

Exhibit 4

Class III Intensive Cultural Resource Inventory Report

MANUSCRIPT DATA RECORD FORM

1. Manuscript Number: [SHPO assigns]
2. SHSND/SHPO Reference #:
3. Author(s): Angela Julin and Adam Harris.
4. Title: A Class III Intensive Cultural Resource Inventory of the Harmony Storage, LLC Project
5. Report Date: 6/18/26
6. Number of Pages: 51
7. Type – I, T, E, B, O: I
I=Inventory; T=Formal Testing; E=Excavation; B=Built Only (report includes architecture only); O=Other
8. List formally tested or excavated sites (not probes):
9. Acres: 74.4
10. List the legal description* and study unit. For study unit assignment, use the township tables in the *State Plan*, http://history.nd.gov/hp/stateplan_arch.html. Study Units: LM, CB, KN, HE, SM, GA, JA, GR, NR, SR, SO, SH, YE

**For inventory, formal testing and excavation projects, list the CLASS II or III legal locations only.*

<u>County</u>	<u>Township</u>	<u>Range</u>	<u>Section</u>	<u>Study Unit</u>
Cass	140N	51W	12	SH

Acceptance of a report does not constitute concurrence with the recommendations stated within the report and is not a notice to proceed with the project. Presence of a manuscript in the SHSND/SHPO collections is not concurrence or agreement with the recommendations or determinations within that report.



August 7, 2026

Dr. Andrew Clark
Archaeology and Historic Preservation Department
State Historical Society of North Dakota
612 East Boulevard Avenue
Bismarck, North Dakota 58505-0830

RE: Project Review Request - Harmony Storage Project, Cass County, North Dakota

Dear Dr. Clark,

Harmony Storage, LLC, a subsidiary of Geronimo Power, proposes to construct a 200-megawatt (mW) Battery Energy Storage System (BESS) facility in Cass County, North Dakota. The Harmony Storage, LLC Project (Project) is located in Township 140N, Range 51W, Section 12 of Harmony Township. The Project Area, hereafter referred to as the Area of Potential Effect (APE), encompasses 74.4 acres.

The Project falls under the jurisdiction of the North Dakota Public Service Commission (PSC) and must comply with North Dakota Century Code (49-22-09), therefore Harmony Storage, LLC contracted Stantec Consulting Services Inc. (Stantec) to conduct a Class I literature review and Class III intensive cultural resource inventory of the APE.

The Project will consist of a 200-megawatt (MW) battery energy storage system (BESS). The Project also includes associated inverters, transformers, underground cables, and other ancillary facilities, such as security fencing, gravel access roads, stormwater facilities and a Battery Management System that will all be located on a gravel pad. The Project will connect to the Harmony Solar 230-kilovolt (kV) collector substation via underground 34.5 kV collection lines. Minimal pre-construction grading is expected due to the flat topography of the APE. Subsurface excavations will be limited to providing a suitable base for the installation of the BESS gravel pad and container foundations and underground electric lines. The depth of construction is anticipated to be up to 15 feet below ground surface.

The Class I literature review conducted prior to the Class III intensive cultural resource inventory identified no previously recorded archaeological or architectural sites or site leads within the APE. One newly identified historic cultural material scatter associated with an extant farmstead (32CS5427) was identified. Stantec recommends the site as unevaluated for the National Register of Historic Places (NRHP). Site 32CS5427 will be avoided during Project activities; therefore, Stantec recommends that no significant sites will be affected by the Project.

Harmony Storage, LLC agrees with Stantec's recommendations and respectfully requests your response within 30 days of receipt of this letter.



If you have any questions or would like any additional information, please contact me at 952-988-9000 or at amohammad@geronimopower.com. I am happy to discuss any questions that you may have about the Project.

Sincerely,

A handwritten signature in black ink that reads "Alia Mohammad".

Alia Mohammad
Senior Permitting Specialist

A Class III Intensive Cultural Resource Inventory of the Harmony Storage, LLC Project

Cass County, North Dakota



Stantec Consulting Services Inc.

Prepared for:
Harmony Storage, LLC

Date:
June 18, 2026

Prepared by:
Angela Julin, MA, RPA, Principal Investigator
Adam Harris

Project/File:
193711746

Disclaimer

The conclusions in the Report titled A Class III Intensive Cultural Resource Inventory of the Harmony Storage, LLC Project are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

Stantec has assumed all information received from Harmony Storage, LLC (the "Client") and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

This Report is intended solely for use by the Client in accordance with Stantec's contract with the Client. While the Report may be provided by the Client to applicable authorities having jurisdiction and to other third parties in connection with the project, Stantec disclaims any legal duty based upon warranty, reliance or any other theory to any third party, and will not be liable to such third party for any damages or losses of any kind that may result.

Prepared by:



Signature

Adam Harris

Reviewed by:



Printed Name

Signature

Claire Witt

Printed Name

Approved by:



Signature

Angelina Perrotti, Ph.D.

Printed Name

Table of Contents

Abstract	1
Acronyms / Abbreviations	2
1 Introduction	3
2 Area of Potential Effect	4
3 Environmental Context	5
3.1 Topography	5
3.2 Hydrology	5
3.3 Geology	6
3.4 Soils	6
3.5 Land Use and Vegetation	7
4 Results of the Literature Review	8
4.1 Paleoindian Period (9,500 to 5,500 BCE)	8
4.2 Plains Archaic Period (5,500 to 400 BCE)	8
4.3 Plains Woodland Period (400 BCE to AD 1200)	9
4.4 Plains Village Period (AD 1200 to 1780)	10
4.5 Equestrian/Fur Trade (1780 to 1880)	11
4.6 Cass County	12
4.7 Historic Map and Aerial Review	14
5 File Search Results	15
5.1 Previously Conducted Cultural Resource Inventories	15
5.2 Previously Recorded Archaeological Sites and Archaeological Site Leads	16
5.3 Previously Recorded Burial Sites and Cemeteries	16
5.4 Previously Identified Architectural Sites	16
6 Research Goals	17
7 Survey Methodology	18
8 Archaeological Survey Results	19
8.1 Field Site STN-AJ-08	20
9 Research Analysis	23
11 Recommendations	24
12 References Cited	24

List of Tables

Table 1. Soil Map Units Within the APE.	7
Table 2. Previously Conducted Cultural Resource Inventories within the Study Area.	15
Table 3. Previously Recorded Archaeological Sites and Site Leads within the Study Area.	16
Table 4. Site 32CS5427 Shovel Test Profile.	22

List of Appendices

Appendix A Figures

Appendix B Unanticipated Discovery Plan



Abstract

Harmony Storage, LLC, a subsidiary of Geronimo Power, proposes to construct a 200-megawatt (mW) Battery Energy Storage System (BESS) facility in Cass County, North Dakota. The Harmony Storage, LLC Project (Project) is located in Township 140N, Range 51W, Section 12 of Harmony Township. The Project Area, hereafter referred to as the Area of Potential Effect (APE) encompasses 74.4 acres.

The Project falls under the jurisdiction of the North Dakota Public Service Commission (PSC) and must comply with North Dakota Century Code (49-22-09), therefore Harmony Storage, LLC contracted Stantec Consulting Services Inc. (Stantec) to conduct a Class III intensive cultural resource inventory of the APE.

The Class I literature review conducted prior to the Class III intensive cultural resource inventory identified no previously recorded archaeological or architectural sites or site leads within the APE. One newly identified historic cultural material scatter associated with an extant farmstead (32CS5427) was identified. Stantec recommends the site as unevaluated for the National Register of Historic Places (NRHP). Site 32CS5427 will be avoided during Project activities; therefore, Stantec recommends a finding of no historic properties for the Project as planned.

Stantec acknowledges the possibility that presently undiscovered archaeological sites may exist in APE. Should an unanticipated discovery arise, the Project coordinator or construction personnel should immediately follow the process outlined in the attached Unanticipated Discovery Plan (Appendix B).



Acronyms / Abbreviations

Acronym / Abbreviation	Full Name
APE	Area of Potential Effect
BCE	Before common era
BESS	Battery Energy Storage System
gentie	Generation tie-line
GLO	General Land Office
GSV	Ground surface visibility
kV	Kilovolt
m	meter
mW	Megawatt
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
Project	Harmony Storage, LLC Project
PSC	North Dakota Public Service Commission
SHPO	North Dakota State Historic Preservation Office
SHSND	State Historical Society of North Dakota
Stantec	Stantec Consulting Services Inc.
SU	North Dakota Archaeological Study Unit
USGS	United States Geological Survey



1 Introduction

Harmony Storage, LLC, a subsidiary of Geronimo Power, proposes to construct a 200-megawatt (mW) Battery Energy Storage System (BESS) facility in Cass County, North Dakota. The Harmony Storage, LLC Project (Project) is located in Township 140N, Range 51W, Section 12 of Harmony Township (Figure 1 in Appendix A). The Project Area, hereafter referred to as the Area of Potential Effect (APE), encompasses 74.4 acres.

The Project falls under the jurisdiction of the North Dakota Public Service Commission (PSC) and must comply with North Dakota Century Code (49-22-09), therefore Harmony Storage, LLC contracted Stantec Consulting Services Inc. (Stantec) to conduct a Class III intensive cultural resource inventory of the APE.

The proposed Project will consist of a 200mW BESS facility and associated gravel access roads and stormwater facilities enclosed by an 8-foot security fence. A 138 kilovolt (kV) generation tie-line (gentie) will also be constructed to connect the Project to the existing Northern States Power Bison Substation. Minimal pre-construction grading is expected due to the flat topography of the APE. Subsurface excavations will be limited to those required for the BESS container foundations and underground electric lines. Maximum excavation depths will range from 4 to 6 feet. Gentie structures will be either direct embed steel monopoles or steel monopoles on concrete foundations. Excavations for these structures will generally be less than 20 feet deep.

Stantec conducted a Class III intensive cultural resource inventory of the APE on May 5 and 6, 2026. The archaeological survey team consisted of Angela Julin and Claire Witt. The Class III intensive cultural resource inventory followed federal and state guidelines for conducting cultural resources investigations, including the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 Federal Register 44716-44740; National Park Service 1983) and the State Historical Society of North Dakota (SHSND)/North Dakota State Historic Preservation Office (SHPO) Guidelines (SHSND 2026). Angela Julin, MA, RPA, served as the Principal Investigator for the Project. Ms. Julin exceeds the Secretary of the Interior's Professional Qualification Standards, as defined in 36 of Federal Regulations Section 61.



2 Area of Potential Effect

The APE for the Project encompasses the 74.4-acre Project Area within Section 12, T140N, R51W. The APE includes the proposed BESS facility footprint, gentie line corridor, access roads, stormwater facilities, and construction disturbance envelope. Direct effects to cultural resources will result from grading, foundation excavation, trenching for underground electric lines, and structure foundation excavation, with maximum excavation depths ranging from 4 to 6 feet for BESS containers and underground lines and up to 20 feet for gentie structure foundations. The APE for archaeological resources is defined as the surface and subsurface footprint of the construction activities. The APE for architectural resources extends to a 0.25-mile buffer around the APE to account for potential indirect visual or auditory effects to historic structures. For the purposes of the Class I literature search, Stantec defined a Study Area extending to a 1-mile buffer around the APE for archaeological resources and a 0.25-mile buffer for architectural resources, consistent with SHPO guidance for evaluating the cultural and historical context of the APE.



3 Environmental Context

North Dakota divides the state into archaeological components, referred to as Study Units (SU), based on the associated drainage basin (SHSND 2021). The Project falls within the Sheyenne River SU, which encompasses the eastern portion of North Dakota and incorporates the Devils Lake basin. At a finer scale, the APE occupies the Glacial Lake Agassiz Basin subregion of the Lake Agassiz Plain ecoregion, characterized by fine-textured glaciolacustrine soils, low relief, and poor drainage (Bryce et al. 1996). Such settings are generally associated with low potential for surface or near-surface precontact archaeological resources due to seasonal saturation, post-glacial lacustrine sedimentation which has buried Holocene-age land surfaces, and absence of locally available high-quality toolstone. Precontact archaeological resources in the Project vicinity are most likely to occur along the better-drained margins of the Sheyenne River and Rush River drainages or in deeply buried Holocene alluvial contexts. The APE itself, located on poorly drained Fargo silty clay and Hegne-Fargo silty clay loam soils on flat terrain over 1 mile from the nearest perennial drainage, presents low potential for precontact archaeological resources.

3.1 Topography

The Sheyenne River SU occupies the Drift Prairie physiographic zone within the broader Central Lowlands physiographic province (Clayton et al. 1980a). Late Wisconsinan glacial activity shaped the Drift Prairie into a glaciated plain marked by distinctive landforms resulting from ice advance and retreat ca. 12,000 to 10,000 years ago (Clayton et al. 1980b). Continental glaciation created a landscape of gently rolling hills interspersed with low ridges and swales characteristic of ground moraine deposition (Bluemle et al. 2004; Clayton and Moran 1982). The region contains numerous prairie pothole lakes and wetlands, depressional features formed through glacial scour and the subsequent melting of buried ice blocks (Winter and Rosenberry 1995). These potholes represent kettles created by stagnant ice that remained after the main ice sheet retreated, subsequently filling with water from snowmelt and precipitation (Sloan 1972).

Following deglaciation, Glacial Lake Agassiz formed in front of the retreating Laurentide Ice Sheet ca. 11,700 GLO and Saskatchewan (Fisher 2003; Teller and Clayton 1983). At its maximum extent, Lake Agassiz was among the largest proglacial lakes in North America, leaving behind extensive deposits of glaciolacustrine sediments across the Red River Valley and adjacent lowlands (Bluemle 1991; Upham 1895). The lake drained catastrophically through multiple outlets over its ca. 2,700-year existence in North Dakota, with final drainage occurring around 9,000 years ago (Kehew and Teller 1994; Teller et al. 2002). The APE developed within this post-glacial terrain, with fluvial processes subsequently reworking and redistributing glacial and glaciolacustrine materials into the alluvial deposits observed within the APE today.

3.2 Hydrology

The APE lies within the Rush River-Sheyenne River watershed, specifically encompassing portions of the Outlet Rush River subwatershed. The Lower Branch Rush River lies approximately 1 mile to the southwest of the APE as an intermittent stream, exhibiting seasonal flow patterns typical of prairie streams in the Drift Prairie region, while the Rush River lies 0.8 miles to the northeast of the APE (North Dakota Geographic



Information Systems 2026). The APE is bound by field-delineated wetlands on both the east and west borders.

Historical changes to the Rush River channel configuration have occurred since Euro-American settlement in the late nineteenth and early twentieth centuries. When comparing modern aerial imagery to the original General Land Office (GLO) survey map, the Rush River did not follow its current meandering course at the time of initial Euro-American settlement, indicating substantial channel modifications over the past century. Agricultural development, including drainage improvements, channelization projects, and the installation of drainage tiles and ditches, has altered natural flow patterns and channel morphology throughout the watershed.

3.3 Geology

The APE exhibits Quaternary glacial and post-glacial deposits overlying Cretaceous marine bedrock. Surface geology consists of Pleistocene Coleharbor Group glacial deposits overlain by Holocene Oahe Formation alluvium (Bluemle 1971; Clayton et al. 1980b). Bedrock consists of Lower to Upper Cretaceous marine shales and sandstones, including the Skull Creek, Newcastle, Mowry, and Belle Fourche Formations (McCloskey 1995).

Local toolstone availability was limited, as Cretaceous bedrock provided no workable lithic materials and Pleistocene glacial deposits contained primarily low-quality metamorphic and igneous cobbles transported from Canadian Shield sources (Bluemle et al. 2004). The nearest high-quality toolstone source, Knife River Flint quarries, lies approximately 200 kilometers west in Dunn and Mercer Counties (Ahler 1986; Kristensen et al. 2018). Precontact populations likely relied on glacially transported cobbles from local lag gravels or acquired higher-quality materials through trade or direct procurement (Bakken 2011). Archaeological materials within the APE may be buried in Holocene alluvial sediments or exposed through deflation and channel migration along the intermittent Rush River (Hoganson and Murphy 2003).

3.4 Soils

Stantec accessed the Natural Resources Conservation Service (NRCS) web soil survey tool to determine soil types within the APE (NRCS 2026; Table 1). The APE contains fine-textured soils developed in glaciolacustrine and alluvial deposits associated with the lower Rush River valley. Fargo silty clay dominates the APE, comprising 87 percent of the area and occurring on nearly level ground with 0 to 1 percent slopes. Hegne-Fargo silty clay loams account for 9 percent of the APE, also occurring on nearly level terrain with 0 to 1 percent slopes. The mapped soils exhibit poor to somewhat poor drainage characteristics typical of low-lying floodplain and terrace positions within the region. Mapped soils formed in glacial lake and river deposits (NRCS 2026).



Table 1. Soil Map Units Within the APE.

Map Unit	Drainage Class	Landform	Percent of APE
Fargo silty clay, 0 to 1 percent slopes	Poorly drained	Flats	87
Hegne-Fargo silty clay loams, 0 to 1 percent slopes	Poorly drained	Flats	8
Overly-Bearden silt loams, 0 to 2 percent slopes	Somewhat poorly drained	Flats	3
Fargo-Hegne silty clays, 0 to 1 percent slopes	Poorly drained	Flats	2

3.5 Land Use and Vegetation

The Sheyenne River SU features a mix of tallgrass prairie and riparian woodlands, with dominant grasses like needlegrass and slender wheatgrass, alongside shrubs such as sage, wolfberry, chokecherry, plum rose, and currant. Forested zones include American elm, green ash, burr oak, and basswood, while wetlands support marsh vegetation. Historically, the fauna included bison, elk, pronghorn antelope, and wolves, but today it is home to white-tailed deer, coyotes, foxes, jackrabbits, raccoons, mink, and muskrats. Birdlife is abundant, with raptors, songbirds, game birds like wild turkey and grouse, and migratory waterfowl. Aquatic ecosystems host northern pike, perch, and freshwater mussels, making this region a diverse prairie-forest-wetland mosaic (SHSND 2021). Based on a review of aerial images, land use within the APE has been primarily cultivated, with a portion consisting of a farmstead from 1941 to 2003 and entirely cultivated from 2003 to the present (North Dakota Department of Water Resources 2026).



4 Results of the Literature Review

The Class I literature review compiled and synthesized published and unpublished sources, historic maps, aerial imagery, environmental data, and SHSND records to develop the cultural and historical context for the APE and to evaluate the potential for cultural resources within the APE prior to fieldwork. Sources consulted included the North Dakota Geographic Information Systems database (North Dakota Geographic Information Systems 2026), historic GLO plat maps and patent records (GLO 1872, 1889), historic Cass County atlases (D.W. Ensign & Co. 1893; R.L. Polk & Co. 1906; Thomas O. Nelson Co. 1951), historic United States Geological Survey (USGS) topographic maps (USGS 1897, 1961, 2011), historic aerial imagery from 1941 through 2026 (North Dakota Department of Water Resources 2026), the SHSND archaeological component of the State Comprehensive Plan (SHSND 2021), and sources on the cultural history of the Sheyenne River SU and Cass County.

The cultural and historical context for the APE is presented below. Cass County and the Project vicinity occupy a landscape with documented occupation spanning the Paleoindian period through the modern era, with the most archaeologically visible occupations dating to the Late Plains Woodland, Northeastern Plains Village, and Equestrian/Fur Trade periods. Euro-American settlement intensified after the formal organization of Cass County in 1873, driven by the arrival of the Northern Pacific Railroad and the Bonanza farming era of the 1870s through the early twentieth century.

4.1 Paleoindian Period (9,500 to 5,500 BCE)

The Paleoindian period marks the earliest confirmed human occupation in North Dakota, spanning ca. 9,500 to 5,500 Before Common Era (BCE). This era begins with the terminal Pleistocene and continues into the early Holocene, a time of rapid climatic change, deglaciation, and major ecological transitions that shaped early settlement opportunities. Paleoindian groups were highly mobile hunter-gatherers focused primarily on hunting large mammals. Early occupations targeted Pleistocene megafauna such as mammoth and camel, shifting later to early Holocene bison forms. Subsistence included plant gathering, though plant remains are poorly documented (SHSND 2021).

Early Paleoindian occupation occurred as retreating glaciers exposed new terrain. Much of the state east of the Missouri Coteau remained covered by spruce–aspen woodland, dotted with meltwater channels, lakes, and marshes, conditions unsuitable for the large herds favored by early hunters. Critical Paleoindian habitation sites are often destroyed or deeply buried. Many intact sites are now encapsulated within the Leonard paleosols of the Aggie Brown Submember of the Lower Member of the Oahe Formation, buried beneath later alluvial and aeolian sediments. Early Holocene surfaces may lie tens of meters below modern floodplains in the Sheyenne River valley. Evidence of Paleoindian occupation is limited primarily to isolated projectile point finds in private collections, including Folsom, Agate Basin, Hell Gap, and Browns Valley types (SHSND 2021).

4.2 Plains Archaic Period (5,500 to 400 BCE)

The Plains Archaic period in the Sheyenne River SU represents a long continuum of hunting-and-gathering adaptations to Holocene environmental change across the Northeastern Plains. Beginning after the terminal



Pleistocene, the period is marked by shifting climatic regimes that alternated between dry and wet conditions. These oscillations influenced river behavior and landform stability within the Sheyenne drainage, affecting both site preservation and settlement opportunities. The Sheyenne valley contains deeply stratified Holocene deposits and terrace systems in which some Archaic-age components are preserved beneath later alluvium, though many early land surfaces may have been removed or buried due to mid-Holocene erosion and sedimentation processes (SHSND 2021).

Early Plains Archaic occupations (ca. 5500 to 3300 BCE), including Logan Creek-Mummy Cave complex materials, are possible but sparsely documented in the Sheyenne SU due to geomorphic constraints. The broader Plains record demonstrates the use of large side-notched dart points with ground bases and notches, and similar artifacts have been found in eastern North Dakota, indicating that Early Archaic groups likely utilized the wooded margins and prairie-transition environments of the Sheyenne basin. During much of the early Holocene, the Sheyenne River valley likely carried glacial meltwater and later accumulated thick alluvial fills, meaning early components may lie deeply buried and difficult to access archaeologically (SHSND 2021).

More substantial evidence for Plains Archaic occupations appears in the Middle and Late Plains Archaic periods (ca. 3300 to 1000 BCE). Point types such as Oxbow, McKean Lanceolate, Duncan, Hanna, and especially Pelican Lake occur in eastern North Dakota and the Sheyenne drainage. Oxbow occupations (ca. 3300 to 2500 BCE) are widely distributed across the Northern Plains and occur in both plains and forest-edge settings, reflecting flexible subsistence strategies focused on bison, deer, and small game. Pelican Lake components (ca. 1800 to 1000 BCE) are particularly relevant to eastern North Dakota, where both large and small corner-notched point variants have been documented in Late Archaic and early Plains Woodland contexts. The presence of small corner-notched points in the Sheyenne SU aligns with broader regional trends suggesting experimentation with fast, lightweight dart technology prior to the widespread adoption of the bow and arrow (SHSND 2021).

Settlement behavior during the Plains Archaic in the Sheyenne SU was likely highly mobile, with repeated short-term use of terraces, upland margins, and ecotonal zones. Site types probably included hunting stands, faunal processing areas, and temporary field camps positioned along the Sheyenne River and its tributaries. The valley's mosaic of prairie, parkland, riparian woodland, and wetlands would have offered diverse subsistence opportunities. Lithic evidence suggests that use of more locally available cherts and silicified sediments increased over time, marking a shift toward more localized procurement strategies compared to the long-distance interaction networks of the Paleoindian period (SHSND 2021).

4.3 Plains Woodland Period (400 BCE to AD 1200)

The Plains Woodland period in the Sheyenne River SU represents a major cultural transition from earlier Archaic hunting-and-gathering economies toward more diverse subsistence systems incorporating early gardening, ceramic production, and mound-building practices. In North Dakota, the Plains Woodland spans roughly 400 BCE to AD 1200, encompassing Early, Middle, and Late Plains Woodland developments. Woodland adaptations in the Sheyenne SU were strongly shaped by the valley's ecological diversity, including riparian forests, prairie margins, and extensive wetlands. These environments provided a broad resource base that supported increasingly settled lifeways. The Sheyenne drainage also contains numerous earthen



mounds which are a hallmark of Middle and Late Plains Woodland ceremonial traditions and appear in North Dakota as early as AD 500 to 600 (SHSND 2021).

Early Plains Woodland components in eastern North Dakota are rare but well represented by the Naze site in the James River valley, which provides a model for similar early occupations in the Sheyenne SU. Early Woodland ceramics resemble Black Sand Tradition wares from the Prairie Peninsula and are associated with small corner-notched projectile points that indicate continued atlatl-based hunting systems. Botanical remains from these early contexts include chenopod and possibly marsh elder, suggesting that indigenous seed crops were being tended or encouraged, representing incipient gardening. Given environmental similarities between the James and Sheyenne River basins in the Northeastern Plains, it is likely that Early Woodland forager-gardeners used similar strategies within the Sheyenne valley, although direct evidence is limited (SHSND 2021).

Middle Plains Woodland occupations (ca. 100 BCE to AD 600) are better represented across eastern North Dakota and are important for understanding the Sheyenne SU. During this period, Besant/Sonota and Laurel influences appear, reflecting large regional interaction networks extending across the Northeastern Plains and adjacent Woodlands. Sonota components are associated with conoidal ceramics, Besant side-notched projectile points, and sometimes elaborate burial mound ceremonialism; Laurel components contribute distinctive ceramic decorative traditions. The Sheyenne River valley likely participated in these interaction spheres, as Middle Plains Woodland groups in the region utilized Knife River flint, obsidian, and copper obtained through long-distance exchange networks. Middle Woodland communities may also have practiced limited horticulture, taking advantage of the valley's moist soils and sheltered bottomlands (SHSND 2021).

Late Plains Woodland occupations (ca. AD 600 to AD 1200) are prominent in the Sheyenne SU, especially because of the presence of mounds and the Sandy Lake, Blackduck, and Avonlea ceramic and projectile point traditions. Sandy Lake ware, characterized by fabric-impressed or cord-marked exteriors and globular vessel forms, is common in eastern North Dakota and is associated with Late Woodland forager-gardeners and protohistoric Middle Dakota Sioux and Assiniboiné groups. Importantly, excavations at the Shea site (32CS101) within the Sheyenne SU provide direct evidence of a Late Woodland community that practiced a mixed subsistence strategy involving maize horticulture, wild plant use, and bison hunting, and that occupied a small, fortified upland settlement. Shea yielded both Plains Woodland ceramics (Sandy Lake) and Plains Village wares, demonstrating cultural blending during the later precontact centuries (SHSND 2021).

4.4 Plains Village Period (AD 1200 to 1780)

The Plains Village period in North Dakota spans ca. AD 1200 to 1780, marking the emergence of settled horticultural-hunter-gatherer communities across the Plains. Although the heart of Plains Village development is in the Middle Missouri subarea, where large fortified earthlodge towns proliferated, the Sheyenne River Study Unit represents the Northeastern Plains Village expression of this broader cultural tradition. In contrast to the large, dense settlements of the Missouri River trench, Plains Village populations in the Sheyenne basin lived in smaller, semi-sedentary horticultural villages, often positioned along river terraces and upland margins. Environmental conditions during the Neo-Atlantic climatic episode (warmer and moister than present) supported the expansion of maize horticulture into eastern North Dakota, creating favorable conditions for Village lifeways to take hold (SHSND 2021).



The most diagnostic cultural markers of the Northeastern Plains Village complex include Buchanan Flared Rim ware, associated with small to medium globular jars possessing flared rims, trailed decorations, and smoothed or cord-roughened bodies. These ceramics are closely tied to the James and Sheyenne River drainages and show affinities with Cambria and Middle Mississippian-influenced technologies. Additional wares such as Blackduck, Sandy Lake, and a variety of unclassified S-rim and recurved forms occur at Sheyenne SU sites, reflecting the region's position at the intersection of Plains and Woodland cultural spheres. Lithic assemblages include high frequencies of Knife River flint, as well as Catlinite and other nonlocal materials, indicating sustained participation in regional trade networks (SHSND 2021).

The Shea site (32CS101) represents the most important Plains Village-related locality in the Sheyenne SU. Excavations revealed a small, fortified late prehistoric settlement with both Plains Woodland and Plains Village ceramics, demonstrating cultural blending during the transition between these periods. Shea provides clear evidence of a mixed subsistence economy involving maize horticulture, wild plant acquisition, and bison hunting. The site produced nearly equal amounts of Sandy Lake (Late Woodland) and Northeastern Plains Village wares, including vessels showing combined decorative traits and some Oneota-like elements. Such ceramic hybridity, along with maize remains and architectural features, positions Shea within the Northeastern Plains Village tradition, specifically within what has been termed the Shea phase (ca. AD 1450 to 1550; SHSND 2021).

Settlement behavior in the Sheyenne SU during the Plains Village period likely included semi-sedentary village occupations, seasonal logistical forays into bison-rich prairie zones, and continued use of older Woodland-era mound landscapes. Village sites were generally smaller and less permanently occupied compared to those in the Missouri Valley, reflecting a more flexible horticultural adaptation dependent on both riverine soils and mixed prairie resources. Many Plains Village groups in this region maintained strong hunting orientations, with horticulture contributing a significant but not exclusive portion of the diet. Imported ceramics, lithics, and marine shell attest to wide-ranging exchange networks, while fortified settlements such as Shea suggest periods of social stress or intergroup competition (SHSND 2021).

4.5 Equestrian/Fur Trade (1780 to 1880)

The Equestrian/Fur Trade period marks the transition from late prehistoric lifeways to the protohistoric era, when Indigenous societies experienced major social, economic, and technological change due to the introduction of European trade goods and, later, the horse. European items began arriving on the Northern Plains by the mid-1600s, initially through long-distance exchange networks connected to Hudson Bay trading posts. Only small quantities reached the region at first, but by the late 1600s and early 1700s, the north-south flow of materials including metal tools, firearms components, beads, and copper alloys had begun influencing groups living in and around the Sheyenne valley. Written records remain sparse until the late 1700s, and much of this period is understood archaeologically through diagnostic trade goods and changing settlement and subsistence patterns (SHSND 2021).

Horses reached the Northern Plains somewhat later, becoming established in the region around AD 1720, after spreading northward from Spanish-controlled areas. Their adoption radically transformed hunting, mobility, and intergroup relations. Compared to dog-powered transport, horses increased the efficiency of bison procurement, expanded the scale of mobility, and enabled groups to incorporate large territories into



seasonal rounds. These changes affected all societies across the Plains, including populations occupying the Sheyenne SU. Ethnographic and archaeological indicators suggest that this shift encouraged more tribally organized sociopolitical structures, replacing earlier band-level organization typical of pre-horse hunter-gatherers (SHSND 2021).

In the Sheyenne River basin, the archaeological visibility of the Equestrian period is strongly connected to Late Plains Woodland and Northeastern Plains Village groups who persisted into protohistoric times. Sandy Lake and Blackduck-affiliated peoples, including ancestors of the Middle Dakota (Yanktonai) and Assiniboine, continued to occupy or traverse the region during this period. Sites in the Sheyenne SU from the latest prehistoric centuries, such as the Shea site, already reflected a mixed subsistence base of maize horticulture, wild plant use, and bison hunting, and these economic foundations made the groups in this area well-positioned to incorporate horse-powered hunting and expanded mobility when horses became available (SHSND 2021).

4.6 Cass County

Euro-American activity in what would become Cass County began during the fur-trade era, when traders, missionaries, and military interests entered the Red River Valley. Prior to formal settlement, the region was shaped by interactions among fur traders operating under the Hudson's Bay Company, Catholic missionaries, and military personnel, including those stationed at Fort Abercrombie, an installation strategically positioned along the Red River trade corridor established in 1858. These early Euro-American entrants used the riverine landscape, including the lower Sheyenne basin, as a transportation and communication route linking the Northern Plains to Canadian trading networks. Their presence laid the groundwork for later agricultural and urban settlement, even as the area remained a contested cultural landscape into the early 1860s (White 2024).

Large-scale Euro-American settlement accelerated after the Civil War and especially with the arrival of the Northern Pacific Railroad, which acted as a catalyst for the founding and rise of Fargo, the county's principal city and administrative center. Cass County was formally defined by the Dakota Territory legislature on January 4, 1873, and organized later that year on October 27, 1873, with Fargo designated as the county seat. The county was named for George Washington Cass, president of the Northern Pacific Railway, underscoring the foundational role of rail transport in shaping Euro-American land use, agricultural expansion, and town creation throughout the region. As railroad corridors expanded, farming communities developed both along the Red River and inland toward tributaries such as the Sheyenne River, where fertile soils supported grain cultivation and drew homesteaders into the basin (White 2024).

The early 1870s saw the introduction of large-scale, investor-owned wheat enterprises that operated across Minnesota and the Dakota Territory. Known as Bonanza farms, their rapid growth was enabled by unique geological conditions in the Red River Valley, the land-access provisions of the Homestead Act of 1862, and the Northern Pacific Railway's post-1873 land liquidation, which allowed investors to acquire enormous acreage at highly discounted rates. These farms leveraged emerging agricultural technologies, including roller-mill flour processing, mechanized seeding and harvesting equipment, and steam-powered threshing systems, to optimize large-volume wheat production. Operational models typically involved absentee ownership supported by professional managers and seasonal labor crews, with highly standardized



processes, large equipment fleets, and centralized control structures. Early investors included George Washington Cass and Benjamin Cheney, who, along with farm manager Oliver Dalrymple, owned over 70,000 acres in Cass County. Despite initial profitability, bonanza farms faced declining viability by the early 20th century due to soil depletion from continuous wheat planting, global wheat price competition, labor shortages, and rising land valuations. By 1920, most Bonanza farms had been subdivided into smaller family-run units (Cameron 2015).

The late nineteenth century was a period of rapid transformation, sometimes referred to as the Great Dakota Boom. Railroad expansion, technological improvements in wheat milling, and aggressive land promotion opened the prairie to migration, enabling the rise of Bonanza wheat farms, new towns, and widespread Euro-American agricultural settlement. Tens of thousands of newcomers, many from Norway, Canada, Germany, and the eastern United States, claimed land through the Homestead, Pre-emption, and Timber Culture acts, rapidly transforming the grassland frontier into a wheat-producing region marked by farms, grain elevators, and expanding transportation networks. The boom reshaped the physical and cultural landscape, intensified competition over Indigenous lands, and created lasting patterns of settlement and land use that defined early North Dakota (Robinson 1966).

Throughout the late nineteenth century, Cass County became one of the most economically productive and demographically dynamic areas of the state. The growth of Fargo and associated agricultural infrastructure transformed the regional landscape, tying Cass County's economy to national grain markets and reinforcing the Sheyenne basin's role as an agricultural hinterland. The county quickly rose to prominence and remains today the most populous county in North Dakota, containing over one-quarter of the state's population (White 2024).

Harmony Township, which comprises 34.4 square miles, is surrounded by the townships of Casselton to the west, Durbin to the south, Raymond to the east, and Rush River and Berkin Townships to the north. Harmony Township had a population of 86 in 2020 (United States Census Bureau 2026).



4.7 Historic Map and Aerial Review

No historic features are depicted in the APE in the original GLO plat map from 1872 (Figure 2 in Appendix A; GLO 1872). An unnamed creek flows south through the APE from a large wetland to the north on the 1872 GLO map. The APE was originally patented to Joseph Azzure (GLO 1889). Azzure's patent was provided under an Indian Allotment via the "Chippewas Treaty Patent". By 1893, landownership had changed to the Fowler Brothers (D. W. Ensign & Co. 1893). By 1906, the APE was owned by Miller, Chaffee, Reed, and Co. (R. L. Polk & Co. 1906). Herbert Fuller Chaffee, manager of the Miller, Chaffee, Reed Company, perished in the Titanic in 1912 (Titanic Inquiry Project 2017).

No structures are depicted within the APE on the reviewed 1893 and 1906 Cass County atlas maps (D. W. Ensign & Co. 1893; R. L. Polk & Co. 1906). In 1951, a structure is depicted within the APE at the southern edge of Section 12. Florence Murphy is noted as the parcel owner in 1951 and 1957 (Thomas O. Nelson Co. 1951, 1957). Early census records place Florence Murphy as a secretary in Fargo and the 1950 census places her married to a farmer and living in Mapleton, Cass County, North Dakota (United States Federal Census 1950). Florence died in 1972 and is buried at Holy Cross Cemetery in Fargo (Find a Grave 2026a).

No structures are depicted within the APE in historic USGS topographic maps from 1897 (USGS 1897). In 1961, a structure and adjacent outbuilding and tree line are depicted within the APE at the southern edge of Section 12 (USGS 1961). In 2011, only 32nd St SE to the south of the APE and 162nd Ave SE to the west of the APE are depicted; no structures are present (USGS 2011).

The APE is shown as predominantly farmland, with a farmstead visible within the APE at the southern edge of Section 12 in historic aerial imagery from 1941, 1962, and 1990 (North Dakota Department of Water Resources 2026). By 1997 only a single outbuilding, possibly a silo, is left of the farmstead. No evidence of farmstead remains are present within the APE in 2003; a transmission line extends through the APE. The APE remains unchanged to the most recent aerials from 2026 (North Dakota Department of Water Resources 2026).

Historic atlas review and aerial imagery document a former farmstead at the southern edge of Section 12, present in 1941 aerial imagery and removed between 1990 and 2003, indicating moderate to high potential for historic-period archaeological deposits at that location and low potential for additional unrecorded historic-period resources elsewhere in the APE. Documented prior disturbances, including transmission line construction visible by 1961, county road and culvert installation along 32nd Street SE, and continuous deep tillage following farmstead removal, were anticipated to compromise the depositional integrity of any cultural resources persisting within the APE. The literature review provided sufficient and reliable information to design the survey strategy.



5 File Search Results

Dierdre Bostyan completed a file search of the Study Area at the SHSND on November 25, 2025. The file search focused on previous cultural inventories on file at the SHSND, including previously identified archaeological sites, isolated finds and site leads, and previously identified architectural sites. The file search covered the APE, a 1-mile buffer Study Area for archaeological resources, and a 0.25-mile buffer for architectural resources.

5.1 Previously Conducted Cultural Resource Inventories

Four previously conducted cultural resource inventories overlap the APE (Table 2; Figure 3 in Appendix A). Previously conducted cultural resource inventories 012800, 013899, and 014111 were conducted in 2011, 2012, and 2013, respectively, by Environmental Resources Management for the Xcel Energy CapX2020 Fargo to St. Cloud 345 kV Transmission Line Project (Bielakowski 2011; Doperalski 2013a; Doperalski 2013b). Juniper Environmental Consulting conducted cultural resource inventory 019842 in 2022 for a pipeline improvement project for the Cass County Rural Water District (Pace and Morrison 2022). No cultural resources were identified during the previously conducted archaeological surveys overlapping APE. Seven additional previously conducted cultural resource inventories are documented within the Study Area (Table 2; Figure 3 in Appendix A).

Table 2. Previously Conducted Cultural Resource Inventories within the Study Area.

MS Number	MS Title	Author(s)/Year
007223	Report 1 for the 1998 Field Season: Cultural Resource Inventories for the Cass Rural Water System, Cass County, North Dakota	Rothwell/1998
010482	Minnkota Power Cooperative, Inc: Pillsbury-Fargo Generation Outlet Project Class I Literature Search, Class II Reconnaissance Inventory and Class III Intensive Cultural Resources Inventory in Barnes and Cass Co., ND	Sabatke/2008
012800*	Class I Literature Search and Class III Intensive Archaeological Investigation of the CapX2020 Fargo to St. Cloud 345 kV Transmission Line Project, Cass County, North Dakota	Bielakowski/2011
013899*	Class I Literature Search and Class III Intensive Archaeological Investigation of the CapX2020 Fargo to St. Cloud 345 kV Transmission Line Project, Cass County, North Dakota Addendum I	Doperalski/2013
014111*	CapX2020 Fargo to St. Cloud 345 kV Transmission Line Project - Class III Archaeological Investigation Report Submittal Addendum II	Doperalski/2013
015141	Class III Intensive Archaeological Investigation of the CAPX2020 Fargo to St. Cloud 345-kV Transmission Line Project, Cass County, North Dakota Addendum III	Doperalski/2014
017262	Class I and Class III Cultural Resource Inventory of the Harmony Solar ND, LLC Solar Project, Cass County, North Dakota	Knudsen et al./2016
017273	2016 WBI Energy Valley Expansion Project, North Dakota Class III Archaeological Resources Inventory in Cass, Barnes, Stutsman & Burleigh Counties, North Dakota	Lange Mueller/2017
019842*	Cass Rural Water District, NDSP 2022 Pipeline Improvements: A Class III Cultural Resource Inventory in Cass County, North Dakota	Pace and Morrison/2022
019916	Project CB2307, Structure 09-132-19.0 Replacement: A Class III Cultural Resource Inventory in Cass County, North Dakota	Peliska/2022



MS Number	MS Title	Author(s)/Year
020279	Bison Generating Station Project – A Class III Cultural Resource Inventory in Cass County, North Dakota	McCarthy and Huling/2023
*Overlaps the APE		

5.2 Previously Recorded Archaeological Sites and Archaeological Site Leads

No previously recorded archaeological sites or site leads are documented within the APE. Three previously recorded archaeological sites and one site lead are documented with the Study Area (Table 3; Figure 3 in Appendix A). Two previously recorded archaeological sites, 32CS05388 and 32CS05389, are historic artifact surface scatters. Site 32CS05388 is unevaluated for inclusion in the National Register of Historic Places (NRHP), while site 32CS05389 was previously recommended as not eligible. Site 32CS05362 is a channelized ditch along the Rush River. Site 32CS05362 has not been evaluated for listing in the NRHP, however drainage ditches without associated built structures are not considered eligible for listing in the NRHP in North Dakota. Site lead 32CSX0358 consists of a single heat-treated Swan River Chert flake previously recommended not eligible for the NRHP at the time of identification in 2012. A site revisit in 2023 noted that the site location has since been destroyed by the construction of the Bison Substation and the previously eligibility recommendation was concurred with (McCarthy and Huling 2023).

Table 3. *Previously Recorded Archaeological Sites and Site Leads within the Study Area.*

Site Number	Site Name	Site Type	Cultural Affiliation	NRHP Status	Most Recent Site Update
32CS05362	Rush River Channel	Canal; Flume	Historic Euro-American	Unevaluated	8/23/2022
32CS05388	No Name	Artifact Scatter	Historic Euro-American	Unevaluated	9/12/2023
32CS05389	No Name	Artifact Scatter	Historic Euro-American	Not Eligible	9/12/2023
32CSX0358	No Name	Isolated Find	Precontact	Not Eligible	9/12/2023

5.3 Previously Recorded Burial Sites and Cemeteries

Stantec reviewed available USGS maps and the Cass County cemetery location database on Find a Grave to locate any potential burial sites and cemeteries in the APE and Study Area (Find a Grave 2026b; USGS 1897, 1961, 2011). No previously identified burial sites or cemeteries are recorded in the Project or Study Areas.

5.4 Previously Identified Architectural Sites

No previously recorded architectural sites are recorded within 0.25 miles of the APE.



6 Research Goals

The objective of the literature review and file search of the APE was to better understand what has been previously documented about the APE and Project vicinity. The literature review, supported by a review of the environmental context, aided in the evaluation of the APE to determine the survey strategy. The purpose of the review of previously recorded cultural resources, survey reports, and archival information was to provide insight into the potential for significant cultural resources within the APE and to understand previous disturbances in the APE to guide survey planning. Moreover, the historical context obtained from the literature review assisted in assessing the significance of potential sites and where they may be located based on known environmental variables.

Stantec designed the survey to locate and identify all cultural resources within the APE, and to evaluate the potential significance of any newly identified cultural resources. A cultural resource is gauged to be significant if it meets at least one of four criteria for eligibility for listing in the NRHP:

- A. Associated with significant events in the broad patterns of national history
- B. Associated with the productive lives of persons significant in our past
- C. Representative of a type, period, or method of construction, or the work of a master
- D. Capable of yielding important information about the past

Criterion D typically applies to archaeological sites. To be capable of yielding important information about the past, generally a site must possess artifacts, soil strata, structural remains, or other cultural features that make it possible to test historical hypotheses, corroborate and amplify currently available information, or reconstruct the sequence of the local archaeological record. To be considered significant, archaeological sites must demonstrate sufficient integrity to answer important research questions. These questions are developed in association with temporally, regionally, and thematically defined historic contexts or study units (National Park Service 1983).

Due to previous disturbance from the installation of a transmission line, proximity to the road right-of-way, farmstead demolition, and continuous deep tillage, the potential for intact cultural resources within the APE is low.



7 Survey Methodology

Stantec conducted the Class III intensive archaeological survey following SHPO guidelines. The APE was systematically surveyed using pedestrian transects spaced at 15-meter (m; 50-foot) intervals walked in a serpentine pattern. The survey was performed by Angela Julin, MA, RPA, Principal Investigator, and Claire Witt on May 5 and 6, 2026 (Figure 4 in Appendix A).

Historic cultural materials were identified during the Class III survey and documented in-field according to material, manufacture, form, and function. Diagnostic features were recorded and photographed for further analysis. No artifacts were collected.



8 Archaeological Survey Results

Stantec identified one previously unrecorded historic archaeological site, 32CS5427, during the Class III pedestrian survey. No additional cultural resources were observed. The APE consisted of active row-crop agricultural field with corn stubble cover yielding 50 to 60 percent ground surface visibility (GSV; Photo 1 and Photo 2). A small portion of the APE consisted of the grassed field edge, which contained a marked buried utility (Photo 3).



Photo 1. APE Overview from Eastern Boundary, Facing West.



Photo 2. APE Overview from Northern Boundary, Facing South.





Photo 3. APE Overview from Southwestern Boundary, Facing East.

8.1 Site 32CS5427

Site 32CS5427 (Field Site STN-AJ-08) consists of a historic cultural material scatter at the location of a former farmstead, identified during pedestrian survey of an active row-crop agricultural field with corn stubble cover yielding 50 to 60 percent GSV (Photo 4; Figure 5 in Appendix A). The site is located within the [REDACTED] within hydric Fargo silty clay (NRCS 2026). Site boundaries were defined by the extent of surface cultural material and measure approximately 40 m east-west by 21 m north-south, encompassing approximately 714 m². At the request of the SHSND, the site boundaries were extended to encompass the footprint of the farmstead on reviewed historic aerial imagery from 1941, encompassing a total of 10.12 acres. Stantec observed 49 historic-period artifacts on the surface of site 32CS5427 and recovered 8 artifacts from a single shovel test probe, for a total of 57 artifacts. No artifacts were collected. The surface assemblage comprises 30 glass fragments, 16 ceramic sherds, 1 piece of cut bone, 1 limestone building fragment, and 1 metal implement fragment.

The glass assemblage consists of flat colorless glass (n=16), colorless container glass (n=4), aqua container glass (n=3), brown/amber container glass including one thick base fragment (n=1) and one fragment with embossed federal warning text reading "...DS. SALE // ...OTTLE" (n=1), an amber container fragment (n=1), a container fragment with an iridescent lustre-painted finish exhibiting visible brush strokes on both surfaces (n=1), a milk glass container base (n=1), a solarized bottle finish with no visible mold seams (n=1), and a colorless bottle finish with a full side mold seam and external threads (n=1). The embossed federal warning text identifies a liquor bottle manufactured between 1935 and 1964, when federal regulations required this embossing on liquor bottles.

The ceramic assemblage consists of whiteware (n=9), stoneware (n=5), and porcelain (n=1). Whiteware artifacts include a cup with a blue transfer print figural decoration depicting horse legs and hooves (n=1), an



A Class III Intensive Cultural Resource Inventory of the Harmony Storage, LLC Project Exhibit 4
8 Archaeological Survey Results

exfoliated undecorated plate base (n=1), an exfoliated undecorated rim sherd (n=1), a container rim with a dark transfer-printed bow design (n=1), an undecorated cup (n=1), an undecorated teacup handle (n=1), a green Fiestaware container fragment (n=1), undecorated container fragments (n=2), and a rim sherd with a pressed/molded design (n=1). The green Fiestaware fragment is consistent with Homer Laughlin China Company production and, if the original light green glaze, dates between 1936 and 1951. Stoneware artifacts include body sherds with Bristol slip (n=4) and a salt-glazed base sherd with an Albany slip interior (n=1). The single porcelain artifact is a rim sherd with a blue floral decal (n=1).

Additional surface artifacts include one piece of cut bone, one limestone building fragment, and one fragment of small, thin sheet metal.

The eight subsurface artifacts recovered from the shovel test consist of corroded metal fasteners, including nails and tacks, recovered between 10 and 20 cmbgs. One piece of coal was also recovered. Abundant coal clinker was present throughout the surface artifact scatter and concentrated at the southeastern margin of a soil and cropmark anomaly visible in current aerial imagery corresponding to the historic farmstead footprint depicted in 1941 and 1962 aerial photographs. No surface features were observed.



Photo 4. 32CS5427 Overview, Facing West.

One shovel test was excavated within the dense artifact concentration (Table 4; Photo 5). The shovel test extended to 88 cmbgs. Disturbance extended to 60 cmbgs, evidenced by the presence of corroded fasteners and mixing between the Bss and Bkg horizons. The shovel test recovered eight heavily corroded nails and tacks distributed between 10 and 60 cmbgs.

**Photo 5. Shovel Test 01.***Table 4. Site 32CS5427 Shovel Test Profile.*

Shovel Test	Horizon	Depth (cmbs)	Munsell	Soil Texture	Notes	Cultural Materials
01	Ap	0 – 33	10YR 2/1	Silty clay		Positive
	Bss	33 – 88	10YR 3/1	Silt loam	Mottled with 2.5YR2.5/1 and 2.5YR8/1	

The site is associated with the broad pattern of late nineteenth- and twentieth-century Euro-American agricultural settlement in the Red River Valley and may be associated with Bonanza farming under the Miller, Chaffee, Reed Company corporate landholding documented at the site location in 1906. However, no structures are depicted within the APE on historic documentation from 1872, 1893, 1897, or 1906 and a structure first appears at the site location in the 1941 aerial photograph (D.W. Ensign & Co. 1893; GLO 1872; North Dakota Department of Water Resources 2026; R. L. Polk & Co. 1906; USGS 1897). The documentary record reviewed does not establish whether a tenant farmstead operated at the site location during the Bonanza farming period (1906 to 1925) or whether construction post-dates the Bonanza era. Site 32CS5427 is currently unevaluated under Criteria A and B pending further archival research. The site is recommended



not eligible under Criterion C, as no standing structures remain and no distinctive type, period, or method of construction was identified.

Subsurface testing within the center of the artifact concentration documented mixed soils to 88 cmbgs that did not align with the NRCS-mapped soil unit and did not reach intact subsoil within the depth of the probe. The integrity of subsurface deposits has not been fully evaluated, and the site may retain features below the disturbed surface that could yield information regarding twentieth-century farmstead occupation in eastern North Dakota. The site is currently unevaluated under Criterion D pending further investigation. The Project will avoid the site boundary.

9 Research Analysis

Stantec documented one cultural resource, site 32CS5427, within the APE. Site 32CS5427 is a previously unrecorded historic-period cultural material scatter at the location of a former farmstead and is not listed in the State Historic Sites Registry (SHSR) or NRHP.

The parcel was held by the Miller, Chaffee, Reed Company, a Bonanza farming corporation, in 1906. No structures are depicted within the Project Area on the 1872 GLO plat, 1893 Ensign atlas, 1897 USGS topographic map, or 1906 R.L. Polk atlas, and a structure first appears in the 1941 aerial photograph. Because no map or aerial depicts the site location during the Bonanza farming period, the documentary record does not establish whether a structure was present during that period or post-dates the Bonanza era. Stantec recommends AJ-08 unevaluated under Criteria A, B, and D and not eligible under Criterion C, as no standing structures or distinctive architectural elements remain.

The proposed Project APE will avoid site 32CS5427, therefore the Project will result in no direct or indirect effects to the site. No further cultural resource work is recommended should the Project proceed as planned.



10 Recommendations

The Class I literature review conducted prior to the Class III intensive cultural resource inventory identified no previously recorded archaeological or architectural sites or site leads within the APE. One newly identified historic cultural material scatter associated with an extant farmstead (32CS5427) was identified. Stantec recommends the site as unevaluated for the NRHP. Site 32CS5427 will be avoided during Project activities; therefore, Stantec recommends a finding of no historic properties for the Project as planned.

Stantec acknowledges the possibility that presently undiscovered archaeological sites may exist in APE. Should an unanticipated discovery arise, the Project coordinator or construction personnel should immediately follow the process outlined in the attached Unanticipated Discovery Plan (Appendix B).



11 References Cited

- Ahler, S. A. 1986. *The Knife River Flint Quarries: Excavations at Site 32DU508*. State Historical Society of North Dakota, Bismarck.
- Bakken, Kent E. 2011. *Lithic Raw Material Use Patterns in Minnesota*. Ph.D. dissertation, Department of Anthropology, University of Minnesota, Minneapolis.
- Bielakowski, Andrew. 2011. *Class I Literature Search and Class III Intensive Archaeological Investigation of the CapX2020 Fargo to St. Cloud 3435kV Transmission Line Project, Cass County, North Dakota*. Environmental Resources Management. Prepared for Xcel Energy. Report on file at the SHSND.
- Bluemle, J. P. 1971. *Geology of McLean County, North Dakota*. Ph.D. dissertation, University of North Dakota, Grand Forks.
- Bluemle, J. P. 1991. *The Face of North Dakota*. Revised edition. North Dakota Geological Survey Educational Series 21. Bismarck.
- Bluemle, J. P., J. R. Reid, and K. J. R. Mitchell. 2004. Glaciation of North Dakota, U.S.A. In Ehlers, J., and P. L. Gibbard (editors), *Quaternary Glaciations—Extent and Chronology, Part II: North America*. Elsevier Science, Amsterdam, pp. 207-212.
- Bryce, S. A., J. M. Omernik, D. E. Pater, M. Ulmer, J. Schaar, J. Freeouf, R. Johnson, P. Kuck, and S. H. Azevedo. 1996. Ecoregions of North Dakota and South Dakota. U.S. Geological Survey, Reston, Virginia. Electronic document, https://dmap-prod-oms-edc.s3.us-east-1.amazonaws.com/ORD/Ecoregions/nd/ndsd_front.pdf, accessed December 15, 2025.
- Cameron, Linda A. 2015. Bonanza Farms, Red River Valley. MNopedia, Minnesota Historical Society. Electronic document, <https://www.mnhs.org/mnopedia/search/index/bonanza-farms-red-river-valley>, accessed March 12, 2026.
- Clayton, Lee, S. R. Moran, and J. P. Bluemle. 1980a. Geologic Map of North Dakota. U.S. Geological Survey, Denver, Colorado. Electronic document, https://ngmdb.usgs.gov/Prodesc/proddesc_16520.htm, accessed December 12, 2025.
- Clayton, Lee, S. R. Moran, and J. P. Bluemle. 1980b. *Explanatory Text to Accompany the Geologic Map of North Dakota*. North Dakota Geological Survey, Report of Investigation No. 69. North Dakota Geological Survey, Grand Forks. Electronic document, https://www.dmr.nd.gov/ndgs/Publication_List/pdf/RI%20SERIES/RI-69.pdf, accessed December 12, 2025.
- Clayton, Lee, and Stephen R. Moran. 1982. Chronology of Late Wisconsinan Glaciation in Middle North America. *Quaternary Science Reviews* 1(1):55- 82.



Doperalski, Mark. 2013a. *Class I Literature Search and Class III Intensive Archaeological Investigation of the CapX2020 Fargo to St. Cloud 345 kV Transmission Line Project, Cass County, North Dakota, Addendum I*. Environmental Resources Management. Prepared for Xcel Energy. Report on file at the SHSND.

Doperalski, Mark. 2013b. *Class III Intensive Archaeological Investigation of the CapX2020 Fargo to St. Cloud 345 kV Transmission Line Project, Cass County, North Dakota, Addendum II*. Environmental Resources Management. Prepared for Xcel Energy. Report on file at the SHSND.

D. W. Ensign & Co. 1893. *Plat Book of Cass County, North Dakota*. Electronic document, <https://historicmapworks.com/Atlas/US/16914/>, accessed December 16, 2025.

Find a Grave. 2026a. Florence *Ford* Murphy. Electronic document, <https://www.findagrave.com/memorial/132877888/florence-murphy>, accessed May 16, 2026.

Find a Grave. 2026b. Cemeteries in Cass County, North Dakota. Electronic database, https://www.findagrave.com/cemetery-browse/USA/North-Dakota/Cass-County?id=county_1732, accessed March 3, 2026.

Fisher, T. G. 2003. Chronology of glacial Lake Agassiz meltwater routed to the Gulf of Mexico. *Quaternary Research* 59(2):271-276.

General Land Office (GLO). 1872. Original Survey, ND, 5th PM, T140N – R51W. U.S. Department of the Interior, Bureau of Land Management. Electronic document, https://glorerecords.blm.gov/details/survey/default.aspx?dm_id=416972&sid=sgrcbxra.r0j, accessed

General Land Office (GLO). 1889. Chippewas Treaty Patent. U.S. Department of the Interior, Bureau of Land Management. Electronic document, <https://glorerecords.blm.gov/details/patent/default.aspx?accession=0380-090&docClass=CT&sid=iefamqn1.kvy>, accessed December 16, 2025.

Hoganson, J. W. and E. C. Murphy. 2003. *Geology of the Lewis and Clark Trail in North Dakota*. Mountain Press Publishing Company, Missoula, Montana.

Kehew, A. E., and J. T. Teller. 1994. History of late glacial runoff along the southwestern margin of the Laurentide Ice Sheet. *Quaternary Science Reviews* 13(9-10):859-877.

Kristensen, T. J., E. Moffat, M. J. M. Duke, A. J. Locock, C. Sharphead, and J. W. Ives. 2018. Identifying Knife River Flint in Alberta: A Silicified Lignite Toolstone from *North Dakota*. *Archaeological Survey of Alberta*, Occasional Paper No. 38, pp. 1-24. Electronic document, <https://open.alberta.ca/dataset/3cb39eb9-c1d4-4c70-b5a9-294fee663769/resource/f0c2a7ef-2508-4c85-a43c-47bf289e1376/download/swing-of-things-knife-river-flint-2018.pdf>, accessed December 15, 2025.

McCarthy, Melinda and Christina Huling. 2023. *Bison Generating Station Project – A Class III Cultural Resource Inventory in Cass County, North Dakota*. Burns & McDonnell. Prepared for Xcel Energy. Report on file at the SHSND.



- McCloskey, G. G. 1995. Depositional History, Environments of Deposition, and Hydrocarbon Potential of the Newcastle Formation (Lower Cretaceous) of Eastern North Dakota. Master's thesis, University of North Dakota, Grand Forks. Electronic document, <https://commons.und.edu/cgi/viewcontent.cgi?article=1193&context=theses>, accessed December 15, 2025.
- National Park Service. 1983. *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation*. Federal Register 48(190): 44716-44740.
- Natural Resources Conservation Service (NRCS). 2026. Web Soil Survey. United States Department of Agriculture. Electronic database, <https://websoilsurvey.nrcs.usda.gov/app/>, accessed March 3, 2026.
- North Dakota Department of Water Resources. 2026. ND Historic Map & Aerial Photography Dissemination Service. Electronic database, <https://aerial.dwr.nd.gov/>, accessed March 3, 2026.
- North Dakota Geographic Information Systems. 2026. GIS Hub Explorer. Electronic database, <https://experience.arcgis.com/experience/261d3076e3aa4ed0ad77dd2e995f4f2f>, accessed March 3, 2026.
- Pace, Rebeca and John G. Morrison. 2022. *Cass Rural Water District, NDSP 2022 Pipeline Improvements: A Class III Cultural Resource Inventory in Cass County, North Dakota*. Juniper Environmental Consulting. Prepared for Advanced Engineering and Environmental Services, LLC, Fargo, North Dakota. Report on file at the SHSND.
- R. L. Polk & Co. 1906. *The County of Cass, North Dakota*. R. L. Polk & Co. Publishers, St. Paul, Minnesota. Electronic document, <https://historicmapworks.com/Atlas/US/9302/>, accessed December 16, 2025.
- Robinson, Elwyn B. 1966. *History of North Dakota*. University of Nebraska Press.
- Sloan, C. E. 1972. Ground-water hydrology of prairie potholes in North Dakota. U.S. Geological Survey Professional Paper 585-C. Electronic document, <https://pubs.usgs.gov/pp/0585c/report.pdf>, accessed December 15, 2025.
- State Historical Society of North Dakota (SHSND). 2021. *Historic Preservation in North Dakota: A Statewide Comprehensive Plan Archaeological Component*. State Historical Society of North Dakota. Electronic document, https://www.history.nd.gov/hp/stateplan_arch.html, accessed December 15, 2025.
- State Historical Society of North Dakota (SHSND). 2026. *North Dakota SHSND/SHPO Guidelines*. State Historical Society of North Dakota. Electronic document, <https://www.history.nd.gov/hp/PDFinfo/NorthDakota-SHSND-SHPO-Guidelines.pdf>, accessed March 3, 2026.
- Teller, J. T., and L. Clayton (editors). 1983. *Glacial Lake Agassiz*. Geological Association of Canada Special Paper 26.

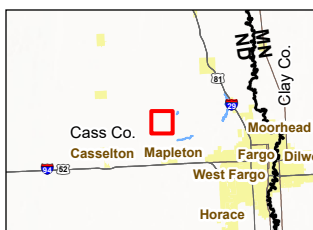
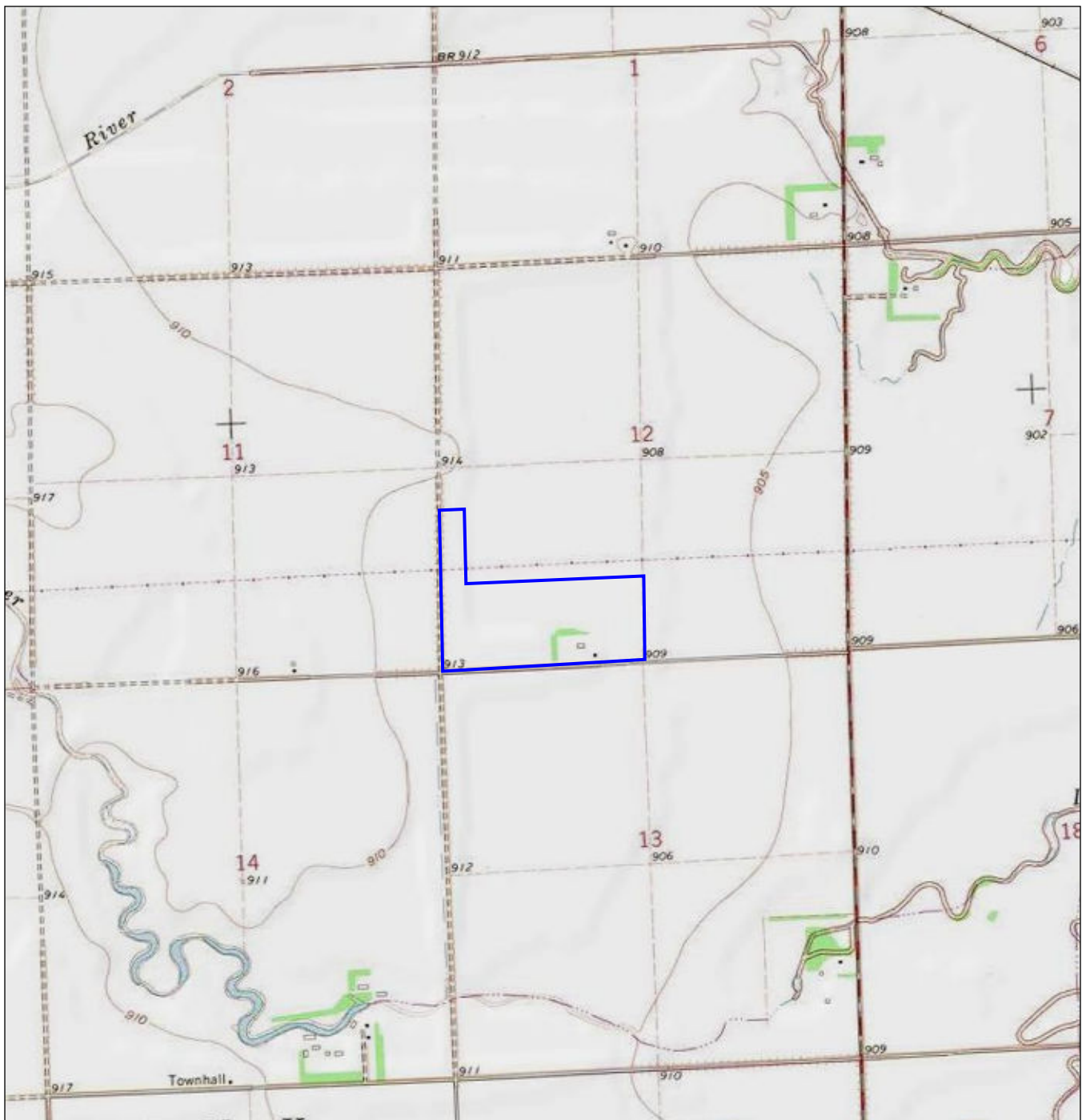


- Teller, J. T., D. W. Leverington, and J. D. Mann. 2002. Freshwater outbursts to the oceans from glacial Lake Agassiz and their role in climate change during the last deglaciation. *Quaternary Science Reviews* 21(8-9):879-887.
- Thomas O. Nelson Co. 1951. *Atlas of Cass County, North Dakota*. Thomas O. Nelson Co., Fergus Falls, Minnesota. Electronic document, <https://historicmapworks.com/Atlas/US/9539/>, accessed December 16, 2025.
- Thomas O. Nelson Co. 1957. *Atlas of Cass County, North Dakota*. Thomas O. Nelson Co., Fergus Falls, Minnesota. Electronic document, <https://historicmapworks.com/Atlas/US/10588/>, accessed December 16, 2025.
- Titanic Inquiry Project. 2017. Limitation of Liability Hearings: CLAIM OF CARRIE T. CHAFFEE, WALTER REED AND ROBERT REED (HERBERT F. CHAFFEE). Electronic document, <https://www.titanicinquiry.org/lol/claims/chaffee-c34.php>, accessed December 18, 2025.
- United States Census Bureau. 2026. Harmony township, Cass County, North Dakota. Electronic document, [https://data.census.gov/profile/Harmony township, Cass County, North Dakota?q=060XX00US3801735580](https://data.census.gov/profile/Harmony%20township,%20Cass%20County,%20North%20Dakota?q=060XX00US3801735580), accessed March 11, 2026.
- United States Federal Census. 1950. *Seventeenth Census of the United States, 1950*; Year: 1950; Census Place: *Mapleton, Cass, North Dakota*; Roll: 1727; Enumeration District: 9-106. Electronic document, <https://www.ancestry.com/search/collections/62308/records/7350353?tid=181742036&pid=102735731568&ssrc=pt>, accessed May 13, 2026.
- United States Geological Survey (USGS). 1897. Casselton, ND. 1:125,000, 1897 ed. Electronic document, https://ngmdb.usgs.gov/ht-bin/tv_browse.pl?id=0b773c7ed15431a9f68d2e68fd86a819, accessed December 16, 2025.
- United States Geological Survey (USGS). 1961. Mapleton, ND. 1:24,000, 1963 ed. Electronic document, https://ngmdb.usgs.gov/ht-bin/tv_browse.pl?id=f7cb88bbfc2ba8d7fd3a2038ba58147b, accessed December 16, 2025.
- United States Geological Survey (USGS). 2011. Mapleton, ND. 1:24,000. Electronic document, https://ngmdb.usgs.gov/ht-bin/tv_browse.pl?id=20bc5ba80abc30ccab0148e971d042de, accessed December 16, 2025.
- Upham, W. 1895. The Glacial Lake Agassiz. U.S. Geological Survey Monograph 25. Electronic document, <https://pubs.usgs.gov/mono/0025/report.pdf>, accessed December 15, 2025.
- White, William H. 2024. Early History and Settlements of Cass County. North Dakota Genealogy. Electronic document, <https://northdakotagenealogy.com/cass/early-history-and-settlements-of-cass-county.htm>, accessed March 11, 2026.
- Winter, T. C., and D. O. Rosenberry. 1995. The interaction of ground water with prairie pothole wetlands in the Cottonwood Lake area, east-central North Dakota, 1979-1990. *Wetlands* 15, 193-211.



Appendix A Figures





Legend
 APE

0 1,000 2,000 Feet
 (At original document size of 8.5x11)
 1:24,000



Project Location
 140N, 51W, S12 & 14
 Twp. of Harmony, Cass Co., ND

Prepared by JDS on 2026-05-12
 TR by JDP on 2025-12-18
 IR by CW on 2026-08-06

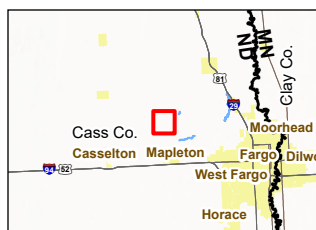
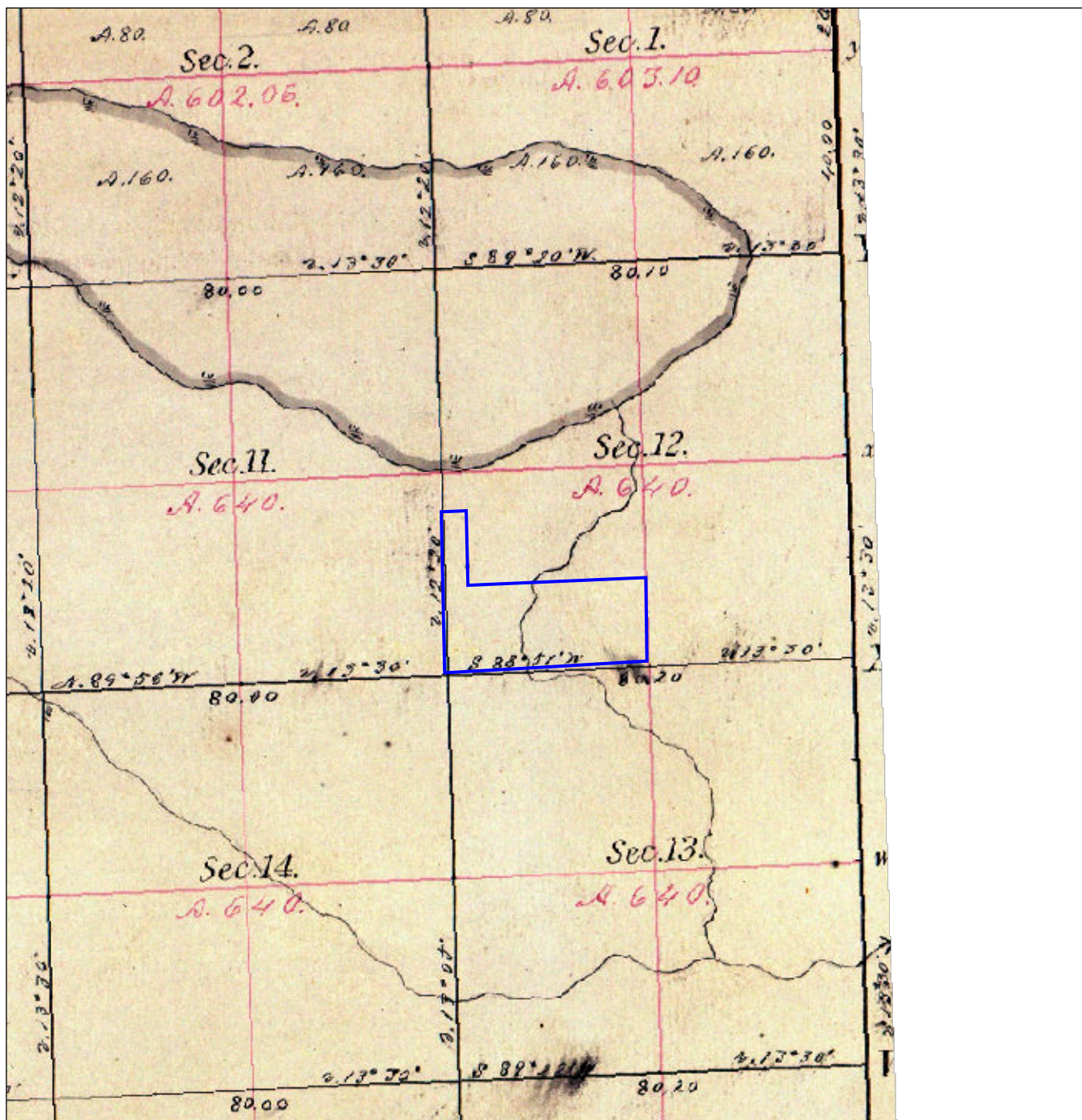
Client/Project
 Harmony Storage LLC
 Harmony Storage Project
 Cultural Resources Report

Figure No.

1

Title

Project Location



Legend
 APE

0 1,000 2,000 Feet
 (At original document size of 8.5x11)
 1:24,000



Project Location Prepared by JDS on 2026-05-12
 140N, 51W, S12 & 14 TR by JDP on 2025-12-18
 Twp. of Harmony, Cass Co., ND IR by CW on 2026-08-06

Client/Project
 Harmony Storage LLC
 Harmony Storage Project
 Cultural Resources Report
 Figure No. 193711746

2
 Title
 General Land Office Records
 Survey Map (1872)

Appendix B Unanticipated Discovery Plan



Cultural Resources Unanticipated Discovery Plan

Harmony Storage, LLC Project



Stantec Consulting Services Inc.

Prepared for:
Harmony Storage, LLC

Date:
August 6, 2026

Prepared by:
Stantec Consulting Services Inc.

Project/File:
193711746

Table of Contents

Acronyms / Abbreviations.....	ii
1 Introduction	1
2 Construction Supervisor and Contractor Training.....	2
3 Unanticipated Discovery of Cultural Materials: Overview	4
STEP 1: DISCOVERY - WORK STOPS AND BUFFER ESTABLISHED	4
STEP 2: MANAGER NOTIFIES HARMONY STORAGE	4
STEP 3: DOCUMENTATION OF THE FIND	4
STEP 4: DETERMINATION OF THE FIND, ADDITIONAL NOTIFICATIONS	5
STEP 5: RESOURCE EVALUATION AND MANAGEMENT	5
STEP 6: RESUME WORK	6
4 Unanticipated Discovery Notification Process: Human Remains and/or Potential Human Remains	6
STEP 1: DISCOVERY - WORK STOPS AND BUFFER ESTABLISHED	6
STEP 2: MANAGER NOTIFIES HARMONY STORAGE	6
STEP 3: MANAGER NOTIFIES LOCAL LAW ENFORCEMENT AGENCY AND THE SHSND ARCHAEOLOGICAL STAFF	7
STEP 4: ACTION PLAN AND RESUME WORK	7
5 Contact List	8



Acronyms / Abbreviations

Acronym / Abbreviation	Full Name
APE	Area of Potential Effect
Harmony Storage	Harmony Storage, LLC, a subsidiary of Geronimo Power
NRHP	National Register of Historic Places
Plan	Cultural Resources Unanticipated Discovery Plan
Project	Harmony Storage, LLC Project
PSC	North Dakota Public Service Commission
SHPO	North Dakota State Historic Preservation Office
SHSND	State Historical Society of North Dakota



1 Introduction

This document outlines the procedure that Harmony Storage, LLC, a subsidiary of Geronimo Power (Harmony Storage), will follow to prepare for and address any unanticipated discoveries of cultural resources, including archaeological sites and possible human remains. It provides direction to Harmony Storage personnel and contractors regarding procedures to follow in the event that unanticipated discoveries are made during the construction of the Harmony Storage, LLC Project (Project).

This Cultural Resources Unanticipated Discovery Plan (Plan) outlines notification procedures for the unanticipated discovery of archaeological resources and human remains within the Area of Potential Effect (APE). Proper implementation of this Plan will assist the Project with complying with applicable state and federal statutes and policies regarding the protection and treatment of cultural resources that may qualify as “historic properties”, and human remains. Historic properties are significant cultural resources that are listed in or eligible for listing in the National Register of Historic Places (NRHP).

If an unanticipated discovery is made during any task associated with construction of the Project, including ground-disturbing activities, Harmony Storage and its contractors will treat the find as a potentially significant resource and avoid additional disturbance of the find until a significance recommendation is made by the Designated Archaeology Consultant.

It is possible that unanticipated archaeological features and/or artifacts may be encountered during Project construction or maintenance, even in areas regarded as possessing low archaeological sensitivity. This Plan is intended to further minimize the risk that archaeological resources could be affected during construction.

The Project falls under the jurisdiction of the North Dakota Public Service Commission (PSC) and must comply with North Dakota Century Code (49-22-09), which requires the PSC to factor in the effect of the proposed site or route on existing scenic areas, historic sites and structures, and paleontological or archaeological sites when evaluating applications and designating sites, corridors,

This Project is not located on publicly managed lands, is not receiving federal funding, and does not require federal permits or approvals. Therefore, federal regulations (i.e., National Historic Preservation Act, Archaeological Resources Protection Act, or Native American Graves Protection Act) are not applicable to the Project.

This Plan is designed to comply with industry best practice, the State Historical Society of North Dakota (SHSND) and the North Dakota State Historic Preservation Office (SHPO) Guidelines, and North Dakota Century Codes and North Dakota Administrative Codes including:

- North Dakota Administrative Code Chapter 40-02-03 (Protection of Prehistoric and Historic Human Burial Sites, Human Remains, and Burial Goods).
- North Dakota Century Code Chapter 23-06 (Care and Custody of Dead)
- North Dakota Century Code Chapter 55-10 (Preservation of Historic Sites and Antiquities)



Any contractors involved with ground-disturbing activities during construction will be provided with printed and electronic copies of this protocol.

2 Construction Supervisor and Contractor Training

Prior to the commencement of construction, the On-Site Construction Supervisor and Contractor personnel will receive environmental training from Harmony Storage, which will include guidance on identifying potential cultural materials and human remains. The orientation will consist of two parts:

1. **Recognition Training:** This section will provide training in the identification of both precontact and historic cultural resources, artifacts, and human remains.
2. **Procedural Protocols:** This section will outline the chain of communication and protocols to be followed if unanticipated cultural resources, artifacts, or human remains are discovered during construction.

The following definitions will guide Harmony Storage and its contractors in the implementation of this Plan:

- **Cultural Resources:** Physical evidence of past human activity or cultural heritage that may have historic, archaeological, or anthropological significance. This term encompasses both archaeological resources and above-ground resources.
- **Archaeological Resources:** Material remains of human life or activities that are at least 50 years old and are of archaeological interest. These include artifacts (portable objects like tools and pottery) and features (non-portable elements such as building foundations and hearths).
- **Above-Ground Resources:** any building, structure, site, or area officially recognized for its historical, architectural, or cultural importance.
- **Artifact:** A portable object made, modified, or used by humans that holds historical, cultural, or archaeological significance. Examples include stone tools, pottery fragments, jewelry, and personal items.
- **Human Remains:** Biological materials of human origin (e.g., bones, teeth, or soft tissue) encountered during construction activities. In this Plan, "human remains" explicitly refers to these materials, which require immediate notification and specialized handling.
- **Unanticipated Discovery:** The unexpected encounter of archaeological resources or human remains during construction activities within the Project Area that were not previously identified or documented.

An archaeological resource discovery could consist of, but is not limited to:

- **Precontact Features:** Storage pits, postmolds (remains of rotted or removed posts), hearths, house floors, occupational surfaces, middens, and anthropogenic soil horizons indicating human activity.



- **Precontact Artifact Concentrations:** Projectile points, lithic debitage (waste flakes), stone tools, pottery fragments, bone tools, and organized manufacturing activity areas.
- **Specialized Precontact Sites:** Kill sites, quarries, rock art locations, and ceremonial grounds.
- **Historic Structural Features:** Foundations, wells, cisterns, privies, cellars, building remains, brick or stone alignments, and trails/roads/canals at least 50 years old.
- **Historic Artifact Concentrations:** Household items (glass bottles, ceramic dishware, tableware), architectural debris (nails, window glass, building hardware), agricultural/industrial equipment, and refuse deposits at least 50 years old.
- **Industrial/Agricultural Remains:** Mill sites, dams, mining operations, kilns, smithies, and farm implements.
- **Culturally Modified Landscapes:** Earthworks, field systems, and altered natural features.
- **Transportation Infrastructure:** Historic roadbeds, railroad grades, and river crossings.

Evidence of a burial site could consist of, but is not limited to:

- **Direct Evidence:** Any human remains including articulated or disarticulated bones, teeth, hair, or preserved soft tissue.
- **Subsurface Indicators:** Soil anomalies such as outlines of burial pits or depressions that may indicate the presence of a grave shaft, which may appear as rectangular or oval soil stains different from surrounding dirt.
- **Surface Markers:** Headstones or footstones; stone configurations such as cairns, stone circles, or other deliberate stone arrangements marking burial locations; conical, linear, and or effigy shaped soil mounds.
- **Hardware:** Coffin wood fragments and associated hardware that signal burial practices.



3 Unanticipated Discovery of Cultural Materials: Overview

STEP 1: DISCOVERY - WORK STOPS AND BUFFER ESTABLISHED

- If any member of the work force believes that they have found archaeological resources or human remains, they shall immediately stop work in the area of discovery.
- No archaeological material will be transported from its original location. The area of discovery shall be treated as potentially significant and kept intact until a formal determination of significance is made.
- The On-Site Construction Supervisor will be responsible to secure the discovery location from further disturbance. Vehicles, equipment, and unauthorized personnel will not be permitted to traverse the Stop-Work Area until notified by the On-Site Construction Supervisor.
- Cessation of ground-disturbing activity will encompass a sufficient area to protect the discovery itself and provide a buffer zone for adequate and safe investigation of the discovery and any other features or artifacts that may be associated with the discovery. The buffer zone will be fenced or delineated with signage by the On-Site Construction Supervisor to prevent further disturbance by vehicle and foot traffic. A general guideline is to create a buffer of at least 100 feet around the discovery, and prohibiting vehicles, equipment and unauthorized persons from traversing the area. The fenced or signed area (Stop-Work Area) can be larger or smaller depending on the Project Area boundary in order to protect the discovery adequately without unnecessary hindrance to construction, if appropriate. No fencing or signage will be installed outside of the construction workspace without prior approval from the landowner.
- Do not call 911 (unless there is an actual emergency warranting such action) or speak with the media. Work may continue in other areas.

STEP 2: MANAGER NOTIFIES HARMONY STORAGE

- The On-Site Construction Supervisor shall notify the Project Manager and the Designated Archaeology Consultant immediately via telephone call upon learning of the discovery.
- The call will be followed up with an email notification summary to the Project Manager and the Designated Archaeology Consultant.
- Following notification, construction may continue outside of the 100-foot (or greater as necessary) buffer surrounding the find.

STEP 3: DOCUMENTATION OF THE FIND

- The On-Site Construction Supervisor, in coordination with the Designated Archaeology Consultant, will take photographs of the find, including photographs of artifacts, features, and general landscape in the vicinity of the find. NOTE: DO NOT TAKE PHOTOGRAPHS OF HUMAN



REMAINS. Additionally, the On-Site Construction Supervisor will provide a description of the discovery and note the location.

- This information will be provided by email to the Project Manager and the Designated Archaeology Consultant.

STEP 4: DETERMINATION OF THE FIND, ADDITIONAL NOTIFICATIONS

- The Designated Archaeology Consultant will determine whether the find was recorded during a previous survey. If the find is determined to be within a previously identified archaeological site area that has been determined as not eligible for listing in the NRHP, the Designated Archaeology Consultant will notify the Project Manager and On-Site Construction Supervisor that construction activities may resume after the fencing or signage is removed, as applicable.
- If the find is discovered in an area where a site was not previously recorded, the Designated Archaeology Consultant will review the location and type of discovered material. If the discovery is determined to be non-cultural, the On-Site Construction Supervisor will notify the construction contractor that construction may resume. The Designated Archaeology Consultant will submit a letter report regarding the discovery and findings to the Project Manager within five business days.
- If an on-site assessment of the find is necessary, the Designated Archaeology Consultant will mobilize to the site within 1 day of notification.
- During the on-site assessment, the Designated Archaeology Consultant would mark, preserve and protect the find from further disturbances until a professional examination can be made by the State Historical Society.
 - If the Designated Archaeology Consultant determines that the discovery constitutes human remains, the procedures described in Section 4 of this Plan will be followed.
 - If the Designated Archaeology Consultant determines that the discovery represents a significant find, the Designated Archaeology Consultant will notify Project Manager the same day and the procedures in Step 5 below will be followed. The Designated Archaeology Consultant will notify the Project Manager of any significant discoveries by telephone and follow up by email.

STEP 5: RESOURCE EVALUATION AND MANAGEMENT

Upon determining that a discovery is a cultural resource, the Designated Archaeology Consultant shall immediately notify the SHSND State Archaeologist by telephone, with written confirmation by email. The Designated Archaeology Consultant will work with the Project Manager to determine appropriate actions, which may include avoidance or additional investigation. If avoidance is not appropriate, the Designated Archaeology Consultant will develop an appropriate treatment plan for SHSND review and comment. Ground-disturbing activities within the Stop-Work Area will not recommence until SHSND examination is complete and a report has been filed with the PSC and verbal approval to resume has been granted. The Designated Archaeology Consultant shall transmit site documentation to SHSND/SHPO for inclusion in state archaeological site files.



The Project Manager shall maintain a documentation log of all archaeological discoveries and implemented management protocols.

STEP 6: RESUME WORK

Upon verbal approval by the Designated Archaeology Consultant and Project Manager, the On-Site Construction Supervisor may remove fencing and signage and resume work within the Stop-Work Area.

4 Unanticipated Discovery Notification Process: Human Remains and/or Potential Human Remains

Pursuant to North Dakota Century Code Chapter 23-06-07, if human remains and/or potential human remains are uncovered during construction of the Project, stop work and immediately contact Harmony Storage, the Cass County Sheriff's Office, and SHSND archaeological staff. The steps outlined below shall be followed if human remains are discovered:

STEP 1: DISCOVERY - WORK STOPS AND BUFFER ESTABLISHED

- If any member of the work force believes that they have found remains and/or potential remains, they shall immediately stop work in the area of discovery to avoid disturbing the find and will immediately notify the On-Site Construction Supervisor.
- Stop-Work Area: A 100-foot avoidance buffer shall be established as outlined in Section 3.
- Any human remains discovered shall be treated with the utmost dignity and respect at all times.
- Photographs may not be taken of any discovered remains for any purpose other than professional assessment under this protocol and may only be taken with permission of the Project Manager and/or the Designated Archaeology Consultant.
- All photographs will be kept secure and confidential, and images will be subject to law enforcement examination and/or repatriation to Native American tribes, as applicable.
- No public or press disclosure of any information regarding human remains shall be shared by Harmony Storage and its contractors, at any time, during or after the Project.

STEP 2: MANAGER NOTIFIES HARMONY STORAGE

- The On-Site Construction Supervisor shall notify the Project Manager and the Designated Archaeology Consultant immediately via telephone call upon learning of the discovery.
- The call will be followed up by an email notification summary to BESS Project the Manager and the Designated Archaeology Consultant.



STEP 3: MANAGER NOTIFIES LOCAL LAW ENFORCEMENT AGENCY AND THE SHSND ARCHAEOLOGICAL STAFF

- The On-Site Construction Supervisor will notify the local law enforcement agency, including the Cass County Sheriff's Office, and the SHSND archaeological staff. Per NDCC Section 23-06-27, the Cass County Sheriff's Office must be notified any time human remains are discovered.
- The Cass County Sheriff will contact the North Dakota State Forensic Examiner to determine whether the remains are associated with a crime scene.
- If the North Dakota State Forensic Examiner determines that the remains are associated with a crime scene and/or must be removed for further evaluation, jurisdiction of the remains will be transferred to law enforcement. Construction work will not recommence until permission is granted by law enforcement agencies.
- If the North Dakota State Forensic Examiner determines that the remains are human, not associated with a crime scene, and are historic or prehistoric, the Designated Archaeology Consultant will contact the SHSND State Archaeologist. The SHSND State Archaeologist and the Designated Archaeology Consultant shall review the remains and any associated artifacts or burial objects pursuant to North Dakota Administrative Code Chapter 40-02-03 and North Dakota Century Code Chapter 23-06-27. When review is complete, the remains and burial goods must be reinterred pursuant to rules adopted by NDDHS and SHSND. Ground-disturbing activities within the Stop-Work Area will not recommence until approval is granted by the SHSND.

STEP 4: ACTION PLAN AND RESUME WORK

- Work will not resume within the Stop-Work Area until written approval has been granted by the local law enforcement agency and/or the SHSND archaeological staff.
- If the human remains have been turned over to the SHSND archaeological staff, work within the Stop-Work Area will not resume until a written action plan has been developed and the SHSND archaeological staff has agreed in writing that work can resume.
- Upon receipt of written approval to resume work and approval by the Project Manager, the On-Site Construction Supervisor may remove fencing and signage and resume work within the Stop-Work Area.



5 Contact List

Agency	Name	Title	Phone	Email
	TBD	On-Site Construction Supervisor		
	TBD	Harmony Storage Project Manager		
Stantec	Angela Julin	Designated Archaeology Consultant	763-245-1005	angela.julin@stantec.com
SHSND	Andrew Clark	North Dakota State Historic Preservation Officer	701.328.2666	andrewclark@nd.gov
Cass County Sheriff's Office	Jesse Jahner	Cass County Sheriff	(701) 241-5800	
North Dakota State Forensic Examiner Division	Dr. Lauren Huddle	North Dakota State Forensic Examiner (ND Dept. of Health)	(701) 328-6138 After hours: (701) 220-6692	NDMEOffice@nd.gov



With every community, we redefine what's possible.

Stantec is a global leader in sustainable engineering, architecture, and environmental consulting. The diverse perspectives of our partners and interested parties drive us to think beyond what's previously been done on critical issues like climate change, digital transformation, and future-proofing our cities and infrastructure. We innovate at the intersection of community, creativity, and client relationships to advance communities everywhere, so that together we can redefine what's possible.



Stantec Consulting Services Inc.
One Carlson Parkway North, Suite 100
Plymouth MN 55447-4440
stantec.com

With every community, we redefine what's possible.

Stantec is a global leader in sustainable engineering, architecture, and environmental consulting. The diverse perspectives of our partners and interested parties drive us to think beyond what's previously been done on critical issues like climate change, digital transformation, and future-proofing our cities and infrastructure. We innovate at the intersection of community, creativity, and client relationships to advance communities everywhere, so that together we can redefine what's possible.

Stantec Consulting Services Inc.

One Carlson Parkway North, Suite 100

Plymouth MN 55447-4440

stantec.com

