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6/27/2022

State Historic Preservation Office
State Historical Society of North Dakota
612 East Boulevard Avenue
Bismarck, North Dakota 58505

RE: NDSHPO Reference #22-0020, Badger Wind Project Class III Cultural Resources Inventory Report
Revision

Dear State Historic Preservation Office Staff,

Please see the accompanying revised Class III Cultural Resources Inventory Report for the Badger Wind Project. We have addressed the comments on the report received from State Historic Preservation Officer (SHPO) Mr. Peterson in the letter dated May 17, 2022. Our revisions include several important changes in response to Mr. Peterson's comments, and these are explained below.

Badger Wind has committed to avoiding impacts on all cultural resources that are eligible for the National Register of Historic Places (NRHP) and all cultural resources that have not been evaluated for the NRHP. In light of this commitment, Atwell has revised the Statements of Significance for sites 32LO161, 32LO164, 32LO165, 32LO166, 32LO167, 32LOX73, 32MT450, and 32MTX111 to unevaluated instead of not eligible for the NRHP. Atwell has also changed the Management Recommendations for these sites, and the report now confirms that Badger Wind will avoid impacts to all of these resources. No changes were made to eligibility recommendations for sites where the SHPO agreed with Atwell's recommendations. These include site 32LO139 (previously determined ineligible for the NRHP by SHPO), site 32LO162 (previously and currently recommended as unevaluated), and site 32LO163 (previously and currently recommended as ineligible for the NRHP). Additionally, two resources, 32LOX73 and 32MTX111, were previously designated as isolated finds; these are now designated as site leads.

Please let us know if you have any questions or comments about these updates.

Respectfully,
ATWELL, LLC

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Late-Filed Exhibit 33-A - Updated Class III Survey Report with Appendices- redacted
Badger Wind, LLC
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Study Units: Southern Missouri River

Class III Inventory Legal Description

County	Township Name	Township	Range	Section(s)
McIntosh	Unorganized Territory	132N	70W	6, 7, 18
McIntosh	Unorganized Territory	132N	71W	1, 2, 4 – 8, 12, 13, 15 – 22, 27 – 30
McIntosh	Unorganized Territory	132N	72W	1, 2, 12, 13, 24
Logan	Unorganized Territory	133N	70W	7, 8, 17 – 20, 28 – 33
Logan	Unorganized Territory	133N	71W	5, 6, 8 – 10, 15, 16, 19 – 22, 25 – 36
Logan	Unorganized Territory	133N	72W	35, 36
Logan	Red Lake	134N	71W	31, 32



A CLASS III CULTURAL RESOURCES INVENTORY FOR THE BADGER WIND PROJECT

LOGAN AND MCINTOSH COUNTIES, NORTH DAKOTA

Prepared for

Badger Wind, LLC

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Chicago, IL 60611

Atwell Project No. 19000785

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Submitted by Atwell, LLC

June 27, 2022

A Class III Cultural Resources Inventory for the Badger Wind Project

EXECUTIVE SUMMARY

Badger Wind, LLC (Badger Wind), is a wholly owned subsidiary of Ørsted Onshore North America, LLC (Ørsted). Ørsted is an independent renewable energy company based in Chicago, Illinois. Badger Wind proposes to construct the Badger wind energy generation facility in Logan and McIntosh Counties, North Dakota. The Badger wind energy generation facility is sited on approximately 55,745 acres of privately owned agricultural fields and pastures (the Project Area). Development of the Badger Wind Project (the Project) will include construction of up to 74 wind turbines, gravel access roads, an underground electrical and collection line system, a collector substation, up to three permanent meteorological towers, aircraft detection lighting system components, and an operations and maintenance facility. Temporary crane paths and haul routes would be used for the construction phase of the proposed Project. Badger Wind is submitting an application for a Certificate of Site Compatibility to the North Dakota Public Service Commission for the proposed Badger Wind Project, pursuant to the North Dakota Energy Conversion and Transmission Facility Siting Act, North Dakota Century Code Chapter 49-22.

As a part of that application process, Badger Wind consulted with the State Historical Society of North Dakota (SHSND) and contracted with Atwell, LLC (Atwell), to conduct a Class III intensive cultural resources inventory for the Project to identify undocumented cultural resources. Badger Wind is voluntarily complying with North Dakota guidelines for archaeological reconnaissance and survey provided by the North Dakota State Historic Preservation Office (NDSHPO) as a due diligence effort. There is no federal nexus for this project; therefore, review under Section 106 of the National Historic Preservation Act is not required.

Prior to conducting the Class III survey, Atwell conducted a Class I literature review for the Badger Wind Project in accordance with the *North Dakota SHPO Guidelines Manual For Cultural Resource Inventory Projects* (SHSND 2020). Atwell's Class I literature review was conducted for a previous version of the Project Area and a 1-mile buffer around the previous Project Area to capture potential visual impacts to cultural resources. Atwell's records search of files kept by the SHSND, the North Dakota Cultural Resources Survey, and the National Register of Historic Places (NRHP) was completed on October 16, 2020. The Project Area has since changed and is now smaller than the Project Area used for the file search.

Atwell conducted a Class III intensive cultural resources inventory of locations where project-related ground disturbance is proposed (the assessment area). The Class III inventory was conducted in accordance with the NDSHPO's guidelines. In total, approximately 5,233 acres were subjected to the Class III inventory over two field seasons (October and November 2020 and September and October 2021). The project layout changed during this period, and some surveyed areas are no longer in the Project Area. The maps in this report depict the current version of the project layout. Cultural Resource Analysts, Inc. (CRA), conducted supplemental cultural resources

A Class III Cultural Resources Inventory for the Badger Wind Project

survey to address any changes between the area surveyed by Atwell (documented in this report) and the current version of the project layout. CRA's work is documented in a separate report (CRA Contract Publication Series 22-146).

The project's assessment area comprises the locations listed below:

- 250-foot-wide construction easements around each turbine location (for crane pads, equipment storage, soil stockpiling, etc.);
- 100-foot-wide construction easements for access roads (for equipment delivery and staging);
- 75-foot-wide construction easements for collection lines;
- 100-foot-wide construction easements for crane paths;
- Approximately 2 acres for the substation and 1.7 acres for the operations and maintenance building; and
- Up to 90.2 acres for the laydown yard.

One previously identified Historic-period architectural site, 32LO139, was visited. The Class III inventory identified eight Historic-period archaeological sites (32LO161, 32LO162, 32LO163, 32LO164, 32LO165, 32LO166, 32LO167, and 32MT450), which include the remnants of six ruined Historic-period farmsteads, one Historic-period refuse dump, and one possible unrecorded Historic-period cemetery (Table 2). Two Site Leads (32LOX73 and 32MTX111) were identified; each consists of a single prehistoric lithic artifact. Two Historic-period architectural sites were identified (temporary site numbers ATBAD6 and ATBAD10, official site numbers 32LO168 and 32MT451, respectively). These two architectural sites are not otherwise discussed in this report; because of the architectural resources present at these two sites, they are addressed in the separate architectural survey and cultural resources inventory report completed by CRA in June of 2022.

Badger Wind plans to avoid all identified sites, regardless of their NRHP eligibility recommendations, and has adjusted their construction plans accordingly.

Atwell has drafted an unanticipated discoveries plan (Appendix C) to address any archaeological materials that may be discovered during project construction. This draft will be finalized as soon as all contact information for relevant project and construction personnel has been identified. If areas beyond the current Project Area are to be used during the Project, Atwell recommends that an additional Class III cultural resources survey be conducted prior to ground-disturbing activities.

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1.0 INTRODUCTION

Badger Wind, LLC (Badger Wind), is a wholly owned subsidiary of Ørsted Onshore North America, LLC (Ørsted). Ørsted is an independent renewable energy company based in Chicago, Illinois. Badger Wind proposes to construct the Badger wind energy generation facility in Logan and McIntosh Counties, North Dakota (the Project). Badger Wind is submitting an application for a Certificate of Site Compatibility (Certificate) to the North Dakota Public Service Commission for the proposed Badger Wind Project, pursuant to the North Dakota Energy Conversion and Transmission Facility Siting Act, North Dakota Century Code (NDCC) Chapter 49-22.

1.1. Project Location

The Project is sited on approximately 55,745 acres of privately owned agricultural fields and pastures in Logan and McIntosh Counties (the Project Area) within south-central North Dakota, west of the town of Wishek, North Dakota (Maps 1 and 2 in Appendix A). The Project is sited within land dominated by cultivated cropland, pastureland, fallow fields, homes, homesteads, wetland systems, drainage swales, grasslands, and road systems. Also present within the Project Area are existing transmission lines, distribution lines, a railroad, and paved and unpaved roads.

1.2. Project Description

Development of the Project would include the construction of up to 74 wind turbines, gravel access roads, an underground electrical and collection line system, a collector substation, up to three permanent meteorological towers (MET towers), aircraft detection lighting system (ADLS) components, and an operations and maintenance (O&M) facility. Temporary crane paths and haul routes would be used for the construction phase of the proposed Project.

1.3. Agency Involvement and Regulatory Requirements

The Energy Siting Conversion and Transmission Facility Siting Act requires that “the effect of the proposed site or route on existing scenic areas, historic sites and structures, and paleontological or archaeological sites” (NDCC 49-22-09) should be considered in evaluating applications for a Certificate.

The Project is located on private land and will not use federal funds or require a federal permit. Badger Wind is voluntarily complying with North Dakota guidelines for archaeological reconnaissance and survey provided by the North Dakota State Historic Preservation Office (NDSHPO) as a due diligence effort. Because no federal nexus applies to this project, Section 106 of the National Historic Preservation Act (NHPA) does not apply, and review under Section 106 of the NHPA is not required.

The Project must comply with North Dakota’s Protection of Human Burial Sites, Human Remains, and Burial Goods law (NDCC 23-06-27) and accompanying administrative rules (North Dakota

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Administrative Code 40-02-03), which outline the procedures to be followed if human remains are identified. Unanticipated discoveries of human remains during project construction are protected under the law and administrative rules and require the cessation of ground-disturbing activities at the discovery location and notification of local law enforcement and the State Historical Society of North Dakota (SHSND).

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2.0 ENVIRONMENT

The Project Area is located in Logan and McIntosh Counties, North Dakota, in a primarily rural agricultural area near the town of Wishek, North Dakota. The area is sparsely populated with small farmsteads situated off public roads laid out in a standard section-line grid. The project vicinity includes land that is dominated by cultivated croplands, pastures, fallow fields, homes, homesteads, wetland systems, drainage swales, grasslands, and road systems. Other infrastructure such as transmission lines, a railroad, and distribution lines is also present. The Project is crossed by State Highways 3 and 13 and is accessed predominantly by section-line roads. Many small farmsteads are located within the Project Area, and small tracts of wetlands and natural stream corridors are also present; however, these natural features are small. Additionally, small, isolated woodlots, generally associated with wind breaks for farmsteads, are scattered throughout the Project Area.

The Project Area is located in both the Missouri Coteau Slope and the Missouri Coteau Level IV Ecoregions within the Northwestern Great Plains Level III Ecoregion of North Dakota (Bryce et al. 1996). The Missouri Coteau is characterized by rolling hummocks that contain numerous wetland potholes. Prior to human occupation of the area, mixed-grass prairie was the most common grassland in the Missouri Coteau ecoregion, and very little upland deciduous forest was present.

Currently, land use is a mixture of agriculture and cattle grazing, which has resulted in the conversion of much of the mixed-grass prairie. Agriculture in this ecoregion typically focuses on small grains, sunflowers, corn, and alfalfa (NDGF 2021). Cattle grazing is extensive across the Missouri Coteau ecoregion.

The Missouri Coteau Slope ecoregion declines in elevation beginning from the Missouri Coteau toward the Missouri River. The Missouri Coteau Slope ecoregion is characterized by rolling to hilly plains created by a mix of erosional and glacial landforms (Bluemle and Biek 1996). Drainage is better developed in the Missouri Coteau Slope, which has led to the creation of more watercourses and fewer prairie potholes compared to the Missouri Coteau ecoregion. As with the Missouri Coteau ecoregion, grasslands are considered mixed-grass prairie. Due to the somewhat level topography, there is more cropland on the Missouri Coteau Slope than on the Missouri Coteau, and cattle grazing is limited primarily to the steeper land and areas along drainages.

Geology within the Missouri Coteau consists of a thick glacial till over Tertiary sandstone and shale in the north and Cretaceous Pierre Shale in the south. Similarly, the Missouri Coteau Slope consists of Wisconsin glacial till over Tertiary sandstone and shale and Cretaceous Pierre Shale (Bryce et al. 1996). Surface geology within the Project Area and buffer area is predominantly composed of two formations, Fox Hills and Pierre, which are characterized by thin glacial

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deposits, and outwash consisting of sand and gravel between 0 and 50 feet thick and underlying bedrock composed of shale (Clayton 1962; Bluemle 1983; Bluemle 1988).

The Natural Resources Conservation Service Soil Survey Geographic Database (known as SSURGO) is a dataset that provides information about soil map units at scales ranging from 1:12,000 to 1:63,360. Soil map units provide a description of the soils present and information about their unique properties and productivity (USDA 2022). In all, 116 soil map units are within the Project Area and buffer area, and 101 soil map units are within the Project Area. The dominant soil map units found within the Project Area and buffer area are classified as silt loams or silty clay loams and range from moderately well drained to poorly drained (USDA 2022).

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3.0 BACKGROUND RESEARCH

The methods employed for the Class I cultural resources inventory follow the *North Dakota SHPO Guidelines Manual for Cultural Resources Inventory Projects* (SHSND 2020). Atwell's Class I cultural resources inventory included an initial file search of the North Dakota Cultural Resources Survey (NDCRS) data files maintained by the SHSND in Bismarck, North Dakota. Principal Investigator Steven Katz, RPA, requested NDCRS data files from Amy Sakariassen in October 2020. This request included a review of archaeological, historical, and architectural site forms; cultural heritage forms; and cultural survey reports available at the SHSND in Bismarck, North Dakota.

Atwell's review of the NDCRS data files was completed for the Project on October 16, 2020. Records within the Project Area and within a 1-mile buffer of the Project Area were examined. The buffer area was used to capture sites that could potentially be visually impacted by the Project. Atwell also reviewed the National Register of Historic Places (NRHP) records maintained by the National Park Service to determine whether historic properties listed on the NRHP are located within the Project Area. Historic plat maps and U.S. Geological Survey (USGS) topographic maps were also reviewed for the Project Area and buffer area.

The project layout and the boundary of the proposed Project have changed over time, and the current Project Area is smaller than the Project Area used for the file search. Some previously identified cultural resources located within the Project Area and buffer area used for the file searches are not in the current Project Area or buffer area. Therefore, the Class I memo in Appendix B presents outdated lists of sites within the Project Area and buffer area.

Table 1 presents a list of previously identified resources in the current Project Area and buffer area. Atwell's file search indicated that no properties listed on the NRHP or the North Dakota State Historic Registry are present within the Project Area (NPS 2022).

The maps in this report depict the current version of the project layout. Cultural Resource Analysts, Inc. (CRA), conducted supplemental cultural resources survey to address any changes between the area surveyed by Atwell (documented in this report) and the current version of the project layout. CRA's work is documented in a separate report (CRA Contract Publication Series 22-146).

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Table 1. Previously Identified Cultural Resources

Site Number	Type	Period	Location	Site Type	Eligibility
32LO23	Archeological	Historic	Buffer Area	Homestead with features	Recommended ineligible
32LO24	Archeological	Historic	Buffer Area	Two depressions and two wagon ruts (former homestead)	Recommended ineligible
32LO26	Architectural	Historic	Buffer Area	Farmstead	Recommended not eligible
32LO27	Architectural	Historic	Buffer Area	Bridge	Recommended ineligible
32LO33	Archeological	Historic	Assessment Area	Soo Line Railroad, Dakota, Missouri Valley & Western Railroad	Unevaluated
32LO37	Archeological	Historic	Buffer Area	Remnants of homestead	Recommended ineligible
32LO110	Archeological	Historic	Project Area	Very small artifact scatter	Recommended ineligible
32LO111	Archeological	Historic	Buffer Area	Windmill, water pump, stock tank	Recommended ineligible
32LO112	Archeological	Prehistoric	Buffer Area	Two stone circles	Unevaluated
32LO113	Archeological	Prehistoric	Project Area	Stone circle	Unevaluated
32LO137	Archeological	Historic	Buffer Area	Depressions and artifact scatter	Recommended ineligible
32LO138	Architectural	Historic	Buffer Area	Windmill	Recommended ineligible
32LO139	Archeological	Historic	Project Area	Farmstead with foundations and water features	Recommended ineligible
32LOX7	Architectural	Historic	Buffer Area	Burnstad Townsite / Post Office	Unevaluated
32LOX8	Architectural	Historic	Buffer Area	Beaver Lake / SOO Line	Unevaluated
32LOX9	Archeological	Historic	Buffer Area	Sully Writing Rock, Sully Camp	Unevaluated
32LOX55	Archeological	Historic	Buffer Area	Homestead foundations and depressions, artifact scatter	Unevaluated
32LOX61	Archeological	Historic	Buffer Area	Fragments of a single ceramic	Unevaluated
32MT27	Architectural	Historic	Buffer Area	Wishek City Cemetery	Eligible for the NRHP

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Site Number	Type	Period	Location	Site Type	Eligibility
32MT43	Architectural	Historic	Buffer Area	Residence	Unevaluated
32MT44	Architectural	Historic	Assessment Area	Farmstead	Recommended ineligible
32MT85	Architectural	Historic	Buffer Area	Bridge	Recommended ineligible

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3.1. Previously Identified Historic-Period Architectural and Archaeological Sites

The records review identified 9 previously identified Historic-period architectural resources and 11 previously identified Historic-period archaeological resources within the Project Area and 1-mile buffer.

One Historic-period architectural resource is in the current Project Area and in the assessment area: site 32MT44, a farmstead. Because this site is an architectural resource, it is included in the cultural resource inventory report prepared by CRA in June of 2022 and is not discussed further here. The other eight Historic-period architectural properties are located within the 1-mile buffer.

One Historic-period archaeological resource is in the assessment area: 32LO33. Site 32LO33 is the Soo Line Railroad, Dakota, Missouri Valley & Western Railroad. No project-related work will be done within the railroad right-of-way; therefore, this site was not revisited and is not discussed further in this report.

Sites 32LO110 and 32LO139 are in the Project Area but not in the assessment area (the area that will experience direct impacts from construction). Site 32LO110 is a small scatter of 15 artifact fragments (21 glass fragments, 1 ceramic fragment, and 1 insulator fragment). No further work was recommended for this site, it will not be affected by the current project layout, and it was not revisited for this Project. Site 32LO139 was visited for the Project and is documented in this report because a previous version of the project layout intersected this site. The current project layout does not intersect this site, and the site will not be impacted by the Project. The other eight Historic-period archaeological resources are in the 1-mile buffer area.

3.2. Previously Identified Prehistoric Archaeological Sites

One previously identified prehistoric archaeological site, 32LO113, was identified within the Project Area but is not in the assessment area (Appendix B). The site will not be affected by the current project layout, and it was not revisited for this Project. Site 32LO113 has been documented as a prehistoric stone circle and has not been evaluated for the NRHP. Site 32LO112 is in the buffer area and is not discussed further here.

3.3. Previous Cultural Resources Surveys

In total, 36 cultural resources surveys have been conducted within the Project Area and the 1-mile buffer. Please see Appendix B for more information on these surveys.

3.4. Historic Atlas and Map Review

Atwell reviewed the 1916 and 1911 atlases for Logan and McIntosh Counties, respectively, and determined that the Project Area was sparsely populated with farmsteads and smaller residential

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buildings. Schools, churches, and three cemeteries (Johannesthal Cemetery, Neudorf Cemetery, and Beaver Creek Baptist Cemetery) are in the Project Area. The Saint Luke Cemetery, Saint Patrick's Cemetery, Wishek City Cemetery, and Worms Cemetery are in the 1-mile buffer area. The maps depict the Minneapolis, St. Paul and Sault Ste. Marie Railroad running roughly north to south through the eastern portion of the project area.

The highest densities of Historic-period structures depicted on the county atlases are in the towns of Wishek and Burnstad, North Dakota (Geo. A. Ogle & Co. 1911; Geo. A. Ogle & Co. 1916). The developed portions of both Wishek and Burnstad are located entirely outside of the Project Area. Review of more recent county atlases (1967 and 1980 for Logan County and 1960 for McIntosh County) indicate that the town of Wishek grew significantly during the early part of the twentieth century (Northwest Atlas Co. 1960; Directory Service Company 1967; Directory Service Company 1980). Additionally, more residential structures are located outside of town in areas that were previously farmland.

Atwell also reviewed USGS topographic maps ranging in date from 1953 to 1982 (ESRI 2021; Historic Aerials 2022). At that time, the Project Area was sparsely populated with a well-established section-line county road network. Residential construction is largely depicted on these maps within 250 feet of the roadside. A few schools, churches, and cemeteries are found throughout the Project Area and 1-mile buffer area.

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4.0 RESEARCH GOALS AND METHODS

The purpose of Atwell's Class III cultural resources inventory was to identify any potential cultural resources located within the Project's assessment area that may be impacted by the proposed Project. The methods employed by Atwell for the Class III cultural resources inventory comply with the standards outlined in *North Dakota SHPO Guidelines Manual for Cultural Resources Inventory Projects* (SHSND 2020).

While in the field, Atwell staff kept a record of daily activity and survey information in a journal and as notes on digital project maps. Photographs were taken at various locations within the assessment area to document field conditions and record cultural resources. Any cultural resources located within the assessment area were mapped using a Trimble R1 Global Positioning System unit.

As the majority of the Project is sited within active or fallow agricultural fields, field visits were timed to take advantage of periods with the greatest ground surface visibility. Pedestrian survey was used exclusively due to moderate to excellent ground surface visibility.

The definitions of archaeological sites, site leads, and isolated finds used during this investigation follow the SHSND definitions:

- Archaeological sites are defined as the "location of past human activity that took place over 50 years ago and which left physical traces of activity in the form of 1) an intact cultural feature, 2) six or more artifacts found within about 60 meters of one another, and/or 3) an intact subsurface cultural deposit regardless of the number of artifacts" (SHSND 2020: 19).
- The SHSND uses two separate definitions for site leads. "The first consists of a location reported by a landowner or other non-professional as containing cultural sites. These locations are identified as site leads until a qualified archaeologist or architectural historian can determine whether cultural sites exist in the area and, if so, whether the location is a site or an isolated find" (SHSND 2020: 19). "The second definition for a site lead is a location with five or fewer surface visible artifacts that may, in the professional judgment of the archaeologist(s), be only a limited surface expression of a former occupation area where most of the artifacts are not visible (i.e., still buried)" (SHSND 2020: 19).
- Isolated finds are locations where five or less artifacts were identified (SHSND 2020: 19). Isolated occurrences are not considered significant cultural resources and are not eligible for listing on the NRHP.

A Class III Cultural Resources Inventory for the Badger Wind Project

Atwell conducted a Class III cultural resources survey, in accordance with NDSHPO guidelines, for all locations of proposed project-related ground disturbance (the assessment area). In total, approximately 5,233 acres were subjected to the Class III cultural resources survey during two field seasons (October and November 2020 and September and October 2021). The assessment area comprised the locations listed below:

- 250-foot-wide construction easements around each turbine location (for crane pads, equipment storage, soil stockpiling, etc.);
- 100-foot-wide construction easements for access roads (for equipment delivery and staging);
- 75-foot-wide construction easements for collection lines;
- 100-foot-wide construction easements for crane paths;
- Approximately 2 acres for the substation and 1.7 acres for the operations and maintenance building; and
- Up to 90.2 acres for the laydown yard.

Fieldwork for the Project began on October 26, 2020, and ended November 16, 2020. Ben Banks, RPA, served as the Principal Investigator, and James Freshwater and Andrea Kulevsky, both Environmental Consultants with Atwell, were archaeological technicians. Additional fieldwork was completed September 27, 2021, and ended October 22, 2021. Steven Katz, RPA, served as Principal Investigator, and Elizabeth Wilk, M.S., RPA, Senior Project Coordinator, and James Freshwater, Environmental Consultant, served as archaeological technicians.

A Class III Cultural Resources Inventory for the Badger Wind Project

5.0 FIELDWORK RESULTS

One previously identified site, 32LO139, was visited. The Class III inventory identified eight Historic-period archaeological sites (32LO161, 32LO162, 32LO163, 32LO164, 32LO165, 32LO166, 32LO167, and 32MT450), which include the remnants of six ruined Historic-period farmsteads, one Historic-period refuse dump, and one possible unrecorded Historic-period cemetery (Table 2). Two Site Leads (32LOX73 and 32MTX111) were identified, each of which consist of a single prehistoric lithic artifact.

Table 2. Cultural Resources Identified or Revisited during the Class III Inventory

Temp # Site #	Type	Period	Site Type	Eligibility
32LO139	Architectural	Historic	Farmstead	Previously recommended ineligible with SHPO concurrence
32LO161	Archeological	Historic	Farmstead	Unevaluated
32LO162	Archeological	Historic	Possible cemetery	Unevaluated
32LO163	Archeological	Historic	Dump	Recommended ineligible
32LO164	Archeological	Historic	Farmstead	Unevaluated
32LO165	Archeological	Historic	Farmstead	Unevaluated
32LO166	Archeological	Historic	Farmstead	Unevaluated
32LO167	Archeological	Historic	Farmstead	Unevaluated
32LOX73	Archeological	Prehistoric	1 chert flake	Site Lead; unevaluated
32MT450	Archeological	Historic	Farmstead	Unevaluated
32MTX111	Archeological	Prehistoric	1 piece of debitage	Site Lead; unevaluated
ATBAD6 (32LO168)	Architectural	Historic	Farmstead	Unevaluated; not included in this report, addressed in CRA's 2022 report
ATBAD10 (32MT451)	Architectural	Historic	Farmstead	Unevaluated; not included in this report, addressed in CRA's 2022 report

Two Historic-period architectural sites with standing architecture were identified during fieldwork (temporary site numbers ATBAD6 and ATBAD10, official site numbers 32LO168 and 32MT451, respectively). These are included in Table 2 but are not otherwise discussed in this report. Because they have Historic-period architectural resources, they are addressed in CRA's 2022 cultural resources report for the Project. Similarly, previously identified site 32MT44 is in the assessment area. Because it has architectural resources, it is included in CRA's 2022 cultural resources report for the Project and is not discussed further here.

A Class III Cultural Resources Inventory for the Badger Wind Project

5.1. 32LO139

Temporary Site Number:	32LO139
Site Type:	Farmstead
Cultural Affiliation and Age:	Historical
Site Size:	22,885 m ²
NRHP Recommendation:	Previously Recommended Ineligible with SHPO Concurrence
Management Recommendation:	No further work
Project Recommendation:	Project will avoid site

Site Description: Site 32LO139 is a previously recorded historic structure associated with ranching activities (Figure 1 and Figure 2). During Atwell's 2020 survey, the site was being used as pasture for a local cattle operation, and the ground surface visibility was approximately 10%. Observed cultural material includes miscellaneous glass and metal fragments as well as concrete remnants of multiple building foundations.

Eight features were observed by Atwell. Feature 1 is the weathering and crumbling remnants of a concrete structure foundation measuring 20 feet by 25 feet with interior load-bearing walls. Feature 2 is a fieldstone foundation measuring 20 feet by 40 feet. Feature 3 is a small fieldstone foundation measuring 20 feet by 20 feet. Feature 4 is a small corrugated-metal well. Feature 5 is a free-standing metal water trough placed on concrete slabs. Feature 6 is a well with a concrete cap; it is approximately 6 feet in diameter. Feature 7 is a small fieldstone foundation measuring 5 feet by 25 feet. Feature 8 is the remnants of a concrete foundation measuring 15 feet by 25 feet.

Atwell's site visit confirmed the data in the NDSHPO's records. No changes to site condition were observed at the time of Atwell's survey, and therefore an updated site sketch was not created.

NRHP Recommendation: Atwell recommends that the existing recommendation of not eligible for listing on the NRHP be retained. SHPO concurred with the ineligible recommendation when the site was originally documented.

A Class III Cultural Resources Inventory for the Badger Wind Project



Figure 1. Site 32LO139 overview looking south.



Figure 2. Site 32LO139 overview looking northwest.

A Class III Cultural Resources Inventory for the Badger Wind Project

5.2. 32LO161

Temporary Site Number:	ATBAD2
Site Type:	Farmstead
Cultural Affiliation and Age:	Historical
Site Size:	5,345 m ²
NRHP Recommendation:	Unevaluated
Management Recommendation:	Further work recommended
Project Recommendation:	Project will avoid site

Site Description: This archaeological site (Figure 3) consists of the remnants of a twentieth-century farmstead (Feature 1) and artifact scatter (Figure 4 and Figure 5). The farmhouse foundation is still extant and is filled in with rubble and more recently deposited Historic-period refuse (Figure 6 and Figure 7). The foundation measures 20 feet by 25 feet; some portions are composed of poured concrete and others are mortared fieldstone.

A well (Feature 2) is located approximately 20 meters west of the residence and is covered with a steel cap (Figure 8 and Figure 9). A windmill (Feature 3) is located northwest of the residence across a double fence (Figure 10 and Figure 11). The windmill appears to have been used to pump water, but the pump parts are missing.

The observed artifact scatter is densest within the farmstead foundation, which appears to have been used as a dump, but cultural material is present all across the site. The artifacts within the foundation are predominantly household waste; based on the composition of the assemblage, these artifacts appear to have originated from a nearby farmstead. This dump includes residential appliances, household goods, machine and automotive parts, tires, bicycle wheels, and fencing materials. Residential appliances observed included two washing machines, a stove, a freezer, and an old-fashioned freezer. Household goods included plastic and metal herbicide containers, plastic food containers, modern pop-top soda and beer cans, ceramic and glass fragments, a garden hose, sneakers, a teapot, and children's toys. Multiple car bumpers were identified among the observed automotive and machine parts. Several diagnostic glass vessels display the 1970s Owens Illinois maker's mark.

During Atwell's 2020 survey, the site was being used as pastureland for a local cattle operation. The ground surface visibility was approximately 10%.

A Class III Cultural Resources Inventory for the Badger Wind Project

Landowner History: General Land Office (GLO) records held by the Bureau of Land Management (BLM) show that Friedrich Lang, an immigrant from Ukraine, received this land from the U.S. federal government in 1900 as part of the Homestead Act of 1862 (BLM 2022). The 1916 Logan County atlas shows three mapped structures at this site (Geo. A. Ogle & Co. 1916). Those structures are absent from the 1967 county atlas, whereas neighboring farmsteads are still depicted (Directory Service Company 1967). On the 1982 Wishek topographic map, only a windmill is plotted at this location (ESRI 2022). Aerial imagery dating back to the early 1980s shows little to no change in site conditions from those observed during Atwell's 2020 survey (Historic Aerials 2022). It appears that the original farmstead and outbuildings may have been in ruins by the late 1960s.

Given the small amount of structural building materials on site, it appears that most of the structural members and cultural materials have been removed from the site. This disturbance and loss of cultural material diminishes the site integrity of 32LO161.

NRHP Recommendation: Site 32LO161 has poor site integrity due to heavy modern disturbances including the removal of nearly all aboveground structures. Additionally, the site is of an age that is already well represented in the historical record and appears to lack any association with a notable historical figure. Testing of site 32LO161 is needed to determine whether subsurface archaeological deposits are present and further characterize the site's integrity and extent. Atwell recommends this site be considered unevaluated for the NRHP.

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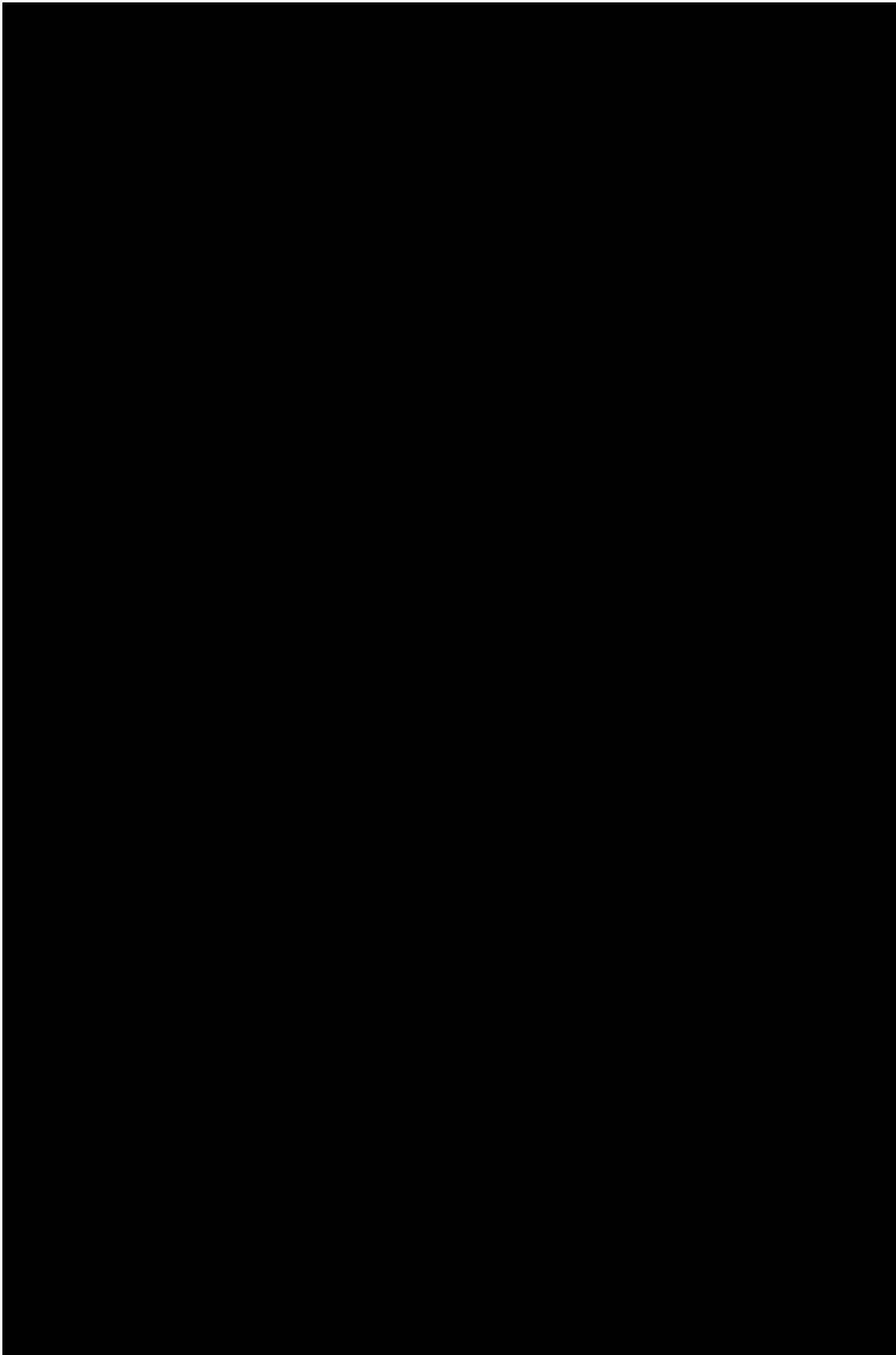


Figure 3. Site 32LO161 site sketch map.

A Class III Cultural Resources Inventory for the Badger Wind Project



Figure 4. Site 32LO161 overview looking north.



Figure 5. Site 32LO161 overview looking west/northwest.

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Figure 6. Site 32LO161 Feature 1 overview looking northwest.



Figure 7. Site 32LO161 Feature 1 overview looking northeast.

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Figure 8. Site 32LO161 Feature 2 overview looking east.



Figure 9. Site 32LO161 Feature 2 close-up.

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Figure 10. Site 32LO161 Feature 3 overview looking north.



Figure 11. Site 32LO161 Feature 3 close-up.

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5.3. 32LO162

Temporary Site Number:	ATBAD3
Site Type:	Cemetery
Cultural Affiliation and Age:	Historical
Site Size:	8,830 m ²
NRHP Recommendation:	Unevaluated
Management Recommendation:	Further work recommended
Project Recommendation:	Project will avoid site

Site Description: This site (Figure 12) may be an unrecorded historic cemetery (Figure 13 and Figure 14). Badger Wind has chosen to voluntarily redesign the Project to avoid any impacts to this location; therefore, no impacts analysis is needed for this site.

This site is marked with a 6-foot-tall cross made of angle iron and a plaque that reads “Pioneer Cemetery” (Figure 15 and Figure 16). Although this site is within the area that encompasses known German-Russian wrought-iron cross sites in North Dakota and is adjacent to one of the primary settlement areas of this ethnic group, the marker does not have any of the characteristics of these traditional markers. This marker has straight, simple lines and is completely unadorned, except for the plaque. The nomination form for the German-Russian wrought-iron cross sites notes that “few German Russians were satisfied with two simple bars of forge-welded iron to mark the resting places of their loved ones” (Kloberdanz 1988: 10). Site 32LO162 is, in fact, two simple bars of angle iron. The NRHP nomination form notes that even the simplest single-bar cross in the German-Russian tradition usually has some decorative features; this cross has none. Therefore, this cross does not appear to have any connection to the German-Russian wrought-iron cross tradition.

The marker is located on the side of a gravel road, on one of the more prominent hilltops in the immediate area. Other than the cross, no features indicating the presence of graves were observed.

At the time of Atwell’s 2020 survey, the site was idle agricultural land. The site was unplowed, but the grass was cut. Ground surface visibility at this location was approximately 15%.

Landowner History: GLO records show that Friedrich Lang, an immigrant from Ukraine, received this land from the U.S. federal government in 1900 as part of the Homestead Act of 1862 (BLM

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2022). The property is mapped as having a schoolhouse in the 1916 Logan County atlas (Geo. A. Ogle & Co. 1916). Review of the 1967 county atlas found no structure or feature of any kind plotted at this location (Directory Service Company 1967).

NRHP Recommendation: This site lacks identifiable features, artifacts, or boundaries. Further investigation is needed to assess whether graves are present, to determine the boundaries of the site, and to evaluate eligibility for NRHP inclusion. Testing of site 32LO162 is needed to determine whether subsurface archaeological deposits or graves are present and further characterize the site's integrity and extent. Atwell recommends this site be considered unevaluated for the NRHP.

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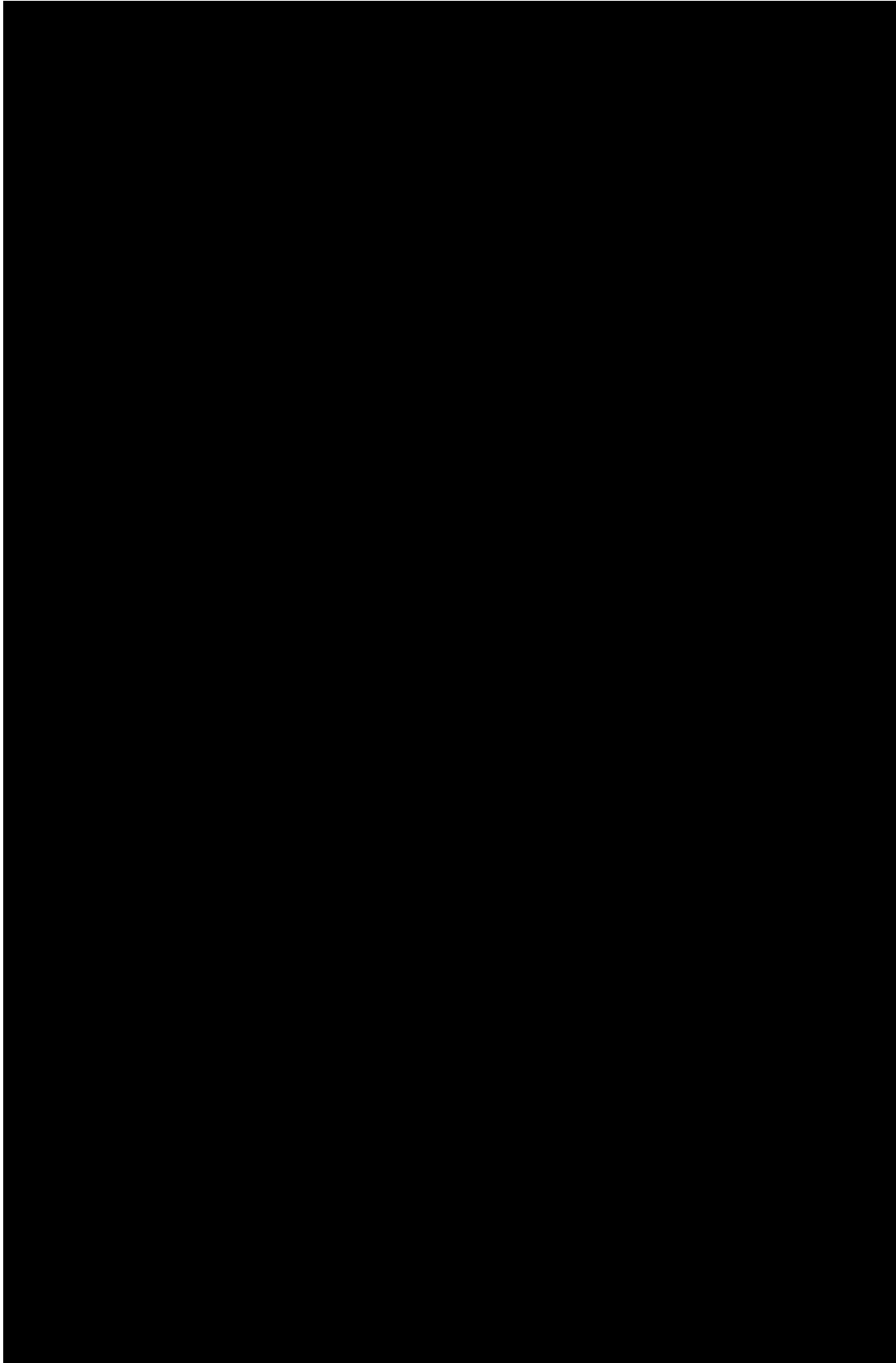


Figure 12. Site 32LO162 site sketch map.

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Figure 13. Site 32LO162 overview looking west-southwest.



Figure 14. Site 32LO162 overview looking north.

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Figure 15. Site 32LO162 Feature 1 close-up looking west. Site consists of a white-painted steel cross with a plaque reading “Pioneer Cemetery.”



Figure 16. Site 32LO162 Feature 1 overview looking west.

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5.4. 32LO163

Temporary Site Number:	ATBAD4
Site Type:	Dump
Cultural Affiliation and Age:	Historical
Site Size:	22,005 m ²
NRHP Recommendation:	Ineligible
Management Recommendation:	No further work recommended
Project Recommendation:	Project will avoid site

Site Description: This site (Figure 17) is a Historic-period refuse dump located in an unplowed area dominated by large piles of stone pulled from neighboring fields (Figure 18). The site encompasses four dumps: one within an excavated pit (Feature 1) and three that are opportunistically collocated atop preexisting piles of stone (Features 2–4). The materials appear to have originated from one of the nearby farmsteads. The largest of the dumps (Feature 1) is located in an excavated hole with an area of 25 meters and is topped with a hay trailer.

The excavated pit primarily contains modern rubber and plastic waste on top of a layer of Historic-period material (Figure 19). This bottom layer appears to consist of metal cans and glass. The feature is capped with an abandoned hay trailer (Figure 20). The other three dumps are thin surficial deposits that vary in size and composition (Figure 21, Figure 22, and Figure 23). One of these dumps is composed primarily of home appliances that appear to be less than forty years old (Figure 24 and Figure 25), and another is composed of rubber tires of a similar age (Figure 26). Only one of the features appears to contain material that is primarily from the Historic period, but it contains little material. Furthermore, due to its placement on top of a pile of stone, the deposit is assumed to be strictly surficial. Diagnostic glass bases within this feature provide dates in the 1950s, but the bulk of the waste is plastic dating to the 1990s.

Although some of the material within the dump is from the Historic period, the bulk of the cultural material is modern in origin. It is not clear what proportion of the site or its features meet the 50-year threshold, and it is possible that the Historic-period materials were deposited recently.

Ground surface visibility at the time of Atwell’s visit was approximately 5%. Portions of the site are currently used as dumps, and the other areas of the site appear to be unused grasslands.

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It appears that this site may still be in use or was recently in use to some degree. Tires, home appliances, and plastics that are much less than 50 years in age were observed mixed in with Historic-period material at this dump. Ruts observed on site and the orientation of the abandoned hay trailer indicate the likely use of a tractor or other heavy machinery at this location. This continued use of the site, non-Historic-period dumping, and use of heavy machinery have likely disturbed the shallow depositional profile within the dump. Due to the muddled and disturbed context of the material at the site, the integrity of site 32LO163 is very poor.

Landowner History: Review of GLO records and historic topographic maps indicated no cultural features or structures at this location (BLM 2022; ESRI 2022). Available county atlases were reviewed, and no evidence of cultural activity was identified at this location (Geo. A. Ogle & Co. 1916; Directory Service Company 1967; Directory Service Company 1980). The excavated pit near the center of the site first appears in the 2003 aerial imagery and is assumed to have been created between 1997 and 2003. Aerial imagery does not indicate a potential age for the surficial scatters, but the piles of stone are evident in the 1984 aerials (Historic Aerials 2022).

NRHP Recommendation: Atwell recommends this site as not eligible for listing on the NRHP. The site lacks integrity of design, feeling, workmanship, and association. It is not associated with events or individuals important to the history of the region. This is an informal dump site and has no association with a particular style of design or construction. It is unlikely that further investigation at this site will contribute substantial information to research questions about the Historic period in the area. Should NDSHPO concur, the Project will not be required to avoid construction impacts to 32LO163.

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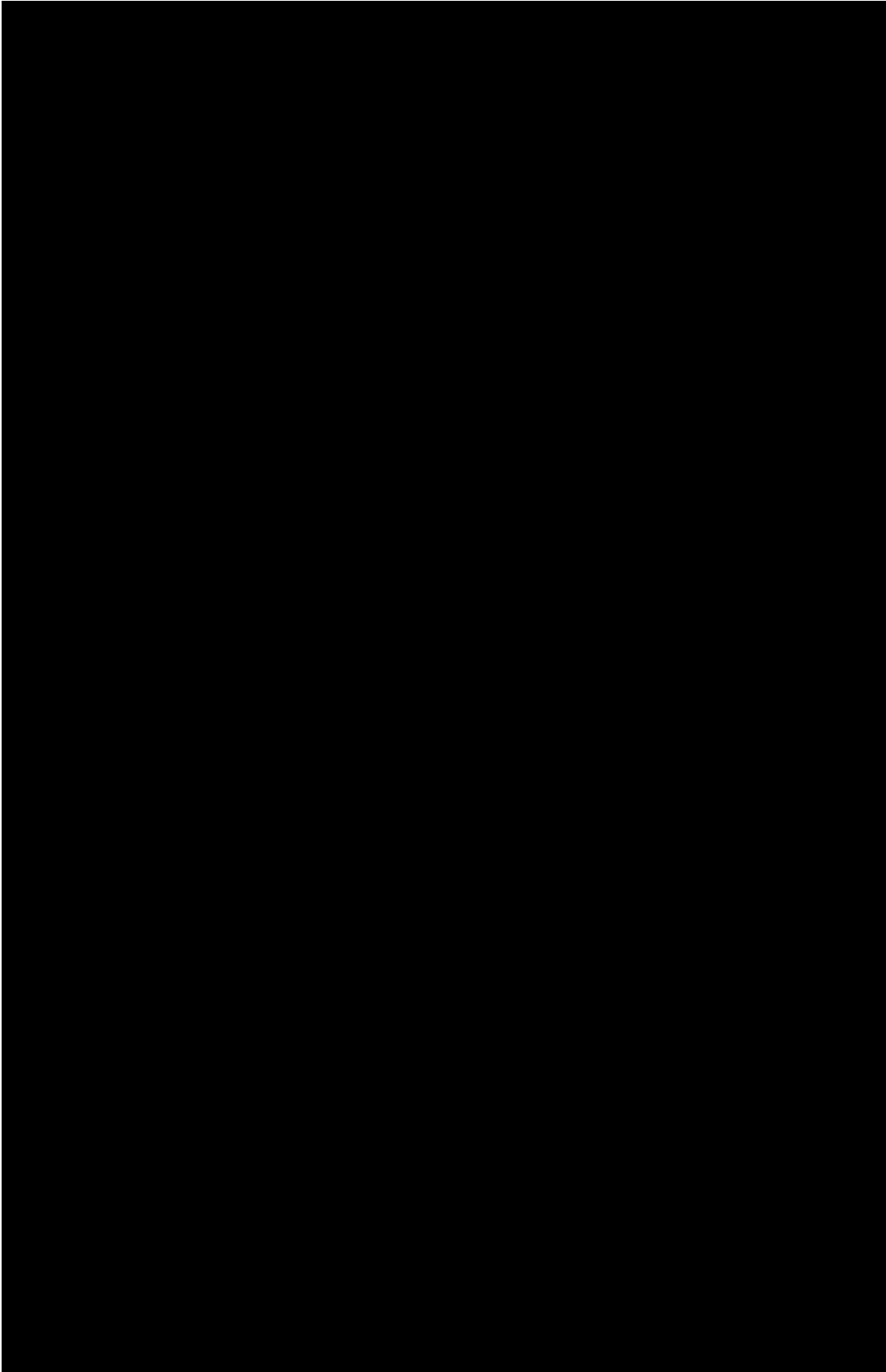


Figure 17. Site 32LO163 site sketch map.

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Figure 18. Site 32LO163 overview looking northeast.



Figure 19. Site 32LO163 Feature 1 close-up showing pile of farmstead waste under overturned hay trailer.

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Figure 20. Site 32LO163 Feature 1 overview showing hay trailer atop pile of farmstead refuse.



Figure 21. Site 32LO163 Feature 2 overview.

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Figure 22. Site 32LO163 Feature 2 close-up.



Figure 23. Site 32LO163 Feature 3 overview.

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Figure 24. Site 32LO163 Feature 3 close-up of discarded appliances.



Figure 25. Site 32LO163 Feature 3 close-up of discarded appliance.

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Figure 26. Site 32LO163 Feature 4 overview of modern waste deposit.

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5.5. 32LO164

Temporary Site Number:	ATBAD8
Site Type:	Farmstead
Cultural Affiliation and Age:	Historical
Site Size:	20,229 m ²
NRHP Recommendation:	Unevaluated
Management Recommendation:	Further work recommended
Project Recommendation:	Project will avoid site

Site Description: This archaeological site is the remnants of a twentieth-century farmstead complex (Figure 27). The site consists of a single outbuilding foundation (Figure 28), a windmill (Figure 29), a 55-gallon drum for burning waste, and the metal remnants of a wagon (Figure 30 and Figure 31). Aside from the burn drum and wagon, no other artifacts were observed. The concrete outbuilding foundation (Feature 1) is located on the east side of the site and appears to have been a large barn. The windmill (Feature 2) is in poor shape, and much of the rotor and tail is missing. There is evidence that cultural material has been removed from the site, probably by the landowner, likely for the benefit of the current livestock operation. The site has very poor integrity due to the lack of cultural material and the recent disturbances.

At the time of Atwell’s 2021 survey, the site had a ground surface visibility of 0%. The site appears to have recently been used as a livestock watering location for one of the local cattle operations.

Landowner History: The property was first purchased by George L. Burr from the U.S. federal government in 1906 (BLM 2022). The property is mapped as belonging to “Wishek & Guy” on the 1916 Logan County atlas (Geo. A. Ogle & Co. 1916). No structures are shown at this location on the 1916 map, but structures are depicted on neighboring parcels. On the 1967 atlas, a single building is depicted at this location, but no name is listed for the owner (Directory Service Company 1967). No structures are shown for this location in the 1980 county atlas (Directory Service Company 1980). Only a single standing structure is visible on the 1997 aerial imagery of the property. Aerial images show that this structure collapsed sometime between 2009 and 2013. Remnants of each of the structures appear on the most recent aerials taken in 2016 (ESRI 2022; Historic Aerials 2022). The 1982 topographic map indicates a single outbuilding in the location of Feature 1. In sum, although this property was purchased in 1906, it appears that the site remained undeveloped until sometime between 1916 and 1967. In 1967 only a single building was depicted on the county atlas, and by 1980 no buildings were shown at this location.

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NRHP Recommendation: Few artifacts were observed on site, and only the foundation remains of the outbuilding. The site has lost integrity of design, workmanship, materials, and feeling and overall has poor integrity. The site appears to be a typical example of a small farmstead, of which there are many extant and better-preserved examples in the region, and the poor integrity makes it difficult to ascertain whether the original structure was in the form of any of the traditional historical farmstead building styles typical of North Dakota (McCroskey 1990; Johnson et al. 1991; State Historical Society of North Dakota 2014; Dennis 2016; Andrzejewski 2017). The site does not appear to be associated with any individuals or events that were significant in local or regional history. The construction style and methods used for the outbuilding and other site components appear to be typical of the place and time and do not contribute any significant information to the construction practices of the period. Testing of site 32LO164 is needed to determine whether subsurface archaeological deposits are present and further characterize the site's integrity and extent. Atwell recommends this site be considered unevaluated for the NRHP.

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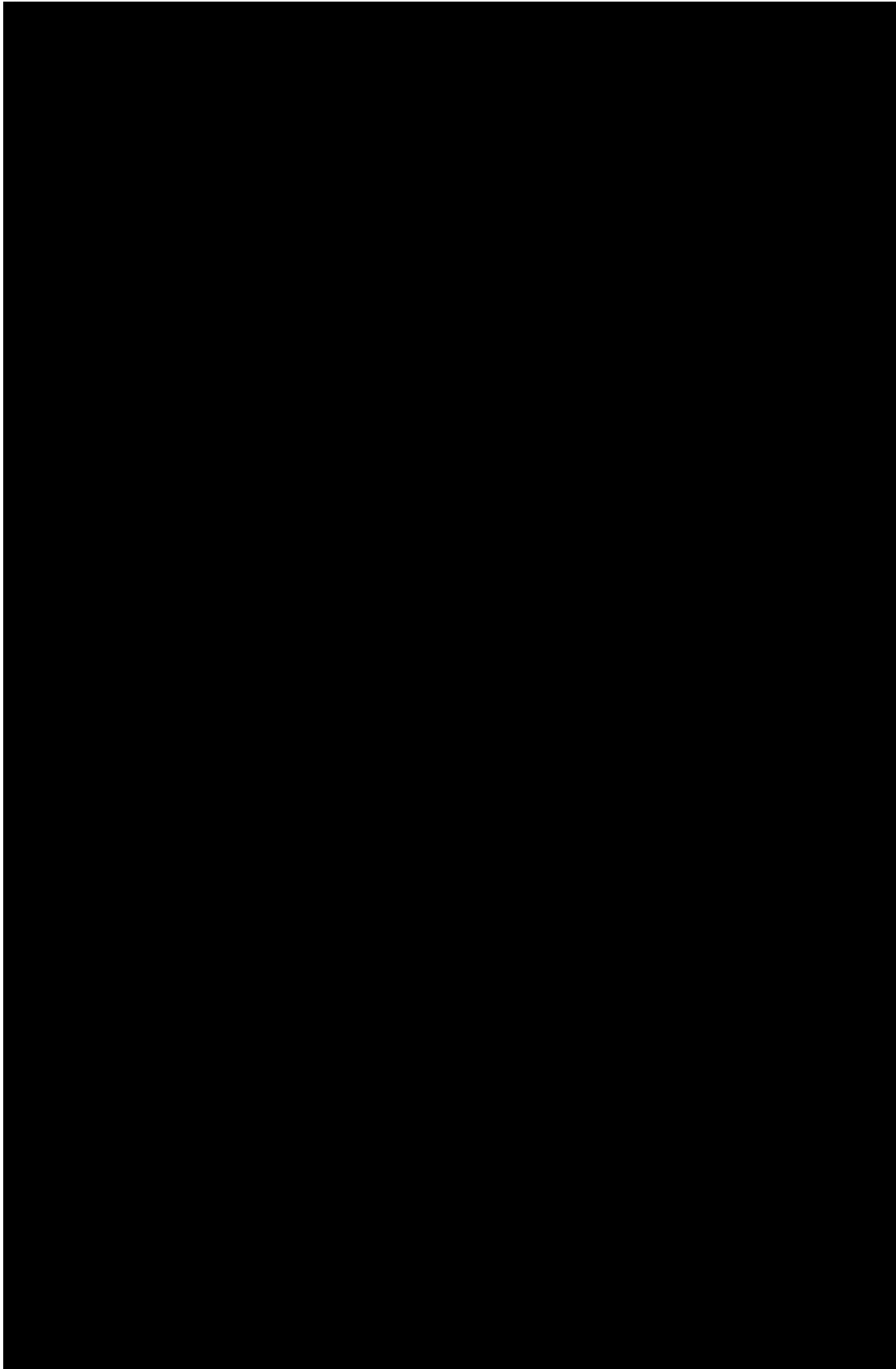


Figure 27. Site 32LO164 site sketch map.

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Figure 28. Site 32LO164 Feature 1 overview of structure foundation looking northeast.



Figure 29. Site 32LO164 Feature 2 overview of windmill remnants looking north.

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Figure 30. Site 32LO164 overview of wrecked wagon.



Figure 31. Site 32LO164 close-up of wrecked wagon.

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5.6. 32LO165

Temporary Site Number:	ATBAD9
Site Type:	Farmstead
Cultural Affiliation and Age:	Historical
Site Size:	9,890 m ²
NRHP Recommendation:	Unevaluated
Management Recommendation:	Further work recommended
Project Recommendation:	Project will avoid site

Site Description: This archaeological site (Figure 32) is the remnants of a twentieth-century farmstead complex consisting of multiple concrete foundations (Features 1, 3, 4, and 5) and one standing outbuilding (Feature 2). At the time of Atwell's 2021 survey, the ground surface visibility was 0%, and most of the site appeared to be unused grassland.

The majority of the site's cultural material was observed within the foundation of the burned farmstead (Feature 1, Figure 33). Artifacts included melted glass, metal waste, wooden structural members, remnants of a windmill, and tin roof panels (Figure 34). The tin roof sheets cover and obscure much of the basement floor.

Feature 1 is the farmstead residence. This structure appears to have burned down, but the poured concrete foundation remains and is in relatively good shape (Figure 35). The foundation has a "Majestic" coal chute door dating to the early 1900s (Figure 36 and Figure 37). This is consistent with the introduction of poured-concrete foundations for various structures in the early decades of the twentieth century (State Historical Society of North Dakota 2014: 26–27). This residence appears to have had a basement with a stairway to the exterior of the building (Figure 38).

Feature 2 is a small shed that still stands just north of the residence, on the eastern portion of the site (Figure 39). Given its size and location, it was likely used as storage for the residence. This shed is leaning, and it appears as though it may soon collapse. A small tree is growing from the foundation and appears to be accelerating the decay of the building.

Feature 3 is the foundation of an outbuilding, the larger of the two observed (Figure 40). It is in the central portion of the site (Figure 41). The aboveground portions are completely gone, and neither the function nor the dimensions could be determined. This structure has a large

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depression within the foundation, and it appears that this feature may have had a subsurface component that has subsided.

Feature 4 is the concrete foundation of a small outbuilding in the northwest quarter of the site (Figure 42 and Figure 43). The aboveground portion is completely gone, and the foundation is fragmented and missing parts. The function and dimensions of this structure could not be determined.

Feature 5 is the concrete foundation of a ruined outbuilding on the northwest edge of the site (Figure 44). The aboveground portion is completely gone, and the original function and dimensions could not be determined. The structure appears to be rectangular, and a small pile of foundation rubble is located on top.

Aerial images from the 1990s show an additional outbuilding that was not observed during Atwell's 2021 survey (Historic Aerials 2022). This structure appears to have been destroyed and removed from the site prior to 2009.

Landowner History: The GLO records do not contain data on this parcel (BLM 2022). The site first appears on the 1916 county atlas (Geo. A. Ogle & Co. 1916). In 1916 two buildings are shown on the site, and the owner is listed as G.G. Wolff. This site appears again in the 1967 atlas with at least one building, but further indications of the level of development are unavailable (Directory Service Company 1967). Review of the 1980 Logan County atlas indicates that the site may have been abandoned or largely destroyed sometime after 1967 (Directory Service Company 1980). A topographic map dated to 1982 appears to indicate a single outbuilding at this location (ESRI 2022; Historic Aerials 2022).

NRHP Recommendation: The structures appear to have been intentionally dismantled or, at a minimum, much of the structural debris has been removed from the site, negatively impacting the site's integrity. The outbuilding, foundations, and other materials on site have poor integrity of materials, workmanship, feeling, and association. Few artifacts were observed on site. These factors, combined with the overall deterioration of the collapsing shed, give the site poor overall integrity.

Because the superstructure of the residence has been dismantled, it cannot be associated with any of the traditional historical farmstead building styles typical of North Dakota (McCroskey 1990; Johnson et al. 1991; State Historical Society of North Dakota 2014; Dennis 2016; Andrzejewski 2017). The deteriorating outbuilding appears to be a typical example of a storage shed in the region and does not exhibit any particular stylistic traits. The site appears to be a typical example of a small farmstead, of which there are many extant and better-preserved examples in the region. The site does not appear to be associated with any individuals or events that were significant in local or regional history. The construction style and methods used for the

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residence and outbuildings appear to be typical of the place and time and do not contribute any significant information to the construction practices of the period. Given the poor site integrity, small artifact assemblage, and commonplace structures, the site has little or no potential to contribute substantially to research questions on the Historic period of the area. Additional investigations at this site would be unlikely to contribute to the historic record. Testing of site 32LO165 is needed to determine whether subsurface archaeological deposits are present and further characterize the site's integrity and extent. Atwell recommends this site be considered unevaluated for the NRHP.

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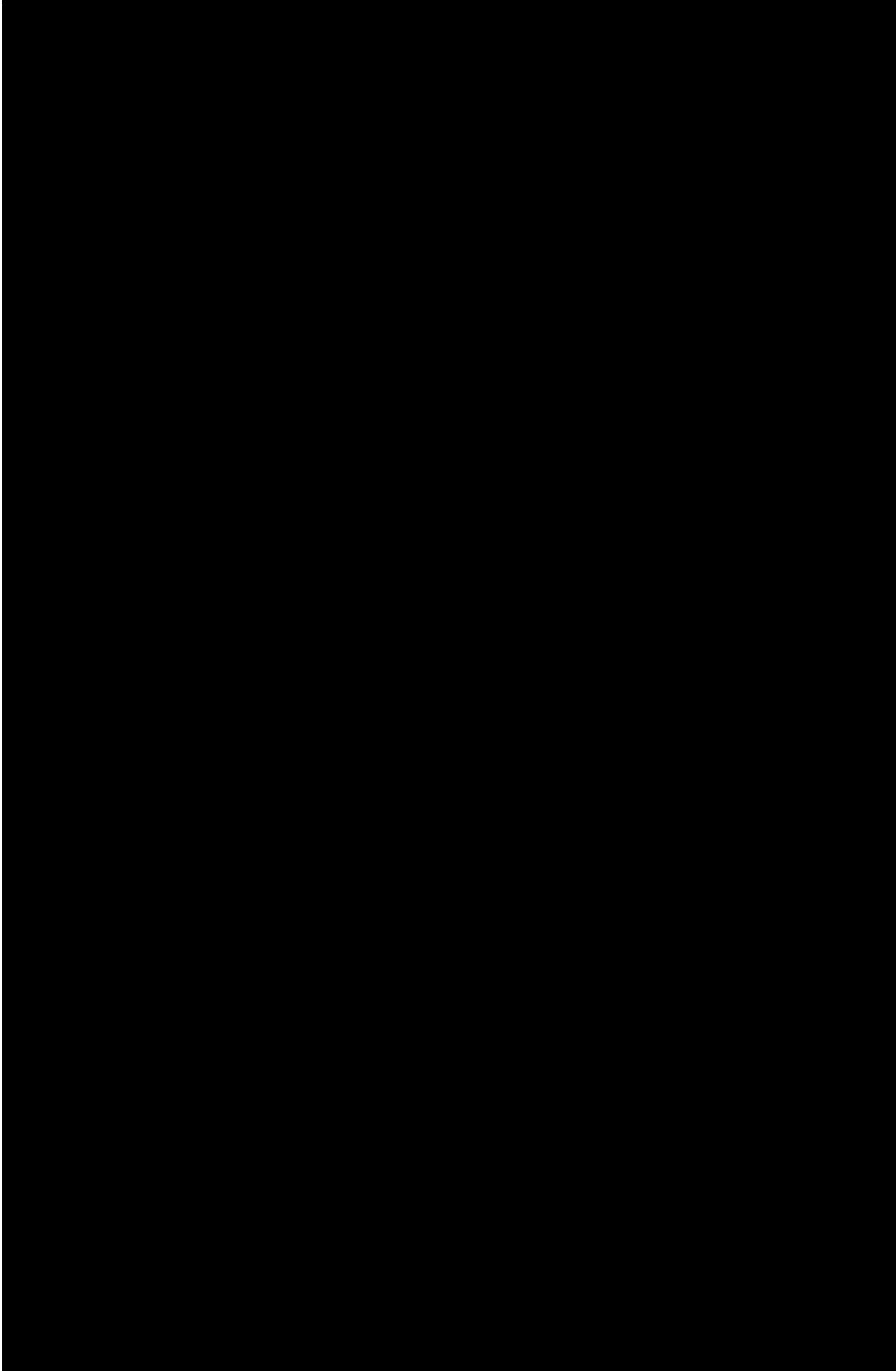


Figure 32. Site 32LO165 site sketch map.

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Figure 33. Site 32LO165 Feature 1 overview of Historic-period farmstead foundation looking north.



Figure 34. Site 32LO165 Feature 1 overview of Historic-period farmstead with windmill remnants and entrance to possible shelter.

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Figure 35. Site 32LO165 Feature 1 close-up of farmstead foundation.



Figure 36. Site 32LO165 Feature 1 overview of farmstead foundation with coal chute and exhaust ducting.

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Figure 37. Site 32LO165 Feature 1 close-up of Majestic coal chute door.



Figure 38. Site 32LO165 Feature 1 close-up of stairs to basement.

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Figure 39. Site 32LO165 Feature 2 overview of small outbuilding looking northeast.



Figure 40. Site 32LO165 Feature 3 overview of outbuilding remnants looking northwest.

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Figure 41. Site 32LO165 Feature 3 overview looking southeast.



Figure 42. Site 32LO165 Feature 4 overview of concrete foundation remnants.

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Figure 43. Site 32LO165 Feature 4 overview of structural remnants.



Figure 44. Site 32LO165 Feature 5 overview of remnants of concrete outbuilding foundation.

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5.7. 32LO166

Temporary Site Number:	ATBAD11
Site Type:	Farmstead
Cultural Affiliation and Age:	Historical
Site Size:	68,833 m ²
NRHP Recommendation:	Unevaluated
Management Recommendation:	Further work recommended
Project Recommendation:	Project will avoid site

Site Description: This archaeological site is the remnants of a twentieth-century farmstead complex (Figure 45 and Figure 46). Atwell has voluntarily revised the project layout to avoid impacts to this site. The site sketch map (Figure 45) and Map 2.1 in Appendix A depict the new alignment of the collector line, which now avoids this site entirely. The site sketch map (Figure 45) still depicts the temporary workspace from the previous layout for reference and shows the new location of the collector line to the southwest of the site.

At the time of Atwell's 2021 survey, the site was being used for ranchland, and ground surface visibility was 0%.

The only standing structure is a tornado shelter located near the center of the site (Feature 1). The tornado shelter has a small wood-framed entryway with a roof, two walls, a set of stairs leading down, and a ventilation duct (Figure 47 and Figure 48). A concrete outbuilding foundation (Features 2) is located off the driveway on the west side of the site (Figure 49). A small Historic-period debris scatter was observed at the top of the hill in the east-central portion of the site. Given the layout of the site, it appears that the residence was located at the top of this hill. Although the tornado shelter is in good shape, the other buildings of the associated farmstead are in ruins.

Brick and glass fragments (Figure 50) were observed on top of the small hill in the central portion of the site, east of the tornado shelter. Atwell's field observations and subsequent desktop research indicates that the farmstead was likely located on top of the hill in the central portion of the site. The lack of surface remains may indicate that multiple site structures have been either fully or partially removed. This removal of most elements of the residence and the likely removal of the residence's contents contribute to a loss of integrity of materials, workmanship, feeling, and association.

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Landowner History: This parcel was originally purchased by John P. Pitterson in 1904 from the U.S. federal government through the Homestead Act of 1862 (BLM 2022). The parcel on which this site is located appears to have changed hands relatively frequently compared to other farmsteads in this area, and it is likely that the site remained undeveloped until a later date. Given that this farmstead first appears on the 1967 atlas, and that it is not plotted on the 1980 atlas, it is possible that this property was active as a farmstead for only a brief period of time. Considering the amount of time that has elapsed since the residence was ruined, and the relatively short and recent window of occupation at the property, there is a low chance the site contains substantial subsurface cultural remains.

NRHP Recommendation: The site does not appear to be associated with any individuals or events that were significant in local or regional history. The construction style and methods used for the residence and outbuildings appear to be typical of the place and time and do not contribute any significant information to the construction practices of the period. The only standing structure is the tornado shelter, and such structures have not been identified as significant to the history of the region (Andrzejewski 2017). Given the poor site integrity, small artifact assemblage, and commonplace structures, the site has little or no potential to contribute substantially to research questions on the Historic period of the area. Testing of site 32LO166 is needed to determine whether subsurface archaeological deposits are present and further characterize the site's integrity and extent. Atwell recommends this site be considered unevaluated for the NRHP.

A Class III Cultural Resources Inventory for the Badger Wind Project

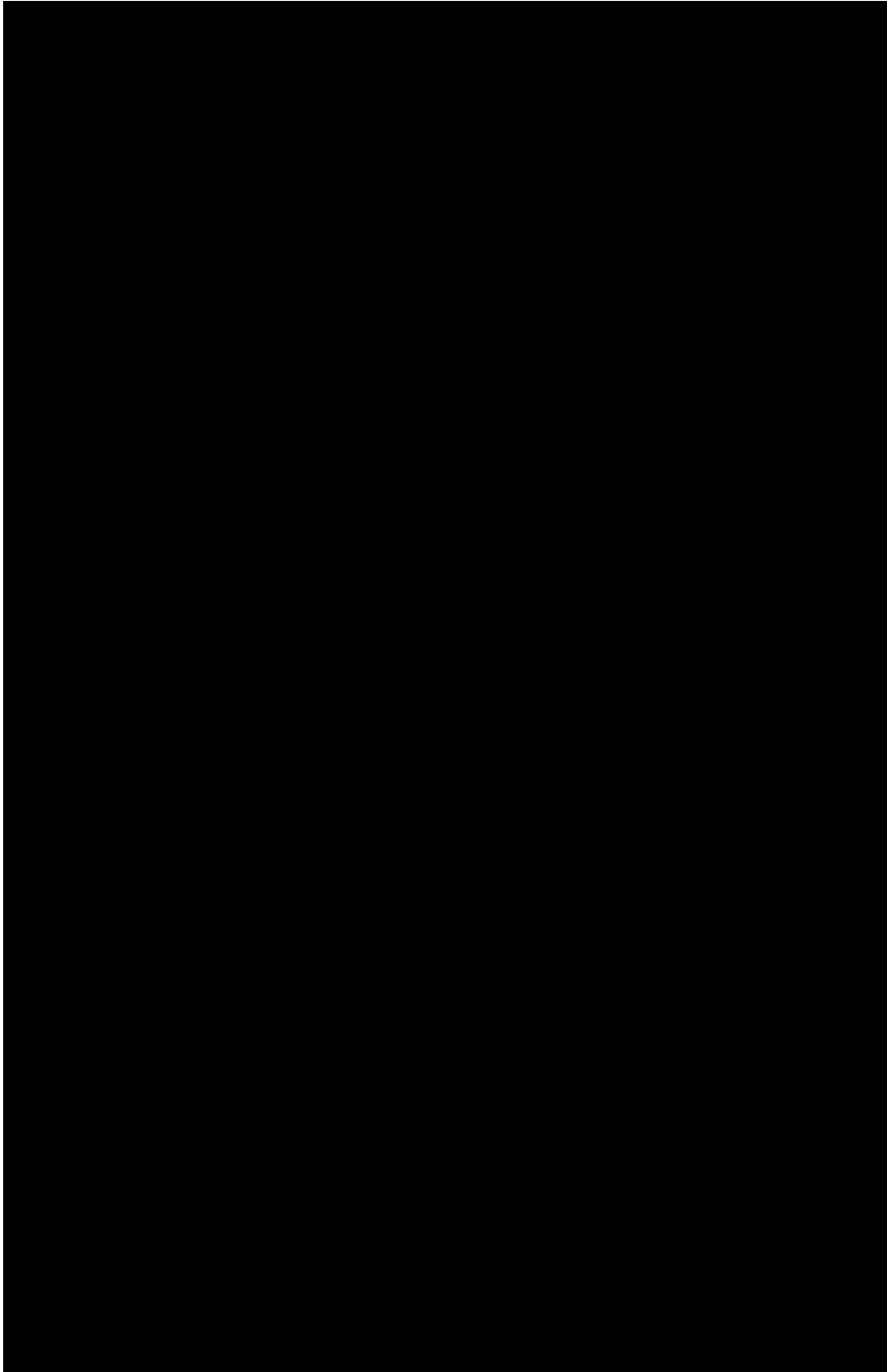


Figure 45. Site 32LO166 site sketch map.

A Class III Cultural Resources Inventory for the Badger Wind Project



Figure 46. Site 32LO166 site overview toward tornado shelter from probable farmhouse location looking west.



Figure 47. Site 32LO166 Feature 1 tornado shelter looking west.

A Class III Cultural Resources Inventory for the Badger Wind Project



Figure 48. Site 32LO166 Feature 1 ventilation duct for the tornado shelter.



Figure 49. Site 32LO166 Feature 2 foundation remnants filled in with field stones.

A Class III Cultural Resources Inventory for the Badger Wind Project



Figure 50. Site 32LO166 brick at likely location of farmhouse.

A Class III Cultural Resources Inventory for the Badger Wind Project

5.8. 32LO167

Temporary Site Number:	ATBAD12
Site Type:	Farmstead
Cultural Affiliation and Age:	Historical
Site Size:	4,833 m ²
NRHP Recommendation:	Unevaluated
Management Recommendation:	Further work recommended
Project Recommendation:	Project will avoid site

Site Description: This archaeological site is the remnants of a twentieth-century farmstead complex and currently lacks standing structures (Figure 51). Atwell has voluntarily revised the project layout to avoid impacts to this site. The temporary workspace around Turbine 36 will be restricted to avoid all impacts to site 32LO167.

At the time of Atwell's 2021 survey, the site was used as ranchland and had a ground surface visibility of 0%.

Remnants of a farmhouse foundation (Feature 1; Figure 52), the foundation of a single large outbuilding (Feature 2; Figure 53), and a well (Feature 3; Figure 54) were identified. Cultural material observed included brick, metal, dishware, and glass fragments scattered across the site (Figure 55). Fragments of glass and porcelain indicate an occupation dating to at least the mid-1900s.

Of the farmstead's structures, only a well and the foundations of two buildings remain. It is unclear how the residence was lost, but little cultural material was observed during Atwell's 2021 survey. It seems likely that cultural material and structural remnants of the residence and outbuilding were removed from the site by a recent landowner. The loss of this material and the modern disturbances contribute to a lack of integrity of materials, workmanship, feeling, and association.

Landowner History: The GLO did not have records for the parcel on which this site is located (BLM 2022). The site is not plotted in the 1916 Logan County atlas, but the owner is identified as George Ackermann (Geo. A. Ogle & Co. 1916). The site is first plotted in the 1967 county atlas (Directory Service Company 1967), but no owner's name is provided. The farmstead may have already been abandoned at that time. This site is not depicted in the 1980 atlas (Directory Service Company

A Class III Cultural Resources Inventory for the Badger Wind Project

1980), which could indicate that the residence had been destroyed by this date. If that is the case, the site was occupied for a very short period of time. This brief period of activity and late date of development make it likely that the site contains few subsurface cultural materials. Aerial imagery from the late 1990s appears to show that the site has changed very little in the last two decades (Historic Aerials 2022). The 1982 Wishek topographic map indicates a single outbuilding structure at this location (ESRI 2022).

NRHP Recommendation: The site does not appear to be associated with any individuals or events that were significant in local or regional history. The construction style and methods used for the foundations appear to be typical of the place and time and do not contribute any significant information to the construction practices of the period. The lack of standing structures means that the remnants cannot be tied to traditional building styles of the region (Andrzejewski 2017). Given the poor site integrity, small artifact assemblage, and commonplace structures, the site has little or no potential to contribute substantially to research questions on the Historic period of the area. Testing of site 32LO167 is needed to determine whether subsurface archaeological deposits are present and further characterize the site's integrity and extent. Atwell recommends this site be considered unevaluated for the NRHP.

A Class III Cultural Resources Inventory for the Badger Wind Project

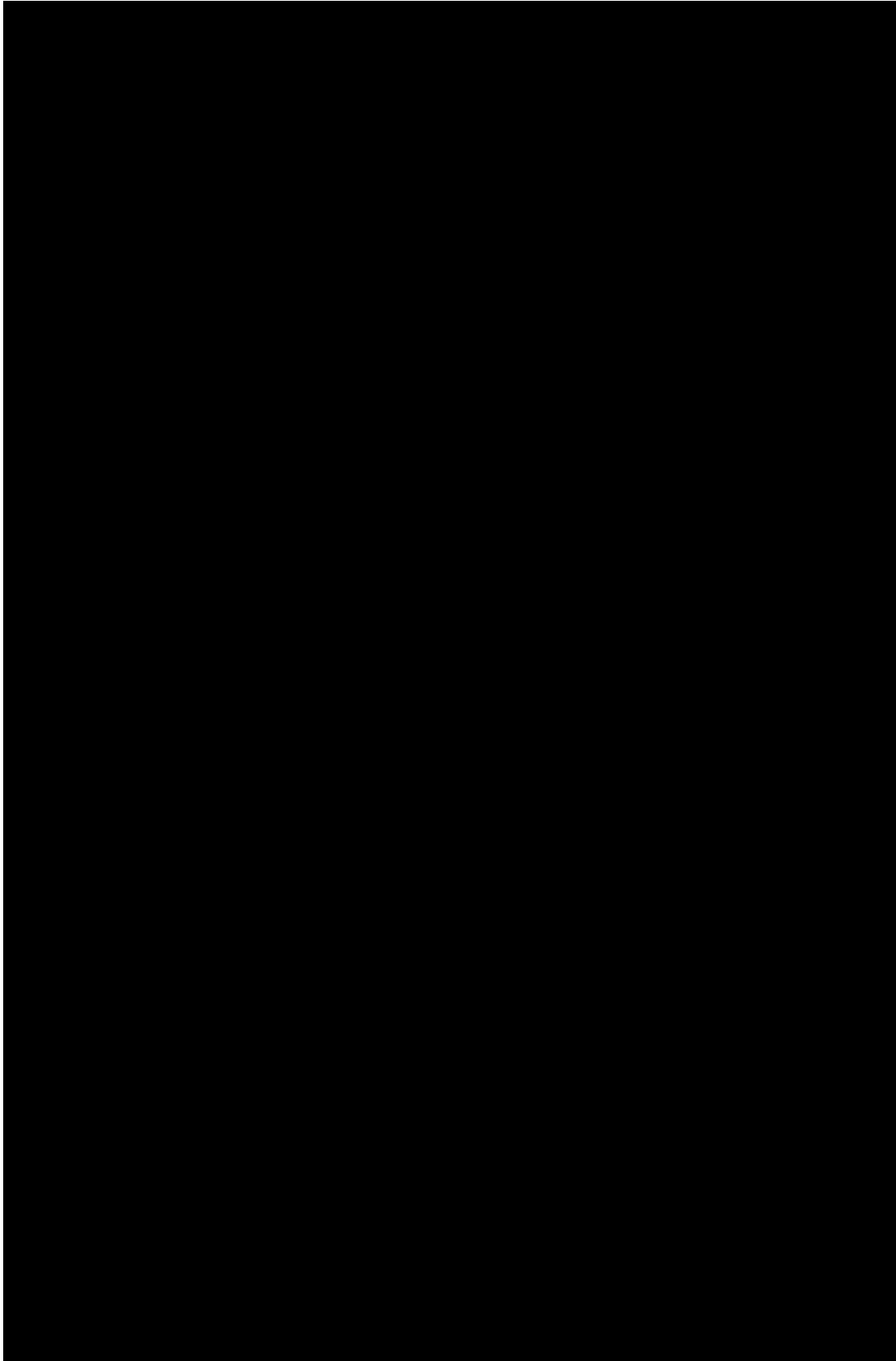


Figure 51. Site 32LO167 site sketch map.

A Class III Cultural Resources Inventory for the Badger Wind Project



Figure 52. Site 32LO167 Feature 1 overview of farmhouse foundation and stoop.



Figure 53. Site 32LO167 Feature 2 overview of outbuilding foundation.

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Figure 54. Site 32LO167 Feature 3 close-up of possible well remnant located to the east of the farmhouse foundation.



Figure 55. Site 32LO167 close-up of glass fragments.

A Class III Cultural Resources Inventory for the Badger Wind Project

5.9. 32LOX73

Temporary Site Number:	ATBAD7
Site Type:	Site Lead
Cultural Affiliation and Age:	Unknown Prehistoric
Site Size:	1 m ²
NRHP Recommendation:	Unevaluated
Management Recommendation:	Further work recommended
Project Recommendation:	Project will avoid Site Lead

Site Description: 32LOX73 is a prehistoric Site Lead (Figure 56) consisting of a single, bright white chert flake of a non-local variety (Figure 57 and Figure 58). The flake was found in a hay field that had ground surface visibility of approximately 90%. Field observations indicate extensive and ongoing disturbance related to agricultural operations. Further investigation is required to assess whether this resource constitutes a site and the degree to which the resource's integrity has been damaged.

NRHP Recommendation: Testing of site 32LOX73 is needed to determine whether subsurface archaeological deposits are present and further characterize the site's integrity and extent. Atwell recommends this site be considered unevaluated for the NRHP.

A Class III Cultural Resources Inventory for the Badger Wind Project

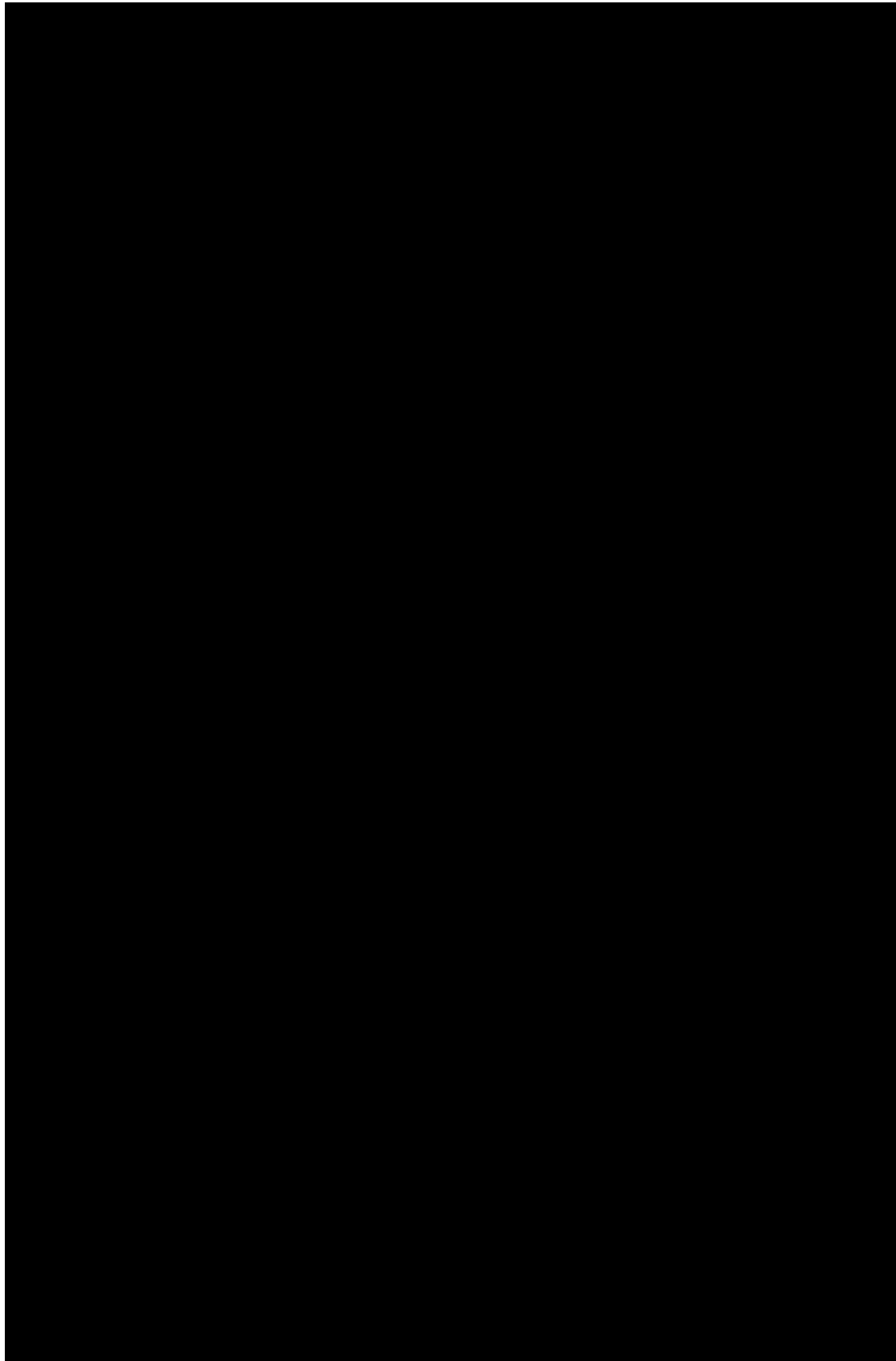


Figure 56. Site 32LOX73 site lead sketch map.

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Figure 57. Site 32LOX73 close-up of isolated chert flake, dorsal side.



Figure 58. Site 32LOX73 close-up of isolated chert flake, ventral side.

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5.10. 32MT450

Temporary Site Number:	ATBAD1
Site Type:	Farmstead
Cultural Affiliation and Age:	Historical
Site Size:	782 m ²
NRHP Recommendation:	Unevaluated
Management Recommendation:	Further work recommended
Project Recommendation:	Project will avoid site

Site Description: This archaeological site consists of the remnants of a twentieth-century farmstead complex (Figure 59). At the time of Atwell’s 2020 survey the site was fallow agricultural land, and the ground surface visibility was 0%. Only one feature was observed in the field. Feature 1 is an outbuilding foundation located in the northwest portion of the site (Figure 60). The building has been destroyed, and the only remnants of the structure are the concrete foundation and scattered building materials. Debris from the building, including its assumed contents, was observed on the ground surface of the site (Figure 61 and Figure 62). A North Dakota license plate, dated to 1958, was found in the debris (Figure 63), as well as rolls of fence wire and window glass.

Aerial imagery dating between the late 1990s and 2016 indicate that multiple structures have been destroyed and removed from the site, presumably by the landowner. Aerial imagery also indicates the fleeting presence of a small junkyard. The junkyard first appears in the 2013 aerials, but it was removed before subsequent photos were taken in 2016. This site has poor integrity due to the intentional removal of cultural material and features. Additionally, the removal of the materials indicates that further investigation at this location would be unlikely to contribute substantial information to research questions about the Historic period in the area.

Landowner History: The property was purchased from the U.S. federal government in 1889 by Jakob Krein, a Ukrainian immigrant to the United States (BLM 2022). The property is mapped as having been owned by J.F. Krein in the 1911 atlas of McIntosh County (Geo. A. Ogle & Co. 1911). Though structures are depicted in neighboring parcels, no buildings are plotted at this location on the 1911 atlas. The first evidence of buildings located at this site appears in the 1960 county atlas (Northwest Atlas Co. 1960). The atlas marks one “farm building” at the location, but it is unclear whether that refers to an outbuilding or a residence. In this 1960 atlas, the owners of the property are listed as Christian H. and Lydia Krein. Two structures are plotted at this location on

A Class III Cultural Resources Inventory for the Badger Wind Project

the 1982 Wishek SW topographic map (ESRI 2022), but it is unclear what these two structures were. Starting in 1985, aerial photographs show Feature 1 and at least four other features located on the site. The ruins are visible in aerial photographs through 2013. They are depicted on the 2013 photograph with an accompanying junkyard that includes multiple vehicles and farm implements. The junkyard and all ruins, other than Feature 1, are absent in the 2016 aerial photos (Historic Aerials 2022). Aside from the single foundation, no other ruins were observed at the time of Atwell's survey. It appears likely that one of the recent landowners has actively removed features and cultural material from the site, severely diminishing site integrity as a result.

NRHP Recommendation: Site 32MT450 retains poor integrity of design, materials, workmanship, feeling, and association. The lack of integrity means that no association with any of the traditional farm building styles in North Dakota could be established (Andrzejewski 2017). Furthermore, the site is of an age that is already well represented in the historic record, there appears to be no association with any notable historical figure, and the site does not display any unique architecture or workmanship. Testing of site 32MT450 is needed to determine whether subsurface archaeological deposits are present and further characterize the site's integrity and extent. Atwell recommends this site be considered unevaluated for the NRHP.

A Class III Cultural Resources Inventory for the Badger Wind Project

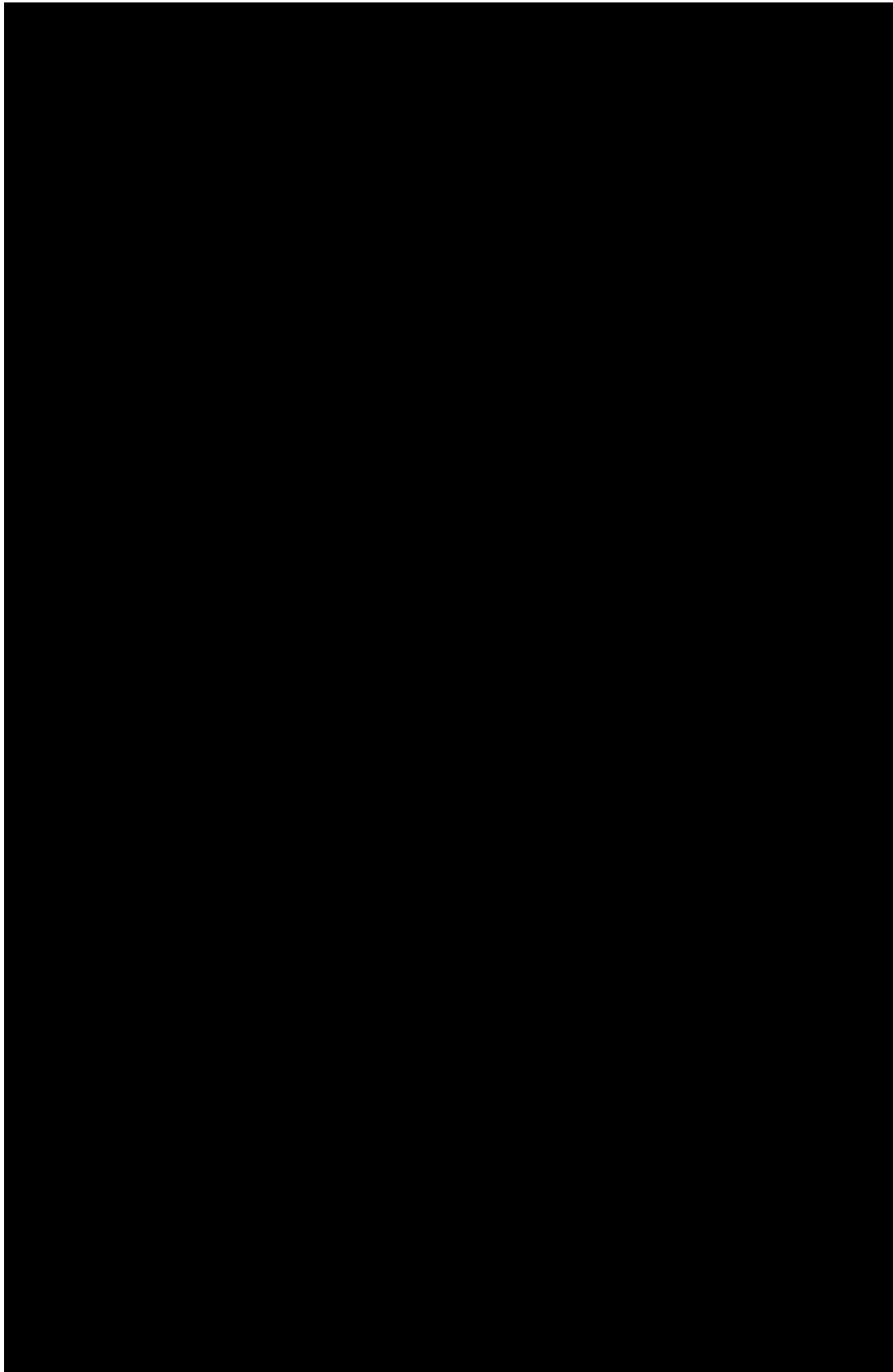


Figure 59. Site 32MT450 site sketch map.

A Class III Cultural Resources Inventory for the Badger Wind Project



Figure 60. Site 32MT450 Feature 1 overview of outbuilding foundation looking west.



Figure 61. Site 32MT450 Feature 1 surface debris looking east.

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Figure 62. Site 32MT450 Feature 1 surface debris looking north.



Figure 63. Site 32MT450 license plate dating to 1958 found to the north of Feature 1.

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5.11. 32MTX111

Temporary Site Number:	ATBAD5
Site Type:	Site Lead
Cultural Affiliation and Age:	Unknown Prehistoric
Site Size:	10 m ²
NRHP Recommendation:	Unevaluated
Management Recommendation:	Further work recommended
Project Recommendation:	Project will avoid Site Lead

Site Description: 32MTX111 (Figure 64) is a prehistoric Site Lead consisting of a single gray tertiary chert flake (Figure 65). The flake was found in a recently harvested cornfield that had ground surface visibility of approximately 65% (Figure 66). Field observations indicate extensive and ongoing disturbance related to agricultural operations. Further investigation is required to determine whether this resource constitutes a site and the degree to which the resource's integrity has been damaged.

NRHP Recommendation: Testing of site 32MTX111 is needed to determine whether subsurface archaeological deposits are present and further characterize the site's integrity and extent. Atwell recommends this site be considered unevaluated for the NRHP.

A Class III Cultural Resources Inventory for the Badger Wind Project

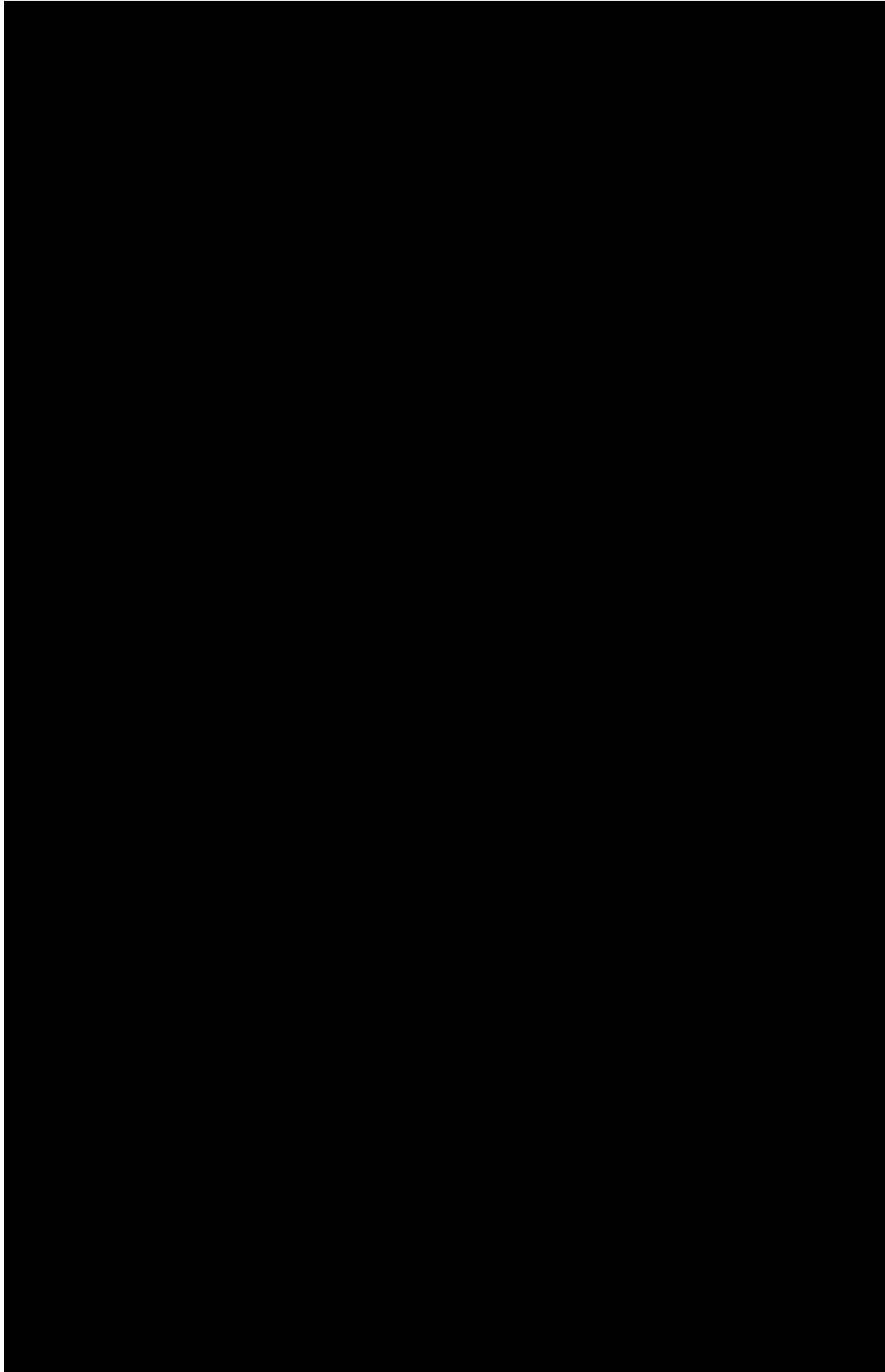


Figure 64. Site 32MTX111 site lead sketch map.

A Class III Cultural Resources Inventory for the Badger Wind Project



Figure 65. Site 32MTX111 close-up of isolated chert flake, ventral side.



Figure 66. Site 32MTX111 overview looking north-northwest.

A Class III Cultural Resources Inventory for the Badger Wind Project

6.0 CONCLUSIONS AND RECOMMENDATIONS

Atwell conducted a Class III cultural resources pedestrian inventory of the assessment area. Badger Wind has committed to avoiding impacts to all cultural resources, regardless of NRHP eligibility status, and has adjusted the project layout as needed. Atwell recommends that the project will have no impact on cultural resources.

A Class III Cultural Resources Inventory for the Badger Wind Project

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APPENDIX A: MAPS

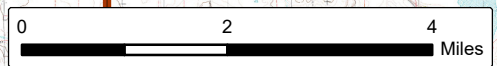
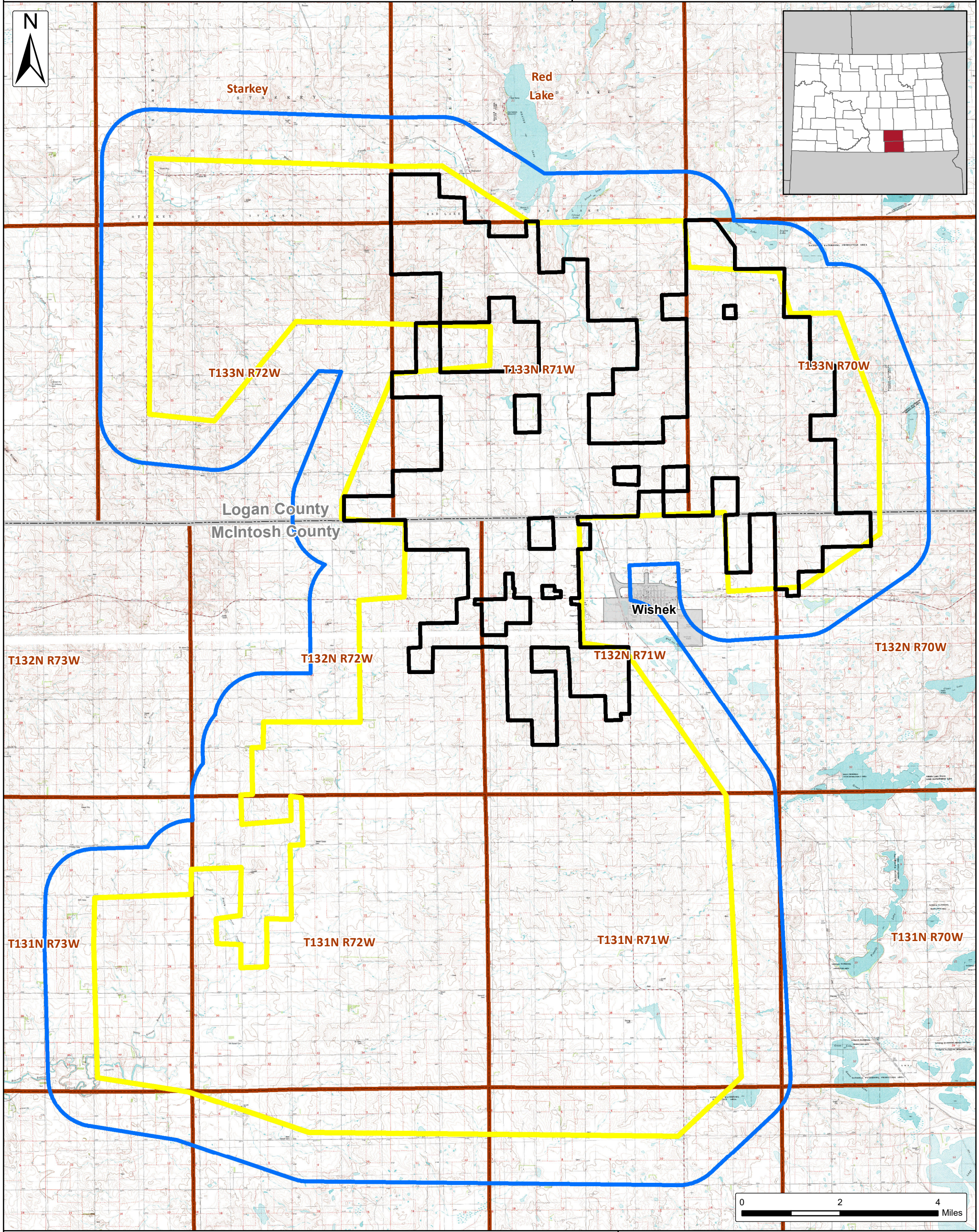
Badger Wind

Map 1. Site Location

Logan and McIntosh Counties, North Dakota

Client:
**Badger Wind,
LLC**

Issue Date:
6/24/2022
Atwell, LLC Project:
19000785

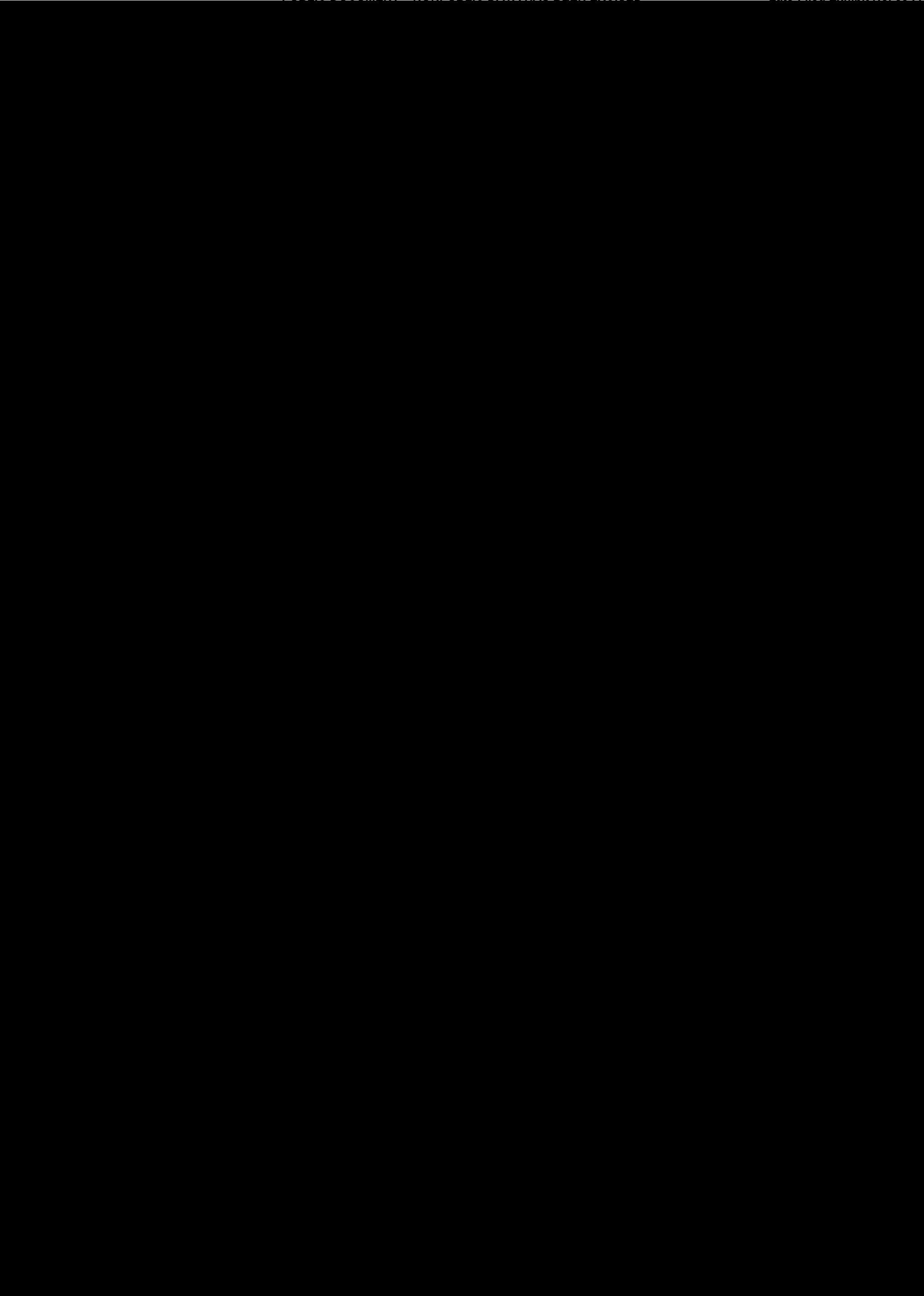





















- Project Area (~57,413 acres)
- Project Area 04/15/2019 (~121,695 acres)
- 1-mile Buffer
- Township
- City/Village
- Counties



The information contained on this map is proprietary and confidential. The use or disclosure of this information by you to third parties is prohibited by law and may give rise to civil or criminal liability.

Source: USGS Topographic Quadrangle



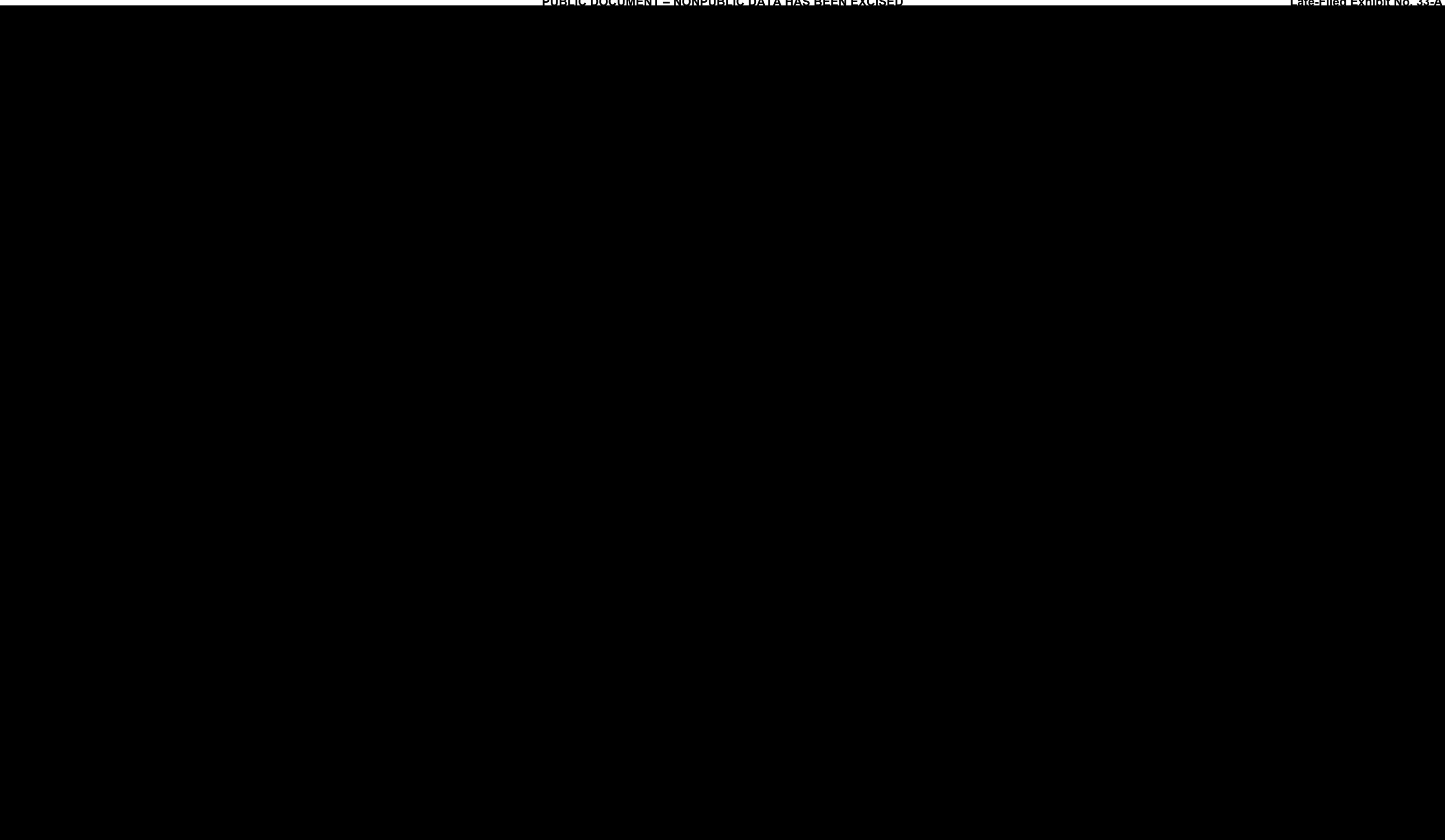
	Previously Identified Architectural Site		Atwell Class III Survey Areas		Project Area
	Previously Identified Archaeological Site or Isolate		Proposed Turbine (symbols not to scale)		1-mile Buffer
	Previously Identified Archaeological Site or Isolate		Proposed MET Tower		County
	Field Identified Architectural Site		Proposed ADLS Tower		Township
	Field Identified Archaeological Site or Isolate		Proposed O&M Building		City/Village
	Field Identified Archaeological Site or Isolate		Proposed Substation		
	Cemeteries (USGS)		Proposed Laydown Yard		



ATWELL

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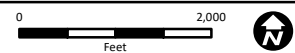
Source: USGS Topographic Quadrangles
Burnstad, Lehr SW, May Lake
May Lake NW, Wishek, Wishek SW (1982)



Source: USGS Topographic Quadrangles
Burnstad, Lehr SW, May Lake
May Lake NW, Wishek, Wishek SW (1982)

Cultural Class I and III Report
Badger Wind, LLC
19000785
June 24, 2022

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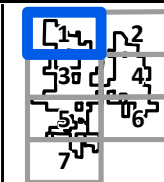


- Previously Identified Archaeological Site or Isolate
- Field Identified Archaeological Site or Isolate

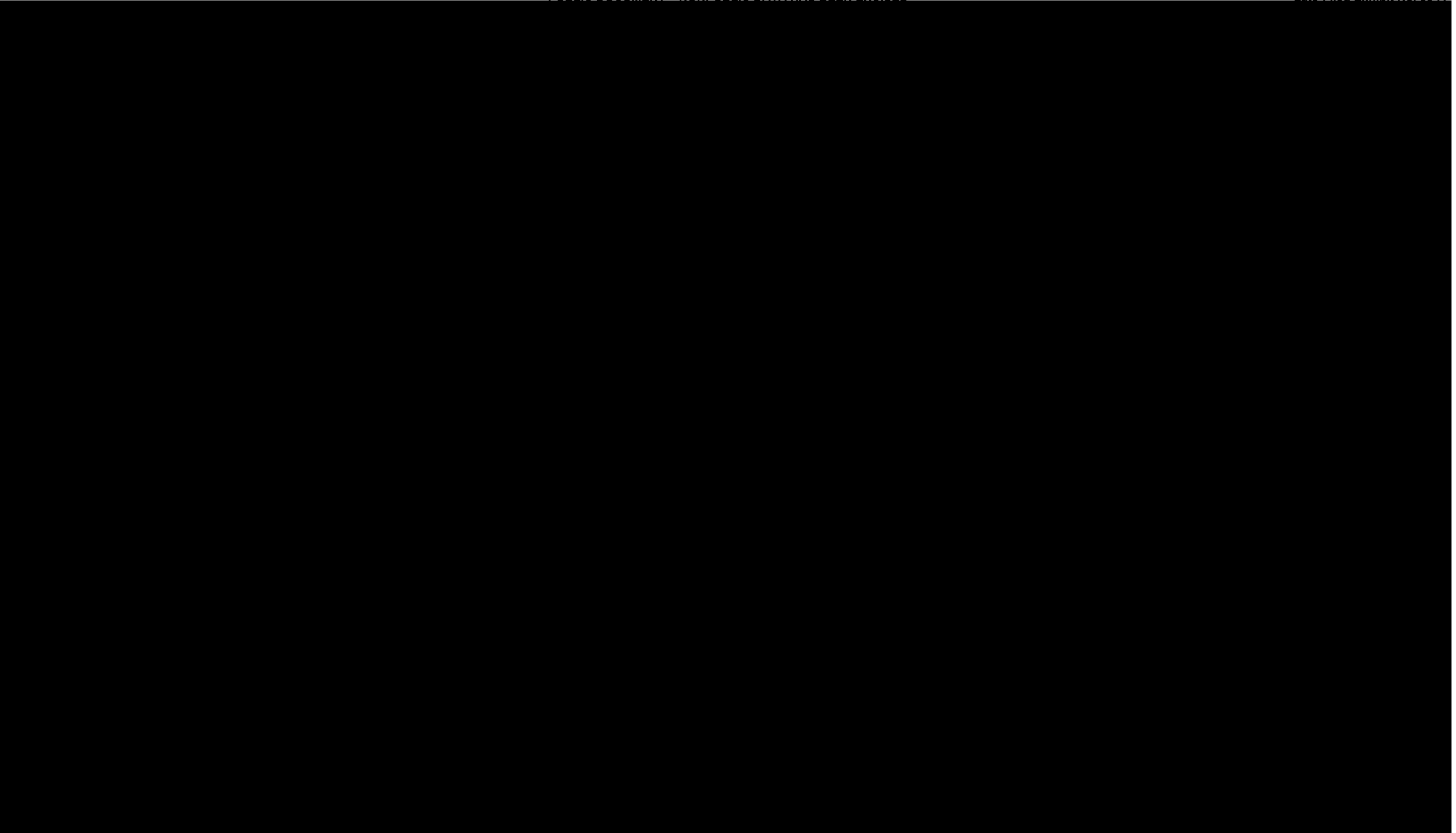
- Atwell Class III Survey Areas
- Project Area
- 1-mile Buffer

- Proposed Turbine (symbols not to scale)
- Proposed Underground Collection Line
- Proposed Access Road

- County
- Township



Map 2.1
Class I and III Survey Results
Logan and McIntosh Counties,
North Dakota



Source: USGS Topographic Quadrangles
Burnstad, Lehr SW, May Lake
May Lake NW, Wishek, Wishek SW (1982)

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Badger Wind, LLC
19000785
June 24, 2022

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Previously Identified Archaeological Site or Isolate

Atwell Class III Survey Areas

Project Area
 1-mile Buffer

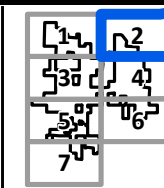
Proposed Turbine (symbols not to scale)

Proposed Underground Collection Line

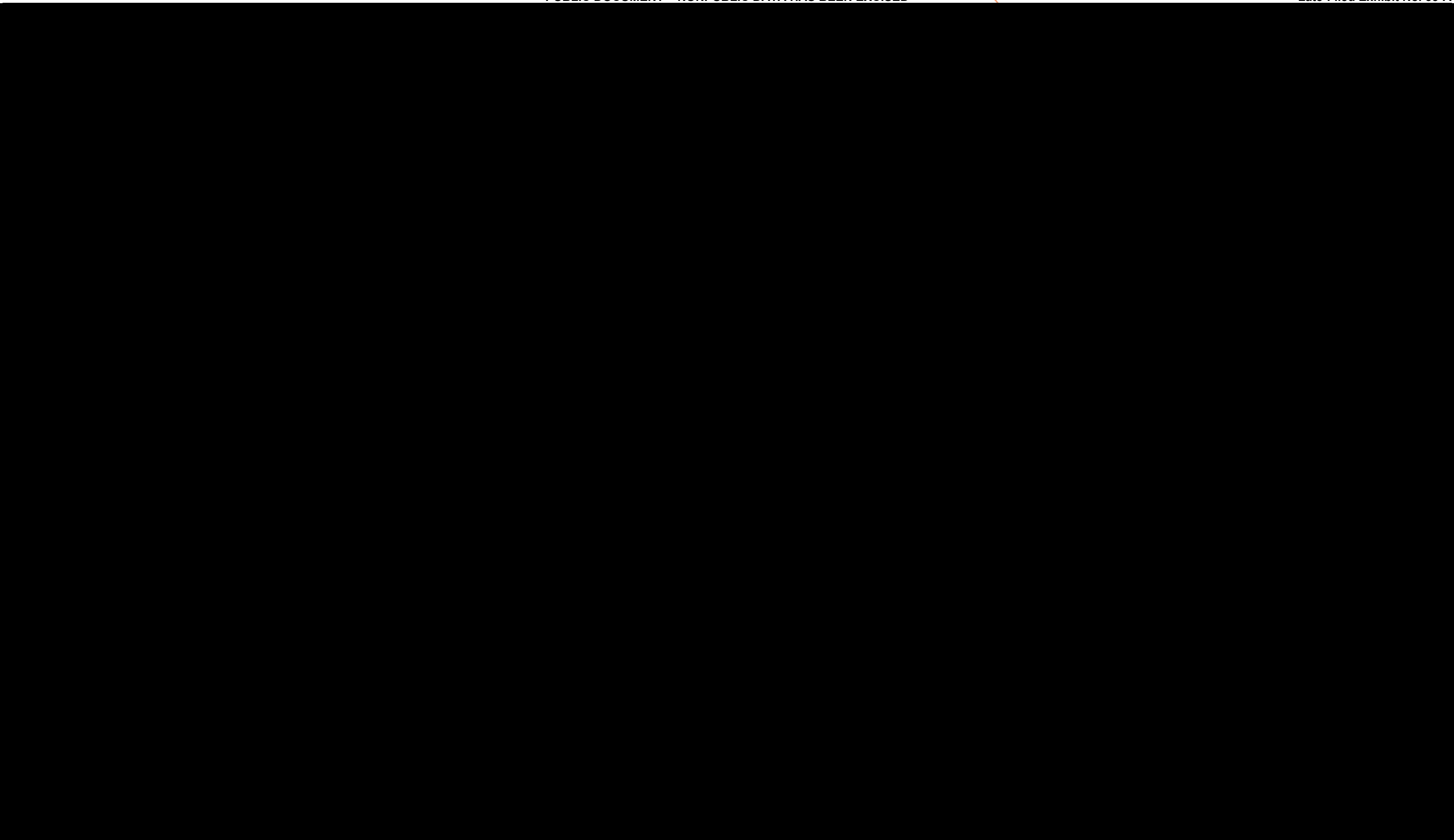
Proposed Access Road

County

Township



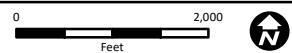
Map 2.2
Class I and III Survey Results
Logan and McIntosh Counties,
North Dakota



Source: USGS Topographic Quadrangles
Burnstad, Lehr SW, May Lake
May Lake NW, Wishek, Wishek SW (1982)

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Badger Wind, LLC
19000785
June 24, 2022

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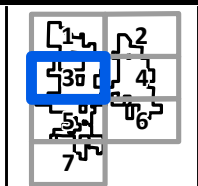


- Previously Identified Architectural Site
- Previously Identified Archaeological Site or Isolate
- Previously Identified Archaeological Site or Isolate
- Field Identified Archaeological Site or Isolate
- Cemeteries (USGS)

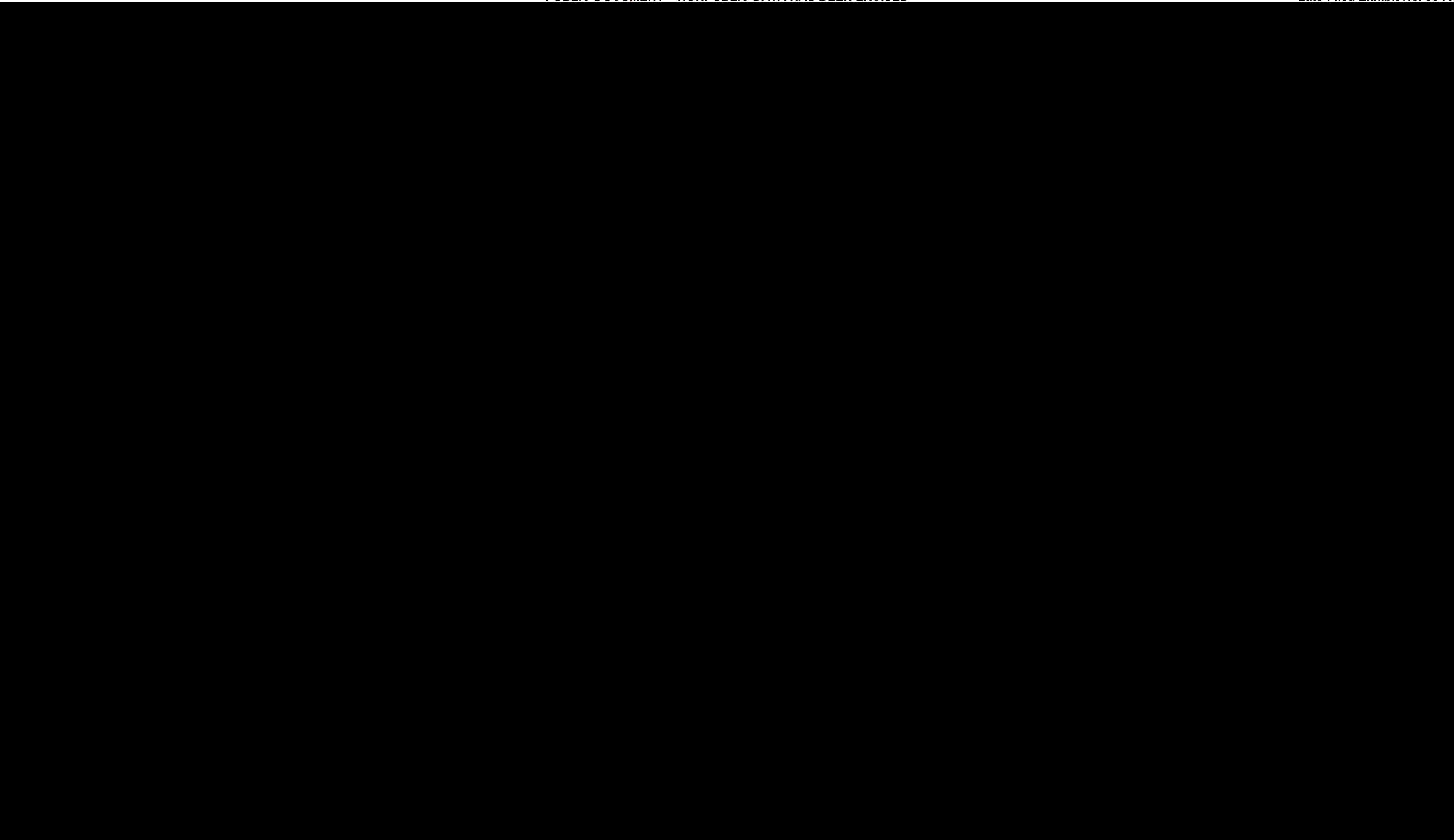
- Atwell Class III Survey Areas
- Project Area
- 1-mile Buffer

- Proposed Turbine (symbols not to scale)
- Proposed MET Tower
- Proposed Underground Collection Line
- Proposed Crane Path
- Proposed Access Road

- County
- Township



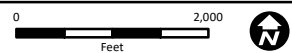
Map 2.3
Class I and III Survey Results
Logan and McIntosh Counties,
North Dakota



Source: USGS Topographic Quadrangles
Burnstad, Lehr SW, May Lake
May Lake NW, Wishek, Wishek SW (1982)

Cultural Class I and III Report
Badger Wind, LLC
19000785
June 24, 2022

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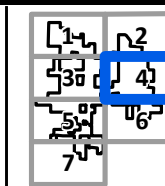


- Previously Identified Archaeological Site or Isolate
- Field Identified Architectural Site
- Field Identified Archaeological Site or Isolate

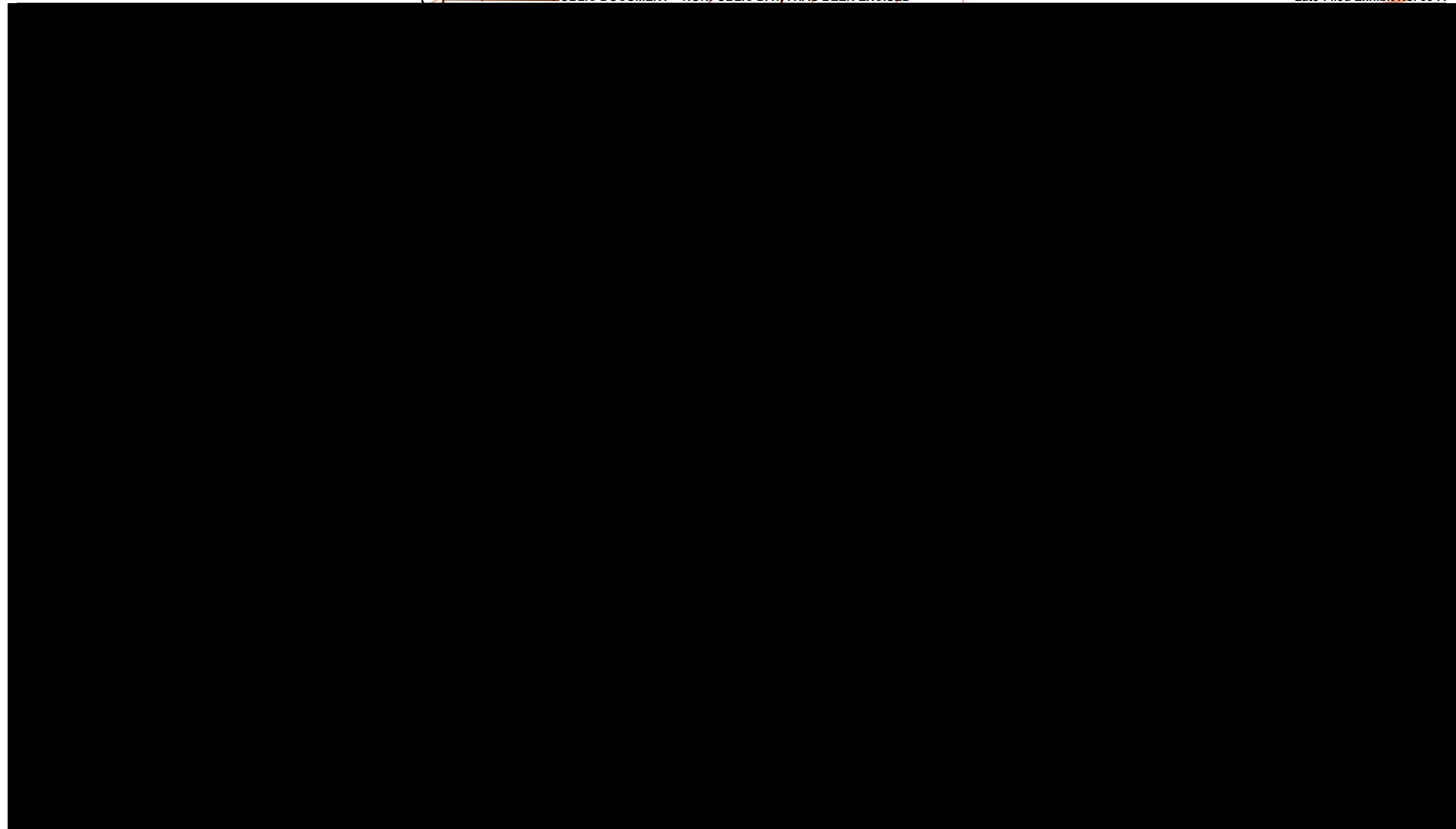
- Atwell Class III Survey Areas
- Project Area
- 1-mile Buffer

- Proposed Turbine (symbols not to scale)
- Proposed MET Tower
- Proposed Underground Collection Line
- Proposed Crane Path
- Proposed Access Road

- County
- Township



Map 2.4
Class I and III Survey Results
Logan and McIntosh Counties,
North Dakota



Source: USGS Topographic Quadrangles
Burnstad, Lehr SW, May Lake
May Lake NW, Wishek, Wishek SW (1982)

Cultural Class I and III Report
Badger Wind, LLC
19000785
June 24, 2022

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(54 U.S.C. 307103)**

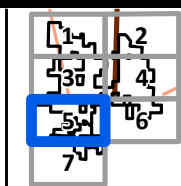


- Previously Identified Archaeological Site or Isolate
- Field Identified Archaeological Site or Isolate
- Field Identified Archaeological Site or Isolate
- Cemeteries (USGS)

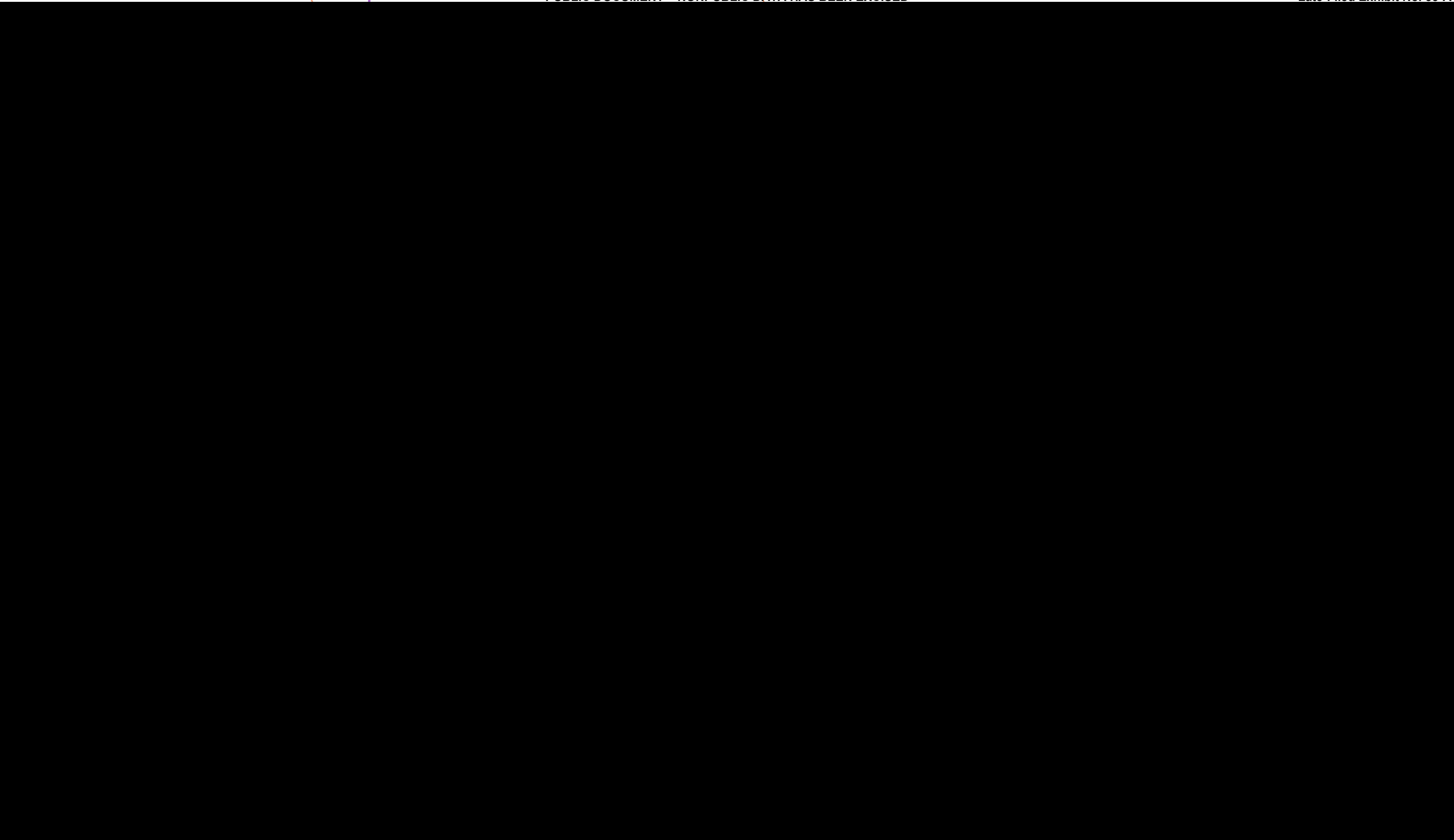
- Atwell Class III Survey Areas
- Project Area
- 1-mile Buffer
- Proposed O&M Building
- Proposed Substation
- Proposed Laydown Yard

- Proposed Turbine (symbols not to scale)
- Proposed MET Tower
- Proposed Underground Collection Line
- Proposed Crane Path
- Proposed Access Road

- County
- Township
- City/Village



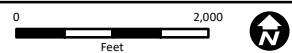
Map 2.5
Class I and III Survey Results
Logan and McIntosh Counties,
North Dakota



Source: USGS Topographic Quadrangles
Burnstad, Lehr SW, May Lake
May Lake NW, Wishek, Wishek SW (1982)

Cultural Class I and III Report
Badger Wind, LLC
19000785
June 24, 2022

**Confidential -
Not for Public Disclosure
(54 U.S.C. 307103)**

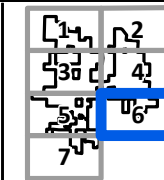


- Previously Identified Architectural Site
- Previously Identified Archaeological Site or Isolate
- Cemeteries (USGS)

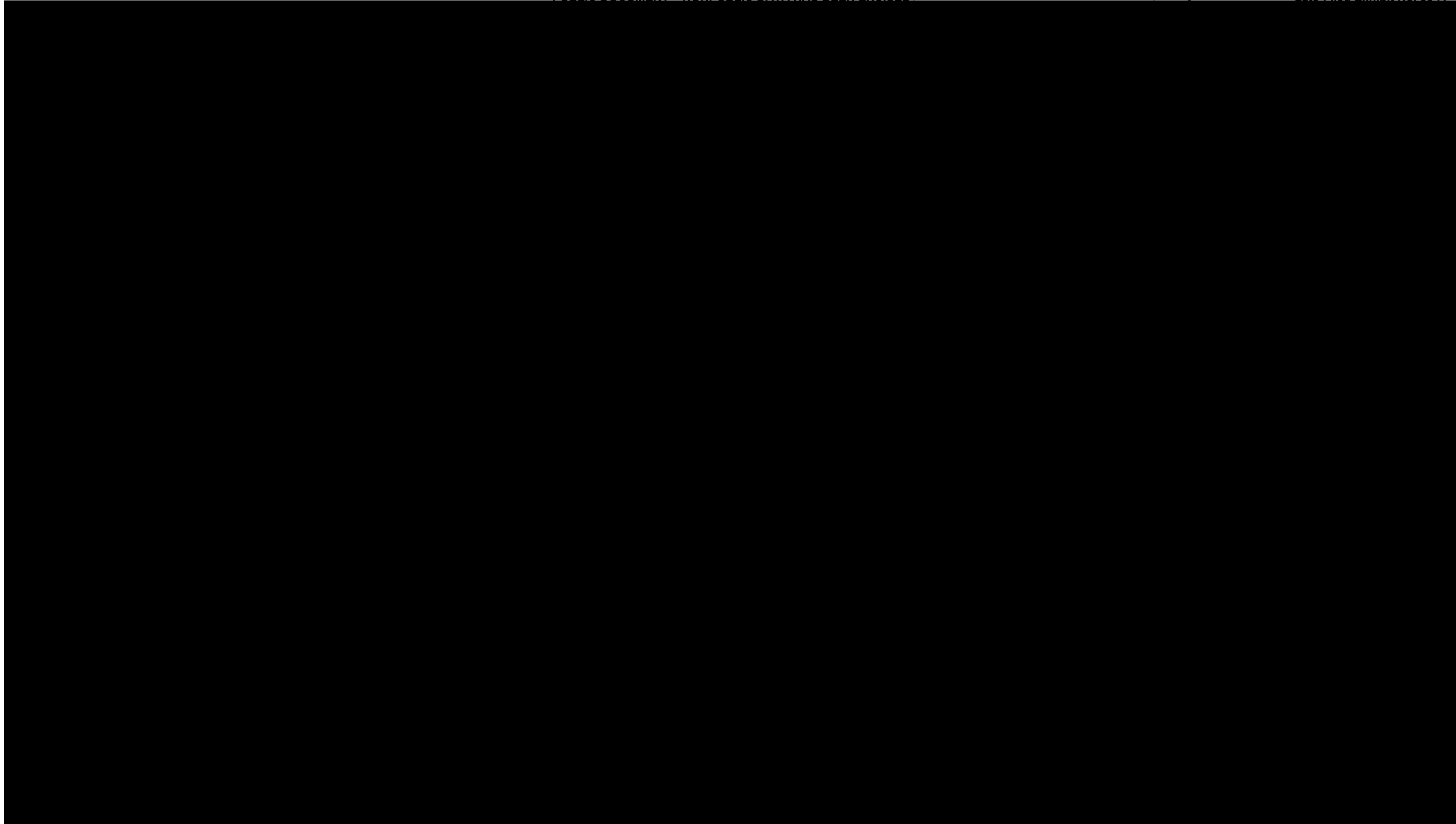
- Atwell Class III Survey Areas
- Project Area
- 1-mile Buffer

- Proposed Turbine (symbols not to scale)
- Proposed MET Tower
- Proposed Underground Collection Line
- Proposed Crane Path
- Proposed Access Road

- County
- Township
- City/Village

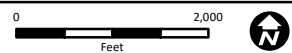


Map 2.6
Class I and III Survey Results
Logan and McIntosh Counties,
North Dakota



Source: USGS Topographic Quadrangles
Burnstad, Lehr SW, May Lake
May Lake NW, Wishek, Wishek SW (1982)

Cultural Class I and III Report
Badger Wind, LLC
19000785
June 24, 2022
**Confidential -
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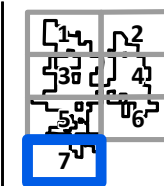


- Previously Identified Archaeological Site or Isolate
- Field Identified Architectural Site
- Cemeteries (USGS)

- Atwell Class III Survey Areas
- Project Area
- 1-mile Buffer

- Proposed Turbine (symbols not to scale)
- Proposed ADLS Tower
- Proposed Underground Collection Line
- Proposed Crane Path
- Proposed Access Road

- County
- Township



Map 2.7
Class I and III Survey Results
Logan and McIntosh Counties,
North Dakota

A Class III Cultural Resources Inventory for the Badger Wind Project

APPENDIX B: BADGER WIND PROJECT CLASS I ARCHAEOLOGICAL LITERATURE SEARCH MEMO



MEMORANDUM

DRAFT/CONFIDENTIAL
Do Not Distribute

To: Sarah Aftergood, Ørsted, Director of Environmental Permitting

From: Jennifer Bring, Senior Project Coordinator
James Freshwater, Environmental Consultant

Date: October 8, 2021

Re: **Badger Wind Project Class I Archaeological Literature Search**

Introduction

Badger Wind, LLC (Badger Wind), proposes to construct the Badger wind energy generation facility in Logan and McIntosh counties, North Dakota. Development of the Badger Wind Project (the project) would include construction of wind turbines, access roads, an underground electric collection line system, a substation, and a transmission line. Temporary crane walk routes and a haul route would be used for the construction of the proposed facility.

The project is voluntarily complying with North Dakota guidelines for archaeological reconnaissance and survey provided by the State Historic Preservation Office (SHPO) as a due diligence effort. As there is no federal nexus for this project, review under Section 106 of the National Historic Preservation Act is not required.

Atwell conducted the Class I Archaeological Literature Search in 2020 through an initial file search of the North Dakota Cultural Resources Survey (NDCRS) data files maintained by the State Historical Society of North Dakota (SHSND). The methods employed for the Class I Archaeological Literature Search follow the SHPO Guidelines Manual for Cultural Resources Inventory Projects (SHSND 2020).

Results

The results of the Class I Archaeological Literature Search indicate that 15 archaeological sites have been previously identified within the Project Boundary from 2020, including two cemeteries. An additional eight archaeological sites have been previously identified within one mile of the 2020 Project Boundary, including one cemetery. There is one additional cemetery within the 2020 Project Boundary and three additional cemeteries within one mile of the Project Boundary.

A historic railroad crosses the Project Area (32LO33). A single National Register of Historic Places (NRHP)-eligible associated site (32MT74), an abandoned railroad segment, is located within the 2020 Project Boundary.

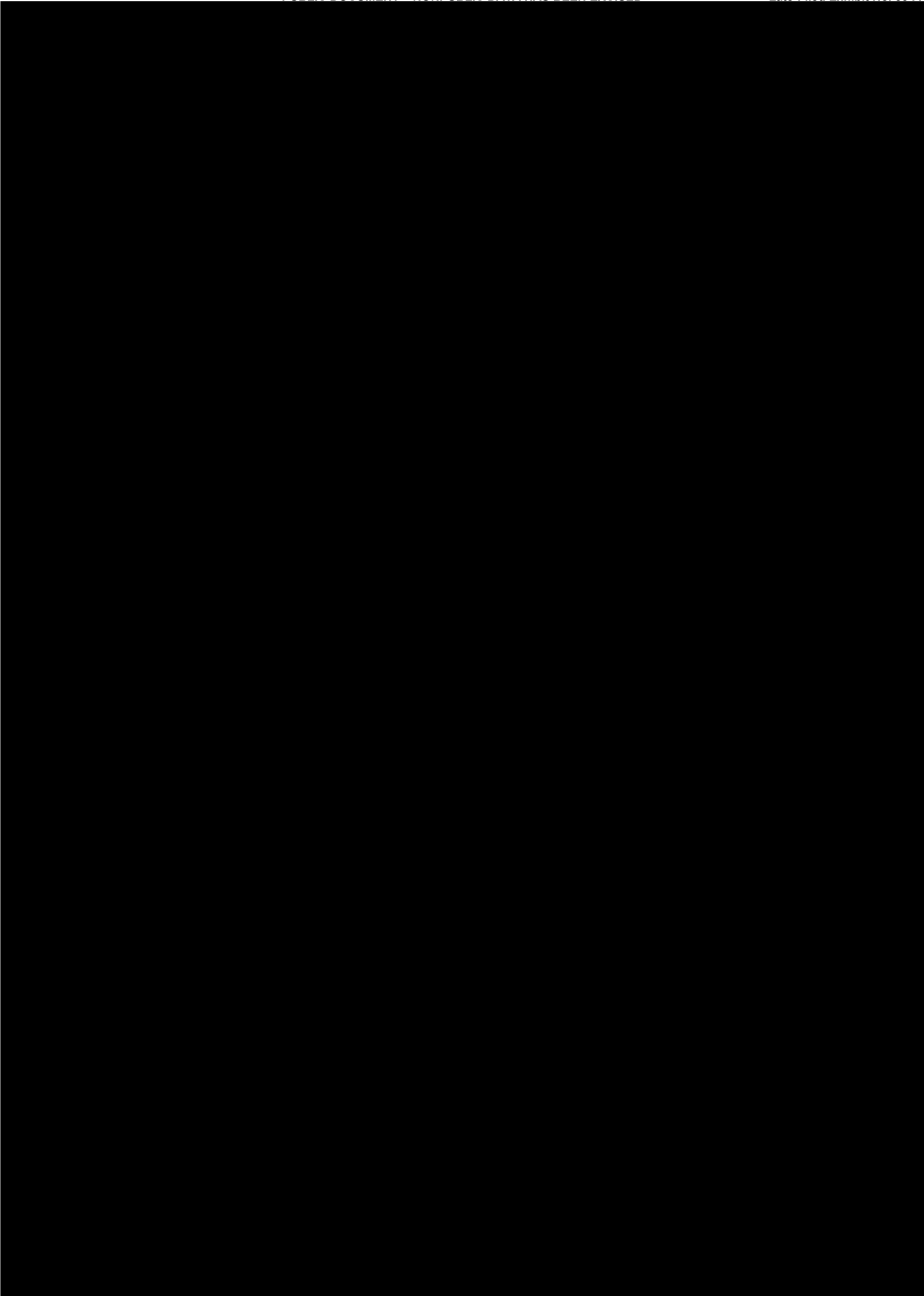
Previously identified archaeological sites in the 2020 Project Boundary and within one mile of the Project Boundary are summarized in Tables 1 and 2 below and depicted on the attached figure.









Table 1. Archaeological Sites and Leads Within the 2020 Project Boundary

Site Number, Name	Site Period, Type	NRHP Eligibility
32LO33	Historic, Railroad	Unevaluated
32LO37	Historic, Foundation/Features	Not Eligible
32LO110	Historic, Artifact Scatter	Not Eligible
32LO111	Historic, Windmill Ruins	Not Eligible
32LO112	Prehistoric, Stone Circles	Not Eligible
32LO113	Prehistoric, Stone Circle	Unevaluated
32LO139	Historic, Farmstead	Not Eligible
32LOX8	Historic, Railroad-related	Unevaluated
32LOX55	Historic, Homestead	Lead only
32LOX61	Historic, Isolated Find	Unevaluated
32MT8	Historic, Farmstead	Not Eligible
32MT74	Historic, Railroad Segment	Eligible
32MT99	Prehistoric, Stone Circles	Unevaluated
32MT281	Historic, Beaver Creek Baptist Cemetery	Unevaluated
32MT282	Historic, Neudorf Cemetery	Unevaluated

Table 2. Archaeological Sites and Leads Within the One Mile of the 2020 Project Boundary

Site Number, Name	Site Period, Type	NRHP Eligibility
32LO23	Historic, Homestead	Not Eligible
32LO24	Historic, Depressions	Not Eligible
32LO137	Historic, Depressions	Not Eligible
32LOX7	Historic, Townsite/Post Office	Unevaluated
32LOX9	Historic, Petroglyph	Unevaluated
32MT27	Historic, Wishek City Cemetery	Unevaluated
32MT100	Historic, Farmstead	Not Eligible
32MTX16	Historic, Post Office	Unevaluated



-  Archaeological Sites and Leads (NDCRS)
-  Railroad (32LO33)
-  Isolates (NDCRS)
-  Cemeteries (USGS)
-  Project Area (12/04/2020)
-  1-mile Buffer
-  City/Village
-  Counties



**Confidential -
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(54 U.S.C. 307103)**

Source: USGS Topographic Quadrangles
Burnstad, Lehr SW, May Lake
May Lake NW, Wishek, Wishek SW (1982)

A Class III Cultural Resources Inventory for the Badger Wind Project

**APPENDIX C: UNANTICIPATED DISCOVERIES PLAN FOR
CULTURAL RESOURCES AND HUMAN REMAINS**

UNANTICIPATED DISCOVERIES PLAN FOR CULTURAL RESOURCES AND HUMAN REMAINS

BADGER WIND PROJECT

LOGAN AND MCINTOSH COUNTIES, NORTH DAKOTA



Prepared for:

Badger Wind, LLC
Orsted Onshore North America, LLC
812 San Antonio Street
Austin, Texas, 78701

April 2022

Badger Wind Project: Unanticipated Discoveries Plan for Cultural Resources and Human Remains

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Badger Wind Project: Unanticipated Discoveries Plan for Cultural Resources and Human Remains

1. INTRODUCTION

Badger Wind, LLC (Badger Wind), is proposing to construct a wind energy project with a nameplate capacity of up to 251.6 megawatts. The Badger Wind facility (the Project) is bisected by the Logan and McIntosh county line, in south-central North Dakota, and encircles the western side of the City of Wishek.

This document outlines the procedure Badger Wind, a wholly owned subsidiary of Orsted Onshore North America, LLC (Orsted), will follow to prepare for and address any unanticipated discoveries of cultural resources, including archaeological sites (precontact archaeological, historic archaeological, and architectural), Tribal resources, and possible human skeletal remains. It provides direction to Badger Wind personnel and their consultants as to the proper procedure to follow in the event that unanticipated discoveries are made during construction of the Project. This plan, henceforth called the Unanticipated Discovery Plan (UDP), complies with North Dakota Century Code (NDCC) chapter 23-06-27 and North Dakota Administrative Code chapter 40-02-03, which apply to the Project if human remains are inadvertently discovered during the course of construction.

Badger Wind is committed to avoidance of cultural resource sites to the maximum extent feasible during construction, which is scheduled to begin in August 2022. However, the current project layout would directly impact sites 32LO163, 32LO166, and 32LO167. Anticipated impacts to the sites would consist of damage caused by construction of a collection line. Feature 4 at site 32LO163 would be the only affected portion of the site; this feature is composed of recently deposited rubber tires. Impacts to 32LO166 are expected to affect both the tornado shelter (Feature 1) and the outbuilding foundation (Feature 2). At site 32LO167, the construction right-of-way would overlap only the southwestern corner of the site. All three sites are of very poor site integrity and are recommended as ineligible for listing on the NRHP. If the NDSHPO concurs with Atwell's recommendations, the Project would not be required to avoid construction impacts to sites 32LO163, 32LO166, and 32LO167.

During Phase III surveys for the Project, no Sites of Religious and Cultural Significance to Tribes (SRCSTT) were identified.

Badger Wind Project: Unanticipated Discoveries Plan for Cultural Resources and Human Remains

2. TRAINING AND ORIENTATION

The Badger Wind Project Manager (PM) will provide training as part of the pre-construction on-site training program for foremen, company inspectors, and construction supervisors. The Badger Wind Construction Manager (CM) will be responsible for advising construction and contractor personnel on the procedures to follow in the event that an unanticipated discovery is made. The CM will advise all operators of equipment involved in grading, stripping, or trenching activities to take the following steps:

- Stop work immediately if they observe any indications of the presence of cultural materials (artifacts or other human-made features), animal bone, or possible human bone or remains.
- Contact the CM, Orsted On-site personnel as soon as possible.
- Comply with the UDP.
- Treat human remains and artifacts with the utmost dignity and respect.

Badger Wind Project: Unanticipated Discoveries Plan for Cultural Resources and Human Remains

3. CULTURAL RESOURCES

Cultural resources include physical evidence of or places of past human activity dating to the Prehistoric or Historic periods (defined as 50 years old or older). Cultural resources in the area may include archaeological sites (precontact archaeological, historic archaeological, and architectural) and SRCSTT for Tribes who historically inhabited the area. Specifically, cultural resources may include Prehistoric- and Historic-period items such as the following:

- Human remains/bones or graves of antiquity
- Prehistoric stone features (e.g., clustered cobbles or alignments of cobbles and stones)
- Prehistoric projectile points (e.g., arrowheads or spearheads)
- Prehistoric hearths (e.g., circular soot or charcoal stains uncovered in the soil)
- Building remnants or ruins (e.g., farm foundations, brick, or other building materials)
- Densely concentrated and substantial buried Historic-period debris (e.g., bottle/can dumps, farm implements)
- Structures (e.g., barns, bridges)

If a presumed cultural resource is found during construction, personnel shall be instructed to stop work immediately around the find and report any cultural materials to the CM per the notification procedures below. Work will halt in the area surrounding the find until a historic property determination has been made by a qualified archaeologist.

Badger Wind Project: Unanticipated Discoveries Plan for Cultural Resources and Human Remains

4. PROCEDURE WHEN CULTURAL MATERIALS ARE OBSERVED

This section describes the discovery procedures and steps to be taken whenever construction personnel encounter or suspect the presence of archaeological and/or SRCSTT remains vulnerable to project-related construction damage.

A discovery occurs when previously unidentified cultural resource materials are encountered. Discoveries could arise during any phase of project construction. When such discoveries occur, all project personnel are obligated to cease all project activities in the vicinity of the discovery, notify appropriate personnel of the event and circumstances (as outlined below), and await further instruction prior to proceeding with activities that may affect the discovered remains.

Standard avoidance measures that should be established immediately upon encountering suspected cultural resources are described in Section 4.1. The full procedures for addressing discovery situations are described in Section 4.2. Procedures for suspected human remains are described in Section 5. Contact information for relevant parties is provided in Appendix A, and a flowchart of procedure steps is provided in Appendix B.

4.1. Immediate Avoidance Measures to Take When Potential Cultural Materials Are Observed

This section explains the steps construction personnel should follow as soon as anything that could be considered cultural materials (artifacts, features, human remains, etc.) is identified.

- A. Stop work in the immediate vicinity of the potentially cultural materials
 1. Construction personnel will notify the CM of the discovery.
 2. The CM will immediately notify the Orsted On-site personnel
 3. If the Orsted On-site personnel believes that an unanticipated discovery has been made:
 - a. The Orsted On-site personnel will direct all ground-disturbing activities to stop within a minimum of 100 feet of the discovery.
 - b. The Orsted On-site personnel will protect and secure the materials in place by delineating the find with protective flagging, staking, or fencing. Additional protection from the elements may be required and will be determined in consultation with the Consultant Principal Investigator.
 - c. Project activities can continue outside of the delineated unanticipated find area, if possible or applicable.

Badger Wind Project: Unanticipated Discoveries Plan for Cultural Resources and Human Remains

- B. The CM will minimize movement of vehicles and equipment in the area immediately surrounding the discovery.
- C. The Orsted On-site personnel will notify the Environmental Compliance Lead of the initial assessment of the discovery.
- D. The Orsted On-site personnel will immediately notify the Consultant Project Manager and Principal Investigator (see Appendix A for contact information).
- E. If the discovery is suspected to be Tribal/Indigenous, the Consultant Project Manager and Badger Wind Project Manager will coordinate to contact the Tribal Historic Preservation Officer(s) (THPOs). THPOs shall be contacted in all cases of verified human remains.

4.2. Procedure for Assessment of Unanticipated Discoveries

Within 24 hours of being notified of the discovery, the Principal Investigator will mobilize to the Project Area to assess the discovery. The Principal Investigator will follow the steps below:

- A. If the Principal Investigator, or an on-site archaeologist under the direction of the Principal Investigator, determines that the discovery is not a cultural resource, the following steps will be taken:
 - 1. The Principal Investigator or on-site archaeologist will immediately advise the CM, the Orsted On-site personnel, and the Badger Wind PM, all of whom will have the authority to remove the stop-work order.
 - 2. The Principal Investigator will submit a letter report (a summary of the evaluation) that will include photographs of the discovery site to Badger Wind within 10 business days.
- B. If the Principal Investigator or on-site archaeologist determines that the discovery is a cultural resource, the Principal Investigator or on-site archaeologist will immediately advise the Badger Wind PM, the CM, and the Orsted On-site personnel. The protocols for the level of survey and documentation necessary for each unanticipated discovery will vary slightly based on the type of site discovered. Unanticipated discoveries will generally fall into one of four categories, which are listed here in ascending order of significance and potential impact to construction activities: isolated finds, Cultural Heritage Sites, archaeological sites, and human remains or suspected human remains. Specific definitions and protocols for the first three categories are described below. A thorough discussion of the protocol for human remains or suspected human remains is presented in Section 5 of this document.
 - 1. Isolated Finds: An isolated find is a collection of five or fewer artifacts representing an area of very limited past human activity.
 - a. It is not necessary to establish a 100-foot avoidance area around isolated finds, but a temporary avoidance buffer should be defined around the discovery until

Badger Wind Project: Unanticipated Discoveries Plan for Cultural Resources and Human Remains

the resource can be confirmed as an isolated find. Once established the Environmental Compliance Lead will mark the avoidance buffer.

- b. Construction personnel will notify the Orsted On-site personnel to initially assess the find.
 - c. The Orsted On-site personnel will notify the Consultant Principal Investigator to confirm that the resource is an isolated find.
 - d. If confirmed, the Consultant Principal Investigator, or an on-site archaeologist under the direction of the Principal Investigator, will carry out the following tasks:
 - i. Record the location of the find with a GPS unit, photograph the find with a scale, prepare thorough notes describing the find, create a 1:24,000 U.S. Geological Survey topographic map depicting the spatial data collected during recordation, and complete the appropriate North Dakota Site Record form.
 - ii. Rebury the artifacts at a location out of the area of disturbance but as near to the original resource location as possible. This reburial area will be marked and described in the isolated find's site form.
 - iii. Notify the CM once the find's documentation is complete. Construction may then be allowed to resume in the area of the isolate.
2. Cultural Heritage Sites: A Cultural Heritage Site is a traditional cultural site, sacred site, and/or SRCSTT.
- a. The Orsted On-site personnel will establish a 100-foot avoidance area around the site.
 - b. Within 24 hours of being notified of the unanticipated discovery, the Consultant Principal Investigator, or an on-site archaeologist under their direction, will examine the location of the discovery, accompanied by the CM.
 - c. The Consultant Principal Investigator, or an on-site archaeologist under their direction, will carry out the following documentation tasks: record the location of the find with a GPS unit, take overview and detailed photographs (with scales, when appropriate), prepare thorough notes describing the find, and complete the appropriate North Dakota Site Record form.
 - d. If the area is avoidable, a satisfactory avoidance buffer within the construction easement will be determined. If the area cannot be avoided, the Badger Wind PM and CM, and the Consultant Principal Investigator.
 - e. A narrative of the Cultural Heritage Site will be included in the unanticipated discoveries report at the end of the Project.

Badger Wind Project: Unanticipated Discoveries Plan for Cultural Resources and Human Remains

- f. If the Principal Investigator or on-site archaeologist determines that a Cultural Heritage Site is eligible for listing in the NRHP, the Principal Investigator or on-site archaeologist will immediately advise the Badger Wind CM, who will inform the PM and Orsted personnel. The Principal Investigator or on-site archaeologist will also notify the Consultant Project Manager. The Principal Investigator will, in turn, notify the North Dakota State Archaeologist by telephone and will provide written confirmation by email (see contact information in Appendix A).
 - i. If the North Dakota State Archaeologist is unavailable, the Associate Director of the Office of the State Archaeologist will be notified (see contact information in Appendix A).
 - ii. The site will be documented following the protocols for Archaeological Sites (see Section B.3 below)
3. Archaeological Sites: An archaeological site is a location containing five or more artifacts or at least one feature.
 - a. Orsted personnel will establish a 100-foot avoidance area around the site.
 - b. Within 24 hours of being notified of the unanticipated discovery, the Consultant Principal Investigator, or an on-site archaeologist under their direction, will examine the location of the discovery, accompanied by the CM.
 - c. The Principal Investigator or on-site archaeologist should survey and document the site in accordance with the standards laid out in the 2012 North Dakota State Historic Preservation Office Guidelines Manual for Cultural Resource Inventory Projects. This includes documenting the boundary with a GPS unit; photographing the site, artifact(s), and feature(s); completing the appropriate North Dakota Archaeological Site Record form, etc.
 - d. The Principal Investigator or on-site archaeologist will notify the North Dakota State Archaeologist within 24 hours of the discovery and will provide their observations of the cultural material. Notification will include one of the following actions:
 - i. Informing the North Dakota State Archaeologist by telephone why the resource is not significant and requesting concurrence by the North Dakota State Archaeologist that construction can resume, or
 - ii. Informing the North Dakota State Archaeologist about the recommended scope of work for evaluating the significance of the resource and evaluating potential project effects on the resource.
 - e. If additional work is required to evaluate the significance of the resource, a scope of work will be written and submitted to the Badger Wind PM and the North Dakota State Archaeologist within 3 business days of the discovery.

Badger Wind Project: Unanticipated Discoveries Plan for Cultural Resources and Human Remains

- f. If approved by the North Dakota State Archaeologist during telephone consultations, cultural resource investigations may begin.
 - i. The Principal Investigator will invite the North Dakota State Archaeologist to observe the implementation of any proposed work.
 - ii. The Principal Investigator will oversee completion of the evaluation per the agreed-upon scope of work.
 - iii. When the evaluation of the cultural resources is complete, the Principal Investigator will notify the North Dakota State Archaeologist by telephone and discuss the potential significance of the resource.
 - iv. As soon as possible following the field investigation, the Principal Investigator will provide the Badger Wind PM with a written report describing the results of the fieldwork.
 - v. If the resource is believed to be significant and cannot be avoided by construction activities, the Consultant Project Manager and Principal Investigator will prepare a scope of work and proposal for data recovery for submission to the Badger Wind PM and the North Dakota State Archaeologist.
 - vi. If the proposed mitigation measures may be implemented without being affected by construction, the submittal to the North Dakota State Archaeologist will be accompanied by a request for concurrence that construction in the area of the discovery be permitted to resume.
 - vii. If the proposed mitigation measures result in a finding of not significant, and the North Dakota State Archaeologist concurs with these findings, construction in the area of the discovery may be permitted to resume.
4. Treatment of Artifacts
- a. Archaeological artifacts will be treated with the utmost dignity and respect. In the case of Tribal/Indigenous artifacts, the most appropriate course of action for such artifacts will be determined in the course of discussions with the North Dakota State Archaeologist.
 - b. Artifacts recovered during data recovery or mitigation will be handled in accordance with the scope of work approved by the PM and the North Dakota State Archaeologist.
- C. THPO Communication

The THPO will be notified immediately in the event of verified human remains (as described below in Section 5).

Badger Wind Project: Unanticipated Discoveries Plan for Cultural Resources and Human Remains

5. PROCEDURE WHEN HUMAN REMAINS AND/OR POTENTIAL HUMAN SKELETAL MATERIALS ARE OBSERVED

Human remains are the physical remains of a human body or bodies including, but not limited to, bones, teeth, hair, and preserved soft tissues (mummified or otherwise preserved) of an individual. Remains may be articulated or disarticulated bones or teeth. The NDCC Chapter 23-06-27 cites it is a Class C felony to intentionally disturb any human remains. Standard avoidance measures that should be established first are described below

- A. Workers will treat all human remains with dignity and respect.
- B. Construction personnel will immediately stop work in the vicinity of an unanticipated discovery involving potential human remains.
- C. Construction personnel will immediately notify the CM about the find.
- D. The CM will stop all ground-disturbing activities within a minimum of 200 feet of the discovery. They will also take the following steps:
 1. Protect and secure the discovery.
 2. Delineate the area with flagging materials, stakes, or safety fencing
 3. Minimize movement by vehicles and equipment in the immediate vicinity of the discovery.
 4. Immediately notify the Badger Wind PM who will, in turn, immediately notify the designated contacts (see Appendix A for contact information).
- E. Within a minimum of 1 day of the discovery, the Consultant Principal Investigator will mobilize to the Project Area to examine the discovery to determine whether the remains are likely human, whether they have an archaeological association, and whether any archaeological association is aboriginal or non-aboriginal.
 1. If the skeletal remains are determined to be nonhuman and to have no archaeological association or paleontological significance, the archaeological Principal Investigator making the determination will immediately advise the CM, the Consultant Project Manager, and the Badger Wind PM, and construction will be allowed to resume.
 - a. The Project archaeologist will submit a letter report including photographs of the discovery site to Badger Wind within 10 business days.
 2. If the skeletal remains are nonhuman but are associated with an archaeological site, the steps in Section 4.1.B.3 above will be followed.
 3. If the skeletal remains may be human, the Principal Investigator will notify the Badger Wind PM and the Logan or McIntosh County Sheriff's office, depending on which county the discovery is in.

Badger Wind Project: Unanticipated Discoveries Plan for Cultural Resources and Human Remains

- a. The appropriate sheriff will call the North Dakota State Medical Examiner to determine whether the remains are associated with a crime scene.
 - b. If the remains are precontact or historic, the Principal Investigator will contact the North Dakota State Archaeologist and the proper THPO (see Appendix A for contact information).
- F. Following stakeholder consultation, if the human remains are removed by the Logan or McIntosh County Sheriff's office, State Medical Examiner, or North Dakota State Archaeologist, construction work will not resume until permission is granted in writing by the North Dakota State Archaeologist and/or appropriate law enforcement agencies.

Badger Wind Project: Unanticipated Discoveries Plan for Cultural Resources and Human Remains

APPENDIX A

NORTH DAKOTA CONTACT LISTS

Badger Wind Project: Unanticipated Discoveries Plan for Cultural Resources and Human Remains

Contact Organization	Address	Telephone Number
Project Contacts		
Subheading Level 2		
NAME- Role	Address, Email	Office and Cell
Table cell left aligned	Centered	Right
Table cell left aligned	Centered	Right
Table cell left aligned	Centered	Right
Table cell left aligned	Centered	Right
State and County Contacts		
Subheading Level 2		
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Table cell left aligned	Centered	Right
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Badger Wind Project: Unanticipated Discoveries Plan for Cultural Resources and Human Remains

APPENDIX B

UNANTICIPATED DISCOVERY FLOW CHART

Badger Wind Project: Unanticipated Discoveries Plan for Cultural Resources and Human Remains

