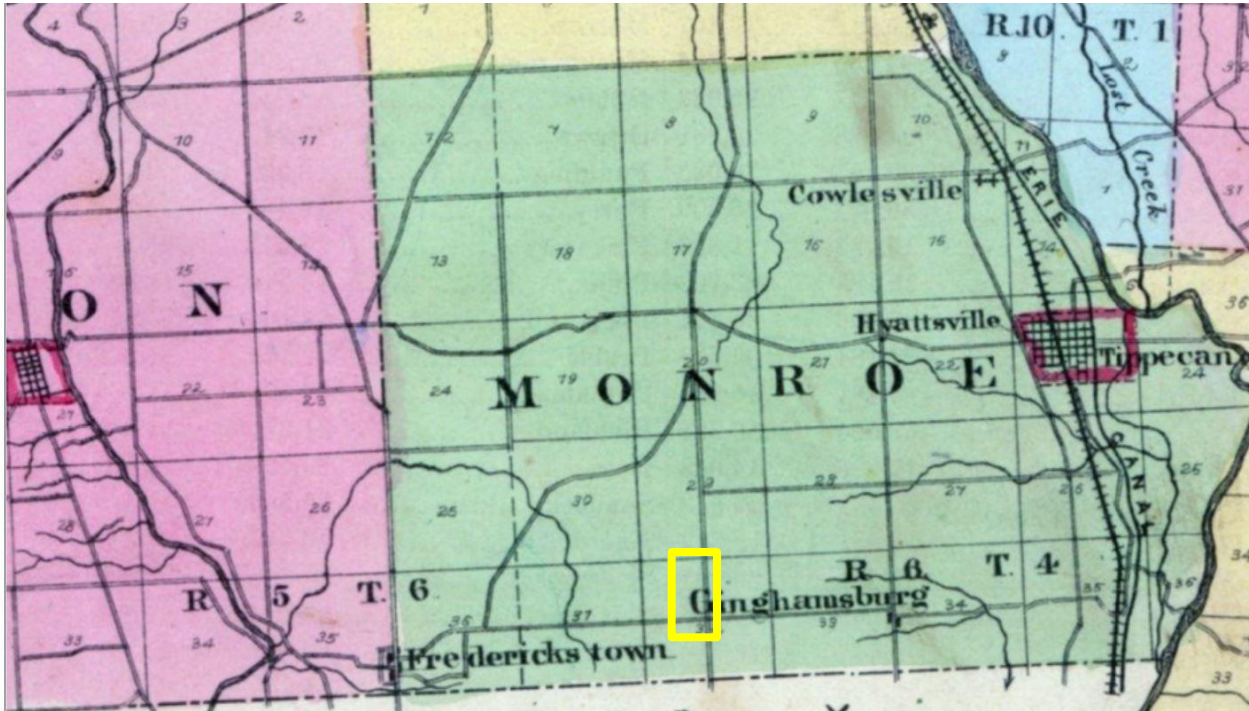


Figure 6. Miami County 1871 Atlas depicting Project Area (in yellow).

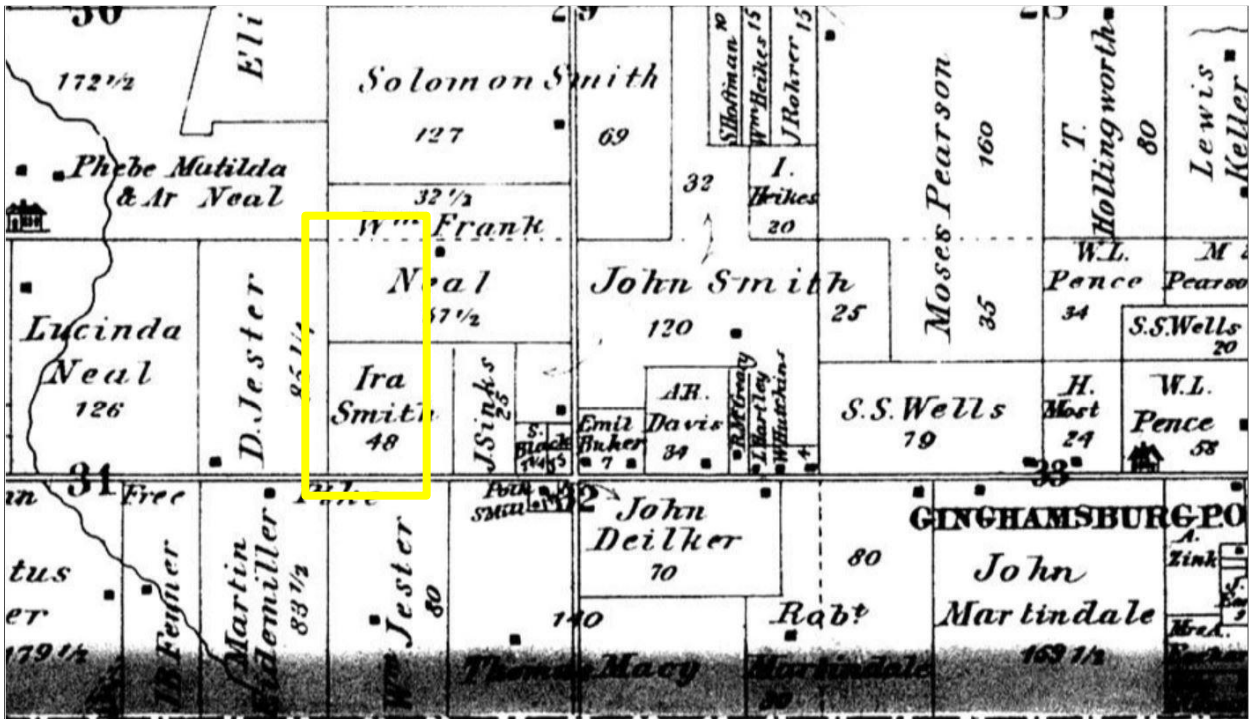


Figure 7. Miami County 1875 Atlas depicting Project Area (in yellow).

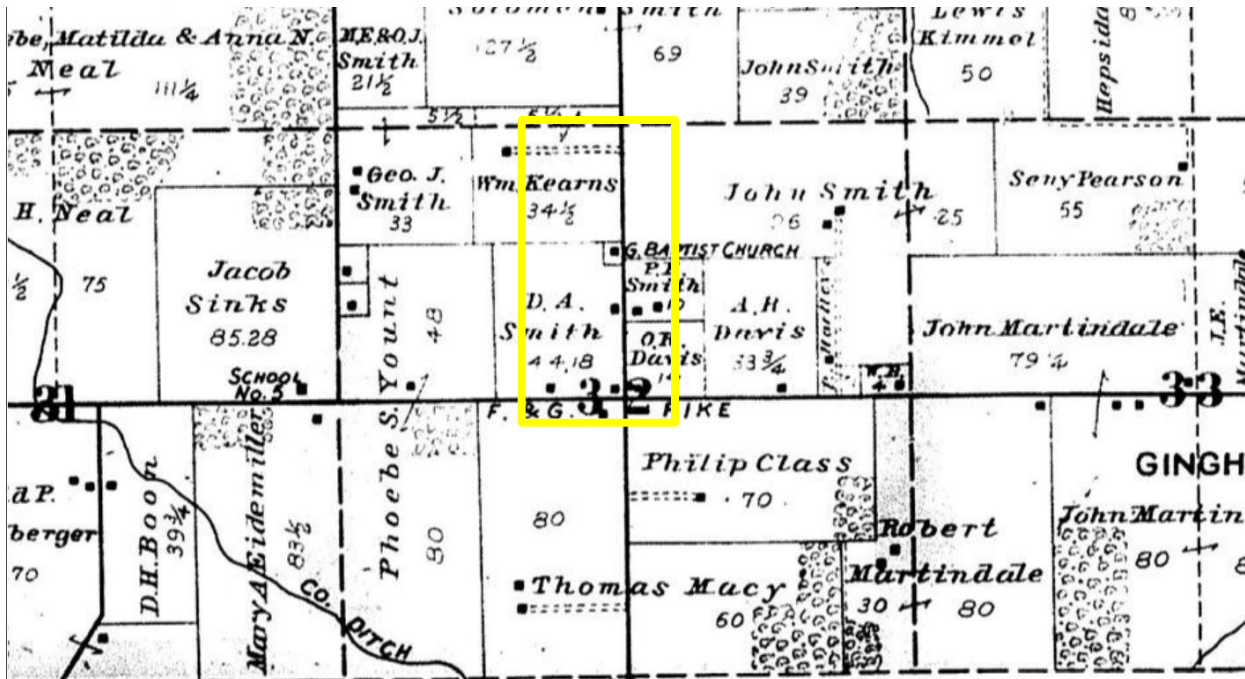


Figure 8. Miami County 1894 Atlas depicting Project Area (in yellow).

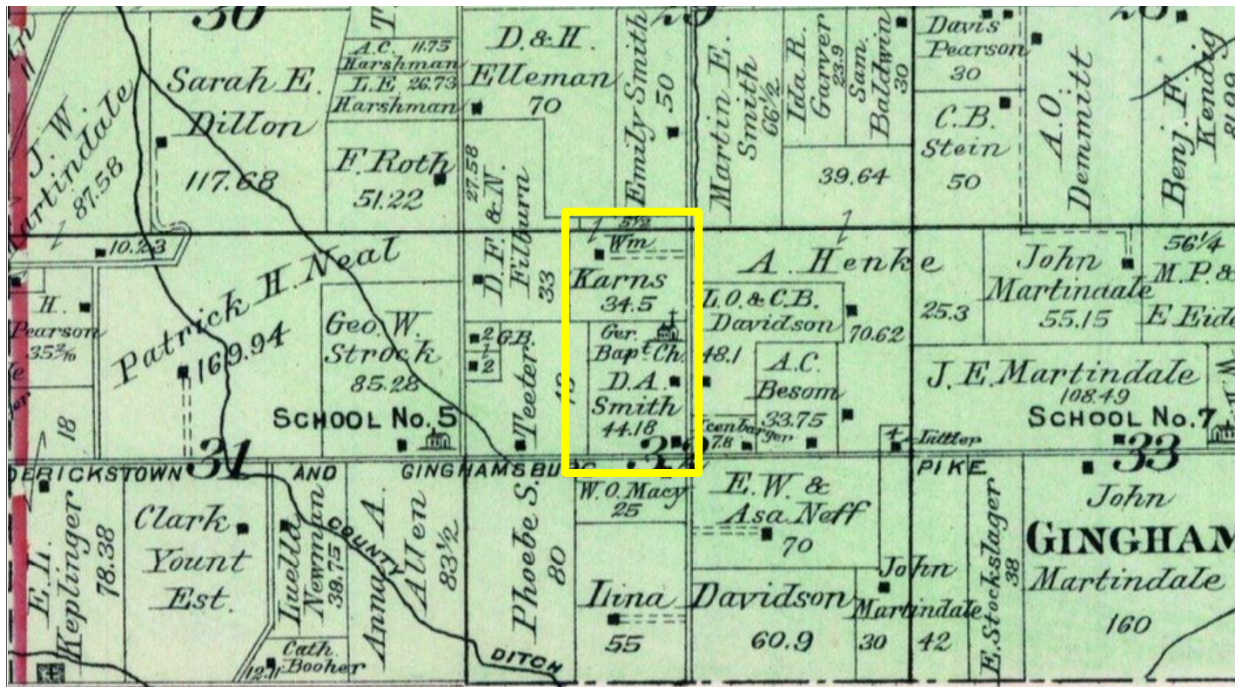
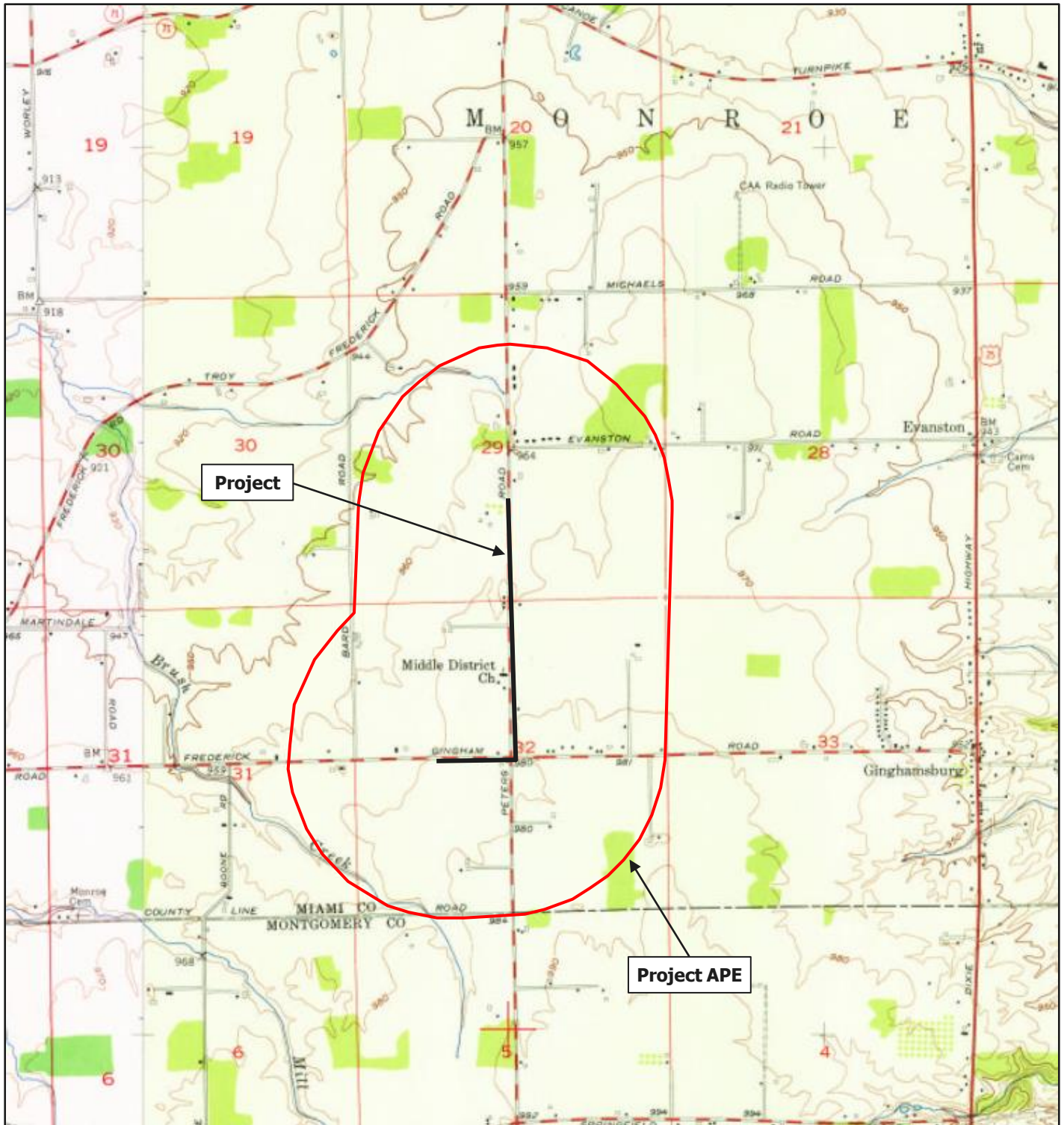


Figure 9. Miami County 1911 Atlas depicting Project Area (in yellow).

Figure 10
1955 Tipp City Quad USGS Topographical Map

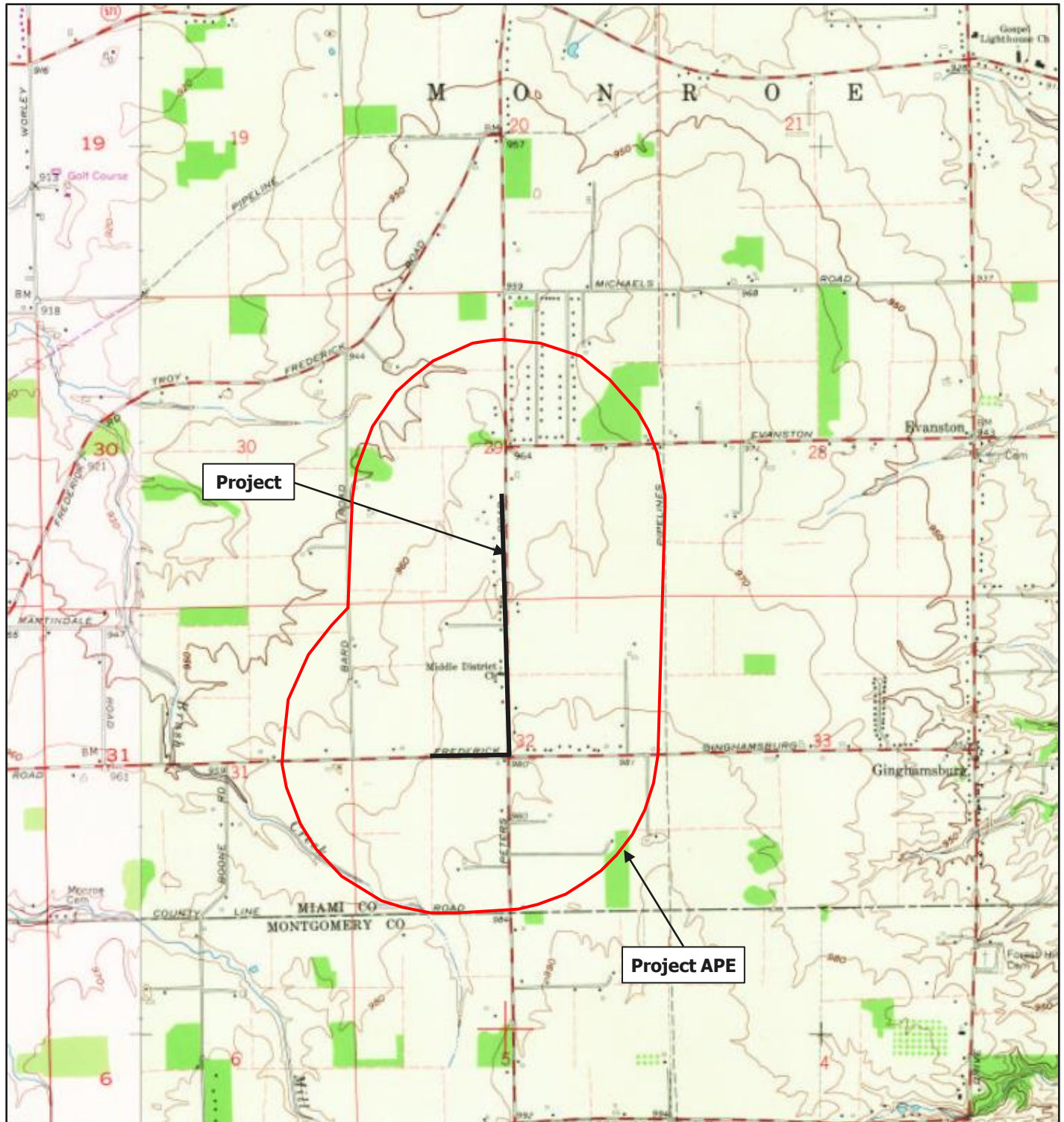
Airport to Miami 138kV Transmission Line Project
Monroe Township, Miami County, Ohio



Source: USGS. Tipp City Topographical Quadrangle Map, 1:24000. Reston, Virginia (1955)

Figure 11
1965 Tipp City Quad USGS Topographical Map

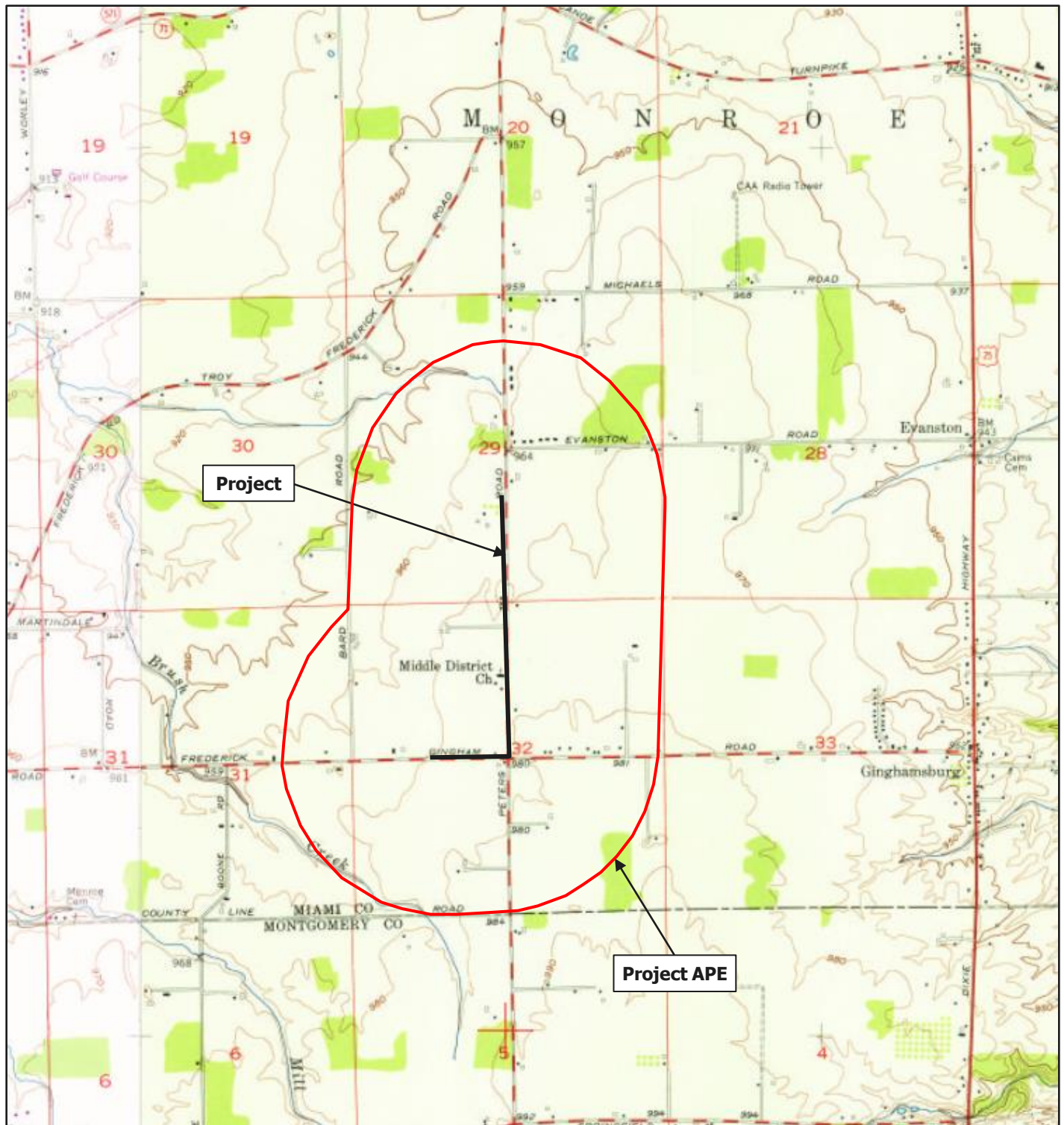
Airport to Miami 138kV Transmission Line Project
Monroe Township, Miami County, Ohio



Source: USGS. Tipp City Topographical Quadrangle Map, 1:24000. Reston, Virginia (1965)

Figure 12
1973 Tipp City Quad USGS Topographical Map

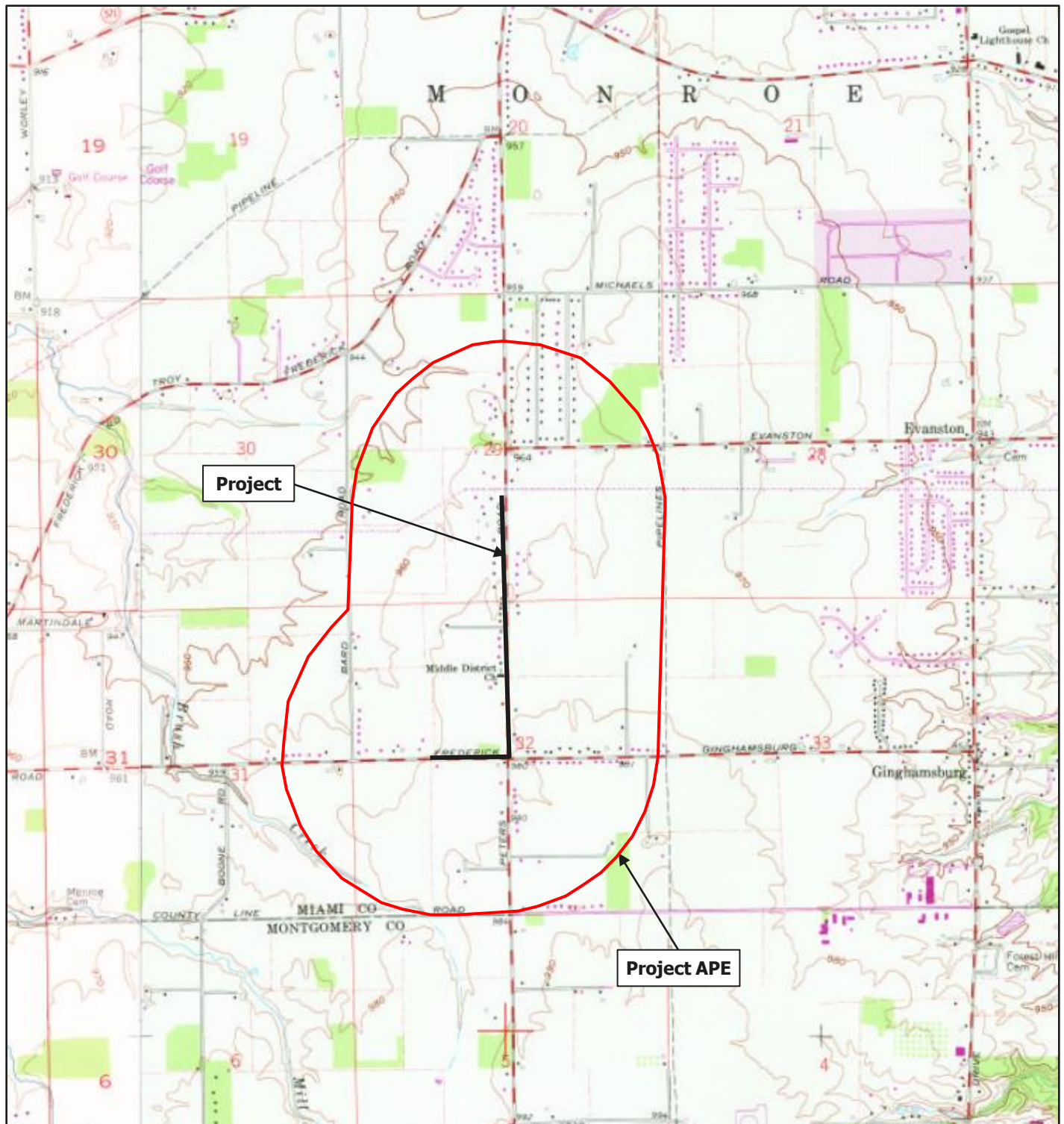
Airport to Miami 138kV Transmission Line Project
Monroe Township, Miami County, Ohio



Source: USGS. Tipp City Topographical Quadrangle Map, 1:24000. Reston, Virginia (1973)

Figure 13
1982 Tipp City Quad USGS Topographical Map

Airport to Miami 138kV Transmission Line Project
Monroe Township, Miami County, Ohio



Source: USGS. Tipp City Topographical Quadrangle Map, 1:24000. Reston, Virginia (1982)

Photographs



Photograph 1. Church along Peters Road (photo taken from Google Earth).



Photograph 2. Historic-Era Residence south of Ginghamburg Frederick Road (September 7, 2021).



Photograph 3. Overview of Project APE, along Peters Road, facing south (October 3, 2021).



Photograph 4. Overview of Project APE, along Peters Road, facing south (October 3, 2021).



Photograph 5. Overview of Project APE, along Ginghamburg Frederick Road, facing west (October 3, 2021).



Photograph 6. Overview of Project APE, along Ginghamburg Frederick Road, facing west (October 3, 2021).



In replies, please use
2021-MIA-53000

November 29, 2021

Crista Haag
Senior Archaeologist/ Cultural Resources Group Leader
Arcadis U.S., Inc.
4665 Cornell Road, Suite 200
Cincinnati, Ohio 45241

Dear Ms. Haag:

RE: The Dayton Power and Light Company Airport to Miami 138kV Transmission Line Project
Monroe Township, Miami County, Ohio

This is in response to the receipt, on October 19, 2021, of the submission related to the Dayton Power and Light Company Airport to Miami 138kV Transmission Line Project Monroe Township, Miami County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are 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]).

Arcadis, on behalf of DP&L, considered both direct and indirect effects when developing the Area of Potential Effect (APE) for the Project. The direct Area of Potential Effects (APE) is limited to the project impacts associated with the ground disturbance that include the 1.1-mile long, 40-foot wide new ROW totaling 5.3 acres. To account for visual impacts, the view shed (or indirect APE) was evaluated using a 0.5-mile buffer around the direct APE.

The SHPO office concurs that the proposed project will have no effect to any historic properties and no further work is necessary. No further coordination is necessary unless the project changes or new or additional historic properties are discovered during the implementation of the project. In such a situation, the SHPO should be contacted as per 36 CFR 800.13. Please be advised that this is a Section 106 decision. This review decision may not extend to other SHPO programs.

If you have any questions, please contact me at (614) 298-2000, or by email at dgagliano@ohiohistory.org. Thank you for your cooperation.

Sincerely,

A handwritten signature in black ink, appearing to read "Dawn Walter Gagliano".

Dawn Walter Gagliano, Project Reviews Manager
Resource Protection and Review

Ser. No. 1090551

Attachment D
USFWS IPaC Report



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ohio Ecological Services Field Office

4625 Morse Road, Suite 104

Columbus, OH 43230-8355

Phone: (614) 416-8993 Fax: (614) 416-8994



In Reply Refer To:

November 12, 2021

Consultation Code: 03E15000-2022-SLI-0238

Event Code: 03E15000-2022-E-00347

Project Name: Airport-Miami Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2))

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <http://www.fws.gov/migratorybirds/RegulationsandPolicies.html>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/BirdHazards.html>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <http://www.fws.gov/migratorybirds/AboutUS.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Ohio Ecological Services Field Office

4625 Morse Road, Suite 104

Columbus, OH 43230-8355

(614) 416-8993

Project Summary

Consultation Code: 03E15000-2022-SLI-0238

Event Code: Some(03E15000-2022-E-00347)

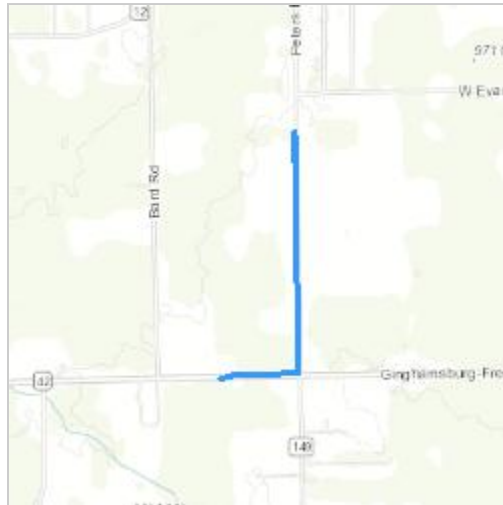
Project Name: Airport-Miami Project

Project Type: TRANSMISSION LINE

Project Description: Transmission line

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@39.9359538,-84.22763497493852,14z>



Counties: Miami County, Ohio

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> Incidental take of the northern long-eared bat is not prohibited at this location. Federal action agencies may conclude consultation using the streamlined process described at https://www.fws.gov/midwest/endangered/mammals/nleb/s7.html Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Attachment E
ODNR Environmental Review Request and
ODNR Environmental Review Response

Miloski, Sarah

From: EnvironmentalReviewRequest@dnr.ohio.gov
Sent: Friday, October 22, 2021 4:54 PM
To: Miloski, Sarah
Subject: Confirmation Receipt for ODNR Environmental Review Request Submission

Thank you for contacting the Ohio Department of Natural Resources. This email is your receipt that we have received your message and/or project review request.

We aim to provide a completed Environmental Review comment letter within 45-60 calendar days, however, during periods of high volume or other extenuating circumstances, it may be longer. If you have any questions please contact Mike.Pettegrew@dnr.ohio.gov

Miloski, Sarah

From: Miloski, Sarah
Sent: Friday, October 22, 2021 4:52 PM
To: environmentalreviewrequest@dnr.state.oh.us
Cc: Ferry, Josh; Freer, Julie; Amanda Foti
Subject: RE: ODNR Environmental Review-AES Airport-Miami 138kV Line
Attachments: AES_Airport-Miami ODNR EnvRev Letter_20211022.pdf; 5_ESA_AirportMiamiTLine_20211019.zip

Hello,

Arcadis US, Inc. (Arcadis), on behalf of AES Ohio, formerly Dayton Power and Light, is requesting an Environmental



Review regarding the potential impacts of the proposed AES Ohio Airport-Miami 138kV Transmission Line Project on state-listed species.

Thank you,

Sarah

Sarah Miloski PWS

Project Ecologist

Arcadis U.S., Inc.

4665 Cornell Road, Suite 200 | Cincinnati, OH | 45241 | USA

T +1 513 985 8007

M +1 631 806 7944

www.arcadis.com



Society of Wetland Scientists Professional Certification Program / Professional Wetland Scientist, PWS #: 2779

Ms. Sarah Tebbe
Ohio Department of Natural Resources – Office of Real Estate
2045 Morse Road, Building E-2
Columbus, OH 43229-6693
Tel 614-265-6397
Sarah.Tebbe@dnr.state.oh.us

Arcadis U.S., Inc.
4665 Cornell Road
Suite 200
Cincinnati
Ohio 45241
Tel 513 860 8700
Fax 513 860 8701
www.arcadis.com

Subject:
Environmental Review Request
Dayton Power and Light Company d/b/a AES Ohio
Airport – Miami 138kV Project
Miami County, Ohio

Date:
October 22, 2021

Contact:
Sarah Miloski

Ms. Tebbe:

Phone:
513.985.8007

On behalf of AES Ohio (“AES Ohio”), Arcadis U.S., Inc. (Arcadis) requests an Environmental Review by the Ohio Department of Natural Resources Office of Real Estate regarding the potential impacts of the proposed Airport – Miami 138kV Project (the Project) on state-listed species.

Email:
Sarah.Miloski@arcadis.com

BACKGROUND

The Project is in Monroe Township, Miami County, Ohio (located at approximately 39.934603°N 84.228045°W) and consists of tapping the existing West Milton to Miami 138 kV line and building a new 1.1-mile 138 kV line extension to a new AES Ohio substation. There will be a single 138/12 kV 30 MVA distribution transformer installed at the new substation and four new 138 kV breakers arranged in a ring bus configuration. Optical ground wire (OPGW) will be installed between West Milton, the new substation, and Miami substation as part of this Project (Attachment 1).

AES Ohio anticipates beginning construction in March 2022. During construction, stormwater runoff will be managed using the best management practices (BMPs) specified in the Stormwater Pollution Prevention Plan (SWPPP) and Erosion and Sediment Control Plan (ESCP).

EXISTING CONDITIONS

Arcadis investigated the Project area during a site visit completed on October 1, 2021, to document existing vegetation communities and hydrologic conditions.

Aerial mapping depicting aquatic features delineated within the environmental survey area (ESA) are provided as Attachment 2 and representative photographs of the Project area are provided as Attachment 3. During the site investigation no wetlands or streams were identified within the ESA (Attachment 2).

Vegetative communities observed within the ESA consisted of agricultural field, upland woods present as fencerows, and maintained lawn. Site photographs are included as Attachment 3.

- Agricultural fields contained corn (*Zea mays*) and soybeans (*Glycine max*).
- Fencerows contained honeysuckle (*Lonicera* sp.), green ash (*Fraxinus pennsylvanica*), and ash-leaf maple (*Acer negundo*).
- Maintained lawn areas contained typical lawn species such as fescue (*Festuca* sp.), bluegrass (*Poa* sp.), red clover (*Trifolium pratense*), white clover (*Trifolium repens*), common dandelion (*Taraxacum officinale*), and English plantain (*Plantago lanceolata*).

PROPOSED IMPACTS

No wetland and stream impacts are proposed, as no wetlands or streams are within the Project area.

FEDERAL CONSULTATION

In addition to this request for Environmental Review, Arcadis consulted the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) online tool to determine the likelihood for threatened and endangered (T&E) species or T&E species habitat to occur within the Project area.

Results from the USFWS IPaC inquiry indicated that the site is located within the range of the federally threatened northern long-eared bat (*Myotis septentrionalis*) and federally endangered Indiana bat (*Myotis sodalis*). The results also indicate that the Project area contains no critical habitat for the identified species. Tree clearing is assumed to be minimal and proposed to occur October 1 through March 31 for the Project. Therefore, no impacts to bats are anticipated. The IPaC species list is included as Attachment 4.

CONCLUSIONS

Arcadis, on behalf of AES Ohio, is requesting comments from your office on potential effects of the proposed Project on state-listed species. If you have any questions or require additional information, please contact Sarah Miloski at 513-985-8007 or via email at sarah.miloski@arcadis.com.

Sincerely,
Arcadis U.S., Inc.



Sarah Miloski
Project Ecologist

Copies:
Amanda Foti, AES Ohio

Ms. Sarah Tebbe
October 22, 2021

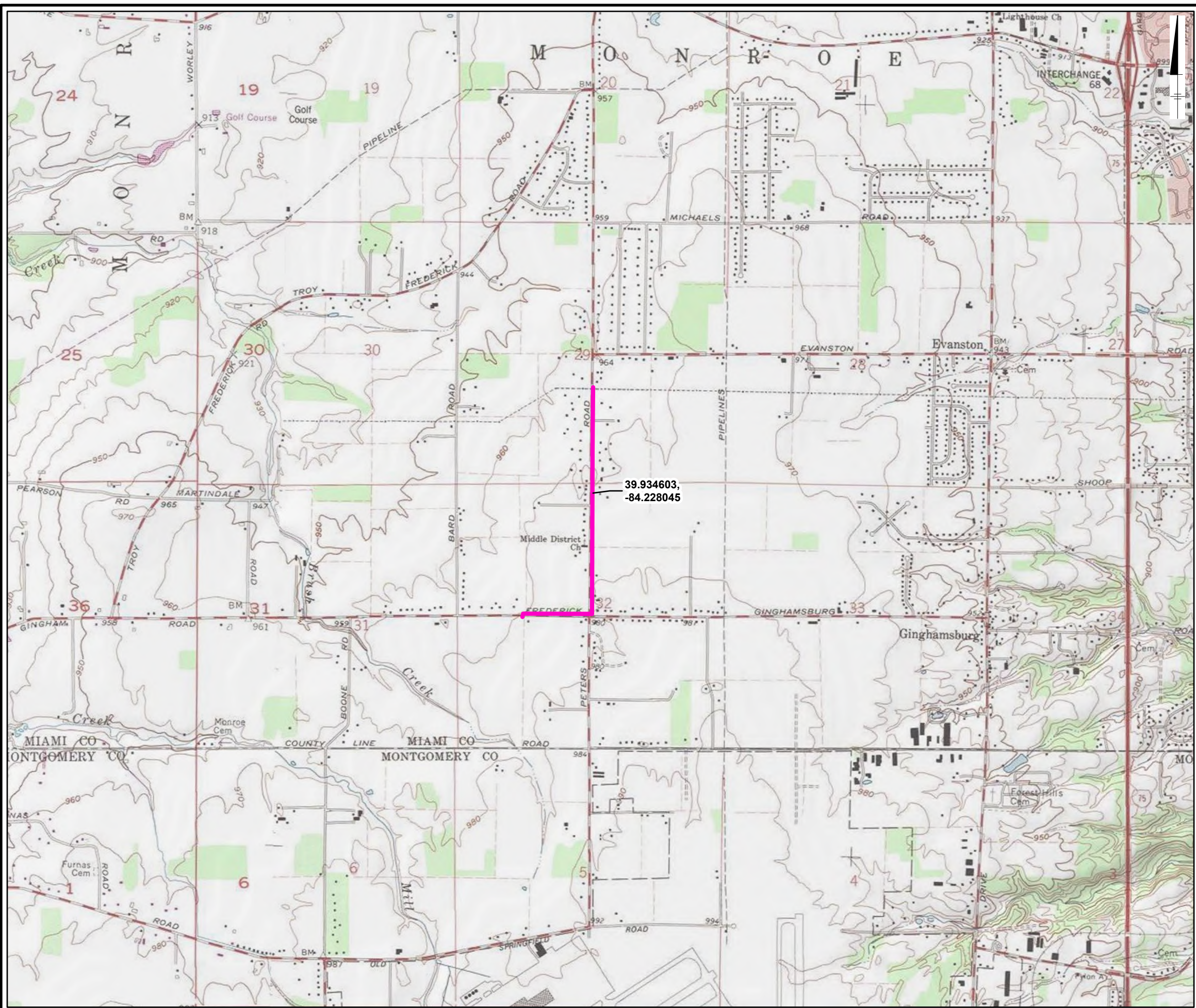
Enclosures:

Attachments

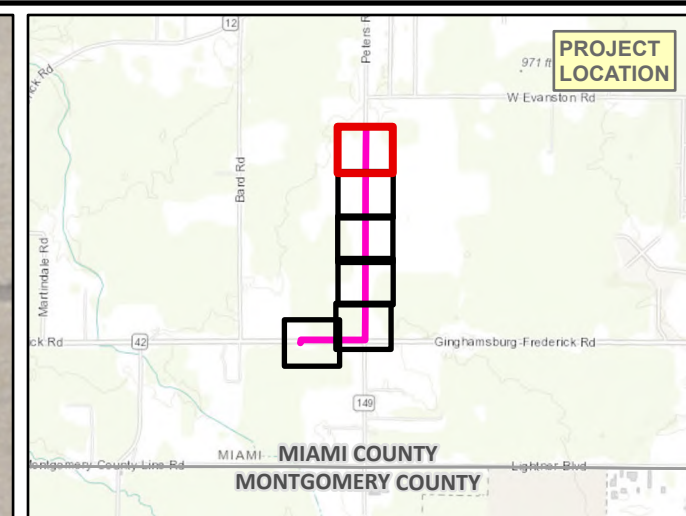
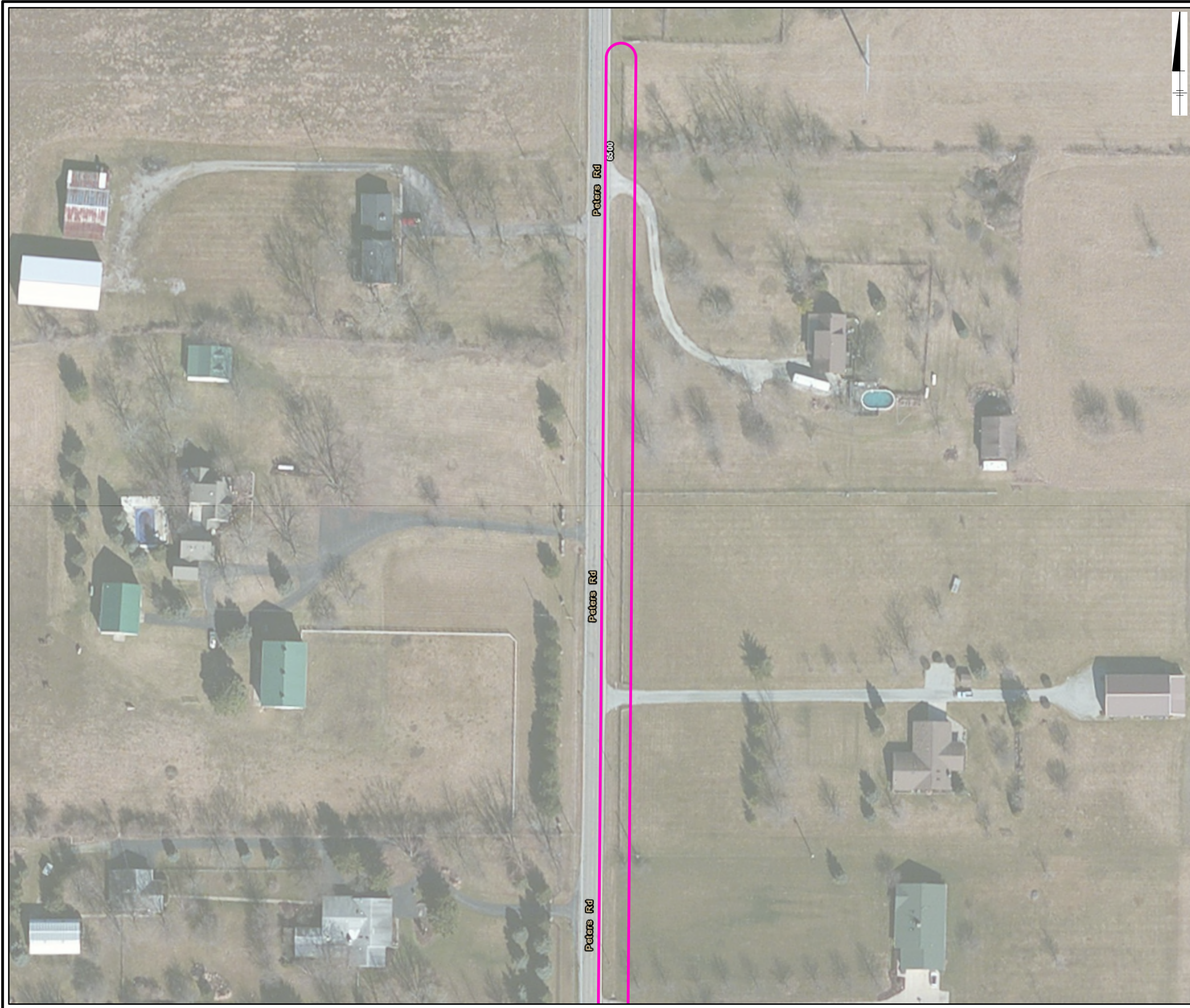
- 1 Site Location Map
- 2 Delineated Streams and Wetlands Map
- 3 Photographic Log
- 4 IPaC Species List
- 5 Project Shapefiles (attached to email)

Attachment 1
Site Location Map

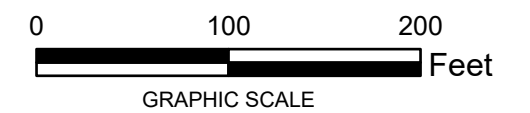
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Attachment 2
Delineated Streams and Wetlands Map



Legend
Environmental Survey Area (ESA)



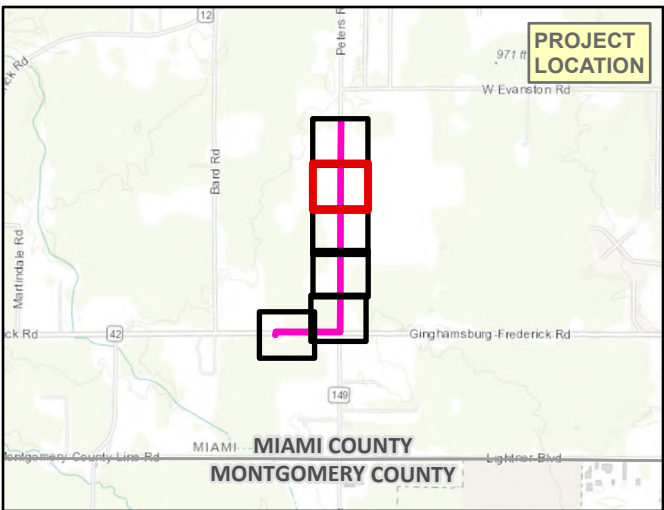
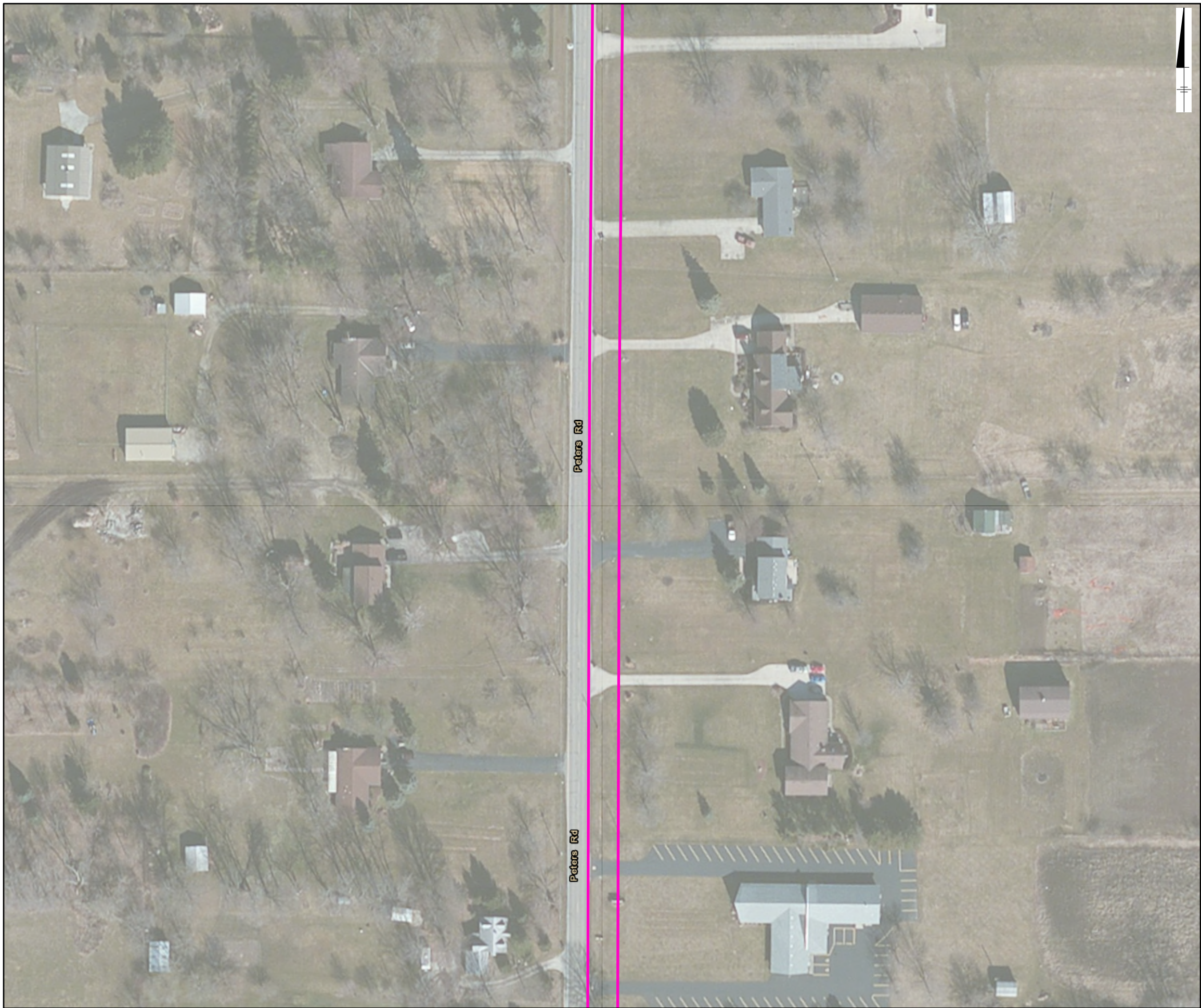
NOTE:
1. 2017 IMAGERY OBTAINED FROM ESRI IMAGE SERVICE.

THE AES CORPORATION
AIRPORT - MIAMI 138KV LINE
MIAMI COUNTY, OHIO

AERIAL MAP AND ESA



FIGURE
1-1



Legend
Environmental Survey Area (ESA)

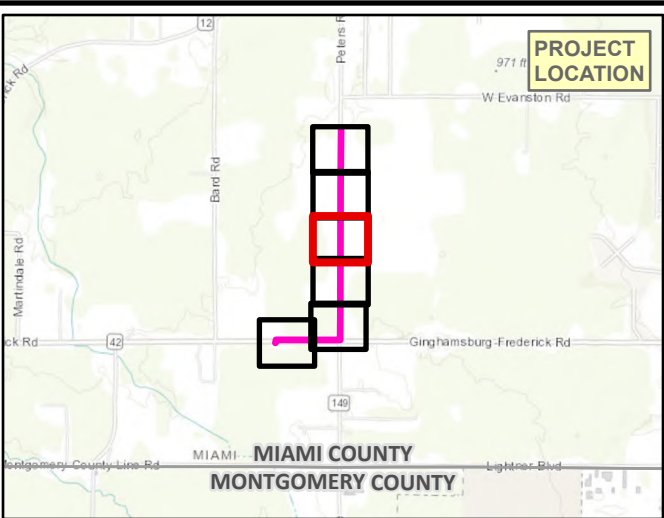


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THE AES CORPORATION
AIRPORT - MIAMI 138KV LINE
MIAMI COUNTY, OHIO

AERIAL MAP AND ESA

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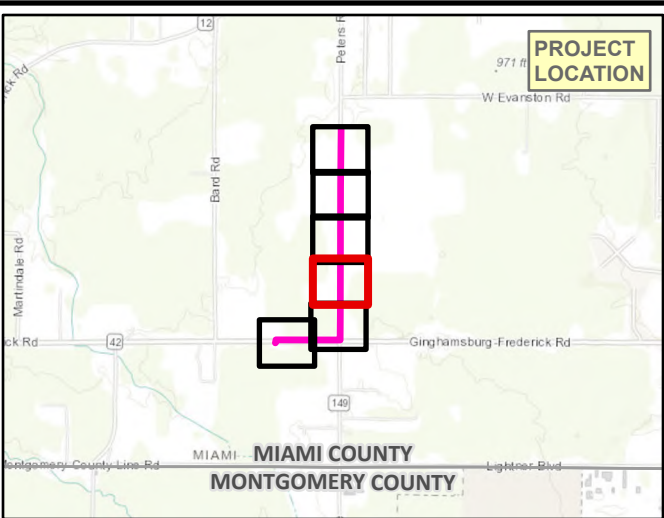
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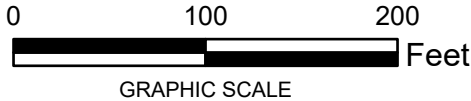
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THE AES CORPORATION
AIRPORT - MIAMI 138KV LINE
MIAMI COUNTY, OHIO

AERIAL MAP AND ESA



Legend
Environmental Survey Area (ESA)

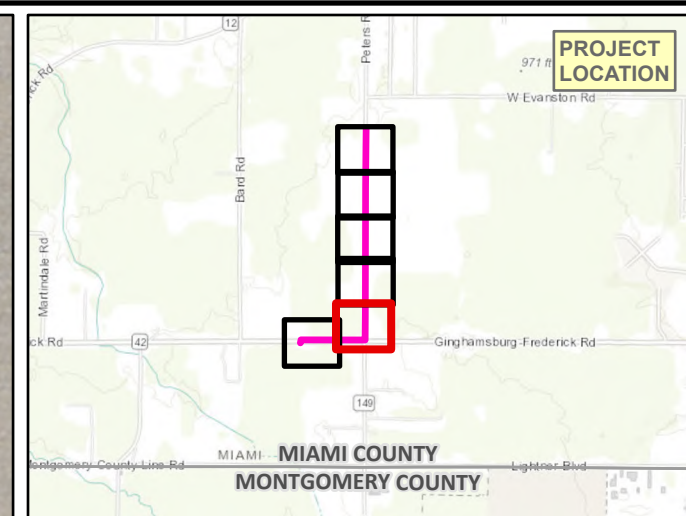
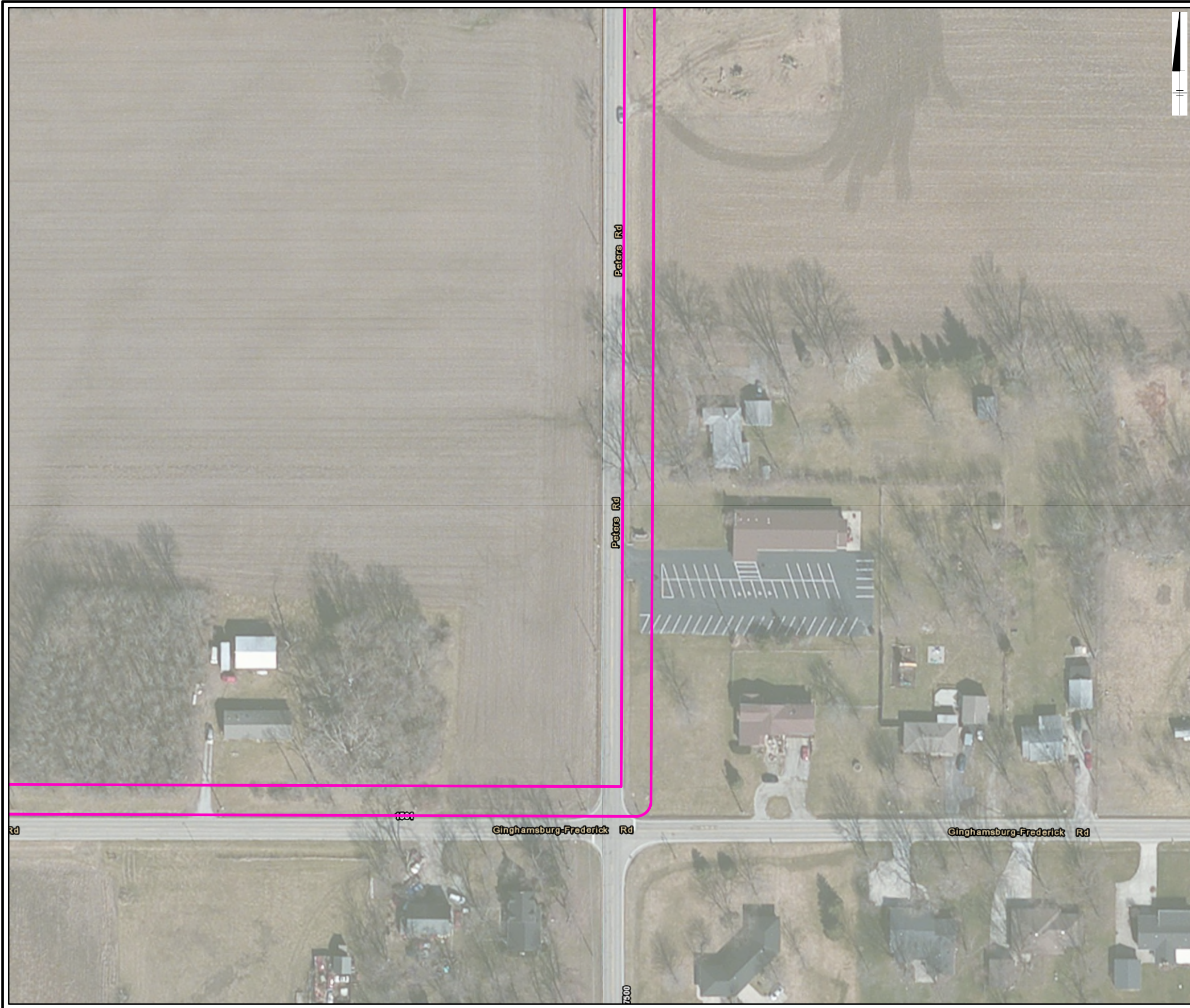


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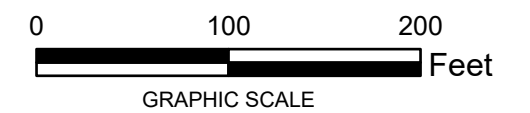
THE AES CORPORATION
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MIAMI COUNTY, OHIO

AERIAL MAP AND ESA

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Environmental Survey Area (ESA)



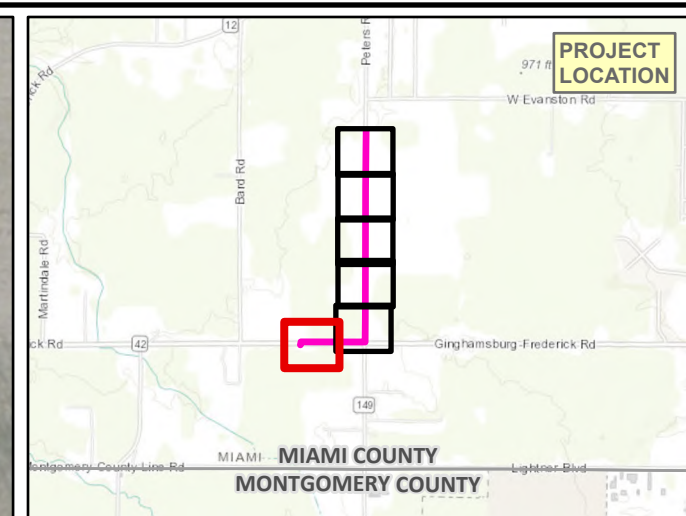
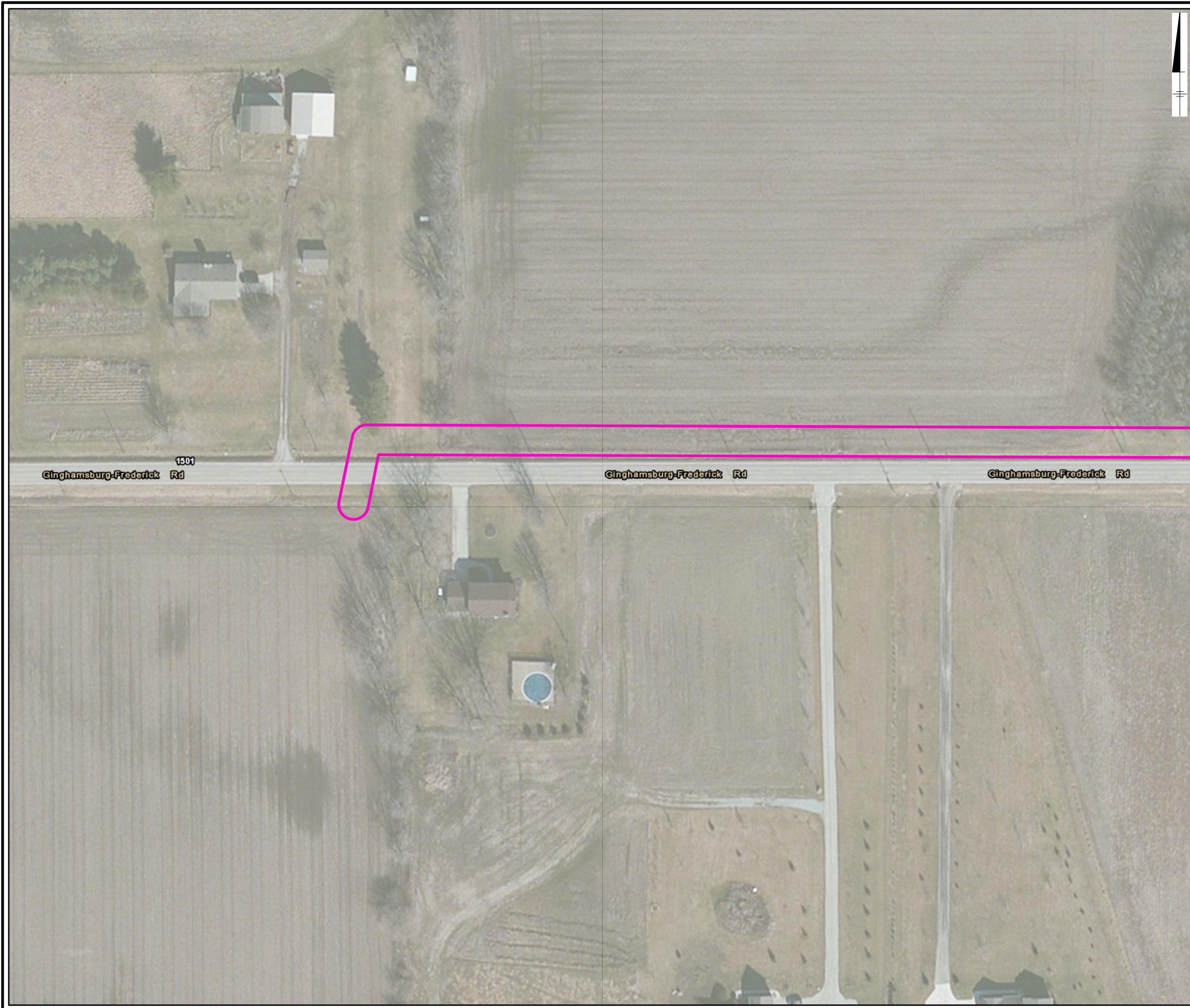
NOTE:
1. 2017 IMAGERY OBTAINED FROM ESRI IMAGE SERVICE.

THE AES CORPORATION
AIRPORT - MIAMI 138KV LINE
MIAMI COUNTY, OHIO

AERIAL MAP AND ESA

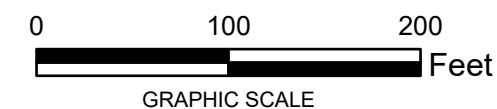


FIGURE
1-5





Legend

Environmental Survey Area (ESA)



NOTE:
1. 2017 IMAGERY OBTAINED FROM ESRI IMAGE SERVICE.

THE AES CORPORATION AIRPORT - MIAMI 138KV LINE MIAMI COUNTY, OHIO	
AERIAL MAP AND ESA	
	 FIGURE 1-6

Attachment 3
Photographic Log

Project Photographs

AES Ohio
Airport – Miami 138kV Project
Miami County, Ohio



Photo: 1

Date:

October 1, 2021

Description:

View of ROW along Peters Road

Direction:

South



Photo: 2

Date:

October 1, 2021

Description:

View of ROW along Peters Road

Direction:

South

Project Photographs

AES Ohio
Airport – Miami 138kV Project
Miami County, Ohio



Photo: 3

Date:

October 1, 2021

Description:

View of ROW along Co Hwy
42 / Ginghamburg
Frederick Rd

Direction:

West



Photo: 4

Date:

October 1, 2021

Description:

View of ROW along Co Hwy
42 / Ginghamburg
Frederick Rd

Direction:

West

Attachment 4
IPaC Species List



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ohio Ecological Services Field Office

4625 Morse Road, Suite 104

Columbus, OH 43230-8355

Phone: (614) 416-8993 Fax: (614) 416-8994



In Reply Refer To:

October 19, 2021

Consultation Code: 03E15000-2022-SLI-0089

Event Code: 03E15000-2022-E-00132

Project Name: Airport - Miami 138kV Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2))

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <http://www.fws.gov/migratorybirds/RegulationsandPolicies.html>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/BirdHazards.html>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <http://www.fws.gov/migratorybirds/AboutUS.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Ohio Ecological Services Field Office

4625 Morse Road, Suite 104

Columbus, OH 43230-8355

(614) 416-8993

Project Summary

Consultation Code: 03E15000-2022-SLI-0089

Event Code: Some(03E15000-2022-E-00132)

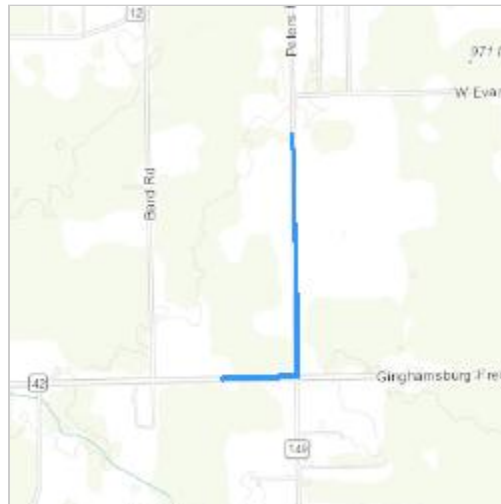
Project Name: Airport - Miami 138kV Project

Project Type: TRANSMISSION LINE

Project Description: DP&L is planning to construct a new 1.1-mile 138kV line extension to improve the capacity and reliability of the electric system serving the growing load center around the Dayton Airport. Project activities will consist of constructing transmission poles and/or replacing existing poles, electric wires, and hardware within the existing 30-foot wide transmission line right of way (ROW) along Peters Road and Ginghamburg-Frederick Road. This new line will be connected to an existing 138kV line and to a new substation¹. The Project falls under jurisdiction of the Ohio Power Siting Board (OPSB) and subsequently, Ohio Revised Code, Sections 149.52-149.54.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@39.9359956,-84.22743350456037,14z>



Counties: Miami County, Ohio

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> Incidental take of the northern long-eared bat is not prohibited at this location. Federal action agencies may conclude consultation using the streamlined process described at https://www.fws.gov/midwest/endangered/mammals/nleb/s7.html Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Attachment 5

Project Shapefiles


Miloski, Sarah

From: EnvironmentalReviewRequest@dnr.ohio.gov
Sent: Friday, November 12, 2021 3:33 PM
To: Miloski, Sarah
Subject: 21-0978; Arcadis - AES Airport-Miami 138kV Line Comments
Attachments: 21-0978; Arcadis - AES Airport-Miami 138kV Line Comments.pdf

Please see the attached ODNR Environmental Review comment letter for your Environmental Review request.

Any questions regarding the letter should be directed to Mike Pettegrew at mike.pettegrew@dnr.ohio.gov.

Thank you,

	<p>Mike Pettegrew <i>Environmental Services Administrator (Acting) and ODOT Program Manager</i> 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/</p>
<p><small><i>This message is intended solely for the addressee(s). Should you receive this message by mistake, we would be grateful if you informed us that the message has been sent to you in error. In this case, we also ask that you delete this message and any attachments from your mailbox, and do not forward it or any part of it to anyone else. Thank you for your cooperation and understanding.</i></small></p>	



Ohio Department of Natural Resources

MIKE DeWINE, GOVERNOR

MARY MERTZ, DIRECTOR

Office of Real Estate

John Kessler, Chief

2045 Morse Road – Bldg. E-2

Columbus, OH 43229

Phone: (614) 265-6621

Fax: (614) 267-4764

November 12, 2021

Sarah Miloski
Arcadis U.S., Inc.
4665 Cornell Road, Suite 200
Cincinnati, Ohio 45241

Re: 21-0978; AES Airport-Miami 138kV Line

Project: The proposed project consists of tapping the existing West Milton to Miami 138 kV line and building a new 1.1-mile 138 kV line extension to a new AES Ohio substation. Additionally, a single 138/12 kV 30 MVA distribution transformer and breakers would be installed at the new substation.

Location: The proposed project is located in Monroe Township, Miami 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 no records at or within a one-mile radius of the project area.

A review of the Ohio Natural Heritage Database indicates there are no other records of state endangered or threatened plants or animals within the project area. There are also no records of state potentially threatened plants, special interest or species of concern animals, or any federally listed species. In addition, we are unaware of any unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, state nature preserves, state or national parks, state or national forests, national wildlife refuges, or other protected natural areas within the project area. The review was performed on the project area you specified in your request as well as an additional one-mile radius. Records searched date from 1980.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Although all types of plant communities have been surveyed, we only maintain records on the highest quality areas.

Fish and Wildlife: The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that Best Management Practices be utilized to minimize erosion and sedimentation.

The 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 threatened 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 the leaves. 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 cut, the DOW recommends cutting 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 DBH ≥ 20 if possible. If trees are present within the project area, and trees must be cut 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 cutting. Mist net and acoustic surveys should be conducted in accordance with the most recent version of the “OHIO DIVISION OF WILDLIFE GUIDANCE FOR BAT SURVEYS AND TREE CLEARING”. If state listed bats are documented, DOW recommends cutting only occur from October 1 through March 31. However, limited summer tree cutting may be acceptable after consultation with the DOW (contact Erin Hazelton at Erin.hazelton@dnr.ohio.gov).

The DOW also recommends that a desktop habitat assessment is conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the project area. Direction on how to conduct habitat assessments can be found in the current USFWS “Range-wide Indiana Bat Survey Guidelines.” If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to Erin Hazelton for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting 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 following listed mussel species.

Federally Endangered

club shell (*Pleurobema clava*)

rayed bean (*Villosa fabalis*)

snuffbox (*Epioblasma triquetra*)

Due to the location, and that there is no in-water work proposed in a perennial stream, 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. Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact this species.

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

Water Resources: The Division of Water Resources has the following comment.

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project. Your local floodplain administrator contact information can be found at the website below.

http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community%20Contact%20List_8_16.pdf

ODNR appreciates the opportunity to provide these comments. Please contact Mike Pettegrew at mike.pettegrew@dnr.ohio.gov if you have questions about these comments or need additional information.

Mike Pettegrew
Environmental Services Administrator (Acting)

Attachment F
Wetland and Waterbody Report

MEMO

To:

AES Ohio
Amanda Foti

Arcadis U.S., Inc.
4665 Cornell Road
Suite 200
Cincinnati
Ohio 45241
Tel 513 860 8700
Fax 513 860 8701

From:

Arcadis U.S., Inc.

Date:

November 15, 2021

Subject:

Airport – Miami and West Milton – Miami 138kV Line Projects
Wetland and Stream Delineation Technical Memorandum

WETLAND AND STREAM DELINEATION TECHNICAL MEMORANDUM

Airport – Miami and West Milton – Miami 138kV Line Projects

Introduction

This Wetland and Waterbody Delineation Technical Memorandum summarizes the results of wetland and waterbody delineation surveys conducted on October 1, 2021, by Arcadis U.S., Inc. (Arcadis) on behalf of AES Ohio (AES Ohio) for the Airport – Miami 138kV Project and the West Milton – Miami 138kV Project (Projects).

The Projects are in Monroe Township, Miami County, Ohio and consist of tapping the existing West Milton to Miami 138 kV line and building two new 138 kV line extensions to a new AES Ohio substation. Optical ground wire (OPGW) will be installed between West Milton, the new substation, and the Miami substation as part of this Project. The environmental survey area (ESA) for the Projects totals approximately 10.15 acres. No wetlands or waterbodies were identified within the ESA.

BACKGROUND INFORMATION

Prior to conducting the wetland and waterbody delineation survey, Arcadis reviewed the following resources to identify the potential location and extent of wetlands and waterbodies within the Project areas:

- United States Geographic Survey (USGS) topographic map *Tipp City* quadrangle (USGS, 1982);
- USGS National Hydrography Dataset (NHD-mapped streams) (USGS, 2012);
- United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) dataset (USFWS, 2007);
- Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (FEMA, 2011);
- United States Department of Agriculture Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS, 2018); and
- Aerial photography (ESRI, 2017).

According to the USGS topographic map, which identifies intermittent and perennial streams, no waterbodies are mapped within the ESA (**Figure 1**; USGS, 1982). No NHD-mapped streams are mapped within the ESA (**Figure 2**; USGS, 2012).

NWI maps are used as a guide, along with other data, to indicate the potential presence of wetlands. The information is often out of date and not necessarily field verified. The presence of an NWI feature is not a definitive indicator that a wetland or waterbody is present. The NWI data indicate that no NWI-mapped features are located within the ESA (**Figure 2**; USFWS, 2007).

The ESA is in the Brush Creek subwatershed (USGS Hydrologic Unit Code [HUC] 050800011403) of the Upper Great Miami Indiana, Ohio watershed (USGS HUC 05080001) (USEPA, 2020). The nearest traditionally navigable waterway (TNW) into which the waterbodies within the ESA flow into is the Great Miami River (USACE, n.d.).

The identification and location of the mapped 100-year flood hazard zones within the ESA was determined by reviewing the FEMA National Flood Hazard Layer. The ESA is in an area of minimal flood hazard (Zone X) (**Figure 2**; FEMA, 2011).

According to the NRCS Web Soil Survey for Miami County, Ohio (NRCS, 2018), five soil units are mapped within the ESA (**Figure 3**). Four of the soil map units are considered predominantly non-hydric, one soil map unit is considered predominantly hydric. Generally, soil units identified as hydric contain soils that indicate through their color that they have experienced dominantly reducing (i.e., oxygen poor) conditions, which are a result of inundation and/or saturation by water. A predominantly hydric soil unit may contain non-hydric soil inclusions, but most of the unit is hydric. A predominantly non-hydric soil unit may contain hydric soil inclusions, but most of the unit is non-hydric. Soil units identified as non-hydric have no hydric soil components identified in the mapped soil unit.

A review of aerial photography (ESRI, 2017) for the ESA shows that surrounding land use is a mixture of existing ROW, agricultural fields, and rural residential land (**Figure 4**).

Methodology

The purpose of the delineation was to assess the presence or absence of wetlands or other waters that may be affected by the proposed Project, and to assess general ecological conditions within the ESA. Surveys were conducted from the public road right-of-way to identify potential wetlands and waterbodies within the ESA on October 1, 2021.

Wetland boundaries, if present, were field-delineated according to Section 404 of the Clean Water Act routine onsite methodology described in the Technical Report Y-87-1 Corps of Engineers Wetlands

Delineation Manual (USACE 1987) and subsequent guidance documents and the U.S. Army Corps of Engineers (USACE) 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region, Version 2.0* (USACE 2010).

On September 3, 2021, the United States Environmental Protection Agency (EPA) and the USACE halted implementation of the Navigable Waters Protection Rule and are interpreting “waters of the United States” (WOTUS) consistent with the pre-2015 regulatory regime until further notice (USACE 2021, USEPA 2021).

Connectivity of wetlands to a traditionally navigable water (TNW) were assessed according to the U.S. Army Corps of Engineers *Jurisdictional Determination Form Instructional Guidebook* (USACE and USEPA, 2007).

Jurisdictional streams are identified as those waters that possessed a defined “bed and bank” or ordinary high water mark (OHWM) indicators and lacked a dominance of upland vegetation in the channel. Channels that parallel roadways or railroad were identified as upland drainage features and are not considered to be jurisdictional unless they have an identifiable OHWM, were identified on the USGS topographic map, or represented a presumed relocation of a natural channel.

The OEPA requires classification of wetlands, if present, according to OEPA methods to establish the “quality” of these wetlands in accordance with the Ohio Wetland Water Quality Standards (Ohio Administrative Code [OAC], 2012). The standards dictate the level of permitting and mitigation required for impacts to the wetlands. Each identified wetland within Ohio was evaluated in accordance with the Ohio Rapid Assessment Method (ORAM), developed by OEPA (Mack, 2001). Categorization was conducted in accordance with the latest quantitative score calibration (Mack, 2000).

The OEPA requires classification of streams, if present, using either the Qualitative Habitat Evaluation Index (QHEI; for streams with drainage areas over one square mile) or the Primary Headwater Habitat Evaluation Index (HHEI; for streams with drainage areas less than one square mile). The OEPA has developed the QHEI as a numeric habitat evaluation index that is used to define structural and functional characteristics capable of supporting aquatic life, though it is not a determining metric in the use designation (OEPA, 2006). The OEPA developed the HHEI to provide standardized assessment methodologies for conducting use attainability analyses of primary headwater habitat streams (OEPA, 2020). The HHEI methods are used to properly classify the actual and expected biological conditions in primary headwater habitat streams.

If present, the outer boundaries of each wetland and waterbody, determined by the ordinary high water mark (OHWM), were delineated and recorded using a handheld Trimble GeoXH global positioning system receiver. As features were collected, they were given a unique feature identification. For streams larger than 10 feet wide, the OHWM was recorded as the boundary along each bank, while only the centerline was recorded for features less than 10 feet wide.

Results

No wetlands or waterbodies were identified within the ESA. The ESA consisted of agricultural fields and residential lawns. Photographs of the ESA are provided in **Attachment A**.

References

ESRI. 2017. ESRI aerial imagery. Accessed October 2021.

Federal Emergency Management Agency (FEMA). 2011. FIRM Panel 39109C0265E, effective on 8/2/2011 [map]. Accessed October 2021. <https://msc.fema.gov/portal>.

- Mack, John J. 2000. *ORAM v. 5.0 Quantitative Score Calibration*. Ohio EPA Technical Bulletin. OEPA, Division of Surface Water, 401 Wetland Ecology Unit, Columbus, Ohio.
- Mack, John J. 2001. *Ohio Rapid Assessment Method for Wetlands, Manual for Using Version 5.0*. OEPA Technical Bulletin Wetland/2001-1-1. OEPA, Division of Surface Water, 401 Wetland Ecology Unit, Columbus, Ohio.
- Natural Resources Conservation Service (NRCS). 2018. Web Soil Survey Geographic (SSURGO) database for Miami County, Ohio. Accessed October 2021.
- Ohio Administrative Code (OAC). 2012. Chapter 3745-1: Water Quality Standards. Ohio Environmental Protection Agency, Columbus, Ohio.
- Ohio Environmental Protection Agency (OEPA). 2006. *Methods for Assessing Habitat in Flowing Waters: Using the Qualitative Habitat Evaluation Index (QHEI)*. OEPA Technical Bulletin EAS/2006-06-01. June 2006.
- OEPA. 2020. Field Methods for Evaluating Primary Headwater Streams in Ohio. Version 4.1. Ohio EPA Division of Surface Water, Columbus, Ohio. 130 pp.
- United States Army Corps of Engineers (USACE). n.d. Huntington District Traditionally Navigable Waters. Accessed October 2021. <https://www.lrh.usace.army.mil/Missions/Regulatory/Jurisdictional-Determinations/Traditionally-Navigable-Waters-TNWs-OH/>.
- USACE. 1987. Corps of Engineers Wetlands Delineation Manual. TR Y- 87-1. Vicksburg, MS: Environmental Laboratory, U.S. Army Corps of Engineers Waterways Experiment Station.
- USACE. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0). ERDC/EL TR-10-16, U.S. Army Engineer Research and Development Center, Vicksburg, MS. August 2010.
- USACE. 2021. 3 September 2021 – Current Implementation of Waters of the United States. Available at: https://www.usace.army.mil/missions/civil-works/regulatory-program-and-permits/juris_info/. Accessed October 2021.
- USACE and United States Environmental Protection Agency (USEPA). 2007. U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook.
- USEPA. 2021. Current Implementation of the Waters of the United States. Available at: <https://www.epa.gov/wotus/current-implementation-waters-united-states>. Accessed October 2021.
- USEPA. 2020. WATERS GeoViewer. [Web page]. Located at <https://www.epa.gov/waterdata/waters-geoviewer>. Accessed October 2021.
- United States Fish and Wildlife Service (USFWS). 2007. National Wetlands Inventory Maps, Wetlands Mapper. [Web page]. Available at <http://www.fws.gov/wetlands/Data/Mapper.html>. Accessed October 2021.
- United States Geological Survey (USGS). 1982. 7.5 Minute Series Topographic Map, *Tipp City* Quadrangle. [Map].
- USGS. 2012. USGS National Hydrography Dataset (NHD) Downloadable Data Collection, National Geospatial Data Asset (NGDA) National Hydrography Dataset (NHD): USGS, National Geospatial Technical Operations Center (NGTOC): Rolla, MO and Denver, CO. Available at: <http://viewer.nationalmap.gov/>. Accessed October 2021.

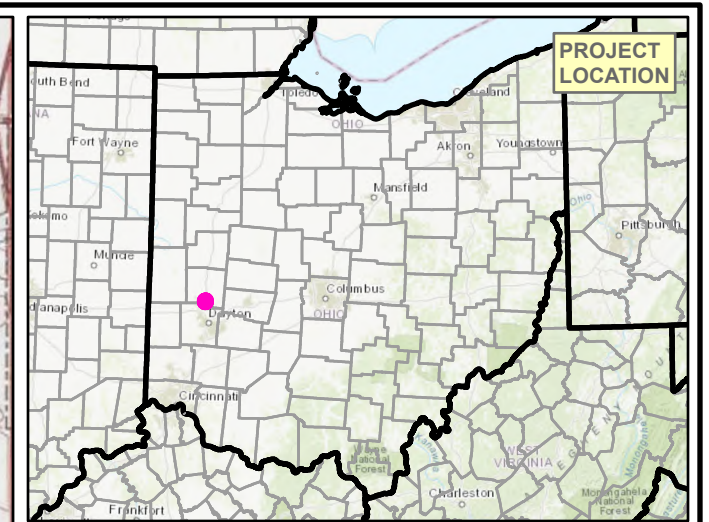
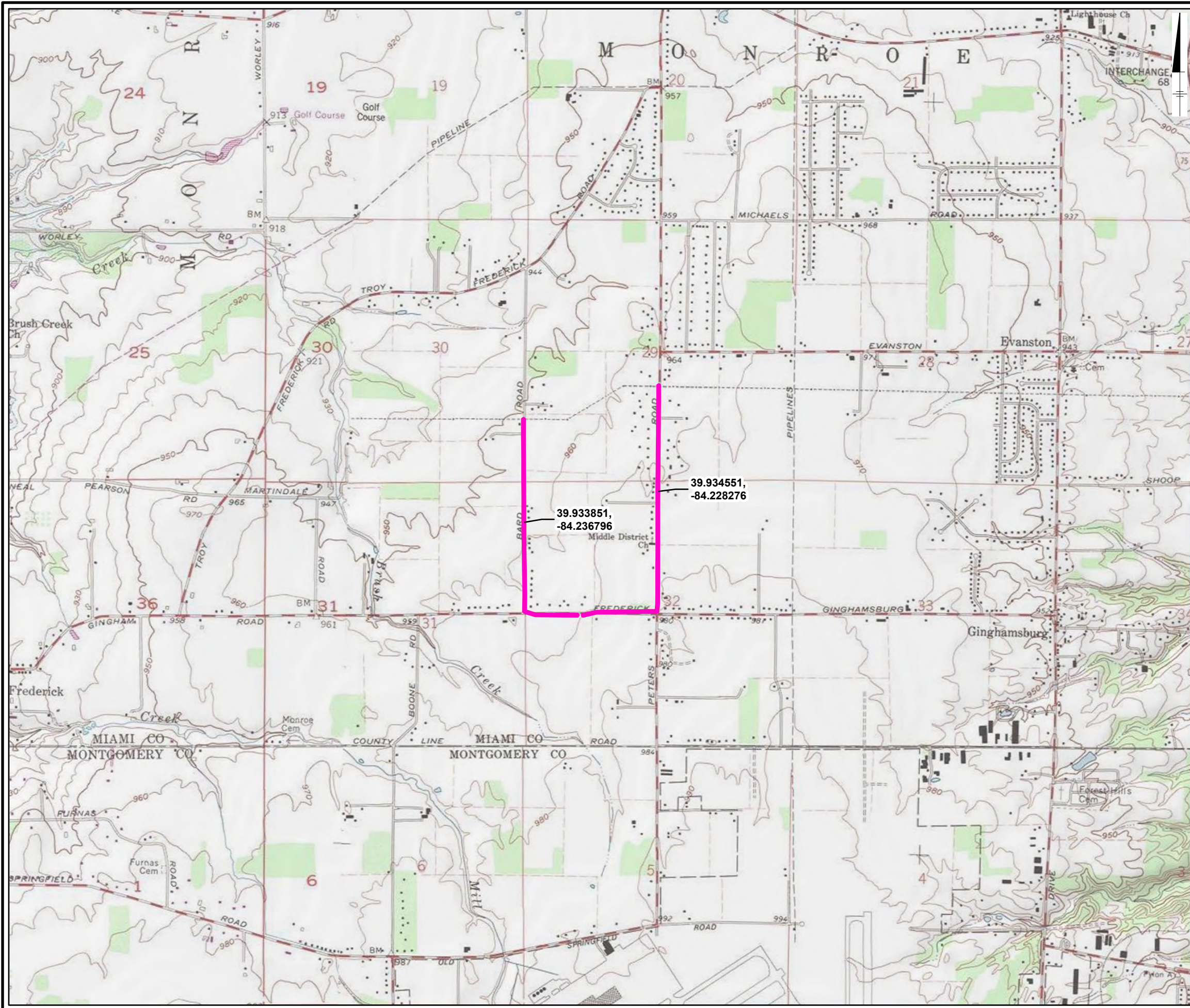
ATTACHMENTS

Figures

Attachment A – Photolog

Figures

City: CIN Div/Group: EPP Created By: M.Vazquez Last Saved By: AVolf
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Legend
Environmental Survey Area (ESA)

0 2,000 4,000 Feet
GRAPHIC SCALE

NOTE:
1. USGS TOPOGRAPHIC QUADRANGLE TIPP CITY, OHIO OBTAINED FROM ESRI IMAGE SERVICE. PHOTO PUBLISHED 1982.

THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

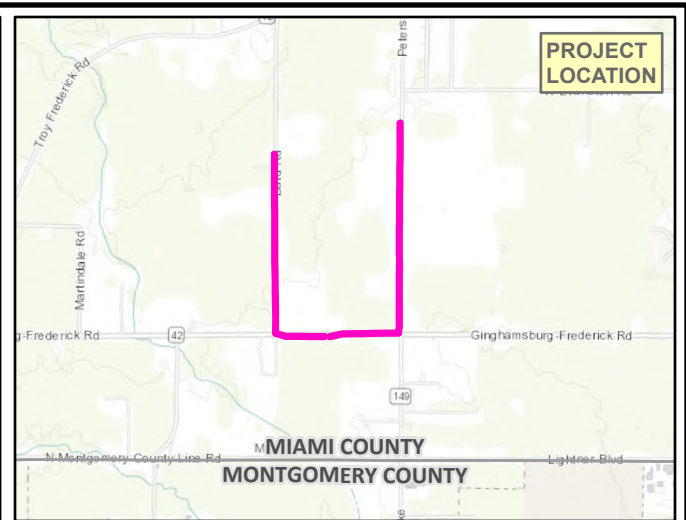
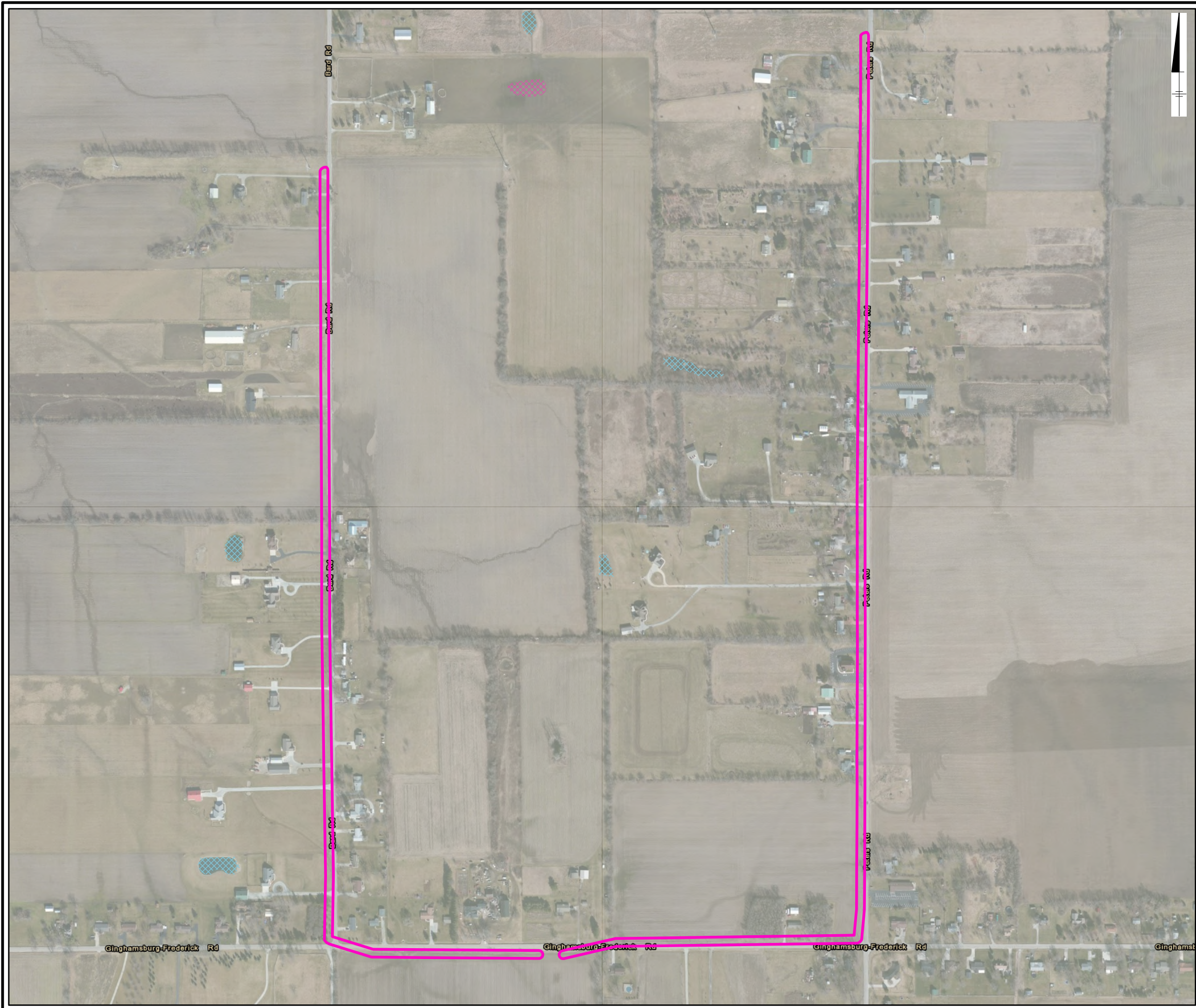
TOPOGRAPHIC MAP

aes

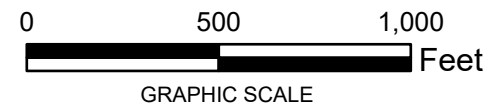
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FIGURE
1

City: CN Div/Group: EPP Created By: MVazquez Last Saved By: AWolf
T:\EPP\AES\OH\Airport_T_Line_Siting\Maps\WDR\WDR.aprx 11/11/2021 8:30 AM



- Legend**
- Environmental Survey Area (ESA)
 - NWI Freshwater Emergent Wetland
 - NWI Freshwater Pond/Lake/Riverine Wetland

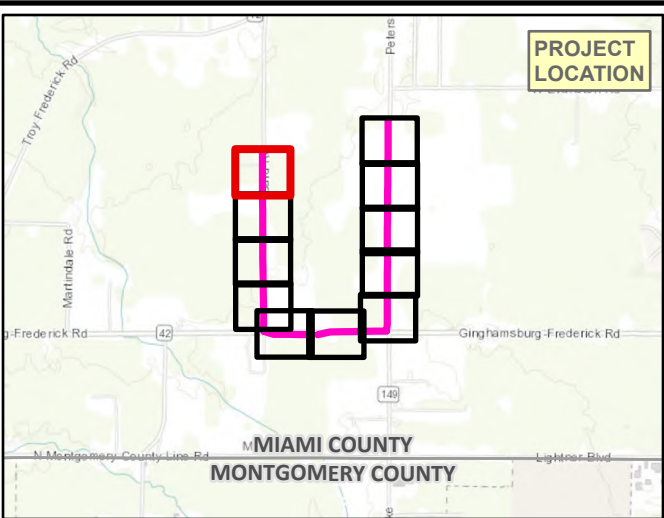
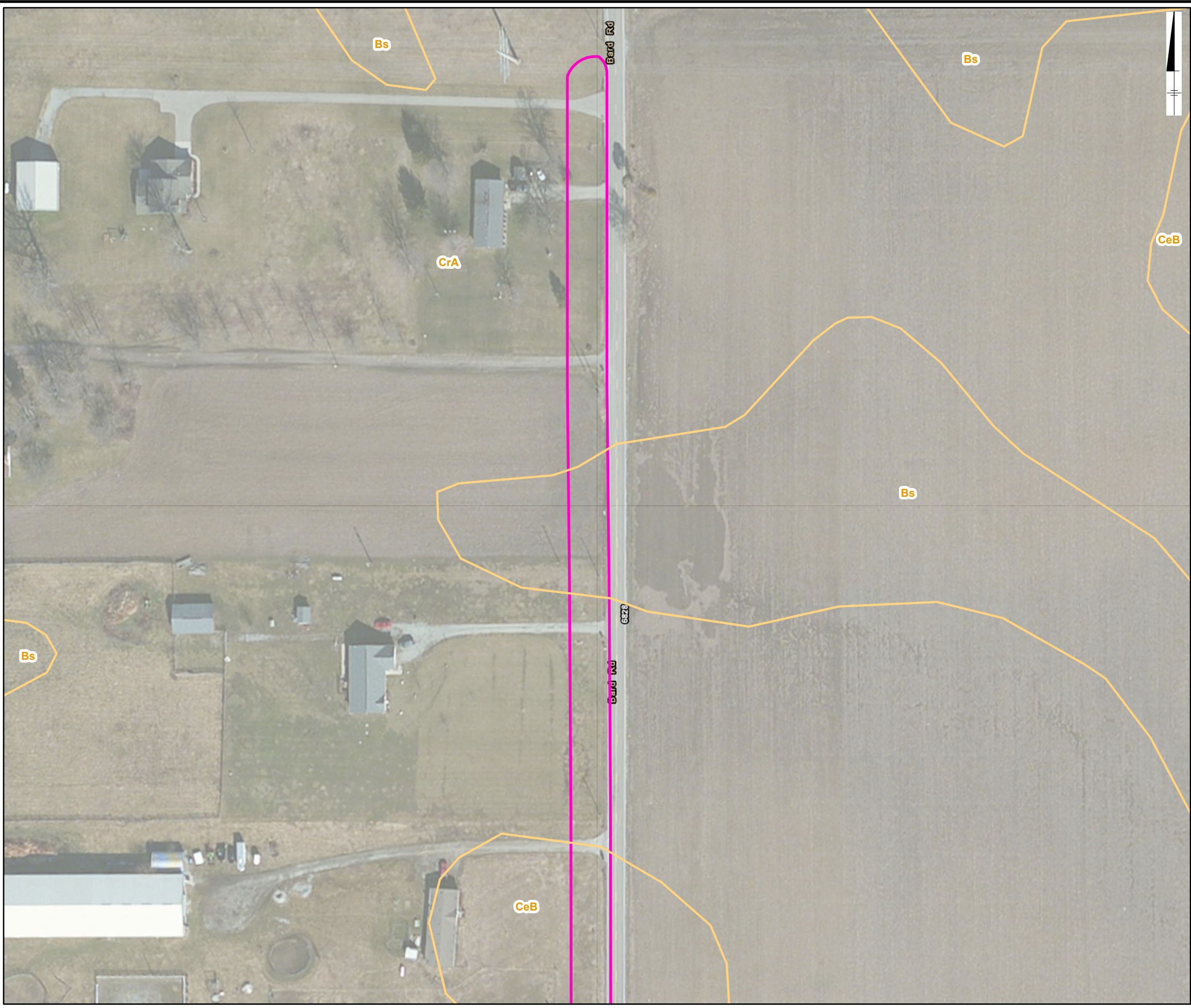


NOTE:
1. 2017 IMAGERY OBTAINED FROM ESRI IMAGE SERVICE.
2. 2007 NATIONAL WETLANDS INVENTORY (NWI) WETLAND DATA OBTAINED FROM THE US FISH & WILDLIFE SERVICE AT: WWW.FWS.GOV.
3. 2012 NATIONAL HYDROGRAPHY DATASET (NHD) OBTAINED FROM THE US GEOLOGICAL SURVEY AT: [HTTPS://NHD.USGS.GOV](https://NHD.USGS.GOV).
4. NO FLOOD HAZARDS WITHIN VICINITY OF SITE
2011 FEMA FLOOD ZONE DATA OBTAINED FROM: [HTTPS://MSC.FEMA.GOV](https://MSC.FEMA.GOV)

THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

NWI / NHD / FEMA MAP

City: CIN Div/Group: EPP Created By: M Vazquez Last Saved By: A Wolf
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Legend

Soil Class Boundary

Environmental Survey Area (ESA)

Soil ID	Soil Description	Hydric Rating
CeB	Celina silt loam, 2 to 6 percent slopes	Predominantly Non-Hydric (1-32%)
CeB2	Celina silt loam, 2 to 6 percent slopes, eroded	Predominantly Non-Hydric (1-32%)
CrA	Crosby silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes	Predominantly Non-Hydric (1-32%)
CrB	Crosby silt loam, Southern Ohio Till Plain, 2 to 6 percent slopes	Predominantly Non-Hydric (1-32%)
Bs	Brookston silty clay loam, fine texture, 0 to 2 percent slopes	Predominantly Hydric (66-99%)

0 100 200 Feet

GRAPHIC SCALE

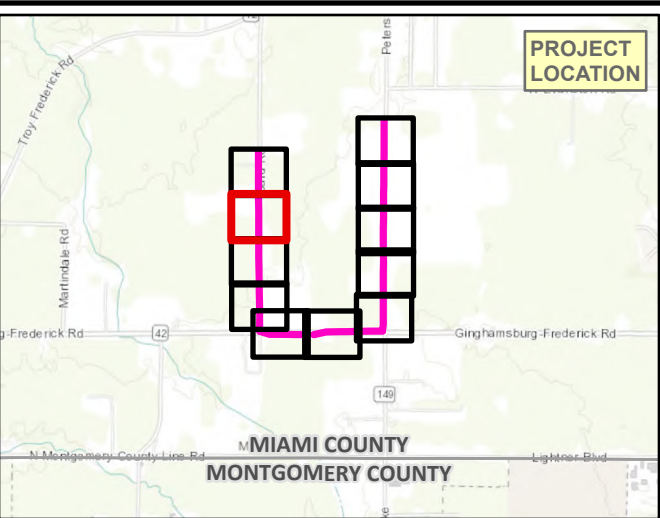
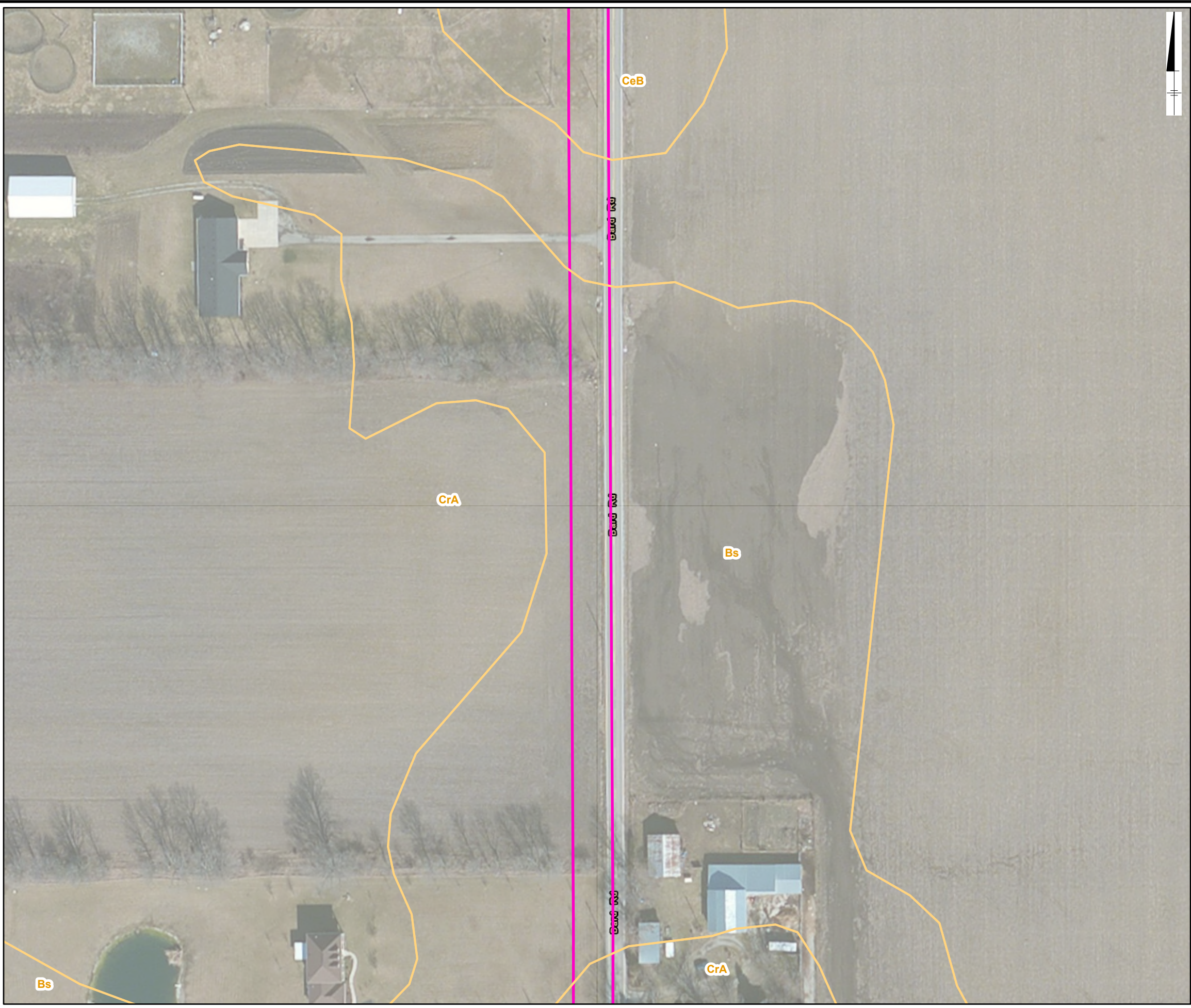
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2. 2018 NATURAL RESOURCES CONSERVATION SERVICE
SOIL DATA OBTAINED FROM: [HTTPS://GDG.SC.EGOV.USDA.GOV](https://gdg.sc.egov.usda.gov)

THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

NRCS SOILS MAP

FIGURE 3-1

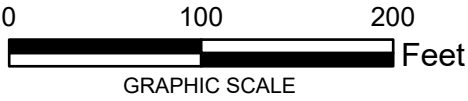
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Legend

- Soil Class Boundary
- Environmental Survey Area (ESA)

Soil ID	Soil Description	Hydric Rating
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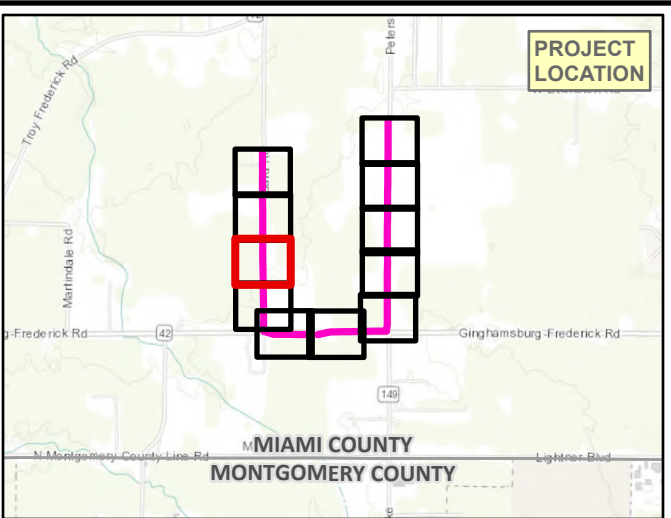
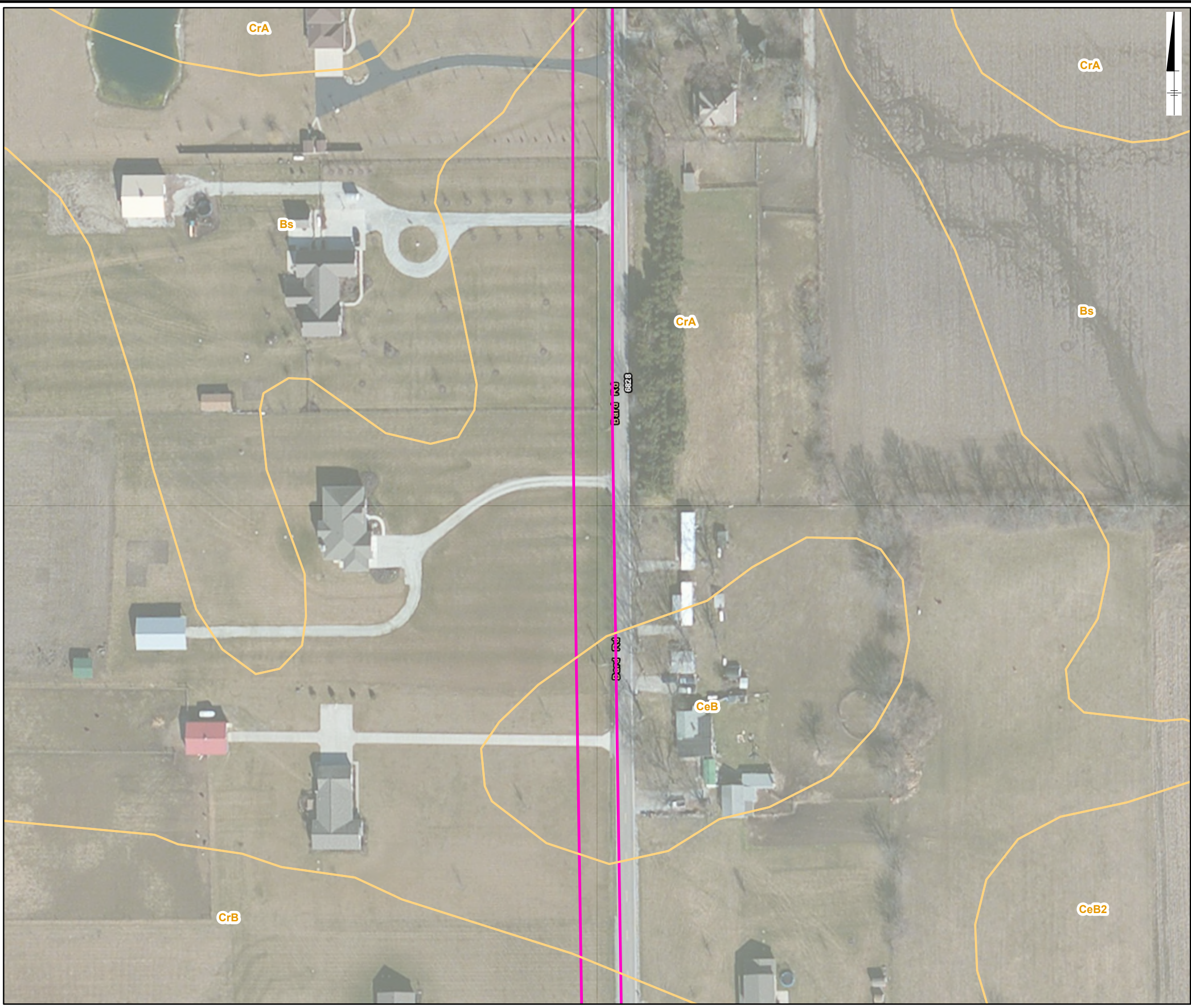


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THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

NRCS SOILS MAP

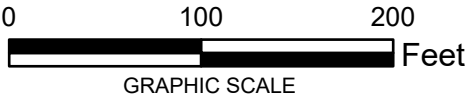
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Legend

- Soil Class Boundary
- Environmental Survey Area (ESA)

Soil ID	Soil Description	Hydric Rating
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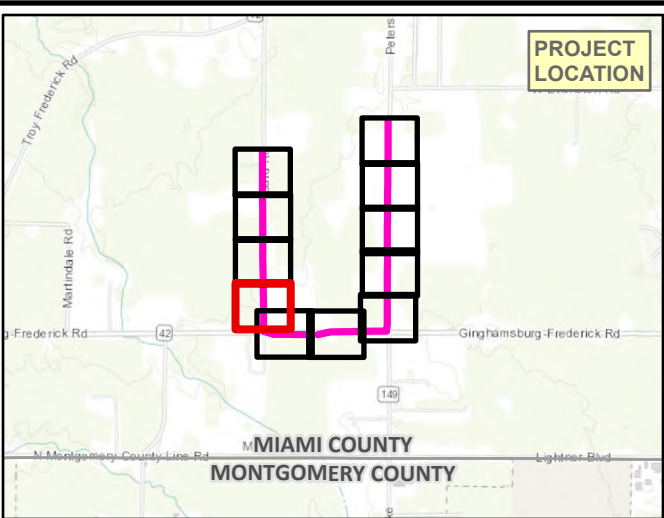
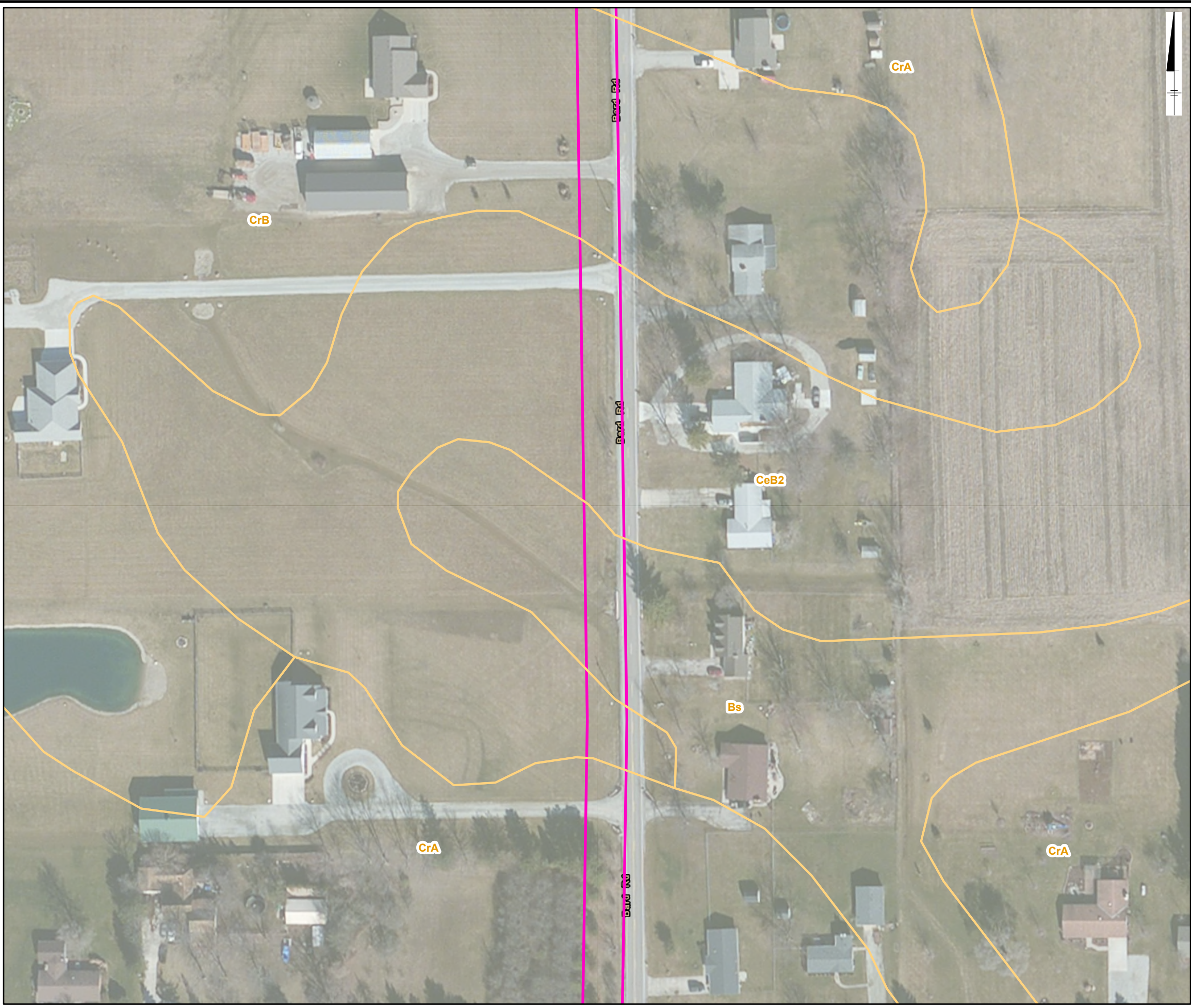


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2. 2018 NATURAL RESOURCES CONSERVATION SERVICE
SOIL DATA OBTAINED FROM: [HTTPS://GDG.SC.EGOV.USDA.GOV](https://gdg.sc.egov.usda.gov)

THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

NRCS SOILS MAP

City: CIN Div/Group: EPP Created By: M.Vazquez Last Saved By: AWolf
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Legend

Soil Class Boundary

Environmental Survey Area (ESA)

Soil ID	Soil Description	Hydric Rating
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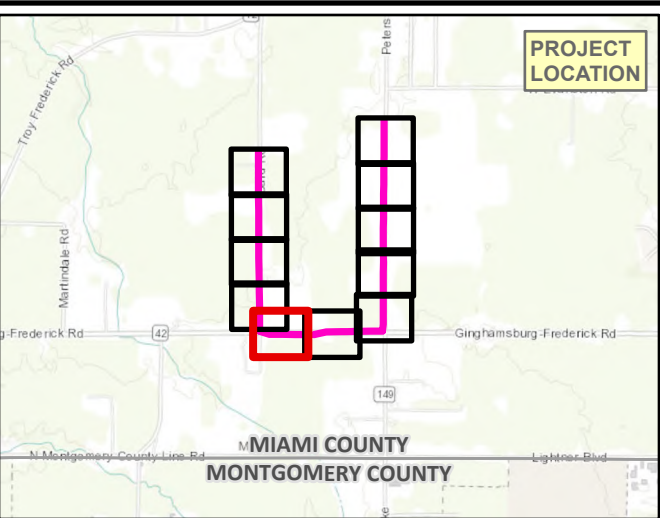
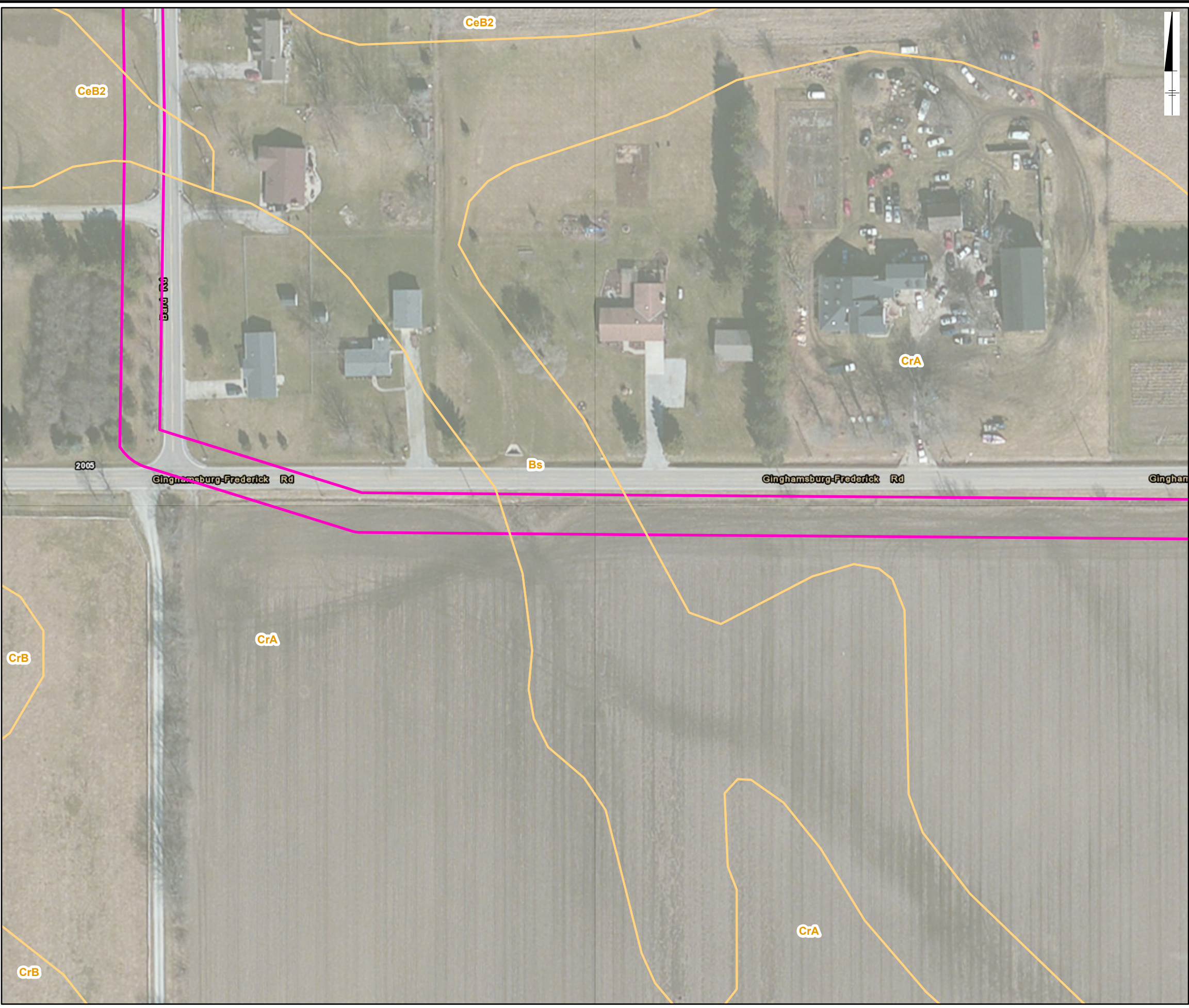
NOTE:
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2. 2018 NATURAL RESOURCES CONSERVATION SERVICE SOIL DATA OBTAINED FROM: [HTTPS://GDG.SC.EGOV.USDA.GOV](https://gdg.sc.egov.usda.gov)

THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

NRCS SOILS MAP

FIGURE 3-4

City: CIN Div/Group: EPP Created By: M Vazquez Last Saved By: A Wolf
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Legend

Soil Class Boundary

Environmental Survey Area (ESA)

Soil ID	Soil Description	Hydric Rating
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Bs	Brookston silty clay loam, fine texture, 0 to 2 percent slopes	Predominantly Hydric (66-99%)

0 100 200 Feet

GRAPHIC SCALE

NOTE:
1. 2017 IMAGERY OBTAINED FROM ESRI IMAGE SERVICE.
2. 2018 NATURAL RESOURCES CONSERVATION SERVICE
SOIL DATA OBTAINED FROM: [HTTPS://GDG.SC.EGOV.USDA.GOV](https://gdg.sc.egov.usda.gov)

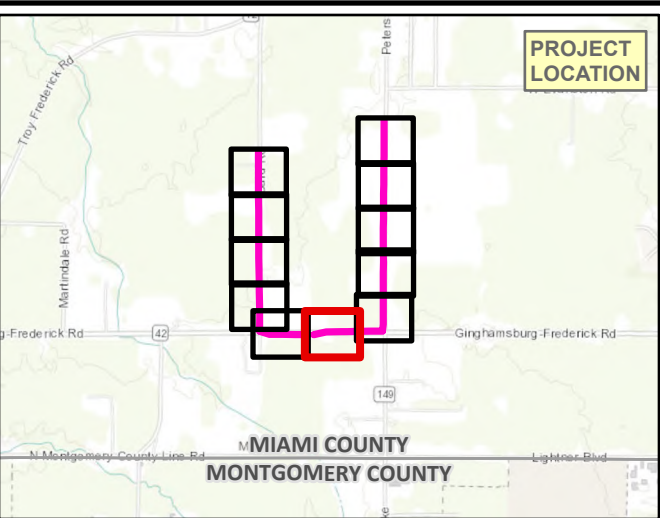
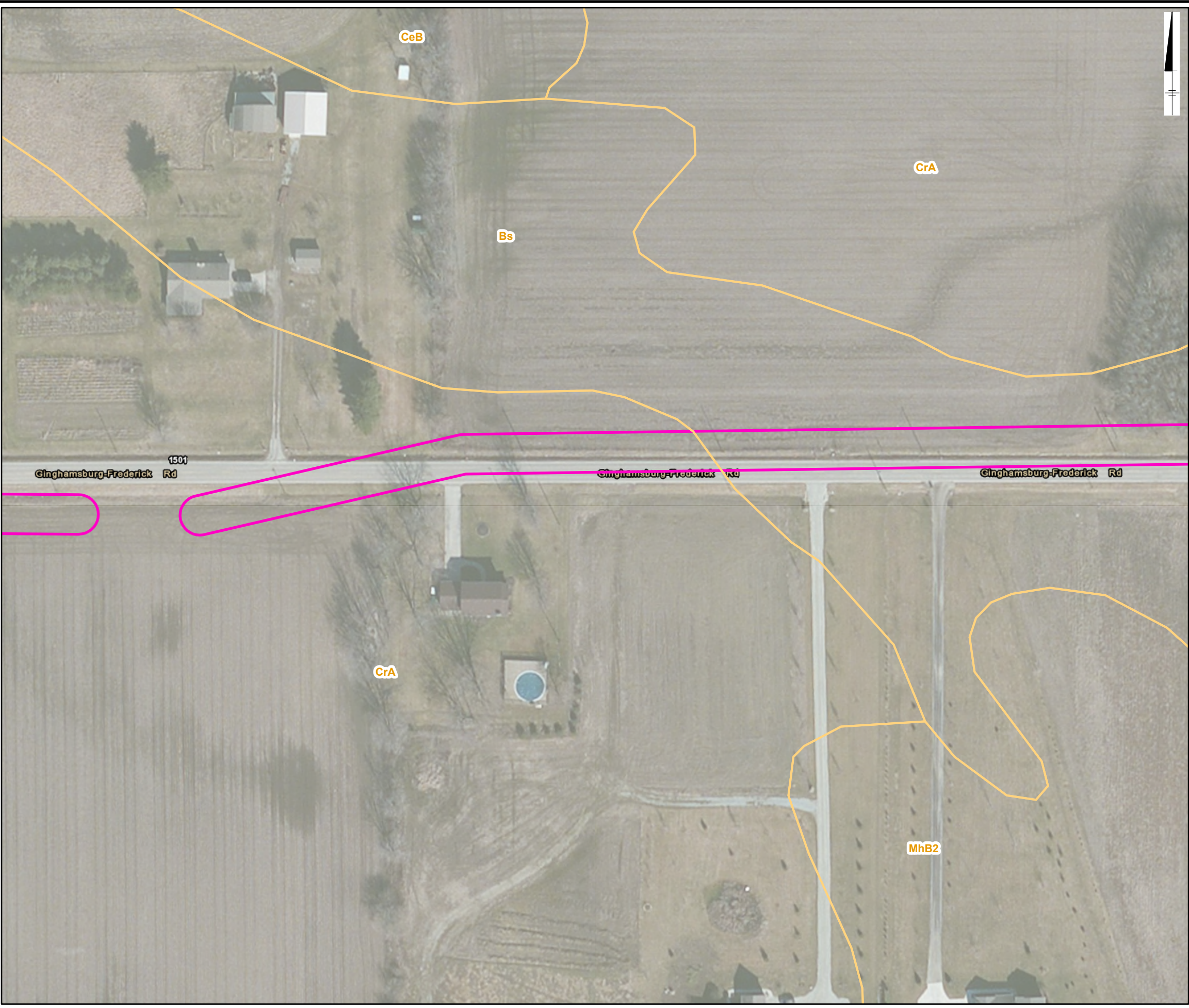
THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

NRCS SOILS MAP



FIGURE
3-5

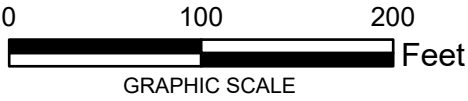
City: CIN Div/Group: EPP Created By: M.Vazquez Last Saved By: AVolf
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Legend

- Soil Class Boundary
- Environmental Survey Area (ESA)

Soil ID	Soil Description	Hydric Rating
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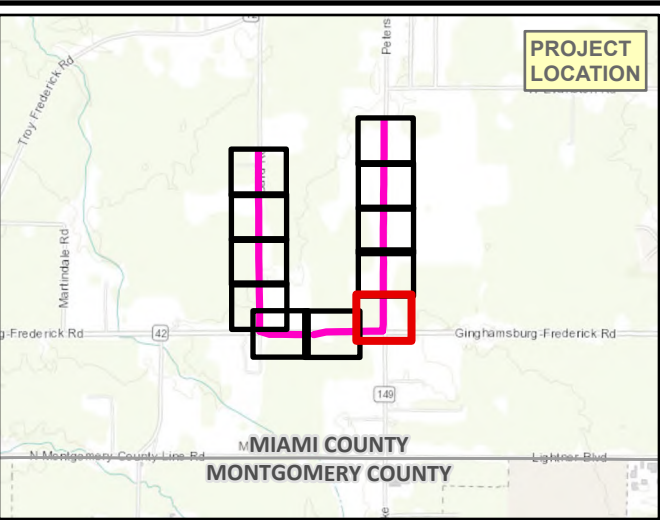
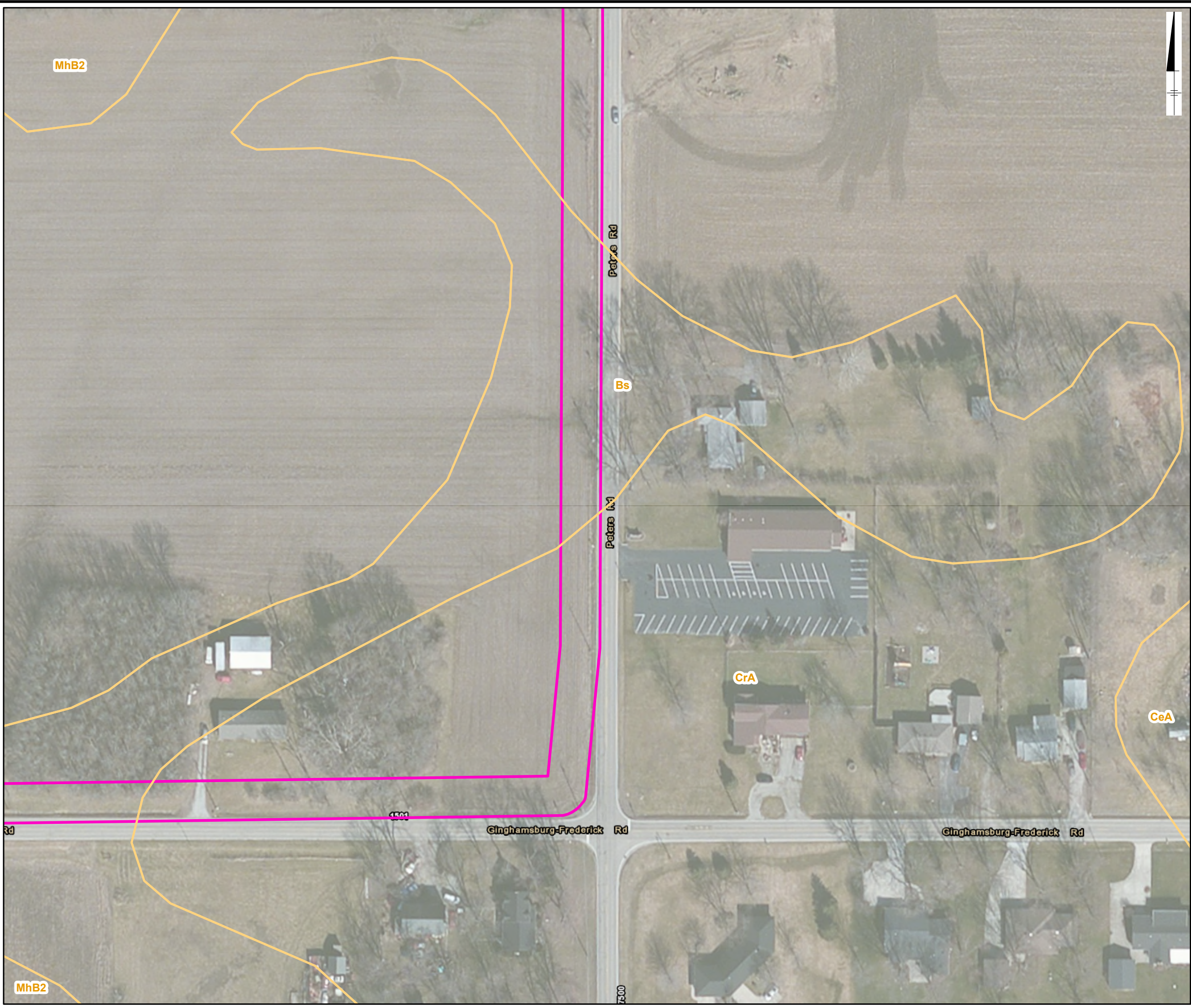


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THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

NRCS SOILS MAP

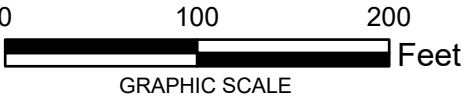
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Legend

- Soil Class Boundary
- Environmental Survey Area (ESA)

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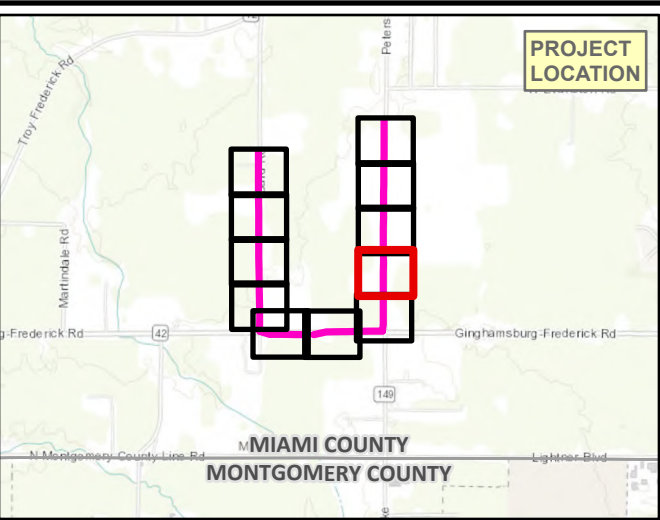
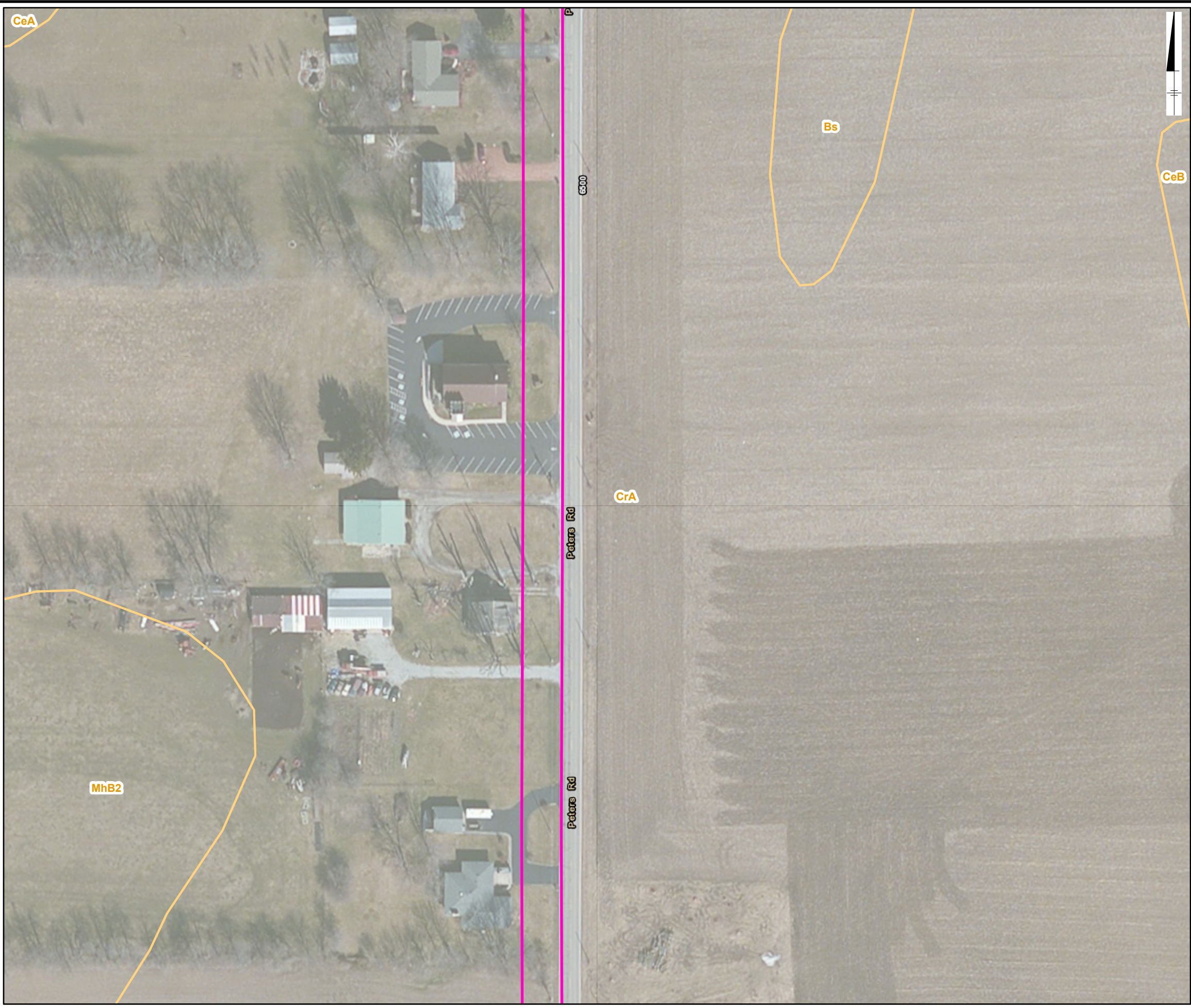


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THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

NRCS SOILS MAP

City: CIN Div/Group: EPP Created By: M Vazquez Last Saved By: A Wolf
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Legend

- Soil Class Boundary
- Environmental Survey Area (ESA)

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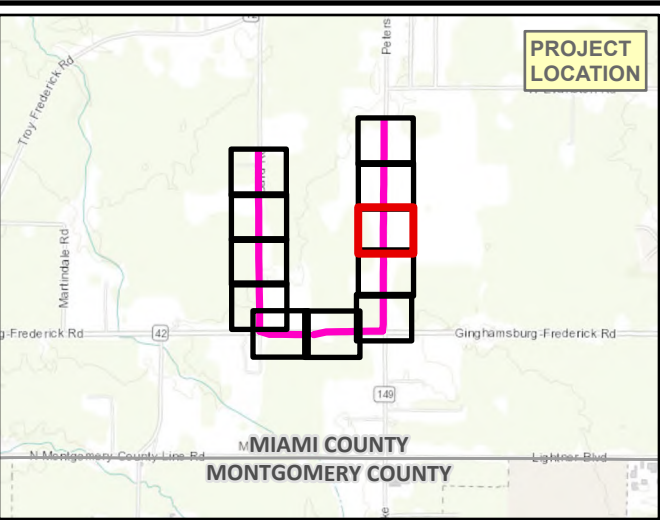
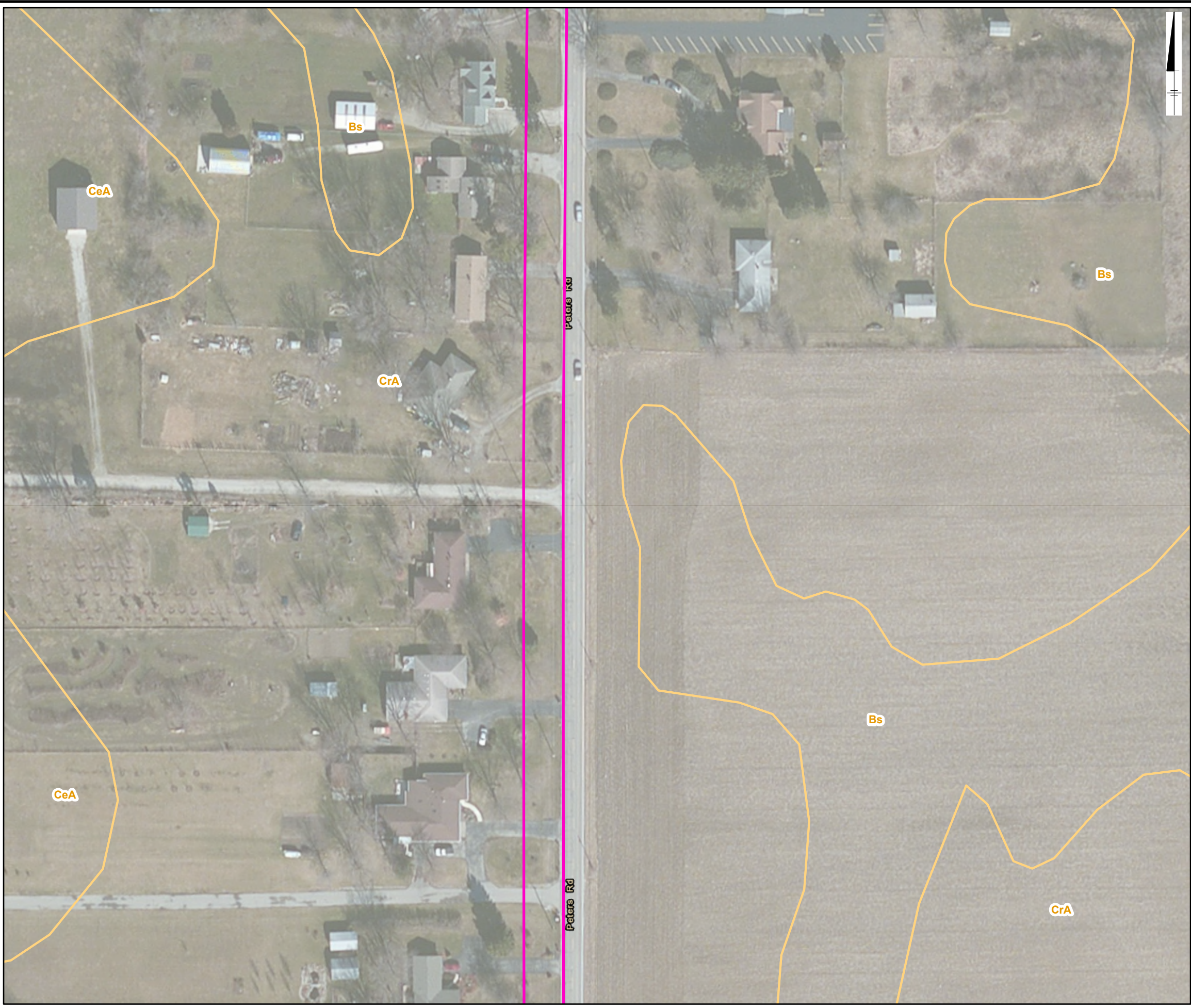


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THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

NRCS SOILS MAP

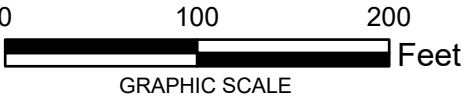
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Legend

- Soil Class Boundary
- Environmental Survey Area (ESA)

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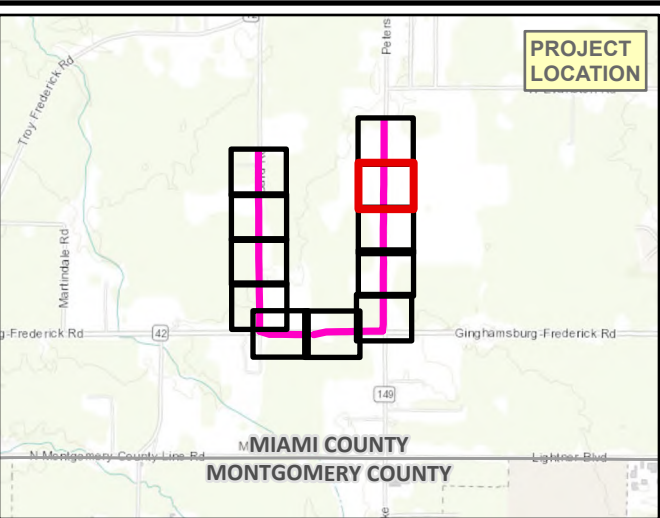
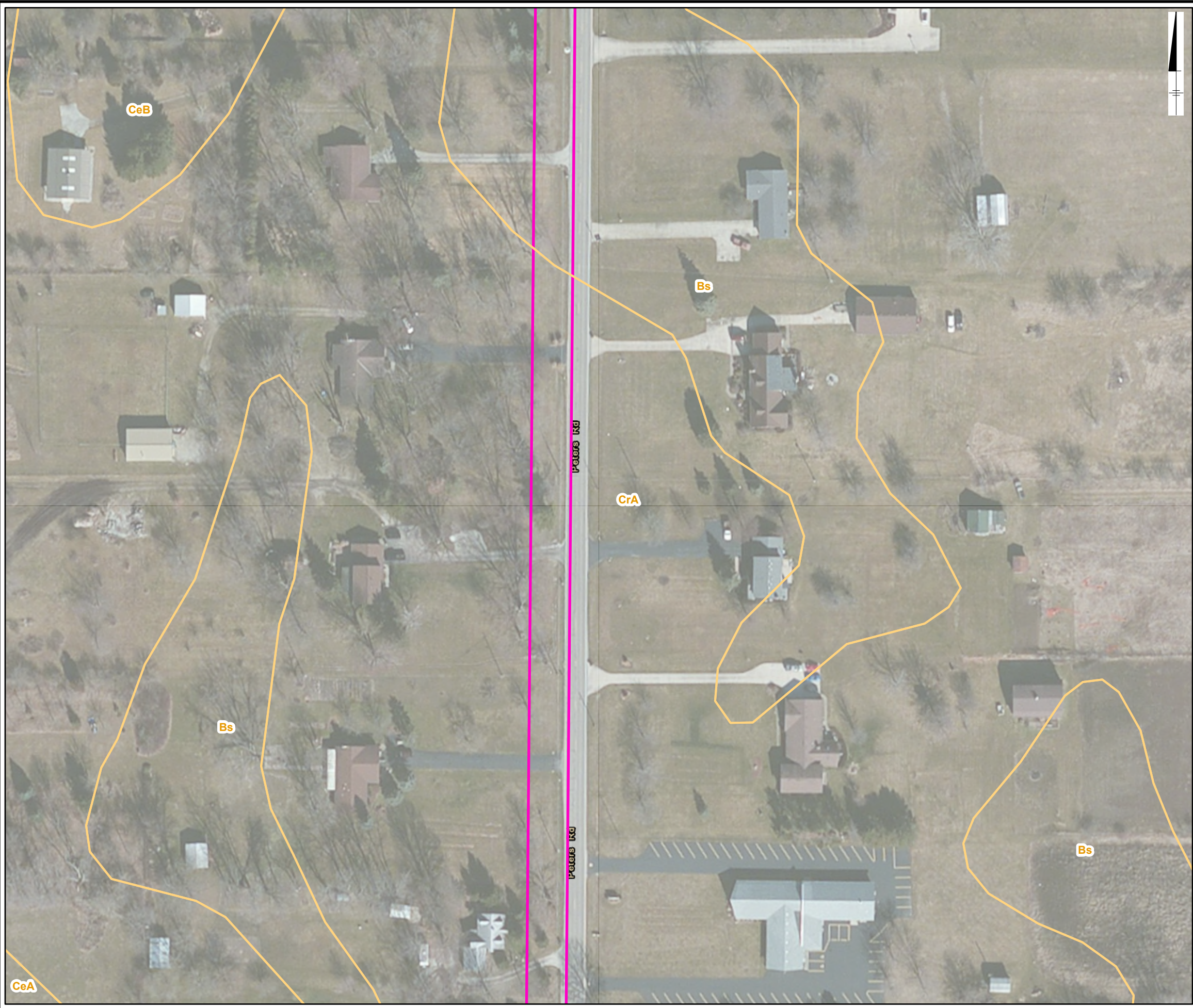


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AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

NRCS SOILS MAP

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Legend

Soil Class Boundary

Environmental Survey Area (ESA)

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0 100 200 Feet

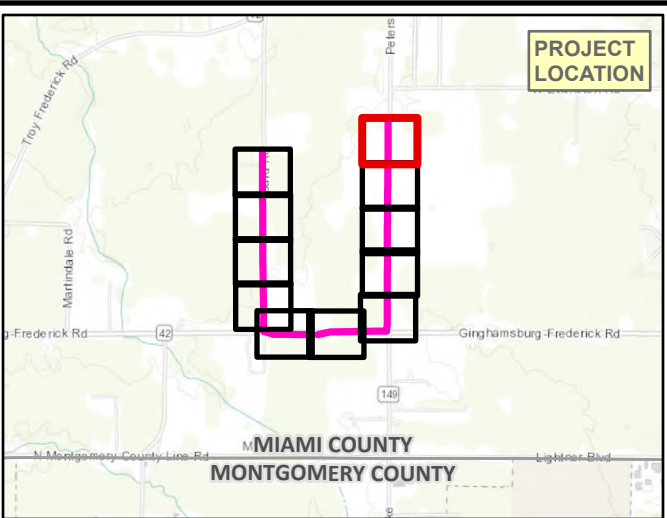
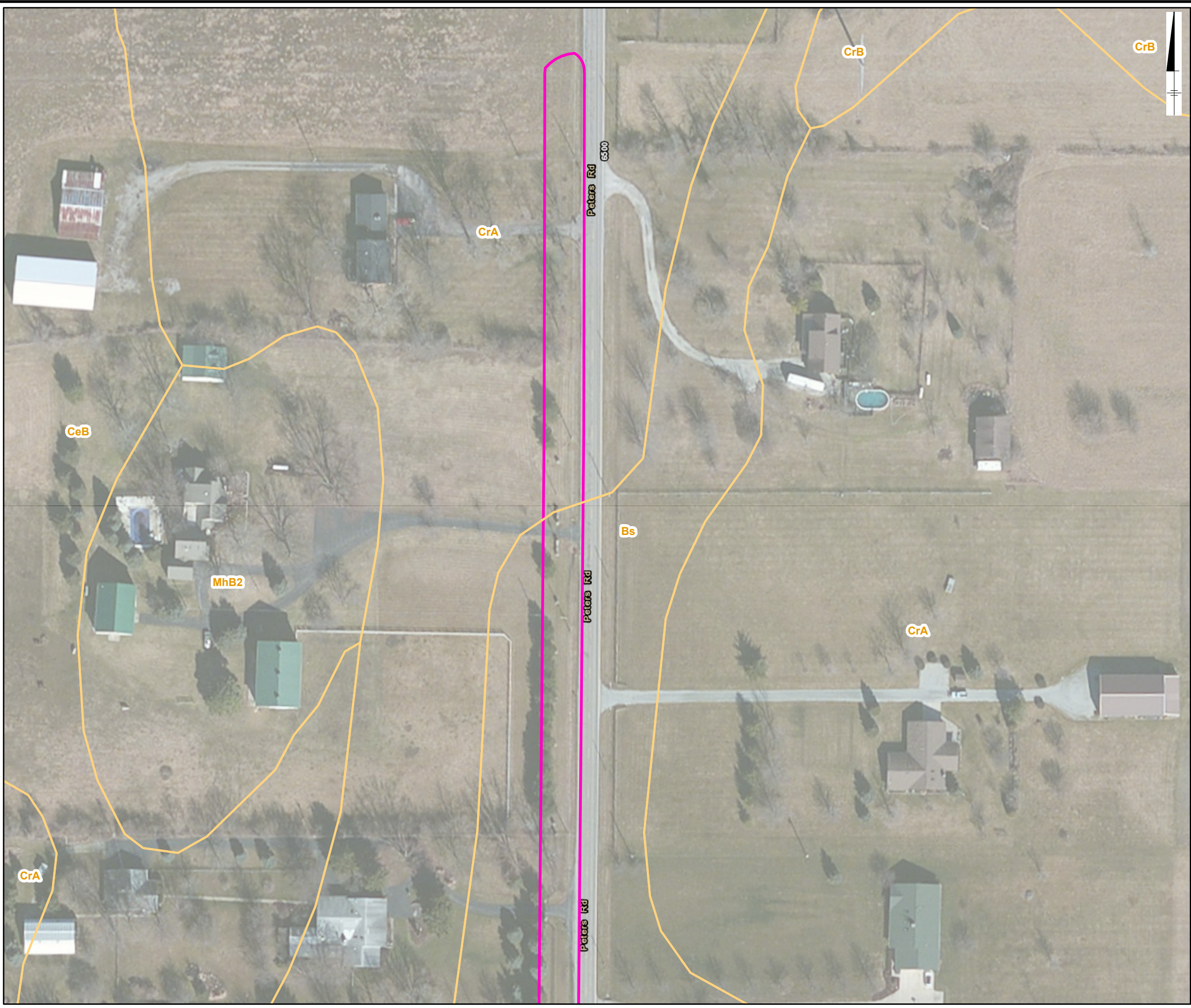
GRAPHIC SCALE

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THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

NRCS SOILS MAP

City: CIN Div/Group: EPP Created By: M Vazquez Last Saved By: AVolf
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Legend

Soil Class Boundary

Environmental Survey Area (ESA)

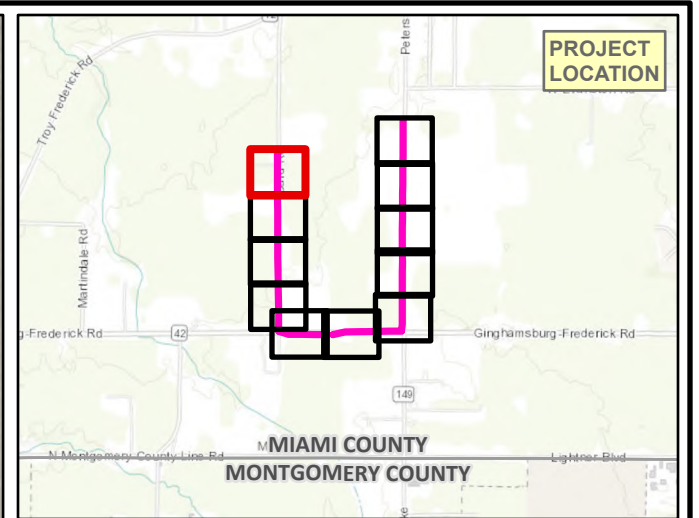
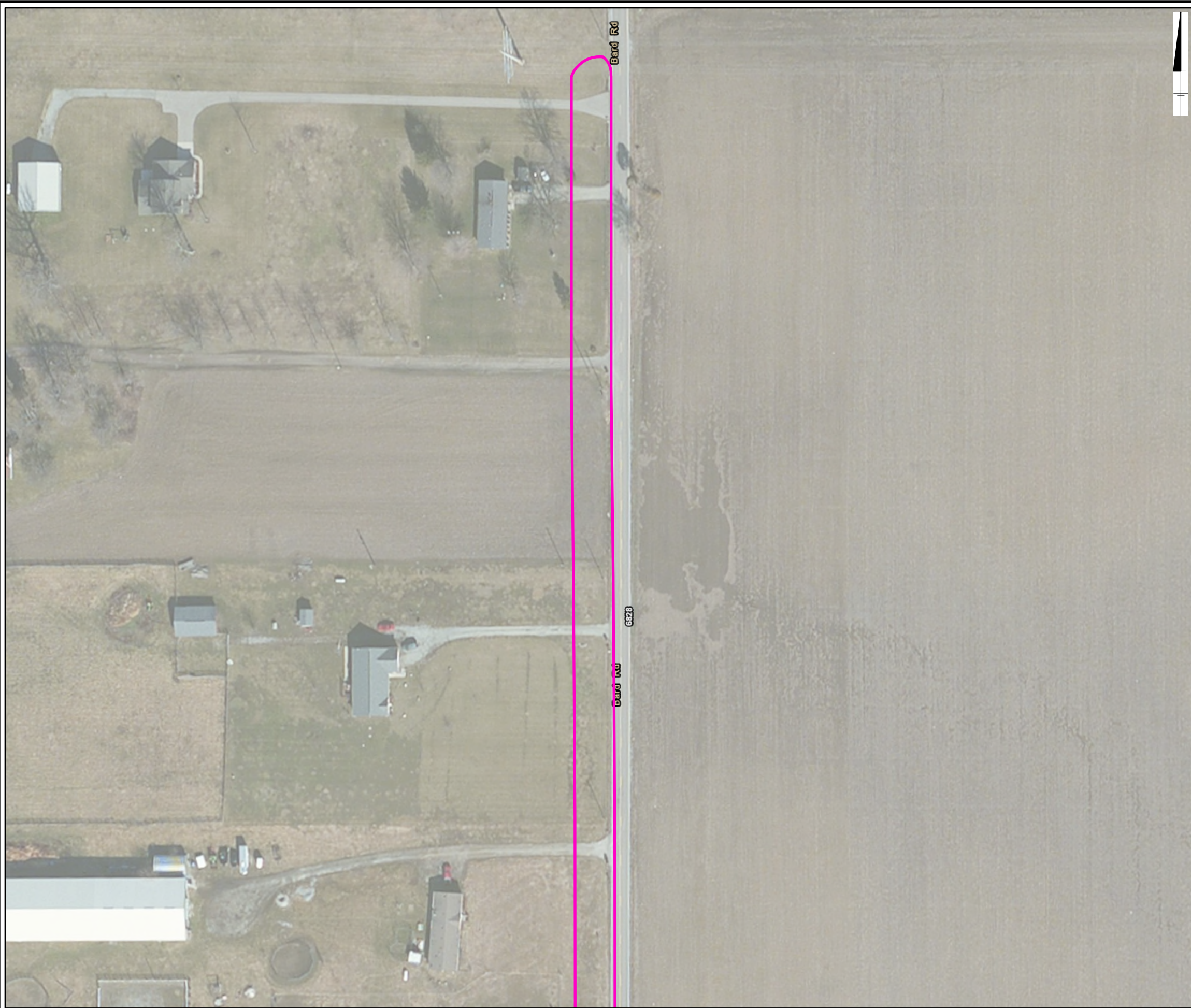
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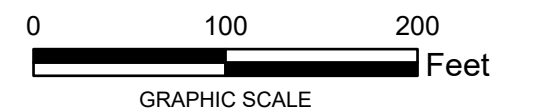
THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

NRCS SOILS MAP



Legend

 Environmental Survey Area (ESA)



NOTE:
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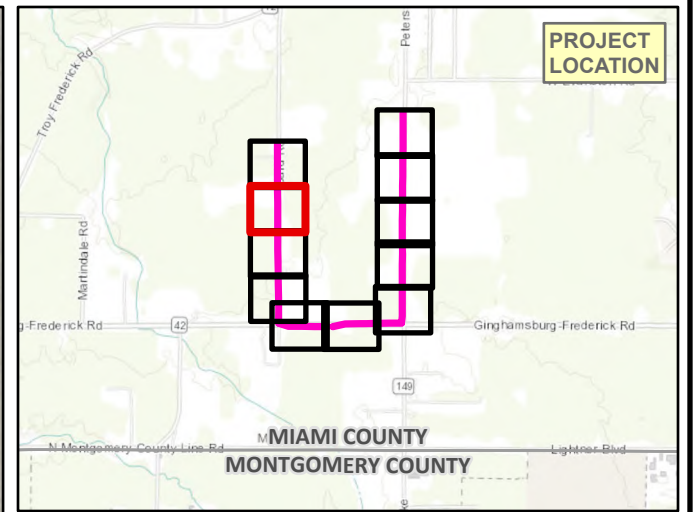
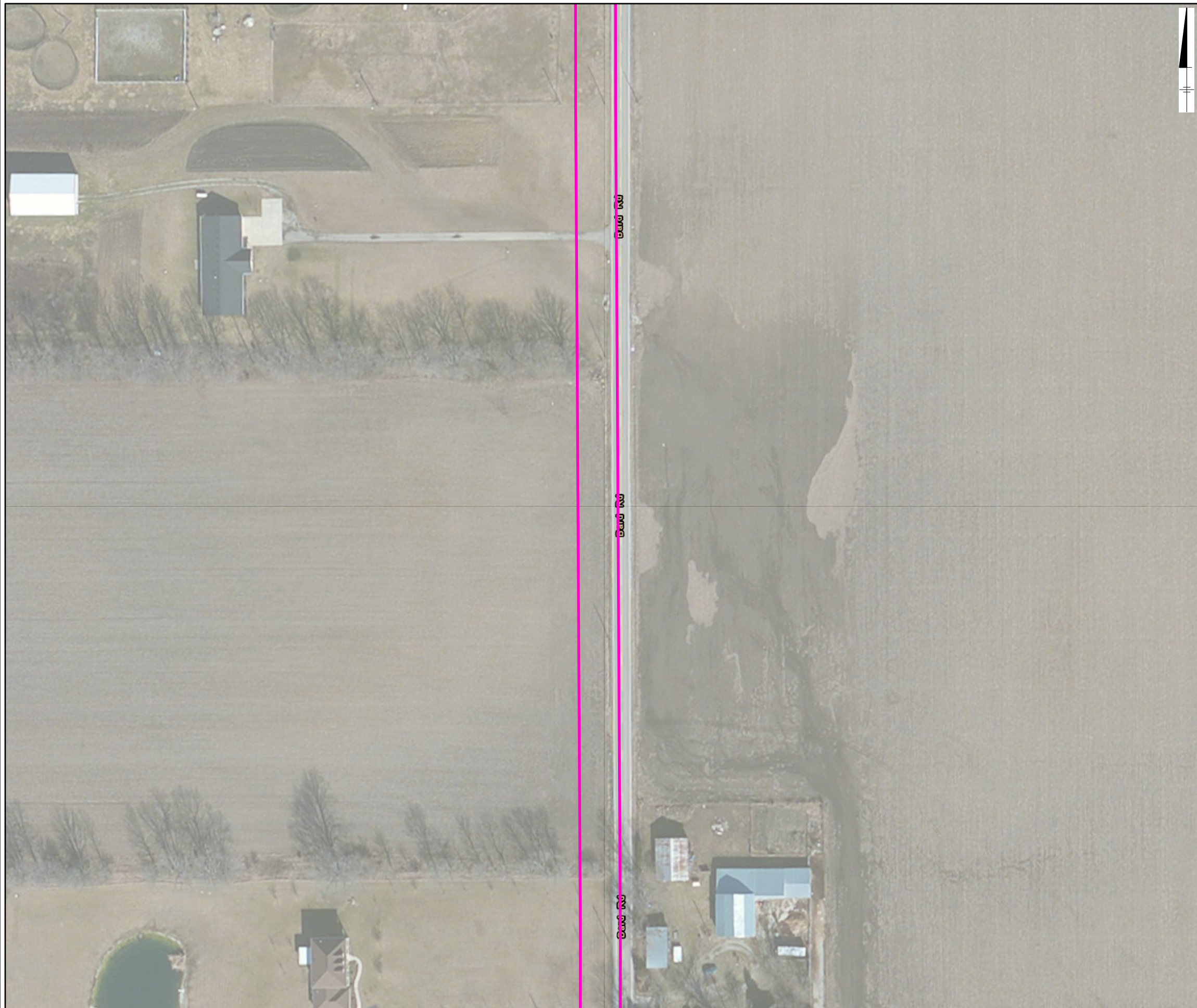
THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

DELINEATED WETLANDS AND STREAMS MAP



FIGURE
4-1

City: CIN Div/Group: EPP Created By: MVazquez Last Saved By: AVolf
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Legend
Environmental Survey Area (ESA)



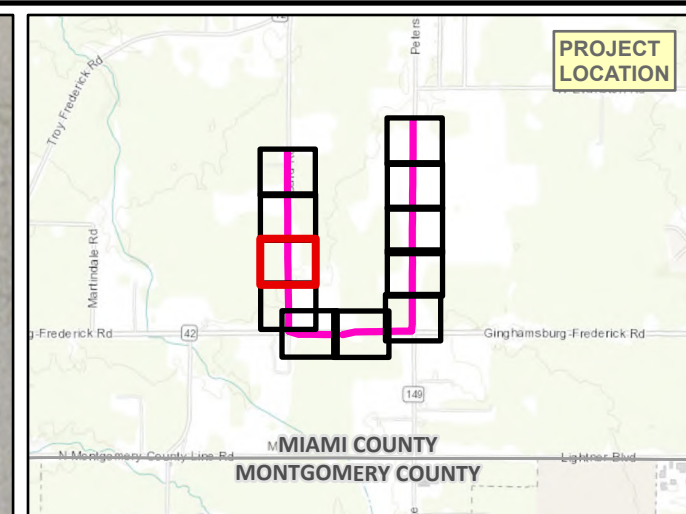
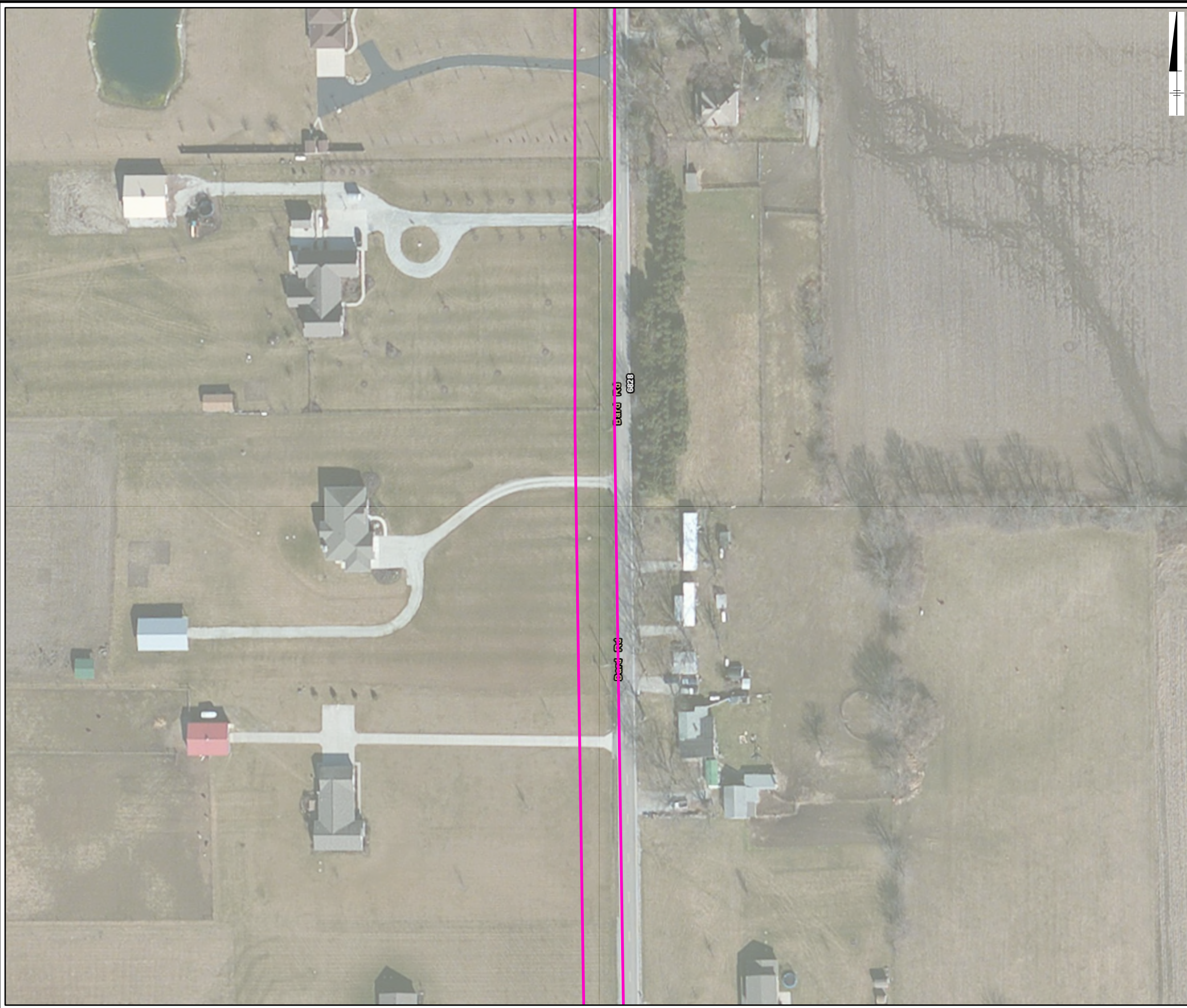
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THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

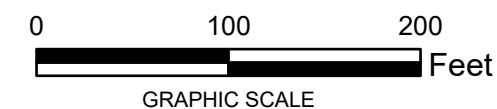
**DELINEATED WETLANDS
AND STREAMS MAP**



FIGURE
4-2



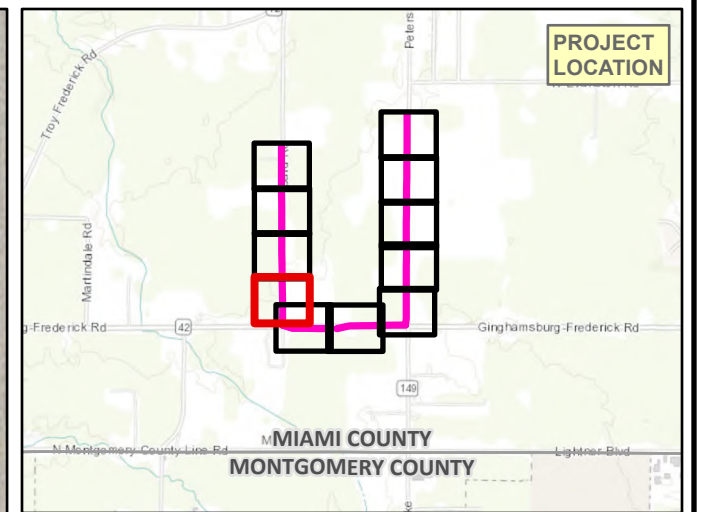
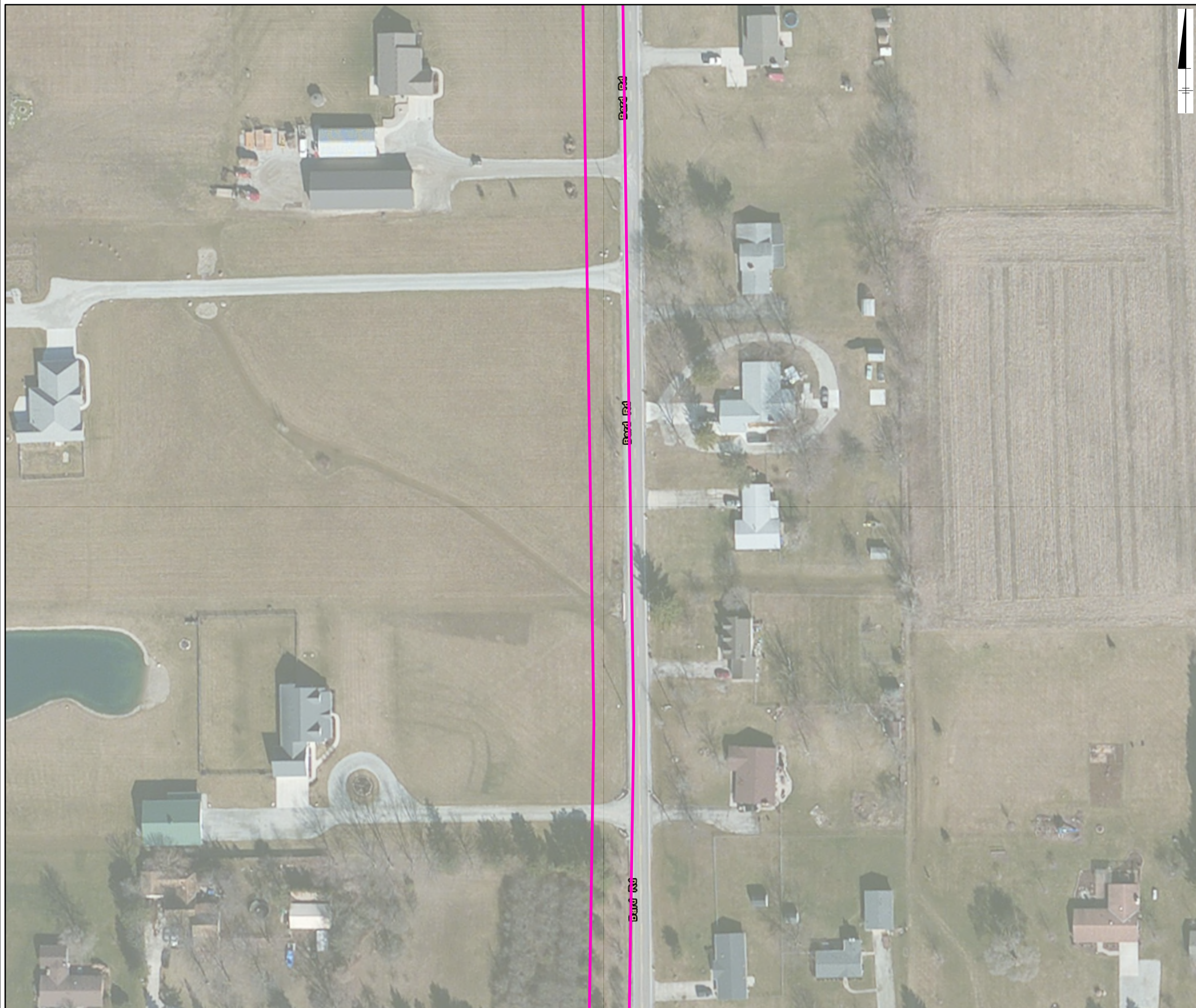
Legend
Environmental Survey Area (ESA)



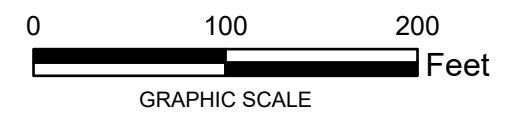
NOTE:
1. 2017 IMAGERY OBTAINED FROM ESRI IMAGE SERVICE.

THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

**DELINEATED WETLANDS
AND STREAMS MAP**



Legend
Environmental Survey Area (ESA)



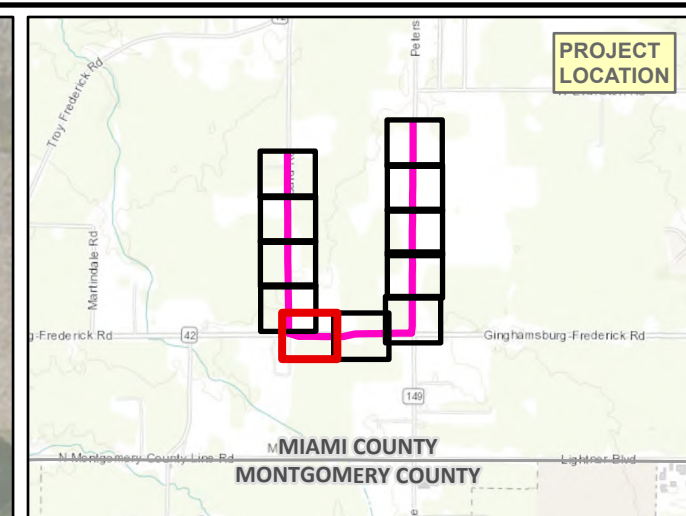
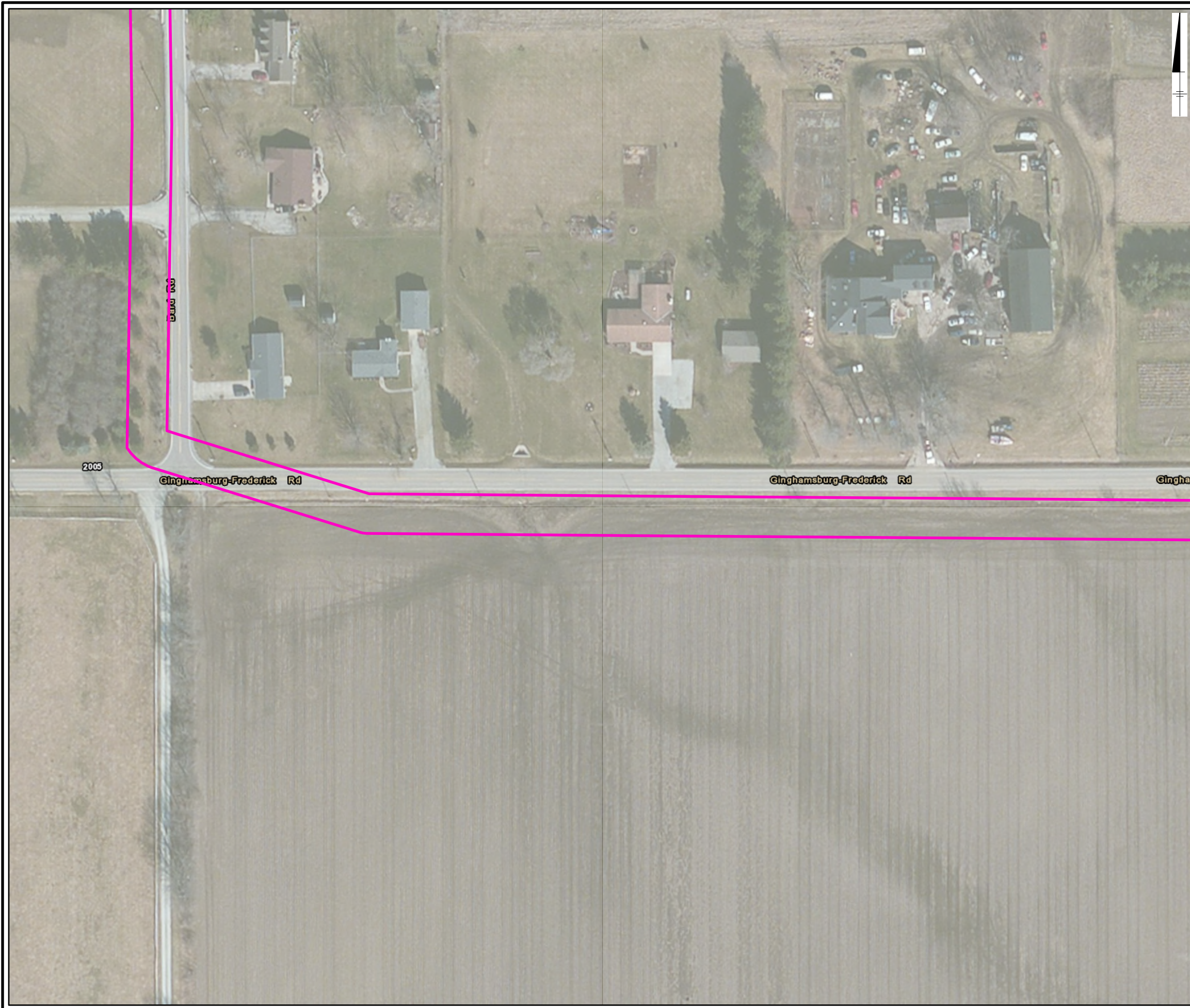
NOTE:
1. 2017 IMAGERY OBTAINED FROM ESRI IMAGE SERVICE.

THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

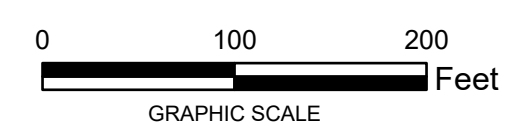
**DELINEATED WETLANDS
AND STREAMS MAP**



FIGURE
4-4



Legend
Environmental Survey Area (ESA)

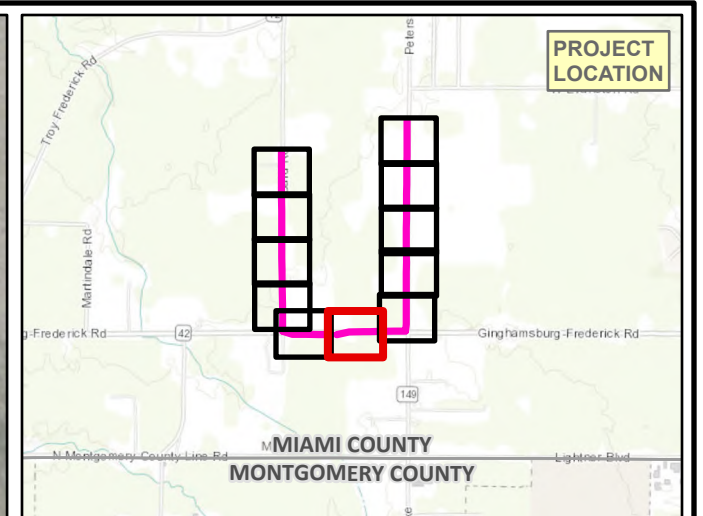
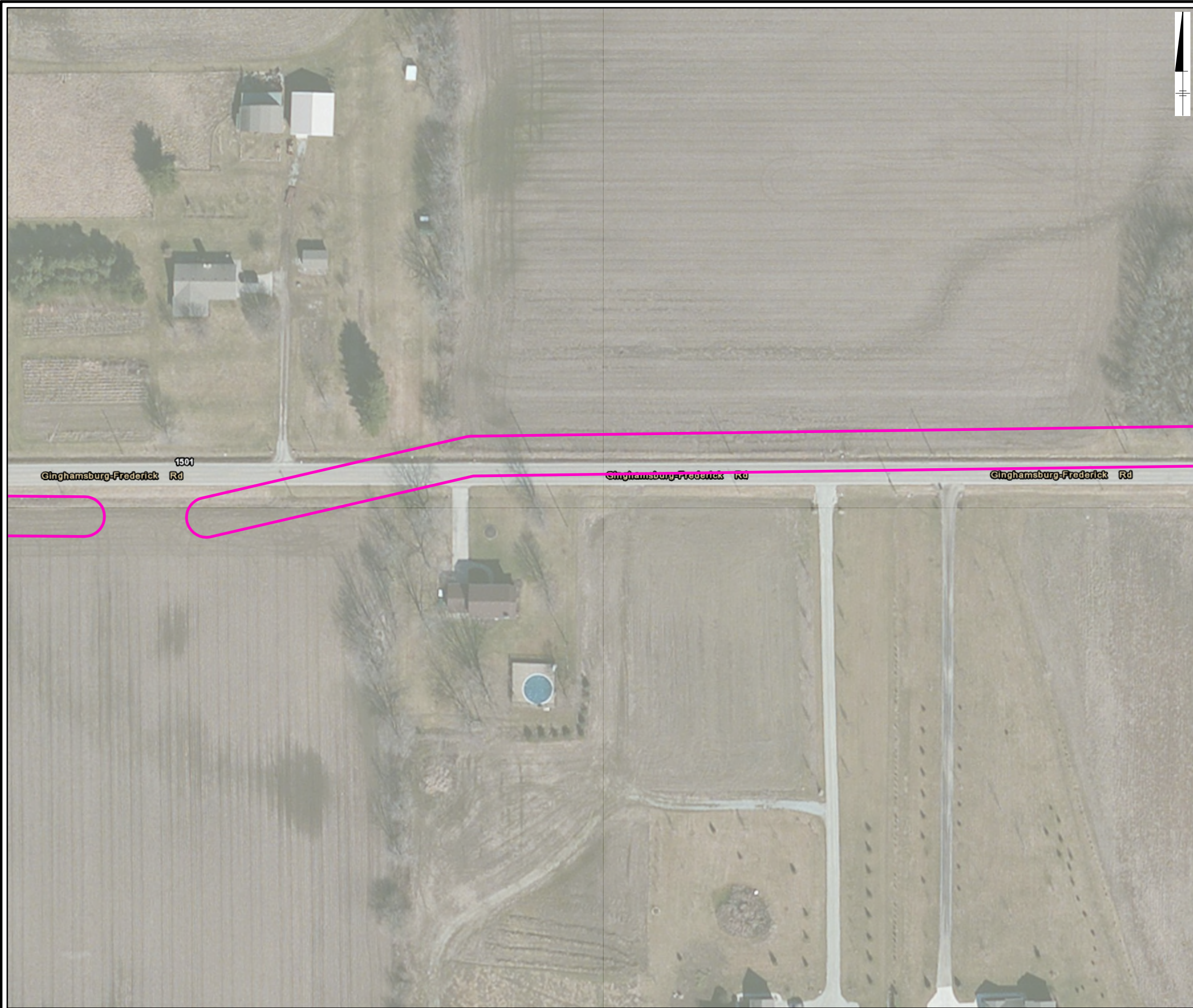


NOTE:
1. 2017 IMAGERY OBTAINED FROM ESRI IMAGE SERVICE.


THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

**DELINEATED WETLANDS
AND STREAMS MAP**

City: CIN Div/Group: EPP Created By: M.Vazquez Last Saved By: A.Wolf
T:\EPP\AES\OH\Airport_T_Line_Siting\Maps\WDR\WDR.aprx 11/11/2021 8:30 AM



Legend

 Environmental Survey Area (ESA)



NOTE:
1. 2017 IMAGERY OBTAINED FROM ESRI IMAGE SERVICE.

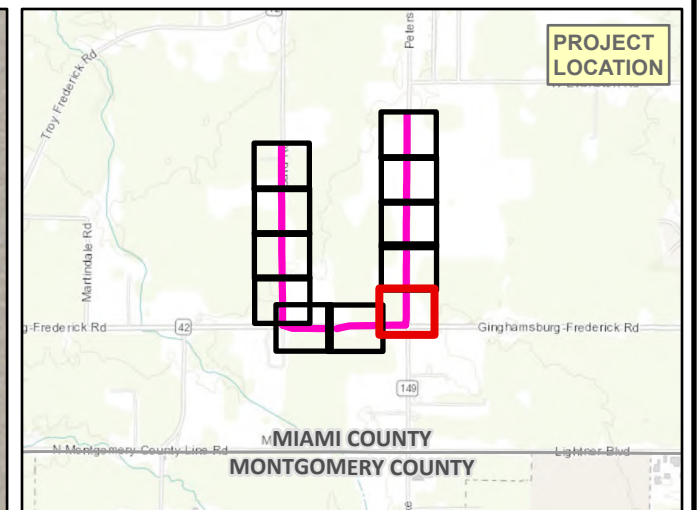
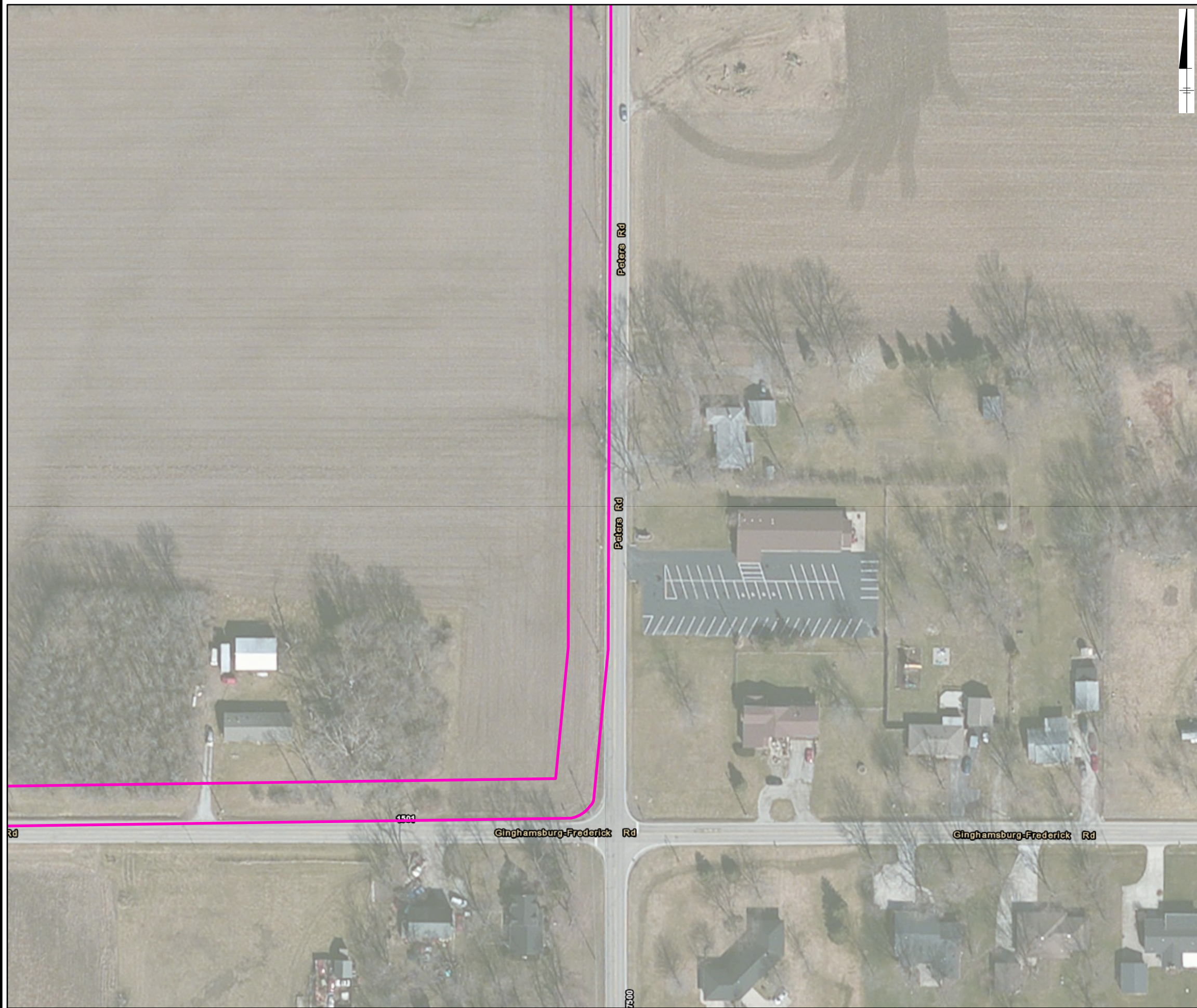
THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

DELINEATED WETLANDS AND STREAMS MAP



FIGURE
4-6

City: CIN Div/Group: EPP Created By: M.Vazquez Last Saved By: A.Wolf
T:\EPP\AES\OH\Airport_T_Line_Siting\Maps\WDR\WDR.aprx 11/11/2021 8:30 AM



Legend

 Environmental Survey Area (ESA)



NOTE:
1. 2017 IMAGERY OBTAINED FROM ESRI IMAGE SERVICE.

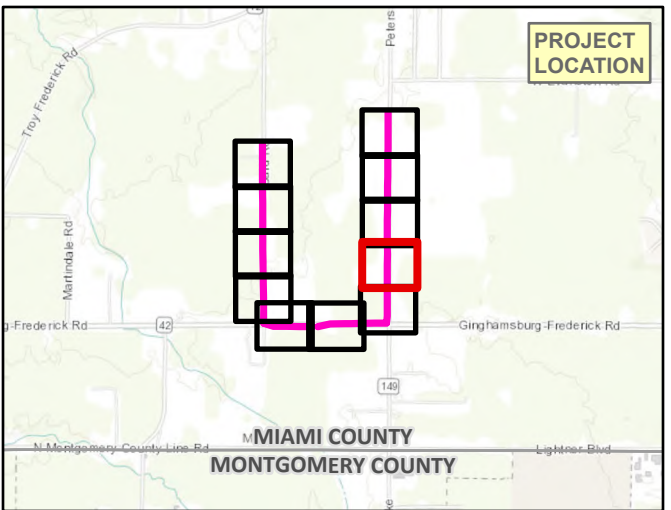
THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

DELINEATED WETLANDS AND STREAMS MAP



FIGURE
4-7

City: CIN Div/Group: EPP Created By: MVazquez Last Saved By: AWolf
T:\EPP\AES\OH\Airport_T_line_Siting\Maps\WDR\WDR.aprx 11/11/2021 8:30 AM



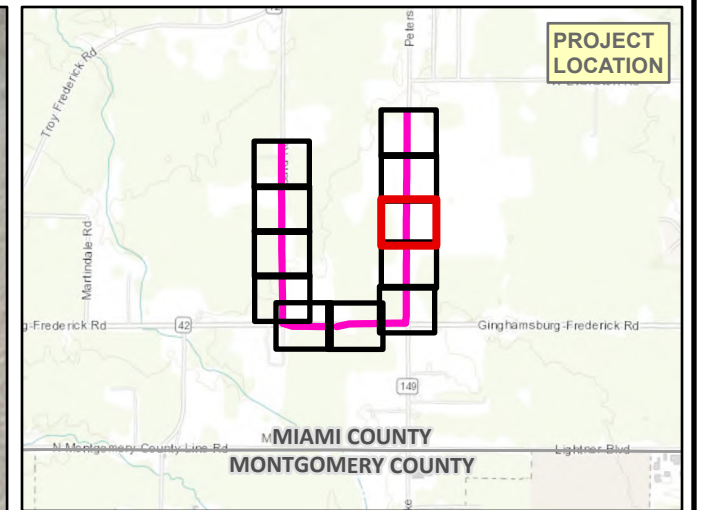
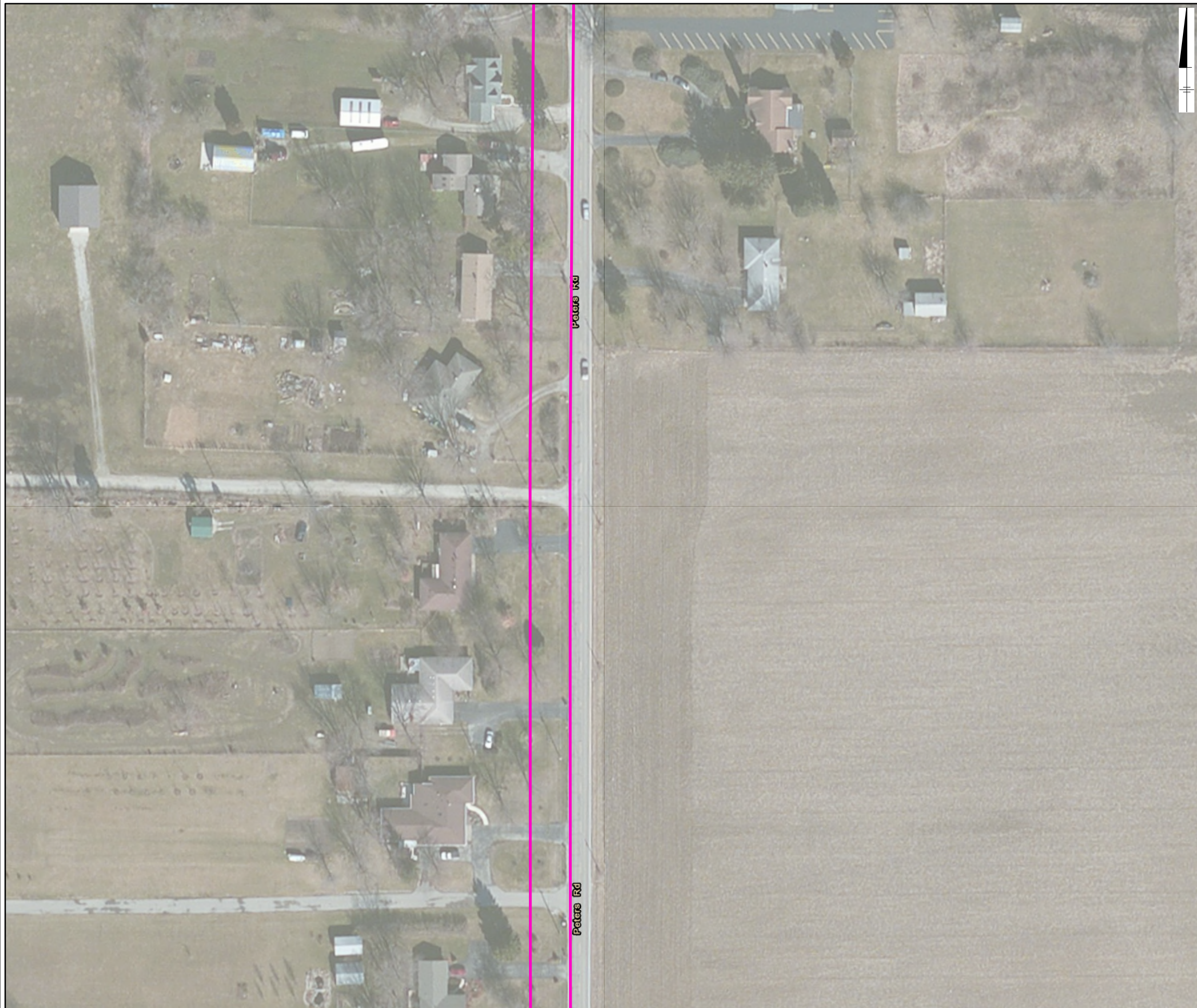
Legend
Environmental Survey Area (ESA)



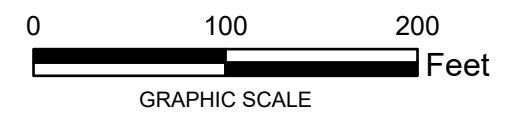
NOTE:
1. 2017 IMAGERY OBTAINED FROM ESRI IMAGE SERVICE.

THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

**DELINEATED WETLANDS
AND STREAMS MAP**



Legend
Environmental Survey Area (ESA)



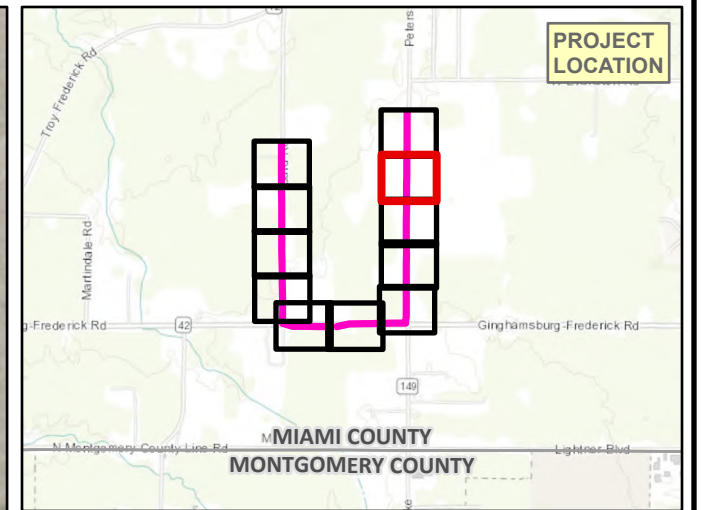
NOTE:
1. 2017 IMAGERY OBTAINED FROM ESRI IMAGE SERVICE.

THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

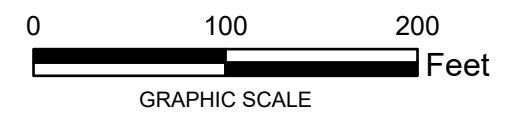
**DELINEATED WETLANDS
AND STREAMS MAP**



FIGURE
4-9



Legend
Environmental Survey Area (ESA)



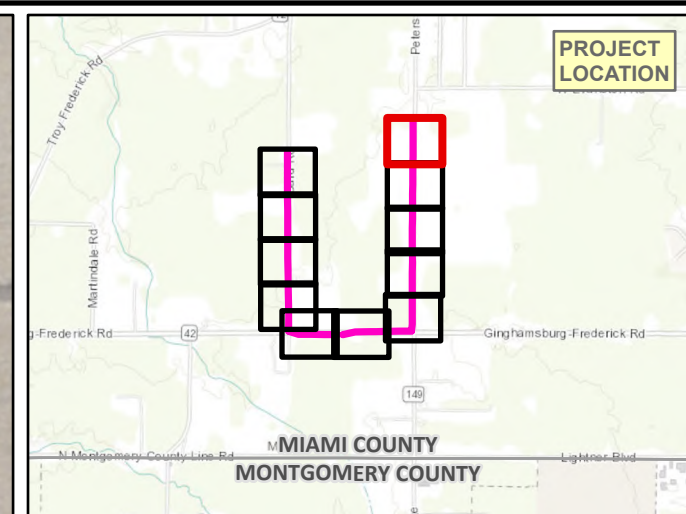
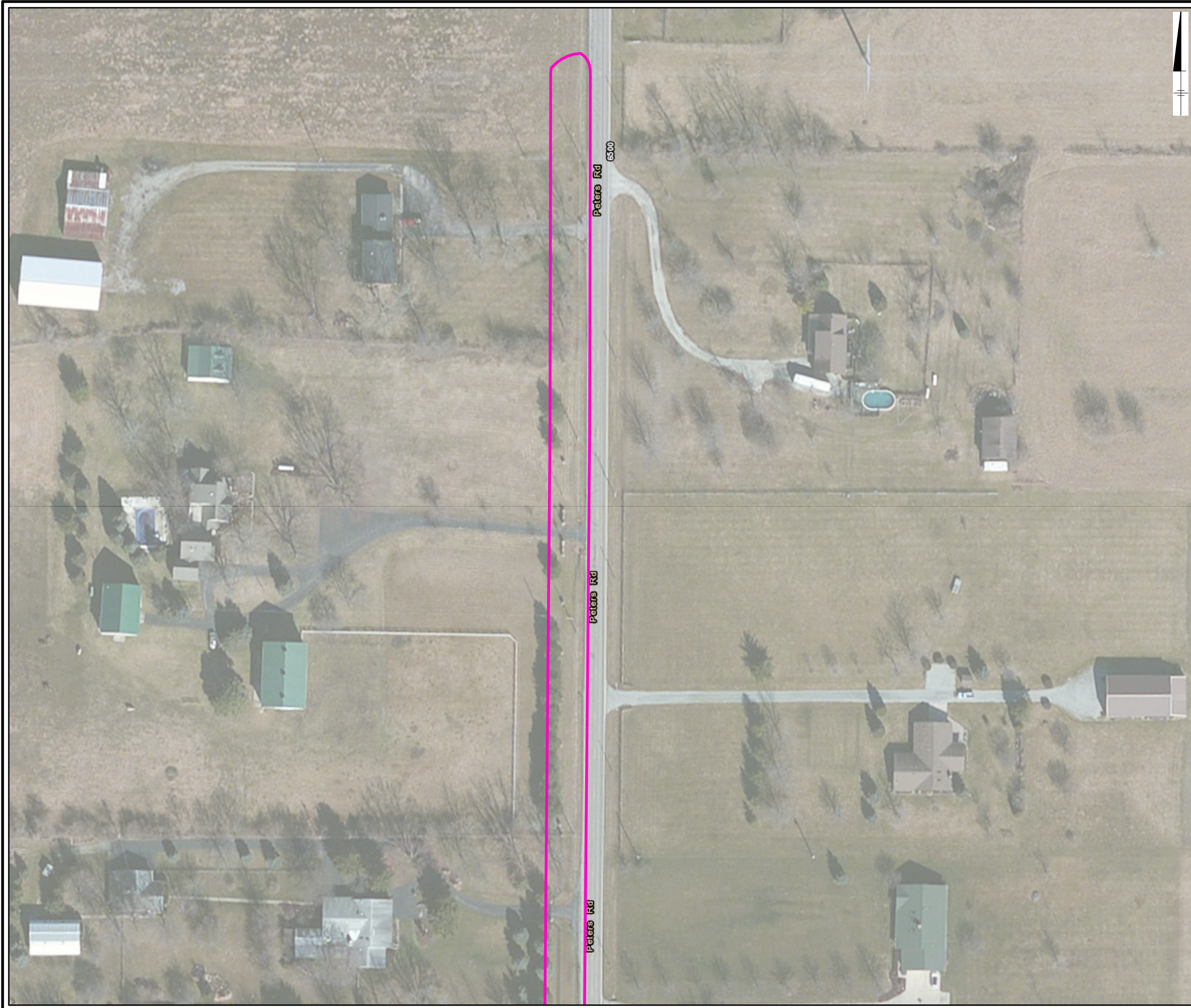
NOTE:
1. 2017 IMAGERY OBTAINED FROM ESRI IMAGE SERVICE.

THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

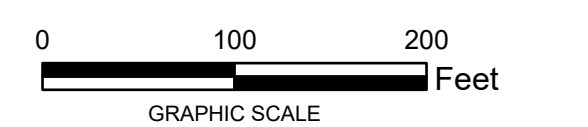
**DELINEATED WETLANDS
AND STREAMS MAP**



FIGURE
4-10



Legend
Environmental Survey Area (ESA)



NOTE:
1. 2017 IMAGERY OBTAINED FROM ESRI IMAGE SERVICE.

THE AES CORPORATION
AIRPORT 138KV DOUBLE CIRCUIT TRANSMISSION LINE
MIAMI COUNTY, OHIO

**DELINEATED WETLANDS
AND STREAMS MAP**

ATTACHMENT A

Photolog

Project Photographs

AES Ohio
Airport – Miami and West Milton – Miami 138kV Line Projects
Miami County, Ohio

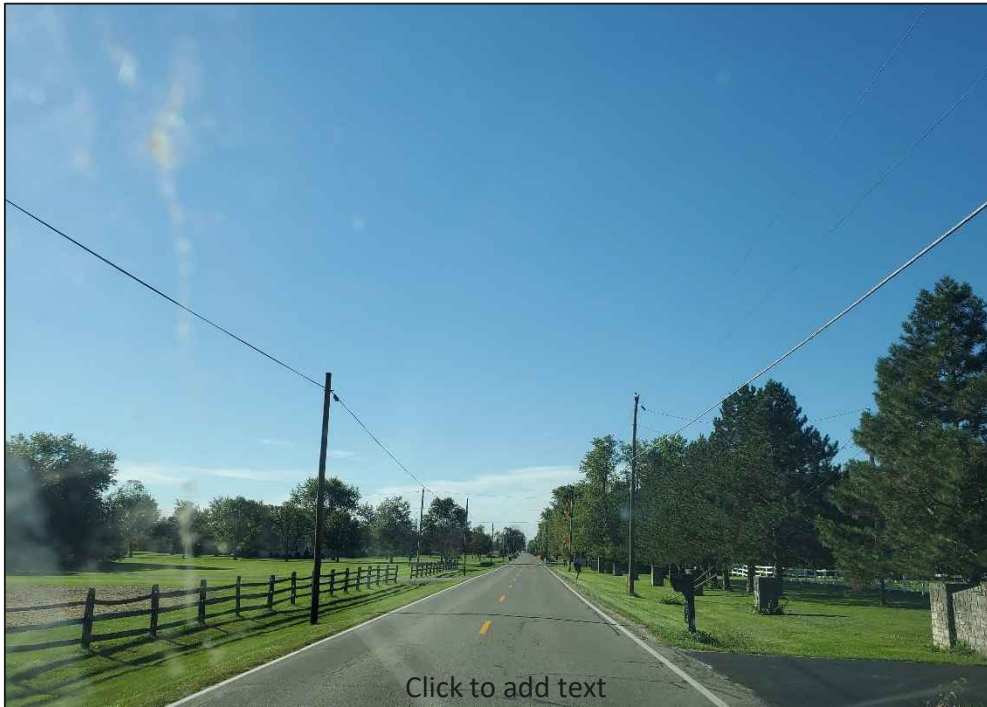


Photo: 1

Date:

October 1, 2021

Description:

View of ROW along Peters Road

Direction:

South

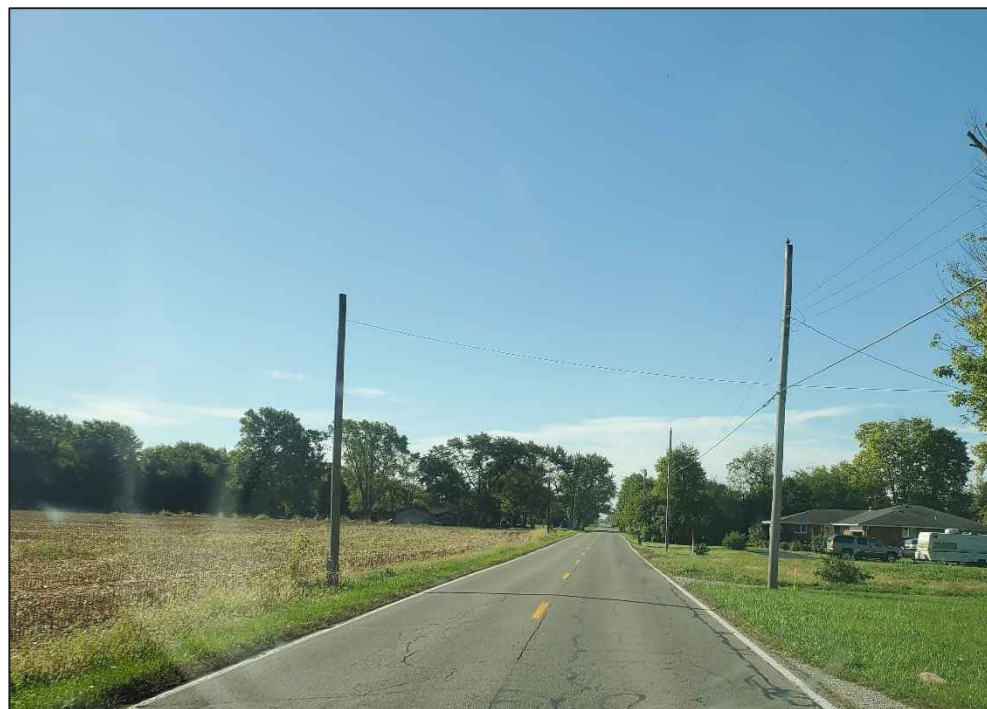


Photo: 2

Date:

October 1, 2021

Description:

View of ROW along Peters Road

Direction:

South

Project Photographs

AES Ohio
Airport – Miami and West Milton – Miami 138kV Line Projects
Miami County, Ohio



Photo: 3

Date:

October 1, 2021

Description:

View of ROW along Co Hwy
42 / Ginghamburg
Frederick Rd

Direction:

West

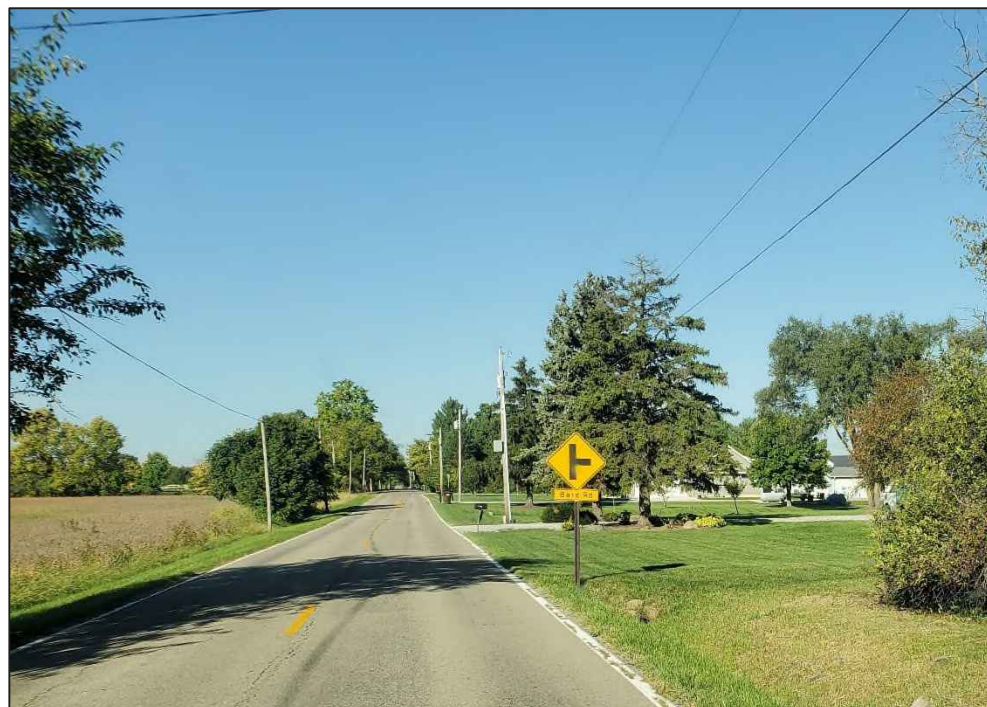


Photo: 4

Date:

October 1, 2021

Description:

View of ROW along Co Hwy
42 / Ginghamburg
Frederick Rd

Direction:

West

Project Photographs

AES Ohio
Airport – Miami and West Milton – Miami 138kV Line Projects
Miami County, Ohio



Photo: 5

Date:

October 1, 2021

Description:

View of ROW along
northern end of Bard Road

Direction:

South

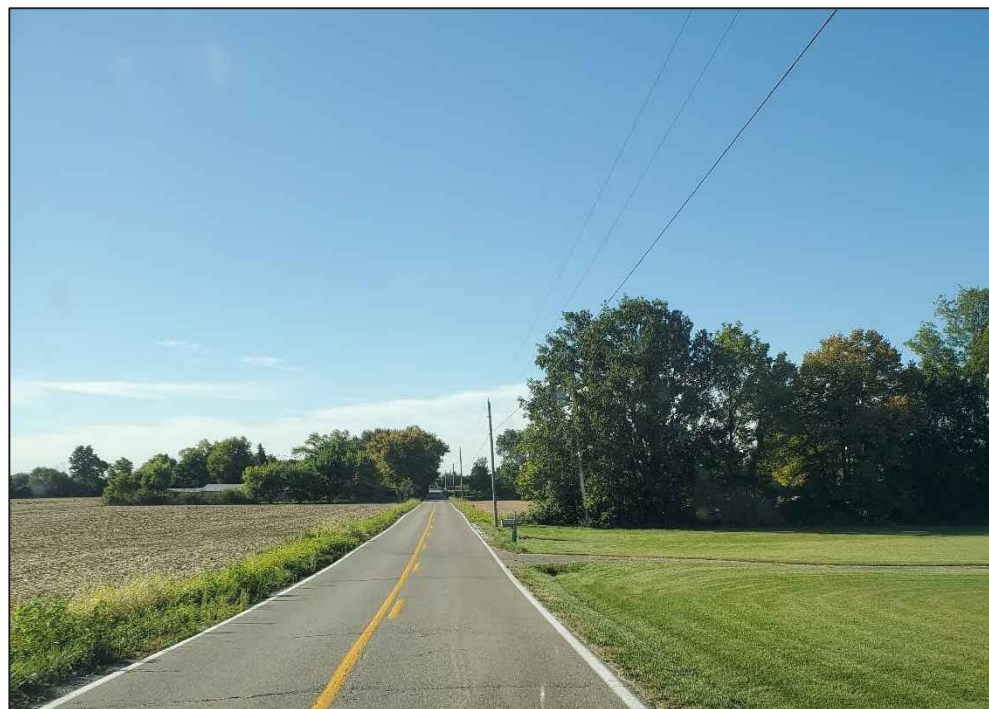


Photo: 6

Date:

October 1, 2021

Description:

View of ROW along Bard
Road

Direction:

South

Project Photographs

AES Ohio
Airport – Miami and West Milton – Miami 138kV Line Projects
Miami County, Ohio

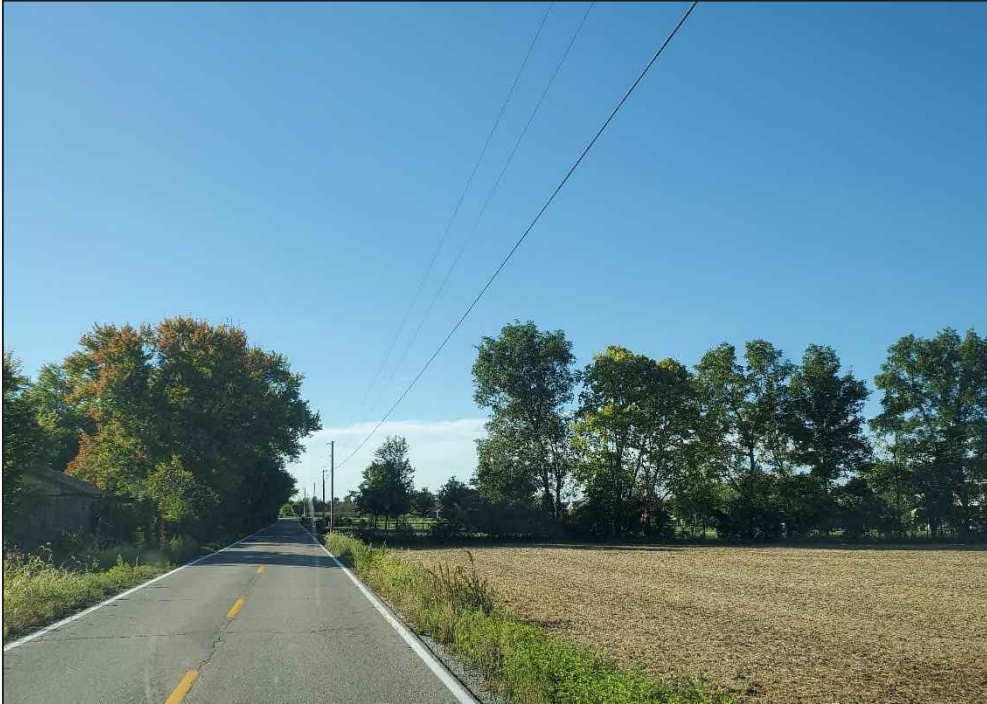


Photo: 7

Date:

October 1, 2021

Description:

View of ROW along Bard Road

Direction:

South

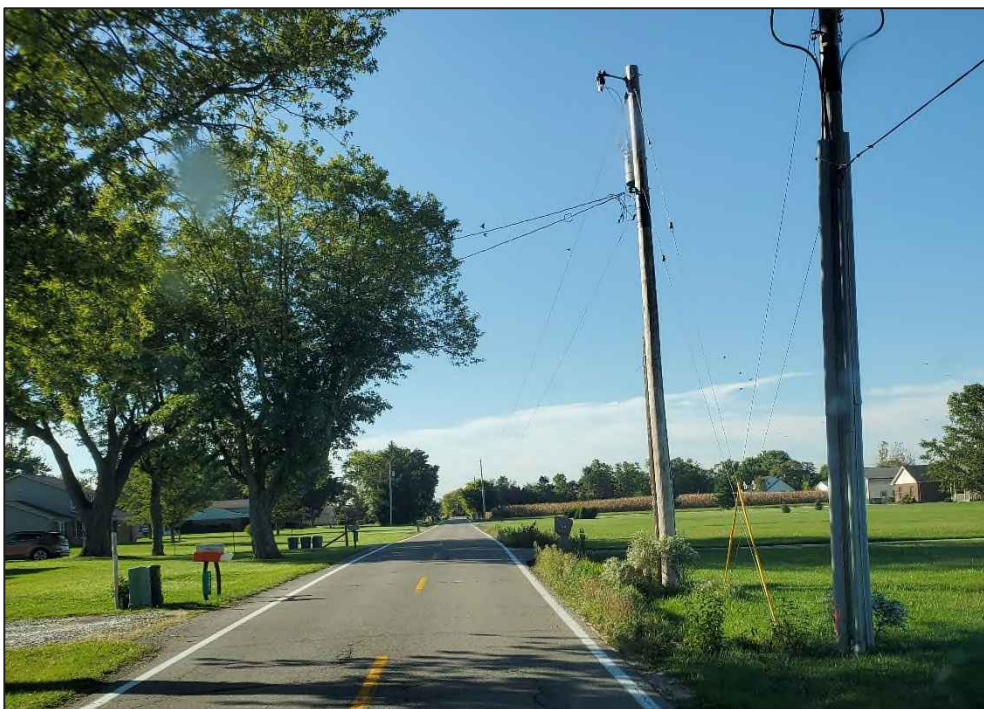


Photo: 8

Date:

October 1, 2021

Description:

View of ROW along Bard Road

Direction:

South

Project Photographs

AES Ohio
Airport – Miami and West Milton – Miami 138kV Line Projects
Miami County, Ohio



Photo: 9

Date:

October 1, 2021

Description:

View of ROW along Bard Road

Direction:

South



Photo: 10

Date:

October 1, 2021

Description:

View of ROW along Bard Road at intersection with Co Hwy 42 / Ginghamburg Frederick Rd

Direction:

South

Project Photographs

AES Ohio
Airport – Miami and West Milton – Miami 138kV Line Projects
Miami County, Ohio



Photo: 11

Date:

October 1, 2021

Description:

View of ROW along Co Hwy
42 / Ginghamburg
Frederick Rd

Direction:

West

**This foregoing document was electronically filed with the Public Utilities
Commission of Ohio Docketing Information System on**

12/2/2021 12:23:32 PM

in

Case No(s). 21-0973-EL-BLN

Summary: Notification of Letter for Airport- Miami 138kV Project electronically filed
by Ms. Sarah Howdeshelt on behalf of The Dayton Power and Light Company