

PUCO Case No. 23-0042-EL-BNR

Submitted to:

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

Submitted by: Ohio Power Company

Construction Notice

Ohio Power Company Adkins Station Expansion Project

4906-6-05

Ohio Power Company (the "Company") provides the following information in accordance with the requirements of Ohio Administrative Code Section 4906-6-05.

4906-6-05(B) General Information

B(1) Project 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 Company proposes the Adkins Station Expansion Project (the "Project"), which is located in Darby Township, Pickaway County, Ohio. The Project involves expanding the existing Adkins Station by approximately 1.2-acre. The expansion is necessary to separate the Company's assets from Darby Power LLC's assets, and to provide enough space for a safe drive path around the station equipment, as well as, to accommodate a new driveway for the Company's access to the station. No station equipment will be added, and no transmission line work is anticipated for the Project. In addition, all work will be completed within the Company's parcel.

Figures 1 and Figures 2, included in **Appendix A**, show the location of the Project in relation to the surrounding vicinity.

The Project meets the requirements for a Construction Notice (CN) because it is within the types of projects defined by item 4(a) of Ohio Administrative Code Section 4906-1-01 Appendix A of the Application Requirement Matrix for Electric Power Transmission Lines:

- 4 Construction additions to existing electric power transmission stations or converting distribution stations to transmission stations where:
 - (a) There is a twenty percent or less expansion of the fenced area

The Project has been assigned PUCO Case No. 23-0042-EL-BNR.

B(2) Statement of Need

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.

Ohio Power Company has acquired full ownership of the Adkins 345 kV Station through the Cinergy, Columbus Southern Power, and Dayton Power & Light ("CCD") partnership dissolution. The Company

will need to expand the station yard to provide safe access to equipment in the station and to separate the Company's assets from those of Darby Power LLC's adjoining generating plant equipment on the site.

Failure to move forward with the proposed project expansion at Adkins Station poses potential safety issues for the Company, affects the Company's ability to adequately provide operation and maintenance activities and threatens the Company's ability to have full control of the through path from Beatty Road to Stuart Station. Since this project does not involve any topology changes, a PJM submittal is not required. The Project is listed in the Company's 2023 Long Term Forecast Report on page 114 (FE-T8, Existing Substations), see **Appendix B**.

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 location of the Project in relation to existing transmission lines and substations are shown on **Figure 1**.

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 Project is located on property the Company has an easement on and is the most suitable location for the Project. Other alternatives would require impacting neighboring properties, as opposed to being located entirely on land the Company has an easement on. In addition, the proposed expansion of the substation eliminates the need for establishment of a new substation in another location as well as new transmission lines to tie-in a new substation to the transmission line grid. The establishment of a new substation would increase costs, impacts to other landowners, as well as increase impacts on ecological resources. The proposed expansion is located adjacent to the existing station and is situated on existing development land (i.e. gravel and/or maintained lawns), so impacts to agricultural and/or residential resources are not anticipated. Wetland and stream delineations were conducted on the Project site with identification of one wetland and one open-water, storm water retention pond. Of these delineated resources, none will be impacted by the Project. Expansion of the station in a different location would interfere with the existing Adkin Station generation facility and substation components or would impact the existing stormwater management control associated with the facility. Changes to the configuration of the generation facility, substation components, and stormwater management controls would result in greater impact to the adjacent property owners, land use, and potential to impact ecological resources. Therefore, the expansion of the substation on the west side of the existing Adkins Station represents the most suitable location and appropriate solution for meeting the Company's needs.

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.

The Company maintains a website (http://aeptransmission.com/ohio/) which provides the public access to an electronic copy of this CN and the public notice for this CN. An electronic copy of the CN will be served to the public library in each political subdivision affected by this proposed Project. The Company also retains ROW land agents that discuss Project timelines, construction and restoration activities and convey information to affected owners and tenants throughout the Project.

B(6) Construction Schedule

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

Construction of the Project is anticipated to begin in August 2023, and the anticipated in-service date is December 2023.

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.

Figure 1 provides the proposed Project area and existing transmission facilities on a map of 1:24,000-scale (1-inch equals 2,000 feet), showing the Project on a topographic map of the Darby provided by the National Geographic Society, i-cubed. **Figure 2** shows the Project area on recent aerial photography, dated 2020, as provided by the Environmental Systems Research Institute (ESRI), at a scale of 1:2,400 (1-inch equals 200 feet).

To visit the Project site from Columbus, Ohio, take I-71 South toward Cincinnati for approximately 12 miles. Then, take Exit 94 for US-62/OH-3 toward Harrisburg. Continue on OH-3 South/US-62 West for 3 miles and then turn left onto Darby Creek Road. Continue on Darby Creek Road for 3 miles and then turn right onto Scioto-Darby Road and continue for approximately 1.5 miles. Then, turn left onto London Road and continue for 1.5 miles and then turn right onto Federal Road and continue for 1 mile. Turn left onto Drummond Road and then right onto Adkins Road. The approximate address of the Project site is 12509 Adkins Road, at latitude 39.71178°, longitude -83.17751°.

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.

All work activities are proposed on parcel (PIN# B06-0-001-00-200-00), which the Company currently has an easement on.

B(9) Technical Features

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

B(9)(a) Operating characteristics, estimated number and types of structures required, and right-of-way and/or land requirements.

The Company does not intend to install any new equipment within the proposed fence expansion area.

B(9)(b) Electric and 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.

No occupied residences or institutions are located within 100 feet of the Project.

B(9)(c) Project Cost

The estimated capital cost of the project.

The capital cost estimate for the proposed Project, which is comprised of applicable tangible and capital costs, is approximately \$9,715,000, using a Class 4 estimate. Pursuant to the PJM OATT, the costs for this Project will be recovered in the Ohio Power Company's FERC formula rate (Attachment H-14 to the PJM OATT) and allocated to the AEP Zone.

B(10) Social and Economic Impacts

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

B(10)(a) Land Use Characteristics

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

An aerial photograph of the Project vicinity is provided as **Figure 2**. The Project location and vicinity have historically been primarily agricultural land. The Project is in Darby Township, Pickaway County. The Project vicinity is currently comprised of the existing Adkins Station facility, surrounded by agricultural land used for row crops, and lesser amounts of maintained lawn, old fields, open water, and palustrine emergent wetland. There are no parks, churches, cemeteries, wildlife management areas, or nature preserve lands within 1,000 feet of the Project.

B(10)(b) Agricultural Land Information

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 Pickaway County Auditor provided a list of parcels registered as Agricultural District Land on April 26, 2023. As a result, the Project is not located within lands identified as Agricultural District Lands.

B(10)(c) Archaeological and 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.

Phase I Archaeological investigations and separate History/Architecture Investigations for the Project occurred in August 2019. One previously recorded archaeological site and two historic properties were identified and found not to be eligible for listing on the National Register of Historic Places (NHRP). On September 15, 2022, the Ohio State Historic Preservation Office ("SHPO") concurred with the recommendations and stated that the Project will have no effect on historic properties and no further investigations or consultation with SHPO is necessary. Coordination with SHPO is provided as **Appendix C**.

B(10)(d) Local, State, and Federal Agency Correspondence

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 Notice of Intent will be filed with the Ohio Environmental Protection Agency for authorization of construction storm water discharges under General Permit OHCooooo6. The Company will also coordinate storm water permitting needs with local government agencies, as necessary. The Company will implement and maintain best management practices as outlined in the Project-specific Storm Water Pollution Prevention Plan to minimize erosion and control sediment to protect surface water quality during storm events. A renewal of the OEPA General Permit Authorization for Stormwater Discharges Associated with Construction Activity Under the National Pollutant Discharge Elimination System is scheduled to occur in April 2023. As the NOI has been filed, a renewal will be submitted to the OEPA if the Project is not completed prior to the expiration of the renewal period (i.e., 180 days from date of renewal permit).

The Company's consultant conducted a stream and wetland delineation within the Project study area. One wetland and one open-water storm water retention pond were identified within the Project study area. Additional details regarding the delineated feature are provided in Section (10) (f) below. No impacts are anticipated to the delineated resources. Therefore, a Pre-Construction Notification (PCN) under Nationwide Permit 57 to the USACE is not warranted, and the Project is compliant with non-reporting conditions of the Nationwide Permit 57 automatic Section 404/401 authorization.

No FEMA regulated floodplains or floodways (based on FEMA map panel 39129Co150J) will be disturbed by the Project.

There are no other known local, state, or federal requirements that must be met prior to commencement of the proposed Project.

B(10)(e) Threatened, Endangered, and Rare Species

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.

On November 17, 2020, coordination letters were sent to United States Fish and Wildlife Service (USFWS) and the Ohio Department of Natural Resources (ODNR) Ohio Natural Heritage Program (ONHP) and Division of Wildlife (DOW), seeking an environmental review for the Project for potential impacts to threatened and endangered species.

Responses were received from the USFWS on November 17, 2020, and from the ODNR on January 11, 2021. According to a response letter received from the USFWS, due to the project, type, size, and location, adverse effects to federally endangered, threatened, or proposed species or proposed designated critical habitat is not anticipated. Regarding state threatened and endangered species that may occur within the Project vicinity, 40 species were listed by the ODNR. These species included: northern long-eared bat (Myotis septentroinalis), Indiana bat (Myotis sodalis), little brown bat (Myotis lucifugus), tricolored bat (Perimyotis subflavus), clubshell (Pleurobema clava), fanshell (Cyprogenia stegaria), northern riffleshell (Epioblasma torulosa rangiana), purple cat's paw (Epioblasma o. obliquata), rayed bean (Villosa fabalis), snuffbox (Epioblasma triquetra), rabbitsfoot (Quadrula cylindrica cylindrica), butterfly (Ellipsaria lineolata), ebonyshell (Fusconaia ebenus), elephant-ear (Elliptio crassidens), long-solid (Fusconaia maculata maculata), Ohio pigtoe (Pleurobema cordatum), pyramid pigtoe (Pleurobema rubrum), sharpridged pocketbook (Lampsilis ovata), washboard (Megalonaias nervosa), black sandshell (Liqumia recta), fawnsfoot (Truncilla donaciformis), pondhorn (Uniomerus tetralasmus), threehorn wartyback (Obliquaria reflexa), Scioto madtom (Noturus trautmani), bigeye shiner (Notropis boops), goldeye (Hiodon alosoides), northern brook lamprey (Ichthyomyzon fossor), northern madtom (Noturus stigmosus), shortnose gar (Lepisosteus platostomus), spotted darter (Etheostoma maculatum), shovelnose sturgeon (Scaphirhynchus platorynchus), blue sucker (Cycleptus elongatus), lake chubsucker (Erimyzon sucetta), paddlefish (Polyodon spathula), Tippecanoe darter (Etheostoma tippecanoe), lark sparrow (Chondestes grammacus), least bittern (Ixobrychus exilis), northern harrier (Circus hudsonis), sandhill crane (Grus canadensis), and upland sandpiper (Bartramia longicauda). A species review for each of these species and potential impacts from the Project was evaluated and a summary provided below.

Presence of the Indiana bat has been established in the area, and the Division of Wildlife (DOW) recommends no summer tree cutting. However, limited summer tree cutting inside this buffer may be acceptable after further consultation with DOW. In addition, the entire state of Ohio is within the range of the northern long-eared bat, little brown bat, and tricolored bat. The DOW recommends tree 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 \geq 20" if possible. Furthermore, the Company's consultant completed a desktop review for potential hibernaculum within 0.25 miles of the Project area and no caves, mines, and/or karst features were identified. Based on general observations during the ecological survey, the Project area is situated within an active disturbance/cleared area and no tree clearing is proposed for the Project. Therefore, potential hibernaculum or suitable foraging and roosting habitat for the Indiana bat, northern long-eared bat, little brown bat, and tricolored bat was not identified within the Project area. Therefore, no further coordination was necessary with either the ODNR and/or USFWS regarding the listed bat species. Results of the initial desktop habitat assessment has been included within **Appendix C**.

No impacts are anticipated to the clubshell, fanshell, northern riffleshell, purple cat's paw, rayed bean, Snuffbox, rabbitsfoot, butterfly, ebonyshell, elephant-ear, long-solid, Ohio pigtoe, pyramid pigtoe, sharp-ridged pocketbook, washboard, black sandshell, fawnsfoot, pondhorn, threehorn wartyback, Scioto madtom, bigeye shiner, goldeye, northern brook lamprey, northern madtom, shortnose gar, spotted darter, shovelnose sturgeon, blue sucker, lake chubsucker, paddlefish, and Tippecanoe darter as no in-water work is anticipated, and no streams were identified within the Project area.

Additionally, field surveys indicated the absence of potential nesting habitat suitable for lark sparrow, least bittern, northern harrier, sandhill crane, and upland sandpiper within the Project area. The area of the proposed expansion is associated with existing gravel and/or maintained lawn that is not suitable for the listed bird species. Therefore, and as per ODNR guidance provided in **Appendix C**, these species are not likely to be impacted by the Project if their habitat will not be impacted. Therefore, no further coordination regarding the listed bird species was warranted regarding this Project.

A copy of the agency correspondence is provided in **Appendix C**. Additional information regarding habitat assessments within the Project area is provide within the Ecological Report found in **Appendix D**.

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.

No unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, state nature preserves, state or national parks, state or national forests, or other protected natural areas were identified within the Project Area.

FEMA Flood Insurance Rate Maps were consulted to identify any floodplains/flood hazard areas that have been mapped in the Project Area (specifically, map number **39129Co15oJ**). Based on these maps, no mapped FEMA floodplains are located in the Project area.

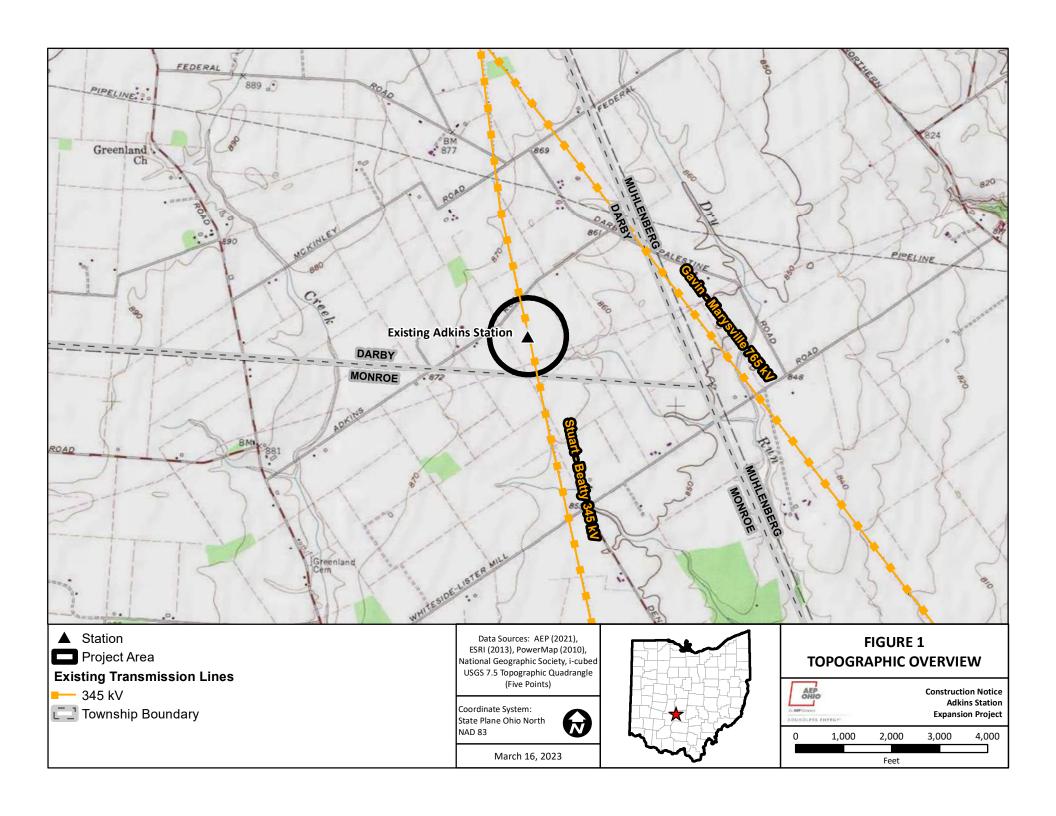
The Company's consultant prepared an Ecological Report, which is provided in **Appendix D**. The survey of the Project area identified one palustrine emergent (PEM) wetland and one open water, storm water retention pond. The Company does not anticipate any crossings of the delineated resources for construction of the Project.

B(10)(g) 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 the Company's knowledge, no unusual conditions exist that would result in significant environmental, social, health, or safety impacts.

Appendix A Project Fig	ures	







PUCO Form FE-T8: Ohio Power Company Summary of Existing Substations on Transmission Lines

	Type			Line
	Distribution			Existing
	(D)			or
	Transmissio		Line Association	Propose
Substation Name	n (T)	Voltage(s) (kV)	(FE3-T7 or FE3-T9 Notation)	d
ACADEMIA	T	138	Academia - North Lexington	Е
ACADEMIA	T	138	Academia - Ohio Central	Е
ACADEMIA	Т	138	Academia - West Mount Vernon	Е
ADAMS (CSP)	Т	138	Adams - Seaman	Е
ADAMS (CSP)	Т	138	Adams - Ware Road	Е
ADDISON	T	138	Addison - Lick - Sporn	Е
ADKINS	Т	345	* Adkins - Atlanta (DPL)	Е
ADKINS	Т	345	Adkins - Beatty Road	Е
ADKINS	Т	345	Adkins - Darby Generation	Е
AMLIN	D	138	Amlin - Dublin	E
AMLIN	D	138	Amlin - Hayden	E
AMLIN	D	138	Amlin - Hyatt	E
AMLIN	D	138	Amlin - Sumac #2	Е
AMLIN	D	138	Amlin - Sumac #1	Е
APPLE CREEK	D	138	East Wooster - South Canton	Е
ASTOR	D	138	Astor - East Broad Street	Е
BEATTY ROAD	Т	345	Adkins - Beatty Road	Е
BEATTY ROAD	Т	138	Beatty - Bolton	Е
BEATTY ROAD	Т	345	Beatty - Cole	Е
BEATTY ROAD	Т	345	Beatty Road - Bixby	Е
BEATTY ROAD	Т	345	Beatty Road - Greene	Е
BEATTY ROAD	Т	138	Beatty Road - McComb	Е
BEATTY ROAD	Т	138	Beatty Road - White Road	Е
BEATTY ROAD	Т	138	Beatty Road - Wilson	Е
BEATTY ROAD	Т	138	Beatty Road - Zuber	Е
BELDEN VILLAGE	D	138	Wagenhals - Wayview	Е
BELPRE	D	138	*Belpre - Parkersburg (APS)	Е

Appendix C	Agency Correspondent	ondence	

United States Department of the Interior



FISH AND WILDLIFE SERVICE

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

November 17, 2020

Ms. Carter Stantec Consulting Services Inc. 1500 Lake Shore Drive, Suite 100 Columbus, OH 43204-3800

Re: Adkins Station Expansion Project, Pickaway County, Ohio

Dear Ms. Carter,

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 \\Field Office Supervisor

TAILS# 03E15000-2021-TA-0326



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

January 11, 2021

Kim Carter Stantec 1500 Lake Shore Drive Suite 100 Columbus OH 43204-3800

Re: 20-1079; Adkins Station Expansion Project

Project: The proposed project involves expansion of the existing Adkins Substation.

Location: The proposed project is located in Darby Township, Pickaway 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 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 project is within the vicinity of records for the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species. Because presence of state endangered bat species has been established in the area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. However, limited summer tree cutting inside this buffer may be acceptable after further consultation with DOW (contact Sarah Stankavich, sarah.stankavich@dnr.state.oh.us).

In addition, 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 bat species 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. The DOW recommends tree 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.

The DOW also recommends that a desktop habitat assessment, followed by a field assessment if needed, is conducted to determine if there are potential hibernaculum(a) present within the project area. Information about how to conduct habitat assessments can be found in the current USFWS "Range-wide Indiana Bat Survey Guidelines." If a habitat assessment finds that potential hibernacula are present within 0.25 miles of the project area, please send this information to Sarah Stankavich, sarah.stankavich@dnr.state.oh.us 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 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

clubshell (*Pleurobema clava*)
fanshell (*Cyprogenia stegaria*)
northern riffleshell (*Epioblasma torulosa rangiana*)
purple cat's paw (*Epioblasma o. obliquata*)
rayed bean (*Villosa fabalis*)
snuffbox (*Epioblasma triquetra*)

Federally Threatened

rabbitsfoot (Quadrula cylindrica cylindrica)

State Endangered

butterfly (Ellipsaria lineolata)
ebonyshell (Fusconaia ebenus)
elephant-ear (Elliptio crassidens)
long-solid (Fusconaia maculata maculata)

Ohio pigtoe (*Pleurobema cordatum*) pyramid pigtoe (*Pleurobema rubrum*) sharp-ridged pocketbook (*Lampsilis ovata*) washboard (*Megalonaias nervosa*)

State Threatened

black sandshell (*Ligumia recta*) fawnsfoot (*Truncilla donaciformis*) pondhorn (*Uniomerus tetralasmus*) threehorn wartyback (*Obliquaria reflexa*)

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

The project is within the range of the following listed fish species:

Federally Endangered

Scioto madtom (Noturus trautmani)

State Endangered

bigeye shiner (Notropis boops)
goldeye (Hiodon alosoides)
northern brook lamprey (Ichthyomyzon fossor)
northern madtom (Noturus stigmosus)
shortnose gar (Lepisosteus platostomus)
spotted darter (Etheostoma maculatum)
shovelnose sturgeon (Scaphirhynchus platorynchus)

State Threatened

blue sucker (Cycleptus elongatus)
lake chubsucker (Erimyzon sucetta)
paddlefish (Polyodon spathula)
Tippecanoe darter (Etheostoma tippecanoe)

The DOW recommends no in-water work in perennial streams from April 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.

The project is within the range of the lark sparrow (*Chondestes grammacus*), a state endangered bird. This sparrow nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. In the Oak Openings area west of Toledo, lark sparrows occupy open grass and shrubby fields along sandy beach ridges. These summer residents normally migrate out of Ohio shortly after their young fledge or leave the nest. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to June 30. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the least bittern (*Ixobrychus exilis*), a state threatened bird. This secretive marsh species prefers dense emergent wetlands with thick stands of cattails, sedges, sawgrass or other semiaquatic vegetation interspersed with woody vegetation and open water. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the northern harrier (*Circus hudsonis*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 15 to August 1. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the sandhill crane (*Grus canadensis*), a state threatened species. Sandhill cranes are primarily a wetland-dependent species. On their wintering grounds, they will utilize agricultural fields; however, they roost in shallow, standing water or moist bottomlands. On breeding grounds, they require a rather large tract of wet meadow, shallow marsh, or bog for nesting. If grassland, prairie, or wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 to September 1. If this habitat will not be impacted, this project is not likely to have an impact on this species.

The project is within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird. Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 to July 31. If this type of habitat will not be impacted, 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 U.S. 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 Sarah Tebbe, Environmental Specialist, at Sarah.Tebbe@dnr.ohio.gov if you have questions about these comments or need additional information.

Mike Pettegrew Environmental Services Administrator (Acting)



In reply, refer to 2019-PIC-45882

September 15, 2022

Mr. Ryan J. Weller Weller & Associates, Inc. 1395 West Fifth Avenue Columbus, Ohio 43212

RE: Adkins Station Expansion Project, Darby Township, Pickaway County, Ohio

Dear Mr. Weller:

This letter is in response to the correspondence received on August 26, 2022 regarding the proposed Adkins Station Expansion Project, Darby Township, Pickaway County, Ohio. We appreciate the opportunity to comment on this project. The comments of the Ohio State Historic Preservation Office (SHPO) are made pursuant to Section 149.53 of the Ohio Revised Code and the Ohio Power Siting Board rules for siting this project (OAC 4906-5). The comments of the Ohio SHPO are also submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. 306108 [36 CFR 800]).

Our office previously reviewed the *Phase I Archaeological Investigations for the 18.3 ha (45.3 ac) Adkins Station Expansion Project in Darby Township, Pickaway County, Ohio* by Ryan J. Weller (Weller & Associates, Inc. 2019) and *History/Architecture Investigations for the 18.3 ha (45.3 ac) Adkins Station Expansion Project in Darby Township, Pickaway County, Ohio* by Austin White (Weller & Associates, Inc. 2019). One (1) archaeological site, Ohio Archaeological Inventory (OAI) #33PI0650 was identified and found to be not eligible for listing on the National Register of Historic Places (NRHP). Two (2) properties fifty years of age or older were also identified with the Area of Potential Effects (APE) and were determined not eligible for listing in the NRHP. During this review, it was determined the project as proposed will have no effect on historic properties.

Our office continues to agree that the project as proposed will have no effect on historic properties. No further coordination with this office is necessary, unless the project changes or unless new or additional historic properties are discovered during implementation of this project. In such a situation, this office should be contacted. If you have any questions, please contact me at (614) 298-2022, or by e-mail at khorrocks@ohiohistory.org. Thank you for your cooperation.

Sincerely,

Krista Horrocks, Project Reviews Manager

Resource Protection and Review

RPR Serial No: 1094808-1094809

Appendix D	Ecological Resources Inventory Report	



Adkins Station Expansion Project, Pickaway County, Ohio

Ecological Resources Inventory Report

Prepared for:

AEP Ohio Transmission Company, Inc. 8600 Smiths Mill Road New Albany, OH 43054

Prepared by:

Stantec Consulting Services Inc. 1500 Lake Shore Drive, Suite 100 Columbus, OH 43204

Sign-off Sheet

This document entitled Adkins Station Expansion Project, Pickaway County, Ohio was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of AEP Ohio Transmission Company, Inc. (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

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	(signature)
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Reviewed by	Japa firstu
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	(signature)

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Introduction January 28, 2021

1.0 INTRODUCTION

AEP Ohio Transmission Company, Inc. (AEP) is proposing to expand the existing Adkins station to separate the 345 kV yard from the generator equipment and expand the existing fenced area for an additional access drive in Pickaway County, Ohio (Figure 1, Appendix B). The Adkins Station Expansion Project (the Project) area includes the existing station pad and adjacent areas where the expansion work may occur. The Project is located to the east of the town of Mount Sterling and approximately 0.5 mile west of the intersection of Adkins Road and Drummond Road (Figure 1, Appendix B). A study area for the station expansion and proposed access road was surveyed for wetlands, waterbodies, open water features, upland drainage features, and potential threatened, endangered, and rare species habitat by Stantec Consulting Services Inc. (Stantec) biologists on November 18, 2020. The approximate locations of features located up to 50 feet outside of the Project area were also recorded during the field surveys, where landowner access was permitted. However, no data forms were collected on features that did not extend into the Project area. These features are shown on the Figure 2 maps in Appendix B as "approximate" wetlands, streams (waterways), open waters, and upland drainage features.

Methods January 28, 2021

2.0 METHODS

2.1 WETLAND DELINEATION

Prior to completing the field surveys, a desktop review of the Project area was conducted using U.S. Geological Survey (USGS) topographic maps, National Wetlands Inventory (NWI) maps, U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey data, and aerial imagery mapping. Stantec completed a wetland delineation study in accordance with the Corps of Engineers Wetlands Delineation Manual (USACE Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0; USACE 2010). Wetland categories were classified using the Ohio Rapid Assessment Method (ORAM) for Wetlands Version 5.0 (Mack 2001).

2.2 STREAM DELINEATION

Streams that demonstrated a continuously defined channel (bed and bank), ordinary high water mark (OHWM), and the disturbance of terrestrial vegetation were delineated within the Project area, per the protocols outlined in the USACE's Guidance on Ordinary High Water Mark Identification (Regulatory Guidance Letter, No. 05-05; USACE 2005). Delineated streams were classified as ephemeral, intermittent, or perennial per definitions in the 22250 Federal Register/Vol. 85, No. 77 (effective June 22, 2020; USACE 2020). Functional assessment of streams within the Project area was based on completion of the Ohio Environmental Protection Agency's (OEPA) Headwater Habitat Evaluation Index (HHEI; OEPA 2018) and/or Qualitative Habitat Evaluation Index (QHEI; OEPA 2006). The centerline and/or the OHWM locations of each waterway were identified and surveyed using a handheld sub-meter accuracy global positioning system (GPS) unit and mapped with GIS software. Additionally, the locations of upland drainage features (which lacked a continuously defined bed and bank/OHWM) identified within the Project area were also recorded with a sub-meter accuracy GPS unit during the field surveys.

2.3 RARE SPECIES

Prior to conducting the field surveys, Stantec contacted the Ohio Department of Natural Resources (ODNR) and the U.S. Fish and Wildlife Service (USFWS) for information regarding rare, threatened, or endangered species and their habitats of concern within the vicinity of the Project area (Appendix E – Agency Correspondence). To assess potential impacts to rare, threatened, or endangered species, Stantec scientists conducted a pedestrian reconnaissance of the Project area, collected information on existing habitats within the Project area, and assessed the potential for these habitats to be used by these species.

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3.0 RESULTS

3.1 TERRESTRIAL HABITAT

Stantec completed field surveys within the Project area on November 18, 2020, for potentially suitable habitats for threatened and endangered species. Figure 3 (Appendix B) shows the land cover, vegetation communities, and any identified rare, threatened, or endangered species habitats observed within the Project area during the habitat assessment surveys. Representative photographs of the vegetation communities/habitats identified within the Project area are included in Appendix D of this report (photo locations are shown on Figure 3 in Appendix B). Information regarding the vegetation communities/habitats identified within the Project area is provided in Table 1.

Table 1. Vegetation Communities and Land Cover Found within the Adkins Station Expansion Project Area, Pickaway County, Ohio

Vegetation Communities and Land Cover Types within the Project Area	Degree of Human-Related Ecological Disturbance	Unique, Rare, or High Quality?	Approximate Acreage Within Project Area
Palustrine Emergent Wetland	Moderate Disturbance/Natural Community (dominated by native and herbaceous species and/or opportunistic invaders). Dominant species included narrow-leaf cattail (Typha angustifolia).	No	0.02
Open Water	Moderate Disturbance/Natural Community (dominated by native and herbaceous species and/or opportunistic invaders). Dominant species included narrow-leaf cattail.	No	0.83
Old Field	Extreme Disturbance/Ruderal Community (dominated by opportunistic invaders, planted non- native species, and/or native highly tolerant taxa). Dominant plant species included Canada goldenrod (Solidago canadensis), Yellow foxtail (Setaria pumila), Indian grass (Sorghastrum nutans), big bluestem (Andropogon gerardii), Fuller's teasel (Dipsacus fullonum), and Bradford pear (Pyrus calleryana).	No	10.40

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Vegetation Communities and Land Cover Types within the Project Area	Degree of Human-Related Ecological Disturbance	Unique, Rare, or High Quality?	Approximate Acreage Within Project Area
Agricultural Field	Extreme Disturbance/Ruderal Community (dominated by opportunistic invaders, planted non- native species, and/or native highly tolerant taxa). Tilled soil was present during the site visit.	No	25.78
Maintained Lawn	Extreme Disturbance/Ruderal Community (dominated by opportunistic invaders, planted non- native species, and/or native highly tolerant taxa). Dominant species included Kentucky bluegrass (Poa pratensis), great plantain (Plantago major), common dandelion (Taraxacum officinale) and Queen Ann's Lace (Daucus carota).	No	7.07
Industrial/Commercial Land	Moderate to Extreme Disturbance/Ruderal Community (free of vegetation and/or dominated by opportunistic invaders, planted non-native species, and native highly tolerant taxa).	No	21.38
		TOTAL	65.48

3.2 WETLANDS

Stantec completed field surveys for wetlands within the Project area on November 18, 2020. Stantec identified one wetland, Wetland 1, within the Project area in the location of wetland determination sample point SP02. Wetland 1 is considered to be potentially isolated due to its lack of hydrological connection to any jurisdictional "waters of the United States". The National Hydrological Database (NHD) depicts an intermittent stream, within the Project area as shown on Figure 2 (Appendix B). However, no stream was observed within the Project area or surrounding area during the field surveys. Therefore, Wetland 1 has no hydrological connection to any jurisdictional "waters of the United States" and is therefore considered to be potentially isolated.

Two wetland determination sample points (SP01 and SP04) were evaluated during the field surveys due to the presence of hydrophytic vegetation, hydric soils, and hydrology. The wetland determination sample points were located within constructed upland drainage features for the existing station. Although SP01 and SP04 met wetland determination criteria, per definitions in the 22250 Federal Register/Vol. 85, No. 77 (effective June 22, 2020; USACE 2020) paragraph (b)(10) stormwater control features are excluded from the "waters of the United States." The upland drainage features were constructed wholly in uplands for the purpose of conveying stormwater

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runoff. Therefore, sample points SP01 and SP04 were not delineated as wetlands. Figure 2 (Appendix B) shows the location of the wetland determination sample points identified by Stantec within the Project area. Representative photographs are included in Appendix D of this report (photo locations are shown on Figure 2, Appendix B). Completed wetland determination and ORAM data forms are included in Appendix C. Information regarding the Cowardin classification and ORAM categories of the wetland is provided in Table 2 and included in Appendix A.

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Table 2. Summary of Wetland Resources Found within the Adkins Station Expansion Project Area, Pickaway County, Ohio

	Location	Location		Location		Location		Location		Location		Location		Location		Location					C	DRAM	Nearest	Existing	Proposed		Proposed	l Impacts
Wetland ID	Latitude	Longitude	Isolated?	Habitat Type	Delineated Area (acre)	Score	Category	Proposed Structure Number	osed Number in	Structure Number	Structure Installation Method	Temporary Matting Area (acre)	Permanent Impact Area (acre)															
Wetland 1	39.710958	-83.175773	Yes	PEM	0.02	16	1	N/A	N/A	N/A	TBD1	0.00	0															
Total:					0.02							0.00	0.000															

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3.3 WATERBODIES

Stantec completed field surveys for streams within the Project area on November 18, 2020. Stantec did not identify any streams within the Project area.

3.4 OPEN WATERS

Stantec completed field surveys for open waters (i.e., ponds, lakes) within the Project area on November 18, 2020. Figure 2 (Appendix B) shows the location of the open water identified by Stantec within the Project area. Representative open water photographs are included in Appendix D of this report (photo locations are shown on Figure 2, Appendix B). Details of the open water is provided in Table 3.

Table 3. Summary of Open Water Resources Found within the Adkins Station Expansion Project, Pickaway County, Ohio

	Loc	cation	Open	Delineated		Proposed Impacts	
Open Water ID	Latitude	Longitude	Water Type	area (acre)	Isolated?	Fill Type	Area (acre)
Open Water 01	39.711072	-83.175046	Storm Water Retention Pond	0.83	N/A*	None	0

^{*}Per definitions in the 22250 Federal Register/Vol. 85, No. 77 (effective June 22, 2020; USACE 2020) paragraph (b)(10) stormwater control features are excluded from the "waters of the United States."

3.5 RARE, THREATENED, OR ENDANGERED SPECIES HABITAT

Table 4. Summary of Potential Federal and State-Listed Species within the Adkins Station Expansion Project Area, Pickaway County, Ohio.

Common/Scientific Name	State Listed Status ^{1,2}	Federally Listed Status ³	Habitat Preference ²	Habitat Observed	Agency Comment (Appendix E)	Potential Impacts and Avoidance Dates
Indiana bat / Myotis sodalis	П	E	The Indiana bat is likely distributed over the entire State of Ohio, though not uniformly. This species generally forages in openings and edge habitats within upland and floodplain forest, but they also forage over old fields and pastures (Brack et al. 2010). Natural roost structures include trees (live or dead) with exfoliating bark, and exposure to solar radiation. Other important factors for roost trees include relative location to other trees, a permanent water source and foraging areas. Dead trees are preferred as maternity roosts; however, live trees are often used as secondary roosts depending on microclimate conditions (USFWS 2007, USFWS 2020b). Roosts have also occasionally been found to consist of cracks and hollows in trees, utility poles, buildings, and bat boxes. Primarily use caves for hibernacula, although are also known to hibernate in abandoned underground mines (Brack et al. 2010).	No suitable winter hibernacula or summer roost habitat was observed in the Project area.	ODNR – The Project is within the vicinity of records for the Indiana bat. Because presence has been established in the area, summer tree cutting is not recommended. However, limited summer tree cutting inside the buffer may be acceptable after further consultation with DOW. The DOW recommends tree 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. The DOW further recommends a desktop habitat assessment, followed by a field assessment, if needed, is conducted to determine if there are potential hibernaculum present within the project area. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species. USFWS - USFWS does not anticipate adverse effects to federally endangered, threatened, proposed, or candidate species due to the Project type, size, and location	No suitable winter hibernacula or suitable summer roosting habitat were observed in the Project area. AEP does not propose any tree clearing for the Project.
Northern long-eared bat / Myotis septertrionalis	E	Т	The northern long-eared bat is found throughout Ohio. This species generally forages in forested habitat and openings in forested habitat and utilizes cracks, cavities, and loose bark within live and dead trees, as well as buildings as roosting habitat (Brack et al. 2010, USFWS 2020a). The species utilizes caves and abandoned mines as winter hibernacula. Various sized caves are used providing they have a constant temperature, high humidity, and little to no air current (Brack et al. 2010).	No suitable winter hibernacula or summer roost habitat was observed in the Project area.	ODNR – The entire state of Ohio is within the range of this bat species. Therefore, the DOW recommends tree 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. The DOW further recommends a desktop habitat assessment, followed by a field assessment, if needed, is conducted to determine if there are potential hibernaculum present within the project area. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this	No suitable winter hibernacula or suitable summer roosting habitat were observed in the Project area. AEP does not propose any tree clearing for the Project.

Common/Scientific Name	State Listed Status ^{1,2}	Federally Listed Status ³	Habitat Preference ²	Habitat Observed	Agency Comment (Appendix E)	Potential Impacts and Avoidance Dates
					project is not likely to impact these species. USFWS - USFWS does not anticipate adverse effects to federally endangered, threatened, proposed, or candidate species due to the Project type, size, and location	
Little brown bat / Myotis lucifugus	E	N/A	This bat uses a wide range of habitats and man-made structures for roosting, including buildings and attics. Less frequently, they use hollows of trees. Winter hibernation sites typically consist of caves, tunnels, abandoned mines. Foraging habitat for this species generally occurs over water, along the edges of lakes and stream or in woodlands near waterbodies (NatureServe 2020).	No suitable winter hibernacula or summer roost habitat was observed in the Project area.	ODNR – The entire state of Ohio is within the range of this bat species. Therefore, the DOW recommends tree 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 The DOW further recommends a desktop habitat assessment, followed by a field assessment, if needed, is conducted to determine if there are potential hibernaculum present within the project area. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species. USFWS – No Comment	No suitable winter hibernacula or suitable summer roosting habitat were observed in the Project area. AEP does not propose any tree clearing or structure removal for the Project.
Tricolored bat / Perimyotis subflavus	E	N/A	This species is found throughout Ohio and is associated with forested landscapes, foraging near trees and along waterways. Maternity and summer roosts usually occur in dead or live tree foliage, or in the south, in clumps of Spanish moss. Maternity colonies may also use tree cavities or man-made structures, such as buildings or bridges. Caves, mines, and rock crevices may be used as night roosts between foraging (NatureServe 2020).	No suitable winter hibernacula or summer roost habitat was observed in the Project area.	ODNR – The entire state of Ohio is within the range of this bat species. Therefore, the DOW recommends tree 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. The DOW further recommends a desktop habitat assessment, followed by a field assessment, if needed, is conducted to determine if there are potential hibernaculum present within the project area. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species. USFWS – No Comment	No suitable winter hibernacula or suitable summer roosting habitat were observed in the Project area. AEP does not propose any tree clearing for the Project.

Common/Scientific Name	State Listed Status ^{1,2}	Federally Listed Status ³	Habitat Preference ²	Habitat Observed	Agency Comment (Appendix E)	Potential Impacts and Avoidance Dates
Clubshell / Pleurobema clava	E	E	Clubshell is found in small to medium rivers, but occasionally found in large rivers, especially those having large shoal areas. It is generally found in clean, coarse sand and gravel in runs, often just downstream of a riffle and cannot tolerate mud or slackwater conditions (USFWS 1994). Badra (2001) found the clubshell in gravel/sand substrate, runs having laminar flow (0.06-0.25 m/sec) within small to medium sized streams.	No suitable habitat was observed within the Project area.	ODNR – Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, the Project is not likely to impact this species. USFWS - USFWS does not anticipate adverse effects to federally endangered, threatened, proposed, or candidate species due to the Project type, size, and location	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Fanshell / Cyprogenia stegaria	E	E	Medium to large streams and rivers with moderate to strong current in coarse sand and gravel and depth ranging from shallow to deep (NatureServe 2020).	No suitable habitat was observed within the Project area.	ODNR – Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, the Project is not likely to impact this species. USFWS - USFWS does not anticipate adverse effects to federally endangered, threatened, proposed, or candidate species due to the Project type, size, and location	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Northern riffleshell / Epioblasma torulosa rangiana	Ш	Е	This mussel is found in a wide variety of streams from small to large (USFWS 2019). Habitat for this species includes riffles and firmly packed substrates of fine to coarse gravel. This mussel needs highly oxygenated water (NatureServe 2020).	No suitable habitat was observed within the Project area.	ODNR – Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, the Project is not likely to impact this species. USFWS - USFWS does not anticipate adverse effects to federally endangered, threatened, proposed, or candidate species due to the Project type, size, and location	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Purple cat's paw / Epioblasama o. obliquata	E	Е	This mussel can be found in medium to large rivers with moderate gradient and riffles. Substrates can be sand to gravel (NatureServe 2020).	No suitable habitat was observed within the Project area.	ODNR – Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, the Project is not likely to impact this species. USFWS - USFWS does not anticipate adverse effects to federally endangered, threatened, proposed, or candidate species due to the Project type, size, and location	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Rayed bean / Villosa fabalis	E	E	Habitat includes gravel or sandy substrate, especially in areas of thick roots of aquatic plants, increase substrate stability (Butler 2002, Parmalee and Bogan 1998). Rayed bean can be associated with shoal or riffle areas, and in shallow, wave-washed areas of glacial lakes. It is generally found in smaller, headwater creeks, but sometimes in larger rivers and open-water bodies. It can occur in shallow riffles	No suitable habitat was observed within the Project area.	ODNR – Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, the Project is not likely to impact this species.	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.

Common/Scientific Name	State Listed Status ^{1,2}	Federally Listed Status ³	Habitat Preference ²	Habitat Observed	Agency Comment (Appendix E)	Potential Impacts and Avoidance Dates
			or in lakes with water depths up to four feet. It has been found in riffles, generally in vegetation, and deeply buried in sand and gravel bound together by roots (Parmalee and Bogan 1998).		usfws - Usfws does not anticipate adverse effects to federally endangered, threatened, proposed, or candidate species due to the Project type, size, and location	
Snuffbox / Epioblasma triquetra	E	E	Snuffbox is commonly found buried in the substrate. It is found in a wide range of particle sized substrates, however, swift shallow riffles with sand and gravel are where it is typically found (Parmalee and Bogan 1998, Watters et al. 2009).	No suitable habitat was observed within the Project area.	ODNR – Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, the Project is not likely to impact this species. USFWS - USFWS does not anticipate adverse effects to federally endangered, threatened, proposed, or candidate species due to the Project type, size, and location	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Rabbitsfoot / Quadrula cylidrica cylindrica	E	Т	The typical habitat for this species is small to medium rivers with moderate to swift currents, and in smaller streams it inhabits bars or gravel and cobble close to the fast current. Found in medium to large rivers in sand and gravel shoals (NatureServe 2020).	No suitable habitat was observed within the Project area.	ODNR – Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, the Project is not likely to impact this species. USFWS - USFWS does not anticipate adverse effects to federally endangered, threatened, proposed, or candidate species due to the Project type, size, and location	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Butterfly / Ellipsaria lineolata	E	N/A	This mussel prefers stable substrate containing rock, gravel and sand in swift currents of large rivers (NatureServe 2020).	No suitable habitat was observed within the Project area.	ODNR – Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, the Project is not likely to impact this species. USFWS – No Comment	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Ebonyshell / Fusconia ebenus	E	N/A	Inhabits large rivers and prefers swift water and stable sand or gravel shoals. Coarse sand and gravel substrates provide the most suitable habitat. It can occur at depths of 10-15 feet with current associated (NatureServe 2020).	No suitable habitat was observed within the Project area.	ODNR – Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, the Project is not likely to impact this species. USFWS – No Comment	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Elephant-ear / Elliptio crassidens	E	N/A	This mussel is found in muddy sand, sand, and rocky substrates in moderate currents. In some areas, it is common in large creeks to rivers with moderate to swift currents primarily on sand and limestone or rock substrates (NatureServe 2020).	No suitable habitat was observed within the Project area.	ODNR – Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, the Project is not likely to impact this species. USFWS – No Comment	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.

Common/Scientific Name	State Listed Status ^{1,2}	Federally Listed Status ³	Habitat Preference ²	Habitat Observed	Agency Comment (Appendix E)	Potential Impacts and Avoidance Dates
Long-solid / Fusconaia maculata maculata	E	N/A	This species is found in medium to large rivers in gravel with a strong current (NatureServe 2020).	No suitable habitat was observed within the Project area.	ODNR – Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, the Project is not likely to impact this species.	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Ohio pigtoe / Pleurobema cordatum	E	N/A	Occurs in medium to large rivers directly above riffles of gravel, cobble, and boulder, but occasionally in muddy or sandy or gravel habitats at great depths (NatureServe 2020).	No suitable habitat was observed within the Project area.	USFWS – No Comment ODNR – Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, the Project is not likely to impact this species.	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Pyramid pigtoe / Pleurobema rubrum	E	N/A	This mussel is a riffle and shoal species that prefers the swift currents of coarse gravel, sand, and mud substrates within medium to large rivers (NatureServe 2020).	No suitable habitat was observed within the Project area.	USFWS – No Comment ODNR – Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, the Project is not likely to impact this species.	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Sharp-ridged pocketbook / Lampsilis ovata	E	N/A	Very generalized in habitat preference, adapting well to both impoundment situations as well as free-flowing, shallow rivers. Usually found in moderate to strong current, it can survive in standing water. The most suitable substrate consists of a mixture of gravel and coarse sand mixed with some silt or mud (NatureServe 2020).	No suitable habitat was observed within the Project area.	USFWS – No Comment ODNR – Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, the Project is not likely to impact this species. USFWS – No Comment	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Washboard / Megalonaias nervosa	E	N/A	Occurs in large rivers, typically in main channel or overbank areas of reservoirs. It is found in areas of slow current with muddy to coarse gravel substrates and water can be up to 50 feet (NatureServe 2020).	No suitable habitat was observed within the Project area.	ODNR – Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, the Project is not likely to impact this species. USFWS – No Comment	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Black sandshell / Ligumia recta	Т	N/A	Typically found in medium-sized to large rivers in locations with strong current and substrates of coarse sand and gravel with cobbles in water depths from several inches to six feet or more (NatureServe 2020).	No suitable habitat was observed within the Project area.	ODNR – Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, the Project is not likely to impact this species. USFWS – No Comment	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Fawnsfoot / Truncilla donaciformis	T	N/A	This species occurs in both large and medium-sized rivers at normal depths varying from less than three feet up to 15 to 18 feet in big rivers such as the Tennessee. A substrate of either sand or mud is suitable and although it is typically found in moderate current, it can adapt to a lake or embayment environment lacking current (NatureServe 2020).	No suitable habitat was observed within the Project area.	ODNR – Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, the Project is not likely to impact this species. USFWS – No Comment	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.

Common/Scientific Name	State Listed Status ^{1,2}	Federally Listed Status ³	Habitat Preference ²	Habitat Observed	Agency Comment (Appendix E)	Potential Impacts and Avoidance Dates
Pondhorn / Uniomerus tetralasmus	T	N/A	This species typically inhabits the quiet or slow-moving, shallow waters of sloughs, borrow pits, ponds, ditches, and meandering streams. It is tolerant of poor water conditions and can be found well buried in a substrate of fine silt and/or mud. It has been known to survive for extended periods of time when a pond or slough has temporarily dried up by burying itself deep into the substrate	No suitable habitat was observed within the Project area.	ODNR – Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, the Project is not likely to impact this species. USFWS – No Comment	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Threehorn wartyback / Obliquaria reflexa	Т	N/A	(NatureServe 2020). Habitat includes large rivers with moderately strong current and stable substrate of gravel, sand, and mud (NatureServe 2020).	No suitable habitat was observed within the Project area.	ODNR – Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size, the Project is not likely to impact this species. USFWS – No Comment	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Scioto Madtom / Noturus trautmani	N/A	E	Only 18 individuals of the Scioto madtom have ever been found. Of those, 14 were found in the fall of 1957 and none have been seen since. No other fish has been searched for more persistently by researchers in Ohio than this species. This fish has never been found outside of Ohio and all 18 individuals were found in a small area of Big Darby Creek. They were found in the tail end of riffles over a sand and gravel substrate. Since all of the individuals were found in the fall it has been speculated that they may spend the remainder of the year further upstream. They likely eat various aquatic invertebrates like most other madtom species (ODNR Division of Wildlife 2020b).	d. Of those, 14 were found in the fall of 1957 and none been seen since. No other fish has been searched for expersistently by researchers in Ohio than this species. If ish has never been found outside of Ohio and all 18 iduals were found in a small area of Big Darby Creek. Were found in the tail end of riffles over a sand and real substrate. Since all of the individuals were found in fall it has been speculated that they may spend the mainder of the year further upstream. They likely eat rious aquatic invertebrates like most other madtom		No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Bigeye shiner / Notropis boops	E	N/A	Flowing pools of moderately clear creeks and small to medium rivers with large permanent pools over bottom of clear sand, gravel, or rock. Often at stream margin in beds of emergent vegetation (NatureServe 2020).	No suitable habitat was observed within the Project area.	ODNR – If no in-water work is proposed in a perennial stream, this Project is not likely to impact this or other aquatic species. USFWS – No Comment	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Goldeye / Hiodon alosoides	E	N/A	This fish is found in large rivers and are rather tolerant of turbid waters from clay silts. They do not, however, tolerate industrial chemical pollutants. They are often found in areas with swift currents, often below dams. This fish is found in the Ohio River and its larger tributaries, particularly the Scioto River (ODNR Division of Wildlife 2020b).	ODNR – If no in-water work is proposed in a perennial stream, this project is not likely to impact this or other aquatic species.		No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Northern brook lamprey / Ichthyomyzon fossor	E	N/A	Adult lampreys are found in clear brooks with fast flowing water and sand or gravel bottoms. Juveniles are found in slow moving water buried in soft substrate in medium to large streams (ODNR Division of Wildlife 2020b).	No suitable habitat was observed within the Project area.	ODNR – If no in-water work is proposed in a perennial stream, this Project is not likely to impact this or other aquatic species. USFWS – No Comment	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.

Common/Scientific Name	State Listed Status ^{1,2}	Federally Listed Status ³	Habitat Preference ²	Habitat Observed	Agency Comment (Appendix E)	Potential Impacts and Avoidance Dates
Northern madtom / Noturus stigmosus	E	N/A	Habitat includes deep, swift riffles of large rivers with substrates of cobble and boulders (ODNR Division of Wildlife 2020b).	No suitable habitat was observed within the Project area.	ODNR – If no in-water work is proposed in a perennial stream, this Project is not likely to impact this or other aquatic species.	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
					USFWS – No Comment	
Shortnose gar / Lepisosteus platostomus	E	N/A	This fish is found in large rivers and associated overflow ponds and backwaters. This fish is found in the Ohio River and some of its larger tributaries, particularly the Scioto River (ODNR Division of Wildlife 2020b).	No suitable habitat was observed within the Project area.	ODNR – If no in-water work is proposed in a perennial stream, this Project is not likely to impact this or other aquatic species.	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
					USFWS – No Comment	
Spotted darter / Etheostoma maculatum	E	N/A	This fish is found in medium sized rivers and streams. They are typically found in areas of swift current at the top or bottom end of a riffle where there are many very large boulders or flab slabs or rock. They spend most of their time hiding under the upstream edge of these large rocks with	No suitable habitat was observed within the Project area.	ODNR – If no in-water work is proposed in a perennial stream, this Project is not likely to impact this or other aquatic species.	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
			their heads sticking out watching for food (ODNR Division of Wildlife 2020b).		USFWS – No Comment	
Shovelnose sturgeon / Scaphirhynchus platorynchus	E	N/A	Habitat includes large rivers with sand and gravel substrates and fast current (ODNR Division of Wildlife 2020b).	No suitable habitat was observed within the Project area.	ODNR – If no in-water work is proposed in a perennial stream, this Project is not likely to impact this or other aquatic species.	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
					USFWS – No Comment	
Blue sucker / Cycleptus elongatus	Т	N/A	Habitat includes the largest rivers and lower portions of major tributaries. Usually occurs in channels and flowing pools with moderate current (NatureServe 2020).	No suitable habitat was observed within the Project area.	ODNR – If no in-water work is proposed in a perennial stream, this Project is not likely to impact this or other aquatic species.	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
					USFWS – No Comment	
Lake chubsucker / Erimyzon sucetta	Т	N/A	This fish is found in natural lakes and very sluggish streams or marshes with dense aquatic vegetation and clear waters primarily found in glacially formed natural lakes often referred to as pothole or kettle lakes. This species is found in the group of lakes between Bellefontaine and Urbana, and three slow moving stream systems that have interconnected wetland complexes which include Killbuck Marsh, the upper Cuyahoga River, and the Black Fork of Symmes Creek including Jackson Lake (ODNR Division of Wildlife 2020b).	or waters or car waters or soften so found in bana, and was observed within the Project area. No suitable habitat was observed within the Project area. ODNR – If no in-water work is proposed in a perennial stream, this Project is not likely to impact this or other aquatic species. USFWS – No Comment		No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Paddlefish / Polyodon spathula	T	N/A	This fish is found in the Ohio River and its larger tributaries, preferring sluggish pools and backwater areas (ODNR Division of Wildlife 2020b).	No suitable habitat was observed within the Project area.	ODNR – If no in-water work is proposed in a perennial stream, this Project is not likely to impact this or other aquatic species.	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
					USFWS – No Comment	

Common/Scientific Name	State Listed Status ^{1,2}	Federally Listed Status ³	Habitat Preference ²	Habitat Observed	Agency Comment (Appendix E)	Potential Impacts and Avoidance Dates
Tippecanoe darter / Etheostoma tippecanoe	Т	N/A	This fish prefers medium to large streams in the Ohio River drainage system and are found in riffles of moderate current with substrate of gravel or cobble sized rocks (ODNR Division of Wildlife 2020b).	No suitable habitat was observed within the Project area.	ODNR – If no in-water work is proposed in a perennial stream, this Project is not likely to impact this or other aquatic species. USFWS – No Comment	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Lark Sparrow / Chondestes grammacus	E	N/A	This species is found in shortgrass, mixed-grass, and tallgrass prairie with shrub components (NatureServe 2020).	No suitable habitat was observed within the Project area.	ODNR – The Project is within the range of the lark sparrow. Therefore, DOW recommends if suitable habitat will be impacted, construction should be avoided in suitable habitat during the species' nesting period of May 1 to June 30. If suitable habitat will not be impacted, the Project is not likely to impact this species. USFWS – No Comment	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Least Bittern / Ixobrychus exilis	Т	N/A	The least bittern hides in dense emergent marshes, particularly where there are thick cattail stands (ODNR Division of Wildlife 2020b). The ODNR response letter adds that habitat should be interspersed with woody vegetation (Appendix E).	No suitable habitat was observed within the Project area.	ODNR – The Project is within the range of the least bittern. Therefore, DOW recommends if suitable habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to July 31. If suitable habitat will not be impacted, the Project is not likely to impact this species. USFWS – No Comment	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Norther harrier / Circus hudsonis	Е	N/A	Northern harriers hunt low over grasslands. It is a common migrant and winter species; nesters are much rarer, although they occasionally breed in large marshes and grasslands (ODNR Division of Wildlife 2020b).	No suitable habitat was observed within the Project area.	ODNR – The Project is within the range of the northern harrier. Therefore, DOW recommends if suitable habitat will be impacted, construction should	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.
Sandhill crane / Grus canadensis	Т	N/A	Sandhill cranes are primarily a wetland dependent species. They will utilize agricultural fields for their wintering grounds. However, they roost in shallow, standing water or moist bottomlands. They require rather large tracts of wet meadows, shallow marsh or bog for breeding and nesting. Sandhill cranes are seasonal residents (ODNR Division of Wildlife 2020b).	Potential suitable wintering habitat (agriculture fields) was observed within the Project area. No suitable nesting habitat was observed within the Project area.	ODNR – The Project is within the range of the sandhill crane. Therefore, DOW recommends is grassland, prairie, or wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 to September 1. If this habitat will not be impacted, the Project is not likely to have an impact on this species.	No suitable nesting habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.

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Common/Scientific Name	State Listed Status ^{1,2}	Federally Listed Status ³	Habitat Preference ²	Habitat Observed	Agency Comment (Appendix E)	Potential Impacts and Avoidance Dates
					USFWS – No Comment	
Upland sandpiper / Bartramia longicauda	E	N/A	This species is found in extensive, open tracts of short grassland habitat. This species nests in dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through Conservation Reserve Program (ODNR DOW 2020b).	No suitable habitat was observed within the Project area.	S .	No suitable habitat was observed within the Project area. Therefore, no impacts to this species are anticipated.

¹Status Key: E = Endangered; T = Threatened

Conclusions and Recommendations January 28, 2021

4.0 CONCLUSIONS AND RECOMMENDATIONS

Stantec conducted a wetland and waterbodies delineation and a preliminary habitat assessment for threatened and endangered species within the Project area on November 18, 2020. During the field surveys, one PEM wetland totaling approximately 0.02 acres and one open water, storm water retention pond, totaling approximately 0.83 acres were delineated. No streams were delineated within the Project area.

Two wetland determination sample points (SP01 and SP04) were evaluated during the field surveys due to the presence of hydrophytic vegetation, hydric soils, and hydrology. The wetland determination sample points were located within constructed upland drainage features for the existing station. Although SP01 and SP04 met wetland determination criteria, per definitions in the 22250 Federal Register/Vol. 85, No. 77 (effective June 22, 2020; USACE 2020) paragraph (b)(10) stormwater control features are excluded from the "waters of the United States." The upland drainage features were constructed wholly in uplands for the purpose of conveying stormwater runoff. Therefore, sample points SP01 and SP04 were not delineated as wetlands.

The information provided by Stantec regarding wetland boundaries is based on an analysis of the wetland and upland conditions present within the Project Area at the time of the field work. The delineations were performed by experienced and qualified professionals using regulatory agency-accepted practices and sound professional judgment.

An ODNR Ohio Natural Heritage Program data request and environmental review request letter was sent to the ODNR Office of Real Estate on November 17, 2020. The ODNR Office of Real Estate response letter dated January 11, 2021 (Appendix E), stated the Natural Heritage Database has no records at or within a one-mile radius of the Project area.

The letter also indicated the Project is within the vicinity of records for the Indiana bat. Because presence of the bat species has been established in the area, the Division of Wildlife (DOW) recommends no summer tree cutting. However, limited summer tree cutting inside this buffer may be acceptable after further consultation with DOW. In addition, the entire state of Ohio is within the range of the northern long-eared bat, little brown bat, and tricolored bat. The DOW recommends tree 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. The DOW also recommends that a desktop habitat assessment, followed by a field assessment if needed, is conducted to determine if there are potential hibernaculum present within the Project area. The desktop assessment, using ODNR interactive tools (ODNR Division of Geological Survey Karst Interactive Map and ODNR Division of Mineral Resources Mines of Ohio Map) revealed no karst features or abandon underground mines within or near the Project area. During field surveys, Stantec did not observe winter hibernacula or suitable foraging and roosting habitat for the Indiana bat, northern long-eared bat, little brown bat, and tricolored bat.

Conclusions and Recommendations January 28, 2021

According to the ODNR response letter, the Project is within the range of the federally listed endangered clubshell, fanshell, northern riffleshell, purple cat's paw, rayed bean and snuffbox, and the federally listed threatened rabbitsfoot, and the state-listed endangered butterfly, ebonyshell, elephant-ear, long-solid, Ohio pigtoe, pyramid pigtoe, sharp-ridged pocketbook, and washboard, and the state-listed threatened black sandshell, fawnsfoot, pondhorn, and threehorn wartyback. However, due to the location, and/or that there is no in-water work proposed in a perennial stream, this Project is not likely to impact these species. During field surveys, Stantec did not identify any streams within the Project area, therefore, impacts to freshwater mussels is not likely.

According to the ODNR response letter, the Project is within the range of the federally listed endangered Scioto madtom, and the state-listed endangered bigeye shiner, goldeye, northern brook lamprey, northern madtom, shortnose gar, spotted darter, and shovelnose sturgeon, and the state-listed threatened blue sucker, lake chubsucker, paddlefish and Tippecanoe darter. The ODNR DOW recommends no in-water work in perennial streams from April 15 to June 30 to reduce impacts to indigenous aquatic species and their habitat. However, if no in-water work proposed in a perennial stream, this Project is not likely to impact these species. During field surveys, Stantec did not identify any streams within the Project area, therefore, impacts to aquatic species is not likely.

According to the ODNR response letter, the Project is within the range of the lark sparrow (Chondestes grammacus; state endangered). This species nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. The DOW recommends if this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to June 30. Field surveys did not identify any potential suitable habitat for this species within the Project area, therefore, no impacts to this species are anticipated.

According to the ODNR response letter, the Project is within the range of the least bittern (Ixobrychus exilis; state threatened). This species prefers dense emergent wetlands with thick stands of cattails, sedges, sawgrass or other semiaquatic vegetation interspersed with woody vegetation and open water. The DOW states, if suitable habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to July 3. Field surveys did not identify any potential suitable habitat for this species within the Project area, therefore, no impacts to this species are anticipated.

According to the ODNR response letter, the Project is within the range of the northern harrier (*Circus hudsonis*; state endangered). This species occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies and the female will build a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. The DOW states, if this type of habitat will not be impacted, this Project is not likely to impact this species. Field surveys did not identify any potential suitable habitat for this species within the Project area, therefore, no impacts to this species are anticipated.

Conclusions and Recommendations January 28, 2021

According to the ODNR response letter the Project is within the range of the sandhill crane (*Grus canadensis*; state threatened). This species is primarily a wetland-dependent species. On their breeding grounds, they require a rather large tract of wet meadow, shallow marsh, or bog for nesting. The DOW states, if grassland, prairie, or wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 to September 1. Field surveys identified potential suitable wintering habitat (agriculture fields) within the Project area. However, no suitable potential nesting habitat was observed within the Project area, therefore, no impacts to this species are anticipated.

According to the ONDR response letter, the Project is within the range of the upland sandpiper (Bartramia longicauda; state endangered). This species utilizes dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). The DOW states if this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 to July 31. Field surveys did not identify any potential suitable habitat for this species within the Project area, therefore, no impacts to this species are anticipated.

A technical assistance request letter was also submitted to the USFWS on November 17, 2020. The USFWS response letter dated November 17, 2020, stated that USFWS does not anticipate adverse effects to federally endangered, threatened, proposed, or candidate species due to the Project type, size, and location (Appendix E).

References January 28, 2021

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Impact Tables January 20, 2021

Appendix A IMPACT TABLES

A.1 WETLAND IMPACT TABLE

ADKINS STATION EXPANSION PROJECT WETLAND TABLE

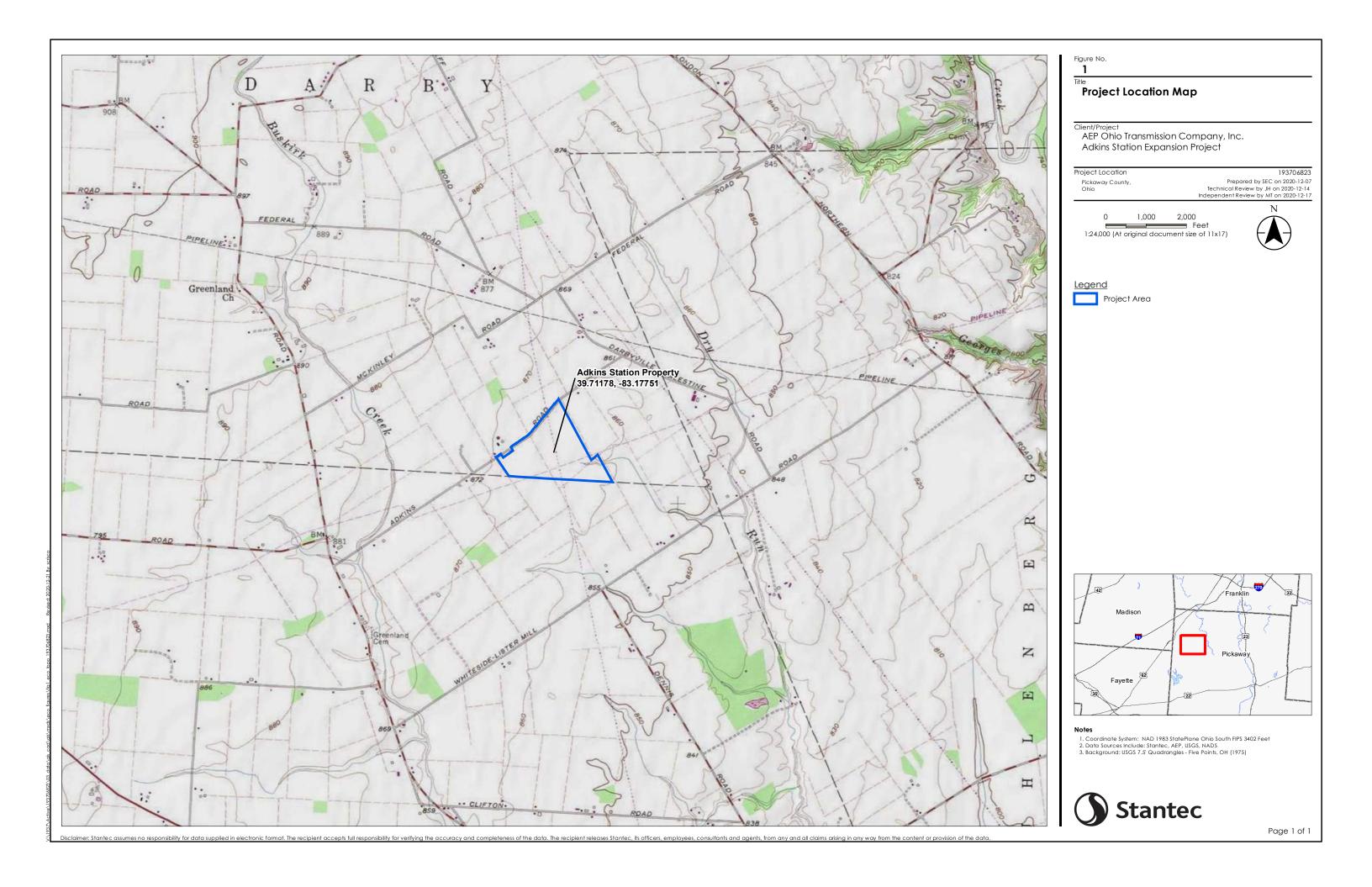
	Loc	ation				C	DRAM	Negrest	Existing	Proposed		Proposed	d Impacts
Wetland ID	Latitude	Longitude	Isolated?	Habitat Type	Delineated Area (acre)	Score	Category	Proposed Structure Number	Structure Number in Wetland	Structure Number in Wetland	Structure Installation Method	Temporary Matting Area (acre)	Permanent Impact Area (acre)
Wetland 1	38.710958	-83.175773	Yes	PEM	0.02	16	1	N/A	N/A	N/A	TBD1	0.00	0
Total:					0.02							0.00	0.000

¹TBD – To be determined. Structure installation method is unknown at this time.

Figures January 20, 2021

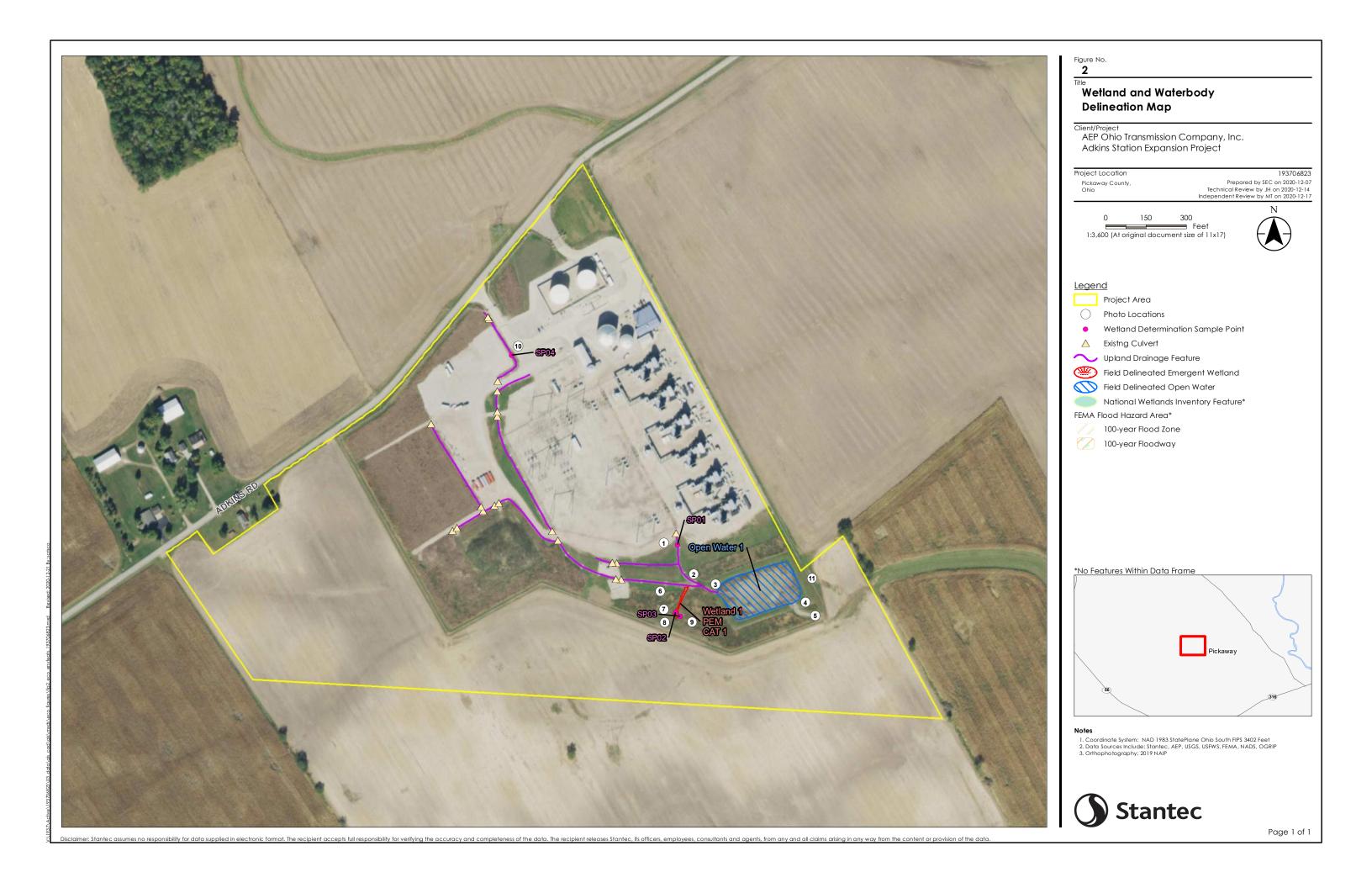
Appendix B FIGURES

B.1 FIGURE 1 – PROJECT LOCATION MAP



Figures January 20, 2021

B.2 FIGURE 2 – WETLAND AND WATERBODY DELINEATION MAP



Figures January 20, 2021

B.3 FIGURE 3 – HABITAT ASSESSMENT MAP



Data Form January 20, 2021

Appendix C DATA FORM

C.1 WETLAND DETERMINATION DATA FORMS

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Adkins Station	City/Co	ounty: Pickawa	y Co. Darby Twp.	Sampling Date	11/18/20	
Applicant/Owner: AEP			State: OH	Sampling Point	:: SP01	
		Section, Township, Range:				
Landform (hillslope, terrace, etc.): Ditch/Depression						
Slope (%):1% Lat:39.711535						
Soil Map Unit Name: Kokomo silty clay loam, 0-2% slo			NWI classific			
Are climatic / hydrologic conditions on the site typical for this time		,				
Are Vegetation N, Soil N, or Hydrology Y signific					No. 1	
			Normal Circumstances" p		NO -	
Are Vegetation N, Soil N, or Hydrology N natural SUMMARY OF FINDINGS – Attach site map show			eded, explain any answer		faaturas atc	
		ping point io	cations, transects	, important i	eatures, etc.	
Hydrophytic Vegetation Present? Yes ✓ No Hydric Soil Present? Yes ✓ No		Is the Sampled	Area			
Hydric Soil Present? Yes ✓ No Wetland Hydrology Present? Yes ✓ No			d? Yes	No_√		
Remarks: Sample point found within constructed up Drains into existing storm water retention	oland drair pond.	nage feature,	with rock check da	ms affecting	hydrology.	
VEGETATION – Use scientific names of plants.						
Abso	solute Dom	nant Indicator	Dominance Test works	sheet:		
<u>Tree Stratum</u> (Plot size:30')		ies? Status	Number of Dominant Sp That Are OBL, FACW, o		1 (A)	
2		I	Total Number of Domina Species Across All Stra		1 (B)	
4		I	Percent of Dominant Sp	acios		
5			That Are OBL, FACW, of		00% (A/B)	
Sapling/Shrub Stratum (Plot size:15')	= Tota	l Cover	Prevalence Index work	kshoot:		
I .			Total % Cover of:		nly by:	
1		I	OBL species			
3		— —	FACW species			
4			FAC species			
5.		I	FACU species			
	= Tota	l Cover	UPL species			
Herb Stratum (Plot size:5')		ODI	Column Totals:	(A)	(B)	
	85 Y	— — I	December of Leden	- 5/4 -		
2		— —— ļ	Prevalence Index Hydrophytic Vegetation			
3		— — I	✓ 1 - Rapid Test for H		otation	
4		— —	✓ 2 - Dominance Tes		etation	
5			3 - Prevalence Inde			
6		— —	4 - Morphological A		ovide supporting	
7		— — I	data in Remarks	or on a separa	te sheet)	
8		— —	Problematic Hydron	ohytic Vegetation	n¹ (Explain)	
10						
Woody Vine Stratum (Plot size: 30')	5 = Tota	l Cover	¹ Indicators of hydric soil be present, unless distu			
1			Hydrophytic			
2			Vegetation	s✓ No_		
		l Cover	rieseiit? Yes	, NO_		
Remarks: (Include photo numbers here or on a separate sheet.	.)					
15% open ground						

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SOIL

(inches)	Matrix		Redo	ox Features	5			
_	Color (moist)	%	Color (moist)	%	_Type ¹ _	_Loc ²	Texture	Remarks
0-7	2.5YR 5/3	98	10YR 5/6	2	C	M	L	
7-20	2.5YR 4/1	60	10YR 5/6	38	С	M	SiC	
			10YR 2/1	2			SiC	
			1011(2)1					
¹ Type: C=Co	ncentration. D=De	pletion. RM	=Reduced Matrix, M	- ——— S=Masked	Sand Gra	ains.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil Ir		p. c						for Problematic Hydric Soils ³ :
Histosol ((A1)		Sandy	Gleyed Ma	trix (S4)			Prairie Redox (A16)
	ipedon (A2)			Redox (S5)			_	urface (S7)
Black His	stic (A3)		Strippe	d Matrix (S	6)		Iron-Ma	inganese Masses (F12)
Hydroger	n Sulfide (A4)		Loamy	Mucky Min	eral (F1)		Very Sh	nallow Dark Surface (TF12)
	Layers (A5)			Gleyed Ma			Other (E	Explain in Remarks)
2 cm Mud	, ,	(4.44)	✓ Deplete	-	-			
	Below Dark Surfa	ce (A11)	_	Dark Surfa ed Dark Su			3Indicate	of hydrophytic vogotation and
	rk Surface (A12) ucky Mineral (S1)			Depression	, ,			of hydrophytic vegetation and hydrology must be present,
_ ′	cky Peat or Peat (S3)		Depression	13 (1 0)			disturbed or problematic.
	ayer (if observed							and an expression and a
Type:	NI/A	,-						,
	hes):						Hydric Soil I	Present? Yes No
Remarks:								
	21/							
Wetland Hyd	rology Indicators						0	
Wetland Hyd	rology Indicators ators (minimum of		ired; check all that ap		(70)			ry Indicators (minimum of two required)
Wetland Hyd Primary Indica Surface V	rology Indicators ators (minimum of Water (A1)		Water-Sta	ined Leave	, ,		Surfa	ace Soil Cracks (B6)
Wetland Hyd Primary Indica Surface V High Wat	rology Indicators ators (minimum of Water (A1) ter Table (A2)		Water-Sta Aquatic Fa	ined Leave auna (B13)	, ,		Surfa Drain	ace Soil Cracks (B6) nage Patterns (B10)
Wetland Hyd Primary Indica ✓ Surface V ✓ High Wat ✓ Saturation	rology Indicators ators (minimum of Nater (A1) ter Table (A2) n (A3)		Water-Sta Aquatic Fa True Aqua	ined Leave auna (B13) atic Plants	(B14)		Surfa Drair Dry-\$	ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2)
Wetland Hyd Primary Indica ✓ Surface V ✓ High Wat ✓ Saturation — Water Ma	rology Indicators ators (minimum of Water (A1) ter Table (A2) n (A3) arks (B1)		Water-Sta Aquatic Fa True Aqua Hydrogen	nined Leave auna (B13) atic Plants (Sulfide Od	(B14) lor (C1)	ing Poets (Surfa Drair Dry-\$ Cray	ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8)
Wetland Hyd Primary Indica ✓ Surface V ✓ High Wat ✓ Saturation — Water Ma — Sediment	rology Indicators ators (minimum of Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2)		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	nined Leave auna (B13) atic Plants Sulfide Od Rhizospher	(B14) lor (C1) res on Livi		Surfa Drain Dry-8 Crayl (C3) Satul	ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9)
Wetland Hyd Primary Indica ✓ Surface V ✓ High Wat ✓ Saturatio — Water Ma — Sediment — Drift Depo	rology Indicators ators (minimum of Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3)		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized F	nined Leave auna (B13) atic Plants (Sulfide Od Rhizospher of Reduce	(B14) lor (C1) res on Livi d Iron (C4	-)	Surfa Drair Dry-\$ Cray! (C3) Satu	ace Soil Cracks (B6) hage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1)
Wetland Hyd Primary Indica ✓ Surface V ✓ High Wat ✓ Saturatio ─ Water Ma ─ Sediment ─ Drift Depu ─ Algal Mat	rology Indicators ators (minimum of Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4)		Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro	nined Leave auna (B13) atic Plants (Sulfide Od Rhizospher of Reduce on Reductio	(B14) lor (C1) res on Livi d Iron (C4 on in Tilled	-)	Surfa Drain Dry-S Crayl (C3) Satur Stunt S) Geor	ace Soil Cracks (B6) hage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)
Wetland Hyd Primary Indica ✓ Surface V ✓ High Wat ✓ Saturatio Water Ma — Sediment — Drift Depo — Algal Mat — Iron Depo	rology Indicators ators (minimum of Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5)	one is requ	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro	nined Leave auna (B13) atic Plants (Sulfide Od Rhizospher of Reduce on Reduction	(B14) lor (C1) res on Livi d Iron (C4 on in Tilled	-)	Surfa Drain Dry-S Crayl (C3) Satur Stunt S) Geor	ace Soil Cracks (B6) hage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1)
Wetland Hyd Primary Indica ✓ Surface V ✓ High Wat ✓ Saturatio — Water Ma — Sediment — Drift Depo — Algal Mat — Iron Depo — Inundatio	rology Indicators ators (minimum of Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aerial	one is requ	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck T) Gauge or	ained Leave auna (B13) atic Plants (Sulfide Od Rhizospher of Reduce on Reduction (Surface (G Well Data	(B14) lor (C1) res on Livi d Iron (C4 on in Tilled C7) (D9)	-)	Surfa Drain Dry-S Crayl (C3) Satur Stunt S) Geor	ace Soil Cracks (B6) hage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)
Wetland Hyd Primary Indica ✓ Surface V ✓ High Wat ✓ Saturation — Water Ma — Sediment — Drift Depot — Algal Mat — Iron Depot — Inundation — Sparsely	rology Indicators ators (minimum of Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aerial Vegetated Concar	one is requ	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Iro Thin Muck T) Gauge or	nined Leave auna (B13) atic Plants (Sulfide Od Rhizospher of Reduce on Reduction	(B14) lor (C1) res on Livi d Iron (C4 on in Tilled C7) (D9)	-)	Surfa Drain Dry-S Crayl (C3) Satur Stunt S) Geor	ace Soil Cracks (B6) hage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)
Wetland Hyd Primary Indica ✓ Surface V ✓ High Wat ✓ Saturation — Water Ma — Sediment — Drift Depo — Algal Mat — Iron Depo — Inundatio — Sparsely Field Observ	rology Indicators ators (minimum of Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Vegetated Concavations:	one is requ	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Ird Thin Muck To Bauge or BB) Other (Ex	ained Leave auna (B13) atic Plants Sulfide Od Rhizospher of Reduce on Reductio & Surface (G Well Data plain in Rel	(B14) lor (C1) es on Livi d Iron (C4 on in Tilled (C7) (D9) marks)	-)	Surfa Drain Dry-S Crayl (C3) Satur Stunt S) Geor	ace Soil Cracks (B6) hage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)
Primary Indicate ✓ Surface V ✓ High Wate ✓ Saturatio — Water Mate — Sediment — Drift Depo — Algal Mate — Iron Depo — Inundatio — Sparsely Field Observ Surface Water	rology Indicators ators (minimum of Nater (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aerial Vegetated Concaverations: ar Present?	one is requi	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Ird Thin Muck F7) Gauge or (B8) Other (Ex)	ained Leave auna (B13) atic Plants Sulfide Od Rhizospher of Reduce on Reductio & Surface (Well Data plain in Reduction	(B14) lor (C1) res on Livi d Iron (C4 on in Tilled (C7) (D9) marks)	-)	Surfa Drain Dry-S Crayl (C3) Satur Stunt S) Geor	ace Soil Cracks (B6) hage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)
Wetland Hyd Primary Indica ✓ Surface V ✓ High Wat ✓ Saturatio Water Ma — Sediment — Drift Depo — Algal Mat — Iron Depo — Inundatio — Sparsely Field Observ Surface Water Water Table F	archogy Indicators ators (minimum of Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Vegetated Concar ations: Present?	I Imagery (B	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Ird Thin Muck Thin Muck To Gauge or (B8) Other (Exp	ained Leave auna (B13) atic Plants (Sulfide Od Rhizospher of Reduce on Reductio c Surface ((Well Data plain in Reduction aches):	(B14) lor (C1) res on Livi d Iron (C4 on in Tilled C7) (D9) marks) 0.5"	d Soils (C6	Surfa Drain Dry-S Crayl (C3) Satur Stunt s) Geor FAC-	ace Soil Cracks (B6) hage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) Neutral Test (D5)
Wetland Hyd Primary Indica ✓ Surface V ✓ High Wat ✓ Saturatio ─ Water Ma ─ Sediment ─ Drift Depo ─ Algal Mat ─ Iron Depo ─ Inundatio ─ Sparsely Field Observ Surface Water	archogy Indicators ators (minimum of Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Vegetated Concavations: or Present? Present?	I Imagery (B	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Ird Thin Muck F7) Gauge or (B8) Other (Ex)	ained Leave auna (B13) atic Plants (Sulfide Od Rhizospher of Reduce on Reductio c Surface ((Well Data plain in Reduction aches):	(B14) lor (C1) res on Livi d Iron (C4 on in Tilled (C7) (D9) marks)	d Soils (C6	Surfa Drain Dry-S Crayl (C3) Satur Stunt s) Geor FAC-	ace Soil Cracks (B6) hage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2)
Wetland Hyd Primary Indica ✓ Surface V ✓ High Wat ✓ Saturatio ─ Water Ma ─ Sediment ─ Drift Depo ─ Algal Mat ─ Iron Depo ─ Inundatio ─ Sparsely Field Observ Surface Water Water Table F Saturation Pro (includes capi	arclogy Indicators ators (minimum of Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Vegetated Concar ations: ar Present? Present? esent?	I Imagery (B	Water-Sta Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Ird Thin Muck Thin Muck To Gauge or (B8) Other (Exp	ained Leave auna (B13) atic Plants (Sulfide Od Rhizospher of Reduce on Reductio c Surface ((Well Data plain in Red aches): aches):	(B14) lor (C1) res on Livi d Iron (C4 on in Tilled C7) (D9) marks) 0.5" 8"	d Soils (C6	Surfa Drain Dry-S Crayi (C3) Satun Stunt S) Geor FAC-	ace Soil Cracks (B6) hage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) Neutral Test (D5)
Primary Indicate Primary Indicate ✓ Surface V ✓ High Wate ✓ Saturation — Water Ma — Sediment — Drift Depo — Algal Mate — Iron Depo — Inundation — Sparsely Field Observ Surface Water Water Table F Saturation Pro (includes capital poscribe Recomment)	arclogy Indicators ators (minimum of Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Vegetated Concar ations: ar Present? Present? esent?	I Imagery (B	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Ird Thin Muck Thin Muck To Gauge or (B8) Other (Exp No Depth (in No Depth (in	ained Leave auna (B13) atic Plants (Sulfide Od Rhizospher of Reduce on Reductio c Surface ((Well Data plain in Red aches): aches):	(B14) lor (C1) res on Livi d Iron (C4 on in Tilled C7) (D9) marks) 0.5" 8"	d Soils (C6	Surfa Drain Dry-S Crayi (C3) Satun Stunt S) Geor FAC-	ace Soil Cracks (B6) hage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) Neutral Test (D5)
Primary Indicator Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio Sparsely Field Observ Surface Water Water Table F Saturation Pro (includes capi	arclogy Indicators ators (minimum of Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Vegetated Concar ations: ar Present? Present? esent?	I Imagery (B	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Ird Thin Muck Thin Muck To Gauge or (B8) Other (Exp No Depth (in No Depth (in	ained Leave auna (B13) atic Plants (Sulfide Od Rhizospher of Reduce on Reductio c Surface ((Well Data plain in Red aches): aches):	(B14) lor (C1) res on Livi d Iron (C4 on in Tilled C7) (D9) marks) 0.5" 8"	d Soils (C6	Surfa Drain Dry-S Crayi (C3) Satun Stunt S) Geor FAC-	ace Soil Cracks (B6) hage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) Neutral Test (D5)
Primary Indicate Primary Indicate ✓ Surface V ✓ High Wate ✓ Saturation — Water Ma — Sediment — Drift Depo — Algal Mate — Iron Depo — Inundation — Sparsely Field Observ Surface Water Water Table F Saturation Pro (includes capital pascribe Recomment)	arclogy Indicators ators (minimum of Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Vegetated Concar ations: ar Present? Present? esent?	I Imagery (B	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Ird Thin Muck Thin Muck To Gauge or (B8) Other (Exp No Depth (in No Depth (in	ained Leave auna (B13) atic Plants (Sulfide Od Rhizospher of Reduce on Reductio c Surface ((Well Data plain in Red aches): aches):	(B14) lor (C1) res on Livi d Iron (C4 on in Tilled C7) (D9) marks) 0.5" 8"	d Soils (C6	Surfa Drain Dry-S Crayi (C3) Satun Stunt S) Geor FAC-	ace Soil Cracks (B6) hage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) Neutral Test (D5)
Wetland Hyd Primary Indica ✓ Surface V ✓ High Wat ✓ Saturation — Water Ma — Sediment — Drift Depo — Algal Mat — Iron Depo — Inundation — Sparsely Field Observ Surface Water Water Table F Saturation Pro (includes capi Describe Rec	arclogy Indicators ators (minimum of Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Vegetated Concar ations: ar Present? Present? esent?	I Imagery (B	Water-Sta Aquatic Fa Aquatic Fa True Aqua Hydrogen Oxidized Fa Presence Recent Ird Thin Muck Thin Muck To Gauge or (B8) Other (Exp No Depth (in No Depth (in	ained Leave auna (B13) atic Plants (Sulfide Od Rhizospher of Reduce on Reductio c Surface ((Well Data plain in Red aches): aches):	(B14) lor (C1) res on Livi d Iron (C4 on in Tilled C7) (D9) marks) 0.5" 8"	d Soils (C6	Surfa Drain Dry-S Crayi (C3) Satun Stunt S) Geor FAC-	ace Soil Cracks (B6) hage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ted or Stressed Plants (D1) morphic Position (D2) Neutral Test (D5)

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Adkins Station	_ City/Co	ounty: <u>Pickav</u>	vay Co. Darby Twp. Sampling Date: 11/18/20			
Applicant/Owner: AEP			State: OH Sampling Point: SP02			
Investigator(s): A. Sjollema , C.Allen	_ Sectio	n, Township, Ra	ange:			
Landform (hillslope, terrace, etc.): Depression		Local relies	f (concave, convex, none): Concave			
Slope (%):0% Lat:39.710863	_ Long:	-83.17583	4 Datum:			
Soil Map Unit Name: Kokomo silty clay loam, 0-2% slopes						
Are climatic / hydrologic conditions on the site typical for this time of y						
Are Vegetation Y, Soil N, or Hydrology N significantl			"Normal Circumstances" present? Yes No			
Are Vegetation N, Soil N, or Hydrology N naturally p			needed, explain any answers in Remarks.)			
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes ✓ No						
Hydric Soil Present? Yes No		Is the Sample				
Wetland Hydrology Present? Yes ✓ No		within a Wetla	and? Yes No			
Remarks: Veg is mowed, drains to man made ditch						
VEGETATION – Use scientific names of plants.						
Absolute		inant Indicator	Dominance Test worksheet:			
<u>Tree Stratum</u> (Plot size: <u>30'</u>) <u>% Cove</u> 1		cies? Status	Number of Dominant Species That Are OBL, FACW, or FAC:1 (A)			
3			Total Number of Dominant Species Across All Strata:1 (B)			
4.			Percent of Dominant Species That Are OBL, FACW, or FAC:100% (A/B)			
15'	= Tota	al Cover				
Sapling/Shrub Stratum (Plot size: 15')			Prevalence Index worksheet:			
1			OBL species x 1 =			
3			FACW species x 2 =			
4.			FAC species x 3 =			
5.			FACU species x 4 =			
	= Tota		UPL species x 5 =			
Herb Stratum (Plot size:5') 1. Typha angustifolia 100	Υ.	oBL	Column Totals: (A) (B)			
2			Prevalence Index = B/A =			
3			Hydrophytic Vegetation Indicators:			
4.			✓ 1 - Rapid Test for Hydrophytic Vegetation			
5.			✓ 2 - Dominance Test is >50%			
6			3 - Prevalence Index is ≤3.0 ¹			
7			4 - Morphological Adaptations¹ (Provide supporting			
8			data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)			
9			- Problematic Hydrophytic Vegetation (Explain)			
10			Indicators of hydric soil and wetland hydrology must			
Woody Vine Stratum (Plot size: 30')	_ = Tota	al Cover	be present, unless disturbed or problematic.			
1			Hydrophytic			
2			Vegetation Present? Yes No			
Remarks: (Include photo numbers here or on a separate sheet.)	_ = 1 ota	al Cover				
Typha has been recently mowed. Other veg	g incl	udes P. ca	apillare, S. pumila, C. frankii			

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SP02

SOIL								Sampling Point: SPUZ		
Profile Des	cription: (Describe	to the dep	th needed to docur	nent the i	ndicator	or confirm	n the absence	of indicators.)		
Depth	Matrix			x Feature		. 2				
(inches)	Color (moist)		Color (moist)		Type ¹	_Loc ²	Texture	Remarks		
0-3	2.5Y 3/2	30	2.5Y 5/4		<u>C</u>	M	SiC			
	2.5Y 4/2	66								
3-16	2.5Y 3/2	65	2.5Y 5/4	5	C_	M	SiC			
	2.5Y 4/2	30								
16-20	2.5Y 3/2	_50_	10YR 3/6	3	C	M	SiC			
	2.5Y 4/2	_47_								
¹ Type: C=C	oncentration, D=Dep	letion, RM:	Reduced Matrix, M	S=Masked	Sand Gra	ains.		² Location: PL=Pore Lining, M=Matrix.		
Hydric Soil	Indicators:						Indicators	for Problematic Hydric Soils ³ :		
Histoso	` '			Gleyed Ma	. ,			Coast Prairie Redox (A16)		
_	pipedon (A2)			Sandy Redox (S5)				Dark Surface (S7)		
_	istic (A3)			Stripped Matrix (S6)				Iron-Manganese Masses (F12)		
_ , ,	en Sulfide (A4)			Loamy Mucky Mineral (F1)				Very Shallow Dark Surface (TF12)		
_	d Layers (A5)			Loamy Gleyed Matrix (F2) Depleted Matrix (F3)				Other (Explain in Remarks)		
_	uck (A10)	- (844)		-	-					
	d Below Dark Surface	e (ATT)	_	Dark Surfa	ice (F6) irface (F7)		31	³ Indicators of hydrophytic vegetation and		
_	ark Surface (A12) Mucky Mineral (S1)			o Dark Su Depressio	, ,			d hydrology must be present,		
	ucky Peat or Peat (S3	3)	Redux I	Depressio	115 (F0)			disturbed or problematic.		
	Layer (if observed):	,						distance of problemate.		
Type:	N/A							,		
Depth (in	ches):						Hydric Soil	Present? Yes No		
Remarks:							•			

HYDROLOGY

Wetland Hydrology Indicators:							
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)						
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Science (C7) Gauge or Well Data (D9)	Stunted or Stressed Plants (D1)						
Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)							
Field Observations:							
Surface Water Present? Yes No Depth (inches):							
Water Table Present? Yes No✓ Depth (inches):	,						
Saturation Present? Yes No _▼ Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:						
Remarks:							

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Adkins Station	(City/Cour	nty: Pickawa	ay Co. Darby Twp. Sampling Date: 11/18/20
Applicant/Owner: AEP				State: OH Sampling Point: SP03
Investigator(s): A. Sjollema , C.Allen		Section,	Township, Rar	nge:
Landform (hillslope, terrace, etc.): Terrace			_ Local relief ((concave, convex, none): None
Slope (%): 1% Lat: 39.710824	ι	Long:	83.175768	Datum:
Soil Map Unit Name: Kokomo silty clay loam, 0-20				NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for thi	is time of yea	ar? Yes	✓ No _	(If no, explain in Remarks.)
Are Vegetation N, Soil N, or Hydrology N	significantly o	disturbed	? Are "I	Normal Circumstances" present? Yes No
Are Vegetation N, Soil N, or Hydrology N	naturally prob	blematic ²	? (If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	sampl	ing point lo	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes N		Ť		· · · · · · · · · · · · · · · · · · ·
Hydric Soil Present? Yes N	10	ls	the Sampled	/
Wetland Hydrology Present? Yes N	10 ✓	wi	thin a Wetlan	nd? Yes No✓
Remarks:				
VEGETATION – Use scientific names of plants				
Tree Stratum (Plot size:30')	Absolute		nt Indicator	Dominance Test worksheet:
1			Status	Number of Dominant Species That Are OBL, FACW, or FAC:1 (A)
2				
3				Total Number of Dominant Species Across All Strata: 2 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)
Sapling/Shrub Stratum (Plot size:15')		= Total C	Cover	Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3.				FACW species x 2 =
4				FAC species65 x 3 =195
5				FACU species35 x 4 =140
5'	:	= Total C	Cover	UPL species x 5 =
Herb Stratum (Plot size:5') 1. Setaria pumila	65	Υ	FAC	Column Totals:100 (A)335 (B)
2 Sorghastrum nutans	25	Y	FACU	Prevalence Index = B/A =3.35
3 Solidago canadensis	10	<u>_</u>	FACU	Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 ¹
7				4 - Morphological Adaptations ¹ (Provide supporting
8				data in Remarks or on a separate sheet)
9				Problematic Hydrophytic Vegetation ¹ (Explain)
10				¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:)	100	= Total C	Cover	be present, unless disturbed or problematic.
1				Hydrophytic
2				Vegetation
		= Total C	Cover	Present? Yes No
Remarks: (Include photo numbers here or on a separate	sheet.)			

US Army Corps of Engineers Midwest Region – Version 2.0

SOIL

		SP03	
Sampling	Point:	01 00	

	cription: (Describe	to the dept				or confirm	the absence of	of indicators.)
Depth (inches)	Matrix Color (moist)	%	Redo Color (moist)	x Features %	Type ¹	Loc²	Texture	Remarks
0-3	10YR 3/2	- /° - - 95	10YR 5/6	5	C	<u></u> M	SiC	Nemarks
3-15	10YR 5/6	- - 50 - 50	7.5YR 5/8	5		M	SiC	
0-10	10YR 3/2		7.511(5/6					
45.00		_ 45						
15-20	10YR 3/1	_ <u>50</u> -	10YR 5/6		<u>C</u>	M	SiC	
	10YR 4/2	_ <u>46</u> .						
¹ Type: C=C	oncentration, D=Dep	oletion, RM=	Reduced Matrix, MS	S=Masked	Sand Gra	ins.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil								for Problematic Hydric Soils³:
Histosol	(A1)		Sandy (Gleyed Ma	trix (S4)		Coast F	Prairie Redox (A16)
. —	pipedon (A2)			Redox (S5)	-			urface (S7)
_	istic (A3)			d Matrix (S	,		_	anganese Masses (F12)
	en Sulfide (A4) d Layers (A5)			Mucky Min Gleyed Ma				nallow Dark Surface (TF12) Explain in Remarks)
	uck (A10)			d Matrix (F			Other (i	Explain in Remarks)
_	d Below Dark Surfac	ce (A11)		Dark Surfa	,			
Thick Da	ark Surface (A12)		Deplete	d Dark Su	rface (F7)		3Indicators	of hydrophytic vegetation and
_ ′	Mucky Mineral (S1)		Redox [Depression	ns (F8)			hydrology must be present,
	ucky Peat or Peat (S						unless	disturbed or problematic.
	Layer (if observed) N/A	:						
Туре:							Hydric Soil I	Present? Yes No _✓
, ,	ches):		_				,	
Remarks:								
HYDROLO	GY							
Wetland Hy	drology Indicators	:						
Primary Indi	cators (minimum of	one is require	ed; check all that ap	ply)			Secondar	ry Indicators (minimum of two required)
Surface	Water (A1)		Water-Sta	ined Leave	es (B9)			ace Soil Cracks (B6)
_ •	ater Table (A2)		Aquatic Fa	, ,				nage Patterns (B10)
Saturati	, ,		True Aqua					Season Water Table (C2)
	farks (B1)		Hydrogen					fish Burrows (C8)
	nt Deposits (B2)		Oxidized F			•	· / —	ration Visible on Aerial Imagery (C9)
	posits (B3)		Presence		•	•	_	ted or Stressed Plants (D1)
	at or Crust (B4)		Recent Iro			Soils (C6		morphic Position (D2)
ı —	posits (B5)	I (D7	Thin Muck	,			FAC-	-Neutral Test (D5)
_	ion Visible on Aerial y Vegetated Concav		, <u> </u>		. ,			
Field Obser	, ,	e Suriace (b	38) Other (Exp	Diain in Re	marks)			
Surface Wat		/es N	lo _✓_ Depth (in	ches).				
Water Table			No Depth (in					
			No Depth (in			_	and Hudralagu	Present? Yes No
Saturation P (includes car	pillary fringe)	res N	o Depth (in	cries)		_ wella	and Hydrology	Present? Yes No
	corded Data (stream	n gauge, moi	nitoring well, aerial _l	photos, pre	evious ins	pections),	if available:	
Remarks:								

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Adkins Station	City/	County:	Pickawa	ay Co. Darby Twp.	Sampling Da	ate: <u>11/18/</u>	20
Applicant/Owner: AEP				State: <u>OH</u>	Sampling Po	oint: <u>SP04</u>	
Investigator(s): A. Sjollema , C.Allen	Sect	tion, To	wnship, Rar	nge:			
Landform (hillslope, terrace, etc.): Depression/Ditch		ι	ocal relief ((concave, convex, none):	Concave		
Slope (%): 1% Lat: 39.713476	Long	g: <u>-83</u>	3.178024		Datum:		
Soil Map Unit Name: Crosby silt loam, southern Ohio till	l plain,	0-2%	slopes	NWI classifica	ation: N/A		
Are climatic / hydrologic conditions on the site typical for this time of	of year?	Yes	✓ No _	(If no, explain in Re	emarks.)		
Are Vegetation N, Soil N, or Hydrology Y significan	ntly distu	urbed?	Are "I	Normal Circumstances" pr	resent? Yes	No	
Are Vegetation N, Soil N, or Hydrology N naturally	problem	natic?	(If ne	eded, explain any answer	s in Remarks	s.)	
SUMMARY OF FINDINGS - Attach site map showi	ing sa	mplin	g point lo	ocations, transects,	importan	nt features	, etc.
Hydrophytic Vegetation Present? Yes ✓ No							
Hydric Soil Present? Yes No		1	e Sampled			/	
Wetland Hydrology Present? Yes <u>√</u> No				d? Yes		<u> </u>	
Remarks: Sample point found within constructed upla	and dra	ainage	e feature,	surrounded by grav	/el.		
VEGETATION – Use scientific names of plants.							
Absolu	ute Do	minant	Indicator	Dominance Test works	choot:		
			Status_	Number of Dominant Sp			
1				That Are OBL, FACW, o	r FAC:	2	(A)
2				Total Number of Domina	ant		
3				Species Across All Strat	a:	2	(B)
4				Percent of Dominant Spe		1000/	
5	= To	otal Cov		That Are OBL, FACW, o	r FAC:	100%	(A/B)
Sapling/Shrub Stratum (Plot size:15')	''	otal Cov	01	Prevalence Index work	sheet:		
1	— —			Total % Cover of:			- I
2				OBL species			
3				FACW species			- 1
4				FAC species			
5	= To			UPL species			
Herb Stratum (Plot size:)				Column Totals:			- 1
		<u>Y</u>	FAC				- \- /
2. Setaria pumila 5		<u>Y</u>	FAC	Prevalence Index			
3				Hydrophytic Vegetation			
4				1 - Rapid Test for H ✓ 2 - Dominance Test		egetation	
5				3 - Prevalence Inde			
6.				4 - Morphological Ad	daptations¹ (Provide supp	orting
8				data in Remarks	or on a sepa	arate sheet)	
9.				Problematic Hydrop	hytic Vegeta	tion¹ (Explair	1)
10				1		landa da mara	
Woody Vine Stratum (Plot size: 30')	= To	otal Cov	er er	¹ Indicators of hydric soil be present, unless distu			ust
, in the second of the second							
1				Hydrophytic Vegetation			
		otal Cov	er	Present? Yes	N	o	
Remarks: (Include photo numbers here or on a separate sheet.)			-	I			$\neg \neg$

Sampling Point: SP04

SOIL

Profile Des	cription: (Describe	o the dept	h needed to docum	nent the i	ndicator	or confirm	n the absence of i	indicators.)
Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ² _	Texture	Remarks
0-14	10YR 3/2	_95	5YR 3/4	3	C	PL	SiC	
			5YR 4/6	2	C	M		
14-20	10YR 3/2	94	5YR 3/4	3	С	PL	SiC	
			10YR 6/6	3				
			10111 0/0					_
	oncentration, D=Depl	etion, RM=I	Reduced Matrix, MS	S=Masked	Sand Gra	ains.		L=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for	Problematic Hydric Soils ³ :
Histoso	, ,			Gleyed Ma			_	irie Redox (A16)
ı —	pipedon (A2)			Redox (S5			Dark Surfa	
ı —	listic (A3)			d Matrix (S	,			anese Masses (F12)
	en Sulfide (A4) d Layers (A5)			Mucky Mir Gleyed Ma				low Dark Surface (TF12) plain in Remarks)
	uck (A10)			d Matrix (0.1101 (EX	olain in Normanco)
ı —	ed Below Dark Surface	(A11)	✓ Redox [,	,			
Thick D	ark Surface (A12)				ırface (F7)		³ Indicators of	hydrophytic vegetation and
. —	Mucky Mineral (S1)		Redox [Depressio	ns (F8)			drology must be present,
	ucky Peat or Peat (S3	5)					unless dis	turbed or problematic.
	Layer (if observed): N/A							
Type:							Hydric Soil Pre	esent? Yes _ ✓ No
Depth (ir	iches):						11,74110 0011111	
Remarks:								
parts of	ditch does not	have s	oils					
ļ ·								
HYDROLO								
1	drology Indicators:							
Primary Indi	cators (minimum of o	ne is require	ed; check all that ap	ply)			Secondary I	ndicators (minimum of two required)
_	Water (A1)		Water-Stai		, ,			Soil Cracks (B6)
ı —	ater Table (A2)		Aquatic Fa					ge Patterns (B10)
ı —	ion (A3)		True Aqua		. ,		— '	ason Water Table (C2)
ı —	Marks (B1)		Hydrogen					n Burrows (C8)
	ent Deposits (B2)		✓ Oxidized F					ion Visible on Aerial Imagery (C9)
I —	posits (B3)		Presence		,	,		or Stressed Plants (D1)
ı —	at or Crust (B4)		Recent Iro			Solls (Co	. —	rphic Position (D2)
	posits (B5)		Thin Muck				FAC-NE	eutral Test (D5)
ı —	ion Visible on Aerial II ly Vegetated Concave				. ,			
Field Obse	, , , , , , , , , , , , , , , , , , , 	Surface (D	8) Other (Exp	nam m Ke	marks)			
		N	Jo ✓ Donth (in	-h\·				
			lo Depth (inc					
Water Table			lo Depth (inc					
Saturation F	Present? Your Your Present?	es N	lo Depth (ind	ches):		_ Wetl	and Hydrology Pr	resent? Yes No
	ecorded Data (stream	gauge, mor	nitoring well, aerial p	photos, pr	evious ins	pections),	if available:	
	•							
Remarks:								
I								

Data Form January 20, 2021

C.2 ORAM DATA FORMS

	Ohio Rapid Assessment Metho 10 Page Form for Wetland Cat	
Vancian 5 0	Background Information	
Version 5.0	Scoring Boundary Worksheet	
	Narrative Rating	Ohio EPA, Division of Surface Water
	Field Form Quantitative Rating	Final: February 1, 2001
	ORAM Summary Worksheet	
	Wetland Categorization Worksheet	
	•	

Instructions

The investigator is *STRONGLY URGED* to read the Manual for Using the Ohio Rapid Assessment Method for Wetlands for further elaboration and discussion of the questions below prior to using the rating forms.

The Narrative Rating is designed to categorize a wetland or to provide alerts to the Rater based on the presence or possible presence of threatened or endangered species. The presence or proximity of such species is often an indicator of the quality and lack of disturbance of the wetland being evaluated. In addition, it is designed to categorize certain wetlands as very low quality (Category 1) or very high quality (Category 3) regardless of the wetland's score on the Quantitative Rating. In addition, the Narrative Rating also alerts the investigator that a particular wetland *may* be a Category 3 wetland, again, regardless of the wetland's score on the Quantitative Rating.

It is *VERY IMPORTANT* to properly and thoroughly answer each of the questions in the ORAM in order to properly categorize a wetland. To *properly* answer all the questions, the boundaries of the wetland being assessed must be correctly identified. Refer to Scoring Boundary worksheet and the User's Manual for a discussion of how to determine the "scoring boundaries." In some instances, the scoring boundaries may differ from the "jurisdictional boundaries."

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories. The most recent version of this document is posted on Ohio EPA's Division of Surface Water web page at: http://www.epa.ohio.gov/dsw/wetlands/WetlandEcologySection.aspx

Background Information

Name: Angela Sjollema

Date:

11/18/20

Affiliation:

Stantec

Address:

1500 Lake Shore Drive Suite 100, Columbus, OH 43204

Phone Number:

614-486-4383

e-mail address:

angela.sjollema@stantec.com

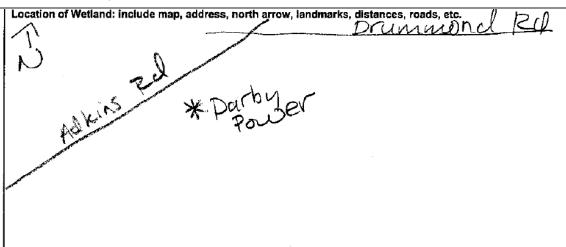
Name of Wetland: Wetland 1

Vegetation Communit(ies):

PEM

HGM Class(es):

Depression

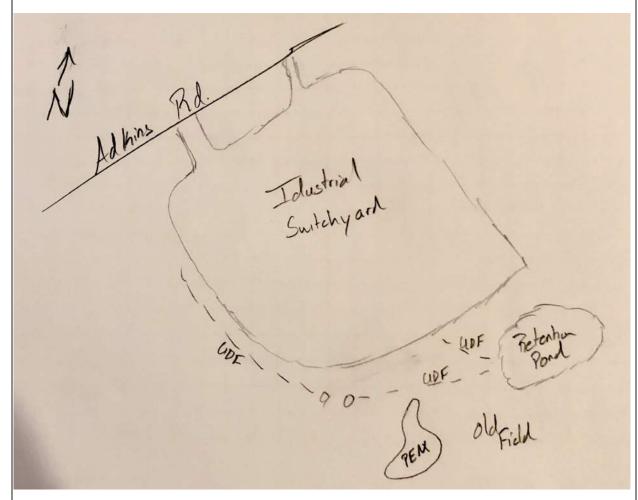


Lat/Long or UTM Coordinate 39.710958, -83.175773	
USGS Quad Name Five Points	
County Pickaway	
Township Darby	
Section and Subsection N/A	
Hydrologic Unit Code 050600020301	
Site Visit 11/18/20	
National Wetland Inventory Map Yes	
Ohio Wetland Inventory Map	
Soil Survey NRCS Pickaway County	
Delineation report/map Figure 4, Ecological Report	

Name of Wetland: Wetland 1

Wetland Size (acres, hectares): 0.02 ac.

Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.



Comments, Narrative Discussion, Justification of Category Changes:

Final score: 16

Category: 1

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. Areas with a high degree of hydrologic interaction should be scored as a single wetland. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

Wetland 1 Angela Sjollema 11/18/20

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	X	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	X	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	X	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	X	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	X	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	X	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

Wetland 1 Angela Sjollema 11/18/20

#	Question	Circle one	
1	Critical Habitat. Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	NO So to Question 2
2	Threatened or Endangered Species. Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3	NO So to Question 3
3	Documented High Quality Wetland. Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland Go to Question 4	NO So to Question 4
4	Significant Breeding or Concentration Area. Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	NO So to Question 5
5	Category 1 Wetlands. Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by Phalaris arundinacea, Lythrum salicaria, or Phragmites australis, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	NO Go to Question 6
6	Bogs. Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	NO So to Question 7
7	Fens. Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	NO So to Question 8a
8a	"Old Growth Forest." Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	NO So to Question 8b

Wetland 1	Angela Sjollema		11/18/20
8b	Mature forested wetlands. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	Wetland should be evaluated for possible Category 3 status.	NO Go to Question 9a
9a	Lake Erie coastal and tributary wetlands. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this	Go to Question 9a YES	NO X
9b	elevation, or along a tributary to Lake Erie that is accessible to fish? Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status	NO Go to Question 10 Go to Question 9c
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	Go to Question 10 YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES Wetland is a Category 3 wetland Go to Question 10	NO Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10	NO Go to Question 10
10	Lake Plain Sand Prairies (Oak Openings) Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES Wetland is a Category 3 wetland. Go to Question 11	NO Solution NO Go to Question 11
11	Relict Wet Prairies. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	NO Complete Quantitative Rating

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	Zygadenus elegans var. glaucus	Calla palustris	Carex cryptolepis	Calamagrostis canadensis
Myriophyllum spicatum	Cacalia plantaginea	Carex atlantica var. capillacea	Carex lasiocarpa	Calamogrostis stricta
Najas minor	Carex flava	Carex echinata	Carex stricta	Carex atherodes
Phalaris arundinacea	Carex sterilis	Carex oligosperma	Cladium mariscoides	Carex buxbaumii
Phragmites australis	Carex stricta	Carex trisperma	Calamagrostis stricta	Carex pellita
Potamogeton crispus	Deschampsia caespitosa	Chamaedaphne calyculata	Calamagrostis canadensis	Carex sartwellii
Ranunculus ficaria	Eleocharis rostellata	Decodon verticillatus	Quercus palustris	Gentiana andrewsii
Rhamnus frangula	Eriophorum viridicarinatum	Eriophorum virginicum		Helianthus grosseserratus
Typha angustifolia	Gentianopsis spp.	Larix laricina		Liatris spicata
Typha xglauca	Lobelia kalmii	Nemopanthus mucronatus		Lysimachia quadriflora
	Parnassia glauca	Schechzeria palustris		Lythrum alatum
	Potentilla fruticosa	Sphagnum spp.		Pycnanthemum virginianum
	Rhamnus alnifolia	Vaccinium macrocarpon		Silphium terebinthinaceum
	Rhynchospora capillacea	Vaccinium corymbosum		Sorghastrum nutans
	Salix candida	Vaccinium oxycoccos		Spartina pectinata
	Salix myricoides	Woodwardia virginica		Solidago riddellii
	Salix serissima	Xyris difformis		C C
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: W	/etland [·]	Rater(s): Angela Sjollema Date: 11/18/20
0	0	Metric 1. Wetland Area (size).
max 6 pts.	subtotal	Select one size class and assign score. >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <20.2ha) (5 pts) 10 to <25 acres (4 to <10.1ha) (4 pts) 3 to <10 acres (1.2 to <4ha) (3 pts) 0.3 to <3 acres (0.12 to <1.2ha) (2pts) 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt) ✓ <0.1 acres (0.04ha) (0 pts)
4	4	Metric 2. Upland buffers and surrounding land use.
max 14 pts.	subtotal	2a. Calculate average buffer width. Select only one and assign score. Do not double check. WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7) MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4) NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1) VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0) 2b. Intensity of surrounding land use. Select one or double check and average. VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7) ✓ LOW. Old field (>10 years), shrub land, young second growth forest. (5) MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3) ✓ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)
11	15	Metric 3. Hydrology.
max 30 pts.	subtotal	3a. Sources of Water. Score all that apply. High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surface water (3) Perennial surface water (lake or stream) (5) 3c. Maximum water depth. Select only one and assign score. >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (2)
1		✓ Recovered (7) ✓ Recovering (3) Recent or no recovery (1) ditch ✓ tile dike road bed/RR track dredging stormwater input other
5	20	Metric 4. Habitat Alteration and Development.
max 20 pts.	subtotal	4a. Substrate disturbance. Score one or double check and average. None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1)
		4b. Habitat development. Select only one and assign score. Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2)
		4c. Habitat alteration. Score one or double check and average. None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1) Check all disturbances observed which is the property of th
SI	20 ubtotal this pa	selective cutting dredging woody debris removal farming nutrient enrichment
last revised	•	

Site: Wetland 1		Rater(s): Angela Sjollema		Date: 11/18/20	
			3 - 3 (-)	,	
SI	20 ibtotal first pa	ge.			
0	20	Metric 5. Special We	tlands.		
max 10 pts.	subtotal	Check all that apply and score as indicated Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wetlake Erie coastal/tributary wetlake Plain Sand Prairies (Oat Relict Wet Prairies (10) Known occurrence state/fede Significant migratory songbird Category 1 Wetland. See Que	etland-unrestricted hydrolo etland-restricted hydrolo k Openings) (10) eral threatened or endal d/water fowl habitat or u	ngered species (10) usage (10)	
-4	16	Metric 6. Plant comm	nunities, inte	erspersion, microto	pography.
max 20 pts.	subtotal	6a. Wetland Vegetation Communities.	Vegetation 0	Community Cover Scale	
		Score all present using 0 to 3 scale. Aquatic bed Emergent	<u> </u>	Absent or comprises <0.1ha (0.24) Present and either comprises small vegetation and is of moderate q	all part of wetland's
		Shrub		significant part but is of low qua	
		Forest Mudflats	2	Present and either comprises sign vegetation and is of moderate q	
		Open water		part and is of high quality	aamy or compilers a circum
		Other	3	Present and comprises significant	
		6b. horizontal (plan view) Interspersion		vegetation and is of high quality	
		Select only one. High (5)	Narrative De	escription of Vegetation Quality	
		Moderately high(4)	low	Low spp diversity and/or predomin	nance of nonnative or
		Moderate (3)		disturbance tolerant native spec	
		Moderately low (2) ✓ Low (1)	mod	Native spp are dominant compone although nonnative and/or distu	_
		None (0)		can also be present, and specie	
		6c. Coverage of invasive plants. Refer		moderately high, but generally w	
		to Table 1 ORAM long form for list. Add		threatened or endangered spp	
		or deduct points for coverage	high	A predominance of native species	
		✓ Extensive >75% cover (-5) Moderate 25-75% cover (-3)		and/or disturbance tolerant native absent, and high spp diversity a	
		Sparse 5-25% cover (-1)		the presence of rare, threatened	
		Nearly absent <5% cover (0)		•	
		Absent (1)		Open Water Class Quality	
		6d. Microtopography. Score all present using 0 to 3 scale.	0	Absent <0.1ha (0.247 acres) Low 0.1 to <1ha (0.247 to 2.47 acres)	erec)
		0 Vegetated hummucks/tussuc		Moderate 1 to <4ha (2.47 to 9.88	
		0 Coarse woody debris >15cm		High 4ha (9.88 acres) or more	
		0 Standing dead >25cm (10in)			
		0 Amphibian breeding pools		aphy Cover Scale	
			0	Absent Present very small amounts or if r	more common
			ı	of marginal quality	noro common
			2	Present in moderate amounts, bu quality or in small amounts of hi	ghest quality
1	ı		3	Present in moderate or greater ar	nounts
16				and of highest quality	

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

Wetland 1 Angela Sjollema 11/18/20

		circle answer or insert	Result
Narrative Rating	Question 1 Critical Habitat	score NO	If yes, Category 3.
	Question 2. Threatened or Endangered	NO	If yes, Category 3.
	Species Question 3. High Quality Natural Wetland	NO	If yes, Category 3.
	Question 4. Significant bird habitat	NO	If yes, Category 3.
	Question 5. Category 1 Wetlands	NO	If yes, Category 1.
	Question 6. Bogs	NO	If yes, Category 3.
	Question 7. Fens	NO	If yes, Category 3.
	Question 8a. Old Growth Forest	NO	If yes, Category 3.
	Question 8b. Mature Forested Wetland	NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	NO	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	NO	If yes, Category 3
	Question 11. Relict Wet Prairies	NO	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size	0	
Ü	Metric 2. Buffers and surrounding land use	4	
	Metric 3. Hydrology	11	
	Metric 4. Habitat	5	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-4	
	TOTAL SCORE	16	Category based on score breakpoints Category 1

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Angela Sjollema

Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	NO X	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold (<i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been overcategorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES Wetland should be evaluated for possible Category 3 status	NO X	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	NO X	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold (including any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO X	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit moderate OR superior hydrologic OR habitat, OR recreational functions AND the wetland was not categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Final Category				
Choose one	Category 1	Category 2	Category 3	
Category 1				

End of Ohio Rapid Assessment Method for Wetlands.

Representative Photographs January 20, 2021

Appendix D REPRESENTATIVE PHOTOGRAPHS

D.1 WETLAND AND WATERBODY PHOTOGRAPHS





Photo Location 1. View of wetland determination sample point SP01. Photograph taken facing east.



Photo Location 1. View of wetland determination sample point SP01 soil profile.





Photo Location 2. View of upland drainage feature. Photograph taken facing southeast.



Photo Location 3. View of Open Water 1, storm water retention pond. Photograph taken facing southeast.





Photo Location 4. View of Open Water 1, storm water retention pond. Photograph taken facing northwest.



Photo Location 5. View of rock channel outlet. Photograph taken facing northwest.





Photo Location 6. View of upland drainage feature. Photograph taken facing northwest.



Photo Location 6. View of rock check dam.





Photo Location 7. View wetland determination sample point SP02 (Wetland 1). Photograph taken facing northwest.



Photo Location 7. View of wetland determination sample point SP02 soil profile.





Photo Location 8. View of wetland determination sample point SP02 (Wetland 1). Photograph taken facing north.



Photo Location 8. View of wetland determination sample point SP02 (Wetland 1). Photograph taken facing east.





Photo Location 8. View of wetland determination sample point SP02 (Wetland 1). Photograph taken facing south.



Photo Location 8. View of wetland determination sample point SP02 (Wetland 1). Photograph taken facing west.





Photo Location 9. View of wetland determination sample point SP03 (upland). Photograph taken facing northwest.



Photo Location 9. View of wetland determination sample point SP03 soil profile.





Photo Location 10. View of wetland determination sample point SP04 (upland). Photograph taken facing sotuhwest.



Photo Location 10. View of wetland determination sample point SP04 soil profile.

ADKINS STATION EXPANSION PROJECT, PICKAWAY COUNTY, OHIO

Representative Photographs January 20, 2021

D.2 HABITAT PHOTOGRAPHS





Photo Location 1. View of old field habitat. Photograph taken facing southwest.



Photo Location 2. View of Industrial habitat. Photograph taken facing north.





Photo Location 3. View of maintained lawn. Photograph taken facing northeast.



Photo Location 4. View of old field, left, and maintained lawn, center. Photograph taken facing southeast.





Photo Location 5. View of industrial habitat. Photograph taken facing south.



Photo Location 6. View of agricultural field. Photograph taken facing southeast.





Photo Location 7. View of agricultural field. Photograph taken facing east.

ADKINS STATION EXPANSION PROJECT, PICKAWAY COUNTY, OHIO

Agency Correspondence January 20, 2021

Appendix E AGENCY CORRESPONDENCE



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

January 11, 2021

Kim Carter Stantec 1500 Lake Shore Drive Suite 100 Columbus OH 43204-3800

Re: 20-1079; Adkins Station Expansion Project

Project: The proposed project involves expansion of the existing Adkins Substation.

Location: The proposed project is located in Darby Township, Pickaway 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 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 project is within the vicinity of records for the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species. Because presence of state endangered bat species has been established in the area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. However, limited summer tree cutting inside this buffer may be acceptable after further consultation with DOW (contact Sarah Stankavich, sarah.stankavich@dnr.state.oh.us).

In addition, 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 bat species 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. The DOW recommends tree 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.

The DOW also recommends that a desktop habitat assessment, followed by a field assessment if needed, is conducted to determine if there are potential hibernaculum(a) present within the project area. Information about how to conduct habitat assessments can be found in the current USFWS "Range-wide Indiana Bat Survey Guidelines." If a habitat assessment finds that potential hibernacula are present within 0.25 miles of the project area, please send this information to Sarah Stankavich, sarah.stankavich@dnr.state.oh.us 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 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

clubshell (*Pleurobema clava*)
fanshell (*Cyprogenia stegaria*)
northern riffleshell (*Epioblasma torulosa rangiana*)
purple cat's paw (*Epioblasma o. obliquata*)
rayed bean (*Villosa fabalis*)
snuffbox (*Epioblasma triquetra*)

Federally Threatened

rabbitsfoot (Quadrula cylindrica cylindrica)

State Endangered

butterfly (Ellipsaria lineolata)
ebonyshell (Fusconaia ebenus)
elephant-ear (Elliptio crassidens)
long-solid (Fusconaia maculata maculata)

Ohio pigtoe (*Pleurobema cordatum*) pyramid pigtoe (*Pleurobema rubrum*) sharp-ridged pocketbook (*Lampsilis ovata*) washboard (*Megalonaias nervosa*)

State Threatened

black sandshell (*Ligumia recta*) fawnsfoot (*Truncilla donaciformis*) pondhorn (*Uniomerus tetralasmus*) threehorn wartyback (*Obliquaria reflexa*)

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

The project is within the range of the following listed fish species:

Federally Endangered

Scioto madtom (Noturus trautmani)

State Endangered

bigeye shiner (Notropis boops)
goldeye (Hiodon alosoides)
northern brook lamprey (Ichthyomyzon fossor)
northern madtom (Noturus stigmosus)
shortnose gar (Lepisosteus platostomus)
spotted darter (Etheostoma maculatum)
shovelnose sturgeon (Scaphirhynchus platorynchus)

State Threatened

blue sucker (Cycleptus elongatus)
lake chubsucker (Erimyzon sucetta)
paddlefish (Polyodon spathula)
Tippecanoe darter (Etheostoma tippecanoe)

The DOW recommends no in-water work in perennial streams from April 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.

The project is within the range of the lark sparrow (*Chondestes grammacus*), a state endangered bird. This sparrow nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. In the Oak Openings area west of Toledo, lark sparrows occupy open grass and shrubby fields along sandy beach ridges. These summer residents normally migrate out of Ohio shortly after their young fledge or leave the nest. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to June 30. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the least bittern (*Ixobrychus exilis*), a state threatened bird. This secretive marsh species prefers dense emergent wetlands with thick stands of cattails, sedges, sawgrass or other semiaquatic vegetation interspersed with woody vegetation and open water. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the northern harrier (*Circus hudsonis*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 15 to August 1. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the sandhill crane (*Grus canadensis*), a state threatened species. Sandhill cranes are primarily a wetland-dependent species. On their wintering grounds, they will utilize agricultural fields; however, they roost in shallow, standing water or moist bottomlands. On breeding grounds, they require a rather large tract of wet meadow, shallow marsh, or bog for nesting. If grassland, prairie, or wetland habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 to September 1. If this habitat will not be impacted, this project is not likely to have an impact on this species.

The project is within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird. Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 to July 31. If this type of habitat will not be impacted, 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 U.S. 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 Sarah Tebbe, Environmental Specialist, at Sarah.Tebbe@dnr.ohio.gov if you have questions about these comments or need additional information.

Mike Pettegrew Environmental Services Administrator (Acting)

United States Department of the Interior



FISH AND WILDLIFE SERVICE

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

November 17, 2020

Ms. Carter Stantec Consulting Services Inc. 1500 Lake Shore Drive, Suite 100 Columbus, OH 43204-3800

Re: Adkins Station Expansion Project, Pickaway County, Ohio

Dear Ms. Carter,

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 \\Field Office Supervisor

TAILS# 03E15000-2021-TA-0326

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

4/28/2023 2:15:46 PM

in

Case No(s). 23-0042-EL-BNR

Summary: Notice Construction Notice electronically filed by Hector Garcia-Santana on behalf of Ohio Power Company.