# PHASE I ARCHEOLOGICAL SURVEY OF 44.5 HA (110 AC) FOR THE PROPOSED WANNIGAN PARK PROJECT, BURLINGTON TOWNSHIP, BECKER COUNTY, MINNESOTA

Section 26, T138N, R40W

# THIS VOLUME MAY CONTAIN SITE LOCATION INFORMATION NOT FOR PUBLIC DISTRIBUTION

BCA 3064

Prepared for City of Frazee 222 Main Avenue West Frazee, Minnesota 56544

Prepared by
Jared A. Langseth
(Principal Investigator)
And
Josh Anderson
(Project Archeologist)

Bear Creek Archeology, Inc. Derek V. Lee, Director P.O. Box 347 Cresco, Iowa 52136

#### MANAGEMENT SUMMARY

This report summarizes a Phase I archeological survey conducted by Bear Creek Archeology, Inc., Cresco, Iowa, for the city of Frazee, Minnesota, in association with the proposed Wannigan Park project. Encompassing approximately 44.5 ha (110 ac), the project area is set near the northeastern fringes of Frazee and occupies portions of the E½ of Section 26, T138N, R40W, Burlington Township, Becker County, Minnesota. Jared A. Langseth served as the principal investigator for this project, and BCA personnel conducted the fieldwork in May of 2022. The background review indicated that no formally recorded official archeological sites or inventoried properties exist within or adjacent to the project area. An alpha site (21BKe) was found to intrude into the southeastern portion of the project area, which represents one or more of the early mills associated with Frazee.

The geomorphic evaluation consisted of a visual examination of the project area and the extraction of 23 hand probes, 16 of which were recorded as formal profiles. The project area, which was mostly occupied by tilled agricultural fields, also included some tree and grass ground covers that were largely focused along the lower-lying stretches that occurred over an undulating glacial outwash plain expressed as a series of rises and depressions. The majority of the project area was found to be disturbed however, largely intact and well-drained soils were encountered along some of the lower rises adjacent to the Otter Tail River floodplains in the east-central part. The archeological investigation involved a pedestrian survey and the excavation of 117 shovel tests. As a result, five prehistoric sites were discovered (21BK0145–21BK0149). A historic artifact scatter, likely relating to a mid-twentieth century dumping episode, was also identified but due to its very poor condition and relative youth, was not formally documented as an official archeological site. No definitive evidence of mill-related activities was observed within the project area during the survey.

The five archaeological sites recorded during this Phase I survey are accounted for by two undifferentiated prehistoric lithic scatters (21BK0145 and 21BK0146), an undifferentiated prehistoric artifact scatter (21BK0147), and two Woodland tradition component artifact scatters (21BK0148 and 21BK0149). Given the disturbances witnessed at 21BK0145–21BK0147, these sites are interpreted as having low to very low potential for the presence of intact archeological deposits. As such, it does not appear likely that 21BK0145–21BK0147 are potentially eligible for National Register of Historic Places listing, and Bear Creek Archeology, Inc. recommends no further work for the sites. Sites 21BK0148 and 21BK0149 do appear to be largely undisturbed single component sites and are thought to have moderate to high potential for the presence of intact archeological deposits. Due to this, 21BK0148 and 21BK0149 are likely potentially eligible for National Register of Historic Places listing under Criterion D therefore, Bear Creek Archeology, Inc. recommends that 21BK0148 and 21BK0149 be avoided. If 21BK0148 and 21BK0149 cannot be avoided during the course of this or future developments, additional investigations are recommended.

# TABLE OF CONTENTS

MANAGEMENT SUMMARY	i
TABLE OF CONTENTS	ii
LIST OF TABLES	iii
LIST OF FIGURES	iii
INTRODUCTION	
PROJECT AREA LOCATION	1
RESEARCH DESIGN	1
BACKGROUND RESEARCH	2
Physiographic Region	3
Archaeological Resource Region	3
Project Area Soils	4
Landscape Analysis	5
Historic Maps	5
Aerial Photographs	6
Previously Recorded Cultural Resources	6
Brief Frazee Mill History	
Background Research Summary	7
FIELD METHODS AND SURVEY RESULTS	8
Field Methods	8
Geomorphic Evaluation	
Archeological Investigation	9
Newly Recorded Archeological Sites	10
21BK0145	10
21BK0146	11
21BK0147	12
21BK0148	13
21BK0149	
SUMMARY AND CONCLUSIONS	16
REFERENCES CITED	19
FIGURES	
APPENDIX A: Soil Profiles	
APPENDIX B: Minnesota Archaeological Site Forms	64
APPENDIX C: Catalog Sheets	
APPENDIX D: National Archaeological Database Form	66

# LIST OF TABLES

Table 1. Mapped soils in the project area	4
LIST OF FIGURES	
Figure 1. Physiographic location of the project area	24
Figure 2. Minnesota Archaeological Resource Regions	
Figure 3. Topographic map of the project area	
Figure 4. Scale map of the project area	27
Figure 5. Soil map of the project area	28
Figure 6. Lidar image of the project area	29
Figure 7. 1871 map of the project area (GLO)	30
Figure 8. 1874 map of the project area (Andreas)	31
Figure 9. 1907 map of the project area (Sanborn)	32
Figure 10. 1911 map of the project area (Ogle and Company)	33
Figure 11. 1929 map of the project area (Brock and Company)	34
Figure 12. 1953 aerial photograph of the project area	35
Figure 13. 1957 aerial photograph of the project area	
Figure 14. 1965 aerial photograph of the project area	
Figure 15. 1970 aerial photograph of the project area	38
Figure 16. 1981 aerial photograph of the project area	39
Figure 17. 1991 aerial photograph of the project area	40
Figure 18. 2003 aerial photograph of the project area	
Figure 19. Project area from the southern portion. View to the east-southeast	
Figure 20. Project area from the southern portion. View to the northeast	
Figure 21. Project area from the southern portion. View to the north-northwest	
Figure 22. Project area from the central portion. View to the south-southwest	
Figure 23. Project area from the central portion. View to the northwest	
Figure 24. Project area from the central portion. View to the northeast	
Figure 25. Project area from the central portion. View to the east	
Figure 26. Project area from the central portion. View to the south	
Figure 27. Project area from the northern portion. View to the southwest	
Figure 28. Project area from the northern portion. View to the south-southeast	
Figure 29. Project area from the northern portion. View to the east	
Figure 30. Rubbish along southeastern portion of project area. View to the north	
Figure 31. Spoil piles northwest of covered bridge. View to the north-northwest	
Figure 32. Spoil piles northwest of covered bridge. View to the northwest	
Figure 33. Covered bridge. View to the northeast	
Figure 34. Covered bridge. View to the north	
Figure 35. Covered bridge. View east-northeast	
Figure 36. Covered bridge. Interior wall	
Figure 37. Covered bridge. Interior roof	51

# LIST OF FIGURES, continued

Figure 38.	Covered bridge. Interior floor	51
Figure 39.	Coverage of historic scatter. View to the east	52
Figure 40.	Sample of materials encountered in historic scatter	52
Figure 41.	Scale map of 21BK0145	53
Figure 42.	Coverage of 21BK0145. View to the east	54
Figure 43.	Coverage of 21BK0145. View to the south	54
Figure 44.	Scale map of 21BK0146	55
Figure 45.	Coverage of 21BK0146. View to the east-southeast	56
Figure 46.	Coverage of 21BK0146. View to the southeast	56
Figure 47.	Scale map of 21BK0147	57
Figure 48.	Coverage of 21BK0147. View to the southwest	58
Figure 49.	Coverage of 21BK0147. View to the west-southwest	58
Figure 50.	Scale map of 21BK0148	59
Figure 51.	Coverage of 21BK0148. View to the south	60
Figure 52.	Coverage of 21BK0148. View to the north-northeast	60
Figure 53.	Scale map of 21BK0149	61
_	Coverage of 21BK0149. View to the south	
Figure 55.	Coverage of 21BK0149. View to the west-southwest	62

#### INTRODUCTION

Bear Creek Archeology, Inc. (BCA), of Cresco, Iowa, was contracted by the city of Frazee, Minnesota, to conduct a Phase I archeological survey for the proposed Wannigan Park project. The project area for the proposed work covers approximately 44.5 ha (110 ac) in Burlington Township, Becker County, Minnesota. The survey was conducted in accordance with the National Historic Preservation Act (Advisory Council on Historic Preservation [ACHP] 2004, 2016) and the Secretary of the Interior's standards for the identification of historic properties (National Park Service [NPS] 1983). The fieldwork and the report of investigation were designed and conducted to meet or exceed the recommended guidelines for archeological investigations in Minnesota, as outlined in the SHPO Manual for Archaeological Projects in Minnesota (Anfinson 2011). The purpose of this investigation was to identify any historic and archeological properties at the Phase I level that may be present within the area of potential effect (ACHP 2016). This report details the information gathering process concerning cultural resource properties that may exist in or near the project area and will describe the fieldwork conducted, provide analysis information, and conclude with site-specific recommendations should they be needed. Jared A. Langseth served as the principal investigator for this project, and BCA personnel conducted the fieldwork in May of 2022.

#### PROJECT AREA LOCATION

The project area is located within the Wadena Drumlin Area and Central Lakes Deciduous Archaeological Resource (Subregion 4w) physiographic regions of Minnesota (Anfinson 1990; Wright 1972a; Figures 1 and 2). Encompassing approximately 44.5 ha (110 ac), the project area is set near the northeastern fringes of Frazee and occupies portions of the E½ of Section 26, T138N, R40W, Burlington Township, Becker County, Minnesota (Figure 3). The northern and southern ends are defined by 120<sup>th</sup> Street and North River Drive, respectively, while the Otter Tail River runs along much of the eastern edge of the project area (Figure 4). A number of small lakes are within 2 km (1.2 mi) of the project area to the north, west, and south.

#### RESEARCH DESIGN

The purpose of this investigation is to document the cultural resources within the project area at the Phase I level of investigation. Goals of the Phase I survey are based on the Secretary of the Interior's Standards and Guidelines for the Identification of Archeological Properties (NPS 1983). Phase I surveys are intended to provide basic data on the occurrence, location, and identification of cultural resources within a given area. The survey strategy is based on the analysis of the project area and the landforms that exist within it. Since geological processes determine the geographic and pedologic character of

a region, an understanding of an area's geologic history is crucial to any evaluation of the archeological record. Landform and soil characteristics have a strong influence on the presence and distribution of the plant and animal communities utilized by human populations. Geological processes not only affect the patterns of human settlement but are also largely responsible for the preservation and destruction of the archeological record.

Therefore, the archeological record can be viewed as a product of both cultural and geological processes (Bettis and Green 1991). Because archeological sites are incorporated into the environment by natural formation processes, they may be viewed not only as cultural remains but also as geological deposits. This perspective on the location of sites allows the investigator to create predictive models of archeological site occurrence and patterned distributions within a given area, relative to its existing landforms (Bettis and Benn 1984; Bettis and Thompson 1981). Such an approach also proves useful in the recognition of post-settlement alluvium (PSA), madeland, plowzones (Ap horizons), and other disturbances that may have modified the area under investigation.

This type of landform modeling as a tool of cultural resource management is crucial to the development of survey strategies. More geologically sensitive strategies allow the investigator to focus on those areas where the probabilities of site occurrence are highest, reducing or eliminating the cost of surveying those areas where sites would not logically occur (e.g., madeland, heavily disturbed areas, or landforms consisting entirely of recent alluvium, etc.). Within those areas of focused investigation, informed survey strategies allow for the determination of the depth and distribution of subsurface tests necessary for the location of buried cultural deposits. Additionally, the nature of the proposed impacts can be assessed in terms of the landforms present.

#### BACKGROUND RESEARCH

Data from multiple sources were accessed and examined during the review of background information for this project area. The information was used to gain an understanding of the environmental and historic context of the project area. Among the sources utilized for the current research were Physiography of Minnesota (Wright 1972a), MN/Model (Hudak et al. 2002), various landform models (Bettis and Benn 1984; Bettis and Littke 1987; Bettis et al. 1996; Ruhe 1969), and records maintained by Minnesota State Historic Preservation Office (SHPO) and Office of the State Archaeologist (OSA). Historic maps and aerial photographs (Andreas 1874; Brock and Company 1929; Geo. A. Ogle and Company 1911; General Land Office [GLO] 1871; John R. Borchert Map Library 2015; Sanborn Map Company 1907), soils data (Christensen 1998; Natural Resources Conservation Service [NRCS] 2021), and sources of local landform information (i.e., lidar imagery, U.S. Geological Survey [USGS] topographic maps) were also consulted prior to fieldwork. A work on the history of Becker County was reviewed as well (Wilcox 1907).

# Physiographic Region

The project area is located within the physiographic region known as the Wadena Drumlin Area (Wright 1972a; Figure 1). This region is positioned between the Alexandria Moraines and the McGrath Till Plain, and consequentially has characteristics of both. Topography within the Wadena Drumlin Area is characterized as gently rolling with sections of drumlins (White 2020). Soils across the Wadena Drumlin Area are represented by moist prairie Udolls in the southern quarter and along the western boundary, forest Udalfs in central and northwestern portions, and a significant area of sandy forest Psamments to the northeast (White 2020).

Within the McGrath Till Plain, the lowest elevations generally occur in river valleys to the south and east before ascending to areas along outwash and glacial drift plains in the north. Native vegetation was primarily prairie in the southwest, aspen-oak woodlands, oak openings, and savannah in the southeast, and hardwoods and aspen-oak woodlands north of the Sauk River (White 2020).

Alexandria Moraine Area physiographic region exhibits kame and kettle topography that is marked by numerous lakes and knobs interrupted by extensive areas of outwash, forming a large continuous ridge across west-central Minnesota that extends for approximately 241 km (150 mi) from the north of Alexandria to the east of Willmar, Minnesota (Anderson 1992; Wright 1972a, 1972b, 1973). Over 200 lakes, varying in size from a few acres to several square miles, have been named in Douglas County alone (Alexandria Chamber of Commerce 1991). These lakes, along with the associated sloughs and marshy wetlands, together account for over 10% (16,495 ha [40,760 ac]) of the surface area of the county (DeMartelaere 1975). Most surfaces within the region are covered by Wisconsinan-age glacial drift associated with the Wadena and Des Moines Lobes. Throughout Douglas County, for instance, drift deposits range from about 38–145 m (125–475 ft) in thickness (Schwartz and Thiel 1954). Although pre-Wisconsinan, Quaternary-age deposits likely exist in the region, they are not well understood and, if present, would probably be deeply buried by more recent drift.

#### Archaeological Resource Region

The Central Lakes Deciduous Archaeological Resource Region covers most of central and east-central Minnesota and could be described as extending into west-central Wisconsin (Anfinson 1990; Gibbon et al. 2002; Figure 2). The topography of the region is characterized by a patchwork of moraines, till plains, and outwash plains, featuring many lakes. The western portion of the region is drained by streams flowing westward into the Red River drainage. The Mississippi River flows through the central and eastern parts of the region, and the Minnesota portion of the region is bound to the east by St. Croix River. Soils found throughout the region reflect the varied glacial and ecological history, displaying medium- to coarse-textured prairie soils in the south and west and medium- to coarse-textured forest soils in the north and east. Bedrock outcrops throughout the region are restricted to occasional exposures in the central and eastern portions of the region. During the first half of the Holocene, the Becker County portion of the region was primarily

covered by prairie vegetation, but by 5000 B.P. an oak dominated forest had expanded to occupy the northeastern two-thirds of the county. At 3000 B.P. the forest was mixed with additional deciduous tree species, which remained the primary vegetation cover at the time of settlement. The forested environment present throughout the latter half of the Holocene, coupled with the presence of numerous lakes and marshes, would have provided ample subsistence resources, including nut masts, wild rice, deer, beaver, bear, a variety of fish and fowl, and, possibly, bison, elk, and moose.

# Project Area Soils

According to the NRCS and Soil Survey of Becker County, there are nine soil units delineated within the project area (Christensen 1998; NRCS 2021; Table 1; Figure 5). One series, Abbeylake loamy sand (753D and 753E), and a complex, the Verndale-Abbeylake (1131B and 1250C), account for four of the units and the majority of the project area, combining to total approximately 78.9%. Abbeylake loamy sand and Verndale-Abbeylake complex soils are associated with upland rises along outwash plains and are excessively or somewhat excessively drained. Representing three of the units present and forming about 13.2% of the project area when taken together, the Nidaros muck series (1111 and 1136) and Haslie, Seelyeville, and Cathro complex (1113) relate to floodplains or upland depressions and are very poorly drained. In general, the elevated, excessively or somewhat excessively drained soils within the project area (units 753D, 753E, 1131B, and 1250C) are interpreted as having moderate to high overall archeological potential, while the lower lying, very poorly drained portions are thought to have low archeological potential overall. The project area also includes two units, Udipsamments (1015) and Udorthents (1027), that together account for around 7.9% of the project area and are associated with modern or historic fill. These two units (1015 and 1027) are interpreted as representing low overall archeological potential as well.

Table 1. Mapped soils in the project area (Christensen 1998; NRCS 2021).

		1 1		,		
Symbol/Soil	% Project	Landscape	Drainage	Parent	Native	Typical 2 m
Name	Area	Position	Class	Material	Vegetation	(6.6 ft) profile
753D Abbeylake loamy sand, 12–20% slopes	15.6	Rises on outwash plains	Excessively drained	Glacial outwash	Mixed forest and prairie vegetation	Ap-Bw-C1/C2
753E Abbeylake loamy sand, 20–30% slopes	1.7	Rises on outwash plains	Excessively drained	Glacial outwash	Mixed forest and prairie vegetation	A-Bw1/Bw2-C
1015 Udipsamments, cut and fill land	3.6	Artificial landforms	Excessively drained	Fill	N/A	AC-C1-C2

Table 1. Mapped soils in the project area (Christensen 1998; NRCS 2021), continued

1027 Udorthents, wet substratum, fill land	4.3	Artificial landforms	N/A	Fill	N/A	C
1111 Nidaros muck, frequently flooded	4	Floodplains on outwash plains	Very poorly drained	Organic material over glacial outwash	Forest or wetland vegetation	Oa1/Oa2- A1/A2-2Cg
Haslie, Seelyeville, and Cathro soils, frequently poned, 0–1% slopes	6.6	Depressions	Very poorly drained	Organic material or Organic material over outwash	Forest or wetland vegetation	Oa-Lco or Oa1- Oa2 or Oa-Cg
1131B Verndale- Abbeylake complex, 1–6% slopes	6.4	Rises on outwash plains	Somewhat excessively drained	Glacial outwash	Mixed forest and prairie vegetation	Ap/A-Bt-Bw-C or A-AB/Bw-C
1136 Nidaros muck	2.6	Depressions on outwash plains	Very poorly drained	Organic material over glacial outwash	Forest or wetland vegetation	Oa-A/Bg-2Cg
1250C Abbeylake- Verndale complex, 6– 12% slopes	55.2	Rises on outwash plains	Excessively drained	Glacial outwash	Mixed forest and prairie vegetation	Ap-Bw1/Bw2- C or Ap-Bt- 2BC-2C

# Landscape Analysis

Combined with the available soil information, a review of topographic and elevational data shows that the project area is mostly comprised of an undulating upland landscape consisting of rises and depressions along an outwash plain but also includes some of the Otter Tail River floodplains (Figures 4–6). The lidar imagery faintly depicts a railroad grade intruding into the southern portion of the project area and also portrays an access road that appears to truncate the rises it traverses (Figure 6). The area associated with soil units deriving from fill (1015 and 1027) seems somewhat linear on the lidar as well, which may relate to possible measures taken to drain a depression. Elevations within the project area range from approximately 417.6–432.8 m (1,370–1,420 m) above the National Geodetic Vertical Datum (NGVD).

# Historic Maps

No historic structures or other artificial features are observable within or adjacent to the project area on the 1871 GLO (Figure 7). The 1874 (Andreas) map depicts a roadway running through or near the project area on a north-south trajectory and also portrays a mill

within the vicinity, but it is not clear whether or not the mill is within the project limits (Figure 8). The mill associated with the Nichols-Chisholm Lumber Company is seen some 350 m (1,148 ft) to the south of the project area on the 1907 (Sanborn map Company) map of Frazee (Figure 9). A railway is shown as passing across the southeastern portion of the project area on the 1911 (Geo. A. Ogle and Company) plat, which also represents the Nichols-Chisholm Lumber Company property and a sawmill to the south (Figure 10). The 1911 plat indicates roadway along the northern border as well. No additional features of relevance are perceivable within or adjacent to the project area on the 1929 (Brock and Company) map, other than the absence of the railway within the project area (Figure 11).

# Aerial Photographs

Aerial photographs from 1953–2017 were reviewed. Most of the project area appears cultivated throughout the sequence of reviewed photographs, and the same images faintly portray an abandoned railroad grade within the southeastern portion (Figures 12–18). The entire sequence of reviewed images also depicts a structure (e.g., bridge or dam) over the Otter Tail River along the eastern border of the project area in the southern portion, and the earliest may show artificial channelization to the west of the structure (Figures 12–18). The access road and feeders associated with the project area do not seem to have achieved the current configuration until sometime between 1991 and 2003 (Figures 17 and 18). No other relevant structures or features were observed on the reviewed aerial photographs.

# Previously Recorded Cultural Resources

A review of SHPO and OSA records indicates that no formally recorded official archeological sites or inventoried historic properties exist within or immediately adjacent to the project area. The records review did demonstrate, however, that an alpha site (21BKe) intrudes into the southeastern portion of the project area (Kapler 1986; Figure 3). The records review also revealed a number of inventoried properties associated with the town of Frazee and two archeological sites within a 1.6 km (1 mi) radius of the project area (21BK0002 and 21BK0005). Both 21BK0002 and 21BK0005 are prehistoric sites that include mounds and are located around 1.5 km (.9 mi) south of the project area (Ollenday 1995a, 1995b).

The alpha site partially within the project area (21BKe) refers to one or more of the early lumber mills in and around Frazee (e.g., the Nichols-Chisholm Lumber Company, Commonwealth Lumber Company, and Campbell-Chilton mills). Differing from its plotted location, a remnant of the alpha site in the form of the cement foundation for the mill burner and a metal anchoring pin are described as being located in a yard south of State Highway 87, which is around 400 m (1,312 ft) south of the project area (Kapler 1986). This written description of 21BKe matches the location of the Nichols-Chisholm Lumber mill as shown on the 1907 (Sanborn Map Company) map of Frazee (Figure 9). The mapped location of the alpha site may either be misplotted or a reference to one of the other mills in the area, such as the Commonwealth Lumber Company or Campbell-Chilton mills.

# Brief Frazee Mill History

The following is taken from *A Pioneer History of Becker County, Minnesota*, which includes a brief history of Frazee's early lumber mills (Wilcox 1907:305–308). In 1872 members of the Cambell and Chilton families built a dam and sawmill in Section 26, near the future location of the Nichols-Chisholm Lumber Company mill, that was soon after acquired by R.L. Frazee and expanded to include a flour mill. In 1881 Frazee moved the mills farther downriver to the south, building a new dam at the east end of Front Street (now Main Avenue). After these structures burned down in 1889, A. H. Wilcox repaired the dam and rebuilt the sawmill, operating these facilities from 1890–1897 before selling to the Commonwealth Lumber Company. Following this transaction, the Commonwealth Lumber Company constructed a steam powered sawmill near where the Campbell-Chilton mill was once located. Based on the reviewed historic maps, the Nichols-Chisholm Lumber Company had replaced the Commonwealth Lumber Company by 1907, but it is not clear whether this involved another mill relocation.

#### Background Research Summary

The background research indicated that the project area is mostly comprised of an undulating upland landscape consisting of rises and depressions along an outwash plain but also includes some of the Otter Tail River floodplains. Given the age of the landforms present and the proximity of the Otter Tail River, the elevated, well-drained portions of the project area are interpreted as having moderate to high overall archeological potential. Conversely, due to the poor drainage capacity of the related soils, the lower-lying parts of the project area are interpreted as having low overall archeological potential. It appears that much of the project area has been under cultivation since at least 1953 (Figure 12), indicating that the likelihood for undisturbed archeological resources has been diminished.

Although no formally documented official archeological sites or inventoried properties exist within or adjacent to the project area, an alpha site (21BKe) does intrude into the southeastern portion. 21BKe represents one or more sawmills from the late nineteenth and/or early twentieth centuries. The review of historic maps and a county history indicated that these mills were most likely south of the project area. However, while it appears that the mills associated with Frazee's Front Street operation and the Nichols-Chisholm Lumber Company certainly occurred south of the project area, the same cannot be said with as much confidence for the Campbell-Chilton and Commonwealth Lumber Company mills. A structure is visible spanning the Otter Tail River along the eastern edge of the southern part of the project area on aerial imagery going back until at least 1953, but it is not clear whether or not this relates to any of these mills (Figures 12–18). An online resource list indicates that a covered bridge was built in 1998 at the location of the span apparent on aerials, but the source of the information is not clear (Travis 2020). Further, railway, now nonextant, which may also have been mill related, likely once existed in the southeastern portion of the project area according to historic maps and aerial imagery. Based on the reviewed maps and photographs, this portion of railway was likely abandoned between 1911 and 1929 (Figures 10 and 11).

#### FIELD METHODS AND SURVEY RESULTS

#### Field Methods

Field investigations were conducted based on the results of the background research and followed the guidelines for archeological investigations in Minnesota (Anfinson 2011). Prior to the site discovery portion of fieldwork, the project area was geomorphologically investigated. The geomorphological evaluation involved a visual inspection and informal walkover of the project area as well as the use of a ¾" hand probe in order to assess the integrity of the included landforms and determine if any buried soils were present. Representative soil profiles (SPs) were recorded for some of the hand probes (see Appendix A). Upon completion of the geomorphological assessment, the site discovery stage utilized a combination of pedestrian survey at 10 m (32.8 ft) intervals in cases of adequate ground surface visibility (GSV) and the completion of shovel tests on landforms determined by the geomorphic study to have suitable potential for cultural materials coupled with low GSV. Shovel tests had 35 cm (15.7 in) diameters and were advanced in 5–15 m (16.4–49.2 ft) intervals along similarly spaced transects. The removed matrix was screened in 10 cm (3.9 in) levels through ¼" hardware mesh, and all tests were dug at least 10–20 cm (3.9–7.9 in) into the B horizon. All tests were backfilled after completion.

# Geomorphic Evaluation

The geomorphic evaluation consisted of a visual examination of the project area and the extraction of 23 hand probes, 16 of which were recorded as formal profiles (see Appendix A). The project area, which was mostly occupied by tilled agricultural fields (80–90% GSV) but also included some tree and grass ground covers (<20% GSV) that were largely focused along the lower-lying stretches, occurred over an undulating glacial outwash plain expressed as a series of rises and depressions (Figures 3–6 and 19–29). The majority of the rises within the project area were relatively small and subtle, exhibiting very gently sloping to moderately steep (1–18%) slopes, but larger, more prominent rises that had up to very steep (>25%) slopes were present as well. Much of the eastern edge of the project area was situated on the floodplains of the Otter Tail River. Historic and modern disturbances other than those obviously related to agriculture were witnessed throughout, including several rubbish piles along the southeastern portion that appeared less than 50 years in age and an access road that ran through the project area along nearly its entire length (Figures 30–40).

The majority of the project area was found to be disturbed (SPs 1–11). The most widespread disturbances seen throughout the project area resulted from cultivation and erosion (SPs 1–3, 5, 7, 9, and 10), but more severe discontinuities associated with other historic and modern activities (e.g., road and railway related) were also witnessed (SPs 4, 6, 8, and 11). The portions of the project area identified as disturbed included all of the agricultural fields present, the only exception being a small stretch of depression along the western border that appeared largely intact but poorly drained (SP 12). In contrast to the rest of the project area, largely intact and well-drained soils were encountered along some

of the lower rises adjacent to the Otter Tail River floodplains in the east-central part (SPs 13–16). The disturbed or poorly drained portions of the project area were interpreted as having low to very low potential for the presence of intact archeological deposits, while the largely intact and well-drained parts were thought to have a moderate to high likelihood for the occurrence of such deposits.

No features representing possible prehistoric mounds were identified during the geomorphological evaluation. One area with artificial surficial anomalies was found, however, the piles had a relatively youthful appearance that was readily perceivable (Figure 31 and 32). A hand probe taken next to the spoil piles, which revealed undeveloped (i.e., recent) fill horizons, also indicated that the features were not prehistoric (SP 6). The reviewed aerial imagery indicated that these piles were likely associated with railway related activities (Figures 12–18).

# Archeological Investigation

The archeological investigation was initiated with a pedestrian survey of the agricultural field portions of the project area at 10 m (32.8 ft) intervals. As a result of the surface survey, three prehistoric archeological sites were discovered (21BK0145–21BK0147). The three sites were subsequently shovel tested at 10 m (32.8 ft) intervals, resulting in the completion of 65 tests combined. Sites 21BK0145–21BK0147 are discussed in more detail in the following section.

A historic scatter was also encountered during the pedestrian survey (Figure 39). The scatter contained both domestic refuse (e.g., ceramics, vessel glass, plastics, and clothing) and building material waste (e.g., window glass and concrete) that appeared to primarily date to the mid-twentieth century (Figure 40). Although lidar and aerial imagery suggests that a railway once passed through the center of the scatter, the materials present combined with the historic aerial photographs indicate the scatter postdates the active use of the railway and that the two are not directly related (Figures 6 and 12–18). No visible surficial evidence of the abandoned railroad grade was observed within the project area. Given the apparent age of the scatter and the inclusion of domestic materials, it is not likely directly related to mill activities. No evidence for a structure(s) within the vicinity of the historic scatter was seen on the reviewed historic maps and aerial photographs, and no indications of such features were observable on the surface (Figures 7–18). It appears that the scatter represents a dumping episode, although the possibility of it being related to a structure at the location cannot be entirely dismissed. Due to its very poor condition and relative youth, the historic scatter was not formally documented as an official archeological site.

To the north-northeast of the historic scatter and southeast of the spoil piles, an actively used covered bridge over the Otter Tail River was found intruding into the project area. The bridge appears to have been made relatively recently or to have undergone a number of modifications since its initial construction (Figures 33–38). It is not clear whether or not the bridge is the same structure depicted at that location in historic aerial images (Figures 12–18). No obvious indications of a dam remnant were observed within the vicinity of the covered bridge.

Following the pedestrian survey, the small, well-drained, largely intact rises identified near the Otter Tail River were shovel tested. Initially, 30 shovel tests were completed across these landforms at 10–15 m (32.8–49.2 ft) intervals, which led to the discovery of two prehistoric archeological sites (21BK0148 and 21BK0149). Additional shovel tests (n = 22) were dug at 5–10 (16.4–32.8 ft) intervals in and around the two sites. Sites 21BK0148 and 21BK0149 are discussed further below. In total, approximately 27.1 ha (67 ac) of agricultural field were systematically surface surveyed and 117 shovel tests were completed throughout the project area during the course of this Phase I investigation, resulting in the discovery and formal documentation of five prehistoric archeological sites (21BK0145–21BK0149).

Newly Recorded Archeological Sites

**Archeological Site:** 21BK0145

Cultural Affiliation: undetermined prehistoric

**Site Type:** prehistoric lithic scatter

Site Area: maximum length by width of 36.6 x 29 m (120 x 95 ft), covering approximately

705 m<sup>2</sup> (7,589 ft<sup>2</sup>) or .1 ha (.2 ac)

Location: NW<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>, Section 26, T138N, R40W, Burlington Township, Becker County,

Minnesota (Figure 3)

UTM Coordinates (midpoint): NAD 83; Zone 15; Easting: 294,015; Northing: 5,179,202

Elevation: 420.6 m (1,380 ft) above the NGVD

Ground Cover: tilled agricultural field with 80–90% GSV and grass with <20% GSV

**Disturbances:** plowing, erosion, and railway related activities

**Mapped Soil Types:** Abbeylake loamy sand, 20–30% slopes (753E), and Abbeylake-Verndale complex, 6–12% slopes (1250C; Table 1; Figure 5)

Geomorphic Context: 21BK0145 is situated on a very gently to moderately sloping (1–9%) portion of a small rise adjacent to the Otter Tail River (Figures 41–43). The rise, which occurs along an outwash plain, has been cut into by the river, giving the landform the impression of a high terrace. Elevations decline slightly to the east and west of the site, while gradually increasing to the north. The escarpment between the rise and Otter Tail River floodplains nearly abuts the southern end of the site. Most of the site is occupied by tilled agricultural field (80–90% GSV), but a narrow stretch of grass (<20% GSV) between the field and riverbank is also present. Shovel testing (n = 13) and hand probing (n = 1) indicated that the agricultural field part of the site is disturbed (SP 1). Shovel tests (n = 3) dug along the grassy area of the site revealed the presence of fill horizons that truncate the subsoil. The fill likely relates to the railway that appears to have once clipped the site southern and eastern portions of the site (Figures 6, 9, 10, and 12). Given the disturbances witnessed throughout the site, it is interpreted as having low to very low potential for the presence of intact archeological deposits.

**Field Investigation:** 21BK0145 was discovered while conducting a surface survey at 10 m (32.8 ft) intervals over a tilled agricultural field with 80–90% GSV (Figures 41–43). During the pedestrian survey, a few possible pieces (n = 3) of fire-cracked rock were observed within the site area but not collected. Shovel tests were subsequently completed across the area in 10 m (32.8 ft) intervals. In total, 16 shovel tests were dug within and adjacent to the site, three of which were positive (STs 1–3), resulting in four artifacts being

recovered. Two of the artifacts collected from the site were found within plowzone contexts from 0–30 cm (0–11.8 in) below the surface, while two others were discovered more deeply (40–50 cm [15.7–19.7 in] below the surface) and likely in a fill horizon (Appendix C).

**Artifact Analysis:** The artifacts collected from 21BK0145 were three pieces of lithic debitage and an unifacial tool fragment. The debitage is represented by a Knife River flint tertiary thinning flake, a piece of heat-treated rhyolite shatter, and a Tongue River silica flake fragment. The unifacial tool fragment is blade-like and made of a heat-treated fossiliferous material that resembles Galena or Burlington chert.

**Interpretation:** 21BK0145 is difficult to interpret because of the low artifact density and high degree of disturbance. The small and materially meager nature of the site may relate to its use as a short-term, single-use camp and/or resource procurement station. However, the site might have once been more substantial, and the contemporary configuration of the site may more be the result of historic and modern disturbances rather than the ephemerality of the behaviors associated with its formation. The limits of the site are well established: negative tests along with an escarpment define the southern border, while the remainder of the site is encompassed by negative tests and areas subjected to pedestrian survey.

**Site Recommendations:** Given the disturbances present at 21BK0145, it does not appear likely that the site is potentially eligible for the National Register of Historic Places (NRHP) listing. As such, BCA recommends no further work for the site.

**Archeological Site:** 21BK0146

Cultural Affiliation: undetermined prehistoric

**Site Type:** prehistoric lithic scatter

Site Area: maximum length by width of 76.2 x 21.3 m (250 x 70 ft), covering

approximately 1,278 m<sup>2</sup> (13,756 ft<sup>2</sup>) or .1 ha (.3 ac)

**Location:** NW½, SE¼, Section 26, T138N, R40W, Burlington Township, Becker County,

Minnesota (Figure 3)

UTM Coordinates (midpoint): NAD 83; Zone 15; Easting: 294,141; Northing: 5,179,227

Elevation: 423.7 m (1,390 ft) above the NGVD

Ground Cover: tilled agricultural field with 80–90% GSV and woods with <20% GSV

**Disturbances:** plowing and erosion

**Mapped Soil Types:** Abbeylake loamy sand, 20–30% slopes (753E), and Abbeylake-Verndale complex, 6–12% slopes (1250C; Table 1; Figure 5)

**Geomorphic Context:** 21BK0146 is situated on a very gently to moderately sloping (1–9%) portion of a small rise adjacent to the Otter Tail River (Figures 44–46). The rise, which occurs along an outwash plain, has been cut into by the river, giving the landform the impression of a high terrace. The rise associated with the site continues a short distance beyond its limits to the northwest and southeast. Beyond the southern border of the site, surfaces gradually descend until a small depression is reached that sits at a similar elevation to the nearby floodplains. The escarpment between the rise and Otter Tail River floodplains largely defines the northern border of the site. Most of the site is occupied by tilled agricultural field (80–90% GSV), but some woods (<20% GSV) are present on the edge of the northern border. Shovel testing (n = 20) and hand probing (n = 2) indicated that both the agricultural field and wooded portions of the site are disturbed (SPs 2 and 3).

Given the disturbances witnessed throughout the site, it is interpreted as having low potential for the presence of intact archeological deposits.

**Field Investigation:** 21BK0146 was discovered while conducting a surface survey at 10 m (32.8 ft) intervals over a tilled agricultural field with 80-90% GSV (Figures 44-46). During the pedestrian survey, fire-cracked rock (n = 2) along with lithic debitage (n = 2)was encountered within the site area. Shovel tests were subsequently completed across the area in 10 m (32.8 ft) intervals. In total, 20 shovel tests were dug within and adjacent to the site, one of which contained a piece of lithic debitage (ST 1). All five of the artifacts found at the site were discovered within plowzone contexts from 0–10 cm (0–3.9 in) below the surface (Appendix C).

Artifact Analysis: The artifacts discovered at 21BK0146 were two fire-cracked rocks and three pieces of lithic debitage. One of the fire-cracked rocks is granite, while the other remains unidentified. The debitage is accounted for by siltstone, quartz, and Swan River chert flake fragments that appear to represent thinning or interior flakes. The Swan River chert flake fragment is the only piece of debitage from the site that appears heat-treated.

**Interpretation:** 21BK0146 is difficult to interpret because of the low artifact density and high degree of disturbance. The small and materially meager nature of the site may relate to its use as a short-term, single-use camp and/or resource procurement station. However, the site might have once been more substantial, and the contemporary configuration of the site may more be the result of historic and modern disturbances rather than the ephemerality of the behaviors associated with its formation. The limits of the site are well established: negative tests along with an escarpment define the northern border, while the remainder of the site is encompassed by negative tests and areas subjected to pedestrian

**Site Recommendations:** Given the disturbances present at 21BK0146, it does not appear likely that the site is potentially eligible for NRHP listing. As such, BCA recommends no further work for the site.

**Archeological Site:** 21BK0147

Cultural Affiliation: undetermined prehistoric

**Site Type:** prehistoric artifact scatter

Site Area: maximum length by width of 152.4 x 62.5 m (500 x 205 ft), covering

approximately 7,278 m<sup>2</sup> (78,340 ft<sup>2</sup>) or .7 ha (1.8 ac)

Location: SW½, NE¼, Section 26, T138N, R40W, Burlington Township, Becker County, Minnesota (Figure 3)

UTM Coordinates (midpoint): NAD 83; Zone 15; Easting: 294,037; Northing: 5,179,713

Elevation: 432.8 m (1,420 ft) above the NGVD

Ground Cover: tilled agricultural field with 80–90% GSV, grass with <20% GSV, and access road with <20% GSV

**Disturbances:** plowing, erosion, and roadway related activities

**Mapped Soil Types:** Abbeylake loamy sand, 12–20% slopes (753D; Table 1; Figure 5)

**Geomorphic Context:** 21BK0147 is situated on a very gently sloping to moderately steep (1–18%) portion of a large rise adjacent to the Otter Tail River (Figures 47–49). The rise occurs along an outwash plain and is relatively prominent, representing a local elevational high. The site is centered along the crest of the rise, and, while surfaces gradually ascend and descend to the east-northeast and west-southwest of the site, respectively, elevations rapidly decrease along the northern and southern flanks. About half of the site is occupied by tilled agricultural field (80–90% GSV), while the other half is covered by grass and access road (<20% GSV). Shovel testing (n=29) and hand probing (n=3) indicated that both the agricultural field and grassy portions of the site are disturbed (SPs 7 and 8). The access road and associated ditch appear to truncate the landform (Figures 6, 48, and 49). Given the disturbances witnessed throughout the site, it is interpreted as having low to very low potential for the presence of intact archeological deposits.

**Field Investigation:** 21BK0147 was discovered while conducting a surface survey at 10 m (32.8 ft) intervals over a tilled agricultural field with 80–90% GSV (Figures 47–49). During the pedestrian survey, a number of artifacts (n = 10) were encountered within the site area. Shovel tests were subsequently completed across the area in 10 m (32.8 ft) intervals. In total, 29 shovel tests were dug within and adjacent to the site, three of which were positive (STs 3, 12, and 17), resulting in the discovery of four more artifacts. All 14 of the artifacts found at the site were discovered within plowzone or fill contexts from 0–60 cm (0–23.6 in) below the surface (Appendix C).

Artifact Analysis: The artifacts discovered at 21BK0147 were three fire-cracked rocks, seven pieces of lithic debitage, two lithic tools, a mammal tooth fragment, and a mammal bone fragment. The fire-cracked rock is represented by two pieces of a granite and a piece of basalt. A Knife River flint end scraper and core fragment made of an unidentified material account for the lithic tools. The debitage from the site is comprised of two decortication flakes, one made from Swan River chert and the other from an unidentified heat-treated material, a piece of Red River chert shatter, a secondary thinning flake of siltstone, and three flake fragments, two of which are Swan River chert and one of which is Knife River flint. The mammal bone fragment, a left mandible, appears to be whitetail deer and given the very light patina, may not be prehistoric in age.

**Interpretation:** Based on the large extent and sprawling nature of 21BK0147, it likely represents multiple episodes and various intensities of use as a camp and/or resource procurement station. It is possible, however, that the disturbances associated with the site have contributed to an artificially enlarged footprint and that the prehistoric behaviors represented by the site actually occurred over a smaller area (i.e., the crest of the rise). The limits of the site are well established, being circumscribed by negative tests and areas subjected to pedestrian survey.

**Site Recommendations:** Given the disturbances present at 21BK0147, it does not appear likely that the site is potentially eligible for NRHP listing. As such, BCA recommends no further work for the site.

**Archeological Site:** 21BK0148

**Cultural Affiliation:** Woodland tradition **Site Type:** prehistoric artifact scatter

Site Area: maximum length by width of 35.1 x 16.8 m (115 x 55 ft), covering approximately 518  $m^2$  (5.576 ft<sup>2</sup>) or < 1 ha (1.52)

approximately 518 m<sup>2</sup> (5,576 ft<sup>2</sup>) or <.1 ha (.1 ac)

**Location:** SW½, NE¼, Section 26, T138N, R40W, Burlington Township, Becker County, Minnesota (Figure 3)

UTM Coordinates (midpoint): NAD 83; Zone 15; Easting: 294,073; Northing: 5,179,615

Elevation: 420.6 m (1,380 ft) above the NGVD

**Ground Cover:** grass and a few trees with <20% GSV

**Disturbances:** erosion

**Mapped Soil Types:** Haslie, Seelyeville, and Cathro soils, frequently ponded, 0–1% slopes (1113), and Abbeylake-Verndale complex, 6–12% slopes (1250C; Table 1; Figure 5)

Geomorphic Context: 21BK0148 is situated on a very gently to strongly sloping (1-14%) portion of a small rise adjacent to the Otter Tail River (Figures 50–52). The rise, which occurs along an outwash plain, has been cut into by the river, giving the landform the impression of a high terrace. The eastern half of the site is more focused on the rise proper, and the landform continues a short distance to the north and south of this portion of the site, gradually increasing and decreasing in elevation, respectively. The eastern border of the site abuts the escarpment between the rise and Otter Tail River floodplains. The western half of the site is slightly more depressed than the eastern, and the portion of the rise associated with the western part more gradually descends into the floodplains. Elevations gradually increase to the north of the western portion of the site, while remaining relatively consistent to the west. The site abuts floodplains along the southern border of the western half. The site is occupied by grass and a few trees (<20% GSV). Shovel testing (n = 24) and hand probing (n = 2) indicated that the site is largely intact (SPs 13 and 14). As such, the site is interpreted as having moderate to high potential for the presence of undisturbed archeological deposits.

**Field Investigation:** 21BK0148 was discovered while shovel testing across the associated landform in 15 m (49.2 ft) intervals (Figures 50–52). Additional shovel tests were subsequently completed at 5–10 m (16.4–32.8 ft) intervals. In total, 24 shovel tests were dug within and adjacent to the site, nine of which were positive (STs 1, 1N, 1SW, 1SE, 2, 2SW, 3, 3SW, and 3NE), resulting in the discovery of 17 artifacts. The artifacts found at the site were recovered from 10–60 cm (3.9–23.6 in) below the surface, and some of the artifacts were encountered within the subsoil (Appendix C).

Artifact Analysis: The artifacts discovered at 21BK0148 were nine fire-cracked rocks, six pieces of lithic debitage, one unifacial lithic tool fragment, and a pottery sherd. Seven of the fire-cracked rocks are granite, and two remain unidentified. The debitage is accounted for by a Gunflint silica primary thinning flake and two flake fragments, one made of rhyolite and the other made of siltstone, along with three pieces of Swan River chert that are represented by shatter, a thinning flake, and a tertiary thinning flake. The unifacial tool fragment is made of an unidentified material and occurs on a large flake. The only lithic artifact recovered from the site that appears to be heat-treated is the Swan River chert thinning flake. The single piece of pottery found at the site is a body sherd with a smoothed surface, finely crushed grit temper, and a thickness of 3–3.5 mm (.1 in).

**Interpretation:** Given the limited size of 21BK0148 and the presence of pottery, it likely represents a small seasonal camp associated with a single use or a few related sequential uses. The limits of the site are well established: negative tests were completed along adjacent portions of the rise associated with the site, while an escarpment and the floodplains of the Otter Tail River define the remainder of the border.

**Site Recommendations:** As 21BK0148 appears to represent a largely intact, single component seasonal camp, it is likely potentially eligible for NRHP listing under Criterion D. As such, BCA recommends that the site be avoided. If the site cannot be avoided during the course of this or future developments, BCA recommends further work for the site in order to assess its NRHP eligibility.

**Archeological Site:** 21BK0149

**Cultural Affiliation:** Woodland tradition **Site Type:** prehistoric artifact scatter

Site Area: maximum length by width of 20 x 20 m (65.6 x 65.6 ft), covering approximately

 $314.2 \text{ m}^2 (3,382 \text{ ft}^2) \text{ or } <.1 \text{ ha} (.1 \text{ ac})$ 

Location: SE½, NE¼, Section 26, T138N, R40W, Burlington Township, Becker County,

Minnesota (Figure 3)

UTM Coordinates (midpoint): NAD 83; Zone 15; Easting: 294,214; Northing: 5,179,677

Elevation: 420.6 m (1,380 ft) above the NGVD

**Ground Cover:** woods with <20% GSV

**Disturbances:** erosion

**Mapped Soil Types:** Abbeylake loamy sand, 12–20% slopes (753D), and Haslie, Seelyeville, and Cathro soils, frequently ponded, 0–1% slopes (1113; Table 1; Figure 5) **Geomorphic Context:** 21BK0149 is situated on a very gently to strongly sloping (1–14%) portion of a small rise adjacent to the Otter Tail River (Figures 53–55). The rise, which occurs along an outwash plain, has been cut into by the river, giving the landform the impression of a high terrace. Surfaces gradually ascend to the north of the site, which is occupied by woods (<20% GSV). The site is bound by the escarpment between the rise and Otter Tail River floodplains to the west, south, and east. Shovel testing (n = 6) and hand probing (n = 1) indicated that the site is largely intact (SP 16). As such, the site is interpreted as having moderate to high potential for the presence of undisturbed archeological deposits.

**Field Investigation:** 21BK0149 was discovered while shovel testing across the associated landform in 10 m (32.8 ft) intervals (Figures 53–55). Additional shovel tests were subsequently completed at 5–10 m (16.4–32.8 ft) intervals. In total, six shovel tests were dug within and adjacent to the site, two of which were positive (STs 1 and 2), resulting in the discovery of three artifacts. The artifacts found at the site were recovered from 10–40 cm (3.9–15.7 in) below the surface, and some of the artifacts were encountered within the transition to subsoil (Appendix C).

**Artifact Analysis:** The artifacts discovered at 21BK0149 were two pottery sherds and a piece of lithic debitage. The lithic debitage is a Knife River flint secondary thinning flake. The two pieces of pottery found at the site are body sherds with smoothed-over cord-marked surfaces, finely crushed grit temper, and thicknesses of 3.5–4 mm (.1–.2 in).

**Interpretation:** Given the limited size of 21BK0149 and the presence of pottery, it likely represents a small seasonal camp associated with a single use or a few related sequential uses. The limits of the site are well established: negative tests were completed along adjacent portions of the rise associated with the site, while an escarpment defines the remainder of the border.

**Site Recommendations:** As 21BK0149 appears to represent a largely intact, single component seasonal camp, it is likely potentially eligible for NRHP listing under Criterion D. As such, BCA recommends that the site be avoided. If the site cannot be avoided during the course of this or future developments, BCA recommends further work for the site in order to assess its NRHP eligibility.

#### SUMMARY AND CONCLUSIONS

This report summarizes a Phase I archeological survey conducted by BCA for the city of Frazee, Minnesota, in association with the proposed Wannigan Park project. The project area is located within the Wadena Drumlin Area physiographic and Central Lakes Deciduous Archaeological Resource (Subregion 4w) regions of Minnesota. Encompassing approximately 44.5 ha (110 ac), the project area is set near the northeastern fringes of Frazee and occupies portions of the E½ of Section 26, T138N, R40W, Burlington Township, Becker County, Minnesota. Jared A. Langseth served as the principal investigator for this project, and BCA personnel conducted the fieldwork in May of 2022.

Given the age of the landforms present and the proximity of the Otter Tail River, the elevated, well-drained portions of the project area were interpreted as having moderate to high overall archeological potential. Due to the poor drainage capacity of the related soils, the lower-lying parts of the project area were interpreted as having low overall archeological potential. It appeared that much of the project area had been under cultivation since at least 1953, indicating that the likelihood for undisturbed archeological resources had been diminished.

Although no formally documented official archeological sites or inventoried properties were found to exist within or adjacent to the project area, an alpha site (21BKe) does intrude into the southeastern portion. 21BKe represents one or more sawmills from the late nineteenth and/or early twentieth centuries. The review of historic maps and a county history indicated that these mills were most likely primarily to the south of the project area. However, while it appears that the mills associated with Frazee's Front Street operation and the Nichols-Chisholm Lumber Company certainly occurred outside of the project area to the south, the same cannot be said with as much confidence for the Campbell-Chilton and Commonwealth Lumber Company mills. A structure is visible spanning the Otter Tail River along the eastern edge of the southern part of the project area on aerial imagery going back until at least 1953, but it is not clear whether or not this relates to any of these mills. A railway, now nonextant, which may also have been mill related, likely once existed in the southeastern portion of the project area according to historic maps and aerial imagery. Based on the reviewed maps and photographs, this portion of railway was likely abandoned between 1911 and 1929.

The geomorphic evaluation consisted of a visual examination of the project area and the extraction of 23 hand probes, 16 of which were recorded as formal profiles. The project area, which was mostly occupied by tilled agricultural fields (80–90% GSV) but also included some tree and grass ground covers (<20% GSV) that were largely focused along the lower-lying stretches, occurred over an undulating glacial outwash plain expressed as a series of rises and depressions. The majority of the project area was found to be disturbed. The most widespread disturbances seen throughout the project area resulted from cultivation and erosion, but more severe discontinuities associated with other historic and modern activities (e.g., road and railway related) were also witnessed. In contrast to the rest of the project area, largely intact and well-drained soils were encountered along some

of the lower rises adjacent to the Otter Tail River floodplains in the east-central part. The disturbed or poorly drained portions of the project area were interpreted as having low to very low potential for the presence of intact archeological deposits, while the largely intact and well-drained parts were thought to have a moderate to high likelihood for the occurrence of such deposits.

No features representing possible prehistoric mounds were identified during the geomorphological evaluation. One area with artificial surficial anomalies that could be mistaken for such features was found however, the piles had a relatively youthful appearance that was readily perceivable. A hand probe taken next to the spoil piles, which revealed undeveloped (i.e., recent) fill horizons, also indicated that the features were not prehistoric. The reviewed aerial imagery indicated that these piles were likely associated with railway related activities.

The archeological investigation was initiated with a pedestrian survey of the agricultural field portions of the project area at 10 m (32.8 ft) intervals. As a result of the surface survey, three prehistoric archeological sites were discovered (21BK0145–21BK0147). These sites were subsequently shovel tested at 10 m (32.8 ft) intervals, resulting in the completion of 65 tests combined. A historic scatter was also encountered during the pedestrian survey. The scatter contained both domestic refuse (e.g., ceramics, vessel glass, plastics, and clothing) and building material waste (e.g., window glass and concrete) that appeared to primarily date to the mid-twentieth century. Although lidar and aerial imagery suggests that railway once passed through the center of the scatter, the materials present combined with the historic aerial photographs indicated the scatter postdated the active use of the railway and that the two are not directly related. No visible surficial evidence of the abandoned railroad grade was observed within the project area. Further, given the apparent age of the scatter and the inclusion of domestic materials, it is not likely directly related to mill activities. No evidence for a structure or structures within the vicinity of the historic scatter was seen on the reviewed historic maps and aerial photographs, and no indications of such features were observable on the surface. It appears that the scatter represents a dumping episode, although the possibility of the scatter being related to a structure at the location cannot be entirely dismissed. Due to its very poor condition and relative youth, the historic scatter was not formally documented as an official archeological site.

To the north-northeast of the historic scatter and southeast of the spoil piles, an actively used covered bridge over the Otter Tail River was found intruding into the project area. The bridge appeared to have been made relatively recently or to have undergone a number of modifications since its initial construction. It is not clear whether or not the bridge is the same structure depicted at that location in historic aerial images, but an online resource list indicates that a covered bridge was built in 1998. No obvious indications of a dam remnant were observed within the vicinity of the covered bridge.

Following the pedestrian survey, the small, well-drained, largely intact rises identified near the Otter Tail River were shovel tested. Initially, 30 shovel tests were completed across these landforms at 10-15 m (32.8-49.2 ft) intervals, which led to the discovery of two prehistoric archeological sites (21BK0148 and 21BK0149). Additional shovel tests (n = 10)

22) were dug at 5–10 (16.4–32.8 ft) intervals in and around the two sites. Sites 21BK0148 and 21BK0149 are discussed further below. In total, approximately 27.1 ha (67 ac) of agricultural field were systematically surface surveyed and 117 shovel tests were completed throughout the project area during the course of this Phase I investigation, resulting in the discovery and formal documentation of five prehistoric archeological sites (21BK0145–21BK0149).

The archaeological sites recorded during this Phase I survey are accounted for by two undifferentiated prehistoric lithic scatters (21BK0145 and 21BK0146), an undifferentiated prehistoric artifact scatter (21BK0147), and two Woodland tradition component artifact scatters (21BK0148 and 21BK0149). Given the disturbances witnessed at 21BK0145–21BK0147, these sites are interpreted as having low to very low potential for the presence of intact archeological deposits. It does not appear likely that 21BK0145–21BK0147 are potentially eligible for NRHP listing, and BCA recommends no further work for the sites. Sites 21BK0148 and 21BK0149, however, appear to be largely undisturbed single component sites and are thought to have moderate to high potential for the presence of intact archeological deposits. Due to this, 21BK0148 and 21BK0149 are likely potentially eligible for NRHP listing under Criterion D therefore, BCA recommends that 21BK0148 and 21BK0149 be avoided. If 21BK0148 and 21BK0149 cannot be avoided during the course of this or future developments, additional investigations are recommended.

No technique of modern archeological research is adequate to identify all archeological sites or cultural deposits within a given area. If any cultural materials not recorded by this investigation are discovered in the course of the proposed development activities SHPO should be contacted immediately. The developer is responsible for the protection of cultural resources from disturbance until a professional examination can be made or authorization to proceed is granted by the SHPO or a designated representative.

Information contained in this report relating to the nature and location of archeological sites is considered private, confidential, and not for public disclosure in accordance with Section 304 of the National Historic Preservation Act (54 U.S.C. § 307103); 36 CFR Part 800.6(a)(5) of the Advisory Council on Historic Preservation's rules implementing Sections 106 and 110 of the National Historic Preservation Act; Section 9(a) of the Archaeological Resource Protection Act (54 U.S.C. § 100707), and Chapter 22.7, subsection 20 of the Iowa Code.

#### REFERENCES CITED

# Advisory Council on Historic Preservation (ACHP)

- 2004 36 CFR Part 800, Protection of Historic Properties, as Amended. Electronic document, http://www.achp.gov/sites/default/files/regulations/2017-02/regs-rev04. pdf, accessed June 2022.
- 2016 National Historic Preservation Act of 1966, as Amended. Electronic document, https://www.achp.gov/sites/default/files/2018-06/nhpa.pdf, accessed June 2022.

#### Alexandria Chamber of Commerce

1991 Alexandria Lakes Area Visitors Guide. Alexandria: Lakes Area Resort and Visitors Bureau, Minnesota.

### Anderson, Jeffrey

1992 Geomorphic Investigations at the Lake Oscar Sites. In *Archeological Investigations in the Vicinity of Lake Oscar, Douglas County, Minnesota*, vol. I, edited

#### Andreas, Alfred T.

1874 An Illustrated Historical Atlas of the State of Minnesota. A. T. Andreas, Chicago.

# Anfinson, Scott F.

- 1990 Archaeological Regions in Minnesota and the Woodland Period. In *The Woodland Tradition in the Western Great Lakes: Papers Presented to Elden Johnson*, edited by Guy E. Gibbon, pp. 135–166. University of Minnesota Publications in Anthropology No. 4. Department of Anthropology, University of Minnesota, Minneapolis.
- 2011 SHPO Manual for Archaeological Projects in Minnesota. State Historic Preservation Office, Minnesota Historical Society, St. Paul.

#### Bettis, E. Arthur, III, and David W. Benn

1984 An Archaeological and Geomorphological Survey in the Central Des Moines River Valley, Iowa. *Plains Anthropologist* 29:211–227.

### Bettis, E. Arthur, III, and William Green

1991 Part I: Grandview to Kingston. In *Paleoenvironments and Archaeological of the Mississippi Valley in Southeastern Iowa*. Prepared for the Annual Meeting of the Association of Iowa Archaeologists, Burlington.

#### Bettis, E. Arthur, III, and John P. Littke

1987 Holocene Alluvial Stratigraphy and Landscape Development in Soap Creek Watershed Appanoose, Davis, Monroe, and Wapello County, Iowa. Contribution No. 14 Iowa Quaternary Studies Group, Geological Survey Bureau, Iowa City.

# Bettis, E. Arthur, III, Deborah J. Quade, and Timothy J. Kemmis

1996 Hogs, Bogs, and Logs: Quaternary Deposits and Environmental Geology of the Des Moines Lobe. Guidebook Series 18. Iowa Geological Survey, Iowa City.

# Bettis, E. Arthur, III, and Dean M. Thompson

1981 Holocene Landscape Evolution in Western Iowa: Concepts, Methods, and Implications for Archaeology. In *Current Directions in Midwestern Archaeology: Selected Papers from the Mankato Conference*, edited by Scott Anfinson, pp. 1–14. Occasional Publications in Minnesota Anthropology No. 9. Minnesota Archaeological Society, St. Paul.

# **Brock and Company**

1929 Standard Atlas of Becker County, Minnesota. Brock and Company, Chicago.

#### Christensen, Keith A.

1998 Soil Survey of Becker County, Minnesota, Part I. Soil Conservation Service. Minnesota Agriculture Experiment Station. U.S. Government Printing Office, Washington, DC.

# DeMartelaere, Donald E.

1975 Soil Survey of Douglas County, Minnesota. Soil Conservation Service. Minnesota Agriculture Experiment Station. U.S. Government Printing Office, Washington, DC.

#### General Land Office (GLO)

1871 Original Survey: Survey Plat Details, land description MN-5<sup>th</sup> PM, Twp. 138N, Rng. 40W. U.S. Department of the Interior, Bureau of Land Management, Washington, DC.

# Geo. A. Ogle and Company

1911 Standard Atlas of Becker County, Minnesota. Geo. A. Ogle and Company, Chicago.

# Gibbon, E. Guy, Craig M. Johnson, and Elizabeth Hobbs

2002 Minnesota's Environment and Native American Culture History. In *A Predictive Model of Precontact Archaeological Site Location for the State of Minnesota*, edited by G. Joseph Hudak, Elizabeth Hobbs, Allyson Brooks, Carol Ann Sersland, and Crystal Phillips. Minnesota Department of Transportation, St. Paul. Electronic document, <a href="http://www.dot.state.mn.us/mnmodel/P3FinalReport/chapter3.html">http://www.dot.state.mn.us/mnmodel/P3FinalReport/chapter3.html</a>, accessed June 2022.

# Hudak, G. Joseph, Elizabeth Hobbs, Allyson Brooks, Carol Ann Sersland, and Crystal Phillips (editors)

2002 A Predictive Model of Precontact Archaeological Site Location for the State of Minnesota. Minnesota Department of Transportation, St. Paul. Electronic Document, https://www.dot.state.mn.us/mnmodel/P3FinalReport/final\_report.html, accessed June 2022.

# John R. Borchert Map Library

2015 Minnesota Historical Aerial Photographs Online. University of Minnesota, Minneapolis. Electronic document https://apps.lib.umn.edu/mhapo/#, accessed June 2022.

# Kapler, Todd

1986 Official Site Form for 21BKe. On-file, Office of the State Archaeologist, St. Paul, Minnesota.

# Natural Resources Conservation Service (NRCS)

2021 Web Soil Survey. U.S. Department of Agriculture, Washington, DC., Electronic document, https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx, accessed June 2022.

#### National Park Service (NPS)

1983 Archeology and Historic Preservation: The Secretary of the Interior's Standards and Guidelines for Preservation Planning, Identification, Evaluation, and Registration. *Federal Register* 48:44716–44728. Electronic document, http://www.nps.gov/history/local-law/arch\_stnds\_0.htm, accessed June 2022.

### Ollenday, Amy

1995a Official Site Form for 21BK0002. On-file, Office of the State Archaeologist, St. Paul, Minnesota.

1995b Official Site Form for 21BK0005. On-file, Office of the State Archaeologist, St. Paul, Minnesota.

#### Ruhe, Robert V.

1969 Quaternary Landscapes in Iowa. Iowa State University Press, Ames.

# Sanborn Map Company

1907 Frazee, Becker County, Minnesota. Sanborn Map Company, Broadway, New York.

# Schwartz, George M., and George A. Thiel

1954 *Minnesota Rocks and Waters*. Minneapolis: Minnesota Geological Survey Bulletin 37.

#### Travis, Dale

2020 Minnesota Covered Bridges List. Electronic document, http://www.dalejtravis.com/cblist/cbmn.htm, accessed June 2022.

### White, Denis

2020 Ecological Regions of Minnesota: Level III and IV maps and descriptions. http://ecologicalregions.info/data/mn/Minnesota-LevelIII+LevelIV-Ecoregions-Text+Appendices\_2020-0424.pdf, accessed June 2022.

# Wilcox, Alvin H.

1907 A Pioneer History of Becker County, Minnesota. Pioneer Press Company, St. Paul, Minnesota.

# Wright, H. E., Jr.

- 1972a Physiography of Minnesota. In *Geology of Minnesota: A Centennial Volume*, edited by P. K. Sims and G. B. Morey, pp. 561–578. Minnesota Geological Survey, University of Minnesota, St. Paul.
- 1972b Quaternary History of Minnesota. In *Geology of Minnesota: A Centennial Volume*, edited by P. K. Sims and G. B. Morey, pp. 515–548. Minnesota Geological Survey, University of Minnesota, St. Paul.
- 1973 Superior and Des Moines Lobe. Geological Society of America: Memoir 136:15–3185.

**FIGURES** 

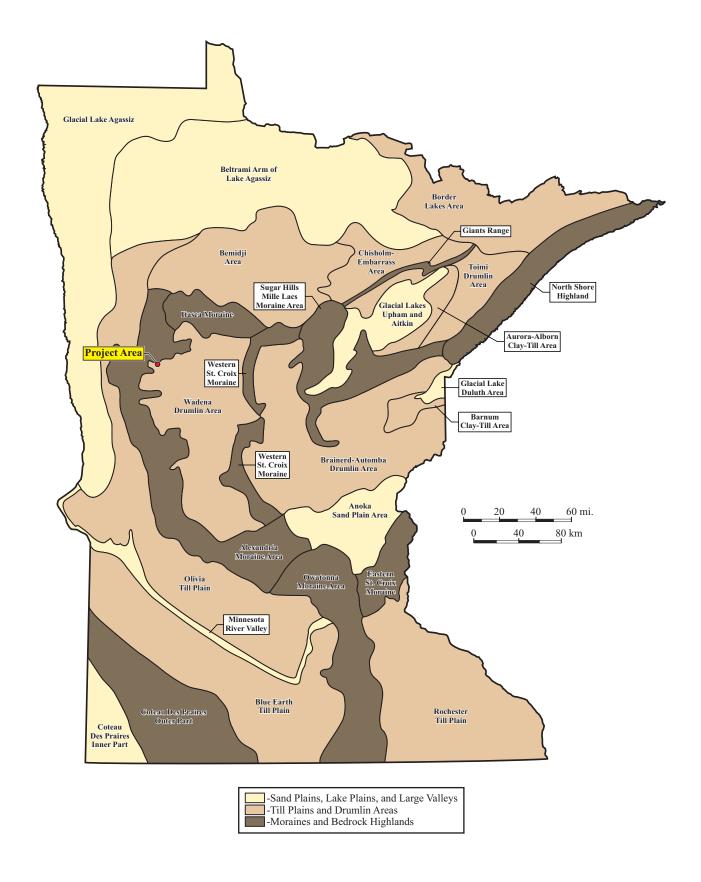


Figure 1. Physiographic location of the project area (adapted from Wright 1972).

24

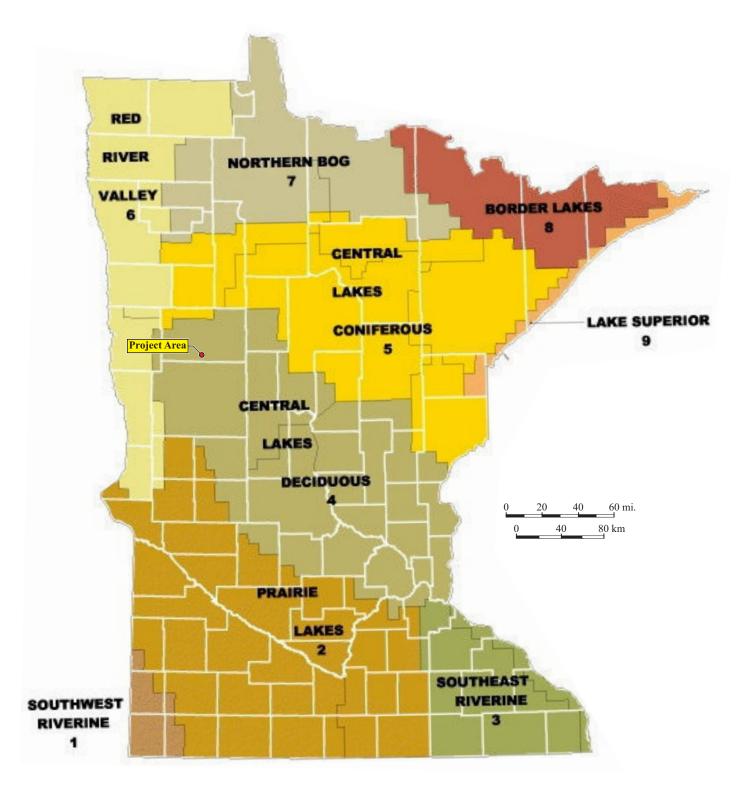


Figure 2. Minnesota Archaeological Resource Regions (Anfinson 1990).

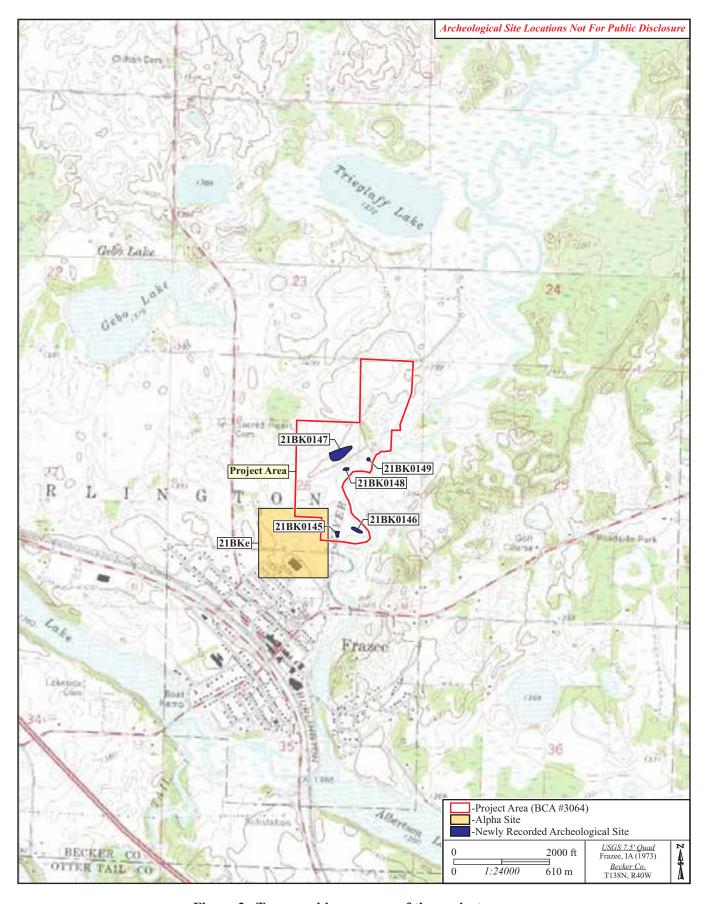


Figure 3. Topographic coverage of the project area.

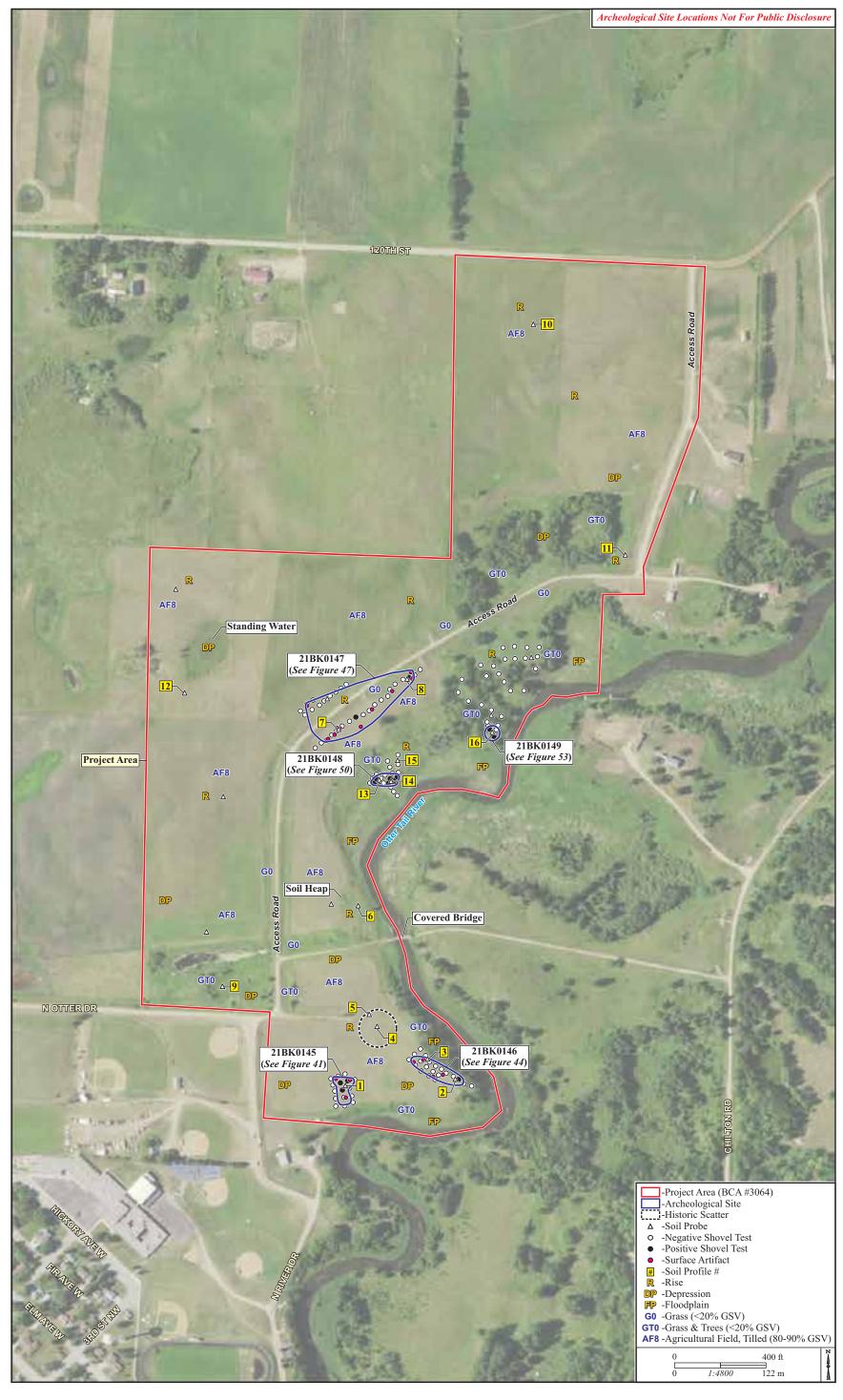


Figure 4. Scale map of the project area.

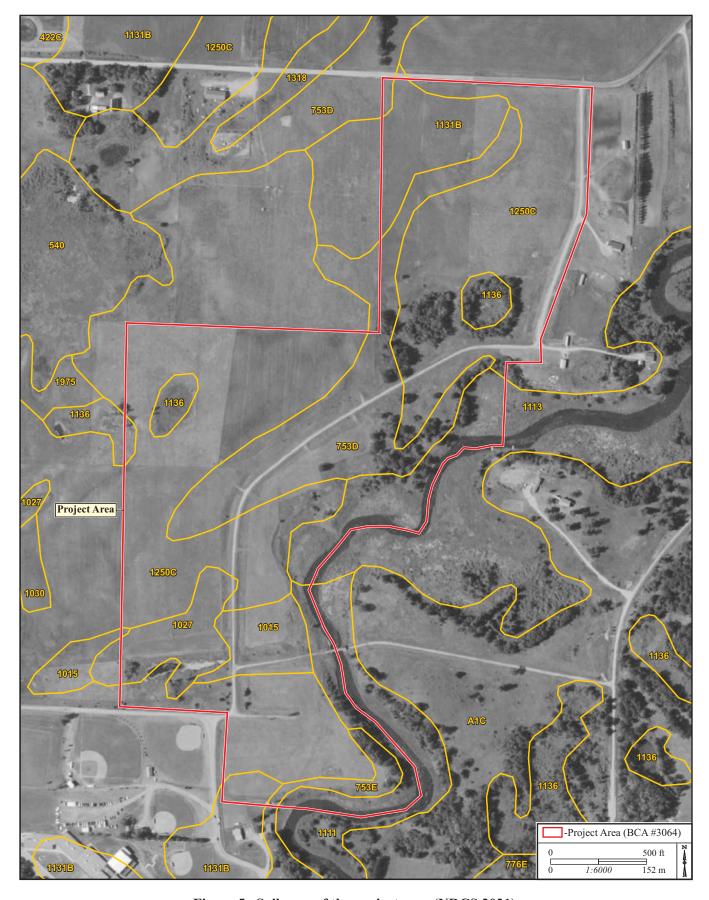


Figure 5. Soil map of the project area (NRCS 2021).

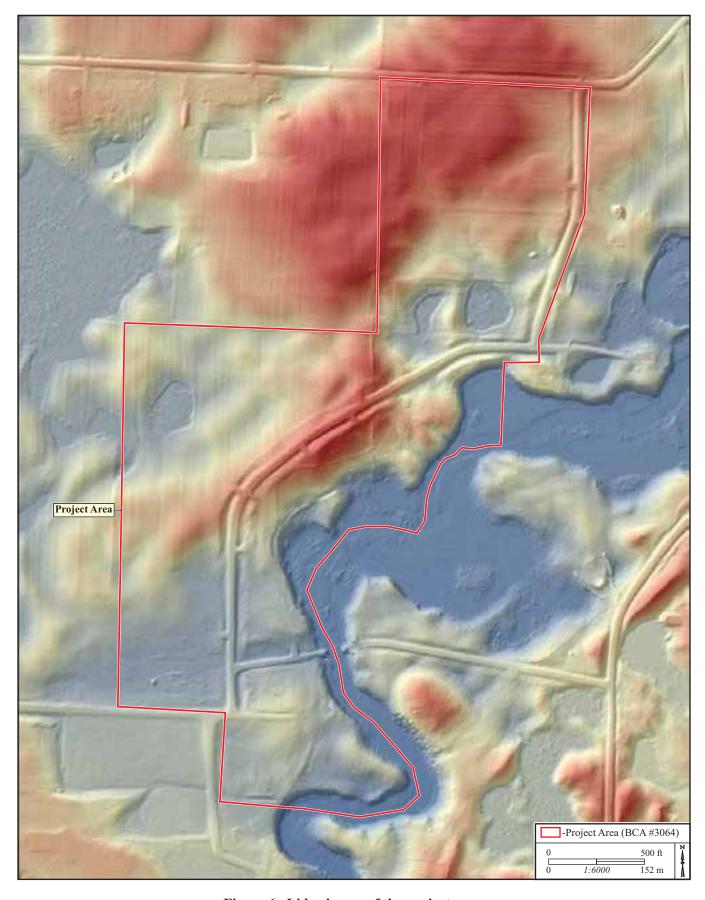


Figure 6. Lidar image of the project area.

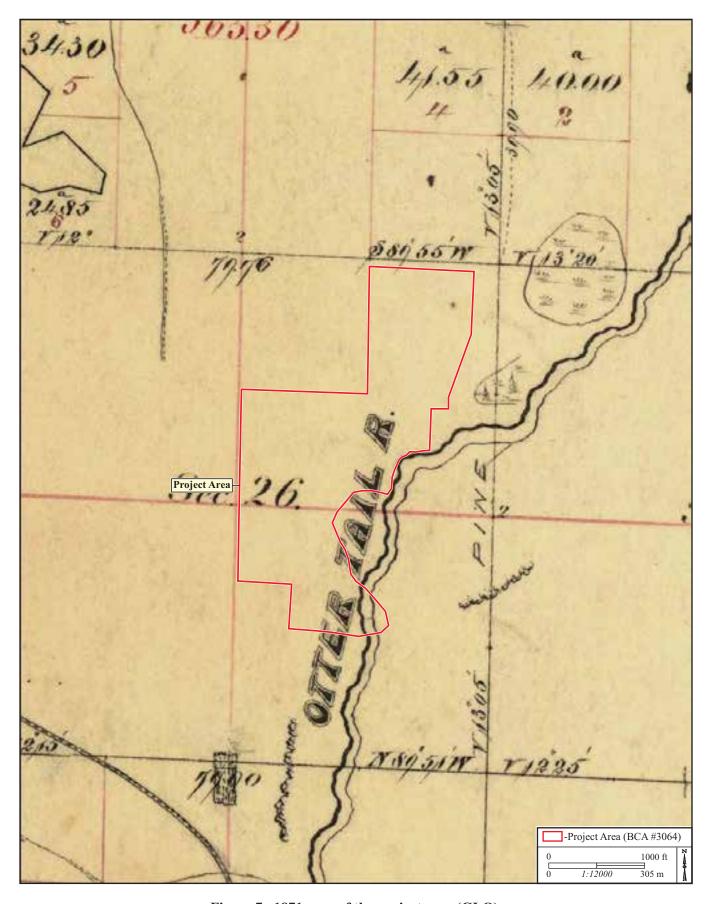


Figure 7. 1871 map of the project area (GLO).



Figure 8. 1874 map of the project area (Andreas).

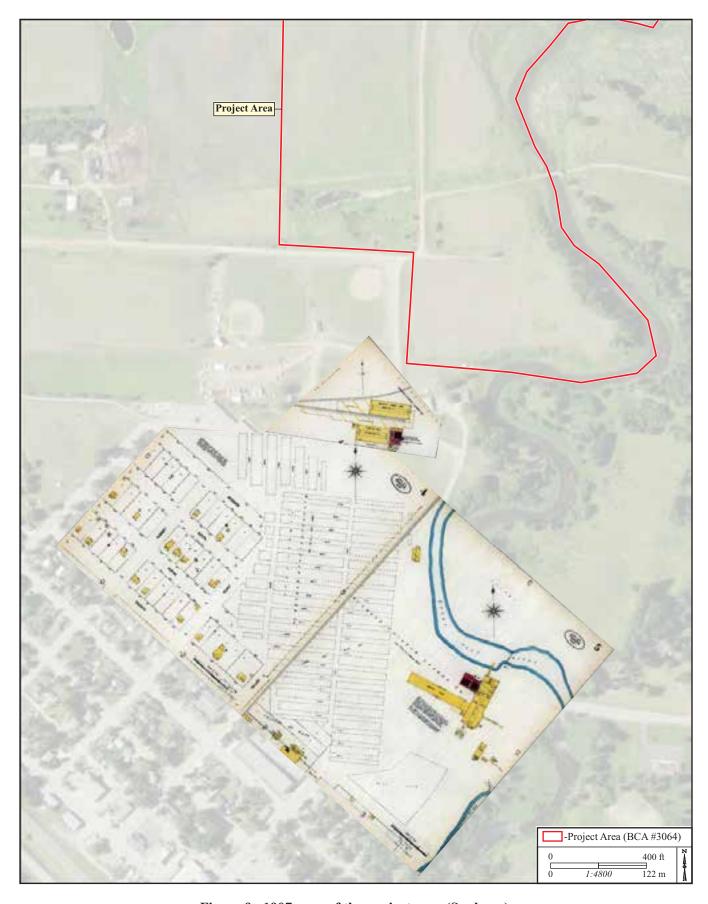


Figure 9. 1907 map of the project area (Sanborn).



Figure 10. 1911 map of the project area (Ogle and Company).

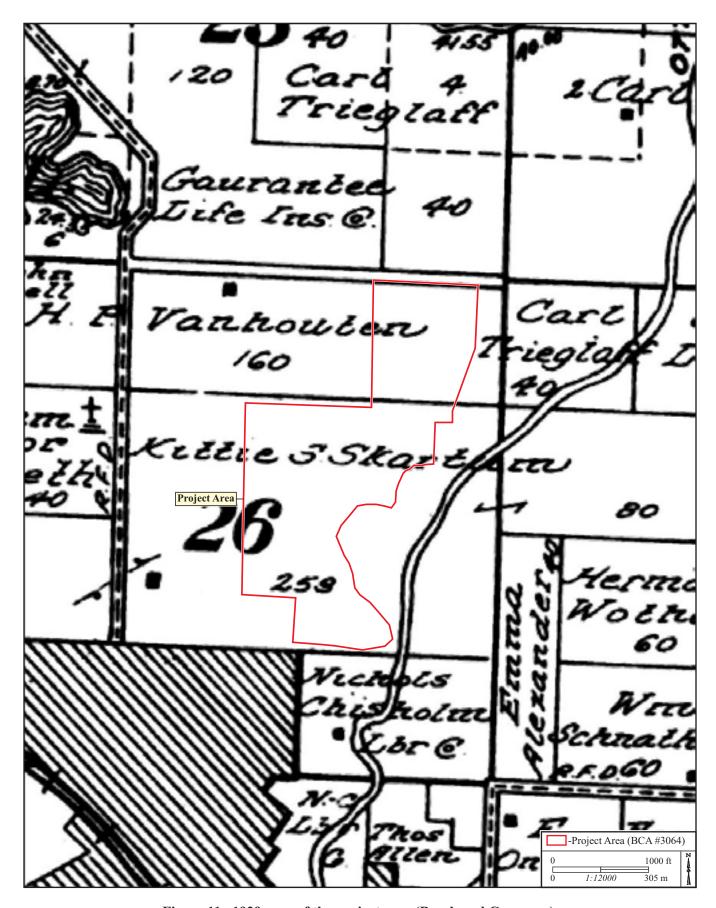


Figure 11. 1929 map of the project area (Brock and Company).

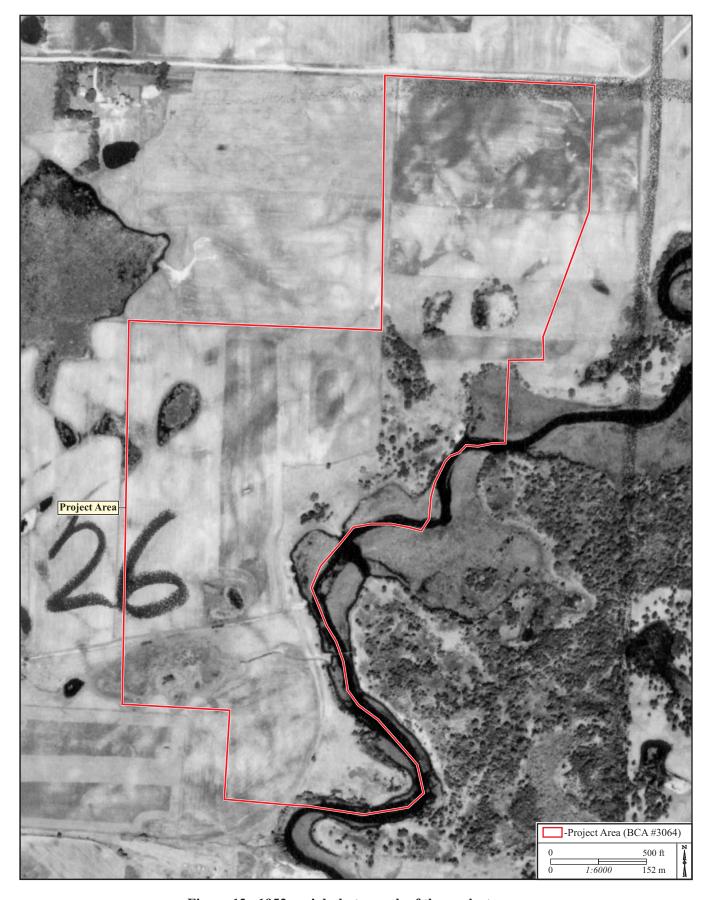


Figure 12. 1953 aerial photograph of the project area.

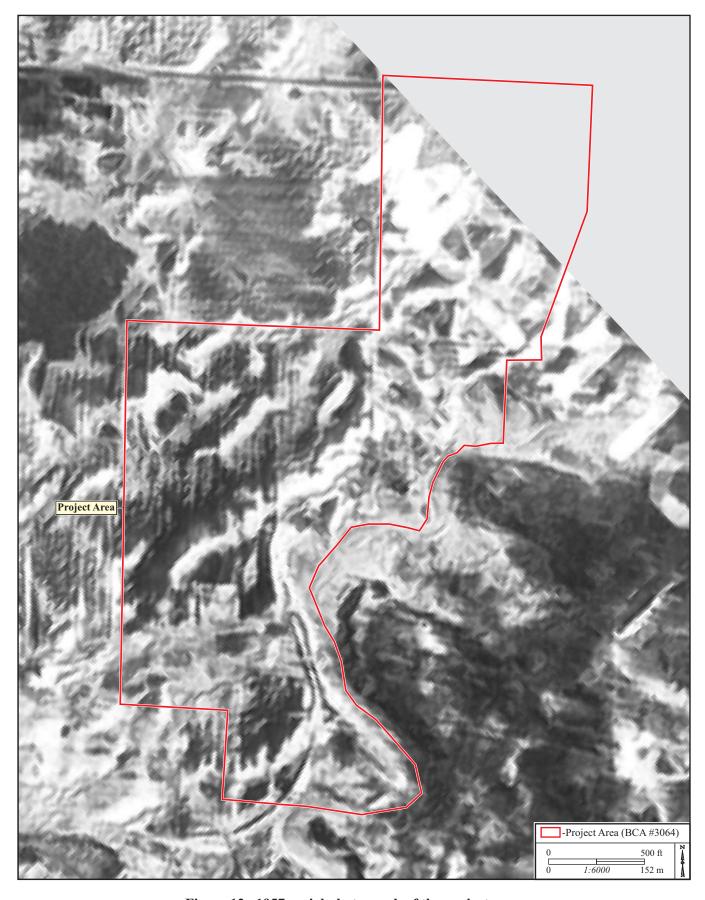


Figure 13. 1957 aerial photograph of the project area.

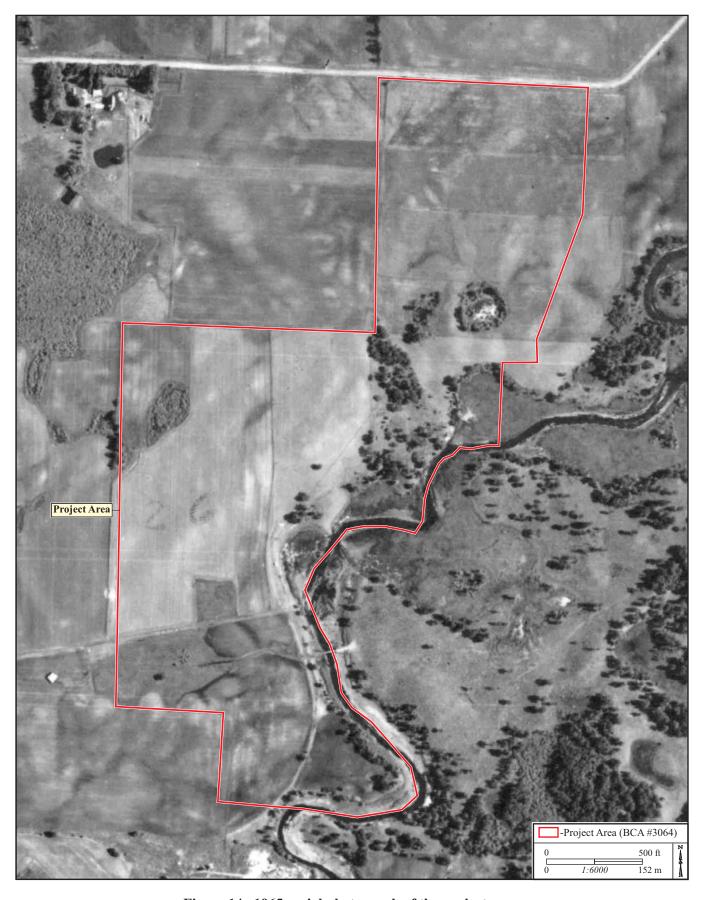


Figure 14. 1965 aerial photograph of the project area.

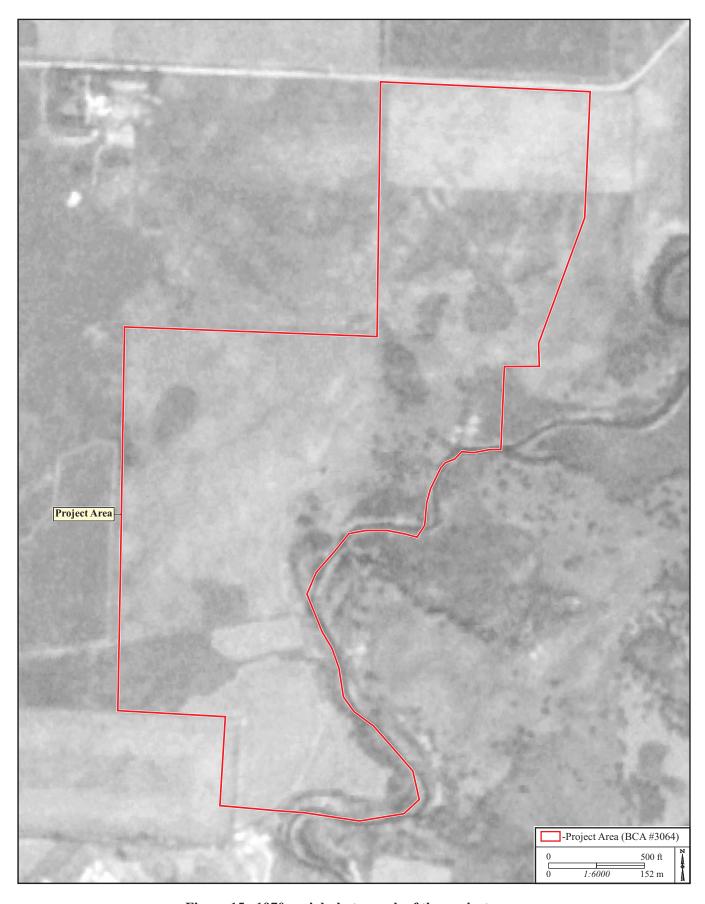


Figure 15. 1970 aerial photograph of the project area.

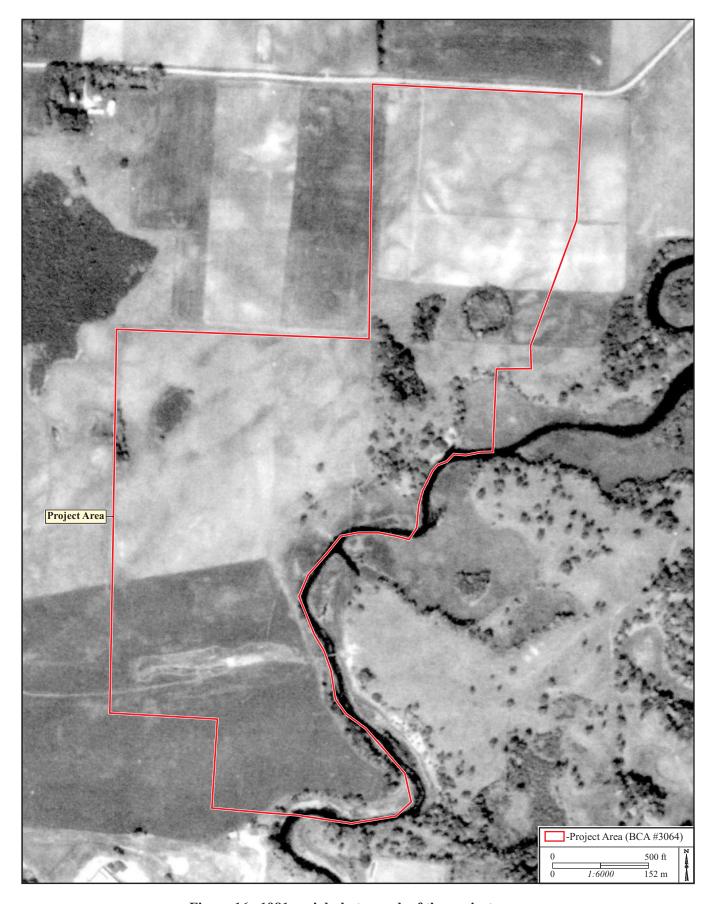


Figure 16. 1981 aerial photograph of the project area.

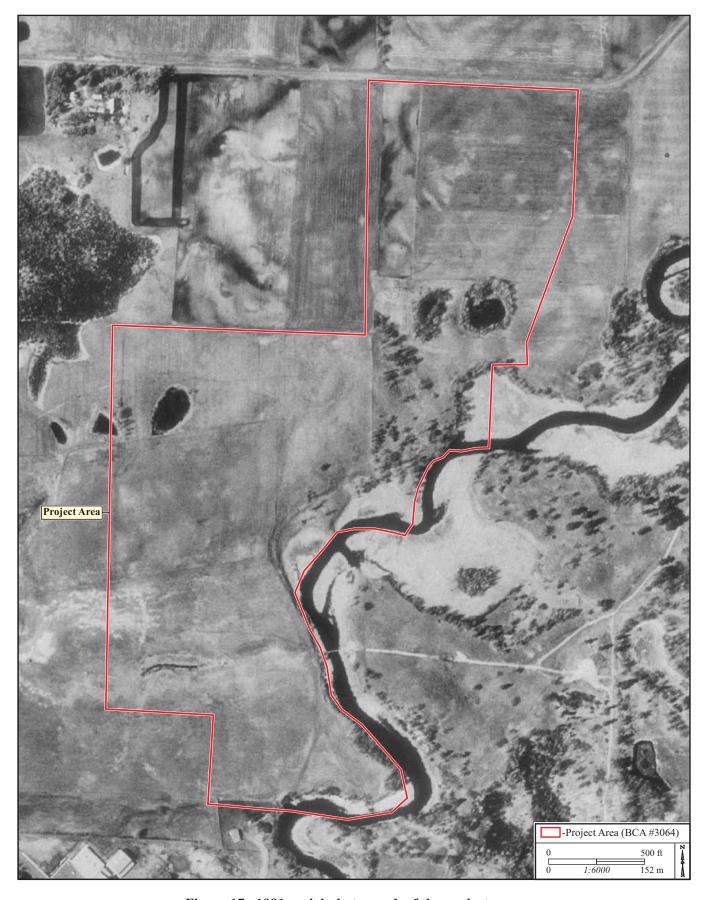


Figure 17. 1991 aerial photograph of the project area.



Figure 18. 2003 aerial photograph of the project area.



Figure 19. Project area from the southern portion. View to the east-southeast (5/10/22).



Figure 20. Project area from the southern portion. View to the northeast (5/10/22).



Figure 21. Project area from the southern portion. View to the northnorthwest (5/10/22).



Figure 22. Project area from the central portion. View to the south-southwest (5/10/22).



Figure 23. Project area from the central portion. View to the northwest (5/10/22).



Figure 24. Project area from the central portion. View to the northeast (5/10/22).



Figure 25. Project area from the central portion. View to the east (5/10/22).



Figure 26. Project area from the central portion. View to the south (5/10/22).



Figure 27. Project area from the northern portion. View to the southwest (5/10/22).



Figure 28. Project area from the northern portion. View to the south-southeast (5/10/22).



Figure 29. Project area from the northern portion. View to the east (5/10/22).



Figure 30. Rubbish along the southeastern portion of project area. View to the north (5/10/22).



Figure 31. Spoil piles northwest of the covered bridge. View to the north-northwest (5/10/22).



Figure 32. Spoil piles northwest of covered bridge. View to the northwest (5/10/22)

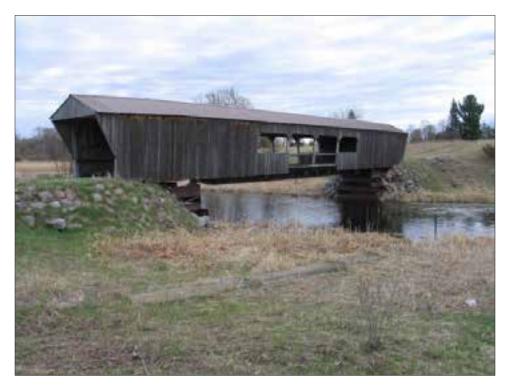


Figure 33. Covered bridge. View to the northeast (5/10/22).

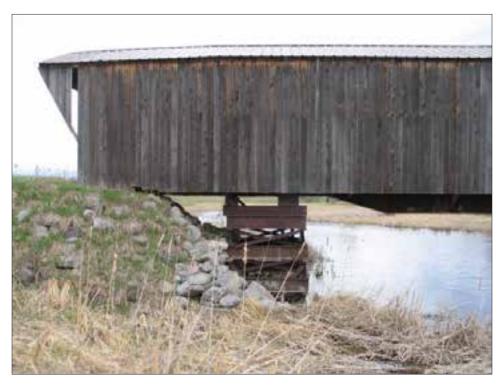


Figure 34. Covered bridge. View to the north (5/10/22).



Figure 35. Covered bridge. View east-northeast (5/10/22).



Figure 36. Covered bridge. Interior wall (5/10/22).



Figure 37. Covered bridge. Interior roof (5/10/22).



Figure 38. Covered bridge. Interior floor (5/10/22).



Figure 39. Coverage of historic scatter. View to the east (5/11/22).



Figure 40. Sample of materials encountered in historic scatter (5/11/22).

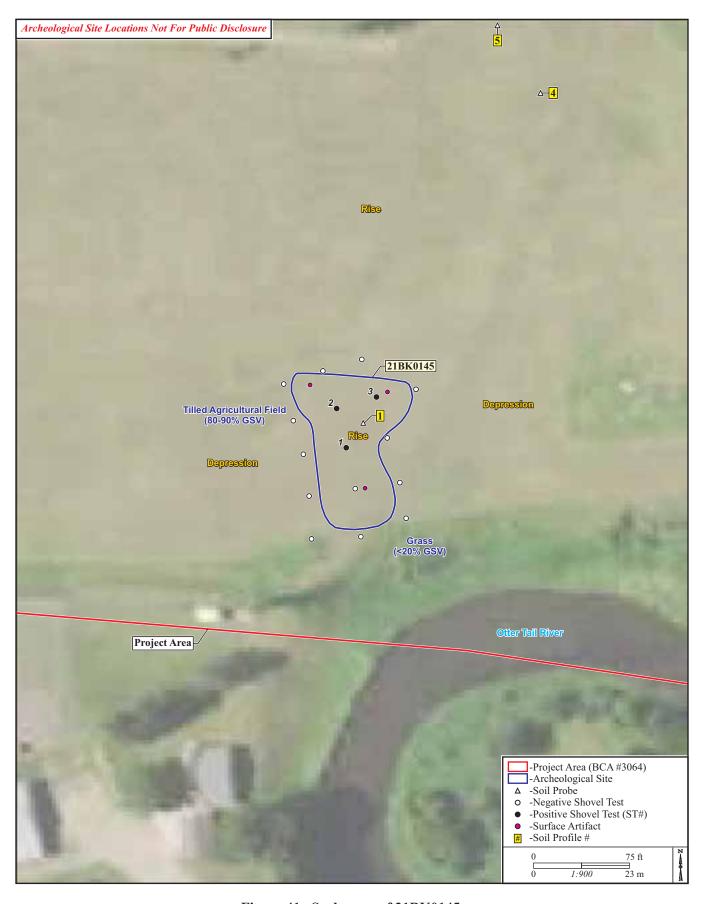


Figure 41. Scale map of 21BK0145.



Figure 42. Coverage of 21BK0145. View to the east (5/11/22).



Figure 43. Coverage of 21BK0145. View to the south (5/11/22).

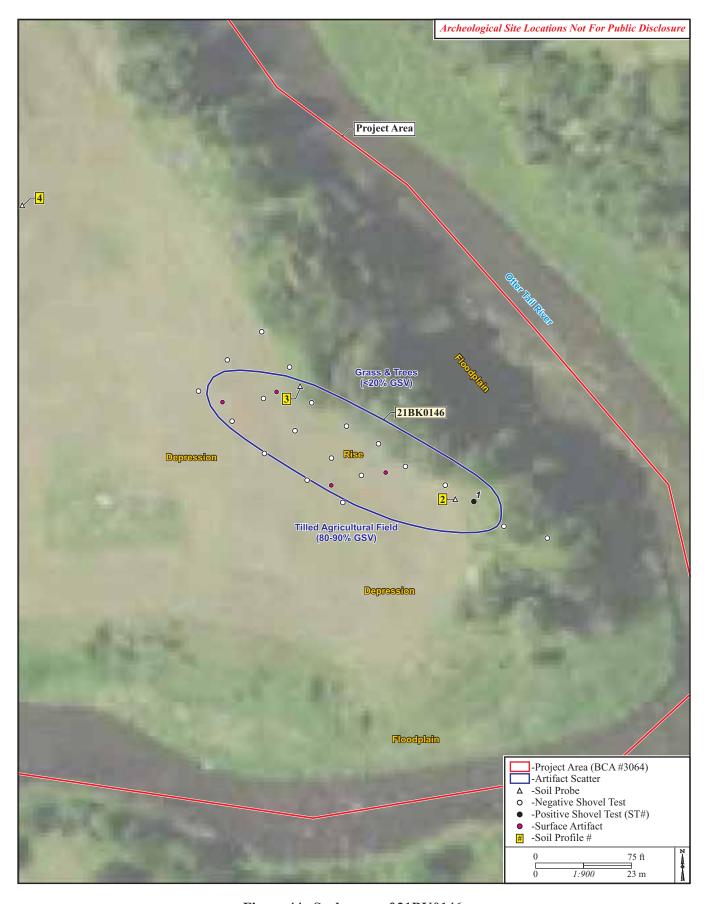


Figure 44. Scale map of 21BK0146.



Figure 45. Coverage of 21BK0146. View to the east-southeast (5/11/22).



Figure 46. Coverage of 21BK0146. View to the southeast (5/11/22).

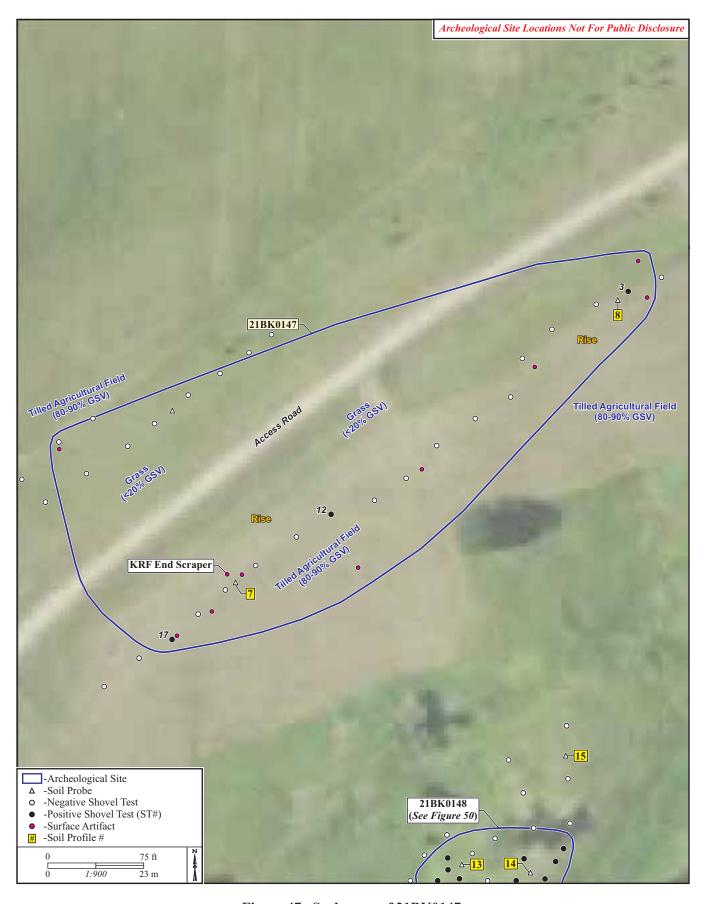


Figure 47. Scale map of 21BK0147.



Figure 48. Coverage of 21BK0147. View to the southwest (5/11/22).



Figure 49. Coverage of 21BK0147. View to the west-southwest (5/11/22).

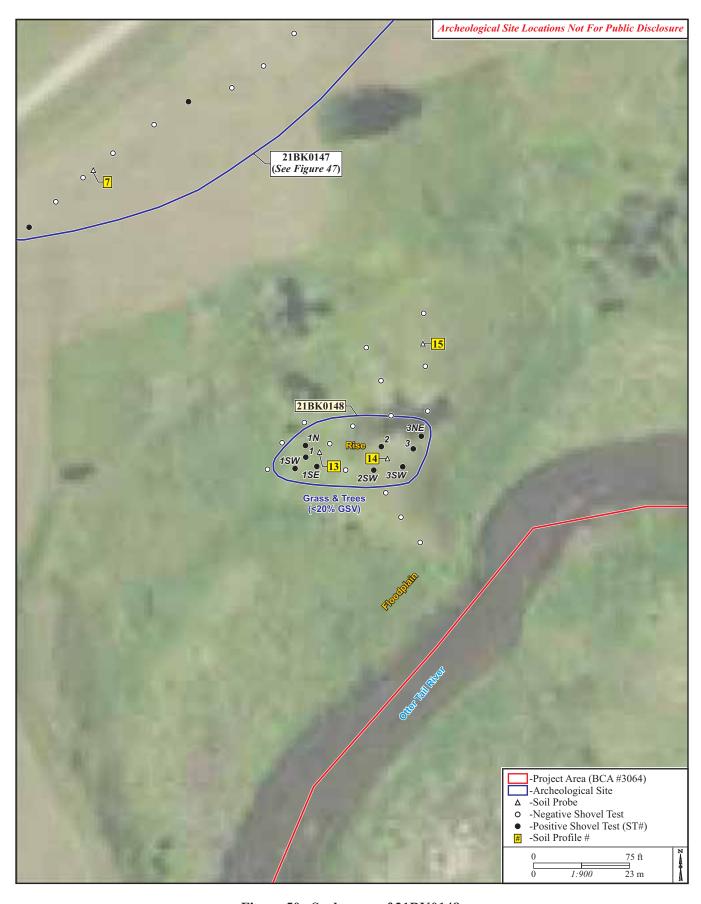


Figure 50. Scale map of 21BK0148.



Figure 51. Coverage of 21BK0148. View to the south (5/11/22).



Figure 52. Coverage of 21BK0148. View to the north-northeast (5/11/22).



Figure 53. Scale map of 21BK0149.



Figure 54. Coverage of 21BK0149. View to the south (5/11/22).



Figure 55. Coverage of 21BK0149. View to the west-southwest (5/11/22).

APPENDIX A Soil Profiles

**DESIGNATION: SP 1** 

LANDSCAPE POSITION: outwash plain (rise), 3-5% slopes

PARENT MATERIAL: glacial outwash

VEGETATION: tilled agricultural field, 80–90%% GSV

METHOD: hand probe

DATE DESCRIBED: 5/11/2022 DESCRIBED BY: J. Langseth

COMMENTS: This profile was recorded from a hand probe extracted near the center of 21BK0145. The probe revealed a plowzone that truncated the subsoil, indicating the location was disturbed. As such, this portion of the site was interpreted as having low potential for intact archeological deposits.

Depth (cm)	Soil Horizon	Description
0–26	Ap	Black (10YR 2/1) silt loam; weak, fine subangular blocky structure; friable; abrupt boundary.
26–40	Bw	Very dark grayish brown (10YR 3/2) sandy loam; weak, fine subangular blocky structure; friable; clear boundary.
40-60+	BC	Dark yellowish brown (10YR 4/4) medium sand; weak, medium to coarse subangular blocky structure; very friable. End.

**DESIGNATION: SP 2** 

LANDSCAPE POSITION: outwash plain (rise), 3–5% slopes

PARENT MATERIAL: glacial outwash VEGETATION: trees and grass, <20% GSV

METHOD: hand probe

DATE DESCRIBED: 5/11/2022 DESCRIBED BY: J. Langseth

COMMENTS: This profile was recorded from a hand probe completed near the eastern end of 21BK0146. The probe exhibited a plowzone that truncated the subsoil prior to obstruction, indicating the location was disturbed. Due to this, this portion of the site was interpreted as having low potential for intact archeological deposits.

Depth (cm)	Soil Horizon	Description
0–22	Ap	Black to very dark gray (10YR 2/1–3/1) loamy sand; weak, fine subangular blocky structure; friable; abrupt boundary.
22–35	Bw	Brown (10YR 4/3) loamy sand; weak, fine subangular blocky structure; friable. Ended at obstruction.

**DESIGNATION: SP 3** 

LANDSCAPE POSITION: outwash plain (rise), 3–5% slopes

PARENT MATERIAL: glacial outwash

VEGETATION: tilled agricultural field, 80-90%% GSV

METHOD: hand probe

DATE DESCRIBED: 5/10/2022 DESCRIBED BY: J. Langseth

COMMENTS: This profile was recorded from a hand probe taken near the western end of 21BK0146. The probe revealed stacked plowzones that truncated the subsoil, indicating the

location was disturbed. As such, this part of the site was interpreted as having low potential for intact archeological deposits.

Depth (cm)	Soil Horizon	Description
0–16	Ap1	Black (10YR 2/1) sandy loam; weak, fine subangular blocky structure; friable; abrupt boundary.
16–24	Ap2	Coarsely mottled very dark gray (10YR 3/1), dark grayish brown (10YR 4/2), and brown (10YR 4/3) sandy loam; weak, fine subangular blocky structure; friable; abrupt boundary.
24–46	Bw	Dark yellowish brown (10YR 4/4) sandy loam; weak, fine subangular blocky structure; friable; gradual boundary.
46–65	ВС	Dark yellowish brown (10YR 4/4) loamy medium sand; very weak, fine subangular blocky structure; very friable; clear boundary.
65-100+	C	Brown (7.5YR 5/4) medium sand; massive to single grain; very friable to loose. End.

**DESIGNATION: SP 4** 

LANDSCAPE POSITION: outwash plain (rise), 5–9% slopes

PARENT MATERIAL: glacial outwash

VEGETATION: tilled agricultural field, 80-90%% GSV

METHOD: hand probe

DATE DESCRIBED: 5/11/2022 DESCRIBED BY: J. Langseth

COMMENTS: This profile was recorded from a hand probe extracted near the center of a historic scatter in the southern portion of the project area. The probe contained fill, which was likely of local origin, that truncated the natural parent material, indicating the location was heavily disturbed. Given this, this part of the project area was interpreted as having very low potential for intact archeological deposits other than those directly related to the historic dumping or demolition episode associated with the scatter.

Depth (cm)	Soil Horizon	Description
0–88	Ap/1C	Mixed bands of black (10YR 2/1), very dark grayish brown (10YR 3/2), and brown
	(local fill)	(10YR 4/3) sandy loam; massive; friable; abrupt boundary.
88-105+	2C	Brown (7.5YR 5/4) medium sand; massive to single grain; very friable to loose. End.

**DESIGNATION: SP 5** 

LANDSCAPE POSITION: outwash plain (rise), 2-5% slopes

PARENT MATERIAL: glacial outwash

VEGETATION: tilled agricultural field, 80-90%% GSV

METHOD: hand probe

DATE DESCRIBED: 5/10/2022 DESCRIBED BY: J. Langseth

COMMENTS: This profile was recorded from a hand probe executed along the southern portion of the project area. The probe revealed a plowzone that truncated the natural parent material prior to obstruction, indicating the location was disturbed. Four subsequent hand probes taken to the north-northwest and northwest contained similar soil sequences. As such, these parts of the project area were interpreted as having low potential for intact archeological deposits.

Depth (cm)	Soil Horizon	Description
0–15	Ap	Very dark grayish brown (10YR 3/2) sandy loam; very weak, fine subangular blocky
		structure; friable; abrupt boundary.
15-27	C	Brown (7.5YR 4/3) medium sand; single grain; loose. Ended at obstruction.

**DESIGNATION: SP 6** 

LANDSCAPE POSITION: outwash plain (rise), 0–2% slopes

PARENT MATERIAL: glacial outwash

VEGETATION: VEGETATION: grass, <20% GSV

METHOD: hand probe

DATE DESCRIBED: 5/10/2022 DESCRIBED BY: J. Langseth

COMMENTS: This profile was recorded from a hand probe taken along the southern portion of the project area. The hand probe was extracted adjacent to relatively recent looking spoil piles on what appeared to be a mechanically leveled rise. Supporting these observations, the probe revealed a series of fill horizons, which were likely of local origin and related to railway activities, prior to being obstructed. Given the heavy disturbances witnessed at the location, this part of the project area was interpreted as having very low potential for intact archeological deposits.

Depth (cm)	Soil Horizon	Description
0–16	Ap1/C1	Black (10YR 2/1) sandy loam; weak, fine subangular blocky structure; friable; abrupt
	(local fill)	boundary.
16–24	Ap2/C2 (local fill)	Black (N 2.5/0) sandy loam with an increase in silt and organics; weak, fine subangular blocky structure; friable; abrupt boundary.
24–42	C3 (local fill)	Coarsely mottled very dark grayish brown (10YR 3/2), dark grayish brown (10YR 4/2), and brown (10YR 4/3) very compact sandy loam; massive; friable. Ended at obstruction.

**DESIGNATION: SP 7** 

LANDSCAPE POSITION: outwash plain (rise), 3-5% slopes

PARENT MATERIAL: glacial outwash

VEGETATION: tilled agricultural field, 80-90%% GSV

METHOD: hand probe

DATE DESCRIBED: 5/11/2022 DESCRIBED BY: J. Langseth

COMMENTS: This profile was recorded from a hand probe extracted along the southwestern stretch of 21BK0147. The probe revealed a plowzone that truncated the natural parent material, indicating the location was disturbed. A similar sequence of soils was witnessed in a hand probe taken within the site limits to the north in the grassy portion. As such, these parts of the site were interpreted as having low potential for intact archeological deposits.

Depth (cm)	Soil Horizon	Description
0–26	Ap	Very dark grayish brown (10YR 3/2) sandy loam; very weak, fine subangular blocky structure; friable; few, fine, distinct black (10YR 2/1) and brown (10YR 4/3) mottles; abrupt boundary.
26-35+	C	Brown (7.5YR 5/4) medium sand; massive; very friable. End.

**DESIGNATION: SP 8** 

LANDSCAPE POSITION: outwash plain (rise), 3–5% slopes

PARENT MATERIAL: glacial outwash

VEGETATION: tilled agricultural field, 80–90%% GSV

METHOD: hand probe

DATE DESCRIBED: 5/11/2022 DESCRIBED BY: J. Langseth

COMMENTS: This profile was recorded from a hand probe taken near the eastern end of 21BK0147. The probe contained fill that truncated the natural parent material, indicating the location was heavily disturbed. The fill likely represents local sediments pushed in association with the construction of the adjacent ditch and access road. Given this, this portion of the site was interpreted as having very low potential for intact archeological deposits.

Depth (cm)	Soil Horizon	Description
0–17	Ap1/1C1 (local fill)	Very dark grayish brown (10YR 3/2) sandy loam; weak, fine subangular blocky structure; friable; abrupt boundary.
17–38	Ap2/1C2 (local fill)	Coarsely mottled black (10YR 2/1), very dark gray (10YR 3/2), and brown (10YR 4/4) sandy loam; weak, fine subangular blocky structure; abrupt boundary.
38-50+	2C	Brown (7.5YR 5/4) medium sand; massive; very friable. End.

**DESIGNATION: SP 9** 

LANDSCAPE POSITION: outwash plain (depression), 2–5% slopes

PARENT MATERIAL: glacial outwash

VEGETATION: VEGETATION: grass, <20% GSV

METHOD: hand probe

DATE DESCRIBED: 5/10/2022 DESCRIBED BY: J. Langseth

COMMENTS: This profile was recorded from a hand probe extracted along the southern portion of the project area. The probe exhibited stacked plowzones that truncated the natural parent material prior to obstruction, indicating the location was disturbed. As such, this part of the project area was interpreted as having low potential for intact archeological deposits.

Depth (cm)	Soil Horizon	Description
0–21	Ap1	Black (N 2.5/0) sandy loam; weak, fine subangular blocky structure; friable; abrupt boundary.
21–30	Ap2	Mixed bands of very dark gray (10YR 3/1) sandy loam with weak, fine subangular blocky structure and brown (10YR 4/3) medium sand, massive; friable; abrupt boundary.
30-70+	C	Brown (7.5YR 4/3) medium sand; massive; friable; becoming damp. End.

**DESIGNATION: SP 10** 

LANDSCAPE POSITION: outwash plain (rise), 3-5% slopes

PARENT MATERIAL: glacial outwash

VEGETATION: tilled agricultural field, 80-90%% GSV

METHOD: hand probe

DATE DESCRIBED: 5/10/2022 DESCRIBED BY: J. Langseth

COMMENTS: This profile was recorded from a hand probe extracted along the northern portion of the project area. The probe revealed a plowzone that truncated the natural parent material prior

to obstruction, indicating the location was disturbed. Due to this, this part of the project area was interpreted as having low potential for intact archeological deposits.

Depth (cm)	Soil Horizon	Description		
0–27	Ap	Very dark grayish brown (10YR 3/2) sandy loam; weak, fine subangular blocky		
		structure; friable; abrupt boundary.		
27–43	C	Brown (10YR 4/3) medium sand; massive; very friable. Ended at obstruction.		

**DESIGNATION: SP 11** 

LANDSCAPE POSITION: outwash plain (rise), 3–5% slopes

PARENT MATERIAL: glacial outwash VEGETATION: grass, <20% GSV

METHOD: hand probe

DATE DESCRIBED: 5/10/2022 DESCRIBED BY: J. Langseth

COMMENTS: This profile was recorded from a hand probe taken along the northern portion of the project area. The probe contained fill that truncated the natural parent material, indicating the location was heavily disturbed. The fill likely represents local sediments pushed in association with the construction of the adjacent ditch and access road. As such, this part of the project area was interpreted as having very low potential for intact archeological deposits.

	Depth (cm)	Soil Horizon	Description		
	0–4	Ap1/1C1 (local fill)	Brown to strong brown (7.5YR 5/4–5/6) medium sand; single grain; loose; abrupt boundary.		
	4–10	Ap2/1C2 (local fill)	Very dark grayish brown to dark brown (10YR 3/2–3/3) loamy sand; massive; friable; abrupt boundary.		
_	10-70+	2C	Brown (7.5YR 5/4) medium sand; massive to single grain; very friable to loose. End.		

**DESIGNATION: SP 12** 

LANDSCAPE POSITION: outwash plain (depression), 5–9% slopes

PARENT MATERIAL: glacial outwash

VEGETATION: tilled agricultural field, 80-90%% GSV

METHOD: hand probe

DATE DESCRIBED: 5/10/2022 DESCRIBED BY: J. Langseth

COMMENTS: This profile was recorded from a hand probe extracted along the western portion of the project area. The probe revealed a largely undisturbed but poorly drained sequence. Given the hydric nature of the observed soil, this part of the project area was interpreted as having low potential for intact archeological deposits.

Depth (cm)	Soil Horizon	Description	
0–16	Ap	Black (10YR 2/1) sandy loam; weak, fine subangular blocky structure; friable; a boundary.	
16–62	AC	Mixed black (N 2.5/0 and 5Y 2.5/1) bands of sandy loam; weak, fine subangular blocky structure; friable; common, fine, faint dark olive brown (2.5Y 3/3) redoximorphic features; abrupt boundary.	
62–79	Ag	Black (2.5Y 2.5/1) sandy clay loam; weak, fine subangular blocky structure; friable; gradual boundary.	
79–105+	Bg	Dark gray (2.5Y 4/1) loamy sand; weak, fine subangular blocky structure; friable. End.	

**DESIGNATION: SP 13** 

LANDSCAPE POSITION: outwash plain (rise), 3–5% slopes

PARENT MATERIAL: glacial outwash

VEGETATION: trees and grass, <20% % GSV

METHOD: hand probe

DATE DESCRIBED: 5/11/2022 DESCRIBED BY: J. Langseth

COMMENTS: This profile was recorded from a hand probe taken along the western portion of 21BK0148. The probe contained a largely undisturbed soil sequence. As such, this part of the site was interpreted as having moderate to high potential for intact archeological deposits.

Depth (cm)	Soil Horizon	Description			
0–18	AC	Black (10YR 2/1) sandy loam; weak, fine subangular blocky structure; friable; abrupt boundary.			
18–56	A	Black to very dark gray (10YR 2/1–3/1) sandy loam; weak, fine subangular blocky structure; friable; clear to gradual boundary.			
56–88	AB	Very dark gray to very dark grayish brown (10YR 3/1-3/2) sandy loam; weak, fine subangular blocky structure; friable; clear boundary.			
88–105+	Bw	Brown (10YR 4/3) sandy clay loam; weak to moderate, fine subangular blocky structure; friable; few, fine, faint very dark grayish brown (10YR 3/2) mottles. End.			

**DESIGNATION: SP 14** 

LANDSCAPE POSITION: outwash plain (rise), 3–5% slopes

PARENT MATERIAL: glacial outwash

VEGETATION: trees and grass, <20% % GSV

METHOD: hand probe

DATE DESCRIBED: 5/11/2022 DESCRIBED BY: J. Langseth

COMMENTS: This profile was recorded from a hand probe taken along the eastern portion of 21BK0148. The probe exhibited a largely undisturbed soil sequence. As such, this part of the site was interpreted as having moderate to high potential for intact archeological deposits.

	Depth (cm)	Soil Horizon	Description	
_	0–26	A	Black (10YR 2/1) sandy loam; weak, fine subangular blocky structure; friable; clear boundary.	
	26–32	AB	Very dark gray (10YR 3/1) sandy loam; weak, fine subangular blocky structure; friable; common, fine, distinct dark grayish brown to brown (10YR 4/2–4/3) mottles near base; clear boundary.	
	32–55	Bw	Brown (10YR $4/3$ ) sandy loam; weak, fine subangular blocky structure; friable; gradual boundary.	
_	55-70+	С	Dark yellowish brown (10YR 4/4) medium sand; massive; very friable. End.	

**DESIGNATION: SP 15** 

LANDSCAPE POSITION: outwash plain (rise), 3-5% slopes

PARENT MATERIAL: glacial outwash

VEGETATION: trees and grass, <20% % GSV

METHOD: hand probe

DATE DESCRIBED: 5/10/2022 DESCRIBED BY: J. Langseth

COMMENTS: This profile was recorded from a hand probe taken along the east-central portion of the project area. The probe revealed a largely undisturbed soil sequence. Similar sequences of soil were seen in two subsequent hand probes taken to the east-northeast. As such, these parts of the project area were interpreted as having moderate to high potential for intact archeological deposits.

Dep	oth (cm)	Soil Horizon	Description	
	0–18	A	Black (10YR 2/1) sandy loam; weak, fine subangular blocky structure; friable; clear boundary.	
1	8–24	AB	Very dark gray to very dark grayish brown (10YR 3/1–3/2) sandy loam; weak, fine subangular blocky structure; friable; clear boundary.	
2	24–44	Bw	Brown (10YR 4/3) sandy loam; weak, fine subangular blocky structure; friable; gradual boundary.	
4	4-70+	C	Brown (10YR 4/3) medium sand; massive to single grain; very friable to loose. End.	

**DESIGNATION: SP 16** 

LANDSCAPE POSITION: outwash plain (rise), 3-5% slopes

PARENT MATERIAL: glacial outwash

VEGETATION: trees and grass, <20% % GSV

METHOD: hand probe

DATE DESCRIBED: 5/11/2022 DESCRIBED BY: J. Langseth

COMMENTS: This profile was recorded from a hand probe executed near the center of 21BK0149. The probe exhibited a largely undisturbed soil sequence. Given this, the site was interpreted as having moderate to high potential for intact archeological deposits.

Depth (cm)	Soil Horizon	Description	
0–21	A	Black (10YR 2/1) sandy loam; weak, fine subangular blocky structure; friable; cleaboundary.	
21–29	AB	Very dark gray to very dark grayish brown (10YR 3/1-3/2) sandy loam; weak, fine subangular blocky structure; friable; common, fine, distinct brown (10YR 4/3) mottles near base; clear boundary.	
29–56	Bw	Brown to dark yellowish brown (10YR 4/3–4/4) sandy loam; weak, fine subangular blocky structure; friable; gradual boundary.	
56–79	BC	Dark yellowish brown (10YR 4/4) sandy loam; very weak, fine subangular blocky structure; very friable; gradual boundary.	
79–105+	C	Brown (7.5YR 5/4) medium sand; single grain; loose. End.	

APPENDIX B Minnesota Archaeological Site Forms

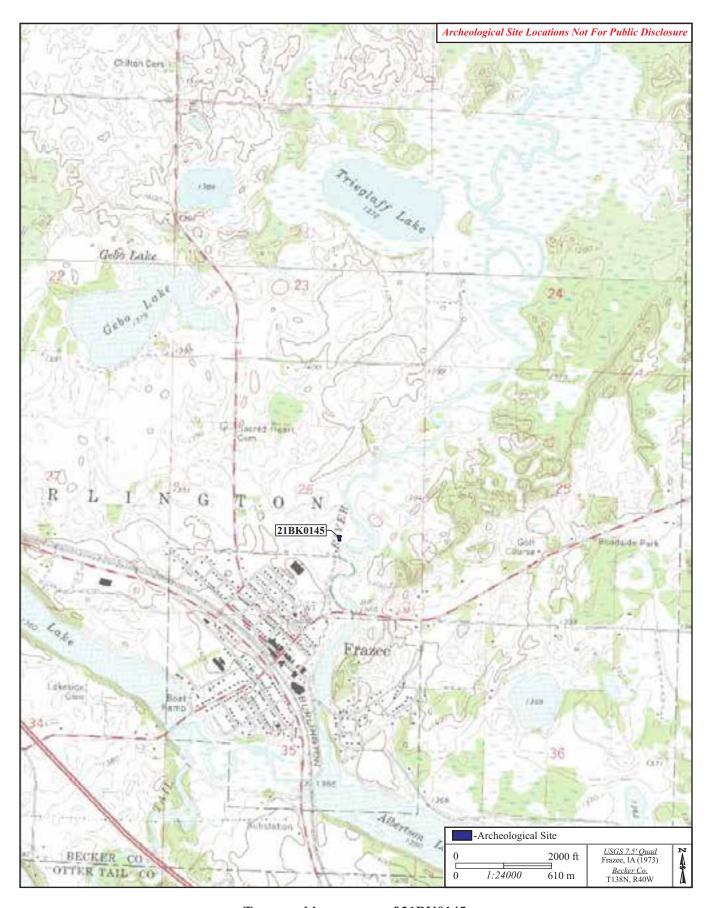
# MINNESOTA ARCHAEOLOGICAL SITE FORM OFFICE OF THE STATE ARCHAEOLOGIST Fort Snelling History Center, St. Paul, MN 55111 (612) 725-2729

SITE #: 21BK0145 (OSA assigns if New		e Name:		Agency/Field #: Site 1
X New Site	Site Update	OSA License #:	N/A	SHPO RC #:
Type of Fieldwork:	X Reconnaissance/I Evaluation/Phase Excavation/Phase	II	Date(s) of This Fie	ldwork: 5/10/22 & 5/11/22
NRHP Status: _ Lis	sted Determined E	ligibleCEF(106)	_ CNEF(106)	X Undetermined
LOCATIONAL INI	FORMATION			
County: Becker	Cit	y/Twp. Name: Burling	ton Twp.	SHPO Sub-Region: 4w (see map in instructions)
USGS 7.5' Quadrang	le Map (name and year	:): Frazee 1973		(see map in instructions)
Township: 138N Township: Township:	Range: 40W Range: Range:	Section: 26 Section: Section:	<ul> <li>1/4 Sections (at least</li> <li>1/4 Sections (at least</li> <li>1/4 Sections (at least</li> </ul>	t 2):
Zone: <u>15N</u>	Datum: 1927		thod: USGS Ma	d site; draw points on USGS) ap GPS <u>X</u> Other
SITE CHARACTE	RISTICS			
Acreage: 0.2 (0.1 ha)	Site Dimensions: N-S	S <u>120 ft (36.6 m)</u> E-W	95 ft (29 m) Maxii	mum Cultural Depth (if known) 50 cm
single artifac burial mound petroglyph surface featur	_ pictograph	tter artifa ) non-moun petroform	act scatter nd lone grave _	_ non-mound cemetery
Surface Features ( $\sqrt{g}$	a <u>ll</u> that apply): eart	hwork pit/depres	sion _ foundation	n/ruin _ other:
	n ( $\sqrt{all}$ that apply):			industrial transportation unknown
95 cultivated	st approximate % for a fallow 5 grassland	commercial re	creational ini	ndustrial residential
	st approximate % for a good	ll that apply): fai	ir	_5 poor/none
	ce ( <i>list approximate %</i> ) moderate 10			unassessed
Current Threats to Si  X erosion	te: ( $\sqrt{all\ that\ apply\ or}$ development $\underline{X}$ agric	$\sqrt{none\ known}$ cultural other: _		none known

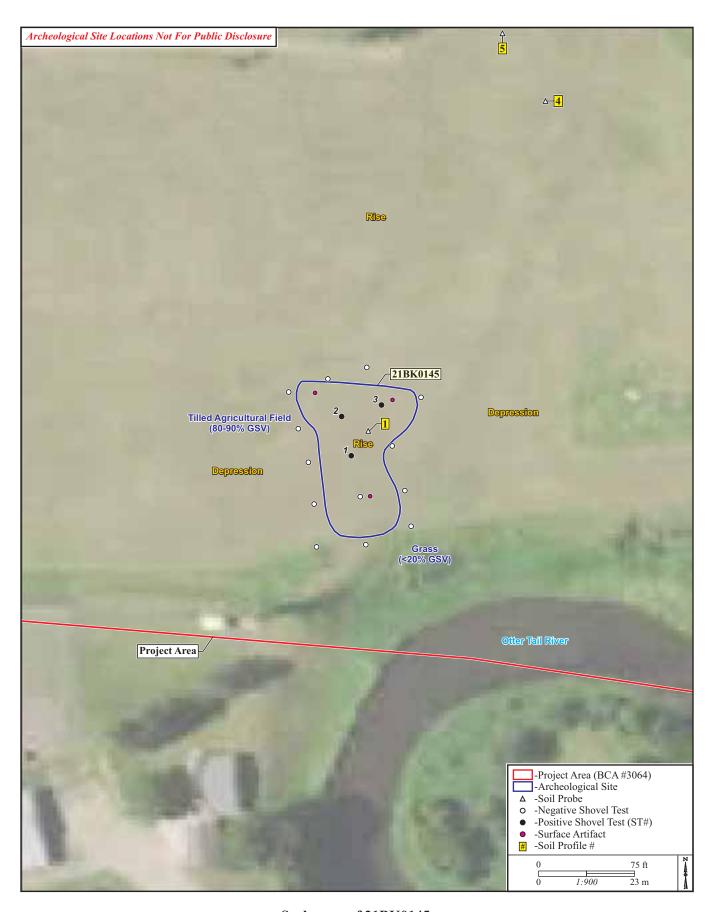
SITE #: 21BK0145 Site Name: Agency/Field #: Site 1

CULTURAL/TEMPORAL (list <u>all</u> that apply by level of		$2 = probable or \sqrt[4]{not detern}$	nined"):	
Period:         not deto           1 Precont	ermined act (9500 BC - 1650 AD)	Contact (1650-1837) Post-Contact (1837-1945)		
		ainty; if unable to discern spec Folsom Eastern Fluted		
Archaic Tradition	_ not determined _ _ Shield _	Prairie Lake-Forest	Riverine other:	
Woodland Tradition	not determined _ SE Mn Early _ Brainerd _ Havana-Related _ other:	C Mn Transitional Blackduck-Kathio SE Mn Late	Laurel Lake Benton Psinomani/Sandy Lake Rainy River Late	
Plains Village Tradition	_ not determined _ _ other:	_ Cambria Great Oasi	Big Stone	
Mississippian Tradition	_ not determined _	_ Silvernale o	ther:	
Oneota Tradition	not determined	Blue Earth Orr or	ther:	
Contact Context: (list <u>all</u> th American Indian	nat apply by level of certain not determined	nty; if unable to discern specifi _ DakotaOjibwe	ic context, \(\forall \text{here} \\) _ other:	
Euro-American	not determined French	British Initial US	other:	
<ul> <li>Indian Communities</li> <li>Early Agriculture &amp; I</li> <li>Northern MN Lumbe</li> <li>Tourism &amp; Recreation</li> </ul>	& Reservations (1837-1938) River Settlement (1840-1879) ring (1870-1930s) n (1870-1945) act Occupation/Site Format	70) Railroads & Agricu Iron Ore Industry (1 Urban Centers (187 tion Date(s):	Lumbering (1830s-1900s) Itural Development (1870-1940) 1880s-1945)	
<ul><li>X artifact type/style</li><li>historic accounts (list</li><li>historic maps (list)</li></ul>	feature type radio	ometric _ relative stratigra		
(For radiometric dates, attac	h photocopies of laborator	ry sheets if available.)		
Aboriginal Euro-American X X	√ <u>all</u> that apply):  thics projectile points other chipped stone tools debitage ground/pecked stone FCR aboriginal copper	Biological Remains animal human unidentified bone seeds/nuts charcoal wood	Historic Materials glass metal brick other:	

SITE #:	21BK0145	Site Name:	Agency/Field #: Site 1
	Exotic Materials ( $\sqrt{a}$		IV:nton outhousestrice
_ c X K	atlinite Knife River Flint	<ul><li>_ native copper</li><li>_ obsidian</li></ul>	Hixton orthoquartzite other:
		_ *********	
	tic Artifacts: amics: Prehistoric	Trumps/Wares/Tommon	
Cera			
Preh	nistoric Lithics:		
Glas	ss:		
Met			
Othe	er:		
ENVIRO	ONMENTAL DATA	Current Topographic Setting (	$\sqrt{all}$ that apply):
Awa	<u>ıy from Water</u>	<u>Riverine</u>	<u>Lacustrine</u>
	general upland	fan	inlet/outlet
te	errace edge	$\underline{X}$ terrace/bluff top	
_ h	nilltop glacial beach ridge	stream-stream jun	ction island
_ g	lacial beach ridge	_ bluff-base _ cave/rockshelter	isthmus
_ r	ock outcrop	_ cave/rockshelter	_ general shoreline
_ of	ther:		_ bog/slough/lake bottom
Topogra	nhia Eastura Nama fr	other: rom USGS Map:	
Topograj	pine reature Name ii	oni OSOS Map.	
OWNER	RSHIP INFORMAT	TION	
			v recorder's office, personal communication, etc.):
		gis-server.co.becker.mn.us/link/jsfe/	
Ownersh	ip Type (list approx	imate % for all that apply; if unknov	$\forall here \underline{\hspace{1cm}}$ ):
	Federal	_ State Local (public)	Tribal <u>100</u> Private
	wner (name and add , CA 94607	ress if known): The Entrust Group	, Inc., FBO Gregory Lee Ness, 555 12th Street Suite 900,
CURRE	NT INVESTIGATI	ON INFORMATION	
	Techniques Employ		
	, , , ,		1" diameter) $\underline{X}$ surface survey
$\frac{\overline{\mathbf{X}}}{\mathbf{X}}$ s	hovel testing	formal test units me	chanical testing max. test depth 100 cm
g	geomorphological sur	vey (specify):	· · · · · · · · · · · · · · · · · · ·
_ g	geophysical survey (s	pecify):	
_ 0	other:		
Informar	nt Name and Address	(if known): None	
Informat	it ivanic and Address	(II KHOWII). INOIIC	
Known (	Collectors/Collections	s: None	
Artifact landown		nd accession numbers or repository	agreement number): None (artifacts will be returned to the
			cheological Survey of 44.5 ha (110 ac) for the Proposed innesota, Langseth, Jared A., and Josh Anderson, 2022
Major Pr	evious Bibliographic	Reference(s) to Site: None	
Principal	Investigator (name o	and affiliation): Jared A. Langseth	
Form Co	ompleted By (name o	and date): Josh Anderson 6/1/22	



Topographic coverage of 21BK0145.



Scale map of 21BK0145.

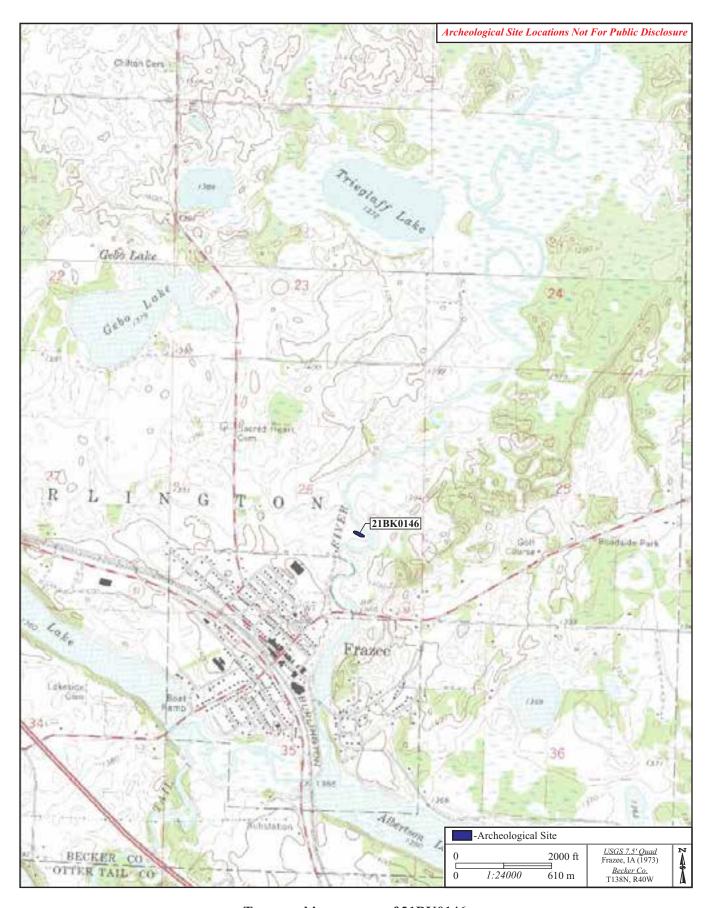
# MINNESOTA ARCHAEOLOGICAL SITE FORM OFFICE OF THE STATE ARCHAEOLOGIST Fort Snelling History Center, St. Paul, MN 55111 (612) 725-2729

SITE #: 21BK0146 (OSA assigns if New		Name:		Agency/Field #: Site 2
$\underline{X}$ New Site $\underline{\hspace{0.2cm}}$ S	Site Update	OSA License #:	N/A	SHPO RC #:
Type of Fieldwork:	X_Reconnaissance/P Evaluation/Phase Excavation/Phase	II	Date(s) of This Fig	eldwork: 5/10/22 & 5/11/22
NRHP Status: List	ted Determined El	igibleCEF(106)	_ CNEF(106)	X Undetermined
LOCATIONAL INF	<u>FORMATION</u>			
County: Becker	City	/Twp. Name: Burling	ton Twp.	SHPO Sub-Region: 4w (see map in instructions)
USGS 7.5' Quadrangl	e Map (name and year)	): Frazee 1973		(see map in instructions)
Township: 138N Township: Township:	Range:	Section: 26 Section: Section:	1/4 Sections (at least	st 2):
Zone: <u>15N</u>	Datum: 1927X ing: 294141 ing ing ing		thod: USGS M	d site; draw points on USGS)  [ap GPS _X_ Other
SITE CHARACTER	RISTICS			
Acreage: 0.3 (0.1 ha)	Site Dimensions: N-S	70 ft (21.3 m) E-W 2	50 ft (76.2 m) Max	imum Cultural Depth (if known) 10 cm
<ul><li>single artifact</li><li>burial mound</li></ul>	pictograph es (list below)	ter artifa	act scatter and lone grave <u>-</u>	_ non-mound cemetery
Surface Features ( $\sqrt{\underline{a}}$	<i>ll that apply</i> ): earth	work _ pit/depress	sion _ foundatio	on/ruin _ other:
	in ( $\sqrt{all}$ that apply):			_ industrial transportation unknown
90 cultivated	t approximate % for all fallow c grassland	commercial red	creational	industrial residential
	t approximate % for all	! that apply): fai	r _	10 poor/none
	e ( <i>list approximate % fo</i> moderate <u>100</u>			unassessed
	te: ( $\sqrt{all\ that\ apply\ or\ 1}$ development $\underline{X}$ agric			none known

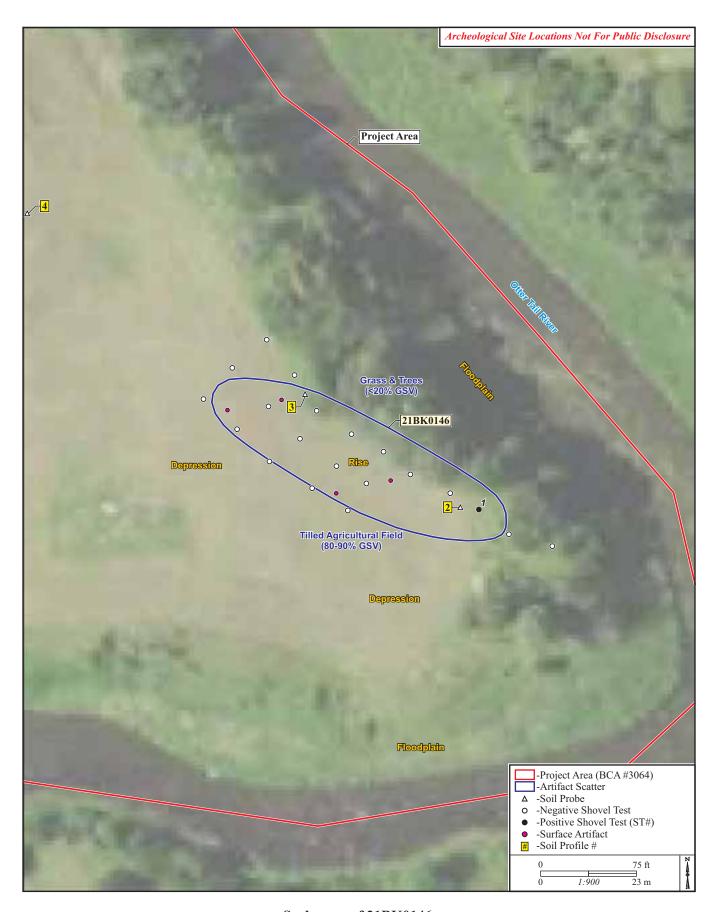
SITE #: 21BK0146 Site Name: Agency/Field #: Site 2

Period:	not data	rminad	Conta	et (1650-1937)
Perioa:	_ not dete 1 Preconta	rmined ct (9500 BC - 1650 AD)	Contac Post-C	ct (1650-1837) Contact (1837-1945)
				specific context, $\sqrt{here} X$
Paleoindi	ian Tradition	_ not determined _	_ Folsom _ Eastern Fluted	Lanceolate Point/Plano
		_ Clovis _	_ Eastern Fluted	other:
Archaic T	Tradition	not determined	_ Prairie	Riverine
		Shield	Lake-Forest	other:
Woodland	d Tradition	not determined	Fox Lake	_ Laurel
		_ SE Mn Early _	C Mn Transitional	_ Lake Benton
		Brainerd	Blackduck-Kathio SE Mn Late	Psinomani/Sandy Lake
			_ 52 1,111 2410	Rainy River Late
		other:		
Plains Vi	llage Tradition	not determined	Cambria Great (	Oasis Big Stone
		other:		
Mississip	pian Tradition	_ not determined _	_ Silvernale	_ other:
Oneota T	<i>Cradition</i>	not determined	Blue Earth Orr	_ other:
Oncola 1	raamon		_ Dide Editif Off _	
Contact Cont	t <b>ext:</b> (list <u>all</u> the		nty; if unable to discern sp	
American	ı Indian	not determined	_ Dakota Ojibwe	other:
<b>-</b>			B	•
Euro-Am	erican	_ not determined _	_ British	other:
		_ French _	_ initial US	
Post-Contact	Context: (list.	all that apply by level of a	vertainty: if unable to disce	ern specific context, √here)
		Reservations (1837-193		gle Lumbering (1830s-1900s)
		Liver Settlement (1840-18	70) Railroads & As	gricultural Development (1870-1940)
		ring (1870-1930s)		rv (1880s-1945)
		i (1870-1945)	Urban Centers (	(1870-1940)
_		(		
Approxin	nate Post-Conta	ct Occupation/Site Forma	tion Date(s):	
		/		
		<b>Methods</b> ( $\sqrt{all}$ that apply		
X artifac	ct type/style	feature type radi	ometric _ relative stra	tigraphy _ geomorphology
histori	c accounts (list)			
histori	c maps (list)			
onler(s	s) (specify)			
For radiomet	tric dates, attacl	n photocopies of laborator	rv sheets if available.)	
	,	1 1 3	, ,	
		$\frac{all}{all}$ that apply):		
Basic Artifac	_		<b></b>	
<u>Ceramics</u>		<u>hics</u>	<u>Biological Remain</u>	<del></del> -
_ Aboriginal		projectile points	animal	_ glass
_ Euro-Amer		other chipped stone tools		metal
	<u>X</u>	debitage	unidentified box	
		ground/pecked stone FCR	seeds/nuts charcoal	other:
		aboriginal conner	cnarcoal wood	

SITE #: 21BK0146	Site Name:	Agency/Field #: Site 2
Major Exotic Materials ( $\sqrt{all}$ _ catlinite _ Knife River Flint	that apply): native copper obsidian	Hixton orthoquartzite other:
·	= =	
Prehistoric Lithics:		
ENVIRONMENTAL DATA	<b>Current Topographic Setting</b>	$(\sqrt{all} that apply)$ :
<del>-</del>	other:	unction island
Topographic Teature Ivame from		
Online property map (https://gi Ownership Type (list approxim Federal  Land Owner (name and addre Oakland, CA 94607  CURRENT INVESTIGATIO Methods/Techniques Employed informant report X shovel testing geomorphological surve geophysical survey (specific propert)	Information (e.g., plat map, counts-server.co.becker.mn.us/link/jsf mate % for all that apply; if unknews and Local (public less if known): The Entrust Ground Information  N INFORMATION  Information (e.g., plat map, counts and counts apply):  X small diameter soil coring (formal test units apply):	own √here): ) Tribal 100 Private  up, Inc., FBO Gregory Lee Ness, 555 12 <sup>th</sup> Street Suite 900,  ≈ 1" diameter) X surface survey mechanical testing max. test depth 100 cm
Informant Name and Address (	if known): None	
Known Collectors/Collections:	None	
Artifact Repository (name and landowner)	accession numbers or repositor	y agreement number): None (artifacts will be returned to the
		Archeological Survey of 44.5 ha (110 ac) for the Proposed Minnesota, Langseth, Jared A., and Josh Anderson, 2022
Major Previous Bibliographic F	Reference(s) to Site: None	
Principal Investigator (name an	d affiliation): Jared A. Langseth	
Form Completed By (name an	ed date): Josh Anderson 6/1/2	2



Topographic coverage of 21BK0146.



Scale map of 21BK0146.

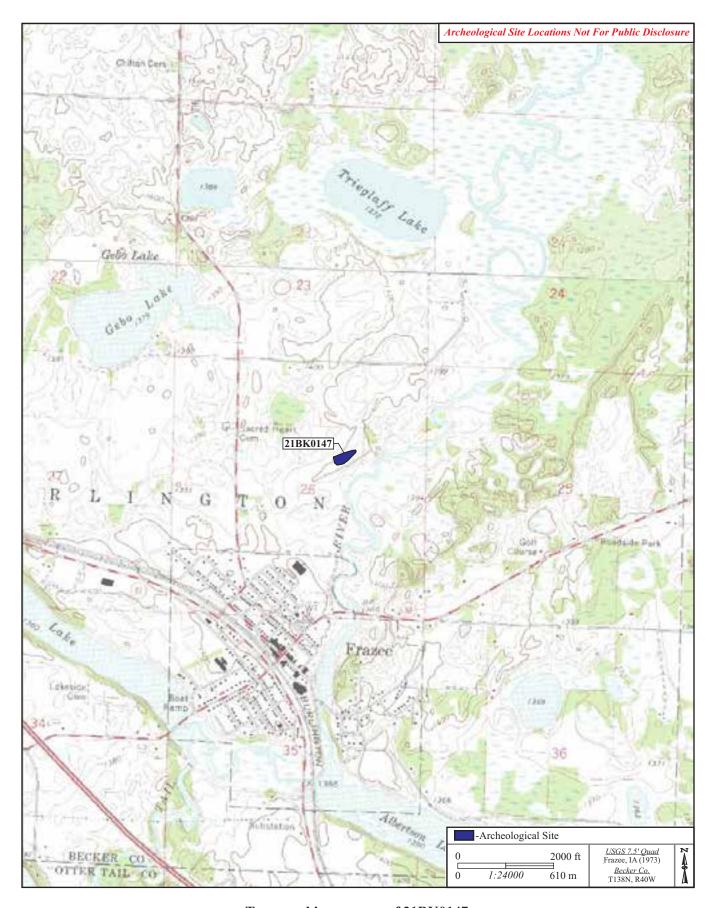
# MINNESOTA ARCHAEOLOGICAL SITE FORM OFFICE OF THE STATE ARCHAEOLOGIST Fort Snelling History Center, St. Paul, MN 55111 (612) 725-2729

SITE #: 21BK0147 (OSA assigns if New		e Name:		Agency/	Field #: Site 3
$\underline{X}$ New Site $\underline{\hspace{0.2cm}}$ S	Site Update	OSA License #:	N/A	SHPO R	C #:
Type of Fieldwork:	X Reconnaissance/I Evaluation/Phase Excavation/Phase	II	Date(s) of This Fie	ldwork: 5/10/22	& 5/11/22
NRHP Status: List	ted _ Determined E	ligibleCEF(106)	_ CNEF(106)	X Undetermin	ed
LOCATIONAL INF	ORMATION				
County: Becker	Cit	y/Twp. Name: Burling	gton Twp.	SHPO Sub-R	
USGS 7.5' Quadrangl	e Map (name and year	r): Frazee 1973		(see map in insir	uctions)
	Range: 40W Range: Range:	Section: 26 Section: Section:	1/4 Sections (at least 1/4 Sections (at least 1/4 Sections (at least	t 2):	21/4
Zone: <u>15N</u>	Datum: 1927 ing: 294037 ing ing ing	nenter; over 10 acres do  X 1983 Me  Northing: 5  Northing  Northing  Northing  Northing	thod: USGS Ma		
SITE CHARACTE	RISTICS				
Acreage:1.8 (0.7 ha)	Site Dimensions: N-S	205 ft (62.5 m) E-W 50	00 ft (152.4 m) Maxi	mum Cultural D	epth (if known) 60 cm
single artifact burial mound petroglyph surface featur	_ pictograph	tter X artifa) non-mou petroform	act scatter nd lone grave _	_ non-mound ce	metery
Surface Features ( $\sqrt{\underline{a}}$	ll that apply): eart	hwork _ pit/depres	sion _ foundation	n/ruin _ othe	r:
		habitation _ mort		industrial unknown	transportation
_50 cultivated	t approximate % for a fallow fallow	ll that apply):  commercial rewater-covered	ecreational in	ndustrial ad and ditch	residential
	t approximate % for a. good	ll that apply): fa	ir _	50 poor/none	
		for all that apply or $\sqrt{0}$ heavy co		_	unassessed
	te: ( $\sqrt{all\ that\ apply\ or}$ development $\underline{X}$ agric	$\sqrt{none \ known}$ cultural other:			none known

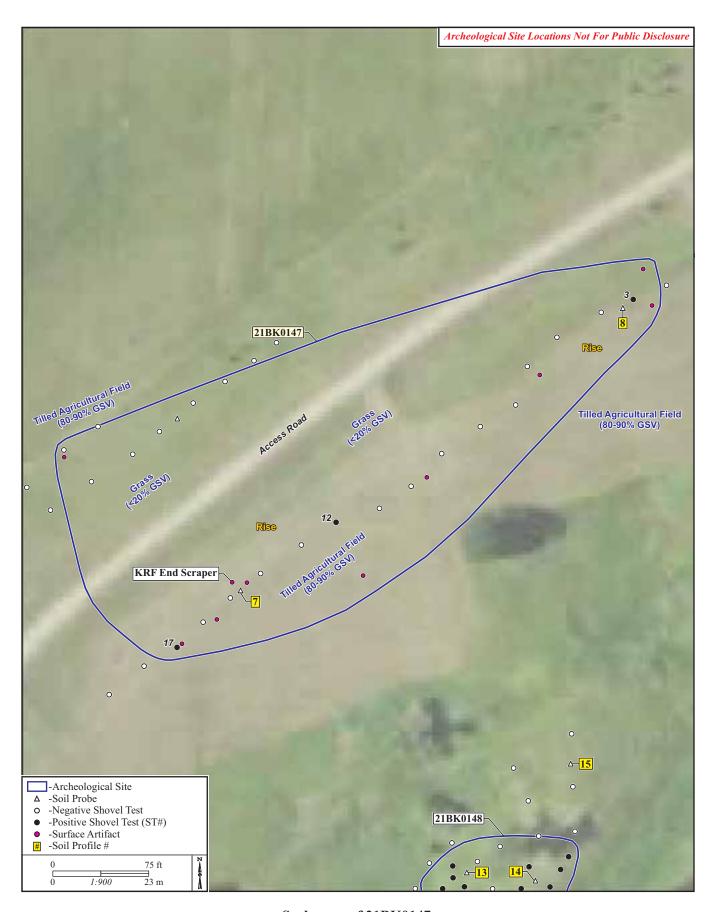
SITE #: 21BK0147 Site Name: Agency/Field #: Site 3

	<b>DRAL AFFILIATION</b> <pre> evel of certainty: 1 = confirmed;</pre>	$2 = probable or \sqrt[]{not de}$	etermined"):
<b>Period:</b> r 1 P	not determined recontact (9500 BC - 1650 AD)	_ Conta _ Post-C	ct (1650-1837) Contact (1837-1945)
Precontact Context: (list <u>all</u> that apply by level of ceres Paleoindian Tradition not determined Clovis			
Archaic Tradition	_ not determined _ _ Shield _		Riverine other:
Woodland Traditi	SE Mn Early	C Mn Transitional Blackduck-Kathio SE Mn Late	<ul><li>Laurel</li><li>Lake Benton</li><li>Psinomani/Sandy Lake</li><li>Rainy River Late</li></ul>
Plains Village Tra	not determined other:		Oasis Big Stone
Mississippian Tra	dition not determined	Silvernale	other:
Oneota Tradition	not determined	Blue Earth Orr	other:
Contact Context: (lis American Indian	t <u>all</u> that apply by level of certain not determined	nty; if unable to discern sp _ Dakota Ojibwe	pecific context, \(\forall here \\) \(_\) other:
Euro-American	_ not determined _ _ French _	British Initial US	other:
Indian Commu Early Agriculto Northern MN I Tourism & Rec	: (list <u>all</u> that apply by level of conities & Reservations (1837-193) are & River Settlement (1840-186) cumbering (1870-1930s) creation (1870-1945)  -Contact Occupation/Site Format	4) _ St. Croix Trian 70) _ Railroads & As _ Iron Ore Indust _ Urban Centers	gle Lumbering (1830s-1900s) gricultural Development (1870-1940) try (1880s-1945)
X artifact type/st historic accoun historic maps (	Dating Methods ( $\sqrt{all}$ that apply yle feature type radicts (list) list) list) list)	ometric relative stra	
(For radiometric dates	, attach photocopies of laborator	ry sheets if available.)	
	ENT ( $\sqrt{all}$ that apply):		
Basic Artifact Categor Ceramics Aboriginal Euro-American	<ul><li><u>Lithics</u></li><li>projectile points</li></ul>	Biological Remain  X animal human unidentified bo seeds/nuts charcoal wood	glass metal

SITE #:	21BK0147	Site Name:	Agency/Field #: Site 3
			Hixton orthoquartzite other:
Cera Prel Gla Met	Historic historic Lithics: ss: tal:		
Oth			
Awa  _	ay from Water general upland terrace edge nilltop glacial beach ridge rock outcrop other:	cave/rockshelter floodplain other:	Lacustrineinlet/outletpeninsula nctionislandisthmusgeneral shorelinebog/slough/lake bottomother:
Topogra	phic Feature Name f	rom USGS Map:	
Online p Ownersh  Land Ov Oakland	property map (https://nip Type (list approximate Federal where (name and additional form), CA 94607	gis-server.co.becker.mn.us/link/jsfesimate % for all that apply; if unkno State Local (public)  lress if known): The Entrust Group	
Methods i X s 8 8	s/Techniques Employ informant report shovel testing geomorphological sur geophysical survey (s	ION INFORMATION $tree (\sqrt{all} \ that \ apply):$ $X = tree (\sqrt{all} \ that \ apply):$ $Tree = tree (\sqrt{all} \ that \ apply):$	
Informa	nt Name and Address	s (if known): None	
Known	Collectors/Collection	s: None	
Artifact landown		nd accession numbers or repository	agreement number): None (artifacts will be returned to the
			rcheological Survey of 44.5 ha (110 ac) for the Proposed linnesota, Langseth, Jared A., and Josh Anderson, 2022
Major Pr	revious Bibliographic	c Reference(s) to Site: None	
Principa	l Investigator (name	and affiliation): Jared A. Langseth	
-		and date): Josh Anderson 6/1/22	



Topographic coverage of 21BK0147.



Scale map of 21BK0147.

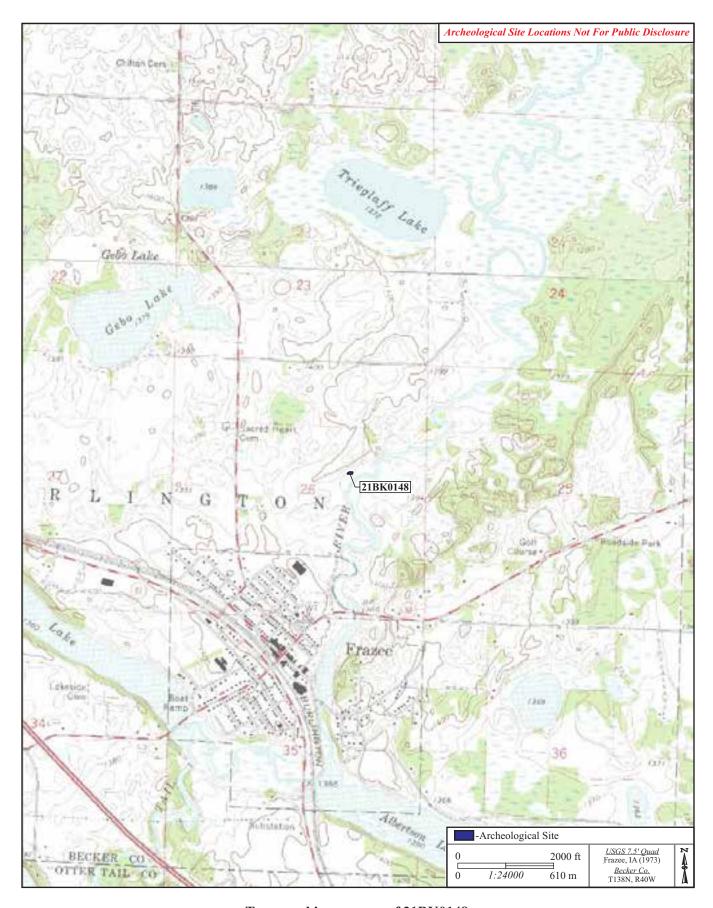
# MINNESOTA ARCHAEOLOGICAL SITE FORM OFFICE OF THE STATE ARCHAEOLOGIST Fort Snelling History Center, St. Paul, MN 55111 (612) 725-2729

(OSA assigns if New		e Name:		Agency/Field #: Site 4
X New Site _ S	Site Update	OSA License #:	N/A	SHPO RC #:
Type of Fieldwork:	X Reconnaissance/I Evaluation/Phase Excavation/Phase	II	Date(s) of This Fie	eldwork: 5/10/22 & 5/11/22
NRHP Status: List	tedDetermined E	ligibleCEF(106)	_ CNEF(106)	X Undetermined
LOCATIONAL INF	ORMATION			
County: Becker	Cit	y/Twp. Name: Burling	ton Twp.	SHPO Sub-Region: 4w (see map in instructions)
USGS 7.5' Quadrangl	e Map (name and year	r): Frazee 1973		•
	Range: 40W Range: Range:	Section: 26 Section: Section:	<ul><li>¼ Sections (at leas</li><li>¼ Sections (at leas</li><li>¼ Sections (at leas</li></ul>	et 2):
Zone: <u>15N</u>	Datum: 1927 ting: 294073 ting ting ting		thod: USGS M	d site; draw points on USGS) ap GPS <u>X</u> Other
SITE CHARACTER	RISTICS			
Acreage: 0.1 (<0.1 ha	) Site Dimensions: N-	S <u>55 ft (16.8 m)</u> E-W <u>1</u>	15 ft (35.1 m) Maxi	mum Cultural Depth (if known) 60 cm
single artifact burial mound petroglyph surface featur	_ pictograph	tter X artifa) non-mour petroform	act scatter and lone grave _	_ non-mound cemetery
Surface Features ( $\sqrt{\underline{a}}$	<u>ll</u> that apply): eart	hwork pit/depress	sion _ foundation	n/ruin _ other:
		habitation _ mortu		industrial transportation unknown
Current Land Use (lis cultivated woodland	t approximate % for a fallow c100 grassland	ll that apply): ommercial reci water-covered	reational in other:	dustrial residential
	t approximate % for a good	ll that apply): fai	r _	100 poor/none
		for all that apply or $\sqrt{}$ heavy		yed unassessed
Current Threats to Sit X erosion o	e: ( $\sqrt{all}$ that apply or development _ agric	$\sqrt{none \ known}$ cultural other:		none known

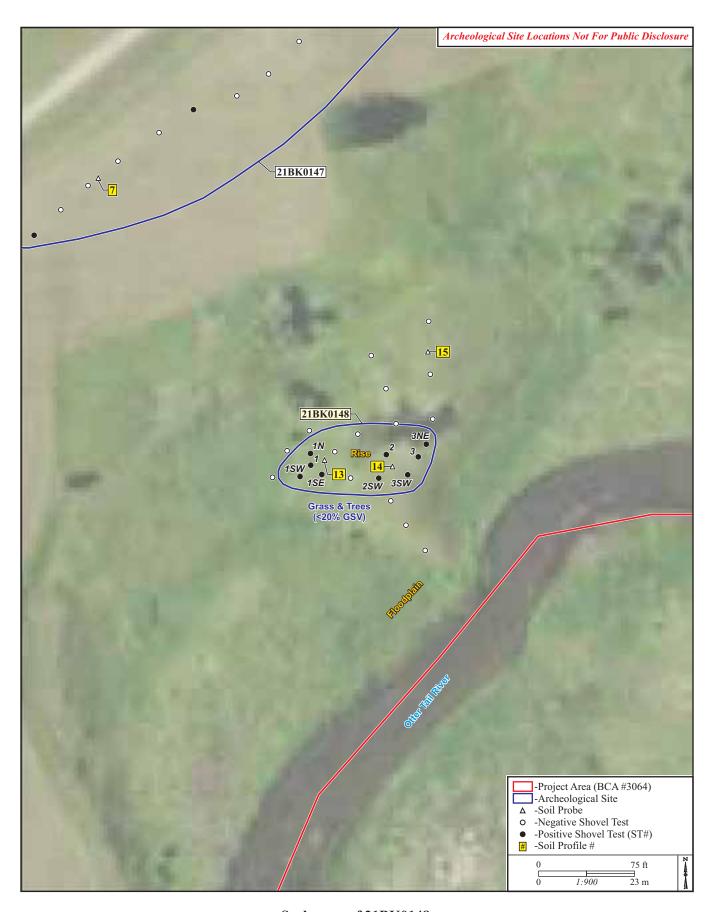
SITE #: 21BK0148 Site Name: Agency/Field #: Site 4

Period:	_ not dete	rmined	Contac	et (1650-1837)
1 01104.	not determined Precontact (9500 BC - 1650 AD)		Post-C	ontact (1837-1945)
Precontact C			ainty; if unable to discern	specific context There
1 000000000	27000000	Clovis	_ Folsom _ Eastern Fluted	_ other:
Archaic T	[radition	not determined	_ Prairie	Riverine
		Shield	Lake-Forest	other:
Woodland	d Tradition	1 not determined	Fox Lake	Laurel
		_ SE Mn Early _	C Mn Transitional	_ Lake Benton
		Brainerd	Blackduck-Kathio SE Mn Late	_ Psinomani/Sandy Lake
			_ 52 1.111 2.110	_ Rainy River Late
		other:		
51 · · · · ·				D. 0
Plains Vil	llage Tradition		_ Cambria Great (	Jasis Big Stone
		other:		
Mississin	pian Tradition	not determined	Silvernale	other:
www.	pian Tradition	_ not determined _		other.
Oneota T	radition	not determined	Blue Earth Orr	other:
		<del>_</del>	<del>-</del> -	
Contact Cont	t <b>ext:</b> (list <u>all</u> the	at apply by level of certair	nty; if unable to discern spe	ecific context, $\sqrt{here}$ )
American	ı Indian	_ not determined _	_ Dakota Ojibwe	other:
Euro-Ame	erican	_ not determined _	_ British	other:
		_ French _	_ Initial US	
Indian Early A Northe Touris	Communities & Agriculture & Rern MN Lumber & Recreation	all that apply by level of c & Reservations (1837-193 kiver Settlement (1840-18' ring (1870-1930s) (1870-1945) ct Occupation/Site Format	4) St. Croix Triang 70) Railroads & Ag Iron Ore Industr Urban Centers (	rn specific context, √here) gle Lumbering (1830s-1900s) ricultural Development (1870-1940) ry (1880s-1945) (1870-1940)
Context Assic	anment/Dating	<b>Methods</b> ( $\sqrt{all}$ that apply	v)·	
				tigraphy _ geomorphology
histori	c accounts (list)		<u> </u>	_ 8
histori	c maps (list)			
other(s	s) (specify):			
_ `			ry sheets if available )	
	ric dates, attach	h photocopies of laborator	y sireeis if arailasie.	
For radiomet			y sincers if available.	
For radiomet  MATERIALS	S PRESENT ( )	In photocopies of laborator $\sqrt{all}$ that apply):	y sheets if aranaetery	
For radiomet  MATERIALS  Basic Artifact	S PRESENT ( ) t Categories	$\sqrt{all}$ that apply):		a Historia Meteriale
For radiomet  MATERIALS  Basic Artifact  Ceramics	S PRESENT ( ) t Categories	√ <u>all</u> that apply): <u>hics</u>	Biological Remain.	<del>-</del>
MATERIALS Basic Artifact Ceramics Aboriginal	S PRESENT ( ) t Categories  proje	$\sqrt{\frac{all}{all}}$ that apply): <u>hics</u> ectile points	<u>Biological Remain:</u> animal	glass
For radiomet  MATERIALS  Basic Artifact  Ceramics	S PRESENT ( ) t Categories  Lit projection X	\(\frac{\all}{all}\) that apply): \(\frac{\text{hics}}{\text{ectile points}}\) other chipped stone tools	<i><u>Biological Remain:</u>  animal  human</i>	glass metal
MATERIALS Basic Artifact Ceramics X Aboriginal	S PRESENT ( $v$ t Categories  Lit projection $\underline{X}$	\(\frac{\all}{all}\) that apply): \(\frac{\hics}{\text{ectile points}}\) other chipped stone tools debitage	Biological Remains animal human unidentified bor	glass metal ne brick
(For radiomet MATERIALS Basic Artifact Ceramics X Aboriginal	S PRESENT ( )  t Categories  Litt projection $\underline{X}$ $\underline{X}$	\(\frac{\all}{all}\) that apply): \(\frac{\text{hics}}{\text{ectile points}}\) other chipped stone tools	<i><u>Biological Remain:</u>  animal  human</i>	glass metal

SITE #: 21BK01	48 Sit	te Name:		Agency/Field #: Site 4
Major Exotic Mat catlinite Knife Rive	erials ( $\sqrt{all}$ that apply):  native Flint obsi	ve copper H dian o	ixton orthoquartzite ther:	
Frehistoric Lit Glass:	rehistoric Types/Wares/ listoric hics:	Temper - <u>Grit tempered body</u>		
Metal: _ Other: _				
ENVIRONMENT	AL DATA Current T	opographic Setting ( $\sqrt{all}$ th	at apply):	
rock outero other:	and e ch ridge p	Riverine fan X terrace/bluff top stream-stream junction bluff-base cave/rockshelter floodplain other:	island isthmus general sh bog/sloug other:	noreline h/lake bottom
Online property ma Ownership Type ( Federal	Ownership Information up (https://gis-server.co.blist approximate % for a State  e and address if known	(e.g., plat map, county recordecker.mn.us/link/jsfe/index.all that apply; if unknown √he Local (public)  ): The Entrust Group, Inc.,	spx) **re ): Tribal 100 Priv	vate
CURRENT INVE Methods/Techniqu informant r X shovel testi geomorpho geophysica	STIGATION INFORM es Employed ( $\sqrt{all}$ that $d$ eport $\underline{X}$ small d ng formal logical survey ( $specify$ ): l survey ( $specify$ ):		al testing max. test dep	urvey oth <u>100 cm</u>
Informant Name ar	nd Address (if known): N	None		
Known Collectors/	Collections: None			
Artifact Repository landowner)	(name and accession n	numbers or repository agreen	nent number): None (artif	acts will be returned to the
		nor, Date: Phase I Archeolo hip, Becker County, Minneson		
Major Previous Bib	oliographic Reference(s)	to Site: None		
Principal Investiga	or (name and affiliation	): Jared A. Langseth		
Form Completed	<b>By</b> (name and date):	osh Anderson 6/1/22		



Topographic coverage of 21BK0148.



Scale map of 21BK0148.

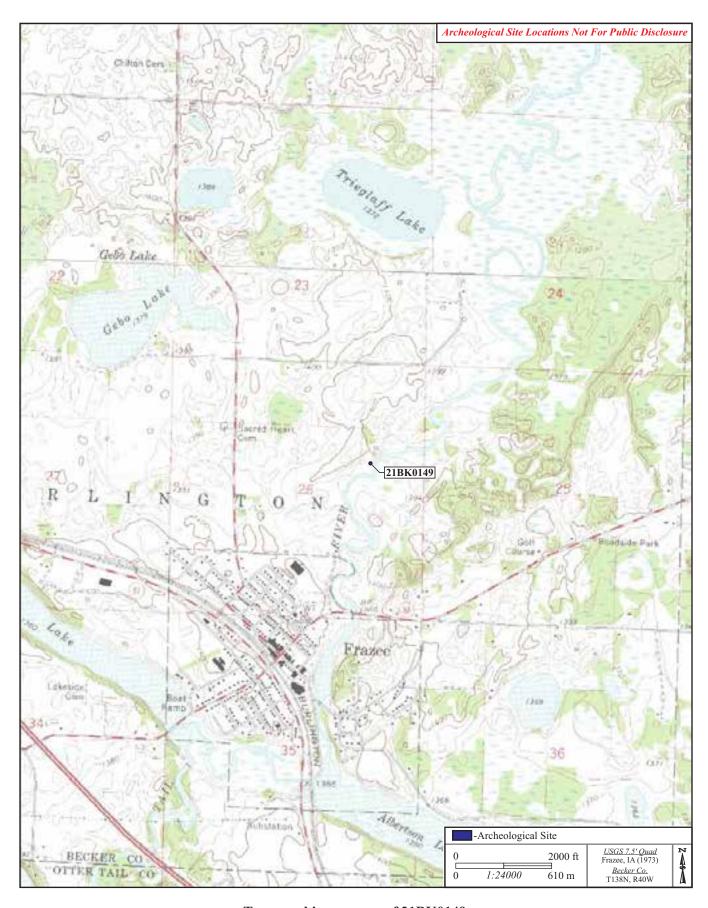
# MINNESOTA ARCHAEOLOGICAL SITE FORM OFFICE OF THE STATE ARCHAEOLOGIST Fort Snelling History Center, St. Paul, MN 55111 (612) 725-2729

(OSA assigns if New		ame:		Agency/Field #: Site 5
X New Site _ S	Site Update	OSA License #: 1	N/A	SHPO RC #:
Type of Fieldwork:	X Reconnaissance/Phase II Excavation/Phase III		Date(s) of This Fiel	dwork: 5/10/22 & 5/11/22
NRHP Status: List	ted Determined Eligi	bleCEF(106)	_ CNEF(106)	X Undetermined
LOCATIONAL INF	ORMATION			
County: Becker	City/T	wp. Name: Burlingt	on Twp.	SHPO Sub-Region: 4w (see map in instructions)
USGS 7.5' Quadrangl	e Map (name and year): I	Frazee 1973		(see map in instructions)
Township: 138N Township: Township:	Range: Se	ection:	<ul><li>½ Sections (at least</li><li>½ Sections (at least</li><li>½ Sections (at least</li></ul>	2):
Zone: <u>15N</u>	Datum: 1927X_ ing: 294214 ing ing ing	1983 Met	hod: USGS Ma	site; draw points on USGS) p GPS <u>X</u> Other
SITE CHARACTER	<u>RISTICS</u>			
Acreage: 0.1 (<0.1 ha	a) Site Dimensions: N-S 65	5.6 ft (20 m) E-W 65	5.6 ft (20 m) Maxim	um Cultural Depth (if known) 40 cm
single artifact burial mound petroglyph surface featur	lithat apply, but only one lithic scatter (number of mounds pictograph es (list below)	X artifac _) non-moun petroform	ct scatter d lone grave	non-mound cemetery
Surface Features ( $\sqrt{\underline{a}}$	ll that apply): earthwo	ork <u>pit/depress</u>	ion _ foundation	/ruin _ other:
	n ( $\sqrt{all}$ that apply): _ ha			industrial transportation unknown
cultivated	t approximate % for all the fallow compared grassland	mercial recr	eational ind _ other:	lustrial residential
Surface Visibility (lise excellent	t approximate % for all th	aat apply): fair	r <u> </u>	100 poor/none
	e (list approximate % for moderate			ved unassessed
Current Threats to Sit X erosion o	te: $(\sqrt{all\ that\ apply\ or\ \sqrt{n}}]$ development agricultu	none known) ural other:		none known

SITE #: 21BK0149 Site Name: Agency/Field #: Site 5

(list <u>all</u> that a <sub>l</sub>	pply by level of o	certainty: $I = confirmed;$	$2 = probable or \sqrt[n]{not de}$	etermined"):
Period:	_ not determined 1 Precontact (9500 BC - 1650 AD)		Contact (1650-1837) Post-Contact (1837-1945)	
				specific context, √here _) _ Lanceolate Point/Plano _ other:
Archaic '	Tradition		Prairie Lake-Forest	Riverine other:
Woodlan	d Tradition	Brainerd	C Mn Transitional Blackduck-Kathio SE Mn Late	_ Psinomani/Sandy Lake
Plains Vi	illage Tradition	not determined _ other:		Oasis Big Stone
Mississip	ppian Tradition	_ not determined _	Silvernale	other:
Oneota T	<i>Fradition</i>	not determined	Blue Earth Orr	other:
Contact Con Americar				ecific context, √here ) other:
Euro-Am	perican	not determined French	British Initial US	other:
Indiar Early North Touris	n Communities & Agriculture & R ern MN Lumber sm & Recreation	& Reservations (1837-193 Liver Settlement (1840-187 ring (1870-1930s) a (1870-1945)	4) _ St. Croix Trian	(1870-1940)
X artifa histor histor	ct type/style ic accounts (list) ic maps (list)			
(For radiome	tric dates, attacl	n photocopies of laborator	ry sheets if available.)	
MATERIAL Basic Artifac	S PRESENT (1	$\frac{dl}{dl}$ that apply):		
Ceramics X Aboriginal Euro-Ame	Lit 	hics projectile points other chipped stone tools debitage ground/pecked stone FCR	Biological Remain animal human unidentified bo seeds/nuts charcoal	glass metal

SITE #: 21BK0149 Site Name:		Agency/Field #: Site		
	<b>aterials</b> ( $\sqrt{all}$ that appear Flint		Hixton orthoquartzite other:	
Diagnostic Artif Ceramics:	Prehistoric Types/V and .5-4 mm thickne	ess	•	othed-over cord-marked surfaces
Prehistoric I Glass: Metal: Other:	Lithics:			
Away from V general u terrace ec hilltop glacial be rock outc	<i>Vater</i> pland lge each ridge	cave/rockshelter	Lacust	t/outlet insula nd
Topographic Fea	ture Name from USC	SS Map:		<del></del>
Source and Date Online property i Ownership Type Federal Land Owner (na Oakland, CA 946  CURRENT INV Methods/Technic informan X shovel tes geomorpl geophysic	map (https://gis-serve (list approximate % State state State state State state state MESTIGATION INF ques Employed ( $\sqrt{all}$ t report x sn sting fo hological survey (specify):	r.co.becker.mn.us/link/jsfe  for all that apply; if unknot Local (public)  nown): The Entrust Grou  CORMATION that apply): nall diameter soil coring (* rmal test units m  cify):	wn √here): Tribal <u>10</u>	Ness, 555 12 <sup>th</sup> Street Suite 900,  face survey est depth 100 cm
	and Address (if know			
	rs/Collections: None	,. 110110		
		sion numbers or repository	agreement number): None	e (artifacts will be returned to the
				5 ha (110 ac) for the Proposed A., and Josh Anderson, 2022
Major Previous B	Bibliographic Referen	ace(s) to Site: None		
Principal Investig	gator (name and affili	ation): Jared A. Langseth		
Form Complete	<b>d By</b> (name and date	): Josh Anderson 6/1/22		



Topographic coverage of 21BK0149.



Scale map of 21BK0149.

APPENDIX C Catalog Sheets

Accession No.	Site No. <u>21BK0145</u>	Site Name
Contractor/Sponsor	Principal Field Archeologist	Principal Lab Archeologist
City of Frazee, Minnesota	Jared A. Langseth	Josh Anderson

Catalog		Specimen Category	No. of	Area/Unit/Test	Depth	Fieldwork Date, Field
Number		<b>Specimen Description</b>	Artifacts		Below	Archeologists, Remarks
					Surface	
1	CST	uniface fragment, unidentified fossiliferous	1	ST 1	0-10 cm	5/11/22
		chert, heat-treated, 1.6 g				KJ
2	FD	1 shatter, rhyolite, 21.1 g; 1 tertiary thinning	2	ST 2	40-50 cm	5/11/22
		flake, Knife River flint, .1 g				VC
3	FD	flake fragment, Tongue River silica,	1	ST 3	20-30 cm	5/11/22
						KJ/RL
			4			

Accession No	Site No. <u>21BK0146</u>	Site Name
Contractor/Sponsor	Principal Field Archeologist	Principal Lab Archeologist
City of Frazee, Minnesota	Jared A. Langseth	Josh Anderson

Catalog		Specimen Category	No. of	Area/Unit/Test	Depth	Fieldwork Date, Field
Number		<b>Specimen Description</b>	Artifacts		Below	Archeologists, Remarks
					Surface	
1	FCR	1 granite, 222.6 g; 1 unidentified material,	2	Surface		5/10/22
		385.1 g				Crew
2	FD	flake fragments: 1 siltstone, 6.1 g; 1 Swan	2	Surface		5/10/22
		River chert, heat-treated, 5.8 g				RL
3	FD	flake fragment, quartz, .8 g	1	ST 3	0-10 cm	5/11/22
						VC
			5			

Accession No.	Site No. <u>21BK0147</u>	Site Name
Contractor/Sponsor	Principal Field Archeologist	Principal Lab Archeologist
City of Frazee, Minnesota	Jared A. Langseth	Josh Anderson

Catalog Number		Specimen Category Specimen Description	No. of Artifacts	Area/Unit/Test	Depth Below	Fieldwork Date, Field Archeologists, Remarks
		,			Surface	
3	COR	core fragment, unidentified material, 96 g	1	Surface		5/10/22
						Crew
5	CST	uniface end scraper, Knife River flint, 4.2 g	1	Surface		5/11/22
						JA
1	FCR	2 granite, 7,115 g; 1 basalt, 191.1 g	3	Surface		5/10/22
						Crew
4	FD	decortication flakes: 1 Swan River chert, 3.8 g;	4	Surface		5/10/22
		1 unidentified material, heat-treated, 2.1 g; 1				Crew
		secondary thinning flake, siltstone, 1 g; 1				
		shatter, Red River chert, 2.1 g				
2	UBO	left mandible fragment, unidentified mammal,	1	Surface		5/10/22
		47.6 g				Crew
6	FD	flake fragments: 1 Knife River flint, .2 g; 1	2	ST 3	30-40 cm	5/11/22
		Swan River chert, .7 g				VC
7	FD	flake fragment, Swan River chert, 1.7 g	1	ST 12	0-10 cm	5/11/22
						JA
8	UBO	tooth fragment, unidentified mammal, .1 g	1	ST 17	40-60 cm	5/11/22
						RL
			14			

Accession No	Site No. <u>21BK0148</u>	Site Name
Contractor/Sponsor	Principal Field Archeologist	Principal Lab Archeologist
City of Frazee, Minnesota	Jared A. Langseth	Josh Anderson

Catalog		Specimen Category	No. of	Area/Unit/Test	Depth	Fieldwork Date, Field
Number		<b>Specimen Description</b>	Artifacts		Below	Archeologists, Remarks
					Surface	
1	CST	uniface fragment, unidentified material, 28.3 g	1	ST 1	40-50 cm	5/11/22
						DL
2	FD	tertiary thinning flake, Swan River chert, .1 g	1	ST 1N	20-30 cm	5/11/22
						KJ/RL
3	FCR	granite, 1,211 g	1	ST 1N	20-30 cm	5/11/22
						KJ/RL
4	FCR	granite, 80.1 g	1	ST 1SE	40-50 cm	5/11/22
						RL
5	FD	primary thinning flake, Gunflint silica, 13.4 g	1	ST 1SW	40-50 cm	5/11/22
						DL
6	FCR	granite, 81.7 g	1	ST 2	10-20 cm	5/11/22
						JA/JL
7	POT	body sherd, smoothed, grit-tempered, .9 g	1	ST 2	20-30 cm	5/11/22
						JA/JL
8	FCR	2 granite, 439.8 g; 2 unidentified material, 188	4	ST 2SW	30-40 cm	5/11/22
		g				KJ
9	FCR	granite, 486.4 g	1	ST 2SW	40-50 cm	5/11/22
						KJ
10	FCR	granite, 6.7 g	1	ST 2SW	50-60 cm	5/11/22
						KJ
11	FD	thinning flake, Swan River chert, heat-treated,	1	ST 3	40-50 cm	5/11/22
		1 g				VC, JA
12	FD	flake fragments, 1 rhyolite, .2 g; 1 siltstone, .3	2	ST 3NE	50-60 cm	5/11/22
		g				VC/JA

Accession No.	Site No. <u>21BK0148</u>	Site Name
Contractor/Sponsor	Principal Field Archeologist	Principal Lab Archeologist
City of Frazee, Minnesota	Jared A. Langseth	Josh Anderson

Catalog Number		Specimen Category Specimen Description	No. of Artifacts	Area/Unit/	Γest	Depth Below	Fieldwork Date, Field Archeologists, Remarks
		-				Surface	<u> </u>
13	FD	shatter, Swan River chert, 5.7 g	1		ST 3SW	10-20 cm	5/11/22
							KJ
			17				

Accession No	Site No. <u>21BK0149</u>	Site Name
Contractor/Sponsor	Principal Field Archeologist	Principal Lab Archeologist
City of Frazee, Minnesota	Jared A. Langseth	Josh Anderson

Catalog		Specimen Category	No. of	Area/Unit/Test	Depth	Fieldwork Date, Field
Number		<b>Specimen Description</b>	Artifacts		Below	Archeologists, Remarks
					Surface	
1	FD	secondary thinning flake, Knife River flint, .1 g	1	ST 1	30-40 cm	5/10/22
						RL
2	POT	body sherd, smoothed-over cord-marked, grit-	1	ST 2	10-20 cm	5/10/22
		tempered, 2.6 g				DL
3	POT	body sherd, smoothed-over cord-marked, grit-	1	ST 2	20-30 cm	5/10/22
		tempered, 3 g				DL
			3			

APPENDIX D National Archaeological Database Form

Database Doc Number:	

#### NATIONAL ARCHAEOLOGICAL DATABASE – REPORTS; DATA ENTRY FORM

1. R and C #:		
2. Authors:	Langseth, Jared, and Josh Anderson	
Year of Publica 3. Title	Phase I Archeological Survey of 4	4.5 ha (110 ac) for the Proposed Wannigan Park er County, Minnesota
4. Report Title:	BCA Reports	
	Publisher: Bear Creek Archeolog	: <u>3064</u> NTIS:
5. Unpublished	Sent From:	
6. Federal Age		<u></u>
7. State: County: Town:	Minnesota Becker	
8. Work Type: 9. Keyword:		1 - Generic terms / Research Questions 3 - Artifact Types / Material Classes 5 - Time Periods 7 - Other Key Words  [0]
10. UTM Zone	: 15 Easting:	Northing: Northing: Northing: Northing: Northing:
11. Township: Range:	138N 40W	

Other Publication 12. Monographs									
	Name: _ Place: _								
13. Chapter:	In:	First:				Last:			<u> </u>
14. Journal:	Volume:			Issue:		First:			Last:
15. Dissertation	: Degree:	Ph.D.	LL.D.	M.A.	M.S.	B.A.	B.S.	Institute _	
16. Paper:	Meeting: Place:								
17. Other:									
18. Site #:	21BK0145	21BI	<u> X0146</u>		0147		Κ0148	21BK01	
								<del>-</del>	
								- <u></u>	
								<u> </u>	
								- <u></u>	
19. Quad Map:			nnesota					Date 1	1973