

APPENDIX E

Agency Correspondence

In accordance with Minnesota Rules, part 7829.0500, and Minnesota Statutes Chapter 13, the Applicants have designated portions of Appendix E as NONPUBLIC DATA–NOT FOR PUBLIC DISCLOSURE because it contains sensitive cultural resource and natural heritage information. The Minnesota State Historic Preservation Office Manual for Archaeological Projects in Minnesota provides for restricted access to sensitive cultural resource information. Similarly, the natural heritage information is nonpublic under Minnesota Statutes § 84.0872. Given the need to include nonpublic information, the Applicants have prepared and are electronically filing both NONPUBLIC and public versions of Appendix E.

Appendix E is organized as follows:

Table 1. Agency Mailing List

These are the individuals that were the primary addressees or copied on agency letters. All correspondence was sent via email.

Sample Letter

All letters were identical. A sample letter is provided.

Table 2. Agency Correspondence Archive

Provides a summary of correspondence sent and received.

Agency Correspondence

Provides correspondence sent to and received by agencies. Emails are provided; however, given a sample letter is included herein, individual letters are excluded.

Table 1. Agency Mailing List

Agency or Organization	Contact Name	Address	Email	Letter
Cedar Township	Dennis Carlson	268 235th St; Odin, MN 56160	dgrev@hotmail.com	Primary Addressee
Martin County	Scott Higgins	201 Lake Ave, Room #100; Fairmont, MN 56031	scott.higgins@co.martin.mn.us	Primary Addressee
	Kevin Peyman		kevin.peyman@co.martin.mn.us	Copied
	Pam Flitter		pam.flitter@co.martin.mn.us	Copied
	Ashley Brenke	923 N State St; Fairmont, MN 56031	ashley.martinswcd@gmail.com	Primary Addressee
Martin County Soil and Water Conservation District				
Minnesota Board of Water and Soil Resources	n/a	520 Lafayette Rd; St. Paul, MN 55155	waterprograms.bwsr@state.mn.us	Primary Addressee
Minnesota Department of Agriculture	Stephan Roos	625 Robert St N; St. Paul, MN 55155-2538	stephan.roos@state.mn.us	Copied
Minnesota Department of Commerce	Chase Christopherson	85 7 th Place E, Ste 280; St. Paul, MN 55101	chase.christopherson@state.mn.us	Primary Addressee
Minnesota Department of Health	Amanda Strommer	1400 E Lyon St; Marshall, MN 56258	amanda.strommer@state.mn.us	Primary Addressee
	David Bell		david.bell@state.mn.us	Copied
	Dereck Richter		dereck.richter@state.mn.us	Copied
	Danielle Luzinski		danielle.luzinski@state.mn.us	Copied
	Yarta Clemens-Billaigbakpu		yarta.clemens-billaigbakpu@state.mn.us	Copied
Minnesota Department of Labor and Industry	Todd Green	443 Lafayette Rd; St. Paul, MN 55155	todd.a.green@state.mn.us	Primary Addressee
Minnesota Department of Natural Resources	Benjamin Schaefer	21371 State Hwy 15; New Ulm, MN 56073-5228	benjamin.schaefer@state.mn.us	Primary Addressee
	Kate Fairman		kate.fairman@state.mn.us	Copied
	Samantha Bump		samantha.bump@state.mn.us	Copied
	Haley Byron		haley.byron@state.mn.us	Copied
Minnesota Department of Revenue	Alan Whipple	600 N Robert St; St. Paul, MN 55146	sa.property@state.mn.us	Primary Addressee
Minnesota Department of Transportation	Stacy Kotch Egstad	395 John Ireland Blvd; St. Paul, MN 55155	stacy.kotch@state.mn.us	Primary Addressee
	Emily Eichner		Emily.Eichner@state.mn.us	Copied
	Carroll Aasen		carroll.aasen@state.mn.us	Copied
Minnesota Indian Affairs Council	Issac Weston	161 Saint Anthony Ave, Ste 919; St. Paul, MN 55103	isaac.weston@state.mn.us	Primary Addressee
Minnesota Pollution Control Agency	Chris Green	504 Fairgrounds Rd, Ste 200; Marshall, MN 56258	chris.green@state.mn.us	Primary Addressee
Minnesota Office of Pipeline Safety	Jonathan Wolfgram	445 Minnesota St, Ste 147; St. Paul, MN 55101	jonathan.wolfgram@state.mn.us	Primary Addressee
Region Nine Development Commission	Nicole Griensewic	3 Civic Center Plaza, Ste 310; Mankato, MN 56001	nicole@rndc.org	Primary Addressee



September 10, 2025

Amanda Strommer
Minnesota Department of Health
1400 East Lyon St.
Marshall, MN 56258
amanda.strommer@state.mn.us

RE: Notice of Opportunity for Pre-application Coordination Meeting or Feedback
161-kilovolt Transmission Line and Associated Substation in Martin County, Minnesota

Dear Amanda Strommer,

On September 28, 2022, Big Bend Wind, LLC (“Big Bend”), an indirect subsidiary of Apex Clean Energy Holdings, LLC (“Apex”), received a route permit²⁹ from the Minnesota Public Utilities Commission (“MPUC”) to construct a 161-kilovolt (“kV”) transmission line and associated facilities to interconnect its approximately 300-megawatt wind project³⁰ to the transmission grid. Since MPUC issuance of the route permit, Big Bend has negotiated an offtake agreement with Great River Energy that requires a new interconnection point to the transmission grid. This change in the interconnection point results in the need for approximately 4.5 miles of additional 161-kV transmission line route and associated facilities, including a substation, not previously permitted. Big Bend will apply for a new MPUC route permit for this transmission line, referred to as the Big Bend Transmission Line Extension Project (“Extension Project”), in early Q4 2025. As part of this application, Great River Energy and Big Bend will apply to construct a new step-up substation and interconnection substation on the same pad (Substation Area) immediately adjacent to the existing Great River Energy-owned Lakefield Junction Substation.

The previously permitted transmission line is approximately 18 miles of 161-kV transmission line located in Cottonwood, Watonwan and Martin Counties, Minnesota. As permitted, the transmission line would extend south from the Big Bend Wind Project’s substation to the Xcel Energy Crandall 345-kV Switching Station in Martin County. The transmission line will now interconnect at the existing Lakefield Junction Substation.

²⁹ MPUC Docket No. IP7013/TL-19-621
³⁰ MPUC Docket No. IP7013/WS-19-619

Amanda Strommer
September 10, 2025

Approximately 16 miles of the previously permitted transmission line will be utilized. The Extension Project will begin east of 40th Avenue, south of 240th Street and north of 230th Street, approximately 9.5 miles southeast of Mountain Lake. It will travel approximately 4.5 miles south/southwest to interconnect at a new 161/345-kV step-up substation to be owned and operated by Big Bend; Great River Energy will have a 345 kV substation on the same pad separated by a fence. This new Substation Area will interconnect to the Lakefield Junction Substation.

Big Bend proposes to use 70- to 120-foot-tall steel or laminate wood structures with spans of approximately 400 to 650 feet. Big Bend is planning to obtain a 100-foot-wide permanent right-of-way when the transmission line follows parcel lines and a 150-foot-wide permanent right-of-way when adjacent to road right-of-way. Big Bend is currently acquiring easements from landowners to secure the right-of-way required for the Extension Project. Great River Energy owns the property where the new Substation Area will be located.

To facilitate your review, we have enclosed a map that depicts the location of the proposed Extension Project and new Substation Area. We welcome any comments your agency might have at this time and throughout the permitting process. Any written agency comments provided in response to this letter will be incorporated into the MPUC's route permit process. Should you need additional information or would like to set up a pre-application coordination meeting, please contact me at brie.anderson@apexcleanenergy.com or 612-501-2801.

Sincerely,

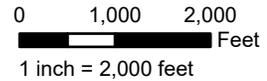
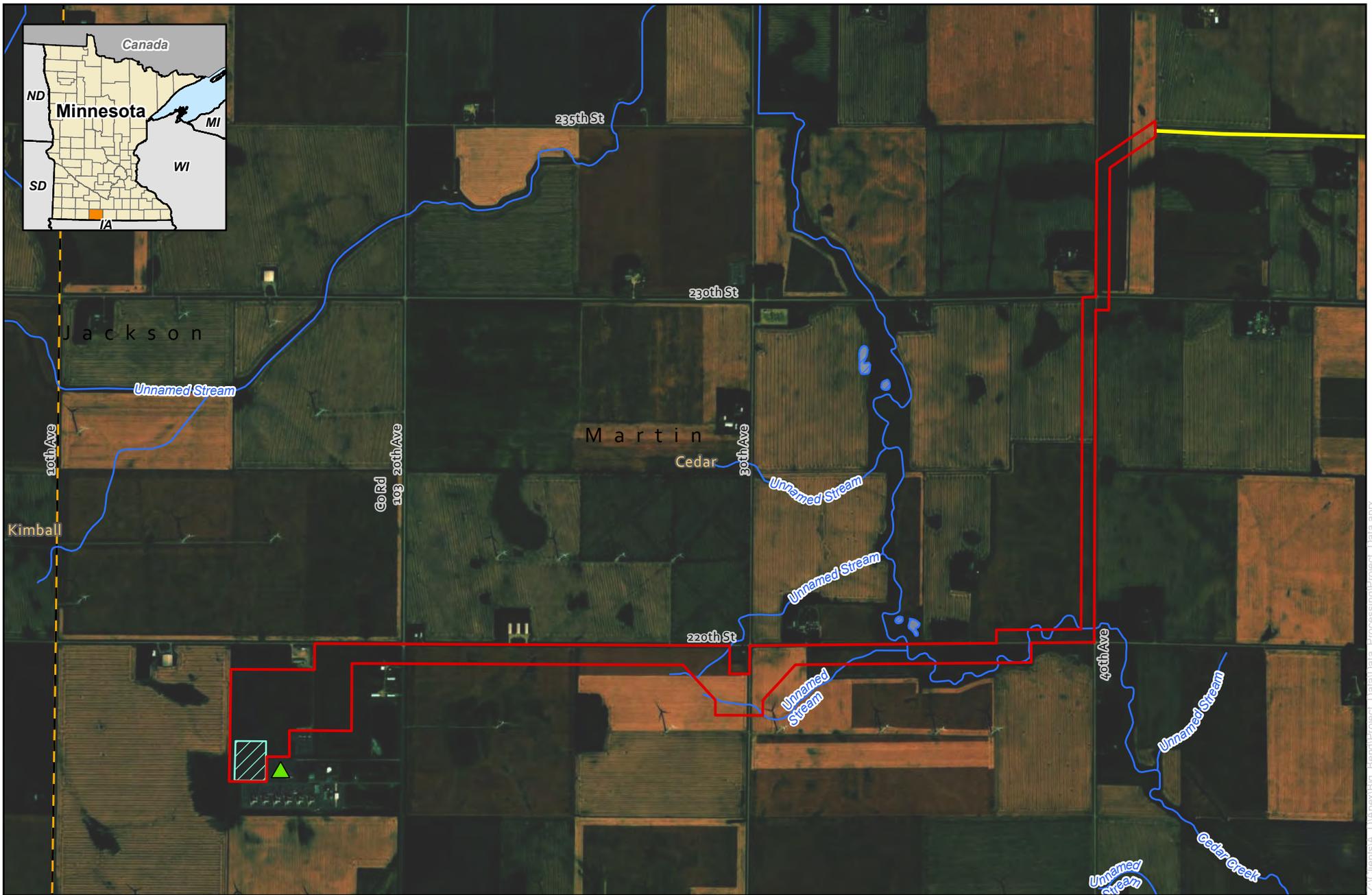


Brie Anderson
Senior Director of Project Permitting
Apex Clean Energy

Enclosure: Project Overview Map

cc:

Dereck Richter, Minnesota Department of Health
Danielle Luzinski, Minnesota Department of Health
Yarta Clemens-Billaigbakpu, Minnesota Department of Health
David Bell, Minnesota Department of Health
Andrew Levi, Merjent



For Environmental Review Purposes Only

Project Overview Map Big Bend Transmission Line Extension Martin County, Minnesota

- Proposed Route
- New Substation Area
- Previously Permitted Transmission Line
- ▲ Existing Lakefield Junction Substation
- MDNR River/Stream
- MDNR Hydro Feature
- Township
- County

Table 2. Agency Correspondence Archive

Agency or Organization	Big Bend Action	Description	Date
Cedar Township	Correspondence sent	Introduction email, letter and overview map (no response)	September 10, 2025
Martin County	Correspondence sent	Introduction email, letter and overview map	September 10, 2025
	Telephone call received	Offer to present the Extension Project for the County Board	October 8, 2025
	Correspondence sent	Acceptance of presentation opportunity	October 9, 2025
	Correspondence received	Confirmation from Martin County	October 10, 2025
	Correspondence received	Martin County provided as-builts for county drainage system to incorporate into final design.	November 19, 2025
Martin County Soil and Water Conservation District	Correspondence sent	Introduction email, letter and overview map	September 10, 2025
	Correspondence received	Indicating where to direct Wetland Conservation Act applications	September 11, 2025
Minnesota Board of Water Soil Resources	Correspondence sent	Introduction email, letter and overview map (no response)	September 10, 2025
Minnesota Department of Agriculture	Correspondence sent	Introduction email, letter and overview map (no response)	September 10, 2025
Minnesota Department of Commerce	Correspondence sent	Introduction email, letter and overview map (no response)	September 10, 2025
Minnesota Department of Health	Correspondence sent	Introduction email, letter and overview map	September 10, 2025
	Correspondence received	Requesting shapefiles to aid review	September 10, 2025
	Data sent	Sending shapefiles	September 10, 2025
	Correspondence received	Indicating no major issues or concerns; noting setbacks	September 12, 2025
	Correspondence sent	Thank you; acknowledging setbacks	September 12, 2025
Minnesota Department of Labor and Industry	Correspondence sent	Introduction email, letter and overview map (no response)	September 10, 2025
Minnesota Department of Natural Resources	Correspondence sent	Introduction email, letter and overview map	September 10, 2025
	Correspondence received	Indicating review lead	September 10, 2025
	Data requested	Requesting shapefiles to aid review	September 10, 2025
	Data sent	Sending shapefiles	September 10, 2025
	Correspondence received	Natural Heritage Review	September 19, 2025
Minnesota Department of Revenue	Correspondence sent	Introduction email, letter and overview map	September 10, 2025
	Correspondence received	General mailbox automated response email (no response)	September 10, 2025
Minnesota Department of Transportation	Correspondence sent	Introduction email, letter and overview map (no response)	September 10, 2025
Minnesota Indian Affairs Council	Correspondence sent	Introduction email, letter and overview map (no response)	October 2, 2025

PUBLIC DOCUMENT - NONPUBLIC DATA HAS BEEN EXCISED

Agency or Organization	Big Bend Action	Description	Date
Minnesota Pollution Control Agency	Correspondence sent	Introduction email, letter and overview map	September 10, 2025
	Correspondence received	Indicating an update in internal process; no comments	September 17, 2025
	Correspondence sent	Thank you.	September 17, 2025
Minnesota Office of Pipeline Safety	Correspondence sent	Introduction email, letter and overview map (no response)	September 10, 2025
Minnesota State Historic Preservation Office	Correspondence sent	Submittal of Phase Ia Report and requesting comment letter	September 23, 2025
	Correspondence received	SHPO comments on Phase Ia Report and request for revisions	November 14, 2025
	Correspondence sent	Re-submittal of Phase Ia Report with requested edits	November 24, 2025
	Correspondence received	SHPO acknowledges receipt	November 25, 2025
Region Nine Development Commission	Correspondence sent	Introduction email, letter and overview map (no response)	September 11, 2025

Cedar Township

From: [Andrew Levi](#)
To: dgreg@hotmail.com
Cc: brie.anderson@apexcleanenergy.com
Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 10, 2025 1:36:00 PM
Attachments: [image001.png](#)
[Apex_AgencyLetter_Mailing_20250909_Cedar_Township.pdf](#)

Dear Dennis Carlson,

Big Bend Wind, LLC (Big Bend) and Great River Energy are proposing to construct approximately 4.5 miles of 161-kilovolt transmission line and associated facilities in Martin County. The transmission line is needed to interconnect the Big Bend Wind Project to the transmission grid because the interconnection point for the wind farm has changed. More detail is provided in the attached letter.

Big Bend is planning to submit a Route Permit Application to the Minnesota Public Utilities Commission in early Q4, 2025. Big Bend would appreciate any comments you might have about the Project. Please reach out to Brie Anderson at brie.anderson@apexcleanenergy.com or 612-501-2801 with questions, written comments, or to request a pre-application coordination meeting.

Thank you,

Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi

612.354.4280 direct

andrew.levi@merjent.com



1 Main Street SE, Suite 300

Minneapolis, MN 55414

612.746.3660 main

www.merjent.com

Martin County



JD91 As Built Link

From Tyler Utesch <Tyler.Utesch@co.martin.mn.us>

Date Wed 11/19/2025 9:37 AM

To Brie Anderson <brie.anderson@apexcleanenergy.com>

Please see the link to access the as built files for JD91 M&J for Martin County. This is in reference to the Big Bend Extension Project. The following link will gain you access to the drainage DB portal where access to JD91 As built can be found. Questions feel free to reach out. Thanks and have a great day.

<https://martin.drainagedb.net/#/portal2>



TYLER UTESCH

Drainage Systems Manager

Drainage Administration

P: 507-238-3130

F: 507-432-6887

E: Tyler.Utesch@co.martin.mn.us

201 Lake Avenue #200 | Fairmont, MN 56031

martincountymn.gov



RE: Big Bend Extension Project - Nov 4 meeting

From Scott Higgins <Scott.Higgins@co.martin.mn.us>

Date Fri 10/10/2025 9:05 AM

To Brie Anderson <brie.anderson@apexcleanenergy.com>

Cc Bipin Thapa <bipin.thapa@apexcleanenergy.com>; Jeremy Spaeth <jeremy.spaeth@apexcleanenergy.com>

Good Morning Brie,

Thanks for the follow up response. We will plan on your Bipin and Jeremy to give a project update to the County Board on Nov 4th. If you wish to include any documentation for the board packets, we would need to have that info by Oct 28th. We look forward to the presentation. Thank you.

From: Brie Anderson <brie.anderson@apexcleanenergy.com>

Sent: Thursday, October 9, 2025 1:57 PM

To: Scott Higgins <Scott.Higgins@co.martin.mn.us>

Cc: Bipin Thapa <bipin.thapa@apexcleanenergy.com>; Jeremy Spaeth <jeremy.spaeth@apexcleanenergy.com>

Subject: Big Bend Extension Project - Nov 4 meeting

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Hi Scott -

Thank you for your call late yesterday to discuss our Big Bend Extension Project, which is a 4.5-mile 161 kV transmission line in Cedar Township.

My colleagues Bipin and Jeremy would love the opportunity to share our Project with the County Board at your November 4 meeting (unfortunately we have conflicts on October 21).

They will be in-person for the meeting.

Please coordinate with them on timing and logistics. We look forward to working with Martin County.

Sincerely,
Brie Anderson

BRIE ANDERSON
Senior Director of Project Permitting

Apex Clean Energy
120 Garrett Street, Suite 700, Charlottesville, VA 22902
cell: 612-501-2801 | fax: 434-220-3712
brie.anderson@apexcleanenergy.com | www.apexcleanenergy.com



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From: [Andrew Levi](#)
To: scott.higgins@co.martin.mn.us
Cc: kevin.peyman@co.martin.mn.us; pam.flitter@co.martin.mn.us; brie.anderson@apexcleanenergy.com
Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 10, 2025 1:41:00 PM
Attachments: [image001.png](#)
[Apex_AgencyLetter_Mailing_20250909_Martin_County.pdf](#)

Dear Scott Higgins,

Big Bend Wind, LLC (Big Bend) and Great River Energy are proposing to construct approximately 4.5 miles of 161-kilovolt transmission line and associated facilities in Martin County. The transmission line is needed to interconnect the Big Bend Wind Project to the transmission grid because the interconnection point for the wind farm has changed. More detail is provided in the attached letter.

Big Bend is planning to submit a Route Permit Application to the Minnesota Public Utilities Commission in early Q4, 2025. Big Bend would appreciate any comments you might have about the Project. Please reach out to Brie Anderson at brie.anderson@apexcleanenergy.com or 612-501-2801 with questions, written comments, or to request a pre-application coordination meeting.

Thank you,

Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi

612.354.4280 direct

andrew.levi@merjent.com



1 Main Street SE, Suite 300

Minneapolis, MN 55414

612.746.3660 main

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Martin County Soil and Water Conservation District

From: [Dustin Benes](#)
To: [Brie Anderson](#)
Cc: [Andrew Levi](#)
Subject: EXTERNAL: Re: Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Thursday, September 11, 2025 9:30:07 AM
Attachments: [image001.png](#)

CAUTION: This email originated from outside of Merjent.

Good morning Brie,

Thank you, we received the email from Andrew Levi regarding the Big Bend Wind LLC project. Please submit any wetland conservation act applications to me, dustin.martinswcd@gmail.com.

Thank you

Dustin Benes
District Technician
Martin Soil and Water Conservation District
923 N State St., Suite 110
Fairmont MN 56031
507-235-6680 ext. 4

On Thu, Sep 11, 2025 at 9:02 AM Ashley Brenke <ashley.martinswcd@gmail.com> wrote:
FYI - don't know if you need this for WCA.

Ashley Brenke
Martin Soil and Water Conservation District
507.235.6680 ext 4

----- Forwarded message -----

From: **Andrew Levi** <andrew.levi@merjent.com>
Date: Wed, Sep 10, 2025 at 1:39 PM
Subject: Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
To: ashley.martinswcd@gmail.com <ashley.martinswcd@gmail.com>
Cc: Brie Anderson <brie.anderson@apexcleanenergy.com>

Dear Ashley Brenke,

Big Bend Wind, LLC (Big Bend) and Great River Energy are proposing to construct approximately 4.5 miles of 161-kilovolt transmission line and associated facilities in Martin County. The transmission line is needed to interconnect the Big Bend Wind Project to the transmission grid because the interconnection point for the wind farm has changed. More detail is provided in the attached letter.

Big Bend is planning to submit a Route Permit Application to the Minnesota Public Utilities Commission in early Q4, 2025. Big Bend would appreciate any comments you might have about the Project. Please reach out to Brie Anderson at brie.anderson@apexcleanenergy.com or 612-501-2801 with questions, written comments, or to request a pre-application coordination meeting.

Thank you,

Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi
612.354.4280 direct
andrew.levi@merjent.com



1 Main Street SE, Suite 300
Minneapolis, MN 55414
612.746.3660 main
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From: [Andrew Levi](#)
To: ashley.martinswcd@gmail.com
Cc: brie.anderson@apexcleanenergy.com
Subject: Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 10, 2025 1:39:00 PM
Attachments: [image001.png](#)
[Apex_AgencyLetter_Mailing_20250909_Martin_County_Soil_and_Water_Conservation_District.pdf](#)

Dear Ashley Brenke,

Big Bend Wind, LLC (Big Bend) and Great River Energy are proposing to construct approximately 4.5 miles of 161-kilovolt transmission line and associated facilities in Martin County. The transmission line is needed to interconnect the Big Bend Wind Project to the transmission grid because the interconnection point for the wind farm has changed. More detail is provided in the attached letter.

Big Bend is planning to submit a Route Permit Application to the Minnesota Public Utilities Commission in early Q4, 2025. Big Bend would appreciate any comments you might have about the Project. Please reach out to Brie Anderson at brie.anderson@apexcleanenergy.com or 612-501-2801 with questions, written comments, or to request a pre-application coordination meeting.

Thank you,

Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi

612.354.4280 direct

andrew.levi@merjent.com



1 Main Street SE, Suite 300

Minneapolis, MN 55414

612.746.3660 main

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Minnesota Board of Water and Soil Resources

From: [Andrew Levi](#)
To: ["waterprograms.bwsr@state.mn.us"](mailto:waterprograms.bwsr@state.mn.us)
Cc: ["brie.anderson@apexcleanenergy.com"](mailto:brie.anderson@apexcleanenergy.com)
Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 10, 2025 1:26:00 PM
Attachments: [image001.png](#)
[Apex_AgencyLetter_Mailing_20250909_Board_of_Water_Soil_Resources.pdf](#)

Dear Water Programs Coordinator,

Big Bend Wind, LLC (Big Bend) and Great River Energy are proposing to construct approximately 4.5 miles of 161-kilovolt transmission line and associated facilities in Martin County. The transmission line is needed to interconnect the Big Bend Wind Project to the transmission grid because the interconnection point for the wind farm has changed. More detail is provided in the attached letter.

Big Bend is planning to submit a Route Permit Application to the Minnesota Public Utilities Commission in early Q4, 2025. Big Bend would appreciate any comments you might have about the Project. Please reach out to Brie Anderson at brie.anderson@apexcleanenergy.com or 612-501-2801 with questions, written comments, or to request a pre-application coordination meeting.

Thank you,

Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi

612.354.4280 direct

andrew.levi@merjent.com



1 Main Street SE, Suite 300

Minneapolis, MN 55414

612.746.3660 main

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Minnesota Department of Agriculture

From: [Andrew Levi](#)
To: stephan.roos@state.mn.us
Cc: brie.anderson@apexcleanenergy.com
Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 10, 2025 1:43:00 PM
Attachments: [image001.png](#)
[Apex_AgencyLetter_Mailing_20250909_Minnesota_Department_of_Agriculture.pdf](#)

Dear Stephan Roos,

Big Bend Wind, LLC (Big Bend) and Great River Energy are proposing to construct approximately 4.5 miles of 161-kilovolt transmission line and associated facilities in Martin County. The transmission line is needed to interconnect the Big Bend Wind Project to the transmission grid because the interconnection point for the wind farm has changed. More detail is provided in the attached letter.

Big Bend is planning to submit a Route Permit Application to the Minnesota Public Utilities Commission in early Q4, 2025. Big Bend would appreciate any comments you might have about the Project. Please reach out to Brie Anderson at brie.anderson@apexcleanenergy.com or 612-501-2801 with questions, written comments, or to request a pre-application coordination meeting.

Thank you,

Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi

612.354.4280 direct

andrew.levi@merjent.com



1 Main Street SE, Suite 300

Minneapolis, MN 55414

612.746.3660 main

www.merjent.com

Minnesota Department of Commerce

From: [Andrew Levi](#)
To: chase.christopherson@state.mn.us
Cc: brie.anderson@apexcleanenergy.com
Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 10, 2025 1:44:00 PM
Attachments: [image001.png](#)
[Apex_AgencyLetter_Mailing_20250909_Minnesota_Department_of_Commerce.pdf](#)

Dear Chase Christopherson,

Big Bend Wind, LLC (Big Bend) and Great River Energy are proposing to construct approximately 4.5 miles of 161-kilovolt transmission line and associated facilities in Martin County. The transmission line is needed to interconnect the Big Bend Wind Project to the transmission grid because the interconnection point for the wind farm has changed. More detail is provided in the attached letter.

Big Bend is planning to submit a Route Permit Application to the Minnesota Public Utilities Commission in early Q4, 2025. Big Bend would appreciate any comments you might have about the Project. Please reach out to Brie Anderson at brie.anderson@apexcleanenergy.com or 612-501-2801 with questions, written comments, or to request a pre-application coordination meeting.

Thank you,

Andrew Levi [on behalf of Brie Anderson, Apex]

Andrew Levi

612.354.4280 direct

andrew.levi@merjent.com



1 Main Street SE, Suite 300

Minneapolis, MN 55414

612.746.3660 main

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Minnesota Department of Health

From: [Brie Anderson](#)
To: [Strommer, Amanda \(MDH\)](#); [Andrew Levi](#)
Cc: [Richter, Dereck \(He/Him/His\) \(MDH\)](#); [Luzinski, Danielle \(MDH\)](#); [Clemens-Billaigbakpu, Yarta \(MDH\)](#); [Bell, David \(MDH\)](#)
Subject: EXTERNAL: Re: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Friday, September 12, 2025 3:58:09 PM
Attachments: [image003.png](#)

CAUTION: This email originated from outside of Merjent.

Hi Amanda -

Thank you for your review of the Big Bend Transmission Line Extension Project. We will ensure the setbacks described below are met during construction.

Sincerely,
Brie Anderson

BRIE ANDERSON
Senior Director of Project Permitting

Apex Clean Energy
120 Garrett Street, Suite 700, Charlottesville, VA 22902
cell: 612-501-2801 | fax: 434-220-3712
brie.anderson@apexcleanenergy.com | www.apexcleanenergy.com



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From: Strommer, Amanda (MDH) <amanda.strommer@state.mn.us>
Sent: Friday, September 12, 2025 6:19 AM
To: Andrew Levi <andrew.levi@merjent.com>; Brie Anderson <brie.anderson@apexcleanenergy.com>
Cc: Richter, Dereck (He/Him/His) (MDH) <dereck.richter@state.mn.us>; Luzinski, Danielle (MDH) <Danielle.Luzinski@state.mn.us>; Clemens-Billaigbakpu, Yarta (MDH) <yarta.clemens-billaigbakpu@state.mn.us>; Bell, David (MDH) <david.bell@state.mn.us>
Subject: RE: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project

The Minnesota Department of Health (MDH) Drinking Water Protection Program appreciates the notification and the opportunity to provide comments on the Proposed Transmission Line Extension.

Based on what was presented to us we did not identify any major issues or concerns with the proposal. We want to make note of the following setback distances from any wells. Electrical transformer storage area, oil filled is 50 feet and electric transmission line is 10 feet required setback. It appears that the proposal meets these setbacks but please ensure they are met

during construction. There are no drinking water supply management areas in the proposed project area.

If you have any questions or if there is any way we can be of further assistance, please contact us.

Amanda Strommer

Principal Planner | Drinking Water Protection Section

Minnesota Department of Health

1400 E. Lyon Street, Marshall, MN 56258-1268

Office: 507-476-4241 | Mobile: 507-649-0854



From: Andrew Levi <andrew.levi@merjent.com>

Sent: Wednesday, September 10, 2025 1:46 PM

To: Strommer, Amanda (MDH) <amanda.strommer@state.mn.us>

Cc: Richter, Dereck (He/Him/His) (MDH) <dereck.richter@state.mn.us>; Luzinski, Danielle (MDH) <Danielle.Luzinski@state.mn.us>; Clemens-Billaigbakpu, Yarta (MDH) <yarta.clemens-billaigbakpu@state.mn.us>; Bell, David (MDH) <david.bell@state.mn.us>; Brie Anderson <brie.anderson@apexcleanenergy.com>

Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project

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Dear Amanda Strommer,

Big Bend Wind, LLC (Big Bend) and Great River Energy are proposing to construct approximately 4.5 miles of 161-kilovolt transmission line and associated facilities in Martin County. The transmission line is needed to interconnect the Big Bend Wind Project to the transmission grid because the interconnection point for the wind farm has changed. More detail is provided in the attached letter.

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Thank you,

Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi

612.354.4280 direct

andrew.levi@merjent.com



1 Main Street SE, Suite 300

Minneapolis, MN 55414

612.746.3660 main

www.merjent.com

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From: [Strommer, Amanda \(MDH\)](#)
To: [Andrew Levi](#); [Brie Anderson](#)
Cc: [Richter, Dereck \(He/Him/His\) \(MDH\)](#); [Luzinski, Danielle \(MDH\)](#); [Clemens-Billaigbakpu, Yarta \(MDH\)](#); [Bell, David \(MDH\)](#)
Subject: EXTERNAL: RE: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Friday, September 12, 2025 6:19:12 AM
Attachments: [image003.png](#)

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The Minnesota Department of Health (MDH) Drinking Water Protection Program appreciates the notification and the opportunity to provide comments on the Proposed Transmission Line Extension.

Based on what was presented to us we did not identify any major issues or concerns with the proposal. We want to make note of the following setback distances from any wells. Electrical transformer storage area, oil filled is 50 feet and electric transmission line is 10 feet required setback. It appears that the proposal meets these setbacks but please ensure they are met during construction. There are no drinking water supply management areas in the proposed project area.

If you have any questions or if there is any way we can be of further assistance, please contact us.

Amanda Strommer

Principal Planner | Drinking Water Protection Section

Minnesota Department of Health

1400 E. Lyon Street, Marshall, MN 56258-1268

Office: 507-476-4241 | Mobile: 507-649-0854



From: Andrew Levi <andrew.levi@merjent.com>
Sent: Wednesday, September 10, 2025 1:46 PM
To: Strommer, Amanda (MDH) <amanda.strommer@state.mn.us>
Cc: Richter, Dereck (He/Him/His) (MDH) <dereck.richter@state.mn.us>; Luzinski, Danielle (MDH) <Danielle.Luzinski@state.mn.us>; Clemens-Billaigbakpu, Yarta (MDH) <yarta.clemens-billaigbakpu@state.mn.us>; Bell, David (MDH) <david.bell@state.mn.us>; Brie Anderson <brie.anderson@apexcleanenergy.com>
Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project

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Thank you,

Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi

612.354.4280 direct

andrew.levi@merjent.com



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Minneapolis, MN 55414

612.746.3660 main

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computer system.

From: [Brie Anderson](#)
To: [Clemens-Billaigbakpu, Yarta \(MDH\)](#); [Andrew Levi](#); [Strommer, Amanda \(MDH\)](#)
Cc: [Richter, Dereck \(He/Him/His\) \(MDH\)](#); [Luzinski, Danielle \(MDH\)](#); [Bell, David \(MDH\)](#)
Subject: EXTERNAL: Re: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 10, 2025 3:05:14 PM
Attachments: [image003.png](#)
[image.png](#)
[BIG_Transmission_Route_20250904.zip](#)

CAUTION: This email originated from outside of Merjent.

Hi Yarta -

Thank you for your response; attached is a shapefile of the Route that will be included in our Site Permit Application.

Thanks,
brie

BRIE ANDERSON
Senior Director of Project Permitting

Apex Clean Energy
120 Garrett Street, Suite 700, Charlottesville, VA 22902
cell: 612-501-2801 | fax: 434-220-3712
brie.anderson@apexcleanenergy.com | www.apexcleanenergy.com



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From: Clemens-Billaigbakpu, Yarta (MDH) <yarta.clemens-billaigbakpu@state.mn.us>
Sent: Wednesday, September 10, 2025 2:10 PM
To: Andrew Levi <andrew.levi@merjent.com>; Strommer, Amanda (MDH) <amanda.strommer@state.mn.us>
Cc: Richter, Dereck (He/Him/His) (MDH) <dereck.richter@state.mn.us>; Luzinski, Danielle (MDH) <Danielle.Luzinski@state.mn.us>; Bell, David (MDH) <david.bell@state.mn.us>; Brie Anderson <brie.anderson@apexcleanenergy.com>
Subject: RE: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project

Hi Andrew,

Thanks for reaching out to the Minnesota Department of Health for comments on your proposed project. In order to better assess the project can you please make available to me the shapefiles for the various GIS layers in the map that was attached
To your email.

Thanks!

Yarta CB

Yarta Clemens-Billaigbakpu

Source Water Protection Program

Drinking Water Protection Section

Minnesota Department of Health

625 Robert St. N

Saint Paul, MN

Office: 651-201-4686 |



From: Andrew Levi <andrew.levi@merjent.com>

Sent: Wednesday, September 10, 2025 1:46 PM

To: Strommer, Amanda (MDH) <amanda.strommer@state.mn.us>

Cc: Richter, Dereck (He/Him/His) (MDH) <dereck.richter@state.mn.us>; Luzinski, Danielle (MDH) <Danielle.Luzinski@state.mn.us>; Clemens-Billaigbakpu, Yarta (MDH) <yarta.clemens-billaigbakpu@state.mn.us>; Bell, David (MDH) <david.bell@state.mn.us>; Brie Anderson <brie.anderson@apexcleanenergy.com>

Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project

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Thank you,

Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi

612.354.4280 direct

andrew.levi@merjent.com



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From: [Clemens-Billaigbakpu, Yarta \(MDH\)](#)
To: [Andrew Levi; Strommer, Amanda \(MDH\)](#)
Cc: [Richter, Dereck \(He/Him/His\) \(MDH\)](#); [Luzinski, Danielle \(MDH\)](#); [Bell, David \(MDH\)](#); [Brie Anderson](#)
Subject: EXTERNAL: RE: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 10, 2025 2:10:24 PM
Attachments: [image003.png](#)

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Hi Andrew,

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To your email.

Thanks!

Yarta CB

Yarta Clemens-Billaigbakpu

Source Water Protection Program

Drinking Water Protection Section

Minnesota Department of Health

625 Robert St. N

Saint Paul, MN

Office: 651-201-4686 |



From: Andrew Levi <andrew.levi@merjent.com>
Sent: Wednesday, September 10, 2025 1:46 PM
To: Strommer, Amanda (MDH) <amanda.strommer@state.mn.us>
Cc: Richter, Dereck (He/Him/His) (MDH) <dereck.richter@state.mn.us>; Luzinski, Danielle (MDH) <Danielle.Luzinski@state.mn.us>; Clemens-Billaigbakpu, Yarta (MDH) <yarta.clemens-billaigbakpu@state.mn.us>; Bell, David (MDH) <david.bell@state.mn.us>; Brie Anderson <brie.anderson@apexcleanenergy.com>
Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project

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Thank you,

Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi

612.354.4280 direct

andrew.levi@merjent.com



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From: [Andrew Levi](mailto:Andrew.Levi@merjent.com)
To: amanda.strommer@state.mn.us
Cc: dereck.richter@state.mn.us; danielle.luzinski@state.mn.us; yarta.clemens-billaigbakpu@state.mn.us; david.bell@state.mn.us; brie.anderson@apexcleanenergy.com
Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 10, 2025 1:45:00 PM
Attachments: [image001.png](#)
[Apex_AgencyLetter_Mailing_20250909_Minnesota_Department_of_Health.pdf](#)

Dear Amanda Strommer,

Big Bend Wind, LLC (Big Bend) and Great River Energy are proposing to construct approximately 4.5 miles of 161-kilovolt transmission line and associated facilities in Martin County. The transmission line is needed to interconnect the Big Bend Wind Project to the transmission grid because the interconnection point for the wind farm has changed. More detail is provided in the attached letter.

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Thank you,

Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi

612.354.4280 direct

andrew.levi@merjent.com



1 Main Street SE, Suite 300

Minneapolis, MN 55414

612.746.3660 main

www.merjent.com

Minnesota Department of Labor and Industry

From: [Andrew Levi](#)
To: ["todd.a.green@state.mn.us"](mailto:todd.a.green@state.mn.us)
Cc: ["brie.anderson@apexcleanenergy.com"](mailto:brie.anderson@apexcleanenergy.com)
Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 10, 2025 1:45:00 PM
Attachments: [image001.png](#)
[Apex_AgencyLetter_Mailing_20250909_Minnesota_Department_of_Labor_and_Industry.pdf](#)

Dear Todd Green,

Big Bend Wind, LLC (Big Bend) and Great River Energy are proposing to construct approximately 4.5 miles of 161-kilovolt transmission line and associated facilities in Martin County. The transmission line is needed to interconnect the Big Bend Wind Project to the transmission grid because the interconnection point for the wind farm has changed. More detail is provided in the attached letter.

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Thank you,

Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi

612.354.4280 direct

andrew.levi@merjent.com



1 Main Street SE, Suite 300

Minneapolis, MN 55414

612.746.3660 main

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Minnesota Department of Natural Resources

From: [Brie Anderson](#)
To: [Haley Byron](#); [Andrew Levi](#)
Cc: [Fairman, Kate \(DNR\)](#); [Bump, Samantha \(DNR\)](#); [Schaefer, Benjamin \(DNR\)](#); [Ihns, Karla A \(DNR\)](#)
Subject: EXTERNAL: Re: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 10, 2025 3:04:06 PM
Attachments: [image006.png](#)
[image007.png](#)
[image008.png](#)
[image010.png](#)
[image011.png](#)
[image003.png](#)
[image.png](#)
[BIG_Transmission_Route_20250904.zip](#)

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Hi Haley -

Thank you for your response; attached is a shapefile of the Route that will be included in our Site Permit Application.

Thanks,
brie

BRIE ANDERSON
Senior Director of Project Permitting

Apex Clean Energy
120 Garrett Street, Suite 700, Charlottesville, VA 22902
cell: 612-501-2801 | fax: 434-220-3712
brie.anderson@apexcleanenergy.com | www.apexcleanenergy.com



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From: Byron, Haley (DNR) <Haley.Byron@state.mn.us>
Sent: Wednesday, September 10, 2025 2:53 PM
To: Andrew Levi <andrew.levi@merjent.com>
Cc: Fairman, Kate (DNR) <kate.fairman@state.mn.us>; Bump, Samantha (DNR) <Samantha.Bump@state.mn.us>; Brie Anderson <brie.anderson@apexcleanenergy.com>; Schaefer, Benjamin (DNR) <benjamin.schaefer@state.mn.us>; Ihns, Karla A (DNR) <karla.ihns@state.mn.us>
Subject: RE: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project

Hello Andrew,

I serve as the DNR's primary point of contact in [Region 4](#) for early coordination. I'll reach out to all applicable DNR divisions for comment and provide a written response to you for the

transmission line extension. To aid in the review process, please provide a shapefile of the proposed transmission line.

If it is determined that a [utility crossing license](#) is required, Karla Ihns with Lands and Minerals will be your primary point of contact for that permitting process.

Please don't hesitate to reach out if you have any questions.

Thank you!

Haley Byron

Regional Environmental Assessment Ecologist | South Region EWR

Minnesota Department of Natural Resources

117 Rogers Street

Mankato, MN 56001

Office: 507-389-8813

Cell: 507-910-8963

Email: haley.byron@state.mn.us

mndnr.gov



From: Schaefer, Benjamin (DNR) <benjamin.schaefer@state.mn.us>

Sent: Wednesday, September 10, 2025 1:51 PM

To: Andrew Levi <andrew.levi@merjent.com>; Ihns, Karla A (DNR) <karla.ihns@state.mn.us>

Cc: Fairman, Kate (DNR) <kate.fairman@state.mn.us>; Bump, Samantha (DNR) <Samantha.Bump@state.mn.us>; Byron, Haley (DNR) <Haley.Byron@state.mn.us>; Brie Anderson <brie.anderson@apexcleanenergy.com>

Subject: RE: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project

Importance: High

Thank you Andrew. I will let Karla Ihns from my office be the lead on this. She can look at your map and letter and let you know our thoughts. Thanks for reaching out to the DNR.



BENJAMIN J. SCHAEFER

Southern Region Operations Coordinator

Division of Lands and Minerals
21371 State Highway 15
New Ulm, MN 56073
Phone: 507-233-1211
Cell: 507-276-1985
benjamin.schaefer@state.mn.us

From: Andrew Levi <andrew.levi@merjent.com>
Sent: Wednesday, September 10, 2025 1:46 PM
To: Schaefer, Benjamin (DNR) <benjamin.schaefer@state.mn.us>
Cc: Fairman, Kate (DNR) <kate.fairman@state.mn.us>; Bump, Samantha (DNR) <Samantha.Bump@state.mn.us>; Byron, Haley (DNR) <Haley.Byron@state.mn.us>; Brie Anderson <brie.anderson@apexcleanenergy.com>
Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project

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Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi

612.354.4280 direct

andrew.levi@merjent.com



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From: [Byron, Haley \(DNR\)](#)
To: [Andrew Levi](#)
Cc: [Fairman, Kate \(DNR\)](#); [Bump, Samantha \(DNR\)](#); [Brie Anderson](#); [Schaefer, Benjamin \(DNR\)](#); [Ihns, Karla A \(DNR\)](#)
Subject: EXTERNAL: RE: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 10, 2025 2:53:14 PM
Attachments: [image006.png](#)
[image007.png](#)
[image008.png](#)
[image010.png](#)
[image011.png](#)
[image003.png](#)

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Regional Environmental Assessment Ecologist | South Region EWR

Minnesota Department of Natural Resources

117 Rogers Street

Mankato, MN 56001

Office: 507-389-8813

Cell: 507-910-8963

Email: haley.byron@state.mn.us

mndnr.gov



From: Schaefer, Benjamin (DNR) <benjamin.schaefer@state.mn.us>

Sent: Wednesday, September 10, 2025 1:51 PM

To: Andrew Levi <andrew.levi@merjent.com>; Ihns, Karla A (DNR) <karla.ihns@state.mn.us>

Cc: Fairman, Kate (DNR) <kate.fairman@state.mn.us>; Bump, Samantha (DNR) <Samantha.Bump@state.mn.us>; Byron, Haley (DNR) <Haley.Byron@state.mn.us>; Brie Anderson <brie.anderson@apexcleanenergy.com>

Subject: RE: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project

Importance: High

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BENJAMIN J. SCHAEFER

Southern Region Operations Coordinator

Division of Lands and Minerals

21371 State Highway 15

New Ulm, MN 56073

Phone: 507-233-1211

Cell: 507-276-1985

benjamin.schaefer@state.mn.us

From: Andrew Levi <andrew.levi@merjent.com>

Sent: Wednesday, September 10, 2025 1:46 PM

To: Schaefer, Benjamin (DNR) <benjamin.schaefer@state.mn.us>

Cc: Fairman, Kate (DNR) <kate.fairman@state.mn.us>; Bump, Samantha (DNR) <Samantha.Bump@state.mn.us>; Byron, Haley (DNR) <Haley.Byron@state.mn.us>; Brie Anderson <brie.anderson@apexcleanenergy.com>

Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project

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From: [Schaefer, Benjamin \(DNR\)](#)
To: [Andrew Levi](#); [Ihns, Karla A \(DNR\)](#)
Cc: [Fairman, Kate \(DNR\)](#); [Bump, Samantha \(DNR\)](#); [Haley Byron](#); [Brie Anderson](#)
Subject: EXTERNAL: RE: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 10, 2025 1:51:18 PM
Attachments: [image003.png](#)
[image004.png](#)
[Apex_AgencyLetter_Mailing_20250909_Minnesota_Department_of_Natural_Resources.pdf](#)
Importance: High

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BENJAMIN J. SCHAEFER

Southern Region Operations Coordinator

Division of Lands and Minerals

21371 State Highway 15

New Ulm, MN 56073

Phone: 507-233-1211

Cell: 507-276-1985

benjamin.schaefer@state.mn.us

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Sent: Wednesday, September 10, 2025 1:46 PM
To: Schaefer, Benjamin (DNR) <benjamin.schaefer@state.mn.us>
Cc: Fairman, Kate (DNR) <kate.fairman@state.mn.us>; Bump, Samantha (DNR) <Samantha.Bump@state.mn.us>; Byron, Haley (DNR) <Haley.Byron@state.mn.us>; Brie Anderson <brie.anderson@apexcleanenergy.com>
Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project

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Andrew Levi

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Minneapolis, MN 55414

612.746.3660 main

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From: [Andrew Levi](mailto:Andrew.Levi@merjent.com)
To: benjamin.schaefer@state.mn.us
Cc: kate.fairman@state.mn.us; samantha.bump@state.mn.us; haley.byron@state.mn.us; brie.anderson@apexcleanenergy.com
Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 10, 2025 1:46:00 PM
Attachments: [image001.png](#), [Apex_AgencyLetter_Mailing_20250909_Minnesota_Department_of_Natural_Resources.pdf](#)

Dear Benjamin Schaefer,

Big Bend Wind, LLC (Big Bend) and Great River Energy are proposing to construct approximately 4.5 miles of 161-kilovolt transmission line and associated facilities in Martin County. The transmission line is needed to interconnect the Big Bend Wind Project to the transmission grid because the interconnection point for the wind farm has changed. More detail is provided in the attached letter.

Big Bend is planning to submit a Route Permit Application to the Minnesota Public Utilities Commission in early Q4, 2025. Big Bend would appreciate any comments you might have about the Project. Please reach out to Brie Anderson at brie.anderson@apexcleanenergy.com or 612-501-2801 with questions, written comments, or to request a pre-application coordination meeting.

Thank you,

Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi

612.354.4280 direct
andrew.levi@merjent.com



1 Main Street SE, Suite 300
Minneapolis, MN 55414
612.746.3660 main
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Minnesota Department of Natural Resources
Natural Heritage Review



Formal Natural Heritage Review - Cover Page

See next page for results of review. A draft watermark means the project details have not been finalized and the results are not official.

Project Name: Big Bend Transmission Line Extension Project

Project Proposer: Big Bend Wind LLC and Great River Energy

Project Type: Utilities, Transmission (electric, cable, phone)

Project Type Activities: Wetland impacts (e.g., dewatering, tiling, drainage, discharge, excavation, fill, runoff, sedimentation, changes in hydrology); Tree Removal; Project activities/impacts will occur outside the road ROW

TRS: T104 R33 S10, T104 R33 S15, T104 R33 S16, T104 R33 S17, T104 R33 S19, T104 R33 S20, T104 R33 S21, T104 R33 S22, T104 R33 S9

County(s): Martin

DNR Admin Region(s): South

Reason Requested: PUC Site or Route Application

Project Description: Big Bend Wind, LLC and Great River Energy are proposing to construct approximately 4.5 miles of 161-kilovolt transmission line and associated facilities ...

Existing Land Uses: cultivated cropland, wetlands, road right of way, grassland

Landcover / Habitat Impacted: cultivated cropland, wetlands, road right of way, grassland

Waterbodies Affected: Cedar Creek and associated riparian/wetland habitat will need to be crossed; however, all avoidance measures will be used to reduce impacts.

Groundwater Resources Affected: N/A

Previous Natural Heritage Review: No

Previous Habitat Assessments / Surveys: No

SUMMARY OF AUTOMATED RESULTS

Category	Results	Response By Category
Project Details	Comments	Tree Removal - Recommendations
Ecologically Significant Area	No Comments	No Further Review Required
State-Listed Endangered or Threatened Species	No Comments	No Further Review Required
State-Listed Species of Special Concern	No Comments	No Further Review Required
Federally Listed Species	No Records	Visit IPaC For Federal Review



Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

September 19, 2025

Project ID: MCE #2025-00796

Hannah Phelps
Merjent, Inc.
1 Main Street SE, Suite 300
Minneapolis, MN 55414

RE: Automated Natural Heritage Review of the proposed Big Bend Transmission Line Extension Project
See Cover Page for location and project details.

Dear Hannah Phelps,

As requested, the above project has been reviewed for potential effects to rare features. Given the project details provided on the cover page, I do not believe the proposed project will negatively affect any known occurrences of rare features. To ensure compliance with federal law, conduct a federal regulatory review using the U.S. Fish and Wildlife Service's (USFWS) online [Information for Planning and Consultation \(IPaC\) tool](#).

Project Type and/or Project Type Activity Comments

- The Natural Heritage Information System (NHIS) tracks bat roost trees and hibernacula plus some acoustic data, but this information is not exhaustive. Even if there are no bat records listed below, all of Minnesota's bats, including the federally endangered northern long-eared bat ([Myotis septentrionalis](#)), can be found throughout Minnesota. During the active season (approximately April-November) bats roost underneath bark, in cavities, or in crevices of both live and dead trees. Tree removal can negatively impact bats by destroying roosting habitat, especially during the pup rearing season when females are forming maternity roosting colonies and the pups cannot yet fly. To minimize these impacts, the DNR recommends that tree removal be avoided from June 1 through August 15.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities, and other natural features. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location and the project description provided on the cover page. If project details change or construction has not occurred within one year, please resubmit the project for review before initiating project activities.

The Natural Heritage Review does not constitute project approval by the Department of Natural Resources. Instead, it identifies issues regarding known occurrences of rare features and potential impacts to these rare features. For information on the environmental review process or other natural resource concerns, you may contact your [DNR Regional Environmental Assessment Ecologist](#).

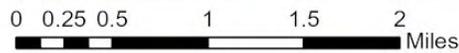
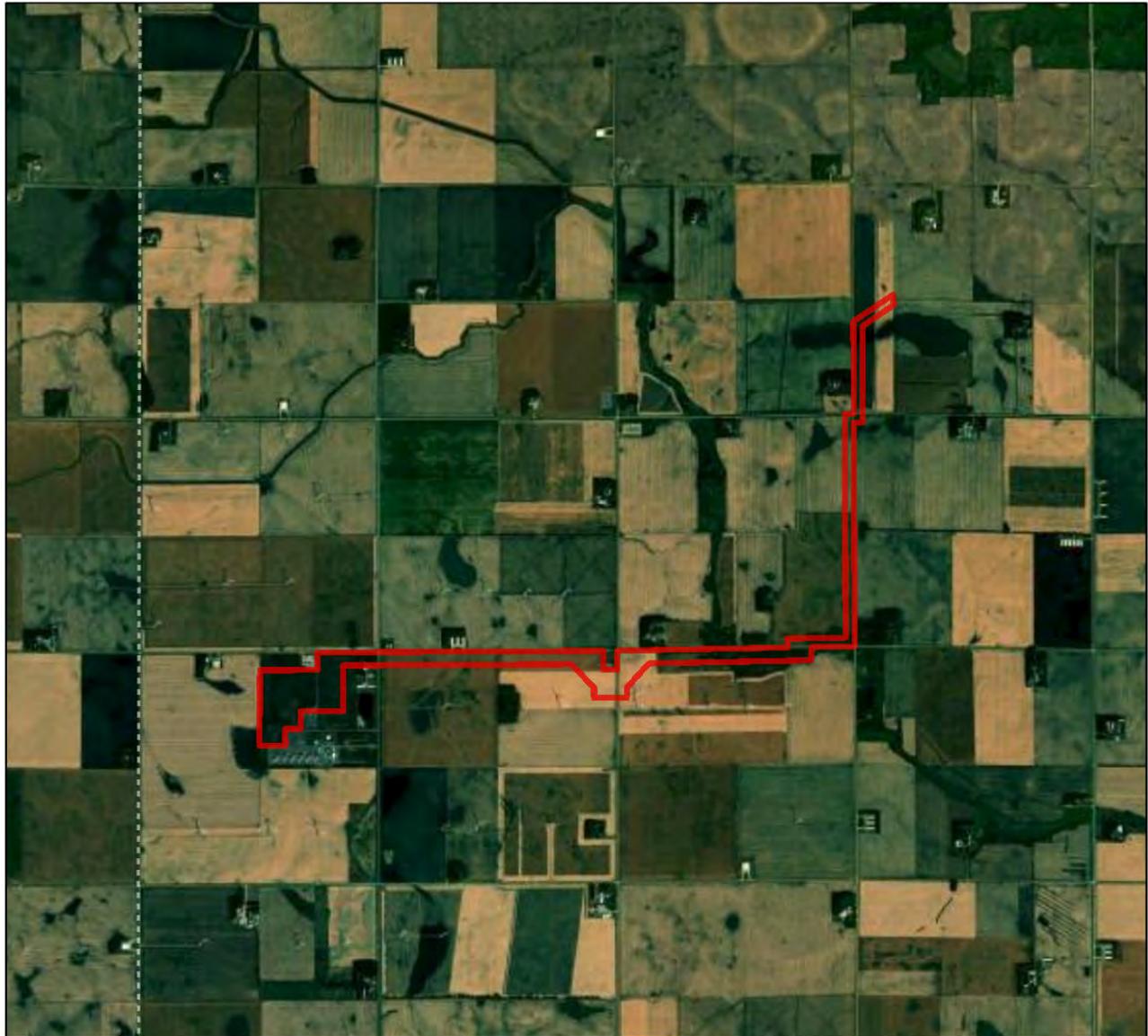
Thank you for consulting us on this matter, and for your interest in preserving Minnesota's rare natural resources.

Sincerely, *The Natural Heritage Review Team* [Natural Heritage Review Program](#)
Review.NHIS@state.mn.us

Links: USFWS Information for Planning and Consultation (IPaC) tool
[Information for Planning and Consultation \(IPaC\) tool](#)
DNR Regional Environmental Assessment Ecologist Contact Info
https://www.dnr.state.mn.us/eco/ereview/erp_regioncontacts.html

Big Bend Transmission Line Extension Project

Aerial Imagery With Locator Map



 Project Boundary

Project Type: Utilities, Transmission (electric, cable, phone)

Project Size (acres): 190.07

County(s): Martin

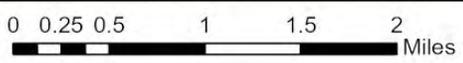
TRS: T104 R33 S10, T104 R33 S15, T104 R33 S16, T104 R33 S17, T104 R33 S19 +

Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
Earthstar Geographics
Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS,



Big Bend Transmission Line Extension Project

USA Topo Basemap With Locator Map



Project Type: Utilities, Transmission (electric, cable, phone)
 Project Size (acres): 190.07
 County(s): Martin
 TRS: T104 R33 S10, T104 R33 S15, T104 R33 S16, T104 R33 S17, T104 R33 S19 +

Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
 Esri, NASA, NGA, USGS, FEMA
 Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS,

Minnesota Department of Revenue

From: [MN MDOR Sa Property](#)
To: [Andrew Levi](#)
Subject: EXTERNAL: Automatic reply: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 10, 2025 1:47:06 PM

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We have received your message.

If you have requested a response, we will be able to respond to most inquiries within three business days, though more complicated issues may take longer.

Thank you,

State Assessed Property Section

Property Tax Division

Minnesota Department of Revenue

Office: 651-556-6091

www.revenue.state.mn.us

Working together to fund the future for all of Minnesota.



From: [Andrew Levi](#)
To: sa.property@state.mn.us
Cc: brie.anderson@apexcleanenergy.com
Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 10, 2025 1:46:00 PM
Attachments: [image001.png](#)
[Apex_AgencyLetter_Mailing_20250909_Minnesota_Department_of_Revenue.pdf](#)

Dear Alan Whipple,

Big Bend Wind, LLC (Big Bend) and Great River Energy are proposing to construct approximately 4.5 miles of 161-kilovolt transmission line and associated facilities in Martin County. The transmission line is needed to interconnect the Big Bend Wind Project to the transmission grid because the interconnection point for the wind farm has changed. More detail is provided in the attached letter.

Big Bend is planning to submit a Route Permit Application to the Minnesota Public Utilities Commission in early Q4, 2025. Big Bend would appreciate any comments you might have about the Project. Please reach out to Brie Anderson at brie.anderson@apexcleanenergy.com or 612-501-2801 with questions, written comments, or to request a pre-application coordination meeting.

Thank you,

Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi

612.354.4280 direct

andrew.levi@merjent.com



1 Main Street SE, Suite 300

Minneapolis, MN 55414

612.746.3660 main

www.merjent.com

Minnesota Department of Transportation

From: [Andrew Levi](#)
To: stacy.kotch@state.mn.us
Cc: Emily.Eichner@state.mn.us; carroll.aasen@state.mn.us; brie.anderson@apexcleanenergy.com
Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 10, 2025 1:47:00 PM
Attachments: [image001.png](#)
[Apex_AgencyLetter_Mailing_20250909_Minnesota_Department_of_Transportation.pdf](#)

Dear Stacy Kotch Egstad,

Big Bend Wind, LLC (Big Bend) and Great River Energy are proposing to construct approximately 4.5 miles of 161-kilovolt transmission line and associated facilities in Martin County. The transmission line is needed to interconnect the Big Bend Wind Project to the transmission grid because the interconnection point for the wind farm has changed. More detail is provided in the attached letter.

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Thank you,

Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi

612.354.4280 direct

andrew.levi@merjent.com



1 Main Street SE, Suite 300

Minneapolis, MN 55414

612.746.3660 main

www.merjent.com

Minnesota Indian Affairs Council

From: [Andrew Levi](#)
To: isaac.weston@state.mn.us
Cc: [Brie Anderson](#)
Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Thursday, October 2, 2025 9:46:00 AM
Attachments: [image001.png](#)
[Apex_AgencyLetter_Mailing_20251002_MIAC.pdf](#)

Dear Isaac Weston,

Big Bend Wind, LLC (Big Bend) and Great River Energy are proposing to construct approximately 4.5 miles of 161-kilovolt transmission line and associated facilities in Martin County. The transmission line is needed to interconnect the Big Bend Wind Project to the transmission grid because the interconnection point for the wind farm has changed. More detail is provided in the attached letter.

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Thank you,

Andrew Levi [on behalf of Brie Anderson, Apex]

Andrew Levi

612.354.4280 direct

612-246-8581 mobile

andrew.levi@merjent.com



1 Main Street SE, Suite 300

Minneapolis, MN 55414

612.746.3660 main

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Minnesota Pollution Control Agency

From: [Andrew Levi](#)
To: "Green, Chris (MPCA)"
Cc: [Brie Anderson](#); [Card, Dan \(MPCA\)](#)
Subject: RE: EXTERNAL: RE: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 17, 2025 6:31:00 PM
Attachments: [image001.png](#)

Thank you, Chris.

Andrew Levi

612.354.4280 direct
612-246-8581 mobile
andrew.levi@merjent.com



1 Main Street SE, Suite 300
Minneapolis, MN 55414
612.746.3660 main
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From: Green, Chris (MPCA) <chris.green@state.mn.us>
Sent: Wednesday, September 17, 2025 10:08 AM
To: Andrew Levi <andrew.levi@merjent.com>
Cc: Brie Anderson <brie.anderson@apexcleanenergy.com>; Card, Dan (MPCA) <dan.card@state.mn.us>
Subject: EXTERNAL: RE: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project

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Hi Andrew,

We are currently evaluating our internal process regarding the early coordination statute change. At this time, we do not have any comments, but we will be further evaluating this project and likely supplying comments during the public comment period after a full-fledged environmental document is finalized (EA/EAW/EIS/etc).

Please let me know if you have any concerns,

Chris Green

Project Manager

Environmental Review

Minnesota Pollution Control Agency

504 Fairgrounds Rd Suite 200

Marshall MN 56258-1688

Office: 507-476-4258

Cell: 507-696-9718

Chris.Green@state.mn.us

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From: Andrew Levi <andrew.levi@merjent.com>
Sent: Wednesday, September 10, 2025 1:47 PM
To: Green, Chris (MPCA) <chris.green@state.mn.us>
Cc: Brie Anderson <brie.anderson@apexcleanenergy.com>
Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project

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Dear Chris Green,

Big Bend Wind, LLC (Big Bend) and Great River Energy are proposing to construct approximately 4.5 miles of 161-kilovolt transmission line and associated facilities in Martin County. The transmission line is needed to interconnect the Big Bend Wind Project to the transmission grid because the interconnection point for the wind farm has changed. More detail is provided in the attached letter.

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Thank you,

Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi

612.354.4280 direct

andrew.levi@merjent.com



1 Main Street SE, Suite 300

Minneapolis, MN 55414

612.746.3660 main

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From: [Green, Chris \(MPCA\)](#)
To: [Andrew Levi](#)
Cc: [Brie Anderson](#); [Card, Dan \(MPCA\)](#)
Subject: EXTERNAL: RE: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 17, 2025 10:08:23 AM
Attachments: [image001.png](#)

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Hi Andrew,

We are currently evaluating our internal process regarding the early coordination statute change. At this time, we do not have any comments, but we will be further evaluating this project and likely supplying comments during the public comment period after a full-fledged environmental document is finalized (EA/EAW/EIS/etc).

Please let me know if you have any concerns,

Chris Green

Project Manager

Environmental Review

Minnesota Pollution Control Agency

504 Fairgrounds Rd Suite 200

Marshall MN 56258-1688

Office: 507-476-4258

Cell: 507-696-9718

Chris.Green@state.mn.us

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From: Andrew Levi <andrew.levi@merjent.com>
Sent: Wednesday, September 10, 2025 1:47 PM
To: Green, Chris (MPCA) <chris.green@state.mn.us>
Cc: Brie Anderson <brie.anderson@apexcleanenergy.com>
Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project

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Big Bend Wind, LLC (Big Bend) and Great River Energy are proposing to construct approximately 4.5 miles of 161-kilovolt transmission line and associated facilities in Martin County. The transmission line is needed to interconnect the Big Bend Wind Project to the transmission grid because the interconnection point for the wind farm has changed. More detail is provided in the attached letter.

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Thank you,

Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi

612.354.4280 direct

andrew.levi@merjent.com



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computer system.

From: [Andrew Levi](#)
To: chris.green@state.mn.us
Cc: brie.anderson@apexcleanenergy.com
Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 10, 2025 1:47:00 PM
Attachments: [image001.png](#)
[Apex_AgencyLetter_Mailing_20250909_Minnesota_Pollution_Control_Agency.pdf](#)

Dear Chris Green,

Big Bend Wind, LLC (Big Bend) and Great River Energy are proposing to construct approximately 4.5 miles of 161-kilovolt transmission line and associated facilities in Martin County. The transmission line is needed to interconnect the Big Bend Wind Project to the transmission grid because the interconnection point for the wind farm has changed. More detail is provided in the attached letter.

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Thank you,

Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi

612.354.4280 direct

andrew.levi@merjent.com



1 Main Street SE, Suite 300

Minneapolis, MN 55414

612.746.3660 main

www.merjent.com

Minnesota Office of Pipeline Safety

From: [Andrew Levi](#)
To: jonathan.wolfgram@state.mn.us
Cc: brie.anderson@apexcleanenergy.com
Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Wednesday, September 10, 2025 1:47:00 PM
Attachments: [image001.png](#)
[Apex_AgencyLetter_Mailing_20250909_Office_of_Pipeline_Safety.pdf](#)

Dear Jonathan Wolfgram,

Big Bend Wind, LLC (Big Bend) and Great River Energy are proposing to construct approximately 4.5 miles of 161-kilovolt transmission line and associated facilities in Martin County. The transmission line is needed to interconnect the Big Bend Wind Project to the transmission grid because the interconnection point for the wind farm has changed. More detail is provided in the attached letter.

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Thank you,

Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi

612.354.4280 direct

andrew.levi@merjent.com



1 Main Street SE, Suite 300

Minneapolis, MN 55414

612.746.3660 main

www.merjent.com

Minnesota State Historic Preservation Office



RE: SHPO No 2025-1795 Big Bend Transmission Line Extension

From GraggJohnson, Kelly (ADM) <kelly.graggjohnson@state.mn.us>

Date Tue 11/25/2025 8:37 AM

To Holven, Adam <adam.holven@tetrattech.com>

Cc Brie Anderson <brie.anderson@apexcleanenergy.com>; Jennie Geiger <jennie.geiger@apexcleanenergy.com>

Thanks for the update, Adam – the revised Phase Ia report has been logged in and routed for review.

Best,

Kelly



Kelly Gragg-Johnson (she/her/hers) | **Environmental Review Specialist**

50 Sherburne Avenue, Suite 203

Saint Paul, MN 55155

(651) 201-3285 | kelly.graggjohnson@state.mn.us

-

From: Holven, Adam <adam.holven@tetrattech.com>

Sent: Monday, November 24, 2025 7:21 PM

To: GraggJohnson, Kelly (ADM) <kelly.graggjohnson@state.mn.us>

Cc: brie.anderson <brie.anderson@apexcleanenergy.com>; Jennie Geiger <jennie.geiger@apexcleanenergy.com>

Subject: RE: SHPO No 2025-1795 Big Bend Transmission Line Extension

Hi Kelly,

Thank you for the comments within your letter dated November 14, 2025. We have updated the Phase IA to address your comments and have resubmitted the report in the OSA portal. We kindly request the SHPO's review of the revised report. We understand that the review is estimated to take up to 30 days, and additional reviews will be necessary after the Phase I Archaeological Survey is complete.

Tetra Tech is in the process of completing the pedestrian survey for the entire 190-acre Extension Project Area. We are also working with the Project to identify locations of subsurface impacts in the vicinity of Cedar Creek, and will develop a shovel testing plan once we have a fuller understanding of the extent of subsurface disturbances along the transmission line route.

Thanks,
Adam

Adam C. Holven | Senior Archaeologist/Project Manager
Direct: 612.643.2237 | Main: 612.643.2200 | Fax: 612.643.2201
adam.holven@tetrattech.com

Tetra Tech
2001 Killebrew Drive, Suite 141 | Bloomington, Minnesota 55425 | www.tetrattech.com

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From: GraggJohnson, Kelly (ADM) <kelly.graggjohnson@state.mn.us>
Sent: Friday, November 14, 2025 3:59 PM
To: Holven, Adam <adam.holven@tetrattech.com>
Cc: brie.anderson <brie.anderson@apexcleanenergy.com>; Jennie Geiger <jennie.geiger@apexcleanenergy.com>
Subject: SHPO No 2025-1795 Big Bend Transmission Line Extension

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Good afternoon,

Here is the initial SHPO comment letter for this proposed project. Please let us know if you have any questions.

Best,

Kelly



Kelly Gragg-Johnson (she/her/hers) | **Environmental Review Specialist**
50 Sherburne Avenue, Suite 203
Saint Paul, MN 55155
(651) 201-3285 | kelly.graggjohnson@state.mn.us

-

From: Holven, Adam <adam.holven@tetrattech.com>
Sent: Tuesday, September 23, 2025 2:09 PM
To: MN_ADM_ENV Review SHPO <ENReviewSHPO@state.mn.us>
Cc: Brie Anderson <brie.anderson@apexcleanenergy.com>; Jennie Geiger <jennie.geiger@apexcleanenergy.com>
Subject: Big Bend Transmission Line Extension_SHPO Request for Comment Letter

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Hello,

Please find attached a request for comment letter for the proposed Big Bend Transmission Line Extension Project.

Thank you for your time and consideration of this request.

Adam

[Adam C. Holven](#) | Senior Archaeologist/Project Manager

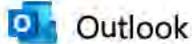
Direct: 612.643.2237 | Main: 612.643.2200 | Fax: 612.643.2201

adam.holven@tetrattech.com

Tetra Tech

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Big Bend Transmission Line Extension_SHPO Request for Comment Letter

From Holven, Adam <adam.holven@tetrattech.com>

Date Tue 9/23/2025 2:09 PM

To ENReviewSHPO@state.mn.us <ENReviewSHPO@state.mn.us>

Cc Brie Anderson <brie.anderson@apexcleanenergy.com>; Jennie Geiger <jennie.geiger@apexcleanenergy.com>

 1 attachment (2 MB)

20250923_Big Bend Transmission Line Extension_SHPO Request for Comment Letter.pdf;

Hello,

Please find attached a request for comment letter for the proposed Big Bend Transmission Line Extension Project.

Thank you for your time and consideration of this request.

Adam

[Adam C. Holven](#) | Senior Archaeologist/Project Manager

Direct: 612.643.2237 | Main: 612.643.2200 | Fax: 612.643.2201

adam.holven@tetrattech.com

Tetra Tech

2001 Killebrew Drive, Suite 141 | Bloomington, Minnesota 55425 | www.tetrattech.com

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Phase IA Cultural Resources Investigation

Big Bend Transmission Line Extension Project Martin County, Minnesota

SHPO Number: 2025-1795



November 24, 2025

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MANAGEMENT SUMMARY

This report presents the findings of a Phase IA Cultural Resources Investigation for the Big Bend Transmission Line Extension and associated Substation (the Extension Project) located northwest of Trimont in Martin County, Minnesota. At this location, Big Bend Wind, LLC (Big Bend) proposes to develop an approximately 4.5-mile-long transmission line and associated Substation within a 190-acre route (Extension Project Area) within predominately agricultural cropland.

On September 28, 2022, Big Bend received a Route Permit from the Minnesota Public Utilities Commission (PUC) to construct a 161-kilovolt (“kV”) transmission line and associated facilities to interconnect its approximately 300-megawatt wind project to the transmission grid. Since PUC issuance of the Route Permit, Big Bend has negotiated an offtake agreement with Great River Energy that requires a new interconnection point to the transmission grid. This change in the interconnection point results in the need for approximately 4.5 miles of additional 161-kV transmission line route and associated facilities, including a substation, not previously permitted. Big Bend will apply for a new PUC Route Permit for this transmission line extension and associated substation, referred to as the Extension Project, in early Q4 2025.

Typically, as part of the permit conditions, a project must describe effects of the facility on archaeological and historic resources under Minnesota Administrative Rules Chapter 7850.1900 and consult with the Minnesota State Historic Preservation Office (SHPO) and Office of the State Archaeologist (OSA) in the event that a cultural or archaeological resource is encountered. The Route Permit will also likely specify that the project shall make every effort to avoid impacts to known archaeological and historical resources during construction. The Extension Project is also subject to the Minnesota Historic Sites Act (Minnesota Statutes [MS] 138.661-138.669), which requires that state agencies consult with the SHPO to determine appropriate treatments and to seek ways to avoid and mitigate any adverse effects on state or federal designated or listed historic properties if such a property may be impacted by the project.

This investigation is a preliminary review of desktop resources to support compliance with the conditions expected in the PUC Route Permit and with Minnesota state law. The investigation included:

- 1) A file review of the Study Area (i.e., the Extension Project Area plus a 1-mile [1.6 kilometer] buffer) to identify any National Register of Historic Places (NRHP) listed or eligible archaeological or architectural resources that are present.
- 2) Recommendations for avoidance of identified cultural resources and recommendations for additional archaeological investigations within the Extension Project Area, where warranted.

Seven previously conducted cultural resource investigations intersect the Extension Project Area. However, the areas subjected to field surveys (i.e., pedestrian survey or shovel testing) associated with these previously conducted archaeological investigations do not intersect the Extension Project Area, or if they do, are represented in a way on report maps that makes meaningful digitization of previous survey areas impossible.

One previously documented archaeological resource was identified within the Study Area; the resource is a Precontact lithic isolated find that is unevaluated for listing in the NRHP. Three previously inventoried architectural resources were identified within the Extension Project Area. Two are unevaluated for listing in the NRHP and one has been determined not eligible for listing in the NRHP. An additional 29 previously inventoried architectural resources were identified within the Study Area, beyond the Extension Project Area. Of these, 26 resources are unevaluated for listing in the NRHP, and 3 resources have been determined not eligible for listing in the NRHP.

Based on a review of historical documents and current aerial imagery, one farmstead is present within the southwestern portion of the Extension Project Area. The farmstead has an increased potential to contain historic archaeological resources.

Tetra Tech recommends the completion of a Phase I Archaeological Investigation for the 190-acre Extension Project Area, which would include a pedestrian survey of all 190 acres of the Extension Project Area, and shovel testing, where warranted, on landforms with the an increased potential to contain archaeological resources.

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1.0 INTRODUCTION

This report presents the findings of a Phase IA Cultural Resources Investigation for the Big Bend Transmission Line Extension and associated Substation (the Extension Project) located northwest of Trimont in Martin County, Minnesota (Table 1; Appendix A, Figure 1). At this location, Big Bend Wind, LLC (Big Bend) proposes to develop 4.5-mile-long transmission line and associated Substation within a 190-acre route (Extension Project Area) within predominately agricultural cropland.

Table 1. Public Land Survey System (PLSS) Description of the Extension Project Area

County	Township Name	Township (T)	Range (R)	Sections
Martin	Cedar	104 North	33 West	9,10, and 15 - 21

1.1 PURPOSE OF THE INVESTIGATION

On September 28, 2022, Big Bend received a Route Permit from the Minnesota Public Utilities Commission (PUC) to construct a 161-kilovolt (“kV”) transmission line and associated facilities to interconnect its approximately 300-megawatt wind project to the transmission grid. Since PUC issuance of the Route Permit, Big Bend has negotiated an offtake agreement with Great River Energy that requires a new interconnection point to the transmission grid. This change in the interconnection point results in the need for approximately 4.5 miles of additional 161-kV transmission line route and associated facilities, including a substation, not previously permitted. Big Bend will apply for a new MPUC route permit for this transmission line extension and associated substation, referred to as the Extension Project, in early Q4 2025.

Typically, as part of the permit conditions, a project must describe effects of the facility on archaeological and historic resources under Minnesota Administrative Rules Chapter 7850.1900 and consult with the Minnesota State Historic Preservation Office (SHPO) and Office of the State Archaeologist (OSA) in the event that a cultural or archaeological resource is encountered. The Route Permit will also likely specify that the project shall make every effort to avoid impacts to known archaeological and historical resources during construction. The Extension Project is also subject to the Minnesota Historic Sites Act (Minnesota Statutes [MS] 138.661-138.669), which requires that state agencies consult with the SHPO to determine appropriate treatments and to seek ways to avoid and mitigate any adverse effects on state or federal designated or listed historic properties if such a property may be impacted by the project.

This investigation is a preliminary review of desktop resources to support compliance with the conditions expected in the PUC Route Permit and with Minnesota state law. The investigation included:

- 1) A file review of the Study Area (i.e., the Extension Project Area plus a 1-mile [1.6 kilometer] buffer) to identify any National Register of Historic Places (NRHP) listed or eligible archaeological or architectural resources that are present (Appendix A, Figure 2).

- 2) Recommendations for avoidance of identified cultural resources and recommendations for additional archaeological investigations within the Extension Project Area, where warranted.

1.2 ORGANIZATION OF THE REPORT

This report details the research methods, environmental and cultural backgrounds, results of the literature review, and recommendations. Mr. Adam Holven served as Principal Investigator. Mr. Holven and Mr. Mike Straskowski served as the lead authors. Supporting documentation for this investigation includes Appendix A. Figures and Appendix B. Historical Map Log.

1.3 BACKGROUND RESEARCH

The Study Area was investigated through a review of Minnesota's Statewide Historic Inventory Portal (MnSHIP) (architectural resources and inventory forms) and through a review of the Minnesota Office of the State Archaeologist (OSA) Site Portal (archaeological resources, previous cultural resource investigations¹, and site forms). These reviews were conducted on August 26, 2025. An onsite review of previous cultural resource investigations was also conducted at the SHPO on September 2, 2025.

2.0 ENVIRONMENTAL BACKGROUND

A brief overview of environmental conditions within the Extension Project Area provides a foundation for understanding human subsistence and settlement patterns in the region over time. Understanding how environmental variables (e.g., availability of food, water, fuel, and tool materials) affected past decision making allows for a greater awareness of a region's potential archaeological resources.

2.1 LANDFORMS AND VEGETATION

The Extension Project Area is located within the Minnesota River Prairie Subsection of the North Central Glaciated Plains Section of the Prairie Parkland Province (Minnesota Department of Natural Resources [MN DNR] 2025). The Minnesota River Prairie Subsection consists of a gently rolling ground moraine split in half by the Minnesota River. The dominant landforms of the subsection are till plains with occasional end moraines and lake plains. The topography of the Extension Project Area is gently rolling.

Prior to Euro-American settlement, vegetation in the region was predominately tallgrass prairie with islands of wet prairie (MN DNR 2025). Forests of silver maple, elm, cottonwood, and willow grew on floodplains along streams.

¹ Previous surveys for Martin County have not been fully incorporated on the OSA Site Portal; therefore, an onsite review of files at the SHPO was completed.

The current vegetation within the Extension Project Area consists primarily of agricultural cropland with the exception of wooded areas along Cedar Creek, which intersects the Extension Project Area.

2.2 SOILS

A total of 13 soil map units encompass the Extension Project Area (U.S. Department of Agriculture-Natural Resources Conservation Service [USDA-NRCS] 2025a). These 13 soil map units consist of 12 individual soil series (Table 2). The parent materials for the soil map units include glacial till and outwash, sandy and gravelly outwash, lacustrine sediments, colluvium, and alluvium (USDA-NRCS 2025b). The most common soil map unit within the Extension Project Area is the Canisteo-Glencoe complex, which encompasses approximately 45 percent of the Project Area. The Canisteo series and Glencoe series are generally formed in till on upland landforms. The potential for deeply buried cultural materials within the Canisteo-Glencoe complex is low.

Three soil map units in the Extension Project Area are formed in colluvium or alluvium (Table 2). Delft series soils are formed in colluvium and encompass approximately 4 percent of the Extension Project Area. While buried cultural horizons can occur in colluvial settings, based on a review of the landform the Delft series is located on within the Extension Project Area, the potential for deeply buried cultural materials associated with Delft soil map units is low.

The Coland and Webster soil map units are formed in alluvium and together encompass approximately 34 acres, or 18 percent, of the Extension Project Area. While formed through alluvial actions, Webster series soils are formed in alluvium derived from till on uplands; this formation mechanism would not likely result in deeply buried cultural materials. Coland series soils are formed in alluvium on floodplains and alluvial fans in river valleys and upland drainageways, which could potentially result in deeply buried cultural material horizons. Coland series soils are present along Cedar Creek and encompass approximately 16 acres, or 9 percent of the Extension Project Area.

Table 2. Soil Map Units in the Extension Project Area

Soil Series	Description
Canisteo	Poorly and very poorly drained soils formed in calcareous, loamy till or in a thin mantle of loamy or silty sediments and the underlying calcareous, loamy till on rims of depressions, depressions, and flats on moraines or till plains.
Clarion	Moderately well drained soils formed in glacial till on uplands.
Crippin	Somewhat poorly drained, moderately permeable, calcareous soils formed in glacial till on uplands.
Coland	Poorly drained soils formed in alluvium on floodplains and alluvial fans in river valleys and upland drainageways in dissected till plains.
Delft	Poorly drained and somewhat poorly soils formed in loamy colluvium derived from till and underlying loamy till on till plains and moraines.

Soil Series	Description
Estherville	Somewhat excessively drained soils formed in 25 to 50 centimeters (9.8 to 19.7 inches) of loamy sediments over sandy and gravelly outwash on outwash plains, stream terraces, valley trains, and kames on moraines.
Glencoe	Very poorly drained soils formed in loamy sediments from till in closed depressions on moraines.
Klossner	Very poorly drained soils formed in well decomposed organic material overlying loamy or silty lacustrine deposits, slope alluvium, or till formed on moraines, till plains, lake plains, flood plains, and seeps.
Nicollet	Somewhat poorly drained soils formed in calcareous loamy glacial till on till plains and moraines.
Storden	Well drained soils formed in calcareous loamy glacial till on glacial moraines.
Swanlake	Well drained soils formed in loamy calcareous till on ground moraines and till plains.
Webster	Poorly drained, moderately permeable soils formed in glacial till or local alluvium derived from till on uplands

Source: USDA-NRCS 2025b

2.3 HYDROLOGY

Cedar Creek intersects the Extension Project Area, which is within the Cedar Creek Watershed (USGS 2025). A chain of lakes consisting of Cedar Lake, North Lake, Buffalo Lake, and Fish Lake are located approximately 1.8 to 2.5 miles (2.9 to 4.0 kilometers) east of the Extension Project Area. Cedar Creek flows into Cedar Lake, approximately 3.3 miles south of the Extension Project Area.

3.0 CULTURAL BACKGROUND

This section provides a summary of the known cultural resources within the region. Similar to Section 2.0 (Environmental Background), a general understanding of a region's cultural resources is necessary for contextual interpretations of newly documented sites. The Study Area lies within the Prairie Lakes (2s) Archaeological Region. The Archaeological Regions are used for Precontact, Contact, and Post-Contact archaeological site studies and management in the state.

3.1 PRECONTACT AND CONTACT PERIOD

Precontact cultures within the Prairie Lakes Archaeological Region are divided into three periods: Early Prehistoric, Middle Prehistoric, and Late Prehistoric (Anfinson 2005). These periods are based largely on technological innovations that can be observed in the archaeological record. These innovations include changes in the forms of projectile point styles and the development and decoration of pottery. Behavioral adaptations such as changing subsistence and mobility patterns also serve as points of reference in determining the transition from one tradition

to another. The following descriptions were compiled from the *Southwestern Minnesota Archaeology: 12,000 Years in the Prairie Lakes Region* (Anfinson 1997) and *Archaeology of Minnesota* (Gibbon 2012).

3.1.1 Early Prehistoric Period (10,000 – 3,000 B.C.)

The Early Prehistoric Period in Minnesota includes two traditions: the Paleoindian Tradition and the Prairie Archaic Tradition. These traditions are poorly understood in south-central and southwestern Minnesota since most associated archaeological evidence is from surface sites. Populations in the Early Prehistoric Period within the Prairie Lakes Archaeological Region of Minnesota typically relied on bison as their primary form of subsistence. This Period is also marked by environmental stress as the climate became warmer and drier.

3.1.1.1 – Paleoindian Tradition (10,000 – 6,000 B.C.)

The Paleoindian Tradition is characterized by hunting and gathering adaptations with a notable concentration on now-extinct big game animals. The beginning of the Paleoindian Tradition focused attention on Pleistocene fauna such as mammoths and camelops; later focus was on bison species that were intermediate in size between late Pleistocene and modern forms. Other characteristics of the Paleoindian Tradition include (1) geographically extensive interaction networks between social groups (Hayden 1981), and (2) distinctive lanceolate projectile point styles by which the various Paleoindian cultural complexes are identified. Cultural complexes represented in south-central and southwestern Minnesota from oldest to youngest include the Clovis, Folsom, and Plano complexes. The best-known Paleoindian site in the Prairie Lakes Archaeological Region is the Browns Valley Site (21TR0005) in west-central Minnesota.

3.1.1.2 – Prairie Archaic Tradition (5,500 – 3,000 B.C.)

The Prairie Archaic Tradition coincides with the peak of the Altithermal, a warm, dry climactic episode. In the archaeological record, the Prairie Archaic Tradition is marked by a shift in lithic tool technologies to a wider variety of projectile point styles and the emergence of ground stone tools (Benchley et al. 1997). In the Prairie Lakes Archaeological Region, populations focused on bison as a primary source for subsistence and tended to live near major drainages and lakes. The best-dated Prairie Archaic site is the Granite Falls Bison Kill Site (21YM0047), a bison processing site in west-central Minnesota.

At the end of the Prairie Archaic Period, the climate became wetter and cooler, and a wider range of subsistence strategies appear, as evidence by changing lithic technology, suggesting foraging was increasingly important.

3.1.2 – Middle Prehistoric Period (3,000 B.C. – A.D. 900)

The Middle Prehistoric Period in southwestern Minnesota includes three phases: the Mountain Lake Phase, the Fox Lake Phase, and the Lake Benton Phase. As climatic trends from the end of the Prairie Archaic Tradition continued, bison herds shifted west while lakes and the wooded areas that surrounded them in southwestern Minnesota expanded. Aquatic resources less readily available during the Prairie Archaic Tradition flourished in the wetter and cooler climate of the Middle Prehistoric Period and became as equally essential for subsistence as bison.

Prior to being drained, the Project Area could have provided a setting similar to archaeological sites associated with this Period.

3.1.2.1 – Mountain Lake Phase (3,000 – 200 B.C.)

The Mountain Lake Phase in the Prairie Lakes Archaeological Region is marked by a shift in human occupation to island lake and peninsula sites. Bison hunting was still an important subsistence strategy, but lacustrine resources were also essential to the diet. The Mountain Lake Phase is not as well understood as other phases in the Middle Prehistoric Period due to component mixing in excavated sites. However, there is no evidence of early agriculture or intensive use of seeds and nuts, as in other parts of Minnesota during this period. The type site for this phase is the Mountain Lake Site (21CO0001) in Cottonwood County. The Fox Lake (21MR0002) site in Martin County, approximately 14 miles (22.5 miles) southwest of the Project Area, and the Pedersen (21LN0002) and Fox Lake (21MR0002) site in Lincoln County also have evidence of this phase of occupation. All three sites are located in southwestern Minnesota.

3.1.2.2 – Fox Lake Phase (200 B.C. – A.D. 700)

The Fox Lake Phase in the Prairie Lakes Archaeological Region coincides with the spread of ceramic technology throughout Minnesota and the development of distinctive material cultural components, analogous to contemporary populations throughout the Mid-Continent (Justice and Kudlaty 1999). Geographic variation in occupation setting during this period reflects refinements of cultural lifeways in response to local physical and social environments. The Fox Lake Phase is more strongly influenced by the western Plains traditions than other parts of Minnesota. Artifacts associated with this Phase include incised-over-cordmarked Fox Lake ceramics and chipped stone tools with a wide variety of morphological characteristics. Most Fox Lake Phase sites are found along lake, stream, and river margins. Well-known habitation sites with Fox Lake components include the Fox Lake site (21MR0002) in Martin County, the Big Slough site (21MU0002) in Murray County, and the Mountain Lake site (21CO0001) in Cottonwood County, all of which are in southwestern Minnesota, and the Arthur site (13DK0027) in northern Iowa. Burial mounds do not appear in the Prairie Lakes Archaeological Region until the end of the Middle Prehistoric Period.

3.1.2.3 – Lake Benton Phase (A.D. 700 – 1200)

The Lake Benton Phase in the Prairie Lakes Archaeological Region is defined by a shift in ceramic technology and mortuary practices. Subsistence and settlement patterns for this phase are nearly identical to the Fox Lake Phase. Changes in ceramic manufacture during the Lake Benton Phase include using crushed rock instead of sand temper, increased use of surface smoothing, and thinner vessel walls. Burial mounds were increasingly used by populations in the region, tended to be located on lake shores, and tended to not have a habitation site associated with them. The largest Lake Benton Phase mound group in the region is Site 21LN001 located on the north shore of Lake Benton in southwestern Minnesota and includes 26 mounds. The type site for the Lake Benton Phase is the Pedersen Site (21LN002) in Lincoln County.

3.1.3 Late Prehistoric Period (A.D. 900 – 1650)

In the Prairie Lakes Archaeological region, the Late Prehistoric Period is characterized by the Plains Village Tradition. Unlike earlier cultural traditions, the Plains Village Tradition relied heavily on horticulture and, to a lesser extent, on hunting and gathering (Steinacher and Carlson 1998). Cultigens in use at this time included maize, beans, squash, sunflowers, gourds, and tobacco. Archaeological evidence from the Plains Village Tradition in southwestern Minnesota dates from approximately A.D. 900 to 1650, after which Native American populations were decimated by exposure to European diseases. Archaeological evidence such as semi-subterranean lodges with multiple cache pits suggests that the key element in Plains Village adaptive strategies was the production of a dependable, storable surplus food supply, primarily in the form of dried corn. Stored surpluses of food facilitated the formation of larger, more permanently situated residential village communities. Several cultural complexes including Great Oasis, Cambria, Over Focus, and Mill Creek are categorized under the Plains Village Tradition in eastern South Dakota, southern Minnesota, and northern Iowa (Alex 2000).

3.1.4 – Contact Period (A.D. 1650 – 1837)

At the time of European contact, Siouan groups (Dakota) were the predominant Native American groups represented in the southern portion of Minnesota and within Martin County. European contact with the Dakota began with French fur-trading expeditions, and interactions between Native American groups and Europeans became more frequent between 1750 and 1800. The French had the largest non-native presence in the region until the British began controlling the fur trade following the French and Indian War in 1760 (Zimmerman 1985). The British maintained control of the fur trade until the United States purchased the Louisiana Territory in 1803. During the Contact Period, Native American populations declined due largely to warfare and disease. European expansion also affected Native American settlement patterns as groups in the eastern portion of the United States were pushed west by the increasing European population. This frequently led to conflict between the different Native American groups.

3.2 – POST-CONTACT PERIOD

3.2.1 – Early Period (1837-1850s)

Much of southern Minnesota, along with present-day Martin County, was ceded to the United States government by the Dakota in 1851 (approved in 1853) as part of the Traverse des Sioux and Mendota treaties (Minnesota Historical Society 2025). Following these treaties, the first Euro-American settlers began to enter the area.

3.2.2 – Settlement Period (1853 to Present)

Present-day Martin County was established in 1857, consisting of land split from Brown and Faribault Counties. The county was either named after Morgan Lewis Martin, a congressional delegate from the Wisconsin Territory who introduced the act to organize Minnesota Territory, or Henry Martin, an early settler of the area from Connecticut (Martin County 2022). The first Euro-Americans to settle in present-day Martin County were Calvin Tuttle and Mr.

Rickey, arriving in March 1856 from Fort Dodge, Iowa (Budd 1897). They settled and built a one-room log house near Clear Lake in Section 1 of Township 101 North, Range 30 West (Silver Lake Township), approximately 26 miles (41.8 kilometers) southeast of the Project Area. Additional settlements were established later that year near present-day Fairmont, approximately 19 miles (30.6 kilometers) southeast of the Project Area, and the population of Martin County included 20 men, 9 women, and 23 children by the winter of 1857.

In March 1857, a Dakota band attacked settlements in Spirit Lake, Iowa, and along the Des Moines River in neighboring Jackson County, Minnesota. In response, the settlers in present-day Martin County constructed a log fort for protection on property owned by George Britts along the Center Chain lakes in Silver Lake Township and called it Fort Britt. Some settlers left the area and other settlers gathered in the fort on July 25, 1857, after an article published in the *Mankato Independent* suggested that a war was possible between the Dakota and the United States. The settlers organized a company for defense, electing George Britts as captain and William H. Budd as lieutenant. Growing conflict with the Dakota in Minnesota culminated in the Dakota War of 1862; however, no major conflicts took place in Martin County (Budd 1897).

Many early settlers of Martin County were of English heritage. In 1872, H. F. Shearman, a lawyer of English heritage from Connecticut, visited Martin County during a hunting trip and was impressed by the economic potential of the area (City of Fairmont 2007). During a trip back to England, Mr. Shearman convinced many English investors to move to Martin County and raise beans. The English settlers arrived in the spring of 1873 and established the “English Colony”, also known as the “Bean Colony” (City of Fairmont 2007). The settlers planted approximately 1,000 to 1,200 acres of beans around Fairmont in Tenhassen and Rolling Green Townships. A grasshopper infestation began in June of 1873 and lasted until 1877, causing large-scale crop failures for the English immigrants and forcing many to stop growing beans or return to England. Despite these initial setbacks, there were 219 English immigrants in Martin County by 1880 (City of Fairmont 2007). The expansion of railroads into Martin County in the late 1800s brought increased settlement and prosperity for settlers in the county. Since the county was established, agriculture has served as its primary economy. The population in Martin County peaked at around 27,000 in 1960. As of the latest census data Martin County has a population of approximately 20,000 (United States Census Bureau 2023).

3.2.3 – Cedar Township

Cedar Township was organized in 1872 and named after Cedar Lake located on the eastern edge of the township (Upham 1920). The villages of Triumph and Monterey were platted in 1899, approximately 5.0 miles (8.0 kilometers) southeast of the Extension Project Area (City of Fairmont 2025). Triumph was platted by the Western Town Lot Company, a division of the Chicago North Western Railroad Company (City of Fairmont 2025). The villages merged to form the city of Trimont in 1959.

4.0 RESULTS OF THE LITERATURE REVIEW

The purpose of the file search is to provide a general understanding of the cultural resources identified within the Study Area and to provide a general overview of land use change within the Study Area.

4.1 PREVIOUSLY DOCUMENTED CULTURAL RESOURCES

4.1.1 Previous Archaeological Investigations

Based on the OSA Site Portal, seven previously conducted archaeological investigations were identified within the Extension Project Area (Appendix A, Figure 2).

Three of the previous investigations were for a proposed wind farm (Florin and Lindbeck 2008 [Manuscript No. MULT-2008-006]; Florin and Lindbeck 2010 [Manuscript No. MULT-2010-011]; and Blondo 2014 [Manuscript No. 2009-2529]). No useful maps were included in Blondo (2014) that could be used to confirm if portions of the Extension Project Area had been surveyed. Field maps from Florin and Lindbeck (2008) and Florin and Lindbeck (2010) indicated surveys were completed in Section 19 of Township 104 North, Range 33, likely within the Extension Project Area. However, the scale of the maps and the absence of actual survey corridors prohibited meaningful digitization of the previous surveys. No cultural resources were identified in the portion of the survey that intersected the Extension Project Area.

One investigation was for the proposed Big Bend Transmission Line (Newton and Rom 2022 [Manuscript No. 2018-0592/2021-0387]). A SHPO approved probability model was employed to guide archaeological field surveys along the proposed Big Bend Transmission Line. Based on the available maps, a limited area of the western portion of the proposed Extension Project Area in Section 19 of Township 104 North, Range 33 West may have been surveyed; however, due to the scale of the maps in the report, Tetra Tech was unable to calculate the actual acres. No cultural resources were identified in the portion of the survey that intersected the Extension Project Area.

Two investigations were conducted for the proposed Northern Borders Pipeline (Hudak 1980 [Manuscript No. MULT-1980-08] and Hudak 1981 [MULT-1981-05]). The 1980 investigation included a limited review of the proposed pipeline for deep archaeological testing and did not include field surveys within the proposed Extension Project Area. The 1981 investigation indicated "None Warranted" in regard to survey for the portion of the pipeline that intersects the Extension Project Area in Section 19, Section 19 of Township 104 North, Range 33 West.

One investigation was included a cultural resources overview study (Halloran et al. 1997 [Manuscript No. MULT-1998-03]). This document is a cultural resources management plan to assist with U.S. Fish and Wildlife wetland management districts. The extent of the investigation area is not shown Appendix A: Figure 2.

[NONPUBLIC DATA BEGINS]

4.1.2 Archaeological Resources

No previously documented archaeological resources were identified within the Extension Project Area during the file review. However, one previously documented archaeological resource (21MR0075) was identified within the Study Area. Site 21MR0075 consists of a Precontact lithic isolated find [REDACTED]. The site is currently unevaluated for listing in the NRHP.

4.1.3 Architectural Resources

Three previously inventoried architectural resources (MR-CED-00024, MR-CED-00028, and MR-CED-00068) were identified within the Extension Project Area (Table 3; Appendix A, Figure 2). Resource MR-CED-00024 (Sazama Hog Sheds) is located in the south-central portion of the Extension Project Area [REDACTED]. Resource MR-CED-00028 (J. P. Carlson Farm) is located in the southwestern portion of the Extension Project Area [REDACTED]. Resource MR-CED-00068 (Bridge L5974) is located on the southeastern portion of the Extension Project Area [REDACTED]. Resources MR-CED-00024 and MR-CED-00028 are currently unevaluated for listing in the NRHP, and Resource MR-CED-00068 has been determined not eligible for listing in the NRHP.

An additional 29 previously inventoried architectural resources were identified outside the Project Area, but within the Study Area (Table 3; Appendix A, Figure 2). Of these 29 architectural resources, 26 resources are unevaluated for listing in the NRHP and 3 resources are not eligible for listing in the NRHP. The locations of these resources range from immediately adjacent to the Project Area to approximately 0.9 mile (1.4 kilometer) from the Project Area.

Table 3. Previously Inventoried Architectural Resources within the Study Area

Inventory Number	Name	Address	NRHP Status	Location
JK-KIM-00021	Farmstead	[REDACTED]	Unevaluated	Study Area
MR-CED-00002	Church	[REDACTED]	Unevaluated	Study Area
MR-CED-00017	Farmstead	[REDACTED]	Unevaluated	Study Area
MR-CED-00018	Carl Olson Farm	[REDACTED]	Unevaluated	Study Area
MR-CED-00019	Aldora L. Blunt Farm	[REDACTED]	Unevaluated	Study Area
MR-CED-00021	J.M. Hanson Farm	[REDACTED]	Unevaluated	Study Area
MR-CED-00022	Cedar Town Hall	[REDACTED]	Unevaluated	Study Area
MR-CED-00023	Isadore Tibbedeaux Farm	[REDACTED]	Unevaluated	Study Area
MR-CED-00024	Sazama Hog Sheds	[REDACTED]	Unevaluated	Extension Project Area
MR-CED-00025	Henry and Miles Smith Farm	[REDACTED]	Unevaluated	Study Area

Inventory Number	Name	Address	NRHP Status	Location
MR-CED-00027	Great River Energy Lakefield Junction Electrical Station	[REDACTED]	Unevaluated	Study Area
MR-CED-00028	J. P. Carlson Farm		Unevaluated	Extension Project Area
MR-CED-00029	Farmstead		Unevaluated	Study Area
MR-CED-00030	Elm Creek Pipe Station		Unevaluated	Study Area
MR-CED-00031	Farmstead		Unevaluated	Study Area
MR-CED-00032	Voss-Anderson Farm		Unevaluated	Study Area
MR-CED-00033	Cedar Lutheran Cemetery		Unevaluated	Study Area
MR-CED-00034	Farmstead		Unevaluated	Study Area
MR-CED-00035	R.H. Wade Farm		Unevaluated	Study Area
MR-CED-00036	Farmstead		Unevaluated	Study Area
MR-CED-00037	Farmstead		Unevaluated	Study Area
MR-CED-00038	Farmstead		Unevaluated	Study Area
MR-CED-00043	Farmstead		Not Eligible	Study Area
MR-CED-00046	Farmstead		Unevaluated	Study Area
MR-CED-00047	Gabriele Groeger Farm		Unevaluated	Study Area
MR-CED-00058	Sven Hanson Farm		Unevaluated	Study Area
MR-CED-00060	Amund Syverson Farm		Unevaluated	Study Area
MR-CED-00061	Hans A. Running Farm		Unevaluated	Study Area
MR-CED-00062	John Olson Farm		Unevaluated	Study Area
MR-CED-00068	Bridge L5974		Not Eligible	Extension Project Area
MR-CED-00069	Bridge L9577	Not Eligible	Study Area	
MR-CED-00075	Bridge 89366	Not Eligible	Study Area	

[NONPUBLIC DATA ENDS]

4.2 HISTORICAL DOCUMENT REVIEW

Tetra Tech reviewed historical atlases, topographic quadrangles, and aerial photographs to identify the presence of structures, settlements, trails, roads, railroads, and other manufactured features that may have been historically present within the Extension Project Area. Through this review, Tetra Tech identified the locations of former structures and features within the Extension Project Area; these former structure and feature locations have the increased potential to contain historic archaeological resources. Based on the historical document review, one extant farmstead was identified within the Extension Project Area (Appendix B).

A review of the 1858 GLO plat for T104N, R33W revealed no historic features illustrated within the Extension Project Area (Appendix B, Map 1). Two marshes were illustrated in the northern portion of the Extension Project Area. Multiple drainages were illustrated in the southeastern portion of the Extension Project Area. The drainages are illustrated in vicinity of the current location of Cedar Creek. Additional marshes and bodies of water were illustrated in the sections surrounding the Extension Project Area.

A review of the 1911 Geo. A. Ogle & Company atlas for Martin County revealed that the Extension Project Area was located in Cedar Township (Appendix B, Map 2). Cedar Run was illustrated intersecting the Extension Project Area in the current alignment of Cedar Creek. Section line roads were illustrated intersecting and adjacent to the Extension Project Area. While no structures were illustrated within the Extension Project Area, multiple structures were illustrated in the vicinity.

A review of the 1970 USGS 7.5-Minute Mountain Lake SE, Minnesota Topographic Quadrangle revealed an occupied structure was illustrated in the southwestern portion of the Extension Project Area in the approximate location of architectural resource MR-CED-00028 (Appendix A, Figure 2). The church and cemetery previously illustrated within the Extension Project Area on the 1911 Geo. A. Ogle & Company plat was illustrated immediately adjacent to it. Gravel pits were illustrated in the southeastern portion of the Extension Project Area, adjacent to Cedar Creek. A southwest-northwest trending transmission line was illustrated adjacent to the northernmost and westernmost portions of the Extension Project Area. Additional structures were illustrated in the vicinity.

A review of 2023 USGS NAIP aerial photograph revealed a farmstead in the location as the occupied structure illustrated on 1970 USGS 7.5-Minute Mountain Lake SE, Minnesota Topographic Quadrangle (Appendix B, Map 3). Gravel roads and transmission lines were observed in the southwestern portion of the Extension Project Area. These facilities appear to be associated with a substation immediately south of the southwestern portion of the Extension Project Area. Multiple wind turbines were observed in the vicinity.

5.0 RECOMMENDATIONS

Seven previously conducted cultural resource investigations intersect the Extension Project Area. However, the areas subjected to field surveys (i.e., pedestrian survey or shovel testing) associated with these previously conducted archaeological investigations do not intersect the Extension Project Area, or if they do, are represented in a way on report maps that makes meaningful digitization of previous survey areas impossible.

Three previously inventoried architectural resources were identified within the Extension Project Area. Two are unevaluated for listing in the NRHP and one has been determined not eligible for listing in the NRHP. An additional 29 previously inventoried architectural resources were identified within the Study Area, beyond the Extension Project Area. Of these, 26 resources are unevaluated for listing in the NRHP, and 3 resources have been determined not eligible for listing in the NRHP.

Based on a review of historical documents and current aerial imagery, one farmstead is present within the southwestern portion of the Extension Project Area. The farmstead has an increased potential to contain historic archaeological resources due to its age and the type of activities typically conducted on farmsteads.

Tetra Tech recommends the completion of a Phase I Archaeological Investigation for the 190-acre Extension Project Area, which would include a pedestrian survey of all 190 acres of the Extension Project Area, and shovel testing, where warranted, on landforms with the an increased potential to contain archaeological resources.

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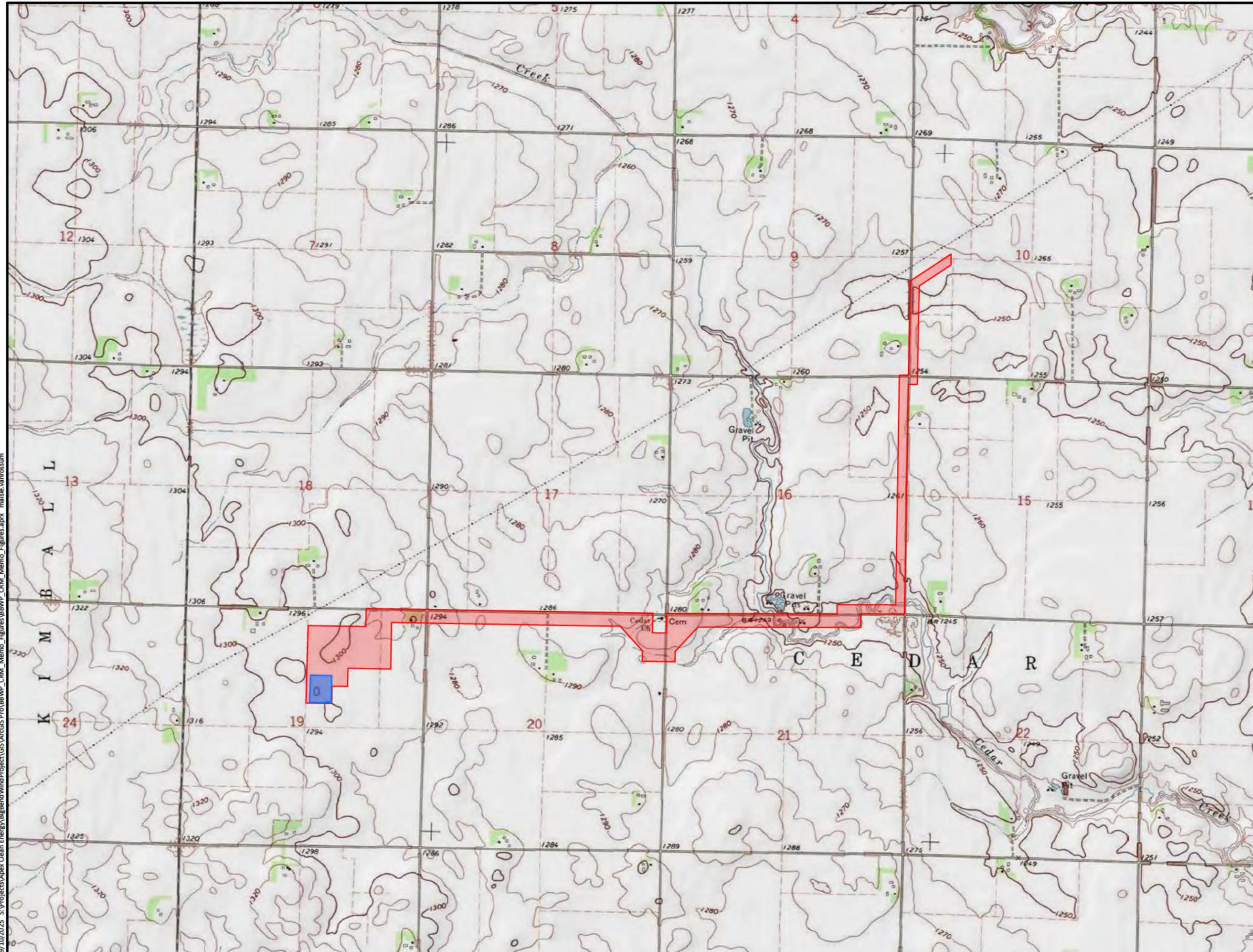
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APPENDIX A. FIGURES



- Project Area
- Proposed Substation



Figure 1
Project Area

**Big Bend Transmission Line
Extension Project
Martin County, Minnesota**



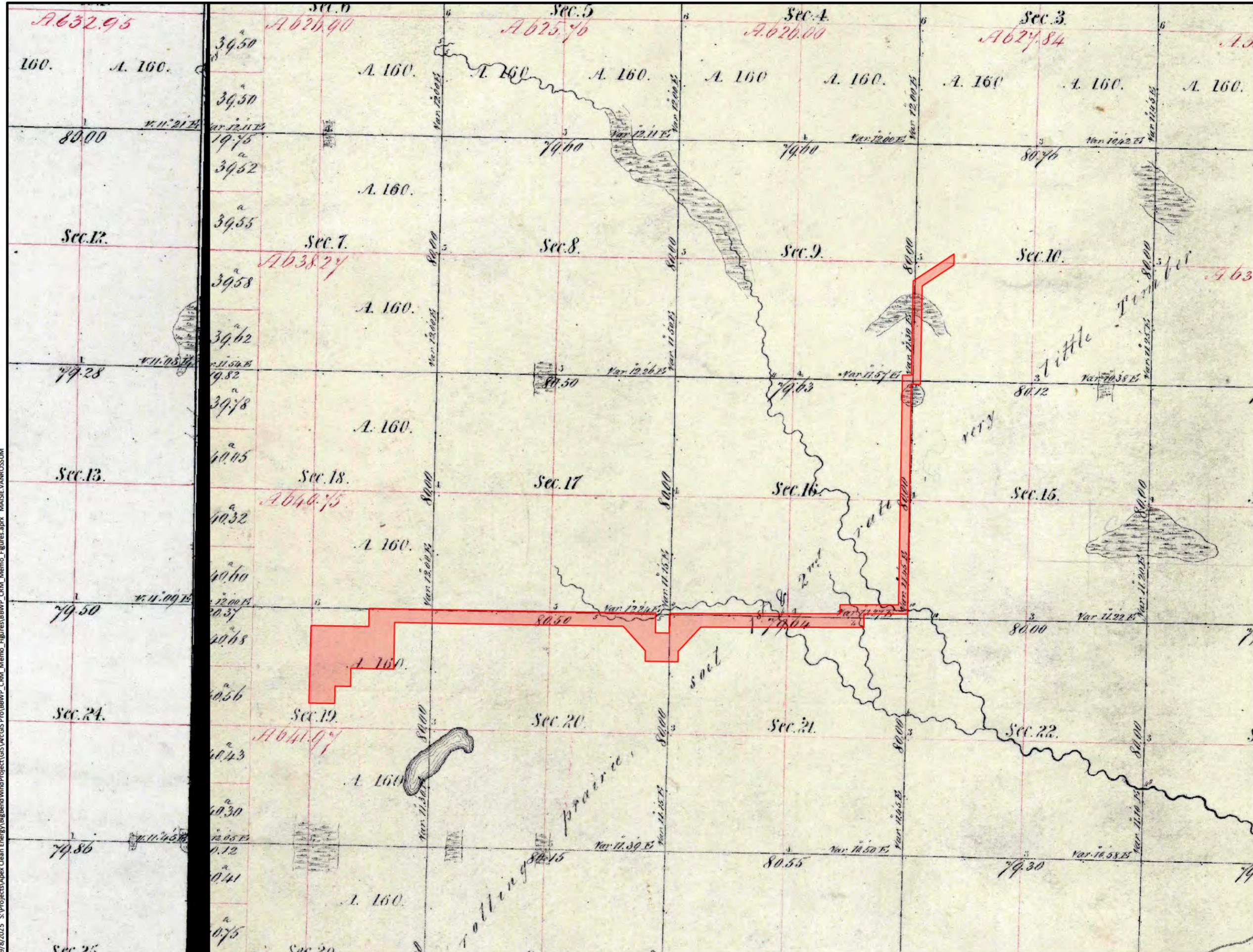
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Source: Map adapted from ArcGIS Map Server USA Topo Maps - 24K Mountain Lake SE (1970); Sections 9, 10, 15 - 21, Township 104N, Range 33W of Martin County. Project data by Big Bend, LLC. Scale: 1:24,000

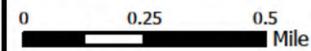
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APPENDIX B. HISTORICAL MAP LOG



Project Area

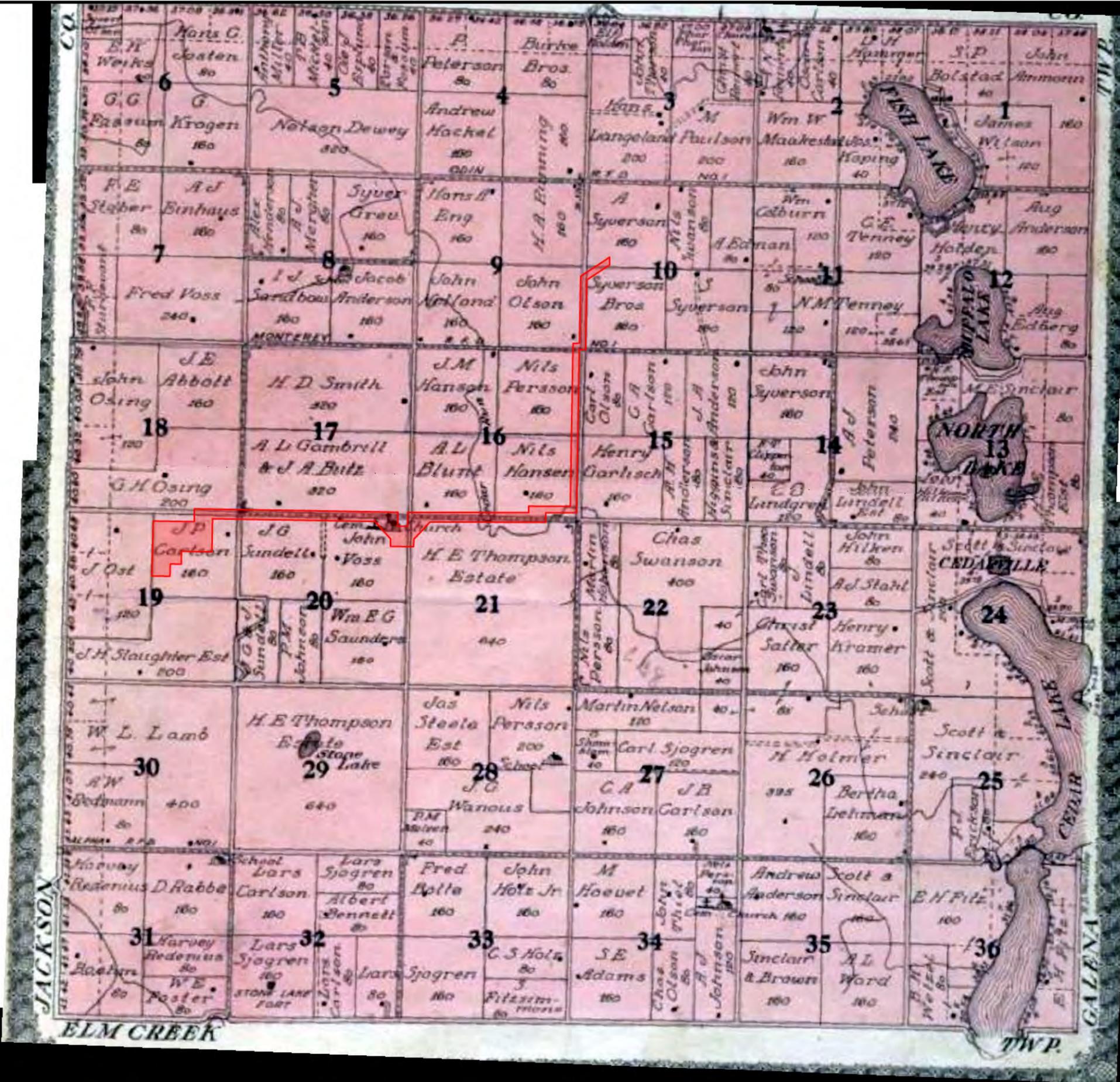


Map 1
1858 GLO Plat

Big Bend Transmission Line
Extension Project
Martin County, Minnesota



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Project Area



Map 2
1911 Geo. A. Ogle &
Company Atlas

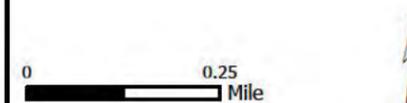
Big Bend Transmission Line
Extension Project
Martin County, Minnesota



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- Extension Project Area
- Structure



Map 3
2023 ESRI NAIP Aerial
Photograph

Big Bend Transmission Line
Extension Project
Martin County, Minnesota



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September 23, 2025

Ms. Kelly Gragg-Johnson
Environmental Review Specialist
Minnesota State Historic Preservation Office
203 Administration Building
50 Sherburne Avenue
St. Paul, MN 55155

Sent via email: ENReviewSHPO@state.mn.us

RE: Notice of Opportunity for Pre-application Coordination Meeting or Feedback
161-kilovolt Transmission Line and Associated Substation in Martin County, Minnesota

Dear Kelly,

On September 28, 2022, Big Bend Wind, LLC (“Big Bend”), an indirect subsidiary of Apex Clean Energy Holdings, LLC (“Apex”), received a route permit¹ from the Minnesota Public Utilities Commission (“MPUC”) to construct a 161-kilovolt (“kV”) transmission line and associated facilities to interconnect its approximately 300-megawatt wind project² to the transmission grid. Since MPUC’s issuance of the route permit, Big Bend has negotiated an offtake agreement with Great River Energy that requires a new interconnection point to the transmission grid. This change in the interconnection point results in the need for approximately 4.5 miles of additional 161-kV transmission line route and associated facilities, including a substation, not previously permitted. Big Bend will apply for a new MPUC route permit for this transmission line, referred to as the Big Bend Transmission Line Extension Project (“Extension Project”), in early Q4 2025. As part of this application, Great River Energy and Big Bend will apply to construct a new step-up substation and interconnection substation on the same pad (Substation Area) immediately adjacent to the existing Great River Energy-owned Lakefield Junction Substation.

The previously permitted transmission line is approximately 18 miles of 161-kV transmission line located in Cottonwood, Watonwan and Martin Counties, Minnesota. As permitted, the transmission line would extend south from the Big Bend Wind Project’s substation to the Xcel Energy Crandall 345-kV Switching Station in Martin County. The transmission line will now interconnect at the existing Lakefield Junction Substation.

¹ MPUC Docket No. IP7013/TL-19-621

² MPUC Docket No. IP7013/WS-19-619

Ms. Kelly Gragg-Johnson
September 23, 2025

Approximately 16 miles of the previously permitted transmission line will be utilized. The Extension Project will begin east of 40th Avenue, south of 240th Street and north of 230th Street, approximately 9.5 miles southeast of Mountain Lake. It will travel approximately 4.5 miles south/southwest to interconnect at a new 161/345-kV step-up substation to be owned and operated by Big Bend; Great River Energy will have a 345 kV substation on the same pad separated by a fence. This new Substation Area will interconnect to the Lakefield Junction Substation.

Big Bend proposes to use 70- to 120-foot-tall steel or laminate wood structures with spans of approximately 400 to 650 feet. Big Bend is planning to obtain a 100-foot-wide permanent right-of-way when the transmission line follows parcel lines and a 150-foot-wide permanent right-of-way when adjacent to road right-of-way. Big Bend is currently acquiring easements from landowners to secure the right-of-way required for the Extension Project. Great River Energy owns the property where the new Substation Area will be located.

In August 2025, Big Bend contracted Tetra Tech, Inc. (“Tetra Tech”) to conduct a Phase IA Cultural Resource Investigation of the Extension Project, which includes 190 acres (“Extension Project Area”). No previously documented archaeological resources were identified within the Extension Project Area. One previously documented archaeological resource (21MR0075) was identified within 1 mile of the Extension Project Area; the resource is a Precontact lithic isolated find that is unevaluated for listing in the NRHP. Three previously inventoried architectural resources (MR-CED-00024, MR-CED-00028, and MR-CED-00068) were identified within the Extension Project Area. Two are unevaluated for listing in the NRHP (MR-CED-00024 and MR-CED-00028) and one has been determined not eligible for listing in the (NRHP MR-CED-00068). An additional 29 previously inventoried architectural resources were identified within 1 mile of the Extension Project Area. Of these, 26 resources are unevaluated for listing in the NRHP, and 3 resources have been determined not eligible for listing in the NRHP.

Additionally, five previously conducted archaeological investigations were identified intersecting 111 acres of the Extension Project Area (see enclosed map). Two of the previous investigations were conducted for the proposed Elm Creek I and Elm Creek II Wind Projects (Florin and Lindbeck 2008 [Manuscript No. MULT-2008-006]; Florin and Lindbeck 2010 [Manuscript No. MULT-2010-011]; and one was conducted for the proposed Odell Wind Farm (Blondo 2014 [Manuscript No. 2009-2529]). One investigation was conducted for the proposed Big Bend Transmission Line (Newton and Rom 2022 [Manuscript No. 2018-0592/2021-0387]). One investigation was for the proposed Northern Border Pipeline (Hudak 1980 [Manuscript No. MR-80-4]); portions of this survey that intersect the Extension Project Area appeared to have re-surveyed for the proposed Elm Creek I Wind Project (Florin and Lindbeck 2008 [Manuscript No. MULT-2008-006]). All of the previous investigations failed to identify cultural resources within the Extension Project Area.

The majority of the Extension Project Area (111 acres) have been surveyed within the past 20 years and were surveyed through the use of modern survey techniques and equipment. Based off this information, Tetra Tech recommended the completion of Phase I Archaeological Survey for the 79 acres of un-surveyed portions of the Extension Project Area, which would include a pedestrian survey and reporting on pedestrian survey results.

Ms. Kelly Gragg-Johnson
September 23, 2025

Big Bend is requesting SHPO review and comment on the need for additional survey work for the previously surveyed 111 acres of the Extension Project Area.

To facilitate your review, we have enclosed maps depicting the location of the proposed Extension Project Area, and the location of previously documented resources and previously completed cultural resource investigations within the Extension Project Area plus a 1-mile buffer. We welcome any comments your agency might have at this time and throughout the permitting process. Any written agency comments provided in response to this letter will be incorporated into the MPUC's route permit process. Should you need additional information or would like to set up a pre-application coordination meeting, please contact me at brie.anderson@apexcleanenergy.com or 612-501-2801.

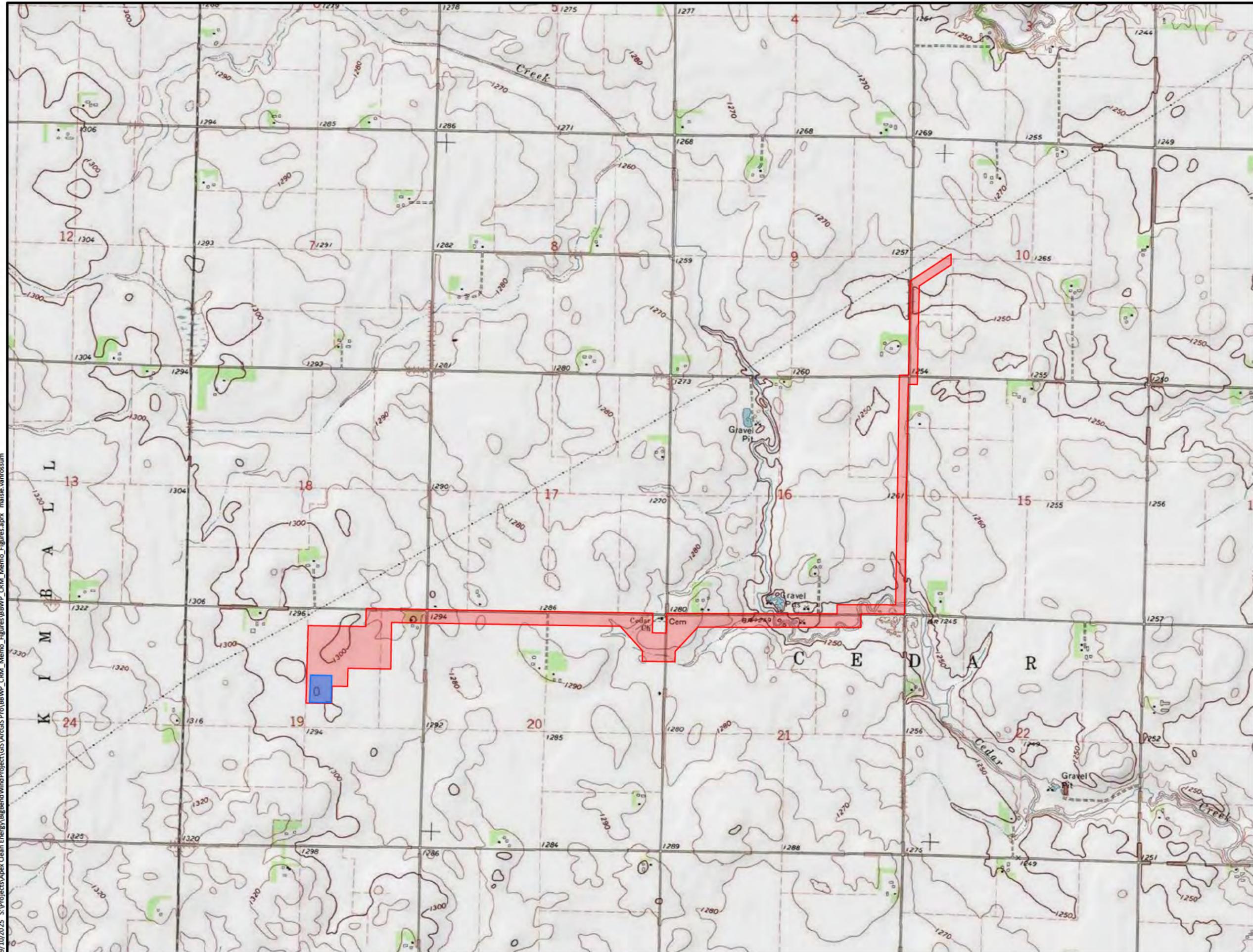
Sincerely,



Brie Anderson
Senior Director of Project Permitting
Apex Clean Energy

Enclosure: Figure 1 – Project Area, and Figure 2 – File Search Results

cc: Jennier Geiger, Apex Clean Energy
Adam Holven, Tetra Tech



- Project Area
- Proposed Substation



Figure 1
Project Area

**Big Bend Transmission Line
Extension Project
Martin County, Minnesota**



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Source: Map adapted from ArcGIS Map Server USA Topo Maps - 24K Mountain Lake SE (1970); Sections 9, 10, 15 - 21, Township 104N, Range 33W of Martin County. Project data by Big Bend, LLC. Scale: 1:24,000

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Phase IA Cultural Resources Investigation

Big Bend Transmission Line Extension Project Martin County, Minnesota

SHPO Number: 2018-0592 and 2021-0387



September 10, 2025

PRESENTED TO

Big Bend Wind, LLC
120 Garrett Street, Suite 700
Charlottesville Virginia 22902

PRESENTED BY

Tetra Tech, Inc.
2001 Killebrew Drive, Suite 141
Bloomington, Minnesota 55425
(612) 643-2200

MANAGEMENT SUMMARY

This report presents the findings of a Phase IA Cultural Resources Investigation for the Big Bend Transmission Line Extension and associated Substation (the Extension Project) located northwest of Trimont in Martin County, Minnesota. At this location, Big Bend Wind, LLC (Big Bend) proposes to develop an approximately 4.5-mile-long transmission line and associated Substation within a 190-acre route (Extension Project Area) within predominately agricultural cropland.

On September 28, 2022, Big Bend received a Route Permit from the Minnesota Public Utilities Commission (PUC) to construct a 161-kilovolt (“kV”) transmission line and associated facilities to interconnect its approximately 300-megawatt wind project to the transmission grid. Since PUC issuance of the Route Permit, Big Bend has negotiated an offtake agreement with Great River Energy that requires a new interconnection point to the transmission grid. This change in the interconnection point results in the need for approximately 4.5 miles of additional 161-kV transmission line route and associated facilities, including a substation, not previously permitted. Big Bend will apply for a new PUC Route Permit for this transmission line extension and associated substation, referred to as the Extension Project, in early Q4 2025.

Typically, as part of the permit conditions, a project must describe effects of the facility on archaeological and historic resources under Minnesota Administrative Rules Chapter 7850.1900 and consult with the Minnesota State Historic Preservation Office (SHPO) and Office of the State Archaeologist (OSA) in the event that a cultural or archaeological resource is encountered. The Route Permit will also likely specify that the project shall make every effort to avoid impacts to known archaeological and historical resources during construction. The Extension Project is also subject to the Minnesota Historic Sites Act (Minnesota Statutes [MS] 138.661-138.669), which requires that state agencies consult with the SHPO to determine appropriate treatments and to seek ways to avoid and mitigate any adverse effects on state or federal designated or listed historic properties if such a property may be impacted by the project.

This investigation is a preliminary review of desktop resources to support compliance with the conditions expected in the PUC Route Permit and with Minnesota state law. The investigation included:

- 1) A file review of the Study Area (i.e., the Extension Project Area plus a 1-mile [1.6 kilometer] buffer) to identify any National Register of Historic Places (NRHP) listed or eligible archaeological or architectural resources that are present.
- 2) Recommendations for avoidance of identified cultural resources and recommendations for additional archaeological investigations within the Extension Project Area, where warranted.

Four previously conducted archaeological investigations intersect 111 acres of the Extension Project Area. No previously documented archaeological resources were identified within the Extension Project Area. One previously documented archaeological resource was identified within the Study Area; the resource is a Precontact lithic isolated find that is unevaluated for listing in the NRHP. Three previously inventoried architectural resources were

identified within the Extension Project Area. Two are unevaluated for listing in the NRHP and one has been determined not eligible for listing in the NRHP. An additional 29 previously inventoried architectural resources were identified within the Study Area, beyond the Extension Project Area. Of these, 26 resources are unevaluated for listing in the NRHP, and 3 resources have been determined not eligible for listing in the NRHP.

[NONPUBLIC DATA BEGINS]

Based on a review of historical documents and current aerial imagery, one farmstead is present within the [REDACTED] of the Extension Project Area. The farmstead has an increased potential to contain historic archaeological resources. [NONPUBLIC DATA ENDS]

Tetra Tech recommends the completion of a Phase I Archaeological Investigation for the 79 acres of unsurveyed portions of the Extension Project Area, which would include a pedestrian survey and reporting on those results. Tetra Tech recommends the report be submitted to the SHPO to identify if additional archaeological field surveys, such as shovel testing, are warranted within the Extension Project Area.

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APPENDIX A: FIGURES

Figure 1 – Project Area

Figure 2 – File Search Results

APPENDIX B: HISTORICAL MAP LOG

1.0 INTRODUCTION

This report presents the findings of a Phase IA Cultural Resources Investigation for the Big Bend Transmission Line Extension and associated Substation (the Extension Project) located northwest of Trimont in Martin County, Minnesota (Table 1; Appendix A, Figure 1). At this location, Big Bend Wind, LLC (Big Bend) proposes to develop 4.5-mile-long transmission line and associated Substation within a 190-acre route (Extension Project Area) within predominately agricultural cropland.

Table 1. Public Land Survey System (PLSS) Description of the Extension Project Area

County	Township Name	Township (T)	Range (R)	Sections
Martin	Cedar	104 North	33 West	9,10, and 15 - 21

1.1 PURPOSE OF THE INVESTIGATION

On September 28, 2022, Big Bend received a Route Permit from the Minnesota Public Utilities Commission (PUC) to construct a 161-kilovolt (“kV”) transmission line and associated facilities to interconnect its approximately 300-megawatt wind project to the transmission grid. Since PUC issuance of the Route Permit, Big Bend has negotiated an offtake agreement with Great River Energy that requires a new interconnection point to the transmission grid. This change in the interconnection point results in the need for approximately 4.5 miles of additional 161-kV transmission line route and associated facilities, including a substation, not previously permitted. Big Bend will apply for a new MPUC route permit for this transmission line extension and associated substation, referred to as the Extension Project, in early Q4 2025.

Typically, as part of the permit conditions, a project must describe effects of the facility on archaeological and historic resources under Minnesota Administrative Rules Chapter 7850.1900 and consult with the Minnesota State Historic Preservation Office (SHPO) and Office of the State Archaeologist (OSA) in the event that a cultural or archaeological resource is encountered. The Route Permit will also likely specify that the project shall make every effort to avoid impacts to known archaeological and historical resources during construction. The Extension Project is also subject to the Minnesota Historic Sites Act (Minnesota Statutes [MS] 138.661-138.669), which requires that state agencies consult with the SHPO to determine appropriate treatments and to seek ways to avoid and mitigate any adverse effects on state or federal designated or listed historic properties if such a property may be impacted by the project.

This investigation is a preliminary review of desktop resources to support compliance with the conditions expected in the PUC Route Permit and with Minnesota state law. The investigation included:

- 1) A file review of the Study Area (i.e., the Extension Project Area plus a 1-mile [1.6 kilometer] buffer) to identify any National Register of Historic Places (NRHP) listed or eligible archaeological or architectural resources that are present (Appendix A, Figure 2).

- 2) Recommendations for avoidance of identified cultural resources and recommendations for additional archaeological investigations within the Extension Project Area, where warranted.

1.2 ORGANIZATION OF THE REPORT

This report details the research methods, environmental and cultural backgrounds, results of the literature review, and recommendations. Mr. Adam Holven served as Principal Investigator. Mr. Holven and Mr. Mike Straskowski served as the lead authors. Supporting documentation for this investigation includes Appendix A. Figures and Appendix B. Historical Map Log.

1.3 BACKGROUND RESEARCH

The Study Area was investigated through a review of Minnesota's Statewide Historic Inventory Portal (MnSHIP) (architectural resources and inventory forms) and through a review of the Minnesota Office of the State Archaeologist (OSA) Site Portal (archaeological resources, previous cultural resource investigations¹, and site forms). These reviews were conducted on August 26, 2025. An onsite review of previous cultural resource investigations was also conducted at the SHPO on September 2, 2025.

2.0 ENVIRONMENTAL BACKGROUND

A brief overview of environmental conditions within the Extension Project Area provides a foundation for understanding human subsistence and settlement patterns in the region over time. Understanding how environmental variables (e.g., availability of food, water, fuel, and tool materials) affected past decision making allows for a greater awareness of a region's potential archaeological resources.

2.1 LANDFORMS AND VEGETATION

The Extension Project Area is located within the Minnesota River Prairie Subsection of the North Central Glaciated Plains Section of the Prairie Parkland Province (Minnesota Department of Natural Resources [MN DNR] 2025). The Minnesota River Prairie Subsection consists of a gently rolling ground moraine split in half by the Minnesota River. The dominant landforms of the subsection are till plains with occasional end moraines and lake plains. The topography of the Extension Project Area is gently rolling.

Prior to Euro-American settlement, vegetation in the region was predominately tallgrass prairie with islands of wet prairie (MN DNR 2025). Forests of silver maple, elm, cottonwood, and willow grew on floodplains along streams.

¹ Previous surveys for Martin County have not been fully incorporated on the OSA Site Portal; therefore, an onsite review of files at the SHPO was completed.

The current vegetation within the Extension Project Area consists primarily of agricultural cropland with the exception of wooded areas along Cedar Creek, which intersects the Extension Project Area.

2.2 SOILS

A total of 13 soil map units encompass the Extension Project Area (U.S. Department of Agriculture-Natural Resources Conservation Service [USDA-NRCS] 2025a). These 13 soil map units consist of 12 individual soil series (Table 2). The parent materials for the soil map units include glacial till and outwash, sandy and gravelly outwash, lacustrine sediments, colluvium, and alluvium (USDA-NRCS 2025b). The most common soil map unit within the Extension Project Area is the Canisteo-Glencoe complex, which encompasses approximately 45 percent of the Project Area. The Canisteo series and Glencoe series are generally formed in till on upland landforms. The potential for deeply buried cultural materials within the Canisteo-Glencoe complex is low.

Three soil map units in the Extension Project Area are formed in colluvium or alluvium (Table 2). Delft series soils are formed in colluvium and encompass approximately 4 percent of the Extension Project Area. While buried cultural horizons can occur in colluvial settings, based on a review of the landform the Delft series is located on within the Extension Project Area, the potential for deeply buried cultural materials associated with Delft soil map units is low.

The Coland and Webster soil map units are formed in alluvium and together encompass approximately 34 acres, or 18 percent, of the Extension Project Area. While formed through alluvial actions, Webster series soils are formed in alluvium derived from till on uplands; this formation mechanism would not likely result in deeply buried cultural materials. Coland series soils are formed in alluvium on floodplains and alluvial fans in river valleys and upland drainageways, which could potentially result in deeply buried cultural material horizons. Coland series soils are present along Cedar Creek and encompass approximately 16 acres, or 9 percent of the Extension Project Area.

Table 2. Soil Map Units in the Extension Project Area

Soil Series	Description
Canisteo	Poorly and very poorly drained soils formed in calcareous, loamy till or in a thin mantle of loamy or silty sediments and the underlying calcareous, loamy till on rims of depressions, depressions, and flats on moraines or till plains.
Clarion	Moderately well drained soils formed in glacial till on uplands.
Crippin	Somewhat poorly drained, moderately permeable, calcareous soils formed in glacial till on uplands.
Coland	Poorly drained soils formed in alluvium on floodplains and alluvial fans in river valleys and upland drainageways in dissected till plains.
Delft	Poorly drained and somewhat poorly soils formed in loamy colluvium derived from till and underlying loamy till on till plains and moraines.

Soil Series	Description
Estherville	Somewhat excessively drained soils formed in 25 to 50 centimeters (9.8 to 19.7 inches) of loamy sediments over sandy and gravelly outwash on outwash plains, stream terraces, valley trains, and kames on moraines.
Glencoe	Very poorly drained soils formed in loamy sediments from till in closed depressions on moraines.
Klossner	Very poorly drained soils formed in well decomposed organic material overlying loamy or silty lacustrine deposits, slope alluvium, or till formed on moraines, till plains, lake plains, flood plains, and seeps.
Nicollet	Somewhat poorly drained soils formed in calcareous loamy glacial till on till plains and moraines.
Storden	Well drained soils formed in calcareous loamy glacial till on glacial moraines.
Swanlake	Well drained soils formed in loamy calcareous till on ground moraines and till plains.
Webster	Poorly drained, moderately permeable soils formed in glacial till or local alluvium derived from till on uplands

Source: USDA-NRCS 2025b

2.3 HYDROLOGY

Cedar Creek intersects the Extension Project Area, which is within the Cedar Creek Watershed (USGS 2025). A chain of lakes consisting of Cedar Lake, North Lake, Buffalo Lake, and Fish Lake are located approximately 1.8 to 2.5 miles (2.9 to 4.0 kilometers) east of the Extension Project Area. Cedar Creek flows into Cedar Lake, approximately 3.3 miles south of the Extension Project Area.

3.0 CULTURAL BACKGROUND

This section provides a summary of the known cultural resources within the region. Similar to Section 2.0 (Environmental Background), a general understanding of a region's cultural resources is necessary for contextual interpretations of newly documented sites. The Study Area lies within the Prairie Lakes (2s) Archaeological Region. The Archaeological Regions are used for Precontact, Contact, and Post-Contact archaeological site studies and management in the state.

3.1 PRECONTACT AND CONTACT PERIOD

Precontact cultures within the Prairie Lakes Archaeological Region are divided into three periods: Early Prehistoric, Middle Prehistoric, and Late Prehistoric (Anfinson 2005). These periods are based largely on technological innovations that can be observed in the archaeological record. These innovations include changes in the forms of projectile point styles and the development and decoration of pottery. Behavioral adaptations such as changing subsistence and mobility patterns also serve as points of reference in determining the transition from one tradition

to another. The following descriptions were compiled from the *Southwestern Minnesota Archaeology: 12,000 Years in the Prairie Lakes Region* (Anfinson 1997) and *Archaeology of Minnesota* (Gibbon 2012).

3.1.1 Early Prehistoric Period (10,000 – 3,000 B.C.)

The Early Prehistoric Period in Minnesota includes two traditions: the Paleoindian Tradition and the Prairie Archaic Tradition. These traditions are poorly understood in south-central and southwestern Minnesota since most associated archaeological evidence is from surface sites. Populations in the Early Prehistoric Period within the Prairie Lakes Archaeological Region of Minnesota typically relied on bison as their primary form of subsistence. This Period is also marked by environmental stress as the climate became warmer and drier.

3.1.1.1 – Paleoindian Tradition (10,000 – 6,000 B.C.)

The Paleoindian Tradition is characterized by hunting and gathering adaptations with a notable concentration on now-extinct big game animals. The beginning of the Paleoindian Tradition focused attention on Pleistocene fauna such as mammoths and camelops; later focus was on bison species that were intermediate in size between late Pleistocene and modern forms. Other characteristics of the Paleoindian Tradition include (1) geographically extensive interaction networks between social groups (Hayden 1981), and (2) distinctive lanceolate projectile point styles by which the various Paleoindian cultural complexes are identified. Cultural complexes represented in south-central and southwestern Minnesota from oldest to youngest include the Clovis, Folsom, and Plano complexes. The best-known Paleoindian site in the Prairie Lakes Archaeological Region is the Browns Valley Site (21TR0005) in west-central Minnesota.

3.1.1.2 – Prairie Archaic Tradition (5,500 – 3,000 B.C.)

The Prairie Archaic Tradition coincides with the peak of the Altithermal, a warm, dry climactic episode. In the archaeological record, the Prairie Archaic Tradition is marked by a shift in lithic tool technologies to a wider variety of projectile point styles and the emergence of ground stone tools (Benchley et al. 1997). In the Prairie Lakes Archaeological Region, populations focused on bison as a primary source for subsistence and tended to live near major drainages and lakes. The best-dated Prairie Archaic site is the Granite Falls Bison Kill Site (21YM0047), a bison processing site in west-central Minnesota.

At the end of the Prairie Archaic Period, the climate became wetter and cooler, and a wider range of subsistence strategies appear, as evidence by changing lithic technology, suggesting foraging was increasingly important.

3.1.2 – Middle Prehistoric Period (3,000 B.C. – A.D. 900)

The Middle Prehistoric Period in southwestern Minnesota includes three phases: the Mountain Lake Phase, the Fox Lake Phase, and the Lake Benton Phase. As climatic trends from the end of the Prairie Archaic Tradition continued, bison herds shifted west while lakes and the wooded areas that surrounded them in southwestern Minnesota expanded. Aquatic resources less readily available during the Prairie Archaic Tradition flourished in the wetter and cooler climate of the Middle Prehistoric Period and became as equally essential for subsistence as bison.

Prior to being drained, the Project Area could have provided a setting similar to archaeological sites associated with this Period.

3.1.2.1 – Mountain Lake Phase (3,000 – 200 B.C.)

The Mountain Lake Phase in the Prairie Lakes Archaeological Region is marked by a shift in human occupation to island lake and peninsula sites. Bison hunting was still an important subsistence strategy, but lacustrine resources were also essential to the diet. The Mountain Lake Phase is not as well understood as other phases in the Middle Prehistoric Period due to component mixing in excavated sites. However, there is no evidence of early agriculture or intensive use of seeds and nuts, as in other parts of Minnesota during this period. The type site for this phase is the Mountain Lake Site (21CO0001) in Cottonwood County. The Fox Lake (21MR0002) site in Martin County, approximately 14 miles (22.5 miles) southwest of the Project Area, and the Pedersen (21LN0002) and Fox Lake (21MR0002) site in Lincoln County also have evidence of this phase of occupation. All three sites are located in southwestern Minnesota.

3.1.2.2 – Fox Lake Phase (200 B.C. – A.D. 700)

The Fox Lake Phase in the Prairie Lakes Archaeological Region coincides with the spread of ceramic technology throughout Minnesota and the development of distinctive material cultural components, analogous to contemporary populations throughout the Mid-Continent (Justice and Kudlaty 1999). Geographic variation in occupation setting during this period reflects refinements of cultural lifeways in response to local physical and social environments. The Fox Lake Phase is more strongly influenced by the western Plains traditions than other parts of Minnesota. Artifacts associated with this Phase include incised-over-cordmarked Fox Lake ceramics and chipped stone tools with a wide variety of morphological characteristics. Most Fox Lake Phase sites are found along lake, stream, and river margins. Well-known habitation sites with Fox Lake components include the Fox Lake site (21MR0002) in Martin County, the Big Slough site (21MU0002) in Murray County, and the Mountain Lake site (21CO0001) in Cottonwood County, all of which are in southwestern Minnesota, and the Arthur site (13DK0027) in northern Iowa. Burial mounds do not appear in the Prairie Lakes Archaeological Region until the end of the Middle Prehistoric Period.

3.1.2.3 – Lake Benton Phase (A.D. 700 – 1200)

The Lake Benton Phase in the Prairie Lakes Archaeological Region is defined by a shift in ceramic technology and mortuary practices. Subsistence and settlement patterns for this phase are nearly identical to the Fox Lake Phase. Changes in ceramic manufacture during the Lake Benton Phase include using crushed rock instead of sand temper, increased use of surface smoothing, and thinner vessel walls. Burial mounds were increasingly used by populations in the region, tended to be located on lake shores, and tended to not have a habitation site associated with them. The largest Lake Benton Phase mound group in the region is Site 21LN001 located on the north shore of Lake Benton in southwestern Minnesota and includes 26 mounds. The type site for the Lake Benton Phase is the Pedersen Site (21LN002) in Lincoln County.

3.1.3 Late Prehistoric Period (A.D. 900 – 1650)

In the Prairie Lakes Archaeological region, the Late Prehistoric Period is characterized by the Plains Village Tradition. Unlike earlier cultural traditions, the Plains Village Tradition relied heavily on horticulture and, to a lesser extent, on hunting and gathering (Steinacher and Carlson 1998). Cultigens in use at this time included maize, beans, squash, sunflowers, gourds, and tobacco. Archaeological evidence from the Plains Village Tradition in southwestern Minnesota dates from approximately A.D. 900 to 1650, after which Native American populations were decimated by exposure to European diseases. Archaeological evidence such as semi-subterranean lodges with multiple cache pits suggests that the key element in Plains Village adaptive strategies was the production of a dependable, storable surplus food supply, primarily in the form of dried corn. Stored surpluses of food facilitated the formation of larger, more permanently situated residential village communities. Several cultural complexes including Great Oasis, Cambria, Over Focus, and Mill Creek are categorized under the Plains Village Tradition in eastern South Dakota, southern Minnesota, and northern Iowa (Alex 2000).

3.1.4 – Contact Period (A.D. 1650 – 1837)

At the time of European contact, Siouan groups (Dakota) were the predominant Native American groups represented in the southern portion of Minnesota and within Martin County. European contact with the Dakota began with French fur-trading expeditions, and interactions between Native American groups and Europeans became more frequent between 1750 and 1800. The French had the largest non-native presence in the region until the British began controlling the fur trade following the French and Indian War in 1760 (Zimmerman 1985). The British maintained control of the fur trade until the United States purchased the Louisiana Territory in 1803. During the Contact Period, Native American populations declined due largely to warfare and disease. European expansion also affected Native American settlement patterns as groups in the eastern portion of the United States were pushed west by the increasing European population. This frequently led to conflict between the different Native American groups.

3.2 – POST-CONTACT PERIOD

3.2.1 – Early Period (1837-1850s)

Much of southern Minnesota, along with present-day Martin County, was ceded to the United States government by the Dakota in 1851 (approved in 1853) as part of the Traverse des Sioux and Mendota treaties (Minnesota Historical Society 2025). Following these treaties, the first Euro-American settlers began to enter the area.

3.2.2 – Settlement Period (1853 to Present)

Present-day Martin County was established in 1857, consisting of land split from Brown and Faribault Counties. The county was either named after Morgan Lewis Martin, a congressional delegate from the Wisconsin Territory who introduced the act to organize Minnesota Territory, or Henry Martin, an early settler of the area from Connecticut (Martin County 2022). The first Euro-Americans to settle in present-day Martin County were Calvin Tuttle and Mr.

Rickey, arriving in March 1856 from Fort Dodge, Iowa (Budd 1897). They settled and built a one-room log house near Clear Lake in Section 1 of Township 101 North, Range 30 West (Silver Lake Township), approximately 26 miles (41.8 kilometers) southeast of the Project Area. Additional settlements were established later that year near present-day Fairmont, approximately 19 miles (30.6 kilometers) southeast of the Project Area, and the population of Martin County included 20 men, 9 women, and 23 children by the winter of 1857.

In March 1857, a Dakota band attacked settlements in Spirit Lake, Iowa, and along the Des Moines River in neighboring Jackson County, Minnesota. In response, the settlers in present-day Martin County constructed a log fort for protection on property owned by George Britts along the Center Chain lakes in Silver Lake Township and called it Fort Britt. Some settlers left the area and other settlers gathered in the fort on July 25, 1857, after an article published in the *Mankato Independent* suggested that a war was possible between the Dakota and the United States. The settlers organized a company for defense, electing George Britts as captain and William H. Budd as lieutenant. Growing conflict with the Dakota in Minnesota culminated in the Dakota War of 1862; however, no major conflicts took place in Martin County (Budd 1897).

Many early settlers of Martin County were of English heritage. In 1872, H. F. Shearman, a lawyer of English heritage from Connecticut, visited Martin County during a hunting trip and was impressed by the economic potential of the area (City of Fairmont 2007). During a trip back to England, Mr. Shearman convinced many English investors to move to Martin County and raise beans. The English settlers arrived in the spring of 1873 and established the “English Colony”, also known as the “Bean Colony” (City of Fairmont 2007). The settlers planted approximately 1,000 to 1,200 acres of beans around Fairmont in Tenhassen and Rolling Green Townships. A grasshopper infestation began in June of 1873 and lasted until 1877, causing large-scale crop failures for the English immigrants and forcing many to stop growing beans or return to England. Despite these initial setbacks, there were 219 English immigrants in Martin County by 1880 (City of Fairmont 2007). The expansion of railroads into Martin County in the late 1800s brought increased settlement and prosperity for settlers in the county. Since the county was established, agriculture has served as its primary economy. The population in Martin County peaked at around 27,000 in 1960. As of the latest census data Martin County has a population of approximately 20,000 (United States Census Bureau 2023).

3.2.3 – Cedar Township

Cedar Township was organized in 1872 and named after Cedar Lake located on the eastern edge of the township (Upham 1920). The villages of Triumph and Monterey were platted in 1899, approximately 5.0 miles (8.0 kilometers) southeast of the Extension Project Area (City of Fairmont 2025). Triumph was platted by the Western Town Lot Company, a division of the Chicago North Western Railroad Company (City of Fairmont 2025). The villages merged to form the city of Trimont in 1959.

4.0 RESULTS OF THE LITERATURE REVIEW

The purpose of the file search is to provide a general understanding of the cultural resources identified within the Study Area and to provide a general overview of land use change within the Study Area.

4.1 PREVIOUSLY DOCUMENTED CULTURAL RESOURCES

4.1.1 Previous Archaeological Investigations

Five previously conducted archaeological investigations were identified intersecting 111 acres of the Extension Project Area (Appendix A, Figure 2). Three of the previous investigations were for a proposed wind farm (Florin and Lindbeck 2008 [Manuscript No. MULT-2008-006]; Florin and Lindbeck 2010 [Manuscript No. MULT-2010-011]; and Blondo 2014 [Manuscript No. 2009-2529]); one investigation was for a proposed Big Bend Transmission Line (Newton and Rom 2022 [Manuscript No. 2018-0592/2021-0387]), and one investigation was for a proposed pipeline (Hudak 1980 [Manuscript No. MR-80-4]). All of the previous investigations failed to identify cultural resources within the Extension Project Area.

[NONPUBLIC DATA BEGINS]

4.1.2 Archaeological Resources

No previously documented archaeological resources were identified within the Extension Project Area during the file review. However, one previously documented archaeological resource (21MR0075) was identified within the Study Area. Site 21MR0075 consists of a Precontact lithic isolated find located [REDACTED] of the Extension Project Area within [REDACTED] (Appendix A, Figure 2). The site is currently unevaluated for listing in the NRHP.

4.1.3 Architectural Resources

Three previously inventoried architectural resources (MR-CED-00024, MR-CED-00028, and MR-CED-00068) were identified within the Extension Project Area (Table 3; Appendix A, Figure 2). Resource MR-CED-00024 [REDACTED] is located in the [REDACTED] of the Extension Project Area along the [REDACTED]. Resource MR-CED-00028 [REDACTED] is located in the [REDACTED] of the Extension Project Area within the [REDACTED]. Resource MR-CED-00068 [REDACTED] is located on the [REDACTED] of the Extension Project Area within [REDACTED]. Resources MR-CED-00024 and MR-CED-00028 are currently unevaluated for listing in the NRHP, and Resource MR-CED-00068 has been determined not eligible for listing in the NRHP.

An additional 29 previously inventoried architectural resources were identified outside the Project Area, but within the Study Area (Table 3; Appendix A, Figure 2). Of these 29 architectural resources, 26 resources are unevaluated for listing in the NRHP and 3 resources are not eligible for listing in the NRHP. The locations of these resources range from [REDACTED] from the Project Area.

Table 3. Previously Inventoried Architectural Resources within the Study Area

Inventory Number	Name	Address	NRHP Status	Location
JK-KIM-00021			Unevaluated	Study Area
MR-CED-00002			Unevaluated	Study Area
MR-CED-00017			Unevaluated	Study Area
MR-CED-00018			Unevaluated	Study Area
MR-CED-00019			Unevaluated	Study Area
MR-CED-00021			Unevaluated	Study Area
MR-CED-00022			Unevaluated	Study Area
MR-CED-00023			Unevaluated	Study Area
MR-CED-00024			Unevaluated	Extension Project Area
MR-CED-00025			Unevaluated	Study Area
MR-CED-00027			Unevaluated	Study Area
MR-CED-00028			Unevaluated	Extension Project Area
MR-CED-00029			Unevaluated	Study Area
MR-CED-00030			Unevaluated	Study Area
MR-CED-00031			Unevaluated	Study Area
MR-CED-00032			Unevaluated	Study Area
MR-CED-00033			Unevaluated	Study Area
MR-CED-00034			Unevaluated	Study Area
MR-CED-00035			Unevaluated	Study Area
MR-CED-00036			Unevaluated	Study Area
MR-CED-00037			Unevaluated	Study Area
MR-CED-00038			Unevaluated	Study Area
MR-CED-00043			Not Eligible	Study Area
MR-CED-00046			Unevaluated	Study Area
MR-CED-00047			Unevaluated	Study Area
MR-CED-00058			Unevaluated	Study Area
MR-CED-00060			Unevaluated	Study Area
MR-CED-00061			Unevaluated	Study Area
MR-CED-00062			Unevaluated	Study Area
MR-CED-00068			Not Eligible	Extension Project Area

Inventory Number	Name	Address	NRHP Status	Location
MR-CED-00069			Not Eligible	Study Area
MR-CED-00075			Not Eligible	Study Area

4.2 HISTORICAL DOCUMENT REVIEW

Tetra Tech reviewed historical atlases, topographic quadrangles, and aerial photographs to identify the presence of structures, settlements, trails, roads, railroads, and other manufactured features that may have been historically present within the Extension Project Area. Through this review, Tetra Tech identified the locations of former structures and features within the Extension Project Area; these former structure and feature locations have the increased potential to contain historic archaeological resources. Based on the historical document review, one extant farmstead was identified within the Extension Project Area (Appendix B).

A review of the 1858 GLO plat for T104N, R33W revealed no historic features illustrated within the Extension Project Area (Appendix B, Map 1). Two marshes were illustrated in the northern portion of the Extension Project Area. Multiple drainages were illustrated in the southeastern portion of the Extension Project Area. The drainages are illustrated in vicinity of the current location of Cedar Creek. Additional marshes and bodies of water were illustrated in the sections surrounding the Extension Project Area.

A review of the 1911 Geo. A. Ogle & Company atlas for Martin County revealed that the Extension Project Area was located in Cedar Township (Appendix B, Map 2). Cedar Run was illustrated intersecting the Extension Project Area in the current alignment of Cedar Creek. Section line roads were illustrated intersecting and adjacent to the Extension Project Area. While no structures were illustrated within the Extension Project Area, multiple structures were illustrated in the vicinity.

A review of the 1970 USGS 7.5-Minute Mountain Lake SE, Minnesota Topographic Quadrangle revealed an occupied structure was illustrated in the [REDACTED] of the Extension Project Area in the approximate location of architectural resource MR-CED-00028 (Appendix A, Figure 2). The church and cemetery previously illustrated within the Extension Project Area on the 1911 Geo. A. Ogle & Company plat was illustrated immediately adjacent to it. Gravel pits were illustrated in the southeastern portion of the Extension Project Area, adjacent to Cedar Creek. A southwest-northwest trending transmission line was illustrated adjacent to the northernmost and westernmost portions of the Extension Project Area. Additional structures were illustrated in the vicinity.

A review of 2023 USGS NAIP aerial photograph revealed a farmstead in the location as the occupied structure illustrated on 1970 USGS 7.5-Minute Mountain Lake SE, Minnesota Topographic Quadrangle (Appendix B, Map 3). Gravel roads and transmission lines were observed in the southwestern portion of the Extension Project Area.

These facilities appear to be associated with a substation immediately south of the southwestern portion of the Extension Project Area. Multiple wind turbines were observed in the vicinity.

5.0 RECOMMENDATIONS

Four previously conducted archaeological investigations intersect 111 acres of the Extension Project Area. No previously documented archaeological resources were identified within the Extension Project Area. One previously documented archaeological resource was identified within the Study Area; the resource is a Precontact lithic isolated find that is unevaluated for listing in the NRHP.

Three previously inventoried architectural resources were identified within the Extension Project Area. Two are unevaluated for listing in the NRHP and one has been determined not eligible for listing in the NRHP. An additional 29 previously inventoried architectural resources were identified within the Study Area, beyond the Extension Project Area. Of these, 26 resources are unevaluated for listing in the NRHP, and 3 resources have been determined not eligible for listing in the NRHP.

Based on a review of historical documents and current aerial imagery, one farmstead is present within the [REDACTED] of the Extension Project Area. The farmstead has an increased potential to contain historic archaeological resources due to its age and the type of activities typically conducted on farmsteads.

Tetra Tech recommends the completion of a Phase I Archaeological Investigation for the 79 acres of unsurveyed portions of the Extension Project Area, which would include a pedestrian survey and reporting on those results. Tetra Tech recommends the report be submitted to the SHPO to identify if additional archaeological field surveys, such as shovel testing, are warranted.

[NONPUBLIC DATA ENDS]

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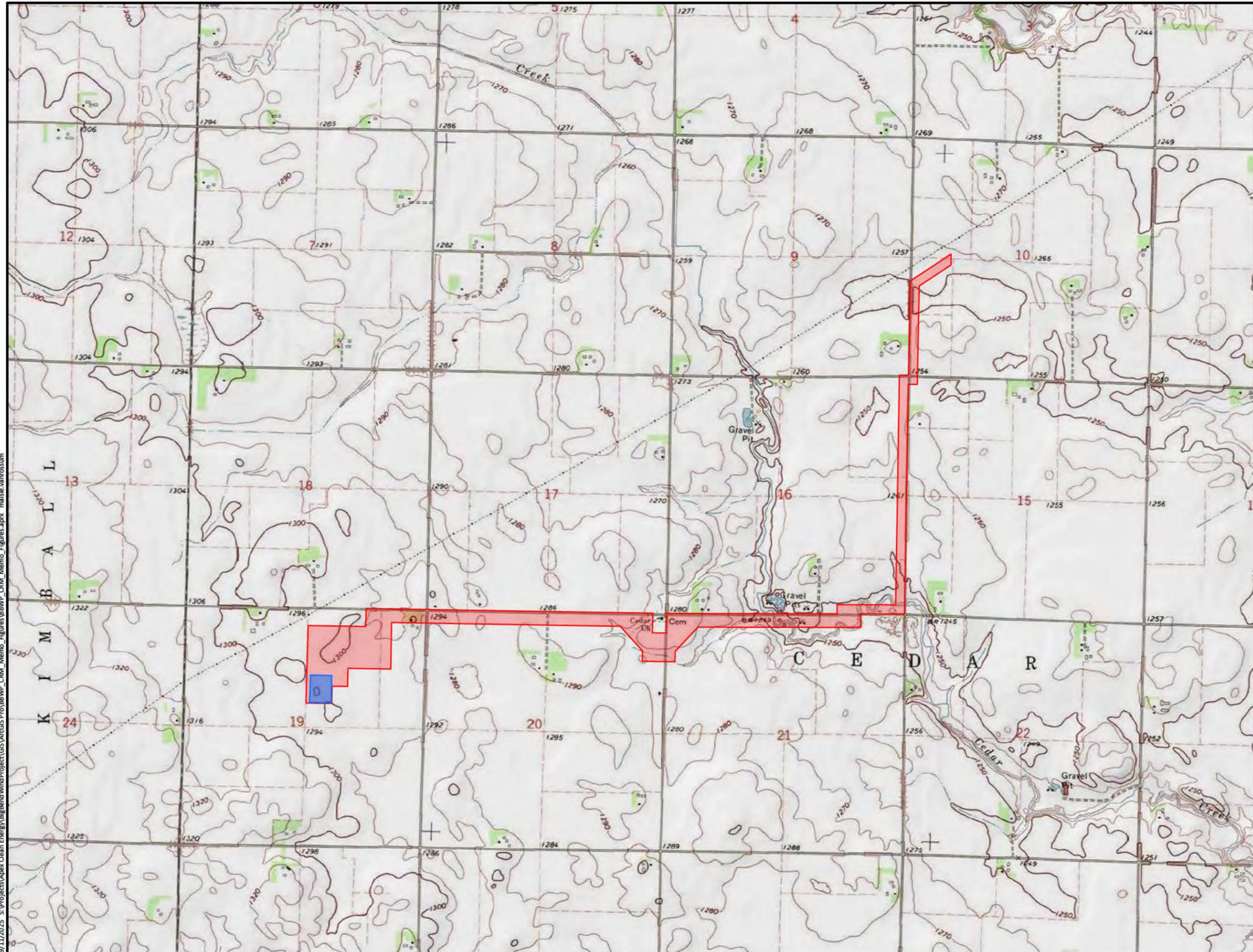
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APPENDIX A. FIGURES



- Extension Project Area
- Proposed Substation



Figure 1
Project Area

**Big Bend Transmission Line
Extension Project
Martin County, Minnesota**



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Source: Map adapted from ArcGIS Map Server USA Topo Maps - 24K Mountain Lake SE (1970); Sections 9, 10, 15 - 21, Township 104N, Range 33W of Martin County. Project data by Big Bend, LLC. Scale: 1:24,000

[NONPUBLIC DATA BEGINS]



- Extension Project Area
- 1-mile Study Area
- Previously Surveyed Area
- Previous Investigation
- Previous Investigation for Proposed Big Bend Transmission Line
- Archaeological Site
- Architectural Resource
- Architectural Resource



Figure 2
File Search Results

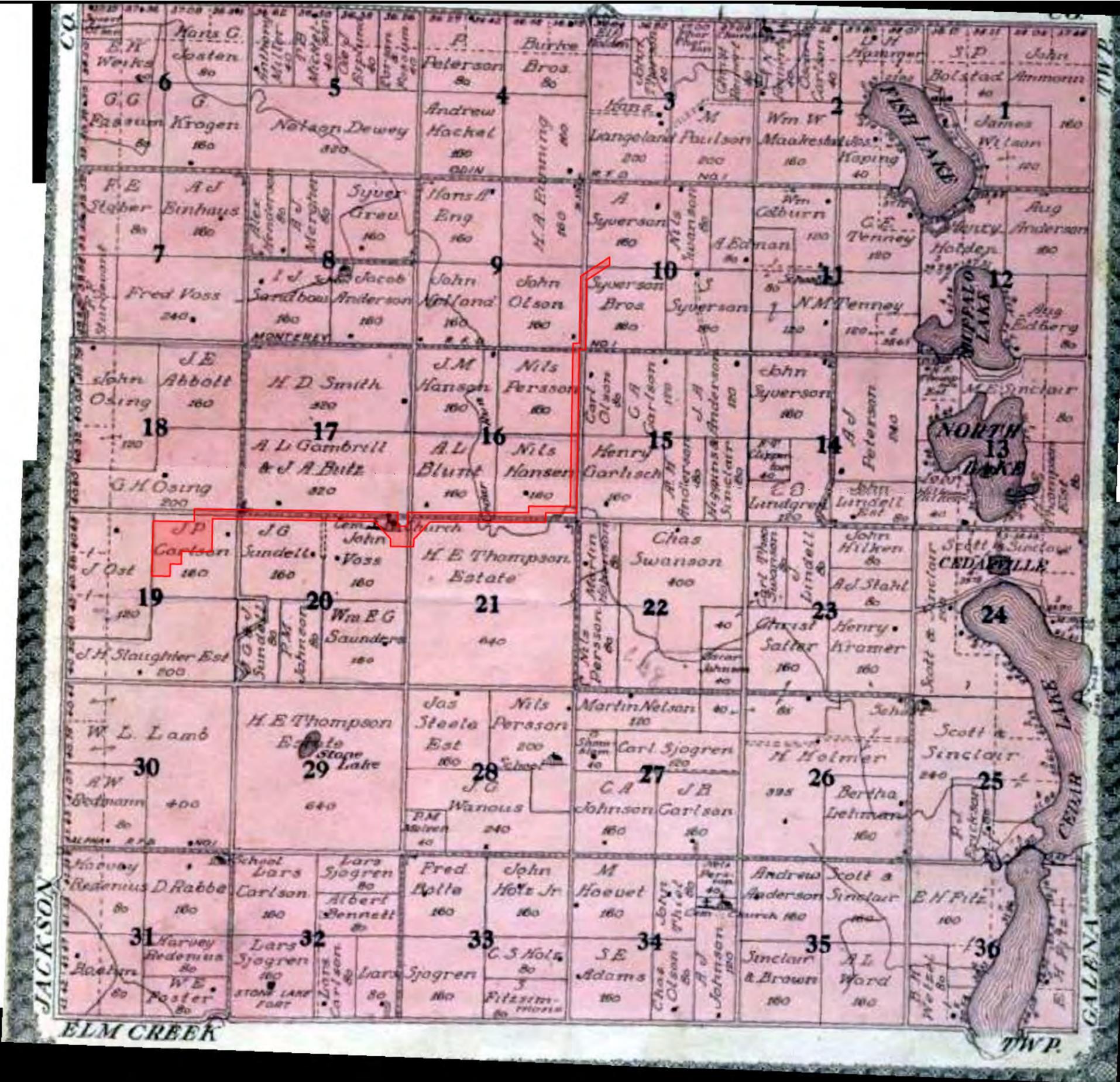
**Big Bend Transmission Line
Extension Project
Martin County, Minnesota**



[NONPUBLIC DATA ENDS]

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APPENDIX B. HISTORICAL MAP LOG



 Extension Project Area



Map 3
1911 Geo. A. Ogle &
Company Atlas

Big Bend Transmission Line
Extension Project
Martin County, Minnesota

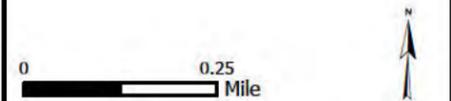


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[NONPUBLIC DATA BEGINS]



- Extension Project Area
- Structure



Map 3
2023 ESRI NAIP Aerial
Photograph

Big Bend Transmission Line
Extension Project
Martin County, Minnesota



[NONPUBLIC DATA ENDS]

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Region Nine Development Commission

From: [Andrew Levi](#)
To: nicole@rndc.org
Cc: brie.anderson@apexcleanenergy.com
Subject: Big Bend Wind, LLC -- Big Bend Transmission Line Extension Project
Date: Thursday, September 11, 2025 8:12:00 AM
Attachments: [image001.png](#)
[Apex_AgencyLetter_Mailing_20250909_Region_Nine_Development_Commission.pdf](#)

Dear Nicole Griensewic,

Big Bend Wind, LLC (Big Bend) and Great River Energy are proposing to construct approximately 4.5 miles of 161-kilovolt transmission line and associated facilities in Martin County. The transmission line is needed to interconnect the Big Bend Wind Project to the transmission grid because the interconnection point for the wind farm has changed. More detail is provided in the attached letter.

Big Bend is planning to submit a Route Permit Application to the Minnesota Public Utilities Commission in early Q4, 2025. Big Bend would appreciate any comments you might have about the Project. Please reach out to Brie Anderson at brie.anderson@apexcleanenergy.com or 612-501-2801 with questions, written comments, or to request a pre-application coordination meeting.

Thank you,

Andrew Levi [on behalf of Brie Anderson, Big Bend]

Andrew Levi

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