



**ENVIRONMENTAL ASSESSMENT
SCOPING DECISION**

**In the Matter of the Applications of Xcel
Energy for a Certificate of Need and Route
Permit for the Alexandria to Big Oaks 345 kV
Transmission Line Project**

**DOCKET NOS. E017, ET2, E002, ET10, E015/CN-22-538
DOCKET NOS. E002, ET2, ET10, E015, E017/TL-23-159**

The above matters have come before the Commissioner of the Department of Commerce (Department) for a decision on the scope of the environmental assessment (EA) to be prepared for the Alexandria to Big Oaks 345 kV Transmission Line Project in central Minnesota.

Project Description

On September 29, 2023, Northern States Power Company, doing business as Xcel Energy, along with Great River Energy, Minnesota Power, Otter Tail Power Company, and Missouri River Energy Services, on behalf of Western Minnesota Municipal Power Agency, (hereinafter the applicant or Xcel Energy) filed certificate of need¹ and route permit applications² with the Minnesota Public Utilities Commission (Commission). The route permit application was submitted under the alternative review process (Minnesota Statute 216E.04).

Xcel Energy proposes to string approximately 105 miles of new 345 kV high voltage transmission line (HVTL) along existing 345 kV HVTL structures from Alexandria to Becker, Minnesota (East Segment) utilizing current HVTL right-of-way for 95 percent of this length.³ Existing transmission line structures originate from the CapX2020 projects,⁴ which were permitted by the Commission and constructed as double-circuit capable along the entire route. A new Big Oaks Substation would be constructed near the city of Becker to interconnect the new second circuit of 345 kV transmission line.

The entire project includes an East Segment (route permit and certificate of need applications) and a future West Segment (certificate of need application). The West Segment would connect the existing Big Stone South Substation in South Dakota with the Alexandria Substation.

The proposed route follows existing HVTL right-of-way, with few deviations needed for new structures to facilitate stringing the second circuit. New structures are proposed in select areas to accommodate angles, highway crossings, or alignment modifications where installing the second monopole for the original CapX2020 project would not have been needed at the time. Approximately 67 to 78 new structures are proposed for the entire project, with the majority needed at four locations to accomplish:

¹ Big Stone South – Alexandria – Big Oaks Transmission Project, Application to the Minnesota Public Utilities Commission for a Certificate of Need for a High Voltage Transmission Line, September 29, 2023, eDocket Nos. [20239-199284-01 \(through -05\)](#), hereinafter the Certificate of Need Application.

² Xcel Energy Alexandria to Big Oaks 345 kV Transmission Project, Application to the Minnesota Public Utilities Commission for a Route Permit for a High Voltage Transmission Line, September 29, 2023, eDocket Nos. [20239-199287-01 \(through -08\)](#), hereinafter the Route Permit Application.

³ Route Permit Application, Section 1.

⁴ Monticello to St. Cloud 345 kV Transmission Project (E002, ET2/TL-09-246) and the Fargo to St. Cloud 345 kV Transmission Project (E002, ET2/TL-09-1056).

- (1) establishing new right-of-way to tap into the Alexandria Substation;
- (2) reconfiguration of the Alexandria to Quarry Substation circuit to bypass the Riverview Substation near the city of Freeport;
- (3) a bypass of the Quarry Substation near the city of Waite Park; and
- (4) crossing the Mississippi River to connect the new 345 kV transmission line to the new Big Oaks Substation (hereinafter the Mississippi River Crossing).⁵

Of the new right of way areas to be created, the first three listed above are cumulatively less than one mile of new HVTL and associated infrastructure.⁶ For the Mississippi River Crossing, the applicant is considering two options ranging from 0.7 to 2.1 miles.⁷ The project is currently scheduled to be placed in service by the fourth quarter of 2027.⁸

Project Purpose

Xcel Energy indicates that the project is needed to provide benefits to the Midwest subregion of the Midcontinent Independent System Operator (MISO) footprint by facilitating more reliable, safe, and affordable energy delivery.⁹ The current 345 kV transmission system is at capacity which leads to several reliability concerns that could affect customers' service.¹⁰ The project intends to provide additional transmission capacity, mitigate current capacity issues, and improve electric system reliability throughout the region as more renewable energy resources are added to the electric system in and around the region.¹¹

Regulatory Process and Procedures

The proposed Alexandria to Big Oaks 345 kV Transmission Line Project requires two approvals from the Commission – a certificate of need (CN) and a route permit. On December 5, 2023, the Commission issued an order accepting the Alexandria to Big Oaks 345 kV Transmission Line Project certificate of need and route permit applications as complete and authorized joint hearings and combined environmental review for these two approvals.¹² The project qualifies for the alternative permitting process because it is an HVTL in excess of 200 kV and at least 80 percent of the distance of the line in Minnesota would be along existing HVTL rights-of-way.¹³

Department of Commerce, Energy Environmental Review and Analysis (EERA) staff is responsible for conducting environmental review for CN and route permit applications submitted to the Commission.¹⁴ As two concurrent environmental reviews are required – one for the CN application for the West and

⁵ Route Permit Application, Section 1.

⁶ Route Permit Application, Map 1.

⁷ Route Permit Application, [Appendix C](#), p. 71.

⁸ Route Permit Application, Table 2.7-1.

⁹ Route Permit Application, Section 1.1.

¹⁰ *Ibid.*

¹¹ *Ibid.*

¹² Commission Order, December 5, 2023, eDockets Number [202312-200978-02](#).

¹³ Minn. Stat. 216E.04, subd. 2(5) and Minn. R. 7850.2800, subp. 1(E).

¹⁴ Minnesota Rule 7849.1200; Minnesota Rule 7850.3700.

East Segments and one for the route permit application for the East segment – the Commission has authorized EERA staff to combine the environmental review for the two applications.¹⁵

An EA will be prepared to meet the requirements of both review processes. An EA contains an overview of the resources affected by the project. It also discusses potential human and environmental impacts and mitigation measures.¹⁶ Under the alternative permitting process, an EA is the only required state environmental review document.¹⁷

Scoping Process

Scoping is the first step in the environmental review process. The scoping process has two primary purposes: (1) to gather public input as to the impacts and mitigation measures to study in the EA and (2) to focus the EA on those impacts and mitigation measures that will aid in the Commission’s decisions on the CN and route permit applications.

Staff uses the information gathered during scoping to inform the content of the EA. EERA staff gathered input on the scope of the EA through public meetings and an associated comment period. This scoping decision identifies the impacts and mitigation measures as well as alternatives to the project itself that will be analyzed in the EA.

Public Information and Scoping Meetings

Department and Commission staff held six public information and scoping meetings regarding the project on December 12, 13, and 14¹⁸ as summarized below:

Date	Time	Location	Attendees
December 12, 2023	10:00 a.m. – 1:00 p.m.	Alexandria	3
December 12, 2023	5:00 p.m. – 8:00 p.m.	Monticello	15-20
December 13, 2023	10:00 a.m. – 1:00 p.m.	Ortonville	1
December 13, 2023	5:00 p.m. – 8:00 p.m.	Benson	15-20
December 14, 2023	10:00 a.m. – 1:00 p.m.	St. Joseph	7
December 14, 2023	6:00 p.m. – 9:00 p.m.	Remote-Access	3

The purpose of the meetings was to provide information to the public about the proposed project, to answer questions, and to allow the public an opportunity to suggest alternatives and impacts for consideration during preparation of the EA. A court reporter was present at the meetings to document oral statements.

Nine attendees (four in Monticello, one in Benson, and four at the remote-access meeting) provided public comments.¹⁹ Commenters asked questions about the project layout and voltage, capacity, permitting process, and timing, as well as detailed concerns about new transmission infrastructure

¹⁵ Commission Order, December 5, 2023, eDockets Number [202312-200978-02](#).

¹⁶ Minn. R. [7850.3700](#), subp. 4.

¹⁷ Minn. Stat. 216E.04, subd. 5

¹⁸ Notice of Public Information and Environmental Assessment Scoping Meetings, November 28, 2023, eDockets Number [202311-200772-01](#).

¹⁹ Combined Public Comments on Scope of Environmental Assessment, eDockets No. [20241-202015-01](#).

siting, public hearing timing, the EA, and personal property and easements. Commenters noted concerns with topics such as electric and magnetic fields (EMF), stray voltage, frequency interference, and human health in addition to requesting mitigation measures such as bird diverters for the project.

Written Public Comments

A comment period, ending on January 8, 2024, provided the public an opportunity to provide input on the scope of the EA. Written comments were received during this comment period from two state agencies, one local unit of government, one labor union, and seven community members.²⁰ Per Minnesota Rule 7850.3700, Xcel Energy was provided the opportunity to respond to each route alternative request and submitted this response on January 19, 2024.²¹

Minnesota Department of Natural Resources (DNR)

DNR comments focused on potential environmental impacts; DNR proposed three alternative Mississippi River Crossing options (DNR Alternatives 1-3).²² DNR requested that the EA analyze impacts to ecologically significant areas including several Minnesota Biological Survey (MBS) sites around the applicant's proposed Mississippi River Crossings, St. Martin 15 Calcareous Fen, and several fauna and flora species. Additionally, DNR requested the EA analyze lighting, dust control, erosion control, and control of invasive species. DNR's three alternatives aim to reduce environmental impacts and minimize disturbance to ecologic and biologic resources near the Mississippi River Crossing.

Minnesota Department of Transportation (MNDOT)

MNDOT comments focused on the applicant needing to prepare a Traffic Control Plan for helicopter use near trunk highways, scheduled lane closures, early consultation with MNDOT for each district impacted by the project, and requested the opportunity to participate in pre-construction meetings.

Swift County Commissioner

The Swift County Commissioner's comments focused on avoiding impacts to agriculture, specifically by placing transmission lines along current rights-of-way, considering irrigation systems along the route, and by requesting the applicant make proper alterations or repairs to any drainage systems that are damaged by the project.

International Brotherhood of Electrical Workers (IBEW) Local 160

The IBEW focused their comments on avoiding unnecessary delays for the project through the Commission's permitting and environmental review process, and how this project is an important part of needed investments into Minnesota's electric grid.

Other Comments

Community members that submitted written public comments presented a variety of topics, including but not limited to: considering decision-making within the context of all the Midcontinent Independent System Operator (MISO) approved Long Range Transmission Planning projects for Minnesota,²³ not analyzing the need for the project based on MISO's approval, not allowing the West and East segments

²⁰ Combined Public Comments on Scope of Environmental Assessment, eDockets No. [20241-202015-01](#).

²¹ EA Scoping Response Letter, January 19, 2024, eDockets No. [20241-202407](#).

²² Minnesota DNR Scoping Comments, January 8, 2024 eDockets No. [20241-201967-01](#).

²³ See generally *Grid North Partners Congestion Relief Projects*, retrieved from: https://mn.gov/puc-stat/documents/pdf_files/GNP_NT_CongestionProjects_010324.pdf.

of the project to be separated in the permitting and environmental review process, including a no-build alternative in the EA, connecting analysis of this project to the Northern Reliability²⁴ and Minnesota Energy Connection²⁵ projects, removing current transmission infrastructure from the CapX2020 project,²⁶ cumulative effects with the previous CapX2020 project, conflicts with recreational resources, wildlife, aesthetics, substation lighting, EMF, human health, and water resources.

Applicant

Xcel Energy submitted a comment letter on January 19, 2024, in response to the DNR Alternatives 1-3.²⁷ Xcel Energy stated that while they do not oppose the study of DNR's alternatives in the EA, they requested slight modifications to ensure they can be feasibly constructed, operated, and maintained. Each modification suggested by the applicant is within DNR's recommended route widths.

Xcel Energy requested that the length of alternative routes, new private property easements, residence offset distances, and transmission structure configurations to reduce impacts to river and flyway corridors be included in the EA. The applicant also agreed with the DNR that the ecologically significant areas, calcareous fens, threatened and endangered fauna and flora, facility lighting, dust control, and erosion control measures outlined in their scoping comment letter should be studied in the EA. Xcel Energy committed to continuing to work with the DNR on these items to avoid or minimize impacts.

Commission Review

After close of the public comment period, EERA staff provided the Commission with a summary of the EA scoping process.²⁸ The summary discussed the comments received on the scope of the EA and EERA staff's recommendation to study the applicant's proposed route, and DNR's three Mississippi River Crossing alternatives (DNR Alternatives 1-3) with Xcel Energy's modifications.²⁹ The Commission considered the routes to be studied in the EA through their consent agenda process. On February 6, 2024, the Commission agreed with and adopted EERA staff's recommendations on the scope of the EA.³⁰

Route Alternatives

The only route alternatives proposed during the EA scoping period were DNR Alternatives 1-3. These alternatives will be included in the scope of EA.

System Alternatives

No system alternatives were proposed during the EA scoping period.

Beyond system alternatives proposed during scoping, Minnesota Rule 7849.1500 notes alternatives that should be examined during environmental review for all certificate of need applications. These alternatives include, among others, the no-build alternative, purchased power, and generation rather

²⁴ See eDockets CN-22-416 and TL-415.

²⁵ See eDockets CN-22-131 and TL-22-132.

²⁶ See eDocket TL-09-246.

²⁷ EA Scoping Response Letter, January 19, 2024, eDockets No. [20241-202407](#).

²⁸ Department of Commerce, Comments and Recommendations on Scoping Process, January 23, 2023, eDockets No. [20241-202503-02](#).

²⁹ EA Scoping Response Letter, January 19, 2024, eDockets No. [20241-202407](#).

³⁰ Commission Order Adopting Department of Commerce Scoping Recommendations, February 6, 2024, eDockets. No. [20242-203123-02](#).

than transmission.³¹ In its order of April 19, 2023, the Commission approved exemptions requested by the applicant for certain types of CN data.³² However, the Commission did not exempt the applicant from any of the Minnesota Rule 7849.1500 alternatives.³³ Thus, the EA will also analyze the applicable system alternatives noted in Minnesota Rule 7849.5100.

HAVING REVIEWED THE MATTER, consulted with EERA staff, and in accordance with Minnesota Rule 7850.3700, I hereby make the following scoping decision:

MATTERS TO BE ADDRESSED

The EA will describe the project and the human and environmental resources of the project area. It will provide information on the potential impacts of the project as they relate to the topics outlined in this scoping decision and possible mitigation measures. It will identify impacts that cannot be avoided and irretrievable commitments of resources, as well as permits from other government entities that may be required for the project. The EA will discuss the relative merits of proposed routes with respect to the routing factors in Minnesota Rule 7850.4100.

Data and analyses will be commensurate with the level of impact for a given resource and the relevance of the information to consider mitigation measures. EERA staff will consider the relationship between the cost of data and analyses and the relevance and importance of the information in determining the level of detail of information to be prepared for the EA. Less important material may be summarized, consolidated, or simply referenced.

If relevant information cannot be obtained within timelines prescribed by statute and rule, the costs of obtaining such information is excessive, or the means to obtain it is unknown, EERA staff will include in the EA a statement that such information is incomplete or unavailable and the relevance of the information in evaluating potential impacts or alternatives.

The EA will include a description and analysis of the human and environmental impacts of the proposed project and alternatives to the project that would have otherwise been required by Minnesota Rule 7849.1500 in an environmental report. This includes evaluating matters of size, type, and timing that would normally be excluded in an EA for a route permit application. The EA will describe and analyze the availability and feasibility of system alternatives.

The issues outlined below will be analyzed in the EA for the project. This outline is not intended to serve as a table of contents for the document itself.

I. PROJECT OVERVIEW

- A. Description
- B. Purpose
- C. Costs
- D. Schedule

³¹ Minn. R. 7849.1500.

³² Commission Order (Approving Request for Exemptions), April 19, 2023, eDockets Number [20234-194943-01](#).

³³ *Ibid.*

II. REGULATORY FRAMEWORK

- A. Certificate of Need
- B. Route Permit
- C. Environmental Review
- D. Public Hearing
- E. Certificate of Need and Route Permit Decisions
- F. Other Permits and Approvals

III. PROJECT DESIGN

- A. Construction
 - Transmission Line Segments
 - Right-of-Way Requirements
 - New Substation and Existing Substation Reconfigurations
 - Associated Facilities
- B. Operation and Maintenance
 - Restoration and Vegetation Management
 - Decommissioning

IV. AFFECTED ENVIRONMENT, POTENTIAL IMPACTS AND MITIGATIVE MEASURES

- A. Environmental Setting
- B. Human Settlements
 - Noise
 - Aesthetics
 - Displacement
 - Zoning and Land Use Compatibility
 - Cultural Values
 - Transportation and Public Services
 - Radio and Television Interference
- C. Socioeconomics
 - Environmental Justice
 - Local Economies
- D. Public Health and Safety
 - Electric and Magnetic Fields
 - Emergency Services
- E. Land Based Economies
 - Agriculture
 - Forestry
 - Mining
 - Recreation and Tourism
- F. Archaeological and Historic Resources
- G. Natural Environment
 - Air Quality (including Greenhouse Gases)
 - Climate Change and Design for Resilience
 - Water Resources
 - Geology and Soils
 - Vegetation

- Wildlife
- Threatened / Endangered / Rare and Unique Natural Resources
- H. Use or Paralleling of Existing Right-of-Way
- I. Electric System Reliability
- J. Costs that are Dependent on Design and Route
- K. Adverse Impacts that Cannot be Avoided
- L. Irreversible and Irretrievable Commitments of Resources
- M. Cumulative Potential Effects

V. ROUTE ALTERNATIVES

The EA will analyze the applicant’s proposed route (Map 1) and DNR Alternatives 1-3 with Xcel Energy’s modifications (Maps 2-4).

VI. SYSTEM ALTERNATIVES

The EA will analyze the availability and feasibility of the following system alternatives, along with the human and environmental impacts and potential mitigation measures associated with each:

- A. No-build
- B. Different size or technology transmission types
- C. Different transmission endpoints
- D. Underground transmission alternative
- E. Upgrading of existing facilities

ISSUES OUTSIDE THE SCOPE OF THE EA

The EA will not address the following topics:

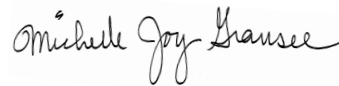
- Any route, route segment, or alignment alternative not specifically identified for study in this scoping decision.
- Any system alternative not specifically identified for study in this scoping decision.
- Potential impacts of specific energy sources.
- The manner in which landowners are compensated for the project.

SCHEDULE

The EA is anticipated to be completed and available in May 2024. Upon completion, it will be noticed and made available for review. Public hearings will be noticed and held in the project area after issuance of the EA. Comments on the EA may be submitted into the hearing record.

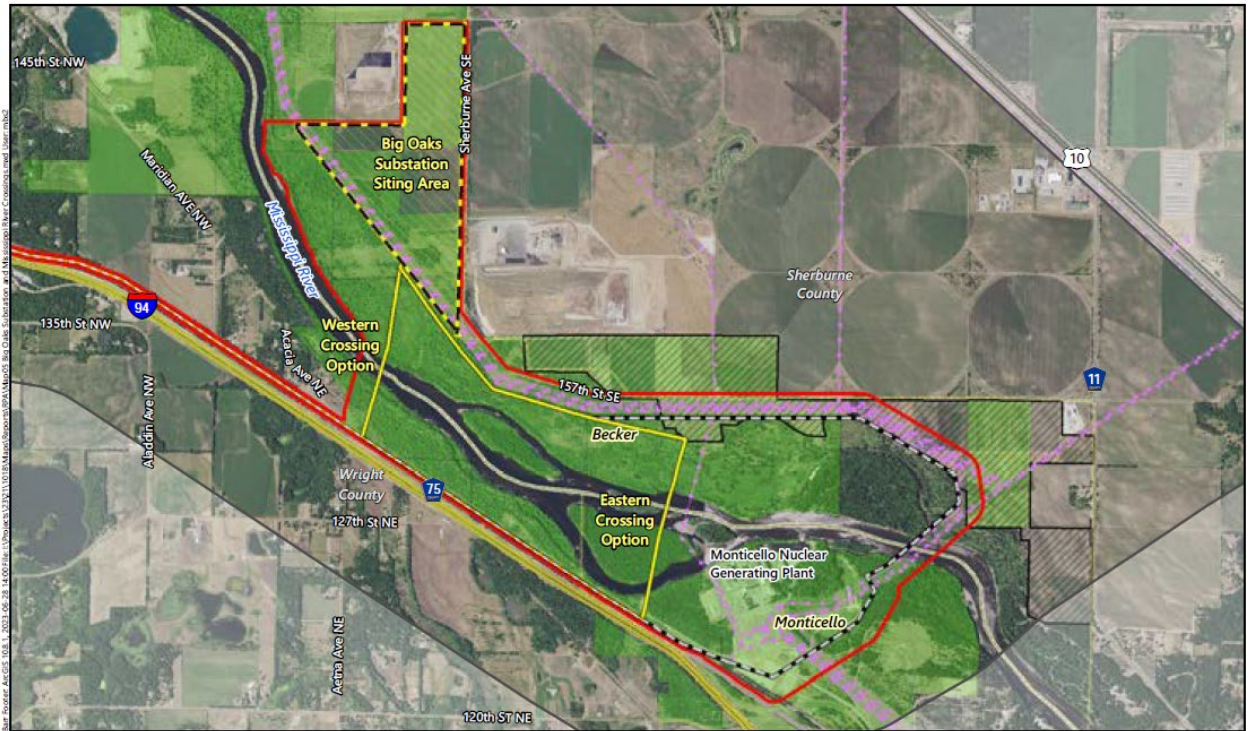
Signed this 21st day of February, 2024







STATE OF MINNESOTA
DEPARTMENT OF COMMERCE



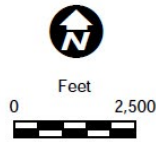
Michelle Gransee, Deputy Commissioner

Map 1: Xcel Energy Proposed River Crossing Options



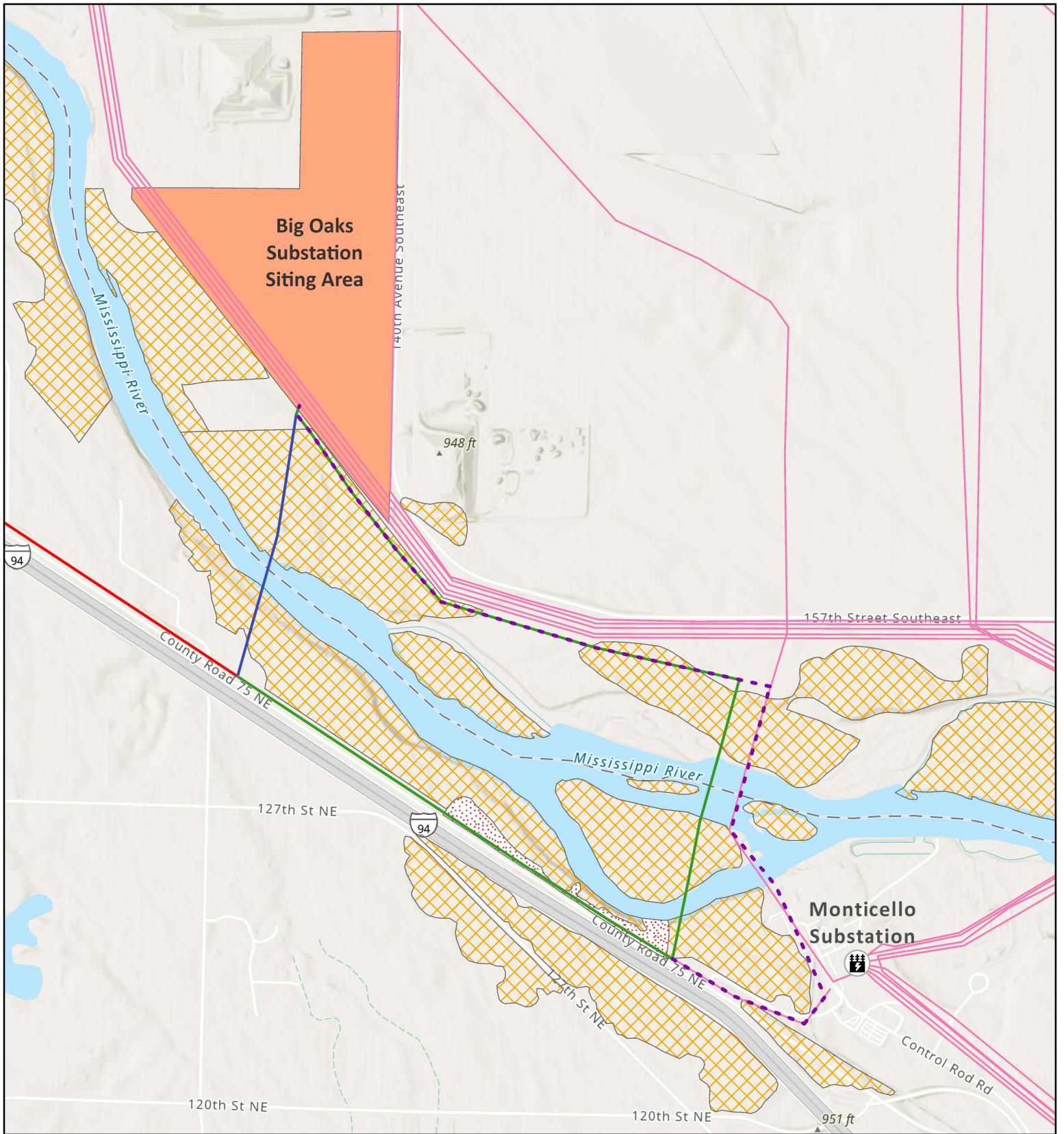
-  Proposed Route
-  Project Study Area
-  Anticipated Alignment (Existing)
-  Anticipated Alignment (New Build)
-  Alignment Considered But Rejected
-  Existing High-Voltage Transmission Line

-  University of Minnesota Sand Plain Research Farm
-  Xcel Energy Owned Parcel
-  Municipal Boundary
-  County Boundary

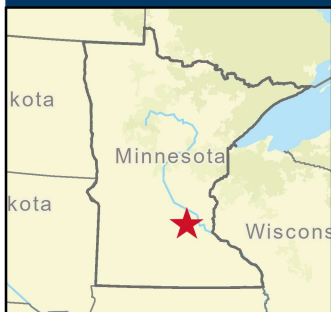


Map 5
BIG OAKS SUBSTATION AND MISSISSIPPI RIVER CROSSINGS
ALEXANDRIA TO BIG OAKS
MISO LRTP-2 Route Permit Application

Map 2: DNR Alternative 1



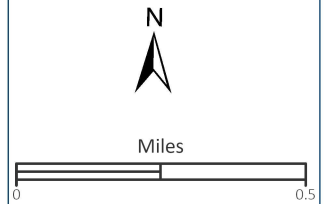
DNR Alternative 1



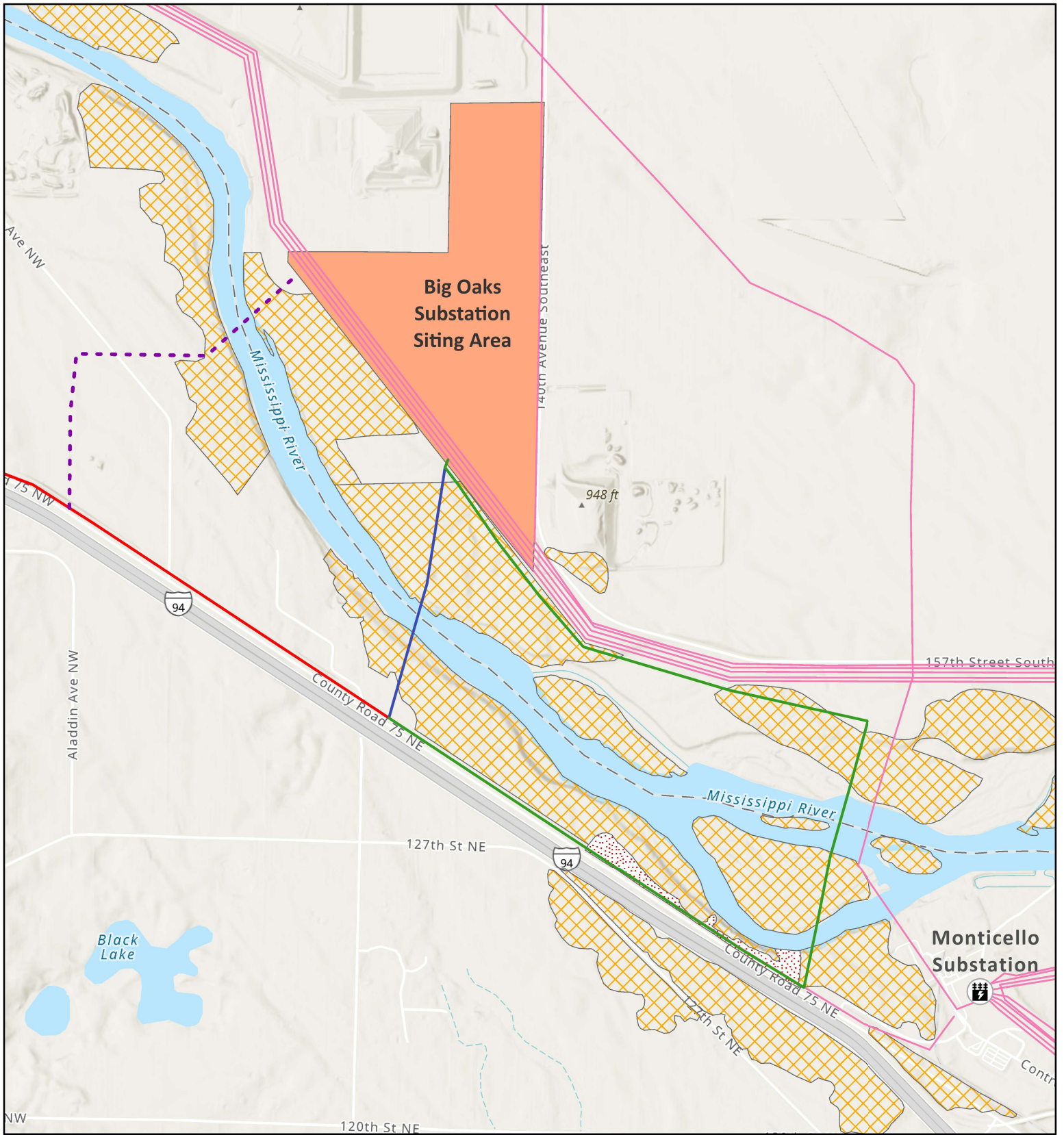
- Existing Substations
- Big Oaks Substation Siting Area
- Existing Lines
- Native Prairies
- MBS Sites of Biodiversity Significance

- DNR Alternatives**
- Option 1

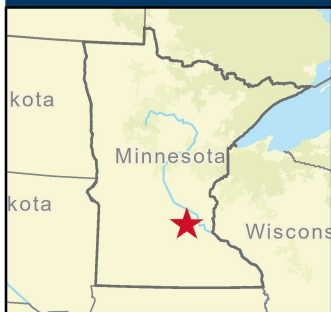
- Proposed Transmission Line Alignments**
- Western Crossing Option
 - Eastern Crossing Option
 - Project Transmission Line








Map 3: DNR Alternative 2



DNR Alternative 2






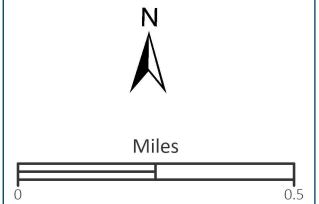
-  Existing Substations
-  Big Oaks Substation Siting Area
-  Existing Lines
-  Native Prairies
-  MBS Sites of Biodiversity Significance

DNR Alternatives

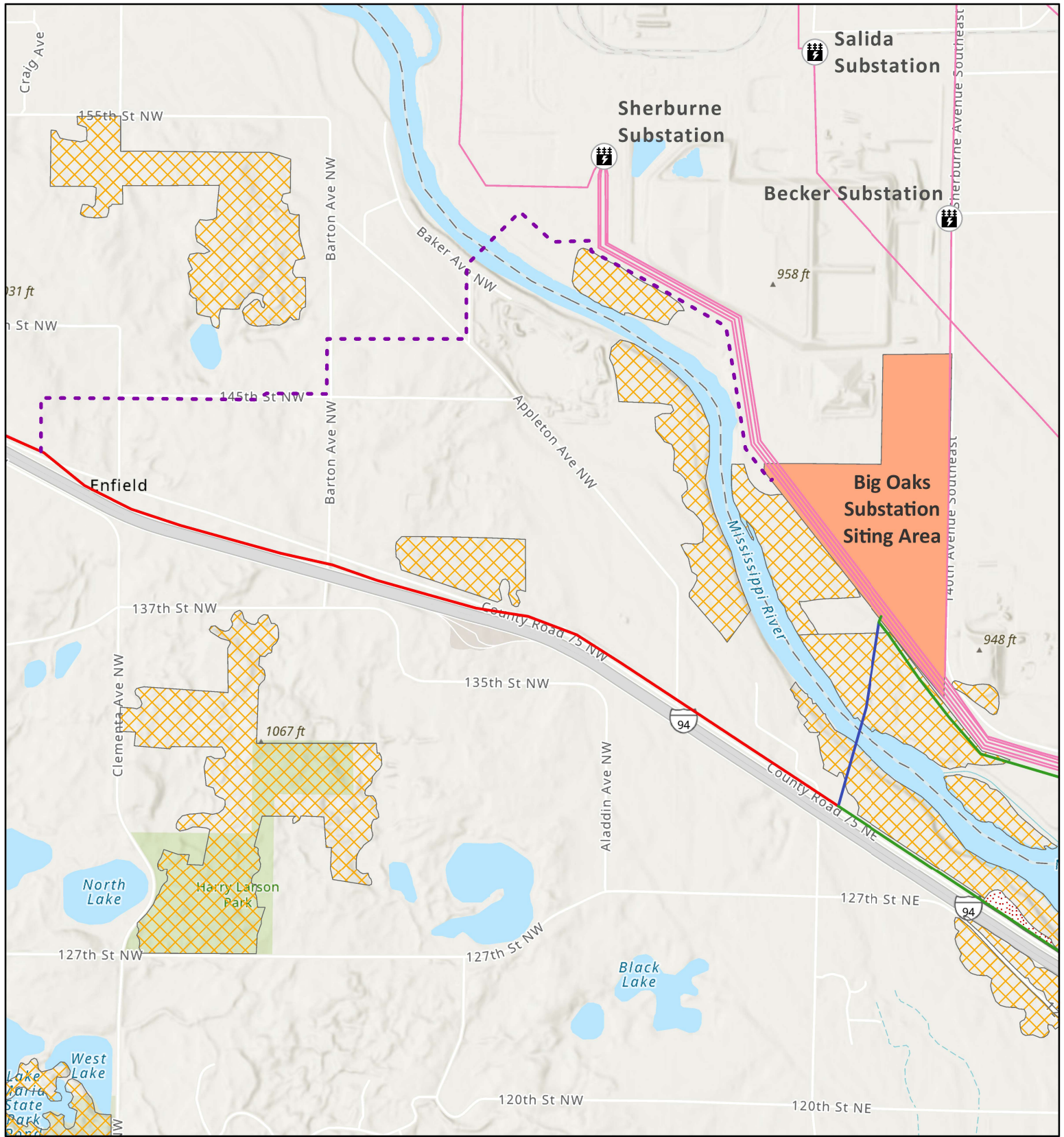
-  Option 2

Proposed Transmission Line Alignments

-  Western Crossing Option
-  Eastern Crossing Option
-  Project Transmission Line



Map 4: DNR Alternative 3



DNR Alternative 3



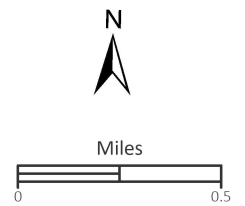
- Existing Substations
- Big Oaks Substation Siting Area
- Existing Lines
- Native Prairies
- MBS Sites of Biodiversity Significance

DNR Alternatives

- Option 3

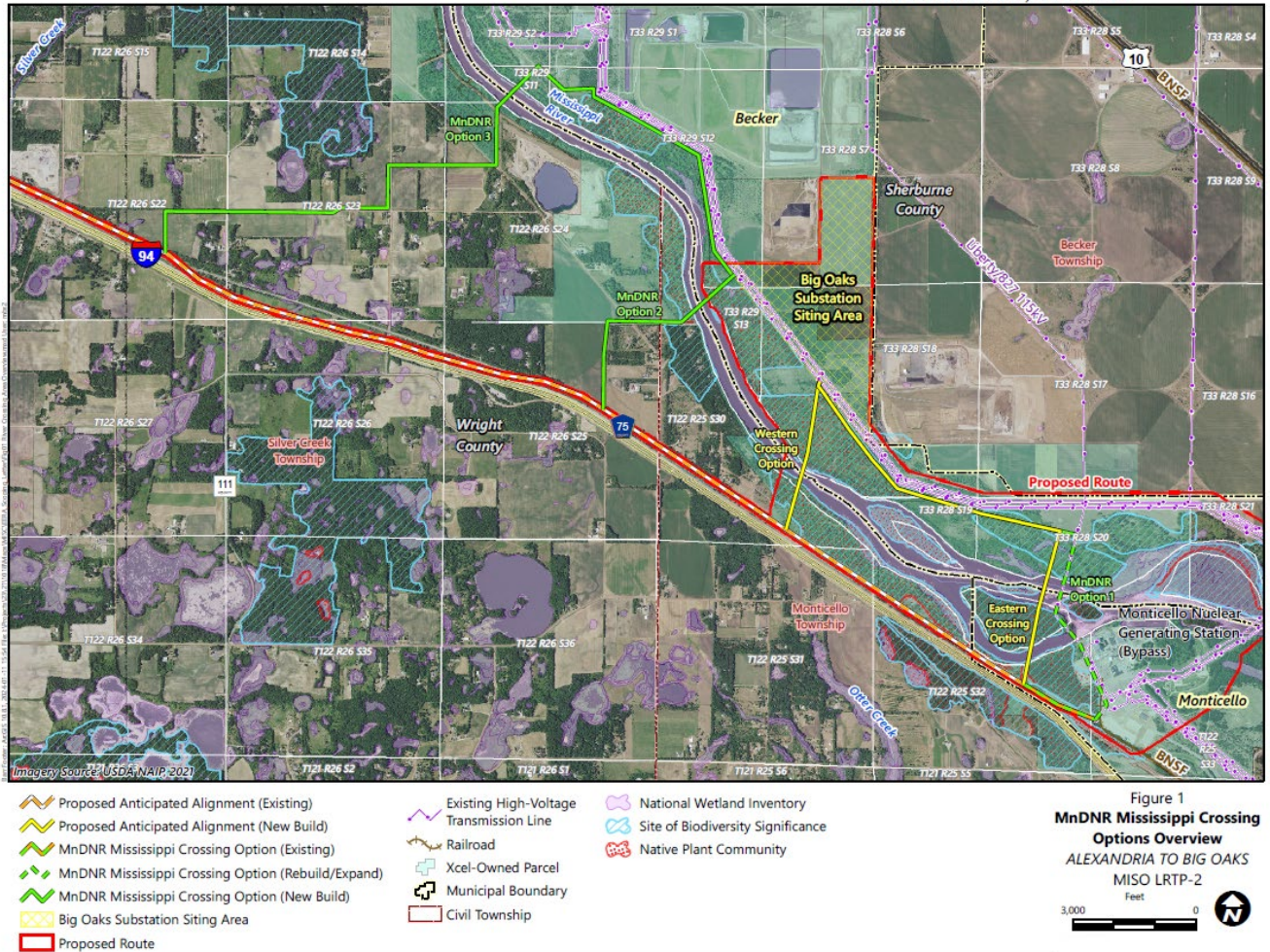
Proposed Transmission Line Alignments

- Western Crossing Option
- Eastern Crossing Option
- Project Transmission Line

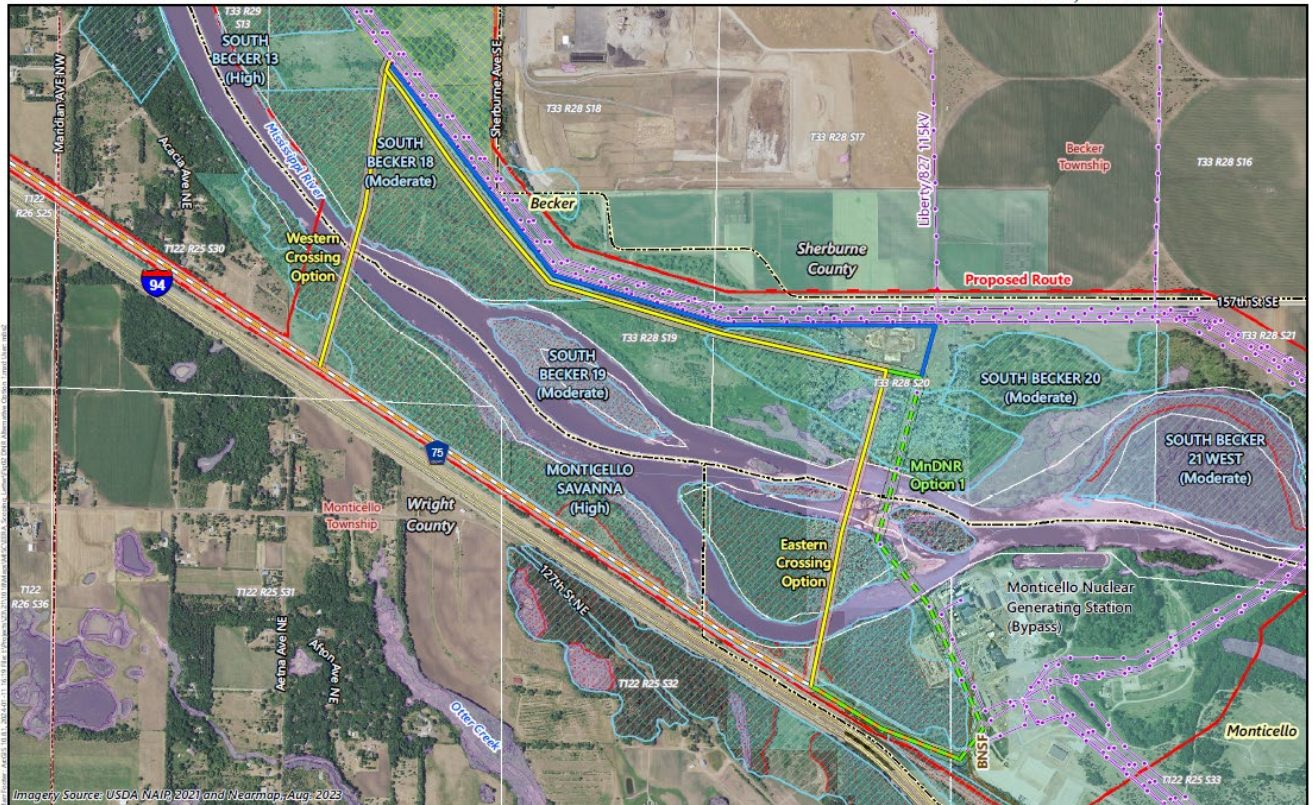


Attachment A: Xcel Energy Proposed Modifications to DNR Crossing Options

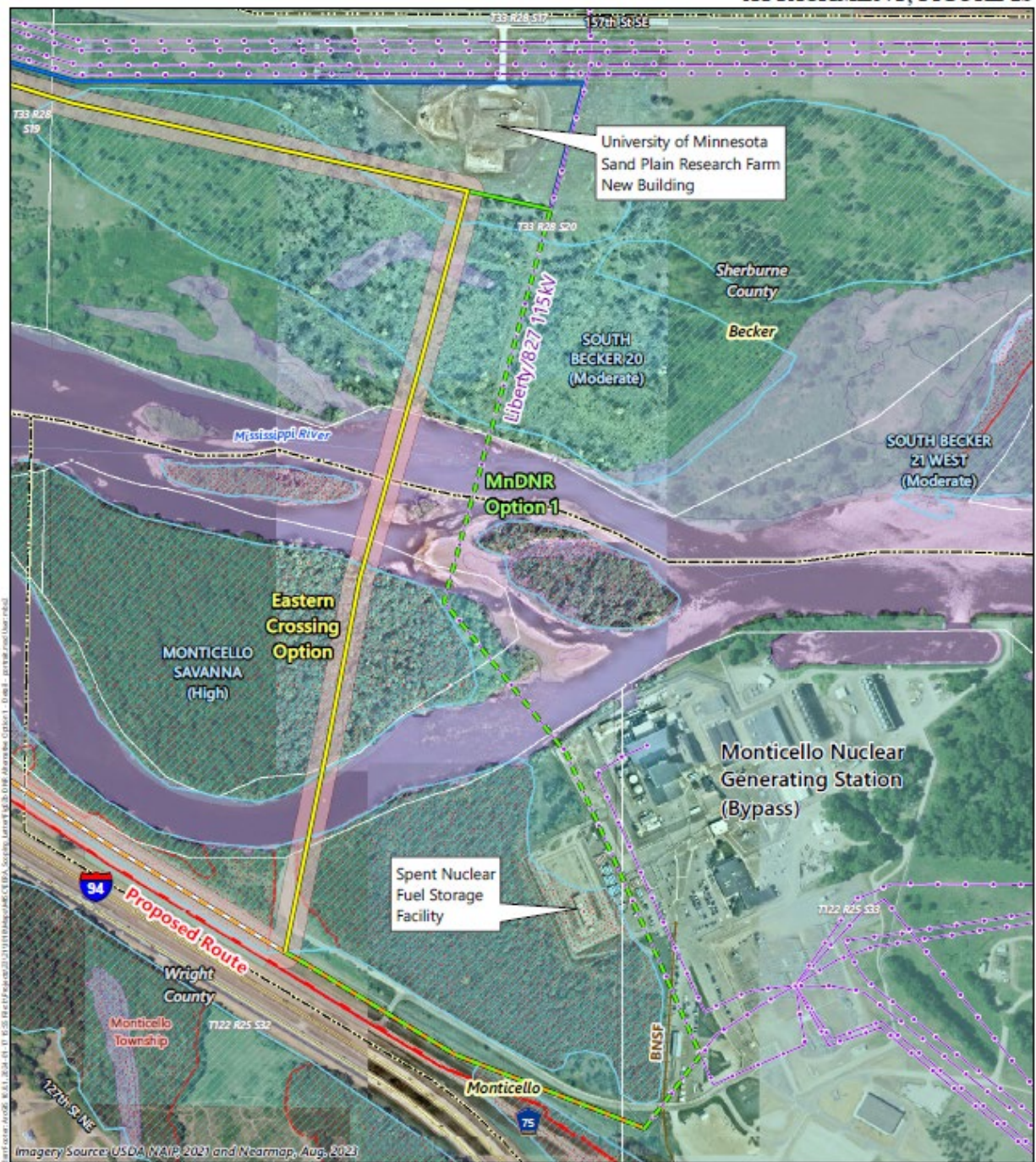
ATTACHMENT A, FIGURE 1



ATTACHMENT A, FIGURE 2a



ATTACHMENT, FIGURE 2b



Proposed Anticipated Alignment (Existing)	Proposed Route	National Wetland Inventory
Proposed Anticipated Alignment (New Build)	Existing High-Voltage Transmission Line	Site of Biodiversity Significance
Proposed and Existing 150-Foot Right-of-Way	Railroad	Native Plant Community
MnDNR Option Revised Alignment (Existing)	Xcel-Owned Parcel	
MnDNR Option Revised Alignment (Rebuild/Expand)	Municipal Boundary	
MnDNR Option Revised Alignment (New Build)	Civil Township	
MnDNR Option Original Alignment		

Figure 2b
MnDNR Mississippi Crossing Option 1 - Detail
 ALEXANDRIA TO BIG OAKS
 MISO LRTP-2

Feet

ATTACHMENT A, FIGURE 3

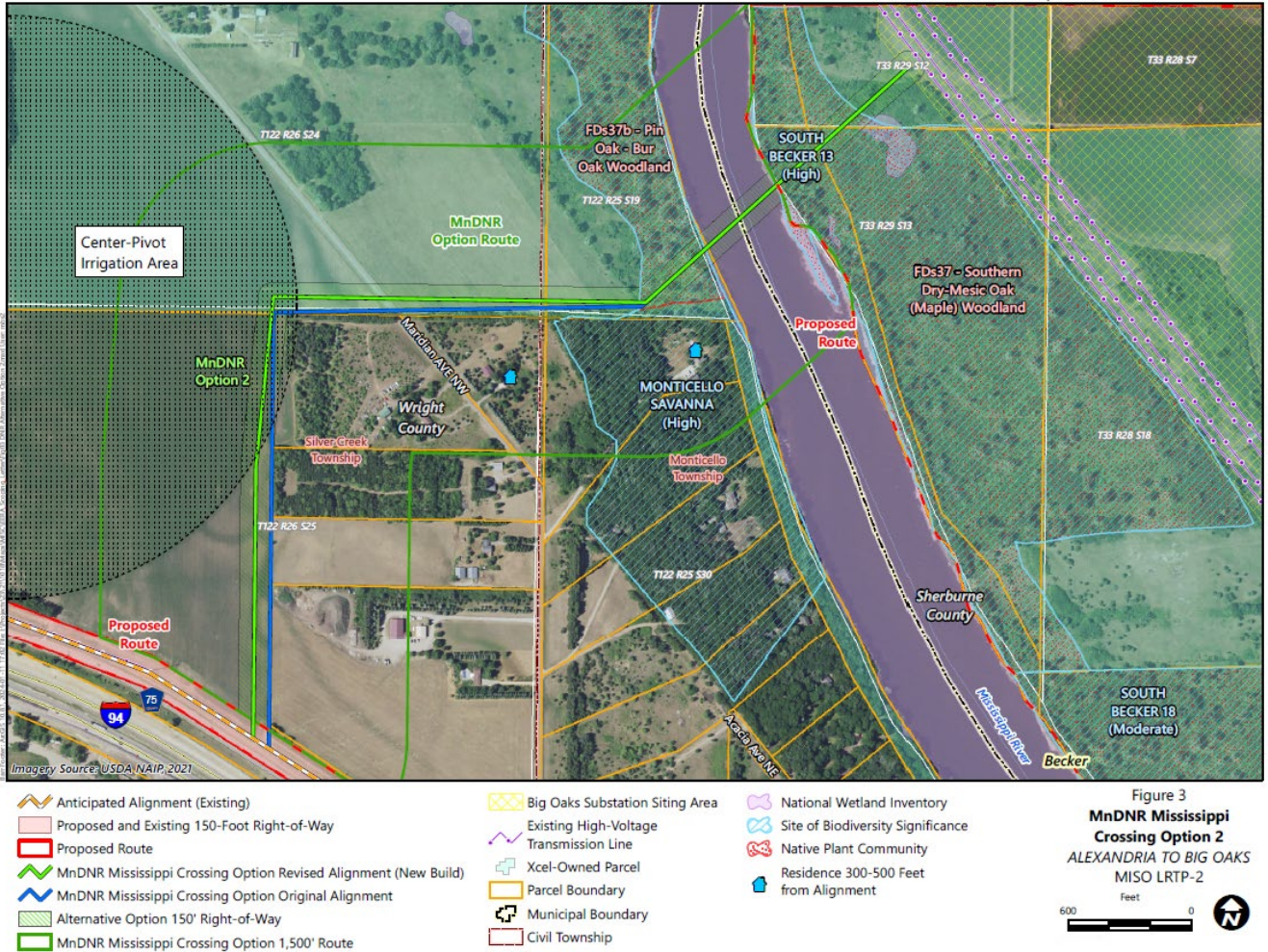


Figure 3
MnDNR Mississippi Crossing Option 2
 ALEXANDRIA TO BIG OAKS
 MISO LRTP-2
 Feet

ATTACHMENT A, FIGURE 4

