

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Beverly Jones Heydinger
David C. Boyd
Nancy Lange
J. Dennis O'Brien
Betsy Wergin

Chair
Commissioner
Commissioner
Commissioner
Commissioner

In the Matter of the Application of Xcel Energy
for a Route Permit for the Kohlman Lake to
Goose Lake 115 kV Transmission Line Upgrade
Project in Ramsey County

ISSUE DATE: January 21, 2014

DOCKET NO. E-002/TL-12-1151

ORDER ISSUING ROUTE PERMIT

PROCEDURAL HISTORY

On January 17, 2013, Northern States Power Company d/b/a Xcel Energy (Xcel) filed an application for a route permit under Minn. Stat. § 216E.03 to construct approximately 2.8 miles of new 115 kilovolt (kV) transmission line in Ramsey County, a project described in the application as the Kohlman Lake to Goose Lake Transmission Line Rebuild Project (the Project).

On March 15, 2013, the Commission found the route permit application complete and referred the application to the Office of Administrative Hearings to develop the record.

On April 25, 2013, the Department of Natural Resources (DNR) filed comments on the scope of the proposed project, including comments on avoiding and minimizing impacts on Blanding's turtles, a state-listed threatened species that the DNR identified as located within the vicinity of the project area.

On August 30, 2013, the Energy Environmental Review and Analysis unit of the Department of Commerce (EERA) filed its Environmental Assessment on the Project.

On September 10, 2013, Administrative Law Judge Barbara L. Neilson conducted a public hearing in White Bear Lake on the route permit application. On November 18, 2013, she filed her FINDINGS OF FACT, CONCLUSIONS, AND RECOMMENDATIONS (ALJ's Report) on the Project, recommending that the Commission issue a route permit to the Applicant for the Applicant's proposed route.

On December 3, 2013, both Xcel and the EERA filed exceptions to the ALJ's Report.

On December 19, 2013, the matter came before the Commission.

FINDINGS AND CONCLUSIONS

I. The Proposed Project

Applicants propose to remove approximately 2.8 miles of an existing, single circuit 115 kV transmission line between the Kohlman Lake and Goose Lake Substations and construct approximately 2.8 miles of a new double circuit 115 kV transmission line in nearly the same alignment as the line intended for removal. The proposed project area extends from the Kohlman Lake Substation (located near the intersection of Highway 61 and Interstate 694) in Maplewood north through White Bear Lake and Vadnais Heights to the Goose Lake Substation (located northwest of the intersection of White Bear Parkway and Otter Lake Road) in White Bear Township.

II. The Legal Standard

The Project is subject to Minn. Stat. Chapter 216E, which requires that high-voltage transmission lines be routed consistent with the state's goals to locate electric power facilities in an orderly manner compatible with environmental preservation and the efficient use of resources.¹ In addition, the statute requires that route permit determinations be guided by the policy objective to conserve resources, minimize environmental impacts, minimize human settlement and other land use conflicts, and ensure the state's electric energy security through efficient, cost-effective power supply and electric transmission infrastructure.²

The Project is also subject to environmental review under Minn. Stat. § 216E.04, subd. 5, which directs the Commissioner of the Department of Commerce (the Department) to prepare an Environmental Assessment on proposed high voltage transmission lines between 100 and 200 kV and to study and evaluate the impacts of the proposed project and alternatives.

Furthermore, in designating a route, the Commission must consider the permitting criteria contained in Minn. Stat. § 216E.03, subd. 7 (b) and Minn. R. 7850.4100.

III. Environmental Assessment

Minn. R. 7850.3700 requires that the Environmental Assessment include:

- A. a general description of the proposed facility;
- B. a list of any alternative sites or routes that are addressed;
- C. a discussion of the potential impacts of the proposed project and each alternative site or route on the human and natural environment;
- D. a discussion of mitigative measures that could reasonably be implemented to eliminate or minimize any adverse impacts identified for the proposed project and each alternative site or route analyzed;
- E. an analysis of the feasibility of each alternative site or route considered;
- F. a list of permits required for the project; and
- G. a discussion of other matters identified in the scoping process.

¹ Minn. Stat. § 216E.02.

² Minn. Stat. § 216E.03, subd. 7 (a) and Minn. Rules, part 7850.4000.

On June 27, 2013, the Department issued a scoping decision, which identified the issues to be addressed in the Environmental Assessment, including a project description; a discussion of the affected environment, potential impacts, and mitigative measures; and required permits and approvals.

On August 30, 2013, the EFP issued the Environmental Assessment, which contains a comprehensive analysis of the proposed project, including an evaluation of the affected environment, potential impacts, and possible mitigation measures.

The Commission has reviewed the Environmental Assessment under Minn. R. 7850.3900, subp. 2, which requires the Commission to determine whether the Environmental Assessment and the record created at the public hearing address the issues identified in the scoping decision. Based on its review of the Environmental Assessment, the Commission finds that, under Minn. R. 7850.3900, subp. 2, the Environmental Assessment and the record as a whole address the issues identified in the scoping decision.

IV. The ALJ's Report

The Administrative Law Judge's Report is well reasoned, comprehensive, and thorough. She made some 181 findings of fact and conclusions and recommended that the Commission issue a route permit for the Applicant's proposed route.

Having itself examined the record and having considered the ALJ's Report, the Commission concurs in most of her findings, conclusions, and recommendations. In a few instances, however, the Commission will make clarifications to the ALJ's Report, as delineated and explained below. On all other issues, the Commission accepts, adopts, and incorporates her findings, conclusions, and recommendations.

Although Xcel and the EFP filed exceptions to the ALJ's Report, by the time the Commission met to consider the matter, the parties concurred on recommended clarifications to the ALJ's Report.

The Commission agrees with the parties' recommended modifications to the ALJ's Report and will adopt the ALJ's Report as modified below.

V. Modifications to the ALJ's Report

A. Findings 35

Finding 35 includes information describing the Project. Xcel has recommended the following technical corrections:

The Project is needed to reliably serve electrical loads in the ~~northwest~~ northeast region of the Twin Cities metropolitan area by providing a redundant electrical transmission source to the area. Electrical loads in that region are currently served from three sources: the Chisago County, Kohlman Lake, and Riverside/Terminal substations. Planning studies completed during 2010 for voltage stability and compliance with standards of the North American Electric Reliability Corporation (NERC) identified this area as vulnerable to severe low voltages and thermal overloads. The Project is necessary to meet NERC planning standards without decreasing load or utilizing operating procedures during transmission outages.

Xcel stated that the change to the last sentence of this Finding is consistent with language on page 12 of its permit application that states that Xcel “also considered utilizing operating procedures to mitigate the thermal overloads and serve low voltages in the area.”

The Commission concurs with Xcel’s suggested modifications and will therefore modify Finding 35 as recommended.

B. Finding 64

Finding 64 addresses the DNR’s suggested changes to section 4 of the draft route permit that include adding the phrase “with landowner input.” The ALJ’s Report recommended further clarification of the phrase. In response, Xcel recommended the phrase “input that is provided to Xcel” must be considered.

Sections 4.26 and 4.5 of the draft permit require Xcel to consider input from, and work with, landowners to prevent and mitigate potential impacts. And by the time the Commission met to consider the matter, the parties had agreed that the existing permit language sufficiently addresses the issue and that no further changes to the permit are necessary. The Commission concurs.

C. Finding 84

Xcel recommended modifying the last sentence of Finding 84 by replacing the term “wires” with the term “conductors.” The Commission concurs with Xcel will therefore make the recommended modifications to Finding 84.

D. Findings 161 and 164

Xcel recommended the following modifications to Findings 161 and 164.

161. The Proposed Route maximizes the use of existing transmission line right-of- way. ~~One hundred percent~~ Nearly all of the Proposed Route is within the right-of-way of the existing transmission line. Xcel Energy anticipates that new right-of-way for the Project will be needed along the west side of Otter Tail Road near the Goose Lake substation and along the Bruce Vento trail near the Kohlman Lake substation.

164. The Proposed Route maximizes the use of existing transportation and electrical transmission system rights-of-way. The Proposed Route uses an existing transmission line right-of-way for ~~one hundred percent~~ nearly all of its length, and uses an existing railroad right-of-way for approximately ninety percent of its length. Xcel Energy anticipates that new right-of-way for the Project will be needed along the west side of Otter Tail Road near the Goose Lake substation and along the Bruce Vento trail near the Kohlman Lake substation. The Project endpoints are existing substations, and modifications to the substations shall occur within their existing footprint.

The Commission concurs with Xcel that the suggested modifications provide clarification and are supported by the record. The Commission will therefore modify Findings 163 and 164 as recommended by Xcel.

E. Conclusion 14

Conclusion 14 includes several recommended permit requirements, and both Xcel and the EERA recommended technical corrections.

1. Xcel

Xcel recommended striking the condition requiring it to consult and coordinate with local governments about the preferred finish of transmission line structures because there were no comments filed by local governments addressing the issue. The Commission concurs with Xcel and will therefore modify Conclusion 14 as recommended.

2. The EERA

The EERA had originally recommended modifying a requirement in Conclusion 14, which requires Xcel to comply with the conditions set forth in Finding 63, to read as follows:

- comply with ~~the~~ those conditions related to the Project and supported by the record set forth in Finding 63 above, as modified in Finding 64.

Finding 63 of the ALJ's Report addresses permit changes recommended by the DNR that would: allow low growing species to remain in the right-of-way; require that any area disturbed during construction be returned to a condition that is equal to or better than its preconstruction condition, with landowner input; and require that native seed mixes be used to the extent practical, with landowner input. Finding 64 recommends clarification of the phrase "with landowner input."

Section 4.2.5 of the draft route permit incorporates the DNR's recommended change to allow certain low growing species to remain in the right-of-way. Section 4.2.7 of the draft route permit requires Xcel to restore all areas disturbed during construction to preconstruction conditions (rather than requiring Xcel to restore any area disturbed by construction to a condition that is equal to *or better than* its preconstruction condition). Section 4.2.7 requires Xcel to use native seed mixes, to the extent possible.

Sections 4.26 and 4.5 of the draft route permit require Xcel to consider input from, and work with, landowners to prevent and mitigate potential impacts from the Project.

By the time the Commission met to consider the matter, the parties had agreed that the draft permit language sufficiently addresses the concerns raised by the DNR and that no further changes to the permit are necessary. The Commission concurs and will therefore strike the requirement in Conclusion 14, which directs Xcel to comply with the conditions set forth in Finding 63 as modified in Finding 64, to avoid potential confusion over permit requirements.

VI. Conclusion

With the decisions contained herein, the Commission finds that the Kohlman Lake to Goose Lake Transmission Line Project satisfies the routing criteria contained in Minn. Stat. § 216E.03 and Minn. R. 7850.4100 and meets the goal set forth in Minn. Stat. § 216E.02 to locate large electric power facilities in an orderly manner compatible with environmental preservation and the efficient use of resources. The Commission will therefore issue the route permit to the Applicants in the form attached.

ORDER

1. The Commission hereby approves and adopts the ALJ's Report as modified herein.
2. The Commission hereby finds that the Environmental Assessment and the record created at the public hearing address the issues identified in the environmental assessment scoping decision.
3. The Commission hereby issues a high-voltage transmission line route permit identifying a specific route and permit conditions to Xcel Energy for the Kohlman Lake to Goose Lake 115 kV Transmission Line Project in Ramsey County, in the form attached.
4. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION

Burl W. Haar
Executive Secretary



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STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION
ROUTE PERMIT FOR CONSTRUCTION OF A HIGH-VOLTAGE TRANSMISSION
LINE AND ASSOCIATED FACILITIES

IN
RAMSEY COUNTY

ISSUED TO
XCEL ENERGY

PUC DOCKET NO. E-002/TL-12-1151

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

XCEL ENERGY

Xcel Energy is authorized by this route permit to construct approximately 2.8 miles of new double circuit 115 kV/115 kV transmission line between the Kohlman Lake and Goose Lake substations in Ramsey County, 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 21st day of January, 2014

BY ORDER OF THE COMMISSION

Burl W. Haar,
Executive Secretary

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Official Route Maps

ATTACHMENTS

Attachment A – Complaint Procedures for High-Voltage Transmission Lines

Attachment B – Compliance Filing Procedure for Permitted Energy Facilities

1.0 ROUTE PERMIT

The Minnesota Public Utilities Commission (Commission) hereby issues this route permit to Xcel Energy (Permittee) pursuant to Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850. This permit authorizes Xcel Energy to construct approximately 2.8 miles of new double circuit 115 kV/115 kV transmission line between the Kohlman Lake and Goose Lake substations in Ramsey County, Minnesota, and as identified in the attached route permit maps, hereby incorporated into this document.

2.0 PROJECT DESCRIPTION

The Project includes removing approximately 2.8 miles of existing 115 kV single circuit transmission line and structures¹, rebuilding a new 115 kV/115 kV double circuit transmission line in approximately the same alignment as the existing 115 kV transmission line to be removed, reconductoring a span of existing single circuit 115 kV line between existing structures 124 and 123, and modifications to the Kohlman Lake and Goose Lake substations.

2.1 Project Location

The Project extends from the Kohlman Lake Substation located south of Highway 694 in the city of Maplewood, north through the cities of White Bear Lake and Vadnais Heights, to the Goose Lake Substation located northwest of the intersection of White Bear Parkway and Otter Lake Road in White Bear Township.

2.2 Associated Facilities and Substations

Modifications to the Kohlman Lake and Goose Lake substations will occur within the existing substation footprints and will include new and modified 115 kV breakers, disconnects, and controls.

2.3 Structures and Conductors

The structures authorized for the project be will single pole galvanized or self-weathering steel davit arm structures capable of supporting two 115 kV circuits. The structures will be 80 to 100 feet in height with average span of 300 to 500 feet between structures and will be supported by a 6-foot diameter by 25-foot deep drilled pier concrete foundation. Specialty structures authorized for the project will be two dead-end structures, one running angle structure, and one tangent structure capable of supporting two 115 kV circuits and designed for distribution underbuild.

¹ The project includes the removal of approximately 41 existing structures (2 lattice tower structures and 39 steel pole structures), several wooden poles, and all associated guy wires, anchors, and poles.

The specialty structures will be 90 to 100 feet in height and will be supported by an approximately 8-foot diameter by 30-foot deep drilled pier concrete foundation.

The phase wires will be 795-kcmil 26/7 aluminum core steel supported (ACSS) conductor or a conductor of similar capacity. A shield wire will be installed above the conductors for lightning protection.

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 designated by the Commission in this permit is the route described below and shown on the route maps attached to this permit. The route is generally described as follows:

The route exits the Kohlman Lake Substation and proceeds northward along a section of the Bruce Vento Trail and across Interstate 694. The route proceeds northward along the eastern edge of the Burlington Northern Santa Fe railroad right-of-way, crossing over County Road E. The route then jogs westward toward Otter Lake Road, with circuit #1 joining Xcel Energy Line 0885 and circuit #2 joining Xcel Energy Line 5519. Circuit #2 proceeds along Otter Lake Road to the Goose Lake Substation.

The route width approved by this permit is 200 feet wide; 100 feet on each side of the existing transmission line centerline; and 100 feet on each side of the most direct path connecting existing structures #124 and #629. The identified route width will provide the Permittee with flexibility for minor adjustments of the specific alignment or right-of-way to accommodate landowner requests and unforeseen conditions. The final alignment (i.e., permanent and maintained rights-of-way) will be located within this designated route unless otherwise authorized below.

3.1 Right-of-Way

The approved right-of-way width for the project is up to 75 feet. The Permittee will utilize its existing rights-of-way associated with the single circuit 115 kV transmission line being replaced to the greatest extent possible.

This permit anticipates that the right-of-way will generally conform to the anticipated alignment as noted on the attached route permit maps unless changes are requested by individual landowners and agreed to by the Permittee or for unforeseen conditions are encountered 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 4.1 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.

4.0 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.

4.1 Plan and Profile

At least 30 calendar 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.

4.2 Construction Practices

The Permittee shall follow those specific construction practices and material specifications described in Xcel Energy's application to the Commission for a route permit for the *Kohlman Lake to Goose Lake Rebuild from 115 kV Single Circuit to 115/115 kV Double Circuit Transmission Line Project*, dated January 2013, unless this permit establishes a different requirement in which case this permit shall prevail.

4.2.1 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.

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 written notice to the Commission.

4.2.2 Local Governments

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

4.2.3 Cleanup

All waste and scrap that is the product of construction shall be removed from the area 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.

4.2.4 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.

4.2.5 Vegetation Removal

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.

The Permittee shall avoid construction and maintenance practices, particularly the use of fertilizer, herbicides or other pesticides, that are inconsistent with the landowner's or tenant's use of the land.

4.2.6 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.

4.2.7 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 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.

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.

The Permittee shall employ best management practices to avoid the potential spread of invasive species within and adjacent to the right-of-way during construction and maintenance of the transmission lines.

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.

4.2.8 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.

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.

4.2.9 Archaeological and Historic Resources

The Permittee shall make every effort to avoid impacts to identified archaeological and historic resources when installing the high-voltage transmission line on the approved route. In the event that a resource is encountered, the Permittee shall contact and consult with the State Historic Preservation Office (SHPO). Where feasible, avoidance of the resource is required. Where not feasible, mitigation must include an effort to minimize project impacts on the resource consistent with SHPO and State Archaeologist requirements.

Prior to construction, workers shall be trained about the need to avoid cultural properties, how to identify cultural properties, and procedures to follow if undocumented cultural properties, including gravesites, are found during construction.

4.2.10 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.

4.2.11 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.

4.2.12 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.

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

4.2.13 Notice of Permit

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

4.3 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.

4.4 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 set forth in the complaint procedures attached to this permit.

4.5 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.

4.6 Completion of Construction

4.6.1 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.

4.6.2 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.

4.6.3 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.

4.7 Electrical Performance Standards

4.7.1 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.

4.7.2 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.

4.7.3 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.

4.8 Other Requirements

4.8.1 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.

4.8.2 Other Permits

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 required permits is included in the permit application. The Permittee shall submit a copy of such permits to the Commission upon request.

4.8.3 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.

4.9 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.

5.0 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.

5.1.1 Railroad Authority

The Permittee shall consult and coordinate with Ramsey County and the Regional Railroad Authority to ensure that it has proper land rights to construct the project.

5.1.2 Metropolitan Council

The Permittee shall consult and coordinate with the Metropolitan Council Interceptor Engineering Department prior to construction to ensure potential impacts to multiple Council wastewater interceptors is avoided.

5.1.3 Wildlife-Friendly Erosion Control Materials

The Permittee, in cooperation with the Minnesota Department of Natural Resources, shall use wildlife-friendly erosion control materials in areas known to be inhabited by wildlife species (birds, small mammals, reptiles, and amphibians) susceptible to entanglement in plastic netting.²

² <http://files.dnr.state.mn.us/eco/nongame/wildlife-friendly-erosion-control.pdf>

5.1.4 Rare and Unique Resources

The Permittee shall follow measures and recommendations for avoiding and minimizing impacts to Blanding's turtle populations as outlined in the Minnesota Department of Natural Resources Environmental Review Fact Sheet Series for the Blanding's Turtle.³ Construction and maintenance personnel will be made aware of rare resources and plant communities during pre-construction meetings to minimize potential disturbance. The Permittee shall avoid impacts to state-listed endangered, threatened, and special concern species in all areas of the project including temporary workspaces associated with the project.

6.0 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.

7.0 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.

8.0 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.

³ http://files.dnr.state.mn.us/natural_resources/animals/reptiles_amphibians/turtles/blandings_turtle/fact_sheet.pdf

**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 be filed by mail or email to:

Northern States Power Company d/b/a Xcel Energy
Sean Lawler, Associate Land Rights Agent
414 Nicollet Mall, MP-7B
Minneapolis, MN 55401
(612) 330-1956
Sean.W.Lawler@xcelenergy.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

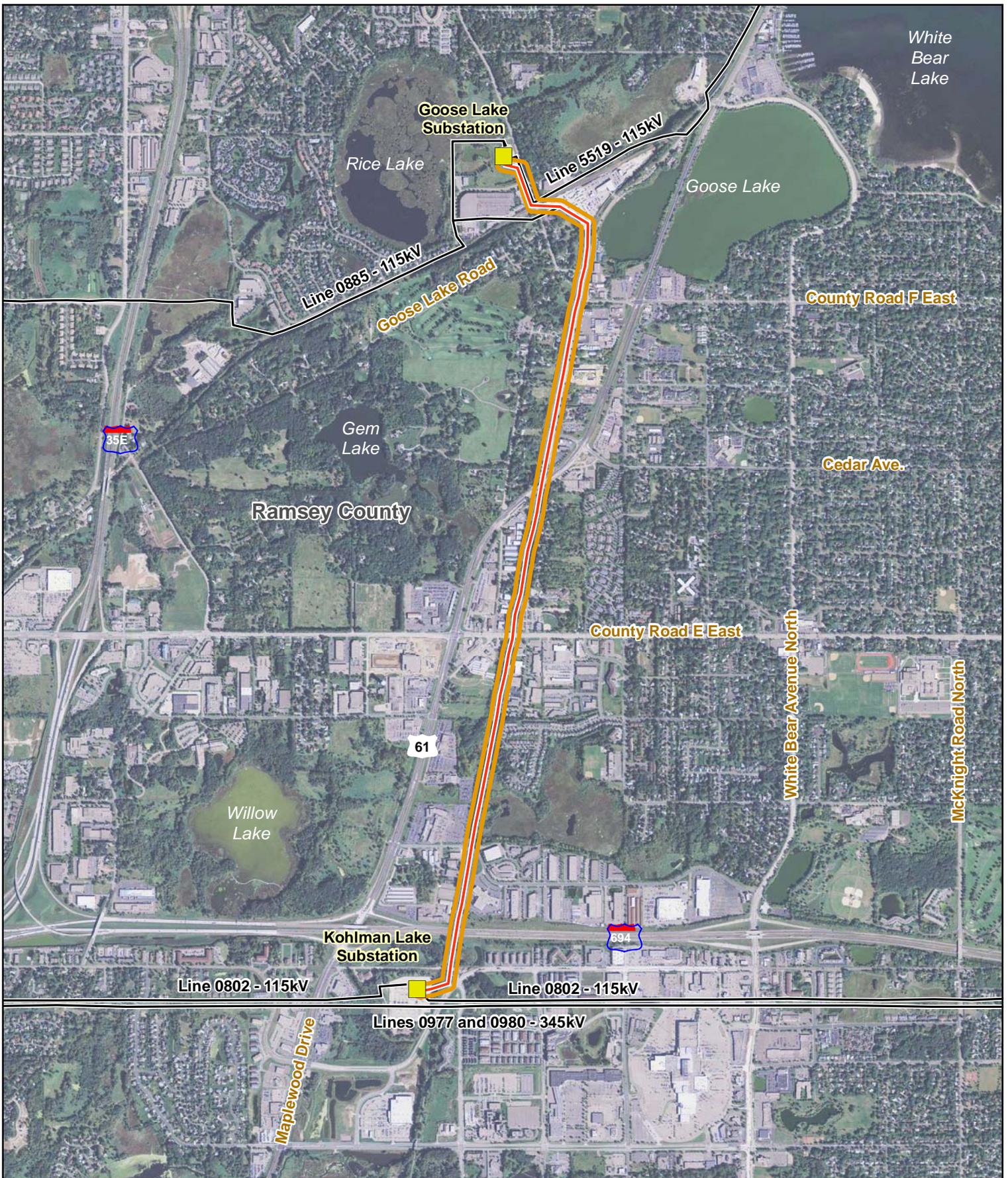
1. The permittee shall eFile all compliance filings with Dr. Burl W. Haar, Executive Secretary, Public Utilities Commission, through the eDockets system. The eDockets system is located at: <https://www.edockets.state.mn.us/EFiling/home.jsp>

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.



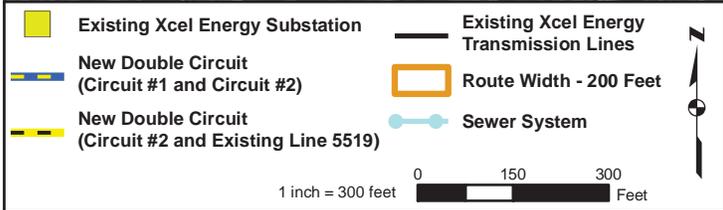
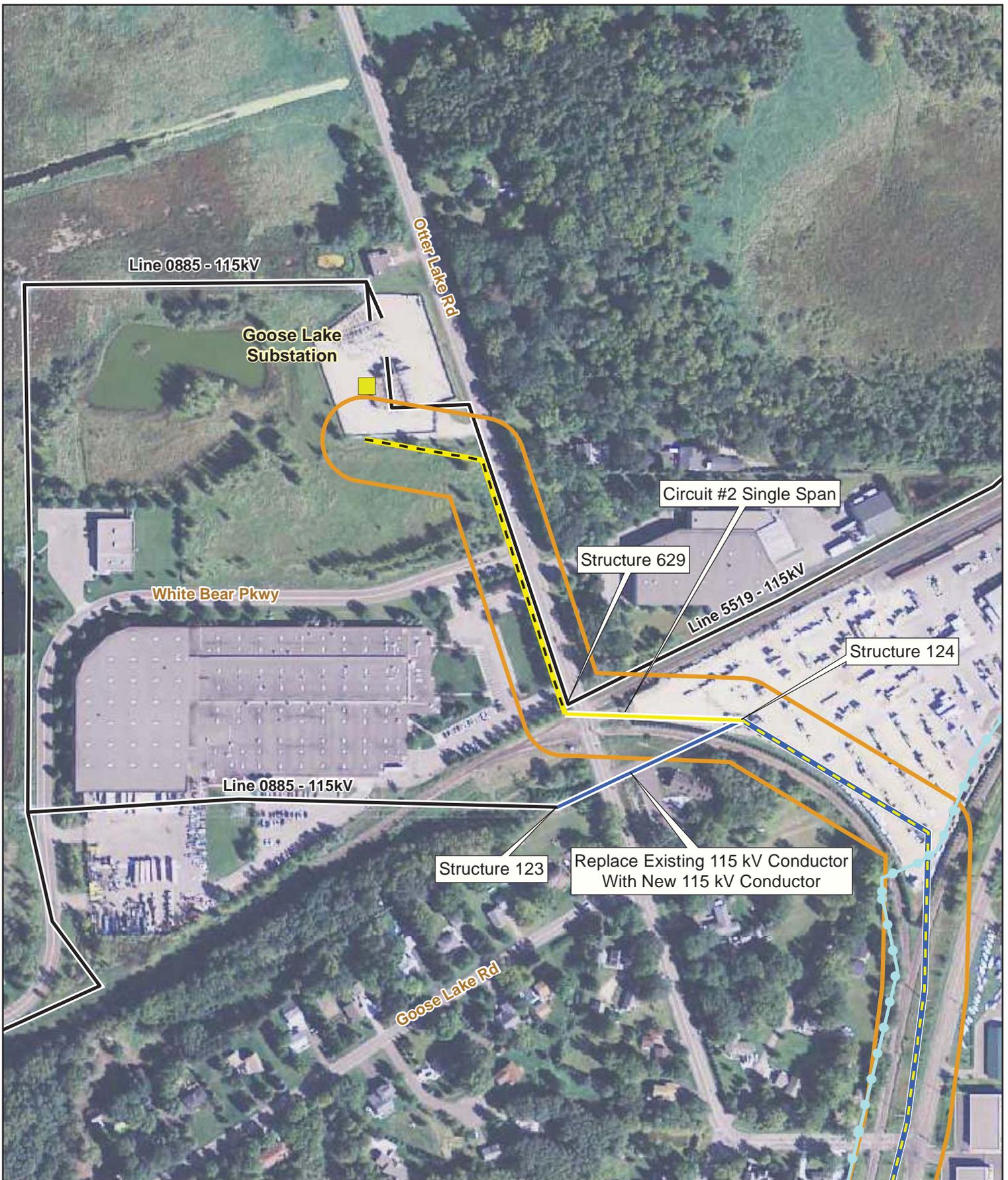
- Xcel Energy Substation
- Proposed Kohlman Lake to Goose Lake Rebuild to Double Circuit 115kV
- Existing Xcel Energy Transmission Lines
- Route Width

0 1,000 2,000
Feet
1 inch = 2,000 feet

Overview Map

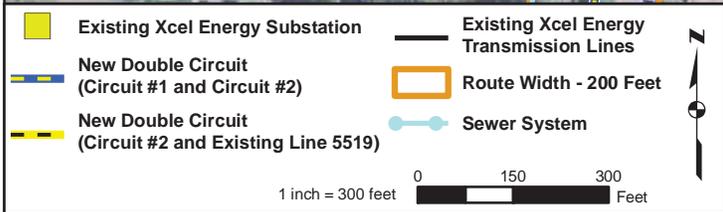
Kohlman Lake to Goose Lake 115 kV Project

Source: Department of Commerce Environmental Assessment for Kohlman Lake to Goose Lake 115/115 Transmission Project (August 2013), Maps B1 to B-7



Route Map 1

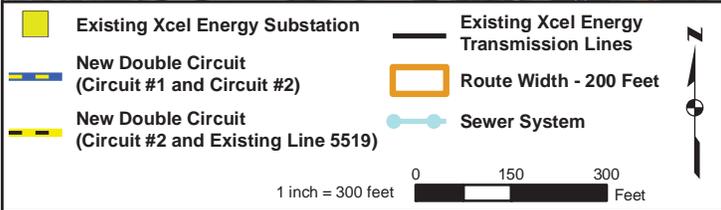
Kohlman Lake to Goose Lake 115 kV Project





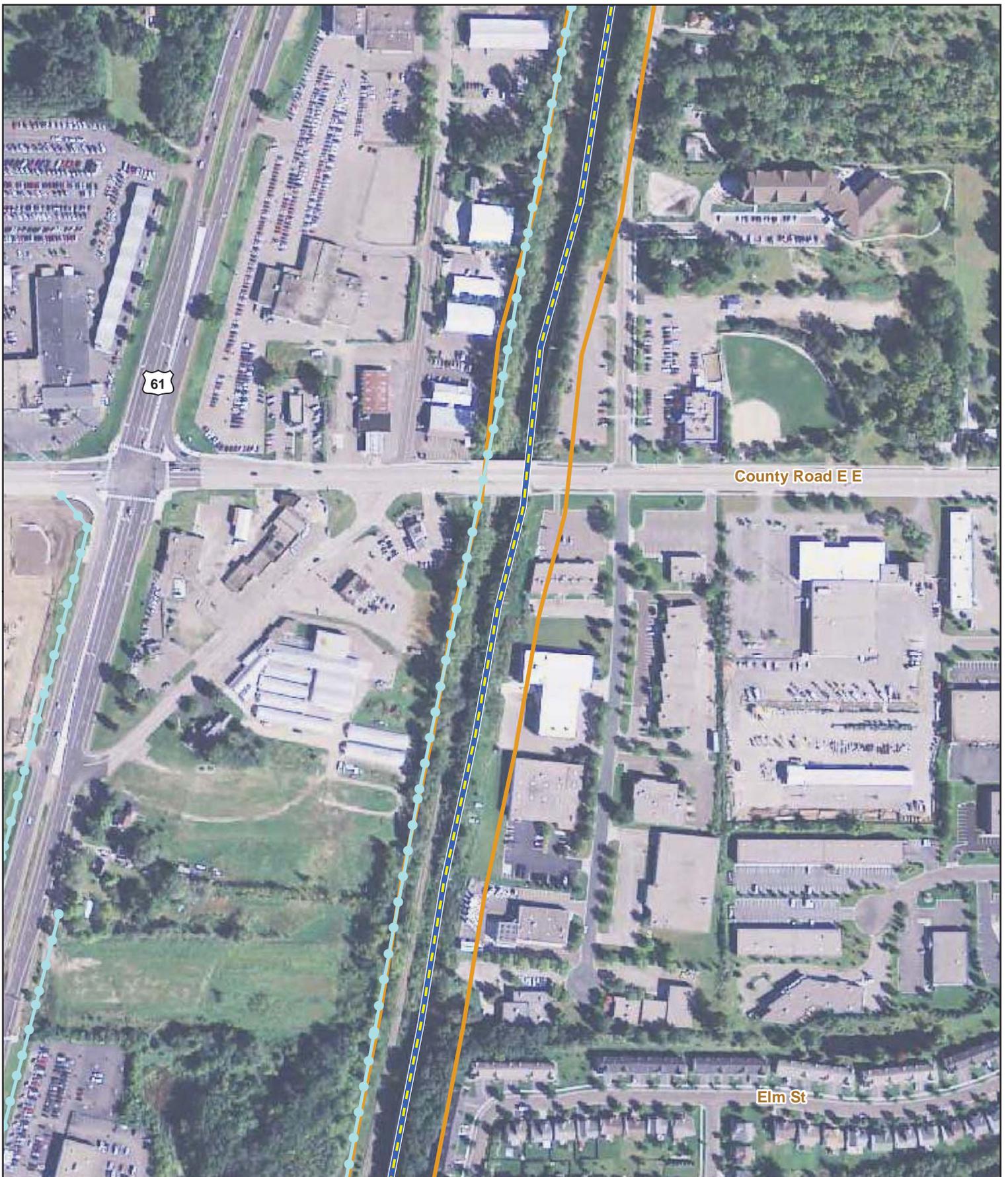
Route Map 2
Kohlman Lake to Goose Lake 115 kV Project

Source: Department of Commerce Environmental Assessment for Kohlman Lake to Goose Lake 115/115 Transmission Project (August 2013), Maps B1 to B-7



Route Map 3
Kohlman Lake to Goose Lake 115 kV Project

Source: Department of Commerce Environmental Assessment for Kohlman Lake to Goose Lake 115/115 Transmission Project (August 2013), Maps B1 to B-7



County Road E E

Elm St

- Existing Xcel Energy Substation
- Existing Xcel Energy Transmission Lines
- New Double Circuit (Circuit #1 and Circuit #2)
- Route Width - 200 Feet
- New Double Circuit (Circuit #2 and Existing Line 5519)
- Sewer System

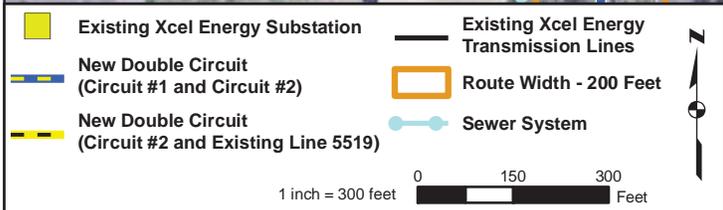
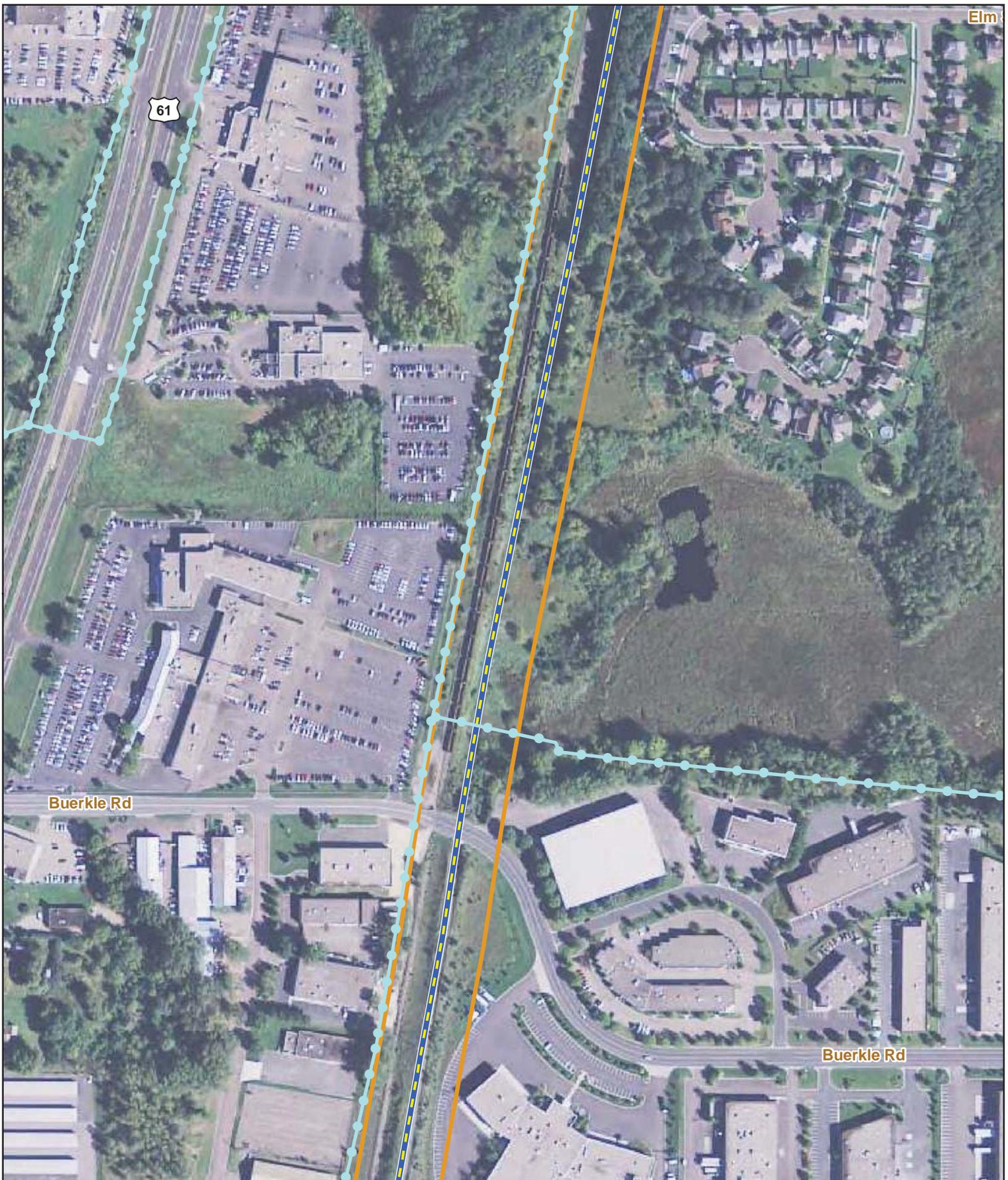
1 inch = 300 feet 0 150 300
Feet



Route Map 4

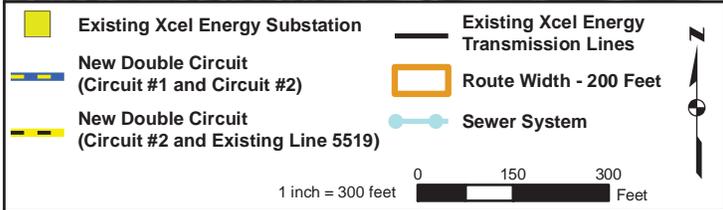
Kohlman Lake to Goose Lake 115 kV Project

Source: Department of Commerce Environmental Assessment for Kohlman Lake to Goose Lake 115/115 Transmission Project (August 2013), Maps B1 to B-7



Route Map 5

Kohlman Lake to Goose Lake 115 kV Project



Route Map 6

Kohlman Lake to Goose Lake 115 kV Project