CONSTRUCTION NOTICE
FOR THE

MILLCREEK 138KV EXTENSION PROJECT

PUCO CASE NO. 20-0845-EL-BNR

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

Submitted by:
The Dayton Power and Light Company
1900 Dryden Road
Moraine, Ohio 45439

April 2020

4906-6-05: APPLICATION REQUIREMENTS

The Dayton Power and Light Company (DP&L) 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.

The Dayton Power and Light Company (DP&L) plans to extend the 138 kilovolt (kV) Sidney to Eldean 138kV transmission line to serve an expansion of the Millcreek 138/12kV Substation. The Millcreek Substation, located at 2305 Fair Road in Shelby County, OH, is currently tapped off the existing Sidney-Eldean 138kV transmission line, but DP&L plans to build a new 138kV extension that will loop the Millcreek Substation.

The proposed Project will be located on parcels owned by DP&L and the Shelby County Commissioners.

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

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

(a) Line(s) not greater than 0.2 miles in length.

The proposed Project is within the requirements of Item (1)(a) because the length of the transmission line tap is approximately 0.19 miles in length.

The Project has been assigned PUCO Case No. 20-0845-EL-BNR.

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 is needed because an industrial customer in the Sidney area is adding 10 MVA of load in the third quarter of 2020. The three distribution transformers at Sidney Substation are already loaded to approximately 90% during peak times, so the additional load would overload the transformers. The loss of one of the three transformers at Sidney Substation would result in the load shed of approximately 4,000 customers. The 138/12kV transformer at the nearest

substation, Millcreek Substation, is currently loaded to approximately 70% during peak times. Millcreek Substation is tapped off the existing 138kV line that connects Sidney substation to Eldean substation. The solution to this issue is to extend the Sidney to Eldean 138kV line by approximately 0.19 miles, using 1351 ACSR conductor, to loop in and out of a new four breaker ring bus at Millcreek Substation, where a second 138/12kV transformer will also be added. The second transformer will allow load to be transferred from the Sidney Substation to the Millcreek Substation and will provide the needed capacity at Millcreek to be able to serve the new 10MVA of load. No expansion of the existing Millcreek substation is proposed.

The proposed project is a PJM Supplemental project that is going through the PJM process. Both the Need and Solution have been presented to PJM and the Stakeholders but at the time of filing, it has not yet been assigned an "s" number.

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.

A Site map of the proposed Project is provided as Figure 1, included as part of the map are as follows:

- Aerial view of the proposed Project Site showing the existing Millcreek Substation and the existing Sidney-Eldean 138 kV transmission line
- Existing tap from the Sidney-Eldean 138 kV transmission line to the Millcreek Substation
- Proposed loop from the Sidney-Eldean 138 kV transmission line to the Millcreek Substation

To reach the Project from the Columbus, Ohio area head west on I-70 W towards Dayton. After approximately 61 miles, merge onto I-75 N via exit 33 toward 1-75/Toledo/Dayton. Follow I-75N for approximately 29 miles and then take the Fair Rd. Exit, exit 90 toward Sidney. Proceed 0.25 miles and turn left onto Fair Rd./County Highway-8. The Millcreek substation is located on the left, at 2305 Fair Road.

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.

The proposed loop will tie into the existing Millcreek substation and share a portion of the right-of-way (ROW) associated with the existing Millcreek 138 kV tap. 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.

There is only one property owner affected by the proposed Project: the Shelby County Commissioners. DP&L has negotiated to secure an additional 50-foot wide easement onto the southern side of the existing ROW for this 138kV line extension with the county. DP&L will notify the county of the intent to file a CN and at the start of construction activities. DP&L maintains a website (https://www.dpandl.com/About-DPL/Reliability/Transmission-Improvements/) that provides the public information about the Project and how to request a copy of the CN. A copy of the CN 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 CN will also be served to the Amos Memorial 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.

DP&L intends to commence construction activities on or around September 1, 2020 and anticipates that construction activities will be completed on or around December 31, 2020.

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 Millcreek 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.

DP&L has secured easements with the following entity.
Shelby County Commissioners
129 East Court Street, Suite 100
Sidney, OH 45365

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 proposed transmission line includes the installation of four vertical double deadend structures and a substation takeoff structure. The four vertical double deadend structures will range in height from approximately 95 feet to 105 feet above ground level and will all be galvanized steel monopoles on drilled pier concrete foundations. The substation takeoff structure will be a galvanized, tubular A-frame structure that will be approximately 50 feet in height from ground level and will be set on concrete foundations. The proposed static wire will be 3/8-inch EHS steel, and the conductor will be a 1351 ACSR 45x7 "Dipper". The proposed transmission line will be insulated to and will operate at 138kV.

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.

There are no occupied residences or institutions within 100 feet of the proposed transmission line.

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

The estimated capital cost of the project.

The estimated transmission capital cost for the Project is $750,000.

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 Sidney, Shelby County, Ohio. The proposed Project work is located on the same parcel of land where the existing Millcreek substation and the existing tap to the Sidney-Eldean 138kV transmission line are located. The land use at the Project site is a mix of industrial (utility ROW, substation and associated facilities) with regularly maintained mowed lawn, 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 and is located within and adjacent to the existing electric transmission ROW.

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 agricultural land. Once construction has been completed, it is anticipated that agricultural practices will resume within the ROW other than in the area immediately adjacent to the structure foundations. The Project does not affect any agricultural district land.

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, a cultural resources desktop assessment (Attachment A) for the Project was conducted. The study 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 totaling 2.7 acres. The construction of the new poles and permanent transmission line ROW has the potential to cause visual impacts to the immediate landscape. However, given that the poles will be of similar design/height and are adjacent to the existing transmission line ROW and substation, visual impacts are considered to be minimal for the Project. As such, the viewshed (or indirect APE) was evaluated using a 500-foot buffer around the direct APE.

Background research was conducted on April 7, 2020, using the Ohio Historic Preservation Office (OHPO) online mapping database to locate previously recorded cultural resources and investigations within a one-mile radius of the Project APE. Information collected included

archaeological sites, architectural and historical resources, Determinations of Eligibility (DOE) files, National Register of Historic Places (NRHP) properties, National Historic Landmarks, historic cemeteries, historic bridges, and previous cultural resources surveys. The assessment also included a review of historic-era online mapping available for the Project area.

Results of the background research identified 13 archaeological sites, two architectural and historical resources, one historic-era cemetery, and two previous surveys within one-mile of the Project. None of the known cultural resources or surveys are within the direct or indirect APE. It is expected that the probability of identifying NRHP-eligible archaeological sites within the direct APE is low based on the results of nearby cultural resources surveys of similar settings as well as the likelihood of previous disturbance within the direct APE.

The viewshed (or indirect APE) was evaluated using a 500-foot buffer around the direct APE. The above ground resources in the vicinity of the Project area (particularly to the west and south) are situated on home lots with a number of mature trees that serve as windbreaks as well as visual barriers that limits the viewsheds of these resources. Additionally, the viewsheds of these resources have already been compromised by the construction of modern residential and commercial development along Fair Road and modern infrastructure including Interstate 75 and existing electrical transmission lines.

As noted in Attachment A, the Project should not have any adverse effect on historic properties within the direct or indirect Area of Potential Effect (APE). Based on the results of this assessment, it is assumed that no additional cultural resources investigations are required.

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 in the table below. No other government agency requirements are known at the time of this filing.

Table 1. Millcreek 138 kV Extension Project Anticipated Environmental Permits

Agency	Approval/Clearance/ Authorization	Agency Review Time	Comments
U.S. Fish and Wildlife Service (USFWS)	Federally Listed Endangered Species Review	N/A	The USFWS Information, Planning and Conservation System (IPaC) was completed 3/24/2020. A USFWS consultation letter was submitted on April 1, 2020. A clearance letter was obtained from the USFWS on April 15, 2020.

Agency	Approval/Clearance/ Authorization	Agency Review Time	Comments
Ohio Department of Natural Resources (ODNR) Office of Real Estate	Environmental Review (State T&E Species Consultation and Clearance)	60 days	An ODNR environmental review request was submitted on April 1, 2020. To date the applicant has not received a response.
Ohio Historic Preservation Office (OHPO)	Cultural and Architectural Resources Review	N/A	An online review of the OHPO Online Mapping System was completed 4/7/2020. Based on the results of this assessment, it is assumed that no additional cultural resources investigations are required.".
Ohio Environmental Protection Agency (OEPA)	Stormwater General Permit for Discharges of Storm Water Associated with Construction Activity (OHC000005) Notice of Intent (NOI)	NOI should be submitted 21 days prior to the start of construction	Requires the preparation of a project-specific Stormwater Pollution Prevention Plan (SWPPP) and Erosion and Sediment Control Plan (ESCP) drawings.
Shelby County Engineer's Office	Shelby County SWPPP Permit	7-14 days for SWPPP approval	Requires the completion and submission of a SWPPP to Shelby County. Once approved, an NOI is submitted to OEPA as noted above. Email completed NOI to the Shelby County Engineer's Office.

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 U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) tool was completed on March 24, 2020, to determine if known occurrences of rare, threatened, or endangered species (T&E species) or their critical habitats are present within the Project site or its vicinity (Attachment B). The results of the IPaC are included as Table 2. An on-site habitat assessment was conducted on March 25, 2020, to evaluate the Project Site for the occurrence

of potential habitat for the T&E species identified by the IPaC Suitable habitat for these species was not identified within the Project Site. A consultation letter was submitted to the USFWS on on April 1, 2020, requesting comments on potential effects to T&E species. The USFWS responded in a letter dated April 15, 2020 and stated that no adverse effects to federally listed species are anticipated (Attachment B).

An ODNR environmental review request was submitted on April 1, 2020 (Attachment C). To date, a response from the ODNR has not been received. The ODNR State Listed Wildlife Species for Shelby County is provided in Attachment C. Table 2, below, includes the Shelby County state-listed endangered or threatened species provided by ODNR.
Based on proposed Project impacts and the lack of suitable habitat, state and federally listed species are not anticipated to be affected by the Project.

Table 2. Rare, Threatened and Endangered Species Occurrence

Common Name	Species Name	Federal Status	State Status	Potential Impacts
Indiana bat	*Myotis sodalis*	Endangered	Endangered	No caves or mines are located within the Project site. No tree clearing is proposed for the Project. Therefore, no effects to the Indiana bat are anticipated Therefore, no effects to the Indiana bat or Northern long-eared bat are anticipated.
Northern long-eared bat	*Myotis septentrionalis*	Threatened	Threatened	
Rayed bean	*Villosa fabalis*	Endangered	Endangered	There are no stream impacts associated with the Project. Therefore, no effects to the Rayed Bean are anticipated.
Northern harrier	*Circus cyaneus*	—	Endangered	The Project is not likely to impact this species because there are no grasslands or large marshes within the Project site.
Barn owl	*Tyto alba*	—	Threatened	The Project is not likely to impact this species because there are no grasslands within the Project site.

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.

Environmental and ecological site assessments were conducted on March 25, 2020. The land use at the Project site is a mix of industrial (utility ROW, substation and associated facilities) with regularly maintained mowed lawn and agricultural land. The Project site is surrounded by industrial areas, rural and suburban residential areas, and agricultural fields. Vegetative communities at the Project site consist of maintained lawn and agricultural field.

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 site or the potential disturbance area of the Project. There are also no Federal Emergency Management Agency (FEMA) designated floodplains.

A wetland and waterbody delineation was conducted on March 25, 2020 (see Attachment D). The delineation study did not identify any streams or wetlands within the Project site.

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 DP&L's knowledge, no unusual conditions exist that would result in significant environmental, social, health, or safety impacts.

4906-6-07: DOCUMENTATION OF CONSTRUCTION NOTICE APPLICATION TRANSMITTAL AND AVAILABILITY FOR PUBLIC REVIEW

A copy of this CN has been provided, concurrently with this OPSB filing, to the officials of Shelby County and the City of Sidney departments listed below. A copy of this CN has been provided to the libraries listed below for public viewing.

Shelby County

Ms. Julie Ehemann
Shelby County Commissioner
129 East Court Street, Suite 100
Sidney, OH 45365

Mr. Bob Guillozet
Shelby County Commissioner
129 East Court Street, Suite 100
Sidney, OH 45365

Mr. Tony Bornhorst
Shelby County Commissioner
129 East Court Street, Suite 100
Sidney, OH 45365

Mr. Robert B. Gevy, P.E., P.S.
Shelby County Engineer
500 Gearhart Road
Sidney, OH, 45365

Mr. Jason Bruns
Director, Shelby County Soil & Water Conservation District
822 Fair Road
Sidney, OH 45365

Ms. Dianna Reisinger
Executive Director, Shelby County Regional Planning Commission
129 E. Court St. Floor 2
Sidney, OH 45365

City of Sidney, OH

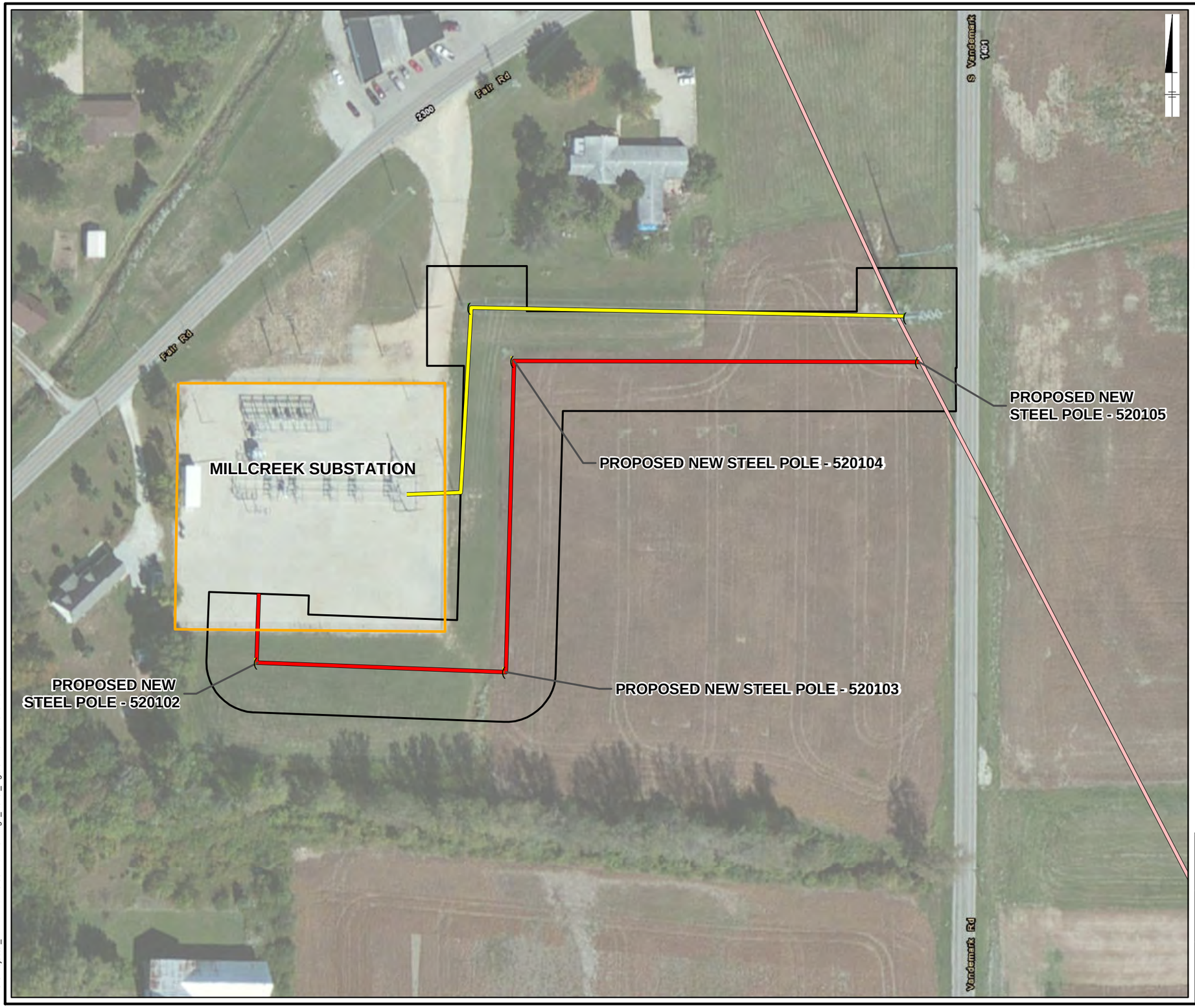
Mr. Mark Cundiff
City Manager
201 W. Poplar Street
Sidney, OH 45365

Mr. Randy Magoto, P.S.
Engineering Manager
201 W. Poplar Street
Sidney, OH 45365

Libraries

Amos Memorial Public Library
230 E. North St.
Sidney, OH 45365

Figures



Legend

- Existing Structures
- Proposed Structure
- Substation Fence Line
- Existing Millcreek Tap
- Proposed Millcreek 138kV Transmission Line
- Existing Sidney – Eldean 138 kV line
- Project Site

0 25 50 100 150 Feet

GRAPHIC SCALE

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

THE DAYTON POWER AND LIGHT COMPANY
MILLCREEK 138KV EXTENSION PROJECT
SHELBY COUNTY, OHIO

PROJECT SITE

DP&L. ARCADIS

FIGURE 1

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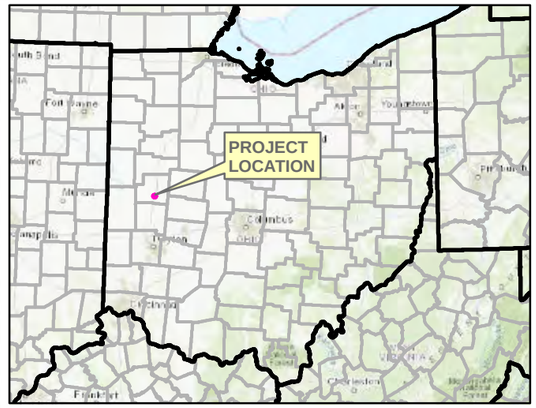

Legend

Project Site

0 500 1,000 2,000 Feet

GRAPHIC SCALE

NOTE:
1. USGS SIDNEY QUADRANGLE, TOPOGRAPHIC MAP

THE DAYTON POWER AND LIGHT COMPANY
MILLCREEK 138KV EXTENSION PROJECT
SHELBY COUNTY, OHIO

PROJECT AREA

DP&L ARCADIS

FIGURE 2

City: CIN Div/Group: EPP Created By: MVazquez Last Saved By: NCochran
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Attachment A
Cultural Resources Assessment

Millcreek 138kV Extension Project

Cultural Resources Desktop Assessment

To:

Amanda Foti, AES Corporation

From:

Galen K Smith, Arcadis U.S., Inc.

Josh Ferry, Arcadis U.S., Inc.

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

Date:

April 9, 2020

Subject:

Cultural Resources Desktop Assessment for the Millcreek 138kV Extension Project

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INTRODUCTION

On behalf of Dayton Power and Light Company (DP&L), an AES Corporation company, Arcadis U.S., Inc. (Arcadis), conducted a cultural resources desktop assessment of the Millcreek 138/12kV Substation Project (Project) located in the City of Sidney, Shelby County, Ohio. The Project falls under a United States Army Corps of Engineers (USACE) Nationwide Permit (NWP) 12 automatic authorization. The Project also requires a Construction Notice (CN) from the Ohio Power Siting Board (OPSB), which is part of the Public Utilities Commission of Ohio (PUCO).

A consideration of potential effects on historic properties is required under Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, for any undertakings by a federal agency. The implementing regulations for the NHPA are contained in 36 Code of Federal Regulation Part 800 and are outlined by the Advisory Council on Historic Preservation. These activities are also stipulated within state legislation, namely, the Ohio Revised Code, Sections 149: 52-149:54. The purpose of this technical memorandum is to summarize the results of the cultural resources assessment in order to evaluate potential Project effects to historic properties.

PROJECT DESCRIPTION AND AREA OF POTENTIAL EFFECT

DP&L plans to extend the 138kV transmission line presently connecting the Sidney Substation to the Eldean Substation in order to serve an expansion of the Millcreek 138/12kV Substation. The Millcreek Substation is currently tapped off the existing Sidney-Eldean 138kV transmission line, but DP&L plans to construct a new loop in and out of the Millcreek Substation.

The Project is linear in nature and extends a total distance of 1,035 feet paralleling the existing Millcreek tap and perimeter of the Millcreek Substation. Project activities will include the installation of approximately four new poles and construction of the new transmission line ROW. The Project limits-of-disturbance (LOD) will include a 100-foot-wide construction corridor along the new proposed line and two 100 foot by 100-foot workspaces around existing pole structures within the Millcreek tap. The total Project footprint is 2.7 acres.

Based on the current Project description, Arcadis 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 totaling 2.7 acres. The construction of the new poles and permanent transmission line ROW has the potential to cause visual impacts to the immediate landscape. However, given that the poles will be of similar design/height and are adjacent to the existing transmission line ROW and substation, visual impacts are considered to be minimal for the Project. As such, the viewshed (or indirect APE) was evaluated using a 500-foot buffer around the direct APE.

BACKGROUND RESEARCH

OHPO Online Database

Arcadis conducted background research for the Project on April 7, 2020 using the OHPO online mapping database to locate previously recorded cultural resources and investigations within a one-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.

Results of the background research within one mile of the Project APE identified 13 archaeological sites, two architectural and historical resources, one historic-era cemetery, and two previous surveys. The documented archaeological sites consist primarily of prehistoric isolates representing biface fragments and lithic debitage. One historic site represented dumping episodes related to a nearby non-extant farmstead. These sites are concentrated to the southwest of the Project within active agricultural land.

The two known architectural resources include the Joslin Farm (SHE0126209) located approximately 680 feet north of the Project along Fair Road and the Cole Farmstead (SHE0127609) located approximately 2,600 feet southwest. These resources date to late 19th and early 20th century and represent typical examples of rural vernacular architecture related to the farming. The historic-era County Home #3 Cemetery is located on the grounds of the former Shelby County Infirmary at the southern extents of the one-mile study area.

Two previous Phase I surveys (Biehl 1998; Weller 2015) were conducted within one mile of the Project. The Biehl (1998) survey was conducted for a cellular tower that identified the Joslin Farm (SHE0126209). The Weller (2015) investigation includes a 247-acre block survey to the immediate southwest of the Project. This survey was conducted for a proposed job development site and accounts for 12 of the identified archaeological sites in the area. None of the known cultural resources or surveys are within the Project APE.

Historic Map Review

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
1875	Page & Smith	***Map of Shelby County, Ohio***
1900	The American Atlas Company	***Atlas and Directory of Shelby County, Ohio***
1914	William C. Mills, Fred J. Heer	***Archeological Atlas of Ohio***
1913-2016	Unites States Geographical Survey	***Topographic Maps***

The Mills (1914) atlas documents prehistoric sites within Ohio, especially the location of no longer extant mounds. Overall, 11 prehistoric sites are recorded in the county mostly to the north and west of the Project.

The earliest historic-era mapping from 1875 depicts Sidney as the center of commercial development near the Project surrounded by large agricultural tracts with associated farmsteads. At the time, the Project APE appears to have been under cultivation as part of the Vandermark family. By 1900, little change had occurred to the landscape. Examples of infrastructure upgrades are visible at that time including several railroads, portions of the Miami and Erie Canal, and a branch of an electric urban railway system running west of the Project along Infirmary Road. Several rural schools and churches are depicted in the area as well as the Shelby County Infirmary approximately one mile south of the Project. From the topographic mapping, the Project area remains relatively rural throughout the early 20th century. Commercial, residential, and infrastructural development begins to encroach on the Project area during the mid to late 20th century. Interstate 75 was constructed to the east and an electrical transmission line intersects the Project by the 1960s. Several modern residences, hotels, and gas stations were constructed by the early 2000's and recently along Fair and Vandermark Roads. Land use within the Project APE remains largely as farmland.

PROJECT RECOMMENDATIONS

The Project currently falls under a USACE NWP 12 automatic authorization and an OPSB CN. The Project involves the expansion of the Millcreek 138/12kV Substation through the construction of a new transmission line ROW. The Project footprint totaling 2.7 acres is defined as the direct APE. The indirect APE includes a 500-foot buffer around the direct APE.

The background records check identified 13 archaeological sites, two architectural and historical resources, one historic-era cemetery, and two previous surveys within one mile of the Project. None of these cultural resources or surveys are within the Project APE. The majority of known cultural resources in the area were identified as a result of the Weller (2015) survey. This survey is located to the immediate southwest of the Project and encompassed 247 acres of farmland similar to that present within the current direct APE.

Fourteen archaeological sites (33SH188-201) and one architectural resource (SHE0127609) were identified as a result of the survey all of which were considered not eligible for listing in the NRHP.

In addition, Project activities will occur within or adjacent to the existing transmission line ROW/Millcreek Substation, which has likely resulted in some level of disturbance (i.e. grading and artificial mounding) to the current direct APE (Photographs 1-5). Considering the results of the Weller (2015) survey, the similarity in setting to the current direct APE, and some degree of previous disturbance within the direct APE, it is anticipated that the probability of identifying NRHP-eligible archaeological sites within the direct APE is low.

The Project is within a generally rural, agricultural area with a mix of development from the expansion of Sidney. The above ground resources in the vicinity of the Project area (particularly to the west and south) are situated on homelots with a number of mature trees that serve as windbreaks as well as visual barriers that limits the viewsheds of these resources (Photograph 6). Additionally, the viewsheds of these resources have already been compromised by the construction of modern residential and commercial development along Fair Road and modern infrastructure including Interstate 75 and existing electrical transmission lines.

Based on the results of the cultural resources desktop assessment, the Project should not adversely effect historic properties within the Project APE.

REFERENCES

Biehl, S. 1998. ***Phase I Cultural Resource Management Investigation for the Proposed 0.13 Ha (0.33 A.) Airtouch Cellular Tower in Clinton Township, Shelby County, Ohio.*** Prepared by Applied Archaeological Services, Inc.

Weller, R. 2015. ***Phase I Cultural Resource Management Survey for a 100.04 ha (247.22 ac) Prospective Job Ready Site in Clinton Township, Shelby County, Ohio.*** Prepared by Weller and Associates, Inc.

Photograph 1. View of existing Millcreek Substation, from western limits of direct APE, facing north.

Photograph 2. View of direct APE facing north.

Photograph 3. View of direct APE facing east.

Photograph 4. View of existing Millcreek Substation and grading disturbance, facing southwest.

Photograph 5. View of artificial mounding in direct APE, facing west.

Photograph 6. Example of vegetative screening south of the direct APE.

Attachment B
USFWS Consultation Letter, Concurrence Letter, and IPaC Report

United States Fish and Wildlife Service
Ohio Ecological Services Field Office
4625 Morse Road, Suite 104
Columbus, OH 43230
ohio@fws.gov

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

Subject:
Dayton Power & Light Company
Millcreek Loop Project
Shelby County, Ohio

ENVIRONMENT

Date:
April 1, 2020

Contact:
Sarah Miloski

Phone:
(513) 985-8007

Email:
Sarah.Miloski@arcadis.com

To Whom It May Concern,

On behalf of Dayton Power & Light Company (DP&L), an AES Corporation company, Arcadis U.S., Inc. (Arcadis) is providing this letter to your office for review under the Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), and the Bald and Golden Eagle Projection Act (BGEPA) for the proposed Millcreek Loop Project (Project) in Shelby County, Ohio (Attachment 1). The Project involves extending the 138 kilovolt (kV) transmission line presently connecting the Sidney Substation to the Eldean Substation in order to serve an expansion of the Millcreek 138/12kV Substation.

The Millcreek Substation, located at 2305 Fair Road, is currently tapped off the existing Sidney-Eldean 138kV line, but DP&L plans to build a new loop in and out of the Millcreek Substation. The 138kV extension will be approximately 0.2 miles (or less) in length, built on its own poles and the lines will be located in Sidney, Shelby County, Ohio. The line extension will mostly share the same right-of-way (ROW) as the existing 138kV Millcreek tap. No stream or wetland impacts are anticipated. Additionally, no tree clearing is proposed as part of the Project. Construction is anticipated to begin September 1, 2020, and be completed by December 31, 2020.

The Project location is shown in Attachment 1.

Arcadis, on behalf of DP&L, submitted an online data request to the USFWS Information for Planning and Consultation (IPaC) tool to determine if known occurrences of rare, threatened, or endangered species or their critical habitats are known from the Project area. Table 1 provides a list of species identified by the IPaC as potentially occurring within the Project area. The Official Species List generated by IPaC for the Project area is included as Attachment 2.

Table 1. Federal T&E Species Potentially Occurring within the Project Area

Species Name	Listing Status	Habitat Requirement	Potential Occurrence
Indiana Bat (***Myotis sodalis***)	Endangered	Indiana bats spend winter hibernating in caves or abandoned mines. During the summer, they roost singly or in colonies underneath bark, in cavities, or in crevices of both live trees and snags of dead trees.	No caves or mines are located within the Project area. No tree clearing is proposed for the Project. Therefore, no effects to the Indiana bat are anticipated.
Northern Long-Eared Bat (***Myotis septentrionalis***; NLEB)	Threatened	NLEB spend winter hibernating in caves and mines, called hibernacula. During the summer, they roost singly or in colonies underneath bark, in cavities, or in crevices of both live trees and snags of dead trees.	No caves or mines are located within the Project area. No tree clearing is proposed for the Project. Therefore, no effects to the NLEB are anticipated.
Rayed Bean (***Myotis sodalis***)	Endangered	The rayed bean generally lives in smaller, headwater creeks, but it is sometimes found in large rivers and wave-washed areas of glacial lakes. It prefers gravel or sand substrates, and is often found in and around roots of aquatic vegetation.	There are no stream impacts associated with the Project. Therefore, no effects to the Rayed Bean are anticipated.

Construction techniques will be consistent with conditions presented in federal, state, and local authorizations, which are designed to minimize the potential for impacts to sensitive resources. Arcadis, on behalf of DP&L, respectfully requests review by your office and written response regarding potential effects on federal and state endangered, threatened, and rare species, species protected under the MBTA and BGEPA, high quality natural communities, and significant natural areas within the vicinity of the Project area.

Please forward an electronic response to me via email at Sarah.Miloski@arcadis.com at your earliest possible convenience. Should you have any questions regarding the proposed Project, please contact me, via phone at (513) 985-8007 or via email.

Sincerely,

Arcadis U.S., Inc.

Sarah Miloski
Staff Ecologist

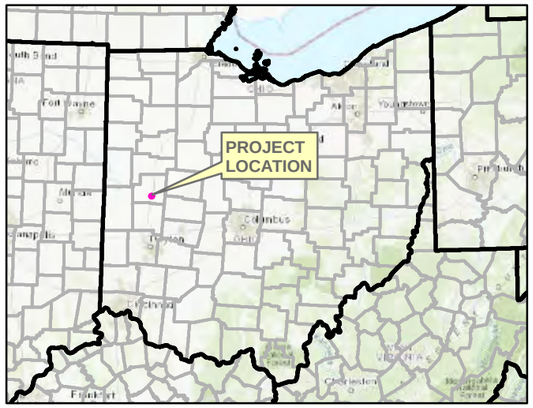
Copies:
Timothy Bockhorn, Dayton Power & Light Company
Michael Russ, Dayton Power & Light Company

ATTACHMENTS

Attachment 1- Site Location Map
Attachment 2- IPaC Official Species List

ATTACHMENT 1

Site Location Map



Legend

Environmental Survey Area (ESA)

0 500 1,000 2,000 Feet

GRAPHIC SCALE

NOTE:
1. USGS SIDNEY QUADRANGLE, TOPOGRAPHIC MAP

AES CORPORATION
MILLCREEK LOOP PROJECT
SHELBY COUNTY, OHIO
RTE SPECIES CONSULTATION

SITE LOCATION MAP

AES we are the energy | ARCADIS | FIGURE 1

City: CIN Div/Group: EPP Created By: MVazquez Last Saved By: Ncochran
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ATTACHMENT 2

IPaC Official 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: March 24, 2020
Consultation Code: 03E15000-2020-SLI-1092
Event Code: 03E15000-2020-E-01480
Project Name: AES-Dayton Power and Light Millcreek 138kV Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/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: 03E15000-2020-SLI-1092

Event Code: 03E15000-2020-E-01480

Project Name: AES-Dayton Power and Light Millcreek 138kV Project

Project Type: TRANSMISSION LINE

Project Description: DP&L plans to extend the 138 kilovolt (kV) transmission line presently connecting the Sidney Substation to the Eldean Substation in order to serve an expansion of the Millcreek 138/12kV Substation. The Millcreek Substation, located at 2305 Fair Road, is currently tapped off the existing Sidney-Eldean 138kV line, but DP&L plans to build a new loop in and out of the Millcreek Substation (see map below). The 138kV extension will be approximately 0.2 miles (or less) in length, built on its own poles and the lines will be located in Sidney, Shelby County, Ohio. The line extension will mostly share the same right-of-way (ROW) as the existing 138kV Millcreek tap.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/40.26441392957247N84.18924093395322W

Counties: Shelby, OH

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 Fisheries[1], 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 ***Myotis sodalis***	Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.	
Species profile: https://ecos.fws.gov/ecp/species/5949	
Northern Long-eared Bat ***Myotis septentrionalis***	Threatened
No critical habitat has been designated for this species.	
This species only needs to be considered under the following conditions:	
▪ 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	

Clams

NAME	STATUS
Rayed Bean ***Villosa fabalis***	Endangered
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/5862	

Critical habitats

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

Miloski, Sarah

From: Ohio, FW3 <ohio@fws.gov>
Sent: Wednesday, April 15, 2020 10:21 AM
To: Miloski, Sarah
Subject: Millcreek Loop Project (Dayton Power & Light)

UNITED STATES DEPARTMENT OF THE INTERIOR
U.S. Fish and Wildlife Service
Ecological Services Office
4625 Morse Road, Suite 104
Columbus, Ohio 43230
(614) 416-8993 / Fax (614) 416-8994

TAILS# 03E15000-2020-TA-1092

Dear Ms. Miloski,

We have received your recent correspondence requesting information about the subject proposal. There are no Federal wilderness areas, wildlife refuges or designated critical habitat within the vicinity of the project area.

FEDERALLY LISTED, PROPOSED, AND CANDIDATE SPECIES COMMENTS: Due to the project, type, size, and location, we do not anticipate adverse effects to federally endangered, threatened, proposed, or candidate species. Should the project design change, or during the term of this action, additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, consultation with the U.S. Fish and Wildlife Service should be initiated to assess any potential impacts.

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or ohio@fws.gov.

Sincerely,

Patrice Ashfield
Ohio Field Office Supervisor

Attachment C
ODNR Environmental Review Request and
ODNR State Listed Wildlife Species for Shelby County

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 & Light Company
Millcreek Loop Project
Shelby County, Ohio

Date:
March 31, 2020

Contact:
Sarah Miloski

Phone:
513.985.8007

Email:
Sarah.miloski@arcadis.com

Ms. Tebbe:

On behalf of Dayton Power & Light Company (DP&L), an AES Corporation company, 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 Millcreek Loop Project (Project) on state-listed species.

BACKGROUND

The Project is in Clinton Township, Shelby County, Ohio and involves extending the 138 kilovolt (kV) transmission line presently connecting the Sidney Substation to the Eldean Substation in order to serve an expansion of the Millcreek 138/12kV Substation.

The Millcreek Substation, located at 2305 Fair Road, is currently tapped off the existing Sidney-Eldean 138kV line, but DP&L plans to build a new loop in and out of the Millcreek Substation. The 138kV extension will be approximately 0.2 miles (or less) in length, built on its own poles and the lines will be located in Sidney, Shelby County, Ohio. The line extension will mostly share the same right-of-way (ROW) as the existing 138kV Millcreek tap. The Project location is depicted in Attachment 1.

Construction is anticipated to begin September 1, 2020 and be completed by December 31, 2020. Best Management Practices will be used during construction in order to prevent sedimentation from reaching nearby surface waters (streams, wetlands, ponds) or roadways.

EXISTING CONDITIONS

Arcadis investigated the Project area during a site visit on March 25, 2020, to document existing vegetation communities and hydrologic conditions. No streams or wetlands were identified within the 2.4-acre environmental survey area (ESA). An aerial map depicting the ESA is provided as Attachment 2 and representative photographs of the Project are provided as Attachment 3.

Vegetative communities observed within the ESA consisted of maintained lawn and agricultural field. The maintained lawn areas contained fescue (***Festuca*** sp.), white clover (***Trifolium repens***), red clover (***Trifolium pratense***), annual blue grass (***Poa annua***), and great plantain (***Plantago major***). The agricultural field contained remnants of harvested soybean (***Glycine max***) with Queen Anne's lace (***Daucus carota***), Fuller's teasel (***Dipsacus fullonum***), rambler rose (***Rosa multiflora***), and Japanese bristle grass (***Setaria faberi***) along the field edges.

PROPOSED IMPACTS

As currently designed, there are no impacts to streams or wetlands. Additionally, it is not anticipated that tree clearing, or tree side-trimming, will be required for the Project.

CONCLUSIONS

Arcadis, on behalf of DP&L, is requesting comments from your office on potential effects of the proposed Project on state-listed species. Please forward an electronic response to me via email at Sarah.Miloski@arcadis.com at your earliest possible convenience. Should you have any questions regarding the proposed Project, please contact me, via phone at (513) 985-8007 or via email.

Sincerely,
Arcadis U.S., Inc.

Sarah Miloski
Staff Ecologist

Copies:
Timothy Bockhorn, Dayton Power & Light Company
Michael Russ, Dayton Power & Light Company

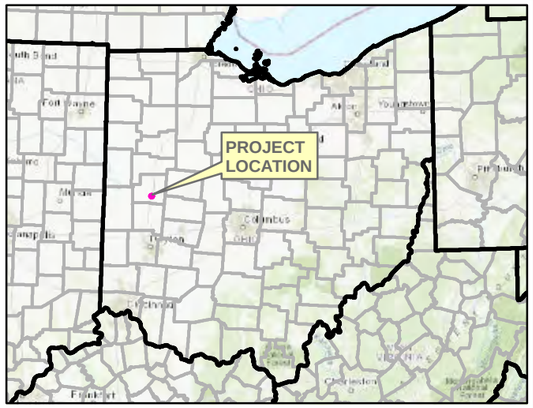
Enclosures:

Attachments

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

ATTACHMENT 1

Site Location Map



Legend

Environmental Survey Area (ESA)

0 500 1,000 2,000 Feet

GRAPHIC SCALE

NOTE:
1. USGS SIDNEY QUADRANGLE, TOPOGRAPHIC MAP

AES CORPORATION
MILLCREEK LOOP PROJECT
SHELBY COUNTY, OHIO
RTE SPECIES CONSULTATION

SITE LOCATION MAP

AES we are the energy | ARCADIS | FIGURE 1

City: CIN Div/Group: EPP Created By: MVazquez Last Saved By: Ncochran
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ATTACHMENT 2

Delineated Streams and Wetlands Map

Legend

Environmental Survey Area (ESA)

0 25 50 100 150 Feet

GRAPHIC SCALE

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

AES CORPORATION
MILLCREEK LOOP PROJECT
SHELBY COUNTY, OHIO

ODNR CONSULTATION

AES we are the energy | ARCADIS

FIGURE 1

City: CIN DivGroup: EPP Created By: MVazquez Last Saved By: Ncochran
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ATTACHMENT 3

Project Photographs

Project Photographs

AES Corporation
Millcreek Loop Project
Shelby County, Ohio

Photo: 1

Date:
March 25, 2020

Description:
View of substation

Direction:
Southwest

Photo: 2

Date:
March 25, 2020

Description:
View of substation within ESA

Direction:
North

Project Photographs

AES Corporation
Millcreek Ohio Power Siting Board Filing
Shelby County, Ohio

Photo: 3

Date:
March 25, 2020

Description:
View of ESA

Direction:
South

Photo: 4

Date:
March 25, 2020

Description:
View of ESA

Direction:
West

Project Photographs

AES Corporation
Millcreek Ohio Power Siting Board Filing
Shelby County, Ohio

Photo: 5

Date:
March 25, 2020

Description:
View of ESA

Direction:
North

Photo: 6

Date:
March 25, 2020

Description:
View of ESA

Direction:
East

Project Photographs

AES Corporation
Millcreek Ohio Power Siting Board Filing
Shelby County, Ohio

Photo: 7

Date:
March 25, 2020

Description:
View of ESA

Direction:
West

ATTACHMENT 4

Project Shapefiles (attached to email)

Shelby County State Listed Animal Species

Common Name	Scientific Name	Group	State Status	Federal Status
Northern Harrier	Circus hudsonius	Bird	Endangered	
Barn Owl	Tyto alba	Bird	Threatened	
Eastern Cricket Frog	Acris crepitans crepitans	Amphibian	Species of Concern	
Sharp-shinned Hawk	Accipiter striatus	Bird	Species of Concern	
Grasshopper Sparrow	Ammodramus savannarum	Bird	Species of Concern	
Common Nighthawk	Chordeiles minor	Bird	Species of Concern	
Northern Bobwhite	Colinus virginianus	Bird	Species of Concern	
Bobolink	Dolichonyx oryzivorus	Bird	Species of Concern	
Red-headed Woodpecker	Melanerpes erythrocephalus	Bird	Species of Concern	
Vesper Sparrow	Pooecetes gramineus	Bird	Species of Concern	
Prothonotary Warbler	Protonotaria citrea	Bird	Species of Concern	
Cerulean Warbler	Setophaga cerulea	Bird	Species of Concern	
Two-spotted Skipper	Euphyes bimacula	Butterfly	Species of Concern	
Western Creek Chubsucker	Erimyzon claviformis	Fish	Species of Concern	
Least Darter	Etheostoma microperca	Fish	Species of Concern	
Badger	Taxidea taxus	Mammal	Species of Concern	
Elktoe	Alasmidonta marginata	Mollusk	Species of Concern	
Purple Wartyback	Cyclonaias tuberculata	Mollusk	Species of Concern	

Attachment D
Wetland and Waterbody Report

ARCADIS Design & Consultancy for natural and built assets

The Dayton Power and Light Company,
AES Corporation

WETLAND AND WATERBODY DELINEATION REPORT

MILLCREEK 138KV EXTENSION PROJECT

Shelby County, Ohio

April 2020

WETLAND AND WATERBODY DELINEATION REPORT

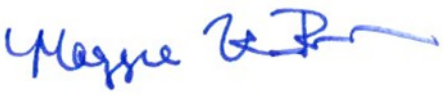
Millcreek 138KV Extension Project

Shelby County, Ohio

Prepared for:

Ms. Amanda Foti
Transmission and Distribution
AES Corporation
One Monument Circle
Indianapolis, Indiana, 46204

Sarah Medziuch
Environmental Scientist



Maggie Vuturo Bosiljevac
Senior Technical Review

Prepared by:

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

Date:

April 2020

CONTENTS

TABLES

FIGURES

APPENDICES

1 INTRODUCTION

This Wetland and Waterbody Delineation Report (Report) summarizes the results of wetland and waterbody delineation surveys conducted on March 25, 2020, by Arcadis U.S., Inc. (Arcadis) on behalf of The Dayton Power and Light Company, an AES Corporation company (DP&L) for the Millcreek 138KV Extension Project (Project). The Project is in Clinton Township, Shelby County, Ohio and involves the extension of the 138 kilovolt (kV) transmission line presently connecting the Sidney Substation to the Eldean Substation in order to serve an expansion of the Millcreek 138/12kV Substation. The Project is located at 40.264414° latitude, -84.189241° longitude and the environmental survey area (ESA) is approximately 2.4 acres (**Figure 1**). Project construction is expected to begin on September 1, 2020 and be completed by December 31, 2020.

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. No wetlands were identified within the ESA.

2 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 area:

- United States Geological Survey (USGS) topographic map (***Sidney*** quadrangle) (USGS 1972),
- 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 2015),
- United States Department of Agriculture Natural Resource Conservation Service (NRCS) Web Soil Survey of Shelby County, Ohio (NRCS 2019), and
- Aerial imagery (ESRI 2017).

2.1 USGS Topographic Map

The USGS topographic map (**Figure 1**), which identifies intermittent and perennial streams, does not identify any blueline streams within the ESA.

2.2 USGS NHD

The NHD represents the drainage network with features such as rivers, streams, canals, lakes, ponds, coastline, dams, and stream gauges (USGS 2012). No NHD waterbodies are mapped within the ESA (**Figure 2**).

The ESA lies within the Brush Creek-Great Miami River (United States Geologic Survey [USGS] Hydrologic Unit Code [HUC] 050800010703) subwatershed of the larger Upper Great Miami River Watershed (USGS HUC 05080001) (USGS 2012). The nearest traditionally navigable waterway (TNW) with hydrologic surface connection to the delineated waterbodies is the Great Miami River (USACE, n.d.).

2.3 USFWS NWI Dataset

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. No NWI features are mapped within the ESA (**Figure 2**) (USFWS 2007).

2.4 FEMA National Flood Hazard Layer

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 (FEMA 2015). The ESA is entirely within an area of minimal flood hazard (Zone X) (**Figure 2**). The extent of the regional mapped FEMA 100-year flood hazard zone is shown in **Figure 2**.

2.5 Digital Soil Survey of Shelby County, Ohio

According to the NRCS Web Soil Survey for Shelby County (NRCS 2019), the following four soil units are mapped within the ESA (**Figure 3**). One of the soil map units was listed as predominantly hydric. The remaining three soil map units were listed as predominantly non-hydric. Generally, soil units identified as hydric contain soils that indicate through their color and structure that they have experienced dominantly reducing (i.e., oxygen poor) conditions, which are a result of inundation and/or saturation by water. Soil units identified as non-hydric have no hydric soil components identified in the mapped soil unit. The soil units identified within the ESA are displayed on **Figure 3** and listed in **Table 1**, below.

Table 1. Soil Units Identified within the ESA

Soil Map Unit Symbol	Soil Map Unit Name	Hydric Rating
Ble1B1	Blount silt loam, end moraine, 2 to 4 percent slopes	Predominantly Non-Hydric
Bs	Brookston silty clay loam, fine texture, 0 to 2 percent slopes	Predominantly Hydric
CrB	Crosby silt loam, 2 to 6 percent slopes	Predominantly Non-Hydric

2.6 Aerial Imagery

A review of aerial imagery for the ESA shows that the ESA is immediately surrounded by rural residential areas and agricultural fields (ESRI 2017). Aerial photography for the ESA and its vicinity is presented as **Figure 4**.

3 METHODOLOGY

Pedestrian surveys were conducted within the ESA to identify wetlands and waterbodies on March 25, 2020. Wetland boundaries 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 Environmental Laboratory 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). The ESA is within the Major Land Resource Area: Central Feed Grains and Livestock Region and the Land Resource Region: Indiana and Ohio Till Plain (USACE 2010).

Wetland delineation data were recorded on the USACE Regional Supplement wetland determination data forms. One data point was recorded for each wetland. Corresponding upland data points were recorded to document upland boundaries and conditions surrounding the wetlands within the ESA.

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

Jurisdictional streams were 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 were not considered to be jurisdictional unless they had an identifiable OHWM, were identified on the USGS topographic map, or represented a presumed relocation of a natural channel.

The OEPA requires classification of streams and wetlands, if present, according to OEPA methods in order to establish the “quality” of these waterbodies 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 was evaluated in accordance with the Ohio Rapid Assessment Method (ORAM), developed by the Ohio Environmental Protection Agency (OEPA) (OEPA 2001). Categorization was conducted in accordance with the latest quantitative score calibration (OEPA 2001).

The OEPA classifies larger streams (with watersheds greater than one square mile) in accordance with the OEPA Qualitative Habitat Evaluation Index (OEPA, 2006). Streams with drainage areas smaller than one square mile are evaluated using the OEPA Primary Headwater Habitat Evaluation (HHEI) (OEPA, 2012). The quality of the stream is based on the score, as well as other features such as past modifications and substrate types.

The outer boundaries of each wetland and waterbody, determined by the ordinary high-water mark, were delineated and recorded using a handheld Trimble GeoXH Global positioning system receiver. As features were collected, they were given a unique feature identification (ID). If a stream was identified, the centerline of each stream was delineated and recorded.

4 SURVEY RESULTS

4.1 Vegetative Communities

Vegetative communities observed within the ESA consisted of maintained lawn and agricultural field.

The maintained lawn areas contained fescue (***Festuca sp.),*** white clover (***Trifolium repens***), red clover (***Trifolium pratense***), annual blue grass (***Poa annua***), and great plantain (***Plantago major***). The agricultural area contained remnants of harvested soybean (***Glycine max***). The agricultural field contained remnants of harvested soybean (***Glycine max***) with Queen Anne's lace (***Daucus carota***), Fuller's teasel (***Dipsacus fullonum***), rambler rose (***Rosa multiflora***), and Japanese bristle grass (***Setaria faberi***) along the field edges.

Photographs of the ESA are provided in **Appendix A**.

4.2 Wetlands

Arcadis did not identify any wetlands within the ESA.

5 CONCLUSIONS

On March 25, 2020, Arcadis conducted wetland and waterbody delineations within the ESA of the proposed Millcreek 138KV Extension Project in Shelby County, Ohio. Arcadis did not identify any wetlands or waterbodies within the environmental survey area (ESA).

6 REFERENCES

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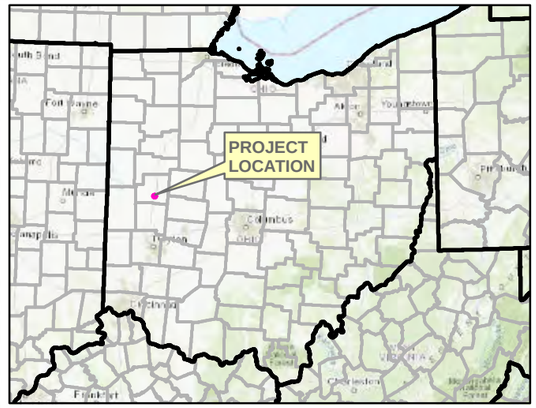
U.S. Department of Interior, USGS, National Hydrography Dataset. 2012. Available at http://nhd.usgs.gov/

FIGURES



Legend

Environmental Survey Area (ESA)

Feet

0 500 1,000 2,000

GRAPHIC SCALE

NOTE:
1. USGS SIDNEY QUADRANGLE, TOPOGRAPHIC MAP

THE DAYTON POWER AND LIGHT COMPANY
MILLCREEK 138KV EXTENSION PROJECT
SHELBY COUNTY, OHIO

SITE LOCATION MAP

DP&L ARCADIS

FIGURE 1

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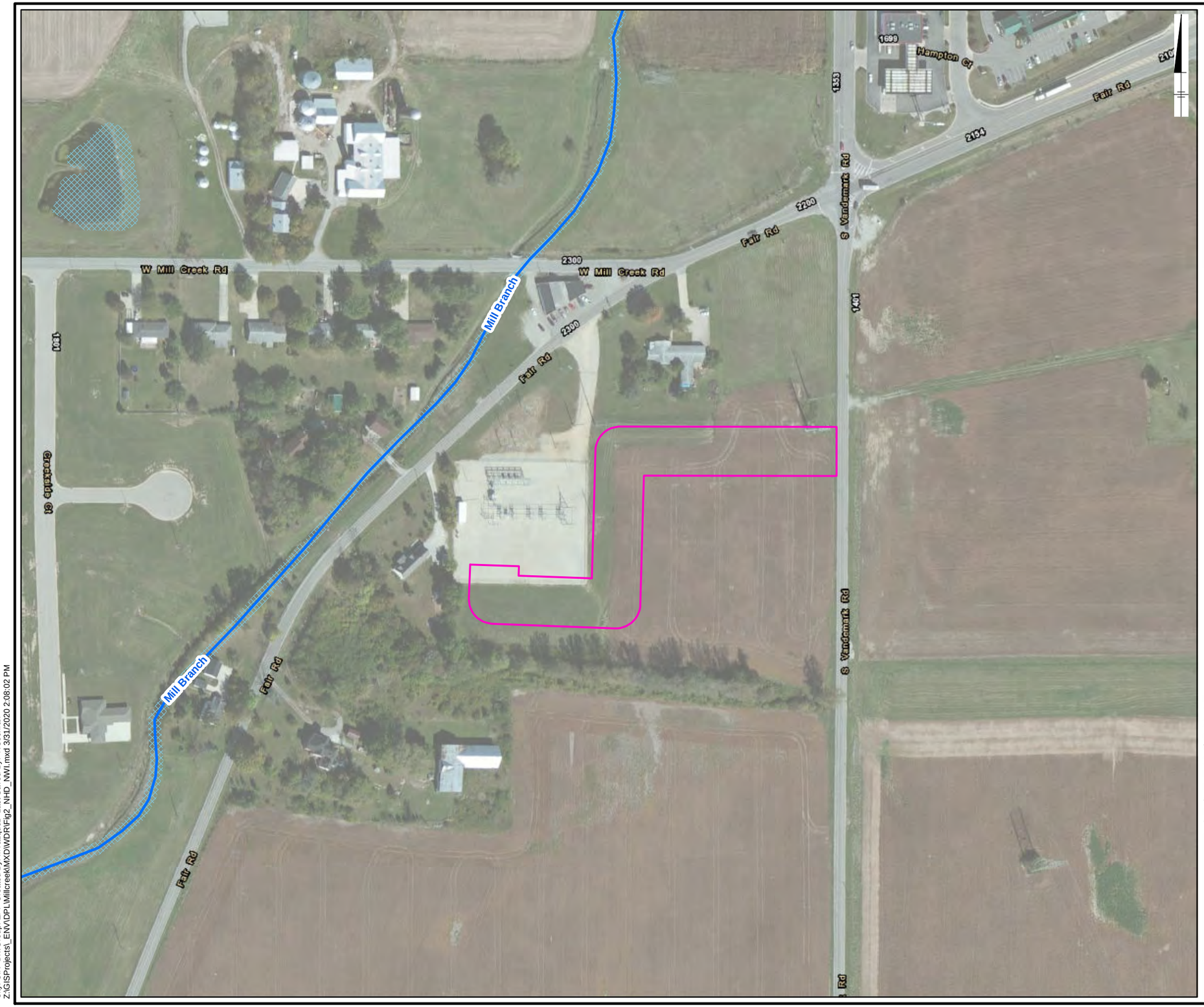

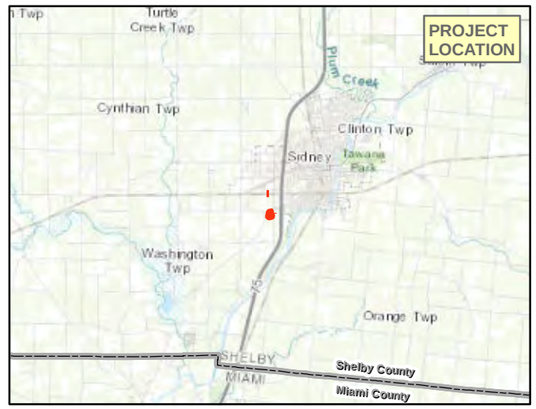

Legend

- NHD Stream
- Environmental Survey Area (ESA)
- Freshwater Pond/Lake/Riverine Wetland

0 125 250 500 Feet

GRAPHIC SCALE

NOTE:
1. 2017 IMAGERY OBTAINED FROM ESRI IMAGE SERVICE.
2. NATIONAL WETLANDS INVENTORY (NWI) WETLAND DATA OBTAINED FROM THE US FISH & WILDLIFE SERVICE AT: WWW.FWS.GOV.
3. NATIONAL HYDROGRAPHY DATASET (NHD) OBTAINED FROM THE US GEOLOGICAL SURVEY AT: HTTPS://NHD.USGS.GOV.
4. FEMA FLOOD ZONE DATA OBTAINED FROM: HTTPS://MSC.FEMA.GO
*NO FEMA FLOODPLAIN WITHIN VACINITY OF PROJECT ESA,

THE DAYTON POWER AND LIGHT COMPANY
MILLCREEK 138KV EXTENSION PROJECT
SHELBY COUNTY, OHIO

NWI / NHD / FEMA MAP

DP&L ARCADIS

FIGURE 2

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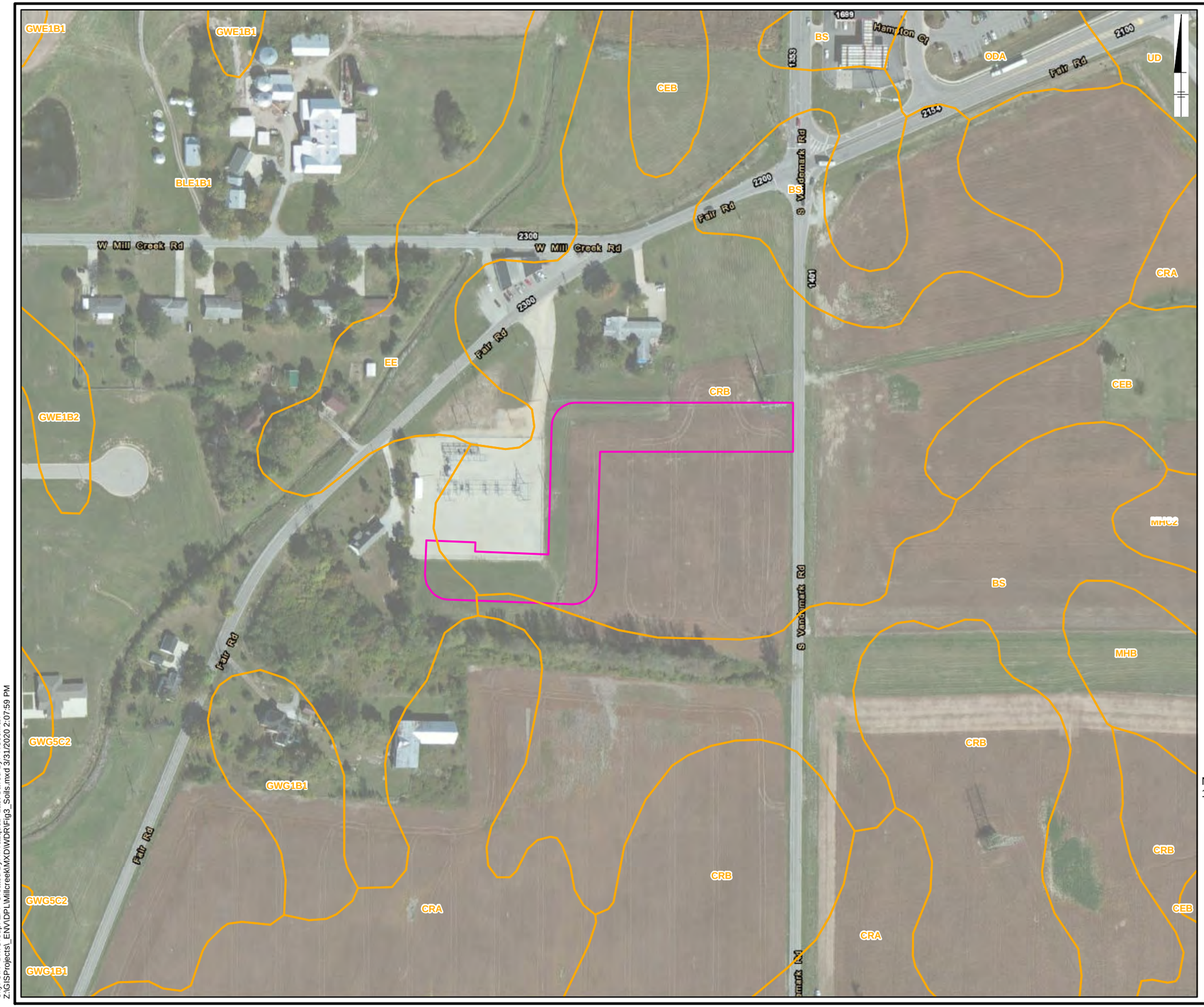

Legend

- NRCS Mapped Soils
- Environmental Survey Area (ESA)

Soil Symbol	Soil Description	Hydric Class
BlE1B1	Blount silt loam, end moraine, 2 to 4 percent slopes	Predominantly non-hydric
Bs	Brookston silty clay loam, fine texture, 0 to 2 percent slopes	Predominantly hydric
CrB	Crosby silt loam, 2 to 6 percent slopes	Predominantly non-hydric

0 125 250 500 Feet

GRAPHIC SCALE

NOTE:
1. U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE. SOIL SURVEY GEOGRAPHIC (SSURGO) DATABASE FOR SHELBY COUNTY, OHIO. (2019)

THE DAYTON POWER AND LIGHT COMPANY
MILLCREEK 138KV EXTENSION PROJECT
SHELBY COUNTY, OHIO

NRCS MAPPED SOILS

DP&L ARCADIS

FIGURE 3

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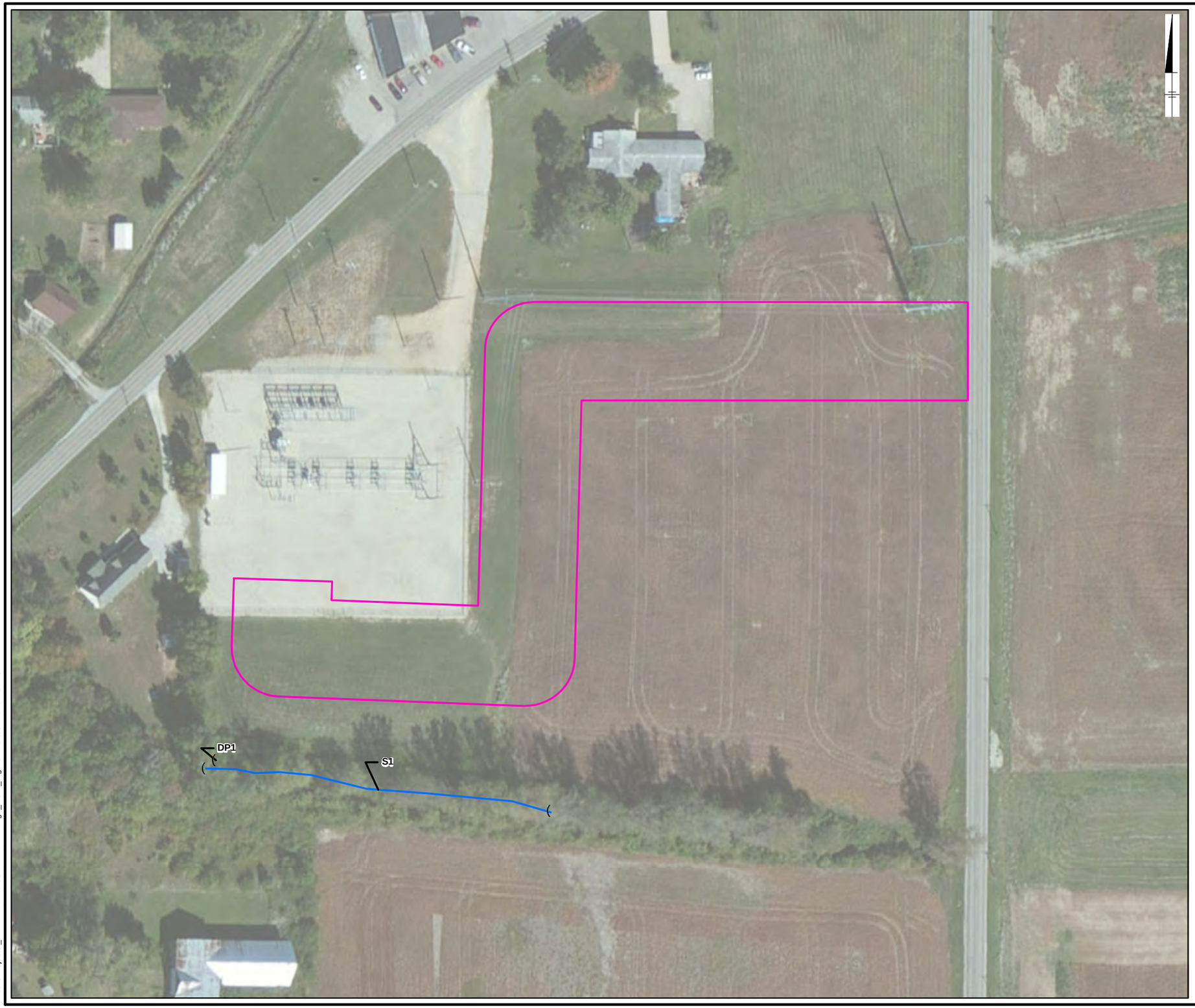

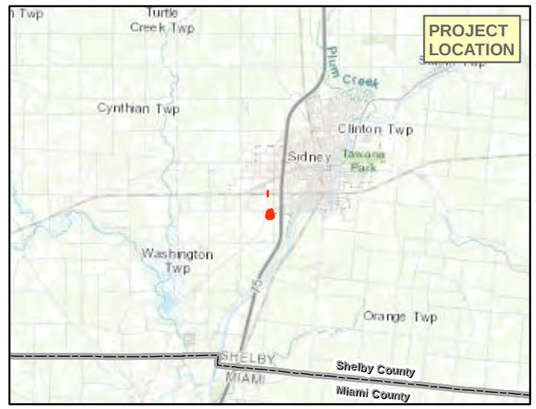

Legend

- (Open Ended Feature
- (Upland Data Point
- Delineated Stream (Intermittent)
- Environmental Survey Area (ESA)

0 25 50 100 150 Feet

GRAPHIC SCALE

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

THE DAYTON POWER AND LIGHT COMPANY
MILLCREEK 138KV EXTENSION PROJECT
SHELBY COUNTY, OHIO

WETLAND AND STREAM DELINEATION

DP&L ARCADIS

FIGURE 4

City: CIN DivGroup: EPP Created By: MVazquez Last Saved By: NCochran
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APPENDIX A

Photographic Log

Project Photographs

AES Corporation
Millcreek 138KV Extension Project
Shelby County, Ohio

Photo: 1

Date:
March 25, 2020

Description:
View of substation

Direction:
Southwest

Photo: 2

Date:
March 25, 2020

Description:
View of substation within ESA

Direction:
North

Project Photographs

AES Corporation
Millcreek 138KV Extension Project
Shelby County, Ohio

Photo: 3

Date:
March 25, 2020

Description:
View of ESA

Direction:
South

Photo: 4

Date:
March 25, 2020

Description:
View of ESA

Direction:
West

Project Photographs

AES Corporation
Millcreek 138KV Extension Project
Shelby County, Ohio

Photo: 5

Date:
March 25, 2020

Description:
View of ESA

Direction:
North

Photo: 6

Date:
March 25, 2020

Description:
View of ESA

Direction:
East

Project Photographs

AES Corporation
Millcreek 138KV Extension Project
Shelby County, Ohio

Photo: 7

Date:
March 25, 2020

Description:
View of ESA

Direction:
West

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Summary: Application Construction Notice: Application for a Certificate of Environmental Compatibility and Public Need for the Millcreek 138kV Expansion Project electronically filed by Mr. Timothy E Bockhorn on behalf of The Dayton Power and Light Company