

Staff Report of Investigation

Republic Wind Transmission Facility
Republic Wind, LLC

Case No. 19-1066-EL-BTX

August 13, 2020



Power Siting
Board

Mike DeWine, Governor | Sam Randazzo, Chairman

**In the Matter of the Application of Republic Wind, LLC)
for a Certificate of Environmental Compatibility and)
Public Need to Construct a Transmission Line in Seneca)
County, Ohio)**

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Submitted to the
OHIO POWER SITING BOARD

BEFORE THE POWER SITING BOARD OF THE STATE OF OHIO

**In the Matter of the Application of Republic Wind, LLC)
for a Certificate of Environmental Compatibility and)
Public Need to Construct a Transmission Line in Seneca)
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Chairman, Public Utilities Commission
Director, Department of Agriculture
Director, Development Services Agency
Director, Environmental Protection Agency
Director, Department of Health

Director, Department of Natural Resources
Public Member
Ohio House of Representatives
Ohio Senate

To the Honorable Power Siting Board:

In accordance with the Ohio Revised Code (R.C.) 4906.07(C) and rules of the Ohio Power Siting Board (Board), the staff of the Public Utilities Commission of Ohio (Staff) has completed its investigation in the above matter and submits its findings and recommendations in this staff report (Staff Report) for consideration by the Board.

The findings and recommendations contained in this report are the result of Staff coordination with the following agencies that are members of the Board: Ohio Environmental Protection Agency (Ohio EPA), the Ohio Department of Health (ODH), the Ohio Development Services Agency (ODSA), the Ohio Department of Natural Resources (ODNR), and the Ohio Department of Agriculture (ODA). In addition, Staff coordinated with the Ohio Department of Transportation (ODOT), the Ohio Historic Preservation Office (OHPO), and the U.S. Fish and Wildlife Service (USFWS).

In accordance with R.C. 4906.07(C) and 4906.12, copies of this Staff Report have been filed with the Docketing Division of the Public Utilities Commission of Ohio (PUCO or Commission) and served upon the applicant or its authorized representative, the parties of record, and pursuant to Ohio Administrative Code (Ohio Adm.Code) 4906-3-06, the main public libraries of the political subdivisions in the project area.

The Staff Report presents the results of Staff's investigation conducted in accordance with R.C. Chapter 4906 and the rules of the Board, and does not purport to reflect the views of the Board nor should any party to the instant proceeding consider the Board in any manner constrained by the findings and recommendations set forth herein.

Respectfully submitted,



Theresa White
Executive Director
Ohio Power Siting Board

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I. POWERS AND DUTIES

NATURE OF INVESTIGATION

The Board has promulgated rules and regulations, found in Ohio Adm.Code 4906:1-01 et seq., which establish application procedures for major utility facilities and economically significant wind farms.

Application Procedures

Any person that wishes to construct a major utility facility or economically significant wind farm in this state must first submit to the Board an application for a certificate of environmental compatibility and public need.¹ The application must include a description of the facility and its location, a summary of environmental studies, a statement explaining the need for the facility and how it fits into the applicant's energy forecasts (for transmission projects), and any other information the applicant or Board may consider relevant.²

Within 60 days of receiving an application, the Chairman must determine whether the application is sufficiently complete to begin an investigation.³ If an application is considered complete, the Board or an administrative law judge (ALJ) will cause a public hearing to be held 60 to 90 days after the official filing date of the completed application.⁴ At the public hearing, any person may provide written or oral testimony and may be examined by the parties.⁵

Staff Investigation and Report

The Chairman will also cause each application to be investigated and a report published by the Board's Staff not less than 15 days prior to the public hearing.⁶ The report sets forth the nature of the investigation and contains the findings and conditions recommended by Staff.⁷ The Board's Staff, which consists of career professionals drawn from the staff of the PUCO and other member agencies of the Board, coordinates its investigation among the agencies represented on the Board and with other interested agencies such as ODOT, OHPO, and USFWS.

The technical investigations and evaluations are conducted pursuant to Ohio Adm.Code 4906-1-01 et seq. The recommended findings resulting from Staff's investigation are described in the Staff Report pursuant to R.C. 4906.07(C). The report does not represent the views or opinions of the Board and is only one piece of evidence that the Board may consider when making its decision. Once published, the report becomes a part of the record, is served upon all parties to the proceeding and is made available to any person upon request.⁸ A record of the public hearings and all evidence, including the Staff Report, may be examined by the public at any time.⁹

1. R.C. 4906.04 and 4906.20.

2. R.C. 4906.06(A) and 4906.20(B)(1).

3. Ohio Adm.Code 4906-3-06(A).

4. R.C. 4906.07(A) and Ohio Adm.Code 4906-3-08.

5. R.C. 4906.08(C).

6. R.C. 4906.07.

7. Ohio Adm.Code 4906-3-06(C).

8. R.C. 4906.07(C) and 4906.10.

9. R.C. 4906.09 and 4906.12.

Board Decision

The Board may approve, modify and approve, or deny an application for a certificate of environmental compatibility and public need.¹⁰ If the Board approves an application, it will issue a certificate. If the Board modifies and approves an application, it will issue a certificate subject to conditions. The certificate is also conditioned upon the facility being in compliance with applicable standards and rules adopted under the Ohio Revised Code.¹¹

Upon rendering its decision, the Board must issue an opinion stating its reasons for approving, modifying and approving, or denying an application for a certificate of environmental compatibility and public need.¹² A copy of the Board's decision and its opinion is memorialized upon the record and must be served upon all parties to the proceeding.¹³ Any party to the proceeding that believes its issues were not adequately addressed by the Board may submit within 30 days an application for rehearing.¹⁴ An entry on rehearing will be issued by the Board within 30 days and may be appealed within 60 days to the Supreme Court of Ohio.¹⁵

OHIO POWER SITING BOARD

The authority of the Board is prescribed by R.C. Chapter 4906. R.C. 4906.03 authorizes the Board to issue certificates of environmental compatibility and public need for the construction, operation, and maintenance of major utility facilities defined in R.C. 4906.01. Included within this definition of major utility facilities are: electric generating plants and associated facilities designed for, or capable of, operation at 50 megawatts (MW) or more; electric transmission lines and associated facilities of a design capacity of 100 kilovolts (kV) or more; and gas pipelines greater than 500 feet in length and more than nine inches in outside diameter, and associated facilities, designed for transporting gas at a maximum allowable operating pressure in excess of 125 pounds per square inch. In addition, pursuant to R.C. 4906.20, the Board authority applies to economically significant wind farms, defined in R.C. 4906.13(A) as wind turbines and associated facilities with a single interconnection to the electrical grid and designed for, or capable of, operation at an aggregate capacity of 5 MW or greater but less than 50 MW.

Membership of the Board is specified in R.C. 4906.02(A). The voting members include: the Chairman of the PUCO who serves as Chairman of the Board; the directors of the Ohio EPA, ODH, ODSA, ODA, and ODNR; and a member of the public, specified as an engineer, appointed by the Governor from a list of three nominees provided by the Ohio Consumers' Counsel. Ex-officio Board members include four legislative members (one legislative member being appointed by the Speaker of the Ohio House of Representatives; one legislative member being appointed by the President of the Ohio Senate; and the minority leaders of each house of the Ohio General Assembly each appointing one legislative member).

10. R.C. 4906.10(A).

11. R.C. 4906.10.

12. R.C. 4906.11.

13. R.C. 4906.10(C).

14. R.C. 4903.10 and 4906.12.

15. R.C. 4903.11, 4903.12, and 4906.12.

CRITERIA

Staff developed the recommendations and conditions in this *Staff Report of Investigation* pursuant to the criteria set forth in R.C. 4906.10(A), which reads, in part:

The board shall not grant a certificate for the construction, operation, and maintenance of a major utility facility, either as proposed or as modified by the board, unless it finds and determines all of the following:

- (1) The basis of the need for the facility if the facility is an electric transmission line or gas pipeline;
- (2) The nature of the probable environmental impact;
- (3) That the facility represents the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, and other pertinent considerations;
- (4) In the case of an electric transmission line or generating facility, that the facility is consistent with regional plans for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems and that the facility will serve the interests of electric system economy and reliability;
- (5) That the facility will comply with Chapters 3704, 3734, and 6111 of the Revised Code and all rules and standards adopted under those chapters and under section 4561.32 of the Revised Code. In determining whether the facility will comply with all rules and standards adopted under section 4561.32 of the Revised Code, the board shall consult with the office of aviation of the division of multi-modal planning and programs of the department of transportation under section 4561.341 of the Revised Code;
- (6) That the facility will serve the public interest, convenience, and necessity;
- (7) In addition to the provisions contained in divisions (A)(1) to (6) of this section and rules adopted under those divisions, what its impact will be on the viability as agricultural land of any land in an existing agricultural district established under Chapter 929 of the Revised Code that is located within the site and alternative site of the proposed major utility facility. Rules adopted to evaluate impact under division (A)(7) of this section shall not require the compilation, creation, submission, or production of any information, document, or other data pertaining to land not located within the site and alternative site; and
- (8) That the facility incorporates maximum feasible water conservation practices as determined by the board, considering available technology and the nature and economics of the various alternatives.

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II. APPLICATION

APPLICANT

Republic Wind, LLC (Applicant) is an indirect wholly owned subsidiary of Apex Clean Energy Holdings, LLC (Apex). Apex is an independent renewable energy company focused on utility-scale generation facilities. Apex currently has operational facilities located in Illinois, Oklahoma, Texas, and Colorado.

HISTORY OF THE APPLICATION

On May 29, 2019, the Applicant held a public informational meeting regarding the proposed electric transmission line project in Green Springs, Ohio.

On August 27, 2019, the Applicant filed the Republic Transmission Facility application.

On November 1, 2019, the Director of Rates and Analysis, PUCO, issued a letter of completeness regarding the application to the Applicant.

On December 17, 2019, the ALJ issued an Entry establishing the procedural schedule in this case.

On February 5, 2020, the Applicant filed a Motion to suspend the procedural schedule “because it intends to file an application to amend the pending application.”

On February 7, 2020, the ALJ issued an Entry suspending the procedural schedule until February 25, 2020.

On February 25, 2020, the Applicant filed the amended application for the Republic Transmission Facility.

On March 31, 2020, the ALJ issued an Entry suspending the procedural schedule due to the Governor’s declaration of a state of emergency in Executive Order 2020-01D, as well as provisions of the Director of ODH’s Stay at Home Order.

This summary of the history of the application does not include every filing in case number 19-1066-EL-BTX. The docketing record for this case, which lists all documents filed to date, can be found online at <http://dis.puc.state.oh.us>.

PROJECT DESCRIPTION

The Applicant proposes to construct a 7.4-mile 138 kV transmission line (Republic Transmission Facility) and point of interconnect (POI) switchyard to be used for delivering power from the Republic Wind Farm (pending approval in Case No. 17-2295-EL-BGN) to the electric transmission power grid. The Applicant would construct, own and operate the Republic Transmission Line, which would be located in Seneca County. The Applicant would construct and own all structures and equipment that would be associated with the POI switchyard.

A 100-foot wide right-of-way is proposed by the Applicant for the new transmission line, which would incorporate approximately 100 structures for support, ranging from 60 to 105 feet in height. Thirty-nine poles would be 60 to 75 feet, 57 poles would be 75 to 100 foot, and 4 poles would be

100 to 105 feet in height. The Applicant's consultant utilized field survey data to help identify route alternatives and ultimately to select the Applicant's Preferred and Alternate routes.¹⁶

Preferred Transmission Line Route

The Applicant's proposed Preferred Route exits the proposed Republic Wind collection substation, located south of Township Road 148 on the west side of Township Road 175, and heads generally northwest for 7.4 miles to the proposed POI switchyard, which would be located along County Road 15, approximately one half of a mile north of County Road 44.

The Preferred Route crosses Township Road 148, State Route 19, State Route 101, Township Road 169, Township Road 76, Township Road 75, and County Road 15. The POI switchyard is located along the American Electric Power (AEP) Freemont Center-Tiffin Center 138 kV transmission line. The Preferred Route traverses 3.8 miles in Pleasant Township and 3.6 miles in Adams Township.

Alternate Transmission Line Route

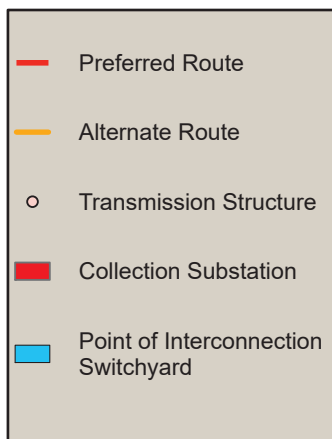
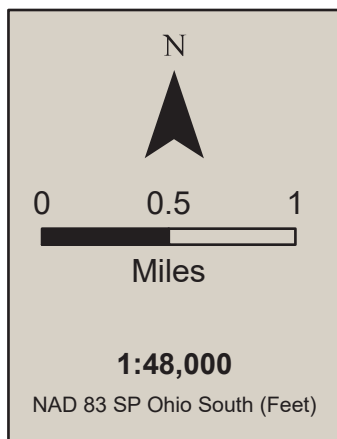
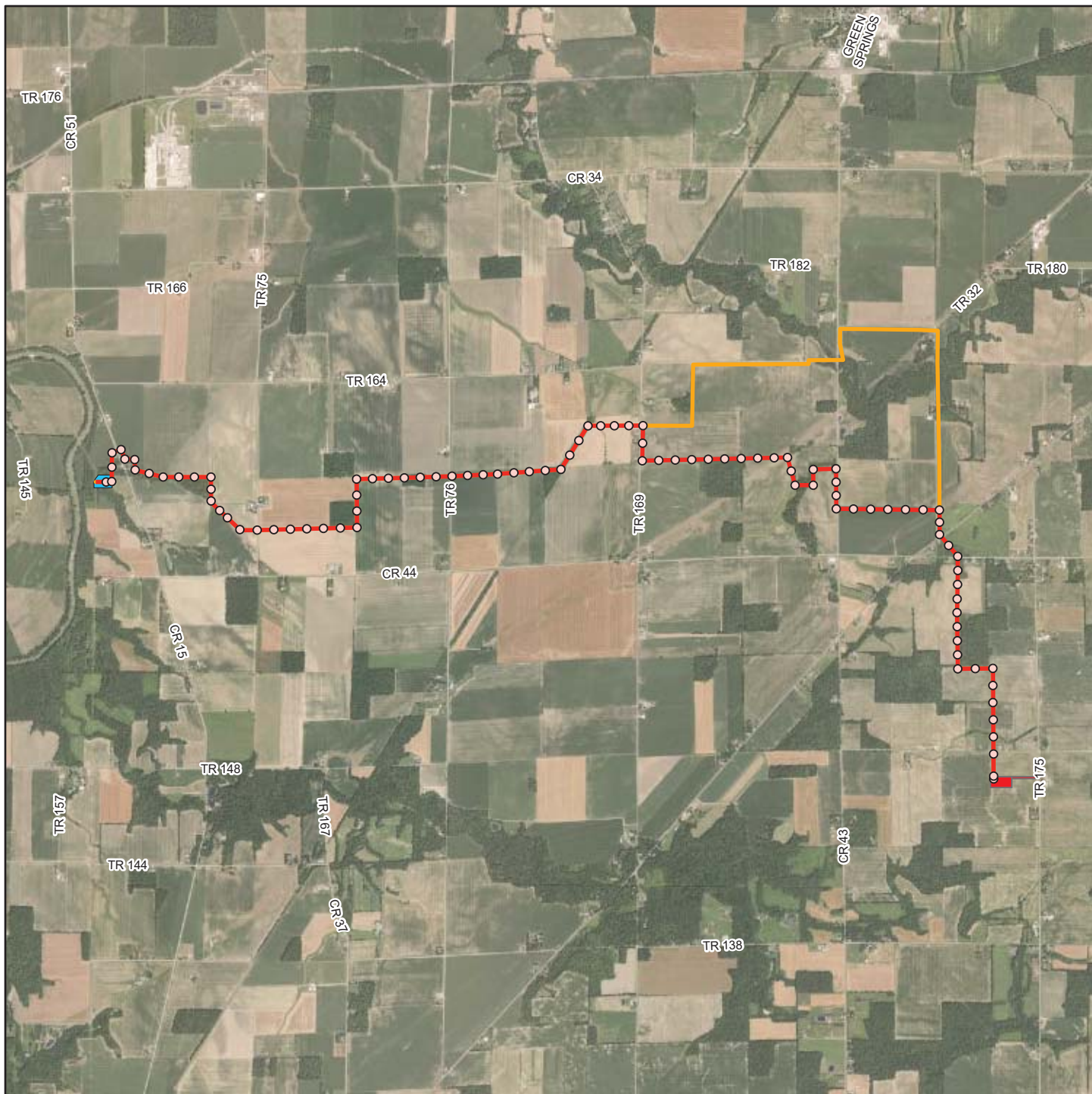
The proposed Alternate Route follows the Preferred Route north from the proposed Republic Wind collection substation, but veers from the Preferred Route north of State Route 101. At this point, the Alternate Route traverses directly north and the southeast for 0.7 miles before joining with the Preferred Route at Township Road 169. The Alternate Route is 8.3 miles in length. The Alternate Route traverses approximately 4.6 miles in Adams Township and 3.8 miles Pleasant Township.

The Preferred and Alternate routes are shown on the maps in this report.

Project Schedule

A public information meeting was held on May 29, 2019. The Applicant plans to complete final transmission line engineering design by incorporating the recommendations of the OPSB and Staff offered through the certification process. The final design would encompass final pole location and placement on plans issued for construction. If a certificate is issued by the Board, the Applicant anticipates construction would commence and take approximately six to nine months to complete and place the facilities in service. The Applicant indicates in its project schedule that this would occur by the summer of 2021.

16. Ohio Adm.Code 4906-5-04.

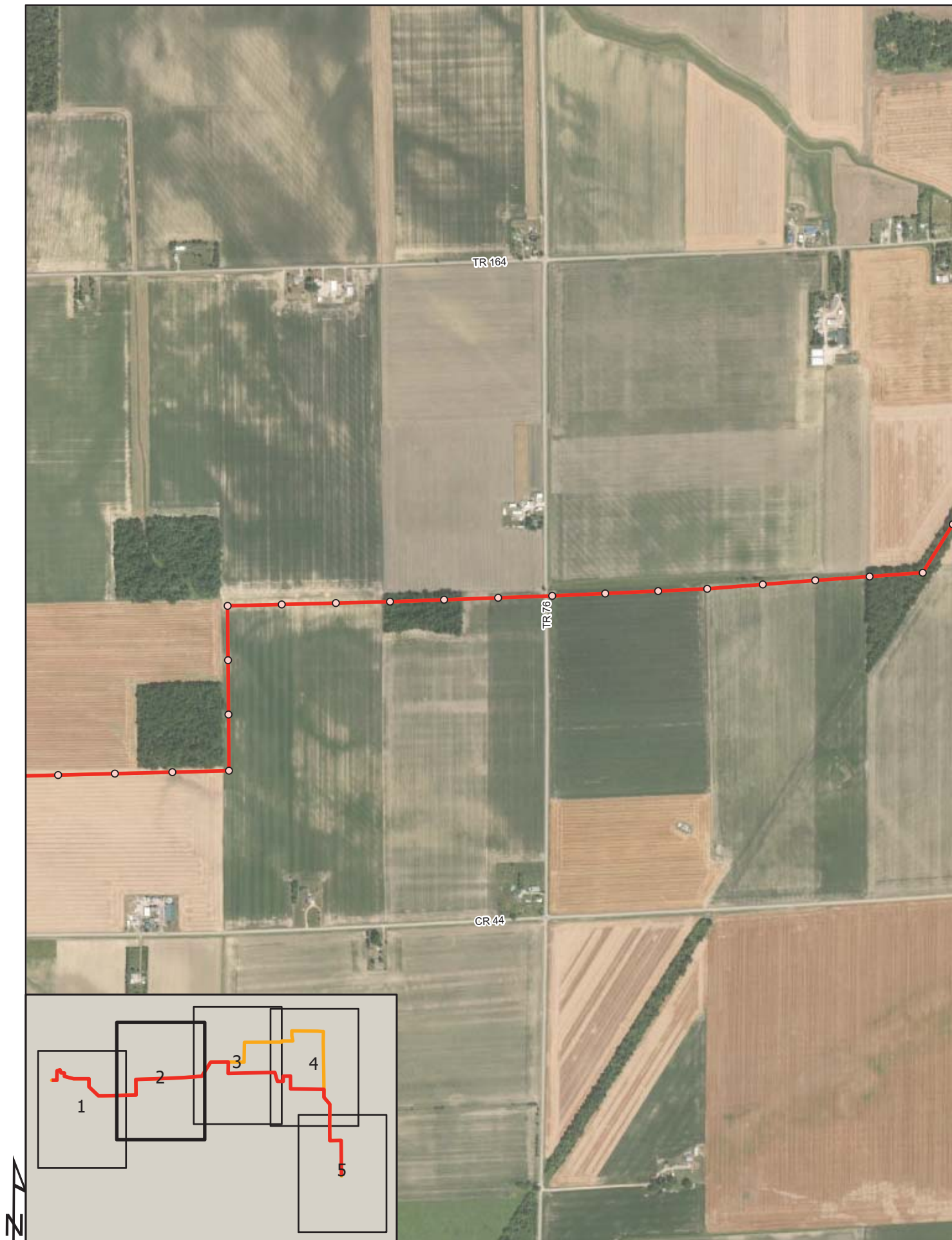


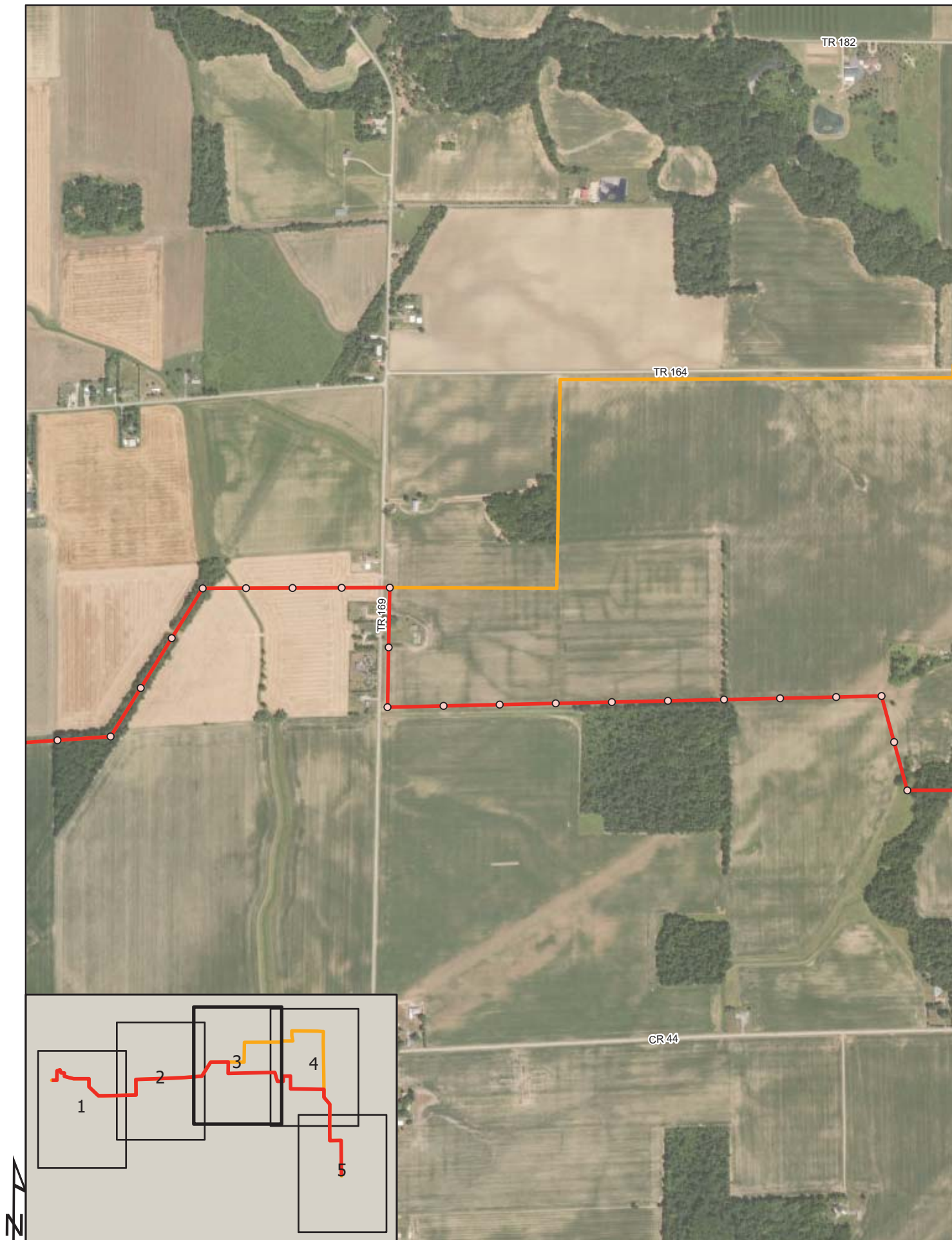
Overview Map

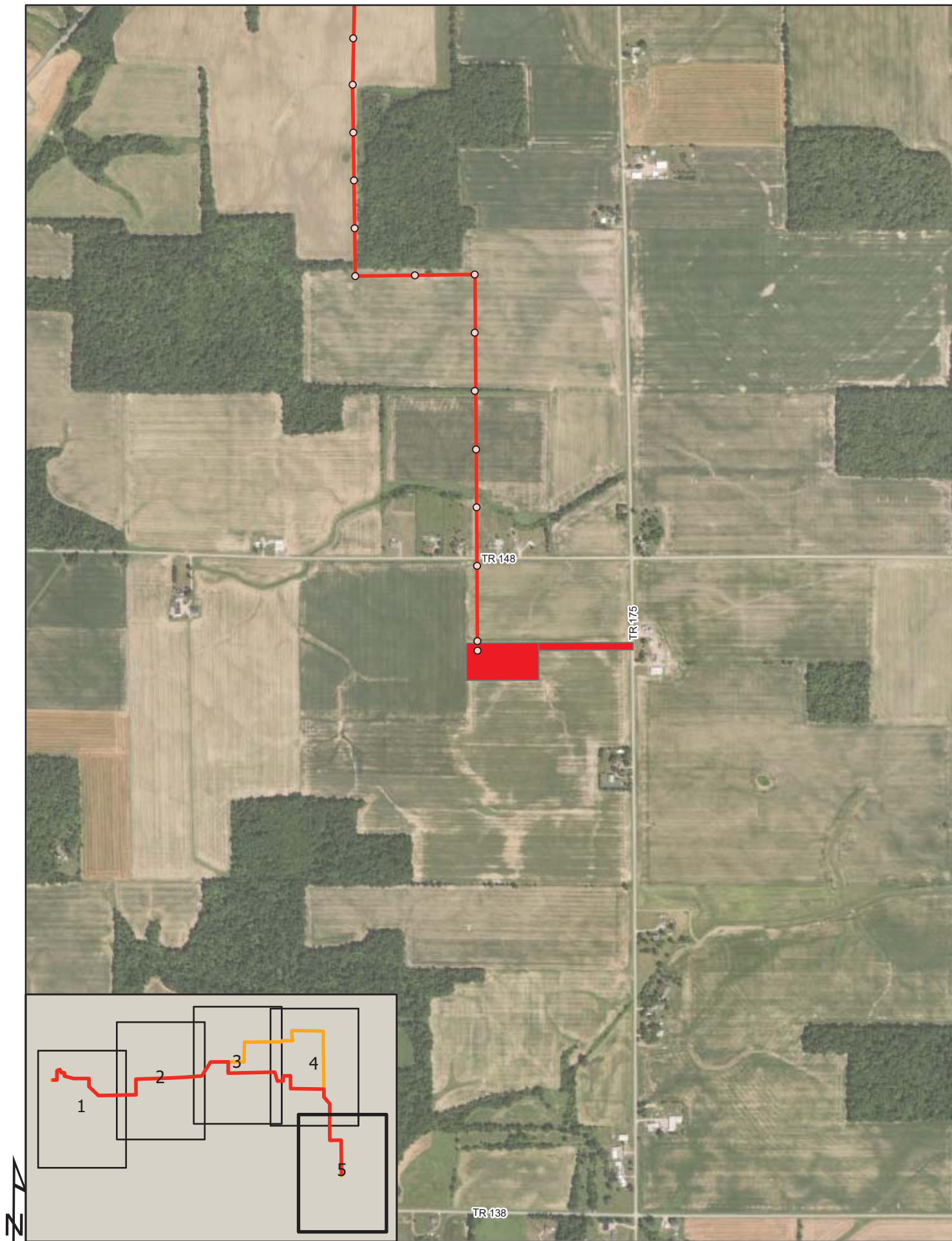
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Republic Wind Transmission Line

Maps are presented solely for the purpose of providing a visual representation of the project in the staff report, and are not intended to modify the project as presented by the Applicant in its certified application and supplemental materials.







III. CONSIDERATIONS AND RECOMMENDED FINDINGS

In the Matter of the Application of Republic Wind, LLC, Staff submits the following considerations and recommended findings pursuant to R.C. 4906.07(C) and 4906.10(A).

Considerations for R.C. 4906.10(A)(1)

BASIS OF NEED

Purpose of the Proposed Facility

The purpose of the Applicant's proposed facility, including a new point of interconnection switchyard and a transmission line connecting the switchyard to the proposed Republic Wind Farm collection substation, is to deliver energy from the proposed Republic Wind Farm to the regional transmission system.

The Applicant's proposed transmission facility project would address the need to provide the proposed Republic Wind Farm's connection to the electrical power grid.

Long Term Forecast

The Applicant is neither an owner nor an operator of a "Major Utility Facility" as defined by the Ohio Revised Code and, as such, is not required to file a Long Term Forecast Report with the PUCO.¹⁷

System Economy and Reliability

The sole purpose of the proposed transmission facility project is to connect the proposed Republic Wind Farm to the bulk power system (BPS). Therefore, there are no project-specific load studies and contingency analyses existing that identify the need for system improvement. However, the Applicant states that the Republic Wind Farm and the transmission facility would be engineered and constructed to comply with good engineering practices and all applicable electrical safety codes.

The Applicant states that the proposed Republic Wind Farm would interconnect and operate in conformance with reliability criteria and standards for the North American Electric Reliability Corporation (NERC), as well as the requirements of PJM Interconnection, LLC (PJM). PJM's established procedures and requirements for generators that propose to interconnect with facilities under the control of PJM include the requirements to conduct both a Feasibility Study and a System Impact Study (SIS). The PJM Feasibility Study and SIS for the proposed Republic Wind Farm were performed and completed under PJM Generation Interconnection Request Queue Position V4-0101 in April 2010 and November 2011 respectively.¹⁸

Regional Transmission Planning Process

As a part of the PJM SIS on the Interconnection Request Queue Position V4-0101, potential local AEP and overall PJM network impacts were evaluated for compliance with reliability criteria for

17. R.C. 4935.04(C) and Ohio Adm.Code. 4901:5-5.

18. PJM Interconnection, LLC, "Feasibility Study, Queue V4-010," accessed June 24, 2020, <https://pjm.com/planning/services-requests/interconnection-queues.aspx>.

PJM Interconnection, LLC, "System Impact Study, Queue V4-010," accessed June 24, 2020, <https://pjm.com/planning/services-requests/interconnection-queues.aspx>.

summer peak conditions in 2014. Network impacts evaluated included generator deliverability, light load analysis, multiple facility contingency, short circuit, contribution to previously identified overloads, new system reinforcements, contribution to previously identified system reinforcements, and potential congestion due to local energy deliverability.

The Republic Wind Farm including the proposed transmission facility in this application successfully met all criterion for evaluating network impacts. The proposed wind farm project was found to have no adverse impact on grid reliability and consequently on the regional plans for the electric grid. Interconnection with the electric grid is further discussed in the Electric Grid section of this Staff Report.

Recommended Findings

Staff recommends that the Board find that the basis of need for the project has been demonstrated and therefore complies with the requirements specified in R.C. 4906.10(A)(1), provided that any certificate issued by the Board for the proposed facility include the conditions specified in the section of this *Staff Report of Investigation* entitled Recommended Conditions of Certificate. Furthermore, since the proposed project is an integral part of the proposed Republic Wind Farm, Staff recommends that the construction of the switchyard and transmission line only occur if construction on the Republic Wind Farm is approved and subsequently begins.

Considerations for R.C. 4906.10(A)(2)

NATURE OF PROBABLE ENVIRONMENTAL IMPACT

Pursuant to R.C. 4906.10(A)(2), the Board must determine the nature of the probable environmental impact of the proposed facility. Staff has found the following with regard to the nature of the probable environmental impact.

Socioeconomic Impacts

Regional Planning

The Applicant has studied the Comprehensive Economic Development Strategy plan for Seneca County, which was adopted by the Seneca County Board of Commissioners in 2011. This developmental plan centers on preservation of agricultural activities, job creation and economic opportunities. The proposed transmission line would be consistent with these developmental goals, as the transmission line is needed to support the associated wind project. Farming activities would require only minor modifications, aside from temporary disruptions that could occur during construction.

Demographics

The proposed facility is located in Seneca County. According to U.S. Census data, in 2010 the population of Seneca County was 56,745. Between 2000 and 2010, the population of Seneca County decreased by 3.3 percent. This project would not be expected to impact existing population trends in this county.

Land Use

Land use in proximity to the proposed facility is approximately 97 percent agricultural use. Approximately 180 acres of agricultural land would experience temporary disturbances, resulting in losses in agricultural production. Approximately five acres of land are expected to be permanently converted to the transmission facility's use. The Applicant does not intend to remove or relocate any existing structures. Significant impacts to commercial, industrial, residential, recreational, and institutional land uses are not anticipated, as these land uses would continue with minimal disruption.

Recreation

Construction and operation of the facility would not physically impact any recreational areas. There are no national parks, forests, wildlife refuges, natural landmarks or federally designated scenic rivers in the study area. Additionally, the study area is devoid of state nature preserves, state parks and state forests. Also, there are no scenic routes, byways, county parks or wildlife production areas within the study area. Staff notes that the Sandusky River (a state designated scenic river), the Buckeye Trail, and two wildlife production areas are located within a half-mile of the facility. The Seneca County Park District Conservation area boundary is approximately 3,000 feet from the proposed facility. However, significant impacts to nearby recreational areas are unlikely.

Cultural, Archaeological, and Architectural Resources

The Applicant conducted a literature records review to ascertain potential impacts to historical properties and archaeological sites located within five miles of the project area. The review

included an analysis of National Register of Historic Places (NRHP) and sites that may be eligible for the NRHP, as well as archaeological resources and known sites, landmarks, historical structures, bridges, cemeteries and historic districts.

The architectural records review revealed one property that was identified as an Ohio Historic Inventory structure and one cemetery. However, these two resources are located approximately 1,000 and 900 feet from the facility, respectively. Neither above-ground site is expected to be significantly impacted by the facility. The Applicant's literature review concluded that the proposed project would not physically or indirectly impact above-ground cultural resources. Staff concurs with the Applicant's analysis.

The Applicant also conducted an archaeological survey of the affected project area. The study involved visual inspection, surface collection and shovel test unit excavations. No previously identified archaeological sites are located within the project area. Eight new archaeological sites were identified during the survey. However, none of these sites are recommended to be eligible for listing in the NRHP. The OHPO reviewed the Applicant's final historic and archaeological studies. The OHPO concluded that no further historical or archaeological survey is necessary for the proposed project. Staff concurs with these OHPO recommendations.

Aesthetics

Due to the height and clearance requirements of the transmission structures, it is impractical to directly screen them from view. Aesthetic impacts and considerations are always measured against the surrounding land use features and potential viewers' subjective opinions. The rural nature of the project vicinity limits the number of potential viewers. Transportation corridors typically are smaller and much more lightly traveled, which reduces the number of viewing impacts. Existing woodlots are also able to offer additional natural screening of portions of the transmission line and existing wooded areas are present on three sides of the proposed switchyard location.

Economics

The Applicant states that it would construct, own, and operate the project. The Applicant plans to acquire rights-of-way and easements for the project through negotiations with property owners. The Applicant may also purchase land and/or come to other types of agreements with property owners. According to the Applicant, all the agreements granting rights along the Preferred Route have been signed as have many along the Alternate Route.

The Applicant chose to file its estimated capital and intangible costs under seal and filed a motion for protective order to keep the information confidential. Similar requests have been common practice in some, but not all, wind farm transmission line projects. Staff verified the Applicant's assertion that the reported average cost of similar facilities is not substantially different from the Applicant's estimated costs for the proposed facility.

Cost Allocation

The Applicant states that it will be responsible for all costs associated the construction and operation of the proposed transmission line, as well as its integration into the transmission system. In other words, these charges will not be transferred to ratepayers under a cost-recovery mechanism.

Liability Insurance

The Applicant would maintain excess commercial general liability insurance covering indemnity of \$10 million per occurrence and \$10 million in annual aggregate.

Taxes

The Applicant estimated local property tax revenue for its utility facilities as between \$1.188 million and \$1.782 million. Staff notes that the transmission line associated with the Republic Wind Farm would be considered part of the ‘energy facility’ defined under R.C. 5727.01 and thus exempt from property taxes under an anticipated payment in lieu of taxes (PILOT) agreement. Payments under the anticipated PILOT would be based solely on the installed capacity of the wind farm, which could be up to 198 MW. Therefore, there would be no incremental revenue associated with the proposed transmission facility. Under the proposed PILOT agreement, the Applicant would pay between \$6,000 per MW and \$9,000 per MW annually.

Staff notes that its review of the Applicant’s cost estimates should not be construed as a recommendation for approval of cost recovery in any ratemaking proceeding.

Ecological Impacts

Surface Waters

The Preferred Route right-of-way contains eleven streams, including two perennial streams, five intermittent streams, and four ephemeral streams, totaling 4,230 linear feet. The Alternate Route right-of-way contains eleven streams, including two perennial streams, five intermittent streams, and four ephemeral streams, totaling 4,450 linear feet. The proposed transmission line would aerially span all streams, and no in-water work is expected. The Applicant has committed not to conduct mechanized clearing within 25 feet of any stream and would only clear trees in this area which are tall enough to have the potential to interfere with safe construction and operation of the line. Construction vehicles would not cross streams. No temporary vehicle crossings would be installed. The Applicant states that impacts would be covered under the Army Corps of Engineers Nationwide 12 Permit.

The Preferred Route right-of-way contains two wetlands totaling 0.75 acre. The Alternate Route right-of-way contains two wetlands totaling 0.75 acre. All delineated wetlands are category 1 and category 2 wetlands. The Applicant anticipates that no structures along any routes would be placed within wetlands. Wetland WHO-101, a Category 1 wetland, would be converted from a palustrine forested wetland to a palustrine emergent wetland due to vegetative clearing. A total of 0.57 acre of wetland impacts would result from the convergence of this wetland. Both the Preferred and Alternate route would impact this wetland. Staff anticipates that this wetland would be jurisdictional to the Army Corps of Engineers, and that impacts would be covered under the Nationwide 12 Permit. Staff recommends that the Applicant coordinate with the appropriate agencies and obtain the necessary wetland permit prior to construction. The Applicant stated that it would use timber matting at any areas where construction access through wetlands is necessary and that selective non-mechanized clearing would be used for removal of woody vegetation in wetlands that would otherwise interfere with the operation of the transmission line.

No lakes, reservoirs, or ponds were observed along the construction corridor of the routes.

The Applicant stated that it would obtain coverage under the Ohio EPA General National Pollutant Discharge Elimination System (NPDES) Permit and anticipates filing for the permit in

August/September 2020. Sedimentation that may occur as a result of construction activities would be minimized through best management practices (BMP), such as silt fences. BMP would be outlined in the Applicant's Stormwater Pollution Prevention Plan (SWPPP) required as part of the NPDES Permit. Neither the Preferred Route nor the Alternate Route would cross within portions of a 100-year floodplain area. Staff recommends the Applicant coordinate with the Seneca County floodplain administrator to obtain any necessary floodplain development permit if Alternate Route is approved.

Threatened and Endangered Species

The Applicant requested information from the ODNR and the USFWS regarding state and federal listed threatened and endangered plant and animal species. Additional information was provided through field assessments and review of published ecological information. The following table identifies state and federal listed species on which the ODNR and the USFWS provided comments due to their potential to be found in the project area considering the available information.

BIRDS				
Common Name	Scientific Name	Federal Status	State Status	Presence in Project Area
northern harrier	<i>Circus cyaneus</i>	N/A	Endangered	Records exist within the project area.
loggerhead shrike	<i>Lanius ludovicianus</i>	N/A	Species of Interest	Records exist within the project area.
upland sandpiper	<i>Bartramia longicauda</i>	N/A	Endangered	Records exist within the project area.
REPTILES & AMPHIBIANS				
Common Name	Scientific Name	Federal Status	State Status	Presence in Project Area
Blanding's turtle	<i>Emydoidea blandingii</i>	N/A	Threatened	Known range. Habitat includes wetlands and adjacent upland areas.
spotted turtle	<i>Clemmys guttata</i>	N/A	Threatened	Known range. Habitat includes wetlands and adjacent upland areas.
Eastern massasauga	<i>Sistrurus catenatus</i>	Threatened	Endangered	Historical range includes the project area. Impacts not anticipated.
MUSSELS				
Common Name	Scientific Name	Federal Status	State Status	Presence in Project Area
rayed bean	<i>Villosa fabalis</i>	Endangered	Endangered	Due to no in-water work, no impacts to this species are anticipated.
MAMMALS				
Common Name	Scientific Name	Federal Status	State Status	Presence in Project Area
Indiana bat	<i>Myotis sodalis</i>	Endangered	Endangered	Presence established in project area.
northern long-eared bat	<i>Myotis septentrionalis</i>	Threatened	N/A	Presence established in project area.

PLANTS				
Common Name	Scientific Name	Federal Status	State Status	Presence in Project Area
Engelman's Spike Rush	<i>Eleocharis engelmannii</i>	N/A	Threatened	Records exist within the project area. Species grows in ephemeral wetlands that contain exposed mud or muck flats in the summer months. A pre-construction survey is recommended.

The Applicant documented several listed species and their habitat during field surveys. Further, the ODNr Natural Heritage Database has records of multiple listed species within one mile of the project area. In the event that the Applicant encounters listed plant or animal species during construction, Staff recommends that the Applicant contact Staff, the ODNr, and the USFWS, as applicable, within 24 hours. Staff recommends that activities that could adversely impact the identified listed plants or animals be immediately halted until an appropriate course of action has been agreed upon by the Applicant, Staff, and the appropriate agencies. Staff also recommends that if the Applicant encounters any listed plant or animal species prior to construction, the Applicant notify Staff of the location and how impacts would be avoided during construction.

As tree roosting species in the summer months, the habitat of the Indiana bat and northern long-eared bat would be impacted by the Applicant's proposed tree clearing during construction. In order to avoid impacts to these species, Staff recommends that the Applicant adhere to seasonal tree cutting dates of October 1 through March 31 for all trees three inches or greater in diameter, unless coordination efforts with the ODNr and the USFWS allows a different course of action. The ODNr and the USFWS may allow tree clearing outside of these dates if the Applicant can document the absence of these species in the project area, which is usually accomplished through mist-net surveys. Presence of the Indiana bat and northern long-eared bat has been established in portions of the project area, so additional surveys in these areas could not establish the absence of this species.

Records exist within the project area for the upland sandpiper, a state endangered bird. Nesting upland sandpipers utilize dry grasslands. The grassland habitat used by upland sandpipers varies widely and can include both exotic and native grasses as well as associated forbs and legumes. Nesting upland sandpipers can be associated with areas that are grazed, hayed, or mowed. Staff recommends that construction be avoided in these habitats during the species' nesting period of April 15 through July 31, unless coordination with the ODNr allows a different course of action. The Applicant has committed to avoiding the habitat for this species during the species' nesting season and states it will continue to coordinate these efforts with the ODNr.

Records exist within the project area for the northern harrier, a state endangered bird. This species is common in the vicinity of the proposed project area during migration and winter. Northern harriers breed and hunt in large wet meadows and dry grasslands. Staff recommends that construction be avoided in this habitat during the species' nesting period of May 15 through August 1, unless coordination with the ODNr allows a different course of action. The Applicant has committed to avoiding the habitat for this species during the species' nesting season and states it will continue to coordinate these efforts with the ODNr.

Records exist within the project area for the loggerhead shrike, a state endangered bird. The loggerhead shrike nests in hedgerows, thickets, fencerows, and other types of dense shrubbery habitat. Staff recommends that construction be avoided in these habitat types during the species' nesting period of April 1 through August 1, unless coordination with the ODNR allows a different course of action. The Applicant has committed to avoiding the habitat for this species during the species' nesting season and states it will continue to coordinate these efforts with the ODNR.

The project is within the range of the state threatened Blanding's turtle and state threatened spotted turtle. These species inhabit a variety of different types of streams, ponds, and wetlands. Although essentially aquatic, these species travel over land as they move from one wetland to the next. Because the project may impact potentially suitable habitat, the ODNR recommended a habitat suitability survey be conducted by an approved herpetologist to determine if suitable habitat exists within the project area. The Applicant has committed to include the proposed transmission line project in the habitat suitability survey of the Republic Wind Farm. If suitable habitat is determined to be present, the ODNR recommends one of the following:

- (1) The area determined to be suitable habitat be avoided along with an appropriate buffer;
- (2) A presence/absence survey be conducted by the approved herpetologist; or
- (3) An avoidance/minimization plan be developed and implemented by the approved herpetologist.

If the Applicant conducts a presence/absence survey and either species is determined to be present, Staff recommends that the Applicant continue to coordinate with the ODNR to assure that impacts are avoided.

If construction is delayed beyond the initial 5-year term of the Board certificate, Staff recommends that certain wildlife surveys be updated as determined by the ODNR at that time.

Vegetation

The Preferred and Alternate routes cross through several vegetative communities. The following table reflects the major vegetative communities present in the construction corridor and associated acres of impact for each route.

VEGETATION		
Community Type	Preferred Route Impacts (Acres)	Alternate Route Impacts (Acres)
Agricultural	84.1	82.5
Forest	6.31	5.9

Impacts to vegetation along both the routes would be limited to the initial clearing for the proposed 100-foot right-of-way and along access roads, and operational maintenance clearing activities. Trees adjacent to the proposed transmission line right-of-way, which are significantly encroaching or prone to failure, may require clearing to allow for safe operation of the transmission line. Vegetative wastes generated during construction would be windrowed or chipped and disposed of appropriately depending on landowner requests. The Applicant does not anticipate the use of herbicides during construction or operation.

Records exist within the project area for the Engleman's spike rush, a state endangered plant. This species grows in ephemeral wetlands that contain exposed mud or muck flats in the summer months. Due to the possible disruption of this species, Staff recommended a pre-construction survey of the proposed project site be conducted for the project to ensure that the plant is not impacted. The Applicant has committed to including the proposed transmission line project in the pre-construction survey for the Republic Wind Farm. The Applicant shall coordinate survey efforts with the ODNR Division of Natural Areas and Preserves' chief botanist.

All Staff recommendations for the requirements discussed in this section of the *Staff Report of Investigation* are included under the **Ecological Conditions** heading of the Recommended Conditions of Certificate section.

Public Services, Facilities, and Safety

Safety

The Applicant stated that it would comply with all applicable safety standards set by the Occupational Safety and Health Administration, safety standards of the PUCO, and the NERC Reliability Standards. The Applicant's design would meet the requirements of the National Electric Safety Code.

Roads and Bridges

The Preferred and Alternate routes cross several county and township roads and State Routes 19 and 101. Neither the Preferred nor the Alternate route cross any bridges in the project area.

Access to construction areas would be through existing farm roads and public roads. The Applicant stated that an increase in truck traffic would be anticipated during construction for the purpose of project area equipment access and equipment and material deliveries. The Applicant does not anticipate any additional traffic during operation of the facility beyond routine maintenance.

Noise

Most noise impacts associated with this project would occur during the proposed construction period. The Applicant would mitigate noise impacts by using standard construction techniques and limiting construction activities to daylight hours, to the extent feasible. The Applicant conducted a noise study that showed operation noise is expected to be below ambient noise levels.

All Staff recommendations for the requirements discussed in this section of the *Staff Report of Investigation* are included under the **Public Services, Facilities, and Safety Conditions** heading of the Recommended Conditions of Certificate section.

Recommended Findings

Staff recommends that the Board find that the Applicant has determined the nature of the probable environmental impact for the proposed facility, and therefore complies with the requirements specified in R.C. 4906.10(A)(2), provided that any certificate issued by the Board for the proposed facility include the conditions specified in the section of this *Staff Report of Investigation* entitled Recommended Conditions of Certificate.

Considerations for R.C. 4906.10(A)(3)

MINIMUM ADVERSE ENVIRONMENTAL IMPACT

Pursuant to R.C. 4906.10(A)(3), the proposed facility must represent the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, along with other pertinent considerations.

Route Selection

The Applicant's switchyard site selection process was initially dictated by electrical engineering requirements that resulted from previously determined PJM study requirements and approvals. If another interconnection site were selected, then the Applicant would have to re-enter the PJM queue and perform new interconnection studies to gain PJM approval, which would result in significant delays. Given this requirement, the Applicant determined feasible routes and potential constraints based upon minimizing overall ecological and sensitive land use impacts. Engineering aspects such as transmission line length, number of turns, road and rail crossings and potential agricultural land impacts were also evaluated. Finally, the Applicant developed a route comparison table summarizing essential differences among proposed routes. Staff finds the Applicant's route selection process to be reasonable.

Minimizing Impacts

While both the Preferred and Alternate routes are viable, Staff concludes that potential impacts are greater along the Alternate Route. The ecological and cultural resources impacts are similar for the routes. In general, land use impacts associated with agricultural, institutional and commercial uses are also similar.

Recommended Findings

Staff recommends that the Board find that the proposed facility represents the minimum adverse environmental impact, and therefore complies with the requirements specified in R.C. 4906.10(A)(3), provided that any certificate issued by the Board for the proposed facility include the conditions specified in the section of this *Staff Report of Investigation* entitled Recommended Conditions of Certificate.

Considerations for R.C. 4906.10(A)(4)

ELECTRIC GRID

Pursuant to R.C. 4906.10(A)(4), the Board must determine that the proposed electric facilities are consistent with regional plans for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems, and that the facilities will serve the interests of electric system economy and reliability.

The Applicant proposes to construct a 7.4-mile 138 kV transmission line in Seneca and Sandusky Counties, Ohio. The proposed facility would interconnect the Republic Wind Farm to the BPS through AEP's existing Freemont Center-Tiffin Center 138 kV circuit.¹⁹

The proposed project is an integral part of the Republic Wind Farm and is necessary to transport energy to the BPS.

NERC Planning Criteria

NERC is responsible for the development and enforcement of the federal government's approved Reliability Standards, which are applicable to all owners, operators, and users of the BPS. As an owner, operator, and/or user of the BPS, the Applicant is subject to compliance with various NERC Reliability Standards, including but not limited to those related to transmission planning for contingency events.

PJM Interconnection, LLC

Interconnection of the proposed Republic Wind Farm to the electric transmission grid was previously reviewed by Staff in the context of the Republic Wind Farm application (case number 17-2295-EL-BGN). In proposing interconnection with the transmission grid, the Applicant utilized generation interconnection queue position V4-010. Queue position V4-010 was submitted to PJM on November 12, 2009 for 200 MW. The SIS was released in September 2010. It was revised in October 2010 and November 2011. Construction of the facility shall not commence until the ISA is executed for queue position V4-010.²⁰

PJM analyzed the BPS for compliance with NERC Reliability Standards and PJM reliability criteria. The PJM system studies indicated that no reliability violations were modeled to occur during single and multiple contingencies.²¹

19. *Application to the Ohio Power Siting Board for a Certificate of Environmental Compatibility & Public Need for the Republic Transmission Facility in Adams and Pleasant Townships in Seneca County, Ohio*, Case No. 19-1066-EL-BTX.

20. PJM Interconnection, LLC, "System Impact Study, Queue Number V4-010," accessed June 24, 2020, <https://pjm.com/planning/services-requests/interconnection-queues.aspx>. PJM Interconnection, LLC, "Interconnection Service Agreement, Queue Number V4-010," accessed January 24, 2020 <https://pjm.com/planning/services-requests.aspx>.

21. PJM Interconnection, LLC, "System Impact Study, Queue Number V4-010," accessed June 24, 2020, <https://pjm.com/planning/services-requests/interconnection-queues.aspx>. PJM Interconnection, LLC, "Interconnection Service Agreement, Queue Number V4-010," accessed January 24, 2020 <https://pjm.com/planning/services-requests.aspx>.

Recommended Findings

Staff recommends that the Board find that the proposed facility is consistent with regional plans for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems, and that the facility would serve the interests of electric system economy and reliability. This, however, is met provided that the proposed facility is constructed, if at all, in conjunction with the proposed wind farm (case number 17-2295-EL-BGN). Therefore, Staff recommends that the Board find that the facility complies with the requirements specified in R.C. 4906.10(A)(4), provided that any certificate issued by the Board for the proposed facilities include the conditions specified in the section of this *Staff Report of Investigation* entitled Recommended Conditions of Certificate.

Considerations for R.C. 4906.10(A)(5)

AIR, WATER, SOLID WASTE, AND AVIATION

Pursuant to R.C. 4906.10(A)(5), the facility must comply with Ohio law regarding air and water pollution control, withdrawal of waters of the state, solid and hazardous wastes, and air navigation.

Air

An air quality permit is required for use of a portable concrete batch plant during construction of the proposed facility. A copy of this permit will be provided to Staff within seven days of issuance or receipt by the Applicant.

Also, fugitive dust rules adopted under R.C. Chapter 3704 may be applicable to the construction of the proposed facility. The Applicant would control fugitive dust through dust suppression techniques such as irrigation, mulching, or application of tackifier resins. Staff finds these methods of dust control seem sufficient to comply with fugitive dust rules.

Water

Neither construction nor operation of the proposed facility would require the use of significant amounts of water. The Applicant would seek coverage, if needed, for surface water impacts associated with the proposed transmission line under the U.S. Army Corps of Engineers Nationwide Permit 12 for Utility Line Activities and the Ohio EPA authorization of the Section 401 water quality certification.

The Applicant intends to submit a Notice of Intent for coverage under the Ohio EPA NPDES general permit for stormwater discharges associated with construction activities. The Applicant would submit a SWPPP to the Ohio EPA as part of the NPDES permit. This SWPPP would include a detailed construction access plan and indicate BMP for construction activities that minimize erosion-related impacts to streams and wetlands. The Applicant has committed to identify wetlands, streams, and other environmentally sensitive areas before commencement of clearing or construction. The Applicant has also stated that no construction or access would be permitted in these areas unless clearly specified in the construction plans and specifications, thus minimizing any disturbance to surface water bodies. With these provisions, construction of this facility would comply with the requirements set forth under R.C. Chapter 6111.

Solid Waste

Debris generated during construction would consist of items such as conductor scrap, construction material packaging, including cartons, boxes, insulator crates, conductor reels, wrapping, and used stormwater erosion control materials. Materials with salvage value would include clearance poles and conductor reels. All construction-related debris would be disposed of in accordance with state and federal requirements.

Any contaminated soils discovered or generated during construction would be handled in accordance with applicable regulations. The Applicant intends to have a Spill Prevention Plan in place and would follow the Spill Prevention Plan for any spill cleanup.

Aviation

The anticipated height of the electric transmission support structures is expected to be from 60 feet to 105 feet tall. The Applicant also indicated that it would utilize cranes during the construction of the proposed facility which may be up to 150 feet tall.

The Federal Aviation Administration (FAA) and the ODOT Office of Aviation administer regulatory programs to provide airport airspace analysis. These programs are also administered to evaluate and authorize certain obstructions near airports. The Applicant submitted a request for review by the FAA for the electric transmission line.

Staff contacted the ODOT Office of Aviation during the review of this application, in accordance with R.C. 4906.10(A)(5) and 4561.341, to consult and determine potential impacts of the proposed transmission line on local airports. The ODOT Office of Aviation has indicated that the project is not within 20,000 feet of an existing or proposed public use airport. Staff and the ODOT Office of Aviation found that none of the proposed structures exceed 199 feet above ground level and the project does not meet notification criteria and does not require filing a form 7460-1 with the FAA.

The Applicant has committed to obtaining and complying with federal and state laws and regulations prior to the commencement of construction activities that require such permits or authorizations. The Applicant would also provide copies of permits and authorizations, including all supporting documentation, to Staff within seven days of issuance or receipt by the Applicant. Furthermore, the Applicant stated that it would provide a schedule of construction activities and acquisition of corresponding permits for each activity at the preconstruction conference.

All Staff recommendations for the requirements discussed in this section of the *Staff Report of Investigation* are included under the **Air, Water, Solid Waste, and Aviation Conditions** heading of the Recommended Conditions of Certificate section.

Recommended Findings

Staff recommends that the Board find that the proposed facility complies with the requirements specified in R.C. 4906.10(A)(5), provided that any certificate issued by the Board for the proposed facility include the conditions specified in the section of this *Staff Report of Investigation* entitled Recommended Conditions of Certificate.

Considerations for R.C. 4906.10(A)(6)

PUBLIC INTEREST, CONVENIENCE, AND NECESSITY

Pursuant to R.C. 4906.10(A)(6), the Board must determine that the facility will serve the public interest, convenience, and necessity.

Electromagnetic Fields

Electric transmission lines, when energized, generate electromagnetic fields (EMF). Laboratory studies have failed to establish a strong correlation between exposure to EMF and effects on human health. There have been concerns, however, that EMF may have impacts on human health.

Because these concerns exist, the Applicant has computed the EMF associated with the new circuits.²² The fields were computed based on the maximum loadings of the lines, which would lead to the highest EMF values that might exist along the proposed transmission line. Daily current load levels normally operate below the maximum load conditions, thereby further reducing nominal EMF values.

The electric field is a function of the voltage, the line configuration, and the distance from the transmission lines. Electric fields are produced by voltage or electric charge. For example, a plugged-in lamp cord produces an electric field, even if the lamp is turned off. The electric field for this transmission line would be 0.6 kV/meter or less. These values are consistent with typical 138 kV transmission line levels. Electric fields are easily shielded by physical structures such as the walls of a house, foliage, etc.

Magnetic fields are a function of the electric current, the configuration of the conductors, and the distance from the transmission lines. The magnetic fields for this project are estimated at the right-of-way edge to be less than 55.5 milligauss. These values are consistent with typical 138 kV transmission line levels. The Applicant states that the transmission facilities will be installed according to the requirements of the National Electric Safety Code.

Communications

Because the Applicant has incorporated minimization of radio interference into the design of the transmission line, the Applicant does not expect AM or FM radio or microwave path interference to occur from the operation of the proposed transmission line along either the Preferred or Alternate route.

Any likely source of television interference would be localized and due to defective hardware that could be easily detected and replaced. The Applicant indicates that it will implement an effective quality control maintenance program for the duration of the transmission line's operation to maintain the transmission line in good condition, which should avoid impacts to television reception. Television interference would be resolved through the complaint resolution process either by equipment repair, employment of a high-gain directional antenna, or other mitigation options.

22. Application, table 7-2 through 7-5.

Public Interaction and Participation

The Applicant hosted a public informational open house on May 29, 2019. Attendees were provided the opportunity to view maps of the project, speak with representatives of the Applicant, and provide comments. The Applicant maintains a website at <http://republicwindenergy.com> and a local office in Bellevue, Ohio.

The Applicant indicated that it served a letter to, and provided electronic access to the complete application for, the Seneca County commissioners, the Seneca County engineer, the Seneca Soil & Water Conservation District, the Seneca Regional Planning Commission, and the trustees of Adams and Pleasant townships. The Applicant indicated that it sent an electronic copy of the complete application to the Tiffin-Seneca Public Library. Copies of the complete application are also available for public inspection at the offices of the PUCO and on the PUCO online Docketing Information System website.

The Applicant stated that it will implement a complaint resolution plan to receive, record, and address concerns and problems from the public during the construction and operation of the facility.

The Applicant also stated that it will notify, by mail, affected property owners and tenants about the timeline for construction of the project, restoration activities, and the complaint resolution plan no later than seven days prior to the start of construction. Staff recommends that a similar notice be mailed to the same recipients at least seven days prior to the start of operation.

All Staff recommendations for the requirements discussed in this section of the *Staff Report of Investigation* are included under the Recommended Conditions of Certificate section.

Recommended Findings

Staff recommends that the Board find that the proposed facility would serve the public interest, convenience, and necessity, and therefore complies with the requirements specified in R.C. 4906.10(A)(6), provided that any certificate issued by the Board for the proposed facility include the conditions specified in the section of this *Staff Report of Investigation* entitled Recommended Conditions of Certificate.

Considerations for R.C. 4906.10(A)(7)

AGRICULTURAL DISTRICTS AND AGRICULTURAL LAND

Pursuant to R.C. 4906.10(A)(7), the Board must determine the facility's impact on the agricultural viability of any existing agricultural district land within the Preferred and Alternate routes of the proposed major utility facility. The agricultural district program was established under R.C. Chapter 929. Agricultural district land is exempt from sewer, water, and electrical service tax assessments.

Agricultural land can be classified as an agricultural district through an application and approval process that is administered through local county auditor's offices. Eligible land must be devoted exclusively to agricultural production or be qualified for compensation under a land conservation program for the preceding three calendar years. Furthermore, eligible land must be at least 10 acres or produce a minimum average gross annual income of \$2,500. According to the information supplied by the Applicant, no impacts to agricultural district land is planned.

The Preferred and Alternate Routes include approximately 175 to 190 acres of agricultural land. For all routes, 4 acres of agricultural land are planned to be permanently repurposed for use by the proposed facility. The majority of agricultural land likely to be temporarily impacted is primarily used for the production of row crops.

The Applicant would take measures to minimize impacts to field operations, irrigation, agricultural and field drainage systems associated with agricultural lands that would occur as a result of construction, operation, and maintenance of the proposed project. The Applicant stated it would coordinate with landowners to mitigate any impact to irrigation systems. Field drainage systems damaged by construction activities would be repaired by the Applicant. The Applicant stated that landowners would be compensated for any lost or damaged crops. Structures would be located, where feasible, at the edge of fields, and excavated topsoil would be segregated and stockpiled. Topsoil would also be restored to original conditions. According to the Applicant, no agricultural structures are anticipated to be impacted by this project.

Recommended Findings

Staff recommends that the Board find that since no existing agricultural district is present in the project area, the impact of the proposed facility on the viability of agricultural land in an existing agricultural district has been determined, and therefore complies with the requirements specified in R.C. 4906.10(A)(7).

Considerations for R.C. 4906.10(A)(8)

WATER CONSERVATION PRACTICE

Pursuant to R.C. 4906.10(A)(8), the proposed facility must incorporate maximum feasible water conservation practices, considering available technology and the nature and economics of the various alternatives.

The facility may require the use of minimal amounts of water for dust control and for concrete foundations during construction. However, the transmission line would not require the use of any water during operation. Therefore, the facility would comply with water conservation practice as specified under R.C. 4906.10(A)(8).

Recommended Findings

Staff recommends that the Board find that the proposed facility would incorporate maximum feasible water conservation practices, and therefore complies with the requirements specified in R.C. 4906.10(A)(8).

IV. RECOMMENDED CONDITIONS OF CERTIFICATE

Following a review of the application filed by Republic Wind, LLC, and the record compiled to date in this proceeding, Staff recommends that a number of conditions become part of any certificate issued for the proposed facility. These recommended conditions may be modified as a result of public or other input received subsequent to the issuance of this report. At this time, Staff recommends the following conditions:

GENERAL CONDITIONS

Staff recommends the following conditions to ensure conformance with the proposed plans and procedures as outlined in the case record to date, and to ensure compliance with all conditions listed in this Staff Report:

- (1) The certificate authority provided in this case shall not exempt the facility from any other applicable and lawful local, state, or federal rules or regulations nor be used to affect the exercise of discretion of any other local, state, or federal permitting or licensing authority with regard to areas subject to their supervision or control.
- (2) The facility shall be installed on the Applicant's Preferred Route, utilizing the equipment, construction practices, and mitigation measures as presented in the application and as modified and/or clarified in supplemental filings, replies to data requests, and clarified by recommendations in this *Staff Report of Investigation*.
- (3) Commencement of construction on the transmission line and/or POI substation may only commence after the approval of the Republic Wind Farm application in case number 17-2295-EL-BGN. In addition, Applicant shall file a notice of withdrawal dismissing this case from record or relinquish any certificate authority if the associated generation case, case number 17-2295-EL-BGN, is otherwise disposed of without the issuance of a certificate.
- (4) The Applicant shall docket a detailed project construction schedule within 7 days of the date of journalization of the certificate.
- (5) The Applicant shall comply with the requirements established by the Ohio Administrative Code Chapter 4906-3-13 and 4906-3-14.
- (6) At least 30 days prior to the preconstruction conference, the Applicant shall submit to Staff, for review and acceptance, one set of detailed engineering drawings of the final project design and mapping in the form of PDF, which the Applicant shall also file on the docket of this case, and geographically referenced data (such as shapefiles or KMZ files) based on final engineering drawings to confirm that the final design is in conformance with the certificate. Mapping shall include the limits of disturbance, permanent and temporary infrastructure locations, areas of vegetation removal and vegetative restoration as applicable, and specifically denote any adjustments made from the siting detailed in the application. All final geotechnical study results shall be included in this submission. The detailed engineering drawings of the final project design shall account for karst topography and include the identity of the registered professional

engineer(s), structural engineer(s), or engineering firm(s), licensed to practice engineering in the state of Ohio who reviewed and approved the designs.

- (7) At least 30 days prior to the preconstruction conference, the Applicant shall submit to Staff, for review and acceptance, mapping in the form of PDF, which the Applicant shall also file on the docket of this case, and geographically referenced data (such as shapefiles or KMZ files) based on final engineering drawings to confirm that the final design is in conformance with the certificate. Mapping shall include the limits of disturbance, permanent and temporary infrastructure locations, areas of vegetation removal and vegetative restoration as applicable, and specifically denote any adjustments made from the siting detailed in the application. All final geotechnical study results shall be included in this submission.
- (8) At least seven days prior to the start of construction and at least seven days prior to the start of facility operations, the Applicant shall notify via mail affected property owners and tenants including those individuals who were provided notice of the public informational meeting, residences located within one mile of the project area, parties to this case, county commissioners, township trustees, emergency responders, airports, schools, and libraries, as well as anyone who has requested updates regarding the project. These notices will provide information about the project, including contact information and a copy of the complaint resolution plan. The start of construction notice must also contain a timeline for construction and restoration activities, and the start of facility operations must also contain a timeline for the start of operations. The Applicant shall also file a copy of these notices on the public docket.
- (9) The Applicant shall replace agricultural field tiles damaged from this project, and excavated topsoil in agricultural fields will be segregated and restored upon backfilling.

ECOLOGICAL CONDITIONS

Staff recommends the following conditions to address the impacts discussed in the **Ecological Impacts** section of the Nature of Probable Environmental Impact:

- (10) The Applicant shall provide a copy of any floodplain permit required for construction of this project, or a copy of correspondence with the floodplain administrator showing that no permit is required, to Staff within seven days of issuance or receipt by the Applicant.
- (11) Thirty days prior to the preconstruction conference, the Applicant shall provide Staff with a construction access plan for review. The plan would consider the location of streams, wetlands, wooded areas, and sensitive plant species, as identified by the Ohio Department of Natural Resources (ODNR) and explain how impacts to all sensitive resources would be avoided or minimized during construction.
- (12) The Applicant shall have an environmental specialist on site during construction activities that may affect sensitive areas, as mutually agreed upon between the Applicant and Staff, and as shown on the Applicant's final approved construction plan. Sensitive areas include, but are not limited to, areas of vegetation clearing, designated wetlands and streams, and locations of threatened or endangered species or their identified habitat. The environmental specialist shall be familiar with water quality protection issues and

potential threatened or endangered species of plants and animals that may be encountered during project construction.

- (13) The Applicant shall contact Staff, the ODNR, and the U.S. Fish and Wildlife Service (USFWS) within 24 hours if state or federal listed species are encountered during construction, operation, or monitoring activities. Activities that could adversely impact the identified plants or animals shall be immediately halted until an appropriate course of action has been agreed upon by the Applicant, Staff and the appropriate agencies. If the Applicant encounters any listed plant or animal species prior to construction, the Applicant notify Staff of the location and how impacts would be avoided during construction.
- (14) The Applicant shall adhere to seasonal cutting dates of October 1 through March 31 for removal of any trees greater than or equal to three inches in diameter, unless coordination efforts with the ODNR and the USFWS allows a different course of action.
- (15) If Staff and the ODNR, in consultation with the USFWS, determine the project results in significant adverse impact to wild animals, the ODNR and Staff will notify the Applicant. As soon as possible and no longer than 30 days after receiving notification of the significant adverse impact, Applicant shall implement practices to rectify the significant adverse impact, which will include development and submission of a mitigation plan or adaptive management strategy to Staff and the ODNR for review to confirm compliance with this condition. Operation activities that could adversely impact the identified animals shall be modified to minimize risk until the mitigation plan or adaptive management strategy is agreed upon.
- (16) Construction in upland sandpiper preferred nesting habitat types shall be avoided during the species' nesting period of April 15 through July 31, unless coordination with the ODNR allow a different course of action.
- (17) Construction in northern harrier preferred nesting habitat types shall be avoided during the species' nesting period of May 15 through August 1, unless coordination with the ODNR allow a different course of action.
- (18) Construction in loggerhead shrike preferred nesting habitat types shall be avoided during the species' nesting period of April 1 through August 1, unless coordination with the ODNR allow a different course of action.
- (19) Prior to construction, if impacts to wetlands or upland habitats adjacent to wetlands are proposed, the Applicant shall obtain an ODNR-approved herpetologist to conduct Blanding's turtle and spotted turtle habitat suitability surveys to determine if suitable habitat exists within the project area. If suitable habitat is determined to be present, the Applicant shall avoid impacts to this habitat by doing one of the following:
 - (a) Avoid the area determined to be suitable habitat along with an appropriate buffer determined by the ODNR.
 - (b) Obtain an ODNR-approved herpetologist to conduct a presence/absence survey. If either species is determined to be present, the Applicant shall continue to coordinate with the ODNR to assure that impacts are avoided.

- (c) Obtain an ODNR-approved herpetologist to develop and implement an avoidance/minimization plan.
- (20) Should construction be delayed beyond five years of the date of the certificate, certain wildlife surveys may be required to be updated as determined by Staff and the ODNR.
- (21) The Applicant shall conduct a pre-construction survey of the proposed project site to ensure that the Engleman's spike rush is not impacted. The Applicant shall coordinate survey efforts with the ODNR Division of Natural Areas and Preserves' Chief Botanist.
- (22) For both construction and maintenance, the Applicant shall limit, to the greatest extent possible, the use of herbicides in proximity to surface waters. Individual treatment of tall-growing woody plant species is preferred, while general, widespread use of herbicides during initial clearing or maintenance should only be used where no other options exist, and with prior approval from the Ohio EPA. Prior to commencement of construction, the Applicant shall submit a plan to Staff for review and confirmation that it complies with this condition, describing the planned herbicide use for all areas in or near any surface waters during initial project construction and/or maintenance.

PUBLIC SERVICES, FACILITIES, AND SAFETY CONDITIONS

Staff recommends the following conditions to address the requirements discussed in the **Public Services, Facilities, and Safety** section of the Nature of Probable Environmental Impact:

- (23) General construction activities shall be limited to the hours of 7:00 a.m. to 7:00 p.m., or until dusk when sunset occurs after 7:00 p.m. Impact pile driving, hoe ram, and blasting operations, if required, shall be limited to the hours between 10:00 a.m. to 5:00 p.m., Monday through Friday. Construction activities that do not involve noise increases above ambient levels at sensitive receptors are permitted outside of daylight hours when necessary. The Applicant shall notify property owners or affected tenants within the meaning of Ohio Adm.Code 4906-5-08(C)(3) (2014), of upcoming construction activities including potential for nighttime construction activities.

AIR, WATER, SOLID WASTE, AND AVIATION CONDITIONS

Staff recommends the following conditions to address the requirements discussed in the **Air, Water, Solid Waste, and Aviation** section of the Nature of Probable Environmental Impact:

- (24) The Applicant shall remove all construction staging area and access road materials after completion of construction activities, as weather permits, unless otherwise directed by the landowner. Impacted areas shall be restored to preconstruction conditions in compliance with the Ohio Environmental Protection Agency (Ohio EPA) General National Pollutant Discharge Elimination System permit(s) obtained for the project and the approved Stormwater Pollution Prevention Plan created for this project.
- (25) The Applicant shall not dispose of gravel, or any other construction material, during or following construction of the facility by placing such material on agricultural land. All construction debris and all contaminated soil shall promptly be removed and properly disposed of in accordance with Ohio EPA regulations.



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Summary: Staff Report of Investigation electronically filed by Mr. Matt Butler on behalf of Staff of OPSB