AGRICULTURAL IMPACT STATEMENT


DATCP File Photo

DATCP #4567

Plymouth Reliability Project
Sheboygan County
PSC Docket ID 137-CE-205

WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

PUBLISHED APRIL 10, 2024

AGRICULTURAL IMPACT STATEMENT

DATCP #4567

Plymouth Reliability Project

Sheboygan County

WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

Tim Anderson
Director
Bureau of Land and Water Resources (DATCP)

Author

Katy Smith
Land and Resource Management Section Manager
Bureau of Land and Water Resources (DATCP)

PUBLISHED APRIL 10, 2024

LETTER TO THE READER

Dear Reader,

Through the Agricultural Impact Statement ("AIS") program, agricultural operations have the opportunity to provide feedback, document impacts, and suggest alternative solutions when their agricultural lands are affected by an entity with the potential powers of eminent domain. The AIS program also provides affected agricultural landowners time to gather information to make well informed decisions before a project begins. Lastly, the AIS program makes suggestions and recommendations to project initiators to promote project alternatives and management practices that would reduce potential impacts to agricultural lands and operations.

The AIS program also serves the needs of the project initiator by conducting the AIS analysis and publishing the statement within a timely manner as required by Wis. Stat. § 32.035. In addition, the AIS program provides a continuing presence throughout project development and oversight processes in order to support the interests of agricultural operations and the statewide priority to preserve prime farmland.

The Agricultural Impact Statement program and the WI Department of Agriculture, Trade and Consumer Protection are honored to provide this essential state service to the agricultural landowners and operators of the state.

Thank you

TABLE OF CONTENTS

TABLES

FIGURES

SUMMARY OF AGRICULTURAL IMPACT STATEMENT

The Wisconsin Department of Agriculture, Trade and Consumer Protection (the Department) has prepared Agricultural Impact Statement (AIS) #4567 for the construction of a new 138 kV electric transmission line between the existing Elkhart Lake – Saukville 138 kV line (8241) to Plymouth Utilities' new Plymouth #5 distribution substation in the Towns of Mitchell and Lyndon in Sheboygan County, WI (the Project) by the American Transmission Company (ATC) (Figure 1). ATC has indicated the primary reason for the Project is meet a new load interconnection request at the proposed Plymouth #5 Substation and to improve Plymouth Utilities' distribution reliability (DATCP, 2024a).

ATC has proposed two route alternatives for the Project, a preferred route and an alternative route. Both route alternatives travel from a point of connection to the existing 8241 circuit in the Town of Lyndon to Plymouth Utilities' new Plymouth #5 distribution substation in the Town of Mitchell, Sheboygan County (Figure 1). Despite efforts to reduce new ROW (Right-of-Way) acquisitions in accordance with the priorities for siting of electric transmission facilities in Wis. Stat. §1.12.(6), ATC proposes to impact up to 44.9 acres of agricultural lands from up to 39 agricultural landowners, depending on the selected alternative.

The Public Service Commission of Wisconsin (PSC) has authority over the Project and ATC must obtain a Certificate of Public Convenience and Necessity (CPCN) to obtain the right to proceed with the Project. Through the issuance of a CPCN, the PSC would select the project route and other project criteria ATC shall follow. As of January 12, 2024, ATC has submitted a CPCN application for the Project to the PSC under PSC Docket ID: 137-CE-205 and is awaiting a ruling from the PSC. The Department will provide the PSC with AIS #4567 as evidence to aid in determining the outcome of ATC's CPCN application.

In accordance with Wis. Stat. §32.035(3), ATC has provided the Department with the necessary information and materials to conduct an AIS. The Department has also contacted the agricultural property owners and operators impacted by the alternative routes. In accordance with Wis. Stat. §32.035(4)(b), the Department has reviewed and analyzed ATC's materials and the comments obtained by the Department from the affected agricultural property owners and operators to assess the agricultural impacts of the proposed project. Through the AIS analysis, the Department offers a set of recommendations and conclusions to the PSC, ATC and the agricultural landowners and operators to help mitigate current and future impacts on agricultural lands and agricultural operations along the selected route.

The set of recommendations are located within the AIS Recommendation Section beginning on page 5. The AIS analysis begins on page 6 with information on the project located in Section 2. Information and conclusions regarding the agricultural setting can be found in Section 3. The agricultural impacts of the project on the impacted land, landowners and operators can be found in

Section 4. Agricultural Impact Mitigation is discussed in Section 5. Appendices for AIS #4567 contain the following information: additional project figures and tables from ATC (Appendix A), information on the appraisal and compensation process (Appendix B), a complete record of comments submitted to the Department from agricultural landowners & operators (Appendix C), a copy of Wisconsin's agricultural impact statement statute (Appendix D), various additional sources of related information for agricultural landowners and operators (Appendix E) and a copy of the Department's agricultural monitoring form for transmission line projects.

If ATC deviates from the proposed route segments, alternatives or the selected sites, ATC shall re-notify the Department. The Department shall review the re-notification for new potential impacts to agricultural lands and may generate an addendum to this AIS, if warranted.

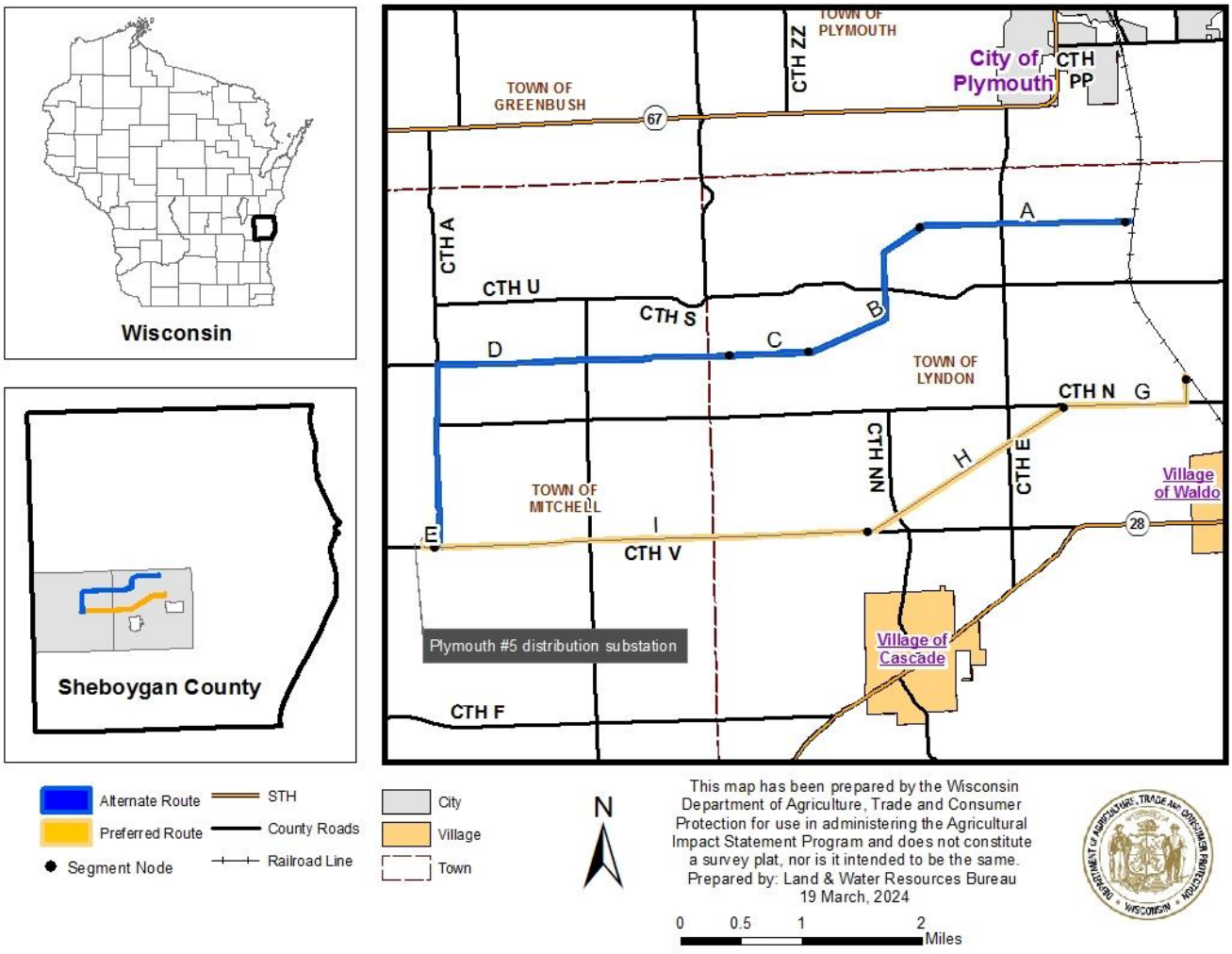

Figure 1: Location of preferred (segments G, H, I, E) and alternative (segments A, B, C, D, E) routes for the proposed Plymouth Reliability project in Sheboygan County, WI (DATCP, 2024a; ATC, 2024b). Segment E is shared between the route alternatives.

AGRICULTURAL IMPACT STATEMENT RECOMMENDATIONS

The Wisconsin Department of Agriculture, Trade and Consumer Protection (the Department) has reviewed and analyzed the materials provided by ATC and comments from the affected agricultural property owners and operators regarding the proposed Plymouth Reliability project. Should the PSC approve the Project, the Department provides the following recommendations, in accordance with Wis. Stat. §32.035(4)(b), to the PSC, ATC and agricultural landowners and operators to help mitigate impacts on agricultural lands and agricultural operations.

Recommendations to the Public Service Commission

1) Should the PSC decide to require an Independent Environmental Monitor (IEM) for the Project, the IEM should be hired in consultation with and the approval of the PSC, DATCP, and WisDNR and all reports generated by the IEM should be shared with the PSC, DATCP, and WisDNR.

Recommendations to ATC

1) Should the PSC select the Creekview- Mullet River 138 kV line (X-97) to Plymouth Utilities' new Plymouth #5 distribution substation system alternative, ATC shall re-notify the Department of the alternative in accordance with Wis. Stat. §32.035.

2) The Department recommends ATC follow all the recommended mitigation efforts described in Section 5 to mitigate Project impacts to or regarding: topsoil mixing, soil compaction, drainage, de-watering, irrigation, erosion, trees and other woody vegetation, fencing, weed control, aerial application of seeds and sprays, construction debris, crop rotation, organic farms & other areas with certifications, biosecurity, construction noise and or dust, and stray voltage.

3) ATC should consult the Sheboygan County Land Conservation Department on the existence of installed SWRM conservation practices within the Project area. Practices that are not maintained in accordance with the terms of the SWRM contract operation and maintenance plan may be subject to repayment of cost-shared funds. ATC should compensate a landowner for any required repayment of SWRM grant funds that is directly linked to Project construction activities.

4) ATC should provide agricultural landowners and operators advanced notice of acquisition and construction schedules so agricultural activities can be adjusted accordingly.

5) ATC should provide landowners with direct phone numbers and email addresses to ATC project staff and project contractors that are able to respond to a range of topics including but not limited to: environmental & agricultural impacts, land acquisition & ROW, project schedule, access limitations, compensation for release of lands from conservation programming and project complaints.

6) If there is adequate growing season for a crop to mature and be harvested after ATC acquires an interest in the impacted lands, but before construction along the Project corridor begins, ATC should allow the current agricultural operators to harvest a crop for that season.

7) ATC should monitor for the presence of underground drainage tiles within the construction ROW. If an active drainage tile is damaged or broken as a result of construction activities, ATC shall compensate the landowner for works to repair or replace the damaged or broken section.

8) Where construction activities have altered existing drainage patterns or the natural stratification of soils resulting in new wet areas or decreased productivity, ATC should work with landowners to determine a means to return the agricultural land either in the ROW or adjoining lands to pre-construction function. New drainage tiles or ditching, de-compaction, regrading, or additional fill may be required to correct problems that arise after construction is complete.

9) ATC should consult with the affected agricultural landowners and operators to ensure any relocated, temporary or newly established agricultural land access points are located in areas that provide safe and efficient access to remnant agricultural properties.

10) If the preferred route is selected, ATC should consult Glacial Lakes Conservancy regarding the perpetual conservation easement recorded as document 2064979 on November 18, 2018 in Sheboygan County, Wisconsin. The easement holder and ATC should discuss the use restrictions of the recorded conservation easement and determine if there are any mutually agreeable solutions for the landowner, easement holder and ATC. If by virtue of the selected route, a portion of the easement must be terminated through a condemnation proceeding or other process, the easement holder and landowner should be adequately compensated for any release of lands.

Recommendations to Agricultural Landowners and Operators

1) Agricultural landowners and operators should review Wis. Stat. §182.017 (i.e. the Landowner Bill of Rights) discussed in Section 4: Agricultural Impacts and seen in Appendix D (V) to understand their rights prior to the start of easement negotiations.

2) Landowners should review the recommended mitigation efforts described in Section 5: Agricultural Impact Mitigation to mitigate Project impacts to or regarding: topsoil mixing, soil compaction, drainage, de-watering, irrigation, erosion, trees and other woody vegetation, fencing, weed control, aerial application of seeds and sprays, construction debris, crop rotation, organic farms & other areas with certifications, biosecurity, construction noise and or dust, and stray voltage.

3) Landowners with conservation easements within the proposed ROW should consult with the easement holder to determine 1) the compatibility of the proposed ROW easement with the existing conservation easement restrictions and 2) if any effects will occur due to the land's alteration or removal from the contract.

4) Landowners who are aware of any Soil and Water Resource Management (SWRM) grant cost-shared practices on their farm within the proposed Project area should consult with the County Land Conservation Department to determine 1) the compatibility of the proposed ROW easement with the existing conservation practice and 2) if any effects will occur due to alteration of a practice during construction activities. If the landowner is charged a fee for removing or altering the installed conservation practice, the landowners should contact the ATC staff member, as designated by ATC, responsible for handling compensation for release of lands from conservation programs.

5) Landowners concerned about potential impacts to their agricultural land should keep records of the conditions of the ROW before, during, and after construction, including field moisture conditions, historic presence/absence of ponded water prior to the start of construction for post-construction comparisons, crop yield records and photographs taken every season.

6) Agricultural landowners have the authority under Wis. Stat. § 182.017(7)(d)) to allow or deny herbicide applications within the ROW they own and agricultural landowners should provide written consent or written lack of consent to ATC regarding herbicide applications.

7) Landowners with organic certification or other certifications should contact ATC and report the range and type of substances that are and are not permitted according to their certifications.

8) Agricultural landowners and beekeepers should consider using the free online DriftWatch™ and BeeCheck™ registries, operated by FieldWatch™ to communicate areas containing specialty crops or beehives with pesticide applicators, in order to minimize the risk of accidental exposure. For more information on DriftWatch, please visit the DATCP DriftWatch website at the provided link or at https://wi.driftwatch.org/.

9) Landowners should inform ATC about the existence and location of drainage systems or planned drainage systems that could be affected by the Project.

10) After construction is complete, landowners and ATC should monitor for drainage problems. If problems are observed that can be attributed to construction, the landowner and ATC should work together to develop a mutually agreeable solution.

11) Landowners should inform ATC if they use aerial planting or aerial spraying.

12) Livestock owners & operators within the Project ROW who are concerned about the noise potential for the Project should inform ATC or their representatives during the easement negotiation process.

13) Confined animal feeding operations or any operation with livestock facilities in the vicinity of the proposed power line should request pre- and post-transmission line energization NEV testing from ATC, the PSC, or their utility provider.

14) Landowners should fully describe and discuss property improvements and agricultural operations with appraisers so the appropriate value of the affected property is established.

15) Prior to the start of construction, landowners should identify for ATC where construction activities may interfere with farm operations, farm building/facilities or farming infrastructure including but not limited to drain tiles, wells, watering systems, drainage ditches, drainage tile, culverts, fencing, farm access roads, or grain bins.

16) Affected farmland owners should inform the tenant agricultural operators if ATC has made a jurisdictional offer, under the power of eminent domain.

AGRICULTURAL IMPACT STATEMENT

1. INTRODUCTION

The Wisconsin Department of Agriculture, Trade and Consumer Protection (the Department) has prepared Agricultural Impact Statement (AIS) #4567 in accordance with Wis. Stat. §32.035 for the proposed construction of a high voltage electric transmission line Sheboygan County, WI (Figure 1) by the American Transmission Company (ATC). Through the Plymouth Reliability Project (the Project), ATC proposes to construct a double-circuit 138 kV transmission line along one of two potential routes between the Towns of Lyndon and Mitchell in Sheboygan County, WI.

According to Wis. Stat. §32.035, the AIS is designed to be an informational and advisory document that describes and analyzes the potential effects of a proposed project on agricultural operations and agricultural resources, but it cannot stop a project. The Department is required to prepare an AIS when the actual or potential exercise of eminent domain powers involves an acquisition of any interest in more than five acres of land from any agricultural operation. The term agricultural operation includes all owned and rented parcels of land, buildings, equipment, livestock, and personnel used by an individual, partnership, or corporation under single management to produce agricultural commodities.

The AIS reflects the general objectives of the Department in its recognition of the importance of conserving vital agricultural resources and maintaining a healthy rural economy. The Department is not involved in determining whether or not eminent domain powers will be used or the amount of compensation to be paid for the acquisition of any property.

ATC has submitted an application for Certificate of Public Convenience and Necessity (CPCN) to the Public Service Commission of Wisconsin (PSC) (REF#: 488864) to obtain approval to construct the Project (ATC, 2024b). The PSC has assigned the Project PSC Docket ID: 137-CE-205, which can be followed within the PSC Electronic Records Filing System. The PSC will analyze the need for the project and the potential environmental and community impacts in an Environmental Assessment (EA). In addition, the PSC will receive testimony and hold hearings to further assess the impacts of this project. Afterwards, the PSC will approve, modify, or deny ATC's proposed project. Construction on the project cannot begin before ATC receives a CPCN from the PSC, as well as permits and approvals from other regulatory entities.

As established under Wis. Stat. §32.035(4)(d), if ATC intends to actualize its powers of condemnation at any point during the project through a jurisdictional offer(s), ATC may not negotiate with an owner or make a jurisdictional offer until 30 days after the AIS has been published. If ATC deviates from the selected alternative or the selected sites, ATC shall re-notify the Department. The Department shall review the re-notification for new potential impacts to agricultural lands and may determine to generate an addendum to this AIS.

The full text of Wis. Stat. §32.035 is included in Appendix D. Additional references to statutes that govern eminent domain and condemnation processes and other sources of information are also included in Appendices B, E, and F.

2. PROJECT DESCRIPTION

Project Summary

ATC has provided the Department with an agricultural impact notification (AIN) and requested spatial materials for analysis for the proposed project (DATCP, 2024a). The AIN, requested materials from ATC and ATC's CPCN application to the PSC serve as the main reference documents for the Project. The proposed project route alternatives presented here do not represent the final project route, which requires PSC approval.

ATC is proposing to construct a new 138 kV electric transmission line between the existing Elkhart Lake – Saukville 138 kV line (8241) to Plymouth Utilities' new Plymouth #5 distribution substation in the Towns of Mitchell and Lyndon in Sheboygan County (Figure 1). In addition, the project design will include two 138 kV breakers, voltage transformers, a station service transformer, bus disconnect switches and a control enclosure at the Plymouth #5 distribution substation (ATC, 2024b) ATC has indicated the primary reason for the Project is meet a new load interconnection request at the proposed Plymouth #5 Substation and to improve Plymouth Utilities' distribution reliability (DATCP, 2024a).

The scope of this analysis is limited to aspects of the Project that may impact agricultural operations. The proposed Project, depending on the selected route, will impact up to 39 agricultural landowners and approximately 44.9 acres of agricultural lands. A summary of current land use by proposed project route ROW (Right-of-Way) may be reviewed in Figures 2 and 3. A list of acres of potential easements from affected farmland owners over 1.5 acres is provided in Tables 2 and 3.

Public Service Commission of Wisconsin (PSC)

The PSC is an independent regulatory agency that regulates public electric, natural gas, water and sewer utilities in Wisconsin. Through PSC regulations, public utilities must obtain PSC approval before setting new utility rates and undertaking major construction projects, such as electric transmission lines or substations. Prior to gaining approval, PSC staff review the utilities application and prepare either an Environmental Impact Statement (EIS) or an Environmental Assessment (EA) to evaluate the need, alternatives, cost, and environmental and social impacts of the proposed project.

Approval from the PSC is obtained by the issuance of a CPCN or a Certificate of Authority (CA), both of which grant the utility the right to proceed with the project as described within the CPCN or

CA. Issuance of a CPCN or CA determined by a three-member PSC Commission. PSC Commissioners are full-time staff, appointed by the Governor, tasked with reviewing the project case file (documents, reports, testimony) and ultimately deciding whether to approve, modify, or deny a project. If the PSC determines that the project is needed and feasible, the utility must adhere to the PSC ruling and project alternatives/route selected by the Commission. PSC approval is not constrained by the utilities' "preferred" or "alternate" route designations mentioned within this AIS and the Commission may choose any combination of route segments described in the application.

ATC submitted an application for a CPCN for the Project to the PSC on January 12, 2024 under PSC Docket ID: 137-CE-205 (ATC, 2024b). The PSC deemed ATC's application complete on February 9, 2024 (PSC REF#: 490841) and issued the need for an EA on February 16, 2024 in accordance with requirements for "Type II Actions" under Wis. Admin. Code § PSC 4.10(2) (PSC REF#: 491492). DATCP expects the PSC to utilize the information contained within this AIS, the EA, the CPCN application, and testimony from the public to determine the degree of impacts each route alternative will have on the agricultural landscape and economy, prior to issuing a ruling.

Project Design and Purpose

According to the CPCN (REF#: 488864), ATC has proposed a preferred system alternative, referred to as a loop through substation configuration, from the Elkhart Lake-Saukville 138 kV line (8241) to Plymouth Utilities' new Plymouth #5 distribution substation, and offered the PSC two different route alternatives (a preferred route and an alternative route) to achieve the preferred system alternative (ATC, 2024b). The CPCN also specified a system alternative, also a loop through substation configuration, from the Creekview-Mullet River 138 kV line (X-97) to Plymouth Utilities' new Plymouth #5 distribution substation, which ATC did not disclose in the AIN to the Department (DATCP, 2024a). Through the Department's review of the Project's CPCN, Appendix D (REF#: 488848) was found to contain information on the system alternative and the comparative analysis performed by ATC. Through the comparative analysis ATC determined the Elkhart Lake-Saukville 138 kV line (8241) to Plymouth Utilities' new Plymouth #5 distribution substation system performed better in power flow, was more cost effective because of the shorter transmission line, performed better in the economic benefits study, and included lesser environmental and public impacts (ATC, 2024c).

Absent information on the Creekview-Mullet River 138 kV line (X-97) to Plymouth Utilities' new Plymouth #5 distribution substation system alternative, the Department's analysis will only focus on the preferred system alternative (i.e. Elkhart Lake- Saukville 138 kV line (8241) to Plymouth Utilities' new Plymouth #5 distribution substation system).

Should the PSC select the Creekview-Mullet River 138 kV line (X-97) to Plymouth Utilities' new Plymouth #5 distribution substation system alternative, ATC shall re-notify the Department of the alternative in accordance with Wis. Stat. §32.035.

The Elkhart Lake-Saukville 138 kV line (8241) to Plymouth Utilities' new Plymouth #5 distribution substation preferred system alternative (the Project), contains two route alternatives (Figure 1); each route alternative is comprised of multiple different route segments as seen in Figure 1 and PSC REF#: 488862. As part of the Project, ATC is also proposing asset upgrades to the existing substations known as Creekview (Fond du Lac County) and Mullet River (Sheboygan County). The asset upgrades to existing substations are outside the scope of this analysis (Kevin Lynch, Personal Communication, March 2024).

Project Location & Proposed Configurations

The proposed route segments that comprise the preferred (G, H, I, E) and alternate (A, B, C, D, E) routes (Figure 1), span from the Town of Lyndon into the Town of Mitchell, terminating at the Plymouth Utilities' Plymouth #5 distribution substation. The preferred and alternate routes will be constructed on new ROW. The typical width of the proposed transmission line ROW is 80 feet wide, but may narrow to 60 feet or increase to 110 feet in some circumstances.

According to the AIN submitted to the Department (DATCP, 2024a) and the CPCN application (REF#: 488864) submitted to the PSC under Docket ID 137-CE-205 (ATC, 2024b), ATC's preferred route alternative for the Project is to build a 7.0 mile 138 kV double circuit transmission line from a point of interconnection with line 8241 in the Town of Lyndon that generally follows town and county roads in addition to an existing natural gas pipeline corridor to the new Plymouth #5 distribution substation in the Town of Mitchell, Sheboygan County Wisconsin (ATC, 2024a).

The preferred route alternative would navigate from Lyndon to Mitchell utilizing route segments G, H, I and E as follows:

- Connect to Line 8241 where Blueberry Lane crosses WI & Southern Railroad. Following Segment G: travel Southerly parallel with Blueberry Lane until reaching the intersection of CTH N; thence traveling westerly parallel with CTH N for a 1.0 mile.
- Following Segment H: Travel southwesterly from CTH N towards CTH V collocating with an existing natural gas pipeline corridor in the same configuration.
- Following Segment I & E: Travel westerly parallel with CTH V for 3.8 miles at which point the line will turn north to interconnect at the new Plymouth #5 substation.

Segment E is a common segment between route alternatives.

ATC proposed one alternative route for the preferred system design. ATC's alternate route for the Project is to build a 8.2 mile 138 kV double circuit transmission line from a point of interconnection

with line 8241 in the Town of Lyndon at a point further to the north of the preferred alternative and generally follows roads in addition to an existing power line corridors westerly to the new Plymouth #5 distribution substation in the Town of Mitchell, Sheboygan County Wisconsin (ATC, 2024a).

The alternative route would navigate from Lyndon to Mitchell utilizing route segments A, B, C, D and E as follows:

- Connect to Line 8241 where Winooski Road crosses WI & Southern Railroad. Following Segment A: travel westerly parallel with the W-1 345 kV line for a 1.7 miles.
- Following Segment B: travel southwesterly for .4 miles. Turn southerly for .5 miles, cross STH S and travel parallel with Dooley Road for .2 miles. From thence travel southwesterly for .7 miles where it will meet and parallel the L-SEC31 345 kV line for .6 miles.
- Following Segment C & D: travel westerly for approximately 2.5 miles, paralleling Kettleview Road for 2.2 miles. Turn south at the intersection of Kettleview Road and CTH A, and travel 1.5 miles parallel with CTH A.
- Following Segment E: Turn westerly at the intersection of CTH A and CTH V, travel .1 miles parallel with CTH V at which point the line will turn north to interconnect at the new Plymouth #5 substation.

Transmission line structures will consist of double-circuit 138 KV weathering steel poles spaced between 500 – 800 ft apart depending on segment. Foundations for transmission line structures will consist of either direct-embedded steel or poured concrete foundations. In the CPCN application (REF#: 48864), ATC reported that 24 transmission structures are proposed within agricultural fields along the preferred route and 33 transmission structures are proposed to be installed within agricultural fields along the alternate route. As a part of either route (segments B, D, E, G, I), there are distribution lines that will be removed or relocated (ATC, 2024b). Permanent construction impacts are anticipated to be localized to the locations of transmission structures (Kevin Lynch, Personal Communication, March 2024).

2.1.1. Off-ROW Access Roads, Laydown Yards and Staging Areas

ATC has identified locations outside the Project ROW where they have proposed various off-ROW access roads, laydown yards and staging areas as shown in Appendix A, Figure 1. ATC plans to obtain permissions/agreements for the temporary off-ROW areas through direct negotiation between the construction contractor and the landowner on a case-by-case basis rather than by formal easement or purchase (DATCP, 2024a). Once construction has concluded, ATC plans to restore the Project's off-ROW sites to pre-construction conditions. (ATC, 2024b).

ATC reported that minimal access from outside proposed routes or existing ATC ROW is required to construct the project. Access is principally planned to occur within proposed or existing ATC ROW

unless the contractor can arrange voluntary alternative access to minimize cots, environmental impact or landowner impact. If the alternate route is selected, off-ROW access is required at the intersection of CTH A and CTH V for the benefit of Segments D and E. Off-ROW access would consist of a temporary matted access lane.

If the alternate route is selected, in some circumstances, ATC may require a temporary workspace to consist of a matted workpad just outside of the project ROW for stringing (two in Segment D, one at the intersection of Segments A and B)(ATC, 2024b).

2.1.2. Project Schedule

According to the AIN and the CPCN application (REF#: 488822), pending approval by the PSC and obtaining all state agency permits, ATC plans on following the schedule shown in Table 1 for the proposed project.

Table 1: The anticipated construction timeline for the proposed Plymouth Reliability Project transmission line project, pending approval by the PSC and obtaining all state permits (ATC, 2024a and 2024d).

Project Activity	Preliminary Date
Submittal to PSC, DNR	January 2024
Anticipated PSC Order	February 2025
ATC Easement Acquisition	March - August 2025
Start Transmission Line Construction	August 2025
Transmission Line In-Service Date	December 2025
Restoration	2026

2.2. Project Right-of-Way (ROW)

ATC plans to acquire new high voltage easements for the Project. The typical width of the proposed transmission line ROW is 80 feet wide, but may narrow to 60 feet or increase to 110 feet in areas with steep terrain. In both the preferred and alternated routes, where the Project is adjacent to public ROW, a portion of the proposed ROW easement will overlap with the public ROW. For the segments of the Alternate route that proposed to parallel existing 345 kV lines, new ROW would abut the existing transmission line easement. For both the preferred and alternate route, a new easement is proposed to overlay an existing 71 ft ROW for lines 8241 and LYNG11. Where a proposed ATC easement overlaps an existing ATC easement, the new ROW easement will add new rights for new ATC facilities (ATC, 2024b).

Overall, the proposed ROW for ATC's preferred route (Segments G, H, I and E) requires 68.0 ROW acres and utilizes 32% of shared ROW with existing transportation or utility corridor ROWs.

Approximately 41.99 acres of the proposed ROW for the preferred route were classified as agricultural property within the AIN. The preferred route is anticipated to have up to 13.64 acres of agricultural impact in off-ROW areas. The alternative route (segments A, B, C, D, E) requires 80.5 ROW acres and utilizes 22% shared ROW with existing transportation or utility corridor ROWs (ATC, 2024b). Approximately 44.9 acres of the proposed ROW for the alternate route were classified as agricultural property within the AIN. The alternative route may have up to 10.99 acres of agricultural impact in off-ROW areas.

3. AGRICULTURAL SETTING

Farmland Preservation

Wisconsin's farmland preservation ("FP") program provides local governments and landowners with tools to aid in protecting agricultural land for continued agricultural use and to promote activities that support the larger agricultural economy. Lands that are planned for FP by the county and included in a certified zoning district or located within an Agricultural Enterprise Area ("AEA") are afforded land use protections intended to support agriculture and may be eligible for the farmland preservation tax credit.

Farmland Preservation Planning

The Department certified Sheboygan County's current FP plan in 2023 for a ten year period ending in 2033. The criteria for land planned for FP in Sheboygan County includes soils that are suitable for agricultural production; land historically used for agricultural use or agriculture-related use; land in close proximity to agricultural infrastructure; land that is in undeveloped natural resource or open space areas that connect other farmland parcels to create a large, uninterrupted block of preserved area; and land that may be under some development pressure but not located in an area the county plans for development in the next 15 years (Sheboygan County, 2023). Approximately 63.8 acres of proposed ROW on the alternate route are planned for farmland preservation in the County's FP plan. Approximately 43.78 acres of proposed ROW on the preferred route are planned for farmland preservation in the County's FP plan.

Farmland Preservation Zoning

FP zoning is a tool to implement an FP Plan. A farmland preservation zoning district restricts covered lands to agricultural uses and uses compatible with agriculture and is certified to be consistent with the state's FP Law, Chapter 91. A review of the Department's FP program records indicates the Town of Lyndon has adopted FP zoning administered under town zoning authority (DATCP, 2023). The certified FP zoning districts in the Town of Lyndon are the A-1, Exclusive Agricultural District, the A-1-RZ, Exclusive Agricultural District, A-1-S, Exclusive Agricultural District Small-Scale, and A-PR, Agricultural Parcel Remnants District. The Town of Mitchell has not

adopted a certified FP zoning ordinance. ATC has applied for a CPCN under Wis. Stat. § 196.491 from the PSC. If such certificate is issued, the project will be a permitted use in FP zoned areas under Wis. Stat. § 91.44(f). If a CPCN is not issued, the project will be subject to conditional use regulations in FP zoned areas under Wis. Stat. § 91.46(4) and must meet the requirements listed under Wis. Stat. § 91.46(4)(a)-(4)(e). One landowner noted participation in the farmland preservation program through zoning.

The project initiator should consult with all applicable local zoning authorities to identify if additional restrictions apply and to ensure compliance with local zoning regulations. For additional context, review Section 1.7.3 *Local Permits* of the project CPCN Application (REF #:488864).

Agricultural Enterprise Areas

AEAs are community-led efforts to establish designated areas important to Wisconsin's agricultural future. This designation highlights the importance of the area for local agriculture and further supports local farmland preservation and agricultural development goals. Designation as an AEA also enables eligible landowners to enter into FP agreements. Through an FP agreement, a landowner agrees to voluntarily restrict the use of his/her land to agriculture for fifteen years in exchange for eligibility for the farmland preservation tax credit. A review of the Department's FP Program records shows that Sheboygan County does not contain any designated AEAs (DATCP, 2024b). Prior to 2009, owners of eligible farmland could sign 10 to 25-year FP agreements outside of AEA boundaries. There are no effective pre-2009 FP agreements located in Sheboygan County.

Purchase of Agricultural Conservation Easement Programs (PACE) and other Conservation Easements

The 2009 - 2011 State of Wisconsin budget authorized the state Purchase of Agricultural Conservation Easement (PACE) Program under Wis. Stats. § 93.73, which is intended to provide matching funds to assist local governments and non-profits with the purchase of permanent agricultural conservation easements. The intent of the PACE program is to preserve agricultural land of significance at risk of development and to provide an additional layer of permanent protection to certified FP planned areas and designated AEAs. Post PACE acquisition, the partnering local entity and the Department co-hold the agricultural conservation easement voluntarily purchased from landowners. At the time of this analysis, the state's PACE Program is not currently funded or accepting new applications. However, the state holds 17 PACE easements. A review of the Department's PACE Program shows the Project would not impact any state held PACE easements.

Counties and private non-governmental organization such as land trusts may also hold agricultural conservation easements. Parcel 59010123750 (Township 14N, Range 21 East, Section 15) along the preferred Project route, is subject to a perpetual conservation easement held by Glacial Lakes Conservancy Recorded as Document Number 2064979 on November 8, 2018 in the Sheboygan County Register of Deeds Office (Isabel Mueller, Personal Communication, February 2024). The

preferred project route proposes to acquire 2.38 acres of permanent ROW easement from this property. The easement is pursuant to Wis. Stats. § 700.40, and seeks to preserve open space and other compatible land uses, including agriculture. The easement restricts: (1) the development of new buildings, structures or improvements within the parcel; (2) commercial and industrial uses, including use by easement or other right for ingress and egress; (3) surface alterations; (4) activities that cause or are likely to cause soil loss, erosion or degradation. See also *Appendix C: Agricultural Landowner Comments.*

Landowners with conservation easements within the proposed ROW should consult with the easement holder to determine 1) the compatibility of the proposed ROW easement with the existing conservation easement restrictions and 2) if any effects will occur due to the land's alteration or removal from the contract.

Holders of a conservation easement should provide ATC a copy of the recorded easement. The easement holder and ATC should discuss the use restrictions of the recorded conservation easement and determine if there are any mutually agreeable solutions with regard to the purpose of the easement for the landowner, easement holder and ATC.

If by virtue of the selected route, a portion of the easement must be terminated through a condemnation proceeding or other process, the landowners should contact the ATC staff member, as designated by ATC, responsible for handling compensation for release of lands from conservation programs. The easement holder and landowner should be adequately compensated for any release of lands.

Managed Forest Law (MFL)

The MFL program is a voluntary sustainable forestry program administered by the Wisconsin Department of Natural Resources (DNR) under subch. III of ch. NR 46. In exchange for reduced property taxes, eligible landowners commit to a 25-50 year sustainable forest management plan on their privately owned woodlands. Sustainable forestry practices such as harvesting mature timber according to sound forest management practices, reforestation and afforestation of the land, are required in enrolled landowner's management plans. Potential enrollees must also show their parcel complies with size and density requirements under Wis. Stat. § 77.82(1)(a)2, which states that at least 80% of the parcel must be producing or capable of producing a minimum of 20 cubic feet of merchantable timber per acre per year. Land with buildings or improvements associated with buildings are not eligible for MFL. Exceptions such as utility ROWs are permitted such that the project and its ROW will not interfere with future or current MFL eligibility (DNR, 2017).

In the AIN submitted to the Department, ATC indicated that the proposed routes each intersect one parcel enrolled in the MFL Program. A review of DNR's 2023 MFL Program database indicates that part of parcel 5901020920 (Township 14N, Range 21 East, Section 21) was enrolled in the MFL program and overlapped with the proposed ROW for the alternate route. DNR confirmed that this

parcel expired from MFL on January 1, 2024 and was not renewed (Andrew Noth, Personal Communication, February 2024). A review of the preferred route's proposed ROW illustrates an intersection with MFL parcel 50910124012 (Township 14N, Range 21 East, Section 16). The proposed ROW is adjacent to the enrolled area but does not impact program enrollment (Andrew Noth, Personal Communication, February 2024).

Landowners may visit the DNR Forestry Assistance Locator website https://apps.dnr.wi.gov/fal/ to find their local DNR Tax Law Forestry Specialist and discuss questions related to MFL enrolled lands.

Drainage Districts

Drainage districts are local governmental entities governed under Wis. Stat. Ch. 88 and organized under a county drainage board for the primary purpose of draining of lands for agricultural use (DATCP, 2021). Landowners who benefit from drainage pay assessments to cover the cost to construct, maintain, and repairing the district's drains. According to the Department, approximately 188 active districts exist within 27 of Wisconsin's 72 counties. A review of the Department's Drainage Program database indicates that Sheboygan County has one drainage district shared with Ozaukee County covering a portion of the Town of Holland. No organized drainage districts are anticipated to be directly or indirectly impacted by the project.

Other Conservation Programs

Voluntary conservation programs such as the USDA Conservation Reserve Enhancement Program (CREP) and the USDA Conservation Reserve Program (CRP) are financial incentive programs to help agricultural landowners meet their conservation goals. The USDA and the Department jointly administer the CREP program in Wisconsin.

Conservation Reserve Enhancement Program

CREP pays eligible agricultural landowners enrolled within the program to install filter strips along waterways or to return continually flooded fields to wetlands while leaving the remainder of the adjacent land in agricultural production. To be eligible for CREP payments, a recipient must have agricultural lands in crop production that are within 150 ft of a stream or water body or 1,000 ft from a grassland project area (DATCP, 2019). A review of the Department's CREP records indicated that the proposed Project would not impact any current CREP fields.

Conservation Reserve Program (CRP)

CRP is a land conservation program administered by the Farm Service Agency of the USDA. CRP enrollment information is privileged to the USDA and CRP program participants. The Department is therefore unable to determine if any of the impacted agricultural parcels are enrolled within the CRP program.

Soil and Water Resource Management Grant Program (SWRM)

The state has a SWRM program with goals including: enhancing surface and groundwater protections, providing financial and technical assistance for locally led conservation and addressing soil and water resource concerns. Through the SWRM Program, the Department allocates funds to County Conservation Departments to facilitate landowner cost-share for installation of conservation practices. When a cost-share contract is issued under Wis. Stat. §92.14, a landowner and or grant recipient agrees to install and maintain the conservation practice according to an operation and maintenance plan.

Landowners who are aware of any SWRM cost-shared practices on their farm within the proposed Project area should consult with the County Land Conservation Department to determine 1) the compatibility of the proposed ROW easement with the existing conservation practice and 2) if any effects will occur due to alteration of a practice during construction activities.

ATC is advised to consult the County Land Conservation Department on the existence of installed SWRM conservation practices within the Project area. Practices that are not maintained in accordance with the terms of the contract operation and maintenance plan may be subject to repayment of cost-shared funds. If a landowner is required to repay any cost-share funds because a construction impact resulted in a violation of the SWRM contract, the landowners should contact the ATC staff member, as designated by ATC, responsible for handling compensation for release of lands from conservation programs. The landowner should be compensated for any termination of SWRM grant contract resulting from a construction impact.

4. AGRICULTURAL IMPACTS

In addition to being a key component of Wis. Stat. §32.035, documenting the agricultural impacts of a project provides the project initiator and the agricultural landowner the opportunity to better understand the project in its own right as well as learn how the project will impact agriculture. Furthermore, the documentation of agricultural impacts by agricultural landowners and operators creates the opportunity for them to support alternatives that may reduce impacts to agricultural lands. In order to promote the opportunity for alternatives, the Department has used information provided by ATC for this AIS and information gathered by the Department from agricultural landowner(s) to analyze the potential agricultural impacts of the Project in Sheboygan County, WI. The analysis of the agricultural impacts and conclusions drawn from the analysis form the basis of the Department's recommendations within the AIS Recommendation Section.

Agricultural operations and future productivity may be affected during construction of the Project. Impacts to agricultural lands may include but are not limited to:

- Interference with farm operation access in the ROW and adjacent areas
- Alteration of surface and subsurface drainage systems

- Impacts to grazing areas, row crops or existing fencing
- Use of prohibited substances on farms that follow organic or other sustainable management practices

Following construction, some impacts may affect agricultural operations for years. These long term impacts may include but are not limited to:

- Yield reduction due to erosion, topsoil mixing and/or compaction
- Ponding from altered surface and subsurface drainage profiles
- Inadequate restoration resulting in alteration to original land contours

ATC has indicated within their CPCN application and AIN, pending Project approval, they will coordinate and consult with each agricultural landowner to obtain detailed information about each agricultural operation including but not limited to: locations of farm infrastructure, livestock and crops, current farm biological security practices, locations of drainage tiles, and landowner concerns. ATC will use agricultural landowner feedback to identify potential project impacts to each agricultural operation along the Project route and to the extent practicable, implement measures to mitigate impacts (DATCP, 2024a). Subsequent discussion includes agricultural acquisitions, landowner concerns and recommended agricultural mitigation practices. A summary record of landowner concerns submitted to the Department through a landowner pre-construction survey for the Project can be found in Appendix C: Agricultural Landowner Comments

Landowner Rights

Wisconsin Statute § 182.017, also referred to as the "Landowner Bill of Rights", describes the rights of landowners and the requirements the utility must adhere to, when a transmission line will be constructed on private property. The transmission line applicant and contractor operating on the applicants behalf must comply with all aspects of this statute, which covers the range of topics described below:

- Compensation
- Infrastructure Repair
- Soil Conservation & Erosion
- Debris Removal
- Consent for Weed & Brush Control
- Landowner and Utility Liabilities
- Tree Harvesting and Tree Ownership
- Interference with television & radio reception
- Right-of-way Restriction

The applicant may request landowners to waive some rights during the negotiation process, but landowners are not required to do so. The Landowner Bill of Rights is still applicable to condemned land. The Department recommends that each affected landowner review the Landowners Bill of Rights (see Appendix D Section V) in its entirety prior to the start of easement negotiations.

Agricultural Land Acquisitions

In order to implement the proposed Project, ATC will affect approximately 41.99 – 44.9 acres of agricultural lands depending on the selected route (Figure 2, Figure 3) and anticipates 10.99 - 13.64 acres for temporary off ROW access roads, stringing areas and laydown yards. Figure 2 illustrates that according to the AIN, 61.85% of lands within the preferred route proposed ROW are currently devoted to some form of agricultural use. Figure 3 illustrates that according to the AIN, 55.89% of lands within the alternate route proposed ROW are currently devoted to some form of agricultural use. ATC plans to acquire new permanent easements to obtain the necessary rights to construct the Project across all agricultural lands, regardless of a lands' current easement status (ATC, 2024b). The Department analyzed Project impacts to agricultural lands, regardless of the lands' current easement status.

Preferred Route	E	Cropland	0.73
		Non-Agricultural Land	0.61
		Other Agricultural Land	0.51
	E Total		1.84
	G	Cropland	3.54
		Non-Agricultural Land	4.50
		Other Agricultural Land	1.54
		Pasture	2.47
	G Total		12.05
	H	Cropland	11.84
		Forest Management	0.11
		Idle or Fallow Fields	0.71
		Non-Agricultural Land	3.68
		Other Agricultural Land	0.59
		Pasture	1.63
	H Total		18.55
	I	Cropland	7.62
		Idle or Fallow Fields	0.89
		Non-Agricultural Land	17.11
		Other Agricultural Land	7.19
		Pasture	2.62
	I Total		35.43
		N/A - Within Substation	0.11
	N/A - Within Substation Total		0.11
		Preferred Route Total	67.99

Figure 2: Current Land Use Summary by Route Segment, Preferred Route ROW (DATCP, 2024a).

Route	Segment	Land Cover	Total (Acres)
Alternate Route	A	Cropland	9.95
		Forest Management	0.08
		Non-Agricultural Land	4.97
		Other Agricultural Land	1.06
		Pasture	0.65
	A Total		16.71
	B	Cropland	11.14
		Idle or Fallow Fields	0.52
		Non-Agricultural Land	2.74
		Other Agricultural Land	0.32
		Pasture	1.00
	B Total		15.73
	C	Cropland	1.63
		Non-Agricultural Land	5.57
		Other Agricultural Land	0.17
	C Total		7.36
	D	Cropland	11.80
		Idle or Fallow Fields	1.33
		Non-Agricultural Land	21.54
		Other Agricultural Land	3.18
		Pasture	0.85
	D Total		38.70
	E	Cropland	0.73
		Non-Agricultural Land	0.59
		Other Agricultural Land	0.52
	E Total		1.84
		N/A - Within Substation	0.11
	N/A - Within Substation Total		0.11
Alternate Route Total			80.45

Figure 3: Current Land Use Summary by Route Segment, Alternate Route ROW (DATCP, 2024a).

The Department attempted to contact 29 agricultural landowners as shown in Table 2 and 3 impacted by the Project who own land associated with a farm operation and may experience Project impacts of 1.5 or more acres. There were another 38 agricultural landowners with lands impacted by the proposed Project route alternatives with impacts less than 1.5 acres, who were not contacted. The following section relays the feedback and comments received from agricultural landowners through the Department's efforts. The information obtained helped form the basis of the Department's analysis of agricultural impacts to specific agricultural landowners and agricultural landowners in general. According to Appendix E of the Project CPCN application, ATC has also engaged in a public outreach campaign, including the distribution of project notifications to every landowner within 300 ft of the Project's proposed centerline (REF#: 488846) and the

creation of a project specific website at www.atc-projects.com (ATC, 2024a). In the CPCN Application, ATC indicated a plan to communicate with potentially impacted landowners through direct mailings, phone and email conversations in lieu of in-person or virtual open houses in the proposed project area (ATC, 2024b). ATC was offered the opportunity to review and comment on this analysis.

Agricultural tenant operators impacted by the Project may be eligible for a farm replacement payment from ATC in accordance with Wis. Stat. §32.19(4m)(b) if ATC exercises the powers of eminent domain through a jurisdictional offer to the agricultural property owner. A voluntary sale between ATC and an agricultural property owner, after a jurisdictional offer has been made, would not negate the potential for a farm replacement payment.

Table 2: Preferred Route- Acres of Potential Easements from Affected Farmland Owners the Department attempted to contact. Agricultural landowners with less than 1.5 acres of impact were not contacted. *Landowner was contacted as having more than 1.5 acres of impact associated with the project- however affected land falls within Plymouth 5 substation boundary.

Agricultural Landowner	*Permanent Easement*	*Total*
Preferred Route (Segments G, H, I, E)		
Milton Abel*	-	-
Heidi Casady & James Zuengler	1.62	1.62
Jason Dahm	1.78	1.78
Jerry & Joanne Friedman	2.46	2.46
Hickory Lawn Dairy Farm, Inc.	1.94	1.94
Hughes Farms LLC	2.99	2.99
KimberLy Hughes	4.67	4.67
Thomas & Janine Kestell	2.35	2.35
Norbert & Janice Kraemer	4.20	4.20
Lincolnwood Properties LP	2.82	2.82
Pearce Woodland Trust	1.64	1.64
Roger & Diane Pietsch	4.26	4.26
Dwayne & Elizabeth Pocian	1.50	1.50
Brenda Schultz, Byron Schultz & Leon Schultz	6.03	6.03
Brenda Schultz ETAL	2.49	2.49
William Schultz Jr.	5.54	5.54
William Schultz Jr. & William Schultz III	2.40	2.40
Michael & Kristi Sorenson	2.38	2.38
Katherine Zens	1.90	1.90
Total of (22) Agricultural Landowners < 1.5 acre of Impact	13.68	13.68
Preferred Route Totals	**66.65**	**66.65**

Table 3: Alternate Route- Acres of Potential Easements from Affected Farmland Owners the Department attempted to contact. Agricultural landowners with less than 1.5 acres of impact were not contacted. *Landowner was contacted as having more than 1.5 acres of impact associated with the project and owns additional affected lands falls within Plymouth 5 substation boundary.

Agricultural Landowner	*Permanent Easement*	*Total*
Alternative Route (Segments A, B, C, D and E)		
Milton Abel*	1.83	1.83
Gene & Kathleen Bohnhoff	8.70	8.70
Larry,Carol & Tara Bucholz	3.00	3.00
Drewery Farms Inc	10.99	10.99
Keith & Ellen Enstrom	1.74	1.74
John & Linda Fischer	9.60	9.60
Matthew & Wendy Krueger	2.38	2.38
Russel Payne	4.51	4.51
Adam & Karie Redlich	2.30	2.30
Robert & Merri Schmidt	3.19	3.19
James Webb	3.59	3.59
Jon & Ann Weeden	2.10	2.10
Total of (21) Agricultural Landowners < 1.5 acre of Impact	11.91	11.91
Alternate Route Totals	**65.84**	**65.84**

Summary of Landowner Concerns

In order to gather additional information about the project's impact to agricultural lands and farm operations, the Department mailed surveys to agricultural landowners in the Project ROW routes who had agricultural impacts of 1.5 or more acres. In total, the Department mailed 29 surveys. Agricultural landowners were given the opportunity to respond by mail, an online survey or call the AIS program manager to give a verbal response. A total of 16 agricultural landowners responded, resulting in a response rate of 55%. A summary record of responses received for the Project can be found in Appendix C: Agricultural Landowner Comments.

The majority of the respondents reported their agricultural operations consisted of cropland followed by homes and farm buildings. 10 respondents also indicated their agricultural operations possessed livestock and farm animals including cattle, poultry and horses. 62.75% of respondents indicated they rent some or all of their agricultural land along the proposed project area to a different agricultural producer.

Landowner responses regarding potential project impacts to their farm operation are illustrated in Figures 4 and 5. Cumulatively, without respect to route, respondents were most concerned about farm residences and buildings, access, fencing and impacts to drainage on agricultural land. Multiple landowners raised other community concerns such as related environmental impacts, wildlife impacts as well as considerations for route alternatives.

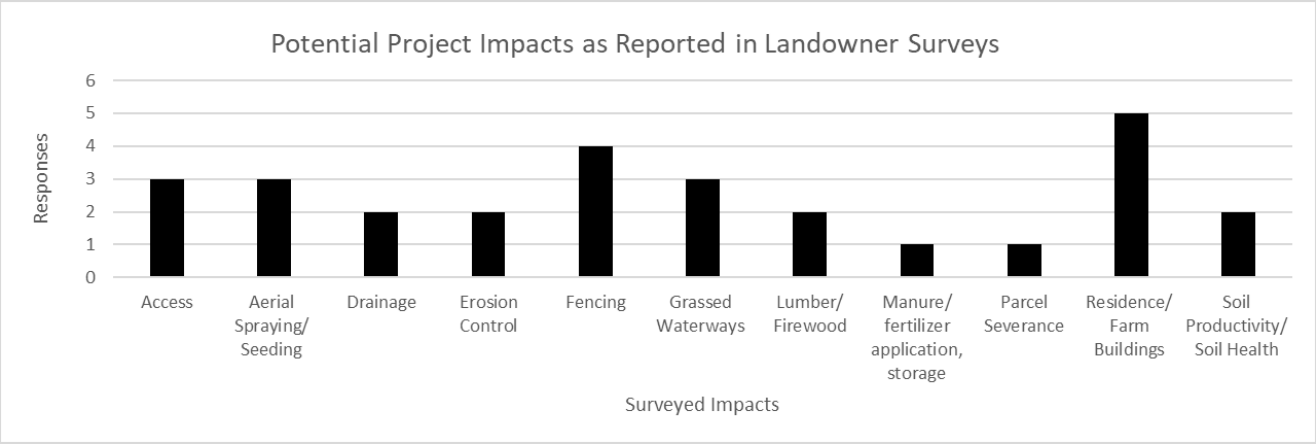

Figure 4: Landowner concerns resulting from the proposed Project, as reported for the Preferred Route.

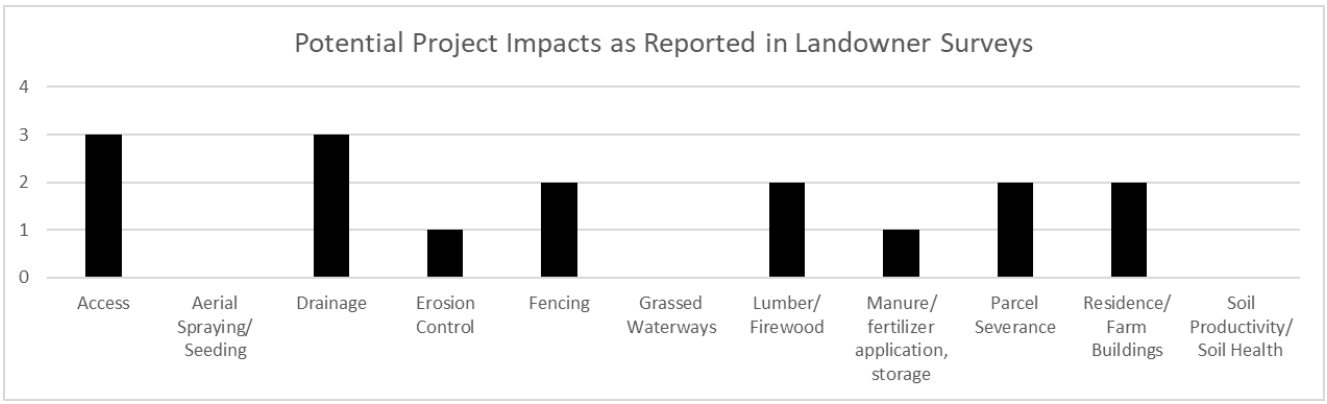

Figure 5: Landowner concerns resulting from the proposed Project, as reported for the Alternate Route.

Please refer to Section 5: Agricultural Impact Mitigation for recommended practices to address landowner concerns related to potential project impacts.

Severance, Access and Wasteland

The temporary and permanent easements of agricultural property required to implement any of the proposed Project alternative routes could result in agricultural parcel severance, removal of existing field access points and potentially the creation of wastelands and uneconomic remnant parcels. The circumstances (i.e. loss of access, severance, wasteland etc.) surrounding the impacts to each impacted remnant agricultural parcel are unique, thus some agricultural parcels may remain economically viable, while others may not. The following analysis will document the potential for severance, loss of access and potential creation of wastelands and uneconomic

remnant parcels for the agricultural parcels impacted by the proposed alternatives for the proposed Project in Sheboygan County, WI.

Severance

Severance may be a physical barrier such as a temporary access road or a non-physical barrier such as permanent land use restrictions. Imposing land use restrictions as part of a transmission line easement ROW may still allow an agricultural landowner to access lands. However, barring the growth of trees or other woody plants as part of an easement may prevent the continuation of an existing agricultural land use or alter the management thereof. Regardless of the means, severing an agricultural parcel effectively splits the existing parcel into two or more smaller parcels. Severing an agricultural parcel may also remove existing access points, create agricultural wastelands or uneconomic remnant parcels, and even divide the operation of a farm. Under Wisconsin's Eminent Domain Statute, compensation for damages resulting from severance is described in Wis. Stat. § 32.09(6).

In the AIN, ATC reported that agricultural parcels are not anticipated to be severed following construction as agricultural use beneath the transmission line will still be possible. A copy of the template high voltage easement including use restrictions, and utility commitments can be reviewed within the CPCN application (PSC REF#:488844). Per easement restrictions, following site restoration, agricultural use may still be possible outside of lands sited with transmission structures. ATC will attempt to apply design and engineering practices that site transmission structures near the edge of farm parcels in a manner that minimizes impacts to farm parcels and agricultural use. See also Figure 6 under *Wasteland* regarding field edge effect vs. in-field siting of towers. Both the preferred and alternate routes include proposed ROW easements that cross contiguous agricultural parcels. In the preferred route, Segment H crosses approximately 13 agricultural parcels in order to collocate with an existing natural gas pipeline corridor in the same configuration. The remaining segments on the preferred route (G, I, E) tend to follow existing transportation corridor ROWs where the potential for agricultural parcel severance is mitigated. In the alternate route, Segments A, B and C cross agricultural parcels outside of existing utility and transportation corridor ROWs -- Segments A and C are parallel to existing 345 kV lines. Segment B crosses agricultural parcels at an angle to avoid a farm residence and minimize impacts to sensitive environmental features including wetlands, waterways and forested habitats (DATCP, 2024a). Route segments that cross agricultural fields will create temporary severance during construction. One landowner, for whom the preferred Project Route may bisect their land, indicated a concern for future land use and questioned whether a future driveway could traverse the project ROW. The impacts of land use restrictions within the selected ROW may affect the future land use decisions of landowners.

Access

As proposed, the Project has the potential to temporarily limit agricultural field access and limit access to agricultural operations. When agricultural lands and operations lose access, even temporarily, agricultural productivity may be impacted if crops, livestock or other agricultural products cannot be tended to. Lost access may also directly result in lost income if a field cannot be planted or harvested, or if an agricultural operation as a whole is hindered.

Access limitations would be specific to permanent easements utilized for the transmission line ROW and any voluntary agreements made between the contractor and landowners for any laydown yards, staging areas, or other off-ROW access.

Where the proposed preferred and alternative project ROWs follow existing transportation corridor ROW easements any agricultural parcel or operation has the potential to experience temporary access limitations during construction. Agricultural parcels where ATC will need to site the transmission line in-field would have the greatest potential for access limitations.

In order to accommodate field access to the remnant agricultural fields, the Department recommends that ATC work with agricultural landowners and any agricultural tenant operators to determine safe new access points to the remnant fields during construction.

Wasteland

Acquisitions and easements that impact farmland frequently create small remnant fields that may be difficult to access, are irregularly shaped, or are no longer able to produce the pre-existing agricultural crop. These small irregularly shaped remnant fields may also contain numerous obstacles, such as transmission line poles, that can make it difficult for agricultural equipment to navigate and reduce the amount of tillable acres. This in turn reduces agricultural productivity, decreases the economic viability of the land and increases the likelihood of creating undeveloped land (Wis. Stat. § 70.32(2)(a)(5)) or what is commonly referred to as wasteland as shown in Figure 6. Compensation for the reduction in the value of parcels that are small and/or irregularly shaped and the potential creation of uneconomic remnant parcels according to Wis. Stat. 32.05(3m) should be addressed in the appraisal of each affected parcel.

By the nature of transmission line projects, both the preferred and alternative routes proposed by ATC for the Project have the potential to permanently create small amounts of agricultural wastelands in the immediate area surrounding each transmission line pole (Figure 6). In the CPCN application (REF#: 48864), ATC reported that 24 transmission structures are proposed within agricultural fields along the preferred route and 33 transmission structures are proposed to be installed within agricultural fields along the alternate route. Six agricultural landowners (37.5% of respondents) reported to the Department concerns about driving farming equipment around transmission towers and/or the lost productivity and revenue that would result from altering planting patterns around the towers (Appendix C "Agricultural Landowner Comments"), which

elevates the cause for concern around the creation of tower-induced wastelands. In the AIN, ATC reported that it will attempt to apply design and engineering practices that site transmission structures near the edge of farm parcels in a manner that minimizes impacts to farm parcels and agricultural use.

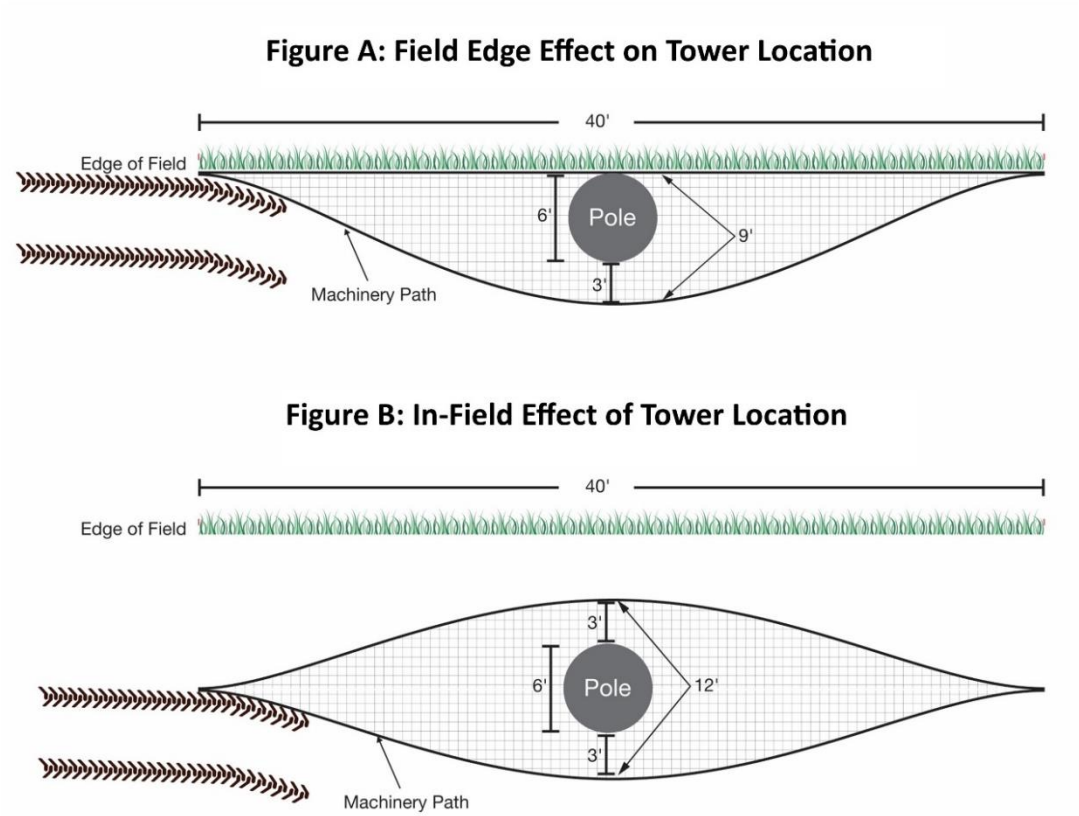

Figure 6: Examples of agricultural wastelands created by altering the pathway of agricultural machinery to navigate around transmission line towers along a field edge (Figure A) and within a field (Figure B).

Prime Farmland and Soils

As proposed, the Project will impact between 41.99 to 45.2 acres of agricultural lands and agricultural soils depending on the selected route, and between 10.86 to 13.64 acres of agricultural lands depending on access roads, stringing areas and laydown yards. Impacts to prime farmland and soils measured in this analysis reflect the Project's cumulative impact and does not necessarily differentiate between permanent or temporary impacts to an agricultural operation. The soils impacted by the proposed Project were cataloged and analyzed by farmland classification, for each route alternative, using the USDA-Natural Resources Conservation Service prime farmland soils GIS layer. Farmland soil classifications impacted by the Project include prime farmland, prime farmland if drained, farmland of statewide importance or farmland of local importance (Table 4). Prime farmland is designated by the USDA according to section 622.3 of the National Soil Survey Handbook (USDA, 2020) and is based on the ability of the land and soil to produce crops. Definitions of prime farmland, prime farmland if drained and farmlands of statewide/local

importance are provided under Table 4. The soil texture of agricultural soils impacted by the Project was analyzed, in general terms, across the project ROW.

It was found that 92% of agricultural lands within the Preferred Route ROW hold some level of Federal or State priority designation and 84% of agricultural lands within the Alternate Route ROW hold some level of Federal or State priority designation. Respective to the preferred and alternative routes, the USDA has designated approximately 31.91 and 24.81 acres respectively as prime farmland/prime if drained, while the State of Wisconsin has designated approximately another 6.76 and 12.82 acres respectively as farmland of statewide importance (Table 4). Cumulative impacts to agricultural soils for off-ROW areas for the preferred and alternate routes are similar in nature. Of the 13.64 acres of agricultural lands required for access roads, stringing areas and laydown yards for the preferred route, 86% hold some level of Federal or State priority designation. Of the 10.86 acres agricultural lands required for access roads, stringing areas and laydown yards for the alternate route, 88% hold some level of Federal or State priority designation. Across the impacted agricultural parcels, the soils primarily consists of silt loam textured soils of various soil series. Silt loam soils are medium-textured soils (Cornell, 2017) with good soil structure, possess an ideal ability to hold onto water without becoming excessively wet and are usually best suited for crop production (UW-Extension, 2005).

This soils analysis shows that both the preferred and alternative routes will impact or remove prime farmland and high quality soils. Comparatively, the preferred route ROW has the potential to impact 25% more acres of prime farmland in lands currently devoted to agricultural use. When evaluating the cumulative impacts to all farmlands for soil classification with some designation of Federal and State importance, the preferred route ROW has the potential to impact only 2.8% more acres than the alternative route ROW. In general, the Department recommends selecting a route that shares an existing roadway ROW to the greatest extent possible to mitigate impacts to prime farmland and agricultural soils.

Table 4: Agricultural soils, shown by Project route and farmland classification, impacted by the proposed Project ROW in Sheboygan County, WI. Off-ROW soil classifications not portrayed.

Soil Texture	Prime Farmland* (acre)	Prime Farmland if Drained◊ (acre)	Farmland of Statewide Importance‡ (acre)	Not Prime Farmland◊ (acre)	Total (acre)
Preferred Route (Segments G, H, I, E)					
Loam	0.0	0.0	0.0	1.12	1.12
Sandy Loam	0.0	0.0	0.0	1.46	1.46
Silt Loam	29.95	1.96	6.76	0.73	39.40
			Preferred Route Total		**41.98**
Alternative Route (Segments A, B, C, D and E)					
Gravel Pit	0.0	0.0	0.0	0.77	0.77
Loam	0.0	0.0	3.62	3.06	6.68
Loamy Land, Seeped	0.0	0.0	0.0	0.22	0.22
Sandy Loam	0.0	0.0	0.0	2.19	2.19
Silt Loam	21.77	3.04	7.23	1.05	33.09
Silty Clay Loam	0.0	0.0	1.97	0.0	1.97
			Alternative Route Total		**44.92**

*__Prime farmland__ is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and may be utilized for cropland, pastureland, rangeland, forest land, or other lands excluding urban built-up land or water. It has the soil quality, growing season, and moisture supply needed to produce economically sustained high yields of crops when treated and managed according to acceptable farming methods, including water management.

◊**Prime farmland if drained**, indicates that if farmland is drained it would meet prime farmland criteria.

‡**Farmlands of statewide importance** are set by state agency(s). Generally, these farmlands are nearly prime farmland and economically produce high yields of crops when treated and managed according to acceptable farming methods. Some may produce yields high as prime farmlands under proper conditions.

◊**Not Prime farmland**, indicates farmland is neither prime farmland nor of designated importance.

Drainage and Soil Health

Maintaining proper field drainage and preserving soil health is vital to the success of an agricultural operation. If drainage is impaired, water can settle in fields and cause substantial damage, such as reducing soil health, harming or killing crops and other vegetation, concentrating mineral salts, flooding farm buildings, or causing hoof rot and other diseases that affect livestock. Soil structure, texture, organic matter and microorganisms are all important factors that influence soil health (Wolkowski and Lowery, 2008).

Drainage and Soil Health Impacts

Project construction activities have the potential to disrupt and/or mix soil profiles within the Project ROW as well as the surrounding area. Construction activities may affect the existing surface and subsurface (i.e. drain tile) drainage patterns of agricultural fields if drainage tile lines are broken or if the topography of grassed waterways, known water flowlines or erosion control structures are altered. There are 5 agricultural landowners who reported concerns related the project potentially impacting drainage or drain tiles on their farm operation (Appendix C: Agricultural Landowner Comments). The agricultural soils impacted by the proposed Project are also known to be hydric or contain hydric inclusions. The preferred route ROW and alternate route ROW contain an estimated 11.57 and 11.84 acres of hydric soils respectively. Hydric soils are commonly saturated, flooded or ponded for an extended period during the growing season, causing anaerobic conditions within the upper soil layer and may be associated with wetlands. It's also common practice for agricultural operations to install drainage systems to mitigate the impacts of hydric soils, thus the presence of drainage tile is likely within the Project area.

The movement of heavy equipment through the Project ROW may also compact soil and impede drainage. UW-Extension report A3367 states that heavy equipment with axle loads that exceed 10 tons increase the risk of soil compaction into subsoil layers that cannot be removed by conventional tillage (Wolkowski and Lowery, 2008). In addition, research has also shown that construction activities can negatively impact soil properties, soil health and crop yields for up to a decade within the ROW depending on the type and severity of construction impacts (e.g equipment axle weight, use of excavation, intermixing of soil layer etc.) (Culley and DOW 1988; Shi et al., 2014).

The Department recommends ATC take several mitigation efforts related to topsoil mixing, soil compaction, drainage, de-watering, and erosion control as seen in Section 5 "Recommended Mitigation Efforts" to mitigate impacts to drainage and soil health on agricultural lands and preserve prime farmland & soils.

5. AGRICULTURAL IMPACT MITIGATION

ATC has indicated within their CPCN application and AIN, pending Project approval, they will coordinate and consult with each agricultural landowner to obtain detailed information about each agricultural operation, including but not limited to: locations of farm infrastructure, livestock and crops, current farm biological security practices, locations of drainage tiles, and landowner concerns. ATC will use agricultural landowner feedback to identify potential project impacts to each agricultural operation along the Project route and to the extent practicable, implement measures to mitigate impacts (DATCP, 2024a).

The Department recommends that landowners whom are concerned about potential impacts to their agricultural land should keep records of the conditions of the ROW before, during, and after construction. Records could include keeping crop yield records, beginning once the ROW is known, and photographs taken every season. These measures can help a landowner negotiate for compensation, should damages caused by Project occur.

Independent Environmental Monitor (IEM)

For large-scale utility projects, the requirement for project initiators (i.e. utilities) to hire an IEM has become a standard part of a PSC approval order. When hired, an IEM works on behalf of the PSC, WisDNR, the Department or other state regulatory agency as opposed to the utility. IEMs monitor project construction activities and report on a wide range of environmental issues such as construction impacts to wetlands, waterways, protected species, archaeological sites, state and federal properties, and erosion control. The IEM is also responsible for reporting incidents and has the power to stop project work if construction activities would violate permits, approvals, PSC order conditions, or agreement with a state regulatory agency.

Should the PSC decide to require an IEM for the Project, the IEM should be hired in consultation with and the approval of the PSC, DATCP, and WisDNR and all reports generated by the IEM should be shared with the PSC, DATCP, and WisDNR.

Independent Agricultural Monitor (IAM)

When a project affects a significant amount of agricultural land an IAM may also need to be hired. IAMs monitor project construction activities and report on a wide range of agricultural issues including but not limited to construction impacts to soil health, soil erosion, crop damage, agricultural operations, irrigation and impacts to surface and subsurface drainage. Similar to and IEM, an IAM works on behalf of the PSC, WisDNR, the Department or other state regulatory agency as opposed to the utility. IAMs should also verify the project initiator is complying with any agricultural best management practices and agricultural conditions in the PSC order and any environmental relevant construction documents approved by the PSC. While the duties of an IAM and IEM may sound similar, the IAM specializes in agricultural impacts and the IAM does not hold the power to stop the project.

The proposed Project offers two route alternatives with comparable amounts of potential agricultural impacts. Agricultural impacts from the Project may include but are not limited to crop damage, loss of access, soil compaction, mixing of topsoil, soil erosion, impacts to surface and subsurface drainage, impacts to irrigation systems and stray voltage. For assistance mitigating these potential agricultural impacts and working with agricultural landowners during the negotiations, construction and restoration phases of the Project, ATC plans to hire an experienced Agricultural Specialist (DATCP, 2024a). Given the Project 1) proposes a length ranging from 7.0 –

8.2 miles, 2) contains a brief transmission line construction schedule (August – December 2025) that avoids the winter snow melt period and 3) has the potential to co-locate up to 32% of the Project ROW on existing ROW, the Department believes the magnitude of agricultural impacts do not constitute the need for an IAM. Absent an IAM, the Agricultural Specialist hired by ATC will have the ability to assist impacted agricultural landowners and help mitigate the potential agricultural impacts from the Project.

Agricultural Mitigation Plan

According to the AIN submitted to the Department (DATCP, 2024a) and the CPCN application submitted to the PSC (REF#: 488864), ATC will not have an agricultural mitigation plan. In place of an agricultural mitigation plan, ATC described their standard practices to mitigate construction impacts to agricultural operations.

ATC plans to minimize Project impacts to agricultural lands through careful consideration of agricultural impacts during the routing & siting process and by implementing construction practices aimed at preserving top soil, reduce soil mixing, preventing erosion, and minimizing soil compaction (DATCP, 2024a; ATC, 2024b). Such stated construction practices include:

- Siting construction access routes to mitigate agricultural impacts.
- Placement of timber matting for vehicle/equipment access and work pads to distribute equipment loads over a larger surface area and minimize compaction of soils.
- Coordinating with landowners during the design process to avoid, to the extent practicable, the siting of a transmission line tower or project structure on or near drain tiles.
- Restoring agricultural lands to pre-existing conditions through soil de-compaction, repair of drain tile if necessary, and appropriate compensation for any loss in productivity.
- Hiring an Agricultural Specialist to work with agricultural landowners through the different project phases: negotiations, construction and restoration.

Prior to construction, ATC also proposes to consult with each agricultural landowner to understand their farm specific agricultural operation, including but not limited to: locations of farm infrastructure, livestock and crops, locations of drainage tiles, and landowner concerns. ATC plans to incorporate agricultural landowner feedback to identify potential project impacts to each agricultural operation along the Project route and to the extent practicable, implement measures to mitigate the impacts.

ATC will apply design practices of cancellation, separation and grounding to mitigate induced voltage. To mitigate the impacts of stray voltage, ATC works through the local distribution company to perform Neutral to Earth Voltage (NEV) testing. The local distribution utility may follow pre & post NEV testing in accordance with the PSC Phase II Stray Voltage Testing Protocol. ATC

reported within the CPCN application (ATC, 2024b) that there are 14 agricultural buildings within 300 feet and 2 dairy operations located within ½ mile of the proposed alternate route. It was also reported that there are 26 agricultural buildings within 300 feet and 5 dairy operations located within ½ mile of the proposed preferred route.

To ensure agricultural landowners along the route the PSC selects are aware of their ability to request pre- and post- NEV testing, at no cost, the Department recommends that ATC inform each landowner with livestock facilities within ½-mile of the selected Project ROW of their ability to request Phase II Stray Voltage Testing from their local utility.

Cleanup and Restoration

In accordance with Wis. Stat. § 182.017(7)(c), following the completion of construction activities, ATC will restore the area to preconstruction conditions. In general, cleanup and restoration activities include the removal of construction mats, temporary clear span bridges, and any other material or debris (including stones and rocks) from the ROW. Stockpiled topsoils and subsoils removed during construction are returned, in the proper order, and graded to match the existing topography and slopes. All ruts and depressions are restored and new topsoil may be brought in where topsoil has been lost or seriously mixed with subsoils. Agricultural soils are also monitored for compaction and when required undergo decompaction efforts to return the soil structure to its original condition. In areas where crops are not present--such as roadsides, pastures, old fields or upland woods--native seed mixes (or other appropriate seed mixes approved by the landowner) may be sown.

Under Wis. Stat. § 182.017(7)(c), if drainage tiles, fencing or other agricultural features are damaged during construction, ATC is responsible to repair and/or replace the damage feature. ATC is also responsible to pay for any crop damages caused by construction or maintenance of the transmission line. Within the AIN to the Department (DATCP, 2024a), ATC stated they will work with agricultural landowners to compensate them for crop damages, compaction, and potential future crop loss as a result of the Project in the following manner. Yield losses would be identified and agreed to in a Damage Report supplied by the landowner once construction commences. ATC would use the USDA Custom Rate Guide as the reference to set crop damage payments, while the National Agricultural Statistics Service website, which gives average yield by crop by county, would be referenced to confirm crop yields. Compensation for soil compaction claims will depend on if the agricultural operator decompacts the soil or if an ATC contractor conducts soil decompaction. Should guidance be required to settle an agricultural damage claim, ATC plans to utilize the hired Agricultural Specialist during the claim process (DATCP, 2024a).

Construction activities may be subject to erosion control regulations under applicable permits including, but not limited to, a stormwater and erosion control permit under NR 216, construction site performance standards under NR 151 and the ATC WPDES general permit for dewatering

discharges. The Department recommends that ATC continue to monitor the ROW for soil erosion and maintain erosion control practices until there is sufficient vegetative growth in the ROW to mitigate soil erosion. Only after restoration activities are complete and vegetation has re-established within the ROW (where applicable), should temporary restoration erosion control devices, not designed to be left in place, be removed. Landowners should contact the Agricultural Specialist for concerns related to erosion on agricultural lands resulting from Project construction activities.

Recommended Mitigation Efforts

Topsoil Mixing

Agricultural topsoil is an invaluable resource that should be preserved. Excavation activities required to create the structural foundations for electric transmission line poles have the potential to mix highly productive topsoil with underlying less productive and potentially rocky subsoils. Deep rutting also has the potential to intermix topsoil. If intermixing of topsoil occurs, the resulting soils are generally known to be less productive and in-turn reduce the agricultural productivity of the impacted area. When excavation is needed, ATC is required by Wis. Stat. § 182.017(7)(c) to segregate and stockpile topsoil from subsoil.

The Department recommends that ATC take the following steps to prevent the mixing of topsoil with subsoil layers within the Project ROW:

1) Do not spread mixed soils or segregated subsoils over cropland, pastures or other agricultural fields.
2) Prevent and monitor for erosion to keep topsoil segregated and within the ROW.
3) Avoid working in areas with recently saturated soils.
4) If rutting occurs, allow sufficient time for the soil to dry before repairing the ruts.
5) If topsoil mixing occurs, remove the intermixed soil and replace with new topsoil.

Soil Compaction

Equipment used to construct electric transmission lines has the potential to compact soil and reduce soil productivity on the farmland traversed during construction. Soil compaction is widely known to have a range a potential negative impacts to the productivity of soil, including reduced crop productivity, reduced crop uptake of water and nutrients, restriction of plant rooting depth, decreased water infiltration and increased surface runoff.

Several factors influence whether soil becomes compacted. An important influence is soil moisture: the wetter the soil, the more likely it is to be compacted from traffic. The potential for compaction also depends on the soil texture. Coarser textured soils, like sand or sandy loam, are less likely to become compacted than are clay or silty clay loams. Finally, the axle weight of the construction

equipment affects compaction. UW-Extension report A3367 states that heavy equipment with axle loads that exceed 10 tons increase the risk of soil compaction into subsoil layers that cannot be removed by conventional tillage (Wolkowski and Lowery, 2008). The expected compaction depth increases as the axle load and soil moisture content increases.

The Department recommends taking the following steps to prevent soil compaction and rutting wherever possible. Measures to prevent soil compaction within the Project ROW include:

1) Using low-ground pressure and/or wide tracked equipment to reduce axel weight applied to soils.

2) Using construction matting in wet areas, areas prone to rutting, or wetlands to spread out ground pressure.

3) When possible, conducting construction work during winter months when the ground is frozen.

4) Avoiding work in areas with recently saturated soils.

5) If rutting occurs, allowing sufficient time for the soil to dry before repairing the ruts.

After construction is complete, the ROW will be compacted to some degree. The Department recommends measuring for soil compaction post-construction within the Project ROW and outside of the Project ROW with a penetrometer throughout the soil horizon and comparing the measurements. If soil measurements within the Project ROW are comparatively higher, this is an indication that compaction has occurred. In areas where soil compaction occurred, the Department recommends ATC take steps to decompact the soils by conducting a sufficient amount of deep tillage (V-ripper, chisel plow, para plow or other depth appropriate tillage implement) within the ROW to help restore the soil structure to pre-construction productivity. Alternatively, ATC could coordinate with landowners or producers who wish to repair on-farm compaction. Following decompaction, the soil should be measured again for signs of compaction to ensure proper decompaction has occurred throughout the topsoil and subsoil profile. The Department also recommends ATC monitor soil moisture conditions post-construction throughout the Project ROW for signs of standing water. Areas with standing water may also have experienced soil compaction and should be measure for compaction.

Drainage

Proper field drainage is vital to a successful farm operation. Construction of an electric transmission line can disrupt improvements such as drainage tiles, grassed waterways, and drainage ditches, which regulate the flow of water on farm fields. If drainage is impaired, water can settle in fields and cause substantial damage, such as killing crops and other vegetation, concentrating mineral salts, flooding farm buildings, or causing hoof rot and other diseases that affect livestock. Construction-caused soil compaction or damaged drain tiles can lead to ponded water where none existed prior to construction. If drain tiles are damaged, ATC is required by Wis. Stat. § 182.017(7)(c) to repair or replace the damage drain tile. ATC practice for the repair of drainage tiles typically includes receipt of estimates from a landowner contractor for works to repair or replace damaged segments of tile and to compensate the landowner based on that estimate (Kevin Lynch, Personal Communication, April 2024).

To help mitigate the potential for drainage impacts, the Department recommends the following:

1) Agricultural landowners should inform ATC about the existence and location of drainage systems or planned drainage systems that could be affected by the Project.

2) Agricultural landowners should document field moisture conditions and the historic presence/absence of ponded water prior to the start of construction for post-construction comparisons.

3) ATC should consider using the techniques outlined in Section "Soil Compaction" when crossing a known drain tile.

4) Where construction activities have created new wet areas, ATC should work with the landowner to determine the best means to return the agricultural land to pre-construction function.

De-watering

During excavation/auguring of the structure foundation for a transmission line pole, dewatering may be necessary. Improper dewatering can result in soil erosion, sedimentation and deposition of gravel, sand, or silt onto adjacent agricultural lands, and the inundation of crops. The discharge of these construction waters must be in compliance with current drainage laws, local ordinances, WisDNR permit conditions, and the provisions of the Clean Water Act. ATC is required by Wis. Stat. § 182.017(7)(c) to compensate the landowner for any damage to agricultural fields caused by construction de-watering activities

The Department recommends the following to mitigate the impacts of construction water discharge on agricultural lands:

1) ATC should identify prior to construction 1) excavation sites with low areas and/or hydric soils where de-watering is likely and 2) suitable upland areas for discharge.

2) Discharge locations should be well-vegetated areas with topography that will prevent the water from returning to the ROW, resist soil erosion, and allow for infiltration and settling of gravel and other unwanted sediments prior to entering a field, pasture, or waterbody.

3) ATC should consider using pre-filter bags or other filter devices, prior to discharge, in order to capture sediments, gravel and rocks.

4) Cropland, pasturelands and other agricultural areas selected for discharge should not be inundated for more than 24 hours, as longer durations could result in crop damage.

5) ATC should not directly discharge or allow construction waters from non-organic farms to enter an organic farming operation.

Erosion and Conservation Practices

Electric transmission line construction activities and the placement of transmission line poles can destabilize existing erosion control practices such as diversion terraces, grassed or lined waterways, outlet ditches, water and sediment control basins, vegetated filter strips, etc. The destabilization of these erosion control practices have the potential to cause soil erosion within the ROW, but also from upland fields. During wet conditions the risk of soil erosion is increased, as exposed soils, especially areas with increased slope, may more easily erode and move downslope. Wind erosion may also be of concern if existing windbreaks are removed from the ROW, especially when soils are dry. If left unchecked, significant erosion can have an adverse effect on the long-term productivity of agricultural lands. ATC is required by Wis. Stat. § 182.017(7)(c) to restore existing erosion control practices such as diversion terraces, grassed or lined waterways, outlet ditches, water and sediment control basins, vegetated filter strips, etc. that are damaged by construction activities to pre-construction condition and function.

The Department recommends the following to mitigate soil erosion within the Project ROW:

1) Once construction is complete, pending soil decompaction, impacted agricultural lands within the ROW should be returned to cropland or seeded with the appropriate seed mix.

2) ATC should inspect all temporary erosion control structures on a daily basis throughout construction and restoration phases and undertake erosion control structure maintenance as required to prevent soil erosion within the ROW.

3) ATC should avoid impacting any existing permanent erosion control structure (e.g diversion terraces, grassed or lined waterways, outlet ditches, water and sediment control basins, vegetated filter strips, etc.) that's intended to prevent soil erosion from an upland agricultural area.

4) Should ATC disrupt an existing permanent erosion control structure, a temporary structure should be installed until the permanent erosion control is restored.

Trees and other Woody Vegetation

Both managed and unmanaged woodlands can provide financial benefit to the landowner either directly through the sale of managed forest for timber, the sale of firewood, or the harvest of tree sap for sale. The removal of any trees from a property may also decrease the market value of the property.

Prior to the start of construction, ATC will remove all woody vegetation, trees and brush not already removed by the landowner from the full width of the Project ROW. Vegetation will be cut at or slightly above the ground surface using mechanized equipment or by hand. Tree stumps are generally left in place, except in areas where stump removal is necessary to facilitate the movement of construction vehicles, or required by the landowner. Once removed, trees are not permitted to regrow or be replanted in the Project ROW after construction is complete or while maintained by ATC. According to Wis. Stat. § 182.017(7)(e), affected landowners will maintain ownership of all trees removed by ATC during construction. ATC is also required to provide the landowner a reasonable amount of time, prior to construction, to harvest the trees on their own. Post construction and restoration, the deforested land could be used for farming so long as the intended crop or agricultural equipment does not interfere with transmission line facilities. ATC will manage and maintain deforested areas, including vegetation removal and management within the deforested ROW for those areas that landowners do not wish to crop or maintain.

The Department recommends the following to mitigate the impacts of tree and woody material removal from the Project ROW:

1) The PSC should select a route that avoids the fragmentation of contiguous forest and prioritize the preservation of windbreaks, and forestlands used for specialty forest products.
2) ATC should compensate agricultural landowners for the construction of any additional structures that serve in the place of the harvested trees.
3) ATC should hire an appraiser who has experience and expertise in valuing trees.
4) Landowners who wish to obtain their own appraisal should also hire an appraiser who has experience and expertise in valuing trees.
5) Landowners who wish to farm within the deforested area should discuss tree stump removal with ATC during the easement negotiation process.

Fencing

The construction process may require fences that cross the Project ROW to be severed. According to Wis. Stat. § 182.017(7)(c), if ATC is required to cut or sever a fence they are required to install a temporary gate and repair all damages to fencing. Changes to existing fence lines can interfere with grazing activities, particularly for rotational grazing operations that depend on precise,

scheduled grazing in particular areas. To mitigate the impacts to fencing, the Department recommends the following:

1) Prior to construction, ATC should consult with agricultural landowners with grazing operations in and adjacent to the Project ROW and modify construction activities and timing to mitigate impacts to livestock.

2) ATC and agricultural landowners should agree on the appropriate measures to prevent livestock from entering the Project ROW.

3) ATC should develop a plan for livestock to access pastures adjacent to the Project ROW or otherwise compensate the landowner for the costs related to restricted grazing.

Weed Control

The Project may introduce noxious weeds or other invasive plants species into the Project ROW that compete with agricultural crops. Noxious weeds may also spread from parcel to parcel by construction equipment and project activities. Once weeds establish, they can interfere with agricultural harvesting equipment, attract unwanted insects, and require physical removal or chemical applications to remove.

Post construction and restoration, agricultural operations may resume normal agricultural cropping activities within the ROW so long as the crop or agricultural equipment do not interfere with transmission line facilities. After construction and during the operation of the line, ATC is required by Wis. Stat. § 182.017(7)(d) to control weeds and brush around the transmission line facilities. However, ATC shall not use herbicide for weed and brush control without the express written consent of the landowner (Wis. Stat. § 182.017(7)(d)).

The Department recommends the following to control for and manage the spread of noxious weeds within the project ROW:

1) Agricultural landowners should state in writing whether they do or do not give ATC their consent for herbicide to be applied within the ROW they own.

2) ATC should clean construction equipment and materials prior to entering an area of certification.

3) ATC should clean all roadways (private, county, state etc.) of construction debris, dirt and rocks.

4) ATC should use tracking pads at frequently used access points.

5) Agricultural landowners and beekeepers should consider using the free online DriftWatch™ and BeeCheck™ registries, operated by FieldWatch™ to communicate areas containing specialty crops or beehives with pesticide applicators, in order to minimize the risk of accidental exposure. For more information on DriftWatch, please visit the DATCP DriftWatch website at the provided link or at https://wi.driftwatch.org/.

6) ATC and its contractors that are applying herbicide or pesticides should utilize the Department's Driftwatch™ online mapping tool to locate agricultural lands and operations that are susceptible to herbicide or pesticides. If the online mapping tool locates an agricultural operation on or near areas that will receive herbicide or pesticide applications, ATC should contact the operation to discuss the appropriate methods required to minimize the risk of accidental exposure.

Aerial Application of Seeds and Sprays

The location of an electric transmission line on cropland can restrict the aerial application of seeds and chemicals and can increase the danger of making aerial applications. In turn, agricultural pilots have to maneuver to avoid transmission lines, which may result in uneven, imprecise or missed aerial applications. When aerial applications are restricted or prevented, agricultural produces may experience 1) increased weed growth and pest infestations that reduce crop yields, 2) increased cost and labor from land based application of seeds and chemical in non-applied areas.

To mitigate the potential for impacts to aerial application, the Department recommends the following:

1) Agricultural landowners inform ATC if they use aerial applications.

2) ATC and the impacted agricultural landowners work to determine the most effective techniques to minimize the impact to their aerial applications.

3) ATC install colored wire shielding near fields that utilize aerial applications.

Construction Debris

After construction is complete, there may be construction debris remaining on the field. If large pieces of debris or rocks are left in the field, agricultural machinery may be damaged when the landowner first works the land. ATC is required by Wis. Stat. § 182.017(7)(c) to clear all debris and remove all stones and rocks resulting from construction activity upon completion of construction. To that end, ATC shall also clear the ROW of signage, construction mat debris, litter, and spoil piles etc.

To mitigate the potential impact of construction debris, the Department recommends the following:

1) Should a landowner find construction debris remaining in the field after ATC has cleared the field, the landowner should contact the ATC Agricultural Specialist to report the debris prior to operating agricultural equipment in the field.

2) Should ATC remove an existing structure from within or immediately adjacent to cropland, ATC should remove the old structure at a minimum of four feet below the ground surface.

3) Should ATC create a hole within croplands during the removal or relocation of existing distribution structures, they should fill the hole with clean imported topsoil.

Crop Rotation and Livestock Operations

The construction of an electric transmission line may disrupt a planned crop or crop rotation. Impacts to alfalfa fields, planned alfalfa seeding or pasture may be disruptive to livestock operations as they need to maintain a proper food supply for livestock. Any delays, yield reductions or damages to an alfalfa crop or pasture may require the operation to buy haylage or hay, obtain more corn silage, and/or provide protein supplements such as soybean oil meal to make up for the lost feed. With advanced notice of the Project's construction schedule, a livestock operator may be able to adjust forage requirements and plan for any increased associated costs. If the Project is approved, the Department recommends that ATC provide any impacted livestock operations with advanced notice of the construction schedule across their operations and compensate the landowner for any increased costs associated with construction impacts to forage requirements.

Organic Farms & Other Areas with Certifications

Construction and ongoing maintenance activities for the Project may jeopardize a farm's organic certification or other certifications such as *pesticide-free* (certified areas) if a prohibited chemical is used on their certified land, drifts from a neighboring field or enters their land on construction machinery, construction matting or improper de-watering. ATC and their contractors must use caution and care where the Project ROW borders or crosses an area with certification. Wis. Admin. Code § ATCP 29.50(2) states that no pesticides (includes herbicides) may be used in a manner that results in pesticide overspray or significant pesticide drift. In addition, any oil or fuel spill on these farms could prevent or remove a farm's certification.

To mitigate impacts to areas with certifications or pending certifications, the Department recommends the following:

1) ATC should not apply pesticides to organic farms or other certified farms that preclude the use of these chemicals without the expressed written consent of the landowner.

2) ATC shall not apply a pesticide in a manner that results in overspray or significant drift.

3) ATC should clean construction equipment and materials prior to entering an area of certification.

4) ATC should post signs at entry points to an area of certification denoting its existence and reminding personnel of appropriate mitigation steps to take.

5) Agricultural landowners with an area of certification should contact ATC and report the range and type of substances that are and are not permitted according to their certifications.

6) Agricultural landowners and beekeepers should consider using the free online DriftWatch™ and BeeCheck™ registries, operated by FieldWatch™ to communicate areas containing specialty crops or beehives with pesticide applicators, in order to minimize the risk of accidental exposure. For more information on DriftWatch, please visit the WDATCP DriftWatch website at the provided link or at https://wi.driftwatch.org/.

7) ATC and its contractors that are applying herbicide or pesticides should utilize the Department's Driftwatch™ online mapping tool to locate agricultural lands and operations that are susceptible to herbicide or pesticides. If the online mapping tool locates an agricultural operation on or near areas that will receive herbicide or pesticide applications, ATC should contact the operation to discuss the appropriate methods required to minimize the risk of accidental exposure.

8) ATC should generate and distribute a list of organic farms or other certified farms and the prohibited chemicals to their construction staff and contractors.

9) Prior to construction, ATC and the farms with areas of certification should agree to the appropriate methods to avoid unintentional contacts or applications of prohibited chemicals from entering their farms.

10) ATC may wish to underlay heavily used areas of the ROW with geotextile fabric in order to limit the potential for prohibited substances from contaminating areas with certification.

11) ATC should consult with farms with areas of certification prior to the application of seeds for revegetation efforts on their property.

Biosecurity

Farm biosecurity is the implementation of measures designed to protect a farm operation from the entry and spread of diseases and pests. Construction activities can spread weeds, diseases, chemicals and genetically modified organisms (GMO's) that impact an agricultural operation. Certified organic farms and farms with other certifications such as pesticide-free are susceptible to the widest range of biosecurity impacts and may suffer greater negative impacts if their agricultural operation is exposed to a biosecurity threat. For more information on basic biosecurity protocols, please visit the Department's Basic Biosecurity website at the provided link or at https://datcp.wi.gov/Pages/Programs_Services/BasicBiosecurity.aspx.

The Department recommends the following to mitigate biosecurity risks within the Project ROW:

1) ATC and agricultural operations within the Project ROW should develop a biosecurity plan that contains a set of protocols including but not limited to: Cleaning construction equipment between parcels; handling manure within the ROW; identifying responsible parties that can move livestock and manure within the ROW; and establishing communication channels to report construction and farm activities within the ROW.

2) ATC and their contractors should avoid contact with livestock and manure throughout the Project.

3) If livestock need to be moved, ATC should work with the livestock owner to move the livestock.

Stray Voltage

Electric distribution systems are grounded to the earth to ensure safety and reliability. At the site of the grounding, electrical current enters the earth where voltage can be detected. This is generally known Neutral to Earth Voltage (NEV). When a person, animal or object is near an NEV, the voltage may pass to them resulting in electrical contact (i.e. shock); this is generally known as stray voltage. Stray voltage often goes unnoticed by humans, but stray voltage from NEV may affect animals on farms. Animals may encounter stray voltage any time the animal makes contact with an electrified point such as a fencing, feeder, the earth or stalls. Animals affected by stray voltage may show changes in behavior or milk production.

The PSC administers Wisconsin's Stray Voltage program under Wis. Stat. § 196.857 in cooperation with the Department. The PSC established the Phase II Stray Voltage Testing Protocol to fulfill its duty to create a standard stray voltage NEV testing protocol as required by Wis. Stat. § 196.857(b). Under the Phase II testing protocol, a utility is mandated to take corrective action to resolve any electrical contact at or above 0.5 volts (Reines and Cook, 1999). The Stray Voltage program is able to review voltage testing data generated by the utility and the conclusions the utility has reached. For more information on the PSC Stray Voltage program, impacts to agricultural operations and mitigation steps, visit https://psc.wi.gov/Pages/Programs/StrayVoltageHomePage.aspx.

Should additional concerns for the health of a dairy herd arise from stray voltage testing, the Department's Herd-Based Diagnostic Program may be able to assist. The program provides a licensed veterinarian, free of charge, to help producers investigate concerns with milk production, milk quality, herd health, and more. Interested dairy producers can reach out to the Department to express interest in receiving a herd consultation whether stray voltage has been completed or not. For more information on the Herd-Based Diagnostic Program visit https://datcp.wi.gov/Pages/Herd-basedDiagnostics.aspx.

The Department recommends the following to mitigate the impact of stray voltage within the project ROW:

1) Confined animal feeding operations or any operation with livestock facilities within ½-mile of the proposed power line should request Phase II Stray Voltage Testing pre- and post-transmission line energization testing from their utility provider, ATC, or the PSC.

2) ATC should inform each landowner with livestock facilities within ½-mile of the Project ROW of their ability to request Phase II Stray Voltage Testing from their local utility, ATC or the PSC. ATC should be responsible for costs associated with Phase II Stray Voltage Testing within ½-mile of the Project corridor.

3) As required by PSC guidance set forth under Wis. Stat. § 196.857, ATC shall take action to resolve electrical contacts at livestock feeding operations detected at or above 0.5 volts that are a result of the Project.

Construction Noise and Dust

During each phase of the Project, noise and dust is likely to be generated. Landowners near the Project ROW may experience noises and dust associated with construction techniques, movement of heavy equipment, and helicopters. This noise and dust may cause dairy, beef cattle and other grazing livestock to stampede, break through fences, and escape from the farm property. Fur animals, poultry and other confined livestock may also be impacted by these sounds. Some crops are known to be sensitive to dust and may require dust mitigation techniques in or near the ROW.

To mitigate impacts of noise and dust, the Department recommends the following:

1) Livestock owners & operators, or other agricultural producers within the Project ROW whom are concerned about the noise potential for the Project should inform ATC or their representatives during the easement negotiation process.

2) Livestock owners & operators near the Project ROW who are concerned about the noise potential for the Project should inform ATC of their concerns prior to the project construction.

3) ATC should identify agricultural livestock operations with sensitive animals within and adjacent to the Project ROW and provide them appropriate advance warning of construction activities, including the use of helicopters, so they may take steps to safe guard their animals.

4) ATC should use tracking pads at frequently used access points.

5) Agricultural landowners & operators, within the Project ROW whom are concerned about the dust potential for the Project should inform ATC or their representatives during the easement negotiation process.

6) When construction activities have the potential to generate substantial amounts of dust that could impact livestock or an agricultural operation, ATC should apply water over the dust generating areas to reduce dust output.

REFERENCES

American Transmission Company (ATC). 2024. Plymouth Reliability Project. Retrieved from https://www.atc-projects.com/projects/plymouth/ (accessed February 15, 2024).

American Transmission Company (ATC). 2024b. *Application for PSCW Certificate of Public Convenience and Necessity and WDNT Utility Permit – Plymouth Reliability.* PSC Docket #137-CE-205. PSC REF # 488864. Madison, WI: Public Service Commission Electronic Records Filing System.

American Transmission Company (ATC). 2024c. *Appendix D*. PSC Docket #137-CE-205. PSC REF # 488848. Madison, WI: Public Service Commission Electronic Records Filing System.

American Transmission Company (ATC). 2024d. *Appendix H, Exhibit 3 Discussion with DATCP*. PSC Docket #137-CE-205. PSC REF # 488822. Madison, WI: Public Service Commission Electronic Records Filing System.

Cornell University (Cornell). 2017. Soil Health Manual Series Fact Sheet Number 16-04: Soil Texture. Retrieved from https://cpb-us-e1.wpmucdn.com/blogs.cornell.edu/dist/f/5772/files/2016/12/04_CASH_SH_Series_Texture_Fact_Sheet_072717-286kw9f.pdf (accessed 5 March 2024).

Culley, J. L. B., and B. K. DOW. 1988. Long-term effects of an oil pipeline installation on soil productivity. Canadian Journal of Soil Science, 68:177-181. doi.org/10.4141/cjss88-018

Dippel, Beth. History Uncovered: The legacy of the stone fence. 2022. Sheboygan Sun. Retrieved from History Uncovered: The legacy of the stone fence | History | sheboygansun.com (accessed 15 March 2024).

Reines, R. and M. Cook. 1999. PSC Staff Report: The Phase II Stray Voltage Testing Protocol. Public Service Commission of Wisconsin. Retrieved from https://psc.wi.gov/SiteAssets/ph2paper.pdf (accessed 14 March 2024).

Sheboygan County. 2023. Sheboygan County Farmland Preservation Plan 2023. Retrieved from https://www.sheboygancounty.com/home/showpublisheddocument/19219/638421193632870000 (accessed 26 Feb. 2024).

Shi, P., Xiao, J., Wang, Y. et al. 2014. The effects of pipeline construction disturbance on soil properties and restoration cycle. Environ Monit Assess. 186, 1825–1835. doi.org/10.1007/s10661-013-3496-5.

U.S. Department of Agriculture (USDA). 2020. Title 430 - National Soil Survey Handbook: Part 622 – Interpretive Groups. Retrieved from https://directives.sc.egov.usda.gov/45381.wba (accessed 7 March 2024).

University of Wisconsin-Extension (UW-Extension). 2005. A3588: Management of Wisconsin Soils. Madison, WI. Retrieved from https://soilsextension.webhosting.cals.wisc.edu/wp-content/uploads/sites/68/2014/02/A3588.pdf (accessed 7 March 2024).

Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP). 2019. CREP: Conservation Reserve Enhancement Program. Retrieved from https://datcp.wi.gov/Documents/ CREPBrochure.pdf (accessed 26 February 2024).

Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP). 2021 Drainage Districts in Wisconsin. Retrieved from https://datcp.wi.gov/Documents2/DrainageProgramFactsheet.pdf (accessed 26 February 2024).

Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP). 2023. Farmland Preservation: Local Jurisdictions with Zoning for 2023 Tax Year. Retrieved from https://datcp.wi.gov/Documents/FPTaxCredZoning.pdf (accessed 26 February 2024).

Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP). 2024a. Agricultural Impact Notice for Electric Projects DARM-BLWR-002 rev 05/22: Plymouth Reliability Project, PSC Docket ID 137-CE-205. Department of Agriculture, Trade and Protection. Madison, WI, USA.

Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP). 2024b. Designated Agricultural Enterprise Areas (AEAs). https://datcp.wi.gov/Pages /Programs_Services/ DesignatedAEAs.aspx (accessed 26 February 2024).

Wisconsin Department of Natural Resources (WisDNR). 2017. Wisconsin's Managed Forest Law: A Program Summary PUB_FR-295. Rev Nov. 2017. http://www.co.forest.wi.gov/ docview.asp?docid=24817&locid=145 (accessed 26 February 2024).

Wolkowski, R., and B. Lowery. 2008. A3367: Soil Compaction: Causes, concerns, and cures. University of Wisconsin-Extension. Retrieved from https://cdn.shopify.com/s/files/1/ 0145/8808/4272/files/A3367.pdf (accessed 7 March 2024)

DISTRIBUTION LIST

Federal and State Elected Officials

Governor

- Governor Tony Evers

State Senators

- Honorable Joan Ballweg (Committee on Agriculture)
- Honorable Duey Stroebel (Senate District 20)
- Honorable Devin LeMahieu (Senate District 9)

State Assembly

- Honorable Travis Tranel (Committee on Agriculture)
- Honorable Terry Katsma (Assembly District 26)
- Honorable Ty Bodden (Assembly District 59)

Federal, State and Local Units of Government

Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP)

- DATCP Public Information Officer – Dan Richter
- DATCP Legislative Liaison – Patrick Walsh
- DATCP Administrator, Agricultural Resource Management Division – Robby Personette
- DATCP Director, Bureau of Land and Water – Tim Anderson

Public Service Commission of Wisconsin

- Environmental Affairs Coordinator Supervisor – Adam Ingwell
- Case Coordinator – Olivia Poelmann

Sheboygan County Wisconsin

- Sheboygan County Conservationist – Tyler Betry
- Sheboygan County Planning and Conservation – Aaron Brault

Towns, Cities and Villages

- Town of Lyndon Chairperson – David Roll
- Town of Lyndon Clerk – Rhonda Klatt
- Town of Mitchell Chairperson – Jackie Veldman
- Town of Mitchell Clerk - Kristin Beckford

News Media, Public Libraries and Repositories

Public Libraries

- Plymouth Public Library

Newspapers

- Agri-View Newspaper
- Cambellsport News
- Country Today Newspaper

Wisconsin Document Depository Program
The Library of Congress

Interest Groups, Entities and Individuals

ATC

Kevin Lynch

Agricultural Landowners

ADAM REDLICH & KARIE REDLICH
BRENDA L SCHULTZ & BYRON & LEON SCHULTZ
BRENDA L SCHULTZ ETAL
DREWRY FARMS INC
DWAYNE M POCIAN & ELIZABETH A POCIAN
GENE F BOHNHOFF & KATHLEEN A BOHNHOFF
HEIDI L CASADY & JAMES R ZUENGLER
HICKORY LAWN DAIRY FARM INC
HUGHES FARMS LLC
JAMES R WEBB
JASON C DAHM
JERRY E FRIEDMAN & JOANNE L FRIEDMAN
JOHN P FISCHER & LINDA K FISCHER
JON L WEEDEN & ANN F WEEDEN
KATHERINE O ZENS
KEITH A ENSTROM & ELLEN R ENSTROM
KIMBERLY K HUGHES
LARRY & CAROL BUCHHOLZ & TARRA BUCHHOLZ
LINCOLNWOOD PROPERTIES LP
MATTHEW S KRUEGER & WENDY K KRUEGER
MICHAEL R SORENSON & KRISTI K SORENSON
MILTON ABEL
NORBERT KRAEMER & JANICE KRAEMER
ROBERT D SCHMIDT & MERRI C SCHMIDT
ROGER P PIETSCH & DIANE M PIETSCH
RUSSELL G PAYNE
THOMAS J KESTELL & JANINE M KESTELL
WILLIAM A SCHULTZ JR
WILLIAM A SCHULTZ JR & WILLIAM A SCHULTZ III

Glacial Lakes Conservancy

Isabel Mueller

WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

DIVISION OF

AGRICULTURAL RESOURCE MANAGEMENT

Agricultural Impact Program
P.O. Box 8911
Madison, WI 53708-8911
608-224-4650

agimpact.wi.gov