

# As-Built Inspection Report

Emmons—Logan Transmission Line

ND PSC Case No. PU-18-281

**Prepared for:**

North Dakota Public Service Commission  
Public Utilities Division  
State Capitol  
600 East Boulevard – Dept. 408  
Bismarck, ND 58505-0480



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As-Built Inspection Report  
Keitu Engineers & Consultants, Inc.

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## Executive Summary

The State of North Dakota, acting through its North Dakota Public Service Commission (Commission), Division of Public Utilities, has contracted Keitu Engineers & Consultants, Inc. (Keitu) to perform consulting services for an As-Built Siting Inspection. This report addresses the Orders established by the Commission and issues established in Case No. PU-18-281.

The Emmons-Logan 230 kV Transmission Line (Project) conveys power from the Emmons-Logan Wind Energy Center (Wind Energy Center) to the interconnection point at the existing 230 kV Heskett-Wishek transmission line. The Project is located in Emmons County, North Dakota approximately 40 miles southeast of Bismarck, North Dakota and 8 miles southwest of Napoleon, North Dakota. The Project is located in a rural area primarily used for agricultural purposes.

The Project is an approximately 6.85-mile-long 230 kV overhead transmission line in Emmons County, North Dakota. The Project Route consisting of a 150-foot wide right-of-way (ROW) encompasses approximately 124.5 acres. The Project is wholly within the Wind Energy Center boundary. It begins with a connection to the Wind Energy Center collection substation and terminates where it connects with the existing 230 kV Heskett-Wishek transmission line. The Project conveys 200 MW from the 102 turbines to the 230 kV Heskett-Wishek transmission line.

The purpose of the As-Built Inspection was to ensure the Project was constructed in compliance with the siting laws, rules, and the applicable Commission Orders for the Project. Prior to the inspection, Keitu reviewed all Project documents to verify any and all aspects requiring site verification.

The site was visually inspected on March 5, 2021 by Keitu staff. The Project was well-maintained, secured, and in good condition. During the As-Built Inspection, the areas appeared to have been properly restored. Vegetation had not be reestablished in all areas due to poor growing conditions in 2020 and will be reseeded in the spring of 2021. Overall, the Project appeared to be constructed as planned with numerous efforts to minimize impacts and to stay in compliance with the siting laws, siting rules, and Commission Orders.

## Introduction

The Project was approved in February, 2019 and construction began in May, 2019. Construction for the Project was completed in November, 2019. The Project is operated by Emmons-Logan Wind, LLC. Emmons-Logan Wind, LLC is a wholly owned, indirect subsidiary of NextEra Energy Resources, LLC. The project consists of approximately 6.85 miles of 230 kV overhead electric transmission line and associated facilities in Emmons County, North Dakota. The Project originates at the Wind Energy Center substation and terminates at the interconnection to the Montana Dakota Utilities 230 kV Heskett-Wishek transmission line. The Project was built in conjunction with the Wind Energy Center which is also operated by Emmons-Logan, LLC. Emmons-Logan, LLC submitted a separate Certificate of Corridor Compatibility application for the Wind Energy Center.

The transmission line was constructed using steel monopole structures. The average height of the single pole structures range from 90 feet to 120 feet. Each monopole structure is directly embedded into the ground, with an overall foundation diameter of approximately six feet and an embedded length of approximately 15-20 feet. The pole locations are approximately 950 feet apart. Guyed structures in three locations consist of up to eight guy wires per structure, each up to 25 feet from the pole structure.

The Project is under the jurisdiction of the North Dakota Public Service Commission, which issued its Route Permit No. 218 and Certificate of Corridor Compatibility No. 208 for Case No. PU-18-281 on February 6, 2019.

## Purpose and Scope of Inspection

The North Dakota Energy Conversion and Transmission Facility Act (North Dakota Century Code Chapter 49-22) authorizes the Public Service Commission to determine that the location, construction, and operation of jurisdictional energy conversion and transmission facilities will produce minimal adverse effects on the environment and welfare of the citizens of North Dakota. Construction Inspections ensure the Project is constructed in compliance with siting laws, rules, and the applicable Commission Order Amending Certificate and Permit (Order).

The Commission retained Keitu to complete an As-Built Construction Inspection of the Project. The inspection process included a review of the Consolidated Application for Certificate of Corridor Compatibility and Route Permit (Application), Order, Certification Relating to Order Provisions (Certification), and other applicable documents to determine Project-specific siting and construction requirements; a site visit and inspection of facilities; documentation of compliance; and a report summarizing findings. This report includes, but is not limited to, site visit observations, documentation of compliance deficiencies, and a summary of issues that should be addressed for the Project to be considered complete and in full compliance.

## Methods

Keitu reviewed North Dakota siting laws and rules, the Application, Certification, and the Order for the Project to identify what Project-specific documentation was required for compliance. Keitu then reviewed Project documents in the PSC Online Case Search to identify those siting laws, rules, and Application and Order assertions that already had written verification, those that still required documentation, and those that required physical site verification.

Keitu Staff visited the Project area on March 5, 2021 to visually inspect the site. Digital photographs were taken showing typical Project infrastructure. The Project was in operation at the time of visit.

## Orders

The following section includes discussion of a list of components of the Project that were asserted in the Order which could be documented during the As-Built Inspection to verify compliance with siting laws, rules and the Order for the Project, via either written documentation or physical site verification. Included are detailed findings and observations from Keitu personnel involved in the As-Built Inspection for the Project.

On October 10, 2018 the Commission deemed the application complete conditioned upon receipt within 30 days of the hearing of: 1) Sound and shadow flicker analysis with detail on residence locations and participating and non-participating landowners; 2) Class III cultural resource surveys; and 3) Wetland delineation reports, and issue a Notice of Filings and Consolidated Hearings in Emmons-Logan Wind, LLC, Emmons-Logan Wind Energy Center-Emmons & Logan, Siting Application, Case No. PU-18-280, and Emmons Logan Wind, LLC, Emmons-Logan 230 kV Transmission Line- Emmons, Siting Application, Case No. PU-18-281.

- 1. Emmons-Logan Wind shall construct and operate the facility in accordance with the Commission's find of fact.**

Order #1 is complete.

- 2. Certificate of Corridor Compatibility No. 2018 is issued to Emmons-Logan Wind designating a corridor for the construction, operation, and maintenance of the Emmons-Logan Wind 230 kV transmission line and associated facilities in Emmons County, North Dakota as identified in Figure 1-1 of Hearing Exhibit No. 18. For purposes of the Certificate, the corridor is an area 150-foot wide centered on the route designated in this Order.**

Certificate of Corridor Compatibility No. 208 was issued to Emmons-Logan Wind, LLC on February 6, 2019. Order #2 was followed.

- 3. Route Permit No. 218 is issued to Emmons-Logan Wind designating a route in Emmons County, North Dakota, for the construction and operation of an approximately 6.85 mile**

**230 kV transmission line. The designated route for this purpose is as identified in Figure 1-1 of Hearing Exhibit No. 18.**

Route Permit No. 218 was issued to Emmons-Logan, LLC on February 6, 2019. Order #3 was followed.

- 4. The December 4, 2018 Certification Relating to Order Provisions- Transmission Facility Siting with accompanying Tree and Shrub Mitigation Specifications is incorporated by reference and attached to this Order. The December 4, 2018 Tree and Shrub Mitigation Specifications may be modified upon the mutual agreement of the Commission and Emmons-Logan Wind.**

Order #4 was followed.

- 5. To the extent there are any conflicts or inconsistencies between Emmons-Logan Wind's Application and the Certification, the Certification provisions control.**

Order #5 was followed.

## **Certification**

The following section includes discussion of relevant items included in the Certification attached by reference to original Order. All certification points relevant to the As-Built Inspection Report are included.

- 1. Company understands and agrees that the Certificate of Site Compatibility will be issued by the Commission subject to the conditions and criteria set forth in Chapter 49-22 of the North Dakota Century Code and Chapter 69-06-08 of the North Dakota Administrative Code, and that Company shall be responsible for compliance with this order and conditions and criteria set forth in the applicable laws and rules.**

Certification Point #1 was followed.

- 2. Company agrees to comply with the rules and regulations of all other agencies having jurisdiction over any phase of the proposed energy conversion facility including all city, township, and county zoning regulations.**

Certification Point #2 was followed.

- 3. Company understands and agrees that it shall obtain all other necessary licenses and permits, and shall provide copies of all licenses and permits to the Commission prior to construction activity associated with the transmission facility that requires said license or permit.**

Certification Point #3 was followed.

4. **Company understands and agrees that any Certificate of Corridor Compatibility or Route Permit issued by the Commission is subject to suspension or revocation and may, in an appropriate and proper case, be suspended or revoked for failure to comply with the Commission’s order, the conditions and criteria of the certificate or subsequent modification, or failure to comply with the applicable statutes, rules, regulations, standards, and permits of other state and federal agencies.**

Certification Point #4 was followed.

5. **Company agrees to maintain records that will demonstrate that it has complied with the requirements of the Commission’s order issuing a Certificate of Corridor Compatibility or Route Permit, and that will preserve these records for Commission inspection at any reasonable time upon reasonable notice.**

Based on available information, it is Keitu’s opinion that Certification Point #5 was followed.

6. **Company understands and agrees that the authorizations granted by any Certificate of Corridor Compatibility or Route Permit issued by the Commission for the transmission facility are subject to modification by order of the Commission if deemed necessary to protect further the public or the environment.**

Certification Point #6 as followed.

7. **Company agrees to hold a preconstruction conference prior to commencement of any construction, which must include a Company representative, its construction supervisor, and a representative of Commission Staff, to ensure that Company fully understands the conditions set forth in the Commission’s order.**

A preconstruction conference was held on April 23, 2019 and was attended by Company representatives, the construction supervisor, Jerry Lein from the ND PSC, and representatives from Keitu, the Commission’s third-party construction inspector. Certification Point #7 was followed.

8. **Company understands and agrees that all cultural resource mitigation plans must be submitted to the North Dakota State Historic Preservation Office and approved prior to the start of any fieldwork and construction activity in the affected area.**

On behalf of Emmons-Logan Wind, LLC, AECOM submitted a Class III Intensive Cultural Resource Survey for the Project to ND SHPO. On October 22, 2018, ND SHPO issued a letter stating it had reviewed the report (ND SHPO Ref: 18-0844 ND Public Service Commission) and found it acceptable. ND SHPO concurred with “No Significant Sites” affected determination for the

Project, provided the Project remains as described and mapped in the report. Certification Point #8 was followed.

- 9. Company understands and agrees that topsoil removal will begin when the Commission's third-party construction inspector is present at the Project site to observe that topsoil is properly removed and kept segregated from subsoil until replacement occurs. Company shall establish the date and time for the Commission's third-party construction inspector's topsoil removal oversight in the preconstruction conference.**

Keitu was present on-site for topsoil removal on May 16th and May 29th, 2019 and determined that the topsoil was properly removed and segregated from subsoil in accordance to the ND PSC's regulations for topsoil removal and segregation. Certification Point #9 was followed.

- 10. Company agrees to inform the Commission and the Commission's third-party construction inspector of its intent to start construction on the transmission facility prior to the commencement of construction. Once construction has started, Company shall keep the Commission and the Commission's third-party construction inspector updated on construction activities on a monthly basis.**

Certification Point #10 was followed.

- 11. Company understands and agrees that all topsoil, up to 12 inches, or topsoil to the depth of cultivation, whichever is greater, over and along trench areas where cuts will be made, must be carefully stripped and segregated from the subsoil. Any area on which excavated subsoil will be placed must also be stripped of topsoil. The stripped topsoil must not be stockpiled in natural drainages and must be protected from water erosion. Care must be taken to protect topsoil from unnecessary compaction by heavy machinery. Unless otherwise approved by the Commission, topsoil must be removed before topsoil freezes in the late fall/early winter to the point that frost inhibits proper soil segregation. After backfilling with subsoil is completed, any excess subsoil must be placed over the excavation area, blending the grade into existing topography. Topsoil must be replaced over areas from which it was stripped only after subsoil is replaced.**

Keitu conducted a topsoil inspection when construction activities commenced for the project and observed topsoil removal during the construction inspection on May 16th and May 29th, 2019 and found topsoil removal activities to be in compliance with the Commission's Order. Certification Point #11 was followed.

- 12. Company understands and agrees that all buried facility crossings of graded roads must be bored unless the responsible governing agency specifically permits Company to open cut the road.**

Based on available information, Keitu's opinion is that Certification Point #12 was followed.

- 13. Company understands and agrees that staging areas or equipment shall not be located on land owned by a person other than Company unless otherwise negotiated with landowners.**

Certification Point #13 was followed.

- 14. Company understands and agrees that if any cultural resource, paleontological site, archeological site, historical site, or grave site is discovered during construction, it must be marked, preserved and protected from further disturbances until a professional examination can be made and a report of such examination is filed with the Commission and the State Historical Society.**

Based on available information, Keitu's opinion is that Certification Point #14 was followed.

- 15. Company understands and agrees that construction must be suspended when weather conditions are such that construction activities will cause irreparable damage to roads or land, unless adequate protection measures are taken by Company.**

Certification Point #15 was followed.

- 16. Company understands and agrees that the Commission has authority to stop Project construction activities in the event of a probably violation of the siting laws, siting rules, or applicable Commission Orders if, in the opinion of the Commission, construction activities are likely to result in irreparable or significant harm.**

Certification Point 16 was followed.

- 17. Company understands and agrees that it shall, as soon as practicable upon the completion of the construction of the transmission facility, restore the area affected by the activities to as near as is practicable to the condition as it existed prior to the beginning of construction.**

During the As-Built Inspection, the areas appeared to have been properly restored. Vegetation had not be reestablished in all areas due to poor growing conditions in 2020 and will be reseeded in the spring of 2021. Keitu's opinion is that Certification Point #17 has been followed.

- 18. Company understands and agrees that all pre-existing township and county roads and lanes used during construction must be repaired or restored to a condition that is equal to or better than the condition prior to the construction of the transmission facility and that will accommodate their previous use, and that areas used as temporary roads or working areas during construction must be restored to their original condition.**

In Keitu's opinion, Certification Point #18 has been followed.

- 19. Company understands and agrees that reclamation, fertilization, and reseeding is to be done according to the Natural Resources Conservation Service recommendations, unless otherwise specified by the landowner and approved by the Commission.**

The majority of the Project ROW was located on agricultural fields currently being used for crop production. In areas not currently in crop production, reclamation, fertilization, and seeding was done according to the Natural Resources Conservation Service recommendations in the summer of 2020. It is Keitu's opinion that Certification Point #19 was followed.

- 20. Company will fulfill its obligation for reclamation and maintenance of the approved transmission facility right-of-way, transmission facility, and associated facilities continuing throughout the life of the transmission facility.**

Based on available information, Keitu's opinion is that Certification Point #20 has been followed.

- 21. Company will repair all fences and gates removed or damaged during all phases of construction and operation of the transmission facility.**

Certification Point #21 has been followed.

- 22. Company will repair or replace all drainage tile broken or damaged as a result of construction and operation of the transmission facility.**

Based on available information, Keitu's opinion is that Certification Point #22 was followed.

- 23. Company agrees to comply with the Tree and Shrub Mitigation Specifications, attached.**

Based on available information, Keitu's opinion is that Certification Point #23 was followed.

- 24. Company understands and agrees that it shall work with landowners and residents to mitigate any increase in television and residential radio interference that results from the construction of the transmission facility.**

Based on available information, Keitu's opinion is that Certification Point #24 was followed.

- 25. Company understands and agrees that it shall remove all waste that is a product of construction and operation, restoration, and maintenance of the site, and properly dispose of it on a regular basis.**

Certification Point #25 was followed.

- 26. Company understands and agrees that it shall provide any necessary safety measures for traffic control or to restrict public access to the transmission facility.**

Based on available information, Keitu's opinion is that Certification Point #26 was followed.

- 27. Company understands and agrees that, prior to beginning construction of the transmission facility at a location, it shall send a letter to each landowner with whom an easement was executed for that location specifying the name and phone number of the company representative for the life of all easements for the transmission facility.**

Based on available information, Keitu's opinion is that Certification Point #27 was followed.

- 28. Company understands and agrees that it will file with the commission the name and phone number of the current company representative who is responsible for receiving and resolving landowner issues for the transmission facility. The company will update this information whenever there is a change to the current company representative for the life of all easements for the transmission facility.**

Based on available information, it is Keitu's opinion that Certification Point #28 was followed.

- 29. Upon request, Company agrees to provide the Commission with engineering design drawings of the transmission facility prior to construction.**

Based on available information, Keitu's opinion is that Certification Point #29 was followed.

- 30. Company understands and agrees that it shall advise the Commission as soon as reasonably possible of any extraordinary events which take place at the site of the transmission facility, including injuries to any person.**

Based on available information, Keitu's opinion is that Certification Point #30 was followed.

- 31. Company agrees to report to the Commission, as soon as reasonably possible, the presence in the permit area of any critical habitat or threatened or endangered**

**species of which Company becomes aware and which were not previously reported to the Commission.**

Based on available information, Keitu's opinion is that Certification Point #31 was followed.

- 32. Company understands and agrees that it shall inform the Commission in writing of any plans to modify the transmission facility or of any plans to modify the site plan for the transmission facility.**

Based on available information, Keitu's opinion is that Certification Point #32 was followed.

- 33. Company agrees to provide the Commission with both an electronic and a paper copy of the corridor approved by the Commission and the facility design specifications for the construction of the transmission facility showing the location of the transmission facility as built, and will provide this information within 3 months of the completion of the construction. Company also agrees to provide an electronic version of the corridor approved by the Commission and the facility design specifications for the construction of the transmission facility showing the location of the transmission facility as built that can imported in ESRI GIS mapping software within 3 months of the completion of the construction. This electronic map data must be referenced to the North Dakota coordinate system of 1983, North and/or South zones US Survey feet (NAD 83) UTM Zone 13N or 14N feet (NAD 83), or geographic coordinate system (WGS 84) feet. The vertical data must be in the appropriate vertical datum for the coordinate system used. All submissions must specify the datum in which the data was developed.**

Certification Point #33 was followed.

- 34. Company shall notify the Commission as soon as reasonably possible of any damage, as defined by North Dakota Century Code Chapter 49-23, occurs to underground facilities during construction conducted under the certificate or permit issued in this proceeding. In the event of any damage to underground facilities, Company shall suspend construction in the vicinity of the damage until compliance with One-Call Excavation Notice System requirements under North Dakota Century Code Chapter 49-23 has been determined.**

Based on available information, Keitu's opinion is that Certification Point #34 was followed.

- 35. Company agrees to utilize the following procedures if Company seeks a route adjustment before or during construction of the transmission line.**

Certification Point #35 was followed.

- 36. Company will file the name and contact information for a key contact person for the purposes of notice and communication during the adjustment application.**

Certification Point # 36 was followed.

- 37. ROUTE ADJUSTMENT WITHIN DESIGNATED CORRIDOR, NO AVOIDANCE AREA AFFECTED: Before conducting any construction activities for any adjustment to the designated route within the designated corridor, the Company will file:**

- a. Certification and supporting documentation affirming that construction activities will be within the designated corridor, will not affect any known exclusion or avoidance areas within the designated corridor;
- b. Certification and supporting documentation, including a map meeting requirements of N.D. Admin. Code § 69-06-04-01(2)(n) identifying the designated corridor, route and the route adjustment;
- c. Certification that Company will comply with the Commission’s order, law and rules designating the corridor and route.

Certification Point #37 has been followed.

- 38. ROUTE ADJUSTMENT WITHIN DESIGNATED CORRIDOR, AVOIDANCE AREA AFFECTED: Before adjusting the route of an electric transmission line within the designated corridor that may affect an avoidance area, and before conducting any construction activities for any adjustment to the designated route within the designated corridor, the Company will file:**

- a. A specific description of the avoidance area expected to be impacted, including a map meeting the requirements of N.D. Admin. Code § 69-06-04-01(2)(n) identifying:
  - i. The designated corridor, route and the route adjustment;
  - ii. All exclusion and avoidance areas within the portion of the designated corridor containing the route adjustment
- b. Certification and supporting documentation affirming:
  - i. That construction activities will be within the designated corridor
  - ii. That construction activities will not affect any known exclusion area
- c. All field studies performed on the portion of the designated corridor containing the route adjustment;
- d. Specific information about any mitigation measures Company will take within the designated area;

- e. Certification that each owner of real property on which the adjustment is to be adjustment area do not oppose the adjustment;
- f. Certification that unless the Commission previously authorized the impact to the same avoidance area, that the utility has good cause and a specific reason to impact the avoidance area and a reasonable alternative does not exist;
- g. Certification that Company will comply with the Commission’s order, law and rules designating the corridor and route.

Based on available information, Keitu’s opinion is that Certification Point #38 has been followed.

**39. ROUTE ADJUSTMENT OUTSIDE DESIGNATED CORRIDOR, NO AVOIDANCE AREA AFFECTED:** Before adjusting the route of an electric transmission line outside the designated corridor and not affecting any exclusion and avoidance area, before conducting any construction activities for any adjustment to the designated route outside the designated corridor, the Company will file:

- a. Certification and supporting documentation affirming that construction activities will not affect any known exclusion or avoidance areas,
- b. Certification and supporting documents stating the length of the proposed route outside of the corridor and a map meeting the requirements of N.D. Admin. Code § 69-06-04-01(2)(n) identifying the designated corridor, corridor adjustment, designated route and the route adjustment;
- c. Certification that each owner of real property on which the adjustment is to be located and any applicable governmental entity with an interest in the same adjustment area do not oppose the adjustment; and
- d. Detailed field studies indicating exclusion and avoidance areas for the proposed adjustment area; and
- e. Certification that Company will comply with the Commission’s order, law and rules designating the corridor and route.

Based on available information, it is Keitu’s opinion that Certification Point #39 was followed.

**40. ROUTE ADJUSTMENT OUTSIDE DESIGNATED CORRIDOR, AVOIDANCE AREA AFFECTED:** Before adjusting the route of an electric transmission line outside the designated corridor that may affect an avoidance area, and before conducting any construction activities for any adjustment to the designated route outside the designated corridor, the Company will file:

- a. A specific description of the avoidance area expected to be impacted, including a map meeting the requirements of N.D. Admin. Code § 69-06-04-01(2)(n) identifying:

- i. **The designated corridor, corridor adjustment, route and the route adjustment;**
  - ii. **All exclusion and avoidance areas within the adjustment area**
- b. **Certification that construction activities will not affect any known exclusion area;**
- c. **Certification that the utility has good cause and a specific reason to impact the avoidance area and a reasonable alternative does not exist within the designated corridor and route;**
- d. **Certification that each owner of real property on which the adjustment is to be located and any applicable governmental entity with an interest in the same adjustment area do not oppose the adjustment;**
- e. **Provide specific information about any mitigating measures Company will take within the adjustment area;**
- f. **Detailed field studies indicating exclusion and avoidance areas for the proposed adjustment area, and**
- g. **Certification that Company will comply with the Commission's order, law and rules designating the corridor and route.**

**Company acknowledges and agrees that:**

Based on available information, it is Keitu's opinion that Certification Point #40 was followed.

**41. When applicable, Company may submit the field studies form the original application for the corridor and route provided they cover the adjustment area.**

Based on available information, it is Keitu's opinion that Certification Point #41 was followed.

**42. Company acknowledges and agrees that written authorization from the Commission for impacting the avoidance area is necessary prior to commencement of construction activity.**

Certification Point #42 was followed.

## Conclusions

Overall, the Project appeared to be constructed as designed with minimal impacts to the surrounding environment. During the As-Built Inspection, the areas appeared to have been properly restored. Vegetation had not be reestablished in all areas due to poor growing conditions in 2020 and will be reseeded in the spring of 2021. The Project site was in good condition, well maintained, and appeared to be constructed in compliance with the siting laws, siting rules, and applicable Commission Orders.

## Management Review

The services performed by Keitu and its staff for this project have been conducted in a manner consistent with the degree of care and technical skill appropriately exercised by professionals currently practicing in this area under similar time and budget constraints.

Recommendations and findings contained in this report represent our professional judgment and are based upon available information and technically accepted practices at the present time and location. Other than this, no warranty is implied or expressed.



4/2/2021

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Jaimee Antognazzi, Operations Manager

**Photo #1: Operation and Maintenance Building**

**South West Elevation**

☉ 39°NE (T) ● 46°23.135'N, 100°6.626'W ±13ft ▲ 2145ft



**Photo #2: Substation**

**West Elevation**

☉ 91°E (T) ● 46°22.246'N, 99°58.800'W ±13ft ▲ 2144ft



**Photo #3: Substation and Transmission Line**

**South West Elevation**

☉ 54°NE (T) ● 46°22.248'N, 99°58.701'W ±13ft ▲ 2127ft



**Photo #4: Guyed Structure near Substation**

**West Elevation**

☉ 107°E (T) ● 46°22.249'N, 99°58.702'W ±13ft ▲ 2128ft



**Photo #5: Transmission Line Corner of 72<sup>nd</sup> St SE and 24<sup>th</sup> Ave SE**

## South Elevation

☉ 345°N (T) ● 46°22.230'N, 99°55.031'W ±9ft ▲ 2144ft



**Photo #6: Transmission Line along 24<sup>th</sup> Ave SE**

## West Elevation

☉ 86°E (T) ● 46°22.573'N, 99°55.063'W ±13ft ▲ 2121ft



**Photo #7: Connection to MDU Heskett-Wishek 230 kV Transmission Line**

## South East Elevation

☉ 333°NW (T) ● 46°25.717'N, 99°55.180'W ±45ft ▲ 2069ft



**Photo #8: Existing MDU Heskett-Wishek 230 kV Transmission Line**

## South West Elevation

☉ 25°NE (T) ● 46°26.792'N, 99°57.538'W ±9ft ▲ 2020ft



**Project Map:**

