# Minnesota Public Utilities Commission

*Staff Briefing Papers*

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Meeting Date: October 23, 2013.....Agenda Item **2

Company: ITC Midwest LLC

Docket No. ET-6675/CN-12-1053 and ET-6675/TL-12-1337

In the Matter of the Application of ITC Midwest LLC for a Certificate of Need for the Minnesota – Iowa 345 kV Transmission Line Project in Jackson, Martin, and Faribault Counties, Minnesota

In the Matter of the Application of ITC Midwest LLC for a Route Permit for the Minnesota – Iowa 345 kV Transmission Line Project in Jackson, Martin, and Faribault Counties, Minnesota

Issue(s):

- Should the Commission find that the environmental impact statement is adequate?
- Should the Commission adopt the administrative law judge's Findings of Fact, Conclusions of Law, and Recommendation?
- Should the Commission grant a certificate of need for the ITC Midwest LLC Minnesota – Iowa 345 kV Transmission Line Project?
- Should the Commission issue a route permit identifying a specific route and permit conditions for the ITC Midwest LLC Minnesota – Iowa 345 kV Transmission Line Project?

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**Relevant Documents**

ITC Midwest Application for a Certificate of Need ..... March 22, 2013
ITC Midwest Application for a Route Permit..... March 28, 2013
ITC Midwest Supplement to Certificate of Need Application ..... April 9, 2013
Order Finding Certificate of Need Application Complete..... June 27, 2013
Notice and Order for Hearing [Certificate of Need]..... June 27, 2013
Order Finding Route Permit Application Complete ..... June 27, 2013
Notice and Order for Hearing [Route Permit] ..... June 27, 2013
Draft EIS ..... March 21, 2014
Draft EIS – Amended Appendix L – Map Book ..... March 24, 2014

Final EIS ..... July 11, 2014
Administrative Law Judge Report ..... September 8, 2014
DOC DER Exceptions to ALJ Report ..... September 23, 2014
DOC EERA Exceptions to ALJ Report ..... September 23, 2014
DNR Exceptions to ALJ Report ..... September 23, 2014
No CapX 2020 Exceptions to ALJ Report ..... September 23, 2014

**Attached Documents**

Attachment 1 – Summary of Exceptions to ALJ Report as Proposed by No CapX 2020
Attachment 2 – Summary of Exceptions to ALJ Report as Proposed by EERA
Attachment 3 – Summary of Exceptions to ALJ Report as Proposed by EERA (Route Permit Conditions Only)
Attachment 4 – Proposed High-Voltage Transmission Line Route Permit
Attachment 5 – Comparison Maps of Modified Route A and Route Alternative I90-2

The attached materials are work papers of the Commission staff. They are intended for use by the Minnesota Public Utilities Commission and are based upon information already in the record unless noted otherwise.

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## I. STATEMENT OF THE ISSUES

- Should the Commission find that the environmental impact statement is adequate?
- Should the Commission adopt the administrative law judge's Findings of Fact, Conclusions of Law, and Recommendation?
- Should the Commission grant a certificate of need for the ITC Midwest LLC Minnesota – Iowa 345 kV Transmission Line Project?
- Should the Commission issue a route permit identifying a specific route and permit conditions for the ITC Midwest LLC Minnesota – Iowa 345 kV Transmission Line Project in Jackson, Martin, and Faribault Counties?

## II. PROJECT OVERVIEW

ITC Midwest LLC (ITC Midwest) has proposed to construct and operate approximately 75 miles of new 345 kilovolt (kV) transmission line in Jackson, Martin, and Faribault counties (Project).

The proposed 345 kV transmission line would run east from the existing Lakefield Junction substation near the city of Lakefield in Jackson County, crossing Martin County to a new Huntley substation near the city of Winnebago in Faribault County. From the new Huntley substation, the transmission line would proceed south crossing the Minnesota – Iowa border near the city of Elmore, Minnesota. The Project also includes expanding the existing Lakefield Junction substation, constructing a new Huntley substation, reconfiguring several existing 69 kV and 161 kV transmission lines, and decommissioning the Winnebago substation.

ITC Midwest stated that the Project is needed to: 1) enhance reliability of the transmission system in southern Minnesota and the region; 2) increase the outlet capacity for new generation, specifically wind generation, in southern Minnesota and northern Iowa; and 3) alleviate constraints of the transmission system in southern Minnesota. The Project comprises a portion of Midwest Independent Transmission System Operator (MISO) Multi-Value Projects (MVP) Project 3, and was studied in and approved in the 2011 MISO Transmission Expansion Plan.

## III. STATUTES AND RULES

### A. Certificates of Need

Under Minn. Stat. § 216B.243, subd. 2, no large energy facility shall be sited or constructed in Minnesota without the issuance of a certificate of need by the Commission. The Project is a large energy facility as defined by Minn. Stat. § 216B.2421, subd. 2(3), because it is a high-voltage transmission line with a capacity of 100 kV or more with more than 10 miles of its length in Minnesota or that crosses a state line.

In assessing the need for a proposed large energy facility the Commission must consider the factors listed under each of the criteria set forth in Minn. Stat. § 216B.243, subd. 3 and Minn. R. 7849.0120.

### B. Route Permits

Under Minn. Stat. § 216E.03, subd. 1, no person may construct a high-voltage transmission line without a route permit from the Commission. A high-voltage transmission line may be constructed only along a route approved by the Commission.

Under Minn. Stat. § 216E.01, subd. 4, a high-voltage transmission line is defined as a conductor of electric energy and associated facilities designed for and capable of operation at a nominal voltage of 100 kilovolts or more and is greater than 1,500 feet in length. The Project would consist of approximately 75 miles of new 345 kV transmission line and, therefore, requires a route permit from the Commission.

The Project is subject to Minn. Stat. § 216E.03, subd. 7, which requires that high-voltage transmission lines be routed consistent with state policy and in a manner that minimizes adverse human and environmental impact while insuring continuing electric power system reliability and integrity and insuring that electric energy needs are met and fulfilled in an orderly and timely fashion. In determining whether to issue a permit for a high-voltage transmission line the Commission must consider the factors contained under Minn. R. 7850.1400. A route permit issued by the Commission must specify the design, routing, right-of-way preparation, facility construction, and any other conditions it deems appropriate.[1]

## IV. PROCEDURAL HISTORY

### A. Certificate of Need Application

On September 28, 2012, ITC Midwest filed a notice plan petition for the Minnesota – Iowa 345 kV Transmission Line Project. The Commission approved the notice plan in an order issued on December 31, 2012.

On March 22, 2013, ITC Midwest filed a certificate of need application for the Minnesota – Iowa 345 kV Transmission Line Project.

On April 9, 2013, ITC Midwest filed a supplement to the certificate of need application.

On June 27, 2013, the Commission issued an Order Granting Exemption, Finding Application Complete, Granting Variances, and Finding Joint Proceedings in the Public Interest; and a Notice and Order for Hearing.

### B. Route Permit Application

On March 28, 2013, ITC Midwest filed a route permit application for the Minnesota – Iowa 345 kV Transmission Line Project under the Full Permitting Process set forth by Minn. Stat. § 216E.03 and Minn. R. 7850.1700 to 7850.2700 and 7850.4000 to 7850.4400.

On June 27, 2013, the Commission issued an Order Finding Application Complete, Authorizing Advisory Task Force, and Requesting Draft Route Alternatives; and a Notice and Order for Hearing.

[1] Minn. Stat. § 216E, subd. 10.

## C. Environmental Impact Statement

Under Minn. Stat. § 216E.03, subd. 5, and Minn. R. 7850.2500, the commissioner of the Department of Commerce is required to prepare an environmental impact statement (EIS) on proposed high-voltage transmission lines. The EIS must contain information on the potential human and environmental impacts of a proposed project and of alternative sites or routes considered and must address mitigation measures for identified impacts.

Under Minn. R. 7849.1900, subp. 2, the Department of Commerce may elect to prepare an EIS in lieu of the required environmental report in the event an applicant for a certificate of need applies to the Commission for a route permit prior to the time the Department of Commerce completes the environmental report. If the documents are combined, the Department of Commerce must include the analysis of alternatives required by Minn. R. 7849.1500, in the EIS, but is not required to prepare an environmental report. The Commission ordered joint environmental review of the certificate of need and route permit applications in this matter.[2]

On June 24, 2013, the Commission issued a Notice of Public Information and Environmental Impact Statement Scoping Meetings in accordance with Minn. R. 7850.2300. Six public meetings were held in the cities of Fairmont, Jackson, and Blue Earth between July 16 and 18, 2013, to provide project information and to identify issues and route alternatives to be addressed in the EIS. Public comments on issues and alternative routes to be considered in the scope of the EIS were accepted until August 2, 2013.

In accordance with Minn. Stat. § 216E.08 and Minn. R. 7850.2400, the Department of Commerce Energy and Environmental Analysis Unit (EERA) established an advisory task force and conducted task force meetings on June 21, July 19, and July 23, 2013. The task force was established to assist in determining the scope of the EIS by identifying specific impacts and issues of local concern, and potential site and route alternatives to be assessed. EERA filed the Minnesota to Iowa 345 kV Transmission Line Advisory Task Force Report on August 16, 2013.

On October 14, 2013, the deputy commissioner of the Department of Commerce issued the EIS Scoping Decision in accordance with Minn. R. 7850.3700, subp. 2. The scoping decision identified the issues to be addressed in the EIS including potential human and environmental impacts, alternative sites or routes, and a schedule for completion of the EIS.

[2] *See* Commission Order Granting Exemption, Finding Application Complete, Granting Variances, and Finding Joint Proceedings in the Public Interest (June 27, 2013): eDocket ID 20136-88593-01.

On March 21, 2014, EERA filed the Draft EIS on the proposed Project in accordance with Minn. R. 7850.2500.[3] The Draft EIS contained a comprehensive description of the Project and alternatives to the Project; a discussion of alternatives required under Minn. R. 7849.1500, a discussion of potential impacts of the Project and any alternatives on the human and natural environment; reasonable mitigation measures that could be implemented to minimize any identified adverse impacts; and required permits and approvals.

On March 24, 2014, the EERA issued a Notice of Availability of Draft EIS and Public Information Meetings in accordance with Minn. R. 7850.2500, subd. 8. EERA staff held six public meetings in the cities of Fairmont, Jackson, and Blue Earth between April 22 and 24, 2014, to provide an opportunity for the public to comment on the Draft EIS. A comment period for submission of written comments was open until May 9, 2014.

On July 11, 2014, the EERA filed the Final EIS for the Project. The Final EIS was an amended version of the Draft EIS that incorporated and identified the necessary changes in the appropriate places. The Final EIS responded to the timely substantive comments received on the Draft EIS consistent with the scoping decision. Written comments on the Draft EIS and responses to those comments were included as Appendix M of the Final EIS. EERA issued the required notices of availability of the Final EIS pursuant to Minn. R. 7850.2500, subp. 9.

### D. Public Hearing

On May 13 and 14, 2014, Administrative Law Judge, James E. LaFave with the Office of Administrative Hearings presided over public hearings that were conducted in the cities of Fairmont, Jackson, and Blue Earth. A comment period for submission of written comments into the record for the certificate of need and route permit applications was open until May 30, 2014.[4]

The hearing procedures included a brief presentation of the proposed Project; an explanation of the process to be followed; introduction of documents to be included in the record; and an opportunity for any person to present and to ask questions of the applicant, EERA staff, and commission staff. The hearings continued until all persons had the opportunity to offer testimony and ask questions. A court reporter was present to transcribe the public hearings.

## V. REPORT OF THE ADMINISTRATIVE LAW JUDGE

On September 8, 2013, the Administrative Law Judge (ALJ) filed his Findings of Fact, Conclusions of Law and Recommendations (ALJ Report).

[3] EERA filed an amended Appendix L of the Draft EIS on March 24, 2014.
[4] Notice of the hearing was mailed and published in accordance with Minn. Stat. § 216E.03, subd. 6 and Minn. R. 7850.2600.

The ALJ Report addressed the certificate of need and transmission line siting for the ITC Midwest Minnesota – Iowa 345 kV Transmission Line Project.

The ALJ Report included 578 findings of fact, including a summary of public comments and government agency participation (Findings 384 to 414); 33 conclusions of law; and six recommendations.[5]

The ALJ Report documented that the procedural requirements were followed, and presented findings of each of the decision criteria under Minn. R. 7849.0120 and 7850.4100. The finding of facts included identification of the applicant and other parties to the proceeding; procedural requirements that were conducted; description of the proposed Project; position of the parties; facts related to the certificate of need proceeding; facts related to the route permit proceeding including alternative routes considered; identification of public and government agency participation in the proceedings; and facts related to the adequacy of the EIS.

The ALJ made the following recommendations:

1. *That the Commission conclude that all relevant statutory and rule criteria necessary to obtain the Certificate of Need for the Minnesota - Iowa 345kV Project have been satisfied and that there are no statutory or other requirements that preclude granting a Certificate of Need based on the record.*

2. *That the Commission conclude that all relevant statutory and rule criteria necessary to obtain a Route Permit for Modified Route A have been satisfied and that there are no statutory or other requirements that preclude granting a Route Permit based on the record.*

3. *The Commission should grant ITC Midwest a Route Permit for the Minnesota – Iowa 345 kV Transmission Line Project and Associated Facilities in Jackson, Martin, and Faribault Counties, Minnesota to construct the Project along Modified Route A.*

4. *The Standard Route Permit Conditions should be incorporated into the Route Permit, unless modified herein.*

5. *The Special Route Permit Conditions identified in paragraphs 25 through 33 above should be incorporated into the Route Permit.*

[5] Given the joint proceeding of the certificate of need and route permit applications, the ALJ Report combined the findings, conclusions, and recommendations of the certificate of need (ET-6675/CN-12-1053) and route permit (ET-6675/TL-12-1337) dockets.

*6. That ITC Midwest be required to take those actions necessary to implement the Commission's orders in this proceeding.*

## VI. EXCEPTIONS

Consistent with Minn. R. 7829.2700, exceptions to the ALJ Report were filed by the Department of Commerce Division of Energy Resources (DOC DER), EERA, the Department of Natural Resources (DNR), and No CapX 2020 within 15 days of the filing of the report. ITC Midwest filed a letter on September 23, 2014, that indicated it did not need to file exceptions to the ALJ Report.

### A. Department of Commerce Division of Energy Resources Exceptions

On September 23, 2014, DOC DER filed exceptions to the ALJ Report, specifically related to the certificate of need proceedings in this matter. The exceptions submitted by DOC DER focused primarily on its assertion that there is no reliable cost estimate of the proposed Project in the record for this matter. DOC DER continued its argument that ITC Midwest has not provide meaningful and reliable cost estimates for the final cost of the Project. In particular, DOC DER pointed out the fact that ITC Midwest used a bandwidth of plus/minus 30 percent around the total cost figure to account for uncertainties associated with the selected route. Thus, DOC DER took "exception to the [ALJ] Report to the extent that it include[d] proposed findings regarding the Project's costs, estimated costs, savings to ratepayers, likely costs to ratepayers, etc." However, DOC DER provided no specific modifications/additions to the ALJ's Findings of Fact as it related to its exceptions.

DOC DER also critiqued MISO's analysis of the Project in its past and current MTEP reports. Specifically, the lack of considering the cost-effectiveness of the shorter stand-alone projects that were ultimately combined and now comprise the Minnesota – Iowa 345 kV Transmission Line Project as proposed by ITC Midwest.

DOC DER made the following recommendations related to the certificate of need in this matter:

- Took no position regarding which alternative best meets the criteria established by Minnesota Statutes and Minnesota Rules.

- Recommended that the Commission allow utilities subject to the Commission's ratemaking authority to recover through their Transmission Cost Riders (TCR) only the amount of cost shown to be reasonable in this certificate of need proceeding: 1) ITC Midwest's cost estimate;

or 2) justify to the Commission's satisfaction why it would be appropriate to charge Minnesota ratepayers for any ITC Midwest cost-overruns through a rider.

- Order ITC Midwest to make a compliance filing containing a spreadsheet that can be used to calculate the cost of alternatives, including the Commission's carbon dioxide ($CO_2$) internal cost and externality values, in future certificate of need filings in a consistent manner.

- Order ITC Midwest to use the Commission's externality values and cost of future $CO_2$ regulation value in future certificate of need proceedings.

## B. No CapX 2020 Exceptions

On September 23, 2014, No CapX 2020 filed exceptions to the ALJ Report, specifically related to the certificate of need proceedings in this matter. No CapX 2020, a limited intervener in the proceeding, requested that the certificate of need be denied because the Applicant has not met its burden of proof and production, and that the matter be remanded to the ALJ to build a more thorough record. No CapX 2020 proposed 32 new Findings of Fact to the ALJ Report (**Attachment 1**) and asserted the following in its exceptions:

- ITC Midwest is not a public service corporation as indicated in Finding 1 and, therefore, does not have the authority to exercise the power of eminent domain, if issued a permit.

- Agreed with DOC DER concerning the uncertainties related to the final cost of the Project (i.e., DOC DER's position that the record does not support the ALJ's proposed Findings regarding "project costs, estimated costs, savings to ratepayers, likely costs to ratepayers, etc.").

- Agreed with DOC DER that there was no information regarding the cost-effectiveness of the shorter 161 kV stand-alone projects.

- The record does not contain distinct identification of Project benefits to Minnesota, and questioned the level of dependence of MVP 3 on MVP 4 and MVP 5 to provide benefits.

- The Project is not being built for wind, and that the record demonstrates that the Project will not displace coal.

- The ALJ's Findings improperly relied on comments that were not made under oath at the public hearings.

## C. Department of Commerce Energy Environmental Review and Analysis Exceptions

On September 23, 2014, EERA filed exceptions to the ALJ Report, specifically related to the route permit proceedings in this matter. EERA's exceptions consisted of five parts: 1) the application of the routing factors of Minn. R. 7850.4100 to the routing options on the record; 2) the removal of the existing 161 kV line from Fox Lake and Lake Charlotte; 3) right-of-way for the Project; 4) route permit conditions for the Project; and 5) minor edits for clarity of the record.

### *1. Routing Factors and 161 kV Lake Removal*

EERA indicated that it did not believe the ALJ Report contained sufficient detail to make a comparison of the routes, route alternatives, and route variations considered for the Project, and did not reflect the "relative merits" discussion of the EIS. EERA provided that the route alternative I90-2 with route variations HI-2 and HI-5 and removal of existing 161 kV transmission lines from Fox Lake and Lake Charlotte best satisfies the routing factors of Minn. R. 7850.4100. Thus, EERA did not agree with the ALJ's recommendation that a route permit should be issued for Modified Route A. To support its recommended route EERA suggested 54 modifications/additions to the ALJ Report (**Attachment 2**).

### *2. Right-of-Way*

EERA indicated that the ALJ Report included the appropriate modifications to ITC Midwest's requested right-of-way as it had suggested. However, EERA suggested further clarification and provided additional modifications to the ALJ's Findings (123, 367, and 371) and Conclusion 21 that relate to the right-of-way for the Project.[6]

### *3. Route Permit Conditions*

EERA provided a number of suggested modifications and additions to the ALJ's conclusions that relate to his recommended permit conditions. The proposed permit condition language modifications relate to the following matters:

- Noise Standards and Project Construction Hours (Conclusion 24)
- Interference with Communication Devices (Conclusion 25)
- Agricultural Impact Mitigation Plan (Conclusion 26)
- Vegetation Management Plan (Conclusion 28)
- Stormwater Pollution Prevention Plan (Conclusion 29)
- Construction Environmental Control Plan (Conclusion 30)

[6] *See* DOC EERA Exceptions to ALJ Report (September 23, 2014), pp. 17-19: eDocket ID 20149-103237-01.

- Des Moines River Crossing (Conclusion 31)
- Archaeological and Historic Resources (Conclusion 32)

*4. Minor Clerical Modifications*

EERA staff recommended edits to Findings 57 and 413 to clarify the record and to correct minor errors.

### D. Department of Natural Resources Exceptions

On September 23, 2014, DNR filed exceptions to the ALJ Report, specifically related to the route permit proceedings in this matter. The DNR indicated in its letter that it agreed with EERA's recommendation to include as part of an approved route the removal of the existing 161 kV transmission lines that currently cross Fox Lake and Lake Charlotte.

The DNR referenced earlier comments it had provided concerning the Draft EIS that provided rational for its recommendation and maintained that the removal of the 161 kV lines across the lakes would: 1) positively impact aesthetics at both lakes by creating one right-of-way rather than two near the lakes; 2) provide a positive impact on agricultural operations where the existing 161 kV lines would be removed; 3) decrease the potential for avian impacts at both lakes; 4) would result in removing the existing 161 kV line near Rooney Run Wildlife Management Area (WMA); and 5) prevent possible hazardous conditions if a transmission line contacted water. The DNR suggested an additional finding and modifications to Conclusion 23 of the ALJ Report to support its recommendation.[7]

## VII. STAFF DISCUSSION

Based on information in ITC Midwest's certificate of need and route permit applications; the analysis provided in the EIS; public comments, testimony, briefs, and exceptions received in this matter; the ALJ Report; and other evidence in the record, staff provides the following discussion and recommendations.

### A. Adequacy of the Environmental Impact Statement

Staff has reviewed the EIS and agrees with the ALJ that EERA: (1) conducted an appropriate environmental analysis of the Project for purposes of the proceedings; (2) addressed the issues and alternatives raised in scoping; (3) provided responses to the timely and substantive comments received during the Draft EIS review process; and

[7] See DNR Exceptions to ALJ Report (September 23, 2014), p. 2: eDocket ID 20149-103238-02.

(4) prepared the EIS in compliance with the procedures in Minn. R. 7850.1000 to 7850.5600. Therefore, staff recommends that the Commission find that the EIS is adequate pursuant to Minn. R. 7850.2500, subp. 10.

## B. Administrative Law Judge Report

Based on its review, staff recommends that the Commission adopt the ALJ Report in its entirety with a few minor corrections and clarifications related to conditions of the route permit only (**Attachment 3**).[8]

Staff believes the ALJ Report is well reasoned, comprehensive, and thorough. The report documented that the procedural requirements were followed, and presented findings of fact for each of the decision criteria that must be considered for a certificate of need and route permit.[9] The finding of facts that the ALJ found to be true and the conclusions of law he reached regarding those facts led to the following recommendations on the certificate of need and route permit in this matter:

- ITC Midwest has satisfied the criteria set forth in Minnesota law for a certificate of need for the Minnesota – Iowa 345 kV Project and that the Commission should grant the certificate of need.

- ITC Midwest has satisfied the criteria set forth in Minnesota law for a route permit for the Minnesota – Iowa 345 kV Project and that the Commission should grant the route permit to construct the Project along Modified Route A.

Staff agrees with the ALJ that the Commission should grant ITC Midwest a certificate of need and route permit for Modified Route A for the Midwest Minnesota – Iowa 345 kV Transmission Line Project.

## C. Certificate of Need

### *1. Department of Commerce Division of Energy Resources*

DOC DER indicated that there is data available in the record that demonstrates the Project would allow a wind farm with a Commission-approved power purchase agreement to be interconnected, although at costs that may exceed the cost estimates provided by ITC Midwest, but took no position regarding which alternative best meets the criteria established by rule and statute.

[8] Discussed further in Section VII.D.
[9] Minn. Stat. § 216B.243 and Minn. R. Ch. 7849 (certificate of need); Minn. Stat. Ch. 216E and Minn. R. Ch. 7850 (route permit).

Because DOC DER believes that there is no reliable cost estimate of the Project in the record for this matter, staff agrees that, in this case, the Commission should incorporate into its order the following conditions on the certificate of need as recommended by DOC DER:

- Allow utilities subject to the Commission's ratemaking authority to recover through their TCR's only the amount of cost shown to be reasonable in this certificate of need proceeding: 1) ITC Midwest's cost estimate; or 2) justify to the Commission's satisfaction why it would be appropriate to charge Minnesota ratepayers for any ITC Midwest cost-overruns through a rider.

- Order ITC Midwest to make a compliance filing containing a spreadsheet ITC can use to calculate the cost of alternatives, including the Commission's $CO_2$ internal cost and externality values, in future certificate of need filings in a consistent manner.

- Order ITC Midwest to use the Commission's externality values and cost of future $CO_2$ regulation value in future certificate of need proceedings.

Should the Commission choose to incorporate the following conditions, Conclusion 11 of the ALJ Report that indicates no conditions on the certificate of need are necessary should be stricken.

*2. No CapX 2020*

Staff has reviewed the exceptions filed by No CapX 2020 and does not agree that a certificate of need for the Project should be denied. Staff believes the ALJ has provided facts in his report that demonstrate ITC Midwest has met its burden of proof and production. Further, staff believes the ALJ Report and the record created in this proceeding is sufficiently comprehensive to form a basis for a decision, and does not find a need to supplement the record.

No CapX 2020 suggested numerous modifications and additions to the ALJ Report. Staff has reviewed the suggested modifications and does not find that they would change or otherwise benefit the report as prepared by the ALJ.

Because No CapX 2020 is in agreement with DOC DER regarding the potential reliability of the cost estimates for the Project, staff believes No CapX 2020 concerns would be addressed should the Commission require the conditions suggested by DOC DER.

Staff also provides a discussion regarding a few other assertions made by No CapX 2020 in its exceptions:

- ITC Midwest, under Minn. Stat. § 216E.01, subd. 10, is,"[an] entity engaged or intending to engage in this state in the generation, transmission, or distribution of electric energy including, but not limited to, a private investor-owned utility, cooperatively owned utility, and a public or municipally owned utility." Thereby, under Minn. Stat. § 216E.12, subd. 1, "The power of eminent domain shall continue to exist for utilities and may be used according to law to accomplish any of the purposes and objectives of [Chapter 216E], including acquisition of the right to utilize existing high-voltage transmission facilities which are capable of expansion or modification to accommodate both existing and proposed conductors."

- The claimed need of the Project as described by the Applicant does not contemplate the displacement of coal, rather, the stated need is to: 1) enhance reliability of the transmission system in southern Minnesota and the region; 2) increase the outlet capacity for new generation, specifically wind generation, in southern Minnesota and northern Iowa; and 3) alleviate constraints of the transmission system in southern Minnesota.

- Under Minn. R. 7850.3800, subp. 2, "Persons may testify at the hearing without being first sworn under oath."

## D. Route Permit

### *1. Department of Commerce Energy Environmental Review and Analysis*

EERA indicated that it did not believe that Modified Route A, as recommended by the ALJ, was the best alternative for the Project. EERA instead suggested that Route Alternative I90-2 with route variations HI-2 and HI-5 and removal of existing 161 kV transmission lines from Fox Lake and Lake Charlotte best satisfies the routing factors. EERA presented 54 suggested modifications and additions to the ALJ Report.[10]

*ALJ Report*

EERA believes that the ALJ Report lacked sufficient detail to make a comparison of the routes, route alternatives, and route variations considered for the Project. Staff respectfully disagrees with EERA and points to the following:

- Section V. of the ALJ Report (Findings 322 - 348) provided detailed descriptions of ITC's proposed routes (Route A, Route B, and Modified Route A) and the alternative routes evaluated during the proceedings ( I90-1, I90-2, I90-3, I90-4, and I90-5).

[10] See EERA Exceptions to Administrative Law Judge's Report (September 23, 2014), Sec. IA. 1-8, pp. 3-10; Sec. IB., pp. 11-12; Sec. II., pp. 15-17: eDocket ID 20149-103237-02.

- The ALJ Report provided numerous findings that compared each of the identified alternatives using facts available in the record as they related to routing factors such as displacement, agriculture, forestry, mining, archaeological resources, surface water resources, flora, fauna, existing right-of-way, reliability (Findings 415 - 545).

- The ALJ Report provided findings (546 - 553) that discuss EERA's recommended route and the reasons, as contained in the record, why Modified Route A is a more appropriate route for the Project.

Staff notes that EERA provided the very same proposed changes to the ALJ in its Reply Comments submitted during the reply brief period.[11] Thus, the ALJ had an opportunity to review and consider EERA's suggestions prior to preparation of his Report.

Staff believes the ALJ Report appropriately reflects the information on record. The ALJ made sufficient and comprehensive findings supported by the record that provide for a comparison of the various alternatives that led to his selection of Modified Route A. For these reasons staff does not recommend that the Commission accept any of EERA's suggested modification/additions to the ALJ Report except for those related to general permit conditions as discussed below. Staff has attached a proposed High-Voltage Transmission Line Route Permit for consideration that incorporates EERA's permit language suggestions (**Attachment 4**).

*Removal of Existing 161kV Transmission Lines from Lakes*

It is staff's understanding that EERA's recommendation on route alternative I90-2 is fully contingent on whether the existing 161 kV transmission lines that span Fox Lake and Lake Charlotte are removed and re-routed as part of this Project.[12] Further, EERA indicated that the choice between I90-2 and Modified Route A in the area between the Fox Lake Substation and the Rutland Substation is a very close call. Thus, if the 161 kV lines were not removed it would appear that EERA would agree that Modified Route A is the best alternative for the Project. Maps providing a comparison of Modified Route A and route alternative I90-2 are included with these briefing papers (**Attachment 5**).

EERA, DNR, and the Martin County Board have recommended that the existing 161 kV lines spanning the two lakes should be removed as part of the Project. Staff does not find convincing evidence in the record that would lead to such a recommendation.

[11] Department of Commerce EERA Reply Comments (August 8, 2014): eDocket ID 20148-102140-02.
[12] EERA Initial Comments (July 11, 2014), pp. 2-3: eDocket ID 20147-101373-02.

Staff questions what potential impacts of the Project would be avoided by removing the two existing 161 kV lines. The only evidence staff can find in the record to support removal of the lines relates to multiple rights-of-ways. The argument that the new transmission line would create a second right-of way near the lakes is true; however; it is important to note the distances involved (one-half to one mile from the lake). Staff does not believe the new transmission line right-of-way would encroach on the lakes to the point that it creates impacts and does not see how removal of the lines from the lakes would mitigate potential impacts of the Project.

- Modified Route A would create a new right of way following section lines and roads approximately one mile east of Fox Lake.

- Both Modified Route A and route alternative I90-2 would co-locate with existing transmission lines along I-90 approximately one-half mile south of Fox Lake.

- Modified Route A near Lake Charlotte would create a new right-of-way in close proximity to the lake, but would also follows a road that crosses the lake.

- I90-2 with removal of the lake lines would place the line approximately 200 feet from Buffalo Lake and through the Krahmer WMA.

- I90-2 would impact a residence at Bixby Road (Section 36 Frasier Township and Section 31 Rutland Township) by boxing in the property with transmission lines on all four sides.

- I90-2 would cross over Interstate 90 four times, whereas Modified Route A would only do so twice.

- I90-2 with removal of the lake lines would create approximately 13.2 miles of triple circuiting; Modified Route A would require approximately 6.2 miles of triple circuiting.

Additionally, the history of the 161 kV lines crossing the lakes should be a consideration in such a decision.

- The lines have crossed Fox Lake and Lake Charlotte since the 1950s.

- The crossings at Fox Lake and Lake Charlotte were rebuilt within the last three years at a cost of $7 million to ensure they met the minimum clearance requirements. ITC Midwest worked with the DNR to ensure proper construction. The DNR issued an amended license for the crossings in 2010.

- Removal of the 161 kV transmission lines from the two lakes would add an estimated $7.8 million to the cost of the Project.

- ITC Midwest has proposed structures for the Project that are capable of carrying the 161 kV circuits that span the lakes to allow relocation of the lines in these areas when rebuilds are needed due to age or other considerations.

Staff agrees that removal of the 161 kV may likely create positive impacts to the lakes, however, the removal of the existing lines is not a necessary part of the Project and is not appropriate at this time. Therefore, staff does not recommend that the Commission require removal and rerouting of the 161 kV lines that span Fox Lake and Lake Charlotte as part of the Project.

*Permit Language*

Staff agrees with all of EERA's suggested modifications to only the conclusions and the permit language as suggested by the ALJ in his Report (**Attachment 3**). EERA proposed modifications to the following Conclusions in the ALJ Report that relate to general permit language:[13]

- Noise Standards and Project Construction Hours (Conclusion 24)
- Interference with Communication Devices (Conclusion 25)
- Agricultural Impact Mitigation Plan (Conclusion 26)
- Vegetation Management Plan (Conclusion 28)
- Stormwater Pollution Prevention Plan (Conclusion 29)
- Construction Environmental Control Plan (Conclusion 30)
- Des Moines River Crossing (Conclusion 31)
- Archaeological and Historic Resources (Conclusion 32)

[13] *See* EERA Exceptions to Administrative Law Judge's Report (September 23, 2014), Sec. IV., pp. 19-24: eDocket ID 20149-103237-02.

## COMMISSION DECISION ALTERNATIVES

### A. Environmental Assessment

1. Find that the EIS meets the requirements of Minn. R. 7850.1500, subp. 10, in that it:

    - Addresses the issues and alternatives raised in scoping to a reasonable extent considering the availability of information and the time limitations for considering the permit application;
    - Provides responses to the timely substantive comments received during the draft environmental impact statement review process; and
    - Was prepared in compliance with the procedures in parts 7850.1000 to 7850.5600.

2. Take some other action deemed appropriate.

### B. Findings of Fact, Conclusions of Law and Recommendation

1. Approve and adopt the ALJ's Findings of Fact, Conclusions of Law and Recommendation for the ITC Midwest Minnesota – Iowa 345 kV Transmission Line Project.

2. Approve and adopt the ALJ's Findings of Fact, Conclusions of Law and Recommendation for the ITC Midwest Minnesota – Iowa 345 kV Transmission Line Project with modifications to Conclusions 25, 26, and 28-32 relating to permit conditions, as proposed by EERA in its Exceptions to the ALJ's Report.

3. Approve and adopt the ALJ Findings of Fact, Conclusions of Law and Recommendation for the ITC Midwest Minnesota – Iowa 345 kV Transmission Line Project, with the modifications or combination thereof proposed by EERA in its Exceptions to the ALJ's Report.

4. Approve and adopt the ALJ Findings of Fact, Conclusions of Law and Recommendation for the ITC Midwest Minnesota – Iowa 345 kV Transmission Line Project, with the modifications or combination thereof proposed by No CapX 2020 in its Exceptions to the ALJ's Report.

5. Take some other action deemed appropriate.

## C. Certificate of Need

1. Grant a certificate of need for the ITC Midwest Minnesota – Iowa 345 kV Transmission Line Project.

2. Grant a certificate of need for the ITC Midwest Minnesota – Iowa 345 kV Transmission Line Project, and impose the conditions as proposed by DOC DER in its Exceptions to the ALJ's Report.

3. Do not grant a certificate of need for the ITC Midwest Minnesota – Iowa 345 kV Transmission Line Project.

4. Take some other action deemed appropriate.

## D. High-Voltage Transmission Line Route Permit

1. Issue a high-voltage transmission line route permit identifying Modified Route A for the ITC Midwest Minnesota – Iowa 345 kV Transmission Line Project in Jackson, Martin, and Faribault Counties.

2. Issue a high-voltage transmission line route permit identifying alternative route I90-2 for the ITC Midwest Minnesota – Iowa 345 kV Transmission Line Project in Jackson, Martin, and Faribault Counties, as recommended by EERA.

3. Do not issue a route permit for the ITC Midwest Minnesota – Iowa 345 kV Transmission Line Project.

4. Take some other action deemed appropriate.

**Staff Recommendation:** A1, B2, C2, and D1

# Docket No. ET-6675/CN-12-1053 and ET-6675/TL-12-1337

# Attachment 1

# Summary of Exceptions to ALJ Report as Proposed by No CapX 2020

## EXCEPTIONS TO ALJ'S RECOMMENDATION

## FINDINGS OF FACT

1. ITC Midwest is a transmission-only utility that owns approximately 6,600 circuit miles of transmission lines and more than 200 transmission substations in Iowa, Minnesota, Illinois, and Missouri. ITC Midwest is a "transmission company" and "utility" under state law.[2] ITC Midwest is also a "public utility" under Section 203 of the Federal Power Act.[3] As such, ITC Midwest is subject to plenary rate regulation and other oversight by the Federal Energy Regulatory Commission (FERC).

123. ITC has proposed a right-of-way of 200 feet for the project. ITC will need to acquire additional right-of-way for this project. Within the 200 foot right-of-way…

139. The electrical system in the Project area and in the region was originally designed to serve the residential and commercial needs of customers in utility service territories. Substantial changes have been made both in this region and locally in the project area to facilitate bulk power transfer.

**RE: Special Protection System**

14. ITC stated that the proposed Project is designed to relieve transmission constraints in southwestern Minnesota and northern Iowa areas. ITC stated that the proposed Project would also facilitate the movement of energy associated with renewable resources to markets outside the local area.[13]

15. ITC stated in the Petition that there are currently two special protection systems (SPSs) imposed by MISO on ITC's system in southwestern Minnesota:

- the Fieldon Capacitor Bypass SPS (Fieldon SPS) and
- the Nobles County—Wilmarth SPS (Wilmarth SPS).

The Fieldon SPS has been in-place since 2001 and the Wilmarth SPS has been in-place since 2007.[14]

[13] ITC Ex. 22 at 5-12 (Berry Direct).
[14] ITC Ex. 6 at Appendix J, pages 17-18 (Petition).

16. ITC's view is that an SPS is a remedial operating solution to a transmission reliability violation, often resulting from the installation of new facilities which either aggravate an existing transmission violation or initiate a new violation. ITC's experience is that SPSs are generally undesirable because they can lead to exponential growth in demands placed on the transmission system and create operational complexities.[15]

17. ITC stated that the results of the Company's analysis suggest that both SPSs would be retired if MVP 3 were constructed. However, ITC also noted that MISO makes the final determination of whether an SPS should or should not be retired.[16]

18. One of ITC's claimed needs is to relieve SPSs in southwestern Minnesota. Because these SPS are currently in existence, the accuracy of ITC's forecast of future demand for the type of energy that would be supplied by the proposed facility is not relevant. That is, one of the claimed needs is to alleviate problems that currently exist, rather than the claimed need being based on a potential future state of the electrical system.

19. Regarding transmission issues in general, Department witness Mr. Adam Heinen's analysis of recent operations estimated that there were 12 constraints, for a total of 1,981 hours, in calendar year 2011 and 3 constraints, for a total of 1,242 hours, in calendar year 2012 for the area near the proposed Project. Based on this analysis of historical data Mr. Heinen concluded that the number and magnitude of constraints suggest that additional transmission capacity is needed.[17] Mr. Heinen reasonably concluded that "construction of a transmission line in the Project area would likely improve deliverability and reduce constraints on the transmission system."[18]

20. Three separate witnesses addressed Mr. Heinen's questions regarding the SPSs in Rebuttal Testimony:

- Mr. Randall Porter for CEI;
- Mr. Diguanto Chatterjee for MISO; and
- Mr. Joe Berry for ITC.

21. Mr. Heinen's surrebuttal reasonably concluded that ITC witness Mr. Berry did not address why MISO labeled the SPSs in the area of MVP 3 as inactive or whether reliability concerns still exist. Mr. Heinen reasonably concluded that, in ITC's estimation, either the 161 kV Rebuild alternative or the proposed MVP 3 could relieve

[15] ITC Ex. 6 at Appendix J, page 18 (Petition).
[16] ITC Ex. 6 at Appendix J, page 19 (Petition).
[17] DOC-DER Ex. 200 at 7 (Heinen Direct).
[18] DOC DER Ex. 200 at 14 (Heinen Direct).

the two SPSs in the southwestern Minnesota and Northern Iowa areas.[19] However, Mr. Heinen stated that he was:

> … unable to identify a definitive statement regarding future retirement of SPS conditions. Also of note, ITCM Witness Berry suggests that construction of the 161 kV rebuild alternative also has the potential to relieve SPS conditions in the Project Area.[20]

22. Mr. Heinen interpreted MISO witness Mr. Chatterjee's rebuttal as indicating that even though an active SPS is not required in 2015, and thus is designated inactive, based on MISO's transmission modeling assumptions the thermal loading concerns are still present and need to be relieved by a transmission project at some point in time.[21]

122. MISO's witness Chatterjee, who clarified that the purpose of the MVP projects is baseload unit transfer capacity:

> You're trying to move capacity resources or, capital P, capital R, planning resources. These are baseload units that you're moving from local resource zone one for utilization in all of the other MISO local resource zones for every load to meet their local -- to meet their planning reserve margin requirement.
>
> So you know how much you need and you know what you're transferring, you're transferring capacity resources, baseload units, and wind also, but wind has a very small capacity credit value. And we identified a significant benefit there. So that is an important context.[22]

123. ITC has proposed a right-of-way of 200 feet for the project. ITC will need to acquire additional right-of-way for this project. Within the 200 foot right-of-way…

> 125. The final cost of the entire MN-IA 345 kV Project is highly dependent on a number of factors that are outside of ITC Midwest's control, including the final route (which impacts final design); the timing of construction; and availability of construction crews, and the cost of materials.[163] In light of these uncertainties, ITC Midwest provided approximate Project costs using a bandwidth of plus/minus 30 percent.[164] A more typical contingency range for a transmission project is plus/minus

[19] DOC-DER Ex. 202 at 3 (Heinen Surrebuttal).
[20] DOC-DER Ex. 202 at 6 (Heinen Surrebuttal).
[21] DOC-DER Ex. 202 at 5 (Heinen Surrebuttal).
[22] MISO's Chatterjee, Evidentiary Hearing, Tr. p. 94-95.

15%. The midpoint values of these estimated total Project cost ranges are provided in the table below:

| Project Costs ($ Millions) Minnesota Route | Minnesota Cost of Construction[165]* | Iowa Cost of Construction[166] | Total Project Cost[167] |
|---|---|---|---|
| Route A | $208 | $77 | $285 |
| Route B168 | $196 | $77 | $273 |
| Modified Route A | $207 | $77 | $284 |

*Cost of construction includes re-locating associated facilities from Winnebago Junction Substation to the Proposed Huntley Substation

126. All but $7.4 million of the ITC Midwest costs for MVP 3 will be recovered regionally through MISO Schedule 26A charges. These Charges to ratepayers are based upon the MVP Usage Rate ("MUR") as calculated pursuant to Attachment MM of the MISO Tariff. A key component of the MUR is the MVP revenue requirement of each MVP Transmission-Owning Member of MISO. Minnesota ratepayers' share of the annual revenue requirement is determined by the percent of total energy in the MISO Classic footprint169 used in Minnesota, which has been estimated at approximately 13.3 percent based on MISO's posted 2010 energy withdrawal data.[170] The MVP revenue requirement is calculated pursuant to a formula provided for in Attachment MM of the MISO Tariff. To ensure public review of the calculation of each MVP owner's calculation of its revenue requirement, Section 2(g) of Attachment MM requires public posting to the MISO OASIS of its revenue requirement calculation.[171]

127. The determination of the MVP revenue requirement is based on a series of inputs from ITC Midwest's Attachment O formula rate. In calculating the Attachment O formula rate, the MISO Tariff provides for information sharing procedures and review [31853/1]
by interested parties. The MISO Tariff, Attachment O, explicitly identifies state regulatory commissions as interested parties and provides them standing to both conduct discovery and challenge calculation of the inputs to the formula rate at FERC.[172] The record does not contain information regarding Minnesota's participation or position, if any, in these rate dockets.

128. The total annual first year revenue requirement for the Project will be approximately $52.4 million.[173] Of this amount, approximately $7.0 million will be collected from Minnesota ratepayers.[174] Under Schedule 26A, the annual revenue requirement will be collected each year for a 20 year term, from 2015 -2034.

139. The electrical system in the Project area and in the region was originally designed to serve the residential and commercial needs of customers in utility service territories. Substantial changes have been made both in this region and locally to facilitate bulk power transfer.

XXX. The ITC Midwest project and the entire 17 project MISO MVP Portfolio, at a cost of over $5.2 billion, will result in an estimated -0.85% decrease in MWH of coal generation. It will have a negligible impact on decrease of generation by coal.[23]

XXX. MISO's Chatterjee testified that the purpose of the project is moving baseload generation and that wind is a very small part of it:

> These are baseload units that you're moving from local resource zone one for utilization in all of the other MISO local resource zones for every load to meet their local -- to meet their planning reserve margin requirement.
>
> So you know how much you need and you know what you're transferring, you're transferring capacity resources, baseload units, and wind also, but wind has a very small capacity credit value. And we identified a significant benefit there. So that is an important context.[24]

157. ~~MVP 3 enhances the reliability of the regional bulk transmission system by creating a new 345 kV transmission tie between Minnesota and Iowa to meet the increasing demands placed on the system, including demands by wind energy resources.[223] Wind generation, because of its intermittent operation, adds to the operational variability and uncertainty inherent in all power systems. This reliability concern is significantly reduced with a robust grid which allows the benefits of diversity to be realized (geographic, resource, and load).[224]~~

157. Benefits are claimed in decreased LMP cost. These lower costs from the ITC Midwest portion of MVP 3, and of MVP 3 are nominal, and dependent on MVP 4 and MVP 5.[25]

> More importantly, it does not independently address Minnesota benefits: The Project, together with other facilities being proposed by MidAmerican Energy Company (MidAmerican) to be constructed in Iowa comprises what is referred to as MVP 3 in MISO's MVP portfolio. The development of MVP 3 is closely tied to MVP 4, which is also being proposed by ITC Midwest and MidAmerican. Together, MVPs 3 and 4 provide new pathways to help power flow from western Minnesota and Iowa, connecting to major 345 kV

[23] Ex. __, MISO MTEP 11, Table 2.5-6.
[24] MISO's Chatterjee, Evidentiary Hrg., Tr. p. 94-95.

[25] Ex. 33, Schatzki Rebuttal, Schedule 2 (attached).

hubs in eastern Iowa, along with providing reliability and congestion relief benefits.[26]

158. The production cost analysis is found in Tables 8 and 9 Id., p. 25-26. In Table 8, "MISO Production Cost Changes from MVPs 3 and 4" the annual MISO production cost change with MVP 5 is shown for "Cost Change Due to MVP 3 only" as a difference ranging from -0.2% to -0.3%, and "Cost Change Due to MVPs 3 and 4" as ranging from 0.8% to 0.9%. Without MVP 5, "Cost Change Due to MVP 3 only" ranges from -0.4 to -0.5% and "Cost Change Due to MVPs 3 and 4" as ranging from 0.7% to 0.9%. These results are for the entire MISO footprint and are negligible. There is no breakdown of benefit to Minnesota. What small percentage is shown as a benefit is for the entire MISO footprint. The record does not identify a distinct benefit for Minnesota.

159. In Table 9, "MISO Production Cos7 per MWh Load Changes from MVPs 3 and 4" the annual MISO production cost per MWh load change with MVP 5 is shown for "Cost Change Due to MVP 3 only" as a difference ranging from -0.2% to -0.3%, and "Cost Change Due to MVPs 3 and 4" as ranging from 0.8% to 0.9%. Without MVP 5, "Cost Change Due to MVP 3 only" ranges from -0.4 to -0.5% and "Cost Change Due to MVPs 3 and 4" as ranging from 0.7% to 0.9%. Again, these results are for the entire MISO footprint and at less than 1% are negligible. There is no breakdown of benefit to Minnesota, and the small percentage is shown as a benefit is for the entire MISO footprint. The record does not identify a distinct benefit for Minnesota.

~~190. Justin Pickar, Director of Development at Geronimo Energy, also testified regarding the need for the Project. Geronimo Energy has an interest in projects that have PPAs approved by the MPUC that are dependent on the Minnesota – Iowa 345 kV line being built.283 Mr. Pickar testified about the impacts that denial of this Certificate of Need would have on Geronimo Energy's Odell wind farm.284 According to Mr. Pickar, "[t]he direct impact from our wind farm's going to bring around $50 million over 20 years and 10 to 12 good-paying full-time jobs to the area. So we support the ITC 345 kV MVP line being built and see the need."[285]~~

~~189. For example, Shannelle Montana, representing EDF Renewable Development, testified about the benefits the communities in southwestern Minnesota would realize as a result of wind development projects.[279] EDF Renewable Development was involved with projects, including the Lakefield Wind Project and the Nobles and Fenton Projects. Ms. Montana testified that many of the communities in which EDF Renewable Development has been working have been asking for more development as a result of the economic benefits, job creation, and increase in tax money going back to these same communities.[280] Ms. Montana further testified that the MVP lines, particularly the Minnesota – Iowa 345 kV line, "is very important for us to continue developing."[281] Ms. Montana explained that transmission was necessary to increase development "to get the power from our project areas to more densely populated areas" which "allows us to sell the project and have a successful project."[282]~~

[26] Ex. 33, Schatzki Rebuttal, Schedule 2, p. 7 of 36.

~~191. Brad Haupert, a site supervisor for Vestas, also testified regarding need for the Project. Vestas has wind turbines in the upper Midwest, including southern Minnesota and northern Iowa where it has 100 employees in the region.286 Mr. Haupert discussed the job opportunities that wind development has brought to the area.287 Mr. Haupert testified that there was very little opportunity "until the wind industry came into the area and offered a lot of very good-paying jobs for many people in the area."288 Mr. Haupert further elaborated that these jobs brought with them good benefits, stability, and a higher rate of income.289~~

~~192. Mr. Sokolski, a business developer at Iberdrola Renewables, also submitted comments to supplement his testimony at the public hearing on May 14, 2014. Iberdrola Renewables owns and operates the Trimont, Elm Creek, and Elm Creek II wind projects.290 In addition to the community benefits and job growth discussed by other witnesses, Mr. Sokolski addressed the need for MVP 3 in the area for the wind industry to continue to develop:~~

> ~~Denial of the project will increase the cost of a future transmission project to provide the multiple benefits of the proposed project by pushing off the capital and labor costs into the future, when materials and labor will be more expensive than they are today." Mr. Sokolski stated that denying the Project would not solve any of the existing problems on the local transmission system facilities "which are frequently overloaded causing curtailment of wind production.291 facilities "which are frequently overloaded causing curtailment of wind production.~~[291]

259. While the capital cost for the 161 kV Rebuild Alternative is less than the Project, the cost allocation of MVP Project 3 compared to the 161 kV Rebuild Alternative is materially different.[420] This is because "the Project" is only roughly ½ of MVP 3.

260. The costs of MVP Projects, including MVP Project 3, are allocated across the MISO Midwest footprint, with approximately 13.3 percent recovered from Minnesota's network load under MISO's allocation formula.[421] Accordingly, the approximately $6.8 million estimated annual revenue requirement for the Project would be spread across all Minnesota MISO load.[422] The approximately $____ million estimated annual revenue requirement for MVP 3 would be spread across all Minnesota MISO load. Id. The approximately $____ million estimated annual revenue requirement for the MISO MVP Portfolio would be spread across all Minnesota MISO laod. Id. ITC Midwest's zonal network customers in Minnesota would pay four percent, approximately $279,000, of Minnesota's portion.[423] ITC Midwest's zonal network customers in Minnesota would also pay 14 percent of the associated zonal revenue requirement, an additional $169,000 for the associated facilities.[424] In contrast, as a baseline reliability project, the 161 kV Rebuild Alternative would be assigned 100 percent—the entire $8.5 million annual revenue requirement—to ITC Midwest's customers.[425]

261. Dr. Schatzki's analysis also shows that the Project offers more net benefits relative to the 161 kV Rebuild Alternative when other costs and benefits are considered. These

costs and benefits include transmission construction costs, changes in production costs, and changes in the social cost of aggregate emissions.[426] With MVP 5 in service, the annual net benefits of MVP 3 and 4 (relative to the 161 kV Rebuild Alternative) range from $9.1 million to $30.6 million.[427] With MVP 5 in service, the annual net benefits of MVP 3 alone (relative to the 161 kV Rebuild Alternative) range from $8.6 million to $22.7 million.[428] When MVP Project 5 is not in service, the relative net benefits of MVP Project 3 alone range from a decrease of $7.1 million to an increase of $4.6 million.[429] The benefits of "the project," which is essentially one-half of MVP three accrue at these amounts only with the other half of MVP 3 modeled, plus the addition of MVP 4 and/or MVP 5.

# Docket No. ET-6675/CN-12-1053 and ET-6675/TL-12-1337

# Attachment 2

# Summary of Exceptions to ALJ Report as Proposed by EERA

# ATTACHMENT 2

Department of Commerce EERA
Taken from: Exceptions to the ALJ Report (September 23, 2014): eDocket ID 20149-103237-01

**FINDINGS OF FACT SECTION**

57. The Commission and the DOC EERA held public information and scoping meetings on July 16, 2013 in Fairmont, Minnesota, July 17, 2013 in Jackson, Minnesota, and July 18, 2013 in Blue Earth, Minnesota.[1]

123. ITC Midwest ~~It~~ has ~~a~~ proposed a right-of-way of 200 feet for the project. Within the 200-foot right-of-way, ITC Midwest indicates that it will restrict placement of its structures to the center 150-foot area.[2] ITC Midwest indicates that it will have vegetation management rights and will prohibit placement of other structures within the center 150-foot area.[3] In the outer 25 feet on either side of this center 150-foot area of the 200-foot right-of-way, ITC Midwest indicates that it may trim or remove trees that pose a threat to the transmission facility or impede construction.[4] ITC Midwest indicates that ~~T~~this 200-foot width is needed to provide sufficient area to ensure safe and reliable operation of the line in compliance with National Electric Safety Code ("NESC"), North American Reliability Corporation ("NERC"), and ITC Midwest standards.[5]

344. For Route Alternatives I90-1 and I90-2, the EIS evaluates the possibility of removing the existing Lakefield to Border 161 kV Transmission Line from Fox Lake and Lake Charlotte and possibly from certain areas between the lakes.[6] ITC Midwest has not proposed to remove the crossings at Fox Lake and Lake Charlotte that were rebuilt within the last five years at a cost of $7 million.[7] ITC Midwest has, however, proposed to construct Modified Route A on structures capable of carrying the 161 kV circuit. ~~in the future when conditions warrant its removal from the lake.~~[8] ~~Ordering removal of the existing Lakefield to Border 161 kv Transmission Line from Fox Lake and Lake Charlotte at this time is not necessary as part of the Project. The proposed structure design for the Project has been planned to allow relocation of the Lakefield to Border 161 kV Transmission Line in this area when it needs to be rebuilt due to age or other considerations.~~

367. ITC Midwest will have vegetation management rights subject to the Vegetation Management Plan (VMP), will place its structures on the centerline of the 150-foot right-of-way, and will prohibit placement of other structures within this 150 foot area.[9] In a 25 ~~feet~~ foot area on either side of this ~~center~~ 150-foot ~~area of the 200-foot easement~~ right-of-way, ITC Midwest will trim or remove trees that pose a threat to the safe operation of the transmission facility as

[1] Ex. 16 (Public Information and Scoping Meeting Presentation).
[2] Ex. 7 at 34 (Route Permit Application).
[3] *Id.*
[4] *Id.*
[5] Ex. 21 at 8 (Ashbacker Direct); Ev. Hrg. Tr. at 25 (Ashbacker).
[6] Ex. 108A at Map 3-8 (DEIS).
[7] Ex. 24 at 31-32 (Coeur Direct).
[8] Ex. 24 at 33 (Coeur Direct); Ex. 32 at 16 (Middleton Rebuttal).
[9] Ex. 7 at 34 (Route Permit Application).

outlined in the VMP.[10]

371. For the 161 kV associated facilities requiring reconfiguration from the Winnebago Junction Substation to the Proposed Huntley Substation that will not be co-located with a 345 kV transmission line, ITC Midwest requires a 100-foot right-of-way.[11] ITC Midwest will have vegetation management rights subject to the VMP, will place its structures in the centerline of the 100-foot right-of-way, and will prohibit placement of other structures within this 100-foot area.[12] In a 25 foot area on either side of this 100-foot right-of-way, ITC Midwest ~~may~~ will trim or remove trees that pose a threat to the transmission facility as outlined in the VMP ~~or impede construction~~.[13] This 150-foot width ~~is needed~~ for the 161 kV lines will ~~to~~ provide sufficient area to ensure safe and reliable operation of the line in compliance with NESC, NERC, and ITC Midwest standards.[14]

407a. On May 9, 2014, the MnDNR provided comments on several routing options for the project.[15] The MnDNR indicated that the alignment of the existing 161 kV line would best minimize impacts to flora and fauna at the Des Moines River.[16] The MnDNR noted that "feasible and prudent alternative routes exist that avoid Fox Lake and Lake Charlotte" and recommended that double-circuiting the 343 kV and 161 kV line across the lakes "be removed from further consideration and not permitted by the Commission" and that the "existing 161 kV lines be removed from Fox Lake and Lake Charlotte."[17]

413. On April 24, 2014, ~~the~~ Minnesota's State Historic Preservation Office (SHPO) provided comments on the project.[18]

438. Modified Route A ~~and,~~ Route A, and Route Alternative I90-2 are anticipated to minimize impacts on aesthetics when compared to Route B and other Route Alternatives as they make the greatest use of existing transmission line rights-of-way.[19]

439. Modified Route A and Route Alternative I90-2, with I90-2's use of the alignment of Modified Route A near Fox Lake, ~~is~~ are anticipated to minimize impacts on aesthetics more than Route A as ~~it~~ they make ~~a~~ greater use of existing transmission line rights-of-way than Route A.[20]

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[10] *Id.*

[11] Route Permit for North Rochester to Chester 161 kV Transmission Line Project, TL-11-800, eDockets Number 20129-78624-01; Route Permit for the Pleasant Valley to Byron 161 kV Transmission Line Project, TL-09-1315, eDockets Number 20113-60069-01.

[12] Ex. 7 at 34 (Route Permit Application).

[13] *Id.*

[14] Ex. 21 at 8 (Ashbacker Direct); Ev. Hrg. Tr. at 25 (Ashbacker).

[15] Ex. 116B (Agency Comments Received on DEIS), Comment Letter from the DNR.

[16] *Id.*

[17] *Id.*

[18] Ex. 116B (Agency Comments Received on DEIS), Comment Letter from SHPO.

[19] Ex. 25 at Schedule 2 and Schedule 12 (Middleton Direct); Ex. 108A at Appendix J (DEIS); Ex. 117, Section 7.1.1 (FEIS).

[20] Ex. 25 at Schedule 2 and Schedule 12 (Middleton Direct); Ex. 117, Section 7.1.2 (FEIS).

439a. Route Alternative I90-2, double-circuited with the existing 161 kV line that crosses Fox Lake and Lake Charlotte, is anticipated to minimize impacts on aesthetics more than Modified Route A as it creates one transmission line ROW in the project area, whereas Modified Route A leaves two, and as it follows the largest infrastructure ROW in the project area, I-90.[21]

439b. Between Fox Lake and the Rutland substation, Modified Route A is near relatively fewer residences than I90-2, with four residences within 500 feet of its anticipated alignment whereas I90-2 has eight residences within 500 feet of its anticipated alignment.[22]

439c. Because I90-2, double-circuited with the existing 161 kV line that crosses Fox Lake and Lake Charlotte, minimizes aesthetic impacts by minimizing the number of transmission line ROWs between Fox Lake and the Rutland substation and utilizing I-90, and because Modified Route A is near relatively fewer residences between Fox Lake and the Rutland substation, the indicators of the aesthetic impacts of Modified Route A and I90-2 analyzed in the EIS – use of existing ROWs and proximity to residences – are mixed.[23]

439d. Aesthetic impacts of the project can be avoided and minimized by double-circuiting the new 345 kV line with the existing 161 kV line across Fox Lake and Lake Charlotte.[24] Aesthetic impacts can also be avoided and minimized by removing the existing 161 kV line from Fox Lake and Lake Charlotte and double-circuiting the new 345 kV line.[25]

439e. The MnDNR believes "feasible and prudent alternative routes exist that avoid Fox Lake and Lake Charlotte" and recommends that double-circuiting the 343 kV and 161 kV line across the lakes "be removed from further consideration and not permitted by the Commission" and that the "existing 161 kV lines be removed from Fox Lake and Lake Charlotte."[26]

439f. The Martin County Board of Commissioners recommends that the new 345 kV line "not span over Fox Lake" and has indicated a preference for routing the project along I-90 in Martin County.[27]

439g. Several citizens expressed a preference for using I-90 or route alternative I90-2 specifically for the project.[28]

439h. The alignment of Modified Route A near the city of Sherburn and south of Fox Lake,

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[21] Ex. 117, Map 3-8 (FEIS); Ex 24 (Couer Direct).
[22] Ex. 117, Maps 6-1 and 6-2 (FEIS).
[23] Ex. 117, Sections 7.1.1 and 7.1.2 (FEIS).
[24] Ex. 117 at 135-136 and 146-149 (FEIS).
[25] Ex. 117 at 143-145 and 155 (FEIS).
[26] Ex. 116B (Agency Comments Received on DEIS), Comment Letter from the DNR.
[27] Ex. 116C (LGU Comments Received on DEIS), Comment Letter from the Martin County Board of Commissioners.
[28] Ex. 116A (Oral Comments Received on DEIS at Public Information Meetings), Comments of Mr. Douglas Hilgendorf, April 22, 2014, at 58-60, Comments of Mr. Eugene Lehman, April 22, 2014, at 61, Comments of Mr. Maynard Jagodzinske, April 22, 2014, at 137-140; Hearing Comment Letter of Mr. Lyle Ziemann, Public Comment – Amended Batch 1, eDockets Number 20146-100681-01 (inquiring why routing along I-90 is not being seriously considered); Ex. 611 (Submission by Sarah Jagodzinske Rohman, 5-14-14).

crossing to the south side of I-90 in Section 5 of Manyaska Township, Martin County and then back to the north side of I-90 at the western edge of Section 3 of Manyaska Township, and moving an existing 69 kV line to follow this alignment, minimizes aesthetic impacts in this area of the project.[29]

439i. In Section 23 of Verona Township, Martin County, route A minimizes aesthetic impacts of the project.[30]

439j. Just south of the Faribault Substation, in Section 26 of Jo Daviess Township, Faribault County, the alignment of route variation HI-2 minimizes aesthetic impacts of the project.[31]

439k. Near the Iowa border, in Sections 26 and 35 of Pilot Grove Township, Faribault County, route variation HI-5 minimizes aesthetic impacts of the project.[32]

468. Construction of the Project along Route A, ~~or~~ Modified Route A, or Route Alternatives I90-1 or I90-2 will replace H-frame structures with single pole structures where the Project follows the existing Lakefield to Border 161 kV Transmission Line between the Lakefield Junction Substation and the Proposed Huntley Substation, while Route B introduces a new transmission line to the area.[33]

468a. Construction of the Project along the I90 route alternatives would replace existing H-frame structures with single poles structures where the Project follows the existing 69 kV transmission line along I-90 between Fox Lake and the city of Fairmont.[34]

469. Construction along I90-1, ~~I90-2 ,~~ I90-3, I90-4, and I90-5 would result in increased impacts to agricultural operations where the existing ~~69 kV or~~ 161 kV transmission line~~s~~ along Interstate 90 would be rebuilt because the Project would need to be placed further into agricultural fields than the existing transmission lines.[35]

470. Construction along Route A, ~~or~~ Modified Route A, and I90-2 would minimize impacts to agricultural lands as the routes follow existing transmission line rights-of-way.[36] Using Interstate 90 for the Project does not mitigate agricultural impacts as well as using transmission line rights-of-way.[37] Modified Route A, Route A, and Route Alternative I90-2 best minimize impacts to agricultural lands.[38]

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[29] Ex. 117, Map 3-12 and Map Sheet LH30 (FEIS).
[30] Ex. 117 at 242-243 (FEIS).
[31] Ex. 117 at 244 (FEIS).
[32] Ex. 117 at 246-247 (FEIS).
[33] Ex. 7 at 162 and 223 (Route Permit Application); Ex. 117, Section 3.6.2 and Map 3-4.
[34] Ex. 117, Map 3-4 and Map 3-10 (FEIS).
[35] Ex. 25 at 26 (Middleton Direct); Ex. 32 at Schedule 29 at 1 (Middleton Rebuttal).
[36] Ex. 32 at Schedule 29 at 1 (Middleton Rebuttal); Ex. 108A at Figure 7.2 (DEIS).
[37] Ex. 32 at Schedule 29 at 1 (Middleton Rebuttal); Ex. 108A at Figure 7.2 (DEIS).
[38] Ex. 108A at 98 (DEIS). Modified Route A, while not specifically discussed in the DEIS, primarily follows Route A and is anticipated to only have approximately 500 $ft^2$ of permanent impacts to agricultural land than Route A. Further, Modified Route A is anticipated to only have one more acre of temporary impacts to agricultural land than Route A. Ex. 25 at Schedule 2 and Schedule 12 (Middleton Direct).

470a. Route Alternative I90-2, double-circuited with the existing 161 kV line that crosses Fox Lake and Lake Charlotte, would have fewer agricultural impacts than Route A or Modified Route A by consolidating into one ROW, with single pole, triple-circuit structures, transmission lines that currently run along two ROWs with H-frame structures.[39]

470b. Agricultural impacts of the project can be avoided and minimized by double-circuiting the new 345 kV line with the existing 161 kV line across Fox Lake and Lake Charlotte.[40] Agricultural impacts can also be avoided and minimized by removing the existing 161 kV line from Fox Lake and Lake Charlotte and double-circuiting with the new 345 kV line.[41]

470c. In Section 23 of Verona Township, Martin County, route A minimizes agricultural impacts of the project.[42] In this area, Modified Route A minimizes agricultural impacts of the project relative to route variation HI-1, but has greater agricultural impacts that route A.[43]

470d. Just south of the Faribault Substation, in Section 26 of Jo Daviess Township, Faribault County, Modified Route A minimizes agricultural impacts of the project.[44]

470e. Near the Iowa border, in Sections 26 and 35 of Pilot Grove Township, Faribault County, Modified Route A minimizes agricultural impacts of the project.[45]

502a. In Section 23 of Verona Township, Martin County, Modified Route A minimizes impacts to flora by removing the existing 161 kV line and placing the 161 kV line and new 345 kV line outside of the Blue Earth River's riparian area.[46]

505a. Because Route Alternative I90-2 follows an existing 69 kV transmission line across the Krahmer WMA, the impacts to fauna in the WMA are anticipated to be incremental and minimal.[47]

505b. The MnDNR has indicated that crossing the Krahmer WMA along the alignment of the existing 69 kV line would be permittable.[48]

506a. Impacts to avian species due to the project can be avoided and minimized by double-circuiting the new 345 kV line with the existing 161 kV line across Fox Lake and Lake Charlotte

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[39] Ex. 117, Section 7.1.1 and Map 3-10 (FEIS).
[40] Ex. 117 at 138 and 150 (FEIS).
[41] Ex. 117 at 143-145 and 155 (FEIS).
[42] Ex. 117 at 242-243 (FEIS).
[43] *Id*.
[44] Ex. 117 at 244 (FEIS).
[45] Ex. 117 at 246-247 (FEIS).
[46] Ex. 117 at 242-243 (FEIS).
[47] Ex.117 at 115-115, Map 6-7, and Map Sheet LH42 (FEIS).
[48] Ex. 116B (Agency Comments Received on DEIS), Comment Letter from the DNR. The DNR notes that the Krahmer Lake WMA "may need to be impacted if the I-90 route is selected in order to reduce other impacts by increasing utilization of a disturbed interstate corridor." See also the Public Hearing Testimony of Ms. Jamie Schrenzel (DNR) at 32-34, May 13, 2014, eDockets Number 20145-99815-01.

and through the use of specialty structures to flatten the transmission line profile across the lakes.[49] Avian impacts can also be avoided and minimized by removing the existing 161 kV line from Fox Lake and Lake Charlotte and double-circuiting with the new 345 kV line.[50]

506b. Impacts to avian species near the Des Moines River crossing can be mitigated by following the alignment of Modified Route A across the river, as this route has the shortest and most perpendicular crossing of the river.[51]

506c. In Section 23 of Verona Township, Martin County, Modified Route A minimizes impacts to fauna by removing the existing 161 kV line and placing the 161 kV line and new 345 kV line outside of the Blue Earth River's riparian area.[52]

510a. There is a rare Oak-Basswood forest along the Des Moines River that would be crossed by Modified Route A where there is currently no existing ROW.[53]

510b. The MnDNR recommends crossing the Des Moines River using the alignment of the existing 161 kV line across the Des Moines River unless it is feasible to avoid or mitigate the impacts to the rare Oak-Basswood forest along Modified Route A.[54]

513. The evidence on the record demonstrates that Modified Route A and Route Alternatives I90-1 and I90-2 best satisfy this factor. ~~Modified Route A~~ These Routes and Route Alternatives make~~s~~ the greatest use of ~~the~~ existing ~~Lakefield to Border 161 kV Transmission Line~~ transmission line rights-of-way and also provide~~s~~ for the co-location of other transmission lines with the Project.[55]

514. While Route B provides the greatest ability to accommodate expansion of transmission capacity through its 345 kV/161kV double-circuit capable design, Modified Route A and Route Alternatives I90-1 and I90-2 best utilize~~s~~ existing transmission line rights-of-way and co-location opportunities along existing transmission line centerlines to minimize impacts to human settlement and the natural environment.[56]

515. Further, ~~even~~ in areas where Modified Route A and Route Alternatives I90-1 and I90-2 ~~is~~ are not proposed to be co-located with another transmission line or where ~~Modified Route A~~ these routing options ~~is~~ are proposed to be co-located with a 69 kV transmission line, the structures will have an open position for a 161 kV transmission line in the future when conditions warrant.[57]

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[49] Ex. 117 at 141-142 and 154 (FEIS).
[50] Ex. 117 at 143-145 and 155 (FEIS).
[51] Ex. 117 at 234-236 (FEIS).
[52] Ex. 117 at 242-243 (FEIS).
[53] Ex. 117 at 234-236 (FEIS).
[54] Hearing Comment Letter from the DNR, May 30, 2014, eDockets Numbers 20145-100021-01, 20145-100021-02.
[55] Ex. 25 at Schedule 2 and Schedule 12 (Middleton Direct), Ex. 117 at 95-98.
[56] Ex. 25 at Schedule 2 and Schedule 12 (Middleton Direct), Ex. 117 at 95-98
[57] Ex. 7 at 10 (Route Permit Application); Ex. 24 at 33 (Coeur Direct); Ex. 25 at 28 and 30 (Middleton Direct); Ex. 32 at 16 (Middleton Rebuttal).

523. The evidence on the record demonstrates that Modified Route A and Route Alternatives I90-1 and I90-2 make the greatest use of existing high voltage transmission line rights-of-way.[58]

523a. The evidence on the record demonstrates that the I90 Route Alternatives make the greatest use of existing transportation ROW and transmission line ROW.[59]

533. East of Fox Lake, Route Alternatives I90-1, I90-2, I90-3, I90-4, and I90-5 ~~could not~~ may or may not be able to be constructed along the same centerline as the existing 69 kV transmission line because of the proximity of the existing line to the MnDOT right-of-way.[60] ~~This is likely to increase impacts on agricultural operations in this are along Interstate 90~~.

534a. ITCM disfavors triple-circuiting due to the relatively greater risk of multiple outages and difficulties in performing maintenance.[61] ITCM indicates that triple-circuit structures along Modified Route A and Route Alternatives I90-1 and I90-2 are constructible.[62]

536a. The evidence on the record demonstrates that there is likely a greater risk of negative impacts on electrical system reliability with I90-1 and I90-2 compared with Modified Route A, Route A, or Route B due to the relatively greater length of triple-circuiting with I90-1 and I90-2, but the magnitude of this risk is uncertain.

~~542. The evidence on the record demonstrates that Modified Route A will have fewer unavoidable adverse human and natural environment impacts than the other route options.~~

553a. The MnDNR recommends that the existing Lakefield to Border 161 kV line be removed from across Fox Lake and Lake Charlotte.[63] The MnDNR does not provide a recommended timing for this removal.[64]

553b. ITCM indicated that it was agreeable to relocating the existing 161 kV line from Fox Lake and Lake Charlotte "in the future when existing 161 kV structure maintenance occurs or other operational conditions warrant or should the Commission require this relocation as part of the Project."[65]

553c. ITCM subsequently indicated that removing the existing 161 kV line from Fox Lake and Lake Charlotte "is not necessary as part of the Project" and that the line can be relocated when

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[58] Ex. 25 at Schedule 2 and Schedule 12 (Middleton Direct); Ex. 32 at Schedule 26 (Middleton Rebuttal); Ex. 35 at 35-B through 35-F (Large Format Maps); Ex. 108A at Appendix J at J-10 (DEIS), Ex. 117 at 95-98.
[59] Ex. 117 at 95-98 (FEIS); Ex. 32 at Schedule 27 (Middleton Rebuttal).
[60] Ex. 32 at Schedule 29 (Middleton Rebuttal).
[61] Ev. Hrg. Tr. at 26-27 (Ashbacker).
[62] *Id.*
[63] Ex. 116B (Agency Comments Received on DEIS), Comment Letter from the DNR.
[64] *Id.*
[65] Ex. 116D at 15 (Applicant Comments Received on DEIS).

the line needs "to be rebuilt due to age or other considerations."[66]

553d. Analysis in the EIS indicates that one transmission line ROW at Fox Lake and Lake Charlotte, rather than two ROWs, best avoids and minimizes potential aesthetic, agricultural, and avian impacts of the project.[67]

**CONCLUSIONS SECTION**

17. The record evidence demonstrates that all routing options and all substation locations and associated facilities analyzed in the EIS, with the exception of Route Variations FL-1 and LC-4, are permittable and ~~Modified Route A, including the Lakefield Junction Substation expansion, decommissioning of the Winnebago Junction Substation and returning the site to a more natural state, the Proposed Huntley substation, and the 161 kV Associated Facilities~~ satisfiesy the Route Permit criteria set forth in Minnesota Statutes Section 216E.03, subdivision 7(a) and Minnesota Rule 7850.4100 based on the factors in Minnesota Statues Section 216E.03, subdivision 7 and Minnesota Rule 7850.4000.

18. The evidence on the record demonstrates that constructing the Project along Modified Route A, Route Alternative I90-2, Route Variation HI-2 or Route Variation HI-5 does not present a potential for significant adverse environmental effects pursuant to the Minnesota Environmental Rights Act, Minnesota Statutes Sections 116B.01-116B.13, and the Minnesota Environmental Policy Act, Minnesota Statutes Sections 116D.01-116D.11.

19. The record evidence demonstrates that Modified Route A~~, as shown on Attachment 1,~~ and I90-2 following the alignment of Modified Route A near Fox Lake, best avoid and minimize potential impacts of the project, and that of these two routing options I90-2 has the greatest merit relative to the routing factors of Minnesota Rule 7850.4100, and ~~is the best alternative for the Project~~ is the most appropriate route for the Lakefield to Huntley segment of the Project.

19a. The record evidence demonstrates that Modified Route A with alignment variation HI-2 and route variation HI-5 best avoids and minimizes potential impacts of the project, has the greatest merit relative to the routing factors of Minnesota Rule 7850.4100, and is the most appropriate route for the Huntley to Iowa Border segment of the project.

21. ITC Midwest's request for a right-of-way for the 345 kV transmission lines of 200 feet and for the 161 kV transmission line for 150 feet, with a 25 foot area on either side for vegetation management should be modified as recommended by the EERA to a right-of-way for the 345 kV transmission lines of 150 feet and for the 161 kV transmission lines of 100 feet, and permit ITCM, in a 25 foot area immediately adjacent to and outside of the ROW, to trim or remove trees that pose a threat to the reliable operation of the transmission line, consistent with the VMP for the Project. Standard Route Permit Condition 4.2.5 regarding the right-of-way shall include the following provision: "In a 25 foot area on each side of the right-of-way for the Project, only trees

[66] ITC Midwest's Post-Hearing Brief in Support of its Application for a Route Permit at 44, eDockets Number, 20147-101419-07.
[67] Ex. 117 at 134-155 (FEIS).

that pose a threat to the transmission facility will be trimmed or removed."

23. It is ~~not~~ appropriate ~~at this time~~ to order ITC Midwest to remove the existing Lakefield to Border 161 kV Transmission Line ~~between the Fox Lake and Rutland substations or~~ from crossing Fox Lake and Lake Charlotte as part of the Project.

~~24. Standard Route Permit Condition 4.2.4 should be modified to acknowledge that occasionally construction activities may occur outside the defined daytime hours of 7 a.m. to 10 p.m. or on a weekend if ITC Midwest is required to work around customer schedules, line outages, or has been significantly impacted due to other factors.~~

~~25. Standard Route Permit Condition 4.7.3 regarding interference with communication devices should be modified to read:~~

> ~~Should electronic interference with radio or television, satellite, wireless internet, GPS-based agriculture navigation systems or other communication devices occur as a result of the presence or operation of the transmission line, Permittee will work with affected landowners on a case-by-case basis to assess the cause of the interference and, to the extent practicable, restore electronic reception to pre-Project quality.~~

26. A Special Route Permit Condition requiring an AIMP and requiring ITC Midwest's compliance with the AIMP is appropriate for the Project~~.~~:

> The Permittee shall comply with the AIMP prepared for this project and approved by the Minnesota Department of Agriculture. The permittee shall distribute the AIMP with the route permit to all affected landowners in accordance with Section 4.5 of this permit.

28. A Special Route Permit Condition requiring ITC Midwest to prepare a vegetation management plan (VMP) is appropriate for the Project:

> Permittee shall develop a VMP. Permittee shall submit the VMP with the Construction Environmental Control Plan and monitor compliance with the VMP in accordance with the procedures set forth in the VMP. The purpose of the VMP shall be to identify measures to minimize the disturbance and removal of vegetation for the Project, prevent the introduction of noxious weeds and invasive species, and revegetate disturbed non-cropland areas with appropriate native species in cooperation with landowners and state, federal, and local resource agencies, in such a way that does not negatively impact the safe and reliable operation of the Project. The VMP shall include:
>
> 1. Measures that will be taken to minimize vegetation disturbance and removal during construction of the Project to the extent that such actions do not violate sound engineering principles of system reliability criteria.
>
> 2. Measures that will be taken to prevent the introduction of non-native and invasive species.

3. Measures that will be taken to revegetate disturbed non-cropland areas with appropriate native species to the extent that such actions do not violate sound engineering principles or system reliability criteria.

4. Processes by which Permittee will identify landowner and resource agency preferences or requirements regarding vegetation management (e.g., no herbicide application, etc.) and how these preferences or requirements will be addressed.

5. Measures that will be used to manage vegetation during operation and maintenance of the Project, including tall tree species within and outside of the permitted right-of-way that endanger the safe and reliable operation of the transmission line, in accordance with this permit and any local, state or federal permit licenses, or approvals.

~~29. A Special Route Permit Condition requiring ITC Midwest to prepare a SWPPP is appropriate for the Project.~~

30. A Special Route Permit Condition requiring a Construction Environmental Control Plan worded as follows is appropriate:

Permittee shall develop a Construction Environmental Control Plan. The Construction Environmental Control Plan shall include all environmental control plans and special conditions imposed by permits or licenses issued by state or federal agencies related to agency-managed resources. Plans within the Construction Environmental Control Plan shall include the Agricultural Impact Mitigation Plan (AIMP), an Avian Mitigation Plan (AMP), a Vegetation Management Plan (VMP), and a Stormwater Pollution Prevention Plan (SWPPP). The Construction Environmental Control Plan shall be filed with the Commission thirty (30) days prior to submitting the Plan and Profile for any segment of the Project. The Construction Environmental Control Plan shall include the following:

1. Identification of and contact information for an Environmental Monitor to oversee the construction process and monitor compliance with the Construction Environmental Control Plan and all plans therein.

2. A process for regular reporting on construction status and the results of construction inspection and monitoring to the Commission.

3. A process for reporting the status of permits and licenses or other approvals from local units of government, state agencies, or federal agencies for the Project to the Commission.

4. A process for internal tracking of construction management, including required plan or permit inspection forms.

31. The following Special Route Permit Condition for the Des Moines River crossing is appropriate for the Project:

~~This Route Permit shall allow Permittee to construct the Project across the Des Moines River within Modified Route A along either the existing transmission line centerline (referred to as JA 2 in the EIS) or the Modified Route A alignment without providing additional information on the potential for environmental impacts. Permittee intends to work with the MnDNR and the landowners on the east and west banks of the Des Moines River, to the extent practicable. To accommodate various considerations regarding impacts to environmental features, including an Oak-Basswood forest, avian species, and agricultural operations, and to avoid interference with air navigation at the Jackson Municipal Airport, Permittee may use specialty structures if necessary~~.

The Permittee shall consult with the MnDNR regarding the feasibility of mitigation measures for the crossing of the Des Moines River, and shall jointly determine with the MnDNR the alignment and mitigation measures that best mitigate avian impacts and impacts to the Oak-Basswood forest at the Des Moines River crossing. The Permittee shall document this consultation and the alignment and mitigation measures agreed upon by the Permittee and the MnDNR for the crossing. The Permittee shall submit this information with the plan and profile for this section of the Project.

32. It is not appropriate to require ITC Midwest to train construction workers in the handling of archaeological resources but it is appropriate to require ITC Midwest to inform construction workers of known archaeological and historic resource areas along the permitted route for the Project ~~given the limited risk for impact to archaeological and historic resources as Modified Route A primarily follows disturbed areas including agricultural fields~~. The following Special Route Permit Condition is appropriate for the Project:

Permittee shall consult with State Historic Preservation Office (SHPO) concerning the extent of a Phase I archaeological survey and appropriate mitigation measures for the Project. Permittee shall document and submit to the Commission the results of this consultation, including those portions of the Project that will be surveyed and the extent of the survey with the Construction Environmental Control Plan for the Project.

For those portions of the Project that are surveyed, Permittee shall submit, with the plan and profile for these portions, the results of the survey and all applicable avoidance and mitigation measures employed or to be employed.

Permittee shall inform construction personnel of known archaeological resources along the permitted route for the Project and of archaeological survey results. The Permittee shall employ a monitor that reports to and communicates with the Environmental Monitor to identify and report archaeological resources encountered during construction of the Project and to coordinate with SHPO on appropriate mitigation measures.

**RECOMMENDATIONS SECTION**

2. That the Commission concludes that all relevant statutory and rule criteria necessary to obtain a Route Permit ~~for Modified Route A~~ have been satisfied and that there are no statutory or other requirements that preclude granting a Route Permit based on the record.

3. The Commission should grant ITC Midwest a Route Permit for the Minnesota – Iowa 345 kV Transmission Line Project and Associated Facilities in Jackson, Martin, and Faribault Counties, Minnesota to construct the Project along ~~Modified Route A.~~ Route Alternative I90-2 and following the alignment of the existing 161 kV line across the Des Moines River and the alignment of Modified Route A near Fox Lake for the Lakefield to Huntley segment of the Project.

3a. The Commission should grant ITC Midwest a Route Permit for the Minnesota – Iowa 345 kV Transmission Line Project and Associated Facilities in Jackson, Martin, and Faribault Counties, Minnesota to construct the Project along Modified Route A with alignment variation HI-2 and route variation HI-5 for the Huntley to Iowa Border segment of the Project.

3b. The Commission should order ITC Midwest to remove the existing Lakefield to Border 161 kV Transmission Line from crossing Fox Lake and Lake Charlotte as part of the Project.

# Docket No. ET-6675/CN-12-1053 and ET-6675/TL-12-1337

# Attachment 3

# Summary of Exceptions to ALJ Report as Proposed by EERA (Route Permit Conditions Only)

# ATTACHMENT 3

Department of Commerce EERA
Taken from: Exceptions to the ALJ Report (September 23, 2014): eDocket ID 20149-103237-01

~~24. Standard Route Permit Condition 4.2.4 should be modified to acknowledge that occasionally construction activities may occur outside the defined daytime hours of 7 a.m. to 10 p.m. or on a weekend if ITC Midwest is required to work around customer schedules, line outages, or has been significantly impacted due to other factors~~.

~~25. Standard Route Permit Condition 4.7.3 regarding interference with communication devices should be modified to read:~~

> ~~Should electronic interference with radio or television, satellite, wireless internet, GPS-based agriculture navigation systems or other communication devices occur as a result of the presence or operation of the transmission line, Permittee will work with affected landowners on a case-by-case basis to assess the cause of the interference and, to the extent practicable, restore electronic reception to pre-Project quality.~~

26. A Special Route Permit Condition requiring an AIMP and requiring ITC Midwest's compliance with the AIMP is appropriate for the Project~~.~~:

> The Permittee shall comply with the AIMP prepared for this project and approved by the Minnesota Department of Agriculture. The permittee shall distribute the AIMP with the route permit to all affected landowners in accordance with Section 4.5 of this permit.

28. A Special Route Permit Condition requiring ITC Midwest to prepare a vegetation management plan (VMP) is appropriate for the Project:

> Permittee shall develop a VMP. Permittee shall submit the VMP with the Construction Environmental Control Plan and monitor compliance with the VMP in accordance with the procedures set forth in the VMP. The purpose of the VMP shall be to identify measures to minimize the disturbance and removal of vegetation for the Project, prevent the introduction of noxious weeds and invasive species, and revegetate disturbed non-cropland areas with appropriate native species in cooperation with landowners and state, federal, and local resource agencies, in such a way that does not negatively impact the safe and reliable operation of the Project. The VMP shall include:
>
> 1. Measures that will be taken to minimize vegetation disturbance and removal during construction of the Project to the extent that such actions do not violate sound engineering principles of system reliability criteria.
>
> 2. Measures that will be taken to prevent the introduction of non-native and invasive species.
>
> 3. Measures that will be taken to revegetate disturbed non-cropland areas with appropriate native species to the extent that such actions do not violate sound engineering principles or system reliability criteria.

4. Processes by which Permittee will identify landowner and resource agency preferences or requirements regarding vegetation management (e.g., no herbicide application, etc.) and how these preferences or requirements will be addressed.

5. Measures that will be used to manage vegetation during operation and maintenance of the Project, including tall tree species within and outside of the permitted right-of-way that endanger the safe and reliable operation of the transmission line, in accordance with this permit and any local, state or federal permit licenses, or approvals.

~~29. A Special Route Permit Condition requiring ITC Midwest to prepare a SWPPP is appropriate for the Project.~~

30. A Special Route Permit Condition requiring a Construction Environmental Control Plan worded as follows is appropriate:

Permittee shall develop a Construction Environmental Control Plan. The Construction Environmental Control Plan shall include all environmental control plans and special conditions imposed by permits or licenses issued by state or federal agencies related to agency-managed resources. Plans within the Construction Environmental Control Plan shall include the Agricultural Impact Mitigation Plan (AIMP), an Avian Mitigation Plan (AMP), a Vegetation Management Plan (VMP), and a Stormwater Pollution Prevention Plan (SWPPP). The Construction Environmental Control Plan shall be filed with the Commission thirty (30) days prior to submitting the Plan and Profile for any segment of the Project. The Construction Environmental Control Plan shall include the following:

1. Identification of and contact information for an Environmental Monitor to oversee the construction process and monitor compliance with the Construction Environmental Control Plan and all plans therein.

2. A process for regular reporting on construction status and the results of construction inspection and monitoring to the Commission.

3. A process for reporting the status of permits and licenses or other approvals from local units of government, state agencies, or federal agencies for the Project to the Commission.

4. A process for internal tracking of construction management, including required plan or permit inspection forms.

31. The following Special Route Permit Condition for the Des Moines River crossing is appropriate for the Project:

~~This Route Permit shall allow Permittee to construct the Project across the Des Moines River within Modified Route A along either the existing transmission line centerline (referred to as JA-2 in the EIS) or the Modified Route A alignment without providing~~

~~additional information on the potential for environmental impacts. Permittee intends to work with the MnDNR and the landowners on the east and west banks of the Des Moines River, to the extent practicable. To accommodate various considerations regarding impacts to environmental features, including an Oak-Basswood forest, avian species, and agricultural operations, and to avoid interference with air navigation at the Jackson Municipal Airport, Permittee may use specialty structures if necessary~~.

The Permittee shall consult with the MnDNR regarding the feasibility of mitigation measures for the crossing of the Des Moines River, and shall jointly determine with the MnDNR the alignment and mitigation measures that best mitigate avian impacts and impacts to the Oak-Basswood forest at the Des Moines River crossing. The Permittee shall document this consultation and the alignment and mitigation measures agreed upon by the Permittee and the MnDNR for the crossing. The Permittee shall submit this information with the plan and profile for this section of the Project.

32. It is not appropriate to require ITC Midwest to train construction workers in the handling of archaeological resources but it is appropriate to require ITC Midwest to inform construction workers of known archaeological and historic resource areas along the permitted route for the Project ~~given the limited risk for impact to archaeological and historic resources as Modified Route A primarily follows disturbed areas including agricultural fields~~. The following Special Route Permit Condition is appropriate for the Project:

Permittee shall consult with State Historic Preservation Office (SHPO) concerning the extent of a Phase I archaeological survey and appropriate mitigation measures for the Project. Permittee shall document and submit to the Commission the results of this consultation, including those portions of the Project that will be surveyed and the extent of the survey with the Construction Environmental Control Plan for the Project.

For those portions of the Project that are surveyed, Permittee shall submit, with the plan and profile for these portions, the results of the survey and all applicable avoidance and mitigation measures employed or to be employed.

Permittee shall inform construction personnel of known archaeological resources along the permitted route for the Project and of archaeological survey results. The Permittee shall employ a monitor that reports to and communicates with the Environmental Monitor to identify and report archaeological resources encountered during construction of the Project and to coordinate with SHPO on appropriate mitigation measures.

# Docket No. ET-6675/CN-12-1053 and ET-6675/TL-12-1337

# Attachment 4

# Proposed High-Voltage Transmission Line Route Permit

**STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION**

# ROUTE PERMIT FOR CONSTRUCTION OF A HIGH-VOLTAGE TRANSMISSION LINE AND ASSOCIATED FACILITIES

**IN**
**JACKSON, MARTIN, AND FARIBAULT COUNTIES**

**ISSUED TO**
**ITC MIDWEST LLC**

**PUC DOCKET NO. ET-6675/TL-12-1337**

In accordance with the requirements of Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850 this route permit is hereby issued to:

**ITC MIDWEST LLC**

ITC Midwest LLC is authorized by this route permit to construct and operate approximately 75 miles of new 345 kilovolt transmission line in Jackson, Martin, and Faribault counties, Minnesota.

The transmission line and associated facilities shall be built within the route identified in this permit and as portrayed on the official route maps, and in compliance with the conditions specified in this permit.

Approved and adopted this ____ day of [*Month, Year*]

BY ORDER OF THE COMMISSION

_____

Burl W. Haar,
Executive Secretary

**CONTENTS**

**FIGURES**



**ATTACHMENTS**

## 1.0 ROUTE PERMIT

The Minnesota Public Utilities Commission (Commission) hereby issues this route permit to ITC Midwest LLC pursuant to Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850. This permit authorizes ITC Midwest LLC (Permittee) to construct and operate approximately 75 miles of new 345 kilovolt (kV) transmission line in Jackson, Martin, and Faribault counties, Minnesota, and as identified in the attached route permit maps, hereby incorporated into this document.

### 1.1 Pre-emption

Pursuant to Minn. Stat. § 216E.10, this route permit shall be the sole approval required to be obtained by the Permittee for construction of the transmission facilities and this permit shall supersede and preempt all zoning, building, or land use rules, regulations, or ordinances promulgated by regional, county, local and special purpose government.

## 2.0 PROJECT DESCRIPTION

The Project includes the construction and operation of approximately 75 miles of new 345 kV transmission line in Jackson, Martin, and Faribault counties. The 345 kV transmission line would run east from the existing Lakefield Junction substation near the city of Lakefield in Jackson County, crossing Martin County to a new Huntley substation near the city of Winnebago in Faribault County. From the new Huntley substation, the transmission line would proceed south crossing the Minnesota-Iowa border near the city of Elmore, Minnesota. The Project also includes expanding the existing Lakefield Junction substation, constructing a new Huntley substation, reconfiguring several existing 69 kV and 161 kV transmission lines, and decommissioning the Winnebago substation.

### 2.1 Project Location

The Project is located in southern Minnesota in Jackson, Martin, and Faribault counties, specifically within the townships of Hunter, Des Moines, Belmont, Wisconsin, Jay, Manyaska, Fox Lake, Fraser, Rutland, Center Creek, Verona, Jo Daviess, and Pilot Grove.

| County | Township Name | Township | Range | Section |
|---|---|---|---|---|
| Jackson | Hunter | T102N | R36W | 1, 2, 3 |
| | Des Moines | T102N | R35W | 1, 2, 3, 4, 5, 6 |
| | Belmont | T103N | R35W | 34, 35, 36 |
| | Wisconsin | T012N | R34W | 1, 2, 3, 4, 5, 6 |

| County | Township Name | Township | Range | Section |
|---|---|---|---|---|
| Martin | Jay | T102N | R33W | 1, 2, 3, 4, 5, 6 |
| | Manyaska | T102N | R32W | 2, 3, 4, 5, 6 |
| | Fox Lake | T103N | R32W | 13, 24, 25, 26, 35, 36 |
| | Fraser | T103N | R31W | 13, 14, 15, 16, 17, 18, 19, 30 |
| | Rutland | T103N | R30W | 13, 14, 15, 16, 17, 18, 19, 20, 21 |
| | Center Creek | T103N | R29W | 13, 14, 15, 16, 17, 18 |
| Faribault | Verona | T103N | R28W | 9, 10, 11, 14, 15, 16, 17, 18, 22, 23, 26, 35 |
| | Jo Daviess | T102N | R28W | 2, 11, 14, 23, 26, 35 |
| | Pilot Grove | T101N | R28W | 2, 11, 14, 23, 26, 35, 36 |

## 2.2 Associated Facilities and Substations

The associated facilities for the Project include expansion of the existing Lakefield Junction substation, removal of the existing Winnebago Junction substation, construction of the new Huntley substation, reconfiguration of four 161 kV transmission lines, and reconfiguration of three 69 kV transmission lines to be constructed to 161 kV standards.

### 2.2.1 Lakefield Junction Substation

The Lakefield Junction substation is located in the southwest quarter of the northeast quarter of Section 3 in Hunter Township. The substation will be expanded east approximately three acres to house additional equipment as part of the Project. Grading will be required over the full three acres. The fenced area will only be expanded by approximately 2.2 acres. New equipment will include one 345 kV bay using one position and a future bay position to allow for three future connections.

### 2.2.2 Winnebago Junction Substation

The Winnebago Junction substation is located in the northwest quarter of the southeast quarter of Section of Section 11 in Verona Township. The substation will be decommissioned as part of the Project. Decommissioning will entail the removal of all substation infrastructure at the site including electrical equipment, foundations, gravel, and fencing. One 161 kV transmission line and two 69 kV transmission lines will remain on the property after the substation infrastructure is removed.

The site will be allowed to return to its natural state by reestablishing vegetation in areas not crossed by the remaining transmission line rights-of-way. ITC Midwest will continue to own and operate transmission lines across the parcel.

### 2.2.3 Huntley Substation

The new Huntley substation will be constructed on a 32-acre parcel located in the southwest quarter of the southeast quarter of Section 14 in Verona Township. The substation fenced area will be approximately 12 acres and will include a control building. The remainder of the 32-acre parcel will be graded to allow for property setbacks, line clearances, retention pond, and road access requirements. Equipment to be installed within the fenced area includes a 40 MVAR bank of reactors, one 345 kV/161 kV transformer, two 161 kV/69 kV transformers, two 345 kV breaker-and-a-half bays with three 345 kV breakers, four 161 kV breaker-and-a-half bays with eleven 161 kV breakers, three 69 kV breakers, associated switches, steel, foundations, and dead end structures. The substation will be designed to allow for future installation of two 345 kV breaker-and-a-half bays and one additional 161 kV breaker-and-a-half bay.

### 2.2.4 Transmission Line Reconfiguration

The Project will include the reconfiguration of four existing 161 kV transmission lines and three existing 69 kV transmission that currently terminate at the Winnebago Junction substation that will be decommissioned. The seven transmission lines will be reconfigured and rerouted from the Winnebago Junction substation to the Huntley substation as follows:

- The existing 161 kV Rutland – Winnebago Junction will be constructed on single pole double-circuit structures with the new 345 kV transmission line and operated at 345 kV/161 kV.

- The existing 161 kV N.B.E.I – Winnebago Junction and the 69 kV Winnebago Local – Winnebago Junction transmission lines will be constructed on single pole double-circuit structures to 161 kV/161 kV standards but operated at 161 kV/69 kV (Local/N.B.E.I – Huntley).

- The existing 161 kV Freeborn – Winnebago Junction and the 69 kV Blue Earth – Winnebago Junction transmission lines will be constructed on single pole double-circuit structures to 161 kV/161 kV standards but operated at 161 kV/69 kV (Blue Earth/Freeborn – Huntley).

- The existing 69 kV Walters – Winnebago Junction transmission will not be co-located with another line but will instead be constructed on single pole structures to 161 kV standards but operated at 69 kV (Walters – Huntley).

The portions of rights-of-way currently occupied by the existing 161 kV Rutland – Winnebago Junction and the 69 kV Blue Earth – Winnebago Junction transmission lines will no longer be needed after the Project is constructed and will be abandoned.

## 2.3 Structures

The primary tangent structures authorized for the Project be will single pole galvanized or self-weathering steel davit arm structures capable of supporting one 345 kV circuit and one 161 kV circuit. The structures will be 130 to 190 feet in height with an average span of 700 to 1,000 feet between structures and will be supported by an approximately 8-foot diameter 25-foot deep drilled pier concrete foundation.

Specialty structures authorized for the Project may include angle, dead-end, H-frame, multiple pole, and low profile. The table below details specifics on the various structure types as presented in the route permit application.

| Line Type | Initial Operation | Structure Type | Right-of-way (feet) | Height (feet) | Structure Base | Foundation | Span (feet) |
|---|---|---|---|---|---|---|---|
| | | | | | Diameter (feet) | | |
| 345 kV/161 kV | 345 kV/161 kV or 345 kV/None | Single Pole Davit Arm | 150 | 130-190 | 5-9 | 8-12 | 700-1,000 |
| | | Single Pole Davit Arm Low Profile | 150 | 100-160 | 5-9 | 8-12 | 500-1,000 |
| | | Two Pole | 150 | 130-190 | 9 | 12 | 700-1,000 |
| | | Three Pole Low Profile | 150 | 100-160 | 9 | 12 | 500-1,000 |
| 345 kV/161 kV/69 kV | 345 kV/161 kV/69 kV | Single Pole Davit Arm | 150 | 175-195 | 9 | 12 | 600-800 |
| 345 kV/161 kV/69 kV | 345 kV/161 kV/69 kV | 2 Pole Deadend | 150 | 175-195 | 11 | 14 | 600-800 |
| 345 kV/161 kV/69 kV | 345/69 kV | Single pole davit arm with Underbuild | 150 | 130-190 | 7 | 10 | 600-800 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 345 kV/161 kV/69 kV | 345/69 kV | 1 Pole Deadend | 150 | 130-190 | 11 | 14 | 600-800 |
| 345 kV/161 kV | 345 kV/69 kV | Single Pole Davit Arm | 150 | 130-190 | 5-9 | 8-12 | 700-1,000 |
| | | Two Pole | 150 | 130-190 | 9 | 12 | 700-1000 |
| 161 kV/161 kV | 161 kV/161 kV or 161 kV/69 kV | Single Pole Braced Post | 100 | 80-120 | 3.5-7 | 10 (Angle) | 600-800 |
| | | Single Pole Davit Arm | 100 | 80-120 | 7 | 10 | 600-800 |
| 161 kV | 69 kV | Single Pole Braced Post | 100 | 70-110 | 3-5 | 8 (Angle) | 600-800 |
| | | Single Pole Davit Arm | 100 | 70-110 | 5 | 8 | 600-800 |

Note: All structures will be comprised of galvanized or self-weathering steel.

## 2.4 Conductors

Each 345 kV phase wire for the Project will consist of two twisted pair Drake 795-circular mil 26/7 aluminum conductor steel reinforced (ACSR) conductors, or equivalent 3,000 amp conductor. Each ACSR cable consists of a core of seven steel conductors surrounded by 26 aluminum strands. The 345 kV twisted pair conductors (two sets for each of the three phases) will have a capacity equivalent to 3,000 amps. The same conductor and bundled configuration will be used for all the 345 kV sections of the transmission line in Minnesota. The minimum conductor clearance for the 345 kV transmission line between the ground and lowest point of the conductor will measure 35 feet.

Each 161 kV phase wire for the Project will consist of twisted pair Drake 795-circular mil 26/7 (ACSR) conductors, or equivalent 1,600 ampere conductor. The 161 kV line from N.B.E.I. to Huntley will consist of aluminum conductor steel supported 565-circular mil Calumet, or equivalent 1,400 amp conductor. The minimum conductor clearance for the 161 kV transmission line between the ground and lowest point of the conductor will measure 25 feet.

The 69 kV transmission lines to be relocated from the Winnebago Junction substation to the Huntley substation will consist of twisted pair Drake 795-circular mil 26/7 ACSR conductors, or comparable conductor. Other 69 kV conductors for the Project will consist of 600 amp conductor, or equivalent conductor. The minimum conductor clearance for the 69 kV transmission line between the ground and lowest point of the conductor will measure 21 feet.

An approximately 1-inch diameter shield wire will be installed above the conductors for lightning protection. The shield wire may include a fiber optic cable that allows for substation protection equipment to communicate with other terminals on the line.

### 2.5 Safety Codes and Design Requirements

The transmission line and associated facilities shall be designed to meet or exceed all relevant local and state codes, the National Electric Safety Code (NESC), and North American Electric Reliability Corporation (NERC) requirements. This includes standards relating to clearances to ground, clearance to crossing utilities, clearance to buildings, strength of materials, clearances over roadways, right-of-way widths, and permit requirements. The transmission line shall be equipped with protective devices to safeguard the public if an accident occurs.

## 3.0 DESIGNATED ROUTE

The route for the Project will vary in width from 1,000 feet and 2,200 feet. The widths greater than 1,000 feet are as follows: Des Moines River (1,400 feet); south of Lake Charlotte (1,200 feet); east of Lake Charlotte near State Highway 15 (1,400 feet); south of and adjacent to the Proposed Huntley substation (2,200 feet); and along the Blue Earth River south of the Proposed Huntley Substation (1,700 feet).

### 3.1 Lakefield Junction to Huntley – Jackson County

In Jackson County, the route originates at ITC Midwest's existing Lakefield Junction substation, located in Section 3 in Hunter Township. The route extends southeast from the Lakefield Junction Substation approximately 0.5 mile (north of 810th Street) and joins the existing Lakefield to Border 161 kV transmission line. It continues east approximately 0.5 mile until crossing 470th Street. From here, the route continues east through the middle of Sections 2 and 1 in Hunter Township for approximately two miles until reaching 490th Avenue. Before reaching 490th Avenue and for a short distance after crossing 490th Avenue, the route deviates slightly from the existing Lakefield to Border 161 kV transmission line. The existing 161 kV line will be removed from its current location and co-located with the new 345 kV line for approximately 1,900 feet as it crosses 490th Avenue. The route continues east through the middle of Sections 6 and 5 in Des Moines Township for approximately 1.8 miles. The route then turns to the southeast then east for approximately 1.6 miles crossing through the southern half of Section 4 in Des Moines Township to the middle of Section 3 where the route reaches the western bank of the Des Moines River. From this location, there are two options for crossing the Des Moines River in Section 3 of Des Moines Township. Both options would remove the existing Lakefield to Border 161 kV transmission line for 1.5 mile through Section 2 and the western half of Section 1 of Des Moines Township. In this area, the route width expands to a maximum of 1,400 feet for approximately 0.5 mile:

Alignment Option 1

The first option for crossing the Des Moines River is to follow the alignment, which deviates from the existing Lakefield to Border 161 kV transmission line to cross the Des Moines River perpendicularly for approximately 2,700 feet in a northeast direction. From this point, the alignment turns north before reaching Section 2 of Des Moines Township. Use of route alignment across the Des Moines River would remove the existing Lakefield to Border 161 kV transmission line from its current crossing of the Des Moines River.

Alignment Option 2

The second option for crossing the Des Moines River is to follow an alignment, which crosses the Des Moines River along the existing Lakefield to Border 161 kV transmission line centerline for approximately 3,100 feet in a northeast, then east direction. From this point, the alignment turns north before reaching Section 2 of Des Moines Township.

After the crossing of the Des Moines River, the route continues north for another 0.5 mile to 820th Street, where it turns east. The route extends along 820th Street for 0.6 mile, continuing east for an additional mile and across U.S. Highway 71 between Sections 3, 2, and 1 of Des Moines Township and 34, 35, and 36 of Belmont Township, respectively. The route then turns south, 0.5 mile east of U.S. Highway 71 in Section 1 of Des Moines Township. The route extends south for 0.5 mile and rejoins the alignment of the existing Lakefield to Border 161 kV transmission line. It turns east in the middle of Section 1 of Des Moines Township, and extends another 0.5 mile to 550th Avenue/County Road 23 and Wisconsin Township. From here, the route continues through the middle of Sections 6, 5, 4, 3, 2, and 1 of Wisconsin Township along field lines for approximately 6 miles until reaching 10th Avenue and the Martin County line. In Section 5, the route deviates from the existing Lakefield to Border 161 kV transmission line for 1,300 feet and the 161 kV and 345 kV transmission lines would be co-located along the new alignment.

## 3.2 Lakefield Junction to Huntley – Martin County

In Martin County, the route continues eastward in Jay Township from the Jackson County border. Between Section 6 and 5 at 20th Street, the existing 161 kV line will be relocated, and co-located with the 345 kV line for approximately 2,000 feet. The route continues through the middle of Sections 6, 5, 4, 3, 2 and 1 for six miles until just west of Fox Lake. The route continues east through the middle of Section 6 of Manyaska Township in Section 6 for one mile. The route then deviates from the existing Lakefield to Border 161 kV transmission line, continues east into Section 5 for approximately 0.3 mile and continues east before turning south across Interstate 90 and then east along the south side of the Interstate for 1.7 miles through Sections 5 and 4 of Manyaska Township.

The existing ITC Midwest 69 kV Fox Lake to Fairmont transmission line currently located north of 125th Street would be removed from this location and would be co-located with the new 345 kV transmission line along the new route south of Interstate 90. At the border between Sections 4 and 3 of Manyaska Township, the route crosses to the north side of Interstate 90 and 125th Street, before turning east for approximately 0.8 mile. The route continues east, north, and northeast along the existing ITC Midwest 69 kV Fox Lake to Fairmont transmission line for approximately 1.3 miles through Sections 3 and 2 of Manyaska Township and Section 35 of Fox Lake Township, crossing over an existing Union Pacific Railroad line and 110th and 120th Avenues. In Section 35 of Fox Lake Township, the route A continues north and separates from the existing 69 kV transmission line where it turns east. The route continues north in Section 35 of Fox Lake Township for approximately 0.5 mile crosses into Section 26 at 140th Street where it turns east. The route continues east along the border of Sections 26/35 and 25/36 along 140th Street for 1.5 miles where it reaches 130th Avenue, and turns to the north. The route continues north along 130th Avenue for approximately 2.5 miles through Sections 30, 19, and 18 of Frasier Township where it rejoins the existing Lakefield to Border 161 kV transmission line.

The route turns east along field lines through the center of Sections 18, 17, 16, 15, 14, and 13 of Frasier Township for approximately 5.5 miles. In Section 17, the existing 161 kV line is proposed to be relocated with the new 345 kV for approximately 1,000 feet; and in 1,500 feet in Section 15. In the middle of Section 13 of Frasier Township, the route turns south, deviating from the existing Lakefield to Border 161 kV transmission line that extends across Lake Charlotte. The route continues south along a field line for 0.5 mile where it turns east along 160th Street. The route continues east along of 160th Street for approximately 0.5 mile until crossing 190th Avenue and into Rutland Township.

In Rutland Township, the route continues along 160th Street and along the existing Great River Energy FE-RU 69 kV transmission line as it continues east for approximately 2.2 miles between Sections 18 and 19, and 17 and 20 of Rutland Township. Along this section, the route width is expanded to approximately 1,200 feet and the existing line is proposed to be relocated slightly for approximately 1,100 feet along 160th Street. As the route crosses between Sections 16 and 21 of Rutland Township, it is no longer co-located with the existing 69 kV transmission line. The route continues east along 160th Street for 0.5 mile where it turns north along a field line for approximately 0.5 mile before turning east and rejoining with the existing Lakefield to Border 161 kV transmission line in Section 16 of Rutland Township. From Section 16 into Section 15 of Rutland Township, the route width is expanded to approximately 1,400 feet and the existing 161 kV line is proposed to be relocated slightly for approximately 1,600 feet just west of 220th Avenue/State Highway 15.

The route crosses State Highway 15 and continues east along field lines for 3.5 miles through Sections 16, 15, 14, and 13 of Rutland Township before entering Center Creek Township, crossing 230th and 240th Avenues and Judicial Ditch Number Three. The route continues east for approximately one mile, crossing 255th Avenue and County Highway 53 (260th Avenue) in Section 18 of Center Creek Township. It continues east for an additional five miles along field lines through Sections 17, 16, 15, 14, and 13, of Center Creek Township, crossing 265th, 280th, 288th, 290th (County Road 159), 293rd (County Highway 59), and 298th Avenues before reaching the Faribault County line. In this area, the route also crosses Judicial Ditches One, Twenty-Eight, and Forty. The route also crosses a Canadian Pacific rail line in the middle of Section 13 of Center Creek Township.

### 3.3 Lakefield Junction to Huntley – Faribault County

From the Martin/Faribault County border, the route extends northeast into Verona Township through Sections 18, 17, 9/16, and 10/15 for approximately 3.2 miles, still co-located with the existing Lakefield to Border 161 kV transmission line. The route then turns south along a field line in Section 15 of Verona Township to 160th Street. At this point the existing 161 kV line that continues east to the existing Huntley substation site would be removed and collocated with the new 345 kV line. At 160th Street, Modified Route A turns east and continues along the north side of the road between Sections 15/22 and 14/23 of Verona Township for approximately 1.3 miles to the new Huntley substation site.

### 3.4 Huntley to Iowa Border – Faribault County

Just south of the Huntley Substation in Section 23 of Verona Township, the route includes a wider triangular-shaped area measuring 2,200 feet at its widest along the southern boundary of the new Huntley substation to accommodate positioning of the circuits into the substation. From the new Huntley substation, the route extends south along the existing Lakefield to Border 161 kV transmission line for approximately 0.3 mile where it turns southwest along the west bank of the Blue Earth River in Section 23 of Verona Township. The route then continues south and then southeast, reconnecting with the existing Lakefield to Border 161 kV transmission line approximately 0.4 mile (approximately 400 feet) before 150th Street. This area is approximately 0.9 mile long through Section 23 in Verona Township and has an expanded route width of approximately 2,200 feet. The existing Lakefield to Border 161 kV transmission line will be moved from its current alignment in Section 23 to follow the new route in this area. The route then continues south along the existing line for approximately two miles in Verona Township, Sections 23, 26, and 35. It crosses 160th, 150th, 140th, and 130th (County Highway 8) Streets, as well as South Creek in several locations.

The route continues south approximately two miles along field lines into Jo Daviess Township through Sections 2 and 11, crossing Interstate 90, 120th Street, County Ditch Number Sixty, and 115th Street. After crossing 115th Street, the route follows 355th Avenue for 0.5 mile, crossing a rail line and extending to 110th Street (County Highway 16). The route then continues south from 110th Street along the existing 161 kV line for two miles, through Sections 14 and 23 Jo Daviess Township, crossing 100th Street and Little Badger Creek. The route deviates from the existing 161 kV Lakefield to Border transmission line and turns southeast as it crosses 90th Street (County Highway 6). The route continues south and then back west to join with the existing 161 kV line. A portion of the existing 161 kV line would be relocated in Section 26 of Jo Daviess Township to move it farther from a home for approximately 1,000 feet where the new route crosses 85th Street. The route continues south along the existing Lakefield to Border 161 kV Transmission Line and field lines for approximately 1.3 miles through Sections 26 and 35 of Jo Daviess Township, crossing 80th and 70th Streets.

The route enters Pilot Grove Township in Section 2, and extends south, continuing along field lines and co-locating with the existing Lakefield to Border 161 kV transmission line, through the Pilot Grove Lake WPA and Sections 11, 14 and 23. The route crosses 60th, 50th, 40th, and 30th Streets, and follows Judicial Ditch Number Seven for 0.3 mile before crossing it in Section 23. The route turns east along 30th Street between Sections 23 and 26 of Pilot Grove Township, continuing to follow the existing Lakefield to Border 161 kV transmission line for approximately 0.5 mile before turning south along 360th Avenue and the existing line. The route continues south to the Iowa border along the existing Lakefield to Border 161 kV transmission line through Sections 26, 25, 35 and 36 of Pilot Grove Township crossing the West Branch of the Blue Earth River (Section 36) before reaching the Minnesota/Iowa border at the intersection of 510th Street (Minnesota) and 160th Avenue (Iowa). Between Section 35 and 36, the existing Lakefield to Border 161 kV transmission line is proposed to be relocated slightly for approximately 1,400 feet.

### 3.5 Transmission Line Reconfiguration between Winnebago Junction and Huntley Substations

The proposed construction configuration of the associated facilities will occur within a 500-foot route width between the Winnebago Junction substation and the Huntley substation and a 500-foot route width approximately 0.4 mile long along 170th Street. The existing Rutland—Winnebago Junction transmission line will be removed from Sections 11 and 10 of Verona Township. The existing Blue Earth—Winnebago Junction transmission line will be removed in Section 11 of Verona Township between 170th Street and the Winnebago Junction substation (See route maps 2 and 2A).

## 4.0 RIGHT-OF-WAY

The approved rights-of-way for the Project are as follows:

- 345 kV single-circuit structures, 161/345 kV double-circuit structures, and 69/161/345 kV triple-circuit structures shall be constructed and maintained within a 150-foot right-of-way. The Permittee may only trim or remove trees that pose a threat to the transmission facility within the outer 25 feet on either side of the center 150-foot right-of-way.

- 345 kV/161 kV double-circuit structures that cross through the Pilot Grove Lake Waterfowl Production Area shall be constructed and maintained within the existing 100-foot right-of-way.

- 161 kV/161 kV double-circuit capable and 161 kV single-circuit structures shall be constructed and maintained within a 100-foot right-of-way. The Permittee may only trim or remove trees that pose a threat to the transmission facility within the outer 25 feet on either side of the center 100-foot right-of-way.

- The Permittee shall utilize its existing rights-of-way associated with the existing single circuit 161 kV transmission line being replaced to the greatest extent possible.

This permit anticipates that the right-of-way will generally conform to the alignment identified on the attached route permit maps unless changes are requested by individual landowners and agreed to by the Permittee or for unforeseen conditions that are encountered or are otherwise provided for by this permit.

Any alignment modifications within the designated route shall be located so as to have comparable overall impacts relative to the factors in Minn. R. 7850.4100, as does the alignment identified in this permit, and shall be specifically identified and documented in and approved as part of the plan and profile submitted pursuant to Section 9.1 of this permit.

Where the transmission line route parallels existing highway and other road rights-of-way, the transmission line right-of-way shall occupy and utilize the existing right-of-way to the maximum extent possible, consistent with the criteria in Minn. R. 7850.4100, the other requirements of this permit, and for highways under the jurisdiction of the Minnesota Department of Transportation (Mn/DOT) rules, policies, and procedures for accommodating utilities in trunk highway rights-of-way.

## 5.0 GENERAL CONDITIONS

The Permittee shall comply with the following conditions during construction of the transmission line and associated facilities over the life of this permit.

### 5.1 Notification to Landowners

The Permittee shall provide all affected landowners with a copy of this permit and, as a separate information piece, the complaint procedures at the time of the first contact with the landowners after issuance of this permit. The Permittee shall contact landowners prior to entering the property or conducting maintenance along the route.

The Permittee shall work with landowners to locate the high-voltage transmission line to minimize the loss of agricultural land, forest, and wetlands, and to avoid homes and farmsteads.

### 5.2 Construction Practices

The Permittee shall follow those specific construction practices and material specifications described in ITC Midwest's Application to the Commission for a Route Permit for the Minnesota – Iowa 345 kV Transmission Project and Associated Facilities in Jackson, Martin, and Faribault Counties, dated March 28, 2013, unless this permit establishes a different requirement in which case this permit shall prevail.

#### 5.2.1 Field Representative

At least 14 days prior to commencing construction, the Permittee shall advise the Commission in writing of the person or persons designated to be the field representative for the Permittee with the responsibility to oversee compliance with the conditions of this permit during construction. This person shall be accessible by telephone during normal business hours throughout right-of-way preparation, construction, cleanup, and restoration.

The field representative's address, phone number, emergency phone number, and email shall be provided to the Commission and shall be made available to affected landowners, residents, public officials and other interested persons. The Permittee may change the field representative at any time upon notice to landowners and the Commission.

### 5.2.2 Employee Training and Education of Permit Terms and Conditions

The Permittee shall inform all employees, contractors, and other persons involved in the transmission line construction of the terms and conditions of this permit.

### 5.2.3 Public Services, Public Utilities, and Existing Easements

During construction, the Permittee shall minimize any disruption to public services or public utilities. To the extent disruptions to public services or public utilities occur these would be temporary and the Permittee will restore service promptly. Where any impacts to utilities have the potential to occur the Permittee will work with both landowners and local agencies to determine the most appropriate transmission structure placement.

The Permittee shall work with the landowners, townships, cities, and counties along the route to accommodate concerns regarding tree clearing, distance from existing structures, drain tiles, pole depth and placement in relationship to existing roads and road expansion plans.

The Permittee shall cooperate with county and city road authorities to develop appropriate signage and traffic management during construction.

### 5.2.4 Temporary Work Space

The Permittee shall limit temporary easements to special construction access needs and additional staging or lay-down areas required outside of the authorized right-of-way. Temporary space shall be selected to limit the removal and impacts to vegetation. Temporary easements outside of the authorized transmission line right-of-way will be obtained from affected landowners through rental agreements and are not provided for in this permit.

Temporary driveways may be constructed between the roadway and the structures to minimize impact using the shortest route possible. Construction mats should also be used to minimize impacts on access paths and construction areas.

### 5.2.5 Noise

Construction and routine maintenance activities shall be limited to daytime working hours, as defined in Minn. R. 7030.0200, to ensure nighttime noise level standards will not be exceeded.

### 5.2.6 Site Sediment and Erosion Control

The Permittee shall implement those erosion prevention and sediment control practices recommended by the Minnesota Pollution Control Agency (MPCA) Construction Stormwater Program.

The Permittee shall implement reasonable measures to minimize erosion and sedimentation during construction and shall employ perimeter sediment controls, protect exposed soil by promptly planting, seeding, using erosion control blankets and turf reinforcement mats, stabilizing slopes, protecting storm drain inlets, protecting soil stockpiles, and controlling vehicle tracking. Contours shall be graded as required so that all surfaces provide for proper drainage, blend with the natural terrain, and are left in a condition that will facilitate re-vegetation and prevent erosion. All areas disturbed during construction of the facilities shall be returned to pre-construction conditions.

Where larger areas of one acre or more are disturbed or other areas designated by the MPCA, the Permittee shall obtain a National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Construction Stormwater permit from the MPCA.

### 5.2.7 Aesthetics

The Permittee shall consider input pertaining to visual impacts from landowners or land management agencies prior to final location of structures, rights-of-way, and other areas with the potential for visual disturbance. Care shall be used to preserve the natural landscape, minimize tree removal and prevent any unnecessary destruction of the natural surroundings in the vicinity of the Project during construction and maintenance.

Structures shall be placed at a distance, consistent with sound engineering principles and system reliability criteria, from intersecting roads, highway, or trail crossings and could cross roads to minimize or avoid impacts.

### 5.2.8 Vegetation Removal and Protection

The Permittee shall minimize the number of trees to be removed in selecting the right-of-way specifically preserving to the maximum extent practicable windbreaks, shelterbelts, living snow fences, and vegetation in areas such as trail and stream crossings where vegetative screening may minimize aesthetic impacts, to the extent that such actions do not violate sound engineering principles or system reliability criteria.

Tall growing species located within the transmission line right-of-way that endanger the safe and reliable operation of the transmission facility will be removed by the Permittee. The Permittee shall leave undisturbed, to the extent possible, existing low growing species in the right-of-way or replant such species in the right-of-way to blend the difference between the right-of-way and adjacent areas, to the extent that the low growing vegetation that will not pose a threat to the transmission facility or impede construction.

### 5.2.9 Application of Herbicides

The Permittee shall restrict herbicide use to those herbicides and methods of application approved by the Minnesota Department of Agriculture and the U.S. Environmental Protection Agency. Selective foliage or basal application shall be used when practicable. The Permittee shall contact the landowner or his designee to obtain approval for the use of herbicide prior to any application on their property. The landowner may request that there be no application of herbicides on any part of the right-of-way within the landowner's property. All herbicides shall be applied in a safe and cautious manner so as not to damage crops, orchards, tree farms, or gardens.

### 5.2.10 Noxious Weeds

The Permittee shall take all reasonable precautions against the spread of noxious weeds during all phases of construction. When utilizing seed to establish temporary and permanent vegetative cover on exposed soil the Permittee shall select site appropriate seed certified to be free of noxious weeds. To the extent possible, the Permittee shall use native seed mixes. The Permittee shall consult with landowners on the selection and use of seed for replanting.

### 5.2.11 Restoration

The Permittee shall restore the right-of-way, temporary work spaces, access roads, abandoned right-of-way, and other public or private lands affected by construction of the transmission line. Restoration within the right-of-way must be compatible with the safe operation, maintenance, and inspection of the transmission line. Within 60 days after completion of all restoration activities, the Permittee shall advise the Commission in writing of the completion of such activities.

### 5.2.12 Wetlands and Water Resources

Wetland impact avoidance measures that shall be implemented during design and construction of the transmission line will include spacing and placing the power poles at variable distances to span and avoid wetlands, watercourses, and floodplains. Unavoidable wetland impacts as a result of the placement of poles shall be limited to the immediate area around the poles. To minimize impacts, construction in wetland areas shall occur during frozen ground conditions. When construction during winter is not possible, wooden or composite mats shall be used to protect wetland vegetation. Soil excavated from the wetlands and riparian areas shall be contained and not placed back into the wetland or riparian area.

Wetlands and riparian areas shall be accessed using the shortest route possible in order to minimize travel through wetland areas and prevent unnecessary impacts. No staging or stringing set up areas shall be placed within or adjacent to wetlands or water resources, as practicable. Power pole structures shall be assembled on upland areas before they are brought to the site for installation.

Areas disturbed by construction activities shall be restored to pre-construction conditions. Restoration of the wetlands will be performed by Permittee in accordance with the requirements of applicable state and federal permits or laws and landowner agreements.

All requirements of the U.S. Army Corps of Engineers (wetlands under federal jurisdiction), Minnesota Department of Natural Resources (Public Waters/Wetlands), and County (wetlands under the jurisdiction of the Minnesota Wetland Conservation Act) shall be met.

### 5.2.13 Archaeological and Historic Resources

The Permittee shall consult with the State Historic Preservation Office (SHPO) concerning the extent of a Phase I archaeological survey and appropriate mitigation measures for the Project. Permittee shall document and submit to the Commission the results of the consultation, including those portions of the Project that will be surveyed and the extent of the survey with the Construction Environmental Control Plan for the Project.

For those portions of the Project that are surveyed, Permittee shall submit, with the plan and profile for these portions, the results of the survey and all applicable avoidance and mitigation measures employed or to be employed.

Permittee shall inform construction personnel of known archaeological resources along the permitted route for the Project and of archaeological survey results. Permittee shall employ a monitor that reports to and communicates with the Environmental Monitor to identify and report archaeological resources encountered during construction of the Project and to coordinate with SHPO on appropriate mitigation measures.

### 5.2.14 Avian Mitigation

The Permittee's standard transmission design shall incorporate adequate spacing of conductors and grounding devices in accordance with Avian Power Line Interaction Committee standards to eliminate the risk of electrocution to raptors with larger wingspans that may simultaneously come in contact with a conductor and grounding devices.

The Permittee will consult with the Minnesota Department of Natural Resources regarding type and placement of bird diverters.

### 5.2.15 Cleanup

All waste and scrap that is the product of construction shall be removed from the right-of-way and all premises on which construction activities were conducted and properly disposed of upon completion of each task. Personal litter, including bottles, cans, and paper from construction activities shall be removed on a daily basis.

### 5.2.16 Pollution and Hazardous Wastes

All appropriate precautions to protect against pollution of the environment must be taken by the Permittee. The Permittee shall be responsible for compliance with all laws applicable to the generation, storage, transportation, clean up and disposal of all wastes generated during construction and restoration of the right-of-way.

### 5.2.17 Damages

The Permittee shall fairly compensate landowners for damage to crops, fences, private roads and lanes, landscaping, drain tile, or other damages sustained during construction.

## 5.3 Electrical Performance Standards

### 5.3.1 Grounding

The Permittee shall design, construct, and operate the transmission line in a manner so that the maximum induced steady-state short-circuit current shall be limited to five milliamperes root mean square (rms) alternating current between the ground and any non-stationary object within the right-of-way, including but not limited to large motor vehicles and agricultural equipment. All fixed metallic objects on or off the right-of-way, except electric fences that parallel or cross the right-of-way, shall be grounded to the extent necessary to limit the induced short-circuit current between ground and the object so as not to exceed one milliampere rms under steady state conditions of the transmission line and to comply with the ground fault conditions specified in the NESC. The Permittee shall address and rectify any induced current problems that arise during transmission line operation.

### 5.3.2 Electric Field

The transmission line shall be designed, constructed, and operated in such a manner that the electric field measured one meter above ground level immediately below the transmission line shall not exceed 8.0 kV/m rms.

### 5.3.3 Interference with Communication Devices

If interference with radio or television, satellite, wireless internet, GPS-based agriculture navigation systems or other communication devices is caused by the presence or operation of the transmission line, the Permittee shall take whatever action is feasible to restore or provide reception equivalent to reception levels in the immediate area just prior to the construction of the line.

## 5.4 Other Requirements

### 5.4.1 Applicable Codes

The Permittee shall comply with applicable NERC planning standards and requirements of the NESC including clearances to ground, clearance to crossing utilities, clearance to buildings, right-of way widths, erecting power poles, and stringing of transmission line conductors.

5.4.2 Other Permits and Regulations

The Permittee shall comply with all applicable state rules and statutes. The Permittee shall obtain all required permits for the Project and comply with the conditions of these permits. A list of the permits known to be required is included in the permit application. The Permittee shall submit a copy of such permits to the Commission upon request.

## 6.0 SPECIAL CONDITIONS

The Permittee shall provide a report to the Commission as part of the plan and profile submission that describes the actions taken and mitigative measures developed regarding the Project and the following special conditions. Special conditions shall take precedence over other conditions of this permit should there be a conflict.

### 6.1 Construction Environmental Control Plan

The Permittee shall develop a Construction Environmental Control Plan (CECP) that shall include all environmental control plans and special conditions imposed by permits or licenses issued by state or federal agencies related to agency-managed resources. Plans within the CECP shall include the Agricultural Impact Mitigation Plan, the Avian Mitigation Plan, the Vegetation Management Plan, and a Stormwater Pollution Prevention Plan. The CECP shall be filed with the Commission 30 days prior to submitting the plan and profile for any segment of the Project. The CECP shall include the following:

1. Identification of and contact information for an Environmental Monitor to oversee the construction process and monitor compliance with the Construction Environmental Control Plan and all plans therein.

2. A process for regular reporting on construction status and the results of construction inspection and monitoring to the Commission.

3. A process for reporting the status of permits and licenses or other approvals from local units of government, state agencies, or federal agencies for the Project to the Commission.

4. A process for internal tracking of construction management, including required plan or permit inspection forms.

## 6.2 Agriculture Mitigation Plan

The Permittee shall comply with the Agricultural Impact Mitigation Plan (AIMP) prepared for this Project and approved by the Minnesota Department of Agriculture. The permittee shall distribute the AIMP with the route permit to all affected landowners in accordance with Section 5.1 of this permit.

## 6.3 Vegetation Management Plan

The Permittee shall develop a Vegetation Management Plan (VMP). The Permittee shall submit the VMP with the CECP and monitor compliance with the VMP in accordance with the procedures set forth in the VMP. The purpose of the VMP shall be to identify measures to minimize the disturbance and removal of vegetation for the Project, prevent the introduction of noxious weeds and invasive species, and re-vegetate disturbed non-cropland areas with appropriate native species in cooperation with landowners and state, federal, and local resource agencies, in such a way that does not negatively impact the safe and reliable operation of the Project. The VMP shall include:

1. Measures that will be taken to minimize vegetation disturbance and removal during construction of the Project to the extent that such actions do not violate sound engineering principles or system reliability criteria.

2. Measures that will be taken to prevent the introduction of non-native and invasive species.

3. Measures that will be taken to re-vegetate disturbed non-cropland areas with appropriate native species to the extent that such actions do not violate sound engineering principles or system reliability criteria.

4. Processes by which Permittee will identify landowner and resource agency preferences or requirements regarding vegetation management (e.g. no herbicide application, etc.) and how these preferences or requirements will be addressed.

5. Measures that will be taken to manage vegetation during operation and maintenance of the Project, including tall tree species within and outside of the permitted right-of-way that endanger the safe and reliable operation of the transmission line, in accordance with this permit and any local, state, or federal permits, licenses, or approvals.

### 6.4 Avian Mitigation Plan

The Permittee shall develop an avian mitigation plan (AMP). The Permittee shall submit and implement the plan in accordance with the CECP for the Project. The Purpose of the AMP shall be to identify site-specific risks to avian species from the Project and to identify and implement strategies to avoid and mitigate potential impacts to these species, including but not limited to, the use of bird flight diverters. The AMP shall include and document Permitee's consultation with the DNR and the U.S. Fish and Wildlife Service (USFWS) in the development of the AMP.

### 6.5 Des Moines River Crossing

The Permittee shall consult with the DNR regarding the feasibility of mitigation measures for the crossing of the Des Moines River, and shall jointly determine with the DNR the alignment and mitigation measures that best mitigate avian impacts and impacts to the Oak- Basswood forest at the Des Moines River crossing. The Permittee shall document this consultation and the alignment and mitigation measures agreed upon by the Permittee and the DNR for the crossing. The Permittee shall submit this information with the plan and profile for this section of the Project.

## 7.0 DELAY IN CONSTRUCTION

If the Permittee has not commenced construction or improvement of the route within four years after the date of issuance of this permit the Permittee shall file a report on the failure to construct and the Commission shall consider suspension of the permit in accordance with Minn. R. 7850.4700.

## 8.0 COMPLAINT PROCEDURES

Prior to the start of construction, the Permittee shall submit to the Commission the procedures that will be used to receive and respond to complaints. The procedures shall be in accordance with the requirements of Minn. R. 7829.1500 or Minn. R. 7829.1700, and as set forth in the complaint procedures attached to this permit.

Upon request, the Permittee shall assist the Commission with the disposition of unresolved or longstanding complaints. This assistance shall include, but is not limited to, the submittal of complaint correspondence and complaint resolution efforts.

## 9.0 COMPLIANCE REQUIREMENTS

Failure to timely and properly make compliance filings required by this permit is a failure to comply with the conditions of this permit. Compliance filings must be electronically filed with the Commission.

### 9.1 Plan and Profile

At least 30 days before right-of-way preparation for construction begins on any segment or portion of the Project, the Permittee shall provide the Commission with a plan and profile of the right-of-way and the specifications and drawings for right-of-way preparation, construction, structure specifications and locations, cleanup, and restoration for the transmission line. The documentation shall include maps depicting the plan and profile including the right-of-way, alignment, and structures in relation to the route and alignment approved per this permit.

The Permittee may not commence construction until the 30 days has expired or until the Commission has advised the Permittee in writing that it has completed its review of the documents and determined that the planned construction is consistent with this permit. If the Permittee intends to make any significant changes in its plan and profile or the specifications and drawings after submission to the Commission, the Permittee shall notify the Commission at least five days before implementing the changes. No changes shall be made that would be in violation of any of the terms of this permit.

### 9.2 Periodic Status Reports

The Permittee shall report to the Commission on progress regarding finalization of the route, design of structures, and construction of the transmission line. The Permittee need not report more frequently than monthly.

### 9.3 Notification to Commission

At least three days before the line is to be placed into service, the Permittee shall notify the Commission of the date on which the line will be placed into service and the date on which construction was complete.

### 9.4 As-Builts

Within 60 days after completion of construction, the Permittee shall submit copies of all final as-built plans and specifications developed during the Project.

### 9.5 GPS Data

Within 60 days after completion of construction, the Permittee shall submit to the Commission, in the format requested by the Commission, geo-spatial information (e.g., ArcGIS compatible map files, GPS coordinates, associated database of characteristics) for all structures associated with the transmission line and each substation connected.

## 10.0 PERMIT AMENDMENT

This permit may be amended at any time by the Commission. Any person may request an amendment of the conditions of this permit by submitting a request to the Commission in writing describing the amendment sought and the reasons for the amendment. The Commission will mail notice of receipt of the request to the Permittee. The Commission may amend the conditions after affording the Permittee and interested persons such process as is required.

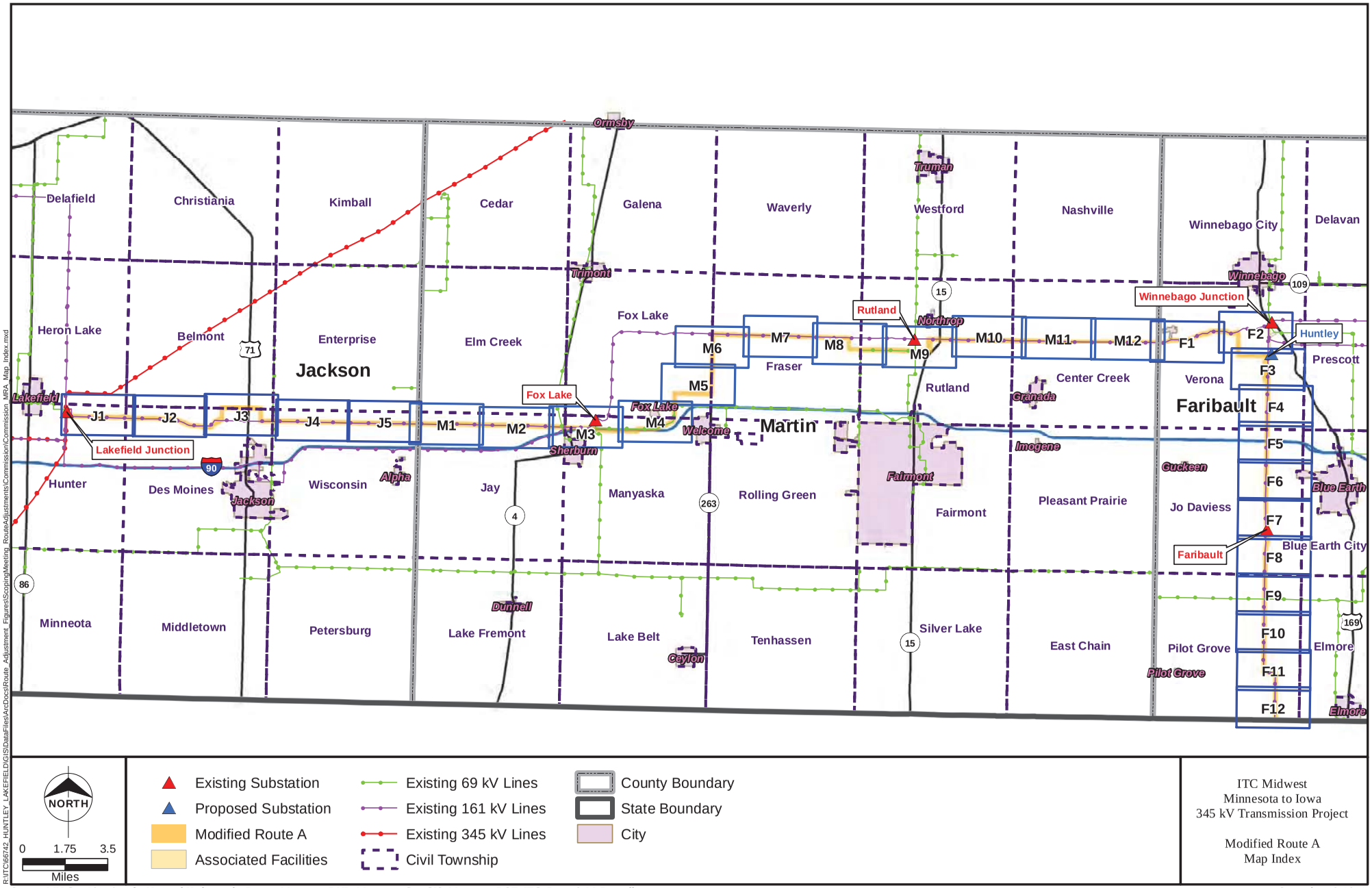
## 11.0 TRANSFER OF PERMIT

The Permittee may request at any time that the Commission transfer this permit to another person or entity. The Permittee shall provide the name and description of the person or entity to whom the permit is requested to be transferred, the reasons for the transfer, a description of the facilities affected, and the proposed effective date of the transfer.

The person to whom the permit is to be transferred shall provide the Commission with such information as the Commission shall require to determine whether the new Permittee can comply with the conditions of the permit. The Commission may authorize transfer of the permit after affording the Permittee, the new Permittee, and interested persons such process as is required.

## 12.0 REVOCATION OR SUSPENSION OF THE PERMIT

The Commission may initiate action to revoke or suspend this permit at any time. The Commission shall act in accordance with the requirements of Minn. R. 7850.5100, to revoke or suspend the permit.

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Source: MN Geo 2011 Aerials; National Hydrography Datase; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

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Source: MN Geo 2011 Aerials; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

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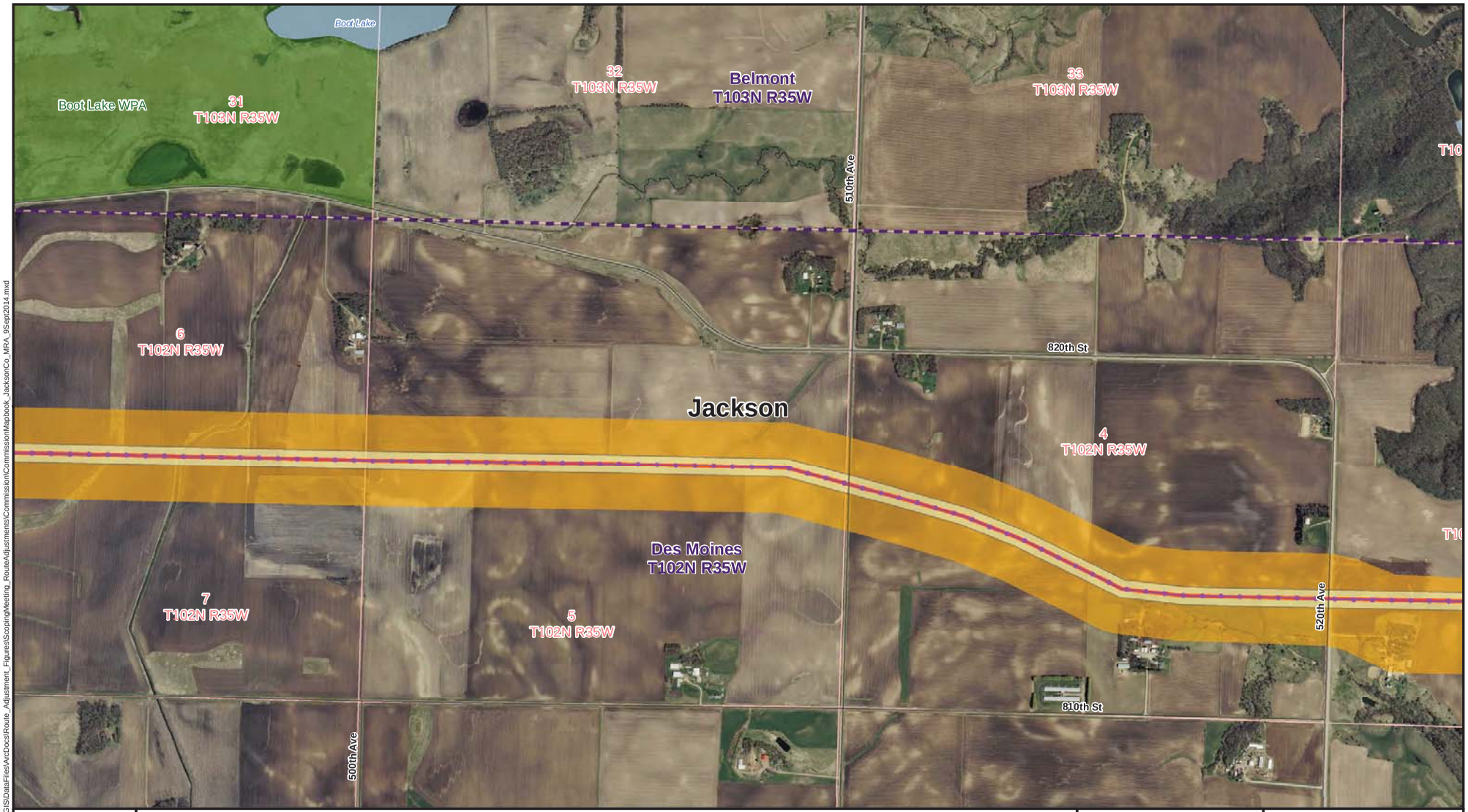


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Source: MN Geo 2011 Aerials; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

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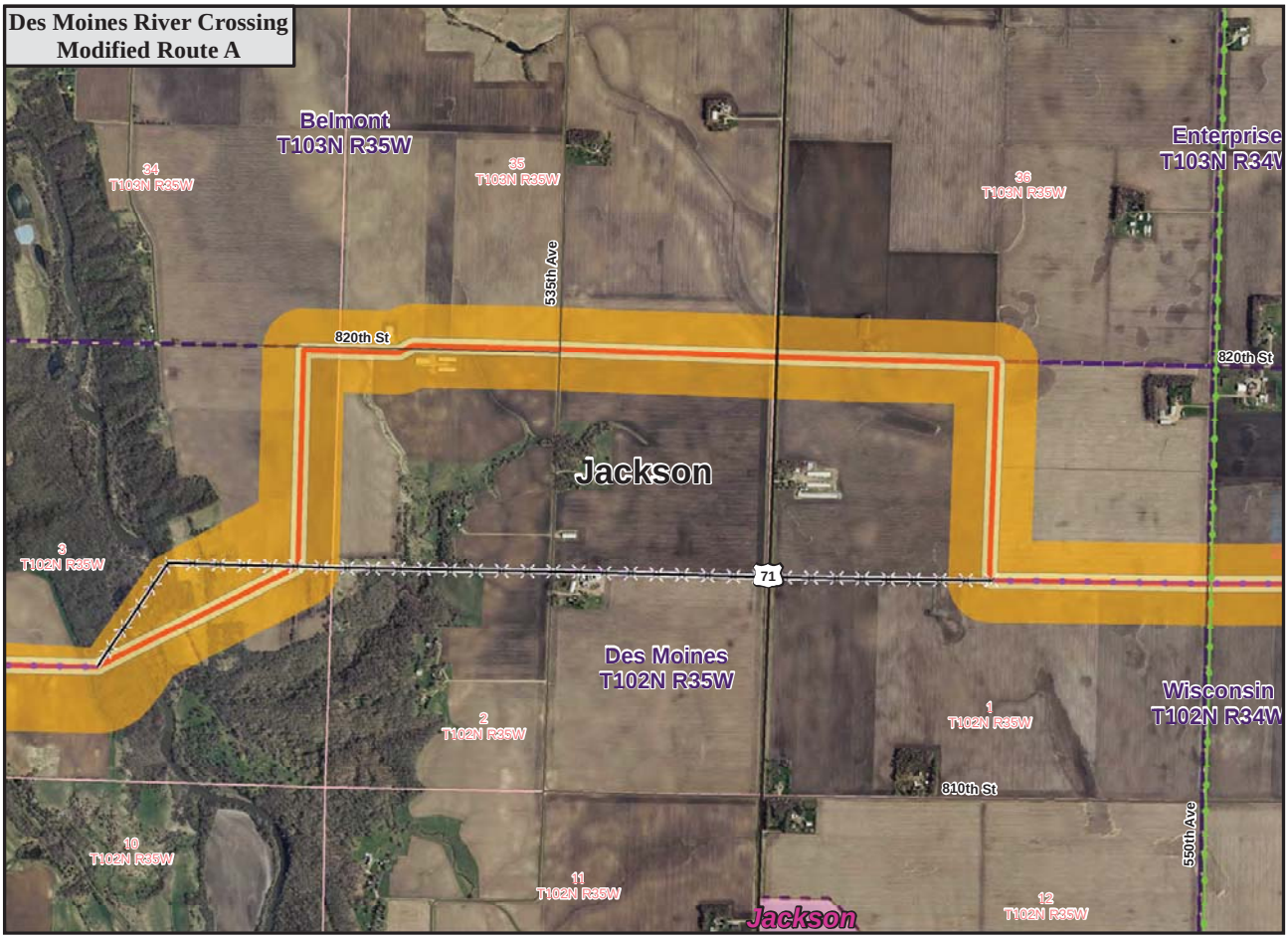


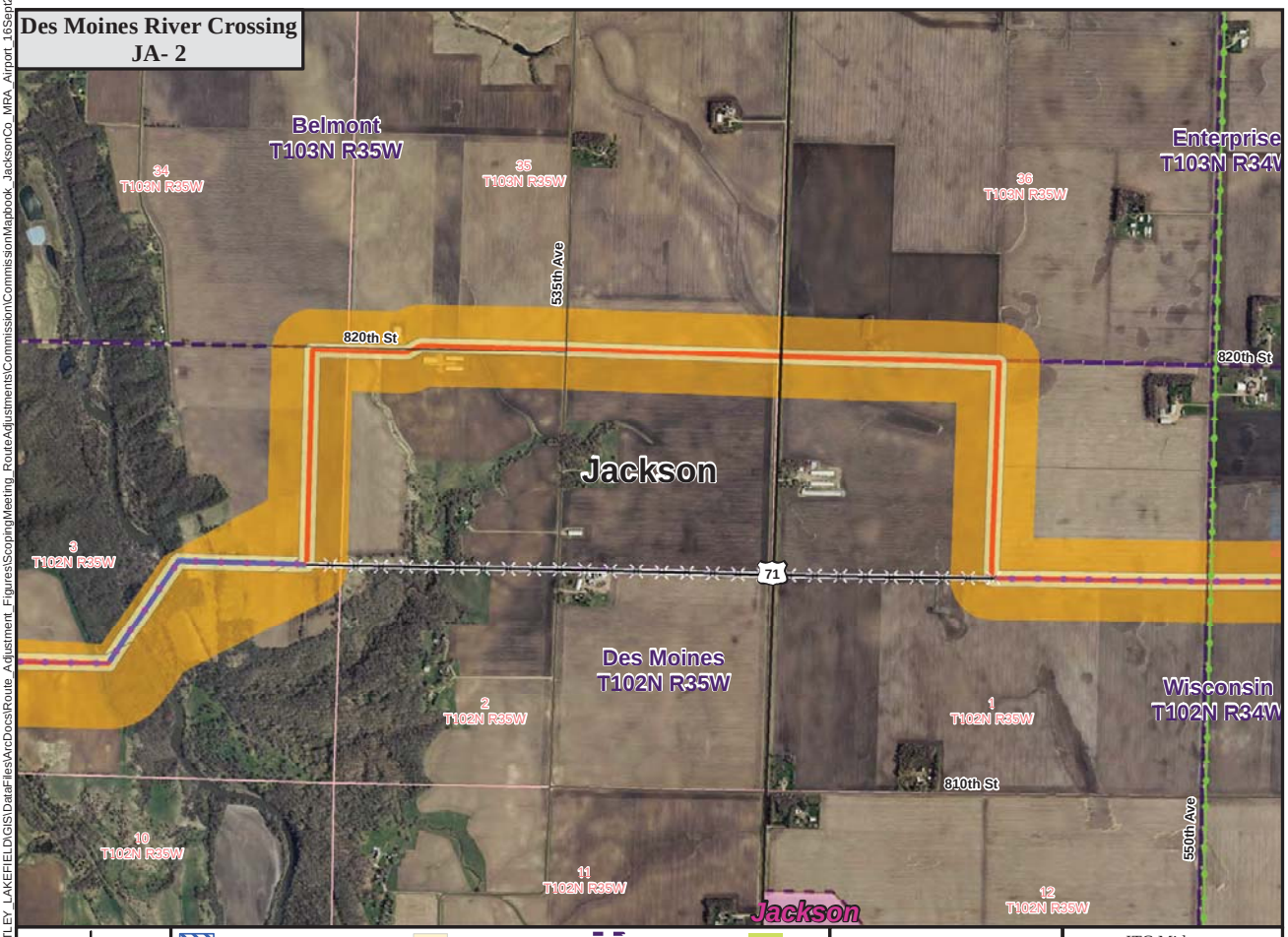


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Source: MN Geo 2011 Aerials; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

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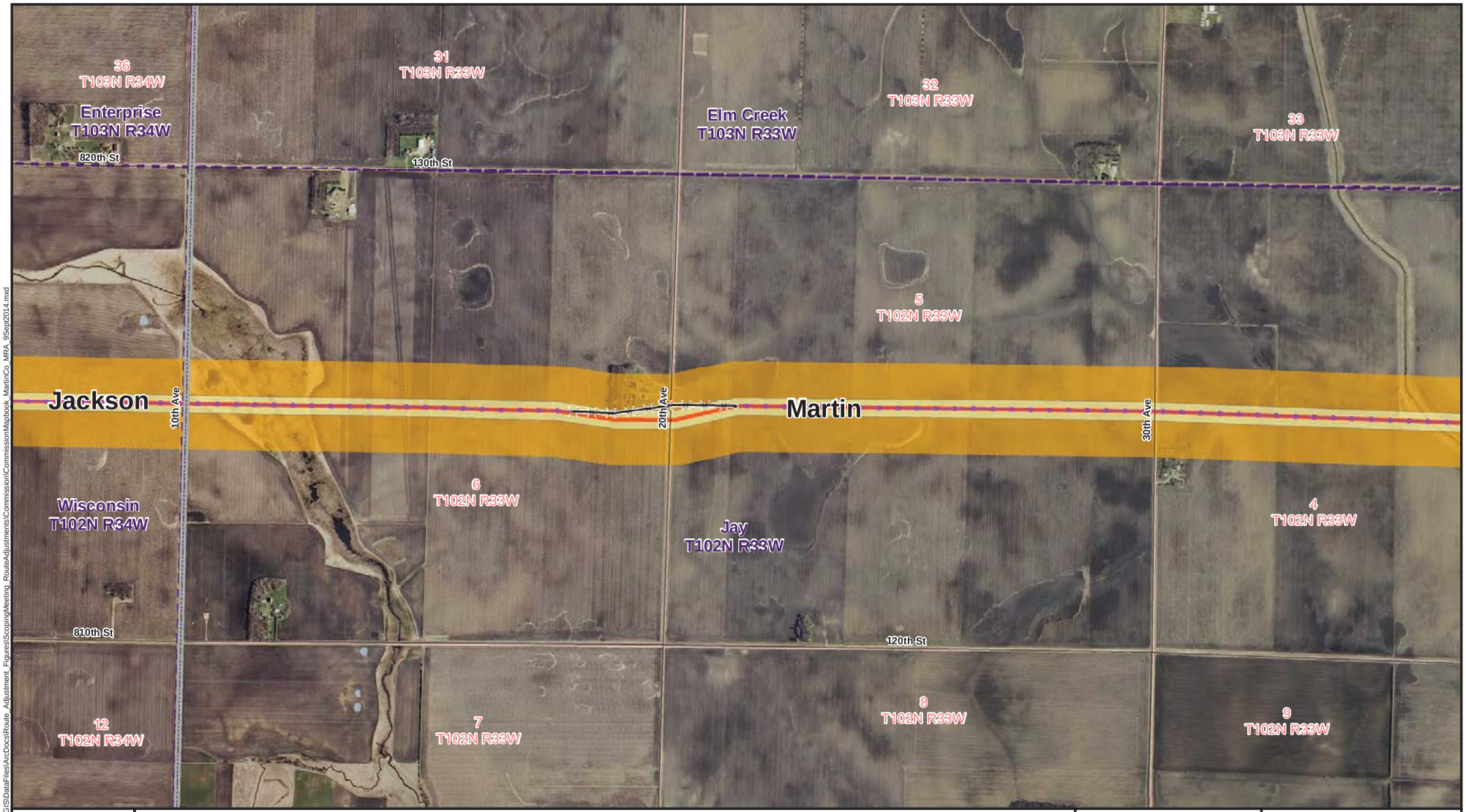


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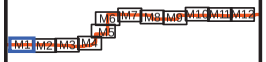


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Source: MN Geo 2011 Aerials; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

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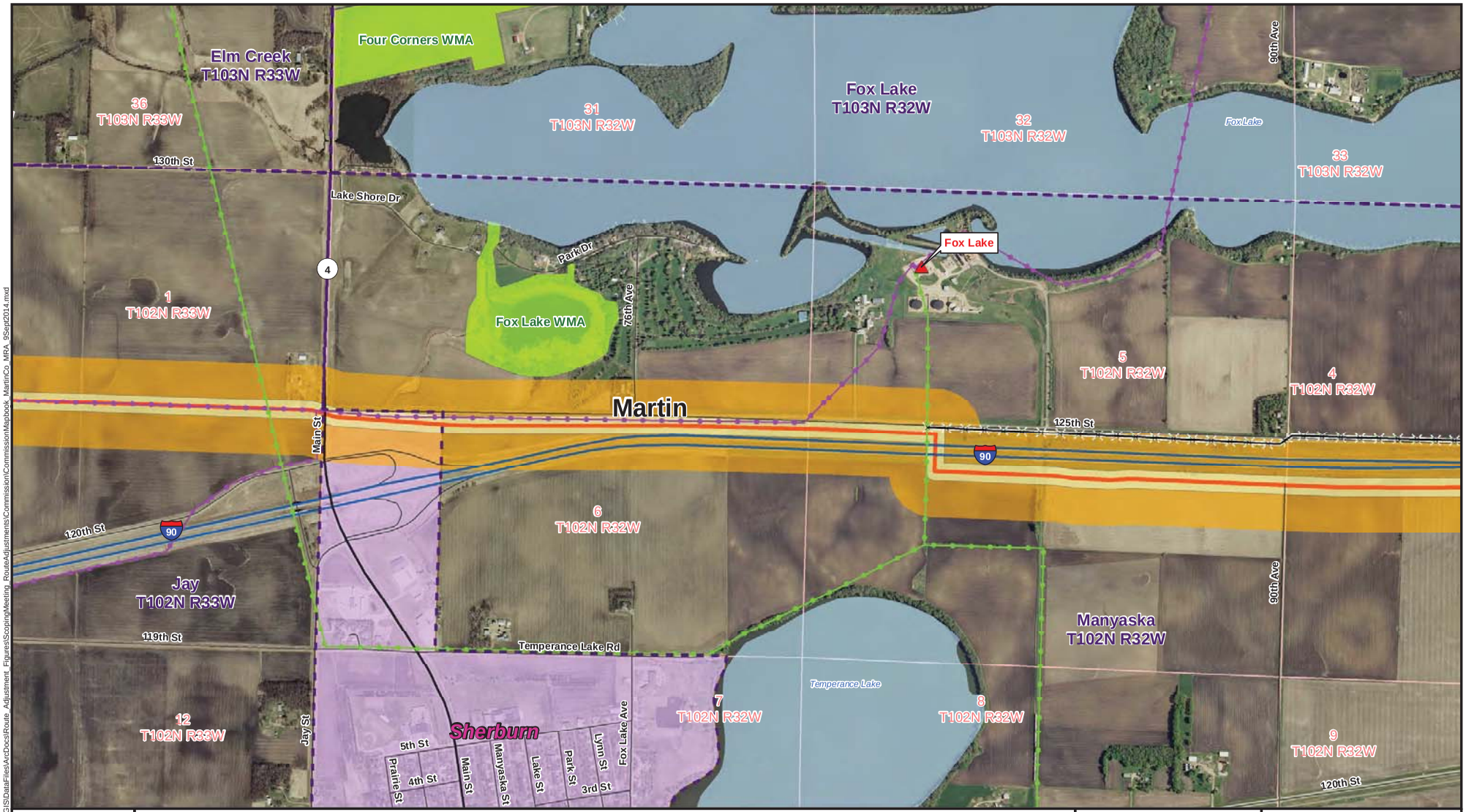


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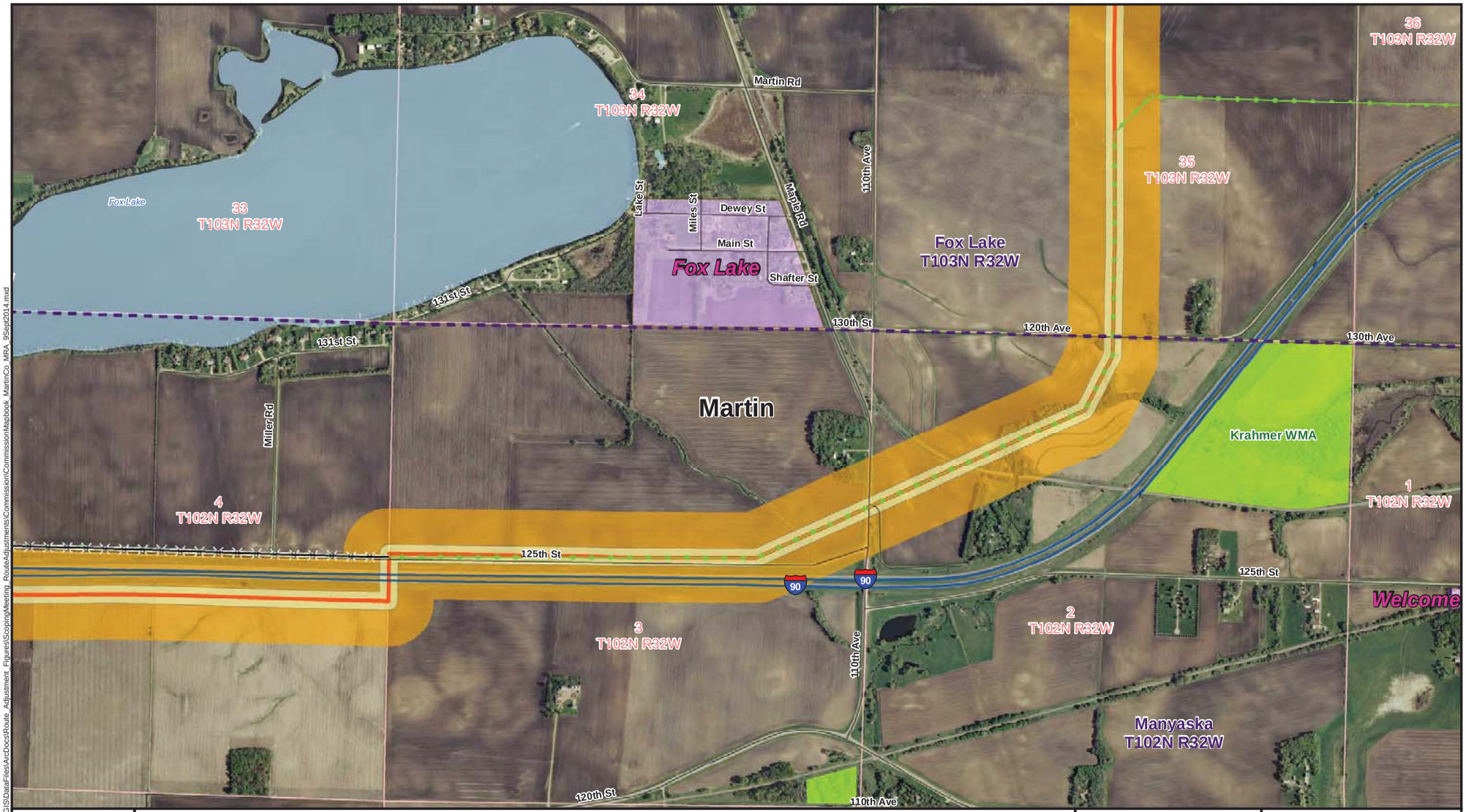


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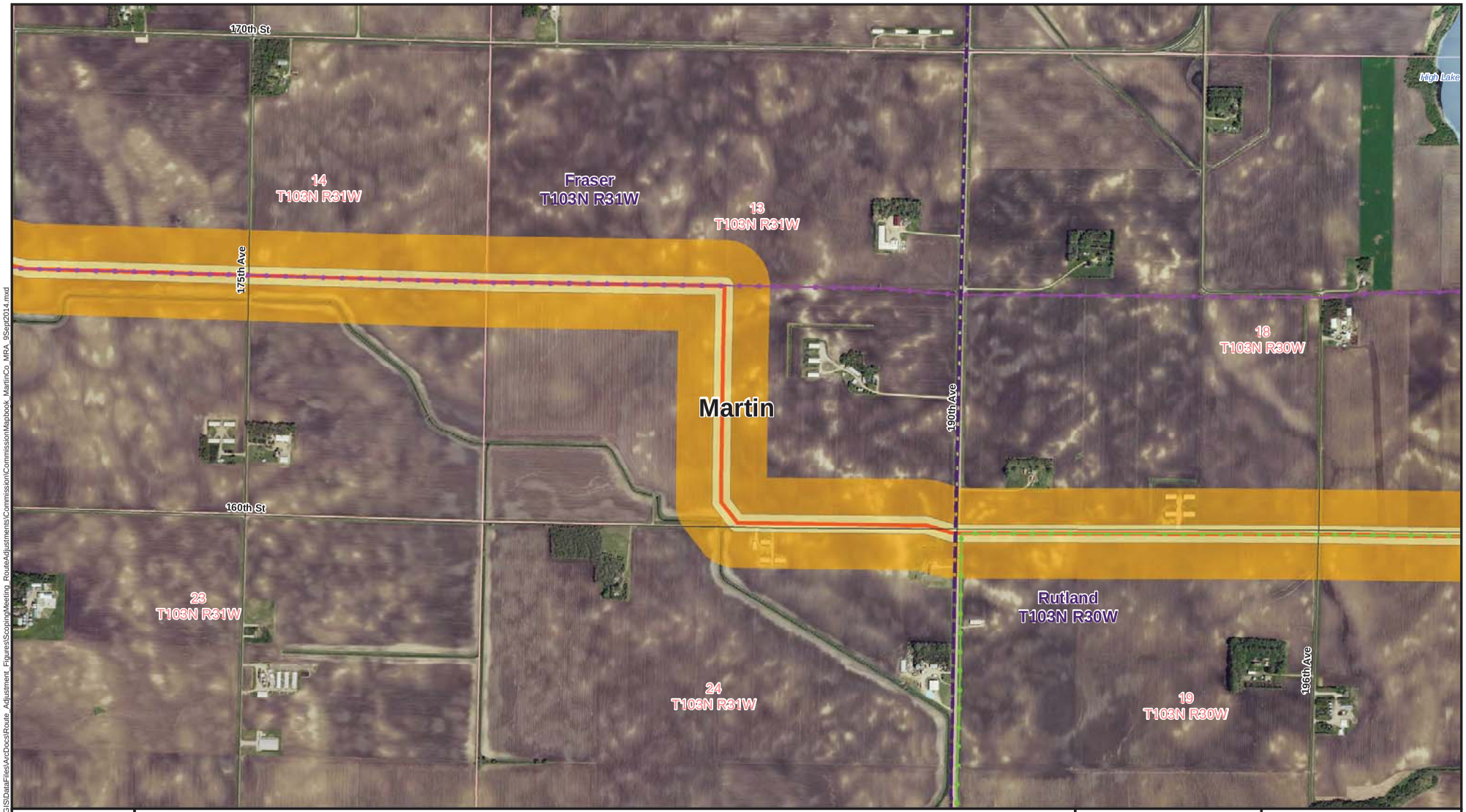
September 19, 2014

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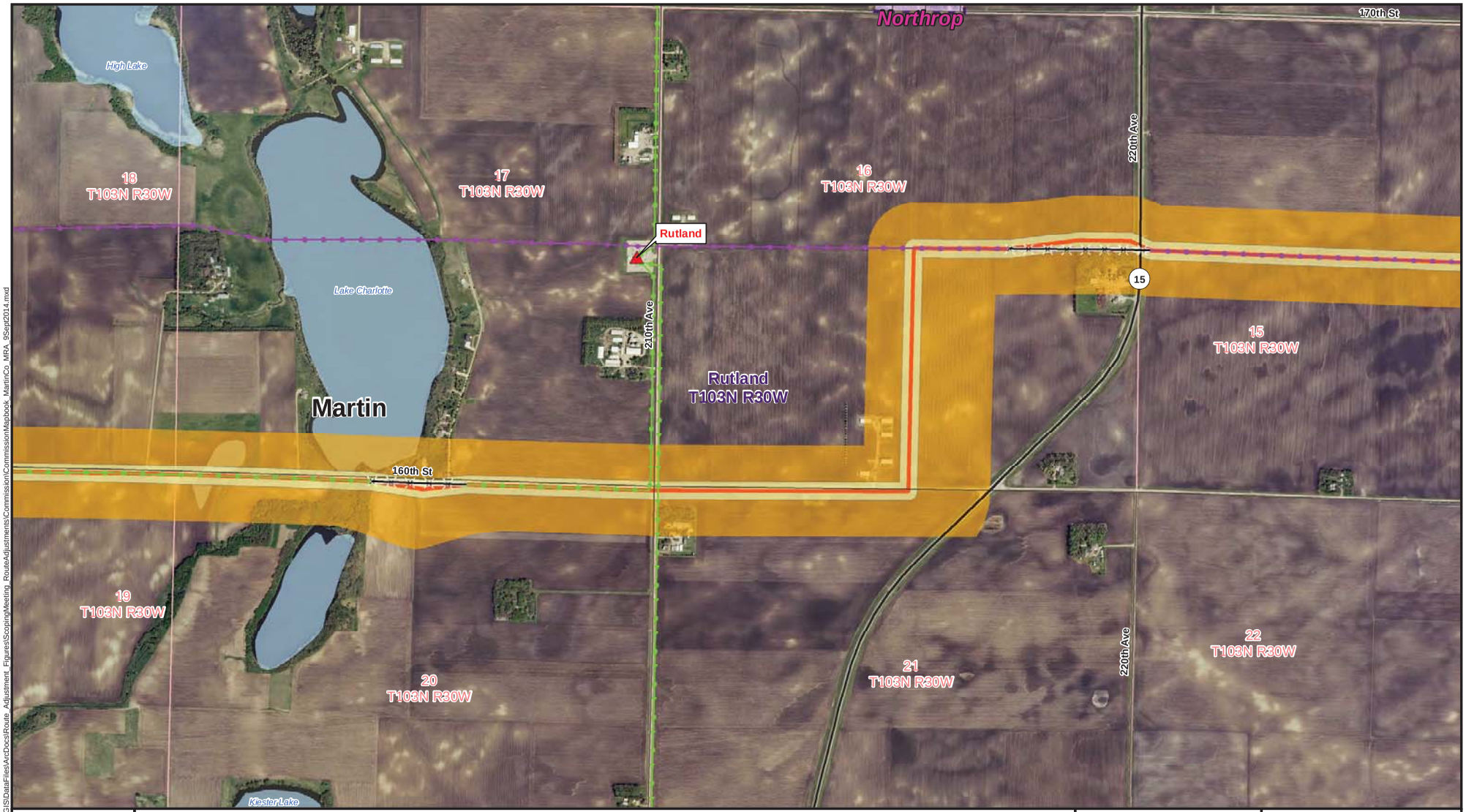


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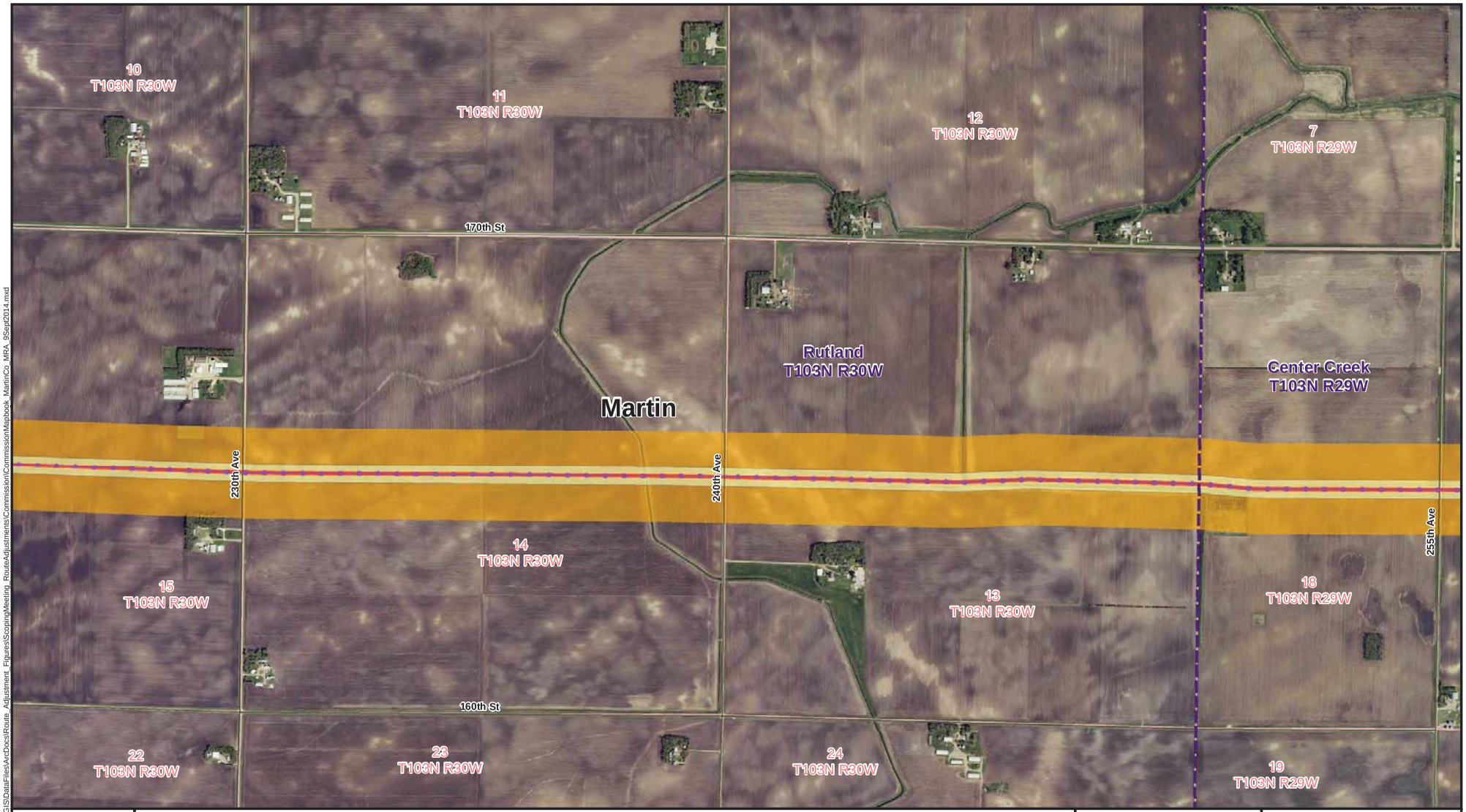
Source: MN Geo 2011 Aerials; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

September 19, 2014




NORTH

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Feet

- Proposed Substation/Expansion
- Existing Substation Area
- Substation to be Removed
- Modified Route A- Alignment
- Modified Route A
- Project ROW
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- Existing 345 kV Lines
- Line to be Removed
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- Township Sections
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- State Boundary
- City
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- WPA
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Martin County


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ITC Midwest
Minnesota to Iowa
345 kV Transmission Project

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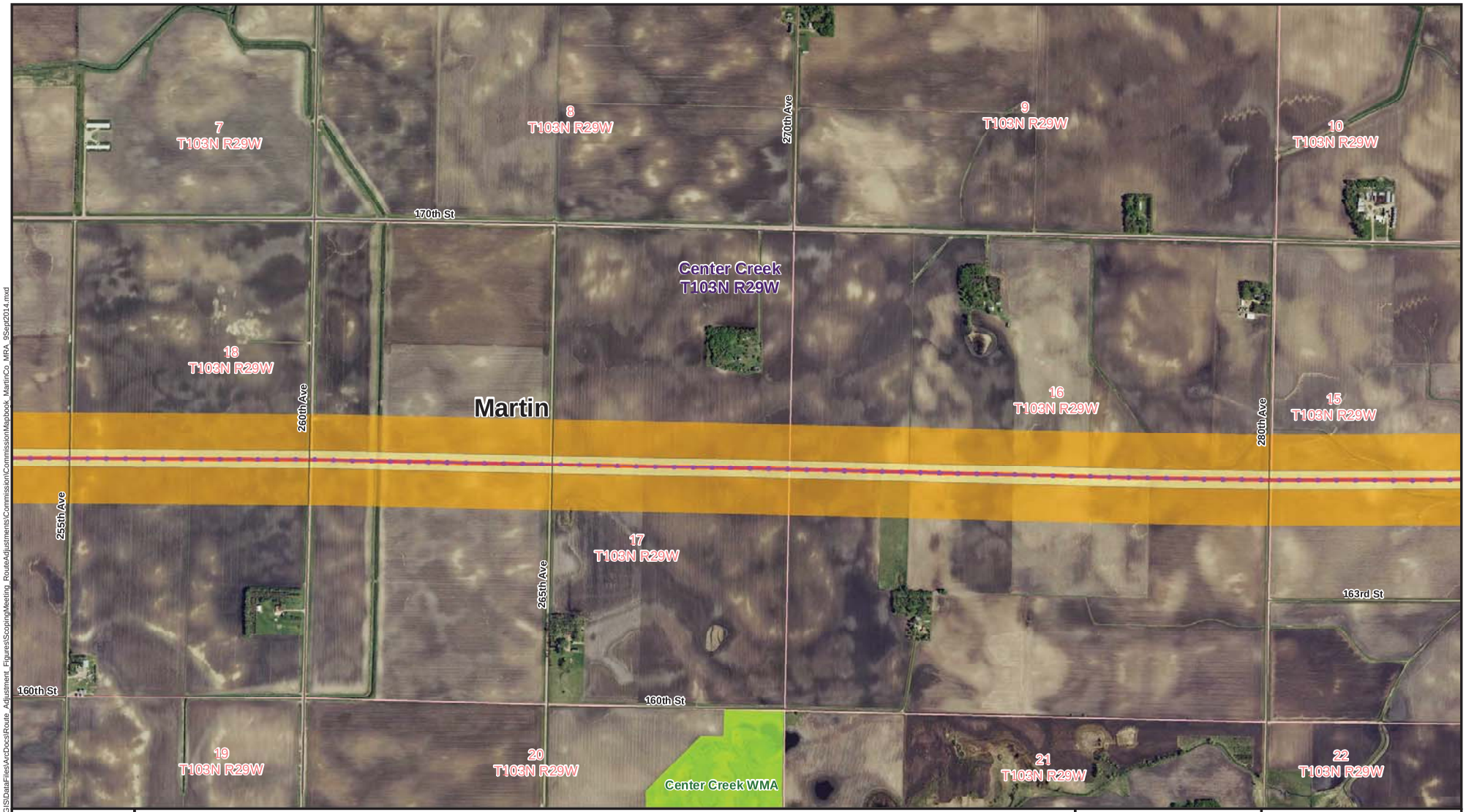
Source: MN Geo 2011 Aerials; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

September 19, 2014

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Martin County

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Minnesota to Iowa
345 kV Transmission Project

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Sheet 11 of 12

Source: MN Geo 2011 Aerials; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

September 19, 2014

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Martin County

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ITC Midwest
Minnesota to Iowa
345 kV Transmission Project

Modified Route A
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Sheet 12 of 12

Source: MN Geo 2011 Aerials; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

September 19, 2014

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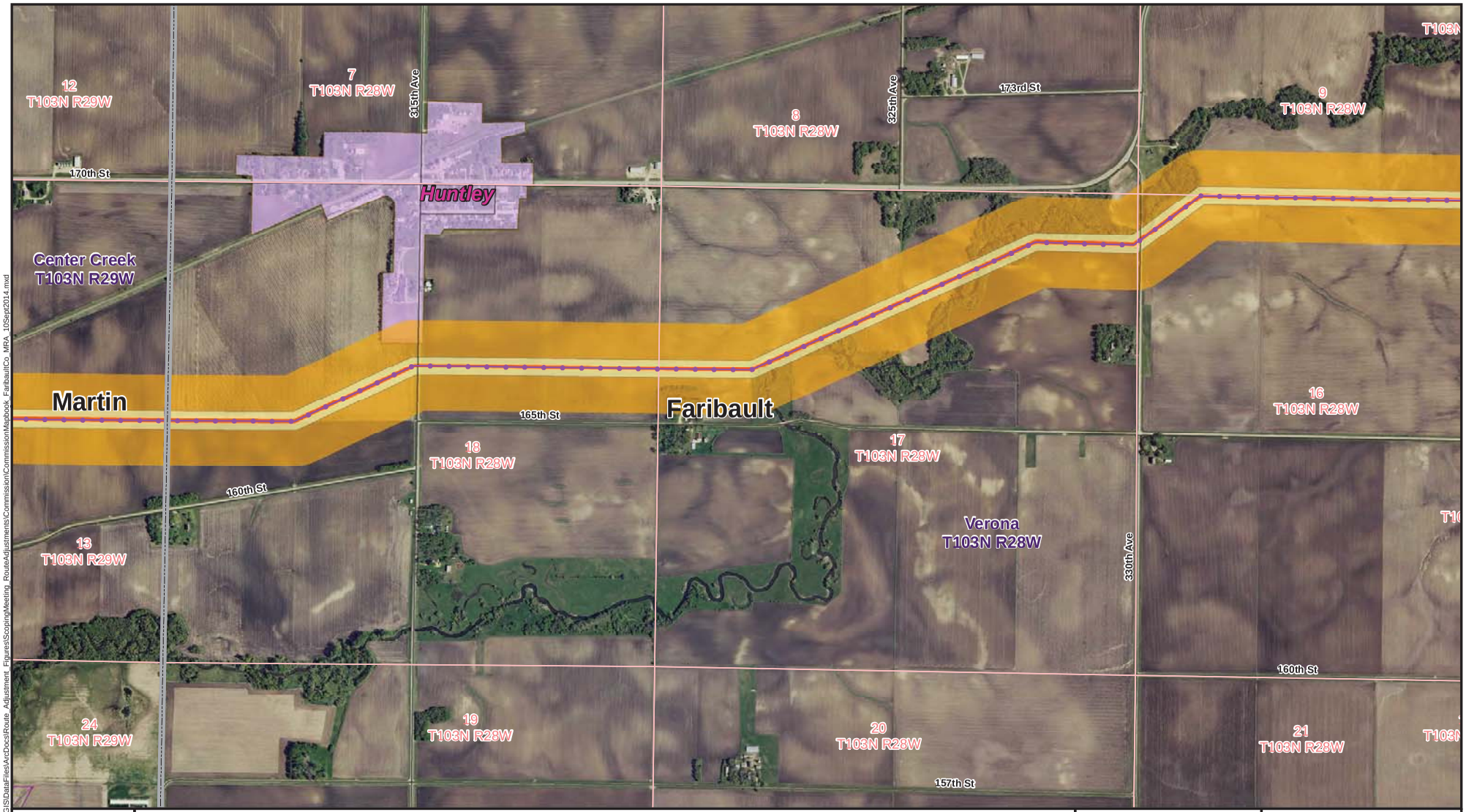


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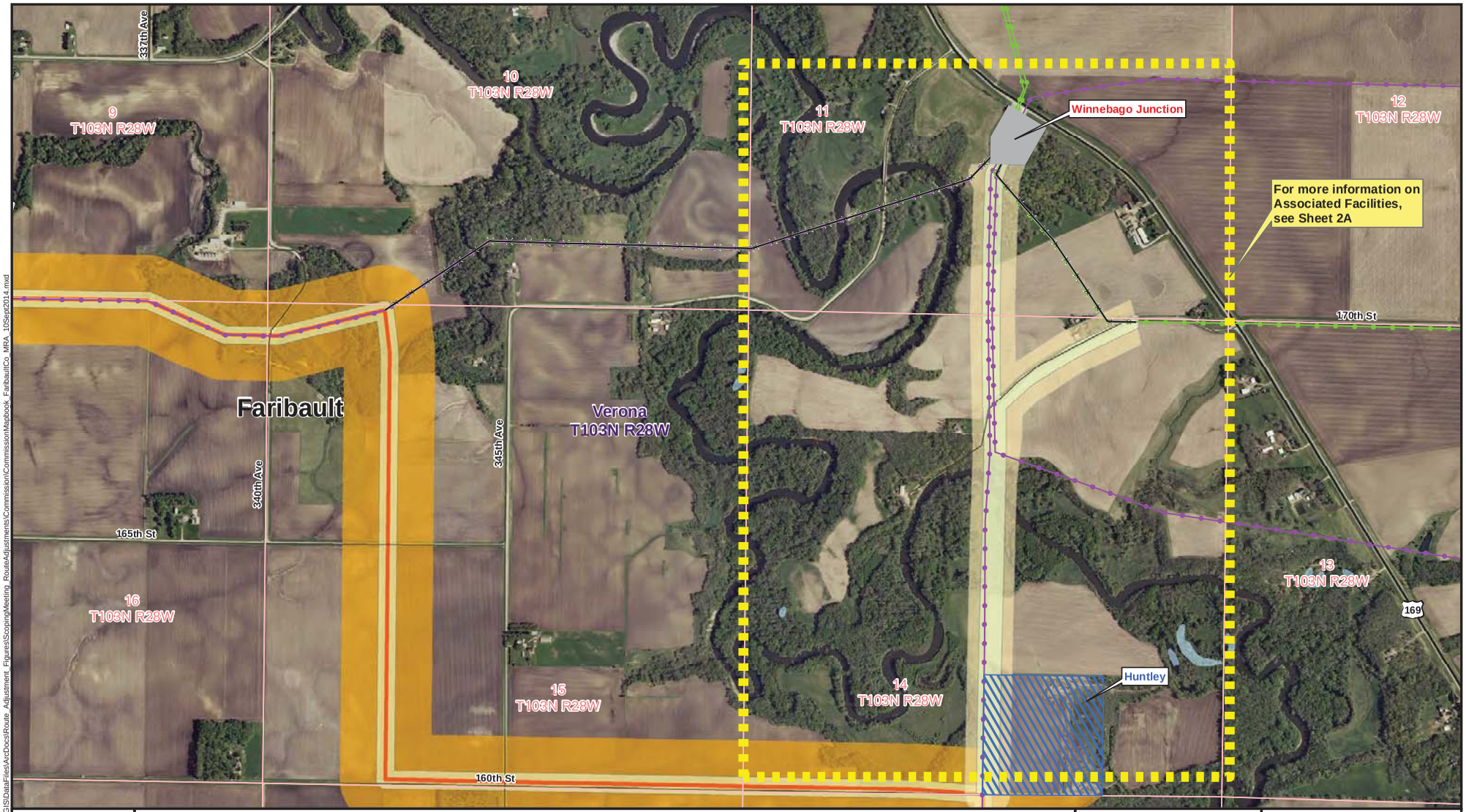
Source: MN Geo 2011 Aerials; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

September 19, 2014

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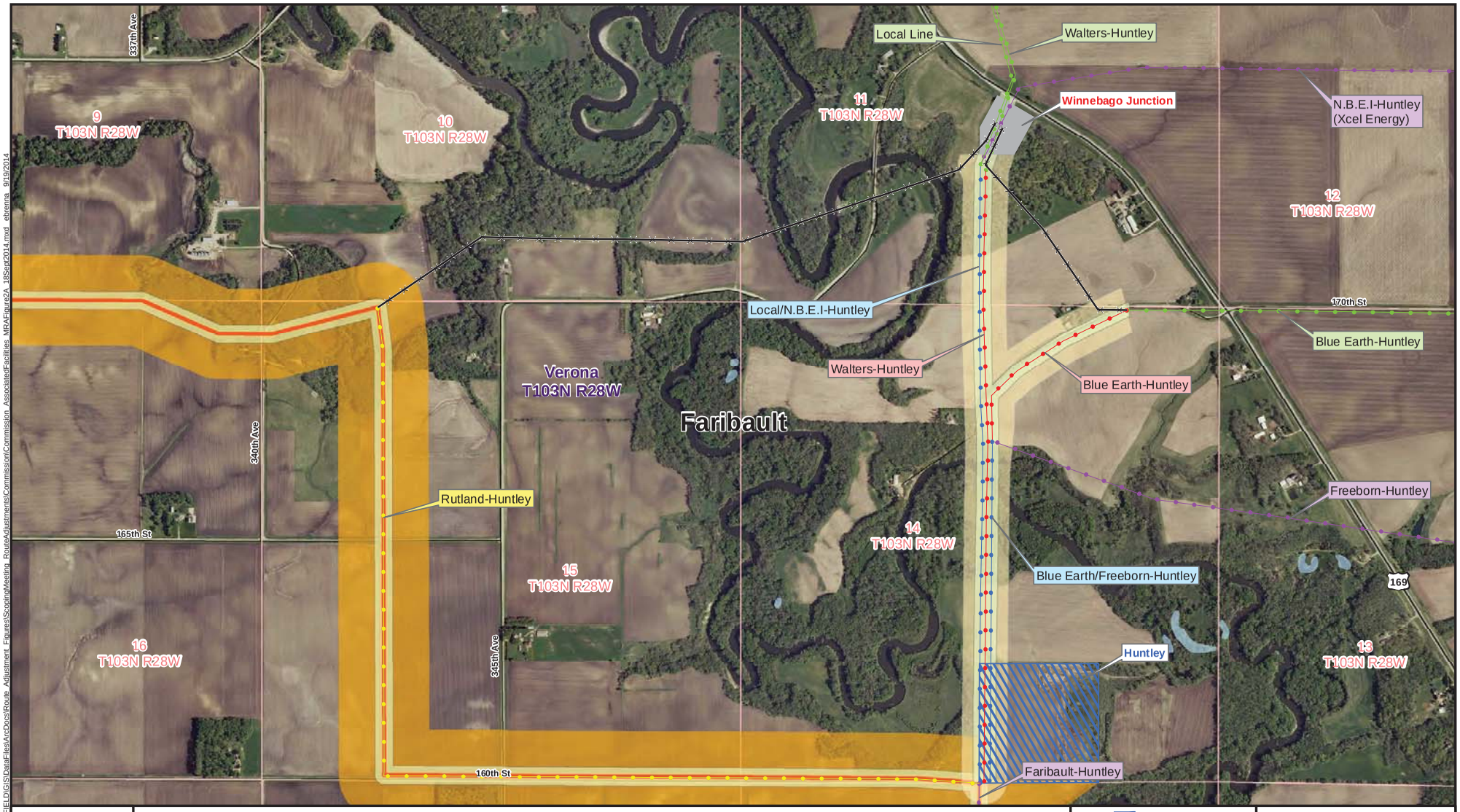
September 19, 2014

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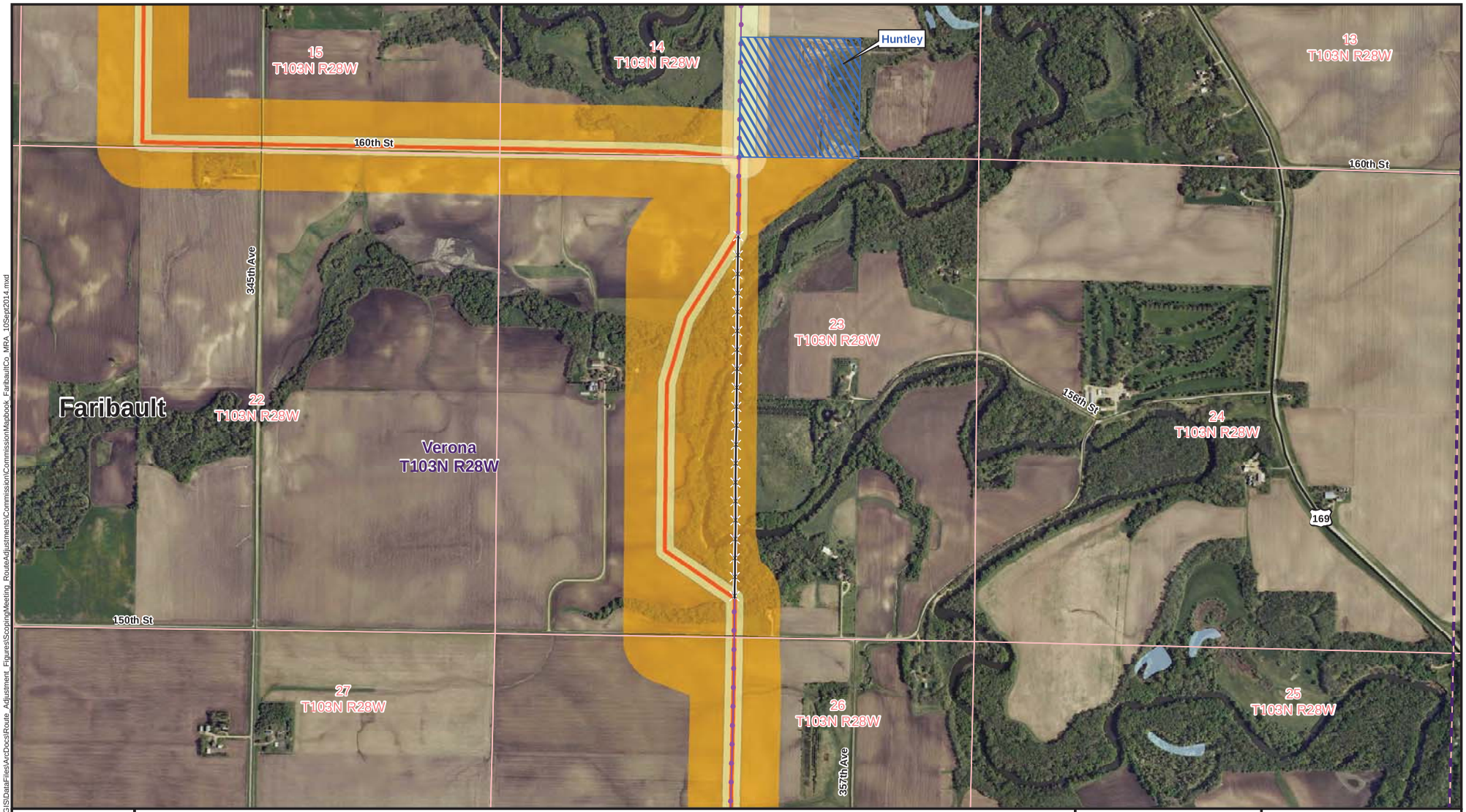
September 19, 2014

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Faribault County

Map Index

ITC Midwest
Minnesota to Iowa
345 kV Transmission Project

Modified Route A
Faribault County
Sheet 3 of 12

Source: MN Geo 2011 Aerials; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

September 19, 2014

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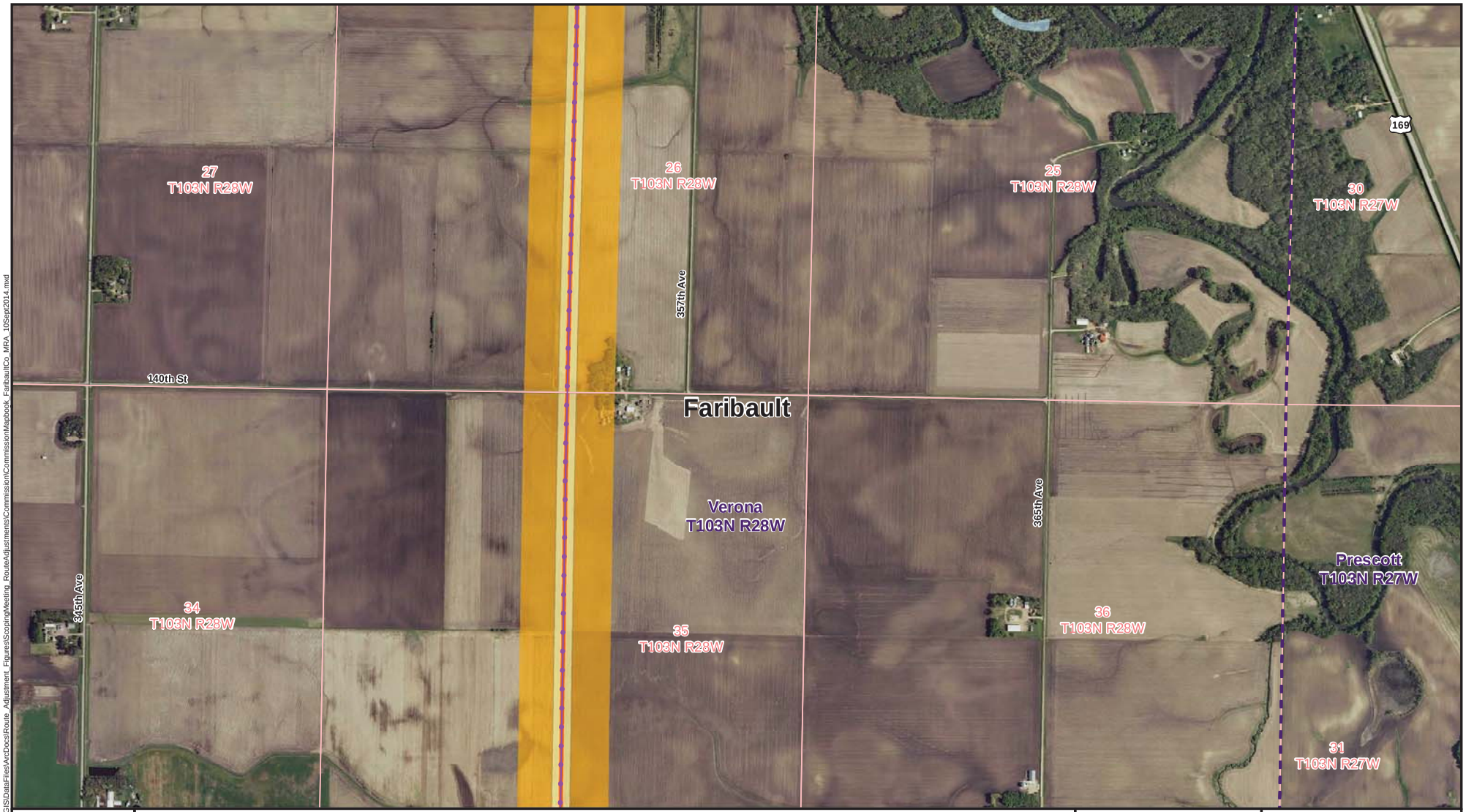


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Faribault County

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ITC Midwest
Minnesota to Iowa
345 kV Transmission Project

Modified Route A
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Sheet 4 of 12

Source: MN Geo 2011 Aerials; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

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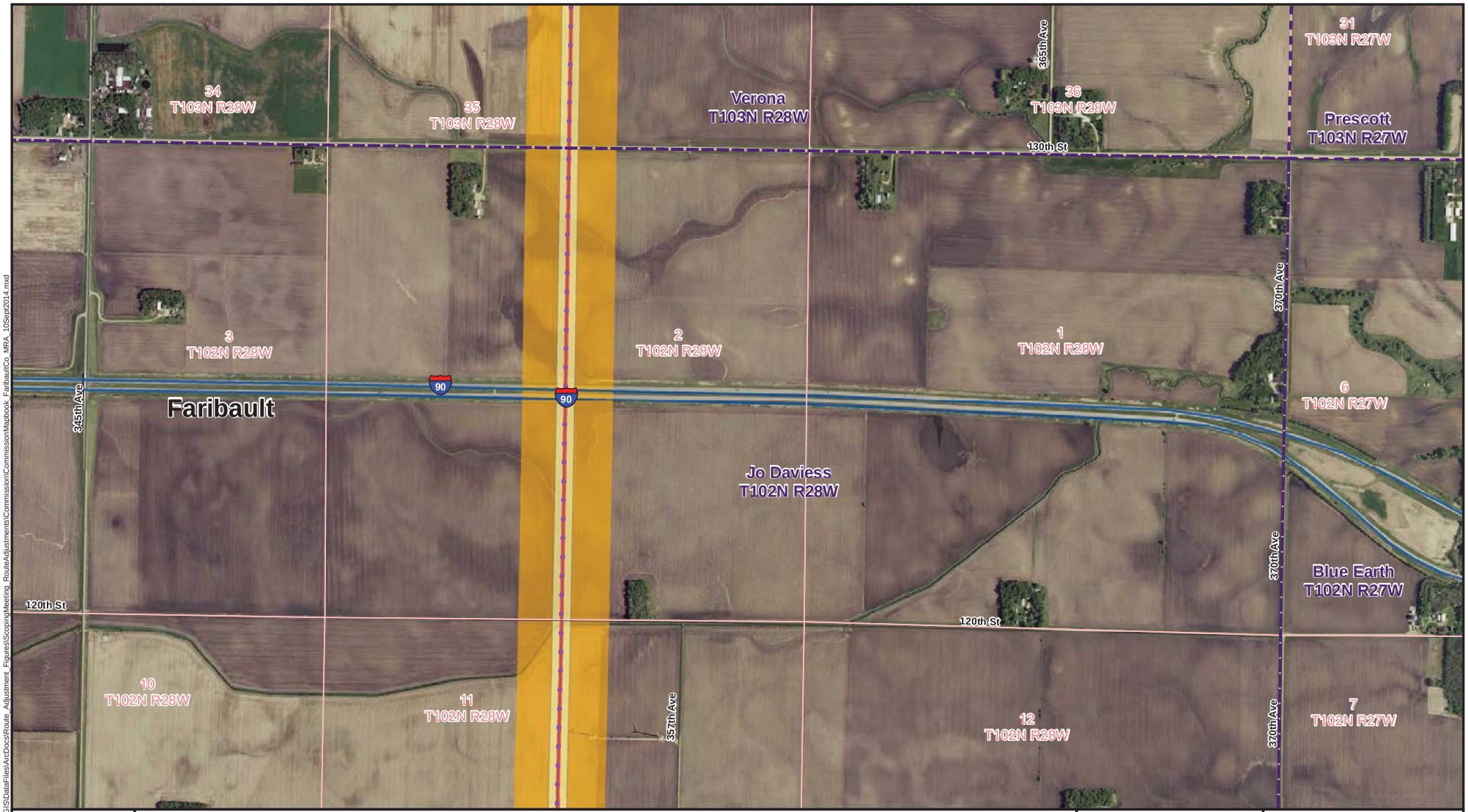


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Faribault County

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ITC Midwest
Minnesota to Iowa
345 kV Transmission Project

Modified Route A
Faribault County
Sheet 5 of 12

Source: MN Geo 2011 Aerials; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

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ITC Midwest
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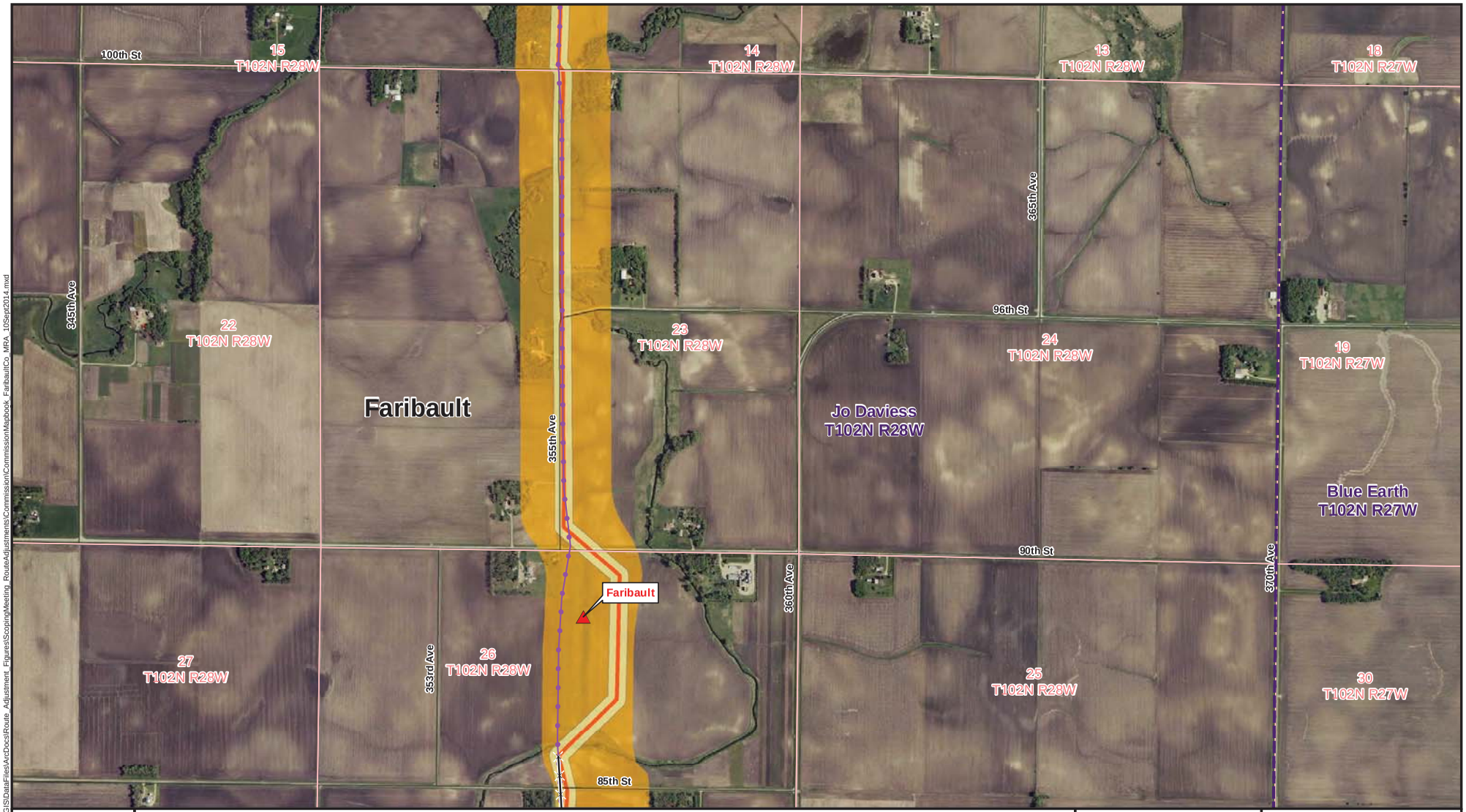


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Faribault County

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ITC Midwest
Minnesota to Iowa
345 kV Transmission Project

Modified Route A
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Sheet 8 of 12

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Faribault County

Map Index

ITC Midwest
Minnesota to Iowa
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Modified Route A
Faribault County
Sheet 11 of 12

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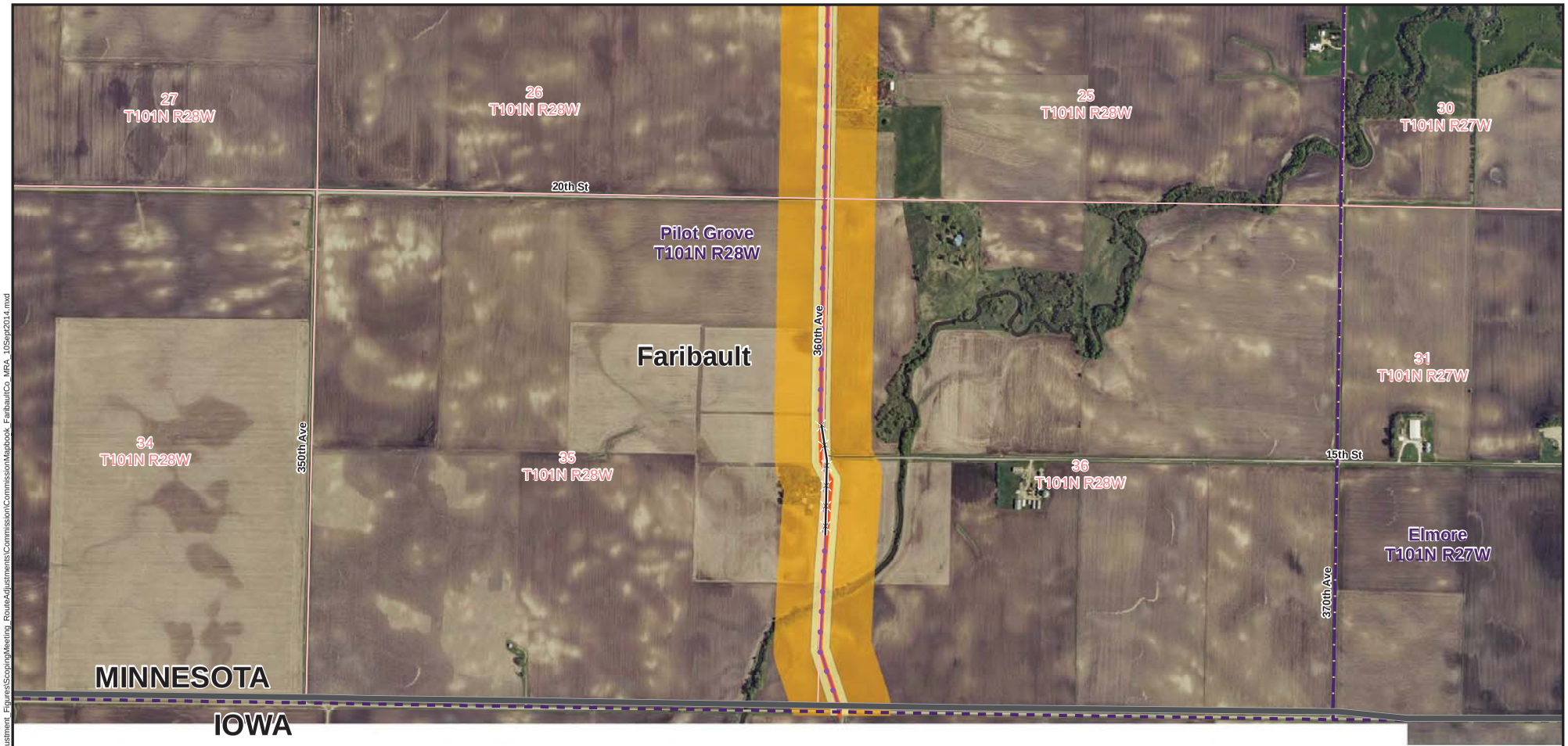


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Faribault County

Map Index

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Faribault County
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Source: MN Geo 2011 Aerials; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

September 19, 2014

# MINNESOTA PUBLIC UTILITIES COMMISSION
# COMPLAINT HANDLING PROCEDURES FOR
# HIGH-VOLTAGE TRANSMISSION LINES

## A. Purpose

To establish a uniform and timely method of reporting complaints received by the permittee concerning permit conditions for site preparation, construction, cleanup and restoration, operation, and resolution of such complaints.

## B. Scope

This document describes complaint reporting procedures and frequency.

## C. Applicability

The procedures shall be used for all complaints received by the permittee and all complaints received by the Minnesota Public Utilities Commission (Commission) under Minn. R. 7829.1500 or Minn. R. 7829.1700 relevant to this permit.

## D. Definitions

**Complaint:** A verbal or written statement presented to the permittees by a person expressing dissatisfaction or concern regarding site preparation, cleanup or restoration or other route and associated facilities permit conditions. Complaints do not include requests, inquiries, questions or general comments.

**Substantial Complaint:** A written complaint alleging a violation of a specific permit condition that, if substantiated, could result in permit modification or suspension pursuant to the applicable regulations.

**Unresolved Complaint:** A complaint which, despite the good faith efforts of the permittee and a person, remains to both or one of the parties unresolved or unsatisfactorily resolved.

**Person:** An individual, partnership, joint venture, private or public corporation, association, firm, public service company, cooperative, political subdivision, municipal corporation, government agency, public utility district, or any other entity, public or private, however organized.

## E. Complaint Documentation and Processing

1. The permittee shall designate an individual to summarize complaints for the Commission. This person's name, phone number and email address shall accompany all complaint submittals.

2. A person presenting the complaint should to the extent possible, include the following information in their communications:

    a. name, address, phone number, and email address;
    b. date of complaint;
    c. tract or parcel number; and
    d. whether the complaint relates to a permit matter or a compliance issue.

3. The permittee shall document all complaints by maintaining a record of all applicable information concerning the complaint, including the following:

    a. docket number and project name;
    b. name of complainant, address, phone number and email address;
    c. precise description of property or parcel number;
    d. name of permittee representative receiving complaint and date of receipt;
    e. nature of complaint and the applicable permit condition(s);
    f. activities undertaken to resolve the complaint; and
    g. final disposition of the complaint.

## F. Reporting Requirements

The permittee shall commence complaint reporting at the beginning of project construction and continue through the term of the permit. The permittee shall report all complaints to the Commission according to the following schedule:

**Immediate Reports:** All substantial complaints shall be reported to the Commission the same day received, or on the following working day for complaints received after working hours. Such reports are to be directed to the Commission's Consumer Affairs Office at 1-800-657-3782 (voice messages are acceptable) or consumer.puc@state.mn.us. For e-mail reporting, the email subject line should read "PUC EFP Complaint" and include the appropriate project docket number.

**Monthly Reports:** By the 15th of each month, a summary of all complaints, including substantial complaints received or resolved during the preceding month, shall be filed to Dr. Burl W. Haar, Executive Secretary, Public Utilities Commission, using the eDockets system. The eDockets system is located at: https://www.edockets.state.mn.us/EFiling/home.jsp

If no complaints were received during the preceding month, the permittee shall file a summary indicating that no complaints were received.

## G. Complaints Received by the Commission

Complaints received directly by the Commission from aggrieved persons regarding site preparation, construction, cleanup, restoration, operation and maintenance shall be promptly sent to the permittee.

## H. Commission Process for Unresolved Complaints

Commission staff shall perform an initial evaluation of unresolved complaints submitted to the Commission. Complaints raising substantial permit issues shall be processed and resolved by the Commission. Staff shall notify the permittee and appropriate persons if it determines that the complaint is a substantial complaint. With respect to such complaints, each party shall submit a written summary of its position to the Commission no later than ten (10) days after receipt of the staff notification. The complaint will be presented to the Commission for a decision as soon as practicable.

## I. Permittee Contacts for Complaints and Complaint Reporting

Complaints may filed by mail or email to:

ITC Midwest LLC
Lori Broghammer
Area Manager, Local Government and Community Affairs
20789 780th Avenue
Albert Lea, MN 56007
Phone: 507-377-6000, Ext. 2002
lbroghammer@itctransco.com

This information shall be maintained current by informing the Commission of any changes by eFiling, as they become effective.

# MINNESOTA PUBLIC UTILITIES COMMISSION
# COMPLIANCE FILING PROCEDURE FOR
# PERMITTED ENERGY FACILITIES

## A. Purpose

To establish a uniform and timely method of submitting information required by the Commission energy facility permits.

## B. Scope and Applicability

This procedure encompasses all compliance filings required by permit.

## C. Definitions

**Compliance Filing:** A filing of information to the Commission, where the information is required by a Commission site or route permit.

## D. Responsibilities

1. The permittee shall eFile all compliance filings with Dr. Burl W. Haar, Executive Secretary, Public Utilities Commission, through the eDockets system. The eDockets system is located at: https://www.edockets.state.mn.us/EFiling/home.jsp

General instructions are provided on the eDockets website. Permittees must register on the website to eFile documents.

2. All filings must have a cover sheet that includes:

    a. Date
    b. Name of submitter/permittee
    c. Type of permit (site or route)
    d. Project location
    e. Project docket number
    f. Permit section under which the filing is made
    g. Short description of the filing

3. Filings that are graphic intensive (e.g., maps, engineered drawings) must, in addition to being eFiled, be submitted as paper copies and on CD. Paper copies and CDs should be sent to: 1) Dr. Burl W. Haar, Executive Secretary, Minnesota Public Utilities Commission, 121 7th Place East, Suite 350, St. Paul, MN 55101-2147, and 2) Department of Commerce, Energy Environmental Review and Analysis, 85 7th Place East, Suite 500, St. Paul, MN 55101-2198.

The Commission may request a paper copy of any eFiled document.

**PERMIT COMPLIANCE FILINGS**[1]

PERMITTEE: **ITC Midwest LLC**
PERMIT TYPE: **High-Voltage Transmission Line Route Permit**
PROJECT LOCATION: **Jackson, Martin, and Faribault Counties**
PUC DOCKET NUMBER: **ET-6675/TL-12-1337**

| Filing Number | Permit Section | Description of Compliance Filing | Due Date |
|---|---|---|---|
| | 5.1 | Notification of Landowners | First contact after issuance of route permit. |
| | 5.2.1 | Field Representative | 14 days prior to commencing construction. |
| | 5.2.11 | Restoration | 60 days after completion of all construction activities. |
| | 5.2.13 | State Historic Preservation Office Consultation | After completion of consultation. |
| | 5.4.2 | Other Permits and Regulations | Upon request of the Commission. |
| | 6.1 | Construction Environmental Control Plan (CECP) | 30 days prior to submitting the plan and profile for any segment of the Project. |
| | 6.2 | Agricultural Impact Mitigation Plan distribution | First contact after issuance of route permit in accordance with Section 4.1. |
| | 6.3 | Vegetation Management Plan | Submitted with CECP in accordance with Section 5.1. |
| | 6.4 | Avian Mitigation Plan | Submitted with CECP in accordance with Section 5.1. |

[1] This compilation of permit compliance filings is provided for the convenience of the permittee and the Commission. It is not a substitute for the permit; the language of the permit controls.

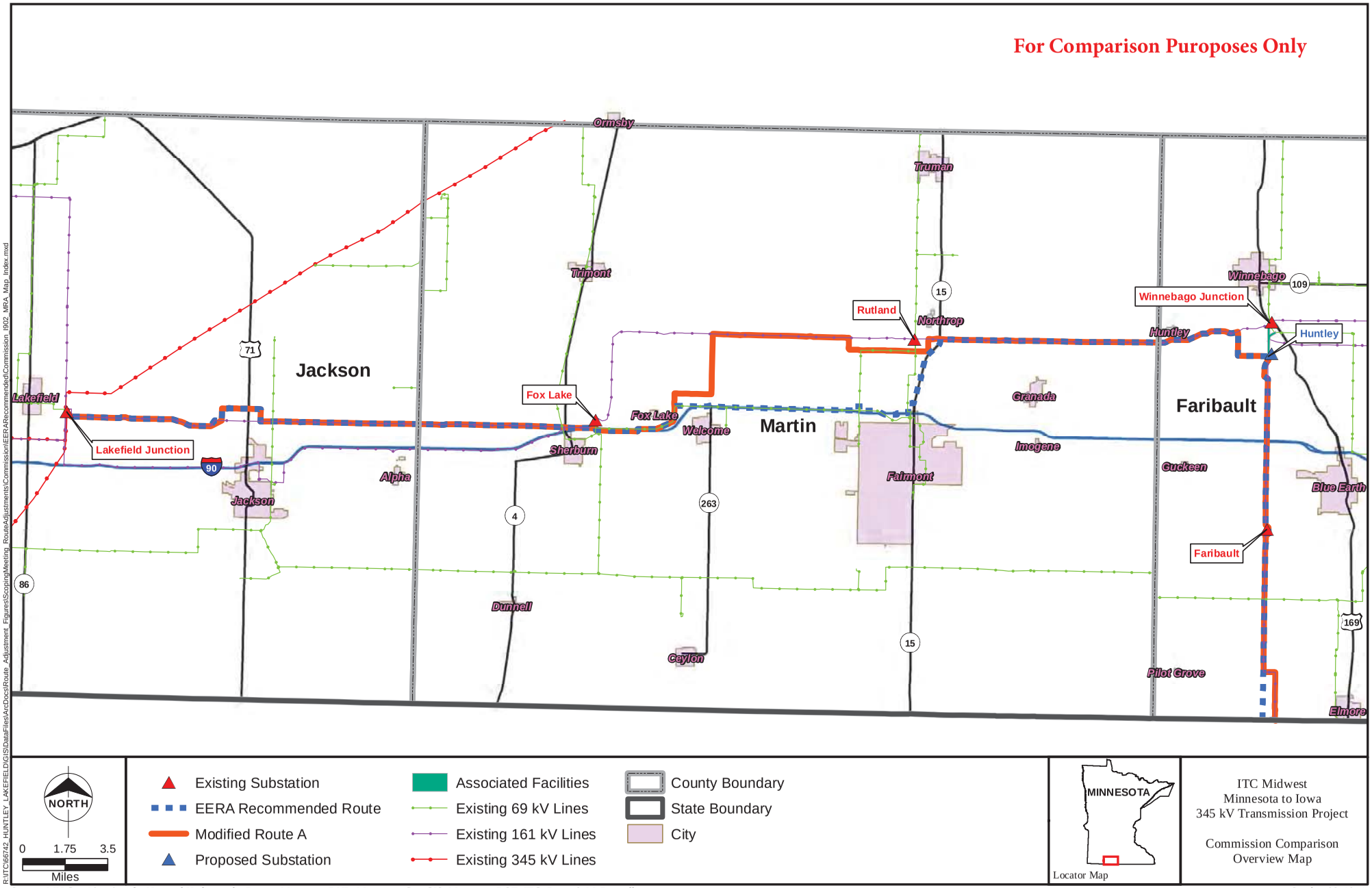
| Filing Number | Permit Section | Description of Compliance Filing | Due Date |
|---|---|---|---|
| | 6.5 | Des Moines River Crossing | Upon completion of consultation with DNR and as part of the plan and profile in accordance with Section 8.1. |
| | 8.0 | Complaint Procedures | Prior to the start of construction. |
| | 9.1 | Plan and Profile | 30 days before right-of-way preparation. |
| | 9.2 | Periodic Status Reports | Monthly |
| | 9.3 | Completion of Construction and In-Service Date | Three days prior to in-service date. |
| | 9.4 | As-Builts | 60 days after completion of construction. |
| | 9.5 | GPS Data | 60 days after completion of construction. |

# Docket No. ET-6675/CN-12-1053 and ET-6675/TL-12-1337

## Attachment 5

## Comparison Maps of Modified Route A and Route Alternative I90-2

**(For Comparison Purposes Only)**


For Comparison Puroposes Only
Ormsby
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Northrop
Winnebago
Winnebago Junction
Huntley
Huntley
Jackson
Fox Lake
Fox Lake
Granada
Faribault
Lakefield
Lakefield Junction
Welcome
Martin
Sherburn
Imogene
Alpha
Fairmont
Guckeen
Blue Earth
Jackson
Faribault
Dunnell
Ceylon
Pilot Grove
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Miles
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State Boundary
City
MINNESOTA
Locator Map
ITC Midwest
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345 kV Transmission Project
Commission Comparison
Overview Map
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October 08, 2014


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Source: MN Geo 2011 Aerials; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

October 08, 2014


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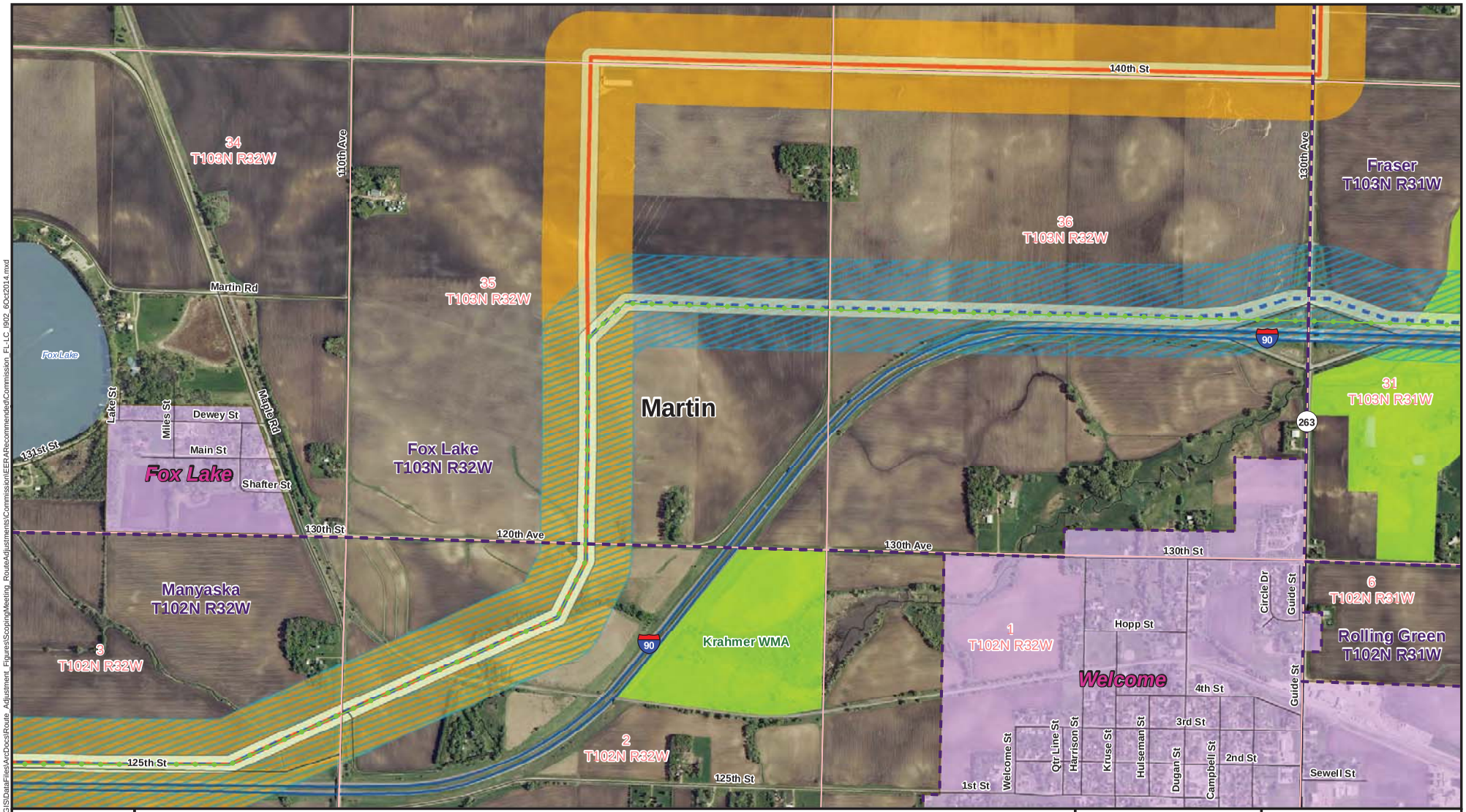
October 08, 2014

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October 08, 2014


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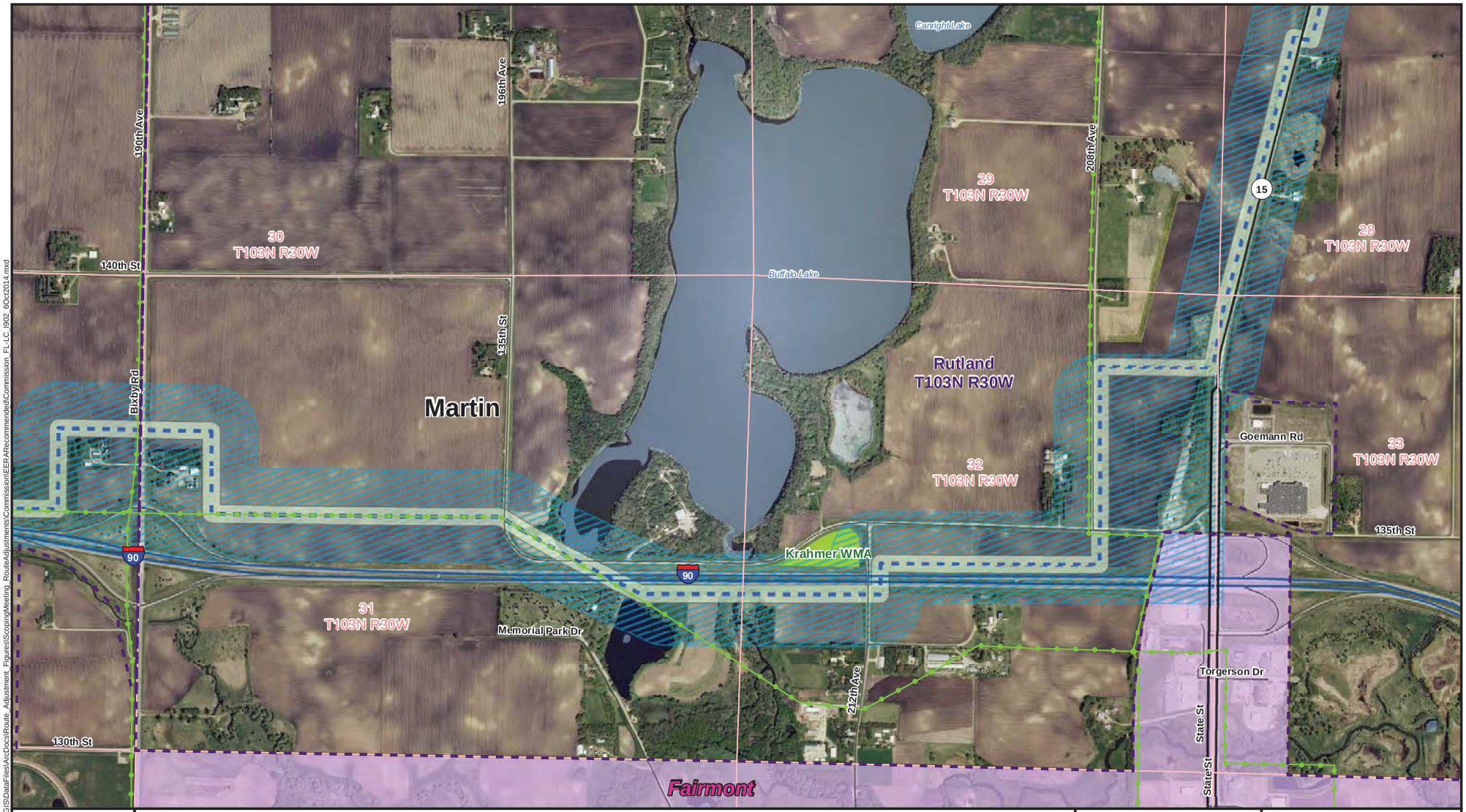


NORTH

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Martin County

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ITC Midwest
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345 kV Transmission Project

Commission Comparison Map
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Source: MN Geo 2011 Aerials; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

October 08, 2014


NORTH

0 500 1,000

Feet

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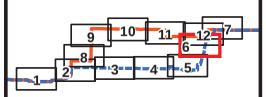
- Existing 345 kV Lines
- Line to be Removed
- Civil Township
- Township Sections
- County Boundary
- State Boundary
- City
- WMA
- WPA
- WRP

Martin County

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ITC Midwest
Minnesota to Iowa
345 kV Transmission Project

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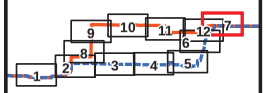
Martin County

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ITC Midwest
Minnesota to Iowa
345 kV Transmission Project

Commission Comparison Map
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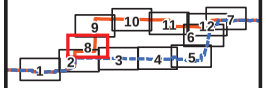
Martin County

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345 kV Transmission Project

Commission Comparison Map
Martin County
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Source: MN Geo 2011 Aerials; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

October 08, 2014


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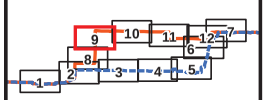
Martin County

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Source: MN Geo 2011 Aerials; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

October 08, 2014


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Martin County


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Minnesota to Iowa
345 kV Transmission Project

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Martin County
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Source: MN Geo 2011 Aerials; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

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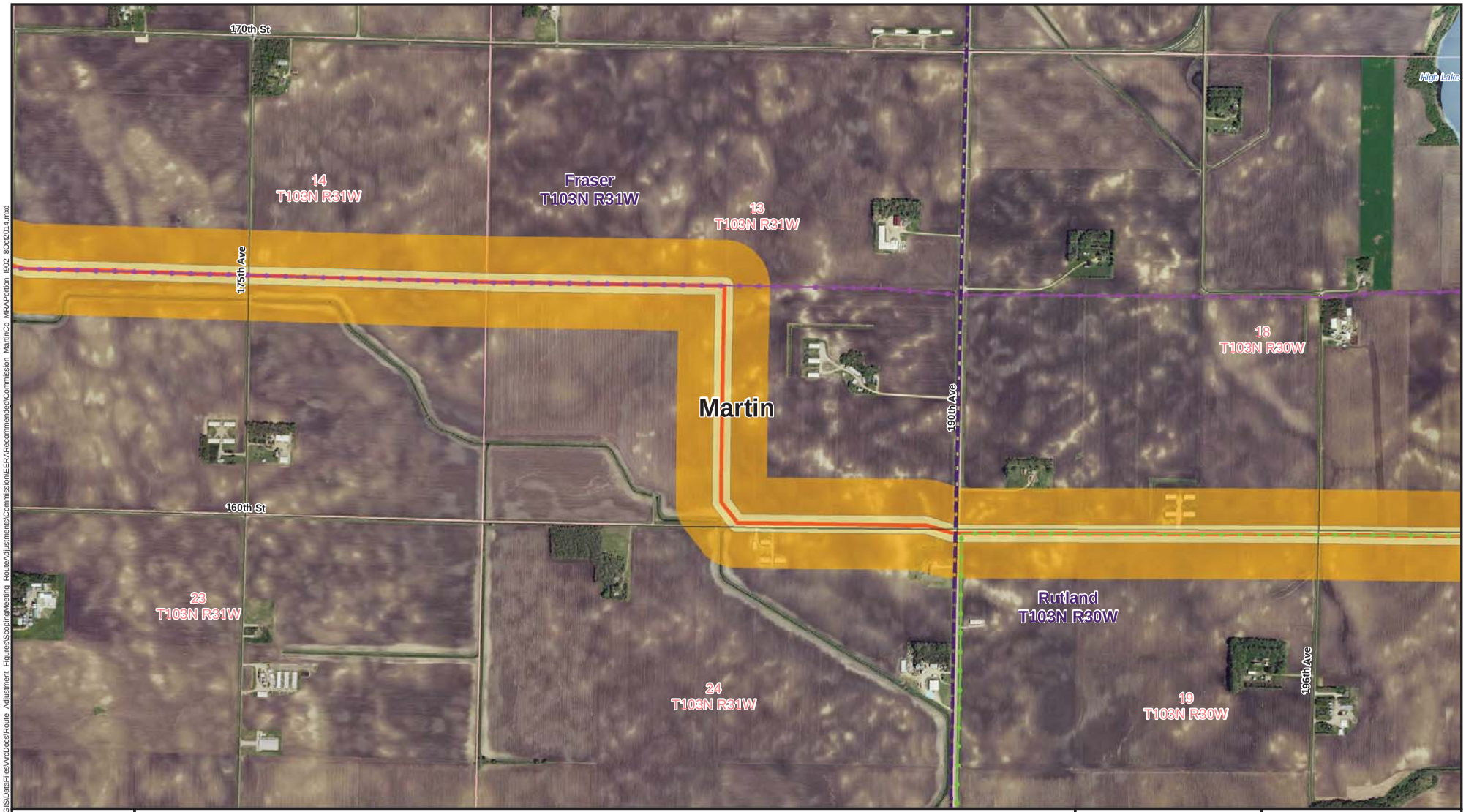


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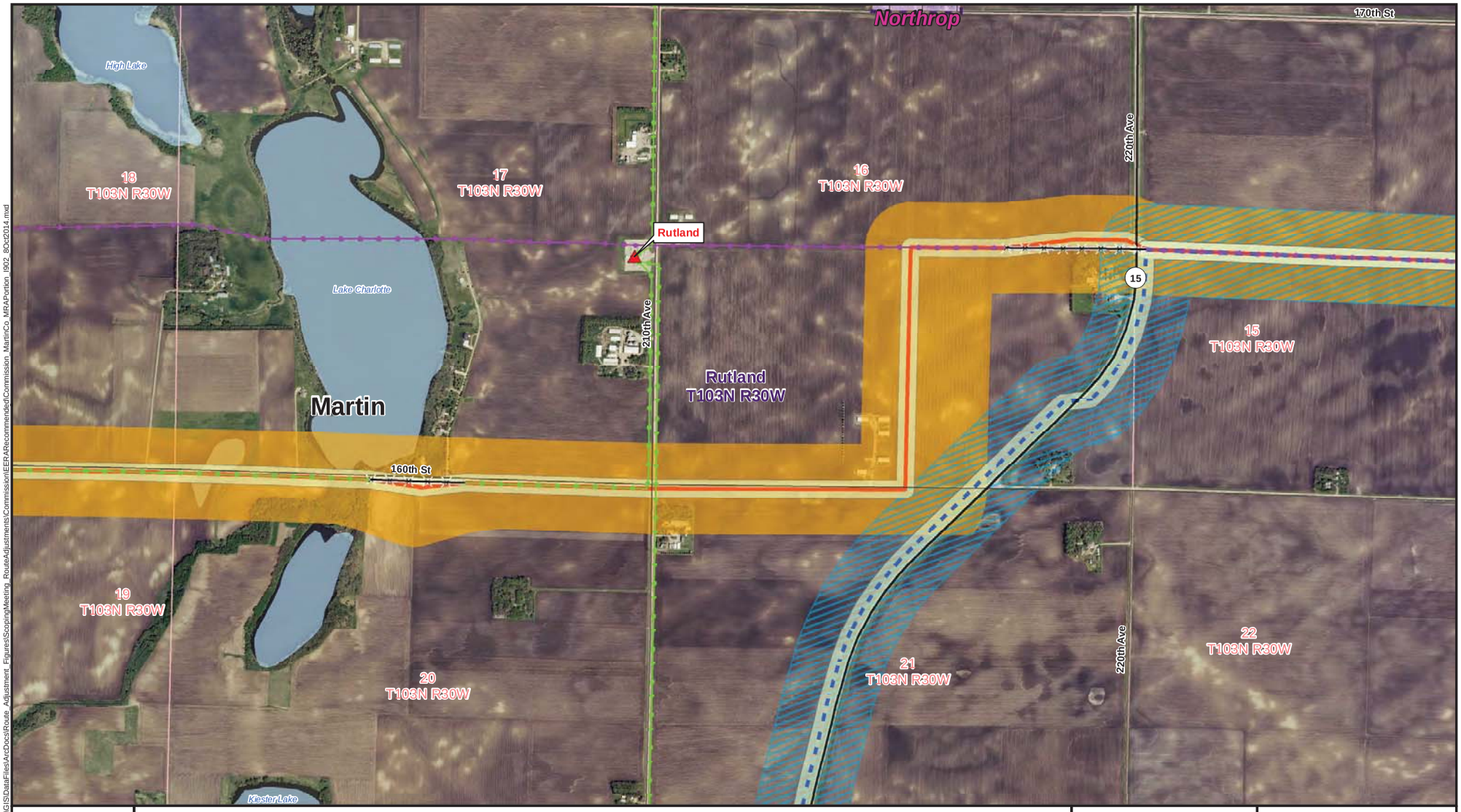


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Faribault County

Locator Map

ITC Midwest
Minnesota to Iowa
345 kV Transmission Project

Commission Comparison Map
Faribault County

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Source: MN Geo 2011 Aerials; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

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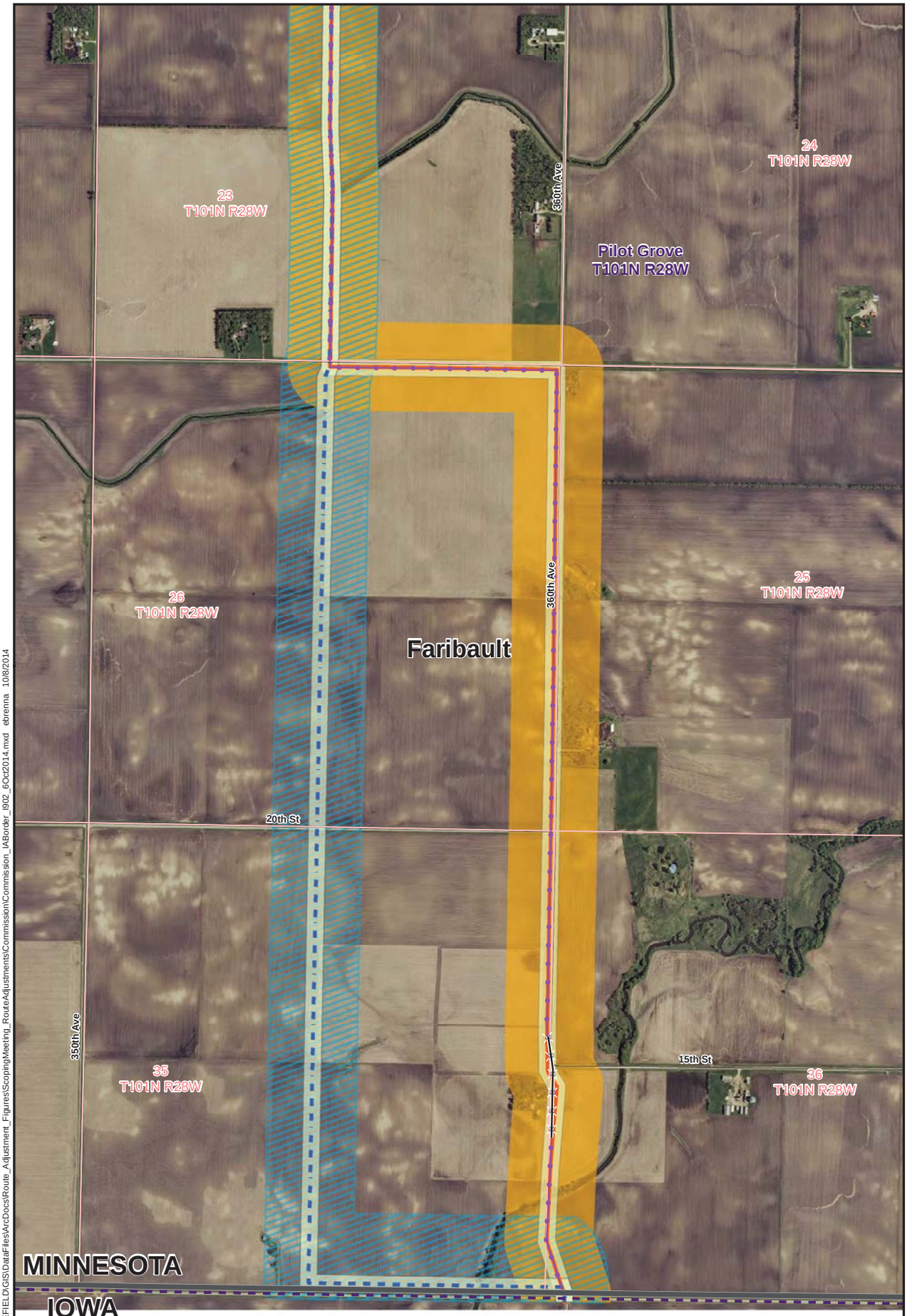


NORTH

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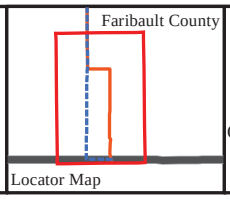


ITC Midwest
Minnesota to Iowa
345 kV Transmission Project

Commission Comparison Map
Faribault County

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Source: MN Geo 2011 Aerials; Minnesota DNR; Minnesota Geo GIS; Minnesota DOT; ITC; Burns & McDonnell.

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