

PHASE I ARCHAEOLOGICAL SURVEY
Rose Creek Repower Project
Mower County, Minnesota
Addendum 1



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Rose Creek Wind, LLC
Phase I Archaeological Survey

July 2022

EXECUTIVE SUMMARY

ConEdison Development, a New York renewable energy development and operations company doing business as Rose Creek Wind, LLC (Rose Creek), is planning to repower an existing wind facility in Mower County, Minnesota. A cultural resources review is a requirement of the Project's Minnesota Large Wind Energy Conversion System site permitting process, which requires that the applicant coordinate with the Minnesota State Historic Preservation Office (SHPO). The investigation documented in this report is a continuation of the Phase I archaeological survey completed by Merjent, Inc. (Merjent) on behalf of the Project. The initial Phase I survey was completed in November 2021, at which time some areas were not surveyed due to lack of access. The current effort completes the Phase I survey in areas where survey access was granted and covers Project layout changes. The 2022 Survey Corridor encompasses 67.0 acres in Township 101 North, Ranges 15 and 16 West, in Mower County, Minnesota.

Merjent applied industry best practices and adhered to the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 CFR 44716) and the *State Archaeologist's Manual for Archaeological Projects in Minnesota* (Anfinson, 2011). The field survey was conducted by Merjent archaeologists Pamela Flynn and Erika Eigenberger on June 21–22, 2022. Ms. Flynn served as the principal investigator and meets the Secretary of the Interior's Professional Qualification Standards for Archaeology as published in 36 CFR § 61. A literature search completed for the Project in 2021 identified no previously documented archaeological sites intersecting the Survey Corridor. No archaeological sites were identified during the survey. Merjent recommends that no historic properties will be affected by the Project as currently planned.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
1.0 PROJECT DESCRIPTION.....	1
2.0 FIELD METHODS AND OBJECTIVES	1
3.0 SURVEY RESULTS.....	2
Township 101N, Range 15W, Section 18 (Appendix A, Figure 3.5).....	4
Township 101N, Range 16W, Section 13 (Appendix A, Figure 3.5).....	4
Township 101N, Range 16W, Section 22 (Appendix A, Figures 3.1, 3.2).....	4
Township 101N, Range 16W, Section 23 (Appendix A, Figures 3.1, 3.2).....	4
Township 101N, Range 16W, Section 24 (Appendix A, Figure 3.3, 3.4).....	4
Township 101N, Range 16W, Section 25 (Appendix A, Figure 3.3).....	5
Township 101N, Range 16W, Section 26 (Appendix A, Figures 3.2, 3.3).....	5
Township 101N, Range 16W, Section 36 (Appendix A, Figure 3.6).....	5
4.0 SUMMARY AND RECOMMENDATIONS	6
5.0 REFERENCES CITED	7

LIST OF TABLES

Table 1.1-1 2022 Survey Corridor Legal Description	1
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LIST OF PHOTOS

Photo 1. Typical field conditions in the Survey Corridor, planted corn field.	2
Photo 2. Typical field conditions in the Survey Corridor, planted bean field with harvested corn chaff.	3
Photo 3. Typical road ROW conditions in the Survey Corridor, road berm and ditch with mixed grasses, weeds, and utilities.....	3

LIST OF APPENDICES

Appendix A Figures	
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Rose Creek Wind, LLC
Phase I Archaeological Survey

July 2022

ACRONYM AND ABBREVIATIONS

CFR	Code of Federal Regulations
GSV	Ground surface visibility
Merjent	Merjent, Inc.
NRHP	National Register of Historic Places
OSA	Office of the State Archaeologist
Project	Rose Creek Repower Project
Project Boundary	A boundary depicting lands proposed to be used for Project infrastructure and including non-participating parcels that will have Project infrastructure within adjacent public rights-of-way.
Rose Creek	Rose Creek Wind, LLC
ROW	right-of-way
SHPO	State Historic Preservation Office
Survey Corridor	The areas of ground disturbance covered by the Phase I survey.

1.0 PROJECT DESCRIPTION

Consolidated Edison Development, Inc., a New York renewable energy development and operations company doing business as Rose Creek Wind, LLC (Rose Creek), is planning to repower an existing wind facility in Mower County, Minnesota (Appendix A, Figure 1). The Rose Creek Project (Project) requires a Minnesota Large Wind Energy Conversion System site permit. Under Minnesota Administrative Rules 7854.0500 Site Permit Application Requirements, applicants for a site permit are required to complete an analysis of potential project impacts on cultural and archaeological resources. As part of the review process and in compliance with the Minnesota Historic Sites Act (Minn. Stat. 138.665-666), the applicant coordinates with the Minnesota State Historic Preservation Office (SHPO). ConEdison Development contracted Merjent, Inc. (Merjent) to provide permitting assistance, including Phase I archaeological surveys, for the Project. This Project currently has no federal actions that would trigger cultural resource review under Section 106 of the National Historic Preservation Act of 1966 and its implementing regulations in Title 36 Code of Federal Regulations (CFR) Part 800.

This report represents a continuation of archaeological investigations completed for the Project in November 2021 (Flynn 2022). Some parcels were not surveyed during the previous effort due to lack of access. The current effort completes the Phase I survey in areas where survey access was granted and includes Project design changes (Table 1.0-1). The 2022 survey corridor is 67.0 acres (Table 1.1-1).

TABLE 1.1-1		
2022 Survey Corridor Legal Description		
Township	Range	Sections
101 N	15 W	18
101 N	16 W	13, 22, 23, 24, 25, 26, 36

A Phase I survey was completed by Merjent archaeologists Pamela Flynn and Erika Eigenberger on June 21–22, 2022. Ms. Flynn served as the principal investigator and meets the Secretary of the Interior's Professional Qualification Standards for Archaeology as published in 36 CFR § 61. As portions of the Survey Corridor overlapped with public road right-of-way (ROW), a Phase I archaeological license (license no. 22-114) was obtained from the Minnesota Office of the State Archaeologist (OSA).

This report covers the field objectives and methods, survey results, and recommendations. A literature search completed in advance of the survey identified no previously documented archaeological sites intersecting the Survey Corridor. For a complete description of the literature search results, please see *Phase I Archaeological Survey for the Rose Creek Repower Project, Mower County, Minnesota* (Flynn 2022).

2.0 FIELD METHODS AND OBJECTIVES

The objective of the Phase I survey is to identify archaeological resources with a potential to be impacted by the Project. The Project Survey Corridor included areas of potential ground disturbance. Prior to survey, Merjent received shapefiles from ConEdison Development of the proposed Project components. A Survey Corridor was created using the following buffers on the components: 500-foot buffer on the turbine locations (T1–T7 and Alternate T1), a 100-foot total width on collector line and access road routes, and a 50-foot buffer on the substation and

laydown yard. For areas where all Project activity would be completed in the public ROW (i.e., county-managed road ROW) and would not extend onto private land, the Survey Corridor was limited the public ROW.

Systematic pedestrian survey was completed in transects spaced at a maximum 15-meter interval. Areas that were steeply sloped (more than 15 degrees), inundated, or exhibited obvious disturbance from earthmoving or development (for example, road ditches, landscaped yards with buried utilities, and the graveled substation facility) were photo documented and not subjected to formal survey. Shovel testing was proposed for areas with less than 25 percent ground surface visibility that had a potential to contain intact buried archaeological deposits based on topography and land use. The survey was geographically oriented using Geographic Information System data in conjunction with a Trimble R1 Integrated Global Navigation Satellite System receiver and iPad. Field observations including vegetation, ground surface visibility (GSV), slope, general topography, and areas of soil disturbance or inundation were recorded. Because no artifacts were encountered or collected during the survey, curation was not necessary.

3.0 SURVEY RESULTS

A Phase I survey was conducted for the 67.0-acre Survey Corridor on June 21–22, 2022 (Appendix A, Figures 2 and 3). Land use in the Survey Corridor consisted of cultivated fields and county and township road ROW. Cultivated fields contained young, recently planted corn and soybeans (see Photos 1 and 2). Typical road ROW conditions consisted of built-up paved or graveled roadbed, ditches with mixed grasses and weeds, concrete culverts, and utilities (see Photo 3). Natural streams crossing the Survey Corridor have been modified into controlled drainages. No archaeological sites were identified during the survey, and no areas were identified for shovel testing. Survey results are presented below by Section and associated Project component.



Photo 1. Typical field conditions in the Survey Corridor, planted corn field.



Photo 2. Typical field conditions in the Survey Corridor, planted soybean field with harvested corn chaff.



Photo 3. Typical road ROW conditions in the Survey Corridor, road berm and ditch with mixed grasses, weeds, and utilities.

Rose Creek Wind, LLC
Phase I Archaeological Survey

July 2022

Township 101N, Range 15W, Section 18 (Appendix A, Figure 3.5)

Project Component	Current Land Use and GSV	Comments
Access road to T2 (survey area buffer only)	Road ROW	No cultural material

Township 101N, Range 16W, Section 13 (Appendix A, Figure 3.5)

Project Component	Current Land Use and GSV	Comments
Access road from 680th Ave to T2	Planted beans (75%)	No cultural material

Township 101N, Range 16W, Section 22 (Appendix A, Figures 3.1, 3.2)

Project Component	Current Land Use and GSV	Comments
Collector line south of substation (west side of 660th Ave)	Road ROW	No cultural material

Township 101N, Range 16W, Section 23 (Appendix A, Figures 3.1, 3.2)

Project Component	Current Land Use and GSV	Comments
Collector line south of substation (east side of 660th Ave)	Road ROW	No cultural material
Collector line from Alternate T1 to 660th Ave (north side of 120th St)	Road ROW	No cultural material

Township 101N, Range 16W, Section 24 (Appendix A, Figure 3.3, 3.4)

Project Component	Current Land Use and GSV	Comments
Access road from 680th Ave to T3	Planted corn (75%)	No cultural material
Collector line from 120th Street to T3	Planted corn (50–75%), Road ROW	No cultural material

Rose Creek Wind, LLC
Phase I Archaeological Survey

July 2022

Township 101N, Range 16W, Section 25 (Appendix A, Figure 3.3)

Project Component	Current Land Use and GSV	Comments
Collector line between 670th Ave and 680th Ave (south side of 120th St)	Planted corn (75%)	No cultural material

Township 101N, Range 16W, Section 26 (Appendix A, Figures 3.2, 3.3)

Project Component	Current Land Use and GSV	Comments
Collector line between 660th Ave and 670th Ave (south side of 120th St)	Planted corn (75%), planted beans (75%)	No cultural material
Collector line and access road from 120th St to Alternate T1	Planted corn (50%), planted beans & harvested corn chaff (50–75%), harvested corn chaff	No cultural material
Alternate T1	Planted corn (50%), planted beans & harvested corn chaff (50–75%)	No cultural material

Township 101N, Range 16W, Section 36 (Appendix A, Figure 3.6)

Project Component	Current Land Use and GSV	Comments
Collector line and access road from 680th Ave to T6 and T7	Planted corn (75%)	No cultural material
T6 (southern 1/3)	Planted corn (75%)	No cultural material
T7	Planted corn (75%)	No cultural material

Rose Creek Wind, LLC
Phase I Archaeological Survey

July 2022

4.0 SUMMARY AND RECOMMENDATIONS

On June 21–22, 2022, Merjent conducted additional Phase I survey for the Project. A literature search completed in advance of survey identified no previously recorded archaeological sites intersecting the 2022 Survey Corridor. The 2022 Survey Corridor encompasses 67.0 acres, all of which was reviewed. No archaeological sites were encountered. Merjent recommends that no further archaeological work is needed, and that no historic properties will be affected by the Project as currently planned.

Rose Creek Wind, LLC
Phase I Archaeological Survey

July 2022

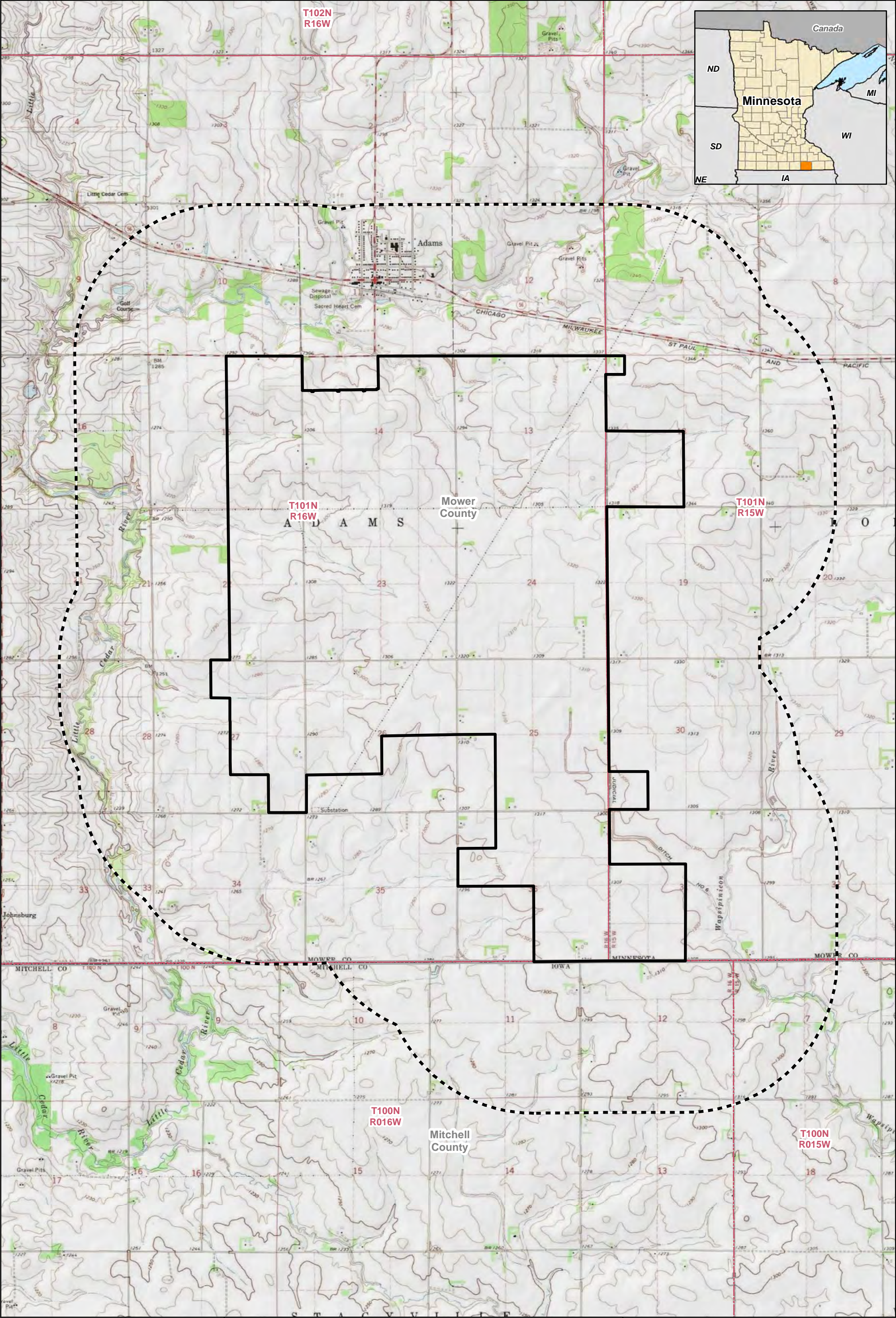
5.0 REFERENCES CITED

Anfinson, S. 2011. State Archaeologist's Manual for Archaeological Projects in Minnesota. Office of the State Archaeologist, Saint Paul, Minnesota. Current version available online at https://mn.gov/admin/assets/OSAmanual_tcm36-186982.pdf. Accessed January 27, 2022.

Flynn, P. 2022. Phase I Archaeological Survey for the Rose Creek Repower Project, Mower County, Minnesota. Merjent, Inc., Minneapolis, Minnesota.

APPENDIX A

Figures



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ConEdison Development

For Environmental Review Purposes Only

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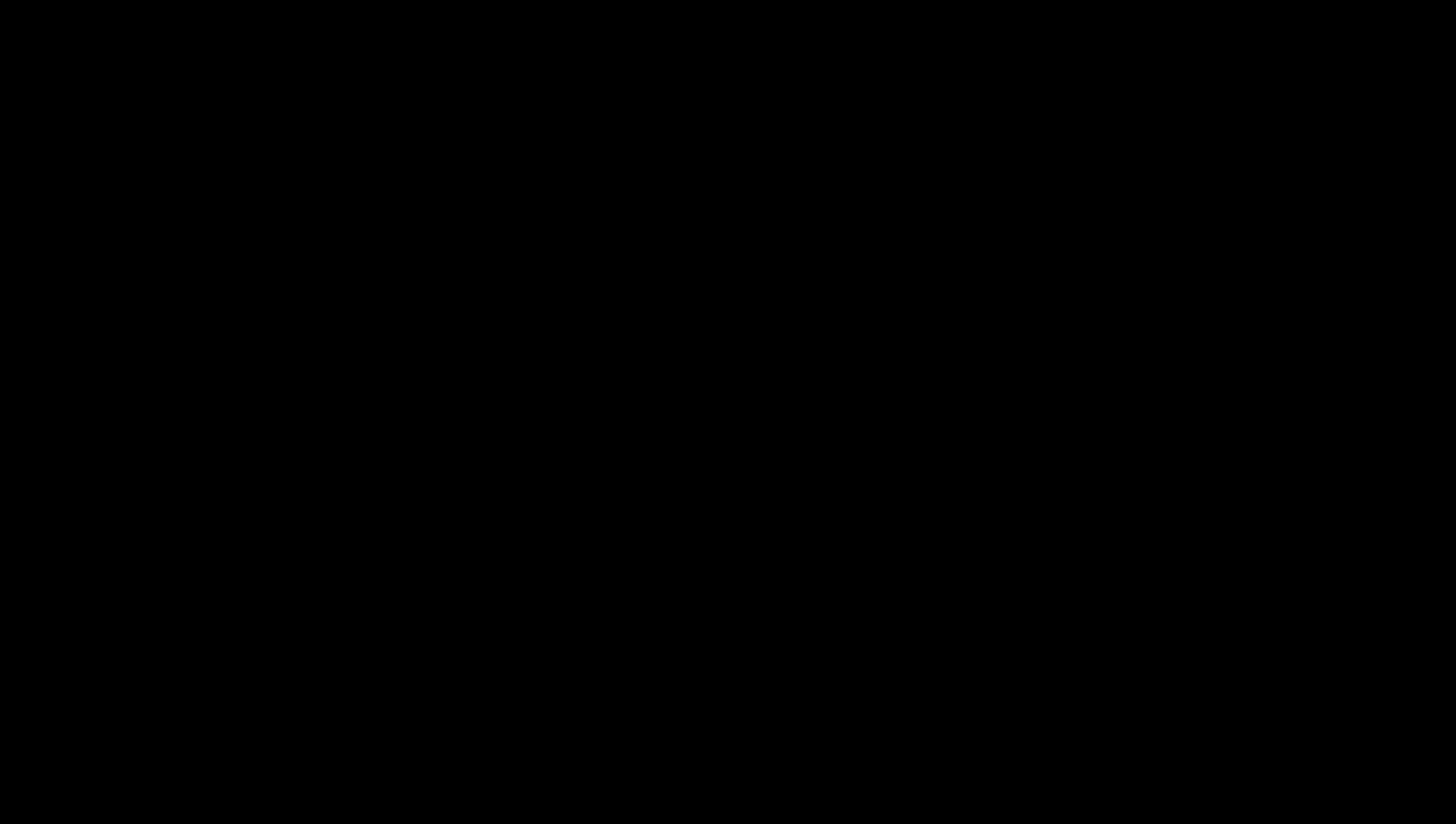
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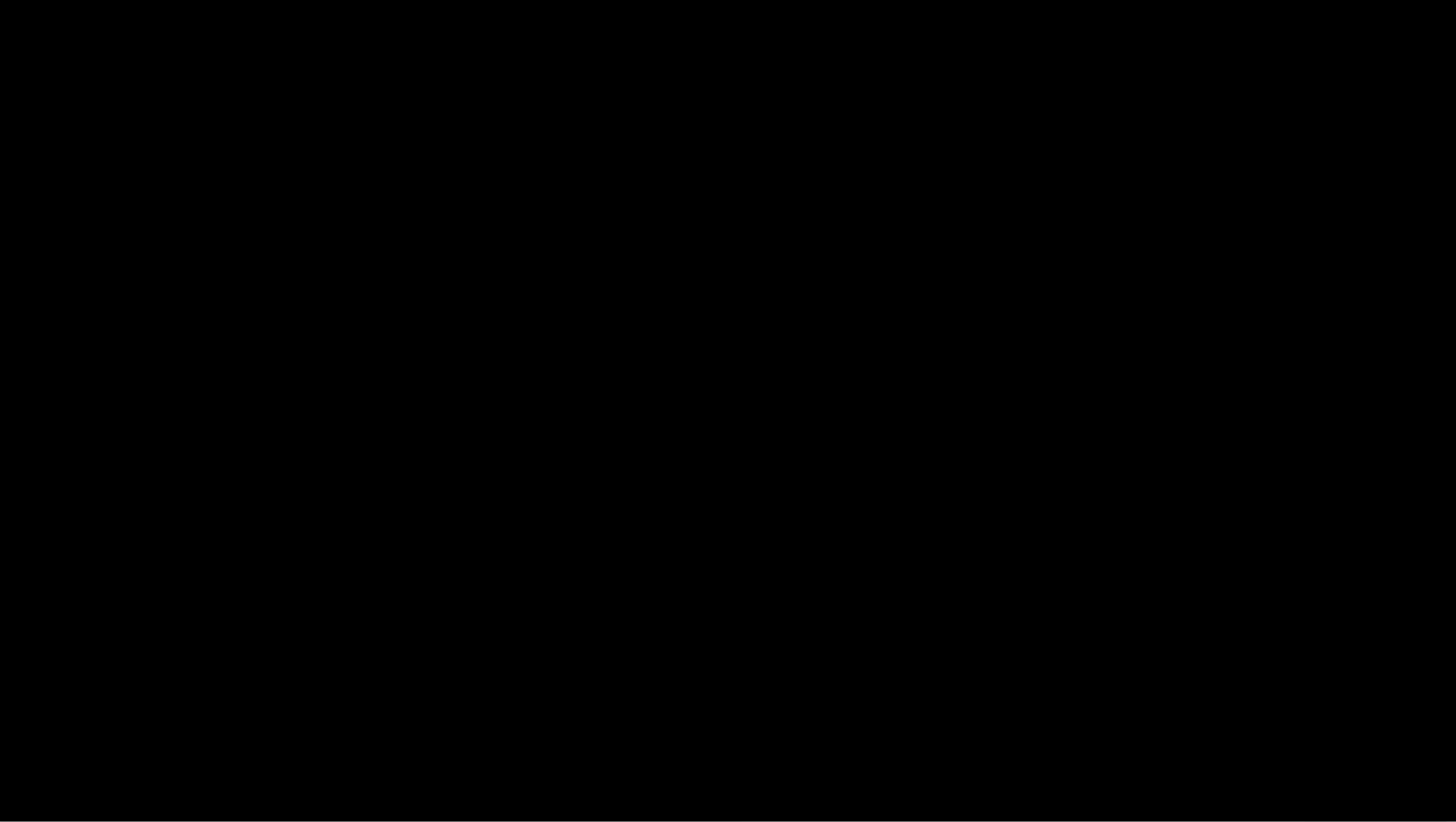
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Figure 1
Rose Creek Wind Project
Rose Creek Wind, LLC
Project Location
Mower County, Minnesota

- Project Boundary
- Literature Search Study Area
- Township Boundary
- County Boundary







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Figure 2.2


Rose Creek Wind Project

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Previous Cultural Resources

Mower County, Minnesota

	Project Boundary		1/24/2022 Proposed Alternate Turbine		MNSHPO Cemetery		Township Boundary
	Literature Search Study Area		1/24/2022 Proposed Primary Turbine		MNSHPO Architectural Structure		County Boundary
	1/24/2022 Access Road		2022 Survey Corridor		MNSHPO Archaeological Site		
	1/24/2022 Collector Line		Surveyed 2021		MNSHPO Previous Survey		



Date: (7/13/2022) Source

