PHASE I AND II ARCHAEOLOGICAL INVESTIGATIONS FOR THE

TRUNK HIGHWAY 8 IMPROVEMENT PROJECT, CHISAGO AND WASHINGTON COUNTIES, MINNESOTA

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MANAGEMENT SUMMARY

The Minnesota Department of Transportation is proposing improvements to Trunk Highway (TH) 8 between Forest Lake and Chisago City. This project may receive funding from the Federal Highway Administration, which would require compliance with Section 106 of the National Historic Preservation Act, as amended. The Minnesota Department of Transportation (Mn/DOT) Cultural Resources Unit (CRU) therefore contracted with Two Pines Resource Group, LLC (Two Pines) to complete archaeological investigations within a study area determined by the Mn/DOT CRU The Study Area, located within the Central Lakes Deciduous East (Study Area). archaeological sub-region, buffers the composite preliminary construction limits for four project alternatives, 3, 4, 5, and 5A, located within Sections 4 and 5, T32N, R21W, Forest Lake Township, Washington County, and Sections 1, 12-14, 23, 24, 26, 27, 33, and 34, T33N, R21W, Wyoming Township, Chisago County. The purpose of the Phase I investigation was to identify any archaeological resources that are potentially eligible for listing in the National Register of Historic Places (NRHP) within the composite preliminary construction limits and, where possible, beyond these within the Study Area. The purpose of the Phase II investigations was to evaluate the eligibility of two archaeological sites and a portion of a third within the composite preliminary construction limits for listing in the NRHP. The investigation was conducted in accordance with the Minnesota Field Archaeology Act of 1963. Michelle Terrell and Andrea Vermeer served as co-Principal Investigators for the Phase I investigation, and Andrea Vermeer served as Principal Investigator for the Phase II investigation.

Eight precontact archaeological sites and five farmstead archaeological sites were identified during the survey. Six of the precontact archaeological sites are recommended as not eligible for listing in the NRHP based on the results of the Phase I investigation, and two of the farmstead sites are recommended as not eligible on the basis of the Phase II investigations. A sizeable portion of a third farmstead archaeological site, 21CH130, lies within the composite preliminary construction limits. The Phase II investigation of this portion of the site found that that portion would not contribute to the any potential significance that the site as a whole might have. No eligible archaeological sites, therefore, are located within the composite preliminary construction limits.

The larger portion of 21CH130, two farmstead archaeological sites entirely beyond the composite preliminary construction limits (21CH130 and 21CH131), and two precontact archaeological sites having just an edge within the composite preliminary construction limits (21CH126, 21CH127), all of which are recommended as potentially eligible for listing in the NRHP, are within the Study Area, as are several unsurveyed areas with moderate to high potential for precontact archaeological resources. When the final alternative for the TH 8 Improvements Project is selected, the area of potential effect (APE) for the final design will need to be reviewed. Any of the five sites or the areas of moderate to high archaeological potential within the APE will require further assessment through Phase I or Phase II archaeological studies.

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INTRODUCTION

The Minnesota Department of Transportation is proposing improvements to Trunk Highway (TH) 8 between Forest Lake and Chisago City. These will include widening TH 8 to allow for expansion of the highway from two to four lanes, the construction or modification of approaches to and intersections with TH 8, and the construction of associated frontage roads. The project may receive funding from the Federal Highway Administration, which would require compliance with Section 106 of the National Historic Preservation Act, as amended. The Minnesota Department of Transportation (Mn/DOT) Cultural Resources Unit (CRU) therefore contracted with Two Pines Resource Group, LLC (Two Pines) to complete archaeological investigations within a study area determined by the Mn/DOT CRU (Study Area).

The Study Area, located within the Central Lakes Deciduous East archaeological subregion, encompasses the composite preliminary construction limits for four project alternatives, designated as alternatives 3, 4, 5, and 5A, and a buffer around them. It was determined by the Mn/DOT CRU to typically extend 500 feet (ft.) on either side of the TH 8 centerline, but wider in some locations to accommodate the proposed construction outside of the main corridor (Figure 1). The UTM coordinates of the Study Area (Zone 15, NAD 83) are south end: 501728E 5015340N, north end 508026-E 5024159N. These coordinates were determined electronically using GoogleEarth. Legal locations for the Study Area are provided in Table 1.

The purpose of the Phase I investigation was to identify any archaeological resources that are potentially eligible for listing in the National Register of Historic Places (NRHP) within the composite preliminary construction limits and, where possible, beyond these within the Study Area. The purpose of the Phase II investigations was to evaluate the eligibility of two archaeological sites, 21CH0128 and 21CH0129, and a portion of 21CH0130 within the composite preliminary construction limits for listing in the NRHP. The investigation was conducted in accordance with the Minnesota Field Archaeology Act of 1963.

The following report describes the objectives and methods of investigation, as well as the cultural and environmental background of the project area. It provides relevant historic contexts, the results of the fieldwork, and cultural resource management recommendations for the TH 8 Improvement Project.

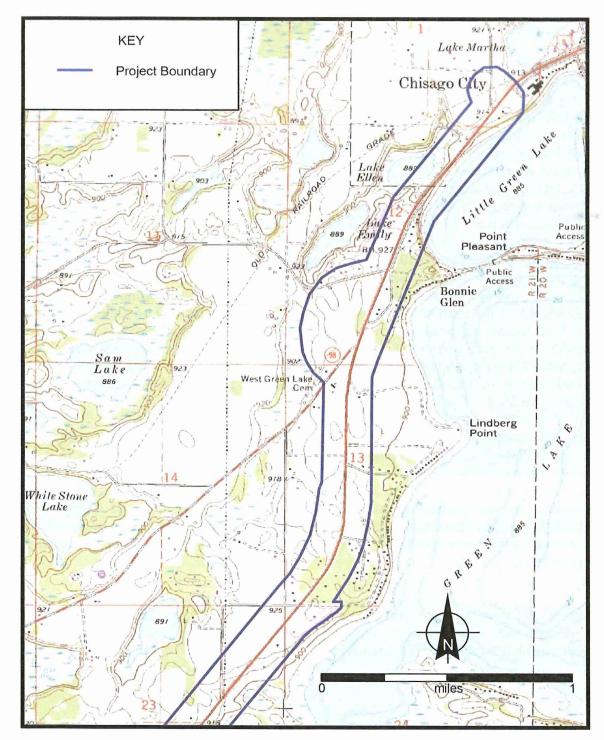


FIGURE 1A. PROJECT LOCATION

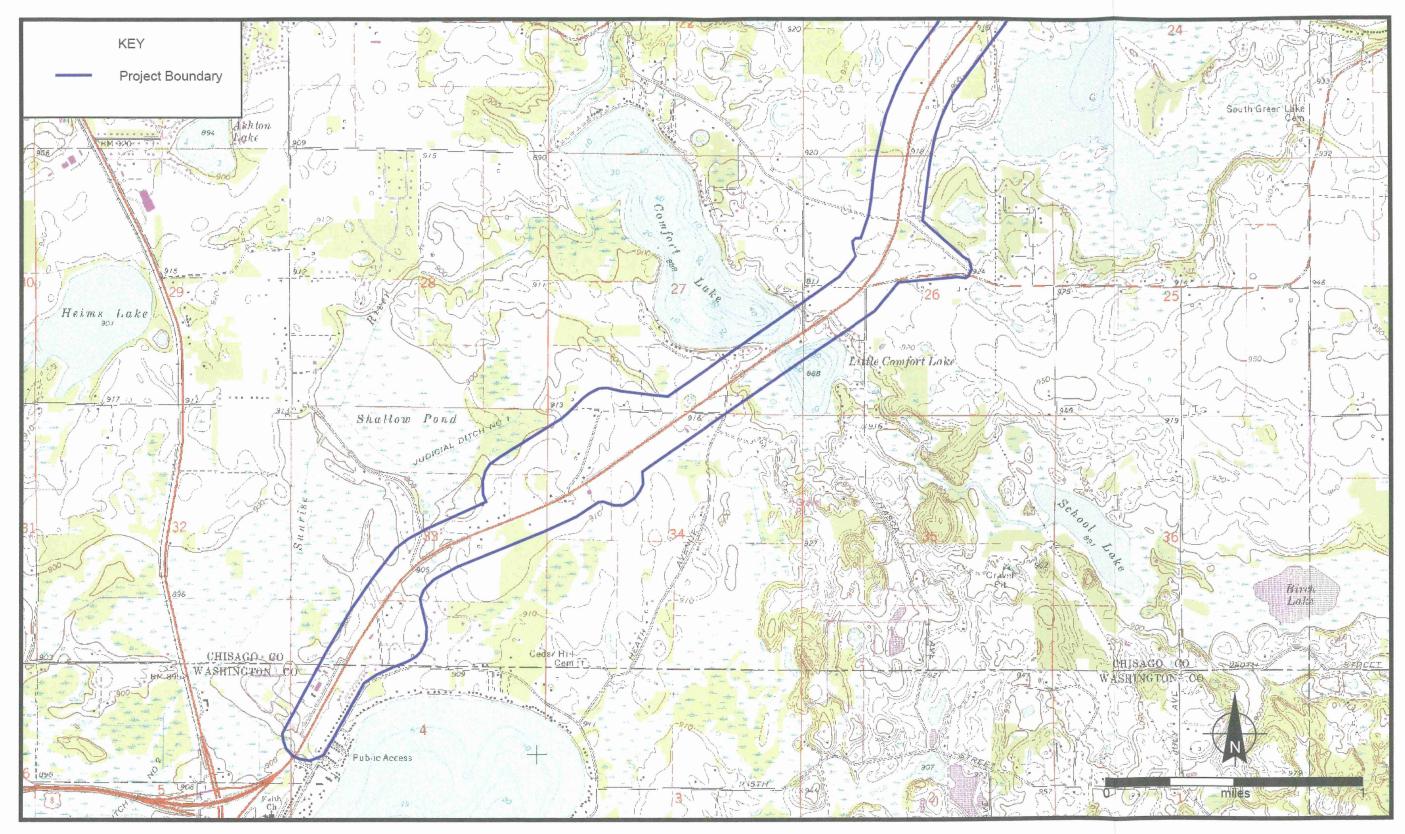


FIGURE 1B. PROJECT LOCATION

TABLE 1. LEGAL LOCATIONS FOR THE TH 8 IMPROVEMENT PROJECT STUDY AREA					
County	Т	R	S	Quarter Sections	
Chisago	33N	21W	1	SE-SE, W-SW-SE	
Chisago	33N	21W	12	E-SE-NW, SW-SE-NW, NW-NE, E-NE-NE, N-SW-NE, SW-SW-NE, NE-NW-SW, S-NW-SW, NE-SW, SW-SW, SE-SW	
Chisago	33N	21W	13	NW-NW-NW, E-W-W, W-E-W, SW-NW-SW, W-SW-SW	
Chisago	33N	21W	14	SE-SE-SE	
Chisago	33N	21W	23	SE-NW-NE, NE-NE, SW-NE, SE-NE, SW-NE-SW, W-SE-SW, E-E-SW, W-W-SE, E-NW-SE	
Chisago	33N	21W	24	N-NW-NW, SW-NW-NW	
Chisago	33N	21W	26	SW-SW-NW, E-SW-NW, E-NW, NW-NW-NE, SW-NE, NW-SW, NW-NW-SW, NW-NE-SW	
Chisago	33N	21W	27	S-S-SW, SW-NE-SE, E-NE-SE, S-SE	
Chisago	33N	21W	33	SE-SE-NW, NE-NE-NE, S-NE-NE, S-SW-NE, SE-NE, E-SW, SW-SW-SW, E-SW-SW, NW-SE, W-SW-SE, N-NE-SE	
Chisago	33N	21W	34	N-NW, SW-NW, NW-SE-NW, N-NW-NE, SW-NW-NE	
Washington	32N	21W	4	NW-NW, W-NE-NW, N-SW-NW	
Washington	32N	21W	5	SE-NE-NE, NE-SE-NE	

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RESEARCH DESIGN

All work was conducted in accordance with the *Mn/DOT's Cultural Resources Unit Project Requirements* (Mn/DOT 2011), the *SHPO Manual for Archaeological Projects in Minnesota* (Anfinson 2005) and the *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (National Park Service 2002a).

OBJECTIVES

The purpose of the Phase I investigation was to identify any archaeological resources that are potentially eligible for listing in the National Register of Historic Places (NRHP) within the composite preliminary construction limits and, where possible, beyond these within the Study Area. The purpose of the Phase II investigations was to evaluate the eligibility of two archaeological sites, 21CH0128 and 21CH0129, and a portion of 21CH0130 within the composite preliminary construction limits for listing in the NRHP.

STUDY AREA

The Study Area was determined by the Mn/DOT CRU Project Manager, and it encompasses four alternatives for the TH 8 Improvement Project, designated as Alternatives 3, 4, 5, and 5a, along with a buffer around these alternatives. The buffer was determined by the Mn/DOT CRU to include an area typically extending 500 ft. on either side of the TH 8 centerline, but wider in some locations to accommodate the proposed construction outside of the main corridor (see Figure 1). These locations are in the vicinity of proposed connections to Greenway Avenue, Hamlet Avenue, Hale Avenue, Hazel Avenue, County Highway 23, Pioneer Road, Viking Boulevard, and Karmel Street.

LITERATURE SEARCH

Staff from Two Pines conducted background research at the State Historic Preservation Office (SHPO) on June 30, 2010. The purpose of this research was to gain information on previously identified archaeological sites within one mile of the project area and on archaeological surveys previously conducted within the project area. In addition, historical maps, historical aerial photographs, and current topographic maps were reviewed online and at the Minnesota Historical Society (MHS). This research was conducted to gain an understanding of the environmental and cultural history of the Study Area in order to assess which portions had greater potential for containing intact archaeological sites.

The assessment of an area's potential to contain archaeological resources consists of an analysis of terrain, water sources, and other environmental and landscape conditions in and adjacent to that area as they were historically. Areas that were occupied by water, permanently or frequently inundated (e.g., wetlands, floodplains), poorly drained, or exhibited slopes of greater than 20 percent would have been inhospitable to human occupation and are therefore considered to have low potential for containing archaeological resources.

Generally, areas with greater potential for containing precontact archaeological resources are in proximity, typically less than 500 ft., to a water source or wetland, though the applicability of this condition varies depending on the nature of the water source (perennial versus intermittent), the size of the body of water, the extent of the floodplain, and the availability of other water sources in the vicinity, i.e., proximity to a small pond may be less indicative of archaeological potential if a large lake is nearby. Topographic prominence is also frequently indicative of high precontact archaeological potential, though relative topographic prominence as a gauge of archaeological potential often is tied to other conditions, such as proximity to water. Proximity to previously recorded precontact archaeological sites often suggests high potential for precontact resources, insomuch as previously recorded sites may not have been fully defined or as the areas around previously recorded sites are typically subject to similar environmental/landscape conditions. The absence, however, of precontact archaeological sites in an area does not necessarily point to low archaeological potential, given that that area may not have been subject to previous survey.

Areas proximate to former and/or existing historical-period buildings, structures, or other features are generally considered to have higher potential for containing historical-archaeological resources. These areas are not limited to the locations of buildings, as often the most important information comes from deposits within associated features, such as privies, cisterns, or middens, which were located away from primary buildings.

Additional research was conducted to develop relevant historic contexts for the project area and to assess whether any potential historical-archaeological resources in the Study Area might be historically significant. County and local histories, along with historical topographic maps, plat maps, atlases, and aerial photographs were consulted in this regard.

ARCHAEOLOGICAL FIELDWORK

Phase I

The Phase I archaeological survey commenced with a thorough visual inspection of the entire Study Area. The purpose of the inspection was to identify any surface features, such as extant foundations, to refine the assessment of archaeological potentials as determined by the literature review, and to identify existing levels of disturbance within the Study Area. Areas demonstrably disturbed through previous construction or other modern land uses were excluded from systematic survey unless the potential existed for intact cultural deposits to be present beneath the disturbance. Likewise, portions of the Study Area meeting the conditions for low archaeological potential were not subject to systematic survey.

Intact areas of moderate to high archaeological potential and affording greater than 25 percent surface visibility were subject to systematic pedestrian survey, which consists of observing the ground surface for archaeological resources via a walkover with field

personnel following evenly spaced transects. During this project, pedestrian survey was conducted along transects spaced at 5 to 15-meter (49-foot) intervals.

Those portions of the project area that were assessed as having the potential to contain intact precontact archaeological sites but affording less than 25 percent surface visibility underwent systematic shovel testing, consisting of the manual excavation of holes 30 to 40 centimeters (cm) (12 to 15 inches) in diameter at regular intervals along evenly spaced transects to identify any subsurface archaeological resources. During this project, a 15-meter (m) shovel-testing interval was used.

Regardless of surface visibility, shovel testing was additionally used in areas where precontact archaeological sites were identified to define the boundaries of those sites within the Study Area. For this purpose, bracketing shovel tests were generally excavated 5 and 10 m (16 and 33 ft.) from all positive shovel tests in the cardinal directions until two consecutive shovel tests spaced 5 m apart were negative, or until severe disturbances, slopes, or the edge of the Study Area were reached. In one case, however, due to the large size and well-defined nature of the landform on which the site was located, bracketing shovel tests were excavated in a grid pattern at 15-m intervals. Shovel testing was also used during the Phase I survey to assess the nature of depressions observed at farmstead archaeological sites, i.e. whether they were the surface expression of a subsurface structural feature or contained artifact deposits.

All soils removed from excavated shovel tests were screened through a ¼-inch mesh. Shovel tests were excavated through all post-glacial soils and sediments to culturally sterile subsoil or to a maximum depth of one meter (three feet) below the surface, depending on which condition was first encountered.

Data gathered during the survey were recorded on shovel test forms and in the field notebook of the Principal Investigator. Items noted included: the location of survey areas; the location of individual shovel tests; the depth of each shovel test and its associated soil profile; the presence or absence of cultural materials within each test; and the excavated soil texture, inclusions, and Munsell® color designation.

Phase II

Phase II field testing was conducted at three historical-period farmstead sites, and therefore followed the protocol established in the *Historic Context Study of Minnesota Farmsteads*, 1820-1960, Volume 4: Historical Archaeology of Minnesota Farmsteads (Terrell 2006). Phase II testing at 21CH0128, 21CH0129, and 21CH0130 commenced with the establishment of a 10-meter (33-foot) shovel test grid over the entire area of each farmstead as it existed historically, with intervals altered as necessary to avoid extant buildings and structures, large trees, areas of standing water, or areas of clear post-1960 disturbance (e.g., septic mounds). Shovel testing was used in an attempt to identify subsurface artifact deposits or features and to further assess the research potential of each site.

Where shovel testing identified such deposits or features, it was followed by the excavation of formal units. These units were excavated in those areas of each site that, based on the results of the shovel testing, were most likely to provide the maximum amount of information for characterizing and determining the NRHP eligibility of the site. In all cases, these locations were those where artifact densities were the highest. Formal units were excavated at 21CH0129 as separate one-by-one meter units to address three areas for which the research potential needed to be assessed. As artifact deposits of any density were limited in area at the testable portion of 21CH0130, these were explored through the excavation of a single one-by-two-meter unit.

All units were excavated through shovel skimming and hand excavation using a trowel, primarily in arbitrary five-centimeter levels, although larger levels were also employed in removing the sod cap/topsoil, or in one instance where the control of a five-centimeter level was not required. All units were excavated until subsoil was reached, or in one instance, to 100 cm below the surface, at which point a shovel/auger test was excavated into the base of the unit to subsoil.

Soils removed during Phase II shovel testing and formal unit excavation were screened through ¼-inch mesh. Archaeological data were recorded through standardized forms, field maps, and photographs. Standardized level forms were used to record information including, but not limited to methods of excavation; descriptions of soil horizons, including depth, texture, and Munsell® color designation; the nature and depth of natural or cultural inclusions; the number and types of artifacts recovered; and overall impressions. Profile maps were drawn of one or more representative walls in each excavation unit. Color photographs were used to document all levels and excavation unit walls.

Geographic Information System Data

A geographic information system (GIS) data layer was created during the course of the archaeological investigations. The locations of all individual shovel tests and excavation units were recorded using a Trimble GeoXT ® GPS Unit. The data were differentially corrected using a National Geodetic Survey (NGS) continuously operating reference station (CORS) data. Trimble Pathfinder Office 3.10 was used to correct the data and export it as ESRI shapefiles. ESRI ArcGIS was used to analyze and map the data.

LABORATORY ANALYSIS AND CURATION

All artifacts recovered during the archaeological investigations were returned to the Two Pines laboratory for cleaning, processing, and cataloging. Artifacts were processed in accordance with the standards and guidelines of the Minnesota Historical Society (MHS) Collections Department.

All artifacts were cleaned and then sorted into categories used in standard professional practice, first by general material type, then by function and other attributes. Materials were cataloged using Microsoft Excel 2010[®]. Each provenience was assigned a distinctive bag number, and each artifact from a particular provenience received a

distinctive artifact number, beginning with the number "1." The bag numbers and the artifact numbers were then combined to create the numbers contained in the artifact catalog.

All artifacts were recovered from private property; therefore, the decision to curate the artifacts from a given site lay with the relevant landowner. The artifacts from 21CH0123, 21CH0124, and 21WA0111 were returned to the appropriate landowners. The artifacts from 21CH0121, 21CH0122, and 21CH0125-21CH0130 were curated at the MHS (Accession Nos. 2012.9-13 and 2012.15-17). No artifacts were collected during the field investigations of 21CH0131 or 21CH0132.

EVALUATION

Following the completion of the literature review, Phase II fieldwork, and laboratory analyses, 21CH0128, 21CH0129, and the portion of 21CH0130 within the composite preliminary construction limits were evaluated with reference to the four NRHP criteria for significance as established in the National Register Bulletin titled *How to Apply the National Register Criteria for Evaluation* (National Park Service 2002b), summarized below. These criteria were similarly used to assess the potential significance of all archaeological sites identified during the Phase I survey:

- •Criterion A association with events that have made a significant contribution in our past;
- •Criterion B association with the lives of persons significant in our past;
- •Criterion C embodiment of the distinctive characteristics of a type, period, or artistic values; or representation of the work of a master; possession of high artistic values; or representation of a significant and distinguishable entity whose components may lack individual distinction; or
- •Criterion D potential to yield information important to prehistory or history (National Park Service 2002b).

While all four criteria are considered, historical-archaeological sites are typically eligible for listing in the NRHP under Criterion A, B, or D (Anfinson 2005:18). Applicable historic contexts (see Chapter 4) were used to guide the significance evaluations of 21CH0128, 21CH0129, and CH0130.

Sites 21CH0128, 21CH0129, and 21CH0130 were additionally evaluated with reference to the NRHP aspects of integrity. While the National Park Service identifies seven such aspects, including location, design, setting, materials, workmanship, feeling, and association (National Park Service 2002b), the SHPO guidelines for evaluating archaeological sites state, "With regard to archaeological sites significant under Criterion D, the most critical aspects are location, materials, and association. For Criterion A, setting and feeling are also important" (Anfinson 2005:40). Anfinson (2005:40) notes, "In general, eligible archaeological sites need diagnostic artifacts, features, and intact cultural horizons where artifacts and features retain some vertical and horizontal integrity."

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LITERATURE SEARCH RESULTS

PREVIOUS INVESTIGATIONS

Background research conducted at the SHPO revealed that two archaeological surveys have previously occurred within the Study Area for the TH 8 Improvement Project. In 1990, a Phase I survey was conducted of the locations of proposed turn and bypass lanes, a turnaround, and a bikeway along TH 8 between TH 61 and Taylors Falls. Within the current Study Area, these locations included corridor segments ranging from 40 to 155 ft. outside of the TH 8 centerline in Sections 1 and 27, T33N, R21, although more precise survey locations cannot be discerned from the project report. Only a small portion of the location within Section 27 had not been disturbed by previous road construction, accommodating just two shovel tests, both of which were negative. The location within Section 1 was entirely disturbed by previous road construction and borrow activity, and therefore was not subject to systematic survey (Peterson et al. 1991:272-274).

In 2000, a Phase I survey was conducted for proposed road improvements in Wyoming Township, including a segment that followed TH 8 from a point approximately 800 ft. southwest of its intersection with County State Aid Highway 23 to its intersection with Pioneer Road. According to the report, this location was determined by the Mn/DOT to have low potential for containing archaeological resources, though the reason is not specified. It was therefore not systematically surveyed. Based on the report graphic, it is possible that this location was entirely within disturbed road right-of-way (Lyon and Stark 2001).

PRECONTACT ARCHAEOLOGY

No precontact archaeological sites have been previously recorded (field verified) within the Study Area. One precontact site, however, may be located within the Study Area in Section 13, T33N, R21W. This potential site, currently designated as 21CHk, is the reported location of artifacts picked up by local collectors in 1955 (Memo on Chisago County, June 3, 1955, 21CHk site file, held at the SHPO).

Eight precontact archaeological sites have been previously recorded within a one-mile radius of the Study Area (Table 1). Three of these, 21CH1, 21CH2, and 21CH3, are burial mound sites. 21CH1 is located on the shore of Little Green Lake and 21CH2 on the shore of Chisago Lake, while 21CH3 is situated on a terrace of the Sunrise River (Winchell 1911:284-286; Minnesota Archaeological Site Form, 21CH3, on file at the SHPO). The remaining five previously recorded sites include two Woodland-period artifact scatters (21CH55 and 21CH88), one likely Woodland-period lithic scatter (21CH87), a non-diagnostic lithic scatter (21CH89), and a site consisting of two non-diagnostic lithic artifacts (21CH78). Site 21CH55 is located on the shore of Comfort Lake, while 21CH78 is at the edge of an upland, adjacent to wetlands associated with Comfort Lake (Minnesota Archaeological Site Forms, 21CH55 and 21CH78, on file at the SHPO). Sites 21CH88 and 21CH89 are on terraces of the Sunrise River, and 21CH87

is adjacent to a large wetland called Shallow Pond (Minnesota Archaeological Site Forms, 21CH87, 21CH88, and 21CH89, on file at the SHPO).

In addition, three potential precontact archaeological sites, 21CHa, 21CHe, and 21CHk, are located within one mile of the Study Area. The location of 21CHa is based on the 1860s account of an individual who claimed to have excavated a burial mound near the northwesternmost point of Chisago Lake in Section 6, T33N, R21W (Winchell 1911:285). The potential for 21CHe and 21CHk is based on collections of artifacts reported to have been found south and west of Green Lake and associated wetlands in Section 24 (21CHe) and east of a large wetland in Section 13 (21CHk), T33N, R21W.

The locations of previously identified precontact archaeological sites in the area indicate that uplands, terraces, and other landforms with relative topographic prominence in proximity to bodies of water such as Forest Lake, Comfort Lake, Green Lake, and the Sunrise River or large wetlands are likely to contain precontact archaeological resources and burial mounds. Additionally, lakeshores or areas adjacent to wetlands associated with lakes are considered to have high potential for containing precontact archaeological resources. As these types of locations constitute nearly all of the Study Area outside of those portions occupied by water or wetlands, all of the drier areas within the Study Area were considered to have moderate to high potential for containing precontact archaeological resources.

HISTORICAL ARCHAEOLOGY

No historical-archaeological sites have been previously recorded in or within one mile of the Study Area. One potential historical-archaeological site, 21CHv, is located within a one-mile radius of the Study Area on the southwesternmost point of Chisago Lake in Section 7, T33N, R21W. The SHPO database indicates that the potential for this site to exist is based on historical documentation, and that the site is associated with the SHPO historic context *St. Croix Lumbering Triangle*, but no additional information is available either in the database or within the site file. In any case, this site would be at a sufficient distance that associated resources would not be present within the Study Area.

The review of historical maps and aerial photographs indicated the potential for three different types of historical-archaeological sites to be present within the TH 8 Improvement Study Area: those associated with the historically platted community of Deer Garden, those associated with a former school, and those associated with farmsteads. Deer Garden was platted in 1857 as 37 lots on the western shore of Little Green Lake and north shore of Lake Ellen, but it never truly evolved into the village it was intended to be (Hackl 2001:219). As of 1888, only five of the lots contained houses, two of which were situated within the Study Area. The first, owned in 1888 by Swen Dahl, was located northwest of TH 8 and west of modern-day Karmel Avenue. The second, owned in 1888 by A. Johnson, was located southeast of TH 8, just east of its intersection with Karmel Avenue (C. M. Foote & Co. 1888). An aerial photograph shows that as of 1938, the area of Deer Garden was largely occupied by agricultural fields, and the two houses within the Study Area were associated with two or three outbuildings

each. Although the scale of the aerial photograph is such that the function of the buildings cannot be identified, given their surroundings, it is likely that both locations were farmsteads. A current aerial photograph shows that all vestiges of the Johnson farmstead have been completely removed by modern residential development. The Dahl farmstead is discussed below.

The school that was formerly present within the Study Area was the Bonnie Glen School, which was constructed sometime prior to 1888 and closed in 1918 when the original Lakeside School was built (C. M. Foote & Co. 1888; Shoquist and Regan 1981:14). The location of the school was subsequently occupied by an area platted as Green Lake Beach, and a 1938 aerial photograph shows the location of the school to be occupied by agricultural fields, which later aerial photos show was the case until at least 1973. A current aerial photograph shows that the location has been residentially developed. It is therefore unlikely that any archaeological resources associated with the school would remain intact.

A review of historical maps and aerial photographs indicated that in addition to the two Deer Garden farmsteads, at least 14 farmsteads were historically located within the Study Area. These locations were considered to have high potential for containing historical-archaeological resources. A visual inspection indicated that the locations of all but 13 of these farmsteads have been substantially disturbed by more recent residential development, road construction, or agricultural activity, making it unlikely that any potential associated resources would remain intact. The remaining 13 were subject to additional historical-archaeological research in anticipation of finding associated resources, the results of which are presented in the following sections of the report.

Rahm Farmstead

The location of the Rahm farmstead is in the SE ¼ of the NE ¼ of Section 5, T32N, R21W. The The General Land Office (GLO) tract book contains a transaction dating to April 9, 1855, with the E ½ of the NE ¼ of Section 5 sold to James Day. The property, listed at 74.78 acres, was patented to Day on April 15, 1856. No buildings are depicted in the vicinity of the farmstead on the original GLO map of the project corridor, or a historical map dating to 1874 (GLO 1848; Andreas 1874). The first available map on which a building appears in the location of the farmstead dates to 1901, which shows it to be situated within a 109.12-acre property owned by Gottlieb Rahm and consisting of 74.78 acres of the E ½ of the NE ¼ of Section 5, and 34.34 acres of the NW ¼ of the NW ¼ of Section 4, T32N, R21W (North West Publishing Co. 1901). No information on Rahm was located in available county histories. Comparison of aerial photographs dating to 1936, 1953, 1965, and 1973 between each other and with recent aerial photographs was hampered by the dense tree cover that was present in the location of the farmstead historically and the quality and scale of the aerial photographs, making it difficult to gauge any changes in layout.

Gardner Farmstead

The location of the Gardner farmstead is in the SW ¼ of the NW ¼ of Section 4, T32N, R21W, in what was platted as Lot 4. The GLO tract book contains a transaction dating to December 19, 1854, with Lots 1-4 being sold to Casper H. Schurmeier and Robert C. Knox. The property was patented to Schurmeier and Knox on November 10, 1855. No buildings are depicted in the vicinity of the farmstead on the original GLO map of the project corridor, or a historical map dating to 1874 (GLO 1848; Andreas 1874). The first available map on which a building appears in the location of the farmstead dates to 1901, which shows it to be situated within a 36.15-acre property consisting of most of the SW ¼ of the NW ¼ of Section 4, T32N, R21W and owned by an A. Gardner (North West Publishing Co. 1901). No information on an A. Gardner was located in available county histories. A 1936 aerial photograph shows no buildings to be present on the property.

Simmons/Munn/Palmer Farmstead

The location of the Simmons farmstead is in the SW ¼ of the SE ¼, Section 33, T33N, R21W. The GLO tract book for this locality indicates that the S ½ of the SW ¼ and the S ½ of the SE ¼ were sold to James Day on April 9, 1855, and patented to the same on April 15, 1856. No buildings are depicted in the vicinity of the farmstead on the original GLO map of the project corridor (GLO 1849; Andreas 1874). A building is depicted in the SE ¼ of Section 33 on an 1874 map of the project area, but it is not drawn to scale, thus it is not known whether this building is associated with the Simmons farmstead or another farmstead in the SE 1/4. The first available map on which a building appears in the location of the farmstead dates to 1888, which shows it to be situated within a 40-acre property belonging to R. W. Simmons (C. M. Foote & Co. 1888). By 1914, ownership of the property had transferred to Marcus D. Munn, incorporated into a 236-acre property that also included the N ½ of the SW ¼, the SE ¼ of the NW ¼, the NE ¼ of the SW ¼ and the S ½ of the SW ¼ of Section 33 (Webb Publishing Co. 1914). Sometime before 1950, ownership of this property came to Mahlon Palmer, who continued to be the owner as of 1961 (Atlas Company 1950; Thomas O. Nelson Co. 1961). No information on either Simmons, Munn, or Palmer was located in available county histories. Comparison of aerial photographs dating to 1936, 1953, 1965, and 1973 indicates that although the farmstead expanded after 1936, its layout remained fairly similar over the years.

Tolzmann Farmstead

The Tolzmann farmstead is located in the NE ¼ of the NW ¼ of the SE ¼ of Section 33, T33N, R21W. According to the GLO tract book, the SE ¼ of the NW ¼, the SW ¼ of the NE ¼, the NE ¼ of the SW ¼, and the NW ¼ of the SE ¼ of Section 33 was sold to Thomas H. Buck on January 24, 1857, and patented to the same on February 10, 1860. No buildings are depicted on this property on the original GLO map of the project area (GLO 1849). Although an 1874 map of the project area shows a house in the SE ¼ of Section 33, the house is not drawn to scale, thus it is not known whether it is associated with the property patented to Buck or an adjacent property (Andreas 1874). The 1888 plat of the project area shows the 160-acre property to be under the ownership of D. Banta, with the farmhouse located in the SE ¼ of the NW ¼ (C. M. Foote & Co. 1888). By 1914, the SW ¼ of the NE ¼ of Section 33 had been transferred to F. A. Carl et al.,

with the remainder of the Banta property, along with the S ½ of the SW ¼ and the SW ¼ of the SW ¼ of Section 33, coming under the ownership of Marcus D. Munn. The Munn farmhouse was located in the SW ¼ of the SW ¼ (Webb Publishing Co. 1914). The NW ¼ of the SE ¼ remained vacant until at least 1936; an aerial photograph of that year shows it to be occupied by an agricultural field. By 1950, the NW ¼ of the SE ¼ had come under the ownership of August Tolzmann (Atlas Company 1950), and as of 1953, only a house was present on the property. The farmstead, based on aerial photographs, was developed sometime between 1957 and 1965, after which its layout remained fairly similar into the present. As of 1961, the property was owned by Norman Tolzmann (Thomas O. Nelson Co. 1961). No information on the Tolzmanns was located in available county histories; however, Norman Tolzmann's obituary indicates that he retired from farming in 1968 to focus solely on running an ornamental iron works (*Forest Lake Times* 2008).

Christensen/Case Farmstead

The Christensen/Case farmstead is located in the NW ¼ of the SW ¼ of the NW ¼ of Section 34, T33N, R21W. The GLO tract book indicates that the W ½ of the NW ¼ was sold to George Prichard on June 21, 1856, and patented to the same on August 18, 1858. No buildings are depicted on this property on historical maps dating through 1914 (GLO 1849; Andreas 1874; C. M. Foote & Co. 1888; Webb Publishing Co. 1914). An aerial photograph dating to 1936 shows at least a house and barn present that year, and subsequent aerial photographs demonstrate that substantial changes in layout have occurred at the farmstead since 1953. By 1950, the farmstead was under the ownership of W. N. Christensen (Atlas Company 1950), then by 1961, under the ownership of Thomas Case (Thomas O. Nelson Co. 1961). No information on Christensen or Case was located in available county histories.

Peterson Farmstead

The Peterson farmstead is located in the SW ¼ of the NW ¼ of the NW ¼ of Section 34, T33N, R21W. GLO tract records show that the W ½ of the NW ¼ was sold to George Prichard on June 21, 1856, and patented to the same on August 18, 1858. No buildings appear in this location on maps dating to 1914 or earlier (GLO 1849; Andreas 1874; C. M. Foote & Co. 1888; Webb Publishing Co. 1914). A 1936 aerial photograph shows that at least the house was in place by that year. By 1950, the property was under the ownership of J. A. Peterson (Atlas Company 1950). Within the next 11 years, it had been transferred to D. E. and Ruth Westphal. No information on Peterson or the Westphals was located in available county histories. A comparison of aerial photographs dating between 1936 and the present shows that beyond the general progression of the growth of the farmstead, which appears to have been relatively small and simple, the layout of the farmstead has remained consistent over time.

Strom Farmstead

The Strom farmstead is located in the NW ¼ of the SW ¼ of the SE ¼ and in the NE ¼ of the SE ¼ of the SW ¼ of Section 23, T33N, R21W. The GLO tract book shows that the property on which the farmstead would eventually be located was purchased by

Charles H. Parker on February 14, 1855, and patented to the same on November 10 of the same year. The property included Lots 2 (the NW ¼ of the SE ¼ and the portion of the NE ¼ of the SE ¼ not occupied by Green Lake) and 3 (the portion of the S ½ of the SE ¼ not occupied by Green Lake), as well as the SE ¼ of the SW ¼ of Section 23, totaling 113.9 acres that would eventually become the Strom property (C. M. Foote & Co. 1888). It also included Lot 1 (the portion of the SE ¼ of the NE ¼ not occupied by Green Lake) and the NE 1/4 of the NE 1/4, Section 23, which would eventually become the Glye property (see Glye/Glyer Farmstead, below). No buildings were constructed on the property until sometime between 1874 and 1888, as indicated by historical maps dating to those years (Andreas 1874; C. M. Foote & Co. 1888). Sometime between 1855 and 1888, the farmhouse was built, and ownership of the property described above was transferred to Gustaf Strom, who continued to own the property through at least 1914 (Webb Publishing Co. 1914). By 1950, ownership of the property had been transferred to Clayton C. Storm (Atlas Company 1950). No information on Strom or Storm was located in available county histories. A comparison of aerial photographs dating to 1938, 1953, 1965, and 1973 between each other and with a recent aerial suggests that the composition of the farmstead changed substantially between 1938 and 1953, since which time it has retained the same basic layout, albeit with some growth via the addition of a few buildings.

Palmquist/Conklin Farmstead

The Palmquist/Conklin farmstead is located in the SE ¼ of the NE ¼ of the SW ¼, Section 23, T33N, R21W. On November 20, 1855, the SW ¼ of Section 23 was sold to Charles J. Badger, and it was patented to him on April 3, 1857. By 1888, the property had been split, with all but the SE ¼ of the SW ¼ being under the ownership of H.W. Griggs (C. M. Foote & Co. 1888). Sometime between that year and 1914, it was divided yet again, and the N ½ of the SW ¼ transferred to Carl G. Palmquist (Webb Publishing Co. 1914). No buildings are illustrated on the property on the 1888 or 1914 plat map, but they are visible on an aerial photograph dating to 1938 (C. M. Foote & Co. 1888; Webb Publishing Co. 1914). By 1950, ownership of the 80-acre property had fallen to Ray R. and Irene Conklin, who remained the property owners through at least 1961 (Atlas Company 1950; Thomas O. Nelson Co. 1961). Aerial photographs dating to 1938 and 1953 indicate that although the southeastern portion of the farmstead as it appeared in 1938 was truncated prior to 1953 by the construction of TH 8, that portion was occupied only by trees that formed part of the windbreak. These photographs, when compared with those dating to 1965 and 1973, demonstrate that the farm was fairly consistent in its layout throughout the period spanning 1938 to 1973. A recent aerial shows that most buildings and structures have been removed, but those remaining are in keeping with their historical locations.

Glye/Glyer Farmstead

The Glye/Glyer farmstead is located in the SE ¼ of the NE ¼ of the NE ¼, Section 23, T33N, R21W. As noted above (see Strom Farmstead), the Glye farm was located on part of a property originally sold to and patented to Charles H. Parker in 1855. By 1888, Lot 1 and the NE ¼ of the NE ¼ of Section 23, as well as Lot 1 of Section 24, were owned by

Gustaf Glye, and a farmhouse was located on the property in the NE ¼ of the NE ¼. The 1914 plat map labels the owner of Lot 1 of Section 24 as G. Glyer, who is likely the same as or related to Gustaf Glye; the portions of the property in Section 23 were owned at that time by Frank and G. Glyer (NE ¼ of the NE ¼) and Fr. A. Glyer (Lot 1). The farmstead remained in the Glyer family until at least 1961, when it was owned by C. R. Glyer (Atlas Company 1950; Thomas O. Nelson Co. 1961).

County histories indicate that Gustave Glyer came to Chisago County in 1868 or 1869, and his "first residence was a cave dug in the banks of Green Lake" (Chisago County Bicentennial Committee [CCBC] 1976:56). Harris (2006:16-17) states:

John Robert Glyer said that it took his father four years to clear all the trees from his eighty acres of land west of Green Lake . . . Glyer recalled that his father Gustav's first plow, a log eight to twelve inches thick with a branch sticking straight out from the side as a handle, was called an ador. The other end of the plow was sharpened to carve the furrows in the field. After the furrows were dug, children walked along dropping seeds for corn or potatoes at even intervals. Then their mother followed with a hoe or rake to cover the seeds with dirt.

Aerial photographs dating to 1938, 1953, 1965, and 1973 demonstrate that the layout of the farmstead did not change substantially during between those years. A recent aerial photograph, however, shows that many of the buildings have been removed, leaving a house and up to three outbuildings (two may be remnants).

Wallmark/Carlson/Lindberg Farmstead

The Wallmark/Carlson/Lindberg farmstead is located in the NW ¼ of the NE ¼ of the NW ¼ of Section 13, T33N, R21W. On February 14, 1855, Charles H. Parker purchased Lots 1 through 4 and the SW ¼ of the SW ¼ of Section 13, and this property was patented to him on November 10 of the same year. No buildings are depicted anywhere on the property on maps dating prior to 1888. The plat map of that year shows that Lots 1 through 3, consisting of 134.27 acres made up of the E ½ of the NW ¼ and those portions of the W ½ of the NE ¼ and the NE ¼ of the SW ¼, Section 13, not occupied by Green Lake, were by that time owned by Otto Wallmark, with a farmhouse located in the NE ¼ of the NW ¼. Although Otto Wallmark owned the property, his involvement in farming it was likely minimal. As of 1882, Wallmark was a storeowner, with both his businesses and residence located in Chisago City. From 1887 to 1890, he served as a state senator (Shoquist and Regan 1981:17, 38-39).

Between 1888 and 1914, the property was divided so that the northern 77.29 acres were separately owned, by Frank O. Carlson (Webb Publishing Co. 1914). By 1950, ownership of the Carlson property had been transferred to Carl Lindberg, who remained the owner as of 1961 (Atlas Company 1950; Thomas O. Nelson Co. 1961). Only two mentions of Carlson and/or Lindberg were located in available county histories. One notes that Carl Lindberg was the County Commissioner as of 1976. The other states,

"[Carl Lindberg] purchased the Carlson farm as a young man. Now he is living in a problem area. When the sewer line comes around the lake, he will have to sell" (CCBC 1976:56, 58). Aerial photographs dating to 1938 and 1953 show substantial changes in the layout of the farmstead between those two years, with a transition from buildings oriented primarily on an east-west axis to a north-south axis. More recent aerials show that the layout subsequently remained consistent.

Bergquist/Daley/Gaudette Farmstead

The Bergquist/Daley/Gaudette farmstead is located in the NE ¼ of the NW ¼ of the NW 1/4, Section 13, T33N, R21W. According to the GLO tract book, the W 1/2 of the NW 1/4 was sold along with the NW 1/4 of the SW 1/4, Section 13, to David C. Price on May 25, 1855, and patented to the same on April 15 of the following year. No buildings are depicted on the property on maps dating through 1914 (GLO 1849; Andreas 1874; C. M. Foote & Co. 1888; Webb Publishing Co. 1914). The farmstead, however, had been welldeveloped by 1938, as an aerial photograph of that year illustrates. As of 1950, the property was owned by Fred Daley (Atlas Company 1950), though an account in the SHPO site files indicates that the Daley farm was formerly owned by William Bergquist, which is in keeping with the ownership indicated on the 1914 plat map (Webb Publishing Co. 1914; SHPO Site File, 21CHk). Although a building is not depicted in this location on the plat, it may have been omitted in order to label the cemetery on the adjacent parcel to the south. By 1961, the farmstead was owned by Leroy J. Gaudette (Thomas O. Nelson Co. 1961). No information on Bergquist, Daley, or Gaudette was located in available county histories. Aerial photographs dating to 1938, 1953, 1965, and 1973 indicate that the farmstead underwent moderate changes with regard to the buildings present, but overall retained the same basic layout. Only two buildings are visible on a current aerial photograph of the property; however, tree cover is dense, preventing an assessment of any recent changes in layout.

Swenson Farmstead

The Swenson farmstead is located in the SE ¼ of the NW ¼ of the SW ¼, Section 12, T33N, R21W. The page of the GLO tract book containing Section 12 is missing from the microfilm roll at the MHS, and therefore information on the original sale of the property could not be obtained. No buildings appear near the location of the farmstead on maps pre-dating 1888 (GLO 1849; Andreas 1874). The 1888 plat map shows the W ½ of the SW ½ to be owed by D. Swenson, and it shows two houses, both appearing to be within the Study Area, on the property. Both houses were still present as of 1914, by which time the 80-acre property was owned by Chas E. Swenson (Webb Publishing Co. 1914). Multiple farmstead buildings were located on the farmstead property by 1938, but the scale of the aerial photograph of that year makes it difficult to confirm whether both houses remained standing, as the functions of the buildings shown largely cannot be discerned. As of 1950, the property remained in the Swenson family, owned at that time by Henry Swenson (Atlas Company 1950), who continued to own the property along with Gilbert Swenson in 1961 (Thomas O. Nelson Co. 1961). One county history notes, "C. E. Swenson had a farm near Bonnie Glen. His sons, Henry and Gilbert, lived there, but were never married, and died on the farm. It is now being sub-divided" (CCBC

1976:57). More interesting is the account of the farm, known as Glenwater Farm, put forth by Harris (2006:133-134), which describes the filming of scenes for "Swedes in America" by Ingrid Bergman there in 1943:

Scenes were filmed on Lindstrom's main street, in the Elim Lutheran Church in Scandia, and at Chisago City's Glenwater Farm where Ingrid Bergman and her daughter Pia stayed. Henry and Gilbert Swenson managed the farm with its prize herd of Guernsey cows. Their father, Charles, had been named a Master Farmer and the farm was often the destination for visitors escorted by the University of Minnesota. In the film and in still photographs published in *Look* magazine Miss Bergman carries milk pails and cuddles a tiny piglet.

... Pia returned to the Glenwater Farm for a later visit. Henry Swenson, in return, was invited to the opening night of "Joan of Lorraine," starring Ingrid Bergman, in New York City. On his way home ... he attended the International Livestock Show in Chicago.

Aerial photographs dating to 1938, 1953, 1965, and 1973 show that the farmstead retained a similar layout over period incorporating those years, although a current aerial photograph indicates that several of the buildings have since been removed.

Dahl Farmstead

The Dahl farmstead is located in the SE ¼ of the SW ¼ of the SE ¼, Section 1, T33N, R21W, in the area that was formerly platted as Deer Garden. By 1888, several of the lots in the platted area were owned by Swen Dahl, including Lot 22, upon which a house was located (C. M. Foote & Co. 1888). "G.E. and [W. A.? illegible]" Dahl appears over a few of the lots within Deer Garden, including Lot 22 and adjacent lots, on a 1914 map of the project area (Webb Publishing Co. 1914). Despite the intention for Deer Garden to be a village or town site, Lot 22 and the area surrounding it are clearly under agricultural use on aerial photographs dating between 1938 and 1973. No information on either Swen or G. E. Dahl was located in available county histories. A comparison of historical aerial photographs shows that this farmstead underwent substantial changes in layout, particularly after 1965.

ENVIRONMENTAL HISTORY

The TH 8 Improvement Project is located within the Central Lakes Deciduous East archaeological sub-region. The following environmental history of this sub-region is based largely on information contained in Borchert and Gustafson's *Atlas of Minnesota Resources and Settlement* (1980) and an overview entitled "Minnesota's Environment and Native American Culture History" by Gibbon et al. (2002).

The Central Lakes Deciduous East archaeological sub-region includes much of east-central Minnesota. The sub-region is bound to the west by the Mississippi River and to

the east by the St. Croix River. The area between these two rivers contains numerous lakes, streams, and wetlands.

The topography of the Central Lakes Deciduous East sub-region consists of glacial moraines, till plains, and outwash plains. As implied by the region's name, during the contact period much of the vegetation of the Central Lakes Deciduous East archaeological sub-region consisted of hardwood forests with a mix of deciduous-coniferous forest dominated by pine in the northern portion of the sub-region.

South of Green Lake and its associated wetlands, the project area includes primarily soils of the Braham-Blomford-Eckvoll association, characterized as nearly level to rolling well drained (Braham), poorly drained (Blomford), and moderately well drained (Eckvoll) sandy soils that formed in glacial outwash and the underlying glacial till, on uplands (Vinar 1980:10; Anderson 1995:8). Also present are soils of the Seelyeville-Markey association, characterized as nearly level, very poorly drained soils that formed in organic deposits and in organic deposits overlying glacial outwash, on uplands (Anderson 1995:11). As the Study Area approaches Green Lake and runs north, it traverses soils of the Nebish-Talmoon association, nearly level to very steep, well drained and poorly drained, loamy soils that formed in glacial till, on uplands (Anderson 1995:6).

During the Late Holocene period, subsistence resources in the Central Lakes Deciduous East sub-region would have included white-tailed deer, small herds of bison and elk, beaver, bear, and some moose. Fish and waterfowl would have been plentiful, and wild rice beds were present throughout most of the sub-region.

HISTORIC CONTEXTS

The Minnesota SHPO has developed a series of broad Statewide historic contexts and themes for the interpretation and evaluation of cultural properties (Dobbs 1990a; Dobbs 1990b; SHPO 1993). These contexts cover three broad periods of Minnesota's history: precontact (before ca. 1650); contact (A.D. 1630-1837); and historical-period (1830s to the present). The following synopses relevant to this study are based on information provided in these contexts as well as the recently completed Minnesota Statewide Multiple Property Documentation Form (MPDF) for the Woodland Tradition (Arzigian 2008).

PRECONTACT PERIOD

Precontact cultures within Minnesota are divided into four major traditions: Paleoindian; Archaic; Woodland; and Mississippian/Plains Village. These traditions are largely defined by technical innovations or behavioral adaptations that can be observed in the archaeological record, such as physical alterations in the forms and types of material culture (e.g., arrowhead styles or pottery decoration) used by a precontact culture, or the adaptation of their subsistence life-ways to a changing landscape (e.g., hunting, gathering, or cultivation). As the diagnostic precontact artifacts recovered during the TH 8 Improvement Project indicate an association with the Woodland tradition, contexts relevant to the Paleoindian, Archaic, and Mississippian/Plains Village traditions would be extraneous to this report and therefore are not presented here.

Woodland Tradition (3,000 B. P. – EuroAmerican contact)

Within the last 3,000 years, the climate of the state of Minnesota began to stabilize into an ecology that is very similar to that which exists today. Within the western portion of the state were expansive prairies that were separated from the pine forests of the arrowhead region by a swath of oak savanna that stretched across the state from the northwest to the southeast. In this environment, the native peoples of Minnesota began to develop an increasingly more sedentary lifestyle. While hunting and gathering continued, and was still the primary means of subsistence, the domestication of plants and the long-term, and re-occurring, occupation of seasonal village sites emerged during this period. Tied to this increased stability and regional occupation was the advent of ceramic technology and the construction of mounds, which are two of the archaeological signatures of this period. It should be noted that these innovations were not adopted in all areas of the state at the same time nor necessarily together. Even so, the period in which these innovations occurred has been designated as a single archaeological period, the Woodland Tradition.

Archaeologically, Woodland sites are among the most frequently encountered site types in Minnesota since they are not usually as deeply buried as Paleoindian and Archaic sites. The presence of ceramics and distinct tool types also allows Woodland sites to be more definitively attributed to a tradition than non-diagnostic lithic scatters. Consequently, a relative abundance of artifacts has enabled archaeologists to develop a chronological

framework consisting of an Early and Middle (Initial) (ca. 2000 B.C.–A.D. 500) and Late (Terminal) (ca. A.D. 500-1650) periods, and to assign Woodland sites to distinct traditions. The following distinct Woodland-period traditions can be associated with 21CH0126 and 21CH0127.

The Havana-Related Complex: Howard Lake Phase

In southeastern Minnesota, the Initial Woodland period is marked by the presence of northern Havana Hopewell ceramic and burial mound traditions that originated from the Illinois River valley just south of Peoria (Dobbs 1990a:130). The Havana-related Complex dates to the Middle Woodland (ca. 200 B.C. – A.D. 200/300) in central and eastern Minnesota (Arzigian 2008). As explained by Arzigian (2008:25), "The Havana-related complex fits within the more broadly defined Lake Forest Middle Woodland tradition," and it includes the Howard Lake, Sorg, and Malmo phases.

Howard Lake is the northernmost variant to come from the Hopewell Interaction Sphere. The two key sites in Minnesota associated with this phase are the type site, the Howard Lake site (21AN1), and the nearby Andersen site (21AN8). The Howard Lake site comprises three earthen mounds located on the northeastern shore of Howard Lake in Anoka County. Excavations of the smallest mound recovered ceramic sherds, stone tools, and nondescript refuse. At the southern end of Howard Lake, excavations at the Andersen site, the location of a village, recovered ceramic sherds, stone tools, copper implements, a soapstone pipe, and a clay pipe. The decoration on Howard Lake vessels is typically on the exterior rim and shoulder, and occasionally on the interior rim, lip, and mid-body area. Decorative modes usually include straight dentate stamps, ovoid stamps, trailed lines, and bosses. Ceramics are grit tempered with smoothed surfaces. The presence of an interior-beveled lip is a distinctive characteristic of Howard Lake ceramics (Anfinson 1979:96).

Lloyd Wilford compared the ceramic decorations from the Howard Lake and Andersen sites and concluded that they were similar to those of the Havana Hopewell tradition (Dobbs 1990a:131; The Institute for Minnesota Archaeology 1999). Other similarities between the Howard Lake phase and Havana Hopewell tradition include the construction of linear and conical burial mounds and a heavy dependence on exotic raw materials for stone tools. The exchange of cultural concepts between the Havana Hopewell and Howard Lake inhabitants likely resulted from the development of an extensive trade network that focused on the transfer of raw materials from one region to another (Dobbs 1990a:130). Research questions for this phase include but are not limited to the relationship of Minnesota's Havana-related cultures to those of Hopewell, the geographic boundaries of Havana-related ceramics, and the analysis of lithics with a definite association with a Havana-related occupation.

The Central Minnesota Transitional Woodland Complex

This context marks the transition between the Middle and Late Woodland cultures in central Minnesota that occurred ca. A.D. 300–1000 (Arzigian 2008:85). Ceramics encompassed by this complex include St. Croix wares, followed slightly later in time by

Onamia wares. Ties to the later (Terminal Woodland) Blackduck-Kathio and Lake Benton complexes are evidenced in the ceramics and in other material culture. St. Croix ceramics have been found in central and northeastern Minnesota, northwestern SouthDakota, eastern North Dakota, and northwestern Wisconsin, while Onamia ceramics tend to cluster in central and southwestern Minnesota (Arzigian 2008:85). These two types of ceramics have been identified in Arvilla primary and secondary burials. The Neubauer site (21PN0007) is the type site for St. Croix ceramics, while the Petaga Point site (21ML0011) is the type site for Onamia ceramics.

St. Croix ceramics are grit tempered, with a high vertical rim and rounded shoulders. Two varieties of St. Croix ceramics are recognized: the Dentate Stamp Variety, with geometric designs made of a carved stamp or rectangular punctates arranged in oblique, vertical, or horizontal lines around the vessel; and the Comb Stamped Variety, with geometric designs made with V-shaped comb impressions arranged in oblique, vertical, or horizontal rows in various combinations (Arzigian 2008:87), although a St. Croix Cordwrapped-Stick Stamped variety was also proposed by Gibbon and Hohman-Caine (1980).

Onamia ceramics demonstrate loosely wound and widely spaced cord-wrapped stick impressions (Onamia Cordwrapped Stick Impressed variety) arranged in an oblique row around the exterior of the rim and often on the interior as well. A horizontal band of cord-wrapped stick impressions is present below this oblique row (Anfinson and Ready 1979:149). A variety of Onamia (Onamia Dentate) demonstrates large-toothed, dentate-stamped impressions on the rim, neck, and lip, arranged in oblique or horizontal bands. While very similar in decoration, Onamia ceramics can be distinguished from St. Croix by their "heavy" stamping.

Both exotic and local lithic raw materials are recovered from Central Minnesota Transitional Woodland sites. Projectile points found with St. Croix Stamped ceramics include triangular points and small, side-notched points; the same is reported from Onamia sites. With regard to subsistence, deer were an important resource, along with beaver, bear, bison, and other small mammals, and to a lesser degree, fish. Evidenced in this, and the subsequent Blackduck Woodland complex, is a shift from a relatively diffuse, hunting-gathering economy to that of a more focal subsistence strategy (Gibbon and Hohman-Caine 1980). Research questions related to this complex include but are not limited to subsistence strategies, cultural relationships, and the nature of the transition from Middle Woodland and Hopewell-related cultures to Late Woodland complexes such as Blackduck-Kathio.

HISTORICAL PERIOD

The following context is based in the Minnesota statewide context, Railroads and Agricultural Development, 1870-1940.

Railroads and Agricultural Development in Chisago County

The rise of agriculture in Chisago County occurred steadily over the 1850s, catalyzed by Euroamerican settlement in southeastern Minnesota (Van Dyke Robinson 1915:40). In Chisago County, such settlement was by largely Swedish immigrants, the first group coming into the county from Illinois in 1851, then from Illinois and Sweden beginning in 1854 (Rice 1981:249). During the 1850s, the county's first 173 farms were established, growing primarily oats, potatoes, and corn (Van Dyke Robinson 1915:256). Some farms additionally raised cattle, sheep, goats, and swine, contributing to the local market for meat, dairy products, wool, and mohair. In 1859, Chisago County's 173 farms collectively produced 28,005 bushels of potatoes, 20,697 bushels of corn, 13,115 bushels of oats, 5,787 bushels of wheat, 5,260 bushels of rye, 636 bushels of barley, 266 pounds of tobacco, and 2,272 tons of hay and forage (Van Dyke Robinson 1915:260-269). By 1860, the period of the rise of agriculture had ended in Minnesota; production was such that the field crops, "comprising the bulk of the local food supply, thus increased roughly three and a half times as fast as the population outside of incorporated places" (Van Dyke Robinson 1915:56). Agricultural surpluses reached a point that allowed the state's farmers to fulfill not only local needs, but those of other states.

Although the rise of agriculture was ending in 1860, wheat production specifically began to take off around this time. Beginning with the demand fueled by "disorganization in the wheat trade and stoppage of supplies" (Van Dyke Robinson 1915:57) brought on by the Crimean War in 1855, and compounded by the subsequent rapid Euroamerican settlement of Minnesota and shortages precipitated by water-route congestion and then the Civil War, wheat became a profitable venture for the state's farmers, resulting in an emphasis on the crop that would span the next two decades. Chisago County's farmers were no exception, having increased wheat production six times over between 1859 and 1869, the latter year generating 32,857 bushels. The profitability of wheat was surely enhanced at this time by the ease of distribution brought about by the construction of the Lake Superior and Mississippi Railroad line into Wyoming from St. Paul in 1868, on its way to Duluth, which was attained in 1870 (Prosser 1966:138), Ten years and another railroad line later, wheat production had jumped to 153,709 bushels, with oats the only other crop to come close in relative production increase, rising from 39,596 bushels in 1869 to 109,112 bushels in 1879 (Van Dyke Robinson 1915:260-261; Prosser 1966:167).

The influx of Swedes begun in the 1850s continued in waves throughout this period and into the 1880s, prompted by population pressures in Illinois, religious intolerance, crop failure and famine in Sweden, and later, encouragement by already established family and community members. The number of Swedes widely surpassed those of other ethnic groups in the area of Chisago City, Center City, and Lindstrom, and eventually into Isanti County, resulting in a dominance by "a single ethnic group over [a] large a rural area. . . unusual in American settlement history" (Rice 1981:250). Many of these immigrants came from rural locations in Sweden, thus the continuation of farming in Minnesota was a natural transition.

Between 1880 and 1900, primarily as a response to the natural and financial consequences of over-farming wheat, farmers throughout Minnesota began to shift their attention away from wheat and adopted a pattern of diversified farming. In Chisago County, potatoes were re-established as the dominant crop by 1890, but the production of oats, corn, rye, and flaxseed also increased substantially (Van Dyke Robinson 1915:260-269). By 1900, Chisago County was second only to Isanti County in the production of potatoes in the state, and the census of that year additionally demonstrates sizeable increases in the numbers of dairy and other cattle, swine, and poultry owned and in the quantities of milk and eggs produced in the county (Van Dyke Robinson 1915:276-294). Though diversified farming could mean an individual farmer transitioning from a concentration on a single crop to raising a variety of crops, in many instances, individual farmers continued to specialize in a single crop, but each chose different replacements for wheat, "so the regional effect was crop diversity" (Keillor 2002:102). Keillor (2002:103) notes:

To diversify fully on the individual farm was to return to pioneer farming a generation earlier, before wheat became Minnesota's cash crop. That alternative was unrealistic. Railroads were slowly eliminating the local markets to which pioneer farmers bought 'odds and ends to sell at different seasons.' Regions were specializing in products to sell in a national market. Farmers could not reverse that process even if they had wanted to. Neither did merchants wish to return to a pre-railroad economy where they bought 'odds and ends' they then had to market. Nor did specialized buyers want to abandon wheat and set up marketing networks for 'odds and ends' because each town's buyer of each product would handle too small a volume to be profitable. It made no sense to return to smaller volumes after railroads had made the marketing of higher volumes possible.

Beyond potatoes, Chisago County farmers frequently selected dairying as a specialty, which was an appealing transition for a number of reasons. Many farmers already had small-scale experience in dairying activities because they kept a small number of dairy cattle and produced dairy goods for home use. Technological advances had been made in the area of cream separation with the introduction of the continuous centrifugal separator in 1879. Successful models for dairying cooperatives had already been established in other parts of the U.S., eliminating concerns dairy framers may have had about financial trial-and-error. In the 1890s, farmers were quick to discover that centralization in the production of cream, butter, and cheese combined with supervision by a skilled manufacturer in a factory equipped with the centrifugal separator was a ready success. During this decade, the demand for local creameries grew, due not only to the success of creameries, but also because their presence in a town tended to attract other service providers and retail shops. Chisago County gained their creamery, located in Chisago City, in February of 1896:

In the creamery's best years, they earned many awards for their excellent butter, which was shipped to stores in New York and other eastern cities.

During World War II, the Chisago County Creamery supplied butter for the Navy . . . when the creamery installed milk-processing equipment in the early 1940s, it began to sell other products in a retail store [Shoquist and Regan 1981:25].

Chisago County is located within a farming region that maintained dairying and potatoes as its main foci into the mid twentieth century, though certainly sugar beets, hay, tobacco, rye, barley, corn, and other crops had notable roles in agriculture there, as did a variety of livestock (Granger and Kelley 2005:4.12-4.14). Sometime over the three decades after 1940, however, a shift away from dairying occurred:

After 74 years of operation, the creamery fell victim to hard times. As local farmers increased beef herds at the expense of dairy cattle, the lower volume of milk and rising costs of food operation forced the closing of the creamery in January 1970 [Shoquist and Regan 1981:25].

Today, although residential and commercial development has encroached, much of the Study Area remains agricultural in nature, with corn, soybeans, alfalfa, and hay as the primary crops.

PHASE I SURVEY RESULTS

The Phase I archaeological fieldwork for the TH 8 Improvement Project was conducted on July 23 and 26, and August 2-5, 9-12, 16, 20, 23, and 25, 2010, and on May 6, 2011. Andrea Vermeer and Michelle Terrell served as co-Principal Investigators and conducted the fieldwork with Jammi Ladwig, Michelle Porwoll, Eva Terrell, and Katie Wojcik. Systematically surveyed areas, i.e., those with moderate to high potential for containing archaeological resources and which had not undergone substantial previous disturbance, were given letter designations for ease of reference in the field. The results for each area are provided below (Figure 2).

In addition, the Phase I investigation identified one area with high archaeological potential which could not be surveyed due to landowner refusal. Compliance with Section 106 will require a Phase I survey of this location prior to construction.

The remaining portions of the Study Area consist of wetlands, which are considered to have low archaeological potential, as well as areas disturbed by processes such as previous road construction, utility installation, and commercial and residential development, in which archaeological resources are unlikely to remain intact. These areas were therefore excluded from systematic survey.

AREA A

Area A is located around the intersection of Jocelyn Avenue and Viking Boulevard on the west side of TH 8 (see Figure 2). It is situated in a rolling landscape, and it is approximately 500 ft. west of Green Lake, 500 ft. south of Lake Emily, and adjacent to a large wetland to the west. Based on its relative topographic position and proximity to the lakes and wetland, this location was considered to have moderate to high potential for containing precontact archaeological resources.

At the time of the survey, Area A consisted of a cornfield divided on a north-south axis by Jocelyn Avenue and on an east-west axis by Viking Boulevard. The cornfield afforded approximately 95 percent visibility between rows; therefore, pedestrian survey at 10-m (33-ft.) or narrower intervals was used to survey this location. During the survey, a broken projectile point (FS 1) was identified, leading to the designation of 21CH0121.

21CH0121

Site 21CH0121 is located on a general upland adjacent on the west to a large wetland, approximately 700 ft. east of the west edge of the Green Lake lakebed, 1,000 ft. east-northeast of a large wetland, and 900 feet southeast of Lake Emily (Figure 3; see Figure 2). It consists of a single broken projectile point found on the ground surface during pedestrian survey (Figure 4). Close-interval pedestrian survey around the point did not locate any additional cultural materials. A single shovel test was excavated in the location of the find spot, which demonstrated that soils in this area consist of the

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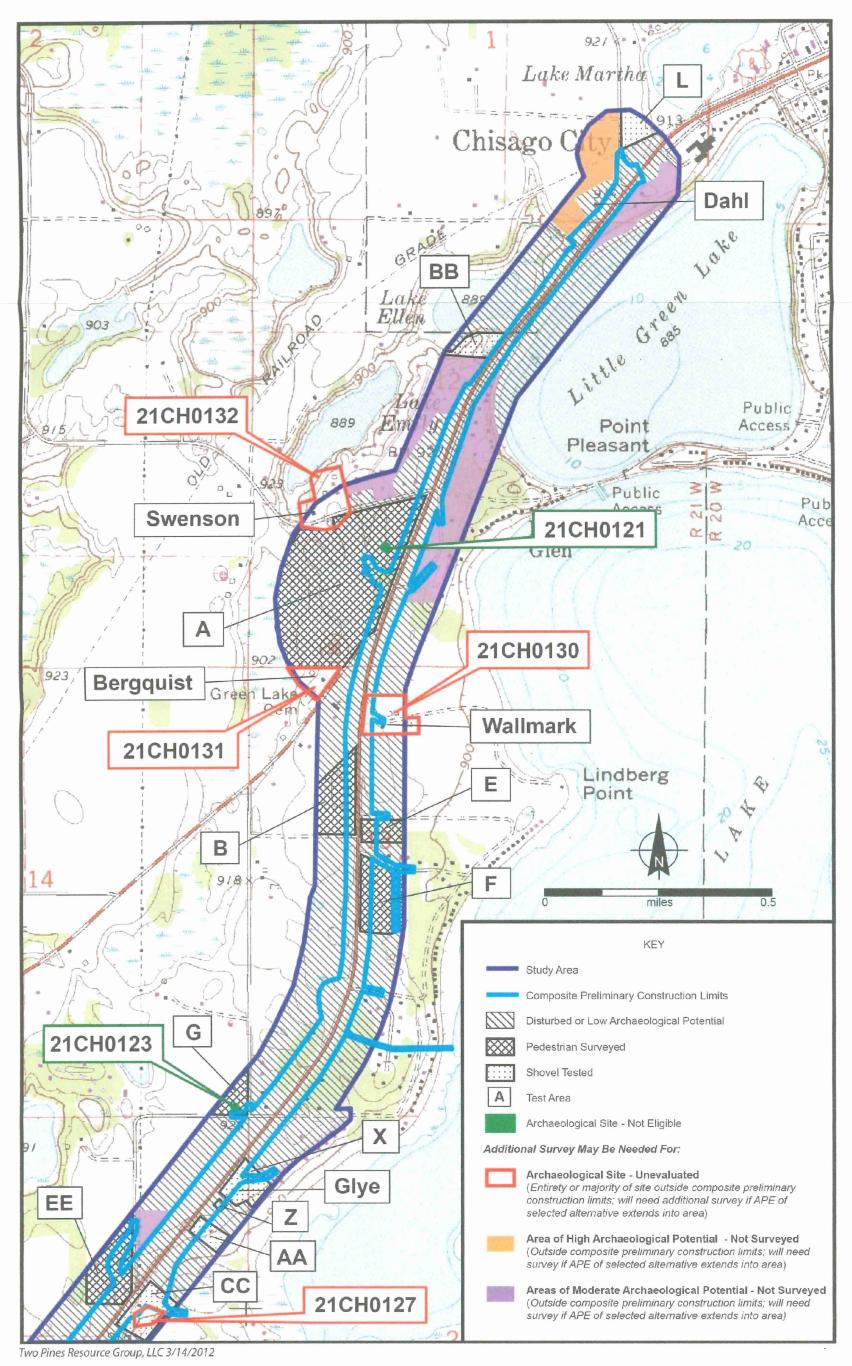
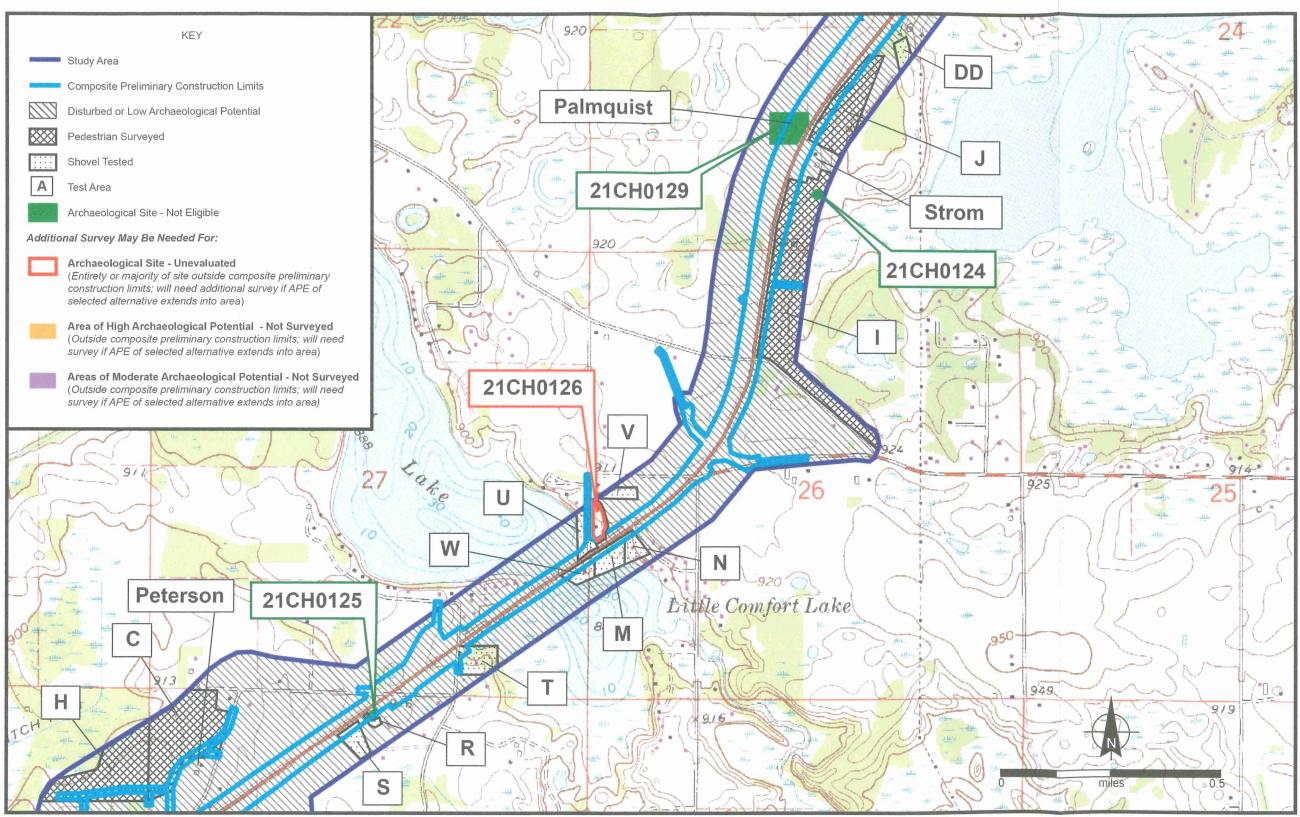
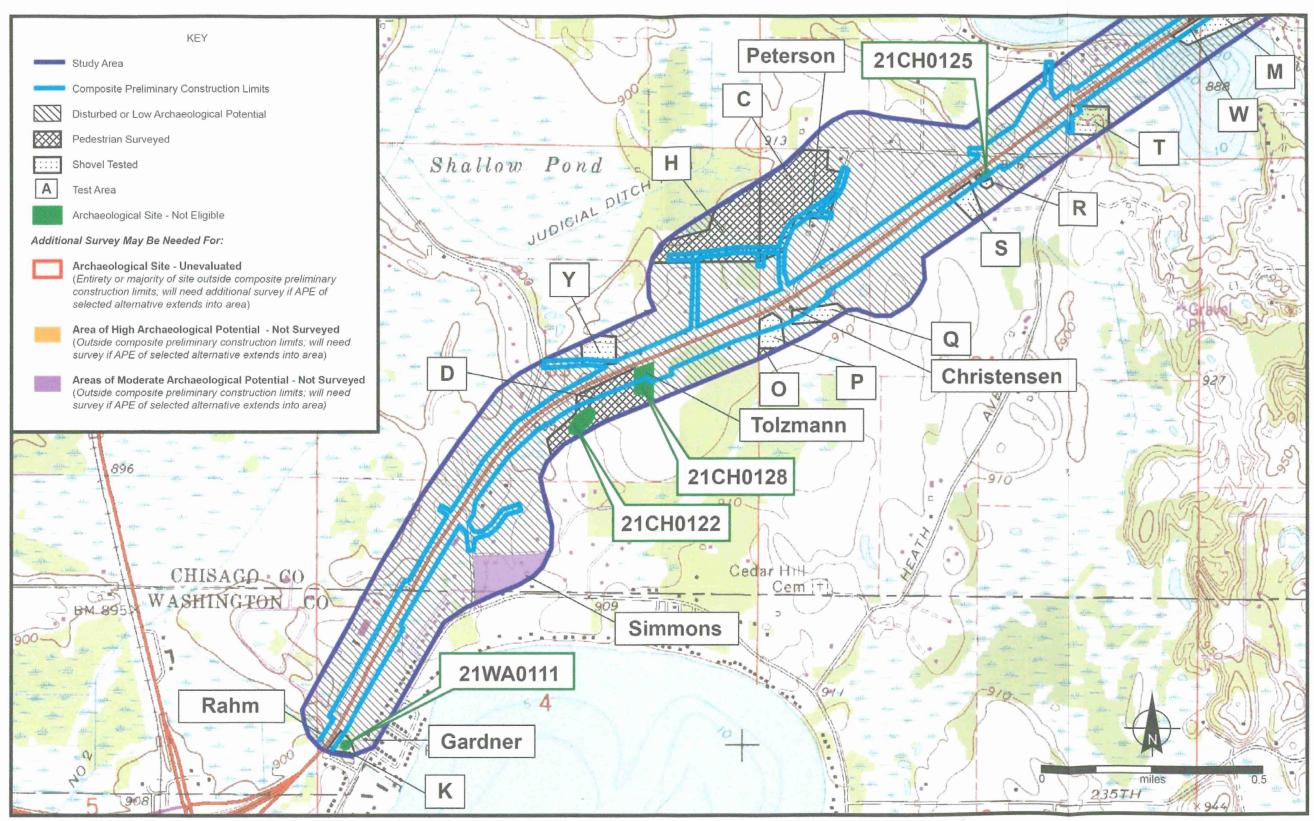


FIGURE 2A. SURVEY RESULTS



Two Pines Resource Group, LLC 3/14/2012



Two Pines Resource Group, LLC 3/14/2012

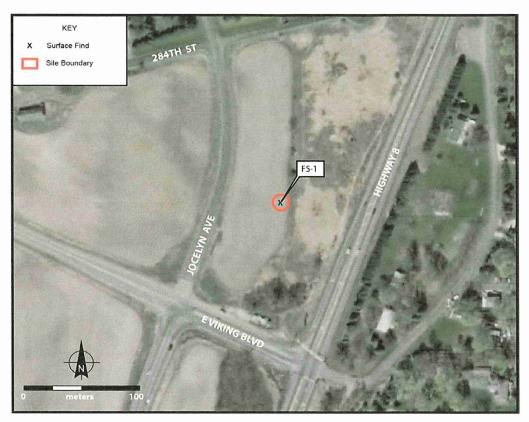


FIGURE 3. SITE MAP, 21CH0121

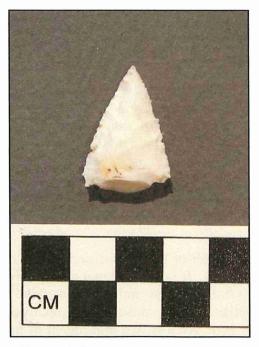


FIGURE 4. PARTIAL PROJECTILE POINT, 21CH0121

plowzone, a brown (10YR 4/3) silt loam, resting directly over subsoil, a light yellowish brown (10 YR 6/4), silty sand glacial till that was encountered at 36 cmbs. No cultural materials were encountered in the shovel test.

Lithic Analysis

One partial projectile point was recovered from 21CH0121.

Morphology

The partial projectile point is missing its base and the barbs, although the notches are partially present and suggest that it was of a corner-notched variety. It is biconvex in cross section. The partial point is 2.77 cm in length, and it measures 1.8 cm at is widest point. The maximum thickness of the point is 5.71 mm. This point is typical of Late Woodland-period point complexes such as Des Moines points, which were being used by A.D. 500 across Minnesota and in conjunction with the adaptation of bow-and-arrow technology (Gibbon 2008; Higginbottom 1996).

Raw-Material Type

The partial projectile point recovered from 21CH0121 is of Burlington chert. Burlington chert is a non-local raw material, the source area for which includes extreme southeastern Iowa, parts of western Illinois, and parts of northwestern to west-central Missouri (Bakken 1995; Meyers 1970; Ives 1975, 1984; Morrow 1984, 1994).

Synthesis

The isolated nature of the broken projectile point that constitutes 21CH0121 precludes an assessment of site function. The raw material indicates a connection to raw-material sources several hundred kilometers to the south and southeast.

Recommendations

Although the projectile point can be associated with the Late Woodland period, as an isolated find within disturbed soils, it would not be significant within that context; therefore, it would not meet NRHP Criterion A or D. Site 21CH0121 is therefore recommended as not eligible for listing in the NRHP. For this reason, and based on the absence of intact soils within the field in which 21CH0121 was located, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area A.

AREA B

Area B is located north and south of the intersection of TH 8 with 276th Street, on the west side of TH 8 (see Figure 2). It is situated in a rolling landscape between the Green Lake lakebed, which is 900 ft. to the east, and a large wetland 700 ft. to the west. Based on its distance from the wetland, and its position as a relatively higher and drier area in relation to the wetland and lake, Area B was considered to have moderate potential for containing precontact archaeological resources.

Area B was occupied by a cornfield at the time of the survey, which afforded 25 to 50 percent surface visibility between the rows and could therefore be pedestrian surveyed at 10-m (33-ft.) intervals. No cultural materials were observed. Area B surrounded another portion of the cornfield that exhibited less than 25 percent surface visibility, but based on the surrounding negative survey and the relative level of archaeological potential in this location, this portion of the field was not subject to systematic survey.

Recommendations

Based on the absence of cultural materials in this location, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area C.

AREA C

Area C is between Hale and Hazel avenues on the west side of TH 8 (see Figure 2). It is situated in a rolling landscape, and its northernmost point is adjacent to Shallow Pond. Based on its proximity to this large wetland and its relative topographic prominence, Area C was considered to have moderate to high potential for containing precontact archaeological resources.

Area C was planted in corn at the time of the survey, with surface visibility averaging 75 percent between the rows. Pedestrian survey was therefore used in this location, with transects spaced 10 m (33 ft.) apart. No cultural materials were encountered.

Recommendations

Based on the absence of cultural materials in this location, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area C.

AREA D

Area D is located approximately 800 ft. east of the intersection of TH 8 and Greenway Avenue North, south of TH 8 (see Figure 2). It is within a rolling landscape situated approximately 500 ft. south of Shallow Pond and 900 ft. north of another large wetland. Based on its relative topographic prominence and proximity to the wetlands, this location was considered to have moderate to high potential for containing precontact archaeological resources.

At the time of the survey, Area D was planted in corn, with surface visibility approaching 95 percent between the rows, allowing for pedestrian survey at 10-m (33-ft.) intervals. During the survey, one lithic flake and one piece of fire-cracked rock (FCR) were identified on the surface, leading to the designation of 21CH0122.

21CH0122

Site 21CH0122 is located within a rolling landscape approximately 900 ft. south of Shallow Pond and 700 ft. north of a large wetland (Figure 5; see Figure 2). It consists of a sparse lithic scatter comprising one lithic flake and one piece of FCR identified on the ground surface during pedestrian survey. Close-interval pedestrian survey performed 15 m (49 ft) in all directions from the two finds identified no additional cultural materials. Shovel tests excavated in the locations of the finds indicated that soils in the field consist of a very dark grayish brown to dark brown, sandy silt loam plowzone resting either directly upon clay subsoil or a mottled transition to the subsoil. In the case of the former, the subsoil was brown (10YR 5/3) and encountered at 29 cmbs; in the other, it was dark grayish brown (2.5Y 4/2) and encountered at approximately 50 cmbs.

Lithic Analysis

The Phase I survey of 21CH0122 yielded two lithic artifacts, including one lithic flake and one piece of FCR.

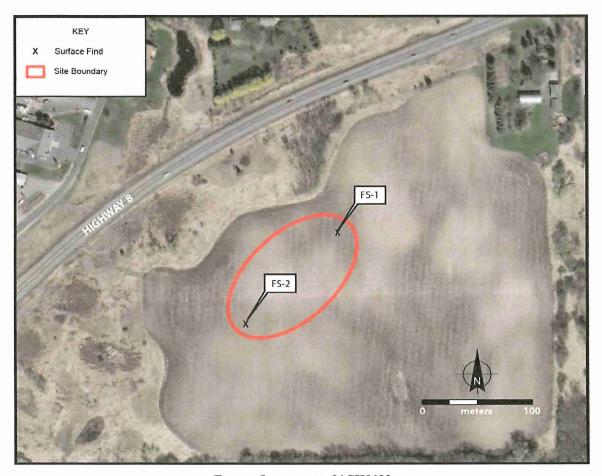


FIGURE 5. SITE MAP, 21CH0122

Morphology

The lithic flake is a tertiary flake.

Raw-Material Type

The lithic flake is of Swan River chert, and the piece of FCR is gabbro. Swan River chert would have been available from glacial sediments in the vicinity of 21CH0122 and is therefore considered locally available (Bakken 1995, 2011).

Synthesis

The non-diagnostic nature and low density of the artifacts that constitute 21CH0122 preclude an assessment of site function, beyond a general likelihood of lithic tool manufacture or maintenance.

Recommendations

Based on the isolated and non-diagnostic nature of the two artifacts that constitute 21CH0122, they cannot be associated with a historic context, as would be required for the site to be significant under NRHP Criterion A, nor would they be able to answer important research questions, as would be required for the site to be significant under NRHP Criterion D. The site is therefore recommended as not eligible for listing in the NRHP. For this reason, and because the remainder of this location was negative for cultural materials, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area D.

AREA E

Area E is located at the southeast corner of the intersection of TH 8 with 276th Street (see Figure 2). It is within a rolling landscape and is located immediately west of the Green Lake lakebed. Based on its proximity to the lake, it was considered to have moderate to high potential for containing archaeological resources.

Area E was planted in corn at the time of the survey, and the field afforded 50 percent or better surface visibility between the rows. Pedestrian survey was therefore conducted at 10-m (33-ft.) intervals in this location. Other than a small amount of apparently fairly recent twentieth-century materials encountered at the eastern field edge, including fragments of colorless glass, milk glass, safety glass; a beaded chain; and a Styrofoam cup, no cultural materials were encountered during the survey. As these materials were not within a definable context and are likely recent, they were not designated as an archaeological site.

Recommendations

Based on the absence of archaeological resources in this location, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area E.

AREA F

Area F is located at the southeast corner of the intersection of TH 8 with 275th Street (see Figure 2). Located within a rolling landscape approximately 200 ft. west of the Green Lake lakebed, it was considered to have moderate to high potential for containing precontact archaeological resources based on its proximity and topographic relationship to the lake.

Area F was planted in corn at the time of the survey, which afforded 50 percent or better surface visibility and allowed pedestrian survey to be conducted at 10-m (33-ft.) intervals. Although no precontact materials were encountered in Area F, a small, sparse scatter of historical-period materials was noted in approximately the center of the field. These materials consisted of two fragments of buff-bodied stoneware, one with a clear glaze over a handpainted blue design; one fragment of amber bottle glass; two fragments of colorless bottle glass; and one fragment of colorless flat glass. These artifacts are not associated with any historically documented features, and no features were identified in their vicinity during the field survey, thus they are not in a definable context. Additionally, they are present in an extremely light density. For these reasons, the materials were not designated as an archaeological site.

Recommendations

Because the historical-period materials found in this area were determined not to constitute an archaeological site, and because the remainder of this location was negative for cultural materials, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area F.

AREA G

Area G is located at the northwest corner of the intersection of 270th Street with Jeffrey Avenue (see Figure 2). It is situated within a fairly level area approximately 1,300 ft. west of the Green Lake lakebed, 1,600 ft. south-southeast of a large wetland, and 2,000 ft. northeast of a small, unnamed lake. Based on its position between the lakes and wetlands, but considering its distance from each, Area G was considered to have moderate potential for containing precontact archaeological resources.

At the time of the survey, Area G was planted in corn. Surface visibility ranged from 50 to 75 percent between the rows; therefore, pedestrian survey at 10-m (33-ft.) intervals was employed in this area. The survey resulted in the discovery of a partial projectile point, leading to the designation of 21CH0123.

21CH0123

Site 21CH0123 is located in a relatively level general upland between Green Lake, a large wetland, and a small unnamed lake (Figure 6; see Figure 2). It consists of a partial projectile point identified on the ground surface during pedestrian survey (Figure 7). Close-interval pedestrian survey around the point did not locate any additional cultural

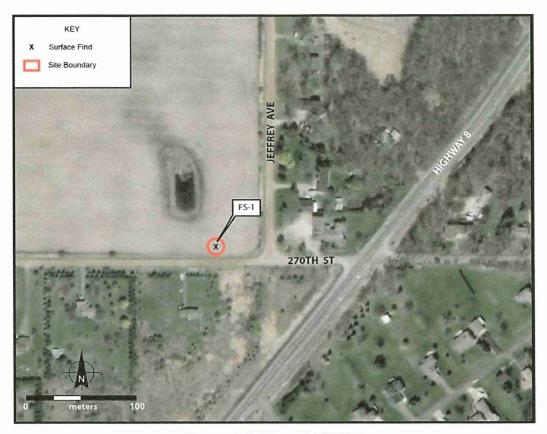


FIGURE 6. SITE MAP, 21CH0123

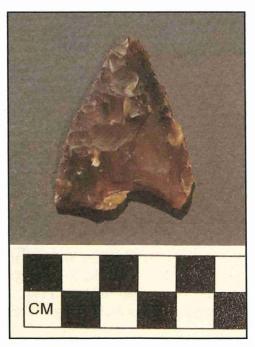


FIGURE 7. PARTIAL PROJECTILE POINT, 21CH0123

materials. A single shovel test was excavated in the location of the find spot, which demonstrated that soils in the field are deflated and consist of the plowzone, a brown (10YR 4/3) sandy silt loam 20 cm deep, over a 6-cm-thick lens of pale brown (10YR 6/3), sandy silt that rests directly on subsoil, here a yellowish brown (10 YR 5/6) silty clay. No cultural materials were encountered in the shovel test.

Lithic Analysis

One partial projectile point was recovered from 21CH0123, the base having broken off.

<u>Morphology</u>

The partial point is triangular with slightly pressure-flaked excurvate edges, and one side is fluted. It measures 4.64 cm in length, and its maximum width is 3.6 cm. The maximum thickness of the point is 5.02 mm. The point is too partial to be assigned to a historic context.

Raw-Material Type

The partial projectile point recovered from 21CH0123 is of Knife River Flint. Knife River Flint is a non-local raw material, the source area for which is primarily west-central North Dakota (Bakken 1995).

Synthesis

The isolated nature of the broken projectile point that constitutes 21CH0123 precludes an assessment of site function. The raw-material used to make the point indicates a connection to a raw-material source several hundred kilometers to the northwest.

Recommendations

The projectile point that constitutes 21CH0123 is too partial to be associated with a specific historic context, as would be needed for the site to meet NRHP Criterion A. As a non-diagnostic, isolated find within a disturbed context, it would not be able to answer important research questions; therefore, it does not meet NRHP Criterion D. Site 21CH0123 is therefore recommended as not eligible for listing in the NRHP. For this reason, and based on the absence of intact soils within the field in which 21CH0123 was located, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area G.

AREA H

Area H is located at the north ends of Hamlet and Hale avenues, north of their intersections with TH 8 (see Figure 2). It is on low and intermediate terraces adjacent to Shallow Pond, a large wetland associated with the Sunrise River. Based on its relative topographic prominence and its proximity to Shallow Pond, Area H was considered to have high potential for containing precontact archaeological resources.

Area H was planted in corn at the time of the survey, which afforded 80 to 95 percent surface visibility between the rows and allowed pedestrian survey at 10-m (33-ft.)

intervals to be conducted. During the survey, a light and diffuse scatter of historical-period materials was identified in the east half of the field, containing two to three fragments of whiteware; single fragments of redware, colorless flat glass, colorless bottle glass, colorless curved glass, amber glass, and terra cotta; and one aqua canning jar base. These artifacts are not associated with any historically documented features, and no features were identified in their vicinity during the field survey, thus they are not in a definable context. Additionally, they are present in an extremely light density. For these reasons, the materials were not designated as an archaeological site.

Recommendations

Because the historical-period materials found in this area were determined not to constitute an archaeological site, and because the remainder of this location was negative for cultural materials, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area H.

AREA I

Area I follows the north side of Pioneer Road then extends north along the east side of TH 8 for a distance of approximately 2,200 ft. through a rolling landscape adjacent to wetlands associated with Green Lake. Based on its topographic relationship and proximity to the wetlands/lake, Area I was considered to have high potential for containing precontact artifacts.

At the time of the survey, Area I was within a cornfield affording 80 to 95 percent surface visibility between the rows. Pedestrian survey was therefore conducted in this area, with intervals spaced 10 m (33 ft.) apart. A single quartz flake was identified during the course of the survey, leading to the designation of 21CH0124.

21CH0124

Site 21CH0124 is situated within a rolling landform approximately 200 ft. northwest of wetlands associated with Green Lake (Figure 8; see Figure 2). It consists of a single lithic artifact located on the ground surface during pedestrian survey. Close-interval pedestrian survey around the point did not locate any additional cultural materials. A single shovel test was excavated in the location of the find spot, which demonstrated that soils in this area consist of the plowzone, a brown (10YR 4/3) sandy silt loam, with a thin, mottled transition to subsoil, a yellowish brown (10 YR 5/4) clay that was encountered at 36 cmbs. No cultural materials were encountered in the shovel test.

Lithic Analysis

One piece of lithic flaking debris was recovered from 21CH0124.

Morphology

The lithic flake is a tertiary flake.



FIGURE 8. SITE MAP, 21CH0124

Raw-Material Type

The tertiary flake recovered from 21CH0124 is of quartz. Quartz would have been available from glacial sediments in the vicinity of 21CH0124 and is therefore considered locally available (Bakken 1995, 2011).

Synthesis

The non-diagnostic and isolated nature of the artifact that constitutes 21CH0124 precludes an assessment of site function, beyond a general likelihood of lithic tool manufacture or maintenance. The raw material indicates a use of locally available resources.

Recommendations

Based on the isolated and non-diagnostic nature of the artifact that constitutes 21CH0124, it cannot be associated with a historic context, as would be required for the site to be significant under NRHP Criterion A, nor would it be able to answer important research questions, as would be required for the site to be significant under NRHP Criterion D.

The site is therefore recommended as not eligible for listing in the NRHP. For this reason, and because the remainder of this location was negative for cultural materials, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area I.

AREA J

Area J is located on the east side of TH 8, approximately 500 ft. north of Area I and extending northeast for approximately 1,200 ft. (see Figure 2). Area J follows a relatively level landform adjacent to a drained wetland associated with Green Lake. Based on its relative topographic prominence and proximity to the lake, Area J was considered to have high potential for containing precontact archaeological resources.

Area J was planted in corn at the time of the survey, which afforded 80 to 95 percent surface visibility between the rows, allowing pedestrian survey at 10-m (33-ft.) intervals to be conducted. No cultural materials were observed during the course of the survey.

Recommendations

Based on the absence of archaeological resources in this location, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area J.

AREA K

Area K is located on the east side of TH 8, south of its intersection with Goodview Circle (see Figure 2). It is situated on level terraces on opposite sides of a tributary of the Sunrise River. Although it appears that this tributary follows an artificially modified path, the possibility exists that this path roughly follows a formerly natural route, in which case the topographic relationship and proximity of the terraces to the tributary would suggest high potential for precontact archaeological resources.

Area K, located within a lightly developed residential area, was covered in grass at the time of the survey; therefore, shovel testing was employed to survey this location. On the west side of the tributary, six shovel tests were excavated 12 to 15 m (39 to 49 ft.) apart as the tributary would allow, along three north-south transects spaced at 15-m (49-ft.) intervals. The two shovel tests closest to the tributary were generally wet, and the water table was encountered at 63 and 84 cmbs in these. Soil profiles were highly inconsistent in the west terrace, containing anywhere from three to six horizons ranging from sandy to silty to clayey in composition and from black (10YR 2/1) to light yellowish brown (2.5Y 6/3) in color, with no discernible pattern. The likelihood of disturbance in this area, as indicated by the soils, was further supported by a strong petroleum smell that emanated from one of the shovel tests near a former access drive. All shovel tests on the west terrace were negative for cultural materials.

On the east terrace, also within a light residential development, an additional six shovel tests were excavated at 15-m intervals along two roughly north-south transects spaced 15

m apart. The shovel tests in the eastern transect contained soil profiles indicative of disturbance, as they were inconsistent between tests, exhibited displaced subsoil, and/or exhibited substantial mottling. The two shovel tests nearest to the tributary, constituting the western transect, varied in profile. The northern test contained a very dark grayish brown (10YR 3/2), silt loam to 31 cmbs over a silt of the same color that extended to 53 cmbs, at which point a brown (10YR 4/3) clayey silt with oxidation was reached. This stratum overlay subsoil, a light yellowish brown (2.5Y 6/3) silty clay. The southern test contained a very dark gray (10YR 3/1) loam to a depth of 28 cmbs over a 22-cm-thick layer of light yellowish brown (2.5Y 6/4) fine sandy silt, which rested upon a black (10YR 2/1) clayey silt encountered at 50 cmbs. This test yielded a single lithic artifact and fish bone, leading to the designation of 21WA0111.

21WA0111

Site 21WA0111 consists of a single lithic artifact found on a terrace adjacent to a possibly artificially modified tributary of the Sunrise River (Figure 9; see Figure 2). One of the initial shovel tests excavated in the area of the site, ST 8, produced a piece of lithic shatter from between 35 and 40 cmbs and fish bone from between 45 and 50 cmbs.



FIGURE 9. SITE MAP, 21WA0111

Bracketing shovel tests were subsequently excavated at 5- and 10-m (16- and 33-ft.) intervals in the cardinal directions from this shovel test, except to the west and 10 m to the south, all of which would have been within the tributary. Soil profiles within the bracketing shovel tests were highly inconsistent between tests, and some contained mottled strata, indicative of disturbance. All bracketing shovel tests were negative for cultural materials.

Lithic Analysis

One piece of lithic shatter was recovered from 21WA0111.

Raw-Material Type

The piece of lithic shatter recovered from 21WA0111 is of Prairie du Chien chert. Prairie du Chien chert would have been locally available in the project area (Bakken 1995, 2011).

Faunal Analysis

Fourteen fragments of fish bone were recovered from 21WA0111. These fragments are too small to allow for more refined analyses.

Synthesis

The non-diagnostic and isolated nature of the artifacts that constitute 21WA0111 precludes an assessment of site function, beyond a general likelihood of lithic tool manufacture or maintenance. The fish bone may be incidental.

Recommendations

Based on the isolated and non-diagnostic nature of the artifacts that constitute 21WA0111, it cannot be associated with a historic context, as would be required for the site to be significant under NRHP Criterion A, nor would it be able to answer important research questions, as would be required for the site to be significant under NRHP Criterion D. The site is therefore recommended as not eligible for listing in the NRHP. For this reason, and because the remainder of this location was negative for cultural materials, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area K.

AREA L

Area L is located to the east of Karmel Street, south of its intersection with 292nd Street (see Figure 2). It is within a terrace that is adjacent to a slope down to the shore of Lake Martha, the lakeshore being approximately 150 ft. east of Area L. Based on its topographic relationship and proximity to the lake, Area L was considered to have high potential for containing precontact archaeological resources.

At the time of the survey, Area L was planted in hay, which eliminated surface visibility. Shovel testing was therefore used to survey this area. Two north-south transects were established 10 m (33 ft.) apart, each containing five shovel tests spaced 15 m (49 ft.)

apart. The excavation of these shovel tests revealed consistent soil profiles, consisting of a brown (10YR 4/3), silt loam plowzone averaging 32 cm in depth resting either directly over the subsoil, a yellowish brown (10YR 5/4) clay, or separated from it by a yellowish brown clayey silt with gravel. In those seven cases where the middle horizon was present, it averaged 13 cm in thickness. No cultural materials were encountered during shovel testing.

Recommendations

Based on the absence of cultural materials in this location, combined with the deflated nature of the soils, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area L.

AREA M

Area M is located on the southeast side of TH 8, approximately 150 ft. southwest of 253rd Street (see Figure 2). It is situated on a terrace adjacent to Little Comfort Lake, which rises very gradually from the level of the lake. Based on its proximity and topographic relationship to the lake, it was considered to have high potential for containing precontact archaeological resources.

Area M is situated on two adjacent wooded land parcels, the southwestern one of which evidenced substantial disturbance in the form of huge berms and ditches or gullies. Ceramic tiles and other fairly recent-looking debris had been dumped in this area. Systematic survey was thus begun in the northeastern parcel, where shovel testing was required due to poor surface visibility. Initially, four generally east-west running transects paralleling the lakeshore were established 10 m (33 ft.) apart, each containing five shovel tests at 15-m (49-ft.) intervals. With the exception of the easternmost test, the shovel tests in the transect closest to the lake exhibited fairly similar soil profiles, including a silt ranging in color from very dark gray (10YR 3/1) to dark grayish brown (10YR 4/2) and in depth from 13 to 28 cmbs over a yellowish brown (10YR 5/4 to 5/6) wet sand to wet silt. The wet sand to wet silt overlay a greenish gray (Gley 1, 10Y 5/1) gley, encountered at depths ranging from 44 to 59 cmbs. The easternmost shovel test, however, included a dark yellowish brown (10YR 4/6) sand with gravels under the topsoil, from 20 to 60 cmbs, at which point a 15-cm-thick, black (10YR 2/1) silt layer was encountered, after which the gley was reached.

In the next transect to the west, however, the topsoil, a dark grayish brown (10YR 4/2) silt loam was directly underlain by a brown (7.5YR 4/4) sandy clay with gravel that appeared to be glacial till, occurring at 18 and 24 cmbs in the two eastern shovel tests in the transect. Both of these tests contained large, impassable roots within the possible till. Because it was not clear whether the possible till was in a natural stratigraphic position, the central shovel test was excavated through this stratum, which was found to overlay mottled and heavily mixed clay, silty clay, and sandy clay ranging in color from black (10YR 2/1) to light brownish gray (2.5Y 6/2). This mixed layer, which was reached at 35 cmbs, contained a piece of whiteware between 55 and 60 cmbs. Based on the apparent disturbance within these three shovel tests, only one shovel test from each of the

remaining transects was excavated in an attempt to confirm that the disturbance extended throughout this area. Both shovel tests contained heavily mixed soils down to 100 cmbs, and one produced another piece of whiteware and a piece of curved glass from approximately 50 cmbs. Shovel testing was therefore abandoned in the northeastern parcel.

In the southwestern parcel, an attempt was made to place shovel tests in those areas that appeared from the surface to be undisturbed, resulting in the establishment of a single L-shaped transect with three shovel tests running roughly north to south and a fourth located to the west of the southernmost of those tests, all at 15-m intervals. Despite appearances, these tests contained highly inconsistent soil profiles and mixed soils. Two of these tests held historical-period or modern artifacts at depths ranging from approximately 40 to 50 cmbs, including one aqua glass fragment and one curved glass fragment; these two tests also smelled of petroleum.

Recommendations

Based on the substantial disturbance that has occurred in this location, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area M.

AREA N

Area N is located at the southeast corner of the intersection of TH 8 with 253rd Street (see Figure 2). It is situated within a terrace adjacent to Little Comfort Lake. Based on its topographic relationship and proximity to the lake, it was considered to have high potential for containing precontact archaeological resources.

At the time of the survey, Area N was in residential yards with manicured lawns that eliminated surface visibility; therefore, shovel testing was used to survey this area. Two roughly east-west running transects were established in Area N, the first along the lower part of the terrace closest to the lake shore. This transect contained four shovel tests spaced 15 m (49-ft.) apart. All four tests exhibited substantial disturbance, with mixed and mottled, primarily clay fill over gley in all, two having shallow topsoil over the fill. One shovel test smelled strongly of petroleum, while another contained a wire nail within the gley, between 58 and 100 cmbs. A second transect of two shovel tests spaced 15 m apart was subsequently established approximately 25 m (82 ft.) north of and farther uphill than the first. These tests exhibited a shallow topsoil over glacial till, confirming that the entire area had been disturbed as a result of residential construction.

Recommendations

Based on the level of disturbance that has occurred and the absence of archaeological resources in this location, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area N.

AREA O

Area O is located approximately 400 ft. south of TH 8 at its intersection with Hale Avenue (see Figure 2). Area O is within a terrace-like, level landform that is adjacent to a large wetland, the portion of the terrace within Area O being situated approximately 200 ft. north of the wetland. Based on its topographic relationship and proximity to the wetland, combined with the size of the wetland, this area was considered to have moderate to high potential for containing precontact archaeological resources.

Area O was within a grassy pasture at the time of the survey, which afforded no surface visibility and dictated the use of shovel testing. A total of eight shovel tests at 15-m (49-ft.) intervals were excavated along three southwest-northeast running transects spaced 15 m apart. Soils profiles were fairly consistent throughout Area O, consisting of a brown (10YR 4/3) silt loam to silty clay loam 25 to 36 cm deep, resting upon either a light yellowish brown (10YR 6/4) silty sand to sandy clay that extended down to subsoil, or resting directly on subsoil, a light olive brown to light yellowish brown (2.5Y 5/3 to 6/4) silty clay, occasionally with gravels. In those tests where the middle horizon was present, it ranged from 11 to 25 cm in thickness. No cultural materials were found in any of the shovel tests.

Recommendations

Based on the absence of cultural materials in this location, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area O.

AREA P

Area P is located on the south side of TH 8, north of Area O (see Figure 2). Area P is an extension of the terrace within which Area O is located, and it was therefore also considered to have high potential for containing precontact archaeological resources.

At the time of the survey, Area P was planted partially in corn and partially in other vegetables, all of which, for the most part, afforded 90 percent or better surface visibility between the rows. Pedestrian survey was therefore conducted in this area, with intervals spaced at 10 m (33 ft.). No cultural materials were observed.

Recommendations

Based on the absence of cultural materials in this location, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area P.

AREA Q

Area Q is located approximately 100 ft. south of the intersection of TH 8 with Hazel Avenue (see Figure 2) east of Area P. As an extension of the terrace within which Areas O and P were located, but being slightly more distant from the large wetland, and given

the negative survey results of Areas O and P, Area Q was considered to have moderate potential for containing precontact archaeological resources.

Area Q traversed both a manicured lawn and a wooded area, neither of which afforded sufficient surface visibility for pedestrian survey. As Area Q was limited to an area between a minor wetland and a farmstead, and because the impacts of the farmstead on subsurface deposits was unknown, a single roughly east-west transect of 11 shovel tests spaced at 15-m (49-ft.) intervals was established in this location. Soil profiles in Area Q were similar to those observed in Area O, and the shovel tests yielded no cultural materials, with the exception of a piece of wire found in one test. Based on these results, the negative survey of the other parts of the landform, and the disturbance to the area surrounding Area Q (see Christensen Farmstead, below), no further shovel testing was conducted in this location.

Recommendations

Based on the absence of archaeological resources in this location, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area Q.

AREA R

Area R is located on the south side of TH 8, approximately 300 ft. west-southwest of its intersection with 250th Street (see Figure 2). Area R is situated on a small rise, truncated on the east by retaining walls built for a neighboring landscaping business. The rise slopes gently down to large wetlands to the south and a wetland/swale to the west. Based on its topographic relationship and proximity to the wetlands, Area R was considered to have high potential for containing precontact archaeological resources.

Area R was covered with grass at the time of the survey, which eliminated surface visibility. Shovel testing was therefore used to survey this location. Initially, due to the small size of the rise, two shovel tests spaced 15 m (49 ft.) apart were excavated along a single north-south transect. Soil profiles differed between the shovel tests, with the northern shovel test, Shovel Test (ST) 1, exhibiting a grayish brown (10YR 5/2) silty sand to 30 cmbs over a light yellowish brown (10YR 6/4) silty sand that was 14 cm thick and rested upon a yellowish brown (10YR 5/4) silt that was present to at least 100 cmbs. The southern shovel test contained a very dark grayish brown (10YR 3/2) silt loam to 25 cmbs over a light yellowish brown fine sand that extended to 66 cmbs before the subsoil, a dark yellowish brown (10YR 4/6) clay with sand, was reached. The northern shovel test was positive for cultural materials, leading to the designation of 21CH0125.

21CH0125

Site 21CH0125 is a precontact lithic scatter situated on a rise that slopes gently down to adjacent wetlands to the west and south and is truncated on the north by the TH 8 right-of-way (Figure 10; see Figure 2). The rise constitutes the shore of a drained wetland that

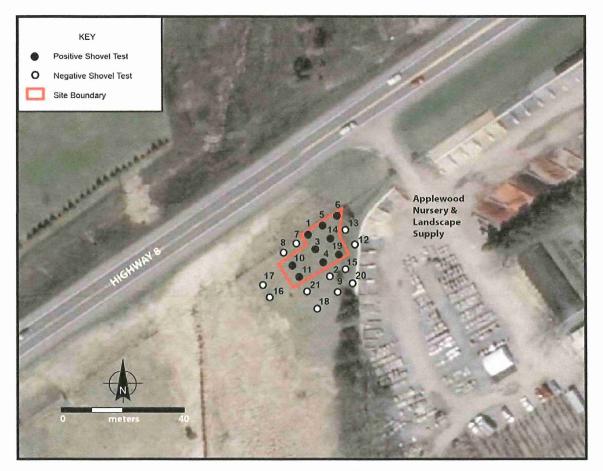


FIGURE 10. SITE MAP, 21CH0125

was formerly part of a large, interconnected body of water, of which Comfort Lake, Shallow Pond, and Forest Lake are remnants. One of the initial shovel tests excavated in the area of the site, ST 1, produced a lithic flake from between 0 and 70 cmbs.

Bracketing shovel tests were subsequently excavated at 5- and 10-m (16- and 33-ft.) intervals in the cardinal directions from this shovel test, except to the north, which was within the ditch associated with TH 8. Soil profiles in the shovel tests to the east and south, these tests being located on the rise, were similar to that observed in ST 1, except that in ST 4, located 10 m east of ST 1, a brown (7.5YR 4/3) clay with sand was encountered instead of the yellowish brown silt. All of these shovel tests proved positive for cultural materials, ST 3 producing two pieces of lithic shatter from between 0 and 40 cmbs, ST 4 one flake from between 40 and 50 cmbs, ST 5 one piece of FCR from between 60 and 70 cmbs, and ST 6 one flake from between 0 and 70 cmbs. The bracketing shovel tests to the west were located on the uppermost portion of the slope down to the swale on the west. Soil profiles in these tests, which were negative for cultural materials, differed. ST 7 contained a 23-cm-thick brown (10YR 4/3), fine sandy silt over a 32-cm-thick, pale brown, slightly silty fine sand over a light olive brown (2.5Y 5/4) clay with sand, while ST 8 contained a dark gray (10YR 4/1) loam, 49 cm thick, over

a mottled, primarily light yellowish brown (2.5Y 6/3) silty clay that extended to 77 cmbs and rested upon a horizon of light brownish gray (2.5Y 6/2) clayey silt mottled with light olive brown (10YR 5/6) clay. Subsequent bracketing tests around the positive tests to the east and south demonstrated that the site is limited to the northern portions of the rise and uppermost part of the slope (see Figure 10).

Lithic Analysis

One hammerstone, six pieces of lithic flaking debris, three pieces of lithic shatter, and one piece of FCR were recovered from 21CH0125.

Morphology

The hammerstone exhibits use-wear on handling surfaces and notable pitting on three striking surfaces. The pieces of lithic flaking debris are all tertiary flakes.

Raw-Material Type

The lithic debris includes Burlington chert (2), Cedar Valley chert (2), Galena chert (1), Prairie du Chien chert (1), quartz (1), rhyolite (1), and Swan River chert (1). With the exception of the Burlington chert, all of the raw material could have been locally procured. Burlington chert is a non-local raw material, the source area for which includes extreme southeastern Iowa, parts of western Illinois, and parts of northwestern to west-central Missouri (Bakken 1995, 2011; Meyers 1970; Ives 1975, 1984; Morrow 1984, 1994). The hammerstone material could not be identified.

Synthesis

The non-diagnostic nature and low density of the artifacts that constitute 21CH0125 preclude an assessment of site function, beyond a general likelihood of lithic tool manufacture or maintenance. The presence of Burlington chert indicates a connection to raw-material sources several hundred kilometers to the south and southeast.

Recommendations

Because the artifacts recovered from 21CH0125 are not diagnostic, the site cannot be linked to a specific historic context, as would be required for it to be significant under Criterion A. The non-diagnostic character of the artifacts, the low density of the artifact assemblage, and the absence of evidence for features indicate that the site would not be able to shed light on important research questions; therefore, the site is not significant under NRHP Criterion D. It is therefore recommended that 21CH0125 is not eligible for listing in the NRHP, and no further archaeological work is necessary prior to or during construction for the TH 8 Improvement Project in Area R.

AREA S

Area S is located on a small rise just west and on the opposite side of a wetland/swale from Area R (see Figure 2). Based on its similarities with Area R in topography and proximity to the wetlands to the south, combined with its proximity to 21CH0125, Area S was considered to have high potential for containing precontact archaeological resources.

At the time of the survey, Area S was covered in grass that eliminated surface visibility; therefore shovel testing was employed to survey this location. The rise accommodated two north-south transects spaced 10 m (33 ft.) check apart, each containing four shovel tests at 15-m (49-ft.) intervals. Soil profiles were generally consistent in these shovel tests, with the majority exhibiting a dark grayish brown to brown (10YR 4/2 to 4/3) silt loam averaging 33 cm in depth over a pale brown (10YR 6/3) silty sand that extended to depths ranging between 50 and 100 cmbs. In those tests where the pale brown silty sand did not extend to 100 cmbs, it was found to overlie a yellowish brown (10YR 5/4 to 5/6) sandy clay. All shovel tests were negative for cultural materials.

Recommendations

Based on the absence of archaeological resources in this location, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area S.

AREA T

Area T is located at the southeast corner of the intersection of TH 8 with Heath Avenue (see Figure 2). It is on lower and upper terraces adjacent to wetlands associated with Little Comfort Lake. Based on its relative topographic prominence and its proximity to the wetlands/lake, Area T was considered to have high potential for containing precontact archaeological resources.

Area T was wooded at the time of the survey, and the understory afforded poor surface visibility. Shovel testing was therefore used to survey this area. Each terrace accommodated a single, roughly east-west transect of shovel tests spaced 15 m (49 ft.) apart, but as the transects were set up to follow the landforms, the distance between transects varied from 40 to 50 m (131 to 164 ft.). Shovel tests in the northern transect, which was situated within the lower terrace, exhibited varied soil profiles, the variations due partially to differing proximity to the wetlands but probably also to disturbances; it was noted, for example, that an Invisible Fence underground line ran proximate to the transect. All of the tests in this transect began with a very dark gray (7.5YR 3/1 to 10YR 3/1) to very dark grayish brown (10YR 3/2) A horizon, which ranged from 16 to 47 cm in depth. Under this horizon, a range of horizons were present, depending on the shovel test, consisting primarily of combinations of sands and silts, frequently wet, ranging from black (10YR 2/1) to gray (10YR 6/1) in color, although in two tests, very dark gray to gray (Gley 1, N 3/ to 4/) gley was encountered near the base of the test. Within the southern transect, which was located within the upper terrace, soil profiles were intact, although the easternmost test contained fill to 15 cmbs. The intact profile included a dark brown to brown (10YR 3/3 to 4/3) silt loam 21 to 30 cm deep over a yellowish brown to light yellowish brown (10YR 5/4 to 6/4) silty sand. In those cases where the silty sand did not extend to 100 cmbs, it was found to rest upon a dark yellowish brown to yellowish brown (10YR 4/4 to 5/6) clay with sand. With the exception of a few pieces of modern debris in one of the shovel tests within the upper terrace and one within the lower terrace, all shovel tests in Area T were negative for cultural materials.

Recommendations

Based on the absence of archaeological resources in this location, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area T.

AREA U

Area U is located on the north side of TH 8, on both the east and west sides of Iris Avenue (see Figure 2). It is situated on a terrace adjacent to and extending east from the southeastern-most shore of Comfort Lake, and it is approximately 400 ft. north of Little Comfort Lake. Based on its topographic relationship and proximity to the lakes, Area U was considered to have high potential for containing precontact archaeological resources.

West of Iris Avenue, at the time of the survey, Area U was wooded, while east of the road, it was within manicured lawns associated with adjacent residential development. Both sides of the road afforded poor surface visibility, resulting in the use of shovel testing to survey Area U. West of Iris Avenue, two north-south transects containing a total of three shovel tests were established, with both transects and shovel tests at 15-m (49-ft.) intervals. The two shovel tests in the eastern transect were similar in profile, with a shallow, very dark gray (10YR 3/1) silt loam overlying a brown (10YR 5/3) silt encountered at 10 and 15 cmbs in the two shovel tests, and this stratum resting upon subsoil, a yellowish brown (10YR 5/4) clay with gravels and cobbles, which was reached at 37 and 50 cmbs. The third shovel test varied substantially from the other two, exhibiting a very dark grayish brown (10YR 3/2) clay loam, 12 cm deep, over a yellowish brown (10YR 5/6) clay with gravels to 26 cmbs. This clay with gravels was situated over a 9-cm-thick layer of dark grayish brown (10YR 4/2) silt, which in turn overlay a brown (10YR 5/3) silt. The subsoil was reached at 50 cmbs. No cultural materials were observed in the shovel tests west of the road.

On the east side of the road, a total of 11 shovel tests spaced 15 m (49 ft.) apart were established along three north-south transects at 10-m (33-ft.) intervals, the westernmost transect containing five shovel tests located approximately 7 m (23 ft.) east of the road cut. The southernmost shovel test in this transect, which was nearest the house, exhibited a dark brown (10YR 3/3) silt loam to a depth of 10 cmbs and overlying a mottled horizon. The mottled horizon, in turn, overlay a dark brown silty sand, extending from 23 to 46 cmbs, that rested upon a dark yellowish brown (10YR 4/4) clay. The central test in the transect was located near a large garden bed, and its profile consisted of a very dark grayish brown (10YR 3/2) silt loam to 27 cmbs over a light yellowish brown (2.5Y 6/3) compact silty sand that extended to 42 cmbs, at which point a light yellowish brown (10YR 6/3) clay subsoil was reached. The remaining shovel tests in the transect exhibited intact soil profiles, consisting of a very dark grayish brown (10YR 3/2), silt loam to silty clay loam A horizon, 16 to 20 cm deep, over a brown to yellowish brown (10YR 4/3 to 5/4), sandy loam B horizon averaging 14 cm in depth and resting upon a vellowish brown (10YR 5/6) clay with gravels. One of these additionally held a light yellowish brown (10YR 6/4), 4-cm-thick, silty sand E horizon between the B and C horizons. All five of the shovel tests were positive for precontact cultural materials, leading to the designation of 21CH0126; the remaining six shovel tests to the east were negative for cultural materials.

21CH0126

Site 21CH0126 is an artifact scatter situated within a relatively level terrace adjacent to and east of wetlands associated with Comfort Lake (Figure 11; see Figure 2). Five initial shovel tests, STs 4 through 8, within a single transect yielded artifacts from between 0 and 50 cmbs, many of which were within intact A, B, or E horizons.

Because the site had been defined on the west by the disturbed right-of-way for Iris Avenue and negative shovel tests beyond, shovel testing to define the remainder of the site occurred 5 m north of the northernmost shovel test in the transect and 5 m east of all shovel tests, with one shovel test being offset to avoid elements of the residential yard, such as a swing set and a garden bed. A bracketing shovel test was not excavated 10 m to the north of the northernmost shovel tests, as this area was disturbed by a driveway and the previous TH 8 construction beyond. Similarly, bracketing shovel tests were not

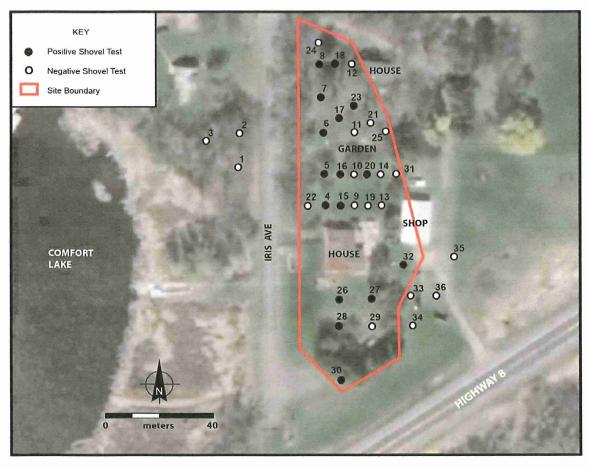


FIGURE 11. SITE MAP, 21CH0126

excavated 5 and 10 m south of the southernmost shovel test, as this area was occupied by a house and driveway.

Soil profiles in these bracketing tests contained similar A, B, and C horizons to those seen in the intact initial shovel tests, except that in all but two tests, the B horizon was absent. While the northern bracketing test was negative for cultural materials, the shovel tests to the east all yielded artifacts from within the A and B horizons. Subsequent bracketing tests determined the extent of the site on the basis of substantial disturbance caused by the residential development and negative shovel tests on the east, and the edge of the landform and ditch for TH 8 beyond the house and driveway on the south.

Ceramic Analysis

Four rim sherds and six body sherds were recovered from 21CH0126, the rim sherds from ST 26, and the body sherds from STs 5 (1), 6 (2), 8 (2), and 16 (1). The sherds are either grit and sand tempered (7) or sand tempered (3).

The rim sherds refit, representing a vessel with a flattened lip. The lip exhibits oblique cord-wrapped object or dentate impressions, as does the rim exterior, with impressions oriented to the right. Beneath these oblique impressions are clusters of parallel dentate stamping on a smoothed exterior surface. The decoration reflects a Middle Woodland component associated with the Havana-Related complex, and likely the Howard Lake phase (Figure 12).

One of the body sherds is St. Croix Stamped reflecting a Middle to Late Woodland-period occupation. It exhibits two sets of two parallel lines of comb-stamping on a smoothed exterior surface (see Figure 12). The remaining body sherds include two with both surfaces exfoliated, two with both surfaces smoothed, and one with one surface exfoliated and no surface treatment on the other side. These remaining body sherds, based on their thickness, would be consistent with the Havana-Related complex.

Lithic Analysis

One unfinished projectile point (Figure 13), 13 pieces of lithic flaking debris, 11 pieces of lithic shatter, 1 piece of tested raw material, and 9 pieces of FCR were recovered from 21CH0126.

Morphology

It appears that the unfinished projectile point is incompletely worked due to the fashioning of it having been abandoned. The lithic flaking debris includes tertiary flakes (8), one secondary flake, and primary flakes (3). One of the secondary flakes has been utilized.



FIGURE 12. DECORATED CERAMIC SHERDS, 21CH0126

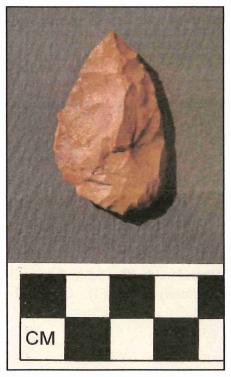


FIGURE 13. INCOMPLETE PROJECTILE POINT, 21 CH0126

Raw-Material Type

The projectile point is of heat-treated Tongue River silica, a minor raw material available in the area of the TH 8 Improvement Project. The flaking debris is of Galena chert (5), Tongue River silica (4), Prairie du Chien chert (3), Cedar Valley chert (2), quartz (2), Swan River chert (2), Burlington chert (1), Gunflint silica (1), indeterminate cherts (3), and indeterminate materials (2). Of these, Burlington chert is the only material whose source is of substantial distance; it includes extreme southeastern Iowa, parts of western Illinois, and parts of northwestern to west-central Missouri (Bakken 1995, 2011; Meyers 1970; Ives 1975, 1984; Morrow 1984, 1994).

Faunal Analysis

One small, indeterminate mammal bone fragment was recovered from 21CH0126.

Synthesis

Site 21CH0126 is an intact artifact scatter representing a precontact habitation site dating to the Middle Woodland and possibly into the Late Woodland. Diagnostic artifacts include St. Croix Stamped and Havana-Related pottery. The presence of Burlington chert indicates a connection to raw-material sources several hundred kilometers to the south and southeast.

Recommendations

Based on an absence of archaeological resources, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in that portion of Area U located to the west of Iris Avenue.

Site 21CH0126 is an intact archaeological site containing diagnostic artifacts that associate it with the historic contexts *The Havana-Related Complex: Howard Lake Phase* and *The Central Minnesota Transitional Woodland Complex*, as would be needed for the site to significant under NRHP Criterion A. This association, combined with the fairly high artifact density and evidence for potential features at the site in the form of fire-cracked rock, suggests that it may be able to address important research questions as would be required for the site to be significant under NRHP Criterion D. For these reasons, it is recommended that 21CH0126 is potentially eligible for listing in the NRHP. It is therefore further recommended that construction avoid this site. If the site cannot be avoided, a Phase II evaluation of the site is recommended to determine its eligibility for listing in the NRHP.

AREA V

Area V is located approximately 275 ft. east-northeast of Area U (see Figure 2). Area V consists of a low rise located approximately 500 ft. east-northeast of Comfort Lake and 800 ft. north of Little Comfort Lake. Based on its relative topographic prominence and its proximity to the lakes and 21CH0126, it was considered to have moderate to high potential for containing precontact archaeological resources.

The rise was covered in hay at the time of the survey, which eliminated surface visibility and dictated the use of shovel testing. It accommodated a single east-west transect of seven shovel tests spaced 15 m (49 ft.) apart. Soils within these shovel tests were consistent in profile, consisting of a dark grayish brown (10YR 4/2) silt loam plowzone ranging from 22 to 49 cm deep either resting directly over the subsoil, a yellowish brown to light yellowish brown (10YR 5/4 to 6/4) clay encountered anywhere between 22 and 27 cmbs, or separated from it by a brown to yellowish brown (10YR 5/3 to 5/4) silty sand ranging, in which cases the subsoil was encountered anywhere between 36 and 82 cmbs. All shovel tests were negative for cultural materials.

Recommendations

Based on the absence of archaeological resources in this location, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area V.

AREA W

Area W is located south of TH 8 just west of its intersection with Iris Avenue and opposite Area U (see Figure 2). It consists of a portion of the shore of Little Comfort Lake, which is fairly low on the south and gradually but slightly rises in elevation to the north. Based on its topographic relationship and proximity to the lake, Area W was considered to have high potential for containing precontact archaeological resources.

Area W was within a manicured lawn at the time of the survey, and surface visibility was poor; therefore, shovel testing was conducted in this location. Two parallel transects, each containing four shovel tests at 15-m (49-ft.) intervals, were established 20 m (66 ft.) apart, one following the lakeshore and one paralleling the highest portion of the landform, as was one additional shovel test to the west of an existing access drive. Seven of the shovel tests within the two transects were excavated and found to contain predominantly wet silts and gleys, which are indicative of wetlands and low archaeological potential, while the shovel test to the west of the access drive was heavily disturbed and consisted of fill layers. Based on the results of these shovel tests, all of which were negative for cultural materials, the final shovel test in this area was abandoned.

Recommendations

Based on the absence of archaeological resources in this location, as well as its inundated and/or disturbed nature, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area W.

AREA X

Area X is located at the southeast corner of the intersection of TH 8 with Jennifer Court (see Figure 2). Situated on an upper terrace overlooking Green Lake from a distance of approximately 400 ft., Area X was considered to have high potential for containing

precontact archaeological resources, based on its relative topographic prominence and proximity to the lake.

At the time of the survey, Area X was covered by a manicured lawn that eliminated surface visibility; therefore, shovel testing was employed in this area. Prior to shovel testing, the landowner informed Two Pines that a barn had formerly been located on the terrace, associated with the Glye/Glyer farmstead (see below). A single, roughly southwest-northeast running transect of 10 shovel tests spaced 15 m (49 ft.) apart was established along the southeast edge of the terrace, which was closest to the lake and therefore held the highest potential for containing precontact archaeological sites. Ranging from 4 to 15 m (13 to 49 ft.) northwest of this transect was a berm marking where the Glye/Glyer barn had been. Soil profiles within the shovel tests were inconsistent. Although all shovel tests began with a very dark grayish brown to dark grayish brown (10YR 3/2 to 4/2) silt loam, this topsoil was underlain in two cases by subsoil, a light yellowish brown (10YR 6/4) clay encountered between 28 and 39 cmbs; in two cases by a mottled transition or transitions overlying subsoil, the latter encountered between 25 to 47 cmbs; in one case by a 10-cm-thick dark yellowish brown (10YR 4/4) silty sand with gravels that overlay subsoil, reached at 30 cmbs; and in the remaining five cases by what appeared as a somewhat intact profile, consisting of a direct or mottled transition to a brown (10YR 5/3) silty sand that overlay the subsoil.

The southwestern five shovel tests produced historical-period artifacts associated with the Glye/Glyer farmstead, which is addressed in the Farmsteads section, below. One shovel test in the northeastern half of the transect produced what appeared as a possible piece of FCR or shatter from within the topsoil, but bracketing shovel tests in the cardinal directions from this shovel test were negative for cultural materials. Because no evidence was found to support the identity of this piece as cultural or pre-modern, it was not designated as an archaeological site.

Recommendations

Based on the absence of precontact archaeological resources and the disturbance that was caused by the former presence of a barn in this location, and because the Glye/Glyer farmstead is recommended as not eligible for listing in the NRHP as an archaeological site (see Farmsteads, below), no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area X.

AREA Y

Area Y is located on the north side of TH 8, opposite the east end of Area D (see Figure 2). A rise situated between two medium-sized wetlands, Area Y was considered to have moderate potential for containing precontact archaeological resources, based on its relative topographic prominence and proximity to the wetlands, combined with the size of the wetlands.

A fallow field occupied Area Y at the time of the survey, which afforded poor surface visibility and therefore required shovel testing. A total of 22 shovel tests were excavated

at 15-m (49-ft.) intervals along three roughly east-west transects, two of which were set 15 m apart along the highest portion of the rise, and the other of which was 30 m to the north of the northern of these two transects, following the shoulder of the rise above the wetland to the north. Soils in all of the shovel tests were fairly consistent in profile, the majority exhibiting a dark grayish brown to brown (10YR 4/2 to 4/3) silt loam, 23 to 38 cm deep, over a yellowish brown (10YR 5/4) to light yellowish brown (10YR 6/4) silty sand averaging 17 cm in thickness, which in turn rested upon subsoil, a dark yellowish brown (10YR 4/4) to light yellowish brown clay. Three shovel tests produced fragments of colorless curved glass from between 0 and 38 cmbs; otherwise no cultural materials were found.

Recommendations

Because only three non-diagnostic and likely modern fragments of glass were identified in this location, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area Y.

AREA Z

Area Z is located just southwest of Area X, to the southeast of TH 8 (see Figure 2). Located on the same terrace as Area X, it was also considered to have high potential for containing precontact archaeological resources.

At the time of the survey, Area Z appeared as the only intact location within a former pasture area surrounded by an excavated watering hole, rock piles, push piles, and dumped materials. Due to poor surface visibility, this small area was subject to shovel testing, accommodating three shovel tests at 15-m (49-ft.) intervals along a single transect that paralleled the edge of the terrace. Soil profiles were consistent, containing a very dark grayish brown to dark grayish brown (10YR 3/2 to 4/2) silt loam to sandy silt Ap horizon, 25 to 38 cm deep, over a brown to yellowish brown (10YR 5/3 to 5/4) silty sand, 25 to 42 cm thick, over yellowish brown clay subsoil. All shovel tests were negative for cultural materials.

Recommendations

Based on the absence of archaeological resources in this location, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area Z.

AREA AA

Area AA is located on the southeast side of TH 8, approximately 925 ft. northeast of its intersection with James Avenue and just southwest of Area Z (see Figure 2). It is located on an upper terrace overlooking Green Lake, and it is approximately 400 ft. west of the lakebed and wetlands associated with the lake. Based on its proximity and topographic relationship to the lake, it was considered to have moderate to high potential for containing precontact archaeological resources.

At the time of the survey, Area AA was within the manicured lawn of a residential yard that afforded no surface visibility. Shovel testing was therefore conducted in this location. Two nearly north-south running transects were established, one on either side of an existing house. The western transect contained five shovel tests spaced at a 15-m (49-ft.) interval, the first four running generally north to south, and the fifth located 15 m west of the southernmost test to follow the terrace. These shovel tests varied substantially in profile, and the presence of mixed and displaced soils, as well as modern debris that included Styrofoam, colorless and green bottle glass, red plastic fragments, and a piece of barbed wire, suggested that soils had been recently deposited in this area. No other cultural materials were encountered in this transect.

The eastern transect, consisted of two shovel tests spaced 25 m (82 ft.) apart to avoid large oak trees surrounding a concrete pad, per the request of the landowner. The southern test appeared disturbed, containing gravels throughout a soil profile consisting of a 30-cm-deep, brown (10YR 4/3) silt loam over a light brownish gray (10YR 6/2) compact sandy silt that rested on a pale brown (10YR 6/3) silty clay. The northern test, beneath a 15-cm-deep, very dark grayish brown (10YR 3/2), silt loam, was wet, with a light gray (10YR 7/2) wet sand with oxidation overlying a light greenish gray (Gley 1, 10Y 8/1) gley, reached at 65 cmbs. These two tests were negative for cultural materials.

Recommendations

Because only modern debris was present in this location, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area AA.

AREA BB

Area BB is located on the west side of TH 8, approximately 500 ft. north-northeast of Jocelyn Court (see Figure 2). It is situated on a ridge adjacent to a slope down to the south shore of Lake Ellen. Based on its relative topographic prominence and proximity to the lake, it was considered to have high potential for containing precontact archaeological resources.

Area BB was wooded at the time of the survey, and because the understory limited surface visibility, shovel testing was employed to survey this area. A total of 14 shovel tests were established at 15-m (49-ft.) intervals along three transects spaced 10 to 18 m (33 to 59 ft.) apart, depending on slopes, trees, and other such conditions. Within these shovel tests, soils were intact, with profiles typically consisting of a very dark gray to very dark grayish brown (10YR 3/1 to 3/2), silt loam A horizon averaging 22 cmbs over one or two brown to pale brown (10YR 4/3 to 6/3) silt loam, sandy silt, or silty sand B horizons that overlay subsoil, a brown to yellowish brown (10YR 5/3 to 5/4) clay with oxidation, encountered at an average depth of 40 cmbs.

One shovel test produced one piece of FCR from within the A or B horizon at a depth between 10 and 25 cmbs, but no other cultural materials were encountered. Subsequently, therefore, bracketing shovel tests were excavated 10 m to the west, east,

and south of the shovel test to assess whether additional cultural materials might be present. A bracketing shovel test was not excavated to the north, as an initial shovel test had already been excavated in that location. The bracketing shovel tests, which also contained intact soils, were negative. Because no other cultural materials were identified, and the FCR could not be culturally or temporally associated, no additional shovel testing was conducted.

Recommendations

Based on the absence of archaeological resources in this location, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area BB.

AREA CC

Area CC is located southeast of TH 8, east of its intersection with James Avenue (see Figure 2). It is situated within a series of terraces and former shoreline ridges overlooking Green Lake and adjacent to wetlands associated with the lake. Based on its topographic relationship and proximity to the wetlands/lake, Area CC was considered to have high potential for containing precontact archaeological resources.

Area CC, at the time of the survey consisted of a vacant, largely natural area through which a paved driveway and several ATV trails ran and which was bound on the west by a transmission corridor. Although Area CC was covered in grasses and other vegetation that hampered surface visibility, the ATV trails provided limited areas of exposure. During the initial walkover, a lithic flake (Find Spot [FS] 1) was observed within one of the trails. Based, however, on the otherwise poor surface visibility within Area CC, shovel testing was conducted in this location. Initially, three transects were established in Area CC, two on the uppermost terrace and one following the intermediate terrace on which FS 1 was located and continuing on to an adjacent intermediate terrace to the west.

The transects on the uppermost terrace were spaced 10 m (33 ft.) apart, and each contained three shovel tests at 15-m (49-ft.) intervals. The majority of these shovel tests exhibited a dark grayish brown to brown (10YR 4/2 to 4/3) silt loam with gravels, averaging 29 cm in depth. In three cases, the silt loam overlay a mottled transition to the next horizon, consisting in one test of a pale brown (10YR 6/3) sandy silt with gravels, which was encountered at 36 cmbs and overlay a yellowish brown (10YR 5/4) loamy clay with gravels subsoil, reached at 52 cmbs; in the second of a dark yellowish brown (10YR 4/4) silty sand with gravels, which was encountered at 39 cmbs and extended to 50 cmbs, where a light yellowish brown (10YR 6/4) silty sand with gravels was reached; and in the third of a yellowish brown (10YR 5/4) sand with gravels, extending from 54 to 100 cmbs. Combinations of similar soils were present beneath the upper horizon in the remaining three shovel tests. All of the shovel tests located in the upper terrace were negative for cultural materials.

Eight shovel tests spaced 15 m apart were established within the transect on the intermediate terraces, four on the terrace containing FS 1, and four on the terrace to the

east. The shovel tests on the eastern terrace were the same in profile, each containing a very dark grayish brown (10YR 3/2) loam with gravels, 15 to 30 cm deep, over a 15-to-22-cm-thick horizon of brown (10YR 5/3) silty clay loam with gravels, which rested upon subsoil, a pale brown (10YR 6/3) silty clay with gravels. These four tests were negative for cultural materials.

The four shovel tests on the western terrace exhibited intact, though slightly varying soil profiles. The profile of the two eastern tests consisted of a dark grayish brown silt loam horizon, 33 to 56 cm deep, over a 23-to-27-cm-thick, brown, silty sand horizon that rested upon a brown to pale brown sand horizon, which in one case was found to be situated over a light gray (10YR 7/2) sand with oxidation. The profile of the two western tests began with a dark brown (10YR 3/3) silt loam horizon, 27 to 32 cm deep, then transitioned to a 16-to-43-cm-thick, dark yellowish brown silty loam to silty sand horizon, which directly overlay a light yellowish brown sand horizon or was separated from it by a 33-cm-thick yellowish brown silty sand. Three of the four shovel tests produced precontact artifacts that, along with the find spot, led to the designation of 21CH0127.

21CH0127

Site 21CH0127 is an artifact scatter situated within an intermediate terrace and adjacent to wetlands associated with Green Lake (Figure 14; see Figure 2). Four initial shovel tests, STs 12, 13, 7, and 15, within a single transect yielded artifacts from between 0 and 100 cmbs, many of which were within intact soil horizons.

As several negative shovel tests had already been excavated at 15-m intervals east from the easternmost positive shovel test (ST 12), and these demonstrated that the site did not extend to the intermediate terrace to the east, shovel testing to define the boundaries of the site occurred to the north, south, and west. Based on coverage needed to define the site within Area CC and the well-defined nature of the terraces, delineation of the site limits began with the establishment of two additional east-west running transects, one 15 m to the north and one 15 m to the south of the original transect, as well as the excavation of shovel tests 15 and 30 m west of the westernmost positive shovel test, ST 7.

The transect 15 m to the south of the original transect was located within a lower terrace, and soils in the shovel tests within this transect reflected their proximity to the wetland to the south of the site. These generally included a very dark gray to very dark grayish brown (10YR 3/1 to 3/2) silt loam topsoil, 32 to 34 cm deep, over one to three layers of sand to silty sand ranging in color from dark grayish brown to light yellowish brown (10YR 4/2 to 2.5Y 6/3), which became increasingly wet with depth, the water table being present at approximately 100 cmbs. These shovel tests were all negative for cultural materials, indicating that the site did not extend to the lower terrace, which was unsurprising given that it was likely frequently inundated in the past when the lake levels were higher.

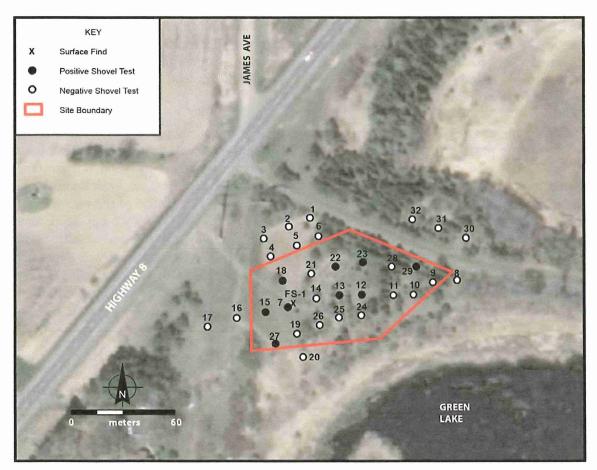


FIGURE 14. SITE MAP, 21CH0127

For the most part, shovel tests located on the same terrace as the positive shovel tests, which constituted the transect to the north and the shovel tests to the west, exhibited intact horizons with soils similar to those observed in the original transect. Exceptions included the westernmost shovel test, which was situated within and had apparently been disturbed during the creation of the corridor, as indicated by the presence of 62 cm of fill and displaced soils over coarse sand, and the central shovel test in the northern transect, which was near the base of a ridge marking a transition to the upper terrace. This ridge, although largely natural, did appear somewhat abrupt in places, suggesting that some past modification may have occurred in its vicinity.

Four more positive shovel tests occurred on the terrace, the extent of which was therefore determined to correspond to the extent of the site. Although the terrace, and therefore the site, may have possibly once extended farther to the west, it appears to have been truncated by the creation of the transmission line corridor, which is supported by an artificial ridge paralleling the east side of the corridor, and the disturbance evident in the shovel test within the corridor.

Ceramic Analysis

Six body sherds were recovered from 21CH0127, from STs 7 (4) and 13 (2). Those with decoration evident include one with smoothed-over, multi-directional, fine cordmarking on the exterior and a smoothed buff interior; one with smoothed-over, multi-directional cordmarking on the exterior and no surface treatment on the interior; and one with smoothed-over, finely parallel cordmarking on a buff exterior and a smoothed interior. The remaining sherds have only smoothed surfaces.

The ceramics are of varying ranges of thickness, which correspond to two different levels of excavation: 0 to 70 cmbs and 70-100 cmbs. The upper ceramics, which are thinner, are consistent with Late Woodland ceramics, while the lower ceramics, which are thicker, appear to be from the Middle Woodland period.

Lithic Analysis

One scraper, two pieces of lithic flaking debris, one piece of lithic shatter, one raw-material sample, and 11 pieces of FCR were recovered from 21CH0127.

Morphology

The shape of and use-wear evident on the scraper suggest that it was a thumb scraper. The pieces of lithic flaking debris are tertiary flakes.

Raw-Material Type

The scraper is quartz, as is the raw-material sample recovered from 21CH0127. Raw-material types of the lithic flaking debris include Cedar Valley chert, quartz, and Tongue River silica, all of which could have been locally obtained.

Synthesis

Site 21CH0127 is an intact artifact scatter representing a precontact, multi-component habitation site. Diagnostic artifacts include ceramics dateable to the general Middle and Late Woodland periods, and the presence of FCR suggests the potential for features to be present.

Recommendations

Site 21CH0127 is an intact, multi-component, precontact archaeological site containing diagnostic artifacts that associate it with the Middle and Late Woodland periods, as would be needed for the site to be significant under NRHP Criterion A. This association, combined with the evidence for potential features at the site, suggests that it may be able to address important research questions as would be required for the site to be significant under NRHP Criterion D. For these reasons, it is recommended that 21CH0127 is potentially eligible for listing in the NRHP. It is therefore further recommended that construction avoid this site. If the site cannot be avoided, a Phase II evaluation of the site is recommended to determine its eligibility for listing in the NRHP.

AREA DD

Area DD is located southeast of TH 8, southwest of Area CC (see Figure 2). It consists of a portion of a high ridge that parallels the edge of wetlands associated with Green Lake at a distance of approximately 75 ft. Based on its topographic prominence and proximity to the wetlands/lake, Area DD was considered to have high potential for containing precontact archaeological resources.

At the time of the survey, the ridge was wooded, and although surface visibility was good, exposure was poor; therefore, shovel testing was conducted in this location. A single north-south transect was established, with five shovel tests spaced at 15-m (49-ft.) intervals to follow the crest of the ridge to the south edge of the Study Area. These shovel tests exhibited the same, shallow soil profile, consisting of a dark grayish brown (10YR 4/2) silt loam with a maximum depth of 23 cmbs over a brown (10YR 5/3) silty clay loam that extended to between 30 and 44 cmbs, at which point the subsoil, a yellowish brown (10YR 5/4 to 5/6) clayey glacial till was reached. No artifacts were encountered in any of the shovel tests.

Recommendations

Based on the absence of archaeological resources in this location, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area DD.

AREA EE

Area EE is located west-northwest of TH 8, opposite Area CC, which contained 21CH0127 (see Figure 2). It is located within a rolling landscape approximately 300 ft. west of wetlands associated with Green Lake. Based on its proximity to the wetlands, lake, and site, it was considered to have moderate to high potential for containing precontact archaeological resources.

At the time of the survey, Area EE consisted of a plowed field affording better than 90 percent surface visibility. It was therefore pedestrian surveyed, using an interval of 15 m (49 ft.). No cultural materials were encountered during the survey.

Recommendations

Based on the absence of archaeological resources in this location, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in Area EE.

FARMSTEADS

Rahm and Gardner Farmsteads

The Rahm farmstead was formerly located in an area on the west side of TH 8, in the NE ¹/₄ of the SE ¹/₄ of the NE ¹/₄, Section 5, and the Gardner farmstead in an area on the west side of TH 8, in the NW ¹/₄ of the SW ¹/₄ of the NW ¹/₄, Section 4, T32N, R21W, both

south of the intersection of TH 8 with Goodview Circle (see Figure 2). A visual inspection of both former farmstead locations indicated that no remnants of either farmstead remain, and their locations are now occupied by wetlands that may have been created through modifications to the Sunrise River and nearby commercial development.

Research Potential

Property Type: The Rahm and Gardner farmsteads, although likely farmsteads based on the acreage of the property owned by Rahm and Gardner in 1901 and the largely agricultural nature of Chisago County at that time, cannot be confirmed as such. If these potential farmsteads functioned as such, they would be associated with the context *Industrialization and Prosperity*, 1900-1920, and likely *Diversification and the Rise of Dairying*, 1875-1900.

Site Status: No farmstead remnants are present at these locations, which therefore have no research potential.

Recommendations

Because farmstead archaeological resources are not present, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in relation to the former Rahm or Gardner farmstead.

Simmons/Munn/Palmer Farmstead

The Simmons/Munn/Palmer farmstead was formerly located in an area on the east side of TH 8, in the SE ¼ of the SE /14 of the SW ¼, Section 33, T33N, R21W, south of Greenway Lane (see Figure 2). A visual inspection of the former farmstead location revealed that no remnants of the farmstead remain, and its location has been residentially developed.

Research Potential

Property Type: The Simmons/Munn/Palmer farmstead is a confirmed farmstead that was occupied and in use from at least 1888 into the 1970s, which would associate it with several historic contexts established for farmsteads in Minnesota.

Site Status: No vestiges of the farmstead are present at this location, which therefore has no research potential.

Recommendations

Because farmstead archaeological resources are not present, no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project in relation to the former Simmons/Munn/Palmer farmstead.

Tolzmann Farmstead

The Tolzmann farmstead is located on the south side of TH 8, in the NE ¼ of the NW ¼ of the SE ¼, Section 33, T33N, R21W, west of Hamlet Avenue (see Figure 2).

A walkover of the farmstead to identify above-ground and potential subsurface features associated with its pre-1960 occupation was conducted at 5-m (16-ft.) intervals over the entire farmstead. During this survey, standing buildings were observed within the Study Area, as was a single small depression and several discrete trash dumps. The buildings include the farmhouse, barn, and three outbuildings that have been connected. It is not known whether the three outbuildings were originally used for agricultural purposes, but at least one of them was at some point used for the ornamental iron works. The outbuildings, along with the barn, were constructed sometime between 1957 and 1965, while the house was moved to its current location from a site near Forest Lake in 1953 (Zellie and Lucas 2010:A-64). A shovel test was excavated into the depression, located within two rows of trees that form a windbreak, which revealed intact soil horizons and produced only a fence staple, which was not collected.

Research Potential

Property Type: The Tolzmann farmstead is a confirmed farmstead. Based on historical documentation, the farmhouse has been present since at least as early as 1953, while the outbuildings were constructed sometime between 1957 and 1965. The property is additionally the site of a former ornamental iron works.

Site Status: The farmstead is extant and occupied, but it is no longer operational, which would suggest moderate research potential.

Structural Remains: The farmhouse and barn are standing. Additional research would be needed to determine whether the other outbuildings were originally built for agricultural purposes, but insomuch as these were built at the same time as the house and barn, i.e., they were not built in a fashion that would have disturbed the farmstead components, the structural remains suggest that the farmstead site has high research potential.

Condition of the Farmstead Site: The farmstead site contains all extant structures that constitute most of those present on the 1965 aerial photograph, suggesting that it has high research potential.

Identify Portion of Farm within the Study Area: The entire farmstead is within the Study Area, indicating that the portion of the farm within the Study Area would contain any areas with high research potential.

Artifact Contexts: Discrete trash dumps are present on the property, which appear to contain primarily large discards of metal items, but these are overgrown with vegetation and could therefore not be fully assessed. Beyond the single shovel test excavated in the windbreak, no subsurface testing was conducted.

Recommendations

Based on its anticipated high research potential as a farmstead site with a tight temporal context, the Tolzmann farmstead is recommended as potentially eligible for listing in the NRHP. For this reason, it is designated as an archaeological site, 21CH0128. It is

additionally recommended that the site is potentially eligible as a cottage-industrial site in relation to the ornamental iron works.

Christensen/Case Farmstead

The Christensen/Case farmstead is situated on the south side of TH 8 in the NW ¼ of the SW ¼ of the NW ¼, Section 34, T33N, R21W, at the intersection of TH 8 with Hazel Avenue (see Figure 2). The farmstead is currently occupied, but no longer functions as such. Extant buildings range in date from ca. 1900 to the modern era.

A walkover of the farmstead was conducted over the entire farmstead in 5-m (16-ft.) intervals to identify any above-ground or potential subsurface features associated with the pre-1960 occupation of the farmstead. This survey identified the farmhouse, the silo base, two likely modern sheds, and a garage. During the survey, the current property owner informed Two Pines that several years ago, he had the barn and many other outbuildings removed and the foundations bulldozed.

Research Potential

Property Type: The Christensen/Case farmstead is a confirmed farmstead. Based on historical documentation, this farmstead has been present since at least as early as 1936, which would associate it with at least three historic contexts established for farmsteads in Minnesota.

Site Status: Portions of the farmstead are extant, but much of it has been heavily altered by the removal of many of its components, most notably the barn, which suggests that the farmstead holds low research potential.

Recommendations

Based on its anticipated low research potential, the Christensen/Case farmstead is recommended as not eligible for listing in the NRHP. It is therefore recommended that no archaeological work is necessary in relation to the farmstead prior to or during construction for the TH 8 Improvement Project.

Peterson/Westphal Farmstead

The Peterson/Westphal farmstead is located on the west side of Hazel Avenue, north of its intersection with TH 8, in the SW ¼ of the NW ¼ of the NW ¼, Section 34, T33N, R21W, (see Figure 2).

The farmstead was surveyed in 5-m (16-ft.) intervals to identify any above-ground or potential subsurface features associated with the pre-1960 occupation of the farmstead. The farmhouse and barn were identified, as was a modern garage. During the survey, the current property owner informed Two Pines that the garage is in the location of the former milkhouse. No other buildings or features were encountered.

Research Potential

Property Type: The Peterson/Westphal farmstead is a confirmed farmstead. Based on historical documentation, this farmstead has been present since at least as early as 1936, which would associate it with at least three historic contexts established for farmsteads in Minnesota.

Site Status: The farmhouse and barn are extant, but any other outbuildings have been removed, and no evidence for associated archaeological features or artifact deposits is present, which indicates that the farmstead has low research potential.

Recommendations

Based on its anticipated low research potential, the Peterson/Westphal farmstead is recommended as not eligible for listing in the NRHP. It is therefore recommended that no archaeological work is necessary in relation to the farmstead prior to or during construction for the TH 8 Improvement Project.

Strom Farmstead

The Strom farmstead is situated on the east side of TH 8 near the southernmost portion of Green Lake, in the NE ¼ of the SE ¼ of the SW ¼ and in the NW ¼ of the SW ¼ of the SE ¼, Section 23, T33N, R21W (see Figure 2).

A walkover of the farmstead to identify above-ground and potential subsurface features associated with its pre-1960 occupation was conducted at 5-m (16-ft.) intervals over the entire farmstead. During this survey, standing buildings and structures were observed within the Study Area, ranging in date from ca. 1900 to 2005 (Zellie and Lucas 2010:A-72). These include a large, modern house occupying the location of the original house, a barn complex, two Quonset sheds, three grain storage tanks, a small shed, and a large rectangular outbuilding/garage. Additionally, a ceramic fragment bearing a transfer print was located on the ground surface approximately 13 m (43 ft.) north-northeast of the house. A shovel test placed in the location of this discovery exhibited a highly disturbed profile, consisting of fill over subsoil. No evidence of archaeological features was observed during the walkover or within the shovel test.

Research Potential

Property Type: The Strom farmstead is a confirmed farmstead. Historical documentation indicates that it has been present since at least as early as 1888, which would associate it with several historic contexts established for farmsteads in Minnesota.

Site Status: The Strom farmstead is extant and operational, which would suggest moderate research potential.

Structural remains: The farmhouse is less than 50 years in age, and it occupies the location of and surrounding the original farmhouse. The footprint of the building and the disturbance that would have resulted from its construction has likely obscured/destroyed

any area that would contain a domestic archaeological component at the farmstead. This possibility is supported by the observation of a late nineteenth-century artifact on the surface of an area occupied by fill. The farmstead, therefore, likely has low research potential. Without any other archaeological features or deposits, the research potential of the remainder of the farmstead has likely been exhausted by the Phase I survey.

Recommendations

Based on the disturbance that has occurred to the domestic area of the farmstead and the anticipated low research potential of the entire farmstead, the Strom farmstead is recommended as not eligible for listing in the NRHP. It is therefore recommended that no archaeological work is necessary in relation to the farmstead prior to or during construction for the TH 8 Improvement Project.

Palmquist/Conklin Farmstead

The Palmquist/Conklin farmstead is located on the west side of TH 8 opposite the Strom farmstead, in the SE ¼ of the NE ¼ of the SW ¼, Section 23, T33N, R21W (see Figure 2).

A walkover was conducted in 5-m (16-ft.) intervals over the entire farmstead to identify any above-ground or potential subsurface features, during which both extant buildings and foundations were encountered. Based on cornerstones on the house and barn, buildings on the property were put there between 1905 and 2004 and include the house, a privy, and a small shed. At the time of the Phase I survey, a replacement barn with a 2004 cornerstone was being constructed on the property, but it is not in the location of the original barn, which has been demolished. Near the location of the original barn is the base of the silo, which now holds a picnic table and fire pit. The silo is adjacent to a wooded area where the original barn once stood. This area contains a substantial amount of demolition debris, but artifacts related to the activities at the barn, such as milking equipment and an oil lamp, were also observed. Portions of the barn foundation were observed intact where it was not covered by the debris or dirt.

Research Potential

Property Type: The Palmquist/Conklin farmstead is a confirmed farmstead. Historical documentation indicates that it has been present since at least as early as 1938, although the 1905 cornerstone on the house suggest that it was established nearer that time. It would, therefore, be associated with several historic contexts established for farmsteads in Minnesota.

Site Status: The Palmquist/Conklin farmstead is partially extant, in that it includes both standing buildings and foundations, which would indicate moderate research potential.

Structural Remains: The farmhouse is standing, as are the privy and a small shed outbuilding. The foundations of the barn and a silo are visible. These conditions are indicative of high research potential.

Condition of the Farmstead Site: The farmstead contains both extant buildings and intact foundations, indicating high research potential.

Identify Portion of Farm within the Study Area: The entire farmstead is within the Study Area, indicating that the portion of the farm within the Study Area would contain any areas with high research potential.

Artifact Contexts: Sheet refuse is present in the vicinity of the former barn, suggesting that the farmstead has high research potential.

Recommendations

Based on its anticipated high research potential, the Palmquist/Conklin farmstead is recommended as potentially eligible for listing in the NRHP. For this reason, it is designated as an archaeological site, 21CH0129.

Glye/Glyer Farmstead

The Glye/Glyer farmstead is on the east-southeast side of TH 8, south of its intersection with Jennifer Court, in the SE ¼ of the NE ¼ of the NE ¼, Section 23, T33N, R21W (see Figure 2).

A walkover of the farmstead in 5-m (16-ft.) intervals to identify above-ground and potential subsurface features found the house, an outbuilding that is now used as a garage, and a silo base. The extant buildings appear to date to the early-to-mid twentieth century. A rectangular berm marking the location of the barn was also noted. A local resident informed Two Pines that the barn had a basement, into which the foundation and other demolition materials were pushed when the barn was razed. A large push pile marked what another resident indicated was the location of indicated a former horse barn that was destroyed in a fire. This building appears on a fairly recent aerial photograph.

A transect of shovel tests was excavated south of the barn, based on the precontact potential of the area (see Area X, above). Although occasional historical-period artifacts were encountered during this testing, including some ceramic fragments, glass fragments, and demolition debris, overall the soils in this transect were inconsistent, indicating disturbance.

Research Potential

Property Type: The Glye/Glyer farmstead is a confirmed farmstead. Historical documentation indicates that it has been present since at least as early as 1888, which would associate it with several historic contexts established for farmsteads in Minnesota.

Site Status: A small portion of the farmstead is extant, but it no longer functions as such. Remnants of the farm are, for the most part, no longer visible. These conditions suggest, at best, that the farmstead would hold moderate research potential.

Structural remains: The farmhouse is present, but the main barn and the majority of the other elements of the farmstead have been removed and their locations substantially disturbed, so that no vestiges of any former buildings or structures beyond the current garage and the silo base remain. The Glye/Glyer farmstead would therefore likely have low research potential.

Recommendations

Based on its anticipated low research potential, the Glye/Glyer farmstead is recommended as not eligible for listing in the NRHP. It is therefore recommended that no archaeological work is necessary in relation to the farmstead prior to or during construction for the TH 8 Improvement Project.

Wallmark/Carlson/Lindberg Farmstead

The Wallmark/Carlson/Lindberg farmstead is on the east side of TH 8 in the NW ¼ of the NE ¼ of the NW ¼, Section 13, T33N, R21W (see Figure 2).

A walkover of the farmstead to identify above-ground and potential subsurface features associated with its pre-1960 occupation was conducted at 5-m (16-ft.) intervals over the entire portion of the farmstead within the Study Area. During this survey, standing buildings were observed within the Study Area, with the exception of one small depression located on the west side of the house. These buildings date between ca. 1902 and ca. 1950 (Zellie and Lucas 2010:37) and include the farmhouse, barn, and a small shed, as well as two Quonset sheds, one of which is only partially within the Study Area.

A shovel test excavated into the depression quickly demonstrated that it marked the former location of a tree, as it contained remnants of a stump.

Research Potential

Property Type: The Wallmark/Carlson/Lindberg farmstead is a confirmed farmstead. Based on historical documentation, this farmstead has been occupied and in use since the late 1800s, which would associate it with several historic contexts established for farmsteads in Minnesota.

Site Status: The farmstead is not occupied, but it is extant, which suggests that it holds high research potential.

Structural Remains: The farmhouse, barn, and other outbuildings from the period of significance are standing, suggesting that the farmstead holds high research potential.

Condition of the Farmstead Site: The farmstead contains extant structures dating to the period of significance, which is indicative of high research potential.

Identify Portion of the Farm Within the Study Area: Nearly the entire farmstead, including the house and barn, are within the Study Area; therefore, the portion of the

farmstead within the Study Area would contain those locations with high research potential.

Artifact contexts: Beyond the shovel test excavated into the depression as described above, no subsurface testing was conducted at the farmstead; therefore, it is not known whether intact artifact deposits are present.

Recommendations

Based on its anticipated high research potential, the Wallmark/Carlson/Lindberg farmstead is recommended as potentially eligible for listing in the NRHP. For this reason, it is designated as an archaeological site, 21CH0130.

Bergquist/Daley/Gaudette Farmstead

The Bergquist/Daley/Gaudette farmstead is situated on the west side of Wyoming Trail, between Viking Boulevard on the north and Jeffrey Avenue on the south. It is in the NE ½ of the NW ¼, Section 13, T33N, R21W (see Figure 2).

A walkover of the entire farmstead was conducted at 5-m (16-ft.) intervals to identify above-ground archaeological resources and potential subsurface features associated with the pre-1960 occupation of the farmstead. The walkover identified several extant buildings and structures dating to the late nineteenth century, as well as several features. Two Pines spoke to one of the current residents, who had been recently visited by some of the former residents who had occupied the farmstead in the 1930s and informed as to the functions of the various buildings/structures and features, which were shared with Two Pines. The extant buildings and structures include the farmhouse, two outbuildings that have been converted to garages, a chicken house, a horse barn, and a root cellar. Features present include the foundation of the barn, the base of the silo, a stone arrangement in the location of the former ice house, a well cap, and an oval arrangement of concrete identified as a pool. The latter, however, appeared too small to function as a pool, and may have been a pond. Beyond these buildings to the west were trash dumps that included domestic artifacts, such as Fiesta ware, a bakelite toy, and silverware, although these were to some extent covered by tires deposited by an interim owner of the property. The current resident also indicated that previous digging in the yard near the house had turned up glass eggs used to induce chickens to lay and a pearl necklace, among other items.

Research Potential

Property Type: The Bergquist/Daley/Gaudette farmstead is a confirmed farmstead. Historical documentation indicates that the farmstead was present at least as early as 1938, but likely earlier, which would associate it with several historic contexts established for farmsteads in Minnesota.

Site Status: The Bergquist/Daley/Gaudette farmstead is extant and occupied, though not operational, which would indicate moderate research potential.

Structural Remains: The farmhouse and most of the outbuildings from the period of significance are standing. Those that are not standing include the icehouse and the barn, both of which are represented by intact features. These conditions are indicative of high research potential.

Condition of the Farmstead Site: The Bergquist/Daley/Gaudette farmstead site exhibits extant structures and intact foundations, which suggests that it has high research potential.

Identify Portion of Farm within the Study Area: The entire farmstead is within the Study Area; therefore, the portion of the farmstead within the Study Area would contain those locations with high research potential.

Artifact Contexts: Based on information provided by a current resident, intact sheet refuse exists near the house. In addition, it appears that information on the domestic lifeways of the farmstead's residents may be garnered through temporally diagnostic artifacts present within the trash dumps set back from the farmstead. The farmstead, therefore, is likely to have high research potential.

Recommendations

Based on its anticipated high research potential, the Bergquist/Daley/Gaudette farmstead is recommended as potentially eligible for listing in the NRHP. For this reason, it is designated as an archaeological site, 21CH0131.

Swenson Farmstead

The Swenson farmstead is located on the north and south sides of 284th Street, just east of the intersection of 284th Street with Viking Boulevard, in the SE ¼ of the NW ¼ of the SW ¼, Section 12, T33N, R21W (see Figure 2).

A walkover of the farmstead to identify above-ground and potential subsurface features associated with its pre-1960 occupation was conducted at 5-m (16-ft.) intervals over the entire farmstead. During this survey, extant buildings dating between ca. 1885 and the modern period were identified, including the farm house, a barn, a concrete-block garage, and a small shed outbuilding. Additionally, substantial foundations related to a potential second barn and other large outbuildings shown on historical aerial photographs, a collapsed building, and a water pump were encountered.

Research Potential

Property Type: The Swenson farmstead is a confirmed farmstead. Historical documentation indicates that it has been present since at least as early as 1888, which would associate it with several historic contexts established for farmsteads in Minnesota.

Site Status: While it appears that the house and garage, and potentially the barn, are currently occupied and operational, the remainder of the farmstead includes buildings that

have had their superstructures removed or, in one case, have collapsed. These conditions would indicate moderate to high research potential.

Structural Remains: The farmhouse and at least one barn from the period of significance is standing, while the ruins/foundations of a possible second barn and other outbuildings are visible, suggesting that the farmstead site has high research potential.

Condition of the Farmstead Site: The farmstead site contains extant structures and intact foundations, indicating that it has high research potential.

Identify Portion of Farm within the Study Area: The farmhouse and at least one agricultural building are within the Study Area, which suggests that the portion of the farmstead within the Study Area would contain some if not all of the locations with high research potential.

Artifact Contexts: No subsurface testing was conducted at the Swenson farmstead.

Recommendations

Based on its anticipated high research potential, the Swenson farmstead is recommended as potentially eligible for listing in the NRHP. For this reason, it is designated as an archaeological site, 21CH0132.

Dahl Farmstead

The Dahl farmstead is located on the west side of TH 8, just south of its intersection with Karmel Avenue, in the SE ½ of the SW ¼ of the SE ¼, Section 1, T33N, R21W (see Figure 2).

A walkover of the farmstead in 5-m (16-ft.) intervals to identify above-ground and potential subsurface features found that with the exception of the house, no evidence of the historical farmstead remains intact. Some portions of the former farmstead have been graded for gravel accesses, while other portions contain modern metal buildings. Still others appear to contain push piles and debris, likely related to the construction of these accesses and buildings.

Research Potential

Property Type: The Dahl farmstead is a confirmed farmstead. Based on historical documentation, the farmstead has been in existence since at least as early as 1888, which would associate it with several historic contexts established for farmsteads in Minnesota.

Site Status: With the exception of the house, no remnants of the farm are visible, and much of the site has been subject to earth-moving operations. The site is therefore considered to have low research potential.

Recommendations

Based on its anticipated low research potential, the Dahl farmstead is recommended as not eligible for listing in the NRHP. It is therefore recommended that no archaeological work is necessary in relation to the farmstead prior to or during construction for the TH 8 Improvement Project.

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21CH0128 (TOLZMANN FARMSTEAD) – PHASE II RESULTS

The Phase I survey identified 21CH0128, a former farmstead and subsequent ornamental iron works with occupations dating to the mid twentieth century. The site was recommended as potentially eligible based on its anticipated high research potential in relation to one or both operations and on the land-use history of the property, which suggested that any archaeological deposits present would be intact. Phase II archaeological fieldwork at 21CH0128 (Tolzmann Farmstead) for the TH 8 Improvement Project was conducted on May 23 and 27, 2011. Andrea Vermeer served as Principal Investigator and conducted the fieldwork with Jammi Ladwig, Eva Terrell, and Michelle Terrell.

SHOVEL TESTING

The Phase II field investigation commenced with shovel testing over the entire farmstead, which is defined on the north by the TH 8 right-of-way, on the west by agricultural fields, on the south by wetlands, and on the east by the property line (Figure 15). The purpose of the shovel testing was to identify any subsurface features or artifact deposits associated with the historical occupation of the property and to assess the locations where excavation units would be most likely to yield relevant information.

Thirty-seven shovel tests were established to create a generally 10-meter- (33-foot-) interval grid over the farmstead, though exceptions were made as needed to avoid extant buildings, a cesspool, and utility lines (see Figure 15). Soil profiles were largely consistent, supporting the intact nature of the property. Shovel tests typically exhibited a dark grayish brown (10YR 4/2) silt loam to depths ranging from 10 to 54 cm below the surface over 2 to 20 cm of brown (10YR 5/3) sandy silt, which rested upon subsoil, a yellowish brown (10YR 5/4) clay with variable amounts of cobbles, encountered at depths ranging from 23 to 59 cm below the surface. Variations from this profile include the presence of mixed rocky fill in proximity to the barn, and increased silts and sands with oxidation as shovel tests neared the wetlands at the south end of the farmstead.

Although soils were generally intact at 21CH0128, artifact density was low throughout the site, with 21 of the 37 shovel tests being negative for cultural materials, and few artifacts recovered from any single shovel test. Cultural materials encountered in the 16 positive shovel tests (see Figure 15) are largely non-diagnostic. Despite the presence of two milk glass jar liner fragments, which predate 1951, most are assumed to be relatively recent, as they are from deposits that include plastic and foil fragments, the majority of which were not collected. The 33 recovered artifacts include porcelain fragments (2), animal bone fragments (9), colorless window glass fragments (3), colorless curved glass fragments (2), milk glass jar liner fragments (ca. 1869-1950) (2), wire nail fragments (3), an indeterminate flat metal fragment, clay pigeon fragments (4), a plastic taillight fragment, indeterminate plastic fragments (5), and a paper label. Based on the low density and recent nature of the artifacts encountered in the shovel tests, no formal units were excavated at 21CH0128.

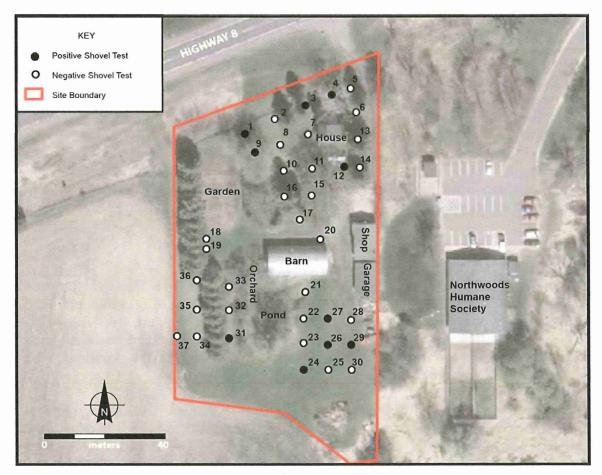


FIGURE 15. SITE MAP, 21CH0128

EVALUATION AND RECOMMENDATIONS

Significance

Site 21CH0128 is associated with a farmstead developed by the Tolzmann family sometime between 1957 and 1965, after which it became the site of the Tolzmann ornamental iron works. The archaeological deposits at the site are non-diagnostic and cannot be associated with either operation. The site therefore does not meet NRHP Criterion A.

No evidence could be found to suggest that Norman Tolzmann or any of his family members were historically significant with regard to agriculture. For this reason, 21CH0128 does not satisfy NRHP Criterion B.

Based on the low density and non-diagnostic nature of the artifacts present at 21CH0128, and given the absence of other significant archaeological features, the site would be unable to answer important research questions relevant to a historic context. The site therefore does not meet NRHP Criterion D.

Eligibility

Based on its lack of significance, 21CH0128 is recommended as not eligible for listing in the NRHP.

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21CH0129 (PALMQUIST/CONKLIN FARMSTEAD) – PHASE II RESULTS

The Phase I survey identified 21CH0129, a former farmstead dating from the early to late twentieth century. The site was recommended as potentially eligible based on its anticipated high research potential as indicated by sheet refuse and the presence of intact foundations, the latter also suggesting that any archaeological deposits present would be intact. Phase II archaeological fieldwork at 21CH0129 (Palmquist/Conklin Farmstead) for the TH 8 Improvement Project was conducted on June 1 and August 3-5, 2011. Andrea Vermeer served as Principal Investigator and conducted the fieldwork with Jammi Ladwig, Eva Terrell, and Michelle Terrell.

Prior to Phase II shovel testing, Two Pines was informed by the current property owner, Mr. Wayne Gartland, that he had conducted a significant amount of cleanup on the property since the completion of the Phase I survey there in August of 2010. A walkover of the property with Mr. Gartland found that few artifacts remained in the area of the original barn, and that foundation stones/concrete had been removed in a few areas. Mr. Gartland also pointed out to Two Pines an area in which bags of garbage had been buried by the previous property owner.

SHOVEL TESTING

The Phase II field investigation commenced with shovel testing over the entire farmstead, which was defined on the north by an area of recent trash burial and agricultural fields, on the west by the property line, on the south by the driveway, formerly a road, and on the east by a windbreak and TH 8 (Figure 16). The purpose of the shovel testing was to characterize any subsurface features or artifact deposits associated with the historical occupation of the property and to assess the locations where excavation units would be most likely to yield relevant information.

Twenty-eight shovel tests were established to create a generally 10-meter- (33-foot-) interval grid over the farmstead, though exceptions were made as needed to avoid extant buildings, a septic field, utility lines, a former driveway, and the area in which the trash bags were buried (see above), as these would have contained relatively recent discarded material (see Figure 16). Overall, soil profiles were consistent, supporting the intact nature of the property. The majority containing a very dark gray to dark brown (10YR 3/1 to 3/3) silt loam topsoil averaging 24 cm in depth situated over either a yellowish brown (10YR 5/4) silty sand or a mottled transition to the same. Variations from this profile include mottled introduced soils between the standard horizons in the vicinity of a former driveway, the presence of a dark yellowish brown (10YR 4/4) silty sand between the standard horizons in two shovel tests near the west end of the farmstead, and multiple varied soils under the standard topsoil in a depression near an extant outhouse.



FIGURE 16. SITE MAP, 21CXXXJ

The seven shovel tests in the eastern part of the farmstead (STs 1 to 7), in the vicinity of the house and former driveway, were negative for cultural materials. In the western part of the farmstead, shovel tests were either negative for cultural materials or contained a very low density of artifacts, with a few exceptions. These exceptions occurred in the vicinity of two spatially separated former outbuilding foundations and near the extant outhouse. ST 26, located approximately two meters to the south of a 4-by-10-foot, poured-concrete foundation, yielded a metal wire fragment, one faunal bone fragment, and a wire nail, but also contained a stone in the east wall with the potential to be structural. All of these elements were within the topsoil and the upper portion of the mottled transition to the yellowish brown silty sand. STs 16 through 18, situated on the north, west, and south sides and within a meter of an approximately 11-by-27-foot concrete slab foundation, yielded artifacts from within the topsoil and the upper portion of the yellowish brown silty sand, including a piece of whiteware, a faunal bone fragment, colorless curved and flat glass, wire nails, a fence staple, and an indeterminate metal fragment.

ST 19, located in a depression approximately two meters north of the extant outhouse, was the most prolific and suggested that the depression was the location of an earlier privy pit. The topsoil in this unit extended to 25 cmbs, and it contained faunal remains,

an eggshell fragment, window glass fragments, wire nails and nail fragments, a thumbtack, metal foil, and indeterminate metal fragments. At 25 cmbs, a brown (10YR 5/3) silt loam horizon containing charcoal, lime, and cinders was encountered, indicating the start of the apparent privy deposits. These continued to at least 109 cmbs, with a dark yellowish brown (10YR 4/4) silt loam present from the base of the brown silt loam at 45 cmbs to 65 cmbs, a very dark grayish brown silt loam occurring from 65 to 71 cmbs, and a mottled but primarily dark brown, sandy silt occurring from 71 cmbs to the base of the shovel test. Artifacts recovered from these deposits include faunal remains, eggshell fragments, a milk glass jar liner fragment, a glass button, colorless curved and flat glass fragments, wire nails and nail fragments, a fence staple, metal can fragments, metal objects of unidentified function, metal foil fragments, cellophane fragments, and a walnut.

Based on the relatively high density of artifacts in STs 16 to 19 and 26, the potential for a buried structural feature in ST 26, and the apparent privy feature in ST 19, formal units were excavated at 21CH0129.

UNIT EXCAVATION

Three one-by-one meter excavation units were established at 21CH0129, one each near ST 19, ST 26, and STs 16 to 18, to explore the artifact concentrations and potential features evidenced in these shovel tests. The datum for each unit was established in the southwest corner at the ground surface.

Unit 1

Unit 1 was a 1-by-1-meter unit excavated adjacent to ST 19, at the edge of the depression thought to represent an earlier privy pit next to the extant outhouse. This placement was established both to better characterize the artifact deposits within the area of the depression and to try to locate a privy wall. With the exception of the first level, Unit 1 was excavated in arbitrary 5-cm levels until the second-to-last level of the unit, by which point it had been determined that the control of a 5-cm level was not necessary; therefore, a 10-cm level was excavated. Excavation by levels extended to 100 cmbd, after which a shovel/auger test was excavated into the base of the unit and into subsoil (Figure 17).

The excavation of Unit 1 commenced with the removal of soils to 10 cmbd as Level 1 to create a level floor. Artifacts were encountered immediately, and those recovered from this level include whiteware sherds, numerous faunal remains and eggshell fragments, curved and flat glass fragments in a variety of colors, numerous wire nails and nail fragments, screws, a bolt, fence staples, a crown cap, metal buttons, a buckle, an elastic bandage clip, a metal tag, metal objects whose function could not be determined, several indeterminate metal fragments, metal foil fragments, part of a leather shoe, and textile fragments. Also present but not collected were other pieces of metal foil, fragments of cellophane, and pieces of coal. Level 1 consisted largely of black (10YR 2/1) loam with organics (Stratum I), but by the base of the level, a brown (10YR 5/3) greasy silt with charcoal flecking (Stratum II) was present in the west-northwest and a brown (10YR 4/3) sandy loam (Stratum III) in the northeast.

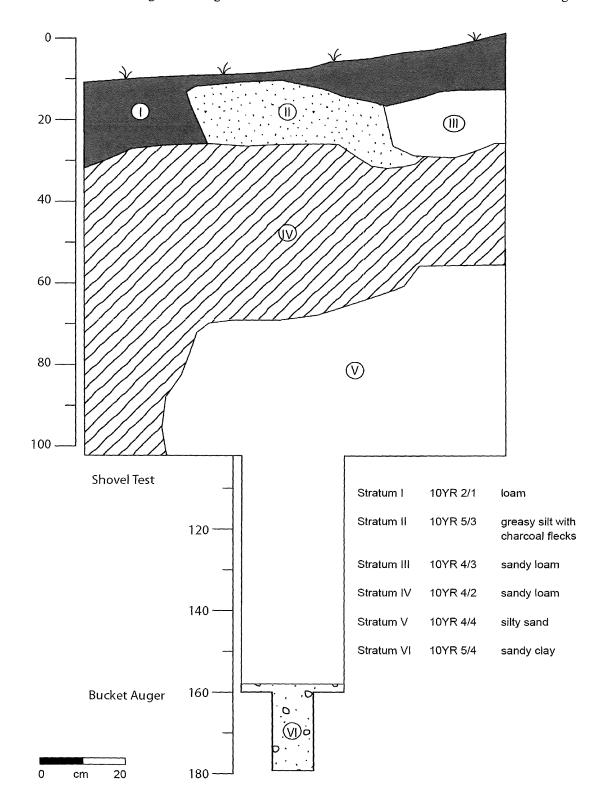


FIGURE 17. SOUTH WALL PROFILE, UNIT 1, 21CH0129

Stratum I decreased with the excavation of subsequent levels, disappearing entirely within Level 5 (25 to 30 cmbd), while Strata II and III expanded and became increasingly mottled together. Levels 2 through 5 yielded a single whiteware sherd, several faunal remains and eggshell fragments, a shell button fragment, window glass fragments, amber and colorless curved glass fragments, numerous wire nails and nail fragments, screws, fence staples, bolt fragments, can lids, metal screw-on bottle caps, crown caps, a razor blade from a scraping tool, a metal tag identical to that found in Level 1, a bobby pin fragment, a safety pin fragment, a metal ring with a red faux jewel, metal buttons, a bullet shell, chain fragments, a barbed wire fragment, metal objects whose function could not be identified, indeterminate metal fragments, and fragments of cellophane. In addition to these recovered artifacts, large amounts of wadded up metal foil and cellophane fragments, along with a few charcoal and brick fragments and a severely degraded metal bucket were encountered but not collected.

Heavily mottled Strata II and III, with pockets of lime, ash, and charcoal, were present partway into Level 6 (30 to 35 cmbd), when only Stratum III, with charcoal flecks, remained across the unit, this soil extending just to the base of Level 7 (35 to 40 cmbd). In addition to brick, indeterminate metal, and cellophane fragments that were not collected, Level 6 generated two ironstone rim sherds, two faunal bone fragments, glass jar fragments, window glass fragments, and other glass fragments, wire nails and nail fragments, metal objects whose function could not be identified, and small plastic rings. One of the faunal bone fragments, a chicken tibiotarsus fragment, refit with another from Level 4, indicating that at least Level 4 through 6 represent a single depositional episode. Level 7 produced an ironstone sherd, faunal bone fragments, eggshell fragments, bottle and window glass fragments, a glass lampshade fragment, other glass fragments, wire nails and nail fragments, the blade of a butter knife, a crown cap, screw-on cap fragments, can lid fragments, a buckle, and metal foil fragments. At the base of Level 7, a concentration of lime, charcoal, and brick in a dark grayish brown (10YR 4/2) sandy loam matrix (Stratum IV) was evident in the central-east/southeast portion of Unit 1, while the remainder of the unit was occupied by a dark yellowish brown (10YR 4/4) silty sand (Stratum V).

Over the next 11 levels (40 to 100 cmbd), Strata IV and V continued to be present, a mottled boundary between the two shifting east and west until Stratum IV resolved into the eastern approximately one-third of the unit in Level 16 (80 to 85 cmbd), where it remained to the bottom of the level excavations. These levels also saw a drop in artifact content, as Stratum V proved to be sterile, but the types of artifacts encountered remained similar. The number of nails, however, dropped off substantially, while the amounts of cellophane/sheet plastic and eggshells increased substantially after Level 9 (45 to 50 cmbd). It is also noted that ceramic cross-mends were present from levels between 9 and 15, indicating a single filling episode, which is supported by the addition of fused catalog-page fragments to the artifact assemblage in these levels. Fused catalog-page fragments continued to be present to the base of level excavations at 100 cmbd, some layered with wood from approximately 81 to just over 85 cmbd.

With artifacts tapering off, a shovel test was excavated into Stratum IV to assess whether changes to the deposits would occur below 100 cmbd. The shovel test extended to 160 cmbd and found that Stratum IV continued to 157 cmbd, at which point subsoil, a yellowish brown (10YR 5/4) sandy clay was present. An auger test within the shovel test extended to 178 cmbd and confirmed the continuation of subsoil to at least that depth. At this point, the excavation of Unit 1 ceased. Although a wall or other structural feature was not encountered, the depth of the artifact deposits combined with the presence of at least some lime and the proximity of the artifact deposits to the extant outhouse suggests that the deposits within Unit 1 represent the filling of an earlier privy pit.

Unit 2

Unit 2 was a 1-by-1-meter unit established one meter southeast of ST 26 to determine whether the stone appearing in the east wall of ST 26 was part of a subsurface structural feature and to characterize the nature and density of artifact deposits near the shovel test, given that it contained slightly more artifacts than the shovel tests surrounding it. Unit 2 was excavated in arbitrary 5-cm levels to 30 cmbd, at which point sterile soils were reached (Figure 18).

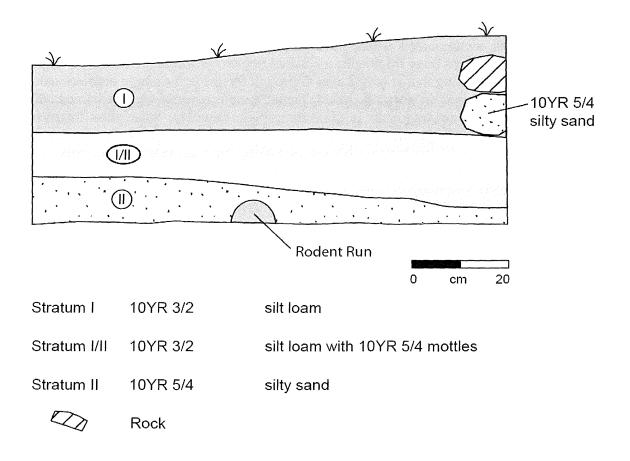


FIGURE 18. NORTH WALL PROFILE, UNIT 2, 21CH0129

After the removal of the sod cap to a maximum depth of 6 cmbd, Level 1 was removed from Unit 2, the resultant depth being 10 cmbd. This level and Level 2 (10 to 15 cmbd) were both within the standard topsoil as had been observed in the shovel tests in this area of the farmstead. Artifacts from within the topsoil include stoneware, terracotta, and whiteware sherds, a faunal bone fragment, a piece of eggshell, milk glass jar liner fragments, amber and colorless curved glass fragments, colorless window glass fragments, wire nails and nail fragments, a fence staple, indeterminate flat metal fragments, metal foil fragments, coal fragments, and cellophane fragments, as well as uncollected asphalt shingle and linoleum fragments, miscellaneous metal bits, and firecracked rock.

Level 3 (15 to 20 cmbd) marked the beginning of the mottled transition to the standard vellowish brown silty sand, which continued into Level 5 (25 to 30 cmbd). During the excavation of Level 4, the consistent yellowish brown silty sand began to expand until it was almost entirely across the unit, the remainder of the mottled soils disappearing during Artifacts substantially tapered off with depth, with none occurring in the consistent yellowish brown silty sand. Level 3 artifacts include a faunal bone fragment, glass jar fragments and other glass fragments, wire nails and nail fragments, a fence staple, a hinge, a yellow plastic fragment, a linoleum fragment, metal foil fragments, cellophane fragments, and asphalt shingle fragments. Level 4 yielded stoneware crock fragments, faunal bone fragments, a glass fragment, a fence staple, a metal plate, a wire nail and wire nail fragments, indeterminate metal fragments, metal foil fragments, and cellophane fragments. Level 5 produced only two wire nails, a metal can fragment, a barbed wire fragment, metal foil fragments, and cellophane fragments before going sterile. The yellowish brown silty sand was known to be beneath the stone in ST 26 and to be sterile based on observation and the results of the shovel testing; therefore, excavation ceased at the base of Level 5. No structural elements were encountered within Unit 2, indicating that the stone observed in ST 26 was incidental and not structural.

Unit 3

Unit 3 was a 1-by-1-m unit established 50 cm west of ST 17 to characterize the nature and density of the artifact deposits in the vicinity of a concrete slab foundation. Unit 3 was excavated in arbitrary 5-cm levels to 45 cmbd, at which point sterile soils were reached (Figure 19).

Level 1 of Unit 3 was excavated to 10 cmbd to remove plant material and level the unit floor, and it was entirely within the topsoil, as were Levels 2 through 6 (10 to 35 cmbd). All of these levels contained artifacts, the most within Level 1, and density decreasing with depth. Artifacts occurring within these levels include faunal bone fragments, a glass jar fragment, window glass fragments, and other glass fragments, wire nails and nail fragments, barbed wire fragments, staples, indeterminate metal fragments, plastic fragments, asphalt shingle fragments, metal foil fragments, cellophane fragments, and a chunk of concrete.

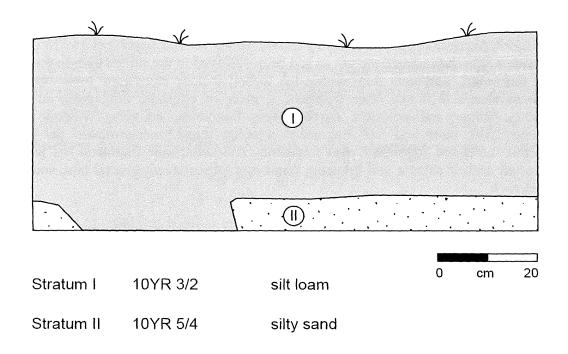


FIGURE 19. EAST WALL PROFILE, UNIT 3, 21CH0129

Level 7 (35 to 40 cmbd) marked the transition to the yellowish brown silty sand, culturally sterile horizon, this horizon being present throughout Level 8 (40 to 45 cmbd). Both levels were occupied by an obvious rodent run, which contained intrusive artifacts: minimal chicken bone, window glass, and cellophane fragments, none of which were collected. With the exception of one piece of colorless glass bearing a mold seam, these levels were otherwise negative for cultural materials; therefore, excavation ceased at the base of Level 8.

ARTIFACT ANALYSIS

During shovel testing and unit excavation at 21CH0129, 1,899 artifacts were recovered. The following sections provide detailed analyses of these artifacts. Associated catalogs are provided in Appendix B.

Ceramic Artifacts

Thirty-three ceramic artifacts were recovered from 21CH0129. Wares represented include whiteware (12), stoneware (7), earthenware (6), ironstone (4), bisque (1), lusterware (1), and terracotta (1) (Figure 20). The final ceramic artifact is a clay pigeon fragment. Decorative treatments include dark brown salt glaze and buff-colored glaze (7 stoneware), polychrome decal (6 earthenware), molding (2 ironstone, 1 whiteware), hand painting (1 whiteware), pink glaze (1 whiteware), and annular lustreware (1 lustreware).



FIGURE 20. REPRESENTATIVE CERAMIC ARTIFACTS, 21CH0129

Those ceramic artifacts that could be identified with regard to vessel function include six refitting fragments of an earthenware dessert plate, a lustreware cup fragment, a whiteware saucer fragment, and two stoneware crock fragments. The plate fragment, which displays a polychrome decal in a floral pattern on a molded body with a brown rim band, has a makers mark on the base attributable to the Salem China Company and dating between 1925 and 1930. The lustreware cup fragment may also have been manufactured by the Salem China Company, as it appears to exhibit their Platinum Alloy pattern. The whiteware saucer fragment bears a 1941 Homer Laughlin maker's mark. The remaining ceramic artifacts were too fragmented to allow the identification of vessel function.

Faunal

A total of 574 faunal artifacts were recovered from 21CH0129. The majority of these are indeterminate calcined or burned bone fragments (209). Bird bones include long bone fragments (47), phalanges and phalanx fragments (11), humeri and humerus fragments (10), vertebra fragments (9), tarsometatarsi and a tarsometatarsus fragment, (8), tibiotarsi and tibiotarsi fragments (6), scapula fragments (3), carpometacarpi (2), coracoids (2), femur fragments (2), a rib fragment, a sternum fragment, one cranium fragment, one ulna fragment, and indeterminate bone fragments (28). Identifiable birds include chicken and turkey.

Mammal bones include long bone fragments (20), cranium fragments (9), vertebra fragments (8), rib fragments (8), metapodial fragments (7), atlas fragments (3), phalanges (2), one mammal tooth, and indeterminate bone fragments (12). Identifiable mammals include pig, cow, and possibly sheep.

Countless chicken eggshell fragments were present at the site, particularly in the former privy pit (Unit 1). Only a representative sample of these was collected (160) and is accounted for in the tally of total artifacts. One fish vertebra and two fish scales constitute the final artifacts in the faunal category.

Based on the preponderance of bird bones and the variety of elements present, it is likely that at least chickens were raised and processed on the farm. The mammal bones, however, do not comprise as many elements, and many are sawn, suggesting that these may have been purchased cuts.

Glass Artifacts

Site 21CH0129 yielded 227 glass artifacts of the following colors: amber (10), aqua (10), aqua to pale green (1), colorless (177), pale aqua to colorless (7), milk glass (3), green (1), pale green (1), pale green to colorless (10), pink tinted colorless (1), and sun-colored amethyst (6). Sun-colored amethyst glass results from the exposure to the sun of colorless glass containing manganese, the manufacture of which occurred circa 1880 to 1920. The use of aqua glass for bottles dates from ca. 1860 to 1920, but aqua canning jars continued to be produced until ca. 1937. Those vessels that can be determined in association with the curved aqua glass recovered from 21CH0129 are canning jar fragments.

The two fragments known to be from aqua canning jars are embossed, one with "[PE]RF[ECT]" / "[M]AS[ON]," and the other with "[PER]FE[CT] MASON," which indicates a manufacture date between ca. 1913 and 1937 (Brantley 1975).

Another 17 colorless glass fragments are also identifiable as being from canning jars, including a base, a base fragment, a finish, a rim fragment, and body fragments. The base bears an Owens-Illinois mark that dates between 1929 and 1954 (Toulouse 1972:403). Five of the body fragments and the base fragment refit to form a partial jar base and near-base. The near-base is embossed with "ATLAS" / "STRONG SHOULDE[R]" / "MASON," while the base is embossed with a Hazel Atlas Glass Co. mark that dates between 1920 and 1964 (Toulouse 1972:239). The finish still has a metal continuous thread lid with the milk-glass liner attached, the combination indicating a manufacture date between circa 1924 and circa 1950. Two unattached milk glass jar liner fragments are also present in the assemblage.

Also identifiable with regard to function are two colorless bottle finishes, both for continuous-thread closures and one of which has the metal cap still attached, these typically post-dating 1924. Another colorless bottle finish is melted, thus its precise form cannot be determined. Five colorless glass fragments refit to form a partial bottle base

and near-base, the base embossed with "O-Cedar" / "MADE IN U.S.A." and possibly the number "7." O-Cedar has been manufacturing household cleaning products since 1906 (Freudenberg Household Products LP 2011). A plate fragment, a button with shank attachment, a lampshade fragment, a drinking glass rim fragment, and two fragments that belong to either a jar or bottle, all of which are colorless, and 55 window glass fragments round out the identifiable glass artifacts. The plate fragment has a mold seam, while the drinking glass fragment exhibits a thick horizontal gold band painted at the rim and a thin horizontal gold band painted approximately 1/5" below it.

Metal Artifacts

Nine hundred ninety-five metal artifacts were recovered from 21CH0129. The largest category of these is wire nails and nail fragments (641), followed by indeterminate fragments (207), most of which are flat and likely once were cans. Other metal artifacts recovered include staples (25), most of which are fence staples and the rest of which look like fence staples but are smaller; metal wire fragments (23); can lids (3), can lid fragments (5), and can fragments (11); crown caps (8) and a crown cap fragment (1) (post-1892); screws (8); bolt fragments (8); caps (2) and cap fragments (3), one of which is for a continuous-thread closure (typically post-1924); barbed wire fragments (4); small metal disks (3), two of which may be buttons but are too rusty to confirm them as such; chain links (2); a washer; a set of three articulated eye hooks; another small hook; a fishing lure fragment; a fishing weight; a butter knife blade; a paring knife; a razor blade for a scraping tool; a hinge; a safety pin and a safety pin fragment; a bullet shell; a thumbtack; a flange; a harness bolt; a piece of metal trim; and a clip for an elastic bandage (likely post-1918). Ten metal objects could not be identified as to function, though they appeared to be utilitarian.

Also present are personal metal artifacts, including bobby pin fragments (3) (post-1920); buckles (3) and a buckle fragment, two of which appear to be from overalls straps; buttons (4), including one embossed with "Lee" (post-1889), one 1-inch button with a shank, and one 0.6-inch two-hole button; two metal tags; and a ring with red faux jewel, either plastic or glass.

Other Material Classes

A 0.4-inch, four-hole shell button and a 0.46-inch, two-hole mother of pearl button were recovered from 21CH0129, as were a leather shoe fragment and four very small textile fragments.

Ten plastic artifacts are present in the collection of recovered artifacts, including four small light-blue rings (utilitarian, not jewelry) and fragments in white (4), green (1), and yellow (1). None of these are diagnostic or otherwise informative.

Twenty asphalt shingle fragments, three pieces of coal, and a linoleum fragment are counted in the number of artifacts recovered from 21CH0129, but these constitute only a representative sample of those encountered during excavations at the site. Similarly, 26 catalog-page fragments, which are fused either through burning or some other process

account for only a portion of those actually observed. While some of the text from these fragments is legible, it is not enough to reconstruct the year in which the catalog was published. Numerous metal foil and cellophane or sheet plastic fragments were encountered at 21CH0129, most of which were not collected; these are not included in the tally of total artifacts.

Botanical artifacts include a walnut and two walnut fragments, both from the privy pit. Also within the privy pit (Unit 1, Level 16) were numerous seeds of the same type. A sample of the seeds was collected but is not included in the counts above.

POST-FIELD RESEARCH RESULTS

Deed research demonstrates that after a long and complicated chain of ownership by primarily absentee owners, the property on which the Palmquist/Conklin farmstead is located was purchased by John Palmquist in May of 1891. Two years later, ownership was transferred by John Palmquist and his wife to Carl J. Palmquist. In March of 1914, Carl Palmquist, then recorded as Carl G. Palmquist, and his wife, Hannah, sold the property to Samuel H. Holtan. Holtan died in 1922, leaving the property to his son Henry Alfred Holtan. Sometime between 1922 and 1930, ownership of the property was transferred to Harry W. and Signetta C. Bigelow, who in 1933 sold it to Gideon J. Conklin. Conklin and his wife, Harriet, transferred the property to their son, Ray, and his wife, Irene, in 1946.

The 1900 United States federal census indicates that Carl Palmquist, listed in that year as Charles G. Palmquist and a farmer, was a Swedish immigrant who came to the United States in 1887. Living with him at the time were his wife, Hannah, also a Swedish immigrant; his father, Peter, his mother, Lizzie, and his brother, Jonas. The same family members occupied their residence in 1910, when Carl was listed as Carl and not Charles. A listing for Samuel Holtan is not present in the 1920 federal census for Wyoming Township. The 1930 census lists Harry, a farmer, and Signetta (Signettie) Bigelow with their daughters, Sylvia and Millicent. Harry was born in Montana, to U.S.-born parents, and Signetta in Minnesota to parents from Minnesota and Wisconsin. Although the 1940 census is not available, Gideon, Harriet, and Ray Conklin, along with the rest of their family are listed in the 1930 federal census, at which time they lived in Anoka County. Gideon was born in Michigan to parents born in Canada, and Hannah in England.

EVALUATION AND RECOMMENDATIONS

Significance

Site 21CH0129 is associated with a farmstead developed by the Palmquist family sometime between 1891 and 1900, and subsequently transferred three times to different owners between year and 1960, the end of the period of significance for historical farmstead archaeological sites in Minnesota.

No significant events occurred at the farmstead site, and it does not reflect any significant historical patterns or trends: Although Swedish immigrants established and operated the

farmstead during the early period, diagnostic artifacts from the only substantial artifact deposit, occurring in the area of the privy, post-dates their residence; and although foundations are present, they are few and most cannot be associated with a specific function, thus the site does not well represent a pattern of farming, diversified or otherwise. Site 21CH0129 therefore does not meet NRHP Criterion A.

No evidence could be found to suggest that the Palmquists, the Holtans, the Bigelows, or the Conklins were historically significant with regard to agriculture. For this reason, 21CH0129 does not satisfy NRHP Criterion B.

Unit 1 produced a substantial amount of artifacts and pointed to a circa-1940 occupation. Although the tight temporal context and high density of the artifacts suggest that the feature has the potential to address important research questions, the types of artifacts that would lend themselves to this task were fairly redundant (e.g., dish mends were present throughout the various levels). Further excavation, therefore, of this feature would not likely yield any information beyond that obtained during the Phase II investigation. Unit 2, in the location of the possible outbuilding foundation revealed that the stone encountered during the shovel testing was incidental, and with the exception of numerous wire nails and metal scraps, the unit produced minimal artifacts. Unit 3 yielded primarily demolition debris from the razing of the superstructure associated with the foundation, including wire nails, shingle fragments, and window glass fragments. A few aqua bottle glass fragments, faunal bone fragments, hard and sheet plastic fragments, and foil fragments were also found. Although the aqua glass could be relatively early, its association with the other materials would point to mixing of deposits, and overall the artifacts in this location did not occur in a sufficient density to address research questions. The site therefore does not satisfy NRHP Criterion D.

Eligibility

Based on its lack of significance, and because much of the farmstead has undergone substantial disturbance, the Palmquist/Conklin Farmstead site is recommended as not eligible for listing in the NRHP.

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21CH0130 (WALLMARK/CARLSON/LINDBERG FARMSTEAD) – PHASE II RESULTS

The Phase I survey identified 21CH0130, a former farmstead with occupations dating from the late nineteenth century. The site was recommended as potentially eligible based on its anticipated high research potential and on the land-use history of the property, which suggested that archaeological deposits present would be intact. Prior to the Phase II investigations, Mn/DOT determined that the construction footprint for the TH 8 Improvement Project would only impact a small portion of CHxxxk, and that the Phase II investigations should therefore be limited to this portion.

Phase II archaeological fieldwork at 21CH0130 (Wallmark/Carlson/Lindberg Farmstead) for the TH 8 Improvement Project was conducted on May 6 and August 5, 2011. Andrea Vermeer served as Principal Investigator and conducted the fieldwork with Jammi Ladwig, Eva Terrell, and Michelle Terrell.

SHOVEL TESTING

The Phase II field investigation commenced with shovel testing over that portion of the farmstead that is within the planned construction footprint, which is defined on the north and south by agricultural fields, on the west by the TH 8 right-of-way, and on the east by the proposed extent of construction (Figure 21). The purpose of the shovel testing was to identify any subsurface features or artifact deposits associated with the historical occupation of the property and to assess the locations where excavation units would be most likely to yield relevant information.

Twelve shovel tests were established to create a generally 10-meter- (33-foot-) interval grid over the relevant portion of the farmstead, though exceptions were made as needed to avoid a driveway and areas clearly disturbed by the TH 8 right-of-way (see Figure 21). Soil profiles were fairly consistent, supporting the intact nature of the property. Shovel tests typically exhibited a very dark grayish brown to dark brown (10YR 3/2 to 3/3) loam or silt loam A horizon to depths ranging from 12 to 36 cm below the surface over 7 to 18 cm of a yellowish brown to light yellowish brown (10YR 5/4 to 6/4) silty sand to silt B horizon, which rested upon subsoil, a yellowish brown (10YR 5/4) loamy clay with gravels, encountered at depths ranging from 40 to 54 cm below the surface. Variations from this profile occurred in one shovel test near a possible septic mound, in which soils were clearly disturbed and in four shovel tests where the B horizon was absent, a mottled transition between the A and C horizons being present instead.

Although several shovel tests were negative for or contained a low density of cultural materials, a cluster of three shovel tests, STs 8, 9, and 10, contained notable artifact concentrations within the A horizon and the uppermost portion of either the B horizon (STs 8 and 9) or the mottled A to C transition (ST 10), including a wire nail, a bobby pin, two metal wire fragments, and an orange-red plastic fragment in ST 8; an ironstone sherd, red brick fragments (not collected), and wood fragments (not collected) in ST 9;

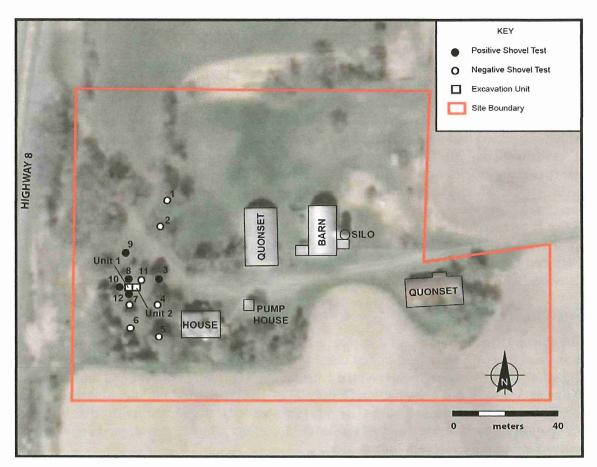


FIGURE 21. SITE MAP, 21CH0130

and three porcelain sherds, one burned mammal long bone fragment, one eggshell fragment, three window glass fragments, 20 wire nails or wire nail fragments, one bolt, one staple, one metal makeup compact, a metal button, a metal snap, a metal tool handle, two indeterminate metal objects (one possibly a pendant), four indeterminate metal fragments, a plastic button, and two pieces of coal in ST 10. ST 8 additionally contained a lens of yellow and red brick within the A horizon, between 10 and 15 cmbs. Based on the relatively high density of artifacts in STs 8, 9, and 10 and the indications of potential structural features, formal units were excavated at 21CH0130.

UNIT EXCAVATION

Two adjacent one-by-two meter excavation units were established between and east of STs 8 and 10 to explore the artifact concentration evidenced in these shovel tests. A shared datum for both units, which were excavated concurrently, was established at the ground surface at the southeast corner of Unit 1 and the southwest corner of Unit 2.

Unit 1

Unit 1 was excavated to 30 cm below datum (cmbd) using arbitrary 5-cm levels (Figure 22), at which point sterile soils were reached. The excavation of Unit 1 commenced with the removal of the sod cap, the resultant depths ranging from 5 to 9 cmbd. Level 1, within lightly mottled soils consisting of the A horizon and a slightly sandier and lighter version of the A horizon, was excavated from this point to a depth of 10 cmbd across the unit and yielded only a piece of rubber (not collected) and a partial walnut. The sandier, lighter A horizon increased with depth in Levels 2 (10 to 15 cmbd) and 3 (15 to 20 cmbd), after which point the B horizon began to appear. The transition to the B horizon was very gradual, and the mottled A horizon soils remained present along with the B horizon soils until partway into Level 5 (25 to 30 cmbd). Artifacts were present coincident with the mottled A horizon soils; recovered artifacts include ceramic sherds, faunal remains, glass fragments, a belt buckle, a metal object that could not be identified, and a machine-cut nail fragment. Once the B horizon was present across the unit, no more artifacts were encountered. For this reason, and because the earlier completed excavation of Unit 2 had already demonstrated that the consistent B horizon was culturally sterile, excavation ceased at the base of Level 5.

Unit 2

Unit 2 was excavated to 35 cmbd using arbitrary 5-cm levels (see Figure 22) marking the base of three consecutive sterile levels. After removal of the sod cap, which resulted in a depth of 4 cmbd, Level 1 was excavated to 10 cmbd, producing ceramic sherds, faunal remains, glass fragments, metal fragments, and a metal object that could not be identified. As with Unit 1, soils from Levels 1 to 3 (15 to 20 cmbd) comprised mottled A horizon soils, although only the sandier version was present by the base of Level 3, along with the beginnings of the B horizon. Levels 2 and 3 generated whiteware sherds, faunal remains, bottle and window glass fragments, and one wire and one machine-cut nail. Level 4 (20 to 25 cmbd) marked the transition to entirely the B horizon and was culturally sterile, as were Levels 5 (25 to 30 cmbd) and 6 (30 to 35 cmbd), all within the B horizon. As culturally sterile soils had been reached, and shovel testing had demonstrated that they would continue, excavation ceased at the base of Level 6.

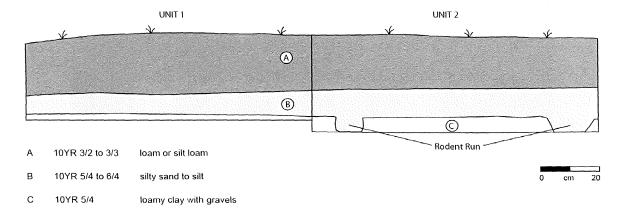


FIGURE 22. WALL PROFILE, UNITS 1 AND 2, 21CH0130

ARTIFACT ANALYSIS

During shovel testing and unit excavation at 21CH0130, 113 artifacts were recovered. The following sections provide detailed analyses of these artifacts. Associated catalogs are provided in Appendix B.

Ceramic Artifacts

Twenty-eight ceramic artifacts were recovered from 21CH0130. Wares represented include whiteware (20), porcelain (4), earthenware (2), stoneware (1), and ironstone (1) (Figure 23). Decorative treatments include molding (2 earthenware, 1 whiteware, 1 stoneware), polychrome decal (1 whiteware), blue transfer print (1 whiteware), flow blue with a scalloped edge and gilding (1 whiteware), and sponging (1 stoneware).

The fragmented nature of many of the ceramic artifacts prevented the identification of vessel function. Those that could be identified include four refitting fragments of a cup, with another 10 likely from the same cup but which have not been refit to the others. The sponged stoneware sherd is from a Red Wing "cap" bowl (post-1906) (DePascquale et al. 1983). One ironstone sherd is from a plate.



FIGURE 23. REPRESENTATIVE CERAMIC ARTIFACTS 21CH0130

Faunal Artifacts

The 18 faunal artifacts recovered from 21CH0130 include cow cranium fragments (9), mammal long bone fragments (6), a cow vertebra, a pig bone fragment, and an eggshell fragment. The cow vertebra bears saw marks and is cut cranially and caudally. The proximal end of the pig bone fragment is unfused, indicating that it is from a juvenile, and it is partially broken.

Glass Artifacts

Site 21CH0130 yielded 17 glass artifacts of the following colors: aqua (7), colorless (7), and sun-colored amethyst (3). Sun-colored amethyst glass results from the exposure to the sun of colorless glass containing manganese, the manufacture of which occurred circa 1880 to 1920. The use of aqua glass for bottles dates from ca. 1860 to 1920, but aqua canning jars continued to be produced until 1937, and the vessel associated with the curved aqua glass recovered from 21CH0130 cannot be determined as the fragments are too small.

Eight of the glass artifacts can be identified as fragments of window glass, five of which are aqua and three of which are colorless or colorless with a tinge of pale aqua. Also identifiable are three bottle fragments, all of which are sun-colored amethyst (Figure 24). One is a patent/extract finish, one a partial shoulder, and one a near-base fragment.

Metal Artifacts

Forty-five metal artifacts were recovered from 21CH0130. These include wire nails or nail fragments (22), machine-cut nails or nail fragments (3), metal wire fragments (3), a bolt, a staple, a tool handle, four miscellaneous metal strips, a piece of folded flat metal, and three indeterminate objects. The latter include a small, oblong disk, 0.85 inch in diameter, with rust accretions; a small, t-shaped, threaded object; and a small object with a spring mechanism, possibly part of a clip.

Also present are personal metal artifacts, including a bobby pin (post-1920), a Dorothy Gray makeup compact (post-1916); a button; half of a snap (post-ca. 1885), a belt buckle, and an object that is indeterminate but appears to be a pendant. The latter is small and diamond-shaped, with a nub that indicates a former attachment at one of the points (Figure 24).

Other Material Classes

A faceted, sunken-face, two-hole, colorless plastic button was recovered from 21CH0130, as were an orange-red indeterminate plastic fragment, two pieces of coal, and a walnut fragment. The use of plastic for buttons typically indicates a post-1930 manufacture date. None of the other artifacts are diagnostic.



FIGURE 24. PERSONAL METAL ARTIFACTS, 21CH0130

POST-FIELD RESEARCH RESULTS

Deed research indicates that Government Lots 1 and 2, the location of the farmstead, were purchased from non-local owners and temporary owners by Otto Wallmark in 1867 and 1866, respectively. As noted in the Literature Search Results, a house was built on the property sometime between that year and 1888, when it appeared on a plat map. In the summer of 1902, Otto Wallmark died, and by September of that year, his family sold the property to Frank O. Carlson. Frank Carlson died in 1929, at which time the property transferred to his children, Willard, Pearl, and Ethel. In 1935, Willard transferred his claim on the property to his sisters, and two years later, they sold the property to Carl A. Lindberg and his wife, Victoria. The deed associated with the sale to the Lindbergs indicates that the farm was at that time under lease to Gilbert Holt.

The 1870 census indicates that Otto Wallmark was born in Sweden. During that year, his profession was county auditor, and he lived with his Swedish-born wife, Eva, and two children, Anna and Carl. In 1880, he was listed as a farmer. Anna had moved out, but Carl (listed as Charles), remained. Also present was a younger daughter, Minnie, and Otto's sister-in-law, Kate Danielson. The 1900 census lists his occupation as "Real Estate Insurance," with his wife and a Swedish-born servant, Hedwig Bangston, the only other occupants of the household.

The 1910 federal census indicates that Frank O. Carlson was a Swedish immigrant who came to the United States in 1883. As of 1910, he was married to Clara Carlson, also of

Swedish descent though born in Minnesota, and they had two children, Willard Carl and Pearl E. The census lists him as a farmer for a general farm, working on his own account. Clara Carlson is not listed as a member of the household in the 1920 census, by which time another daughter, Ethel, had come to the family. Other residents included a housekeeper, Sophia Peterson, Frank Carlson's mother, Eva Nelson, and a hired man, Clause Gustafson, all three of whom were Swedish immigrants.

EVALUATION AND RECOMMENDATIONS

Significance

Site 21CH0130 is associated with a farmstead begun by Swedish-born Otto Wallmark and his family sometime between 1866 and 1888, occupied and farmed from 1902 to 1929 by another Swedish immigrant, Frank Carlson, and his family, then beginning in 1937, by Carl Lindberg, whose occupation postdates available census schedules. Diagnostic artifacts recovered suggest that the deposits present in the composite preliminary construction limits of the alternatives for the TH 8 Improvement Project date to the Carlson occupation.

Only a small fraction of 21CH0130 was tested and characterized, outside of the core of the farmstead, and it yielded just a light scatter of historical-period artifacts. The portion of the site, therefore, within the construction footprint for the TH 8 Improvement Project would not contribute to any potential significance that the site as a whole might have with regard to Criterion A.

No evidence could be found to suggest that Otto Wallmark, Frank Carlson, or Carl Lindberg were historically significant with regard to agriculture. For this reason, 21CH0130 does not satisfy NRHP Criterion B.

Although the excavation units at the Wallmark Farmstead produced some diagnostic, historical-period artifacts in a high density relative to the rest of the test area, these were still not of a sufficient quantity to provide substantial amounts of information. This portion of the site, therefore, does not contribute to any potential significance that the site as a whole might have with regard to NRHP Criterion D.

Eligibility

Based on its lack of significance, the portion of the site within the composite preliminary construction limits for the TH 8 Improvement Project is recommended as not contributing to the eligibility of the site, should the remainder of the site be determined eligible in the future.

The portion, however of the Wallmark Farmstead site beyond the composite preliminary construction limits remains potentially eligible for listing in the NRHP, based on its association with and potential to yield important information on the historical pattern of Swedish immigration and agricultural lifeways in Chisago County. If therefore, project

plans should change so that the right-of-way encompasses more of the farmstead, additional Phase II testing would be recommended.

SUMMARY OF RECOMMENDATIONS

Four alternatives are currently under consideration for the TH 8 Improvements Project. The Study Area for archaeology for the project includes the composite preliminary construction limits for these four alternatives, as well as a buffer around them, as shown in Figures 1 and 2. When the final alternative is selected, it will be necessary to establish a project APE for archaeology based on the actual construction limits of that alternative.

While the Phase I archaeological survey sought to cover as much of the Study Area as possible, it focused on the composite preliminary construction limits, and beyond these, those portions of the Study Area with high potential for containing archaeological sites. The Phase I survey, including the literature review, found the majority of the Study Area to be previously disturbed, have low archaeological potential, or to be negative for archaeological resources (see Figure 2). The survey also identified 13 archaeological sites within the Study Area, seven of which were recommended as potentially eligible for listing in the NRHP. Phase II evaluations were limited to two potentially eligible sites, 21CH128 and 21CH129, that fall entirely within the composite preliminary construction limits and that sizeable portion of a third potentially eligible site, 21CH130, within the composite preliminary construction limits. Phase II investigations were not conducted of the portion of 21CH130 beyond the composite preliminary construction limits, of those potentially eligible sites that fall entirely outside of these limits within the Study Area (21CH131, 21CH132), or those potentially eligible sites (21CH126, 21CH127) having only an edge within the composite preliminary construction limits.

SITES RECOMMENDED AS NOT ELIGIBLE

Based on the results of the Phase I and II investigations, eight archaeological sites are recommended as not eligible for listing in the NRHP: 21CH0121, 21CH0122, 21CH0123, 21CH0124, 21CH0125, 21CH0128, 21CH0129, and 21WA0111.

21CH0121

Site 21CH0121 is an isolated, partial precontact projectile point within disturbed soils, which does not meet NRHP Criterion A or D. Site 21CH0121 is therefore recommended as not eligible for listing in the NRHP, and no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project with regard to this site.

21CH0122

Site 21CH0122 consists of a precontact lithic flake and piece of FCR. Based on the isolated and non-diagnostic nature of the two artifacts that constitute 21CH0122, the site does not meet NRHP Criterion A or D. Site 21CH0122 is therefore recommended as not eligible for listing in the NRHP, and no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project with regard to this site.

21CH0123

Site 21CH0123 is an isolated, partial precontact projectile point within disturbed soils, which does not meet NRHP Criterion A or D. Site 21CH0123 is therefore recommended as not eligible for listing in the NRHP, and no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project with regard to this site.

21CH0124

Site 21CH0124 is an isolated, precontact flake that does not meet NRHP Criterion A or D. Site 21CH0124 is therefore recommended as not eligible for listing in the NRHP, and no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project with regard to this site.

21CH0125

Site 21CH0125 is a precontact, low-density lithic scatter containing no diagnostic artifacts. Based on the low density of and non-diagnostic nature of the artifacts that constitute 21CH0125, it does not meet NRHP Criterion A or D. Site 21CH0125 is therefore recommended as not eligible for listing in the NRHP, and no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project with regard to this site.

21CH0128 (Tolzmann Farmstead)

Site 21CH0128 is a mid twentieth-century farmstead archaeological site associated with the Tolzmann family, who later operated an ornamental iron works on the property. The archaeological deposits at the site are non-diagnostic and cannot be associated with either operation. The site therefore does not meet NRHP Criterion A.

No evidence could be found to suggest that Norman Tolzmann or any of his family members were historically significant with regard to agriculture. For this reason, 21CH0128 does not satisfy NRHP Criterion B.

Based on the low density and non-diagnostic nature of the artifacts present at 21CH0128, and given the absence of significant archaeological features, the site would be unable to answer important research questions relevant to a historic context. The site therefore does not meet NRHP Criterion D.

As 21CH0128 does not meet any NRHP significance criteria, it is recommended as not eligible for listing in the NRHP, and no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project with regard to this site.

21CH0129 (Palmquist/Conklin Farmstead)

Site 21CH0129 is a late nineteenth- through mid twentieth-century farmstead archaeological site. The farmstead was developed by the Palmquist family sometime between 1891 and 1900, and its ownership was subsequently transferred three times to

different families between 1922 and 1960, the end of the period of significance for historical farmstead archaeological sites in Minnesota.

No significant events occurred at the farmstead site, and it does not reflect any significant historical patterns or trends. Site 21CH0129 therefore does not meet NRHP Criterion A. No evidence could be found to suggest that the any of the farmstead occupants were historically significant with regard to agriculture. For this reason, 21CH0129 does not satisfy NRHP Criterion B.

Although the tight temporal context and high density of the artifacts within the privy feature at 21CH0129 suggest that it has the potential to address important research questions, the types of artifacts that would lend themselves to this task were fairly redundant (e.g., dish mends were present throughout the various levels). Further excavation, therefore, of this feature would not likely yield any information beyond that obtained during the Phase II investigation. The remainder of the site has undergone substantial disturbance. The site therefore does not satisfy NRHP Criterion D.

As 21CH0129 does not meet any NRHP significance criteria, it is recommended as not eligible for listing in the NRHP, and no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project with regard to this site.

21WA0111

Site 21 WA0111 consists of a single, precontact piece of lithic shatter, and 14 fish bones, which may be incidental, i.e., unrelated to cultural activities. Based on the low density of and non-diagnostic nature of the artifacts that constitute 21WA0111, it does not meet NRHP Criterion A or D. Site 21WA0111 is therefore recommended as not eligible for listing in the NRHP, and no further archaeological work is recommended prior to or during construction for the TH 8 Improvement Project with regard to this site.

SITES RECOMMENDED AS POTENTIALLY ELIGIBLE

Five sites, 21CH0126, 21CH0127, 21CH0130, 21CH0131, and 21CH0132, have not been evaluated to determine their NRHP eligibility because they fall entirely or, in one case, largely outside of the composite preliminary construction limits. In the latter case, 21CH0130, Phase II testing in the small portion of the site within the composite preliminary construction limits found that that portion of the site would not contribute to any potential significance the site as a whole might have. When the final alternative for the TH 8 Improvements Project is selected, its construction limits and the associated APE for archaeology need to be reviewed to determine whether any of these five sites are included; if so, evaluation of the included sites will be needed. These five sites appear outlined in red in Figure 2.

21CH0126

Site 21CH0126 is an intact artifact scatter representing a precontact habitation site. It contains diagnostic artifacts that associate it with *The Havana-Related Complex: Howard Lake Phase* and *The Central Minnesota Transitional Woodland Complex* historic

contexts, and it has fairly high artifact density and evidence for potential features, suggesting that it may be able to address important research questions. For these reasons, 21CH0126 is recommended as potentially eligible for listing in the NRHP. This site, however, does not fall within the composite preliminary construction limits for the four alternatives currently under consideration for the TH 8 Improvement Project. When the final alternative for the TH 8 Improvements Project is selected, its construction limits and the associated APE for archaeology need to be reviewed to determine whether this site is included; if so, a Phase II evaluation of 21CH0126 will be needed.

21CH0127

Site 21CH0127 is an intact, multi-component, precontact archaeological site containing diagnostic artifacts that associate it with the Middle and Late Woodland periods, as would be needed for the site to be significant under NRHP Criterion A. These artifacts, combined with the evidence for potential features at the site, suggest that it may be able to address important research questions. For these reasons, 21CH0127 is recommended as potentially eligible for listing in the NRHP. This site, however, does not fall within the composite preliminary construction limits for the four alternatives currently under consideration for the TH 8 Improvement Project. When the final alternative for the TH 8 Improvements Project is selected, its construction limits and the associated APE for archaeology need to be reviewed to determine whether this site is included; if so, a Phase II evaluation of 21CH0127 will be needed.

21CH0130 (Wallmark/Carlson/Lindberg Farmstead)

Site 21CH0130 is a late nineteenth- through mid twentieth-century farmstead archaeological site. The farmstead was begun by Swedish-born Otto Wallmark and his family sometime between 1866 and 1888, occupied and farmed from 1902 to 1929 by another Swedish immigrant, Frank Carlson, and his family, then beginning in 1937, by Carl Lindberg. Diagnostic artifacts recovered suggest that the deposits present in the composite preliminary construction limits for the four alternatives for the TH 8 Improvement Project date to the Carlson occupation.

Only a small fraction of 21CH0130, that portion within the composite preliminary construction limits, was tested and characterized. This portion is outside of the core of the farmstead, and it yielded just a light scatter of historical-period artifacts; it would not, therefore, contribute to any potential significance that the site as a whole might have with regard to Criterion A.

No evidence could be found to suggest that Otto Wallmark, Frank Carlson, or Carl Lindberg were historically significant with regard to agriculture. For this reason, 21CH0130 does not satisfy NRHP Criterion B.

Although the excavation units at the Wallmark Farmstead produced some diagnostic, historical-period artifacts in a high density relative to the rest of the test area, these were still not of a sufficient quantity to provide substantial amounts of information. This

portion of the site, therefore, does not contribute to any potential significance that the site as a whole might have with regard to NRHP Criterion D.

Based on its lack of significance, the portion of 21CH0130 within the composite preliminary construction limits for the four alternatives for the TH 8 Improvement Project is recommended as not contributing to the eligibility of the site, should the remainder of the site be determined eligible in the future. It is therefore recommended that no further work is recommended prior to or during construction for the TH 8 Improvement Project with regard to this portion of 21CH0130.

The portion, however of the Wallmark Farmstead site beyond the composite preliminary construction limits for the four alternatives currently under consideration for the TH 8 Improvement Project remains potentially eligible for listing in the NRHP, based on its association with and potential to yield important information on the historical pattern of Swedish immigration and agricultural lifeways in Chisago County. When, therefore, the final alternative for the TH 8 Improvements Project is selected, its construction limits and the associated APE for archaeology need to be reviewed to determine whether any portion of the site beyond that within the composite preliminary construction limits is included; if so, a Phase II evaluation of 21CH0130 will be needed.

21CH0131

Site 21CH0131 is a historical farmstead archaeological site that appears to be intact and have substantial artifact deposits. Based on its anticipated high research potential, 21CH0131 is recommended as potentially eligible for listing in the NRHP. This site, however, does not fall within the composite preliminary construction limits for the four alternatives currently under consideration for the TH 8 Improvement Project. When the final alternative for the TH 8 Improvements Project is selected, its construction limits and the associated APE for archaeology need to be reviewed to determine whether this site is included; if so, a Phase II evaluation of 21CH0131 will be needed.

21CH0132

Site 21CH0132 is a historical farmstead archaeological site that appears to be intact, having extant structures and intact foundations. Based on its anticipated high research potential, 21CH0132 is recommended as potentially eligible for listing in the NRHP. This site, however, does not fall within the composite preliminary construction limits for the four project alternatives currently under consideration for the TH 8 Improvement Project. When the final alternative for the TH 8 Improvements Project is selected, its construction limits and the associated APE for archaeology need to be reviewed to determine whether this site is included; if so, a Phase II evaluation of 21CH0132 will be needed.

UNSURVEYED AREAS OF MODERATE TO HIGH ARCHAEOLOGICAL POTENTIAL

Several locations with moderate potential for containing precontact archaeological resources and one location with high potential for the same were not surveyed during the current investigation. The locations with moderate archaeological potential, appearing as purple in Figure 2, are located outside of the composite preliminary construction limits for the four alternatives currently under consideration. The location with high archeological potential, appearing as orange in Figure 2, was not surveyed due to landowner refusal of access. When the final alternative for the TH 8 Improvements Project is selected, its construction limits and the associated APE for archaeology need to be reviewed to determine whether any of these locations are included; if so, Phase I survey of the included locations will be needed.

The parcel numbers for the location with high archaeological potential (orange) are 13.00069.00, 13.00070.10, and 13.00071.00. The parcel numbers for the locations with moderate archaeological potential (purple) are 13.00078.00, 13.00080.00, 13.00081.00, 13.00081.10, 13.00082.00, 13.00083.00, 13.00083.10, 13.00649.00, 13.00650.00, 13.10187.00, 13.10188.00, 13.10395.20, 13.10882.00, 13.10893.00, 13.00651.00, 13.10894.00, 13.10895.00, 13.10896.00, 13.10897.00, 13.10898.00, 13.10902.00, 13.10903.00, 13.10904.00, 13.10905.00, 13.10906.00, 13.10907.00, 13.10908.00, 13.10911.00, 13.10912.00, 13.10913.00, 13.10914.00, 13.10915.00, 13.10916.00, 13.10917.00, 13.10918.00, 13.10919.00. 13.10920.00. 13.10921.00, 13.10921.10, 13.10929.00, 13.10930.00, 13.10931.00, 13.10940.00, 13.10941.00, 13.10943.00, 13.10943.10, 13.10944.00, 13.10945.00, 13.10946.00, 13.10947.00, 21.10685.00, 21.10687.00. 21.10691.00, 21.10692.00, 21.10699.10, 21.11069.11, 21.11069.12, and 21.11069.13.

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APPENDIX A ARTIFACT CATALOGS

Box#	Catalog #	Qty.		Descriptor Type 1	Object Name	Descriptor Type 2	Descriptor 2	Descriptor Type 3	Descriptor 3	Description	Diagnostic/ Non- diagnostic		Recovery Date	Measurement 1	Measurement Unit 1	Dimension 1	Measurement 2	Measurement Unit 2	Dimension 2	Coll. Method	Horizontal/ Unit #	Landowner	Site #
1	2012.9.1.1	1 1	Burlington chert		projectile point	AAT	triangular	AAT	corner-	Triangular shaped projectile point; broken base; finely worked; could be corner or side-notched; maximum width is 18 mm; maximum height is 27.69 mm; maximum thickness is 5.71 mm	Diagnostic	Pre- Contact Period	07/26/2010	2.2	grams	weight	5.71	millimeters	thickness	general surface	FS 1	Carl A. Lindberg Trust	21-CH-121

Box#	Catalog #	Qty.	ł	Descriptor Type 1	Object Name	Descriptor Type 2	Descriptor 2	1	Historical	1	1	Measurement Unit 1	1	Coll. Method	Horizontal/ Unit #	Landowner	Site#
1	2012.15.1.1	1	Swan River	Local	tertiary flake			Non- diagnostic	Pre- contact Period	08/02/2010	1.4	grams	weight	general surface	FS 1	Beulah Tolzmann	21-CH-122
1	2012.15.2.1	1	gabbro	AAT	fragment	Local	fire-cracked	Non- diagnostic	Pre- contact Period	08/02/2010	72.7	grams	weight	general surface	FS 2	Beulah Tolzmann	21-CH-122

								.,											The same of the sa				
						1		į			Diagnostic/												
				Descriptor	Object	Descriptor		Descripto	r		Non-	Historical	Recovery		Measurement			Measurement		Coll.	Horizontal/		
Catalog	# Qty.	. Mat	aterials 1	Type 1	Name	Type 2	Descriptor 2	Type 3	Descriptor 3	Description	diagnostic	Context	Date	Measurement 1	Unit 1	Dimension 1	Measurement 2		Dimension 2	Method	Unit #	Landowner	Site #
										blade is triangular with slightly pressure-													
								1		flaked excurvate edges; one side is			1							1	İ		
										fluted; base is broken; the maximum		Ì									1		
	-									width is 35.98 mm; maximum height is		Pre-								1			
		Knif	ife River		projectile					46.39 mm; maximum thickness is 5.02		contact								general			
1.1	1	Flin	nt	AAT	point	AAT	triangular	AAT	fluted	mm	Diagnostic	Period	08/02/2010	8.2	grams	weight	5.02	millimeters	thickness	surface	FS 1	David Christensen	21-CH-123

									Diagnostic/									
				Descriptor	Object	Descriptor			Non-	Historical	Recovery		Measurement		Coll.	Horizontal/		
Cat	alog #	Qty.	Materials 1	Type 1	Name	Type 2	Descriptor 2	Description	diagnostic	Context	Date	Measurement 1	Unit 1	Dimension 1	Method	Unit #	Landowner	Site #
				-				possible unfinished		Pre-								
ĺ		ĺ	quartz		projectile			projectile point; one side is		contact					general		John and GL	
1.1		1	(mineral)	AAT	point	AAT	utilized	worked	Diagnostic	Period	08/04/2010	3.3	grams	weight	surface	FS 1	Thompson	21-CH-124

																	· · · · · · · · · · · · · · · · · · ·					1 7101		r criacorogica: 17	T. OBTIGUITOR
									Diagnostic																
				Descriptor	Object	Descriptor			/Non-		Recovery		Measurement		Coll.	Horizontal/	HorizMeas		HorizRef	VPU Star	t VPU End	Vert. Meas.	Vert. Ref.		
3ox#	Catalog #	Qty.	Materials 1	Type 1	Name	Type 2	Descriptor 2	Description	diagnostic	Context	Date	Measurement 1	Unit 1	Dimension 1	Method	Unit#	Unit	HorizCoord1					Pt.	Landowner	Site #
										Pre-														RM	
					tertiary				Non-	contact					shovel						1		ground	Investments	
1	2012.16.1.1	11	Rhyolite	Local	flake				diagnostic	Period	08/09/2010	0.1	grams	weight	test	ST 1	ļ <u>.</u>			0	70	centimeters	surface		21-CH-
			0 - 1 - 1							Pre-					1									RM	
1	2012.16.2.1	1	Cedar Valley chert		shatter				Non- diagnostic	contact Period	08/09/2010	0.4	grams	weight	shovel	ST 3					1.0	centimeters	ground	Investments LLC	21-CH-
<u> </u>	2012.10.2.1		Valley Criert	Local	Stratter				diagnostic	Pre-	100/09/2010	10.4	grams	weight	test	1313	 			10	40	Centimeters	Surface	RM	121-011
			Galena						Non-	contact					shovel								ground	Investments	
1	2012.16.2.2	1	chert	Local	shatter				1	Period	08/09/2010	0.5	grams	weight	test	ST 3				0	40	centimeters	surface		21-CH
					1		<u> </u>		1	Pre-			1							†	+			RM	1
			quartz		tertiary				Non-	contact					shovel								ground	Investments	
1	2012.16.3.1	1	(mineral)	Local	flake				diagnostic	Period	08/09/2010	0.5	grams	weight	test	ST 4	meters	S10	ST 1	40	50	centimeters	surface		21-CH
										Pre-														RM	
		1.	granite			l			Non-	contact		1,,,,			shovel				L		L_		ground	Investments	
1	2012.16.4.1	- 1	(rock)	AAT	fragment	Local	fire-cracked		diagnostic	Period	08/09/2010	187.9	grams	weight	test	ST 5	meters	E5	ST 1	60	70	centimeters	surface	LLC RM	21-CH
			Burlington		tertiary				Non-	Pre- contact					shovel		İ						ground	Investments	
1	2012.16.5.1	1	chert		flake				diagnostic	Period	08/09/2010	0.1	grams	weight	test	ST 6	meters	E10	ST 1	10	70	centimeters			21-CH
	2012.10.0.1	 	- CHOIL	Local	Illako		 	_	diagnostic	Pre-	00/00/2010	0.1	gramo	Weight	1000	1010	meters	12.10		 	10	CONTENTOLOR	Journaco	RM	1
	1		Prairie du		tertiary				Non-	contact					shovel								ground	Investments	
1	2012.16.6.1	1	Chien chert	Local	flake	Local	microdebitage		diagnostic	Period	08/09/2010	0.1	grams	weight	test	ST 10	meters	W10	ST 3	0	40	centimeters	surface		21-CH
										Pre-							1							RM	
		1.	granite			1			Non-	contact	1		,		shovel								ground	Investments	
1	2012.16.7.1	1	(rock)	AAT	cobble	AAT	utilized	1	diagnostic	Period	08/09/2010	173.2	grams	weight	test	ST 11	meters	W10	ST 4	10	40	centimeters	surface	LLC	21-CH-
								utilization scars on one		Pre-														RM	
			Burlington					end; possibly	Non-	contact					shovel								ground	Investments	
1	2012.16.8.1	1	chert	Local	shatter	AAT	utilized	heat-treated	diagnostic	Period	08/10/2010	19	grams	weight	test	ST 14	meters	S5	ST 5	lo	15	centimeters	surface		21-CH-
		<u> </u>		1	10000000			110000	1	Pre-	1	1	1	, weight	1001	1	metere	1		<u> </u>	 			RM	1
			Swan River		tertiary				Non-	contact					shovel								ground	Investments	
1	2012.16.9.1	1	chert	Local	flake			microdebitage	diagnostic	Period	08/10/2010	0.1	grams	weight	test	ST 19	meters	S5	ST 14	0	60	centimeters	surface		21-CH
										Pre-														RM	
			Cedar	1	tertiary				Non-	contact				1	shovel								ground	Investments	
1	2012.16.9.2	11	Valley chert	Local	flake		 	microdebitage	diagnostic	Period	08/10/2010	0.1	grams	weight	test	ST 19	meters	S5	ST 14	10	60	centimeters	surface	LLC RM	21-CH
			plant		1				Non	Pre- contact					shovel				g				around	Investments	
1	2012.16.9.3-4	2	material	AAT	remains				Non- diagnostic	Period	08/10/2010	0.1	grams	weight	shovel test	ST 19	meters	S5	ST 14	lo	60	centimeters	ground		21-CH
'	2012.10.0.0-4	1	material	1001	Tomanis	 	 	 	uiagriosiic	Pre-	00/10/2010	10.1	Igrains	TVV SIGITE	1691	101 19	meters	100	101 14	 	+	ocintimeters	Suriace	RM	121-011
									Non-	contact				***************************************	shovel								ground	Investments	
1	2012.16.9.5-6	2	charcoal	AAT	sample				diagnostic		08/10/2010	0.1	grams	weight	test	ST 19	meters	S5	ST 14	lo	60	centimeters			21-CH-

																												Phase I and II Archaeo	logical Investigación
				Descriptor		Descriptor		Descriptor		Descriptor			Diagnostic/No		Recovery		Measurement			Measurement		Coll.	Horizontal		VPU End	Vert, Meas.		_	
Box #	Catalog #		1 sic igneous	Type 1	Object Name		Descriptor 2	Type 3	Descriptor 3	Type 4	Descriptor 4	Description		Historical Context	Date	Measurement 1	Unit 1		Measurement 2	Unit 2	Dimension 2	Method	Unit#	Depth	Depth	Unit	Vert. Ref. Pt.	Landowner	Site #
1	2012.10.1.1	1 rock)		AAT	fragment	Local	fire-cracked		-			one surface exfoliated; one	Non-diagnostic	Pre-contact Period Pre-contact Period.	08/11/2010	255.9	grams	weight				shovel test	ST 4	0	46	centimeters	×	George and Vida Meland	
1	2012.10.2.1	1 ceramic (n	naterial)	Local	body sherd	Local	sand-tempered	-				surface with no treatment	Diagnostic	Woodland Tradition	08/11/2010	1.9	grams	weight				shovel test	ST 5	-0	30	centimeters	ground surface	George and Vida Meland	1 21-CH-126
												incomplete; excurvate body shape; 24.27 mm maximum width																	
1	2012.10.2.2	1 Tongue Ri	ver Silica	AAT	projectile point		į		1			41.92 mm maximum heigth; 10.13 mm maximum thickness		Pre-contact Period.	08/11/2010	10.2	grams	weight	10.13	millimeters	thickness	shovel test	ST 5	0	30	centimeters	ground surface	George and Vida Meland	d 21-CH-126
1	2012.10.2.3	1 chert		Local	shatter								Non-diagnostic	Pre-contact Period.	08/11/2010	8.9	grams	weight				shovel test		0	30	centimeters	ground surface	George and Vida Meland	d 21-CH-126
1	2012.10.2.4	1 Galena ch	ert	Local	shatter									Pre-contact Period	08/11/2010	1.9	grams	weight				shovel test		0	30	centimeters	ground surface	George and Vida Meland	d 21-CH-126
				1			grit and sand-					both surfaces smoothed; from same vessel as 3.2; oxidized		Pre-contact Period.								SHOVELLEST	011		100				
1	2012.10.3.1	1 ceramic (n	naterial)	Local	body sherd	Local	temper					reddish exterior both surfaces smoothed; from	Diagnostic	Woodland Tradition	08/11/2010	3.9	grams	weight	6.15	millimeters	thickness	shovel test	ST 6	0	27	centimeters	ground surface	George and Vida Meland	1 21-CH-126
1	2012.10.3.2	1 ceramic (n	anterial)	Local	body sherd	Local	grit and sand- temper					same vessel as 3.1; oxidized	Diagnostic	Pre-contact Period. Woodland Tradition	08/11/2010	2.5	grams	weight	6.15	millimeters	thickness	shovel test	CT 6		27	centimeters	ground surface	George and Vida Meland	d 21-CH-126
1	2012.10.4.1	1 gabbro	latorialy	AAT	fragment	Local	fire-cracked					Toddish oxions		Pre-contact Period	08/11/2010		grams	weight		THE STATE OF	UIICKIIOSS	shovel test	T		45	centimeters		George and Vida Meland	
	2012.10.4.1	gabbio		1001	Iragillett	Local	IIIO-CIACREG					two sets of two parallel lines of comb-stamping on smoothed	14011-diagnostic	1 10-contact 1 enou	00/11/2010	70.7	granis	Weight				Shovel test	317	 	143	CCIRIIIOCOTO	ground		1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
											Ot Ossiv	exterior surface (rows are 1.59		Pre-contact Period.															
1	2012.10.5.1	1 ceramic (n	naterial)	Local	body sherd	Local	sand-tempered	Local	comb- stamped		St. Croix Stamped	mm apart; sets of lines are 2.39 mm apart); smoothed interior	Diagnostic	Woodland Tradition. Transitional Woodland	08/11/2010	3.1	grams	weight	6.08	millimeters	thickness	shovel test	ST 8	0	30	centimeters	ground surface	George and Vida Meland	d 21-CH-126
1	2012.10.5.2	1 ceramic (n		Local	body sherd	Local	sand-tempered					both surfaces exfoliated	Diagnostic	Pre-contact Period. Woodland Tradition	08/11/2010	0.4	grams	weight				shovel test	ST 8	0	30	centimeters	ground surface	George and Vida Meland	d 21-CH-126
11	2012.10.5.3-4	basalt (bas 2 rock)	sic igneous	AAT	fragments	Local	fire-cracked						Non-diagnostic	Pre-contact Period	08/11/2010	12.9	grams	weight				shovel test	ST 8	o	30	centimeters	ground surface	George and Vida Meland	d 21-CH-126
1	2012.10.5.5	1 Gunflint sil	ica	Local	tertiary flake	AAT	utilized					utilization marks on one side of flake	Non-diagnostic	Pre-contact Period	08/11/2010	0.4	grams	weight				shovel test	ST 8	0	30	centimeters	ground surface	George and Vida Meland	d 21-CH-126
1	2012.10.5.6	1 chert		Local	tertiary flake								Non-diagnostic	Pre-contact Period	08/11/2010	0.3	grams	weight				shovel test	ST 8	0	30	centimeters	ground surface	George and Vida Meland	d 21-CH-126
1	2012.10.5.7	1 chert		Local	shatter								Non-diagnostic	Pre-contact Period	08/11/2010	0.3	grams	weight				shovel test	ST 8	0	30	centimeters	ground surface	George and Vida Meland	d 21-CH-126
1	2012.10.5.8	1 Prairie du	Chien chert	Local	shatter									Pre-contact Period	08/11/2010	1.2	grams	weight				shovel test		0	30	centimeters	ground surface	George and Vida Meland	d 21-CH-126
1	2012.10.6.1	1 gabbro		AAT	fragment	Local	fire-cracked							Pre-contact Period	08/12/2010	139.3	grams	weight				shovel test		0	30	centimeters	ground surface	George and Vida Meland	d 21-CH-126
1	2012.10.7.1	1 ceramic (n	naterial)	Local	body sherd	Local	grit and sand- temper					both surfaces exfoliated		Pre-contact Period. Woodland Tradition	08/12/2010		grams	weight				shovel test		0	30	centimeters		George and Vida Meland	
1	2012.10.7.2	1 Galena ch		Local	shatter	Local	temper	1				Both Sanaces existated		Pre-contact Period	08/12/2010		grams	weight				shovel test		10	30	centimeters	ground surface	George and Vida Meland	
	2012.10.7.3	1 metal	CIL	AAT		1		1	-							2.5	grams			 		shovel test		ļ. —	30	centimeters	1	George and Vida Meland	
1			n		fragment	<u> </u>	 	 				Indeterminate, small piece		Pre-contact Period	08/12/2010	0.2	1	weight						1	30	centimeters		George and Vida Meland	
1	2012.10.8.1	1 quartz (mir		Local	tertiary flake			1	 					Pre-contact Period	08/12/2010	0.2	grams	weight				shovel test		10	21		ground surface		
1	2012.10.9.1	1 Galena ch		Local	shatter	1			-					Pre-contact Period	08/12/2010	2.0	grams	weight				shovel test		0	30	centimeters	ground surface	George and Vida Meland	
1	2012.10.10.1	1 granite (ro		AAT	fragment	Local	fire-cracked							Pre-contact Period	08/12/2010		grams	weight		 		shovel test	,	10	36	centimeters		George and Vida Meland	
1	2012.10.11.1	1 Prairie du	Chien chert	Local	secondary flake			 				Clusters of parallel dentate-	Non-diagnostic	Pre-contact Period	08/12/2010	0.9	grams	weight				shovel test	ST 23	0	24	centimeters	ground surface	George and Vida Meland	1 21-CH-126
												stamping on smoothed exterior surface (dentates 2.95 mm wide;																	
												rows 3.49 mm apart); CWOI or eroded dentate oblique oriented to	,																
												the right on exterior of rim (spaced 6.07 mm apart; 2.28 mm above																	
											cord-wrapped	dentate-stamping); flattened lip with oblique CWOI or dentate;		Pre-contact Period.									1						
1	2012.10.12.1-4	4 ceramic (n	naterial)	Local	rim sherd	Local	grit and sand- temper	Local	dentate- stamped		stick- impressed	sherds refit; residue on smoothed interior	Diagnostic	Woodland Tradition. Havana Related	08/12/2010	20.6	grams	weight				shovel test	ST 26	30	55	centimeters	ground surface	George and Vida Meland	d 21-CH-126
	2012.10.12.5	1 granite (ro		AAT	fragment	Local	fire-cracked							Pre-contact Period	08/12/2010		grams	weight				shovel test	ST 26	30	55	centimeters	ground surface	George and Vida Meland	d 21-CH-126
	2012.10.12.6	1 Swan Rive		Local	shatter	20001	ino crasicoa	1						Pre-contact Period	08/12/2010	1.3.3	grams	weight				shovel test		30	55	centimeters		George and Vida Meland	
	2012.10.12.7	1 Galena ch		Local	tertiary flake			1						Pre-contact Period	08/12/2010		grams	weight				shovel test		30	55	centimeters	ľ	George and Vida Meland	
1	2012.10.12.7	1 Galena ch		Local	shatter				<u> </u>			type of chalcedony?		Pre-contact Period	08/12/2010		grams					shovel test		30	55	centimeters		George and Vida Meland	
—			eit.	Local	1	1			1			type of charcedony?			7	11.9	1	weight				shovel test		30	55	centimeters	I	George and Vida Meland	
	2012.10.12.9		ic igneous	Local	shatter	t	6	1	-					Pre-contact Period	08/12/2010	17.0	grams	weight	 			shovel test		100	60			George and Vida Meland	
1 1	2012.10.13.1		sic igneous	AAT	fragment		fire-cracked	1	-					Pre-contact Period	08/12/2010	17.6	grams	weight			-			<u> </u>	60	centimeters			
1	2012.10.13.2	1 rock)		AAT	fragment	Local	fire-cracked		 	 				Pre-contact Period	08/12/2010	5.9	grams	weight	 			shovel test		10	00	centimeters		George and Vida Meland	
	2012.10.13.3	1 rock		Local	tertiary flake	-		+	-					Pre-contact Period	08/12/2010	11.2	grams	weight	 			shovel test		-	60	centimeters		George and Vida Meland	
1	2012.10.13.4	1 Swan Rive		Local	tertiary flake	Local	heat-treated	+	-					Pre-contact Period	08/12/2010		grams	weight				shovel test		0	60	centimeters	ground surface	George and Vida Meland	
1	2012.10.13.5	1 Cedar Vali		Local	secondary flake	AAT	utilized	+	 					Pre-contact Period	08/12/2010		grams	weight	_			shovel test		10	60	centimeters	ground surface	George and Vida Meland	
	2012.10.13.6	1 quartz (mir	neral)	Local	shatter		-	-	-				Non-diagnostic	Pre-contact Period	08/12/2010	3.7	grams	weight		 		shovel test		0	60	centimeters	ground surface		
1	2012.10.13.7	1 chert		AAT	sample	 	-	1	+			tested raw material	Non-diagnostic	Pre-contact Period	08/12/2010	6.8	grams	weight				shovel test		0	60	centimeters	ground surface	George and Vida Meland	
1	2012.10.13.8	1 bone (mate	erial)	AAT	remains	ITIS	mammalia	AAT	fragment				Non-diagnostic	Pre-contact Period	08/12/2010	0.1	grams	weight				shovel test		0	60	centimeters	ground surface	George and Vida Meland	
11	2012.10.14.1	1 Cedar Vall	ey chert	Local	shatter	 	 		 			same material as 15.2 and	Non-diagnostic	Pre-contact Period	08/12/2010	4.1	grams	weight	 	<u> </u>		shovel test		0	65	centimeters	ground surface	George and Vida Meland	d 21-CH-126
11	2012.10.15.1	1 Tongue Ri	ver Silica	Local	primary flake	<u> </u>		 				possibly 15.3 same material as 15.1 and	Non-diagnostic	Pre-contact Period	08/12/2010	19.5	grams	weight		ļ		shovel test	ST 30	0	20	centimeters	ground surface	George and Vida Meland	d 21-CH-126
11	2012.10.15.2	1 Tongue Ri	ver Silica	Local	primary flake			-	-			possibly 15.3 possibly same material as 15.1	Non-diagnostic	Pre-contact Period	08/12/2010	1.1	grams	weight				shovel test	ST 30	0	20	centimeters	ground surface	George and Vida Meland	d 21-CH-126
11	2012.10.15.3	1 Tongue Ri	ver Silica	Local	tertiary flake	ļ						and 15.2	Non-diagnostic	Pre-contact Period	08/12/2010	0.7	grams	weight				shovel test	ST 30	0	20	centimeters	ground surface	George and Vida Meland	d 21-CH-126
11	2012.10.16.1	1 Burlington	chert	Local	tertiary flake	ļ		<u> </u>				***************************************	Non-diagnostic	Pre-contact Period	08/12/2010	0.2	grams	weight		<u> </u>		shovel test	ST 32	0	47	centimeters	ground surface	George and Vida Meland	d 21-CH-126
1	2012.10.16.2	1 Prairie du	Chien chert	Local	tertiary flake	<u> </u>							Non-diagnostic	Pre-contact Period	08/12/2010	0.2	grams	weight		<u> </u>		shovel test	ST 32	0	47	centimeters	ground surface	George and Vida Meland	d 21-CH-126

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			Descriptor		Descriptor		Descriptor			Diagnostic/Non-		Recovery		Measurement	:		Measurement		Coll.	Horizontal/	Vertical	VPII Start	VPU End	Vert. Meas.	Vert. Ref.		
Box#	Catalog #	Qty. Materials 1	Type 1	Object Name		Descriptor 2		Descriptor 3	Description	diagnostic	Historical Context		Measurement 1			Measurement 2		Dimension 2	Method	Unit #	Method	Depth	Depth	Unit	Pt.	Landowner	Site #
		auarta.											Į.												ground		
1	2012.11.1.1	quartz 1 (mineral)	Local	tertiary flake						Non-diagnostic	Pre-contact Period.	08/23/2010	1.7	grams	weight				general surface	FS1				centimeters		Kevin and Joni Hogie	21-CH-127
								1	smoothed-over, fine																		
								smoothed-	multi-directional cord marked exterior;	1	Pre-contact Period.				ŀ												İ
		ceramic			1	grit and sand		over-	smoothed buff		Woodland Tradition.				}				shovel						ground		į
11	2012.11.2.1	1 (material)	Local	body sherd	Local	tempered	Local	cordmarked		Diagnostic	Late Woodland	08/25/2010	2.9	grams	weight	3.16	millimeters	thickness	test	ST 7	none	0	35	centimeters	suface	Kevin and Joni Hogie	21-CH-127
									both surfaces smoothed; may be]								-									
		ceramic				grit and sand			smoothed-over-lines		Pre-contact Period.			İ	•				shovel						ground		
11	2012.11.2.2	1 (material)	Local	body sherd	Local	tempered		ļ	on exterior	Diagnostic	Woodland Tradition.	08/25/2010	0.9	grams	weight	4.66	millimeters	thickness		ST 7	none	0	35	centimeters	suface	Kevin and Joni Hogie	21-CH-127
									smoothed-over multi-	_									1								
									directionally cord-																İ		
		l agramia						smoothed- over-	marked exterior; no surface treatment on		Pre-contact Period.														ground		
1	2012.11.2.3	ceramic (material)	Local	body sherd	Local	grit and sand tempered	Local		reduced interior	Diagnostic	Woodland Tradition.	08/25/2010	0.8	grams	weight	4.60	millimeters	thickness	shovel test	ST 7	none	70	100	centimeters		Kevin and Joni Hogie	21-CH-127
			1												T												
1	2012.11.2.4	granite 1 (rock)	AAT	fragment	Local	fire-cracked				Non-diagnostic	Pre-contact Period.	08/25/2010	6.9	grams	weight				shovel test	ST 7	none	70	100	centimeters	ground suface	Kevin and Joni Hogie	21-CH-127
				magmont	1	- Interest of the second of th		<u> </u>		I vally diagnisates			10.0	9	1	1			1001								
1	2012.11.2.5	granite (rock)	AAT	fragment	Local	fire-cracked				Non diagnostic	Pre-contact Period.	08/25/2010	3.5	grams	weight		ĺ		shovel test	ST 7	none	70	100	centimeters	ground	Kevin and Joni Hogie	21-CH-127
 	2012.11.2.5	T (TOCK)	HAA I	iragment	Local	mre-cracked	 	<u> </u>	+	Non-diagnostic	Pre-contact Period.	06/25/2010	3.5	grains	Weight			<u> </u>	lest	317	rione	170	1100	Contamotors	Curaco	1.01.11 4.14 00.11 1.103.0	
		basalt (bas	ic																l		ļ.				ground		
1	2012.11.2.6	igneous 1 rock)	AAT	fragment	Local	fire-cracked				Non-diagnostic	Pre-contact Period.	08/25/2010	15.7	grams	weight				shovel test	ST 7	none	70	100	centimeters		Kevin and Joni Hogie	21-CH-127
				, , , , , , , , , , , , , , , , , , ,																							
1	2012.11.3.1	granite 1 (rock)	AAT	fragment	Local	fire-cracked				Non-diagnostic	Pre-contact Period.	08/25/2010	95.5	grams	weight		ł		shovel test	ST 12	none	90	100	centimeters	ground suface	Kevin and Joni Hogie	21-CH-127
1	2012.11.5.1	((OCK)	1001	maginerit	Local	IIIe-cracked	<u> </u>		one smoothed	14011-diagnostic	1 16-contact 1 chod.	100/20/2010	30.0	grams	Worgin	1		 	1631	01 12	TIONS	100	1,00				
	2012.11.4.1	ceramic		had abard	Local	grit and sand			surface; one	Non-diagnostic	Pre-contact Period. Woodland Tradition.	00/05/0040	0.4	grams	weight				shovel test	ST 13	none		70	centimeters	ground	Kevin and Joni Hogie	21-CH-127
-	2012.11.4.1	1 (material)	Local	body sherd	Local	tempered	 		exfoliated surface	Non-diagnostic	vvoodiand fradition.	06/23/2010	0.4	grams	weigni	 		+	lesi	01 10	TIONE	10	1,0	Continuotoro	Calado	Total and com riegio	2. 0
		basalt (bas	ic]							1								
1	2012.11.4.2	igneous 1 rock)	AAT	fragment	Local	fire-cracked				Non-diagnostic	Pre-contact Period.	08/25/2010	42	grams	weight				shovel	ST 13	none	lo	70	centimeters	ground suface	Kevin and Joni Hogie	21-CH-127
	2012.11.11.2	1 100%	7,7,1	Inaginoni	Local	- In o Gracinoa		<u> </u>		Tron diagnosis	T TO COMMUNICATION	100/20/20 10	1	19	l												
1	2012.11.4.3	Tongue River Silica	Local	tertiary flake						Non diagnostic	Pre-contact Period.	08/25/2010	0.2	grams	weight				shovel	ST 13	none	l ₀	70	centimeters	ground suface	Kevin and Joni Hogie	21-CH-127
	2012.11.4.5	1 INVELORICA	LOCAL	iteritary nake		 				Nor-diagnostic	Fre-contact Fellou.	00/23/2010	0.2	grams	Weight				Tiest	01 10	TIOTIO	1	-		124.422	•	
									smoothed-over,																		1
									finely parallel cord- marked buff exterior;																		
									smoothed reduced															•			
									interior; crushed											1,				}			
			1					smoothed-	quartz-temper; consistent with																		
		ceramic						over-	Middle Woodland		Pre-contact Period.							1	shovel				1.00		ground	Karia and Indiliania	04 011 407
1	2012.11.4.4	1 (material)	Local	body sherd	AAT	grit-tempered	Local	cordmarked	period sherds	Diagnostic	Woodland Tradition.	08/25/2010	2.0	grams	weight	6.33	millimeters	thickness	test	ST 13	none	70	100	centimeters	surace	Kevin and Joni Hogie	21-CH-127
		basalt (bas	ic								,	1															
	0040 44 4 5	igneous		6		6				Niam diamentia	Day and the Dayled	00/05/0040	E 4		alaba	1			shovel	ST 13	none	70	100	centimeters	ground	Kevin and Joni Hogie	21-CH-127
1	2012.11.4.5	1 rock)	AAT	fragment	Local	fire-cracked				Non-diagnostic	Pre-contact Period.	08/25/2010	5.1	grams	weight	 	 	-	lesi	01 10	Tione	170	1100	Certurileters	Sulace	Trevill and som Hogic	21-011-121
1		granite																	shovel	07.45					ground	Karin and lani Hagin	124 CH 127
1	2012.11.5.1	1 (rock)	AAT	fragment	Local	fire-cracked	ļ		 	Non-diagnostic	Pre-contact Period.	08/25/2010	27.6	grams	weight	<u> </u>		-	test	ST 15	none	60	160	centimeters	Surace	Kevin and Joni Hogie	21-01-121
									ana amaathad										ŀ								
		ceramic				sand-			one smoothed surface; one	1	Pre-contact Period.								shovel						ground		
1	2012.11.6.1	1 (material)	Local	body sherd	Local	tempered			exfoliated surface	Non-diagnostic	Woodland Tradition.	08/25/2010	0.4	grams	weight				test	ST 18	none	60	70	centimeters	suface	Kevin and Joni Hogie	21-CH-127
		basalt (bas	ic																								
		igneous			1												1		shovel	07.40		00	70		ground	Maria and Indillanta	04 04 497
1	2012.11.6.2	1 rock)	AAT	fragment	Local	fire-cracked		-	 	Non-diagnostic	Pre-contact Period.	08/25/2010	91.4	grams	weight	 	 	1	test	ST 18	none	60	1/0	centimeters	surace	Kevin and Joni Hogie	21-00-12/
		basalt (bas	ic		1					1									1.								
1	2012.11.7.1	igneous 1 rock)	AAT	fraamont	Local	fire crooked				Non disans-ti-	Pre-contact Period.	08/05/0040	13.6	arama	waight				shovel test	ST 22	none	0	60	centimeters	ground	Kevin and Joni Hogie	21-CH-127
	∠∪ I∠. I I./. I	I IOCK)	1001	fragment	Local	fire-cracked	†	 	†··	Invollediagnostic	i io-contact Penod,	0012012010	13.0	grams	weight	 	 			 	1	†	T	1			
	0040 44 7 0	quartz		annual (Balati)						Non di ''	Dec control Division	00/05/03/5		arar	huoisht				shovel test	ST 22	none	l0	60	centimeters	ground	Kevin and Joni Hogie	21-CH-127
1	2012.11.7.2	1 (mineral)	AAT	scraper (finishing tool)	 	 		-	 	INON-diagnostic	Pre-contact Period.	U8/25/2010	4.4	grams	weight	+	 		, coot	01 22	TIONE	Ť	1	Continueters	Sulave	, Sym and John Hogie	
		quartz																	shovel	ST 22	none		le0	oontimeter:	ground	Kevin and Joni Hogie	21_04.127
1	2012.11.7.3	1 (mineral)	AAT	sample	-	-		ļ	raw material	Non-diagnostic	Pre-contact Period.	08/25/2010	36.0	grams	weight	1	<u></u>	-	test	ST 22	none	10	100	centimeters	surace	IVANII SIIO JOUI HOGIE	: 121-UN-121
		basalt (bas	ic																								
	0040 44 0 4	igneous	AAT	framost	Local	fire erection				Non diagnas-4:-	Pro contact Darie	00/05/0040	20.0	arama	weight				shovel test	ST 23	none	50	60	centimeters	ground	Kevin and Joni Hogie	21-CH-127
1	2012.11.8.1	1 rock)	IAA I	fragment	Local	fire-cracked	 			ivon-diagnostic	Pre-contact Period.	00/20/2010	29.9	grams	weight	+		-		3, 20	1,,,,,,,,	+==	 				
	0040 11 - :	Cedar Valle								Land of the state		00/05/55							shovel test	ST 27	none	0	30	centimeters	ground	Kevin and Joni Hogie	21-CH-127
1	2012.11.9.1	1 chert	Local	shatter			 			INOn-diagnostic	Pre-contact Period.	U8/25/2010	2.3	grams	weight	 		 	1031	31 21	110110	Ť	155	Centimeters	3411000	, Sviii and doni riogle	2, 011-121
		basalt (bas	ic																abay:=!	<u> </u>							
1	2012.11.10.1	igneous 1 rock)	AAT	fragment	Local	fire-cracked		1		Non-diagnostic	Pre-contact Period.	08/25/2010	55.0	grams	weight				shovel test	ST 29	none	0	20	centimeters	ground surface	Kevin and Joni Hogie	21-CH-127
L	-U 12. 1 1. 1U. I	1. 1.000)	1001	Inaditions	120001	I''' O' O' BOVER	L	1		I TO L. CIAGINOSIIC	1. 15-COTRECT FERIOU.	10012012010	100.0	Idiania	Indigit												

	1	T		T	1	T	1	T		T	T		Diagnostic	/	T		1	T	Τ	T	TT-		T			
				Descripte	or Object	Descripto	or	Descriptor		Descriptor			Non-	Historical	Recovery		Measurement		Coll.	Horizontal/	VPU Start VPL	End Vert.		/ert. Ref.	1	
Box#	Catalog #	Qty.	Materials 1	Type 1	Name	Type 2	Descriptor 2	Type 3	Descriptor 3	Type 4	Descriptor 4	Description	diagnostic		Date	Measurement 1	Unit 1	Dimension 1	Method	Unit #	Depth Dep	h Unit		건.		r Site#
			glass										Non-	Post-Contact									۱-	round	Beulah	04 011 400
2	Discarded	_ 1	(material)	AAT	sherd	ļ		<u> </u>		ļ		Colorless	diagnostic	Period	5/23/2011	1.1	grams	weight	Shovel Tes	st 1	0 20	centir	neters s	round	Tolzmann Beulah	21-CH-128
	D'a a serie d					AAT	1	AAT		1		T 1 1 4000	D:	Post-Contact	5/23/2011		grams				0 20	aantin	neters Is	•	Tolzmann	21-CH-128
2	Discarded		metal plastic	AAT	nail	IAA I	wire	IAA I	fragment		ļ	Typically post-1890	Diagnostic	Period	5/23/2011	3.4	grams	weight	Shovel Tes	511	0 20	Certui	ileters 3	unacc	TOIZINGIII	121-011-120
	1		(organic	1									Non-	Post-Contact									g	ground	Beulah	
2	Discarded	1	material)	AAT	fragment						}	Yellow: melted	diagnostic	Period	5/23/2011	1.3	grams	weight	Shovel Tes	st 1	0 20	centir	neters s	surface	Tolzmann	21-CH-128
		<u> </u>	1										Non-	Post-Contact				111.9.11	011010111		T		9	ground	Beulah	
2	2012.17.1.1	1	bone	AAT	remains	ITIS	mammalia				J		diagnostic	Period	5/23/2011	1.5	grams	weight	Shovel Tes	st 3	0 26	centir	neters s	surface	Tolzmann	21-CH-128
														Post-Contact									l			1
		1					1			1		A 470 - 1 1 1 1		Period.	. 1	ŀ										
								1		ł		Milk glass jar liner		Railroads and					1				ا	ground	Beulah	
2	2012.17.2.1-2	, ,	glass (material)	AAT		AAT	1:	AAT				fragments (ca. 1869- 1950)	Disappatio	Agricultural	5/23/2011	20	grams		D To.	-+ 4	0 40	centir	neters is	•	Tolzmann	21-CH-128
	2012.17.2.1-2	- -	(material)	IAA I	jar	- AA1	liner	IAA I	sherd	+	 	1950)	Diagnostic Non-	Development Post-Contact	5/23/2011	3.2	grams	weight	Shovel Tes	5114	0 40	Certin		ground	Beulah	21-011-120
2	Discarded	1	(material)	Local	flat glass	AAT	sherd					Colorless	diagnostic	Period	5/23/2011	1 1	grams	weight	Shovel Tes	st 4	0 40	centir	neters s		Tolzmann	21-CH-128
	Diesarasa		(Material)	120001	mat grade	1	Unora			 	-	COICHIGGO	diagnostis	Post-Contact		1	- grame	Weight	Onover 10				g	ground	Beulah	
2	Discarded	1	metal	AAT	nail	AAT	wire	AAT	fragment			Typically post-1890	Diagnostic	Period	5/23/2011	4.0	grams	weight	Shovel Tes	st 9	0 26	centir	neters s	surface	Tolzmann	21-CH-128
			ceramic											Post-Contact										ground	Beulah	
2	2012.17.3.1	1	(material)	AAT	porcelain	AAT	sherd			1		Molded	Diagnostic	Period	5/23/2011	1.1	grams	weight	Shovel Te	st 12	0 25	centir	neters s		Tolzmann	21-CH-128
													Non-	Post-Contact										ground	Beulah	04 011 400
2	2012.17.3.2	1	faunal	AAT	remains	ITIS	mammalia			ļ			diagnostic	Period	5/23/2011	1.7	grams	weight	Shovel Te	st 12	0 25	centir	neters s		Tolzmann Beulah	21-CH-128
١ ,	0040 47 4 4		ceramic	l			-1						D'	Post-Contact	F/07/0044			1	0	-104	0 30	Conti	neters s	ground	Tolzmann	21-CH-128
2	2012.17.4.1		(material)	AAT	porcelain	AAI	sherd	-		 	 	Green glaze on exeterior	Diagnostic Non-	Period Post-Contact	5/27/2011	1.4	grams	weight	Shovel Te	St 24	10 30	Centi		ground	Beulah	121-011-120
2	Discarded	4	(material)	AAT	clay piged	ΛΔΤ	fragment				1	Black with yellow exterior	diagnostic	Period	5/27/2011	0.8	grams	weight	Shovel Te	st 26	0 10	centii	neters is		Tolzmann	21-CH-128
	Discurded .	-	(material)	17011	ciay pigee	17011	magmone	 			 	Black With Yorlow exterior	Non-	Post-Contact	O/Z//ZOTT	0.0	gramo	Weight	Gilovei 10	5125	1			ground	Beulah	
2	Discarded	1	metal	AAT	fragment							Indeterminate; flat	diagnostic	Period	5/27/2011	2.6	grams	weight	Shovel Te	st 26	0 10	centir	neters s	surface	Tolzmann	21-CH-128
		1									1							1								
				-								Cut or wire indeterminate	Non-	Post-Contact						1			- 1	ground	Beulah	
2	Discarded	1	metal	AAT	nail	AAT	wire	AAT	fragment			due to rust accretions	diagnostic	Period	5/27/2011	3.0	grams	weight	Shovel Te	st 27	0 20	centii	neters s	surface	Tolzmann	21-CH-128
1	1			1								Small/medium mammal		D				1		1			ا	around	Beulah	1
2	0040 47 5 4		vertebrae	AAT		ITIC	mammalia			I	f	vertebrae fragment (broken)	Non-	Post-Contact	E /07/0014		grams		Shovel Te	at 20	0 30	centi	neters is	ground	Tolzmann	21-CH-128
	2012.17.5.1		vertebrae	IAAI	remains	ITIS	mammana	Local	medium	AAT	fragment	(bloken)	diagnostic Non-	Period Post-Contact	5/27/2011	1.1	grams	weight	Shover re	51125	10 100	COTTO		ground	Beulah	121011120
2	2012.17.5.2	1	rib	AAT	remains	ITIS	mammalia	AAT	fragment				diagnostic	Period	5/27/2011	2.1	grams	weight	Shovel Te	st 29	0 30	centii	meters s		Tolzmann	21-CH-128
 	120.2	+	11.2	 	1.011.021.0	1110	113211111111111	7.5.11	nag,non			Small unidentifiable	Non-	Post-Contact	10.2		19.4	1.0.9					9	ground	Beulah	
2	2012.17.5.3-7	7 5	faunal	AAT	remains						1	fragments	diagnostic	Period	5/27/2011	0.1	grams	weight	Shovel Te	st 29	0 30	centi	meters s	surface	Tolzmann	21-CH-128
			glass										Non-	Post-Contact										ground	Beulah	
2	Discarded	1	(material)	AAT	sherd							Colorless	diagnostic	Period	5/27/2011	0.5	grams	weight	Shovel Te	st 29	0 30	centi	meters s	surface	Tolzmann	21-CH-128
			plastic		·															1					Dayloh	
	D:	1.	(organic			1				1		D 1 (D 1 1000)	<u></u>	Post-Contact	F /07/0044		l	imba	Chaust Ta	-+100	0 30	l conti	neters is	ground	Beulah Tolzmann	21-CH-128
2	Discarded	11	material)	AAT	taillight	AAT	fragment			-	ļ	Red (Post-1898) Black: one embossed	Diagnostic	Period	5/27/2011	1.1	grams	weight	Shovel Te	St 29	10 130	Centi	Heleis is	Suriace	TOIZIIIAIIII	21-011-120
				ļ								with "[]ND[]" on one											- 1			
			i									side and "[]LA[]" on]				- 1				
			plastic						1	İ		the other; one embossed											1			1
		1	(organic							1		with [PATE]NT" /	Non-	Post-Contact									g	ground	Beulah	1
2	Discarded	4	material)	AAT	fragment			1				"[]767"	diagnostic	Period	5/27/2011	6.9	grams	weight	Shovel Te	st 29	0 30	centi	meters s	surface	Tolzmann	21-CH-128
																										1 1
							1	1			1	Red, white, and blue; no	L.					1		1			l		David-1	
	<u></u>	1.	paper (fiber	l		1		1				diagnostic characteristics		Post-Contact		l	1		Ohan T	- 100				ground	Beulah	24 04 400
2	Discarded	1	product)	AAT	label (ider	1 AAT	fragment	ļ		<u> </u>	ļ	or lettering	diagnostic	Period	5/27/2011	0.2	grams	weight	Shovel Te	St 29	0 30	centi	meters s	surface around	Tolzmann Beulah	21-CH-128
	Discouded	_	glass		flat ala		ahand	1				Caladasa	Non-	Post-Contact	E /07/0044	14.0	grams	weight	Shovel Te	ct 21	0 30	centi	meters	•	Tolzmann	21-CH-128
2	Discarded	14	(material)	Local	flat glass	IAA I	sherd	1	I	1	1	Colorless	diagnostic	Period	5/27/2011	111.9	grams	IMEIRIT	TOTIONEL 16	ગ ા ા	10 130	Cent	HCICIS S	Juliauc	1 OIZHIAHH	121-011-120

	Descriptor	Descriptor	Descriptor D	escriptor Descriptor	Descriptor		Diagnostic/Non-			Measurement		Measurement	Measurement	Horizontal/ Vertical	VPU VPU Start End Vert. Meas.
Box # Catalog # Qty. Materials 1 1 Discarded 1 glass (material)	Type 1 Object Name AAT sherd	Type 2 Descriptor 2	Type 3 Descriptor 3 Ty	ype 4 Descriptor 4 Type 5	Descriptor 5 Type 6 Descriptor 6	Description Colorless	Non-diagnostic	Historical Context Post-Contact Period Post-Contact Period	Recovery Date Me 06/01/2011 1.9	grams	weight	nent 2 Unit 2 Dimension 2	Measurement 3 Unit 3	Dimension 3 Coll. Method Unit # Method Shovel Test 9	Vertical # Depth Depth Unit Vert. Ref. Pt. Landowner Site #
1 Discarded 1 metal 1 Discarded 2 metal 4 Discarded 1 gless (metal)	AAT fragment AAT nail	AAT wire	AAT fragment			Indeferminate; flat Typically post-1890 Coloriess; burned	Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	06/01/2011 2.9 06/01/2011 1.9	grams	weight weight weight			Shovel Test 11 Shovel Test 12	0 25 centimeters ground surface Wayne and Susan Gartland 21-CH-129
1 Discarded 1 glass (material) 1 Discarded 7 metal 1 2012.12.1.1 1 metal	AAT sherd AAT fragment AAT neil	AAT wire				Indeterminate; flat Typically post-1890	Non-diagnostic	Post-Contact Period Post-Contact Period	06/01/2011 6.9 06/01/2011 2.0	grams	weight 7.00	penny length		Shovel Test 12 Shovel Test 13	0 40 centimeters ground surface Wayne and Susan Gartland 21-CH-129
1 2012.12.2.1 1 ceramic (material)	AAT whiteware AAT sherd	AA1 rim sherd				Hand-painted silver band at rim Colorless	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	06/01/2011 1.6 06/01/2011 2.5	grams	weight weight			Shovel Test 16 Shovel Test 16	0 30 centimeters ground surface Wayne and Susan Gartland 21-CH-129 ground surface Wayne and Susan Gartland 21-CH-129 (55 centimeters ground surface Wayne and Susan Gartland 21-CH-129 (56 Centimeters ground surface)
1 2012.12.3.1 1 metal 1 2012.12.3.2 1 metal	AAT nail	AAT wire				Typically post-1890 Typically post-1890 Typically post-1890	Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	06/01/2011 4.6 06/01/2011 2.6 06/01/2011 3.2	grams	weight 8.00 weight 5.00	penny length penny length penny length		Shovel Test	0 55 centimeters ground surface Wayne and Susan Gartland (21-CH-129) 0 55 centimeters ground surface Wayne and Susan Gartland (21-CH-129)
Oncomber Oncomber	AAT staple Local flat glass	AAT wire				Typically post-1890 Fence staple Colorless	Non-diagnostic	Post-Contact Period Post-Contact Period	06/01/2011 6.0 06/01/2011 4.7	grams	weight 3.00 weight weight	Jenny Integra		Shovel Test	0 (55 centimeters ground surface Wayne and Susan Gartland 21-CH-129 0 (55 centimeters ground surface Wayne and Susan Gartland 21-CH-129
1 Discarded 3 glass (material)	AAT fragment Local flat glass	AAT sherd				Colorless	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	06/01/2011 1.0 06/01/2011 3.6	grams grams	weight weight			Shovel Test 17 Shovel Test 17 Shovel Test 18 18	0 55 centimeters ground surface Wayne and Susan Gertland 21-CH-129 0 35 centimeters ground surface Wayne and Susan Gertland 21-CH-129 Wayne and Susan Gertland 21-CH-129
1 Discarded 1 metal 1 Discarded 1 metal	AAT nall AAT fragment	AAT wire	AAT fragment			Typically post-1890 Indeterminate; flat	Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	06/01/2011 2.3 06/01/2011 2.3	grams grams grams	weight weight			Shovel Test	0 35 centimeters ground surface Wayne and Susan Gartland 21-CH-129 0 25 centimeters ground surface Wayne and Susan Gartland 21-CH-129 0 25 centimeters ground surface Wayne and Susan Gartland 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 21-CH-129 0 0 21-CH-129 0 21-
1 2012.12.4.1 1 long bone 1 2012.12.4.2-8 7 bone	AAT remains AAT remains	Local calcined	Cocas Inediani D	ocal medial fragment Local	alcined	Small/medium bird Indeterminate species/element	Non-diagnostic	Post-Contact Period	06/01/2011 1.7	grams	weight			Shovel lest 19	0 25 centimeters ground surface (Wayne and Susan Gartland 21-CH-129
1 2012.12.4.9 1 eggshell (animal material) 1 2012.12.4.10-12 3 metal 1 2012.12.4.13 1 metal 4 2012.12.4.14.15 2 metal	AAT fragment AAT nail AAT nail	AAT viire				Typically post-1890	Diagnostic	Post-Contact Period Post-Contact Period	06/01/2011 0.0 06/01/2011 11.		weight 8.00	penny length		Shovel Test 19 Shovel Test 19	0 25 centimeters ground surface Wayne and Susen Gartland 21-CH-129 0 25 centimeters ground surface Wayne and Susen Gartland 21-CH-129 0 25 contimeters ground surface Wayne and Susen Gartland 21-CH-129
1 2012, 12.4, 14-10 3 11/0, 11	AAT [nail	AAT wire				Typically post-1890 Typically post-1890 Post-1904	Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	06/01/2011 1.5 06/01/2011 4.1	grams	weight 3.00	penny length penny length		Shovel Test 19	0 25
I 1 (Discarded I4 (diass (material)	Local flat glass AAT nail	AAT sherd	AAT fragment			Colorless Typically post-1890	Non-diagnostic	Post-Contact Period Post-Contact Period	06/01/2011 2.1 06/01/2011 2.7	grams	weight weight			Shovel Test 19 Shovel Test 19	0 25 centimeters ground surface Wayne and Susan Gartland 21-CH-129 0 25 centimeters ground surface Wayne and Susan Gartland 21-CH-129
1 Discarded 1 metal 1 Discarded 4 metal 1 Discarded [foil (metal)	AAT fragment AAT fragment					Indeterminate; flat	Non-diagnostic	Post-Contact Period Post-Contact Period	06/01/2011 1.7 06/01/2011	grams grems	weight weight			Shovel Test 19 Shovel Test 19	0 25 centimeters ground surface Wayne and Susan Gartland 21-CH-129 0 25 centimeters ground surface Wayne and Susan Gartland 21-CH-129
1 2012 12 5 1 1 bone	AAT remains	ITIS mammalia	Local medium I	ocal burner		Medium/large mammal charred fragment; indeterminate species/element	Non-diagnostic	Post-Contact Period	06/01/2011 3.4	grams	weight			Shovel Test 19	25 65 centimeters ground surface Wayne and Susan Gartland 21-CH-129 25 65 centimeters ground surface Wayne and Susan Gartland 21-CH-129
1 2012.12.5.1 1 bone 1 2012.12.5.2-5 4 bone	AAT remains	Local calcined	Cool Moduli	DUTTOU DUTTOU		Indeterminate taxa/element Milk glass; partial jar liner (ca. 1869-	Non-diagnostic	Post-Contact Period Post-Contact Period	06/02/2011 1.7	grams	weight			Shovel Test 19	
1 2012.12.5.6 1 glass (material) 1 2012.12.5.7 1 metal	AAT sherd AAT nall AAT nall	AAT wire				1950) Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	06/01/2011 4.9 06/01/2011 6.2		weight 10.00	penny length		Shovel Test 19 Shovel Test 19 Chavel Test 19	25 65 contimeters ground surface Wayne and Susan Gartland 21-CH-129 ground surface Wayne and Susan Gartland 21-CH-129 ground surface Wayne and Susan Gartland 21-CH-129 Tool Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012,12,5,7	AAT nell AAT nell	AAT wire AAT wire				Typically post-1890 Typically post-1890 Typically post-1890	Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	06/01/2011 3.8 06/01/2011 1.3	grems	weight 8.00 weight 6.00 weight 4.00	penny length penny length penny length		Shovel Test 19 Shovel Test 19	25 65 centimeters ground surface Wayne and Susan Gartland 21-CH-129 25 65 centimeters ground surface Wayne and Susan Gartland 21-CH-129 25 65 centimeters ground surface Wayne and Susan Gartland 21-CH-129 25 65 centimeters ground surface Wayne and Susan Gartland 21-CH-129
1 2012.12.5.21 1 metal 1 2012.12.5.22-24 3 metal 1 2012.12.5.25 1 metal 1 2012.12.5.26-27 2 metal	AAT nali AAT staple	AAT wire				Typically post-1890 Fence staple	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	06/01/2011 2.7 06/01/2011 2.5	grams	weight 3.00 weight	penny length		Shovel Test 19 Shovel Test	25 65 centimeters (ground surface Wayne and Susan Gartland 21-CH-129
1 Discarded 1 glass (material)	AAT can (container) AAT sherd	AAT fragment				Colorless	Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	06/01/2011 14. 06/01/2011 1.0	grams	weight weight			Shovel Test 19 Shovel Test 19 Shovel Test 19 Shovel Test 19 Shovel Test 19	25 65 centimeters ground surface Wayne and Susan Gartland 21-CH-129 25 65 centimeters ground surface Wayne and Susan Gartland 21-CH-129 25 65 centimeters ground surface Wayne and Susan Gartland 21-CH-129 21-C
I 1 Discarded I7 Imetal	Local flet glass AAT nail AAT fragment	AAT sherd AAT wire	AAT fragment			Colorless Typically post-1890 Indeterminate; flat	Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	06/01/2011 0.2 06/01/2011 17.	grams grams grams	weight weight			IShover lest 19	25 65 centimeters ground surface Wayne and Susan Gertland (21-CH-129) 25 65 centimeters ground surface Wayne and Susan Gertland (21-CH-129)
1 Discarded 7 metal 1 Discarded foil (metal) 1 Discarded cellophane	AAT fragment AAT fragment						Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	06/01/2011 06/01/2011	grams grams	weight weight			Shovel Test 19 Shovel Test 19	25 65 centimeters ground surface Wayne and Susan Gartland 21-CH-129 25 65 centimeters ground surface Wayne and Susan Gartland 21-CH-129 27-CH-129
1 2012.12.6.1 1 vertebrae	AAT remains	ITIS aves	AAT large A	AT fragment Local	ew marks	Sawn along two axes; unfused indica juvenile Likely chicken based upon size; one	Non-diagnostic	Post-Contact Period	06/01/2011 7.0	grams	weight			Shovel Test 19	25 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129
1 2012.12.6.2 1 phalanx 1 2012.12.6.3 1 sternum	AAT remains AAT remains	ITIS aves	ITIS chicken Le	ocal cut marks AT fragment		mark near distal end	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	06/01/2011 0.2 06/01/2011 0.3	grams grams	weight weight			Shovel Test 19 Shovel Test 19	25 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129 25 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129
1 2012.12.6.4 1 tarsometatarsus	AAT remains	ITIS aves	ITIS chicken A	AT right Local	roximal ragment Local calcined	likahi shiskan hasad wasa siri	Non-diagnostic	Post-Contact Period	06/01/2011 0.9	grams	weight			Shovel Test 19 Shovel Test 19	25 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129 25 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129
1 2012.12.6.5-10 6 long bone 1 2012.12.6.11 1 bone 1 2012.12.6.12 1 fish scale	AAT remains AAT remains AAT remains	ITIS aves Local calcined	Local medium A	AT fragment Local	alcined	Likely chicken based upon size	Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	06/01/2011 0.7 06/01/2011 0.0	grams grams grams	weight weight weight			Shovel Test	25 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129 25 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129 25 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129 25 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129 25 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129 25 109 centimeters ground surface wayne and Susan Gartland 21-CH-129 25 109 centimeters ground surface wayne and Susan Gartland 21-CH-129 25 109 centimeters ground surface wayne and Susan Gartland 21-CH-129 25 109 centimeters ground surface wayne and Susan Gartland 21-CH-129 25 109 centimeters ground surface wayne and Susan Gartland 21-CH-129 25 109 centimeters ground surface wayne and Susan Gartland 21-CH-129 25 109 centimeters ground surface wayne and Susan Gartland 21-CH-129 25 109 centimeters ground surface wayne and Susan Gartland 21-CH-129 25 109 centimeters ground surface wayne and Susan Gartland 21-CH-129 25 109 centimeters ground surface wayne and Susan Gartland 21-CH-129 25 109 centimeters ground surface wayne and Susan Gartland 21-CH-129 25 109 centimeters ground surface wayne and Susan Gartland 21-CH-129 25 109 centimeters ground surface wayne ground surface
1 2012.12.6.13-30 18 eggshell (animal material)							Non-diagnostic	Post-Contact Period	06/01/2011 1.2	grams	weight			Shovel Test 19	25 109 continuous ground surface Wayne and Susan Gattland 21-CH-129
1 2012.12.7.1 1 glass (material) 1 2012.12.7.2 1 glass (material)	AAT sherd AAT sherd					Amber (ca. 1860-present) Colorless to pale aqua	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	06/01/2011 0.8 06/01/2011 2.1	grams grams	weight weight			Shovel Test 19 Shovel Test 19	55 109 centimeters ground surface Weyne and Susan Gartland 21-CH-129 65 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129
1 2012.12.7.3 1 glass (material) 1 2012.12.7.4 1 glass (material)	AAT bottle	AAT finish				(typically 1924-present) Colorless, mold seam present		Post-Contact Period Post-Contact Period	06/01/2011 49 06/01/2011 44	grams grams	weight weight			Shovel Test 19 Shovel Test 19	65 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129 65 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129
4 2000 40 75	AAT rim sherd					Colorless, mold seam present Colorless; thin band of fine ridges approx. 1/4" below and paralleling rin	n Non-diagnostic	Post-Contact Period	06/01/2011 2.2	grams	weight			Shovel Test 19	65 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129 65 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129
1 2012.12.7.6 1 glass (material) 1 2012.12.7.7 1 metal 1 2012.12.7.8 1 metal	AAT button (fastener) AAT nail	AAT sherd AAT wire				Colorless; shank Typically post-1890 Typically post-1890	Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	06/01/2011 2.4 06/01/2011 19. 06/01/2011 9.6	grams	weight 20.00 weight 12.00	penny length penny length		Shovel Test 19	65 109 centimeters ground surface Wayne and Susan Garlland 21-CH-129 65 109 centimeters ground surface Wayne and Susan Garlland 21-CH-129
1 2012.12.7.9-10 2 metal 1 2012.12.7.11-12 2 metal	AAT nali AAT nali	AAT wire AAT wire				Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	06/01/2011 14 06/01/2011 11	grams	weight 10.00 weight 8.00	penny length penny length		Shovel Test 19 Shovel Test 19	65 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129 65 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129
1 2012.12.7.13-18 6 metal 1 2012.12.7.19-20 2 metal	AAT neil	AAT wire AAT wire				Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	06/01/2011 19 06/01/2011 4.1	grams	weight 6.00 weight 5.00	penny length		Shovel Test 19	65 109 contimeters ground surface Wayne and Susan Gartland 21-CH-129 65 109 contimeters ground surface Wayne and Susan Gartland 21-CH-129 65 109 contimeters ground surface Wayne and Susan Gartland 21-CH-129 65 109 contime
1 2012.12.7.21 1 metal 1 2012.12.7.22 1 metal	AAT object	AAT Wire	+			Typically post-1890 Unknown metal object; possible meta plate or fastener	al	Post-Contact Period Post-Contact Period	06/01/2011 0.6	grams grams	weight 2.00	penny length		Shovel Test 19	65 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129 65 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129
1 2012.12.7.23 1 metal	AAT object					Unknown metal object; ring-shaped Unknown metal object; includes a	Non-diagnostic	Post-Contact Period	06/01/2011 2.9		weight 0.50	inches interior diamete	r	Shovel Test 19	
1 2012.12.7.24 1 metal 1 2012.12.7.25 1 nut (plant material)	AAT object AAT walnut (nut)					spring	Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	06/01/2011 14 06/01/2011 19		weight weight			Shove Test 19	65 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129 65 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129 65 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129 21-CH-129
1 2012.12.7.25 1 nut (plant material) 1 Discarded 5 glass (material) 1 Discarded 1 glass (material) 1 Discarded 18 metal	Local flat glass AAT nail	AAT sherd AAT wire				Colorless Colorless Typically post-1890	Non-diagnostic	Post-Contact Period Post-Contact Period	06/01/2011 0.9 06/01/2011 61	grams	weight weight weight			Shovel Test 19 Shovel Test 19	65 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129 65 109 centimeters ground surface Wayne and Susan Gartland 21-CH-129
1 Discarded 2 metal 1 Discarded cellophane	AAT fragment AAT fragment					Indeterminate; flat	Non-diagnostic	Post-Contact Period Post-Contact Period	06/01/2011 5.5 06/01/2011	grams grams	weight weight			Shovel Test 19	65 109 centimaters ground surface Wayne and Susan Gartland 21-CH-129 65 109 centimaters ground surface Wayne and Susan Gartland 21-CH-129 0 22 centimaters ground surface Wayne and Susan Gartland 21-CH-129 1 1 1 1 1 1 1 1 1
1 Discarded 1 glass (material) 1 Discarded 1 metal 1 2012.12.8.1 1 metal	AAT sherd AAT object	AAT wire				Colorless Cylindrical; possible nail fragment Typically post-1890	Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	06/01/2011 0.5 06/01/2011 17. 06/01/2011 6.6	grams	weight weight weight 12.00	penny length		Shovel Test 20 Shovel Test 21	0 22 centimeters ground surface Wayne and Susan Gardand 21-CH-129 0 20 centimeters ground surface Wayne and Susan Gardand 21-CH-129
1 Discarded 1 glass (material) 1 2012.12.9.1 1 ceramic (material)	Local flat glass AAT stoneware	AAT sherd AAT sherd				Colorless Buff-colored glaze	Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period	06/01/2011 2.6 06/01/2011 4.7	grams	weight weight			Shovel Test 22	0 10 centimeters ground surface Wayne and Susan Gartland 21-CH-129 0 30 centimeters ground surface Wayne and Susan Gartland 21-CH-129 0 30 centimeters ground surface Wayne and Susan Gartland 21-CH-129
Discreted	AAT sherd AAT staple		- AAT 6			Amber; patterned Fence staple	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	06/01/2011 0.5 06/01/2011 6.4	grams grams	weight weight			Shovel Test 24	0 30 Gentimeters ground surface Wayne and Susan Gartland 21-CH-129 0 40 centimeters ground surface Wayne and Susan Gartland 21-CH-129 0 40 centimeters ground surface Wayne and Susan Gartland 21-CH-129 0
1 2012 12 11 1 1 vertebrae	AAT remains	ITIS mammalia	Local medium A	AT fragment Local	aw marks	Typically post-1890 Cut along 3 axes; likely pig or sheep based upon size	Non-diagnostic	Post-Contact Period	06/01/2011 3.1	grams	weight			Shovel Test 26	0 45 centimeters ground surface Wayne and Susan Gartland 21-CH-129
1 2012.12.11.2 1 metal 1 Discarded cellophane	AAT nall AAT fragment	AAT vire				Typically post-1890	Diagnostic	Post-Contact Period Post-Contact Period	06/01/2011 7.4 06/01/2011	grams	weight 10.00 weight	penny length		Shovel Test 26 Shovel Test 28	0 45 centimeters ground surface Wayne and Susan Gartland 21-CH-129 0 45 centimeters ground surface Wayne and Susan Gartland 21-CH-129 0 30 centimeters ground surface Wayne and Susan Gartland 21-CH-129
1 2012.12.12.1 1 metal 1 Discarded 1 metal	AAT fragment	AAT wire				Typically post-1890 Indeterminate; flat	Diagnostic Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	06/01/2011 5.6 06/01/2011 4.3		weight 8.00 weight	penny length		Shove Tes	0 30 centimeters ground surface Wayne and Susan Gartland 21-CH-129 1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129
1 2012.12.13.1-2 2 ceramic (material) 1 2012.12.13.3 1 ceramic (material) 1 2012.12.13.4-6 3 atlas	AAT whiteware AAT whiteware AAT remains	AAT rim sherd AAT sherd ITIS mammalia	ITIS suidae A	AT fragment Local	aw marks	Near-base Fragments sawn-through	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 1.4 08/03/2011 16	grams	weight weight			Excavation Unit 1 Level Excavation Unit 1 Level	1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129 1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129
1 2012.12.13.7 1 phelanx	AAT remains	iTIS mammalia		ocal calcined		Broken distal-most end	Non-diagnostic	Post-Contact Period	08/03/2011 0.3		weight			Excavation Unit 1 Level Excavation Unit 1 Level	1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129 1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129
1 2012.12.13.8-13 6 metapodial 1 2012.12.13.14-16 3 long bone	AAT remains	ITIS mammalia	AAT large II.	AT fragment Local ocal medial fragment Local	alcined	Unfused epiphyses; indicates juvenile Medium/large mammal long bone fregments	Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 5.9 08/03/2011 5.0	grams	weight			Excavation Unit 1 Level	1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129
1 2012.12.13.17-20 4 bone	AAT remains	ITIS mammalia	Local medium Lo	ocal calcined Local	aw marks roximal	All have sawn ends Several rodent gnaw marks on anterior	Non-diagnostic or	Post-Contact Period	08/03/2011 7.3	grams	weight			Excavation Unit 1 Level Excavation Unit 1 Level	1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129 1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129
1 2012.12.13.21 1 humerus 1 2012.12.13.22 1 ulna 1 2012.12.13.23-25 3 humerus	AAT remains AAT remains AAT remains	ITIS aves ITIS aves ITIS aves	ITIS turkey Au Local medium Au ITIS chicken Au	AT left Local	agment Local calcined istal fragment Local calcined istal fragment Local calcined	Two fragments refit; MNi of at least 2	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 4.7 08/03/2011 0.6 08/03/2011 0.6	grams grams grams	weight weight weight			Excavation Unit 1 Level Excavation Unit 1 Level Excavation Unit 1 Level	1 0 10 Centimeters Gatum Wayne and Susan Garilland 21-CH-129 1 0 10 Centimeters datum Wayne and Susan Garilland 21-CH-129 1 0 10 Centimeters datum Wayne and Susan Garilland 21-CH-129
1 2012.12.13.26 1 carpometacarpus	AAT remains	ITIS aves	AAT small A	1 1 1	roximal cocal calcined	Very fragmentary	1 1	Post-Contact Period	08/03/2011 0.2	grams	weight			Excavation Unit 1 Level	1 0 10 contimeters datum Wayne and Susan Gartland 21-CH-129
1 2012.12.13.27 1 femur	AAT remains	ITIS aves	Local medium A	AT right Local	roximal agment Local calcined		1 1	Post-Contact Period	08/03/2011 1.2	grams	weight			Excavation Unit 1 Level	1 0 10 centimeters datum Wayne and Susan Gertland 21-CH-129
1 2012.12.13.28 1 tarsomelatarsus 1 2012.12.13.29 1 phalanx	AAT remains AAT remains	ITIS aves	Local medium A	AT left Local	roximal agment alcined	Only unfused proximal articular surface present, indicates juvenile	Non-diagnostic	Post-Contact Period	08/03/2011 0.4 08/03/2011 0.2		weight weight			Excavation Unit 1 Level Excavation Unit 1 Level	1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129 1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129
1 2012.12.13.30 1 phalenx 1 2012.12.13.31-38 8 long bone	AAT remains AAT remains	ITIS aves	Local medium A	AT fragment Local	alcined alcined	Distal-most phalanx fragment	Non-diagnostic Non-diagnostic Non-diagnostic	Post-Contact Period	08/03/2011 0.1 08/03/2011 3.3	grams grams	weight weight			Excavation Unit 1 Level Excavation Unit 1 Level	1 0 10 centimeters datum Wayne and Susan Gertland 21-CH-129 1 0 10 centimeters datum Wayne and Susan Gertland 21-CH-129
1 2012.12.13.39 1 vertebrae 1 2012.12.13.40 1 scale (animal material)	AAT remains AAT remains	ITIS sves ITIS Bony Fish ITIS Bony Fish ITIS Bony Fish				Broad have (Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 0.4 08/03/2011 0.1	grams grams	weight weight			Excavation Unit 1 Level	1 0 10 centimeters datum Weyne and Susan Gartland 21-CH-129 1 0 10 centimeters datum Weyne and Susan Gartland 21-CH-129 1 0 10 centimeters datum Weyne and Susan Gartland 21-CH-129
	AAT remains AAT remains	ITIS mammelia Local calcined	AAT large Lo	ocal calcined		Broad bone fragments Indeterminate taxa/element		Post-Contact Period Post-Contact Period	08/03/2011 14	grams grams	weight weight			Excavation Unit 1 Level	1 0 10 centimeters deturn Wayne and Susan Gartland 21-CH-129
1 2012.12.13.43-102 60 bone 1 2012.12.13.103-115 13 eggshell (animal material)	l							Post-Contact Period Post-Contact Period	08/03/2011 1.0	grams	weight			Excavation Unit 1 Level	1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129 1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129 1 Wayne and Susan Gartland 21-CH-129
1 2012.12.13.116-117 2 glass (material) 1 2012.12.13.118-119 2 glass (material) 1 2012.12.13.120 1 glass (material) 1 2012.12.33.120 1 glass (material)	AAT sherd AAT container (receptacle)	AAT fragment				Amber (ca. 1860-present) Colorless; bottle or jar; thick Green; melled	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 4.9 08/03/2011 51 08/03/2011 2.4	grams grams grams	weight weight			Excavation Unit 1 Level Excavation Unit 1 Level Excavation Unit 1 Level	1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129 1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129
1 2012.12.13.121 1 metal 1 2012.12.13.122 1 metal	AAT sherd AAT nail AAT nail	AAT wire				Typically post-1890 Typically post-1890	Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 12 08/03/2011 9.0	grams	weight 20.00 weight 16.00	penny length penny length		Excavation Unit 1 Level Excavation Unit 1 Level	1
1 2012.12.13.123-125 3 metal 1 2012.12.13.126-148 23 metal	AAT nail	AAT wire				Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 20 08/03/2011 99	grams grams	weight 10.00 weight 8.00	penny length penny length		Excavation Unit 1 Level Excavation Unit 1 Level Excavation Unit 1 Level	1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129 1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129 1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129 1 0 10
1 (2012.12.13.149-150 2 metal 1 2012.12.13.151-153 3 metal 1 2012.12.13.154 1 metal	AAT nail AAT nail AAT neil	AAT wire AAT wire				Typically post-1890 Typically post-1890 Typically post-1890	Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 5.7 08/03/2011 5.7	grams	weight 6.00	penny length penny length penny length		Excavation Unit 1 Level Excavation Unit 1 Level	1 0 10 centimeters datum Wayne and Susan Gardand 21-CH-129
1 (2012.12.13.164-17) 2 glass (material) 1 (2012.12.13.164-19) 2 glass (material) 1 (2012.12.33.162) 1 glass (material) 1 (2012.12.33.120) 1 glass (material) 1 (2012.12.33.121) 1 (metal) 1 (2012.12.33.122) 1 (metal) 1 (2012.12.33.122) 1 (metal) 1 (2012.12.33.122) 1 (metal) 1 (2012.12.33.122) 1 (metal) 1 (2012.12.33.122) 1 (metal) 1 (2012.12.33.122) 1 (metal) 1 (2012.12.33.122) 1 (metal) 1 (2012.12.33.122) 1 (metal) 1 (2012.12.33.122) 1 (metal) 1 (2012.12.33.122) 1 (metal) 1 (2012.12.33.122) 1 (metal) 1 (2012.12.33.122) 1 (metal) 1 (2012.12.33.122) 1 (metal) 1 (2012.12.33.122) 1 (metal) 1 (2012.12.33.122) 1 (metal) 1 (2012.12.33.122) 1 (metal) 1 (metal) 1 (2012.12.33.122) 1 (metal) 1 (metal) 1 (2012.12.33.122) 1 (metal) 1 (meta	AAT nail AAT nail	AAT wire AAT wire				Typically post-1890 Typically post-1890	Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 3.4 08/03/2011 0.7		weight 3.00 weight 2.00	penny length penny length		Excavation Unit 1 Level Excavation Unit 1 Level	1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129 1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129
1 2012.12.13.160-161 2 metal	AAT nail	AAT wire				Typically post-1890; one with attache washer	Dlagnostic	Post-Contact Period	08/03/2011 1.5	grams	weight 0.85	inches length		Excavation Unit 1 Level Excavation Unit 1 Level	1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129 1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129 1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129 1 0 10 centimeters datum Wayne and Susan Gartland 21-CH-129
1 2012.12.13.162-164 3 metal 1 2012.12.13.165 1 metal	AAT screw AAT boll	AAT fragment					Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 6.0 08/03/2011 29	grams grams	weight			Excavation Unit 1 Level	
1 2012.12.13.166-167 2 metal 1 2012.12.13.168 1 metal 1 2012.12.13.169-170 2 metal	AAT button (fastener) AAT crown cap					One embossed with "Lee" (post-1889 Post-1892	Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 5.1 08/03/2011 2.8	grams grems	weight weight			Excavation Unit 1 Level	1
1 2012.12.13.169-170 2 metal 1 2012.12.13.171 1 metal 1 2012.12.13.172 1 metal	AAT steple AAT buckle (strap accessory) AAT clip (fastener)					Fence staples Elastic bandage clip	Non-diagnostic Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 7.4 08/03/2011 5.9 08/03/2011 0.4	grams	weight weight weight			Excavation Unit 1 Level Excavation Unit 1 Level Excavation Unit 1 Level	1 0 10 Centimeters datum Wayne and Susan Gartland 21-CH-129 1 0 10 Centimeters datum Wayne and Susan Gartland 21-CH-129 1 0 10 Centimeters datum Wayne and Susan Gartland 21-CH-129

ox # Catalog # Qty. Materials 1	Descriptor Type 1 Object Name	Descriptor	Descriptor 2	Descriptor Type 3	Descriptor 3 Type 4 Descriptor 4		riptor 6 Descriptor 6 Description	Diagnostic/Non- diagnostic	Historical Context	Recovery Date M	Measurement 2	Dimension 1 M	Measurement 2 Un	asurement It 2 Dimension 2	Measurement 3	Measurement	Coll. Method	Horizontal/ Vertical		VPU VPU Start End Vert Meas. Depth Depth Unit Ve	rt. Ref. Pt. Landowner Site
1 2012.12.13.173 1 metal	AAT 190	- Inper			17564 Beautiful 4	i je s Statistaj s Tije	Metal tag, with slideout for insert; se as 14.76	ime	Post-Contact Period	n8/03/2011 2	Offerna	weight	NASSAI CHICIN Z	- Dimension	. Incliantement 3	Unit 3 Dimension 3		Unit# Method	Vertical #	n 10 centimeters da	um Wayne and Susan Gartland 21-0
1 2012.12.13.174 1 metal	AAT object						Unknown object; possibly part of a lifer opening a can	Non-diagnostic Non-diagnostic	Post-Contact Period	08/03/2011 8.	grams	weight					Excavation Unit	1 Level	-1	0 10 centimeters dai	um Wayne and Susan Gartland 21-0
	00/00						Unknown, heavy but small rectangu		001 0011100 1 0100	0.000.000	gratia	Hogan					Excavagon Ong	1 Level		U IU COMMINICION DE	
1 2012.12.13.175 1 metal	AAT object		<u> </u>				object with a hole thorugh it; 0.31 inches thick; possible weight	Non-diagnostic	Post-Contact Period	08/03/2011 28	5 grams	vveight 1	.28 Inc	hes length	0.78	inches width	Excavation Unit	1 Level	1	0 10 centimeters da	um Wayne and Susan Gartland 21-0 um Wayne and Susan Gartland 21-0
1 2012.12.13.175 1 metal 1 2012.12.13.176 1 metal 1 2012.12.13.177 1 metal 1 2012.12.13.177 1 metal 1 2012.12.13.178-180 3 textile material 1 2012.12.13.181 1 leather 1 Discarded 9 olass (material)	AAT disk (object genre) AAT object			1			Unknown object	Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 5.	grams	weight 0.	1,85 Inc	hes dlameter			Excavation Unit	1 Level	1	0 10 centimeters da 0 10 centimeters da	um Wayne end Susan Gertland 21-0
1 2012.12.13.178-180 3 textile material 1 2012.12.13.181 1 leather 1 Discarded 9 glass (material)	AAT fragment AAT shoe (footwear)	AAT	fragment				Slaten	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 0.	grams grams	weight weight					Excavation Unit	1 Level	1	0 10 centimeters da 0 10 centimeters da	um Wayne and Susan Gartland 21-0
1 Discarded 1 glass (material)	Local flat glass	AAT	sherd				Aqua	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 2		weight					Excavation Unit	1 Level	- !-	0 10 centimeters da 0 10 centimeters da	tum Wayne and Susan Gartland 21-0
1 Discarded 7 glass (material) 1 Discarded 25 metal 1 Discarded 24 metal 1 Discarded foil (metal)	AAT nail	AAT	sherd wire	AAT fi	fragment		Colorless to pale green Typically post-1890	Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 38	.9 grams	weight weight					Excavation Unit Excavation Unit	1 Level	1	0 10 centimeters da 0 10 centimeters da	um Wayne and Susan Gartland 21-C
1 Discarded 24 metal 1 Discarded foil (metal)	AAT fragment AAT fragment						Indeterminate; flat	Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 18 08/03/2011	.4 grams	weight weight					Excavation Unit	1 Level	1	0 10 centimeters da 0 10 centimeters da	turn Wayne and Susan Gartland 21-0 turn Wayne and Susan Gartland 21-0
							Medium/large mammal rib fragment (maybe multiple taxa: cow and plg);	- 1					1								
1 2012.12.14.1-5 5 rib	AAT remains	ITIS	mammalia	Local n	medium AAT fragment	Local saw marks	one burned fragment; 3 fragments v sawn ends	Non-diagnostic	Post-Contact Period	08/03/2011 2:	i.5 grams	weight					Excavation Unit	1 Level	2	10 15 centimeters da	tum Wayne and Susan Gartland 21-0 tum Wayne and Susan Gartland 21-0
1 2012.12.14.1-5 5 rib 1 2012.12.14.6 1 vertebrae 1 2012.12.14.5 19 cranium 1 2012.12.14.19-18 3 bone 1 2012.12.14.19-27 9 bone	AAT remains AAT remains	ITIS	aves mammalla	Local n	small AAT fregment medium AAT fregment	Local calcined		Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 0. 08/03/2011 3.	grams	weight weight					Excavation Unit Excavation Unit	1 Level	2 2	10 15 centimeters da 10 15 centimeters da	turn Wayne and Susan Gartland 21-0
1 2012.12.14.16-18 3 bone 1 2012.12.14.19-27 9 bone	AAT remains AAT remains	Local	burned					Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 1. 08/03/2011 3.	1 grams	weight weight					Excevation Unit Excevation Unit	1 Level	2 2	10 15 centimeters da 10 15 centimeters da	tum Wayne and Susan Gartland 21-0
1 2017.17.14.19-27 9 cone 2017.17.14.29-5 8 esgathell (animal material) 2017.17.14.29-5 8 esgathell (animal material) 2017.17.14.39 1 shell (animal material) 2017.17.14.39 1 metal 2017.17.14.39-47 9 metal 2017.17.14.39-47 9 metal 2017.17.14.39-47 9 metal 2017.17.14.39-47 9 metal 2017.17.14.39-47 9 metal 2017.17.14.39-5 8 metal 2017.17.14.39-5 8 metal 2017.17.14.39-5 8 metal	erial) AAT (fragment	AAT	fragment				Four-hole	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 0. 08/03/2011 0.	grems grems	weight 0	0.40 ind	hes diameter			Excavation Unit Excavation Unit	1 Level	2 2	10 15 centimeters da 10 15 centimeters da	tum Wayne and Susan Gartland 21-0
1 2012.12.14.37 1 metal 1 2012.12.14.38 1 metal	AAT nell	AAT	wire wire				Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 16 08/03/2011 13	1.2 grams 1.5 grams	weight 2 weight 3	0.00 per 3.75 inc	nny length hes length			Excavation Unit Excavation Unit	1 Level	2 2	10 15 centimeters da 10 15 centimeters de	tum Wayne and Susan Gartland 21-0
1 2012.12.14.39-47 9 metal 1 2012.12.14.48-58 11 metal	AAT neil AAT neil	AAT	wire	1			Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 5/ 08/03/2011 4/	1.1 grams 1.7 grems	weight 1 weight 8	10,00 per 3,00 per	nny length nny length			Excavation Unit Excavation Unit	1 Level	2 2	10 15 centimeters da 10 15 centimeters da	tum Wayne and Susan Gartland 21-0 tum Wayne and Susan Gartland 21-0
1 2012.12.14.59 1 metal 1 2012.12.14.60-65 6 metal	AAT nail AAT nail	AAT	wire				Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 2 08/03/2011 1		weight 7 weight 6	7.00 per 5.00 per				Excavation Unit Excavation Unit	1 Level	2 2	10 15 centimeters da 10 15 centimeters da	turn Wayne and Susan Gartland 21-0 turn Wayne and Susan Gartland 21-0
1 2012.12.14.66-68 3 metal 1 2012.12.14.69 1 metal	AAT neil	AAT	wire				Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 5. 08/03/2011 1.		weight 5 weight 3	5.00 per 3.00 per				Excavation Unit Excavation Unit	1 Level	2	10 15 centimeters da 10 15 centimeters da	tum Wayne and Susan Gertland 21-0
1 2012.12.14.70 1 metal 1 2012.12.14.71 1 metal	AAT staple AAT screw						Fence staple	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 6. 08/03/2011 8.	1 grems 6 grems	weight weight					Excavation Unit Excavation Unit	1 Level	2 2	10 15 centimeters da 10 15 centimeters da	tum Wayne and Susan Gertland 21-0
1 2012.12.14.99 1 metal 1 2012.12.14.69 1 metal 1 2012.12.14.70 1 metal 1 2012.12.14.71 1 metal 1 2012.12.14.71 1 metal 1 2012.12.14.72 1 metal 1 2012.12.14.73 1 metal 1 2012.12.14.73 1 metal	AAT can (container)	AAT	lid				Harness bolt		Post-Contact Period	08/03/2011 8. 08/03/2011 8.	grems	weight 2 weight 1	2.85 inc	hes diameter hes length			Excavation Unit Excavation Unit	1 Level	2	10 15 centimeters de 10 15 centimeters de	tum Wayne and Susan Gartland 21-0
1 2012.12.14.74-75 2 metal	AAT staple						Metal tag, with sildeout for insert; so	Non-diagnostic	Post-Contact Period	08/03/2011 0	grams	weight					Excavation Unit	1 Level	2	10 15 centimeters da	
1 2012.12.14.76 1 metal	AAT tag		-	+			as 13.175 Continuous-thread cap for bottle	Non-diagnostic	Post-Contact Period	08/03/2011 2	1 grams	weight					Excavation Unit	1 Level	2	10 15 centimeters de	tum Wayne and Susan Gertland 21-0
1 2012.12.14.77 1 metal	AAT cap (closure) blade (tool and equipm	ent	-	+			(typically 1924-present)	Diagnostic	Post-Contact Period	08/03/2011 3	1 grams	weight					Excavation Unit	1 Level	2	10 15 centimeters de	tum Wayne and Susan Gartland 21-0
2012.12.14.78 1 metal 2012.12.14.79 1 metal	AAT component)		fragment	++			Rezor blade insert for scraping tool twisted	Non-diagnostic	Post-Contact Period	08/03/2011 4	7 grams .9 grams	weight weight					Excavation Unit Excavation Unit	1 Level	2	10 15 centimeters da 10 15 centimeters da	turn Wayne and Susan Gartland 21-0 turn Wayne and Susan Gartland 21-0
1 2012,12,14.79 1 metal 1 Discarded 1 glass (material) 1 Discarded 12 metal	Local flat glass	AAT AAT	sherd	AAT 6	fragment		Colorless	Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 1. 08/03/2011 2	2 grams	weight					Excavation Unit	1 Level	2 2	10 15 centimeters da 10 15 centimeters da 10 15 centimeters da	tum Wayne and Susan Gartland 21-0
1 Discarded 1 metal 1 Discarded cellophene	AAT fragment AAT fragment		-				Typically post-1890 Indeterminate; flat	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 0. 08/03/2011	7 grams grams grams	weight weight					Excavation Unit Excavation Unit Excavation Unit	1 Level 1 Level	2	10 15 centimeters da 10 15 centimeters da 10 15 centimeters da	tum Wayne and Susan Gartland 21-0
1 2012.12.15.1 1 ceramic (material)	AAT whiteware	AAT	sherd			provimal		Diagnostic	Post-Contact Period	08/03/2011 1.	D grams	weight weight					Excavation Unit	1 Level	3	15 20 centimeters da	
1 2012.12.15.2 1 humerus	AAT remains	ITIS	aves	Local n	medium AAT left	Local fragment Local	calcined	Non-diagnostic	Post-Contact Period	08/03/2011 0.	2 grams	weight					Excavation Unit	1 Level	33	15 20 centimeters de	tum Wayne and Susan Gartfand 21-6
1 2012.12.15.3 1 femur	AAT remains	ITIS	aves	Local n	medium AAT right	Local fragment Loca	calcined Only head/neck present	Non-diagnostic	Post-Contact Period	08/03/2011 0.	1 grams	weight					Excavation Unit	1 Level	3	15 20 centimeters da	turn Wayne and Susan Gartland 21-0
1 2012.12.15.4 1 tibiotarsus	AAT remains	ITIS	aves	Local n	medium AAT right	Local distal fragment Local	Only portion of condyles present; co mark on patellar surface	Non-diagnostic	Post-Contact Period	08/03/2011 0.	grams	weight					Excavation Unit	1 Level	3	15 20 centimeters da	tum Wayne and Susan Gartland 21-0
1 2012.12.15.5 1 tibiotarsus	AAT remains	ITIS	aves	Local n	medium Local distal fragmen		Distal-most end missing; MNI at lea	st 2 Non-diagnostic	Post-Contact Period	08/03/2011 0	grams grams	weight					Excavation Unit	1 Level	3	15 20 centimeters de	turn Wayne and Susan Gartland 21-turn Wayne and Susan Gartland 21-t
2012.12.15.6-7 2 long bone 2012.12.15.8-12 5 long bone 2012.12.15.13-15 3 bone	AAT remains AAT remains		aves	Local n	medium Local medial fragme medium Local medial fragme	nt Local calcined		Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 0	grams	weight weight					Excavation Unit Excavation Unit	1 Level	3	15 20 centimeters da 15 20 centimeters da	tum Wayne and Susan Gartland 21-
1 1	AAT remains	1115	Bves	 			Indeterminate element Both ends sawn, several cut marks	on [1	108/03/2011 0.	5 grams	weight					Excavation Unit	1 Level	- 1	15 20 centimeters de	tum Wayne and Susan Gartland 21-4
1 2012.12.15.16 1 rlb 1 2012.12.15.17 1 long bone	AAT remains	ITIS	mammalia mammalia	Local n	medium Local medial fragme medium Local medial fragme	nt Local chop marks	Cut marks bone One chopped end	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 7. 08/03/2011 0.	grams grams	weight weight					Excavation Unit Excavation Unit	1 Level	3	15 20 centimeters de 15 20 centimeters da	tum Wayne and Susan Gartland 21-tum Wayne and Susan Gartland 21-t
2012.12.15.17 1 long bone 1 2012.12.15.18-26 9 long bone 1 2012.12.15.27-62 36 bone	AAT remains AAT remains	Local	mammalia calcined	Local n	medium Local medial fragme	nt Local calcined	Indeterminate taxa/element	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 8. 08/03/2011 6.	B grams 2 grams	weight weight					Excavation Unit Excavation Unit	1 Level	3	15 20 centimeters de 15 20 centimeters de 15 20 centimeters de	turn Wayne and Susan Gartland 21-i turn Wayne and Susan Gartland 21-i
1 2012.12.15.63-69 7 eggshell (animal mate								Non-diagnostic	Post-Contact Period	08/03/2011 0.	3 grems	weight					Excavation Unit	1 Level	3	15 20 contimeters de	turn Wayne and Susan Gertland 21-
1 2012.12.15.70 1 glass (material) 1 2012.12.15.77-72 2 metal 1 2012.12.15.73-77 5 metal 1 2012.12.15.78-83 6 metal	AAT sherd AAT nail	AAT	wire				Amber (ca. 1860-present) Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 0. 08/03/2011 38	2 grams 0.8 grams	weight 3	90.00 per	nny length			Excavation Unit	1 Level	3	15 20 centimeters da 15 20 centimeters da	tum wayne and Susan Gartland 21-
1 2012.12.15.73-77 5 metal 1 2012.12.15.78-83 6 metal	AAT nail		wire				Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period	08/03/2011 8/ 08/03/2011 3/	0.1 grams 0.7 grams	weight 2 weight 1	0.00 pe 10.00 pe	nny length			Excavation Unit Excavation Unit	1 Level	3	15 20 centimeters de 15 20 centimeters de	turn Wayne and Susan Gartland 21-
1 2012.12.15.84-92 9 metal 1 2012.12.15.93-100 8 metal	AAT nail	AAT	wire wire				Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 4 08/03/2011 2	.2 grams	weight 8 weight 6	3.00 pe	nny length			Excavation Unit Excavation Unit	1 Level	3 3	15 20 centimeters de 15 20 centimeters de	turn Wayne and Susan Gartland 21- turn Wayne and Susan Gartland 21-
1 2012;12:15,4-92 9 metal 1 2012;12:15,84-92 9 metal 1 2012;12:15,93-100 8 metal 1 2012;12:15,101-103 3 metal 1 2012;12:15;104-112 9 metal 1 2012;12:15:114 2 metal	AAT nail	JAAT	wire				Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 4. 08/03/2011 10	grams .4 grams	weight 4 weight 3	1.00 per 3.00 per				Excavation Unit Excavation Unit	1 Level	3	15 20 centimeters da 15 20 centimeters de	tum Wayne and Susan Gartland 21- tum Wayne and Susan Gartland 21-
1 2012.12.15.113-114 2 metal 1 2012.12.15.115 1 metal 1 2012.12.15.116-118 3 metal	AAT neil AAT screw	AAT	wire				Typically post-1890	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 2, 08/03/2011 8,		weight 2 weight	2.00 per	nny length			Excavation Unit Excavation Unit	1 Level	3	15 20 centimeters da 15 20 centimeters da	tum Wayne and Susan Gertland 21- tum Wayne and Susan Gertland 21-
1 1	AAT bolt	AAT	fragment				One fence staple; two smaller but	Non-diagnostic	Post-Contact Period	08/03/2011 70	.4 grams	weight					Excavation Unit	1 Level	3	15 20 centimeters de	tum Wayne and Susan Gartland 21-
1 2012.12.15.119-121 3 metal 1 2012.12.15.122 1 metal	AAT staple AAT can (container)	AAT	lid	++			similarly shaped staples	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 6. 08/03/2011 9.	7 grams 9 grams	weight 2	2.93 inc	hes diameter			Excavation Unit Excavation Unit	1 Level	3 3	15 20 centimeters de 15 20 centimeters de	tum Wayne and Susan Gartland 21- tum Wayne and Susan Gartland 21-
1 2012.12.15.122 1 metal 1 2012.12.15.123-125 3 metal 1 2012.12.15.126 1 metal	AAT bobby pin AAT button (fastener)	AAT	fragment	-			Post-1922 Shank present	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 1, 08/03/2011 3.		weight 1	1.00 Inc	hes diameter			Excavation Unit Excavation Unit	1 Level	3	15 20 centimeters de 15 20 centimeters de	tum Wayne and Susan Gartland 21-
1 2012.12.15.127-128 2 metal	AAT disk (object genre)						Possibly buttons; rust accretions prevent identification	Non-diagnostic	Post-Contact Period	08/03/2011 8	grams	weight 0.).93 Inc	nes diameter	0.660	inches diameter	Excavation Unit	1 Level	3	15 20 centimeters de	turn Wayne and Susan Gertland 21-
1 Discarded 1 glass (material) 1 Discarded 3 glass (material)	AAT sherd Local flat glass	AAT	sherd	$\overline{-}$			Colorless; melted Colorless	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 0. 08/03/2011 3.	grams grams	weight weight					Excavation Unit Excavation Unit	1 Level	3	15 20 centimeters da 15 20 centimeters da	tum Wayne and Susan Gartland 21-
1 Discarded 30 metal 1 Discarded 21 metal	AAT nall AAT fragment	AAT	wire	AAT fr	ragment		Typically post-1890 Indeterminate; flat	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 93 08/03/2011 43	.3 grams	weight weight					Excavation Unit Excavation Unit	1 Level	3	15 20 centimeters da 15 20 centimeters da	tum Wayne and Susan Gartland 21- tum Wayne and Susan Gartland 21-
1 Discarded 2 metal	AAT fragment						Indeterminate metal strip and metal	Non-diagnostic	Post-Contact Period	08/03/2011 16	2 grams	weight					Excavation Unit	1 Level	3	15 20 centimeters da	tum Wayne and Susan Gartland 21-
							Refits with 18.3; partially-punctured	, man augmoust	1			, , , , , , , , , , , , , , , , , , ,									
2012.12.16.1 1 tibiotarsus	AAT remains	ITIS	aves	ITIS d	chicken AAT right	Local distal fragment Loca	cut marks condyles; several cut marks	Non-diagnostic	Post-Contact Period	08/03/2011 3.	1 grams	weight				ļ	Excavation Unit	1 Level	4	20 25 centimeters da	turn Wayne and Susan Gartland 21-
2012.12.16.2-4 3 bone 2012.12.16.5-7 3 metal	AAT remains		calcined wire	+			Indeterminate taxa/element Typically post-1890	Non-diagnostic	Post-Contact Period	08/03/2011 1. 08/03/2011	grams	weight 2	0.00 per	Inv length			Excavation Unit Excavation Unit	1 Level	4 4	20 25 centimeters de 20 25 centimeters de	turn Wayne and Susan Gartland 21- turn Wayne and Susan Gartland 21-
2012.12.16.8 1 metal 1 2012.12.16.9-11 3 metal	AAT nail	AAT	wire	\vdash			Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 10		weight 2 weight 1	6.00 per	nny length			Excavation Unit	1 Level 1 Level	4 4	20 25 centimeters de 20 25 centimeters de 20 25 centimeters de	turn Wayne and Susan Gartland 21-
1 2012.12.16.12-24 13 metal	AAT nail	AAT	wire wire				Typically post-1890 Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 (20 08/03/2011 (6)		weight 8	3.00 per	nny length			Excavation Unit Excavation Unit	1 Level	4	20 25 centimeters de	tum Wayne and Susan Gartland 21-
2012.12.16.25-30 6 metal 2012.12.16.31-33 3 metal 2012.12.16.34 1 metal 2012.12.16.35 1 metal	AAT nail AAT nail AAT nail	AAT	wire wire	-			Typically post-1890 Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 8.	grams	weight 6 weight 5	5.00 per 5.00 per	nny length			Excavation Unit Excavation Unit Excavation Unit	1 Level	4 4	20 25 centimeters de 20 25 centimeters de 20 25 centimeters de	tum Wayne and Susan Gartland 21-
1 2012.12.16.34 1 metal 1 2012.12.16.35 1 metal 1 2012.12.16.36 1 metal	AAT nail	AAT	wire				Typically post-1890 Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 1.	grams	weight 4 weight 3	3.00 per	nny length nny length			Excavation Unit	1 Level	4	20 25 centimeters da	tum Wayne and Susan Gartland 21-
2012.12.16.36 1 metal 2012.12.16.37-38 2 metal	AAT screw AAT safety pin	[AAT	Wire	+			Typically post-1890	Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 0.	.6 grams	weight 2 weight	u jper	iny length			Excavation Unit	1 Level 1 Level 1 Level		20 25 centimeters da 20 25 centimeters da 20 25 centimeters da	turn Wayne and Susan Gartland 21-
A01.2.12.43.6 1 metal 2012.12.13.86 1 metal 2012.12.13.87.38 2 metal 2012.12.13.97.38 2 metal 2012.12.13.99 1 metal 2012.12.14.90-42 3 metal 2012.12.14.90-42 3 metal 2012.12.14.90-42 3 metal 2012.12.14.90-42 3 metal 2012.12.14.90-42 3 metal 2012.14.90-42 3 metal 2012.14.90-42 201	AAT safety pin AAT crown cap	- MAI	fragment	=			Post-1849 Post-1892	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 0. 08/03/2011 15	.0 grams	weight weight					Excavation Unit Excavation Unit	1 Level	4	20 25 centimeters da	tum Wayne and Susan Gartland 21-
Discarded 3 glass (material) Discarded 7 glass (material)	Local flat glass	AAT	sherd				Colorless Colorless	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 5. 08/03/2011 11	.7 grams	weight weight					Excavation Unit Excavation Unit	1 Level	4	20 25 centimeters da 20 25 centimeters de	tum Wayne and Susan Gartland 21-
Discarded / metal	AAT fragment		wire	AAT II	ragment		Typically post-1890 Indeterminate; flat	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 31 08/03/2011 23	.8 grams	weight weight					Excavation Unit	1 Level	4	20 25 centimeters da 20 25 centimeters da	tum Wayne and Susan Gartland 21-
Discarded cellophane	AAT wire AAT fragment	AAT	fragment					Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 13 08/03/2011	.3 grems	weight weight					Excavation Unit	1 Level	4 4	20 25 centimeters da 20 25 centimeters da	turn Wayne and Susan Gartland 21-
	AAT remains	ITIS	aves	ITIS d	chicken AAT fragment	proximal	Missing "beak"	Non-diagnostic	Post-Contact Period	08/03/2011 6.	4 grams	weight					Excavation Unit	1 Level	5	25 30 centimeters da	1 1
2012.12.17.2 1 humorus	AAT remains	ITIS	aves	ITIS ch	hicken AAT right	Local fragment	One proximal fragment, one distal	Non-diagnostic	Post-Contact Period	08/03/2011 1.	grams grams	weight					Excavation Unit	1 Level	5	25 30 centimeters de	1 1
2012.12.17.3-4 2 humerus	AAT remains	ITIS	aves	ITIS of	hicken AAT left	AAT fragment proximal	fragment; MNI at least 2	Non-diagnostic	Post-Contact Period	08/03/2011 4.	4 grams	weight					Excavation Unit	1 Level	5	25 30 centimeters da	
2012.12.17.5 1 carpometacarpus	AAT remains	ITIS	aves	ITIS ch	chicken AAT right	Local fragment proximal		Non-diagnostic	Post-Contact Period	08/03/2011 0.	5 grams	weight					Excavation Unit	1 Level	- 5	25 30 centimeters de	1
2012.12.17.6 1 scapula	AAT remains	ITIS	aves	ITIS cf	chicken AAT right	Local Iragment		Non-diagnostic	Post-Contact Period	08/03/2011 0.	4 grams	weight					Excavation Unit	1 Level	- 5	25 30 centimeters de	turn Wayne and Susan Gartland 21-
2012.12.17.7 1 scapula 2012.12.17.8-9 2 vertebrae	AAT remains	ITIS	aves	ITIS c	chicken AAT left chicken AAT fragment	Local fragment		Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 0. 08/03/2011 0.	grams grams	weight weight					Excavation Unit Excavation Unit	1 Level	5 5	25 30 centimeters da 25 30 centimeters da	turn Wayne and Susan Gertland 21- turn Wayne and Susan Gertland 21-
2012.12.17.10 1 bone 2012.12.17.11-12 2 metal	AAT remains AAT nail	ITIS	aves wire		hicken		Indeterminate element Typically post-1890	Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 0. 08/03/2011 31	grams	weight 2	0.00 per	iny length			Excavation Unit	1 Level	5	25 30	tum Wayne and Susan Gartland 21- tum Wayne and Susan Gartland 21-
2012.12.17.13-15 3 metal 2012.12.17.16-17 2 metal	AAT nall	AAT	wire wire				Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 23 08/03/2011 11	.2 grams	weight 16 weight 9	0.00 per	nny length			Excavation Unit Excavation Unit	1 Level		25 30 centimeters de 25 30 centimeters de	tum Wayne and Susan Gartland 21- tum Wayne and Susan Gartland 21-
2011.12.17.7	AAT nail	AAT	wire wire				Typically post-1890 Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 74 08/03/2011 15	.1 grams	weight 8. weight 6.	1.00 per	iny length			Excavation Unit Excavation Unit	1 Level	5	25 30 centimeters de 25 30 centimeters de	tum Wayne and Susan Gartland 21- tum Wayne and Susan Gartland 21-
2012.12.17.37-44 8 metal 2012.12.17.45-49 5 metal	AAT neil	AAT	wire wire				Typically post-1890 Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 16 08/03/2011 6	.7 grams	weight 5 weight 4	i.00 per	nny length			Excavation Unit Excavation Unit	1 Level	5 5	25 30 centimeters de 25 30 centimeters de	ium Wayne and Susan Gartland 21-
2012.12.17.50-59 10 metal 2012.12.17.60-62 3 metal	AAT nail AAT nail	AAT	wire wire	-			Typically post-1890 Typically post-1890	Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 9. 08/03/2011 2	grems	weight 3 weight 2	3.00 per	nny length			Excevation Unit Excevation Unit	1 Level	5 5	25 30 centimeters de 25 30 centimeters de	turn Wayne and Susan Gartland 21-
2012.12.17.63-64 2 metal 2012.12.17.65 1 metal	(AAT (nail	AAT	wire				Typically post-1890	Diagnostic Non-diagnostic	Post-Contact Period	08/03/2011 2.	grams	weight 0.).90 inc	nny liength hes length			Excavation Unit Excavation Unit	1 Level	5	25 30 centimeters de 25 30 centimeters de	tum Wayne and Susan Gertland 21-
2012.12.17.65 1 metal	AAT screw AAT bolt AAT staple	AAT	fragment				Sono Maria	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Reat Contact Period	08/03/2011 42	.3 grams	weight weight					Excavation Unit Excavation Unit	1 Level	5	25 30 centimeters da 25 30 centimeters da 25 30 centimeters da	tum Wayne and Susan Gartland 21-
2012.12.17.71 1 metal 2012.12.17.72 1 metal	AAT ring (jewelry)						Fence staples With red faux jewel, glass or plastic Post 1892	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 1. 08/03/2014 1.	grams	weight weight					Excavation Unit Excavation Unit	1 Level 1 Level	5	25 30 centimeters da 25 30 centimeters da 25 30 centimeters da	dum Wayne and Susan Gartland 21-
2012.12.17.72 I metal 2012.12.17.73 1 metal 2012.12.17.74 1 metal	AAT button (fastener)						Post-1892 Two-hole	Non-diagnostic	Post-Contact Period Post-Contact Period Post Contact Period	08/03/2011 51 08/03/2011 0.	.0 grams	weight 0.).60 inc	nes diameter			Excavation Unit	1 Level	5	25 30 centimeters da 25 30 centimeters da 25 30 centimeters da	tum Wayne and Susan Gartland 21-
	AAT shell (ammunition) AAT chain (object)			 				Non-diagnostic	Post-Contact Period Post-Contact Period	UB/U3/2011 0:	grems	weight					Excavation Unit	1 1 1	5	25 30 centimeters da	
2012.12.17.75-76 2 metal			fragment				Links of two different sizes				 Intame 	weight	1	1	1		Excavation Unit	1: (re/6)			

				1																(Val.) (Val.)		
Box# Catalog#	Qty. Materials 1	Descriptor Type 1 Object Name	Descriptor	Descriptor 2	Descriptor Type 3 Descriptor 3	Descriptor Type 4	Descriptor 4 Type 5		Descriptor 6	Description	Diagnostic/Non- diagnostic	Historical Context	Recovery Date	Measurement 1 Unit 1	ment Dimension 1 Measur	Measurement ement 2 Unit 2 Di	mension 2 Measurement 3 Unit 3	Dimension 3 Coll. Method	Horizontal/ Vertical Unit # Method	Start End Vertical # Depth Depth	Vert. Meas. Unit Vert. Ref. Pt.	Landowner Site#
1 2012.12.17.78	1 metal	AAT sinker (fishing)		 						Unknown metal object; possibly from	Non-diagnostic	Post-Contact Period	08/03/2011	8.4 grams	weight			Excavation Unit	1 Level	5 25 30	centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.17.79	1 metal	AAT object				+				an overalls clasp? Folded sheet metal with screws and	Non-diagnostic	Post-Contact Period	08/03/2011	5.2 grams	weight			Excavation Unit	1 Level	5 25 30	centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.17.80 1 2012.12.17.81 1 Discarded	1 barbed wire 20 metel	AAT fragment	AAT	Iragment						Trainelly need 1900	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011	16.3 grams 46.9 grams	weight weight			Excavation Unit	1 Level	5 25 30 5 25 30	centimeters datum centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 Discarded 1 Discarded	28 metal 4 metal	AAT fragment AAT wire	AAT	fragment		+				Typically post-1890 Indeterminate; fiat	Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011	46.8 grams 133.0 grams 23.8 grams	weight weight weight			Excavation Unit Excavation Unit Excavation Unit	1 Level 1 Level 1 Level	5 25 30 5 25 30	centimeters datum centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.18.1-2	2 ceramic (material)	AAT ironstone (pottery)	AAT	rim sherd						Scalloped edge and molding; burned Proximal end broken; several shallow	Diagnostic	Post-Contact Period	08/03/2011	13.2 grams	weight			Excavation Unit	1 Level	6 30 35	certimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.18.3 1 2012.12.18.4	1 tiblotarsus	AAT remains	ITIS	gves	ITIS chicken	AAT	right Local	medial fragment		cut marks perpendicular to shaft; Refit- with 16.1	Non-diagnostic	Post-Contact Period	08/03/2011	2.8 grams	weight			Excavation Unit	1 Level	6 30 35	centimeters datum	Wayne and Susan Gertland 21-CH-129 Wayne and Susan Gertland 21-CH-129
1 2012.12.18.4	2 glass (material)	AAT remains	IIIS	aves	Local calcined					Amber (ca. 1860-present)	Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011	0.1 grams	weight			Excavation Unit	1 Level	6 30 35	centimeters datum	Wayne and Susan Gartland 21-CH-129
	The state of the s	UNIO U								Colorless; Owens-Illinois mark dating	Dagronic	T OSI-SOMEON T SHOU	08/03/2011	U./ grana	rregin			Excavation Unit	1 Level	30 30	Committees	
1 2012.12.18.7	1 glass (material)	AAT jer	AAT	base						between 1929 and 1954 Colorless; likely from same vessel as	Diagnostic	Post-Contact Period	08/03/2011	114.3 grams	weight			Excavation Unit	1 Level	6 30 35	centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.18.8-13 1 2012.12.18.14 1 2012.12.18.15-16	6 glass (material) 1 metal	AAT jar AAT nail	AAT AAT	sherd wire						18.70 Typically post-1890	Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	107.0 grams 15.0 grams	weight 20.00	penny lei	ngth	Excavation Unit Excavation Unit	1 Level	6 30 35 6 30 35	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.18.15-16 1 2012.12.18.17-18 1 2012.12.18.19-28	2 metal	AAT nail	AAT	wire wire						Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011	19.9 grams 14.3 grams	weight 16.00 weight 10.00	penny [fer		Excavation Unit Excavation Unit	1 Level 1 Level 1 Level	6 30 35 6 30 35	centimeters datum centimeters datum centimeters datum	Wayne and Susan Gertland 21-CH-129 Wayne and Susan Gertland 21-CH-129 Wayne and Susan Gertland 21-CH-129
1 2012.12.18.29-30 1 2012.12.18.31-32	2 metal	AAT nail		wire wire						Typically post-1890 Typically post-1890 Typically post-1890	Diagnostic Diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011	6.2 grams 3.1 grams		penny ler	ngth ngth ngth	Excavation Unit Excavation Unit Excavation Unit	1 Level 1 Level 1 Level	6 30 35 6 30 35	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.18.33 1 2012.12.18.34	1 metal 1 metal	AAT boll AAT washer (fastener)		fragment						Thick and with ridges	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	22.7 grams 5.2 grams	weight 0.40		erior diameter	Excavation Unit Excavation Unit	1 Level	6 30 35 6 30 35	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.18.35	1 metal	AAT hooks (fasteners)								Three articulated eye hooks	Non-diagnostic	Post-Contact Period	08/03/2011	9.6 grams	weight			Excavation Unit	1 Level	6 30 35	centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.18.36-38	3 plastic (organic materi									Small, light blue rings	Non-diagnostic	Post-Contact Period	08/03/2011	1.3 grams	weight 0.60	inches int	lerior diameter	Excavation Unit	1 Level	6 30 35	centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 Discarded 1 Discarded 1 Discarded	2 glass (material) 2 glass (material) 4 metal	Local flat glass		sherd wire	AAT fragment					Colorless Colorless Typically post-1890	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011	1.7 grams 13.2 grams	weight weight weight			Excavation Unit Excavation Unit Excavation Unit	1 Level	6 30 35 6 30 35	centimeters datum centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 Discarded 1 Discarded 1 Discarded	2 metal 9 metal	AAT wire AAT fragment		fragment						Indeterminate; flat	Non-diagnostic Non-diagnostic	Post-Contact Period	08/03/2011	13.0 grams 55.9 grams	weight weight			Excavation Unit	1 Level 1 Level	6 30 35 6 30 35	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 Discarded 1 2012.12.19,1	cellophane 1 ceramic (material)	AAT fragment ironstone (pottery)	AAT	sherd							Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	7.5 grams	weight weight			Excavation Unit Excavation Unit	1 Level	6 30 35 7 35 40	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12,19.2 1 2012.12,19.3	1 tarsometatarsus	AAT remains	ITIS	aves	Local medium	AAT	right AAT	fragment		Missing proximal end and part of distal end	Non-diagnostic	Post-Contact Period	08/03/2011	1.3 grams	weight			Excavation Unit	1 Level	7 35 40	centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.19.3	1 coracoid 	AAT remains	ITIS	aves	Local medium	AAT	right Has-1	fragment proximal fragment Local	calcined	Unfused	Non-diagnostic	Post-Contact Period	08/03/2011	0.4 grems	weight			Excavation Unit	1 Level	7 35 40	centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.19.5 1 2012.12.19.6 1 2012.12.19.7-15	1 phalanx 1 rib	AAT remains AAT remains		aves aves	Local medium Local medium	Local AAT	proximal fragment Local fragment	calcined			Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	0.3 grams 0.2 grams	weight weight			Excavation Unit Excavation Unit	1 Level	7 35 40 7 35 40	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.19.7-15 1 2012.12.19.16 1 2012.12.19.17-39	9 long bone	AAT remains AAT remains	ITIS	aves mammalia	Local medium ITIS suidae	Local	medial fragment Local distal fragment Local	calcined calcined		Calcined and burned shaft fragments Only partial distal condyle present	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	1.3 grams 0.9 grams	weight weight			Excavation Unit Excavation Unit	1 Level	7 35 40 7 35 40	centimeters datum	Wayne and Susan Garlland 21-CH-129 Wayne and Susan Garlland 21-CH-129
	1 1	AAT remains	Local	calcined		-				Indeterminate taxa/element	Non-diagnostic	Post-Contact Period	08/03/2011	6.9 grams	weight			Excavation Unit	1 Level	7 35 40	centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.19.40-46	7 eggshell (animal mate	rial) AAT fragment	1							Colorless; all three refit; embossed	ivon-piagnostic	Post-Contact Period	08/03/2011	U.4 grams	weight			Excavation Unit	i (Level	35 40	centimeters datum	TOTAL STREET
										with "O-Cedar"/"MADE IN U.S.A." and possibly the number "7"; O-Cedar has	1				Lancon Control							
1 2012.12.19.47-49	3 glass (material)	AAT bottle	AAT	base sherd						been producing cleaning products since 1906; refit with 1950-51	Diagnostic	Post-Contact Period	08/03/2011	86.4 grams	weight			Excavation Unit	1 Level	7 35 40	centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.19.50-51	2 glass (material)	AAT bottie	AAT.	sherd						Colorless; refit with 19.47-49	Diagnostic	Post-Contact Period	08/03/2011	151.9 grams	weight			Excavation Unit	1 Level	7 35 40	centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.19.52-56 1 2012.12.19.57 1 2012.12.19.58	5 glass (material) 1 glass (material) 1 glass (material)	AAT sherd AAT sherd AAT lampshade	AAT	fragment						Colorless Pinkish tint Colorless	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011	17.3 grams 2.0 grams	weight weight			Excavation Unit Excavation Unit Excavation Unit	1 Level 1 Le	7 35 40 7 35 40 7 35 40	centimeters datum centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
	1 alone (motoriof)	Local flet glass AAT nail	AAT	sherd wire						Colorless to pale green Typically post-1890	Non-diagnostic Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011	1.0 grams	weight weight weight 10,00	penny lei	ngth	Excavation Unit Excavation Unit	1 Level	7 35 40 7 35 40	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.19.59 1 2012.12.19.60-67 1 2012.12.19.68 1 2012.12.19.69-70	8 metal 1 metal	AAT nail	AAT AAT	wire wire						Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	35.0 grams 1.4 grams	weight 8.00 weight 6.00		ngth	Excavation Unit Excavation Unit	1 Level	7 35 40	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 1 12012.12.19.71	i1 Imetal	AAT nail AAT nail	AAT	wire wire						Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	3.9 grams 0.7 grams	weight 5.00 weight 4.00	penny lei penny lei	ngth ngth	Excavation Unit Excavation Unit	1 Level	7 35 40 7 35 40	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.19.72-73 1 2012.12.19.74	2 metal 1 metal	AAT neit		wire wire blade (tool and						Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	1.3 grams 0.6 grams	weight 3.00 weight 2.00	penny lei	ngth ngth	Excavation Unit Excavation Unit	1 Level		centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.19.75	1 metal	AAT butter knife	AAT	equipment component)							Non-diagnostic	Post-Contact Period	08/03/2011	4.3 grams	weight			Excavation Unit	1 Level	7 35 40	centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.19.75 1 2012.12.19.76 1 2012.12.19.76 1 2012.12.19.77-79 1 2012.12.19.80-81 1 2012.12.19.82 1 2012.12.19.83 1 Discarded	1 metal 3 metal	AAT crown cap AAT cap (closure)	AAT	fragment						Post-1892	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	4.4 grams 9.4 grams	weight weight			Excavation Unit Excavation Unit	1 Level	7 35 40 7 35 40	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012,12,19,80-81 1 2012,12,19,82	3 metal 2 metal 1 metal	AAT can (container) AAT buckle (strap accessor	AAT () AAT	fragment	AAT fragment					Possibly from overalls	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	3.5 grams 3.0 grams	weight weight			Excavation Unit Excavation Unit	1 Level	7 35 40 7 35 40	centimeters datum centimeters datum	Wayne and Susan Garlland 21-CH-129 Wayne and Susan Garlland 21-CH-129
1 2012.12.19.83 1 Discarded	1 metal 24 metal	AAT lobject	AAT	vire						Metal plate Typically post-1890	Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	68.7 grams 72.3 grams	weight weight			Excavation Unit	1 Level	7 35 40 7 35 40	centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 Discarded 1 Discarded 1 Discarded	5 metal foil (metal)	AAT wire AAT fragment AAT fragment		fragment						Indeterminate; flat	Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011	6.0 grams grams	weight weight weight			Excavation Unit Excavation Unit Excavation Unit	1 Level 1 Level	7 35 40 7 35 40 7 35 40	centimeters datum centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 Discarded 1 2012.12.20.1 1 2012.12.20.2-8	cellophane 1 humerus	AAT fragment AAT remains	ITIS	aves	ITIS furkey	Local	proximal fragment Local	calcined		Turkey due to size; very fragmentary	Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 08/04/2011	grams 1.8 grams	weight weight			Excavation Unit Excavation Unit	1 Level	7 35 40	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 1	7 long bone	AAT remains	ITIS	aves	Local medium	Local	medial fragment Local	calcined		Medium/small mammal, unfused	Non-diagnostic	Post-Contact Period	08/04/2011	2.1 grams	weight			Excavation Unit	1 Level	8 40 45	centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.20.9-12 1 2012.12.20.13	1 vertebrae	AAT remains	ITIS	mammalia	Local medium	AAT	fragment Local	calcined	 	Medium/email mammal savus through	Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011	1.7 grams	weight			Excavation Unit Excavation Unit	1 Level	8 40 45	centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.20.14-30	17 bone	AAT remains	Local	calcined	Local Inediam	- CO.	ragiliera Eddai	Saw Illans		Medium/small mammal sawn-through Indeterminate taxa/element		Post-Contact Period	08/04/2011	4.2 grams	weight			Excavation Unit	1 Level	8 40 45	centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.20.31-44		ial) AAT fragment									1	Post-Contact Period	08/04/2011	0.4 grams	weight			Excavation Unit	1 Level	8 40 45	centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.20.45	1 glass (material) 1 glass (material)	AAT bottle	AAT	finish fragment		_				Colorless; with metal continuous thread cap attached (typically 1924-present) Colorless	Diagnostic	Post-Contact Period	08/04/2011	38.1 grams 46.3 grams	weight			Excavation Unit Excavation Unit	1 Level	8 40 45	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.20.46 1 2012.12.20.47-56 1 2012.12.20.57 1 2012.12.20.58-62	10 glass (material) 1 metal	AAT sherd AAT nail	AAT	wire						Colorless Typically post-1890	Non-diagnostic Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	53.1 grams 26.9 grams	weight weight weight 40.00	penny lei	ngth	Excavation Unit Excavation Unit	1 Level	8 40 45 8 40 45	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.20.58-62 1 2012.12.20,63-65	5 metal 3 metal	AAT nail	AAT AAT	wire wire						Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	34.9 grams 13.3 grams	weight 10.00 weight 9.00	penny lei penny lei	ngth ngth	Excavation Unit Excavation Unit	1 Level	8 40 45 8 40 45	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.20,63-65 1 2012.12.20,66 1 2012.12.20,67-68 1 2012.12.20,69	1 metal 2 metal	AAT nell AAT nell AAT nell	AAT	wire		+				Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	4.9 grams 7.9 grams	weight 8.00 weight 7.00	penny lei penny lei	ngth ngth	Excavation Unit Excavation Unit	1 Level	8 40 45 8 40 45	centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.20.70 1 2012.12.20.71	1 metal 1 metal 2 metal	AAT neil AAT neil AAT neil	AAT	wire wire						Typically post-1890 Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011 08/04/2011	2.9 grams 2.3 grams 3.3 grams	weight 6.00 weight 5.00 weight 4.00	penny lei	ngth ngth ngth	Excavation Unit Excavation Unit Excavation Unit	1 Level 1 Level 1 Level	8 40 45 8 40 45	centimeters datum centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.20.70 1 2012.12.20.71-72 1 2012.12.20.73-75 1 2012.12.20.76-78 1 2012.12.20.79 1 2012.12.20.80	3 metal 3 metal	AAT nall AAT nall	AAT	wire						Typically post-1890 Typically post-1890	Diagnostic Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	4.6 grams 2.4 grams		penny ler	ngth	Excavation Unit Excavation Unit	1 Level	8 40 45	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.20.79 1 2012.12.20.80	1 metal 1 metal	AAT nail AAT safety pin AAT can (container)	AAT	lld						Post-1849 Small, oval-shaped	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	0.6 grams 7.8 grams	weight weight			Excavation Unit Excavation Unit	1 Level	8 40 45	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.20.81	1 metal	AAT component)		<u> </u>	<u> </u>					Possibly a small foot for something	Non-diagnostic	Post-Contact Period	08/04/2011	3.7 grams	weight 0.40	Inchae	ampler	Excavation Unit	1 Level	8 40 45 8 40 45	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.20.81 1 2012.12.20.82 1 2012.12.20.83 1 Discarded 1 Discarded	1 mother of pearl 1 nut (plant material) 12 metal	AAT button (fastener) AAT welnut (nut) AAT nail		fragment wire	AAT fragment				-	Two-hole Typically post-1890	Non-diagnostic Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011 08/04/2011	0.5 grams 0.9 grams 32.4 grams	weight 0.46 weight weight	linches di	amelér	Excavation Unit Excavation Unit Excavation Unit	1 Level	8 40 45 8 40 45	centimeters datum centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 Discarded 1 Discarded 1 Discarded	11 metal 1 metal	AAT fragment AAT wire		fragment	, insginon					Indeterminate; flat	Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011	10.5 grams 15.9 grams	weight weight			Excavation Unit Excavation Unit	1 Level	8 40 45 8 40 45	centimeters datum centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 Discarded	2 metal	AAT fragment								Indeterminate; elongated Polychrome decal, floral pattern on		Post-Contact Period	08/04/2011	10.5 grams	weight			Excavation Unit	1 Level	8 40 45	centimeters datum	Wayne and Susan Gartland 21-CH-129
										molded body, with brown rim band; Salem China Company, Salem, Ohio												
1 2012.12.21.1	1 ceramic (material)	AAT earthenware	AAT	dessert plate	AAT rim sherd	AAT	decorated			(1925-1930 mark); Refits with 25.1, 26.1, 27.1-3 Silver band painted on exterior near	Diagnostic	Post-Contact Period	08/04/2011	5.8 grams	weight 6.00	Inches di	ameter	Excavation Unit	1 Level	9 45 50	centimeters datum	Wayne and Susan Gertland 21-CH-129
1 2012.12.21.2	1 ceramic (material)	AAT whiteware	AAT	rim sherd					+	and paralleling rim	Diagnostic	Post-Contact Period	08/04/2011	2.7 grams	weight			Excavation Unit	1 Level	9 45 50	centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.21.3-20	18 bone	AAT remains	Local	calcined		+	-		-	Indeterminate taxa/element	Non-diagnostic	Post-Contact Period	08/04/2011	5.9 grams	weight			Excavation Unit	1 Level	9 45 50	centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.21.21-34 1 2012.12.21.35	14 eggshell (animal mater 1 glass (material)	al) AAT fragment AAT sherd								Aqua (ca. 1860-1937)	Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	0.6 grams 1.1 grams	weight veight			Excavation Unit Excavation Unit	1 Level	9 45 50 9 45 50	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.21.36.27	2 glass (motorial)	AAT shert								Colorless with applied color floral design (post-1920); fregments refit	Diagnostic	Post-Contact Period	08/04/2011	79	weight			Excavation Unit	1 Level	9 45 60	centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.21.38-42 1 2012.12.21.43	5 glass (material) 1 metal	AAT sherd AAT nall	AAT	wire						Colorless Typically post-1890	Diagnostic Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	7.9 grams 20.0 grams 7.1 grams	weight 10.00	penny le	ngth	Excevation Unit Excevation Unit	1 Level 1 Level	9 45 50 9 45 50	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.21.44 1 2012.12.21.45-46	1 metal 2 metal	AAT nail	AAT AAT	wire wire						Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	5.3 grams 6.5 grams	veight 8.00 weight 6.00	penny fer penny fer	ngth	Excavation Unit Excavation Unit	1 Level	9 45 50 9 45 50	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.21.47 1 2012.12.21.48-51	1 metal 4 metal	AAT nail AAT nail AAT nail	AAT AAT	wire						Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	2.2 grams 7.0 grams	weight 5.00 weight 3.00	penny lei penny lei	ngth	Excavation Unit Excavation Unit	1 Level	9 45 50 9 45 50	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.21.36-37 1 2012.12.21.38-42 1 2012.12.21.43 1 2012.12.21.44 1 2012.12.21.44-6 1 2012.12.21.45-6 1 2012.12.21.45-6 1 2012.12.21.45-6 1 2012.12.21.57-56 1 2012.12.21.57-56 1 2012.12.21.55-5	2 metal 1 metal	AAT nail AAT crown cap AAT bolt	AAT	wire						Typically post-1890 Post-1892	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	1.3 grams 9.1 grams	weight 2.00 weight	penny lei	ngth	Excavation Unit Excavation Unit Excavation Unit	1 Level 1 Level	9 45 50 9 45 60	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.21.57-58	2 metal	AAT can (container)	AAT	fragment					 		Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	7.4 grams	weight weight			Excavation Unit Excavation Unit	1 Level	9 45 50	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.21.59 1 2012.12.21.60 1 2012.12.21.61	1 metal 1 metal	AAT can (container) AAT buckle (strap accessory AAT hook (fastener)	AAT)	lid	AAT fragment					Small, circular, as for a cocea can	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	2.7 grams 15.7 grams	weight weight			Excavation Unit Excavation Unit	1 Level	9 45 50 9 45 50	centimeters datum centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 1		1 1.								roughly hook-shaped	Non-diagnostic	Post-Contact Period	08/04/2011	13.3 grams	weight			Excavation Unit	1 Level	9 45 50	centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.21.62-63	2 (paper (fiber product))	AAT fragment		i						Catalog or newspaper; no text	Non-diagnostic	Post-Contact Period	08/04/2011	1.2 grams	weight			Excavation Unit	I. (Fevel	ro [45]50	centimeters datum	Wayne and Susan Gartland 21-CH-129

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Box # Catalog # Qty. Materials 1	Descriptor Type 1 Object Name	Descriptor Type 2 Descriptor 2	Descriptor Type 3 Descriptor 3	Descriptor Type 4 Descriptor 4	Descriptor Type 5 Descriptor 6 Type 6 Descriptor 6	Description	Diagnostic/Non- diagnostic	Historical Context	Recovery Date N		surement 1 Dimension	Measurement 2 Unit 2	nt Dimension 2 Meas	Measurement Surement 3 Unit 3 Di	mension 3 Coll. Method Unit #	ontal/ Vertical Method	Start End Vert Meas. /ertical # Depth Depth Unit Vert Ref.	Pt. Landowner Site#
1 Discarded 6 metal 1 Discarded 12 metal	AAT fragment	AAT Wire	AA1 tragment			Typically post-1890 Indeterminate; flat Scalloped edge; molded decoration	Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 1	14.1 gran	ns weight				Excavation Unit 1 Excavation Unit 1	Level	3 45 50 centimeters datum 3 45 50 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.22.1 1 ceramic (material) 1 2012.12.22.2-3 2 long bone	AAT ironstone (pottery) AAT remains	AAT rim sherd ITIS aves	Local medium	AAT fragment	Local calcined	Indeterminate elements	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 0 08/04/2011 0	7.6 gran 0.5 gran	ns veight		 		Excavation Unit 1 Excavation Unit 1	Level	10 50 55 centimeters datum 10 50 55 centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.22.4-6 3 eggshell (animal m 1 2012.12.22.7 1 glass (material)	AAT sherd					Aqua (ca. 1860-1937) Colorless; bead seal closure; likely o	Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 0 08/04/2011 7	7.0 gran	ns weight				Excavation Unit 1 Excavation Unit 1	Level Level	10 50 55 centimeters datum 10 50 55 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.22.6 1 glass (material) 1 2012.12.22.9 1 glass (material)	AAT lar	AAT fragment				1940 Colorless with applied color floral design (post-1920)	Diagnostic Diagnostic	Post-Contact Period	08/04/2011 2	20.8 gran 2.3 gran	ns weight				Excavation Unit 1	Level	10 50 55 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.22.10-11 2 metal 1 2012.12.22.12 1 metal	AAT nell AAT nell AAT nell	AAT wire AAT wire				Typically post-1890 Typically post-1890 Typically post-1890	Diagnostic Diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 1 08/04/2011 5 08/04/2011 6	15.1 gran 5.3 gran 5.2 gran	ns weight	10.00 penny 9.00 penny 6.00 penny	length length length		Excavation Unit 1 Excavation Unit 1	Level Level	10 50 55 centimeters datum 10 50 55 centimeters datum 10 50 55 centimeters datum	Wayne and Susan Garlland 21-CH-129 Wayne and Susan Garlland 21-CH-129 Wayne and Susan Garlland 21-CH-129
1 2012.12.22.13-14 2 metal 1 2012.12.22.15-19 5 metal 1 2012.12.22.20 1 metal	AAT can (container) AAT crown cap	AAT wire AAT fragment AAT fragment				Post-1892	Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 3 08/04/2011 3	36.0 gran 3.6 gran	ns weight		Jorgin .		Excavation Unit 1 Excavation Unit 1 Excavation Unit 1	Level Level	10 50 55 centimeters datum 10 50 55 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.22.21 1 metal 1 2012.12.22.22-24 3 paper (fiber product	AAT knife			}		Paring knife; handle is missing, but metal part that goes into handle with pags is present	Non-diagnostic	Post-Contact Period	08/04/2011 1	12.2 gran	ns weight				Excavation Unit 1	Level	10 50 55 centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.22.22-24 3 paper (fiber product 1 Discarded 2 metal 1 Discarded 2 metal 1 Discarded 2 metal 1 Discarded 2 metal 1 Discarded 2 metal 1 Discarded 2 metal 1 Discarded 2 metal 1 Discarded 2 metal 1 Discarded 2 metal 1 Discarded 2 metal 1 Discarded 2 metal 1 Discarded 2 metal 1 Discarded 2 metal 1 Discarded 3 Di	t) AAT fragment AAT nail AAT fragment	AAT wire	AAT fragment			Catalog or newspaper; no text Typically post-1890 Indeterminate; flat	Non-diagnostic Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 0 08/04/2011 1 08/04/2011 3	0.5 gran 10.3 gran 3.5 gran	ns weight				Excavation Unit 1 Excavation Unit 1 Excavation Unit 1	Level Level	10 50 55 centimeters datum 10 50 55 centimeters datum 10 50 55 centimeters datum	Wayne and Susan Gertland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 Discarded cellophane 1 2012.12.23.1 1 ceramic (material) 1 2012.12.23.2-3 2 bone	AAT fregment AAT whiteware AAT remains	AAT sherd ITIS mammalia	Local medium	Local calcined			Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011 2 08/04/2011 2	gren 2.0 gren 2.5 gren	ns weight ns weight				Excevation Unit 1 Excevation Unit 1 Excevation Unit 1	Level Level Level	10 50 55 centimeters datum 11 55 60 centimeters datum 11 55 60 centimeters datum	Wayne and Susan Gertland 21-CH-129 Wayne and Susan Gertland 21-CH-129 Wayne and Susan Gertland 21-CH-129
1 2012.12.23.4 1 glass (material)	AAT sherd					Amber (ca. 1860-present) Coloriess with applied color floral	Diagnostic	Post-Contact Period	08/04/2011 2	2.7 gran	ns weight				Excevation Unit 1	Level	11 55 60 centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.23.5 1 glass (material)	AAT sherd					design (post-1920) Colorless; one has a mold seam; on	Diagnostic	Post-Contact Period	08/04/2011 3	3.5 grad	ns weight				Excavation Unit 1	Level	11 55 60 centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.23.6-10 5 glass (material) 1 2012.12.23.11 1 metal 1 2012.12.23.12 1 metal	AAT nail AAT nail	AAT wire AAT wire				is somewhat melted Typically post-1890 Typically post-1890	Non-diagnostic Diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 2 08/04/2011 7 08/04/2011 6	7.6 gran 3.0 gran		10.00 penny 9.00 penny	length length		Excavation Unit 1 Excavation Unit 1 Excavation Unit 1	Level Level	11 55 60 centimeters datum 11 55 60 centimeters datum 11 55 60 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.23.13 1 metal 1 2012.12.23.14 1 metal 1 Discarded 1 glass (material)	AAT nail AAT staple Local flat glass	AAT wire				Typically post-1890 Fence staple Colorless	Diagnostic Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 5 08/04/2011 5 08/04/2011 1	5.2 grar 5.1 grar 1.7 grar	ns weight	38.00 penny	length		Excavation Unit 1 Excavation Unit 1 Excavation Unit 1	Level Level Level	11 55 60 centimeters datum 11 55 60 centimeters datum 11 55 60 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 Discarded 1 metal	AAT wire					Green	Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 1	14.5 gran	ns weight				Excavation Unit 1	Level	11 55 60 centimeters datum 11 55 60 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 Discarded 1 plastic (organic me 1 2012.12.24.1 1 toolh 1 2012.12.24.2 1 bone	AAT remains AAT remains	ITIS mammalla ITIS mammalia	AAT large	Local burned Local calcined		Very fragmentary Indeterminate element	Non-diagnostic Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 0 08/04/2011 3	0.9 gran 3.7 gran	ns weight				Excevation Unit 1 Excevation Unit 1	Level Level	12 60 65 centimeters datum 12 60 65 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.24.3 1 tibiotarsus 1 2012.12.24.4 1 phelanx 1 2012.12.24.5-14 10 bone	AAT remains AAT remains AAT remains	ITIS aves ITIS aves ITIS aves	AAT small Local calcined	Local distal fragment Local calcined	Local calcined		Non-diagnostic Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 C 08/04/2011 C 08/04/2011 2	0.4 gran 0.1 gran 2.2 gran					Excavation Unit 1 Excavation Unit 1 Excavation Unit 1	Level Level Level	12 60 65 centimeters datum 12 60 65 centimeters datum 12 60 65 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.24.15-44 30 eggshell (animal m 1 2012.12.24.45-46 2 metal	aterial) AAT fregment AAT nall	AAT wire				Typically post-1890	Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 1 08/04/2011 8	1.4 grar 3.9 grar	ns weight	8.00 penny	length		Excavation Unit 1 Excavation Unit 1	Level	12 60 65 centimeters datum 12 60 65 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.24.47-48 2 metal 1 2012.12.24.49 1 metal 1 Discarded 3 metal	AAT nail AAT nail AAT fragment	AAT wire AAT wire				Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 3 08/04/2011 0	3.1 grer 3.5 grer 3.8 grer	ns weight ns weight	3.00 penny 2.00 penny	length length		Excavation Unit 1 Excavation Unit 1	Level Level	12 60 65 centimeters datum 12 60 65 centimeters datum 12 60 65 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 Discarded 3 metal	AAT Itagment					Polychrome decal, floral pattern on molded body, with brown rim band;	Non-diagnostic	Posi-Contact Period	00/04/2011	s.e grai	is weight				Excavation Unit 1	Level	12 00 00 00 00 00 00 00 00 00 00 00 00 00	
1 2012.12.25.1 1 ceramic (material) 1 2012.12.25.2 1 phelanx	AAT earthenware	AAT dessert plate	AAT rim sherd	AAT decorated		Salem China Company, Salem, Ohi (1925-1930 mark); Refits with 21.1, 26.1, 27.1-3	Diagnostic	Post-Contact Period	08/04/2011 4	48.2 gran	ns weight	6.00 inches	diameter		Excavation Unit 1	Level	13 65 70 centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.25.2 1 phalanx 1 2012.12.25.3 1 vertebrae 1 2012.12.25.4-6 3 bone	AAT remains AAT remains AAT remains	AAT dessert plate ITIS mammalia ITIS aves Local calcined	ITIS suldae Local medium	Local calcined AAT fragment	Local calcined	Distal phalanx Indeterminate taxa/element	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 C 08/04/2011 C 08/04/2011 C	0.3 grar 0.3 grar 0.9 grar	ns (weight				Excavation Unit 1 Excavation Unit 1 Excavation Unit 1	Level Level Level	13 65 70 centimeters datum 13 65 70 centimeters datum 13 65 70 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.25.7 1 glass (material)	AAT for	AAT Sninh				Colorless; metal continuous thread i w/ milk-glass liner attached (1869-co	d		08/04/2011 1	120.6	as waight				Excavation Unit 1	l evel	13 65 70 centimaters datum	Wayne and Susan Gertland 21-CH-129
1 2012-12-20-1 I glass (indicital)		CS.I IIIISII				Colorless; embossed; refits with 26. 44 and 27.16-17 to say "ATLAS"/	Diagnostic	Post-Contact Period	05/04/2071	izoo giai	is weight				Excession of the control of the cont	Luvei		
1 2012.12.25.8 1 glass (material) 1 2012.12.25.9 1 glass (material) 1 2012.12.25.10-14 5 glass (material)	AAT jar AAT bottle	AAT sherd AAT finish				"STRONG SHOULDE[R]" / "MASO! Colorless; melted	Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 2 08/04/2011 1	29.7 grar 10.1 grar	ns weight				Excavation Unit 1 Excavation Unit 1	Level Level	13 65 70 centimeters datum 13 65 70 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.25.9 1 glass (material) 1 2012.12.25.10-14 5 glass (material) 1 2012.12.25.15 1 metal 1 2012.12.25.16 1 metal	AAT sherd AAT nail AAT nail	AAT wire				Colorless; one is melted Typically post-1890 Typically post-1890	Non-diagnostic Diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 4 08/04/2011 5 08/04/2011 2	43.3 grar 5.6 grar 2.7 grar	ns weight ns weight	9.00 penny 7.00 penny	length length		Excavation Unit 1 Excavation Unit 1 Excavation Unit 1	Level Level Level	13 65 70 centimeters datum 13 65 70 centimeters datum 13 65 70 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.25.17-18 2 metal 1 Discarded 2 metal	AAT can (container) AAT fragment	AAT lid	AAT fragment			Indeterminate; flat	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 1 08/04/2011 4	10.9 grar 4.6 grar	ns weight		190,40		Excavation Unit 1 Excavation Unit 1	Level Level	13 65 70 centimeters datum 13 65 70 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 Discarded 1 plastic (organic ma	terial) AAT fragment	<u> </u>				White Polychrome decal, floral pattern on	Non-diagnostic	Post-Contact Period	08/04/2011	0.0 gran	ns weight				Excavation Unit 1	Level	13 65 70 centimeters datum	Wayne and Susan Gartland 21-CH-129
						molded body, with brown rim band; Salem China Company, Salem, Ohi (1925-1930 mark); Refits with 21.1,	•											
1 2012.12.26.1 1 ceramic (material)	AAT earthenware	AAT dessert plate	AAT rim sherd	AAT decorated		25.1, 27.1-3; makers mark "THE SALEM CHINA CO."/"SALEM OHIC	Diagnostic	Post-Contact Period	08/04/2011 4	49,5 grar	ns weight	6.00 inches	diameter		Excavation Unit 1	Level	14 70 75 centimeters datum	Wayne and Susan Gartland 21-CH-129
						Four horizontal platinum bands beginning at rim and decreasing in												
1 2012.12.26.2 1 ceramic (material)	AAT LUCK			207		thickness down from the rim; may be Platinum Alloy pattern of the Salem	D)	Deat Control Desired	00/04/0044						Excavation Unit 1	l evel	14 70 75 centimeters datum	Wayne and Susan Garlland 21-CH-129
1 2012.12.26.2 1 ceramic (material) 1 2012.12.26.3 1 humerus 1 2012.12.26.4 1 tarsomelatarsus 1 2012.12.26.5-7 3 vertebrae	AAT lustreware AAT remains AAT remains	ITIS aves	Local medium Local medium AAT fragment	Local proximal fragment Local proximal fragment	Local calcined Local calcined	China Company Very fragmentary	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 / 08/04/2011 1 08/04/2011 0	7.8 gran 1.1 gran 0.6 gran					Excavation Unit 1 Excavation Unit 1	Level Level	14 70 75 centimeters datum 14 70 75 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.26.5-7 3 vertebrae 1 2012.12.26.8 1 long bone	AAT remains AAT remains	ITIS aves	AAT fragment	Local catcined Local medial fragment		Perhaps turkey based on size, both ends broken	Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 0	0.6 gran 4.4 gran	ns weight				Excavation Unit 1	Level	14 70 75 centimeters datum 14 70 75 centimeters datum	Wayne and Susan Garlland 21-CH-129 Wayne and Susan Garlland 21-CH-129
1 2012.12.26.9-11 3 long bone 1 2012.12.26.12-14 3 bone	AAT remains AAT remains	ITIS aves	AAT small AAT small	Local medial fragment	Local calcined	Small/medium mammal vertebra	Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 C	0.3 gran 0.2 gran	ns veight				Excavation Unit 1 Excavation Unit 1	Level Level	14 70 75 centimeters datum 14 70 75 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.26.15 1 vertebrae 1 2012.12.26.16-27 12 bone	AAT remains	ITIS mammalia	AAT small	AAT fragment		fragment	Non-diagnostic	Post-Contact Period	08/04/2011 C	0.8 gren	ns weight				Excavation Unit 1	Level	14 70 75 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.26.18-27 12 Borne 1 2012.12.26.28-41 14 eggshell (animal m	aterial) AAT fragment	Local datoned				indeterminate taxa/element	Non-diagnostic	Post-Contact Period	08/04/2011	0.7 gran	ns weight				Excavation Unit 1	Level	14 70 75 centimeters datum	Wayne and Susan Gartland 21-CH-129
						Colorless; embossed; refits with 25, 26.43-44, and 27.16-17 to say "ATLAS" / "STRONG SHOULDE[R]"	,											
1 2012.12.26.42 1 glass (material)	AAT jar	AAT base sherd				"MASON"; Hazel Atlas Glass Co. embossed on base (1920-1964)	Diagnostic	Post-Contact Period	08/04/2011 1	145.3 gren	ns weight				Excavation Unit 1	Level	14 70 75 centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012 12 26 43-44 2 place (material)	AAT in	AAT shard				Colorless; embossed; refit with 25.8 26.42, and 27.16-17 to say "ATLAS "STRONG SHOULDE[R]" / "MASON	7	Post-Contact Period	08/04/2014	70.1 aras	ne luminht				Excevation Unit 1	Level	14 70 75 centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.26.43-44 2 glass (material) 1 2012.12.26.45-56 12 glass (material) 1 2012.12.26.57-58 2 metal 1 2012.12.26.59 1 metal	AAT sherd AAT nall	AAT wire				Colorless Typically post-1890	Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 1 08/04/2011 3	141.4 grar 34.0 grar	ns (v/eight	20.00 penny	length		Excavation Unit 1 Excavation Unit 1	Level	14 70 75	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.26.59 1 metal 1 2012.12.26.60 1 metal 1 2012.12.28.61 1 metal	AAT nall AAT nall AAT nall	AAT wire AAT wire AAT wire				Typically post-1890 Typically post-1890 Typically post-1890	Diagnostic Diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 E 08/04/2011 2 08/04/2011 0	3.4 grar 2.5 grar 3.6 grar	ns weight	12.00 penny 6.00 penny 3.00 penny	length length length		Excavation Unit 1 Excavation Unit 1 Excavation Unit 1	Level Level Level	14 70 75 centimeters datum 14 70 75 centimeters datum 14 70 75 centimeters datum 14 70 75 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.26.53 1 metal 1 2012.12.26.51 1 metal 1 2012.12.26.51 1 metal 1 2012.12.26.52 1 metal 1 2012.12.26.53 1 metal 1 2012.12.26.53 1 metal 1 2012.12.26.53 1 metal 1 2012.12.26.53 1 metal 1 2012.12.26.53 1 metal 1 2012.12.26.53 1 metal 1 2012.12.26.53 1 metal 1 2012.12.26.53 1 metal 1 2012.12.26.53 1 2012.12.26.26.26 1 2012.12.26.26.26 1 2012.12.	AAT nail AAT staple AAT staple	AAT wire	AAT fragment			Typically post-1890 Typically post-1890	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 1 08/04/2011 0 08/04/2011 7	1.9 gran 0.1 gran 7.8 gran	ns weight ns weight	2.00 penny	length		Excavation Unit 1 Excavation Unit 1 Excavation Unit 1	Level Level Level	14 70 75 centimeters datum 14 70 75 centimeters datum 14 70 75 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 Discarded 5 metal 1 Discarded 1 plastic (organic ma	lerial) AAT fragment	Name (Name	, or magnetic			White	Non-diagnostic	Post-Contact Period	08/04/2011	0.3 gran	ns weight				Excavation Unit 1	Level	14 70 75 centimeters datum	Wayne and Susan Gartland 21-CH-129
						Polychrome decal, floral pattern on molded body, with brown rim band; Salem China Company, Salem, Ohi	.				-							
1 2012.12.27.1-3 3 ceramic (material) 1 2012.12.27.4 1 tarsometatarsus	AAT earthenware AAT remains	AAT dessert plate	AAT rim sherd ITIS chicken	AAT decorated AAT right		(1925-1930 mark); Refit with 21.1, 25.1, 26.1	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 4 08/04/2011 2	48.7 gran 2,2 gran		6.00 inches	diameter		Excevation Unit 1 Excevation Unit 1	Level Level	15 75 80 centimeters datum 15 75 80 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
	AAT remains	ITIS aves	ITIS chicken	AAT left		Unfused proximal end (broken) and shaft/distal end; juvenile Individual; 81.8mm	Non-diagnostic	Post-Contact Period	08/04/2011	3.0 gran	ns weight	3,20 linches	length		Excavation Unit 1	Level	15 75 80 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.27.5-6 2 larsometalersus 1 2012.12.27.7 1 verfebrae 1 2012.12.27.8-10 3 long bone 1 2012.12.27.11-14 4 bone	AAT remains AAT remains	ITIS aves ITIS mammalia	Local medium AAT large	AAT fragment Local medial fragment	Local calcined Local saw marks	Sawn ends; large/medium taxa	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 0 08/04/2011 5	5.0 gran 5.8 gran	ns weight	and a second			Excavation Unit 1 Excavation Unit 1 Excavation Unit 1 Excavation Unit 1	Level Level	15 75 80 centimeters datum 15 75 80 centimeters datum 15 75 80 centimeters datum 15 75 80 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.27.11-14 4 bone 1 2012.12.27.15 1 glass (material)	AAT remains AAT jar	AAT sherd				Indeterminate taxa/element Aqua; embossed with "[PE]RF[ECT] "[M]AS[ON]" (1913-1937)	Non-diagnostic / Diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 1 08/04/2011 4	1.5 grar 4.7 grar	ns weight				Excavation Unit 1	Level	15 75 80 centimeters datum	Wayne and Susan Garlland 21-CH-129
						Colorless; embossed; refit with 25.8 and 26.42-44 to say "ATLAS" /												
1 2012.12.27.16-17 2 glass (material) 1 2012.12.27.18-25 8 glass (material)	AAT jar AAT sherd	AAT sherd				"STRONG SHOULDEIR]" / "MASON Colorless	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 8 08/04/2011 3	3.6 gran 38.0 gran					Excavation Unit 1 Excavation Unit 1	Level Level	15 75 80 centimeters datum 15 75 80 centimeters datum	Wayne and Susen Gertland 21-CH-129 Wayne and Susen Gertland 21-CH-129
1 2012.12.27.26-33 8 eggshell (animal m 1 2012.12.27.34 1 metal 1 2012.12.27.35-36 2 metal	aterial) AAT (regment AAT nail AAT nail	AAT vire AAT wire				Typically post-1890	Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 0 08/04/2011 1	0.6 gran 15.4 gran	ns weight	20.00 penny	length		Excavation Unit 1 Excavation Unit 1 Excavation Unit 1	Level Level Level	15 75 80 centimeters datum 15 75 80 centimeters datum 15 75 80 centimeters datum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
I 1 (2012.12.27.37-38 I2 Imetal	IAAT Ineil	AAT wire AAT wire				Typically post-1890 Typically post-1890 Fence staple	Diagnostic Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 1 08/04/2011 8 08/04/2011 1	12.5 gran 3.6 gran 1.0 gran	ns weight ns weight	8.00 penny 6.00 penny	length length		Excavation Unit 1 Excavation Unit 1 Excavation Unit 1	Level Level	15 75 80 centimeters detum 15 75 80 centimeters datum 15 75 80 centimeters detum	Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 2012.12.27.40 1 paper (fiber produc) AAT fragment					Catalog or newspaper; text does not provide indicators of date	Non-diagnostic	Post-Contact Period	08/04/2011 1	1.8 cran	ns weight				Excavation Unit 1	Level	15 75 80 centimeters datum	Wayne and Susan Gartland 21-CH-129
1 2012;12:27.39 1 metal 1 2012;12:27.40 1 paper (liber product 1 2012;12:27.41 1 nut (gent material) 1 2012;12:27.41 1 nut (gent material) 1 Discarded 4 metal 1 Oiscarded 1 metal	AAT fragment AAT vvalnut (nut) Local flat glass AAT nall AAT vvire	AAT fragment AAT fragment	AAT (trans)			Coloriess	Non-diagnostic	Post-Contact Period	08/04/2011 1 08/04/2011 2	1.1 gran 2.5 gran	ns weight				Excavation Unit 1 Excavation Unit 1 Excavation Unit 1	Level Level	15	Wayne and Susan Garlland 21-CH-129 Wayne and Susan Garlland 21-CH-129 Wayne and Susan Garlland 21-CH-129 Wayne and Susan Garlland 21-CH-129 Wayne and Susan Garlland 21-CH-129
1 Discarded 1 metal	AAT wire	AAT wire AAT fragment	AAT fragment		 	Typically post-1890	Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 1 08/04/2011 5	12.9 gran 5.4 gran					Excavation Unit 1	Level	15 75 80 centimeters datum	Wayne and Susan Gartland 21-CH-129

	1		Descriptor		Descriptor		Descriptor	Descriptor	Des	scriptor	Descriptor			Diagnostic/Non-				Measurement			Measurement		Measurement		Horizontal/ V	ertical	VPU Start	/PU End Vert. Mea Depth Unit	s.		
Box # Catalog #	Qty.	Materials 1	Type 1	Object Name	Type 2	Descriptor 2	Type 3 Descriptor 3	Type 4 D	Descriptor 4 Typ	pe 5 Descr	riptor 5 Type 6	Descriptor 6	Description White; rim to base; scalloped edge; molded decoration at rim; makers'	diagnostic	Historical Context	Recovery Date	Measurement 1	Unit 1	Dimension 1	Measurement 2	Unit 2	Dimension 2	Measurement 3 Unit 3	Dimension 3 Coll. Method	Unit# M	lethod Veri	ical# Depth	Depth Unit	Vert. Ref. Pt.		Site #
1 2012.12.28.1	11	ceramic (material)	AAT	whiteware	AAT	saucer	AAT rim sherd	AAT m	nolded				mark for Homer Laughlin (1941) Pink with hand carved decoration;	Diagnostic	Post-Contact Period	08/04/2011	69.2	grams y	weight	6.00	inches	diameter		Excavation Unit	1 4	evel 16	80	35 centimete		Wayne and Susan Gartland Wayne and Susan Gartland	
1 2012.12.28.2	1	ceramic (material) tiblotarsus	AAT	bisque (ceramic) remains	ITIS	aves	ITIS chicken	AAT le	eft Loc	proximal fragm	mal nent Local	calcined	Clear glaze; possibly a child's toy	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011	0.7	grams	weight weight					Excavation Unit	1 4	evel 16 evel 16	80	35 centimete 35 centimete	rs datum	Wayne and Susan Gartland	nd 21-CH-129
1 2012.12.28.4 1 2012.12.28.5 1 2012.12.28.6-7	1	tarsometalarsus long bone	AAT	remains remains remains		aves aves	ITIS chicken Local medium Local medium	Local m	ght AA* nedial fragment Loc nedial fragment	T fragm cal calcin			Unfused proximal end	Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011 08/04/2011	1.6	grams	weight weight weight					Excavation Unit Excavation Unit Excavation Unit	1 L	evel 16 evel 16 evel 16	80 80	35 centimete	rs datum rs datum	Wayne and Susan Gartland Wayne and Susan Gartland Wayne and Susan Gartland	nd 21-CH-129
1 2012.12.28.8-13	1	long bone phalanges	AAT	remains	ITIS	aves	Local medium	LOCAL NO	neolar negitient				Some fragmentary; perhaps chicken due to size	Non-diagnostic	Post-Contact Period	08/04/2011	1.1	grams	weight					Excavation Unit	1 6	evel 16	80	35 centimete	1	Wayne and Susan Gartland	
1 2012.12.26.14	1	vertebrae	AAT	remains	ITIS	mammalia	AAT small	AAT fr	ragment Loc	al saw n	marks		Small/medium mammal unfused articular surface, sawn through medially	Non-diagnostic	Post-Contact Period	08/04/2011	0.6	grams	weight					Excavation Unit	1	evel 16	80	85 centimete	ns datum	Wayne and Susan Gartland	nd 21-CH-129
1 2012.12.28.14 1 2012.12.28.15-1 1 2012.12.28.19-2	18 4 24 6	bone bone	AAT AAT	remains remains	ITIS	aves	Local calcined						Indeterminate elements Indeterminate elements	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	1.0		weight weight					Excavation Unit	1 L	evel 16 evel 16	80 80		ns datum	Wayne and Susan Gartland Wayne and Susan Gartland	nd 21-CH-129
1 2012.12.28.25-3	32 8	eggshell (enimal materi	ial) AAT	fragment	-			-					Sun-colored amethyst (ca. 1880-1920)	Non-diagnostic	Post-Contact Period	08/04/2011	0.4	grams	weight	<u> </u>		-		Excavation Unit	1 1	evel 16	80	85 centimete	ns datum	Wayne and Susan Gartland	nd 21-CH-129
1 2012.12.28.33 1 2012.12.28.34-4	1 7	glass (material) glass (material)		base sherd sherd									vessel not determined; very large base with concentric rings Colorless	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011	396.2	grams grams	weight weight	5.73	inches	diameter	<u> </u>	Excavation Unit	1 1	evel 16	80	85 centimete	rs datum rs datum	Wayne and Susan Gartland Wayne and Susan Gartland	id 21-CH-129 nd 21-CH-129
1 2012.12.28.41-4	44 4	glass (material)	AAT	sherd									Sun-colored amethyst (ca. 1880-1920)	Diagnostic	Post-Contact Period	08/04/2011	9.6	grams	weight	40.00				Excavation Unit	1 1	evel 16	80	85 centimete	rs datum	Wayne and Susan Gartland Wayne and Susan Gartland	1
1 2012.12.28.45 1 2012.12.28.46	1	metal seeds	AAT	sample	AAT	wire							Typically post-1890 Unprocessed sample	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	6.7	grams	weignt	10.00	penny	length		Excavation Unit	1 L	evel 16 evel 16	80	85 centimete 85 centimete		Wayne and Susan Gartland	nd 21-CH-129
1 2012.12.28.47-5 1 Discarded 1 2012.12.29.1-2	54 8	paper (fiber product) metal	AAT	fragment nail		wire	AAT fragment Local medium		and all fragment Loc	cal calcin	and and		Catalog; text does not indicate date Typically post-1890	Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	19.7 23.4	grams grams grams	weight weight					Excevation Unit Excevation Unit Excevation Unit		evel 16 evel 16 evel 17	80 80	85 centimete 85 centimete 95 centimete	rs datum rs datum	Wayne and Susan Gartland Wayne and Susan Gartland Wayne and Susan Gartland	nd 21-CH-129
1 2012.12.29.3-5 1 2012.12.29.6-8	1	long bone eggsiteli (animal materi		remains fragment	1113	memmalia	Eccai	Locar	nedial fragment Loc	an Galcin	ieu			Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011	0.0		weight weight					Excavation Unit	1 L	evel 17	85	95 centimete	rs deturn	Wayne and Susan Gertland	nd 21-CH-129
		glass (material)	AAT	sherd	1								Colorless Sun-colored amethyst (ca. 1880-1920)	Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/04/2011	2.6	grams	weight weight	 		 		Excavation Unit	1 1	evel 17	85	95 centimete	rs datum	Wayne and Susan Garlland Wayne and Susan Garlland	nd 21-CH-129
1 2012.12.29.9 1 2012.12.29.10 1 2012.12.29.11 1 2012.12.29.12 1 2012.12.29.13 1 2012.12.29.13	1	metal metal	AAT AAT	nail nail	AAT AAT	wire wire							Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	3.2 3.4	grams	weight weight		penny penny	length length		Excavation Unit Excavation Unit	1 L	evel 17 evel 17	185	95 centimete 95 centimete	rs datum rs datum	Wayne and Susan Gartland Wayne and Susan Gartland Wayne and Susan Gartland	nd 21-CH-129 nd 21-CH-129
1 2012.12.29.12 1 2012.12.29.13 1 2012.12.29.14	1 1	metal metal textile material	AAT	cap (closure) buckle (strap accessory) fragment	-	 		+==+					Possibly from overalls	Non-diagnostic Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011 08/04/2011	4.2 0.4	grams grams grams	weight weight weight	1.30	inches	diameter		Excavation Unit Excavation Unit Excavation Unit	1 L	evel 17 evel 17 evel 17	85 85	95 centimete 95 centimete 95 centimete	rs datum rs datum	Wayne and Susan Gartland Wayne and Susan Gartland	nd 21-CH-129
1 2012 12 29 15-2	20 6	paper (fiber product)	AAT	fragment			AAT (manual						Catalog; text does not indicate date		Post-Contact Period	08/04/2011	62.1	grams	weight weight					Excavation Unit	1 L	evel 17	85	95 centimete	rs datum	Wayne and Susan Gartland Wayne and Susan Gartland	nd 21-CH-129
1 Discarded 1 Discarded	1	metal	AAT	fragment	MI	wire	AAT fragment	+=+					Typically post-1890 Indeterminate; flat		Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	2.3	grams grams	weight					Excavation Unit	1	evel 17 evel 17	85	95 centimete 95 centimete	1	Wayne and Susan Gartland	nd 21-CH-129
1 2012.12.30.1-9 1 2012.12.30.10-3		bone eggshell (animal materi	AAT Iah AAT	remains fragment	Local	calcined		+					Indeterminate taxa/element	Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011	0.5	grams grams	weight weight			-		Excavation Unit	1 1	evel 18	95	100 centimete		Wayne and Susan Gartland Wayne and Susan Gartland	
2012.12.00.105		agency (elimina indivi)	1	-4									Colorless with thick horizontal gold	and an appropriate				[, , , , , , , , , , , , , , , , , , ,							
1 2012.12.30.21 1 2012.12.30.22	1	glass (material) glass (material)	AAT .	drinking glass sherd	AAT	rim sherd							band painted at rim and thin horizontal gold band painted approx. 1/5" below i Aqua to pale green; melted	Non-diagnostic	Post-Contact Period	08/04/2011 08/04/2011	5.0	grams grams	weight weight	-				Excavation Unit Excavation Unit	1	evel 18 evel 18	95 95	100 centimete 100 centimete 100 centimete	ers datum ers datum	Wayne and Susan Gartland Wayne and Susan Gartland Wayne and Susan Gartland	nd 21-CH-129
1 2012.12.30.21 1 2012.12.30.22 1 2012.12.30.23 1 2012.12.30.24	1	metal metal	AAT AAT	nail nail	AAT AAT	wire wire							Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	7.5 5.8	grams	weight weight	12.00 8.00	penny penny	length length		Excavation Unit Excavation Unit	1L	evel 18 evel 18	95 95	100 centimete 100 centimete	rs datum rs datum	Wayne and Susan Gartland Wayne and Susan Gartland	d 21-CH-129 nd 21-CH-129
1 2012.12.30.25-3	30 6	paper (fiber product) gless (material)	AAT Local	fragment flat class	AAT	sherd							Catalog; text does not indicate date Pale green to colorless	Non-diagnostic	Post-Contact Period	08/04/2011 08/04/2011	7.8	grams grams	weight weight	-				Excavation Unit Excavation Unit		evel 18	95 95	100 centimete	ers Idatum	Wayne and Susan Gartland Wayne and Susan Gartland	nd 21-CH-129
1 Discarded 1 Discarded 1 Discarded	5 2	metal metal	AAT	fragment	AAT	wire	AAT fragment						Indeterminate; one flat, one chunk	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	9,9 10.6	grams grams	weight					Excavation Unit Excavation Unit	1 1	evel 18 evel 18	95 95	100 centimete 100 centimete	ers datum ers datum	Wayne and Susan Gartland Wayne and Susan Gartland Wayne and Susan Gartland Wayne and Susan Gartland	nd 21-CH-129
1 2012.12.31.1 1 2012.12.31.2	1	rock	AAT	object	AAI	vrire		1					Typically post-1890 Tapered, worked piece of stone	Non-diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	1.6	grams	weight weight	1.44	penny inches	length length		Excavation Unit	1 1	Shovel Test Shovel Test		160 centimete 160 centimete		Wayne and Susan Gartland	nd 21-CH-129
1 2012.12.31.3 1 Discarded	1 4	plastic (organic material metal	AAT	object nail	AAT	wire	AAT fragment						Typically post-1890	Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	0.3 15.9	grams grams	weight weight					Excavation Unit	1 S	Shovel Test Shovel Test Shovel Test	100 100	160 centimete 160 centimete 160 centimete	ers datum ers datum	Wayne and Susan Gartland Wayne and Susan Gartland Wayne and Susan Gartland	nd 21-CH-129
1 Discarded 1 2012.12.32.1 1 2012.12.32.2	1	metal ceramic (material)	AAT	fragment stoneware	AAT	sherd							Indeterminate; flat and chunks Dark brown salt glaze on one side; buf glaze on the other	Non-diagnostic Diagnostic	1	08/03/2011	1.5	grams grams	weight weight					Excavation Unit	2 L	evel 1	+9	10 centimete	ers datum	Wayne and Susan Gartland	nd 21-CH-129
1 2012.12.32.2	1	ceramic (material)	AAT	terracotta	AAT	shord		1					Medium/large mammal fragment shaft	Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011	7.6	grams	weight					Excavation Unit	2 L	evel 1	+9	10 centimete	ers datum	Wayne and Susan Gartland Wayne and Susan Gartland	1 1
1 2012 12 22 4	1	long bone glass (material)	AAT	jar	AAT	mammalia liner (container component)	AAT sherd	Local	nedial fragment Loc	Adi Salw II	Halks		fragment; one end sawn Milk glass jar lid liner fragment (ca. 1869-1950)	Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011	4.4	grams	weight					Excavation Unit	2 L	evel 1	+9	10 centimete	ers datum	Wayne and Susan Gartland	ind 21-CH-129
1 2012.12.32.5 1 2012.12.32.6 1 2012.12.32.6 1 2012.12.32.7 1 2012.12.32.8 1 Discarded 1 Discarded	1	metal metal metal	AAT AAT	nell neil neil		wire wire							Typically post-1890 Typically post-1890 Typically post-1890	Diagnostic Diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	7.4	grams	weight weight	12.00 10.00	penny penny penny	length length		Excavation Unit Excavation Unit Excavation Unit	2 L 2 L	evel 1 .evel 1 .evel 1	+9 +9 +9	10 centimete 10 centimete 10 centimete	ers datum ers datum	Wayne and Susan Gartland Wayne and Susan Gartland Wayne and Susan Gartland	nd [21-CH-129
1 2012.12.32.8 1 Discarded	i	metal glass (material)	AAT	sherd		THIS .							Fence staple Coloriess	Non-diagnostic Non-diagnostic	Post-Contact Period	08/03/2011 08/03/2011	6.0	grams	weight weight weight		F			Excavation Unit Excavation Unit	2 L	evel 1	+9	10 centimete 10 centimete	ers datum ers datum	Wayne and Susan Gartland Wayne and Susan Gartland Wayne and Susan Gartland	ind 21-CH-129
1 Discarded 1 Discarded 1 Discarded		foil (metal) cellophane	AAT	fragment fragment fragment		 		1 = 1				 	Indeterminate; flat	Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011 08/03/2011	11.1	grams	weight weight weight					Excavation Unit Excavation Unit Excavation Unit	2 L	evel 1 .evel 1 .evel 1	+9	10 centimete 10 centimete 10 centimete 10 centimete 10 centimete 10 centimete	ors datum ors datum	Wayne and Susan Gartland Wayne and Susan Gartland Wayne and Susan Gartland	nd 21-CH-129
													One with dark brown salt glaze on side no glaze on the other; one with dark																		
1 2012.12.33.1-3	3	ceramic (material)	AAT	stoneware	AAT	sherd							brown salt glaze on one side, buff glaz on the other; one with buff glaze on both sides	Diagnostic	Post-Contact Period	08/03/2011	53.0	grams	weight					Excavation Unit	2 L	evel 2	10		ers datum	Wayne and Susan Gartland	nd 21-CH-129
1 2012.12.33.1-3 1 2012.12.33.4-6 1 2012.12.33.7	3	ceramic (material) ceramic (material)	AAT AAT	whiteware whiteware	AAT AAT	sherd sherd							Pink glaze on both sides	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	8.1 0.4	grams grams	weight weight					Excavation Unit	2 L	evel 2	10	15 centimete 15 centimete	ers datum ers datum	Wayne and Susan Gartland Wayne and Susan Gartland Wayne and Susan Gartland	nd 21-CH-129
1 2012.12.33.8		eggshell (animal materi	ial) AAT	fragment		liner (container							Milk glass jar lid liner fragment (ca.	Non-diagnostic	Post-Contact Period	08/03/2011	0.0	grams	weight	-				Excavation Unit	2 L	evel 2	10	15 centimete	ers datum	Wayne and Susan Gartland	
1 2012.12.33.9 1 2012.12.33.10	1	glass (material)	AAT	sherd	AAT	component)	AAT sherd					 	1869-1950) Amber (ca. 1860-present)	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011	0.6	grams	weight weight					Excavation Unit	2 L	ovel 2	10	15 centimete	ers datum	Wayne and Susan Gartland Wayne and Susan Gartland	
1 2012.12.33.10 1 2012.12.33.11- 1 2012.12.33.14- 1 2012.12.33.18- 1 2012.12.33.33.23	13 3 17 4	metal metal	AAT AAT	nail nail	[AAT	wire wire							Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	40.5 29.7	grams	weight weight	10.00	penny	length length		Excavation Unit Excavation Unit	2 L	.evel 2	10		ers datum	Wayne and Susan Garlland Wayne and Susan Garlland Wayne and Susan Garlland Wayne and Susan Garlland	nd 21-CH-129 nd 21-CH-129
		ceramic (material) glass (material)	AAT	nall clay pigeon sherd	AAT	fragment							Typically post-1890 Black Colorless	inou-quagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011 08/03/2011	1.3	grams	weight weight weight	8.00	penny	iengar		Excavation Unit Excavation Unit Excavation Unit	2 L	.evel 2 .evel 2 .evel 2	10		ers datum ers datum	Wayne and Susan Gartland Wayne and Susan Gartland	ind 21-CH-129 ind 21-CH-129
1 Discarded 1 Discarded 1 Discarded	3 12	glass (material) metal	Local AAT	flat glass nail	AAT AAT	sherd wire	AAT fragment						Colorless Typically post-1890	Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	1.0 37.5	grams grams	weight weight					Excavation Unit Excavation Unit Excavation Unit	2 L	evel 2 evel 2 evel 2	10 10	15 centimete 15 centimete 15 centimete	ins datum	Wayne and Susan Gartland Wayne and Susan Gartland Wayne and Susan Gartland	ind 21-CH-129
1 Discarded 1 Discarded 1 Discarded 1 Discarded 1 Discarded 1 Discarded 1 2012.12.34.1	3	metel coal cellophane	AAT	fragment fragment fragment									Indeterminate; flat	Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	4.4	grams	weight weight weight					Excavation Unit Excavation Unit	2 L	evel 2	10	 15 centimete 15 centimete 	ers datum ers datum	Wayne and Susan Gartland Wayne and Susan Gartland	ind 21-CH-129 ind 21-CH-129
1 Discarded 1 2012.12.34.1		cellophane foil (metal) long bone	AA1	fragment remains	ITIS	mammalia	AAT small	Local m	nedial fragment				Small/medium mammal	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	0.6		weight weight					Excavation Unit	2 L	evel 2	15	15 centimete 20 centimete	ers datum ers datum	Wayne and Susan Gartland Wayne and Susan Gartland	
1 2012.12.34.2 1 2012.12.34.3	1 1	glass (material) glass (material)	AAT AAT	sherd jar	AAT	rim sherd							Amber (ca. 1860-present) Colorless	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	3.1 2.5		weight weight					Excavation Unit Excavation Unit	2 L	evel 3	15 15	20 centimete 20 centimete	ers datum ers datum	Wayne and Susan Gartland Wayne and Susan Gartland	rd 21-CH-129 nd 21-CH-129
		gless (material)	AAT AAT	sherd	AAT	wire							Colorless; embossed with lines, possibly for measuring Typically post-1890	Non-diagnostic Diagnostic	Post-Contact Period	08/03/2011 08/03/2011	4.5	grams	weight weight	20.00	penny	length		Excavation Unit Excavation Unit	2 L	evel 3	15 15	20 centimete 20 centimete	rs datum	Wayne and Susan Garlland Wayne and Susan Gartland	nd 21-CH-129
1 2012.12.34.4 1 2012.12.34.5-6 1 2012.12.34.7-13 1 2012.12.34.14-1	3 7 17 4	metal metal	AAT AAT	nall nail	AAT AAT	wire wire							Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	48.7 19.1	grams grams	weight weight	9.00	penny penny	length length		Excavation Unit	2 L	.evel 3	15 15	20 centimete 20 centimete	ers datum ers datum	Wayne and Susan Gartland Wayne and Susan Gartland Wayne and Susan Gartland Wayne and Susan Gartland Wayne and Susan Gartland	nd 21-CH-129
1 2012.12.34.18 1 2012.12.34.19-2 1 2012.12.34.22-2	21 3 23 2	metal metal metal	AAT	nail nail		wire wire wire							Typically post-1890 Typically post-1890 Typically post-1890	Diagnostic Diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011 08/03/2011	9.2 1.9	grams	weight weight weight	6.00 3.00	penny penny penny	length length		Excavation Unit Excavation Unit Excavation Unit	2 L	.evel 3 .evel 3	15 15	20 centimete	ers datum ers datum	Wayne and Susan Gartland Wayne and Susan Gartland	ind 21-CH-129 ind 21-CH-129
1 2012.12.34.24 1 2012.12.34.25	1 1	metal metal	AAT	staple hinge (hardware)									Fence staple	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	4.9 72.8	grams grams	weight weight					Excayation Unit Excayation Unit Excayation Unit	2 L	.evel 3 .evel 3	15 15	20 centimete 20 centimete	ers datum ers datum	Wayne and Susan Gartland Wayne and Susan Gartland Wayne and Susan Gartland	nd 21-CH-129
1 Discarded 1 Discarded 1 Discarded	4	glass (material) metal metal	AAT	sherd nail wire		wire fragment		+					Typically post-1890	Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	3.9 25.9	grams	weight weight weight					Excavation Unit	2 L	evel 3	15 15	20 centimete 20 centimete	ers datum ers datum	Wayne and Susan Gartland Wayne and Susan Gartland	ind 21-CH-129 ind 21-CH-129
1 Discarded 1 Discarded 1 Discarded		metal linoleum	AAT	fragment fragment									Indeterminate; flat 1860-present	Non-diagnostic Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	2.9 0.0	grams	weight weight					Excavation Unit	2 L	evel 3	15 15	20 centimete 20 centimete	rs datum	Wayne and Susen Gartland Wayne and Susen Gartland	ind 21-CH-129 ind 21-CH-129
1 Discarded 1 Discarded	11	plastic (organic material foil (metal)	AAT	fragment fragment									Yellow	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	0.0	grams grams	weight weight					Excavation Unit	2 L	evel 3	15 15	20 centimete	ers datum	Wayne and Susan Garlland Wayne and Susan Garlland	nd 21-CH-129
1 Discarded 1 2012.12.35.1-2 1 2012.12.35.3 1 2012.12.35.4	2	rib metal	AAT	fragment remains	ITIS	memmalia	ITIS cow	Local m	nedlal fragment Loc	al saw m	narks		Fragments refit; both ends sawn Fence staple	Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011 08/03/2011	2.9	grams grams	weight weight					Excavation Unit Excavation Unit Excavation Unit	2 L	.evel 3 .evel 4 .evel 4	20 20	20 centimete 25 centimete 25 centimete	ers datum ers datum ers datum	Wayne and Susan Gartland Wayne and Susan Gartland Wayne and Susan Gartland	nd 21-CH-129
1 2012.12.35.4	1	metal	AAT	object	AAT	fragment							Metal plate	Non-diagnostic	Post-Contact Period	08/03/2011	212.2		weight weight					Excavation Unit	2	evel 4	20	25 centimete 25 centimete	ers datum	Wayne and Susan Garlland Wayne and Susan Garlland	id 21-CH-129
1 2012.12.35.5-6 1 Discarded	2	ceramic (material) glass (material)	AAT AAT	stoneware sherd	AAT	crock	AAT base sherd	1-1-					Fragments refit; dark brown salt glaze on interior, buff salt glaze on exterior Colorless	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	562.4 0.2	grams grams	weight weight					Excavation Unit Excavation Unit	2 L	evel 4	20 20	25 centimete 25 centimete	ers datum	Wayne and Susan Gartland Wayne and Susan Gartland	nd 21-CH-129
1 Discarded 1 Discarded	1	metal metal	AAT AAT	nail wire	AAT AAT	wire fragment	AAT fragment						Typically post-1890	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	2.5	grams grams	weight weight					Excavation Unit Excavation Unit Excavation Unit	2 L	evel 4 evel 4	20	25 centimete 25 centimete	ers datum ers datum	Wayne and Susan Gartland Wayne and Susan Gartland Wayne and Susan Gartland	ind 21-CH-129 ind 21-CH-129
1 Discarded 1 Discarded 1 Discarded		metal foil (metal) cellophane	AAT AAT	fragment fragment fragment	 			$\pm \pm$					Indeterminate; flat	Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011 08/03/2011	11.0	grams	weight weight weight					Excavation Unit	2 L	evel 4	120	25 centimete 25 centimete 25 centimete 30 centimete	ers Idatum	Wayne and Susan Gartland Wayne and Susan Gartland	ind 21-CH-129 ind 21-CH-129
1 2012.12.36.1 1 2012.12.36.2 1 2012.12.36.3-4	1 1	metal metal	IAAT	nell neil can (container)		wire wire							Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011	4.9 3.0	grams grams	weight weight	9.00 5.00	penny penny	length length		Excavation Unit Excavation Unit Excavation Unit	2 L	evel 5 .evel 5 .evel 5	25		ers datum	Wayne and Susan Gertland Wayne and Susan Gertland Wayne and Susan Gertland	nd 21-CH-129
1 2012.12.36.3-4 1 2012.12.36.5 1 Discarded	1	metal barbed wire foil (metal)	AAT	can (container) fragment fragment	I'm	fragment		+						Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	08/03/2011 08/03/2011 08/03/2011	23.9	grams	weight weight weight					Excavation Unit Excavation Unit	2 L	evel 5	25 25	30 centimete 30 centimete	ers datum ers datum	Wayne and Susan Gartland Wayne and Susan Gartland	nd 21-CH-129 ind 21-CH-129
1 Discarded 1 2012.12.37.1	1	cellophane coracold	AAT AAT	fragment remains	ITIS	aves	AAT small	AAT let	oft					Non-diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	08/03/2011 08/04/2011	0.0	grams grams	weight weight					Excavation Unit	2 L	evel 5 evel 1 evel 1		30 centimete 10 centimete	ers datum ers datum	Wayne and Susan Gartland Wayne and Susan Gartland Wayne and Susan Gartland	nd 21-CH-129 nd 21-CH-129
1 2012.12.37.2 1 2012.12.37.3	1	glass (meterial) metel	AAT AAT	sherd nail	AAT	wire						<u> </u>	Aqua (ca. 1860-1937) Typically post-1890	Diagnostic	Post-Contact Period Post-Contact Period	08/04/2011 08/04/2011	1.1		weight weight	10,00	реппу	length		Excavation Unit		evel 1	lő	10 centimete 10 centimete	ers datum	Wayne and Susan Gartland	nd 21-CH-129

Box# Catalog#	Oty. Materials 1	Descriptor Type 1 Object Name	Descripto	Descriptor 2	Descriptor Type 3 Descriptor 3	Descriptor	Descriptor 4	Descriptor Type 5	Descriptor Descriptor	Descriptor 6	Description	Diagnostic/Non- diagnostic	Historical Context	Recovery Date	Measurement 1	Measurement Unit 1	Dimension 1	Measurement 2	Measurement Unit 2	Dimension 2	Measurement 3 Unit 3	Dimension 3 Coll. Metho	Horizor	ntal/ Vertical Method	Vertical #	VPU VPU Start End Depth Depth	Vert. Meas. Unit	Vert. Ref. Pt.	Landowner Site#
1 2012.12.37.4-9	6 metal	AAT nail	AAT	wire		1112		T	146.5		Typically post-1890	Diagnostic	Post-Contact Period	08/04/2011	30.6	grams	weight	8.00	penny	length	Olik S	Excavation (Level	1	0 10	centimeters	datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.37.10-12	3 metal	AAT neil	AAT	wire							Typically post-1890	Diagnostic	Post-Contact Period	08/04/2011	9.2	grams	weight	6.00	penny	length		Excavation	Init 3	Level	- 1	0 10	centimeters	datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.37.13-15	3 metal	AAT nall	AAT	wire							Typically post-1890	Diagnostic	Post-Contact Period	08/04/2011	6.7	grams	weight	5.00	penny	length		Excavation t		Level	1	0 10	centimeters	datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.37.16	1 motal	AAT nail	AAT	wire							Typically post-1890	Diagnostic	Post-Contact Period	08/04/2011	2.8	grams	weight	4.00	penny	length		Excavation (Level	1	0 10	centimeters	datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.37.17	1 metal	AAT nail	AAT	wire							Typically post-1890	Diagnostic	Post-Contact Period	08/04/2011	0.7	grams	weight	3.00	реппу	length		Excavation (Level	1	0 10	centimeters	s datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.37.18-20	3 metal	AAT steple									staples	Non-diagnostic	Post-Contact Period	08/04/2011	8.3	grams	weight					Excavation (Level	1	0 10	centimeters	datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.37.21	1 barbed wire	AAT fragment										Non-diagnostic	Post-Contact Period	08/04/2011	3.2	grems	weight					Excavation	July 3	Lavel	1	0 10	centimeters	datum	Wayne and Susan Gartland 21-CH-129
1 Discarded	7 glass (material)	Local flat glass	AAT	sherd						1	melted	Non-diagnostic	Post-Contact Period	08/04/2011	16.2	grams	weight					Excavation		Level	1	0 10	centimeters	s datum	Wayne and Susan Gartland 21-CH-129
1 Discarded	2 metal	AAT neil	AAT	wire	AAT fragment						Typically post-1890	Diagnostic	Post-Contact Period	08/04/2011	3.1	grams	weight					Excavation	Jnit 3	Level	1	0 10	centimeters	s datum	Wayne and Susan Gartland 21-CH-129
1 Discarded	1 metal	AAT wire	AAT	fragment								Non-diagnostic	Post-Contact Period	08/04/2011	4.5	grams	weight					Excavation I		Level	1	0 10	centimeters	s datum	Wayne and Susan Gartland 21-CH-129
1 Discarded	19 metal	AAT fragment									Indeterminate; flat	Non-diagnostic	Post-Contact Period	08/04/2011	33.5	grams	weight					Excavation	Jnit 3	Level	1		centimeters		Wayne and Susan Gartland 21-CH-129
1 Discarded	13 asphalt	AAT shingle	AAT	fragment								Non-diagnostic	Post-Contact Period	08/04/2011	11.8	grams	weight					Excavation	Jnit 3	Level	1	0 10	centimeters	s datum	Wayne and Susan Gartland 21-CH-129
1 Discarded	foil (metal)	AAT fragment					1					Non-diagnostic	Post-Contact Period	08/04/2011		grams	weight					Excavation	Jult 13	Level	1	0 10	centimeters	s datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.38.1	1 glass (material)	AAT sherd					L				Aqua; embossed (ca. 1860-1937)	Diagnostic	Post-Contact Period	08/04/2011	2.1	grams	weight					Excavation I	Jnit 3	Level	2	10 15	centimeters	s datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.38.2	1 glass (material)	AAT sherd									Colorless	Non-diagnostic	Post-Contact Period	08/04/2011	22.2	grams	weight					Excavation	Jnit 3	Level	2	10 15	centimeters	s detum	Wayne and Susan Gartland 21-CH-129
1 2012.12.38.3	1 metal	AAT nail	AAT	vrire							Typically post-1890	Diagnostic	Post-Contact Period	08/04/2011	2.5	grams	weight	7.00	penny	length		Excavation		Level	2		centimeters		Wayne and Susan Gertland 21-CH-129
1 2012.12.38.4-7	4 metal	AAT nail	AAT	wire							Typically post-1890	Diagnostic	Post-Contact Period	08/04/2011	13.5	grams	weight	6.00	penny	length		Excavation	Jnit 3	Level	2		centimeters		Wayne and Susan Gartland 21-CH-129
1 2012.12.38.8	1 barbed wire	AAT fragment										Non-diagnostic	Post-Contact Period	08/04/2011	9.1	grams	weight					Excavation	Jnit 3	Level	2	10 15	centimeters	s datum	Wayne and Susan Gartland 21-CH-129
1 Discarded	2 glass (material)	AAT sherd									Colorless; one is melted	Non-diagnostic	Post-Contact Period	08/04/2011	5.3	grams	weight					Excavation	Jnit 3	Level	2	10 15			Wayne and Susan Gartland 21-CH-129
1 Discarded	4 glass (meterial)	Local flat glass	AAT	sherd							Pale green to colorless	Non-diagnostic	Post-Contact Period	08/04/2011	7.3	grams	vzeight					Excavation		Level	2		centimeters		Wayne and Susan Gartland 21-CH-129
1 Discarded	2 metal	AAT nail	AAT	wire	AAT fragment						Typically post-1890	Diagnostic	Post-Contact Period	08/04/2011	5.5		veight					Excavation		Level	2		centimeters		Wayne and Susan Gartland 21-CH-129
1 Discarded	8 metal	AAT fragment		_				-			Indeterminate; flat	Non-diagnostic	Post-Contact Period	08/04/2011	127.6	grams	weight					Excavation		Level	2		centimeters		Wayne and Susan Gartland 21-CH-129
1 Discarded	4 asphalt	AAT shingle	AAT	fragment								Non-diagnostic	Post-Contact Period	08/04/2011	8.1	grams	veight					Excavation		Level	2		centimeters		Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 Discarded	foil (metal)	AAT fragment										Non-diagnostic	Post-Contact Period	08/04/2011		grams	vveight					Excavation		Level	2		centimeters		Wayne and Susan Gartland 21-CH-129
1 2012.12.39.1 1 2012.12.39.2-3	1 metal 2 metal	AAT nail	JAA I	wire							Typically post-1890	Diagnostic	Post-Contact Period Post-Contact Period	08/04/2011	2.0	grams	veight	5.00	penny	length		Excavation		Level	3		centimeters		Wayne and Susan Gartland 21-CH-129
1 2012.12.39.4-5	2 metal		IAAT	wire		-					Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period	08/04/2011	2.0	grams	weight	4.00	penny	length length		Excavation Excavation		Level	13		centimeters		Wayne and Susan Gartland 21-CH-129
1 2012.12.39.6-7	2 metal	AAT nail	AAT	wire				+			Typically post-1890	Diagnostic	Post-Contact Period	08/04/2011	1.8	grams	weight	3.00	penny	length		Excavation		Level	3		centimeters		Wayne and Susan Gartland 21-CH-129
1 2012.12.39.8	1 metal	AAT staple	1.511	100				1			Typically poor 1999	Non-diagnostic	Post-Contact Period	08/04/2011	1.1		weight		pomi	- Indiana		Excavation		Level	3		centimeters		Wayne and Susan Gartland 21-CH-129
1 Discarded	1 glass (material)	AAT sherd									Colorless	Non-diagnostic	Post-Contact Period	08/04/2011	1.1	grams	weight					Excavation		Level	3		centimeters		Wayne and Susan Gartland 21-CH-129
1 Discarded	2 metal	AAT nail	AAT	wire	AAT fragment						Typically post-1890	Diagnostic	Post-Contact Period	08/04/2011	3.3	grams	weight					Excavation		Level	3	15 20	centimeters	s datum	Wayne and Susan Gartland 21-CH-129
1 Discarded	1 metal	AAT wire	AAT	fragment								Non-diagnostic	Post-Contact Period	08/04/2011	1.2	grams	weight					Excavation		Level	3	15 20	centimeters	s datum	Wayne and Susan Gartland 21-CH-129
i i	2 plastic (organic material)	AAT fragment									White	Non-diagnostic	Post-Contact Period	08/04/2011	0.3	grams	weight					Excavation		Lovel	3	15 20	centimeters	s datum	Wayne and Susan Gertland 21-CH-129
1 Discarded 1 Discarded	1 asphalt	AAT shingle	AAT	fragment							- William	Non-diagnostic	Post-Contact Period	08/04/2011	1.0	grams	weight		+			Excavation		Level	3	15 20	centimeters		Wayne and Susan Gartland 21-CH-129
1 Discarded	foll (metal)	AAT fragment		, programment				-				Non-diagnostic	Post-Contact Period	08/04/2011		grams	weight		 			Excavation		Level	3		centimeters		Wayne and Susan Gartland 21-CH-129
1 2012.12.40.1	1 glass (material)	AAT sherd									Aqua (ca. 1860-1937)	Diagnostic	Post-Contact Period	08/04/2011	2.7		weight		1			Excavation		Level	4		centimeters		Wayne and Susan Gartland 21-CH-129
1 2012.12.40.2	1 glass (material)	AAT sherd									Colorless with mold seam	Non-diagnostic	Post-Contact Period	08/04/2011	11.1		weight					Excavation		Level	4	20 25	centimeters	s datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.40.3	1 metal	AAT nail	AAT	wire		1					Typically post-1890	Diagnostic	Post-Contact Period	08/04/2011	0.3	grams	weight	0.60	inches	length		Excavation		Level	4	20 25	centimeters	s datum	Wayne and Susan Gartland 21-CH-129
1 Discarded	3 glass (material)	Local flat glass	AAT	sherd							Pale green to colorless	Non-diagnostic	Post-Contact Period	08/04/2011	5.5	grams	weight					Excavation	Unit 3	Level	4		centimeters		Wayne and Susan Gartland 21-CH-129
1 2012.12.41.1-2	2 bone	AAT remains	ITIS	memmalia							Indeterminate taxa/element	Non-diagnostic	Post-Contact Period	08/04/2011	0.4	grams	welght					Excavation	Unit 3	Level	5	25 30	centimeters	s datum	Wayne and Susan Gartland 21-CH-129
											Aqua; embossed with "[PER]FE[CT]																1 .	1.	
1 2012.12.41.3	1 glass (material)	AAT jar	AAT	sherd							MASON" (1913-1937)	Diagnostic	Post-Contact Period	08/04/2011	3.0	grams	weight					Excavation		Level	5	25 30	centimeters		Wayne and Susen Gartland 21-CH-129
1 2012.12.41.4	1 metal	AAT nail	AAT	wire							Typically post-1890	Diagnostic	Post-Contact Period	08/04/2011	4.5	grams	weight	8.00	penny	length		Excavation		Level	5	25 30	centimeters		Wayne and Susan Gartland 21-CH-129
1 2012.12.41.5	1 metal	AAT nail	AAT	wire							Typically post-1890	Diagnostic	Post-Contact Period	08/04/2011	6.8		weight	7.00	penny	length		Excavation		Level	5	25 30	centimeters		Wayne and Susan Gartland 21-CH-129
1 2012.12.41.6	1 metal	AAT nail	JAAT	wire							Typically post-1890	Diagnostic	Post-Contact Period	08/04/2011	2.9	grams	weight	6.00	penny	length		Excavation		Level	5	25 30	centimeters		Wayne and Susan Gartland 21-CH-129
1 2012.12.41.7	1 metal	AAT staple										Non-diagnostic	Post-Contact Period	08/04/2011	1.2		weight					Excayation		Level	5	25 30	centimeters		Wayne and Susan Gartland 21-CH-129
1 Discarded	2 glass (material)	AAT sherd									Pale green to colorless	Non-diagnostic	Post-Contact Period	08/04/2011	12.4		weight					Excavation		Level	- 5	25 30	centimeters		Wayne and Susan Gartland 21-CH-129 Wayne and Susan Gartland 21-CH-129
1 Discarded	2 asphalt	AAT shingle	AAT	fragment							1	Non-diagnostic	Post-Contact Period	108/04/2011	[2,1	grams	weight		+			Excavation		Level	- lb	20 30	centimeters		Wayne and Susan Gartland 21-CH-129
1 2012.12.42.1-2	2 glass (material)	AAT sherd		 			ļ	-		+	Aqua (ca. 1860-1937)	Diagnostic	Post-Contact Period	08/04/2011	2.1		weight					Excavation		Level	10	130 35	centimeters		Wayne and Susan Gartland 21-CH-129
1 2012.12.42.3	1 metal	MAI INSI	IAAT	wire			 	-			Typically post-1890	Diegnostic	Post-Contact Period	08/04/2011	1.3	grams	weight	10.00	penny	length		Excavation	ont 3	Level		30 35	Continuers	a juniurii	rvayrio anu Susan Gartland 21-OF-129
1 2012 12 42 1	dans (material)	اممح المسا		1	1 1				ı	1	Caladasa with mald accus	Non-diamentia	Deet Contest Boried	00/04/2011	60			1	1		1	Evenuation	11-2 -	li annat	l-,	25 40	continuetor	e datum	Wayne and Susan Gartland 21-CH-129
1 2012.12.43.1 1 Discarded	1 glass (material) 1 glass (material)	Local flat glass	LAST	sherd		+	 	+			Colorless with mold seam		Post-Contact Period Post-Contact Period	08/04/2011	22.7		weight		 			Excavation		Level		25 40	centimeters	s datum	Wayne and Susan Gartland 21-CH-129
1 Discarded			1001	Pilain			 	+			Pale green		Post-Contact Period	08/04/2011	43.1	grams	weight		+			Excavation Excavation	Unit 3	Level	- 1/7		centimeters		Wayne and Susan Gartland 21-CH-129
Unscellued	celfophane	AAT fragment		1				_		_		Non-diagnostic	POSP-CORRECT PERIOD	UD/U4/2011	_	Aisus	weignt				1	Excavation	OIII 13	Level		100	- Perminoters	V VOICE!	- I - I - I - I - I - I - I - I - I - I

		Descriptor		Descriptor		Descriptor		Descriptor		Descriptor		escriptor			Diagnostic/Non-	Ī			Measurement			Measurement			Horizontal/		VPL	J Start VPU I	End Vert. Meas.	Vert. Ref. Pt.	Landowner	Site #
Box # Catalog # G	y. Materials 1	Type 1	Object Name	Type 2	Descriptor 2	Type 3	Descriptor 3	Type 4	Descriptor 4	Type 5	Descriptor 5 Ty	pe 6	Descriptor 6	Description	diagnostic	Post-Contact Period.	Recovery Date	Measurement 1	Unit 1	Dimension 1	Measurement 2	Unit 2	Dimension 2	oll. Method	Unit#	Vertical Method	Vertical # Dep	oth Depti	June	Ven. nen r u	Lundowner	J
2 2012,13.1.1 1	motol	AAT	out pail	AAT	machine-made	AAT	fragment			1				Typically pre-1890	Diagnostic	Railroads and Agricultural Development	05/06/2011	83	grams	weight				housel Test		None	0	30	centimeters	ground surface	Carl A. Lindberg Trust	21-CH-130
2 2012.13.2.1 1	metal metal	AAT	nall	AAT	wire	7411	Hagmen							Typically post-1890 Post-1920	Diagnostic	Post-Contact Period	05/06/2011	4.1	grams	weight	8.00	penny	length	shovel Test	8	None	0	35	centimeters	ground surface	Carl A. Lindberg Trust	21-CH-130
2 2012.13.2.1 1 2 2012.13.2.1 1 2 2012.13.2.2 1	metal	AAT	bobby pin											Post-1920	Diagnostic	Post-Contact Period	05/06/2011	0.4	grams	weight			8	hovel Test		None	0	35	centimeters	ground surface	Carl A. Lindberg Trust	21-CH-13U
2 2012.13.2.3 1	plastic (organic material)	AAT	fenoment								1	i	1	Orange-red	Non-diagnostic	Post-Contact Period	05/06/2011	0.0	grame	weight	ł			shovel Test		Mana		35	centimeters	ground surface	Carl A, Lindberg Trust	21-CH-130
2 Discarded 2	metal	AAT	fragment wire	AAT	fragment			+		+				Orange-red	Non-diagnostic	Post-Contact Period	05/06/2011	5.3	grams	weight		 	 	hovel Test	B	None	l o	35	antimeters	ground surface	Carl A Lindherg Trust	121-CH-130
2 2012.13.3.1 1	ceramic (material	AAT	Ironstone (pottery)	AAT	plate (dish)	AAT	sherd								Diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period	05/06/2011	5,0	grams	weight				shovel Test		None	0	20	centimeters	ground surface	Carl A. Lindberg Trust	21-CH-130
2 2012.13.4.1-3 3 2 2012.13.4.4-9 6	ceramic (material	AAT	porcelain	AAT	sherd	- I and	medium	IAAT I	fragment	Local	humand				Diagnostic	Post-Contact Period	05/06/2011 05/06/2011	3.9	grams grams	weight weight				Shovel Test Shovel Test Shovel Test Shovel Test	10	None	0	35	centimeters	ground surface	Carl A. Lindberg Trust Carl A. Lindberg Trust Carl A. Lindberg Trust	21-CH-130
2 2012.13.4.4-9 6	eggshell (animal	- AAI	remains	1110	mammalia	Local	medium	1001	fragment	Local	burned				Non-diagnostic		CONTROL		Name of the second	TWO SALE		+			10	None	 					
2 2012.13.4.10 1	material)	AAT	fragment												Non-diagnostic	Post-Contact Period	05/06/2011	0.0	grams	weight				Shovel Test	10	None	0	35	centimeters	ground surface	Carl A. Lindberg Trust Carl A. Lindberg Trust	21-CH-130
2 2012.13.4.11-16 6	metal	AAT	nali	AAT	wire									Typically post-1890 Typically post-1890	Diagnostic	Post-Contact Period Post-Contact Period	05/06/2011	31.2	grams	weight	8.00	penny	length	Shovel Test Shovel Test Shovel Test Shovel Test Shovel Test		None	10	35	centimeters	iground surface	Carl A. Lindberg Trust	1 21-CH-13U
2 2012.13.4.17 1 2 2012.13.4.18-20 3	metal	AAT	nali nali	AAT	wire wire			+		+				Typically post-1890 Typically post-1890	Diagnostic Diagnostic	Post-Contact Period	05/06/2011	7.6	grams	weight weight	6.00	penny	length	Shavel Test		None None	l ő	35				
2 2012.13.4.21 1 2 2012.13.4.22 1	metal metal	AAT	nail	AAT	wire									Typically post-1890 Typically post-1890	Diagnostic	Post-Contact Period	05/06/2011	2.2	grams	weight	4.00	penny	length sength	Shovel Test	10	None	0	35	centimeters	ground surface	Can A. Lindberg Trust	[Z I-CH-130
2 2012.13.4.22 1	metal	AAT	nail	AAT	wire									Typically post-1890	Diagnostic	Post-Contact Period	05/06/2011	1.0	grams	weight	3.00	penny			10	None	0	35		1	Carl A. Lindberg Trust	
2 2012,13,4.23 1	metal	AAT	naii	TAAT	wire			1			- 1		1	Typically post-1890; large head or possbily in a washer	Diagnostic	Post-Contact Period	05/06/2011	2.9	grams	weight	2.00	nenny	length !	Shovel Test	10	None	0	35	centimeters	ground surface	Carl A. Lindberg Trust Carl A. Lindberg Trust	21-CH-130
2 10040 40 404 14	metal	AAT	bolt											Nut attached	Non-diagnostic	Post-Contact Period Post-Contact Period	05/06/2011	18.6	grams	weight		penny	rengui	Shovel Test Shovel Test	10	None	0	35	centimeters	ground surface	Carl A. Lindberg Trust	21-CH-130
2 2012.13.4.25 1	metal	AAT	staple												Non-diagnostic	Post-Contact Period	05/06/2011	0.4	grams	weight				Shovel Test	10	None	ļlº-	35	centimeters	ground surrace	Carl A. Lindberg Trust	121-011-100
2 2012.13.4.26 1	metal	AAT	compact				1				1		1	Dorothy Gray; post-1916, likely mid twentieth century	Diagnostic	Post-Contact Period	05/06/2011	17.2	grams	weight		1		Shovel Test	10	None	1 0	35	centimeters	ground surface	Carl A. Lindberg Trust	t 21-CH-130
2 2012,13.4.27 1	metal	AAT	button (fastener)											Shank obscured by rust	Diagnostic	Post-Contact Period Post-Contact Period	05/06/2011	2.2	grams	weight	0.60	inches	diameter	Shovel Test		None	o o	35	centimeters	ground surface	Carl A. Lindberg Trust	t 21-CH-130
2 2012.13.4.28 1	metal	AAT	snap	AAT	fragment									One-half of snap (circa-1885-present)	Diagnostic	Post-Contact Period	05/06/2011 05/06/2011	0.2	grams	weight	0.30	inches	diameter	Shovel Test Shovel Test	10	None	1 0	35	centimeters	ground surface	Carl A. Lindberg Trust Carl A. Lindberg Trust	21-CH-130
2 2012.13.4.29 1	metal	JAAT	(00)	AAI	handle		+	+		+					Non-diagnostic	Post-Contact Period		20.4	grams	weight	 	 	maximum		TIV .	NONE	1 I	- 1				1
2 2012.13.4.30 1	metal	AAT	object											Oblong disk with rust accretions	Non-diagnostic	Post-Contact Period	05/06/2011	2.9	grams	weight	0.85	Inches	diameter	Shovel Test	10	None	0	35	centimeters	ground surface	Carl A. Lindberg Trust	121-CH-130
	T	1	-114											Small, diamond-shaped; formerly attached to		Post-Contact Period	05/06/2011	0.0	arama	undaht				Shovel Test	100	None		35	centimeters	ground surface	Carl A. Lindberg Trust	21-CH-130
2 2012.13.4.31 1	metal plastic (organic	MAT	object	+	+	+		+		+				something; pendant?	Non-diagnostic		T	0.5	grams	weight	 	+	 		10	ITOILE	1			1	1	1
2 2012.13,4.32 1	material)	AAT	button (fastener)											Colorless; faceted; two-hole, sunken face	Non-diagnostic	Post-Contact Period Post-Contact Period	05/06/2011	1.1	grame	weight				Shovel Test	10	None	0	35	centimeters	ground surface	Carl A. Lindberg Trust	21-CH-130
2 Discarded 3	glass (material)	Local	flat glass	AAT	sherd									Pale aqua to colorless and colorless	Non-diagnostic	Post-Contact Period	05/06/2011	0.6	grams	weight				Shovel Test Shovel Test		None	100	35	centimeters	ground surface	Carl A. Lindberg Trust Carl A. Lindberg Trust	21-CH-130
2 Discarded 7 2 Discarded 4	metal	AAT	fragment	AAI	wire	AAI	fragment	-						Typically post-1890 Indeterminate strips	Diagnostic Non-diagnostic	Post-Contact Period Post-Contact Period	05/06/2011	4.3	grams grams	weight weight				shovel Test		None	0	35				
2 Discarded 2	coal	AAT	fragment		+									macter minute ecrops	Non-diagnostic	Post-Contact Period Post-Contact Period Post-Contact Period Post-Contact Period	05/06/2011	4.8	grams	weight					10	None	0	35	centimeters	ground surface	Carl A. Lindberg Trust Carl A. Lindberg Trust Carl A. Lindberg Trust Carl A. Lindberg Trust Carl A. Lindberg Trust	21-CH-130
2 2012.13.5.1 1	ceramic (material) AAT	whiteware	AAT	sherd	AAT	decorated	AAT	decal	AAT	polychrome A/	AT 1	floral pattern		Diagnostic	Post-Contact Period	05/06/2011	1.8	grams	weight				Shovel Test Excavation Unit	12	None	1 5	10	centimeters	datum	Carl A. Lindberg Trus	1 21-CH-130
2 2012.13.6.1 1 2 2012.13.7.1 1	walnut (nut) vertebrae	AAT	fragment remains	ITIE	mammalia	ITIS	COM	AAT	fragment	Local	saw marks				Non-diagnostic Non-diagnostic	Post-Contact Period	08/05/2011	10.6	grams grams	weight weight		-		xcavation Unit	1	Level	2 10	15	centimeters	datum	Carl A. Lindberg Trust	R [21-0n-130
2 2012.13.7.2-4 3	cranium	AAT	remains	ITIS	mammalia	AAT	large	AAT	fragment	LOCE	San marks			Likely cow due to size	Non-diagnostic		08/05/2011	4.1	grams	weight				excavation Unit	i		10	15	centimeters		Carl A. Lindberg Trust	. 21-CH-130
2 2012.13.7.5 1	metal	AAT	buckle (strap accessory	0										Belt buckle	Non-diagnostic	Post-Contact Period Post-Contact Period	08/05/2011	3.2	grams	weight				excavation Unit		Level	2 10	15	centimeters		Carl A. Lindberg Trust Carl A. Lindberg Trust	t 21-CH-130
2 2012.13.7.6 1 2 2012.13.8.1 1	metal ceramic (material	AAT	object porcelain	AAT	sherd			+						T-shaped; threaded	Non-diagnostic Diagnostic	Post-Contact Period	08/05/2011	2.4	grams grams	weight weight		+		Excavation Unit Excavation Unit	1	Level	3 15	20	centimeters		Carl A. Lindberg Trust	t 21-CH-130
2 2012.13.8.2-3 2 2 2012.13.8.4 1	ceramic (material) AAT	earthenware	AAT	rim sherd									Buff-colored; molded design at rim exterior	Diagnostic	Post-Contact Period Post-Contact Period	08/05/2011	18.9	grams	weight				Excavation Unit	1	Level	3 15	20	centimeters	datum	Carl A. Lindberg Trust	
2 2012.13.8.4 1	cranium	AAT	remains	ITIS	mammalia	AAT	large	AAT	fragment					Likely cow due to size	Non-diagnostic	Post-Contact Period.	08/05/2011	1.2	grams	weight	ļ			Excavation Unit	1	Level	3 15	20	centimeters	datum	Carl A. Lindberg Trust	12170117130
																Railroads and Agricultural											1 1					
2 2012.13.8.5 1	metal	AAT	cut nail	AAT	machine-made	AAT .	fragment	1						Typically pre-1890	Diagnostic	Development	08/05/2011	24.6	grams	weight	3.60	Inches	length	Excavation Unit	1	Level	3 15	20	centimeters	datum	Carl A. Lindberg Trust Carl A. Lindberg Trust	21-CH-130
2 2012.13.9.1 1	ceramic (material) AAT	whiteware	AAT	sherd	AAT	decorated	-	Ironnfer print	AAT .	blue			Molded Border is consisent with blue willow pattern	Diagnostic	Post-Contact Period Post-Contact Period	08/05/2011	1.8	grams grams	weight				Excavation Unit Excavation Unit		Level	4 20	25	centimeters	datum	Carl A. Lindberg Trust	st 21-CH-130
2 2012.13.9.2 1 2 2012.13.9.3 1	ceramic (material ceramic (material) AAT	whiteware whiteware	AAT	rim sherd rim sherd	AAT	decorated	AAT	transfer-print flow blue	AAT	scalloped A	AT (gilded	border is consisent with blue willow patient	Diagnostic Diagnostic	Post-Contact Period	08/05/2011	1.5	grams	weight	 		 	Excavation Unit		Level	4 20	25	centimeters	datum	Carl A. Lindberg Trust	st 21-CH-130
	glass (material)	AAT	sherd											Colorless; one with mold seam; one melted	Non-diagnostic	Post-Contact Period	08/05/2011	3.4	grams	weight				Excavation Unit	1	Level	4 20	25	centimeters	datum	Carl A. Lindberg Trust Carl A. Lindberg Trust	21-CH-130
2 2012.13.10.1 1 2 2012.13.10.2 1	ceramic (material) AAT	whiteware	AAT	sherd bowl (vessel)	AAT	rim sherd	- AAT	decorated	AAT	anongod A	AT .	melded	Blue and red sponged Red Wing "cap" bowl	Diagnostic	Post-Contact Period Post-Contact Period	08/05/2011	2.3	grams	weight	 			Excavation Unit Excavation Unit	2	Level	1 4	10	centimeters	datum	Carl A. Lindberg Trust	1 21-CH-13
2 2012.13.10.2 1	ceramic (material	, AAI	stoneware (pottery)	- MAI	DOWI (Vessel)	- ^ -	THE STIECT	1001	decorated	100	sponged A	21	morded	Cow due to size; one rodent-gnawed fragment;	Diagnostic			01.1	grania	Weight		 			1	2010.					Ta	
2 2012.13.10.3-7 5	cranium	AAT	remains	ITIS	mammalia	AAT	large	AAT	fragment					fragments are weathered		Post-Contact Period Post-Contact Period.	08/05/2011	4.2	grams	weight	 		ļ	Excavation Unit	2	Level	1 4	10	centimeters	datum	Carl A. Lindberg Trust	. Z1-Cn-13
								1						Sun-colored amethyst (ca. 1880-1920);		Railroads and Agricultural										1		ı				
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2 2012.13.10.11 1	glass (material)	AAT	sherd	\pm	1									Colorless	Non-diagnostic	Post-Contact Period Post-Contact Period	08/05/2011	3.9	grams	weight				Excavation Unit	2	Level	1 4	10	centimeters	datum	Carl A. Lindberg Trust	121-CH-13
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GD-RWC-1417 419 Bush St

Hist Name: Medical Block Clinic

Built: NR Status: 1963 Eligible

The Medical Block Clinic, built in 1963, is located at the northeastern corner of Bush and Fifth streets in downtown Red Wing. The main facade faces west.

The Medical Block Clinic is a one-story, steel-framed building. Its footprint is about 135' \times 90'. Most of the building is faced with brown brick, but a portion of the facade to the left of the main (western) entrance is sided with wood.

The design is dominated by a multi-leveled copper-covered roof with vertical standing seams, the building's most prominent feature. The roof gives dramatic form to what is otherwise a low structure with horizontal emphasis. The roof steps up in sections in response to the height requirements of various interior spaces. Its configuration also allows for the introduction of clerestory windows that bring light to the interior.

There are main entrances on the western and eastern facades, as well as two single-leaf staff doors on the southern facade. Rectangular window openings are generally grouped in horizontal bands. Most sash appears original; some has been sensitively replaced.

Inside the main entrance is an open patient waiting area with a tall ceiling and clerestory windows that filled the area with natural light. A conference room now occupies most of this space. A small third-story room – a combined medical library and conference room – is tucked within the tallest roof form immediately south of the waiting area. The interior has some exposed brick walls. Most interior walls are faced with smooth plaster and sheetrock.

The perimeter of the first story is lined with about 15 small examination rooms, now offices. The rooms are lit by small high square windows, most arranged in horizontal bands. At the core of the building were an x-ray department, laboratory, treatment rooms, records storage, and the business office. Several partition walls have been removed, converting much of this space to open office areas.

There have been few substantive changes to the exterior. Some window sash and doors have been replaced. Interior spaces have been somewhat altered, but much of the original plan remains.

Historical Background

The Medical Block Clinic was constructed in 1963 and served as the clinic for a group medical practice for five years until 1968. The clinic was designed by noted Minneapolis architect James E. Stageberg. (Stageberg was a descendent of an early Red Wing family that included renowned politician Susie Stageberg, a connection that may have brought him the Red Wing commission.) Structural engineers were Myer and Borgman of Minneapolis. Mechanical and electrical engineer was Lewis D. Freeland of St. Louis Park. General contractor was Witcher Construction of Eden Prairie. Kask Electric of Red Wing did the electrical work and Red Wing Iron Works was mechanical contractor.

The practice known as the Medical Block Clinic was founded in 1902 by Drs. M. H. Cremer and L. E. Claydon, with A. E. Johnson joining the first year. The practice was located briefly in a

succession of three downtown commercial buildings before moving in 1912 into a new building on Main Street constructed for the doctors. (It is now part of the St. James Hotel Complex; see the Medical Block Clinic at 412 W. Main Street, GD-RWC-1428.) In 1963 the practice, then comprised of nine physicians, moved from the Main Street building into this new clinic at Bush and Fifth Streets. Claydon's Pharmacy, which had been located at the Main Street building, moved into the drugstore space in the new building (Angell 1977).

After the medical clinic closed in 1968, the building served as the corporate offices for the Red Wing Shoe Company from 1970-1988. It then housed the City of Red Wing's community development and planning office until about 2012.

Design and Construction. The Red Wing Daily Republican Eagle announced the construction of the Medical Block Clinic in an April 1963 front page article which noted:

Red Wing's increasing importance as a medical center will be further augmented by the construction of a handsome and distinctive \$250,000 clinic building this summer.

The new Medical Block Clinic will be a modern, fireproof building with several unique medical and architectural features. It will provide overall facilities for a minimum of eight doctors but will easily accommodate ten without crowding. . . .

The exterior of the building is distinguished by a long, low, canted roof covered with hand-split cedar shingles. [The roofing material was changed to copper before the plans were finalized.] A six-foot colonnade faces both east and west. All walls are brick or glass. The distinguished roof line is created by a raised ceiling over the waiting area and also by a partial second story which will be the doctor's library and employees' lounge.

The newest medical facilities will be provided with a large modern laboratory being located at the hub of the activity. Twenty-three examination or consultation rooms, a x-ray department, an eye, ear, nose, and throat laboratory, three treatment rooms, and a minor surgery room are included in the facilities.

The interior is marked by a high vaulted waiting room with skylights located over hanging planters. . . . Upon completion of the new building, Claydon's [Pharmacy] will move from their present location on Main Street into space immediately adjacent to the clinic space. A common vestibule will be used for entry to both the drugstore and clinic . . . (RW Daily Republican Eagle, April 13, 1963).

The article included perspective drawings of the exterior as well as the waiting room, which depicted the skylights and hanging planters.

A front page article dated February 7, 1964, described the completed building, noting:

Simplicity and cheerfulness keynote the architectural character of the new Medical Block Clinic and Claydon's Pharmacy situated at the corner of Fifth and Bush [streets]. . . . A spirit harmonious and reposeful, yet indicating a sense of purpose, was achieved in the structure with its handsome brown-brick exterior and overhanging copper roof. The typical 'clinical' character was expressly not desired by the architect or staff.

Built at a cost of some \$280,000, the new clinic features 13 examination rooms and 8 consultation rooms surrounding a central service area composed of business office, records section, laboratory, X-ray room, treatment rooms, and minor surgery room. .

The second story of the structure houses separate lounges for the doctors and other personnel. . . . The large waiting room of the clinic is an attractive combination of brown brick and white acoustic plaster walls with a red recessed carpet and blue furnishings. Upper walls are angled inward and feature a series of turret-like windows at the top which provide both sunlight and indirect lighting. Four large, white planters, in the shape of inverted pyramids, hang from the ceiling. They contain live green plants. . . . Also at the far end is a long counter which is equipped with children's furniture and will be used as a play table for youngsters. . . .

Floor framing in the building is of steel bar joists and slab on grade making interior walls non-load bearing for future flexibility (*RW Daily Republican Eagle*, Feb. 7, 1964).

The building received an Honorable Mention award from the Minnesota Society of Architects (AIA Minnesota) in 1964 and nationwide recognition in *Architectural Record* in August 1965 (*Northwest Architect,* Sept.-Oct. 1964; *Architectural Record* Aug. 1965).

The Architectural Record article, entitled "Small Buildings for Group Medical Practice," featured five clinics in the U.S., including the Medical Block Clinic in Red Wing, presenting text, plans, and photographs for each. The article's introduction described the growing demand for such buildings.

There is a growing need for facilities where paying patients can receive, from the physician of their choice, a diversity of services backed by the diagnostic and consultation aids associated with today's medical practice. This need is generating a kind of privately sponsored, self-financed group practice in which several doctors, usually with one hospital affiliation, join in a mutually supporting endeavor-which thrives best in a building designed for its own purposes.

Consultation and examining rooms are laid out in suites for individual doctors, sometimes varied according to specialty, and supported by common X-ray, laboratory and minor surgery spaces. . . . The tax advantages, the simplification of staffing and the ability to more firmly schedule doctors' free time contribute to activity in this rather special kind of small building, of which examples are shown on the following pages (*Architectural Record* Aug. 1965).

According to a recent source on Modern architecture in Minnesota, the use of Modern design for medical clinics in the state was spurred by the well-respected Mayo Clinic in Rochester which "enlisted the clean-lined appeal of Modernism for the design of its 20-story Diagnostic Building," designed by Ellerbe Associates and completed in 1955. "Other smaller private clinics around the state followed suit, engaging architects to create modern designs that suggested the medicine practiced inside was as progressive as the architecture outside" (*Minnesota Modern* 2011).

The Medical Block Clinic could be described as Expressionist in style. Noted architectural historian Carole Rifkind notes:

While abstraction reflected a search for the universal, rational, and ideal, modernism also wanted to express the unique, intuitive, and romantic. As different as they are from each other, the architects who worked in an expressionist mode shared a common interest in creating an emotional response: exaggerating light, space, and mass; enjoying the contrast of boldly articulated geometric forms; and exploiting the sensual quality of materials, especially those close to nature (Rifkind 1998: 29).

In the 1950s and 1960s, nationally known architects were utilizing metal cladding in their designs. Stageberg's stepped copper roof on the Medical Block Clinic appears to be associated with experiments by modernist architects with metal cladding used to achieve dramatic architectural imagery in the postwar period. Stageberg was likely aware of the Herman T. Fasbender Medical Clinic built in 1957 in Hastings, just 24 miles from Red Wing. Designed by Frank Lloyd Wright, the building features a dramatic terne (i.e., an alloy of lead and tin) metal roof installed in horizontal sections that drape over the side walls of the building. Wright also designed the Lindholm Service Station, built in Cloquet, Minnesota, in 1956, a building that features a terne metal roof in a diamond pattern. Also recently completed was Erich Mendelsohn's Mount Zion Temple, built in St. Paul in 1955, which features two dramatic copperclad volumes that house the sanctuary and a chapel. The Education Wing of Christ Church Lutheran, designed by Eero Saarinen and Glen Paulsen and built in Minneapolis in 1962, also features a modest copper canopy above a large window wall.

James E. Stageberg and His Work. James Stageberg was called one of the state's best architects, one of its most influential architects, and one of the most important architects in the postwar modern movement in Minnesota (Architecture Minnesota, Nov.-Dec. 1992; Architecture Minnesota, May-June 1996; Ebert, Alex, Minneapolis Star Tribune, July 10, 2010). The Medical Block Clinic represents an early commercial design by Stageberg built shortly after he opened his own firm.

Stageberg was born in Dawson, Minnesota. He received his bachelor's degree in architecture from the University of Minnesota in 1952 and his master's degree from Harvard University in 1954. In 1954 he began working for Magney, Tusler, Setter and Lindstrom in Minneapolis. He also worked for noted firms Thorshov and Cerny, Willard Thorsen, and Hammel, Green and Abrahamson.

Stageberg began his own practice in the early 1960s. In 1968 he formed a partnership with Thomas Hodne (The Hodne/Stageberg Partners) which lasted until 1982. His subsequent firm was known as The Stageberg Partners, and later as Stageberg, Beyer, Sachs. Stageberg retired in 2000 (Lathrop 2010: 199-200).

Stageberg was also an important educator. He began teaching at the University of Minnesota in 1954 when he was the first new hire by Ralph Rapson when Rapson became head of the School of Architecture. Longtime faculty members such as Stageberg, Rapson, and others helped bring the University's School of Architecture to national prominence in the next decades.

Stageberg designed a wide range of residential, commercial, and institutional buildings. Throughout his career, Stageberg's work received attention in both national and local architectural journals and he was the recipient of many design awards. In Minnesota he won more than 35 awards from the Minnesota chapter of the American Institute of Architects (now AIA Minnesota). (See the individual inventory form on the Medical Block Clinic for a list of awards.) Stageberg received two AIA Minnesota 25-Year Awards. In 1977 he was named a Fellow of the American Institute of Architects. He also received the highest honor from AIA

Minnesota, its Gold Medal, which recognizes an architect's significant contribution to design, professional service, and the community.

Recommendation

Founded in 1902, the Medical Block Clinic was one of Red Wing's earliest and most-long-lived medical practices. However, because the practice occupied the building at 419 Bush Street for only five years, 1963-1968, it is recommended the building is not significantly associated with the history of health and medicine in Red Wing (National Register Criteria A or B). Downtown locations such as the Medical Block Clinic at 412 Main Street (GD-RWC-1428) likely hold more significant associations with the early doctors and their practice.

Gemini recommends that the Medical Block Clinic is eligible for the National Register under Criterion C in the area of Architecture as a significant work by noted architect James E. Stageberg. Stageberg is considered among the most important architects in the postwar modern movement in Minnesota. The Medical Block Clinic represents an early commercial design and a dramatic Expressionist work that was acknowledged both by the Minnesota Society of Architects and by *Architectural Record*. Stageberg's stepped-copper roof enlivens the straightforward brick structure and transforms the building into a dynamic modernist design. The clinic building retains high integrity with few exterior changes. While some interior alterations were made when the building was converted to office space, the property's primary significance lies in the exterior design.

The recommended period of significance is 1963, the year the building was completed. The level of significance is Local. The recommended boundaries of the National Register-eligible property are shown on the sketch map.



Fig. 182. 419 Bush St. Medical Block Clinic, main (west) facade and northern end where drugstore was located (facing E)



Fig. 183. 419 Bush St. Medical Block Clinic, main and south facades (facing N)



Fig. 184. 419 Bush St. Medical Block Clinic, east facade (facing SW)



Fig. 185. 419 Bush St. Medical Block Clinic, columns supporting roof and exam room windows on east facade (facing NW)





Prep by Gemini Research 12-2013





GD-RWC-1422 521 Hill St Hist Name: Miller House

Built: 1953 NR Status: Eligible

The Miller House was designed by Twin Cities architect Carl O. Graffunder and built in 1953. It is located on a long, narrow lot on the northern edge of one of the bluffs that form Red Wing's College Hill. The house is perched on the edge of the bluff and has a spectacular, panoramic view of the Mississippi River valley. The house also seems to emerge right from the bluff – the eastern wall is built against a rock face held back with a limestone retaining wall. The top of the roof is accessible from the hillside to the east.

The Miller House is a modestly-sized, two-level building with an L-shaped, asymmetrical plan and overall dimensions of about $75' \times 50'$. It is sited at grade rather than built on a raised foundation. The garage is located at the eastern end of the main level, the master bedroom at the southwestern end, and the living and dining spaces and a brick fireplace in the middle.

The house has a shallow-pitched gabled roof (almost flat) with exposed purlins projecting across the southern facade. The southwestern part of the house is cantilevered over the basement level. Across the northern (river-facing) facade is a deep wooden deck.

The exterior is faced with vertical and horizontal wood siding of various widths. The basement level is painted white, the main level is deep orange, and the decks, simple window and door casings, and roof edge are blue, making the design lively and expressive.

The northern walls of the main living areas are built almost entirely of glass, providing stunning views from much of the interior. A ribbon of about ten rectangular south-facing clerestory windows brings more natural light into the main living area. Banks of rectangular windows on the southern and western walls light other rooms. Pergola-like sun screens extend over the western windows to filter the light.

The main entrance is offset to the west rather than being front and center as in traditional houses. The entrance is comprised of a single-leaf door and wide sidelights that allow southern light to enter.

In the interior, the living and dining areas flow together. The rooms' relatively modest size is mitigated by the large northern windows that reduce the distinction between inside and out, and by the large deck that expands the living space during mild weather. The central brick fireplace is exposed on three sides and accessible to both living and dining areas. Interior rooms can be separated, if need be, by accordion-like wooden door-screens that can be pushed out of sight. The dining area has a built-in buffet and a large pass-through window that connects this room with the kitchen and can be closed with a sliding door.

The interior walls are finished with lightly-stained wood paneling. Floors are covered with materials such as red ceramic tile, cork, and low-pile carpet. The kitchen features plywood cupbords and blue linoleum countertops.

Historical Background

The Miller House was built in 1953, eight years after the end of World War II. The original owners and long-time occupants were Winston and Mary Miller who married in 1939 and moved to Red Wing in 1948.

Postwar Residential Design. The Miller House's International style design is experimental and innovative. It is strikingly different than typical postwar housing of similar scale in Red Wing and elsewhere in Minnesota. The Miller House is also an excellent demonstration of the postwar concept that an architect-designed house of high artistic quality could be built within financial reach of a middle class family.

While most Americans purchasing a new home after the war chose housing created by developers who built a group of homes or an entire neighborhood, a few homeowners worked with formally-trained architects. According to architectural historian Carole Rifkind, this was possible in part because land and building costs were "relatively modest" for the first 10 to 15 years after the war. The situation gave architects "plenty of scope to experiment with 'starter' houses as small as 2,000 square feet or less." Eventually, Rifkind writes, "rising costs put the architect-designed house out of reach of all but the truly affluent" (Rifkind 1998: 3-4).

Rifkind quotes journalist and scholar Ester McCoy who wrote about the postwar period: "'There was something electric in the air, a particular sort of excitement that comes from the sound of hammers and saws after they have been silent too long.'" Rifkind continues: "Indeed, architecture did seem to be headed on a new course. The Depression and war years had accumulated an enormous pent-up need for housing. Exciting possibilities arose for applying wartime improvements in production methods, plastics, steel, resins, and processed wood products. Many [architects] were stirred by the Modernist visions of Bauhaus leaders who had settled in America at the beginning of the war. . . . Many viewed the private house as a laboratory for innovative design, expecting that solutions for the design problems of the individual house would have positive repercussions for the well-being of society at large" (Rifkind 1998: 3).

International style houses like the Miller House are relatively rare in Minnesota where the style was much more common for commercial, institutional, and other types of buildings. Characteristics of the style include simple massing, an asymmetrical plan, flat roof, lack of decorative detail, smooth planar surfaces and finishes, bands of window providing strong horizontal emphasis, and open floor plans. Architects often tested the possibilities of materials that were new, experimental, industrial, and/or low-maintenance such as plywood, cement asbestos board, linoleum, metal rods, lightweight concrete block, and precast concrete. Economy was achieved with modular units and stock sizes that reduced labor and waste. Houses of this style generally had strong interior shapes and finishes that made extra decoration and a lot of furniture superfluous and distracting.

Architect Carl O. Graffunder (1919-2013). Carl Graffunder had "nationally-recognized prowess as a modern residential architect" according to the Minnesota Chapter of the International Committee for the Documentation and Conservation of Buildings, Sites, and Neighborhoods of the Modern Movement in 2011 (Docomomo US MN) (Annual U.S. Tour Minnesota Chapter International Committee for the Documentation and Conservation of Buildings, Sites, and Neighborhoods of the Modern Movement (Docomomo US MN), Oct. 2011).

The Miller House was built when Graffunder was at the beginning of his 40-year career. The house was completed five years after Graffunder graduated from Harvard and joined the University of Minnesota faculty, and about four years after he established his own practice.

Carl Graffunder designed more than 100 homes, most built in the Twin Cities. According to an obituary, "A Graffunder house typically featured simple forms, open plans, lots of light, and natural materials. He made extensive use of glass and outdoor living spaces to bring the beauty of nature into the home, and knew how to achieve liveability and economy for the client" (*Minneapolis Star-Tribune* Sept. 8, 2013).

Influenced by the European Bauhaus movement and traditional Japanese construction, Graffunder often worked in an aesthetic sometimes dubbed the San Francisco Bay Tradition where careful siting, appropriately-scaled forms, open and light-filled rooms, abundant decks and terraces, and wood cladding and other natural materials helped homes integrate well with their environments and blurred the line between indoors and out.

Most Graffunder-designed houses are located in the Twin Cities area. Some are concentrated in the Prospect Park neighborhood, in University Grove near the University of Minnesota St. Paul campus), and in Minneapolis and western suburbs. Houses from Graffunder's early period include his own house in Golden Valley (1949), the Miller House in Red Wing (1953), the Stougaard House in Fairmont (early 1950s), the Wolf House in Golden Valley (ca. 1954-1955), the Jenson House in Stillwater (ca. 1954-1955), and the Leighton House in Minneapolis (1955), among others.

Graffunder used modest square footage, inexpensive and standard-sized materials, and a relatively simple design to help bring costs down. The Miller House was built only a few years after Graffunder built a cost-conscious for his own family (1949) in the Minneapolis suburb of Golden Valley. A 1955 review of Twin Cities architecture over several decades featured the house (McClure 1955). Another piece on the house, a 1952 Walker Art Center magazine, noted:

After experimenting with one-story plans, architect Carl Graffunder found that a two-story house cost less for the space required by his family of five. . . . A very small budget required a maximum use of space given by the cube-shaped plan and by such devices as the centrally located stairs and the bathroom under the fireplace. The architect cut costs further by careful detailing so that stock parts might be used, avoiding over-finishing, and by doing much of the work himself. The final product is a house of 1,328 usable square feet, built at a cost of 1,500 hours of work and a little less than \$7 per square foot (*Everyday Art Quarterly* [published by Walker Art Center, Minneapolis], Spring 1952).

Carl O. Graffunder was born in Rock Island, Illinois in 1919. He was raised in Hibbing and graduated from high school there in 1936. He received a bachelor's degree in architecture from the University of Minnesota in 1942. During World War II he served in the Navy from 1943-1946, studying at the U.S. Naval Academy in Annapolis where he received a Certificate of Naval Architecture in 1943. He also attended the Navy-affiliated New York Structural Institute (Webb Institute) in Glen Cove, New York, through 1946.

In the summer of 1940 Graffunder had worked as a draftsman for architect Antonin Raymond at Raymond's studio in New Hope, Pennsylvania. After the war Graffunder was Raymond's chief draftsman for nearly two years in 1946-1947. Raymond (1888-1976) was an accomplished Czech-born Modernist who spent most of his career working in the U.S. and in Japan. He was

an important figure in the Japanese postwar reconstruction and is regarded as the father of modern architecture in Japan.

Graffunder attended graduate school at Harvard, receiving a master's degree in 1948. In the fall of 1948, he joined the faculty of the University of Minnesota School of Architecture.

In 1949 Graffunder established Carl Graffunder and Associates in Minneapolis, launching a decades-long practice. Graffunder also worked with Norman Nagle as Graffunder-Nagle and Associates, a partnership that ended with Nagle's death in 1965.

A popular and well-respected professor, Graffunder taught for 38 years at the University of Minnesota, retiring in 1986. During these years the School of Architecture – led much of this time by Modernist Ralph Rapson – became one of the top architecture programs in the country. A particular strength of the University program was the large number of faculty members like Graffunder who both taught and maintained commercial offices, a practice encouraged by Rapson. According to one source, "the School of Architecture at the University of Minnesota played a special role in the development of modern architecture locally and regionally. Under the leadership of renowned architect Ralph Rapson, head of the program from 1954 to 1984, the University produced a host of new architects who created finely executed works in the tradition of the Bauhaus" (*Annual U.S. Tour* Docomomo US MN, Oct. 2011).

While houses were his specialty, Graffunder also designed religious, civic, scholastic, medical, and institutional buildings, as well as additions and alterations for numerous other structures. He designed libraries, for example, in Hibbing (1953), Fairmont (1969), Mankato (1965), and Winona (1967), the latter two on state college campuses.

Graffunder designed four classroom and dormitory buildings for the University of Minnesota-Morris, structures that introduced Modernist design and precast concrete to the campus (Gay Hall 1965-1966; Science 1968; Independence Hall 1970; Residence Hall Apartments 1971).

Graffunder designed Normandale Lutheran Church in Edina (ca. 1954), Bethany Lutheran Church in Minneapolis (1958), and Calvary Lutheran Church in Minneapolis (1966). All are Modernist statements with brick exteriors; soaring ceilings with laminate beams and skylights; rich use of wood, brick, and ceramics; and judicious use of color from window glass, interior lights, and other means.

Graffunder's work was featured in numerous publications and he received several important professional awards. His Hibbing Public Library, for example, won Best Library in 1955 from *Progressive Architecture*, a national publication.

Winston R. and Mary Miller. Winston R. Miller was born in Kansas City, Missouri. He served in the Navy Medical Corps during World War II and studied medicine at the University of Kansas, where he also taught.

Winston Miller and Mary Cavaness were married in 1939 in Kansas. In 1948 the couple moved to Red Wing so Miller could join Red Wing's Interstate Clinic, a practice organized in 1940 by Raymond Hedin and four other doctors. Miller served as Health Officer for the City of Red Wing from 1957-1961. He taught at the University of Minnesota Medical School and in 1954 was named an acting member of the Minnesota Board of Health by Governor C. Elmer Anderson. In 1961 he left Interstate Clinic to become medical director of the Wilder Foundation Institute of St. Paul while continuing to live in Red Wing. In 1967 he became program director for the

Northlands Regional Medical Program, a federally-funded initiative (Angell 1977). Miller died in 1977 at age 62.

Mary Miller was raised in rural Kansas, taught school, and received a B.A. in home economics from the University of Kansas in 1939. She and Winston Miller had three children.

Mary Miller was a Red Wing civic leader with a long list of accomplishments. In 2008 she was inducted into the Red Wing Women's Hall of Fame "for her inspiration and leadership in hospice and other community organizations she served for many years" (Nerhaugen RW Republican Eagle, Nov. 05, 2009). "Her resume includes involvement in numerous organizations and historic preservation efforts," according to an announcement of the award (Jacobson 2008). Miller died in 2008 at age 97 "after a lifetime of volunteer service" (Nerhaugen 2009). According to the local press, "She had made a profound impact on Red Wing" (RW Republican Eagle, Oct. 10, 2008).

Widowed at age 66, Miller served the community for decades. She was an active member of many local civic groups and other organizations. She was president of the League of Women Voters of Red Wing and served on the board of directors of the state body. She served on the City of Red Wing's Park Board for many years and helped develop Red Wing's most popular parks, Bay Point and Colvill. She served leadership roles in local chapters of the American Association of University Women and the American Field Service, and was active in the Art History club which promoted the arts in Red Wing. She was a positive force in Red Wing's historic preservation movement. She mentored and inspired more than a generation of civic leaders, particularly women ("Civic Leader" 2008). Miller is credited with bringing the concept of hospice care to Red Wing and in 1977 cofounded the Red Wing hospice program with nurse Barbara Roth.

Recommendation

Gemini Research recommends that the Miller House, built in 1953, meets National Register Criterion C in the area of Architecture. As an innovative, well-preserved example of postwar Modernist residential design, the house embodies the distinctive characteristics of a type, period, or method of construction and possesses high artistic value. It is one of the most architecturally-significant postwar buildings in Red Wing.

Although further research and analysis is needed to confirm this facet of the property's significance, the Miller House is likely also significant within the work of early Minnesota Modernist architect Carl O. Graffunder. The house was built within the first five years of Graffunder's private practice, is probably one of the most dramatically-sited of Graffunder's homes, is one of relatively few built outside of the Twin Cities, and represents Graffunder's efforts to demonstrate that high-quality design could be achieved for reasonable cost. Graffunder's recent death in August 2013 is likely to stimulate scholarly study of his work which will help further an assessment.

The Miller House was also the home of longtime Red Wing civic leader Mary Miller who passed away in 2008. Because many of Mary Miller's significant contributions occurred during the second half of the 20th century, sufficient time has not yet passed to understand the relative value and implications of her contributions to Red Wing history. It is recommended that further research and evaluation be conducted at some point in the future to determine the Miller House's National Register eligibility under Criterion B, associations with an important person.

The recommended period of significance is 1953, the year the house was built. The level of significance is Local. (It is possible the level of significance may change to State with more analysis of Graffunder's work. It is possible the period of significance may be expanded if the house is eligible under Criterion B because of the contributions of Mary Miller.) The recommended boundaries of the National Register-eligible property are shown on the sketch map.

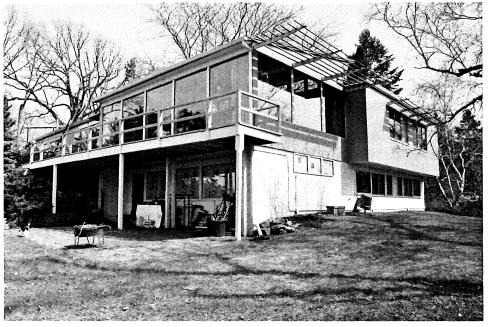


Fig. 186. 521 Hill St. Miller House, north and west facades (facing SE)

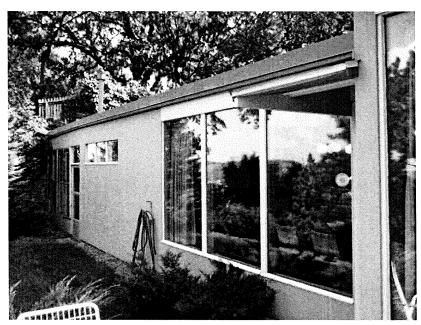


Fig. 187. 521 Hill St. Miller House, eastern end of northern facade (Tony Branfort photo at carlgraffunder.wordpress.com) (facing SE)

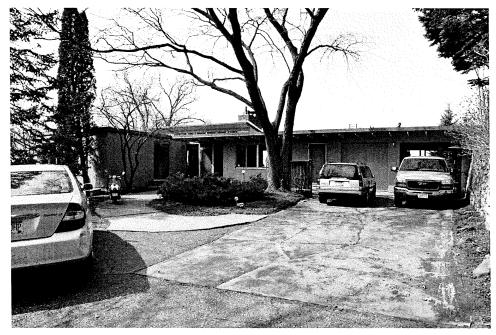


Fig. 188. 521 Hill St. Miller House, main (southern) facade; the eastern (righthand) wall is built against the bluff (facing N)



Fig. 189. 521 Hill St. Miller House, entrance at left, stairs in center (Tony Branfort photo) (facing S)

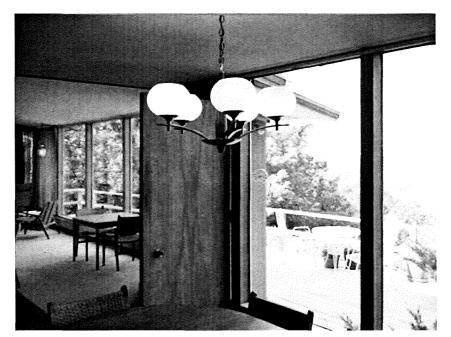


Fig. 190. 521 Hill St. Miller House, northern wall of windows and deck (Tony Branfort photo) (facing NW)

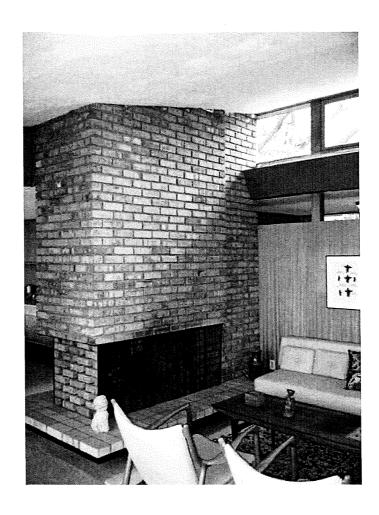
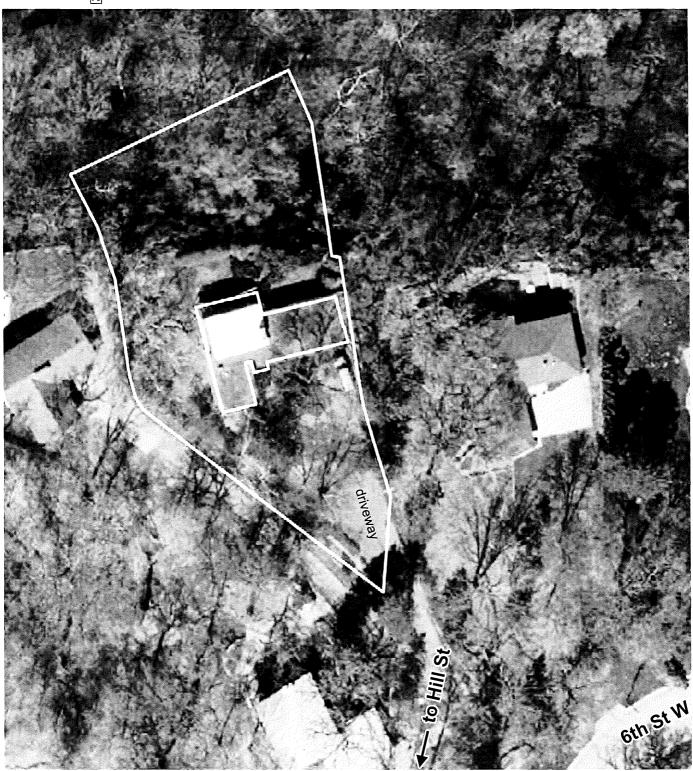


Fig. 191. 521 Hill St. Miller House, central fireplace and clerestory windows (Tony Branfort photo) (facing SE)





Prep by Gemini Research 12-2013



boundary of National Register eligible property

GD-RWC-1383 810 Levee Rd

Hist Name: Burdick Grain Co. Terminal Elevator

Other Name: Red Wing Grain Company

Built: 1955-ca.1958

NR Status: Eligible

The Burdick Grain Company Terminal Elevator, built in two phases in 1955-1956, is located on a shallow peninsula on the bank of the Mississippi River near the intersection of Levee Road and Fulton Street. The site measures about 150' north-south by 800' east-west. The property is located on the northern side of both Levee Road and the former Chicago, Milwaukee, St. Paul, and Pacific Railroad railroad tracks (now Canadian Pacific).

The site's principal structures are an elevator, two large steel bins, railroad spur tracks, an office building, docking facilities, and two sheds. (See sketch map.) There is a bituminous yard along the southern edge of the property and a bituminous parking area near the office building.

The elevator site overlaps another inventoried property, the Red Wing Harbor and Levee (GD-RWC-1424). The elevator is near the CMSTPP Railroad Corridor Historic District (GD-RWC-1371) and adjacent to the Mississippi River Nine-foot Channel (GD-RWC-1452). See those properties.

The elevator is served by a parallel set of railroad track spurs installed in the summer of 1955. In 2010 the spurs were inventoried by 106 Group as a separate property and given the inventory number GD-RWC-1384. The western 800' of the spur tracks is located on Burdick property, the next approximately 350' is located on City of Red Wing property east of the elevator property, and the final 100' is located on railroad property in the CMSTPP Railroad Corridor Historic District (GD-RWC-1371). See the sketch map referenced under Recommendation below for incorporation of the track.

The Elevator. The site's principal structure is a massive reinforced concrete elevator comprised of a headhouse and two banks of bins. Total capacity is about 1.25 million bushels. The headhouse and western bank of 6 cylindrical bins (nicknamed the "6-pack") were built in 1955. The eastern bank of 12 bins (the "12-pack") was added during the next construction season, 1956. Each annex of bins is topped by a flat-roofed concrete gallery. (See the individual inventory form for more details and photographs.)

The headhouse is about 213' tall and has a footprint of about 40' x 44'. According to a 1955 plan, the headhouse has about 18 interior bins with a combined capacity of about 124,800 bushels (Foley Bros "Preliminary General Plan" and "Longitudinal Section," March 8, 1955, Tillit Papers, Northwest Architectural Archives, University of Minnesota Libraries, Minneapolis). Headhouse bins are typically used for cleaning, grading, mixing, drying, and other tasks.

The headhouse and galleries have fairly small, widely-spaced, rectangular window openings, most of which retain original industrial sash. On the northern side of the headhouse there are double doors on the head, scale, and distributing floors. Sometime after 1970 two single-leaf doors and a set of steel fire escape ladders were added to the west facade of the headhouse. Safety railings have been added to the top of the headhouse.

On the southern side of the headhouse is a one-story, flat-roofed concrete block receiving shed with three drive-through bays for loading and unloading. The northern bay (nearest the headhouse) was used for railcars and the southern two bays were originally for trucks. Today there is modern dust-collecting equipment mounted on the shed roof and a steel loading spout

continues to extend from the outside of the headhouse distributor floor through the roof of the shed. The northern drive-through bay has been lengthened by several feet with a steel-sided eastern extension. The doors at the ends of the bays have been replaced.

On the northern side of the headhouse, the original marine leg was replaced in 1973 by the current barge-loading spout and 48"-wide belt conveyor. A modern dust collector is located on the southern side of the headhouse.

The 6-pack of bins measures about 86' (east-west) by 64' (north-south). Total capacity is about 500,000 bushels. The cylindrical bins are about 28' in diameter and 125' tall. There are about four interstitial bins. The gallery is 84' long, 24' wide, and about 10' tall. A fire escape ladder has been added to the west end of the 6-pack. Safety railings have been added to the top of the bins and gallery.

The 12-pack of bins measures about 180' (east-west) by 66' (north-south). Total capacity is about 750,000 bushels. The circular bins are about 28' in diameter and about 100' tall and there are several interstitial bins. The gallery is about 180' long, 24' wide, and 10' tall. Safety railings have been added to the top of the bins and gallery.

The interior of the elevator is largely unaltered. While some equipment has been replaced for efficiency, the large hopper scale and other components are intact. See the full inventory form for a description and additional photos.

Docking Facilities. North of the elevator is an 800'-long bulkhead or dock (aligned east-west) for berthing tugs and barges. In the turf behind the edge of the bulkhead is a row of about 10 original steel mooring piles.

The northern edge of the wharf is retained with a sheet pile bulkhead. The western approximately 350' of sheet piling was originally installed by contractor Dunnigan Construction Company to serve as Red Wing's municipal coal dock (built 1937-1938). The next 280' of sheet piling was installed by Burdick Grain in 1955 when the first phase of the elevator was built. The next 140' of sheet piling was evidently added in 1956 when the second phase of the elevator was built. The 1956 work required considerable fill near the current northeastern corner of the property. Downstream from the Burdick property, and in line with the Burdick dock, are four clustered-steel-pile mooring dolphins spaced about 90' apart. They were installed by the company in 1955.

Steel Bins. The property has two massive circular steel grain bins connected to the headhouse by steel overhead conveyors. Grain Bin 1, on the east, was built in 1961. It is 150' in diameter and made of welded sheets of smooth steel. Capacity is 750,000 bushels. Grain Bin 2 was built in 1995. It is made of rivetted sheets of corrugated steel. It is 100' in diameter and has a 500,000-bushel capacity. Completion of this bin brought total capacity of the facility to 2.5 million bushels.

Office. A small detached woodframe office building was built circa 2000 near the northwestern corner of the property. It has a footprint of about 32' x 32' and a gabled roof, vinyl siding, and horizontal sliding sash.

Probe Shack. At the southeastern corner of the property is a small woodframe shed known as the Probe Shack. Built circa 2000, it has a footprint of about 10' x 10' and a gabled roof. The previous office and probe shack was located at approximately the same spot.

Steel Shed. A steel-sided, gable-roofed shed is aligned east-west immediately north of the 12-pack. It is about 20' wide and 70' long and was built in two stages, perhaps after the 1990s.

Integrity. The property retains good historic integrity. While steel grain bins, a modern office building, and two sheds have been added to the site, none of these structures are directly attached to the 1955-1956 concrete elevator. The concrete headhouse and storage bins have received some exterior alterations including extension of the railcar receiving shed, residing of the bridge to the 12-pack gallery, the addition of fire escapes and safety rails, and replacement of loading spouts, but these changes are minor. The sheet pile bulkhead has been extended both east and west and the depth of the river adjacent has been increased by 3'. These alterations are also minor. Inside the elevator, original equipment has been replaced by more efficient equipment and safety devices have been added. The equipment changes do not substantively affect historic integrity (see Recommendation below). Overall, the elevator is still able to strongly convey its historic appearance and significance.

Historical Background

Burdick Grain Company was built on a site purchased from the City of Red Wing. The western part had been extensively filled in the late 1930s by the Army Corps of Engineers using spoils from the Corps' Nine-Foot Navigation Channel project. The fill created land for the City of Red Wing's industrial/commercial dock (also called the Municipal Coal Dock), completed in 1938. The eastern part of the site (east of about Fulton Street) was the northern part of Levee Park.

Burdick's Red Wing river terminal was constructed in two phases in 1955 and 1956. The elevator was built by Minneapolis-based Burdick Grain Company in partnership with Central Soya of Fort Wayne, Indiana, one of the world's largest soybean processors.

Founder and president of Burdick Grain was Allan L. Burdick, Sr. of the Twin Cities, who, since 1940, had owned Red Wing Malting Company with two partners.

Burdick bought large amounts of corn and soybeans in southern Minnesota and shipped it downriver for processing and to cities such as New Orleans, Galveston, and Mobile for international export. Among the elevators that fed Burdick's Red Wing terminal were large elevators in Waseca and New Ulm which Burdick Grain had purchased a few years earlier.

Red Wing's Postwar Grain Shipping. While Red Wing had been a major wheat shipping port in the 1860s, by the mid-1870s river shipping began to decline as railroads – more flexible and reliable – began to dominate shipping along the river corridor. By the 1890s only two packet boats per week were docking at Red Wing, down from several per day. As the grain trade dwindled, Red Wing's riverfront grain warehouses closed one by one. Shipping ended entirely at the end of the 1918 season.

After being shut down for more than 20 years, Red Wing's shipping sector returned to life in the 1940s and 1950s thanks to several factors including a surge in Minnesota farm productivity, an industrial boom in the southern U.S. that created flour mills and other grain processors, an increase in U.S. grain exports, and revitalization of freight traffic on the Mississippi River which led to the construction of terminals and docking facilities. (See the full inventory form for more information.)

At the same time that Midwest grain production was growing, the Upper Mississippi River became a major transportation artery for the first time in a generation thanks to completion of

the Nine-Foot Navigation Channel. Largely built in the 1930s, this monumental public works project revitalized Mississippi River freight traffic and helped revive grain shipping from the Red Wing port. (The Red Wing Segment of the Nine-Foot Channel was inventoried separately, see GD-RWC-1452.) The centerpiece was a series of 29 locks and dams between St. Paul and St. Louis that created raised water levels to a constant nine-foot depth.

As barge traffic reawakened, grain storage capacity slowly increased. In 1940 there were only five major grain elevators on the middle and upper Mississippi, according to the Army Corps of Engineers, and only one of them, a public elevator in St. Paul, was located north of St. Louis (Hoops 1987: 90). In 1948 elevator storage capacity at Upper Mississippi ports totaled about two million bushels. Seven years later when the Burdick elevator opened in 1955, storage capacity had jumped to 22 million bushels, much of it added in St. Paul and Minneapolis (*RW Daily Republican Eagle* Sept. 28, 1955).

According to Mississippi River historian John Anfinson:

Every time navigation boosters prophesied the return of river commerce with a new project, their prophesies went unfulfilled, but under the Nine-Foot Channel, commerce has far exceeded their most extravagant predictions. Traffic had all but died on the upper river by the 1920s. In 1940, 2.4 million tons of goods moved on the upper river. By 1960 this number had multiplied by more than ten, to over 27 million tons. . . . Grain returned slowly to the river but would eventually dominate. Wheat, corn, and soybeans accounted for less than 10 percent of the total commerce shipped on the upper river until 1958, when these crops reached 14 percent. Leading the resurgence of river commerce, grain comprised 30 percent of the total tonnage shipped by 1964, remaining at this level until 1972, when grain exports began booming. . . . [Today] corn and soybeans are the two principal crops moved on the upper river (Anfinson *River We Have Wrought* 2003: 276-277).

Designers and Builders. Burdick Grain Company's Red Wing terminal elevator is believed to have been designed by Minneapolis engineer Ruben I. Ferster (1906-1994), working on behalf of Foley Brothers, Inc., of St. Paul. Foley Brothers was a large St. Paul firm specializing in large construction projects. Ferster was born in New York in 1906 of Russian-immigrant parents. He graduated from North High School in Minneapolis in 1924 and may have studied engineering at the University of Minnesota. By 1928 Ferster was employed as an engineer in Minneapolis. Grain elevators became a specialty. During the next decades he worked on his own, for McKenzie Hague Company, for the Chris Jensen Construction Company, and for Cargill. In the mid-1960s and early 1970s Ferster collaborated with Foley Brothers to form Foley-Ferster.

Ferster designed many large grain handling facilities in the Midwest and elsewhere. Clients included Cargill, Louis Dreyfus, General Foods, Continental Grain, Peavey, and others. Some projects were designed in collaboration with Minneapolis engineers Walter H. Wheeler and James C. Tillit. (See the inventory form for more information.)

General contractor for Burdick's Red Wing elevator was the Chris Jensen Company of St. Paul, a builder of industrial facilities including large grain terminals. Local firms who worked on the 1955 phase of the Burdick Elevator included Ready-Mixed Concrete, Pomerleau Electric, Central Lumber Company, Farley and Schafer Plumbing, and Red Wing Iron Works.

Construction and Opening. The process of pouring concrete for the terminal's huge cylindrical storage tanks, known as slipform construction, began on July 14, 1955, and continued around the clock for about two weeks. The 125'-tall tanks were made using a 4'-high wooden mold. The concrete was carried to the top of the mold in a bucket lifted by a winch. As the mold filled with concrete, it was slowly lifted by 135 hydraulic jacks, rising an inch every ten minutes. The special jacks, made in Sweden, operated under a pressure of 1,500 pounds per square inch. Swedish engineer Lennart Anderson and another worker traveled to Red Wing to supervise operation of the jacks At a towering 213' the completed Burdick elevator was the tallest structure in Red Wing, as it remains today.

A crowd of 2,500 and many dignitaries attended the grand opening of the new terminal in October 1955. The new terminal elevator employed 20 full time workers and 10 seasonal workers. Elevator manager Hugh H. Hoyt and superintendent C. Herman Peterson handled day-to-day plant operations, while Burdick executives in Minneapolis supervised marketing, plant facilities, and legal affairs.

Most of the soybeans shipped downriver in the 1950s were destined for Chattanooga, Tennessee, where Central Soya had just completed a large soybean processing plant. Chattanooga was located on the Tennessee River, a major tributary of the Mississippi. Corn and other grains were shipped to New Orleans, Mobile, and Galveston for export.

In 1957, two years after the elevator opened, Central Soya purchased Burdick Grain Company's share of the elevator, operating the elevator via a subsidiary called Central Grain Company. In 1977 the elevator was acquired by ConAgra Foods of Omaha and in 1980 it terminal was purchased by Continental Grain Company. It is now owned by Red Wing Grain, a venture by Cargill and Ag Partners Cooperative of Goodhue, Minnesota.

Reinforced Concrete and Terminal Elevators. Minnesota's first terminal grain elevator was built in Minneapolis in 1867. By the late 19th century massive elevators were being built in Buffalo and at Duluth-Superior on the Great Lakes as well as in Buffalo. New York, in line with the Erie Canal, the Hudson River, and the New York Harbor.

In the early 20th century reinforced concrete became the material of choice for grain elevators because it was strong, fireproof, long-lasting, and economical (see Frame 1989 for grain elevators in Minnesota). By the turn of the century major concrete elevators were being built in Duluth, Minneapolis, and other Midwestern cities. The Twin Cities and Duluth collectively contain one of the nation's largest collections of terminal elevators. Most were built of reinforced concrete.

In Red Wing concrete elevators were built in the 1930s at both Pittsburgh Plate Glass (now Archer, Daniels, Midland) and Fleischman Malting Company, both east of Burdick Grain near downtown.

Burdick's Red Wing terminal elevator was one of a limited number of terminal elevators being built on the Upper Mississippi River in the mid-1950s and early 1960s and the only one in Red Wing. Today on the Mississippi River in Minnesota there are terminal grain elevators in St. Paul, South St. Paul, Red Wing, and Winona, and a total of approximately 39 terminals of all types (e.g., handling coal, petroleum products, sand and gravel, grain, etc.) (MnDOT 2001; MnDOT 2011).

Founder Allan L. Burdick, Sr. Burdick Grain Company founder Allan L. Burdick, Sr. (1911-1970) was born on a farm near Dodge Center, Minnesota, in 1911. He graduated from West High School and the University of Minnesota. In 1928, while attending night classes at the University, he began working at the Russell Miller Company (makers of "Occident" flour) in the company's grain division. Burdick remained with Russell Miller for 22 years, rising to vice president of grain operations.

In 1940 Burdick and three partners purchased the closed Froedtert Malting Company in Red Wing, reopened it as Red Wing Malting Company, and began buying barley.

In 1950 at age 39 Burdick left Russell Miller to set up his own business. The Burdick Grain Company began by leasing storage space at elevators in Minneapolis and Duluth and selling grain on the Minneapolis Grain Exchange. The company was also a member of the Chicago Board of Trade and the Winnipeg Grain Exchange. In 1952 Burdick purchased a large elevator in Waseca and in 1953 bought one in New Ulm, later expanding it. In 1957 Burdick and other investors bought Northwestern Malt and Grain Company of Chicago. The purchase included a large malting plants in Chicago and Waterloo, Wisconsin, as well as an elevator complex in St. Louis Park.

Allan Burdick served as president of the Minneapolis Grain Exchange. When he died in 1970 at age 59 he was president of Burdick Grain Company and Red Wing Malting Company and board chair of Northwestern Malt and Grain Company of Chicago and of Kreainer Malting Corporation of Buffalo, New York (*Minneapolis Tribune*, June 19, 1970; *Winona Daily News*, June 19, 1970).

Recommendation

Burdick Grain, built in 1955-1956, was inventoried in 2010 by 106 Group, which recommended the facility was ineligible for the National Register because it "was constructed well after the 19th century dominance of the wheat industry in Red Wing and after the city's prime period of industrial growth, which concluded in 1945" (Van Erem 2010). 106 Group researchers did not identify the facility's original owner or associations with postwar agriculture, with the completion of the Mississippi River Nine-Foot Channel, or with revitalization of transportation and commerce on the Mississippi River and in Red Wing.

Gemini Research reevaluated the National Register eligibility of the Burdick Grain Company Terminal Elevator in 2013.

In 1989 the State Historic Preservation Office commissioned Robert F. Frame to develop a statewide historic context for pre-1946 grain elevators in Minnesota. It forms the basis for a National Register Multiple Property Documentation Form (MPDF) for the property type (Frame 1989). While Frame's context covers the period before and during World War II, the information and recommendations are useful for understanding and evaluating postwar structures like Burdick Grain. According to Frame not all terminal elevators are eligible for the National Register under Criterion A (broad patterns of history), although most played a major role in the economics of agriculture. He writes, "to be eligible under Criterion A, a [pre-1946] terminal grain elevator must have been involved in a particularly meaningful way with a significant development in the grain industry, grain trade, a transportation and shipping nexus, and/or a major processor" (Frame 1989: F3). Frame suspects that few pre-1946 terminal elevators will be eligible for the National Register under Criterion B. He indicates that pre-1946 terminal elevators eligible under Criterion C should not simply be good representatives of the type, but should "embody distinctive characteristics of terminal elevator engineering and construction" or be associated "with

significant elevator engineers, builders, contractors, or fabricators who made significant contributions to the design and construction of terminal elevators" (Frame 1989: F6). A terminal elevator associated with distinctive, significant, or influential engineering or construction might be one built using a new or innovative iteration of slipform construction (Frame 1989: F7).

Extrapolating Frame's integrity guidelines and registration requirements for pre-1946 terminal elevators and applying them to the Burdick Grain Company Terminal Elevator in Red Wing, Gemini Research recommends the property is eligible for the National Register under Criterion A. The Burdick elevator was one of a limited number of terminal grain elevators built on the banks of the Upper Mississippi after World War II. As such, it played a significant role in the postwar rise of Mississippi grain shipping – a phenomenon enabled by increased agricultural productivity, growing U.S. exports, industrial development in the southern U.S., and, importantly, completion of the Mississippi River's Nine-Foot Navigation Channel, a massive public works project. Still the tallest structure in Red Wing, the Burdick elevator is a very visible symbol of the city's postwar economic growth.

Gemini Research did not uncover indication that the Burdick elevator was built with unusual or innovative design elements or construction methods that would qualify it for eligibility under Criterion C. Further research is needed to determine whether the elevator is a significant example of the work of a particular engineer such as Ruben I. Ferster (1906-1994) who is believed to have designed the structure.

Gemini recommends that the Burdick elevator retains sufficient historic physical integrity to meet National Register integrity requirements. The property is eligible under Criterion A in the areas of Industry and Transportation. The level of significance is State. The recommended period of significance is 1955-1970. (The latter year is chosen somewhat arbitrarily and should be reevaluated in the future.) The boundaries of the eligible property are show on the sketch map.

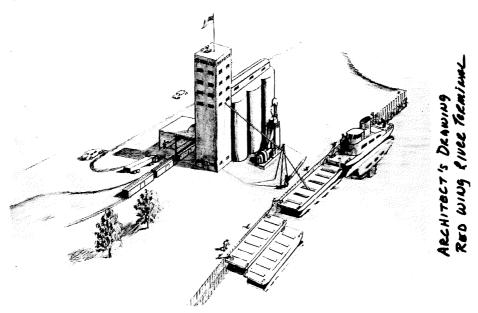


Fig. 192. 810 Levee Rd. Burdick Grain Co. Terminal Elevator, architect's drawing 1955 (Goodhue County Historical Society photo) (facing S)

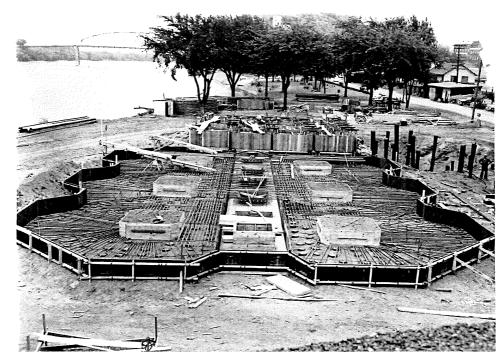


Fig. 193. 810 Levee Rd. Burdick Grain Co. Terminal Elevator, ground-level construction (taken June 28, 1955, Goodhue County Historical Society photo) (facing NE)

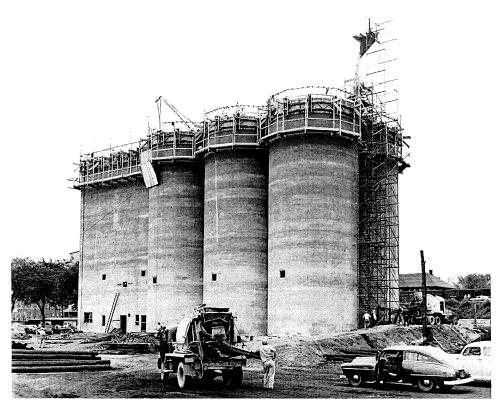


Fig. 194. 810 Levee Rd. Burdick Grain Co. Terminal Elevator, under construction (taken July 16, 1955, Goodhue County Historical Society photo) (facing E)

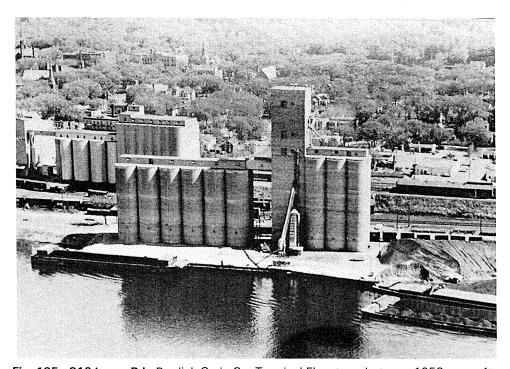


Fig. 195. 810 Levee Rd. Burdick Grain Co. Terminal Elevator, photo ca. 1958 soon after the "12-pack" bins on the east side of the headhouse were built (Red Wing Grain LLC photo) (facing SE)



Fig. 196. 810 Levee Rd. Burdick Grain Co. Terminal Elevator, June 1994; note railcars at the north dumping bay and trucks at the other two; note also the ca. 1970 office southeast of the elevator (Red Wing Grain LLC photo) (facing N)

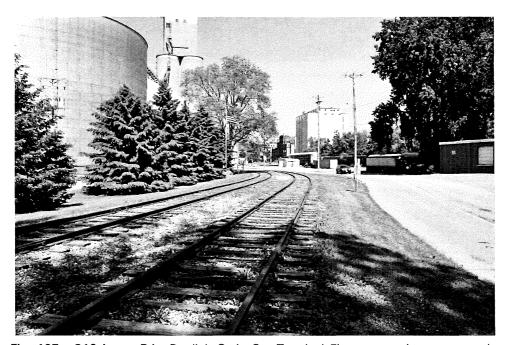


Fig. 197. 810 Levee Rd. Burdick Grain Co. Terminal Elevator, track spurs near the southwest edge of the property (facing NE)

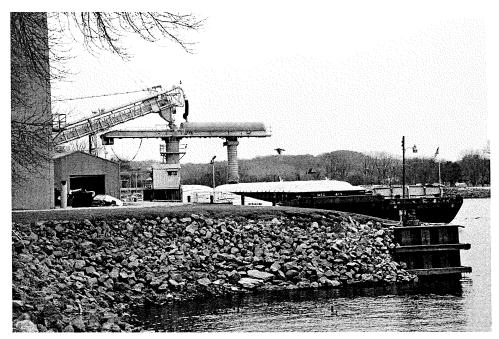


Fig. 198. 810 Levee Rd. Burdick Grain Co. Terminal Elevator, northeast corner of Burdick's sheet pile dock with barges and riprap; note the gable-roofed steel-sided shed in view (facing W)



Fig. 199. 810 Levee Rd. Burdick Grain Co. Terminal Elevator, mooring pile; current elevator office is at upper left (facing SW)



Fig. 200. 810 Levee Rd. Burdick Grain Co. Terminal Elevator, south side with former Milwaukee Road main line (now Canadian Pacific) in foreground (facing NW)

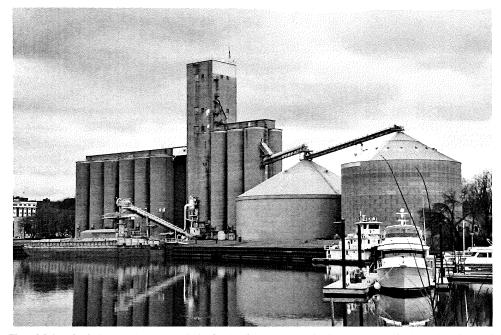


Fig. 201. 810 Levee Rd. Burdick Grain Co. Terminal Elevator, north (river) side with gable-roofed steel shed to left of barge-loading spout and two steel bins (facing SE)



Fig. 202. 810 Levee Rd. Burdick Grain Co. Terminal Elevator, 1973 barge-loading conveyor (replaces the original marine leg); dust collector on side of the headhouse (facing S)

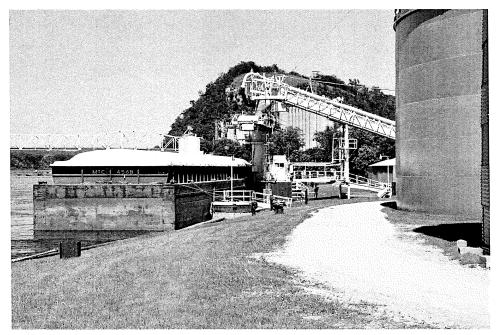


Fig. 203. 810 Levee Rd. Burdick Grain Co. Terminal Elevator, barge docked for loading with conveyor (facing E)



Fig. 204. 810 Levee Rd. Burdick Grain Co. Terminal Elevator, loading spout inside north bay of the drive-through dumping/loading shed (originally the railcar bay) (facing NE)



Fig. 205. 810 Levee Rd. Burdick Grain Co. Terminal Elevator, horizontal belt conveyor in the tunnel beneath the "6-pack" bank of bins west of the headhouse (facing W)

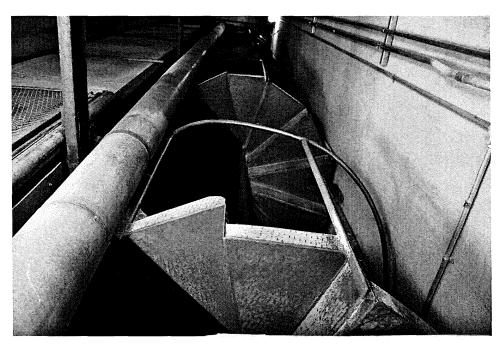


Fig. 206. 810 Levee Rd. Burdick Grain Co. Terminal Elevator, looking up the spiral stairway in the south part of the headhouse; at left edge of photo with the mesh door is the $4' \times 4'$ man-lift (facing W)

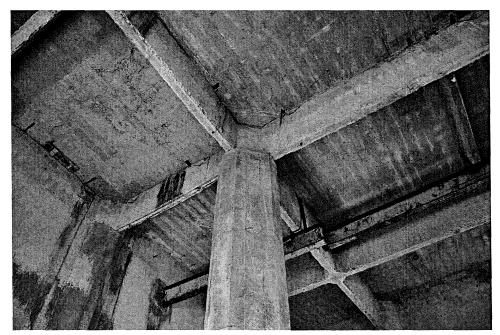


Fig. 207. 810 Levee Rd. Burdick Grain Co. Terminal Elevator, concrete column and ceiling on the head floor at the top of the headhouse (facing SE)



Fig. 208. 810 Levee Rd. Burdick Grain Co. Terminal Elevator, base of the hopper scale on the scale floor (facing S)

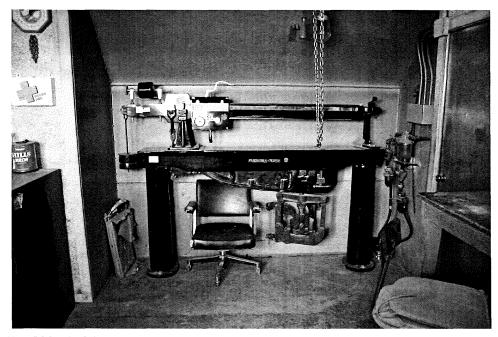


Fig. 209. 810 Levee Rd. Burdick Grain Co. Terminal Elevator, scale room with balance beam portion of Fairbanks-Morse scale; the door at right opens to the outside fire escape on the west wall of the headhouse (facing S)

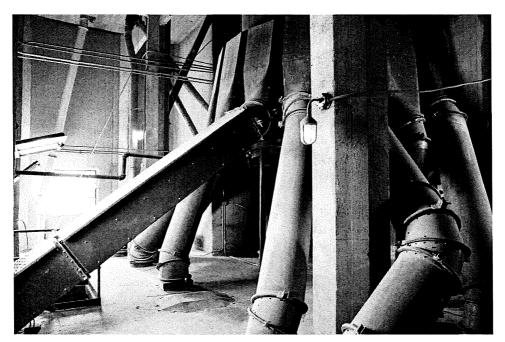


Fig. 210. 810 Levee Rd. Burdick Grain Co. Terminal Elevator, spouts on the distributor floor directing grain into the top of bins (facing NW)

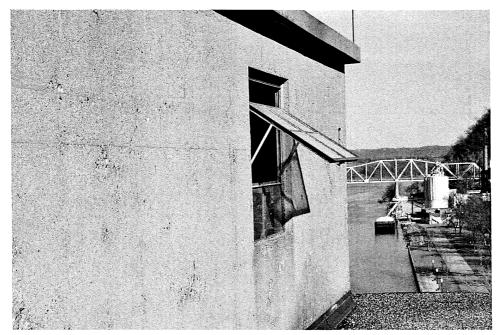
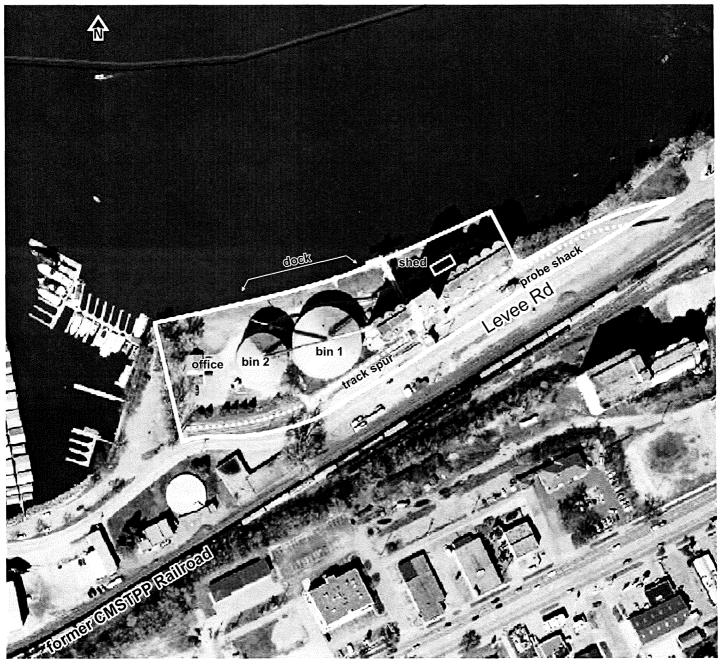
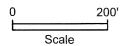


Fig. 211. 810 Levee Rd. Burdick Grain Co. Terminal Elevator, window in the south wall of the gallery on top of the "12-pack" bank of bins (facing E)



Prep by Gemini Research 12-2013





GD-RWC-019 129 Main St. W

Hist Name: Red Wing Shoe Company

Built: 1905-1954 NR Status: Eligible

The Red Wing Shoe Company was built beginning in 1905, the year the company was founded, to serve as a factory and office. The property is located at the southeastern corner of Main and Potter streets near the eastern edge of downtown Red Wing.

The site comprises most of one square block and has five major plant components, each described below. (See sketch map.) All five were built during the period of significance of 1905-1965. Historic photos indicate that alterations to the exterior of each component have been generally minor (as described below), and most occurred within the period of significance.

Original or Main Plant (built 1905-1908). The oldest portion of the complex is a three-story building located at the corner of Main and Potter streets with the main facade facing north. The structure measures about 60' (east-west) \times 142' (north-south).

The basement level and first story were built in 1905 and the second and third stories were added in 1908. The building was designed by Red Wing architect Alonzo R. Brink and built by William Hoff of Red Wing's Lee and Hoff construction firm.

The building has a restrained Neoclassical-influenced design with a red-brown brick exterior and contrasting concrete and limestone trim. There are simple brick cornices at the top of the first story and at the top of the building. Numerous rectangular windows provide natural light to the factory floors. Most window openings were originally filled with 1/1 and 4/4 sash. Most openings now have three-part replacement sash with bottom section operable.

The building's main entrance, located on the northern facade, is deeply recessed within a large rounded arch edged with smooth concrete trim. The steps are limestone.

The building's rear (southern) facade is basically intact. It has segmental-arched window openings, a single pedestrian door entering the basement level, and an original or early metal fire escape stairway. An enclosed angled steel conveyor connects with the Raw Materials Warehouse to the south.

The building had a freight elevator just south of its north-south midpoint. Historic photos show that most of the factory's interior spaces were large open rooms with wooden floors and walls of either exposed brick or plaster. Workers stood or sat in long rows of work stations comprised of workbenches or tables or specialized machines powered by a line-shaft system.

Originally, the building had a sole leather room in the basement; the office and shipping room on the first floor; the lasting and bottoming, stitching, and finishing rooms on the second floor; and the cutting and fitting rooms on the third floor. The finishing room was later moved to the first floor. In 1954 each of the main building's four floors housed about 40 workers.

Raw Materials Warehouse (built 1923). The second part of the complex to be built was the Raw Materials Warehouse, a one-story building constructed in 1923 across the alley to the south of the main building. The warehouse was designed to house raw materials such as leather, nails, hooks, eyelets, and laces, all of which were stored in piles, barrels, and boxes. The exterior is well-preserved.

The warehouse measures about 50' (north-south) \times 110' (east-west). It has a red-brown brick exterior and a simple brick cornice at the top of the main (western) facade. The northern side of the building faces the block's original east-west alley, later occupied by the shoe company and converted to a service court. The court is blocked from Potter Street by a sliding mesh steel gate.

The main facade has a central vehicle entrance flanked by two small industrial sash windows. The entrance originally had a double-leaf wooden door and now has a modern roll-up door.

1928 Shipping Department (built 1928). In 1928 the company added a one-story warehouse and shipping facility to the eastern side of the original building. Its footprint is about 120' (east-west) \times 100' (north-south). It has an early southern addition (see below) that measures about 70' (east-west) \times 42' (north-south).

The shipping department is reportedly an early example of a steel-framed prefabricated steel factory building (Marvin and Vrooman 1986: 89-90).

On the main (northern) facade, the riveted- and bolted-steel construction is visible above the windows beneath the roofline. This area includes a band of steel panels across the top of the windows. In the 1950s the panels were painted white and bore letters that read "Home of Red Wing Shoes."

Most of the main facade is comprised of a continuous horizontal band of large windows. The area beneath the windows across the main facade is faced with red-brown brick. The window openings were originally filled with metal-framed industrial sash (sections of which opened awning-style). In the 1950s most of the windows were replaced with glass block.

The main facade originally had no entrance. At an unknown date, perhaps the early 1950s, a recessed entrance flanked by brick piers was added about 30' east of the western edge of the building. At the same time matching brick piers were added to the western and eastern edges of the facade. The brick matches the 1928 brickwork beneath the windows. The set of windows west of the entrance now have modern fixed sash.

The 1928 shipping department's eastern side wall faces the current parking area. The eastern wall was originally comprised of two sections. The northern 60' was blocked by an adjacent commercial building (owned by others) until the early 1950s. When the adjacent building was removed, the newly-exposed wall of the shipping department was remodeled with three brick piers (matching those on the main facade) forming two bays that were evidently filled with windows. Today the bays are filled with narrow modern windows and one pedestrian door.

The southern 40' of the eastern wall is faced with unusual steel panels that may date from 1928. A former vehicle opening here is now filled with glass block (above three courses of concrete block). This part of the building has two small window openings with replacement sash. Beneath the roofline are three more small window openings that have recently been enclosed with wood.

Sometime before 1938 the 1928 shipping department received a southern one-story addition built of hollow clay tile. The eastern and western exterior walls are faced with unusually large, glazed, hollow clay tiles that were probably manufactured locally. The eastern side, facing the parking area, has one window opening with modern sliding sash.

In the early 1940s the factory's main office was moved from the first floor of the original building to the front of the 1928 shipping department. In 1954 the office housed about 38 employees.

1951 Shipping Addition (built 1951). In 1951 the company expanded the shipping facilities with a large one-story warehouse and shipping addition. It was designed in consort with the 1954 factory expansion (see below) and the two are indistinguishable from the exterior. The 1951 shipping addition measures about 158' (north-south) by 80' (east-west). Its construction expanded the company southward to Third Street. In 1954 there were about 11 employees in the shipping department.

The exterior of the building is faced with brown hollow clay tiles. Each of the principal facades (east and south) is dominated by a continuous band of large aluminum-framed windows designed to bring natural light to the interior. The windows "wrap" around the southeastern corner of the building and have a continuous concrete sill. Above the windows is a frieze faced with original corrugated fiberglass.

The window openings were originally filled with metal-framed industrial sash that had panels that opened awning-style. Sometime after the period of significance (1905-1965), the sash was replaced with the current treatment – large sheets of fiberglass that are scored with black lines to simulate lights. A small separate sash at the bottom opens awning-style.

The eastern facade, which faces the parking area, has a concrete loading dock near the northern end as well as pedestrian doors and an industrial sash window.

1954 Factory Expansion (built 1954). The last major part of the complex to be built is a one-story, factory addition built in 1954. It measures about 92' (north-south) x 100' (east-west) and extended the complex to the corner of Potter and Third streets.

In exterior design, the 1954 factory addition matches the 1951 shipping addition and the two appear as a single building. The factory addition has two sets of red letters reading "Red Wing Shoe Co." at the frieze level near the southwestern corner. The letters are made of red enamel-glazed metal and are original.

The factory addition was built to house the fitting and cutting rooms, departments that were moved from the third floor of the original building. The new addition housed about 130 workers when it opened in 1954.

Historical Background

Red Wing Shoe Company was founded in 1905 by local shoe retailer Charles H. Beckman and 14 other local investors. Beckman, a German immigrant, had been selling shoes in Red Wing since 1883 with tannery owner S. B. Foot as his partner.

The original building was constructed in two phases: the basement and first story were built in 1905 and the upper two stories were added in 1908. Production began in with about 50 workers making 110 pairs of shoes per day. The company immediately became one of Red Wing's largest employers. By 1908 the factory had reached its intended original capacity of 500 pairs per day, with a workforce of 85 employees. In 1909 there were about 100 employees. They worked about 59 hours per week. About one-third of the labor force has historically been women.

Shoes had been manufactured on a small scale in Red Wing since the early 1860s. When Red Wing Shoes was founded in 1905, Red Wing's manufacturing sector had nearly 30 factories including a tannery, two potteries, a sewer pipe factory, flour mills, a hat factory, a glove factory, and several other manufacturers. For much of the late 19th and early 20th centuries, at least one other smaller shoe factory also operated in Red Wing.

In 1910 Red Wing Shoes was among more than 1,300 shoe factories operating in the U.S. Most were fairly small and nearly half were located in Massachusetts. Minnesota had 18 shoe factories in 1910 and ranked 11th in the nation in shoe production (Marvin and Vrooman 1986 1986: 12).

The factory received most of its leather from the S. B. Foot Tannery, a long-established Red Wing firm that had been founded in the late 1850s. The shoe company's relationship with the tannery remained close for the next 80 years and in 1986 Red Wing Shoes bought the tannery.

In 1912 Charles Beckman, the company's founding president, died and was replaced by vice president C. H. Boxrud, one of the original investors. He remained president until 1921, while a succession of managers ran the factory.

The Red Wing Shoe Company has been controlled by the Sweasy family – still its principal owners – since around 1920. Thirty-four-year-old J. R. Sweasy, who had been working for a shoe company in Milwaukee, was hired at Red Wing Shoes in 1914 as assistant superintendent of production. In 1918 Sweasy became general manager and in 1919 controlling stockholder. He succeeded Boxrud as president in 1921. Sweasy ran the company "almost single-handedly" from 1918 until his death in 1949 when control passed to his son (Marvin and Vrooman 1986: 42-43, 49).

From its inception Red Wing Shoes focused on shoes and boots for workers, particularly farmers, loggers, miners, railroad workers, and other laborers. Red Wing shoes became known for their high quality and the company's strong guarantee. In 1920 the company began making boots for oil field workers in the Southwest. During both World War I and II the company made large numbers of military combat boots.

In 1923, with 230 workers, Red Wing Shoes was the second-largest employer in Red Wing ranking behind Union Stoneware Company.

In 1923 the company opened a branch office and warehouse in Dallas close to the oil field market. (The branch closed in 1961.) During the Depression Red Wing Shoes survived in large part by shifting production to a line of low-cost shoes assembled with nails rather than sewn welts. The work force was about 275 in the 1930s and annual output was about 350,000 pairs (Marvin and Vrooman 1986: 110).

Making boots for the military before and during World War II pulled the company out of the Depression of the 1930s. Production from 1940 to 1941 increased 46%. The company was making more than 500,000 pairs annually during a wartime high in 1942 and 1943. When the war ended, pent-up domestic demand and a booming postwar economy helped set the stage for decades of growth.

In 1933 the Red Wing chapter of the Boot and Shoe Workers' Union (Local No. 527) was formed. Interest in union membership increased during World War II and Red Wing Shoes became a "union shop" in 1952 (Marvin and Vrooman 1986).

In 1949 company president J. R. Sweasy died and his son, William D. Sweasy, became president. W. D. Sweasy led the company's postwar expansion and shifted management from a single decision-maker to a broader team that included labor representation.

In 1950 Red Wing Shoes established an office in Salt Lake City to serve western states; the branch still operates today. In 1950 the company assumed control of its own shipping. (Rather than shipping by rail or transport company.) In 1953 the company opened its first Red Wing Shoes retail store; by 1960 there were 12 stores. The workforce grew from 250 workers in 1949 to 440 workers in 1955. In 1954 Red Wing Shoes was Minnesota's largest shoe factory with an output of 2,400 pairs per day. The same year the company built a second raw materials warehouse which still stands on Levee Road adjacent to the Milwaukee Road railroad tracks at the northwestern corner of downtown Red Wing.

In 1962 the company began to export shoes internationally. In 1963 annual production exceeded 1 million pairs for the first time. In 1964-1965 the company built a second factory in the Burnside neighborhood in west Red Wing; it became known as the Burnside Plant or Plant No. 2 while the original plant at Main and Potter became known as Plant No. 1.

Red Wing Shoes stopped using the plant at Main and Potter streets as a factory sometime after the year 2005. The company now uses the facility for offices and warehouse space.

William D. Sweasy. William D. Sweasy led the post-World War II expansion and modernization of the Red Wing Shoe Company. He became president in 1949 and was chief executive officer at his death in 1991. Sweasy was also active in civic affairs. For example, he was president of the Red Wing Young Men's Christian Association (YMCA) and in 1958 was elected to the YMCA's North Central Area Council. He was chairman of the Red Wing Community Chest, served on the Red Wing Board of Education, and was active in Boy Scouts. He was an organizer of the Red Wing Environmental Learning Center, established in 1970 as one of the first organizations of its kind in the state (Angell 1977). Historian Frederick Johnson explains that William Sweasy "had a deep affection for Red Wing. He decided [after leaving the company presidency to become board chair in 1972] to use the financial resources of the Red Wing Shoe Foundation to reinvigorate the town. In the ensuing two decades he started a breathtaking series of projects that made him, in a town known for its benefactors, Red Wing's greatest philanthropist" (Johnson 2000: 312). Under Sweasy's direction, the Red Wing Shoe Company bought the aged St. James Hotel (GD-RWC-004) in 1977 and spearheaded its renovation. In 1988 the company completed the careful rehabilitation of an entire block face of historic downtown commercial buildings and moved its headquarters offices into them (GD-RWC-302, -306, -307, -308, -310). Sweasy was also active in the restoration of the Sheldon Theater (GD-RWC-002) in the 1980s, and rehabilitation of the Milwaukee Road Passenger Depot (GD-RWC-106) several years later.

Recommendation

The Red Wing Shoe Company, built in stages between 1905 and 1954, is the original plant and headquarters of the company. The property retains good historic integrity. Gemini Research recommends that the property meets National Register Criterion A (broad patterns of history) in the area of Industry. Red Wing Shoe Company played a significant role in the history of the community as an important local industry and one of Red Wing's largest employers. It eventually became the largest employer in the area and Minnesota's largest shoe manufacturer.

The Red Wing Shoe Company was also the office of longtime Red Wing civic leader William D. Sweasy who passed away in 1991. Because many of Sweasy's significant contributions to Red Wing community affairs occurred during the second half of the 20th century, sufficient time has not yet passed to understand the relative value and implications of his contributions to Red Wing history. It is recommended that further research and evaluation be conducted at some point in the future to determine whether the Red Wing Shoe Company is also eligible for the National Register under Criterion B, associations with an important person. While Sweasy's home at 1527 W. Fourth Street (GD-RWC-1397) was also inventoried and could be associated with his civic contributions, it is more likely that his office at the Red Wing Shoe Company, rather than his home, was where much of his influential work was planned and executed.

The recommended period of significance for the Red Wing Shoe Company begins in 1905, when the first phase of the factory was built, and ends in 1965 when Plant No. 2 (the Burnside factory) was built and the original plant at Main and Potter was no longer the company's sole manufacturing facility. (This period of significance may be expanded if the property is found to be associated with later contributions of William D. Sweasy.) The level of significance is Local. The recommended boundaries of the eligible property are indicated on the sketch map.

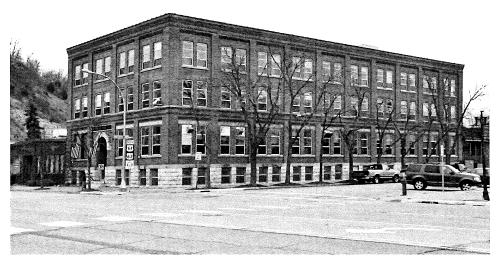


Fig. 212. 129 Main St. W. Red Wing Shoe Company, original plant (facing E)



Fig. 213. 129 Main St. W. Red Wing Shoe Company, west and south wall of original plant (facing N)

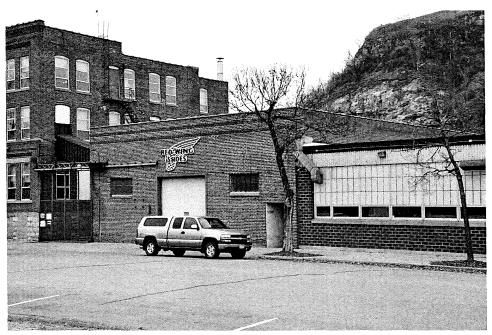


Fig. 214. 129 Main St. W. Red Wing Shoe Company, 1923 raw materials warehouse (facing N)



Fig. 215. 129 Main St. W. Red Wing Shoe Company, 1928 warehouse and shipping department (facing SE)



Fig. 216. 129 Main St. W. Red Wing Shoe Company, loading dock at northeast corner of 1951 shipping addition; 1928 warehouse faced with large glazed tiles at right (facing S)

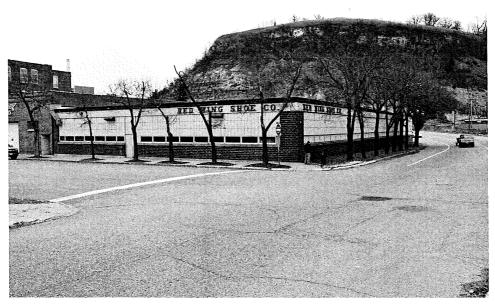


Fig. 217. 129 Main St. W. Red Wing Shoe Company, 1954 factory addition (facing N)

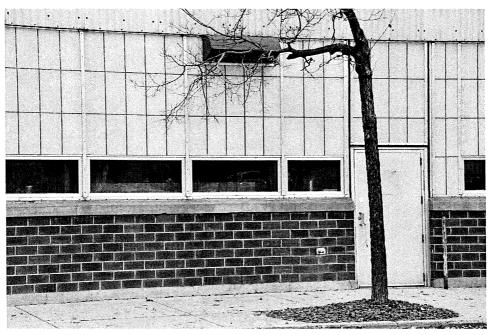
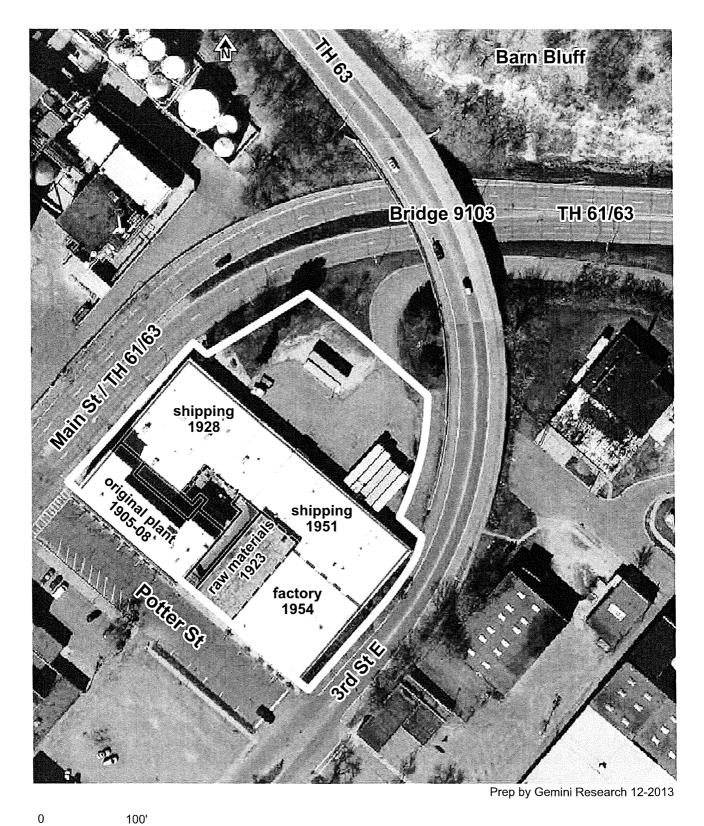


Fig. 218. 129 Main St. W. Red Wing Shoe Company, detail of Potter Street side of 1954 factory addition with aluminum window frames, fiberglass window panels, and hollow tile base (facing NE)



Fig. 219. 129 Main St. W. Red Wing Shoe Company, 1951 shipping addition (facing W)



Scale

boundary of National Register eligible property

GD-RWC-1423 ca.1162 Oak St

Hist Name: Red Wing City Hospital Stairway

Built: 1918 NR Status: Eligible

Contributing to Red Wing Residential Historic District

The Red Wing City Hospital Stairway was inventoried separately from the Red Wing City Hospital itself. (See GD-RWC-277 for the former hospital, which is located at 1166 Oak Street.)

The Red Wing City Hospital Stairway is an impressive, roughly-750'-long, Neoclassical Revival style, poured concrete public stairway built in 1918. The stairway replaced a wooden version in the same location and was built to continue access between Red Wing City Hospital, which had been located on the upper edge of the College Hill bluff since 1889, and a significant part of the city, including the downtown, located at lower elevations.

The stairs climb a steep, wooded hillside northeast of the former hospital buildings, which are located on top of the bluff. The elevation difference between the top and bottom of the staircase is about 80'.

The top of the steps is accessed from a long, 4'-wide poured concrete sidewalk near the northeastern corner of the hospital's building cluster. Depending on the season of the year and how overgrown the vegetation is, the sidewalk and top of the staircase provide an outstanding view of the Mississippi River Valley, Barn Bluff, the river crossing bridge, and the center of the city.

The lower end of the staircase is located at Fourth Street just east of Cedar Street. The Hospital Stairway is essentially a westward extension of Fourth Street's public sidewalk. The lowest run of steps is located between the southern curb of Fourth Street and the northern edge of Fourth Street's public sidewalk.

The Hospital Stairway is about 4' wide and was cast in place. It has about 185 steps separated by 8 concrete landings. Sets of steps between landings range in length from a group of two steps near the lower end of the staircase, to a run of about 75 steps above Landing 7. Three of the longest runs of steps curve in opposite directions. The long curving runs of steps above and below Landing 7 have concrete retaining walls on the upper side. Along the entire stairway is a handrail made of sections of simple pipe rail. Some of the handrail is original or very early, while some sections are fairly recent in-kind replacements.

Landings. Most of the stairway's eight landings are simple poured concrete rectangles. Some were cast with drainage grooves across their surfaces. The three highest landings – Landings 6, 7, and 8 – have poured concrete benches and lamp standards. The three lamp standards match those on Red Wing's College Avenue Stairway. (See College Avenue Stairway under Historical Background below.)

Landing 6, which has a footprint of about 6' x 6', has a simple L-shaped poured concrete bench from which Barn Bluff can be viewed. Landing 6 also has a polygonal poured concrete lamp standard (about 4' tall) topped by an ornate cast iron lamp pole (about 3'6" tall).

Landing 7, located at the staircase's midpoint, is about 20' long. It is considerably larger than the other landings and serves as the staircase's more formal seating area. The landing has a symmetrical plan with a long poured concrete bench that faces east/northeast toward Barn Bluff.

The bench is detailed with graceful curves. The steep slope above the back of the bench is retained by a section of mortared cobblestone retaining wall. At the front corners of the landing are a pair of 4'-tall polygonal lamp standards. Neither standard retains its cast iron pole or globe fixture. Near the center of the floor of the landing is an inscription in simple block letters reading: "City Hospital; J. H. Webster pres; W. Geisheker engineer; Nels Nordholm builder; 1918."

Landing 8, the uppermost, is about 8' long. The name "G. J. Kunau" is incised in a recessed panel in a step riser adjacent to the landing. The landing has a 4'-tall polygonal concrete lamp standard that is missing both the cast iron pole and glass fixture. Landing 8 provides a decision point: the pedestrian can continue up the last run of steps, or leave the staircase and walk west along a dirt footpath that traverses the edge of the bluff and then curves up toward the hospital buildings.

Integrity and Condition. The steps, landings, benches, concrete lamp standards, cobblestone retaining wall, and handrails are basically unaltered. The staircase is in remarkable condition considering its age and the steepness of the bluff, although some elements such as the cobblestone retaining wall above the bench at Landing 7 and the four concrete lamp standards are in poor condition.

Historical Background

The Red Wing City Hospital Stairway was built in 1918 of poured concrete to continue a pedestrian link between Red Wing's public hospital and the rest of the city below. The concrete staircase was built to replace an earlier wooden stairway built for the same purpose circa 1899.

The poured concrete staircase represents a feat of engineering and construction. The staircase was designed by City Engineer William Geisheker and built by an experienced local contractor, Nels Nordholm. (See William Geisheker and Nels Nordholm below.)

Nels Nordholm's son Herbert, who served 46 years as Red Wing deputy clerk and clerk, was a young laborer for the stairway project. Herbert Nordholm wrote about the project in some detail in 1978. Information in the next several paragraphs of this narrative comes from his typescript held by the Goodhue County Historical Society in Red Wing. Nordholm begins:

For many years much publicity has been given the noteworthy accomplishment in the construction [in 1929] of the Barn Bluff Stairway sponsored by the Red Wing Kiwanis Club and financed by individuals, firms, industries, and organizations . . . There is, however, in Red Wing another bluff stairway which, in the opinion of many of our older residents, is equally meritorious, if not more so, when considering the unsettled times, financing difficulties, limited construction equipment, and availability of materials. I am referring to the Red Wing Hospital Stairway, constructed in 1918 several years before the Kiwanis Stairway It was during the period of 1914-1917 that the Trustees decided they must make plans for the replacement of the old [circa 1899] stairway on the north side of the bluff or abandon its use. It was originally built of wood and was not in safe condition for public usage."

The Hospital Board of Trustees, Auxiliary, and "other able and dedicated volunteers devoted many hours soliciting contributions from individuals, firms, and corporations for the project" and conducting fundraisers for the stairway. The board was led by president John Webster, a former Registrar of Deeds and fire chief, and vice president Emma Krise.

Nordholm writes, "In 1917 it became apparent to the Board that sufficient funds would be available and that the project should be undertaken." While design work could proceed, it was not certain when the stairway would be actually built because in April of 1917 the U.S. entered World War I. Nordholm continues:

Through a mutual arrangement with the Board and the City Council the services of William Geisheker, then City Engineer, a most capable and qualified person in his profession, were made available. He was authorized and directed to design a stairway which would provide easy access to the summit of the bluff and to withstand freezing and thawing conditions as well as protection against unstable soil conditions. This decision permitted Mr. Geisheker to prepare a complete topography survey of the entire bluff area in the fall of 1917. During the winter months he prepared a number of designs and plans, taking into consideration the type of stresses and strains the stairway would be subjected to and also providing for sufficient anchor locations . . .

In the spring of 1918 one of the plans and designs was accepted unanimously by the Board of Trustees This design employed a type of circular stairway with reverse curves which provide for a type of keystone lock similar to the keystone used in archway construction to offer rigidity and avoid collapse. It consisted of 185 steps, 48" wide, 6" high with a 12" tread; 8 platforms, 48" wide and varying in length from 4' to 20'; one 16' concrete bench; three [sic] octagon concrete light standards; and three concrete setees.

The stairway was built over a three-month period in the summer of 1918 after it was clear that wartime concrete shortages would not hinder the project. The builder was Nels Nordholm, a Red Wing stone and concrete contractor who was then about 64 years old. Nels Nordholm provided a crew of several skilled and about seven unskilled laborers.

Herbert Nordholm explains the construction process:

The type of construction used in this stairway differed from the Barn Bluff stairway in that poured concrete in-place was used rather than pre-cast concrete. This meant that the pathway along which the proposed stairway was to follow had to be excavated and fine-graded and at designated places deep pits were dug to below the frost line which would serve as anchors in holding the stairway in proper place. Midway up the slope a rest area was provided [Landing 3] which was constructed on the west side of a fairly level sidewalk or platform 20' in length. . . . This afforded an excellent resting place and was at a suitable elevation which provided an attractive view of the core area of the city.

The stairway was built with no motorized equipment. Nordholm writes:

Due to existing conditions it became obvious that all materials would have to be prepared on the summit of the bluff. An ingenious arrangement was constructed for the transportation of the mixed materials from the summit of the bluff to the spot where the project commenced A three-sided chute, about 36" wide and 18" high, was built along the entire length of the project and a concrete buggy, 30" x 24", was also built and equipped with about 15" steel wheels and front axle and only skids on the rear, to which was attached a steel cable and connected to a large winch mounted on the bluff summit. The purpose of the high wheels in front and only skids

on the rear of the buggy was to permit loading the buggy with such a load of mixed concrete as would maintain a proper level of material when descending the steep incline without unnecessary spillage. The crank on the winch was operated by two men who guided the descent of the concrete buggy in a slow and controlled movement. . . . After a given distance had been fine-graded and the form setters had completed their work, the mixed concrete material was then lowered from the summit to the point of construction where laborers would shovel the concrete from the cart into pails Carrying the material from the cart to the forms in pails was somewhat hazardous at such times as damp muddy ground conditions prevailed.

Nordholm explains that a method known as "two-coat" concrete was used. The lower layer in each form was a mixture of aggregate, cement, and water. After this layer set up, a thin finish coat mixture of screened sand, cement, and water was added. After the forms were removed, "all vertical surfaces such as step risers, retaining walls, settees, and light standards and benches" were covered with a plaster coat. The aggregate was hauled in wagons by a local dray line from a gravel pit in Wacouta Township (Nordholm 1978).

William Geisheker and Nels Nordholm. William J. Geisheker, longtime Red Wing City Engineer, designed the City Hospital Stairway. Geisheker, a career-long civil engineer, was born in lowa in 1871. Both he and his wife Mary, also an lowa native, were of German heritage. According to Red Wing city directories, Geisheker was Assistant City Engineer in 1909, Assistant Superintendent of the city water works in 1911, and soon City Engineer. About 1925 the family moved to Milwaukee where Geisheker worked as an engineer for the City. He is believed to have died in 1938 in Milwaukee at the age of 67.

Nels Nordholm was a longtime Red Wing building contractor and a "highly esteemed resident of Red Wing for more than 44 years," according to a local obituary. Nordholm was born in Skane, Sweden in 1856. In 1882 he and Hannah Olson were married in Sweden; the same year they moved to Red Wing. Nordholm's obituary cites the Hospital Stairway among a few of his works listed by name, calling them a testament to "his ability and splendid workmanship." Nordholm retired around 1924. He died in October of 1926 (RW Daily Republican, Nov. 1, 1926).

Red Wing City Hospital. See the Red Wing City Hospital, which was inventoried separately (RC-RWC-277).

Public Staircases. The Red Wing City Hospital Stairway was built before automobiles became commonplace for in-town transportation in Red Wing, and is a significant example of preautomobile transportation infrastructure in the community. It is the longest, most intact early public stairway in Red Wing and is also one of the longest and most intact public staircases of its age in Minnesota.

In 1920, two years after the structure was completed, Red Wing had 8,600 residents and only 600 cars (Angell 1977: 293).

Public staircases were common in hilly cities in Minnesota and across the country. Some were first built by private parties, with responsibility eventually assumed by the municipality. Many began as wooden structures eventually rebuilt with concrete. In many cities aging steps were rebuilt by New Deal work relief crews in the 1930s. In most places public stairways were considered part of a city's essential public infrastructure (Regan 2004; DuSablon 1998; Sturdevant April 10, 2013).

Walking was historically the principal way Americans moved through the cities in which they lived. Public transportation systems eventually developed in large cities, but walking remained the most economical alternative, particularly for the working class. Public staircases allowed city workers to walk to jobs in factories, stores, and offices, and/or linked residents with downtown shopping and other facilities (Regan 2004; DuSablon 1998; Sturdevant April 10, 2013).

The use of automobile for in-town travel did not become widespread in Red Wing and other American cities until after World War II.

In the early 20th century the adoption of the automobile by middle class families was slow, in part because of cost, because of the unreliability of the machines, and because of the poor condition of the nation's roads – terrain that was much easier for a horse than an automobile to navigate. The cost of autos came down between 1905 and 1915 as Henry Ford's factory assembly lines made production more efficient; in 1926 a Model-T Ford cost about one-third the 1913 price (Morain 1988: 109-112, 114-115).

World War I (1914-1918) restricted the use of automobiles and tires by civilians. The nationwide crash of farm prices at the end of World War I launched a decade of financial hardship for farmers (and farming towns) that continued through the 1920s and bled into the Great Depression of the 1930s. Gas and tire rationing during World War II continued to curtail the use of cars, and it was not until after the war that car ownership skyrocketed in the Midwest. Even after cars became widespread, however, they were still relatively expensive, less available to the working class, and generally limited to one per family. Walking remained an important means of in-town transportation, particularly for reasonably short trips.

Red Wing's Public Stairways. Red Wing's principal commercial and industrial areas developed in a low-lying, approximately four-block-wide corridor along the Mississippi River where businesses had ready access to steamboats, railroads, and a highway. The city's first residential neighborhoods were also located on this floodplain, but soon streets and houses began to be built on the sides of the bluffs and ravines. The pervasive hills provided dramatic views for potential buildings, but also presented difficulties for transportation and construction.

The broadest of the bluffs near central Red Wing is College Hill whose summit, at about 900' above sea level, rises about 220' above the surface of the Mississippi River. Below the Hospital Stairway, Fourth Street runs along the lower slope of the bluff. Above this part of Fourth Street, the side of the hill is generally too steep for construction. Early plat maps show segments of several streets such as Pine, Hill, and Franklin that appear to climb the steep side of College Hill but exist only on paper.

By the time the concrete Hospital Stairway was built in 1918, there was a fairly large and still-growing residential neighborhood on top of College Hill. The Hospital Stairway was used routinely by these residents, as well as serving those who worked at, or visited, the hospital.

The Hospital Stairway is the longest, most intact early public stairway in Red Wing. Red Wing had at least six public staircases, all concrete: four on College Hill, one on Sorin's Bluff, and one on Barn Bluff. Two of these have been demolished: a set of steps on the flank of Sorin's Bluff (remnants may remain; Gemini did not investigate) and the Harrison Street Stairway on College Hill about 4,000' west of the Hospital Stairway (Gemini found no remnant).

Extant public staircases, in addition to the Red Wing City Hospital Stairway, include:

College Avenue Stairway. This circa 1915 cast-in-place concrete staircase is located on College Avenue, about 1,700' east of the Hospital Stairway. (The steps are just east of Seminary Nursing Home.) The S-shaped staircase has about 69 steps, a simple pipe handrail, and simple landings. It has two polygonal concrete lamp standards that match those on the Hospital Stairway. The staircase was built to climb the "back" (or southeast) side of College Hill between College Avenue and the former Red Wing Collegiate Institute or Red Wing Seminary.

Buchanan Street Stairway. This cast-in-place staircase of unknown age (perhaps circa 1920) is located about 2,100' west/northwest of the Hospital Stairway. It extends from Fourth Street down part of College Hill. It is aligned with, or serves as, the public right-of-way for Buchanan Street, which exists only on paper at this location because of the very steep hill. The staircase is about 90' long and comprised of about 60 steps. North of the staircase is a modern pedestrian underpass continues the Buchanan Street walkway under present-day Highway 61.

Citizens Memorial Stairway (partly razed; see inventory form for Barn Bluff, GD-RWC-280, for photos). Citizens Memorial Stairway was built on the western end of Barn Bluff in 1929. It was about 310' long with about 450 precast steps. It had several concrete landings, some of which were elaborate. Most of the staircase was razed in 1958 when the Eisenhower Bridge (Bridge 9040) was under construction, but remnants remain. (See the inventory of Barn Bluff, GD-RWC-280.)

Public Stairways in Other Cities in Minnesota. Stillwater has several early public staircases that link hilltop residential neighborhoods with downtown Stillwater and nearby factories close to the river. The earliest staircase is believed to have been built in 1857. The three most well-known extant staircases, all built of concrete, are the Main Street Stairs (the longest with 157 steps); the Chestnut Street Stairs (120 steps); and the Pioneer Park Stairs (possibly 122 steps) (Hatalla 2011; Divine 2013; Ryan May 20, 2013). Stillwater's staircases have been repaired and reconstructed by the city through the years. Gemini Research did not visit them or investigate their historical integrity.

St. Paul has an estimated 90 sets of public steps, perhaps the most in the state (Sturdevant April 17, 2013). Significant concrete staircases include: Grand Hill (81 steps); Grand Avenue to Ramsey Street (29 steps); Ramsey Street to Summit Avenue (55 steps); and Walnut Street (125 steps) (Ryan May 11, 2013; Sturdevant April 17, 2013). Gemini Research did not visit any of the steps and their historical integrity is not known. Many have likely been reconstructed through time.

Public Stairways in Other Cities Nationwide. Pittsburgh evidently has the most public staircases among U.S. cities with more than 700 sets, but hilly cities such as Cincinnati, Los Angeles, Portland, San Francisco, and Seattle each have hundreds of public staircases, most of them concrete (Regan 2004; Beyerlein; DuSablon 1998; Leonard and Collins 2010).

Geographer Bob Regan writes of steps in Pittsburgh's West End neighborhood, "It must have been a workout to traverse these steps at any time, let along at the end of a 12-hour day. Undoubtedly it would have been easier if the mills were on the high ground and the homes on the lowland as then the journey at the end of the day would have been down hill and not up" (Regan 2004: 115).

Regan quotes a 1937 newspaper article about Pittsburgh in which the columnist wrote, "There are nearly 13 miles of city-owned steps in Pittsburgh, going up the mountainsides. The well-to-

do people drive to work. The medium people go on streetcars and 'inclines', which is what they call those cable cars. And the poor people walk up the steps" (Regan 2004: xvi).

Recommendation

The Red Wing City Hospital Stairway is an impressive, roughly-750'-long, Neoclassical Revival style, poured concrete public stairway built in 1918. The stairway replaced a wooden version in the same location and was built to continue access between Red Wing City Hospital, which had been located on the upper edge of the College Hill bluff since 1889, and a significant part of the city, including the downtown, located at lower elevations.

The Hospital Stairway was built before automobiles became commonplace for in-town transportation in Red Wing, and is a significant example of pre-automobile transportation infrastructure in the community. It is the longest, most intact early public stairway in Red Wing and is also one of the longest and most intact public staircases of its age in Minnesota.

It is recommended the Hospital Stairway meets National Register Criterion C (type, period, and method of construction) in the area of Engineering as an excellent and intact example of an unusually long, early 20th century, cast-in-place public staircase with a complex design. It is recommended the property also meets National Register Criterion A (broad patterns of history) in the area of Community Planning and Development as a significant example of pre-automobile transportation infrastructure in Red Wing; as the longest, most intact early public stairway in Red Wing; and one of the longest and most intact public staircases of its age in Minnesota.

The recommended period of significance is 1918-1950. The level of significance is Local. The recommended boundaries of the National Register-eligible property are shown on the sketch map.

Approximately 25% of the National Register-eligible property, including the lower portion of the staircase, is also located within the boundary of the National Register-listed Red Wing Residential Historic District (GD-RWC-022). (See the district.)

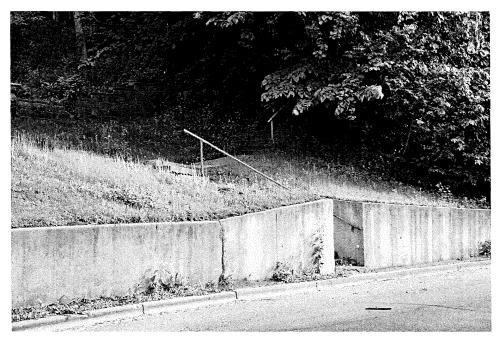


Fig. 220. ca.1162 Oak St. Red Wing City Hospital Stairway, bottom of the stairway at 4th Street W (facing SW)



Fig. 221. ca.1162 Oak St. Red Wing City Hospital Stairway, approaching Landing 6 with Landing 4 in foreground and Landing 5 at center; note original or early handrail (facing SW)



Fig. 222. ca.1162 Oak St. Red Wing City Hospital Stairway, simple L-shaped concrete bench at Landing 6 (facing SW)



Fig. 223. ca.1162 Oak St. Red Wing City Hospital Stairway, polygonal lamp standard with cast iron lamp pole at Landing 6 (facing N)



Fig. 224. ca.1162 Oak St. Red Wing City Hospital Stairway, lamp standard at the north end of Landing 7 (facing SE)



Fig. 225. ca.1162 Oak St. Red Wing City Hospital Stairway, Landing 7 with cobblestone retaining wall, bench, inscription on floor (at right) (facing NW)



Fig. 226. ca.1162 Oak St. Red Wing City Hospital Stairway, leaving Landing 7 for the next run of steps (facing SE)



Fig. 227. ca.1162 Oak St. Red Wing City Hospital Stairway, long curving run approaching Landing 8 (facing S)

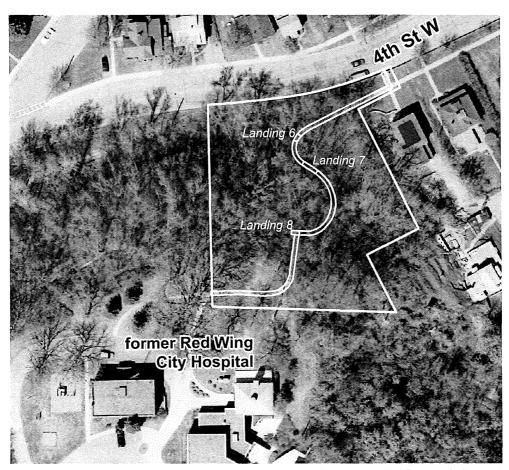


Fig. 228. ca.1162 Oak St. Red Wing City Hospital Stairway, Landing 8 with lamp standard; leading left from the landing is a footpath along the edge of the bluff (facing N)



Fig. 229. ca.1162 Oak St. Red Wing City Hospital Stairway, sidewalk heading toward hospital buildings (facing SW)





Prep by Gemini Research 12-2013



boundary of National Register eligible property

GD-RWC-1439 401 Plum St

Hist Name: First National Bank of Red Wing

Other Name: Wells Fargo Bank

Built: 1967 NR Status: Eligible

The former First National Bank, completed in 1967, is located at the southeastern corner of Plum and Fourth streets in downtown Red Wing. The building is two stories tall with a dramatic, sculptural, blocky form. It was constructed with steel, brick, and concrete and has a footprint of 100' by 70'. The exterior has a smooth surface of dark brown brick with few windows and little, if any, ornamentation. The structure seems self-contained, with little visual reference to surrounding buildings or landscapes. The Modernist design contrasts strongly with nearby downtown buildings constructed in the late 19th and early 20th centuries.

An example of the Brutalist style, the building has a massive feel with the second story projecting over the first. The second story is separated from the first by a smooth white stucco-covered band that contrasts with the dark brick. Architect Lonnie Adkins chose two types of brick for the exterior to create a textural difference between the stories. For the first story he selected a solid brown brick laid vertically with staggered vertical joints and with the bed face exposed to create a wider appearance. A different type of brown brick was selected for the second story, laid in a Swedish bond consisting of two stretchers followed by one header.

On the three principal facades (north, west, and south), the second-story window openings appear as cut outs, or voids, in the massing. The first-story windows are flush with the exterior walls. Most windows have aluminum frames that appear to be original. Many first-story windows have small, sliding, screened sashes about 4' from the ground. A mechanical penthouse faced with perforated brick projects from the roof and is only visible from the rear of the building.

The main entrance is on the northern facade. This entrance is approached by a pedestrian sidewalk, while the southern (secondary) entrance is approached by a fairly large bituminous parking area. Extending from the eastern side of the building is a series of five drive-through banking lanes covered by a canopy that is also faced with dark brown brick. The two lanes closest to the teller window are original, the third lane was originally planned but not added until 1989, and the final two lanes were added more recently. The auto-bank expansion appears to be the bank's only substantial exterior alteration.

The interior of the first floor is largely one open space that extends the entire length of the building from east to west. The teller windows are arranged in a row along the eastern wall, while most of the room is occupied by the desks of banking staff. Coverage in the *Daily Republican Eagle* assured customers concerned about the open plan that private conference areas would be available for confidential business (*RW Daily Republican Eagle*, May 15, 1967).

First-floor areas requiring full partition walls were located along the northern and southern elevations. They include the stairwells, restrooms, the vault, teller work area, a conference room, and the president's office. The northern and southern foyers, the first-floor interior walls, and the stairwells are faced with brown brick. A walk-up teller window and night depository are located in the northern foyer.

The second floor was designed with a board room, bookkeeping department, storage areas, restrooms, and mechanical space. Also included was a community room, a feature which would

help promote engagement with the customer and the community. The community room is now an employee break room.

There have been few exterior changes to the bank. The newer exterior signage for the current Wells Fargo Bank is positioned in the same location as the original signage and is only slightly larger. The northern and southern entrance doors (with sidelights) appear to have been replaced with doors similar to the originals. The most significant change has been the modification and expansion of the auto-bank. The brick used in the expansion is nearly identical to the original brick, minimizing the visual impact of the change.

Similarly, there have been few substantive changes to the interior. A number of glass-sided work stations have been added to the first floor open area. This change does not eliminate the open feel of the interior and is reversible. Some interior walls have been moved on the second floor. Overall, the First National Bank retains high integrity.

The site boundaries (see sketch map) include the parcel in use in 1967. According to a newspaper article at the bank's completion, "The architect's placement of the bank structure upon the building lot allows for nearly a half block of parking area which accommodates 25 cars. It addition, it had to permit easy access to the two present auto-teller stations and allow potential expansion to a third teller station when needed" (RW Daily Republican Eagle, May 15, 1967).

Historical Background

Material housed in the archives of architect Lonnie Adkins' St. Paul architectural firm, now known as The Adkins Association, was a key source for the information summarized below. See the full inventory form for additional information, construction details, and historical background.

The First National Bank of Red Wing was designed by St. Paul architect Lonnie O. Adkins and built in 1966-1967 by Steenberg Construction Company, also of St. Paul.

Red Wing's First National Bank – 102 years old in 1967 – had been organized in June of 1865 by six businessmen, five of whom lived in Red Wing. The bank occupied two successive buildings in downtown Red Wing before it purchased a competing bank in 1936 and moved into that bank's quarters on the main floor of the St. James Hotel on Main Street (see GD-RWC-004). The First National Bank remained the principal storefront tenant of the St. James Hotel for just over 30 years until April 1967.

Arthur Lillyblad, a member of the bank's Board of Directors and owner of the St. James Hotel, entered early discussions with St. Paul architect Lonnie Adkins in July 1963. The bank was seeking larger quarters and the hotel wanted to expand into the space occupied by the bank.

By May 1965 the bank had purchased property at the intersection of Fourth and Plum streets and Lonnie Adkins signed a contract to design the building. The *Daily Republican Eagle* wrote, "The new facility will be the first built specifically to house a bank within the city since the Goodhue County National put up its building in 1905" (*RW Daily Republican Eagle*, July 26, 1965).

The final plans are dated May 20, 1966. By this time Robert Jackels had joined the Adkins firm and drawings for the bank bear the name Adkins-Jackels Associates. Documents in the firm's archives, however, clearly attribute the design of the building to Adkins.

The bank's Brutalist style created a dramatic contemporary statement that clearly separated the new building from traditional banks while conveying an image of both stability and modernism. The design features and modern technologies incorporated in the interior were perhaps even more important. The open plan had almost no physical barriers between the customer and the employee, projecting an image that was both inviting and accessible and which contrasted with the formidable interiors of traditional prewar banks. The walk-up teller window, night depository, and auto-bank facilitated efficiency and convenience and signaled the modern focus on customer service characteristic of the type.

On May 15, 1967, the *Daily Republican Eagle* featured a special five-page insert on the new bank. It included a drawing and photos of the building, a schedule of events for a four-day open house, photos of directors and staff, and descriptions of special design features. The bank was described as follows:

'Architectural Plan Embodies New Design Innovations.' In developing the design concept for the new bank building, architects of the firm of Adkins-Jackels Associates, Inc., sought to carry out a feeling of imaginative 'soundness' and 'newness.'

The philosophy that evolved the exterior expression of the building was one in which the solid character of the institution was portrayed, yet expressed in a manner which was representative of today's modern technology. Without impairing the solidarity character, it provides a pleasing environment for the most modern of banking procedures. . . . (RW Daily Republican Eagle, May 15, 1967).

Among the modern features and services that the bank now provided were a teller window in the entrance lobby – with extended hours so that a transaction could be completed without having to enter the bank proper, a night depository, a private conference area available for personal consultation, and the auto-bank. Instructions and a diagram for using the auto-bank were also included in the newspaper, which were prefaced with the following:

Have you been just a trifle hesitant about doing your banking from the comfort of your car? There's a natural hesitation about this – hardly seems that banking can have reached such a level of convenience. Be reluctant no longer! Follow a typical customer as he turns into the traffic lane from Plum Street.

The ability of tellers to handle multiple transactions with "one-stop service" was also described and contrasted with banks without such services:

The new modern lines of the First National Bank symbolize the new streamlined service provided by each of the friendly tellers.

[Our new customers are] sometimes surprised to see how Full Service Banking has become concentrated right at each teller's window.

Our new bank has been planned around this concept of streamlining customer services in order to save time and steps for every customer, yet making every bank official readily accessible for specialized financial services.

Even the off-street parking was described, a feature that distinguished modern banks of the period from older banks "landlocked" in downtown locations without parking lots:

Yes, there is an ALL-NEW LOOK to banking at First National Bank. If your business requires meeting with a bank official, you simply park your car in one of the 25 handy parking spaces and stroll into the bank. There's no traffic congestion, no meter to pay. Join the happiness crowds – the folks who do their banking NOW at Fourth and Plum streets (*RW Daily Republican Eagle*, May 15, 1967).

The day the new bank opened, the Daily Republican Eagle editorialized:

These are tremendously impressive new quarters, as visitors are already discovering. . . . [This] is not simply another grand opening of another Red Wing business which has improved its quarters. Banks are so deeply involved in a community's economic life – progressive banks are so important to sound economic growth – that we think the new First National is fairly regarded as a civic event of substantial importance for Red Wing's future (*RW Daily Republican Eagle*, April 24, 1967).

In 1974 the First National Bank became the First Northwestern National Bank of Red Wing. In 1983 it became Norwest Bank of Red Wing. Norwest Bank was acquired by Wells Fargo Bank in July 2000.

Modernism and the Bank. Completed in 1967, the First National Bank of Red Wing does not fit within the chronological parameters of a recent statewide Minnesota historic context, "Banks of Minnesota, 1853-1960," completed for the State Historic Preservation Office (Gardner 2011). However, the banking context does provide good information on traditional banks in Minnesota for comparison with the architecture and design elements of Red Wing's First National Bank and other Modernist banks described below.

The First National Bank of Red Wing chose a Modernist design for its 1967 headquarters. This was common for banks nationwide during the post-World War II period, according to historians Carol Dyson and Anthony Rubano in a comprehensive contextual study published by the National Park Service and entitled "Banking on the Future: Modernism and the Local Bank" (Dyson and Rubano 2000). The text discusses historical contexts from which modern banks emerged, describes important characteristics and architectural features of modern banks, and provides a framework for evaluating the significance of these buildings.

The authors explain that prior to World War II banks were typically highly traditional buildings with designs influenced by classical architecture. Yet suddenly in the mid-20th century the banking industry transformed its architectural iconography from classicist to Modernist. According to the authors, "banks embraced new nontraditional vocabularies more easily than did some less conservative building types. New materials, technology, and design were used to symbolize the seemingly divergent expressions of stability and progressivism. Banks were modernized on Main Street or built in new suburbs to make dramatic contemporary statements" (Dyson and Rubano 2000: 2.43).

Within 20 short years from 1935 to 1955 the banking industry moved from a staid conservative business into a highly competitive mass-marketed industry, enthusiastically selling new services with convenience and efficiency, according to the authors. Bank buildings were transformed from dark, ornate, awe-inspiring temples guarded by a prestigious banker to open, glassy stores, incorporating the newest technologies, aesthetics, and materials, and inviting to all.

Dyson and Rubano summarize a banking industry viewpoint that contemporary design "symbolized up-to-date thinking and modern methods." The authors explain that many new

banks incorporated new technologies such as efficient drive-up windows, an element whose equipment was perfected in the 1950s. Modern bank interiors were designed with an "open, hence modern, feel" to accommodate increasing numbers of customers in a growing postwar economy. Bank officers were given desks "separated from the banking floor only by a railing" rather than being hidden away in closed offices (Dyson and Rubano 2000: 2.45-2.46).

A major impetus for the changes was the catastrophic bank failures of the Great Depression. The banking industry knew it had to rebuild its image and provide more efficiency and courtesy to customers. Dyson and Rubano explain:

Despite their unassailable appearance, the temples of the past had failed the public, who now understood that it was not the banks, but governmental intervention that had stabilized and secured the industry. By moving to a more modern design, bankers reinforced a new, more accessible, and progressive image, while disassociating themselves from the institutions many blamed for the Depression (Dyson and Rubano 2000: 2.44).

After a slump during the Depression bank construction resumed in the late 1930s. Dyson and Rubano explain that these new banks were often built in the Streamlined Moderne style. Since the style was classically based, the most significant change from the traditional bank occurred on the interior where floor plans became increasingly open and teller cages were reduced in size or eliminated. After World War II the fiscal and housing boom resulted in unprecedented growth for the banking industry. In order to capture this growth, a bank had to be as appealing as possible and could not risk being perceived as stuffy and outdated. The best way to attract customers to your bank was to sell friendly convenience.

Banking journals encouraged bankers to "merchandise their services" and design banks that were open, friendly, warm, and unimposing with a minimum of obstructions between the customer and the bank's representative. Modern design was also linked with efficiency and economy. A 1950 survey of modernized banks revealed that their deposits increased more than 33 percent above those of commercial banks as a whole. Ninety-six percent of bankers reported improved customer relations. The mid-century fascination with new technology also meshed nicely with the convenience and service orientation of the modern bank. The latest in drive-up window equipment, accounting technology, automation, expanded business hours, and vault-door design were all part of banks' new efficiency. Tellers were brought to the customers in "walk-up windows." Pedestrians could now transact business without even entering the building. However, the most bankable convenience of the period was the drive-up window, which saved time and eliminated parking problems – and there was no standing in line with restless children (Dyson and Rubano 2000: 2.45-2.46).

Interiors were given an open and modern feel. Only low counters separated the tellers from the customers, replacing the foreboding grillwork of prior years. Bank officers were now accessible on the banking floor rather than being hidden in closed offices. There was an effort to create a warm, bright atmosphere.

The most famous postwar Modernist bank was the Midtown Manhattan branch of Manufacturers Trust built in 1954 by Skidmore Owings and Merrill. The building was a clear glass box filled with luminous ceiling panels. Whether due to Manufacturers' influence or Modernism in general, boxy, curtain-walled local banks increased in number in the mid-to-late-1950s. The vernacular Modern bank had become a compact, asymmetrical composition of masonry volumes and glass curtain walls locked together by a flat planar roof edged with aluminum. Occasionally screen

block or anodized aluminum grilles were used. Around 1960 banks began to experiment with more unusual forms. Banks with tilted roof planes and exaggerated geometries began to make their appearance. Futuristic banks coincided with a trend towards more structural expression. Circular banks swept the country and by the mid-1960s bank buildings appeared with oval, diamond-shaped, hyperbolic paraboloid, and folded-plate designs. While seemingly odd to see such unconventional forms used on bank buildings, their use was a continuation of the industry's push towards popular appeal. One California banker remarked that unusual bank buildings naturally attracted more money (Dyson and Rubano 2000: 2.47-2.49).

Not all banks of the 1960s were futuristic. Curtain wall, masonry, or concrete boxes were still common but were now relieved by arches and cutouts, bronze anodized aluminum trim, and massive roof volumes. One bank style – the Colonial Revival – never stopped being built. But the variety and vitality of the experimental 1960s forms proclaimed more exuberantly than did any other phase of bank design that the reserved, historicist bank of the past was gone forever (Dyson and Rubano 2000: 2.49).

The National Park Service's study of the modern bank concludes by noting that mid-century banks used architecture to contribute to a richly progressive modernist vision in communities across the country. The study establishes that these buildings are worthy of documentation, evaluation, recognition, and preservation and cautions that many Modernist banks across the country have been demolished or are currently threatened (Dyson and Rubano 2000: 2.52).

Some of Minnesota's large-scale Modernist banks have been preserved and retain good integrity, while others have been demolished. The Farmers and Mechanics Bank and Tower (1942/1963) and the First National Bank (1959), are both located downtown Minneapolis. Farmers and Merchants is listed on the National Register. Smaller banks include the State Capitol Credit Union in Minneapolis (1964, now a public library) and the Farm Credit Bank in St. Paul (1967). Both retain good integrity. Striking and iconic examples of Modernist banks in Minnesota were the Twin Cities' series of glass-walled, circular Midwest Federal Banks. Nearly all have been demolished. (One stands on Olson Memorial Highway in Golden Valley, now a retail lighting store). Other examples of Modernist bank design include a Wrightian style bank in St. Anthony Park (razed), and a distinctive Modernist bank at Snelling and University avenues in St. Paul.

Architect Lonnie O. Adkins. The First National Bank in Red Wing was the largest and most important commercial project of St. Paul architect Lonnie O. Adkins.

Adkins (1924-1971) was born in Tulsa, Oklahoma, and graduated from Booker T. Washington High School. He earned a bachelor's degree from Hampton Institute in Virginia and bachelor's and master's degrees in Architectural Engineering from the University of Illinois. (A current initiative at the University of Illinois is highlighting the School of Architecture's African-American alumni. An article on that effort notes that the University of Illinois has trained more African-American architects than any university in the United States except for the historically black colleges and universities (Mitchell 2006).)

Adkins moved to St. Paul in the early 1950s and worked for the architectural firm Haarstick, Lundgren and Associates. In 1957 he formed Adkins and Johnson Architects and Engineers with O. Reuben Johnson, who held degrees from the University of Minnesota and MIT. In 1959 Frank Mikutowski joined the firm and the partnership became known as Adkins, Johnson, and Mikutowski Architects and Engineers. By 1961 the firm was known as Adkins Associates. In 1966 Robert Jackels joined the firm, which was then known as Adkins-Jackels Associates. In 1974 the firm became known as The Adkins Association. It still exists under that name today.

The Adkins and Johnson partnership focused on the design of churches including Redeemer Lutheran Church in Fridley, All Saints Lutheran Church in Glen Lake (Minnetonka), St. Timothy's Lutheran Church in Columbia Heights, and Christ Lutheran Church in Blaine. Johnson was the son of a Lutheran minister and Adkins was also active in the Lutheran Church. It is likely that these connections led to their significant number of church commissions, the majority of which were Lutheran churches.

Adkins and Johnson were given national attention in 1960 when they received an award from *Progressive Architecture* magazine, a national publication, for their design of an elementary school in Stewartville, Minnesota. The jury commended the simplicity of form and compactness of the plan (*Progressive Architecture* Jan. 1960: 140-141).

Reuben Johnson left the partnership in 1960 when he was offered the position of St. Paul City Architect. Adkins and his subsequent partners continued to focus on church architecture. One particularly large project was Augustana Lutheran Church in Fergus Falls, which was featured in *Northwest Architect*, a Minnesota publication (*Northwest Architect* March-April 1967: 32-33).

Lonnie Adkins designed the Hallie Q. Brown/Martin Luther King Center in St. Paul, and the firm designed the Martin Luther King Park and Community Center in Milwaukee.

The Adkins firm was also involved in a number of public housing projects. The company received few commercial commissions. The First National Bank in Red Wing was their largest and most important commercial project.

Adkins was also an important community leader. He worked to ensure that blacks were given employment opportunities and particularly the opportunity to learn skills needed for employment in the construction industry. According to Burnell Olson, the current president of The Adkins Association, Lonnie Adkins provided many black architects with their first employment opportunity by hiring them at the firm (Olson Burnell Olson interview with Rolf Anderson Aug. 12, 2013).

Adkins was also president of the St. Paul Urban League, a board member of the National Urban League, and served on the executive board of the Minnesota Synod of the Lutheran Church in America.

Lonnie Adkins died unexpectedly in 1971 at age 48. In an article in *Northwest Architect* soon after Adkins' death, art critic Linda Hoeschler wrote:

Lonnie O. Adkins was not only a designer of buildings, but an architect in the fullest sense, a designer of human environments. His accomplishments were drafted not only on his architectural drawing board, but also on his more expansive drawing board – the Twin Cities Community. . . .

Mr. Adkins' basic goal in affecting human environments was to break down the barriers confronting blacks economically and socially. . . .

Lonnie Adkins' concern for his clients and his community, his perspective as a black professional made it a necessity that he unify the goals of architecture with the needs of society (Hoeschler 1971: 316-317).

African American Architectural Firms in Minnesota. Lonnie O. Adkins established his architectural practice in a time when there were only a small number of African American architects practicing in Minnesota and few who owned their own firms. The First National Bank of Red Wing represented an important project for the firm and was the largest of Adkins' commercial commissions.

One of Minnesota's most prominent African American architects was Clarence ("CAP") Wigington, who was the first registered African American architect in Minnesota and the first African American municipal architect in the nation. Wigington retired from the City of St. Paul in 1949 and practices in the city until 1963 (Taylor 2001: 45-49).

Architectural historian Alan Lathrop commented that there were "a few" black-owned firms in Minnesota in the 1960s and that their numbers most likely increased after the Civil Rights Movement gained momentum in the 1960s and 1970s. In addition to Adkins and Wigington, another important African American architect in the Twin Cities during this period was Lorenzo ("Pete") Williams. In 1962 he formed the Williams/O'Brien Associates with James O'Brien, a partnership that lasted 37 years until Williams retired in 1999 (Lathrop 2013). Another African American with his own practice was Jay Tyson. Like Lonnie Adkins, Tyson received a master's degree in architectural engineering from the University of Illinois. He moved to Minneapolis in 1953 and worked for a number of firms before establishing his own practice in 1977. He retired in the late 1990s (Lathrop 2010: 218). The Twin Cities also had several African American architects who, like Lonnie Adkins, would partner with non-African Americans.

In his book on CAP Wigington, historian David V. Taylor describes the general climate of segregation and discrimination faced by the black community during Wigington's era (Taylor 2001: 56-69). Lonnie Adkins also faced issues which were recounted by his wife, Alpha Adkins. When he first arrived in the Twin Cities with a master's degree, he needed many months before he could find a job. Then in 1963-1964 he spent 18 months trying to find a home for his family outside the "ghetto" area of St. Paul. He was thwarted on several occasions including once when a home was sold for less than Adkins offered. He finally bought a house at 2137 Juno Avenue in St. Paul. Adkins also witnessed the exclusion of blacks from the building trades (Hoeschler 1971: 316; Protzman 1971).

Recent scholarship continues to confirm that African American architects remain underrepresented in the architecture profession compared with other fields such as law or medicine. An historic lack of African-American businesses with sufficient capital to build new buildings is offered as one factor. The Crisis of the African-American Architect: Conflicting Cultures of Architecture and (Black) Power (2002) by Melvin L. Mitchell, FAIA, provides important contextual information on the topic. Designing for Diversity: Gender, Race, and Ethnicity in the Architectural Profession (2001) by Kathryn H. Anthony describes the hurdles that minorities and women continue to face in the architecture profession.

Recommendation

The First National Bank of Red Wing was designed by St. Paul architect Lonnie O. Adkins and built in 1966-1967 by Steenberg Construction Company, also of St. Paul. The property retains strong historic integrity. At the time of this writing (2014) the bank is less than 50 years old (a requirement of National Register eligibility), but it will be 50 years old by 2018 when the Red Wing Bridge Project, for which this cultural resources survey is being conducted, is scheduled to begin construction.

The First National Bank of Red Wing does not fall within the chronological parameters of the statewide historic context entitled "Banks of Minnesota, 1853-1960" (Gardner 2011). If it were to fall within the context's parameters, the bank may well meet the MPDFÆs Registration Requirements for National Register Criterion C (architecture), which state: "A bank may be eligible for listing in the National Register under Criterion C if it reflects the characteristics of a particular architectural style or method of construction. . . . For a bank to be eligible for the National Register for its architecture, it must be a distinctive example of the style. . . . Additionally, a bank may be eligible for the National Register under Criterion C if it is a notable example of the work of an architect or builder significant to our past" (Gardner 2011: F.8).

Gemini Research recommends that the First National Bank, designed by Lonnie O. Adkins, meets National Register Criterion C (type, period, and method of construction) in the area of Architecture. The building was the first new full-service bank constructed in Red Wing since 1905, signaling a new era for community banking both functionally and architecturally. The bank is a well preserved example of a modern postwar bank incorporating all key design features that characterized the property type and are described in a National Park Service contextual document.

While further contextual research is needed to explore and confirm this aspect of significance, the bank may also be eligible under Criterion C as a significant work by Lonnie Adkins, an important African American architect and community leader in Minnesota. Adkins established his practice in a time when there were only a small number of African American architects practicing in Minnesota and few who owned their own firm. The First National Bank represented an important project for Adkins and was the largest of his few commercial commissions.

The recommended period of significance is 1967, the year the bank was completed. The level of significance is State. The recommended boundaries of the National Register-eligible property are shown on the sketch map.



Fig. 230. 401 Plum St. First National Bank of Red Wing, main (north) facade at left and west facade at right (facing E)



Fig. 231. 401 Plum St. First National Bank of Red Wing, west facade (facing N)



Fig. 232. 401 Plum St. First National Bank of Red Wing, south facade and parking lot (facing NW)

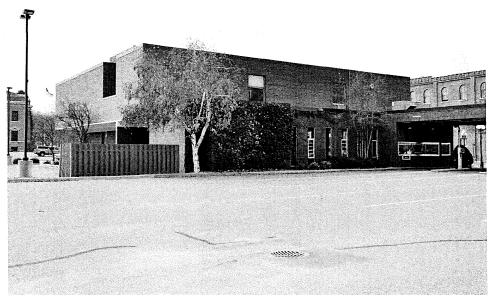


Fig. 233. 401 Plum St. First National Bank of Red Wing, east facade with drive-through at right (facing W)



Fig. 234. 401 Plum St. First National Bank of Red Wing, south side of drive-though (facing W)

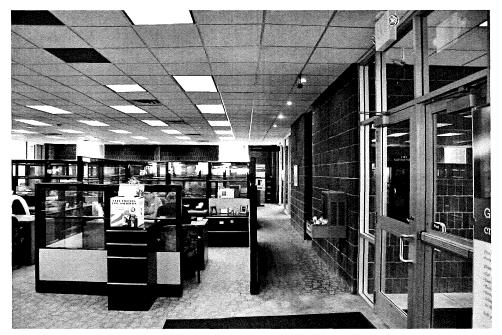
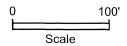


Fig. 235. 401 Plum St. First National Bank of Red Wing, main banking floor with main (north) entrance at right (facing NE)





Prep by Gemini Research 12-2013





PHASE II RESEARCH RESULTS: RECOMMENDED INELIGIBLE FOR THE NATIONAL REGISTER

Chapters 7 and 8 of this report describe the findings of Gemini Research's Phase II research and evaluation of 29 properties identified in Phase I as meriting or requiring further research and analysis to determine or clarify their National Register eligibility.

Gemini Research assessed the National Register eligibility of the properties using National Register evaluation criteria (36 CFR 60.4) and applicable state and local historic contexts.

Chapter 8 describes the 20 properties Gemini recommends are not eligible for the National Register. Chapter 7 describes the 9 properties recommended eligible. (Twenty-nine properties were evaluated, rather than 28 as identified in Phase I, because in Phase II Gemini separated the Red Wing City Hospital (GD-RWC-1438) and the Red Wing City Hospital Stairway (GD-RWC-1423) into two inventoried properties.)

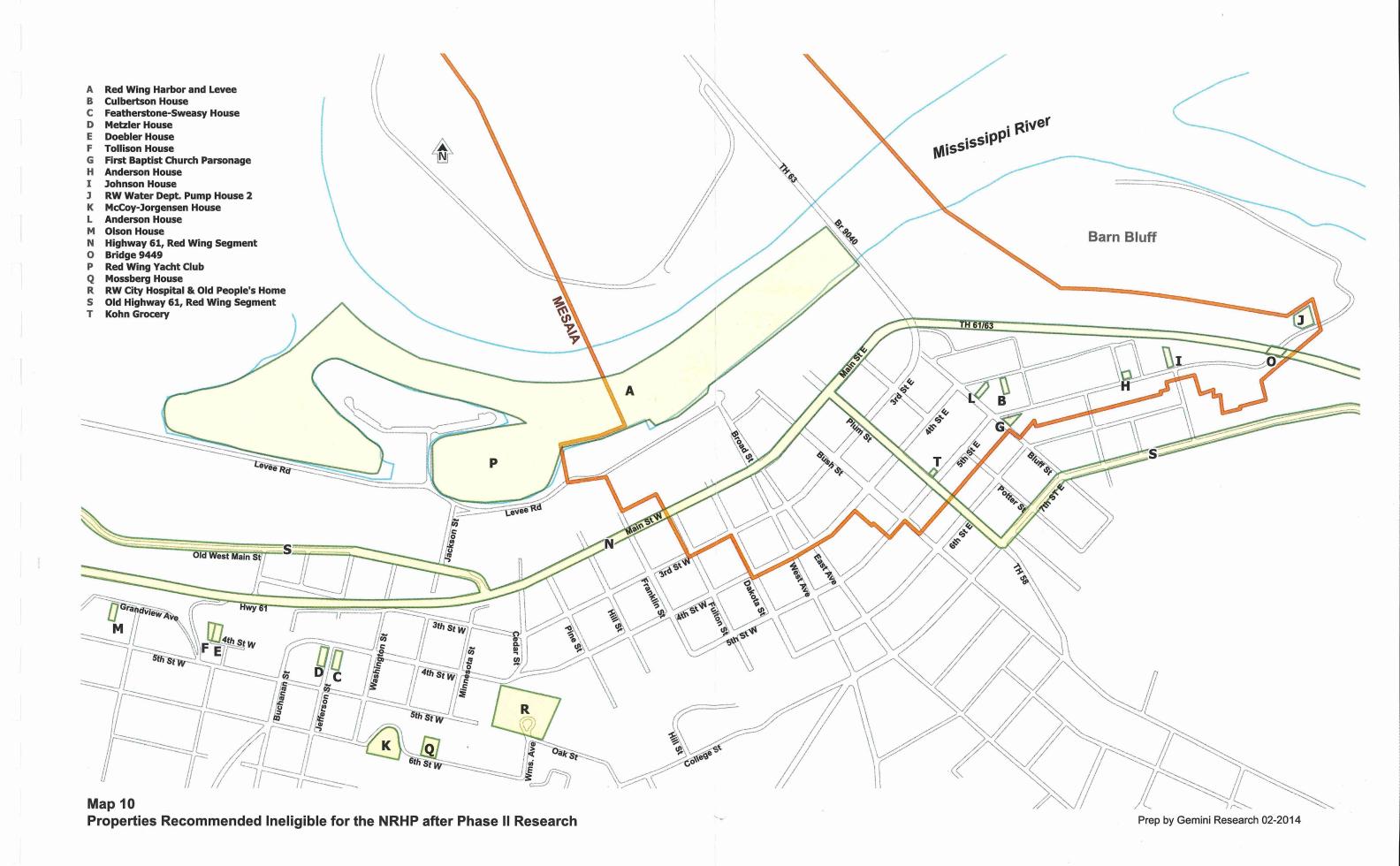
The 20 properties recommended ineligible are listed on the table below, in order by street address. The findings of the Phase II research on each site follow. More information and photographs are available on the individual inventory forms. Locations are marked on Map 10 in this chapter.

Table 17. Properties Recommended Ineligible for the National Register After Phase II Research Properties are listed by street address.

SHPO Inv #	Address	Historic Name
GD-RWC-1424	Mississippi River	Red Wing Harbor and Levee ¹
GD-RWC-389	133 4th St. E	Culbertson House
GD-RWC-1397	1527 4th St. W	Featherstone-Sweasy House
GD-RWC-1398	1603 4th St. W	Metzler House
GD-RWC-1400	1759 4th St. W	Doebler House
GD-RWC-1401	1765 4th St. W	Tollison House
GD-RWC-425	103 5th St. E	First Baptist Church Parsonage
GD-RWC-457	304 5th St. E	Anderson House
GD-RWC-463	342 5th St. E	Johnson House
GD-RWC-1378	ca. 700 5th St. E	RW Water Dept. Pump House 2
GD-RWC-1408	1400 6th St. W	McCoy-Jorgensen House
GD-RWC-739	413 Bluff St.	Anderson House
GD-RWC-1454	1917 Grandview Ave	Olson House
GD-RWC-1448	Highway 61	Highway 61, Red Wing Segment ^{1 2}
GD-RWC-1453	ca. 500 Highway 61	Bridge 9449
GD-RWC-281	ca. 1300 Levee Rd.	Red Wing Yacht Club
GD-RWC-1436	526 Minnesota St.	Mossberg House
GD-RWC-1438	1166 Oak St.	RW City Hospital & Old People's Home
GD-RWC-1434	Old Main/Hwy 61/7th	Old Highway 61, Red Wing Segment 12
GD-RWC-1440	425 Plum St.	Kohn Grocery (Red Wing Laundry)

¹ Also in the Red Wing Mall Historic District (GD-RWC-001)

² Also in the Red Wing Commercial Historic District (GD-RWC-1451)



GD-RWC-1424 Mississippi River

Hist Name: Red Wing Harbor and Levee

Built: 1850s-1980s

NR Status: Not Individually Eligible

Contributing to Red Wing Mall Historic District

For the purposes of this inventory, the Red Wing Harbor and Levee is defined as extending for about 1.25 miles along the southern (western) bank of the Mississippi River from about Cleveland Street on the west, to the U.S. Highway 63 Bridge (Bridge 9040 or Eisenhower Bridge) on the east.

Since 1948 there have also been private and public docking facilities east of the bridge on the northeastern flank of the bluff, and farther east in Colvill Bay. Those areas are not included in the current inventory, which is focused on the architecture-history Area of Potential Effect for the Red Wing Bridge Project.

The Red Wing Harbor and Levee as defined above overlaps six other properties inventoried by Gemini Research: the Red Wing Segment of the Mississippi River Nine-Foot Channel (GD-RWC-1452); the Red Wing Yacht Club (GD-RWC-281); Burdick Grain Company Terminal Elevator (GD-RWC-1383); Levee Park (GD-RWC-111); the Red Wing Mall Historic District (GD-RWC-001); and Archer Daniels Midland (ADM) (GD-RWC-018 and GD-RWC-1450).

The Red Wing Harbor and Levee has historically been served by a street aligned close to the river called Levee Road, and by two railroads: the Chicago, Milwaukee, St. Paul, and Pacific (CMSTPP, now Canadian Pacific) (GD-RWC-1371) and the Chicago Great Western, whose tracks were south of the CMSTPP tracks. The CMSTPP Railroad Corridor has been determined eligible for the National Register as a linear historic district.

For the purposes of this inventory, the Red Wing Harbor and Levee is divided into seven areas, described below in order from west to east (i.e., upstream to downstream) (see sketch map). See the Harbor and Levee inventory form for more information and photos.

- Upper Harbor (former Industrial Harbor)
- Bay Point Park
- Lower or Small Boat Harbor (Vogel Harbor)
- Burdick Grain Co. Terminal (former Municipal Dock and city park, now Red Wing Grain)
- First Small Boat Harbor
- The Levee (at Levee Park)
- Red Wing Milling (now Archer-Daniels-Midland or ADM) Terminal

Upper Harbor (former Industrial Harbor). The westernmost area is the Upper or Industrial Harbor, now often called the Upper Commercial and Recreational Harbor, or simply the Upper Harbor, built in 1956-1962. It is a triangle- or hammerhead-shaped manmade harbor located west of the Bay Point Park entrance drive.

The Upper Harbor served as the City of Red Wing's Industrial Harbor from the mid-1950s to about 2000, and thereafter has been used largely for recreational purposes.

Historically, the Upper or Industrial Harbor comprised the western part of what was known as "The Bay," was a large, shallow, marshy area where Hay Creek flowed into the Mississippi River.

A 1951 aerial photo shows that the future Upper or Industrial Harbor was still a largely natural area with little sign of dredging or improvement. By this time the Army Corps of Engineers and the City of Red Wing were dumping dredge spoils and other materials in the shallowest northeastern part of the Bay. The firm ground that was created is today's Bay Point Park. In 1947 when the Lower Harbor was dredged (see below) spoils were dumped along the eastern edge of what became the Upper or Industrial Harbor.

In the spring of 1956 the City of Red Wing received federal approval for a municipal commercial/industrial harbor at this location. The new harbor was needed to supplement and eventually replace the City's municipal wharf (also called Municipal Coal Dock) which was located about 1,900' to the east. (The current site of Red Wing Grain, formerly Burdick Grain, GD-RWC-1383.) A new commercial/industrial harbor was needed to supplement or replace the former Municipal Dock after the City sold part of that site in the winter of 1954-1955 to Burdick Grain Company for a new terminal elevator (see below).

The first phase of the Industrial Harbor was built in 1956 at a cost of \$64,400. The harbor was long and narrow – a rectangle 1,300' long by 225' wide – and located along the current southwestern shore of today's Bay Point Park. The dredge spoils were dumped to the northeast to create the harbor's on-land storage area (later Bay Point Park). The harbor was accessed from a narrow road that is today's park entrance road. The wharf or dock consisted of a 60'-long sheet pile bulkhead on the edge of the filled area (now the southwestern edge of the park). The bulkhead (also called the coal dock) is presumably extant but buried under granite riprap placed in 1989 along the southwestern edge of Bay Point Park.

The Industrial Harbor was expanded in August 1962. The project enlarged the rectangular area into the current hammerhead-shaped bay which is about 1,500' east-west by 300' north-south. The dredge spoils were dumped in an east-west swath to the south to create solid ground – the current southern edge of the harbor – where an access road – today's Levee Road – was built.

The federal government paid most of the 1962 project's \$200,000 cost and was responsible for harbor maintenance. The harbor was expected to receive large quantities of coal as well as scrap metal and steel. A 1964 aerial photo shows massive coal piles near the bulkhead dock.

Sometime between 1964 and the early 1970s the City built two additional steel sheet pile bulkheads on the southern edge of the harbor. Located about 250' apart, they are about 80' wide and basically unaltered.

Around the mid-1980s the City's commercial/industrial dock was moved to the former Northern States Power (NSP) steam plant docking facilities on the northeast edge of Barn Bluff. (NSP had built a coal-fired power plant there in 1948-1949. The dock became available after NSP stopped burning coal circa 1986.)

At the former Industrial Harbor coal storage area, the City built Bay Point Park (see below), completing the park circa 1983. In circa 1985 a small boat marina was established in the eastern half of the harbor. Today the former Industrial Harbor, or Upper Harbor, has about 128 small boat slips on nine major booms and two or three smaller docks. The northern and eastern shores of the harbor are lined with rock riprap dumped in 1989. The southern edge, where the two circa 1970 bulkheads remain, is evidently lined with earlier rock riprap. The western edge of the harbor may be unstabilized. The western bulkhead is used occasionally for scrap metal.

In general the Upper or Industrial Harbor retains integrity of location. Integrity of design and materials is strengthened by the harbor's original hammerhead shape and by the two circa 1970 southern bulkheads, but diminished by loss of the harbor's principal on-shore facilities: the northeastern bulkhead and adjacent storage yard. Integrity of design and materials has also been altered by large quantities of modern granite riprap dumped along the northern and eastern edges of the harbor, and by the extensive small boat marina that fills the eastern half of the harbor. Bay Point Park, completed in the early 1980s with subsequent improvements, gives the setting a strongly modern, recreational character that diminishes the harbor's integrity of setting, feeling, and association.

Bay Point Park. Bay Point Park and its entrance causeway separate the Upper or Industrial Harbor from the Lower or Small Boat (Vogel) Harbor. The park was completed circa 1983 and retains integrity to the 1980s.

The park was created by the City on a triangular peninsula of fill that was originally a watery marshy island (see The Bay in the Industrial Harbor above). The land was used as a City landfill and as the storage area for the Industrial Harbor. The current park entrance drive was the Industrial Harbor's access road.

The eastern part of the park was built first; it was in place by 1972 per an aerial photo (Minnesota Historical Society). Today the park comprises about 15 acres with a bituminous-paved road, parking lots, a boat launch, looping trails, picnic facilities, and other modern features and landscaping. Most of the peninsula is riprapped with dumped rock, evidently placed in the mid- to late-1980s. The southeastern edges, along the Lower Harbor (see below), have circa 1956 riprap made of dry-laid courses of salvaged concrete.

Lower or Small Boat Harbor (also called Vogel Harbor). The Lower or Small Boat Harbor, also known as Vogel Harbor, is located east of the Bay Point Park entrance drive. This manmade harbor, whose current form dates from 1947, measures roughly 600' north-south by 1,000' eastwest. It is oval in shape with the opening on the east. Levee Road runs east-west along the southern edge of the harbor.

For most of its history the Lower Harbor has been dominated by the docks and slips of the Red Wing Yacht Club. The Yacht Club was inventoried separately; see GD-RWC-281.

In 1906 the new factory of the Red Wing Boat Manufacturing Company (later the Red Wing Motor Company) was built on the southern side of the future Lower Harbor. The company had a boat ramp so boats could be moved from the factory directly into the bay.

Historically the present-day Lower Harbor was the mouth of "The Bay" (see above). It became home to small boats in 1904-1911 when a City project to improve the Levee at the foot of Broad Street began and the Red Wing Yacht Club moved its docks and boats from the First Small Boat Harbor (see below) at the foot of Broad Street to the future Lower Harbor. To gain access to its new quarters, the Yacht Club leased land on the eastern edge of the harbor from the City of Red Wing.

In 1937 a 325'-long battered, poured concrete retaining wall was built along the eastern edge of the harbor on the parcel leased by the Yacht Club from the City. In addition to stabilizing the Lower Harbor, part of the wall's purpose was to hold a large quantity of fill being dumped immediately east of the wall. The fill consisted of spoils from Army Corps dredging for the Nine-

Foot Navigation Channel (see GD-RWC-1452). The fill was used to create the City's Municipal Dock (Municipal Coal Dock) built in 1937-1938 immediately east of the Lower Harbor.

In 1947 the Small Boat Harbor was deepened and formalized in shape in a largely federally-funded project. The spoils were deposited north and west of the harbor creating what became the City's Industrial Harbor storage yard and its entrance road.

The newly dredged Lower Harbor, oblong or oval in shape, can be seen on a 1949 aerial photo. The northern, western, and southern edges had not yet been made smooth and regular, however, nor had Levee Road been completed along the southern edge.

The Lower Harbor was redredged in 1956. The salvaged concrete riprap on the northern and western sides of the harbor may date from this project. A 1964 aerial photo shows that the northern and western sides of the harbor had been smoothed and likely riprapped. Today the southern edge of the harbor is lined with a modern timber retaining wall and there is modern dumped riprap at the southwestern and southeastern corners of the harbor. Along the eastern edge is the 1937 concrete retaining wall.

In general the Lower or Small Boat Harbor retains integrity of location. The harbor retains reasonably good integrity of design and workmanship from the mid-20th century. The harbor's integrity has been diminished by more recent edge materials including modern dumped rock. The integrity of design and materials is also diminished by modernization of the harbor's principal tenant, the Red Wing Yacht Club. The number of Yacht Club boathouses in the harbor has approximately doubled since 1951 per aerial photos, and the size of the boathouses and the materials with which they are faced has changed considerably. (See the Red Wing Yacht Club, GD-RWC-281, for more information and photos.) This change, along with the 1980s development of Bay Point Park, diminishes the harbor's integrity of setting, feeling, and association.

Burdick Grain Co. (former Municipal Dock and city park, now Red Wing Grain). The private docking facilities of the Burdick Grain Company Terminal Elevator (1955-1956) (now Red Wing Grain) are located on a shallow two-block-long peninsula east of the Lower Harbor. The peninsula or wharf is about 800' long and aligned east-west. The property is located on the northern side of both Levee Road and the former CMSTPP tracks.

The Burdick Grain Company Terminal Elevator, built in 1955-1956, was inventoried separately and is recommended individually eligible for the National Register; see GD-RWC-1383.

The eastern part of the site was the northern part of Levee Park until the mid-1950s. The western part of the site was the City of Red Wing's Municipal Dock or Municipal Coal Dock, completed in 1938. The dock was created on extensive fill placed in the late 1930s by the Army Corps of Engineers using spoils from the Corps' Nine-Foot Navigation Channel project.

The Municipal Dock was built in 1937-1938 at a cost of \$28,000. It was about 475' long and built of sheet piling retaining the fill. The sheet pile dock or bulkhead was installed by Dunnigan Construction Company which began work in the late summer of 1937. Between July 1938 and July 1955 about 305,000 tons of freight had crossed the dock, about 93% of which was received and less than 8% of which was shipped out. Nearly all freight received had been coal.

Burdick Grain Company (and successive owners) bought the peninsula from the City in three stages, the first for the 1955 elevator, the second for the second or 1956 phase of the elevator,

and final the western parcel (where the elevator's Grain Bin 2 and office building stand) at an unknown date. After the City sold the first parcel to Burdick it began to develop the Upper or Industrial Harbor (see above) and shift its industrial docking facilities there.

The Burdick grain terminal wharf consists of an 800'-long sheet pile dock, aligned east-west, and four free-standing mooring dolphins located immediately to the east (downstream). (The mooring dolphins are actually located in First Small Boat Harbor (see below).) The western 350' of sheet piling was evidently installed in 1937-1938 as the Municipal Dock.

The former Burdick Grain Company terminal elevator wharf, now Red Wing Grain, generally retains integrity to the mid-1950s. The elevator and dock are basically unaltered. The barge-loading equipment is in its original location but the equipment itself has been replaced. See Burdick Grain Company, GD-RWC-1383, for more information.

First Small Boat Harbor. For the purposes of this inventory, Red Wing's First Small Boat Harbor is defined as a rectangular area about 575' long (east-west) by 50' to 80' wide (north-south) located between the former Burdick Grain Company (see above) and Broad Street. Immediately south of the harbor is a narrow strip of city parkland which historically has been an northern part of Levee Park. The harbor is surrounded by industrial properties on the west and south. The "Levee" and Levee Park extend to the east. Downtown Red Wing is located about two blocks to the south.

The eastern half of the First Small Boat Harbor is included within the boundaries of the Red Wing Mall Historic District (GW-RWC-001) which is listed on the National Register.

Red Wing's First Small Boat Harbor was the location of a small natural bay created where Jordan Creek emptied into the Mississippi River. The natural bay served as a harbor for the Mdewakanton Dakota village located at Red Wing. When the Euro-American village of Red Wing was platted in 1853, Broad Street was laid out to meet the river at the natural bay.

Residents of Red Wing began using the harbor for small boats in the 19th century. The boats of the Red Wing Yacht Club were located here until they were moved to the Lower Harbor (see above) around 1904-1911. Early photos show the area had earthen or gravel banks of variable width. The harbor had an indentation – a sheltered boat launch area – near the western edge of Broad Street.

At some point – possibly in 1904-1906 – the Small Boat Harbor was lined with a substantial battered retaining wall built of mortared, coursed, stone blocks and stone rubble. Remnants of the stone wall remain, covered by rock riprap dumped circa 1982 along the southern and western edges of the harbor.

The First Small Boat Harbor was improved by the City of Red Wing in 1941. A 1951 aerial photo shows the improved harbor with an 100' \times 50' indented boat launch area lined with a new poured concrete retaining wall. A 1964 aerial photo shows a similar configuration. In 1982 the indented area was covered dumped rock riprap (and perhaps fill). Only a slight indentation remains.

Today the harbor is no longer used for small boats, but for grain barges tied to the four mooring structures described above.

At the eastern end of the harbor is a limestone storm sewer outlet that likely carries the remnants of Jordan Creek. The long narrow structure, about 9' x 20', has mortared, coursed stone walls and a curved poured concrete top.

The harbor retains integrity of location. Its integrity of design, materials, workmanship, feeling, and association have been diminished through loss of the long mortared stone retaining wall, loss of the indented boat launch with its poured concrete wall and ramp, and by the addition of a large amount of modern dumped rock riprap. The setting generally retains integrity to the late 1950s when Burdick Grain Company was built to the west, but has been somewhat diminished by post-1982 changes to the Levee to the east (see below).

The Levee (at Levee Park). The three-block-long area from Broad to Potter streets is identified as "Steamboat Landing" and "Levee" on early maps including the original plat of Red Wing. It was sometimes called the Municipal Landing or Levee, or the Plum Street Landing. Today this three-block area is the place most often referenced when Red Wing residents use the term "Levee". Its current appearance is a modification of improvements made in 1904-1906 when a formal Levee wall was built and the adjacent Levee Park was established.

Both the Levee and Levee Park are included within the Red Wing Mall Historic District (GD-RWC-001) which is listed on the National Register. (See Chapter 6.)

The tracks of the former CMSTPP Railroad run along the southern edge of Levee Park and the 1905 depot and pump house are nearby. The Levee and Levee Park are surrounded by industrial structures to the south, southwest, and east, and by the First Small Boat Harbor (see above) and city parkland to the west. Downtown Red Wing is located about 1 1/2 blocks to the south.

Before the first bridge was built across the river linking Red Wing with Wisconsin, ferries crossed the river in the vicinity of the Levee. Red Wing residents met steamboats at the Levee, and the Levee was the site of important community events including celebrations and annual river pageants that began in 1913.

Pre-1904 photos show that the riverbank along the Levee had earthen or gravel banks of variable width. Steamboats and other vessels nosed up to the banks, and houseboats and other craft were moored at wooden piers. The area was populated with wood piles, sheds, and other small wooden structures, and junk. Local historian Frederick L. Johnson explains:

At the turn of the 20th century, pressures of rapid industrialization left Red Wing's levee anything but the scenic, restful, riverside oasis that now exists. A cacophony of commerce arose from riverfront industries producing flour, malt, linseed oil, lime, stone, and finished woodwork that overburdened freight trains pulled out to America and the world. Steamboat and barge traffic only added to the racket. Red Wing's noisy, crowded levee affronted both the ear and eye. Its assortment of ramshackle boathouses, warehouses, and debris from the river and rail trade crowded the shoreline (Johnson 2007: 24).

The Levee's appearance changed considerably in 1904-1906. In 1903 a new group called the Red Wing Civic League was organized, and the Levee and depot area became an early target for League improvement. The clean-up project coincided with construction of the depot and beautification of its grounds. Between 1904 and 1906 the City built a 1,000'-long poured concrete retaining wall along the Levee, filling and leveling the earth behind it. The adjacent land was developed into Levee Park.

In 1982 the City built a new 600'-long sheet pile dock along the Levee immediately in front (north) of the western 600' of the 1906 concrete wall, burying it. Rock riprap was dumped along the eastern 400' of the 1906 Levee wall, evidently replacing the wall rather than burying it.

The 1982 dock has simple timber fenders are mounted on the vertical (water side) surface. Across the top of the piling is a steel cap with steel mooring cleats. Along the western half of the dock is a 15'-wide concrete deck installed over the earthen fill. Along the eastern half of the dock is turf grass. Today the dock is used for mooring transient craft and river excursion boats.

The Levee retains integrity of location. Integrity of setting and feeling have been somewhat diminished by construction of the City's modern Sewage Pumping Station (1960-ca. 1975), construction of the Eisenhower Bridge (1960), modernization of industries adjacent to the south, and improvements to Levee Park. Integrity of design, materials, workmanship, feeling, and association have been diminished by replacement of the 1906 levee wall in 1982 with a sheet pile dock and 400' of dumped rock riprap

Red Wing Milling Company (now ADM) Terminal. The private barge terminal of Red Wing Milling Company (1956) (now Archer-Daniels-Midland or ADM), is located in a one-block area between Potter and Bluff streets. The dock was established in the mid-1950s and has been subsequently modernized. The former CMSTPP Railroad runs along the southern side of the ADM wharf. The current ADM plant, a modern complex that is ineligible for the National Register, occupies parts of Red Wing Milling (1901, see GD-RWC-018) and Red Wing Linseed Mills (1901, see GD-RWC-1450) which it purchased in 1970 and 1971.

The first bridge over the Mississippi was built just east of the present-day ADM wharf in 1895. It was replaced by the current Eisenhower Bridge in 1960.

In the late 19th and early 20th century this part of the Red Wing harbor had earthen or gravel banks of variable width. Steamboats and other boats nosed up to the banks or were moored on piers. A 1917 Sanborn map shows a small building on the riverbank, aligned with the eastern curbline of Potter Street, labeled "steamboat line freight house." The same building is labeled "boat landing" on 1927 and 1943 Sanborn maps.

The current ADM dock was established in 1956 by the Red Wing Milling Company. Prior to this time, the company shipped only by rail. In the spring of 1956, the City made arrangements to lease a 25' x 80' parcel of land north of the railroad tracks and east of Potter Street to Red Wing Milling for its new wharf.

Today the 550'-long wharf has a steel sheet pile dock with a steel deck. There are three mooring dolphins about 30' off shore. Near the western end of the wharf is modern barge-loading equipment. The dock handles grain, meal, sunflower oil, and linseed oil.

The wharf appears to retain integrity to about the 1980s.

Historical Background

The 1.25-mile-long Red Wing Harbor and Levee was historically the port of Red Wing. Until the 1870s the Mississippi River was Red Wing's major portal to the outside world. Even after railroads superceded steamboats, the harbor and levee were economically and culturally critical to the community.

The Red Wing Harbor and Levee encompasses the small natural harbor at the mouth of the Jordan Creek (near present-day Broad Street) that served as a harbor for the Mdewakanton Dakota. During the period of first contact between Native- and Euro-Americans, the harbor was visited by "canoes, keelboats, batteaux, and Mackinaw boats [used] by the Native Americans, traders, missionaries, and the military" (Vogel 1994: VI-1).

Red Wing's original plat of 1853 placed Broad Street perpendicular with the river, meeting the water at the mouth of Jordan Creek. Much of the harbor is accessed by Levee Road, a street also drawn on Red Wing's original 1853 plat.

The first steamboat landed at the Red Wing harbor in 1850. Only seven years later, in the 1857 season, 924 steamboats landed at the port. According to historian Madeline Angell, "The opening of the navigation season each year was an extremely important event. . . . As the time grew near, those who were most eager . . . would climb Barn Bluff more and more often in hopes of seeing a distant column of smoke moving upriver. When the big event finally arrived, practically the whole population, including most of the dogs and pigs in town, would be there at the levee waiting" (Angell 1977: 129, 66).

The first regular ferry crossing the river to Wisconsin was located at Broad Street. Another ferry operated a block east at Bush Street. Ferry service became obsolete when the first bridge was built in 1895. It was replaced by the current Eisenhower Bridge in 1960.

Historically the Red Wing harbor was important for recreational boats and residential houseboats, as well as commercial traffic. Some of the recreational craft were owned by members of the Red Wing Yacht Club, established in 1903. Boat races and regattas were popular community events. Red Wing had an annual river pageant beginning in 1913.

Red Wing's early economic development was fueled by wheat farming and riverboat grain shipping during southeastern Minnesota's wheat boom of 1860-1875. By 1870 the City of Red Wing was collecting substantial wharf or docking fees which were an important source of city income. Large steamboats up to 175' long, smaller steamboats called packets, and a variety of other craft visited the port to deliver and pick up agricultural products, livestock, building materials, people, mail, supplies, and retail inventory. In the 1860s steamboats began to increase their freight capacity by pushing barges. To facilitate navigation, the U.S. Army Corps of Engineers began dredging and clearing snags and obstructions from sections of the Upper Mississippi in the mid-1860s.

Before World War I the riverbank (particularly east of Jackson Street) was lined with commercial warehouses and other facilities that received or shipped freight. An 1868 drawing shows simple, woodframe, gable-roofed buildings lining the riverbanks. Many had a large river-facing door in the gable end (*Bird's Eye* 1868).

The 1870s and 1880s marked the beginning of the end for this era of river shipping as railroads began to dominate the shipping market. Riverboats were often slowed by sandbars and shallows and stopped entirely in the winter, while railroads could operate year-around. The competition drained business from the river carriers until by the mid-1890s only two packets per week stopped at Red Wing (Angell 1977: 138, 144, 211). Despite Army Corps efforts to improve conditions for navigation, commercial use of the river continued to decline. As the grain trade dwindled, Red Wing's riverfront grain warehouses closed one by one. Shipping from the Red Wing port ended entirely at the end of the 1918 season, and did not resume for nearly a generation.

River shipping did not return to Red Wing until the late 1930s when a massive New Deal public works project, the Nine-Foot Channel, was constructed by the federal government. (The Red Wing segment of the Nine-Foot Channel was inventoried separately, see GD-RWC-1452.) The Nine-Foot Channel was a set of locks and dams between St. Paul and St. Louis that created a stair-step series of slackwater pools, each establishing a water depth of 9'. Red Wing is located near the upper end of the pool created by Lock and Dam No. 4 at Alma, Wisconsin.

By guaranteeing a water depth of 9', the Nine-Foot Channel played a major role in revitalizing river traffic and stimulating the construction of new harbors, grain terminals, and other docking facilities in river towns like Red Wing. In 1935, before the channel's completion, docks in the Twin Cities handled 94% of the Upper Mississippi River freight business (between Minneapolis and Guttenberg, Iowa). By the mid 1950s, business was distributed much more broadly, with the Twin Cities' share dropping to 58% and cities like Red Wing entering the market (*RW Daily Republican Eagle*, Sept. 28, 1955). (See the Nine-Foot Channel in Chapter 7 for more information.)

Recommendation

Gemini Research recommends that the 1.25-mile Red Wing Harbor and Levee as defined above does not retain sufficient historic physical integrity to meet the integrity requirements of the National Register eligibility criteria. In specific:

While the Upper or Industrial Harbor retains its original shape, it has lost its principal on-shore facilities comprised of a northeastern bulkhead and adjacent storage yard. Use of the harbor has changed from industrial to recreational, and the harbor has been altered with large quantities of modern granite riprap and the extensive booms and boat slips of the Ole Miss Marina. The setting has been altered with the construction of Bay Point Park. Bay Point Park, a large park completed in the early 1980s, lends a strongly modern recreational character to the western part of the Red Wing Harbor and Levee and to the adjacent Upper and Lower harbors. The Lower or Small Boat Harbor retains much of its mid-20th century design and some materials, but its principal occupant for 100 years, the Red Wing Yacht Club, has been enlarged and modernized to the point that it diminishes the harbor's historic integrity. Bay Point Park has also diminished the integrity of setting. The former Burdick Grain Company terminal wharf, now Red Wing Grain, generally retains integrity to the mid-1950s and is recommended individually eligible for the National Register. The First Small Boat Harbor has been altered through loss of its stone retaining wall and sheltered boat launch area, both covered in 1982 by dumped rock riprap. Small boats no longer use the harbor. The Levee has lost its 1,000' concrete wall built in 1906. The wall has been replaced by a 600' steel dock and 400' of dumped rock riprap, both dating from 1982. The ADM wharf appears to retain integrity to about the 1980s.

Part of the Red Wing Harbor and Levee between approximately Dakota and Potter streets is located within the Red Wing Mall Historic District (GW-RWC-001), which was listed on the National Register in 1980. (See Chapter 6 for the district.) A similar area is located within the Historic Mall District, a historic district designated by the City of Red Wing.

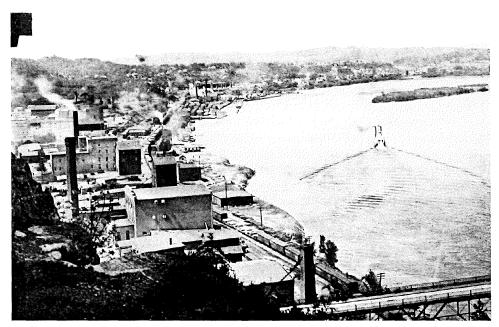


Fig. 236. Mississippi River. Red Wing Harbor and Levee, eastern end with the 1895 bridge in the foreground, taken from Barn Bluff (ca. 1900, Minnesota Historical Society photo) (facing W)



Fig. 237. Mississippi River. Red Wing Harbor and Levee, the Levee with its 1906 poured concrete wall (taken ca. 1930 by Kenneth Wright, Minnesota Historical Society photo) (facing SW)

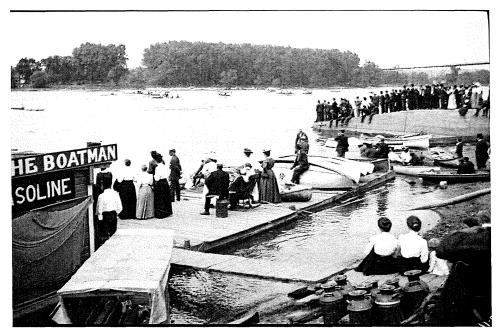


Fig. 238. Mississippi River. Red Wing Harbor and Levee, First Small Boat Harbor at the foot of Broad Street (taken ca. 1906, Goodhue County Historical Society photo) (facing NE)

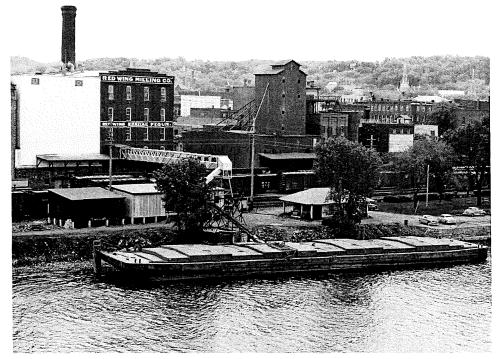


Fig. 239. Mississippi River. Red Wing Harbor and Levee, Red Wing Milling terminal established in 1956 (now ADM) (taken May 1957, Goodhue County Historical Society photo) (facing S)

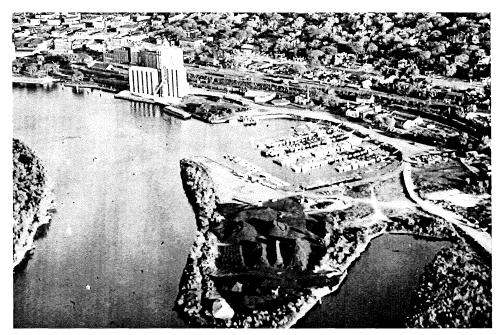


Fig. 240. Mississippi River. Red Wing Harbor and Levee, Upper or Industrial Harbor in foreground with coal piles, Lower Harbor, and Burdick Grain terminal (taken ca. 1960, Goodhue County Historical Society photo) (facing SE)



Fig. 241. Mississippi River. Red Wing Harbor and Levee, part of Ole Miss Marina in the Upper or Industrial Harbor; the coal dock was at right on the shore of present-day Bay Point Park (facing SW)



Fig. 242. Mississippi River. Red Wing Harbor and Levee, Ole Miss Marina in Upper Harbor with southern bulkhead in distance (facing SW)

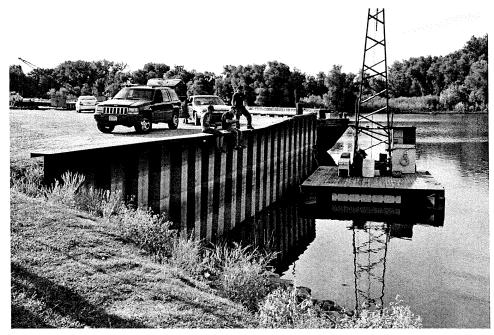


Fig. 243. Mississippi River. Red Wing Harbor and Levee, eastern of the two southern bulkheads in the Upper or Industrial Harbor (facing W)

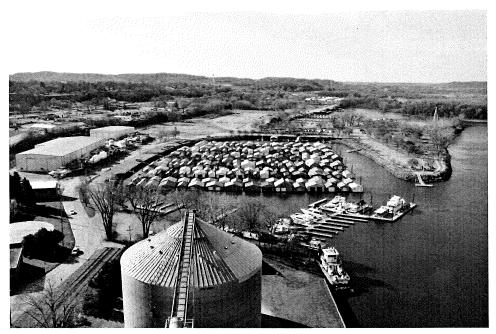


Fig. 244. Mississippi River. Red Wing Harbor and Levee, Bay Point Park at right, Upper Harbor at top, Lower Harbor with Yacht Club booms; taken from the top of the Burdick Grain Company elevator (facing SW)



Fig. 245. Mississippi River. Red Wing Harbor and Levee, north half of the Lower or Small Boat (Vogel) Harbor (Barn Bluff and the former Burdick Grain are in the distance) (facing E)

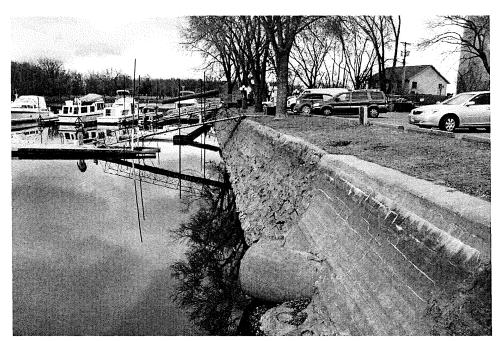


Fig. 246. Mississippi River. Red Wing Harbor and Levee, 1937 concrete retaining wall on east edge of Lower Harbor (facing NE)

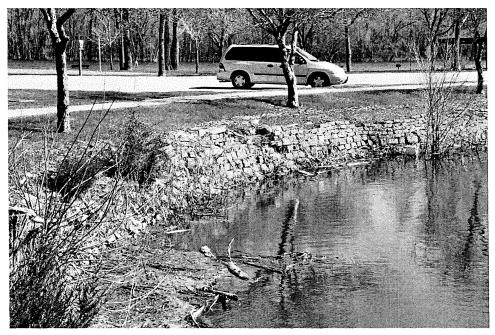


Fig. 247. Mississippi River. Red Wing Harbor and Levee, retaining wall of dry laid salvaged concrete (ca. 1956) on the north edge of the Lower Harbor (facing N)

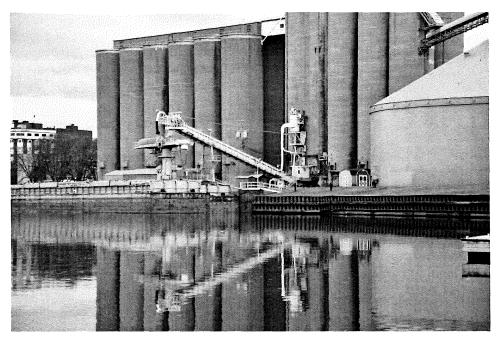


Fig. 248. Mississippi River. Red Wing Harbor and Levee, Burdick Grain Company terminal (now Red Wing Grain) (facing SE)

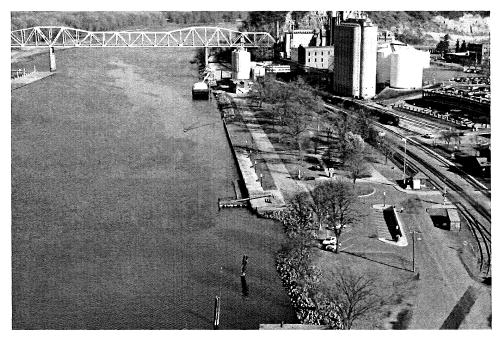


Fig. 249. Mississippi River. Red Wing Harbor and Levee, First Small Boat Harbor, then 1982 Levee wall and riprap, barge at ADM terminal, and 1960 Eisenhower Bridge; taken from the top of Burdick elevator (facing NE)

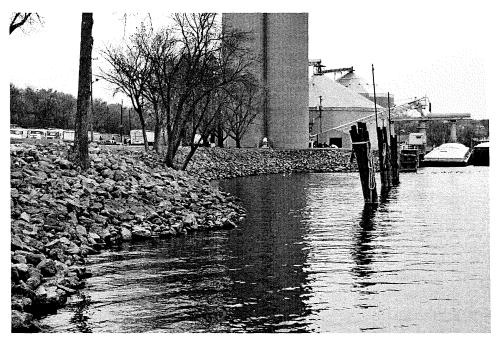


Fig. 250. Mississippi River. Red Wing Harbor and Levee, grain barge mooring dolphins and riprapped bank at the First Small Boat Harbor between Burdick Grain and Broad Street (facing SW)



Fig. 251. Mississippi River. Red Wing Harbor and Levee, mortared stone wall remnant near the east end of the First Small Boat Harbor (facing NE)

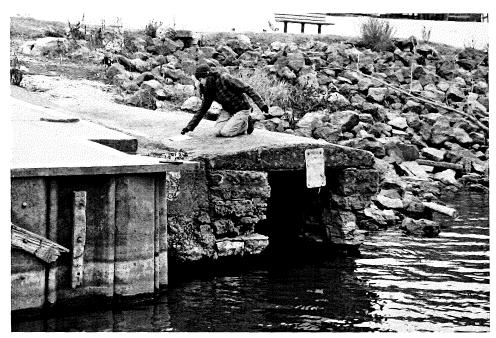


Fig. 252. Mississippi River. Red Wing Harbor and Levee, mortared limestone storm sewer outlet at the east end of the First Small Boat Harbor (facing S)



Fig. 253. Mississippi River. Red Wing Harbor and Levee, 600'-long Levee dock with timber fenders; Levee Park above (facing S)

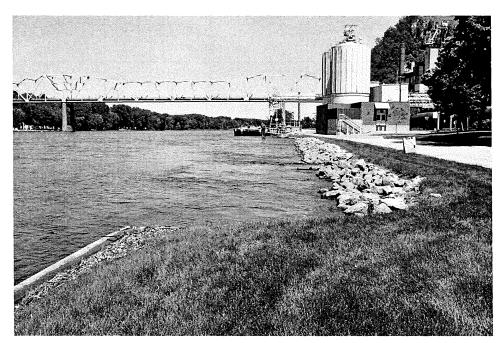
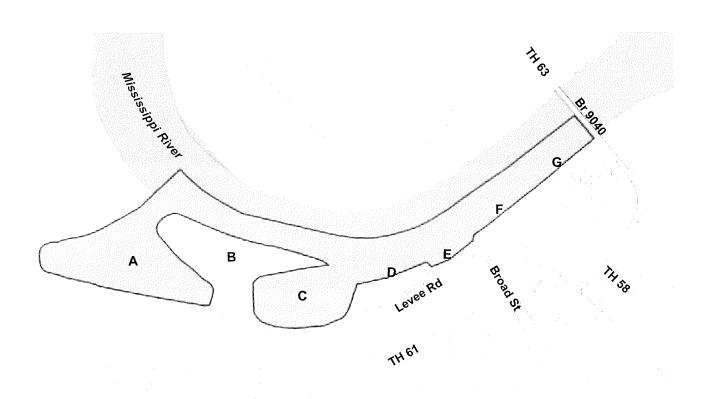


Fig. 254. Mississippi River. Red Wing Harbor and Levee, 400' of rock riprap replacing the east end of the 1906 Levee wall; ADM terminal in view (facing NE)





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- A Upper or Industrial Harbor
 B Bay Point Park
 C Lower or Small Boat Harbor
 D Burdick Grain Terminal (former Municipal Dock)
 E First Small Boat Harbor
- F The Levee
- **G** Red Wing Milling (now ADM) Terminal

GD-RWC-389 133 4th St. E Hist Name: Culbertson House

Built:

ca. 1892

NR Status:

Not Indiviually Eligible

The Culbertson House, built circa 1892, is a 1 1/2-story woodframe house with its gable end facing the street. The core of the house has a footprint of about 28' x 28'. The house has a stone foundation (covered with concrete) and clapboard siding.

Among the house's most distinctive features is ornate Queen Anne-inspired detailing in the main gable end that includes diamond-shaped, square-cut, and sawtooth-shaped wood shingles. There are raked shingles (meeting the eave overhang) in lieu of frieze boards.

The front porch, which is original, is an L-shaped, hip-roofed structure that spans the main facade and part of the western side wall. Within the porch roofline, at the southwestern corner of the house, is an enclosed entrance area. (Both porch and enclosed entrance area appear on an 1895 Sanborn insurance map.) The porch has turned columns, turned fretwork at the cornice level, and fancy brackets. The balustrade is missing. The porch floor is poured concrete.

Window openings are rectangular with architraves at the tops of the casings. Most openings have 1/1 replacement sash.

Across the rear of the house is a 12 x 28' addition built in 1983. It is one story with a shed roof and smooth concrete block foundation.

Behind the house is a circa 1915 single-car garage with a gabled roof and clapboard siding.

Historical Background

Local historian Thomas J. Lutz writes that this house was built "ca. 1890 by unknown parties as an excellent local example of vernacular with a superb blend of skilled craftsmanship, excellent detailing, and expressive materials; other history unknown but highly worthy of further research; one of the finest worker cottages in Red Wing" (Lutz 1979-1982: 77).

According to local architectural historian Carrie Conklin Becker, "Many houses constructed in Red Wing during the 19th and early 20th centuries do not fit into neatly described stylistic categories. These modest homes, built for people with limited or moderate financial means, were not architect-designed. Nevertheless, their contractors and owners strove to keep pace with changing architectural fashion by adding small amounts of decorative details from the currently popular home styles" (Becker 1997: 43).

Becker identifies three popular vernacular forms seen in Red Wing's modest homes. She writes that one – the front gable vernacular – "has its roots in the general proportions, window arrangement, and front-facing roof gable orientation of the Greek Revival style. However, in early examples it is almost totally devoid of ornamentation. . . . Later examples added spindle work porches and sometimes decorative shingles in the gable area in imitation of the Queen Anne style" (Becker 1997: 43).

John S. "Sam" and Sarah Culbertson. The first residents of this house – from circa 1892-1899 – were evidently John S. "Sam" and Sarah Culbertson and their family. Sam Culbertson worked as a blacksmith for Remshardt and Hendel Blacksmith Shop, for A. Newstrom, and for the Minnesota State Training School.

Sam and Sarah were Anglo or "Old Stock" Americans. Sam's parents had moved to Red Wing in 1855 and Sam had been born the following year. His father was a wagonmaker born in Pennsylvania; Sam's mother was born in England. Sarah's parents had been born in Wales. The couple married around 1884 and had at least two children. By 1900 Sam and Sarah had moved from this house to Wilkinson Street a few blocks away and by 1907 they had evidently left the city.

While the Culbertsons lived in the house, it was owned by Rebecca J. Oskey who lived in the house next door to the west (first with her husband and then as a widow). Oskey evidently owned the property for investment purposes. She owned it from 1881-1900; the house was built circa 1892.

John K. and Mathilda E. Swanson. The second owners-occupants, from 1900-1923, were Swedish immigrants John K. and Mathilda E. Swanson who lived here for 23 years. They bought the property in March of 1900. John and Mathilda were married circa 1874 in Sweden and immigrated circa 1892 with a daughter, Valberg. John worked as a shoemaker in Red Wing for many years, part of the time in his own shop. After he died in 1923 the property was acquired by Valberg who had married Swedish immigrant Oscar Larson. Valberg and her husband rented the house to tenants.

Renters lived in the house at the time of the 1930 and 1940 federal census. In 1930 the occupants were proprietor of a soft drink parlor who lived with his wife and his wife's father, a truck driver. In 1940 the occupants were a tannery worker and his wife.

Recommendation

The Culbertson House is a Queen Anne style house built circa 1892. From the front this small house appears to be one of the most intact late 19th century homes in East Red Wing. It is an ornamented version of a front-gable vernacular form of the Queen Anne style and was suspected to be an unusually intact example of early working class housing in Red Wing. Closer examination by Gemini Research during Phase II survey, however, revealed that the house was enlarged in 1983 by a substantial rear addition that expanded the house by about 42%. Gemini Research recommends that, because of the alteration, the house does not meet National Register integrity guidelines, particularly for a house conceivably eligible under Criterion C (architecture) as an intact example of a small working-class Victorian-era residence. Research conducted in numerous published histories, historic newspapers, and the files of the Goodhue County Historical Society revealed no associations with significant events or themes meriting eligibility under Criterion A (important events or broad patterns). None of the principal owners' and residents' contributions and activities rises to a level of significance that would make the property eligible under Criterion B (important person).

Gemini Research recommends that the property is not eligible for the National Register.

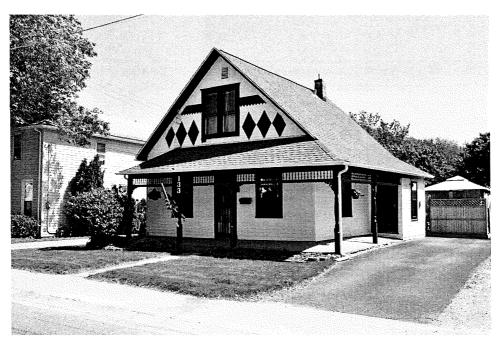


Fig. 255. 133 4th St. E. Culbertson House, main and west facades (facing SE)



Fig. 256. 133 4th St. E. Culbertson House, main and east facades (facing SW)



Fig. 257. 133 4th St. E. Culbertson House, detailing at the top of the main facade (facing S) $\,$

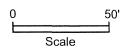


Fig. 258. 133 4th St. E. Culbertson House, rear (facing NE)





Prep by Gemini Research 12-2013





GD-RWC-1397 1527 4th St. W

Hist Name: Featherstone-Sweasy House

Built: 1916

NR Status: Not Indiviually Eligible

The Featherstone-Sweasy House, built in 1916, is located at the southeastern corner of Fourth and Jefferson streets near the edge of the College Hill bluff. The house faces north and has excellent views of the river valley. The house has a rear addition designed by noted Minnesota architect Edwin H. Lundie and built in 1960. Lundie also designed several 1960 alterations to the house, listed below.

The house is a woodframe, 2 1/2-story example of the American Foursquare style with a 30' x 45' footprint and a limestone foundation. The house has a truncated hipped and gabled roof.

The house is faced with dark brown brick that extends up to the second-story window sill level. The rectangular window openings have 1/1 replacement sash. The sills and watertable are poured concrete. Part of the second story and the attic level are faced with stucco and mock half-timbering (the latter of unknown age). Across the main facade is a hip-roofed porch with short square wooden columns resting on a solid brick-faced balustrade. The porch has a simple frieze and is unobtrusively screened.

Circa 1960 alterations, most designed by Lundie, include:

- significant enlargement of the parlor window on the main facade
- alteration of attic level and kitchen window openings
- addition of a wide bay window on the west facade
- addition of a southwestern entrance porch
- replacement of exterior brick on the south end of the eastern facade
- addition or alteration of rear dormer
- remodeling of attic level bedrooms
- 25' x 40' rear wing

The Lundie-designed 1960 rear wing is one story with a gabled roof and a red-brown brick exterior. The windows are multipaned with substantial lintels and brick sills. The eastern facade is dominated by an impressive brick chimney. The wing expanded the kitchen and added a southwest entrance foyer and a family room. The family room has mortise and tenon construction with exposed pegs. There is an elaborate oversized ceiling truss system, a wood and stone fireplace, and several built-in cupboards. Both the family room and foyer have woodpaneled walls. The construction methods, materials, finishes, and high level of detail and craftsmanship are characteristic of Lundie.

South of the house is a hip-roofed garage, built in 1978, that is faced with brick and stucco.

Historical Background

The Featherstone-Sweasy House was built in 1916. From 1916 to circa 1953 it was the home of William and Helen Featherstone and their daughter Ora. From circa 1954 to perhaps 2000 it was the home of William and Evelyn Sweasy and their family.

Featherstone Family. The original owners of the house were William J. and Helen Featherstone. The couple was in their seventies when the house was built, and two generations of Featherstones lived here. William and Helen's daughter Ora lived in the house until shortly before her death in 1953 at age 77.

William and Helen Featherstone were retired farmers of Anglo-American background. William also had extensive business interests in local banks, mills, and other businesses. William and Helen's unmarried daughter Ora, a former teacher, lived with them. From 1922-1928 she was married to a cousin, Grant Featherstone, who also lived in the house. Grant died in 1928.

Sweasy Family. The second couple to occupy the house was William and Evelyn Sweasy. They were married shortly after World War II and moved into the house in the mid-1950s, shortly after William assumed the presidency of the Red Wing Shoe Company. The couple had seven children.

In the mid- to late-1950s the Sweasys commissioned Edwin Lundie to plan an addition to the house as well as a kitchen expansion, finishing of the attic level, and other alterations. The project was completed circa 1960.

William D. ("Bill, Sr.") Sweasy (1916-1991) began working at his family's Red Wing Shoe Company at age 15. (See the inventory of the Red Wing Shoe Company, GD-RWC-019.) Sweasy graduated from the University of Minnesota in 1938 and served in World War II. He became president of the company in 1949 when his father died. William was still chief executive officer (CEO) when he died in 1991.

In addition to leading the Red Wing Shoe Company through a substantial postwar expansion (see the company, GD-RWC-019), William Sweasy was active in civic affairs. He was involved in numerous civic organizations, often serving leadership roles. He was elected to the Red Wing school board. He was an organizer of the Red Wing Environmental Learning Center, established in 1970 as one of the first organizations of its kind in the state (Angell 1977). Historian Frederick Johnson explains that William Sweasy "had a deep affection for Red Wing. He decided [after leaving the company presidency to become board chair in 1972] to use the financial resources of the Red Wing Shoe Foundation to reinvigorate the town. In the ensuing two decades he started a breathtaking series of projects that made him, in a town known for its benefactors, Red Wing's greatest philanthropist" (Johnson 2000: 312). Under Sweasy's direction, the Red Wing Shoe Company bought the aged St. James Hotel in 1977 and spearheaded its renovation. In 1988 the company completed a careful rehabilitation of an entire block of historic downtown commercial buildings and moved its headquarters offices into them. Sweasy was active in the Sheldon Theater restoration in the 1980s, restoration of the Milwaukee Road Passenger Depot several years later, as well as other projects.

Evelyn Jorgensen Sweasy was born in 1923 in Red Wing to George C. and Suzanne Jorgensen. Evelyn's father George was president of Jorgensen Chevrolet. Evelyn Jorgensen Sweasy was a member of several civic organizations and is still a local philanthropist.

Architect Edwin H. Lundie. In 1960 when the Sweasy addition and alterations were built, prominent Minnesota architect Edwin H. Lundie was 74 years old and nearing the end of a long and successful career. Lundie (1886-1972) was born in Iowa and raised in Iowa and South Dakota. In 1906 he moved to St. Paul and began the long period of architectural self-study and apprenticeship. His most important training was with leading Minnesota architects Thomas Holyoke in 1908-1912 and Emmanuel Masqueray in 1913-1917. In 1919 he established his own practice.

By the early 1920s Lundie began to focus almost exclusively on residential design, and by the end of World War II he had a waiting list of wealthy clientele wishing to commission his services. Lundie always worked with a small staff, maintained exacting standards, and was personally involved in all aspects of the design (Michels 1995: 2-10).

Lundie's designs were usually imaginative interpretations of historical styles or motifs, often picturesque and romantic. He often worked in the Colonial Revival style, with his most successful interpretations of this genre being versions of the Cape Cod cottage (Gebhard 1995: x; Michels 1998: 10-13). (See the full inventory form for more information.)

Most Lundie buildings display a very high level of craftsmanship. Biographer Eileen Michels provides a sense of Lundie's approach in the context of his large country estates, projects in which he excelled. She writes:

Beautiful, often irregular sites and interested and tasteful clients with generous budgets allowed him to stipulate the complex forms, rich materials, and fine crafted details that he and his clients so enjoyed. Interior decoration, furniture design, and even garden design fell within his scope. He spent countless hours with his clients on the selection of interior finishes, details, and furnishings. If a desired item was not available through standard sources, he designed it for special fabrication by local craftsmen . . . In some cases it literally took years for the completion of a given project (Michels 1995: 15).

Edwin Lundie's buildings are concentrated around the Twin Cities and in northeastern and southeastern Minnesota. Most of his southeastern Minnesota homes are on large country estates built after 1940 including near Winona, Owatonna, and St. James. The architect also designed about 17 cabins and summer houses built along the North Shore of Lake Superior in 1940-1968.

The Sweasy addition includes timber framing, pegged mortise and tenon joinery, paneled walls, built-in storage spaces, and finely detailed trim and molding. The bold chimney is typical of Lundie. According to architect and Lundie scholar Dale Mulfinger, chimneys and fireplaces were often "elements of sheer delight" in the architect's buildings. Chimneys were often prominent, whether integrated into an end wall or used as a central anchor of the primary gable. They often had unusual massing and complex brickwork with Old World precedents. Fireplaces could be magnificent, intimate, rustic, quaint, or refined with elaborate wood moldings (Mulfinger 1995: 33-38).

In a 1995 study of the architect's work, Dale Mulfinger lists about 118 major projects executed from 1921-1972. Most are residential buildings and the majority are presumed extant. The Sweasy house is not included in the listing, suggesting it was not considered a major project. While the Sweasy addition and alterations are characteristic of Lundie's designs, they do not appear to have been innovative or otherwise distinctive within the large body of Lundie's extant work.

Recommendation

The Featherstone-Sweasy House was built in 1916 and altered in 1960 based on designs by prominent Minnesota architect Edwin Lundie. Because of the extent of the alterations and the size of the addition, the house no longer retains historic integrity from the period of the Featherstones' ownership.

The house does retain integrity from the ownership of William D. and Evelyn Sweasy. Research conducted in numerous published histories, historic newspapers, and the files of the Goodhue County Historical Society revealed no associations with significant events or themes meriting eligibility under National Register Criterion A (important events or broad patterns).

The activities of William D. Sweasy, longtime civic leader and president of the Red Wing Shoe Company, could possibly rise to a level meriting National Register eligibility under Criterion B (important person). However, because many of Sweasy's significant contributions occurred during the second half of the 20th century, it is recommended that sufficient time has not yet passed to understand the relative value and implications of his contributions to Red Wing history and that further research and evaluation should be conducted at some point in the future. In addition, it may be more likely that Sweasy's office at the Red Wing Shoe Company where he was CEO at the time of his death, rather than his home, is more strongly associated with his influential work. (The Red Wing Shoe Company is recommended eligible for the National Register; see GD-RWC-019.)

Under Criterion C (design and construction), it is recommended that the 1960 addition and alterations designed by Lundie do not rise to a level of significance meriting National Register eligibility. Many of Lundie's houses, estates, and lake cabins elsewhere in the state are well-preserved and many represent more well-developed or distinctive Lundie designs. The Sweasy addition and alterations, in contrast, represent a relatively small project that does not appear to be particularly significant within Lundie's large body of work.

Gemini Research recommends that the property is not eligible for the National Register.



Fig. 259. 1527 4th St. W. Featherstone-Sweasy House, main and east facades (facing SW)



Fig. 260. 1527 4th St. W. Featherstone-Sweasy House, main and west facades (facing SE)



Fig. 261. 1527 4th St. W. Featherstone-Sweasy House, rear facade and addition (facing NE)



Fig. 262. 1527 4th St. W. Featherstone-Sweasy House, southeast corner and east facade (facing NW)

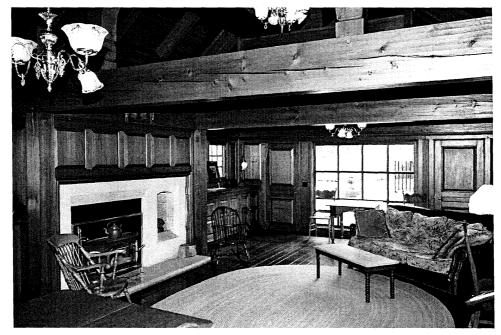


Fig. 263. 1527 4th St. W. Featherstone-Sweasy House, southwest corner of family room (photo courtesy S. Boesch) (facing SW)

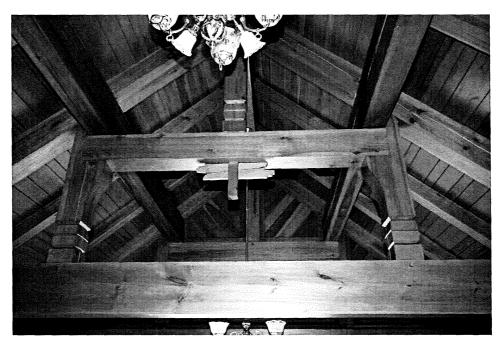


Fig. 264. 1527 4th St. W. Featherstone-Sweasy House, timber framing in family room (photo courtesy S. Boesch) (facing N)





Prep by Gemini Research 12-2013





GD-RWC-1398 1603 4th St. W Hist Name: Metzler House

Built:

ca. 1890

NR Status:

Not Indiviually Eligible

The Metzler House, built circa 1890, is located at the southwestern corner of Fourth and Jefferson streets. It is sited near an edge of the College Hill bluff with a dramatic view of the river valley to the north.

The house has the asymmetrical massing, complex shapes, and multiple surface textures characteristic of the Queen Anne style. The style was very popular in Red Wing and many excellent examples still exist in the community.

The house is a substantial two-story woodframe building with a footprint about 30' x 60'. It has a truncated hipped and gabled roof, clapboard siding, and cornerboards. The foundation is rockfaced limestone blocks. The house has a gable-roofed rear wing with two gabled dormers. Behind this is a smaller wing, also with a gabled roof, that appears to be an early addition.

The front porch is original but now enclosed. It retains its truncated hipped roof, square incised porch columns with chamfered corners, ornate incised brackets at the cornice level, and fishscale shingles at the sides of the porch roof. There is an intact rear porch on the eastern facade. It retains a shed roof, incised square columns with chamfered corners, and ornate fretwork but is missing its balustrades.

The house has rectangular window openings with architraves at the tops of the casings. A few openings have older 2/2 sash but most have 1/1 replacement sash. On the eastern side wall is an original rectangular bay window with a truncated hipped roof and paired brackets.

Behind the house is a circa 1960 garage whose first story is built of smooth concrete blocks. The garage has a gabled roof and wide lap siding in the gable end.

Historical Background

The original owners and occupants were German immigrants Daniel and Bertha Metzler. The family lived in the house for approximately 30 years.

The Metzlers were married in Germany were Daniel attended the School of Brewing in Hanover. The young couple came to the U.S. in 1881 with an infant daughter, moving to Red Wing soon after immigrating. They had four more children. The Metzlers were living in Red Wing by the time of the 1885 state census. (It is likely, but not confirmed, that they were in this house.)

Daniel Metzler owned and operated a brewery in Red Wing, purchased in 1893 by Metzler and two partners. Metzler was involved for 10 years of the brewery's 80-year history. It had been established in 1857 as the Hoffman Brewery, was later called the Christ Brewery, and was renamed by Metzler and partners the Red Wing Brewery. The men operated it for ten years, selling to new owners in 1904. (It closed in 1937.) At the time of Metzler's involvement, the brewery was one of two in Red Wing. Red Wing had four other breweries earlier in the city's history, but they had closed by the early 1880s (Hoverson 2007: 275-279).

Metzler died in 1906 at the age of 51. For the next 13 years until her own death in 1919, Bertha Metzler continued to live in the house, usually with one or more of her adult children. They

included the co-owner of a plumbing business, a bookkeeper (first at a milling company and later a lumber company), a factory worker, and co-proprietor of a retail fur shop. (See the full inventory form for more information.)

In 1919 Bertha Metzler died at age 59. According to an obituary, she was "a woman of many splendid qualities" and an active and devout member of St. Joseph's Catholic Church, as her husband had been (*RW Daily Republican*, Feb. 4, 1919).

By 1930 the house was owned by a single 53-year-old teacher, Mary M. Gilmour. She had several renters including a railroad cashier and his family and a retired widow.

Recommendation

The Metzler House, a Queen Anne style house built circa 1890, is not architecturally distinctive and therefore not eligible under National Register Criterion C (architecture and construction). Research conducted in numerous published histories, historic newspapers, and the files of the Goodhue County Historical Society revealed no associations with significant events or themes meriting eligibility under Criterion A (important events or broad patterns). None of the principal owners' and residents' contributions and activities rises to a level of significance that would make the property eligible under Criterion B (important person).

Gemini Research recommends that the property is not eligible for the National Register.



Fig. 265. 1603 4th St. W. Metzler House, main and east facades (facing SW)



Fig. 266. 1603 4th St. W. Metzler House, west facade (facing SE)

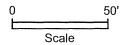


Fig. 267. 1603 4th St. W. Metzler House, east facade with early rear wing and intact dormer, porch, and bay window (facing NW)





Prep by Gemini Research 12-2013





GD-RWC-1400 1759 4th St. W Hist Name: Doebler House

Built:

1951

NR Status:

Not Indiviually Eligible

The Doebler House, built in 1951, is located on the edge of a steep bluff, sited to take advantage of striking views of the Mississippi River Valley. The house stands on the northern side of an alley-like street called Fourth Street. The house next door, also inventoried, is similar (see the Tollison House, GD-RWC-1401).

The Doebler House is a one story, woodframe, gable-roofed Ranch style house with a footprint of about 50' x 30'. It is built into the slope with the northern (main) facade's main floor at grade, while the concrete block basement level exposed on the southern facade. The southern facade includes the garage entrance and what appears to be the most-used pedestrian entrance – a single-leaf door at the center of the basement wall that is sheltered by a small shed-roofed porch with curvilinear detailing. The concrete block is smooth, with bullnose-edged blocks used to create window and door openings.

Around the eastern end of the house is a set of shallow poured concrete steps that curve up to the main level of the house. On the northern (main) facade, facing the river, is a picture window above a low limestone-faced planting box. The limestone is repeated on a stone-faced fireplace chimney that projects from the roof. West of the picture window is the formal "front" door.

At the northeastern corner of the house is a porch tucked within the massing of the roofline. The porch is glazed with unusual, original aluminum-framed panels with window glass and screens.

The main level of the house is sided with vinyl, evidently over original wide-lap wood siding. The vinyl siding is the house's most significant exterior alteration. The gable ends are faced with vertical wood. Most window openings are filled with 1950s double-hung sash with horizontal muntins.

Historical Background

The original owners of this house were Lewis O. and Agnes A. Doebler. The current owner is the couple's son.

The house is located in Red Wing's Fairgrounds neighborhood, which is located west of College Hill and Buchanan Street. According to local historian Frederick Johnson, "The Fairgrounds district is built on former farm fields and pasture that were easily converted to residential lots. Bluff lines to the north and west and the lack of a major roadway help bring a sense of privacy to the residents." He also explains, "The Fairgrounds features a generally well-maintained stock of mixed housing ranging from basic 19th century structures, mid-20th century ramblers, and recently constructed homes" (Johnson 2007: 50-51). The Doebler House and its neighbors on the extreme bluff edge were built after World War II (although the lots were platted in 1929), while houses in the blocks adjacent to the south tend to be considerably older.

Red Wing architectural historian Carrie Conklin Becker provides some context for houses of this age in Red Wing:

Depressed economic conditions and World War II had a tremendous impact on home building in Red Wing during the next 20 years. [During the Depression] families

doubling up to save money created a housing surplus which discouraged most new home construction through the late 1930s. From 1930 to 1934 only 16 new homes were built in Red Wing. Gradually improving economic conditions and a migration of people moving from rural farms into towns and cities spurred a modest boom in new housing during the late 1930s and early 1940s. Most homes erected during this period were small simple structures with few decorative details. Limited numbers of more substantial homes were constructed in the English Cottage and Cape Cod styles but even these were much smaller and more simply detailed than the Classical Revival and Tudor Revival homes constructed in Red Wing during the 1910s.

The start of World War II brought home construction to a virtual halt in the early 1940s. The *Daily Republican Eagle* reported that building activity in Red Wing hit a record low in 1942 with a total outlay of only \$22,895. A federal ban which had gone into effect earlier that year restricted nearly all new construction not directly related to the war effort. The ban remained in effect until 1945.

The close of the war and the return of the veterans and their growing young families resulted in a massive housing shortage nationwide during the late 1940s. Red Wing was no different than the rest of the country.... Construction in Red Wing continued to increase during the late 1940s as wartime shortages of materials eased and businesses returned to normal. The Ranch style gained in popularity with smaller homes filling in the remaining lots in the [new] Sunnyside Addition, and larger versions beginning to extend down Twin Bluff Road from Maple and Harrison streets. These houses foretold the direction of residential development in Red Wing for the next 30 years (Becker 1997: 16-18).

Becker also explains:

Strict rationing of building materials and labor during World War II virtually eliminated new house construction from 1941 to 1945. When construction resumed after the war, a large pent-up demand for houses coupled with a shortage of building materials created a need for small, efficiently-built homes. The Ranch style house became nearly ubiquitous as suburban-type developments sprang up across the United States in the late 1940s and early 1950s. In Red Wing, they were constructed during this period in the newly platted Sunnyside and Birchwood Village neighborhoods and along Twin Bluff Road as well as on scattered lots throughout the older neighborhoods.

The style developed on the West Coast as a loose adaptation of the one story house with a long ground-level front porch which was assumed to be typical of ranch dwellings in the American West. It became popular because its basic rectangular form and simple details easily met the space and cost requirements of the federal veterans mortgage programs which financed construction of many homes during this period (Becker 1997: 54).

Lewis O. and Agnes A. Doebler. Lewis O. Doebler (1903-1991) was born in Cannon Falls, Minnesota, the son of a rural mail carrier of German descent. He graduated from Cannon Falls High School and attended Winona State Teacher's College (now Winona State University), the University of Minnesota, and Dunwoody Institute where he studied printing.

Agnes A. Flom (1907-2006) was born in New England, North Dakota, and grew up in Kenyon, Minnesota. She attended Kenyon High School and graduated from Winona State Teacher's College in the 1920s. In 1941 the couple was married in rural Kenyon. They had two children.

Lewis worked at several newspapers and in 1942, the year after purchased a half interest in the *Cannon Falls Beacon*. In 1947 he sold his interest in the *Beacon* and in 1948 the couple moved to Red Wing and three years later they moved to this house. Lewis worked for the *Red Wing Republican Eagle* for 20 years, retiring in 1968. Agnes received a bachelor of arts degree from Winona State in the 1950s. She taught for more than 30 years in Cannon Falls, Anoka, and Red Wing. The Doeblers were active in the Masonic Lodge, Eastern Star, Sons of Norway, and Red Wing Country Club.

Recommendation

Built in 1951, the Doebler House is one of two adjacent Ranch style houses of similar age and basic design built on the bluff edge with extraordinary views of the Mississippi River Valley. In age, size, style, and form, the Doebler House is typical of many houses in Red Wing built during the city's post-World War II housing boom.

Gemini recommends that the Doebler House is not architecturally distinctive and therefore not eligible under National Register Criterion C (architecture and construction). Research conducted in numerous published histories, historic newspapers, and the files of the Goodhue County Historical Society revealed no associations with significant events or themes meriting eligibility under Criterion A (important events or broad patterns). None of the owners' activities and contributions rises to a level of significance that would make the property eligible under Criterion B (important person).



Fig. 268. 1759 4th St. W. Doebler House, north (main) facade, facing the river, and east facade; note original glassed-in porch and picture window (facing SW)



Fig. 269. 1759 4th St. W. Doebler House, south and west facades (facing NE)

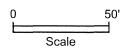


Fig. 270. 1759 4th St. W. Doebler House, south and east facades (facing N)





Prep by Gemini Research 12-2013





surveyed property

GD-RWC-1401 1765 4th St. W

Hist Name: Tollison House
Other Name: Millard House

Built: 1954

NR Status: Not Indiviually Eligible

The Tollison House, built in 1954, is located on the northern edge of a steep bluff with amazing views of the Mississippi River Valley. The house is next door to another inventoried property, the Doebler House, described above (GD-RWC-1400).

The Tollison House is a woodframe, Ranch style building with a simple rectangular form and a $44' \times 30'$ footprint. There have been only minor exterior alterations. The hipped roof has fairly wide overhanging eaves. The main level is sided with asbestos siding. The house has rectangular window openings with 1/1 sash.

The basement, which is built of smooth concrete block, is exposed on the southern side of the house (facing Fourth Street) while the main level is at grade with the bluff-edge lawn north of the house. The basement concrete blocks have bullnose edges.

The basement level on the southern facade incorporates both the garage door opening and the most-used door to the house, which is the basement door. The roll-up garage door has been replaced recently with a door whose partitions resemble those of the original door.

A set of exterior poured concrete steps with a simple pipe railing ascends the slope at the eastern end of the house to access the main level and northern facade.

At the northeastern corner of the house is a porch tucked within the massing of the roofline. The porch is glazed with original glass jalousie windows. A small shed-roofed screened porch (about $10' \times 14'$) was added outside of the glass porch circa 1965.

On the main (northern) facade is the "front" door and a picture window with a brick-faced planter box beneath the window. On the western end wall is an exterior fireplace chimney faced with blond brick.

Historical Background

The original owners of this house were Norman M. and Evelyn M. Tollison. See the Doebler House above (GD-RWC-1400) for information about the neighborhood and for contextual information about houses of this age in Red Wing.

Norman M. Tollison (1908-1992) was born in Esdaile, Wisconsin, northeast of Red Wing. He graduated from Red Wing Seminary in 1926 and worked at S. B. Foot Tannery. Evelyn Peterson (1913-2005) was born in British Columbia but raised in Red Wing. In 1931 the couple married. They had four children.

In 1938 Norman established Tollison Insurance Company, a State Farm Insurance agency. His office was located in downtown Red Wing. He retired in 1982. Evelyn graduated from the University of Minnesota in the first class of a new program educating activities directors. She served as Activities Director for the Red Wing Health Center for 15 years.

Both Norman and Evelyn were active at United Lutheran Church and in civic affairs. Norman was on the board of directors of the Seminary nursing home and Oakwood Cemetery. Both were active in numerous service organizations.

Recommendation

The Tollison House, built in 1954, is one of two adjacent Ranch style houses of similar age and basic design, sited with far-reaching views of the river valley. In age, size, style, and form, the Tollison House is typical of houses built during Red Wing's post-World War II housing boom.

Gemini recommends that the house is not architecturally distinctive and therefore not eligible under National Register Criterion C (architecture and construction). Research conducted in numerous published histories, historic newspapers, and the files of the Goodhue County Historical Society revealed no associations with significant events or themes meriting eligibility under Criterion A (important events or broad patterns). None of the owners' activities and contributions rises to a level of significance that would make the property eligible under Criterion B (important person).



Fig. 271. 1765 4th St. W. Tollison House, north (main) facade, facing the river, and east facade; note the original jalousie windows glazing the porch. (facing SW)

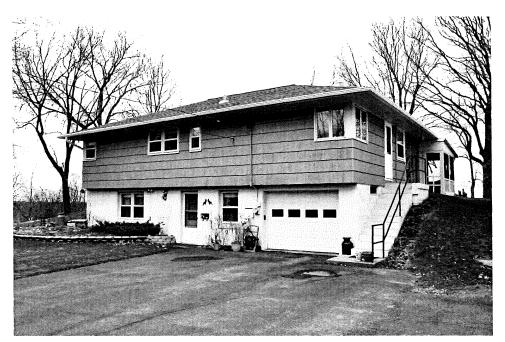


Fig. 272. 1765 4th St. W. Tollison House, south and east facades (facing NW)

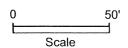


Fig. 273. 1765 4th St. W. Tollison House, north facades and front yards of 1765 and 1759 W. 4th St. (facing W)





Prep by Gemini Research 12-2013





surveyed property

GD-RWC-425 103 5th St. E

Hist Name: First Baptist Church Parsonage

Built: ca. 1940

NR Status: Not Indiviually Eligible

The First Baptist Church Parsonage, built circa 1940, stands on a triangular lot at the intersection of Fifth and Bluff streets in East Red Wing. The house is a two-story woodframe building with a rockfaced concrete block foundation. It has a symmetrical, late Colonial Revival design.

The house has a footprint about 30' x 40'. The roof is gabled with little overhang at the eaves, which is typical of 1930s and 1940s examples of the style. The gable ends face the sides of the lot. The exterior is covered with stucco. Detailing is sparse.

At the center of the main facade is an enclosed entrance porch with a curved roof. The main entrance door is single-leafed.

Most window openings are rectangular and several have modern mock shutters. The second story openings have original 6/1 sash and the first story has multipaned replacement sash. There is a small triangular window at the attic level in the eastern gable end, but a rectangular window in the same position in the western gable end.

Across the rear of the house is a one-story wing comprised of a single-stall garage at the western end and what is evidently an enclosed three-season porch at the eastern end. The wing has a shallow-pitched roof with short parapet walls at each end.

Historical Background

According to local architectural historian Carrie Conklin Becker, "Depressed economic conditions and World War II had a tremendous impact on home building in Red Wing during the [period 1930-1950]. . . . From 1930 to 1934 only 16 new homes were built in Red Wing. Gradually improving economic conditions and a migration of people moving from rural farms into towns and cities spurred a modest boom in new homes during the late 1930s and early 1940s. Most homes erected during this period were small simple structures with few decorative details" (Becker 1997: 16).

The original owners of this house, built circa 1940, were Theodore H. and Louise A. Thompson who bought the property in the spring of 1940. The Thompsons evidently bought the property so the house could be built and serve as the parsonage for the First Swedish Baptist Church of Red Wing which was located about one block away. This house evidently served as the parsonage until the early 1960s.

In 1943 this house was occupied by the First Baptist Church pastor, David N. Moberg, and his wife Esther. (Moberg was a temporary or visiting pastor from Duluth.) After apparently renting the house for about seven years, the First Baptist Church bought it in 1947 and owned it until 1963.

The First Swedish Baptist Church of Red Wing was organized in 1892 with 17 members. The church was located at Fifth and Potter streets about one block west of this house. In 1903 a new church was built and the old church building was used as a parsonage. First Baptist services were conducted entirely in Swedish until 1912, and Swedish was still spoken at some services into the 1920s. Red Wing had two other Swedish-American congregations: First

Covenant Church and First Lutheran Church. Today the Red Wing First Baptist congregation is called Cornerstone Community Church. It meets in downtown Red Wing.

Gemini Research could identify no significant events or associations connected to the house when it served as the First Baptist parsonage from circa 1940-1963. After 1963 the house was a private residence.

Recommendation

The First Baptist Church Parsonage is a late Colonial Revival style house built circa 1940. While an intact example of early 20th century residential design, particularly for East Red Wing, the house is not architecturally distinctive and therefore not eligible under National Register Criterion C (architecture and construction). Research conducted in numerous published histories, historic newspapers, and the files of the Goodhue County Historical Society revealed no associations with significant events or themes meriting eligibility under Criterion A (important events or broad patterns). None of the principal owners' and residents' contributions and activities rises to a level of significance that would make the property eligible under Criterion B (important person).



Fig. 274. 103 5th St. E. First Baptist Church Parsonage, main facade and west side (facing E)

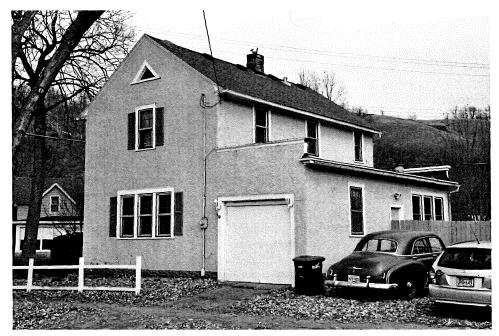
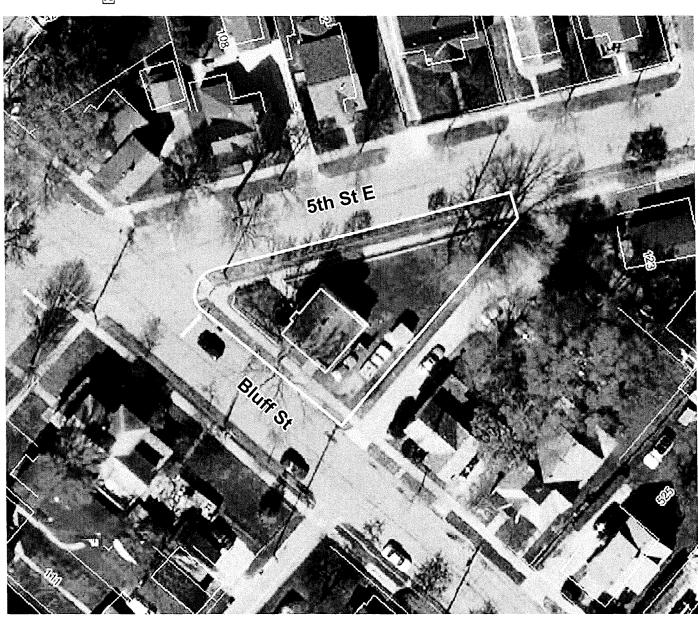


Fig. 275. 103 5th St. E. First Baptist Church Parsonage, west and rear facades (facing N)



Fig. 276. 103 5th St. E. First Baptist Church Parsonage, east facade (facing SW)





Prep by Gemini Research 12-2103





GD-RWC-457 304 5th St. E Hist Name: Anderson House

Built: ca. 1929

NR Status: Not Indiviually Eligible

The Anderson House, built circa 1929, is located at the northeastern corner of Fifth and Green streets, just south of Barn Bluff. It is a small, largely-intact, one-story, Craftsman style bungalow with the gable end facing the street and three-bay sidewalls. The roof has exposed rafter tails. The house has a rockfaced concrete block foundation and clapboard siding.

The house has a footprint about 22' x 30'. The main facade has a small triangle in the gable end faced with asphalt shingles. Beneath the triangle is a small multi-light attic window. At the center of the main facade is a bracketed, gabled overhang sheltering the front door. A wooden stoop has been added. The three-light front door is original.

Most windows retain 3/1 double-hung sash. On the rear facade is an original or very early hiproofed porch that has been enclosed with windows for three-season use.

Behind the house is a matching one-stall garage with clapboard siding. The vehicle door appears to be original and is a double-leaf door made of tongue and groove boards. The garage roof has exposed rafter tails like those on the house.

Historical Background

Local architectural historian Carrie Conklin Becker writes that the Craftsman style bungalow "first appeared in Red Wing in 1909 with the construction of the E. H. Hoard house at 909 W. 4th Street." She indicates most Craftsman bungalows in the community were built between 1915 and 1925. "They were particularly numerous on the south portion of Bush, along East Sixth, and on the far end of East Seventh streets, and in the Fairgrounds area. These neighborhoods experienced a great deal of construction during the building boom which followed the end of World War I." She writes that Craftsman style bungalows tend to be more intact than older houses in Red Wing because of their more recent construction date (Becker 1997: 50-51).

The Anderson House was built circa 1929. The original owners were Harold B. and Lillian M. Anderson, a young couple who had married about two years earlier in 1927. Harold Anderson was a truck driver who, for much of his career, delivered bulk oil.

Harold Anderson was born in Red Wing in 1899. He was of Swedish descent. According to his obituary, he operated the bulk oil business of the Cities Service Oil Company in Red Wing from 1926-1935. He was also a truck driver for the Winona Oil Company and for C. E. Betcher, a lumber company. He died unexpectedly in 1935 at age 36 (*RW Daily Republican*, June 11, 1935).

Lillian Marie Gerdes had been born in 1903 in Goodhue County of German immigrant parents. Lillian and Harold had two children. After Harold's death in 1935, Lillian worked as a stitcher at La Grange Shoe Company for about five years.

Lillian remarried in 1939. She and her second husband, William C. Fleming, lived briefly in the house before moving to rural Cannon Falls, Minnesota, around 1940. They farmed there until retirement. (RW Republican Eagle, Dec. 15, 1986).

Recommendation

The Anderson House, a Craftsman bungalow built circa 1929, is not architecturally distinctive and therefore not eligible under National Register Criterion C (architecture and construction). Research conducted in numerous published histories, historic newspapers, and the files of the Goodhue County Historical Society revealed no associations with significant events or themes meriting eligibility under Criterion A (important events or broad patterns). None of the principal owners' and residents' contributions and activities rises to a level of significance that would make the property eligible under Criterion B (important person).



Fig. 277. 304 5th St. E. Anderson House, main facade and east side (facing NW)



Fig. 278. 304 5th St. E. Anderson House, west facade (facing W)

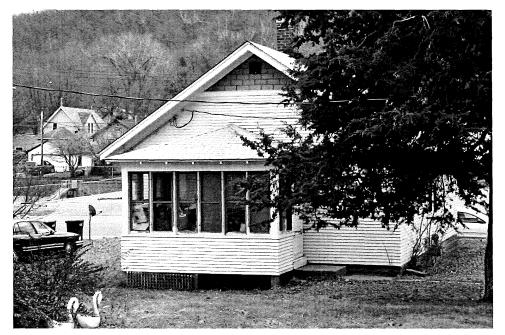
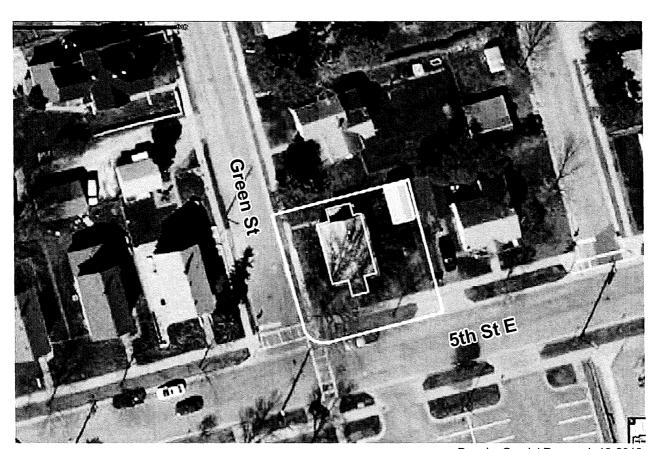


Fig. 279. 304 5th St. E. Anderson House, rear (facing S)





Prep by Gemini Research 12-2013



GD-RWC-463 342 5th St. E Hist Name: Johnson House

Built: ca. 1902

NR Status: Not Individually Eligible

Built circa 1902, the Johnson House is a Dutch Colonial Revival style house located on the northern side of East 5th Street just south of Barn Bluff. The lot is steeply sloped. The rear lot line meets the Highway 61 right-of-way.

The house has a footprint about 24' x 32'. It has 1 1/2 stories, a limestone foundation, and an intersecting gambrel roof. The first story is covered with clapboard siding and the upper story with square cut wood shingles. The wood shingles in the side wall gambrel ends flare out to meet the eaves. In the rear gambrel end, double rows of shingles meet the eave overhang in lieu of frieze boards.

Spanning the front of the building is an open hip-roofed porch with three Tuscan columns. The porch has a wide simple frieze that matches a similar detail on the house at the top of the first story.

Window openings are rectangular with architraves at the tops of the casings. Most openings have 1/1 replacement sash. At the top of the main facade is a pair of windows with fairly rare multipaned Queen Anne style fixed sash. Two window openings on the western facade (flanking the kitchen door) have been replaced with rectangular openings of somewhat different shape than the originals.

There was originally a small rear porch within the massing of the roofline at the northwestern corner of the house. It has been enclosed. A new shed-roofed, partially enclosed porch has been added fairly recently to this corner of the house.

Behind the house is a circa 1960 gable-roofed garage. The first story is built of smooth concrete blocks. The gable ends are faced with clapboard.

Historical Background

Red Wing architectural historian Carrie Conklin Becker indicates that Dutch Colonial Revival style houses are fairly uncommon in Red Wing. Houses of this style first appeared in Red Wing in the 1890s, with later examples built in the 1910s and 1920s. Becker writes that, in Red Wing in the 1920s, Period Revival styles such as the Dutch Colonial, other Colonial Revival, and Tudor Revival styles were built much less often than Craftsman style bungalow designs (Becker 1997: 52). In a quick windshield tour in 2012, Gemini Research identified at least six houses in Red Wing similar to the Johnson House.

The original owners and residents of the house were Swedish immigrants Carl (Charles) J. and Wilhelmina (Mina) Johnson. Carl Johnson was a house builder who undoubtedly constructed the house. At the time the house was built circa 1902, Carl was in his mid-fifties and Mina in her mid-forties. The Johnsons lived in the house for about 15 years.

Carl J. and Wilhelmina Johnson immigrated from Sweden about 1874 and 1882, respectively. They were married about 1886 and had at least four children.

In 1919, after Carl retired, the couple sold the house to John and Ulricka Bang. The house was occupied, however, by the Bang's married daughter Clara and her family. Clara and her husband assumed ownership in 1926 and lived here for about 23 years, until 1941.

Clara L. Bang Bohmbach and her husband H. J. (John) Bohmbach were both the children of German immigrants and both raised in Goodhue County. They married in 1901 and farmed in Montana and North Dakota before moving to Red Wing around 1915. In 1920, the year after they bought the house, John was working as a wagon driver for a fuel and ice company. The couple was living in the house with a son and daughter, John's 74-year-old father who was also a wagon driver, and a lodger employed as a carpenter. In 1940 John was working as a truck driver for Kosec transport, a fuel and transfer company.

In 1941 the Bombachs sold the house to Anton and Lucille Johnson. The next change in ownership occurred sometime after 1960.

Recommendation

The Johnson House is a Dutch Colonial Revival style house built circa 1902. It was identified in the Red Wing HPC's 1986 East End architecture-history survey as an "East End Structure Worthy of Further Consideration" for its fairly intact Dutch Colonial Revival style design (Conklin 1986).

Gemini Research recommends that while it is an intact example of early 20th century residential design particularly for East Red Wing, the house is not architecturally distinctive at a level meriting eligibility under National Register Criterion C (architecture and construction). Research conducted in numerous published histories, historic newspapers, and the files of the Goodhue County Historical Society revealed no associations with significant events or themes meriting eligibility under Criterion A (important events or broad patterns). None of the principal owners' and residents' contributions and activities rises to a level of significance that would make the property eligible under Criterion B (important person).



Fig. 280. 342 5th St. E. Johnson House, main facade and west side (facing NE)



Fig. 281. 342 5th St. E. Johnson House, main facade and east side (facing NW)

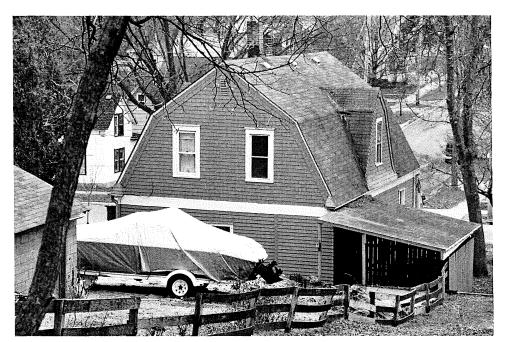
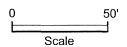


Fig. 282. 342 5th St. E. Johnson House, rear (facing SE)





Prep by Gemini Research 12-2013





GD-RWC-1378 ca. 700 5th St. E

Hist Name: R W Water Pump House 2 & Reservoir

Built: 1923

NR Status: Not Indiviually Eligible

The City of Red Wing's Water Pump House 2, also called the East Fifth Street Reservoir, is located just north of Highway 61/63 at the eastern base of Barn Bluff. East Fifth Street runs along the eastern side of the plant.

The property has two principal structures, a circular concrete reservoir and a brick-faced pump house, both dating from 1923. Additional site features include a concrete and steel hatch used to access the underground well, and a short section of mortared limestone rubble retaining wall behind the western wall of the pump house that helps retain the reservoir embankment.

Reservoir. The reservoir is a circular structure, about 90' in diameter, that is built into the slope at the eastern end of Barn Bluff. It has a capacity of 750,000 gallons. The reservoir has a shallow dome-shaped concrete roof and decorative cap-like coping at the upper edge of the concrete side walls. A 10' x 12' concrete penthouse with a shed roof and rectangular ventilators has been recently added to the roof, probably replacing a smaller ventilator. The upper sidewalls of the reservoir were coated with shotcrete sometime after 1960. A metal pipe leads from the top of the pump house to the roof of the reservoir, presumably to fill the reservoir. The piping may be a modern replacement of earlier pipe.

The western and northwestern sides of the reservoir are buried in Barn Bluff's slope, while the southern and eastern sides are packed with earth. The earth is supported by the lowest tier of the structure, a semicircular concrete support wall. The semicircular wall is reinforced with concrete buttresses. Judging by the quality and age of the concrete, the buttresses were added after 1960, possibly to replace or reinforce earlier buttresses. There is a short length of steel band on the rim of the support wall at its southwestern edge, possibly the remnant of a band that extended along the entire rim of the structure.

Pump House. The pump house is a one-story building with a 30' x 35' footprint. The main facade faces east. The building is faced with dark brown brick laid in seven-course American bond. (The structural system is unknown, perhaps hollow clay tile.) The building has a restrained classically-inspired design with a simple decorative brick cornice at the top of the walls. There is shallow terra cotta coping at the roof edge. The window and door openings are rectangular and have smooth concrete sills and lintels. The main entrance consists of a single-leaf door on the east facade. Originally, the window openings were probably filled with double-hung or industrial sash. All window openings have been closed up with concrete blocks, perhaps in the 1960s. A second door was cut into the northern facade, perhaps also in the 1960s.

The interior of the building is comprised of a single space, the pump room. It has a concrete floor and walls. Near the center of the room is an approximately 25"-tall concrete platform on which the pumping equipment is mounted. The platform elevates the equipment as a precaution against flood.

The pump is a horizontal-shaft split-case centrifugal pump manufactured by Aurora Pump Company of Aurora, Illinois. It is possibly original. (This type and brand of pump was common for small city waterworks of the period. Aurora Pump was founded in 1920 in Aurora, Illinois, by engineers of American Well Works, which had been established in Aurora in the 1860s.)

In line with the pump is a pressure regulator that may be original. Also adjacent to the pump is a 125-horsepower U.S. Motors-brand motor. It replaces the original motor and perhaps dates from the 1960s. Nearby are original lengths of large-diameter pipe with valves. There is a modern electrical control panel along one wall of the building.

The pump house is not currently in use.

Integrity. Reservoir: The exterior walls of the circular reservoir were coated with shotcrete sometime after 1960. A modern ventilator penthouse was added to the reservoir roof fairly recently. The buttresses on the sides of the lower tier support wall appear to postdate the original structure and perhaps date from the 1960s. Pump House: A second entrance was cut into the pump house on the northern facade, perhaps in the 1960s. All window openings have been filled with modern concrete block. The electric motor was replaced sometime after the early 1960s, while the pump and pressure regulator may be original.

Historical Background

The City of Red Wing's Water Pump House No. 2 was built in 1923. Local historian Madeline Angell writes that the City's "waterworks equipment was improved in 1923 by the sinking of another well and the providing of another reservoir and pumping station at the lower end of Barn Bluff" (Angell 1977: 286).

The well, pump house, and reservoir were built on land the City already owned. The original cost of the plant was about \$32,000 (Irvine 1942: 124). Neither the designer or contractor have been identified. (In 1923 the City also built a municipal electric plant designed by Twin Cities engineers Toltz, King, and Day.)

Red Wing's City Engineer William J. Geisheker was undoubtedly involved in the design and construction of the water plant. Geisheker served many years as Red Wing's City Engineer. He was born in Iowa in 1871. Both he and his wife Mary, also an Iowa native, were of German heritage. In 1900, early in his career, Geisheker was a surveyor in Dubuque, Iowa. The couple married in 1905 and moved to Red Wing sometime between 1905 and 1909 (census records). According to city directories, Geisheker was Assistant City Engineer in 1909, Assistant Superintendent of the city water works in 1911, and soon City Engineer. Geisheker designed the Red Wing City Hospital Stairway, built in 1918 and recommended eligible for the National Register (see GD-RWC-1423). About 1925 the family moved to Milwaukee where Geisheker worked for that city. Mr. Geisheker is believed to have died in 1938 in Milwaukee at the age of 67 (census records).

Construction of the new well and pump house was part of the City of Red Wing's continuing effort to improve public infrastructure including water service and quality. In 1920 cases of diarrhea and typhoid fever prompted the City to raise the pump at the main well on Levee Road and take other steps to reduce sources of contamination. Sinking a new well and building a reservoir and pump house at the eastern end of Barn Bluff was evidently part of this effort. At a City Council budget session in October 1921, the Board of Water Commissioners recommended the new well as a means to safeguard the city water supply (Hoisington 2013; City Council minutes Dec. 3, 1920 and Oct. 3, 1921).

Construction of the pumping station was also prompted by the desire to improve fire protection. In June 1920 the Red Wing Lutheran Ladies Seminary had burned to the ground, one of a number of major fires in the early 20th century. The new pumping station was financed by a \$50,000

bond issue that also included sewer work and street paving; fire protection was cited as part of the justification (City Council minutes Sept. 3, 1920). The bond issue was strongly approved by voters in November 1920. The City expected its fire protection rating to increase (likely affecting fire insurance rates) when the facility was completed (City Council minutes Dec. 1, 1922).

The new well and pump house were constructed during an era of significant public improvement in Red Wing. The same season the pump house was built, the City tried to raise water quality by eliminating a cross-connection between the drinking water supply and a river water intake at Pittsburgh Glass (now Archer Daniels Midland). Red Wing also built a new municipal power and light plant the same year. During the 1920s the Red Wing City Council was occupied in nearly every meeting by discussion of new water mains, fire hydrants, sanitary sewers, electric utility poles, street paving, curb and gutter, and sidewalks.

Facility Design. The construction of municipal infrastructure such as waterworks was also a frequent topic in professional journals of the period. Journals such as Municipal and County Engineering and the Journal of the American Water Works Association from the 1920s contain numerous articles describing waterworks systems in small U.S. cities like Red Wing. Designing and building water plants, as well as selecting and installing equipment are covered, with details on wells, reservoirs, pumping stations, and pumps, as well as water mains and purification systems. In the late 19th and early 20th century, pumping stations evolved from coal-fired steam-powered operations to the use of simpler and often more efficient pumps driven by electric motors. As technology improved, pumps and motors became more efficient, wells were dug deeper, water mains were made larger, and purification equipment became more common.

By the 1920s the design and equipping of municipal water systems was fairly standardized. It is evident from a review of several years' of professional journals that Red Wing's deep well, 750,000-gallon storage reservoir, 30' x 30' pumping station, and electrically-powered centrifugal pump represented typical equipment for a small Midwestern city in 1920. The reinforced concrete reservoir, partly banked into the hillside and reinforced with buttresses, was also a common design. According to one article, banking the concrete reservoir with earth helped protect the concrete from temperature extremes that would cause expansion and contraction.

Engineering journals of the period advised that small pumping stations be designed for permanence, efficiency, and cleanliness. Materials such as concrete, tile, and brick were preferred for durability and fireproof construction. Equipment was chosen for reliability and economy. Pump houses of the era were intended to cast an aura of competence and permanence. They were generally not as architecturally ornate as the earlier generation of waterworks facilities designed as symbols of civic pride when a city's first centralized water system was initially established. Red Wing's original waterworks plant, built in 1884 and listed on the National Register, is a good example of the earlier, architecturally impressive type.

Municipal Water Service in Red Wing. Pump House No. 2 was one of a series of facilities that comprised Red Wing's ever-improving municipal water system. The city's first centralized system was established in 1884. It was municipally owned. Water was drawn from the Mississippi River, entered the Red Wing Waterworks plant on Levee Road (1884), was pumped by a coal-fired steam-powered pump to an 80'-diameter reservoir on Sorin's Bluff (replaced), and was gravity-fed to homes and businesses via a distribution system of buried water-main pipes. In 1910 water quality was improved when the first well was driven to replace the river as a source of water. The well was dug at the main waterworks plant on Levee Road where a 750,000-gallon concrete reservoir and a brick well house were also constructed in 1910 (extant). Around

the same time, a new pump house was built on College Hill to help supply water to upper neighborhoods (Hoisington 2013).

In 1920 more steps were taken to decrease water contamination (see above). In 1923 Pump House No. 2 was built at the eastern end of Barn Bluff. In 1927 a new reservoir was built on Sorin's Bluff. In 1931 and 1932 two new wells were dug near the main plant (Hoisington 2013; Angell 1977: 286, 312).

After World War II booster pumps and a new tank on Sand Hill were erected in 1956 to serve neighborhoods on College Hill and other bluffs. Red Wing began to chemically treat its water in 1962. Flouride was added beginning in 1970. In 1972 a new standpipe and pumping station were built on Pioneer Road in southeastern Red Wing. In 1973-1974, after the community of Burnside was annexed to Red Wing, service was extended to this western area. In 1978 there were five deep wells and five reservoirs in the city system (League 1978: 43). Additional wells, pumps, distribution lines and other elements have been added as the city has continued to grow.

Recommendation

Pump House No. 2 was inventoried in 2010 by 106 Group. 106 Group recommended the property was eligible for the National Register of Historic Places (NRHP), by stating: "The growth of the city throughout the first decades of the 20th century necessitated construction of an additional pump house and reservoir. The City Water Department Pump House No. 2 is potentially significant under NRHP Criterion A in the area of Community Planning and Development as an example of the necessary public infrastructure that was required to serve the growing population of Red Wing" (Van Erem "City Water Department Pump House No. 2" 2010).

In 2013 Gemini Research reevaluated the National Register eligibility of the property. Gemini's investigation, which included research in numerous published histories, professional journals of the period, historic newspapers, and the files of the Goodhue County Historical Society, revealed no associations with important events, themes, or broad patterns significant enough to merit eligibility under National Register Criterion A. To be eligible under Criterion A, a property must not be simply associated with a broad pattern of history, but must be *significantly* associated with, or significant to, that broad pattern or important event. It is recommended that simply being an example of typical public infrastructure built to meet the needs of a normally-growing city does not meet the significance threshold necessary for National Register eligibility. (In contrast, the historical significance of Red Wing's original waterworks plant, built in 1884 to introduce the first public water supply to the city, is clear.)

Gemini found no associations with important people suggesting eligibility under Criterion B. Gemini also found that the well, reservoir, and pumping station are not distinctive from an architectural or engineering perspective (unlike the 1884 waterworks plant) and therefore do not meet National Register Criterion C.

It is recommended that the Pump House No. 2 is ineligible for the National Register. Pump House No. 2 lies outside of the boundaries of the National Register-listed Barn Bluff; the boundaries of the National Register-listed property as defined in the 1989 National Register nomination follow the 740' contour line around the bluff. However, Gemini Research recommends that this boundary is too small and excludes the significant lower portion of Barn Bluff. It is recommended that the boundaries of the listed property be amended to follow the boundaries of the city park and that, in the meantime, the portion of Barn Bluff within the city park boundaries be considered

eligible for the National Register. Pump House No. 2 is located within these boundaries and would likely be considered Noncontributing to the property.



Fig. 283. ca. 700 5th St. E. R W Water Pump House 2 & Reservoir, east (main) and south facades of the brick pump house (facing NW)



Fig. 284. ca. 700 5th St. E. R W Water Pump House 2 & Reservoir, east (main) and north facades (facing SW)



Fig. 285. ca. 700 5th St. E. R W Water Pump House 2 & Reservoir, brick pump house (facing NE)



Fig. 286. ca. 700 5th St. E. R W Water Pump House 2 & Reservoir, east side of storage reservoir (facing W)



Fig. 287. ca. 700 5th St. E. R W Water Pump House 2 & Reservoir, south side of reservoir; steps up Barn Bluff at left (facing NE)

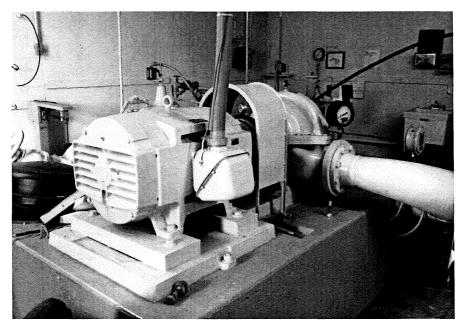


Fig. 288. ca. 700 5th St. E. R W Water Pump House 2 & Reservoir, the motor (left) and pump (right) inside the pump house (facing SW)

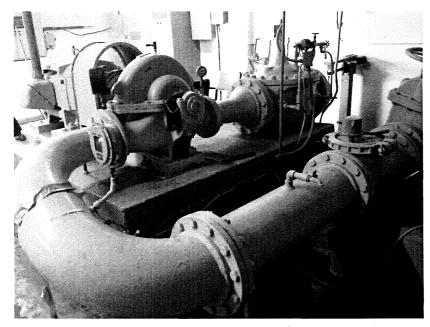
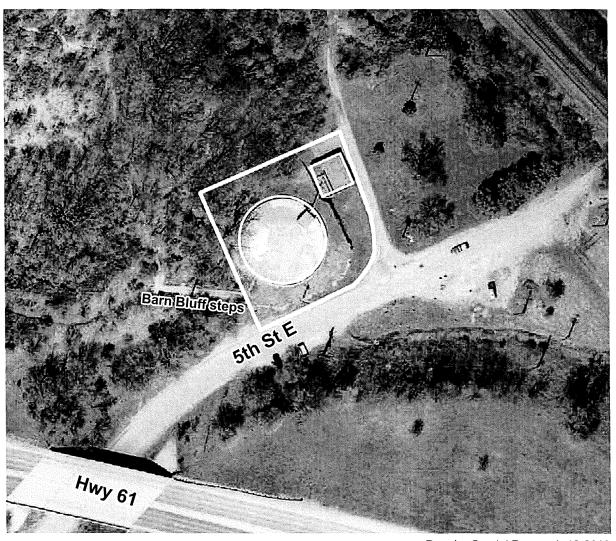


Fig. 289. ca. 700 5th St. E. R W Water Pump House 2 & Reservoir, the motor (upper left) and pump (center) (facing SE)





Prep by Gemini Research 12-2013



GD-RWC-1408 1400 6th St. W

Hist Name: McCoy-Jorgensen House

Built: ca. 1936

NR Status: Not Indiviually Eligible

The McCoy-Jorgensen House was designed by Minneapolis architect Irwin E. Engler and built circa 1936. The house is located on a toe of the massive College Hill bluff near its western end. The house was sited and designed to take advantage of stunning views of the Mississippi River Valley, Barn Bluff, and the city below. The original house, about 35' x 40', is largely intact. Around 2002 a 25' x 50' wing was built at the southwestern corner.

The lot is large, wooded, and irregularly shaped. The land falls off steeply west and north of the house. South of the house is a large yard with simple, naturalistic treatment of trees and shrubs. The house is approached via a driveway and sidewalk that enter from the east. Northeast of the house is a garage built into the side of the hill and accessed from Sixth Street. There was likely a second garage southwest of the house that was perhaps replaced by the house's circa 2002 addition.

The original house is a handsome Period Revival design. The footprint is L-shaped, with a small rear (south) wing. The roof is steeply pitched with little overhang at the eaves. There is both a small gabled dormer and a wider double dormer above the main facade.

The house is faced with wood shingles with mock half-timbering on the upper story. The foundation is poured concrete and is faced with dark brick in some locations such as the base of the porch.

The window openings are rectangular with multipaned double-hung sash and narrow casings. An important double window in the south gable end lights the principal interior stairway.

The main entrance to the house is located on the east side of the south (rear) wing. The area is emphasized with a veneer of uncoursed tan and gray limestone. Nearby are two ornate window planting boxes, likely original. North of the entrance, on the eastern gable end, is an exterior fireplace chimney faced with limestone matching the entrance area.

On the main facade is a substantial screened porch (about 25' x 8') tucked within the massing. The porch is supported by simple square wood posts with curved braces. There is subtle curvilinear detailing on the lintels of the screened porch openings.

The circa 2002 addition, designed by SALA Architects of Minneapolis, is stylistically compatible with the original house. It has living quarters at the north end and a two-stall garage at the south end. The addition was carefully designed to blend with, and not overpower, the original house.

The hillside garage, built circa 1936, appears to be constructed of rockfaced concrete block (perhaps supplementing poured concrete). The hillside flanking the short driveway apron is supported by dry-laid limestone retaining walls that likely postdate World War II.

Historical Background

The McCoy-Jorgensen House was built circa 1936. Both the original and second owners of the house were the owners of early automobile dealerships in Red Wing. There have only been three owners; the current owner is the granddaughter of the second owners.

Jay V. and Marguerite McCoy. The original owners were Jay V. and Marguerite McCoy. Jay was co-owner and president of McCoy-Curran Inc., which began Red Wing operations in 1923. The McCoys lived in the house until 1952.

Jay V. McCoy was born in Aberdeen, South Dakota, of Irish and Scots Irish background. By 1920 Jay was co-owner of an automobile garage in Carleton near Duluth. The company was evidently known as McCoy-Curran. In March 1923 McCoy-Curran moved its operation to Red Wing after purchasing Red Wing's Busch Garage. Jay McCoy was company president, R. M. Curran was vice president, and R. S. Curran was secretary-treasurer. McCoy-Curran sold Dodge, Plymouth, and Chrysler cars. It was located in downtown Red Wing through about 1952.

Marguerite B. (Vogel) McCoy was born in New Ulm, the daughter of German immigrants. Her father was a lumberyard owner.

Jay and Marguerite evidently commissioned Irwin E. Engler to design the house soon after they married in the mid-1930s. The land was part of the former campus of the Red Wing Lutheran Ladies Seminary which burned in June 1920 and was not rebuilt. By 1940 Jay and Marguerite were living in the house with their three-year-old daughter and a 23-year-old maid, Blanche Peterson.

George C. and Suzanne Jorgensen. The second owners, George C. and Suzanne Jorgensen, moved into the house in the 1950s after their three children were grown. George was president of Jorgensen Chevrolet, a dealership established in Red Wing in 1929. The Jorgensens lived in the house from the 1950s to approximately the 1990s (also maintaining a home in Florida).

George Christian Jorgensen (1898-1984), one of nine children, was born in Red Wing of parents born in Denmark. His father owned and operated Red Wing Furniture Company, a local manufacturer. George Jorgensen was educated in Red Wing, enlisted in the Navy in 1917, and served in France during World War I. Suzanne Mina Berthe Jorgensen (1901-1998) was born and raised in France and met her husband while he was serving there during the war. The couple married in Paris in 1920 and soon moved to Red Wing. They had three children, George, Evelyn, and Daniel.

George Jorgensen worked at his family's furniture factory before founding Jorgensen Chevrolet in 1929. The company sold Chevrolets and then added Oldsmobiles in 1935 and Cadillacs in 1939. Jorgensen was one of a select number of dealers who served on General Motors' "National Planning Committee." The dealership was located in downtown Red Wing until the 1960s when a new building was built on Highway 61 in western Red Wing. The Jorgensens' two sons also entered the business. George and sons also owned and operated Jorgy's Marine, which they established in 1958 (Severson 1963: 179).

George Jorgensen was civically active. In 1943, for example, he was one of the incorporators of the Red Wing Community Chest and served on its first board of directors. He was a member of the American Legion, Elks Club, Shriners, and United Commercial Travelers. He was president of the Chamber of Commerce, the Kiwanis Club, and the YMCA. He served on the City Water

Board, and on the governing board of the Red Wing Municipal Airport from 1946-1958 during the time the current airport was established (Angell 1977: 350; *RW Daily Republican Eagle*, Dec. 2, 1984; *Goodhue County's* 1972; Severson 1963: 179).

Architect Irwin E. Engler. Irwin Emil Engler (1904-1987) was an architect practicing in Minneapolis. Engler was born in Minnesota of German immigrant parents. His father was a millworker and later foreman of a sash and door factory. In both 1930 and 1940, according to the federal census, Engler worked as an architect for lumber companies, part of the time for the Carr-Cullen Company in Minneapolis. After World War II Engler evidently worked for Minneapolis architects Liebenberg and Kaplan. By 1950 he was practicing on his own in an office on Lake Street in Minneapolis. Engler is known to have designed a dental clinic near 31st Street and Cedar Avenue (1949), a mid-century modern apartment building (extant) at 22nd Street and 3rd Avenue (1950), and an addition to Elim Lutheran Church (extant) on Broadway Avenue (circa 1960), all in Minneapolis. (Engler is not listed in Lathrop's 2010 Minnesota Architects: A Biographical Dictionary.)

Recommendation

The McCoy-Jorgensen House is an interesting, well-designed, Colonial Revival-inspired house on a dramatic bluff-top site. Although the house has been expanded, Gemini Research identified the property for Phase II research because the addition was sufficiently isolated from the original house that the property could conceivably have met National Register integrity guidelines and eligibility criteria if research revealed outstanding historical significance.

Phase II research indicates the McCoy-Jorgensen House was designed by Minneapolis architect Irwin E. Engler and built circa 1936. The house was nearly doubled in size circa 2002 with an addition that is architecturally sensitive and set off from the original building. The altered building is not eligible for the National Register under Criterion C (architecture and construction). Research conducted in numerous published histories, historic newspapers, and the files of the Goodhue County Historical Society revealed no associations with important events or significant themes meriting eligibility under Criterion A (important events or broad patterns). None of the principal owners' contributions or activities rises to a level of significance that would make the property eligible under Criterion B (important person).

Gemini Research recommends that the property is not eligible for the National Register.



Fig. 290. 1400 6th St. W. McCoy-Jorgensen House, the house from the northwest; original house is on the left (facing S) $\frac{1}{2}$



Fig. 291. 1400 6th St. W. McCoy-Jorgensen House, main (north) facade (facing SW)



Fig. 292. 1400 6th St. W. McCoy-Jorgensen House, east facade (facing N)



Fig. 293. 1400 6th St. W. McCoy-Jorgensen House, south facade of the original house (facing N)

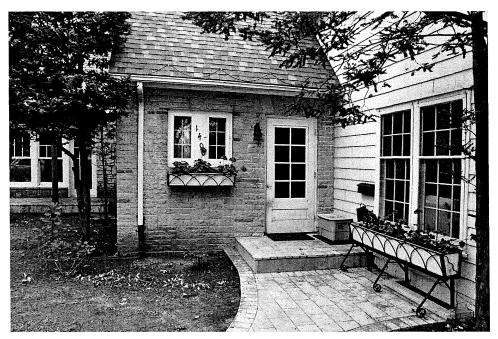


Fig. 294. 1400 6th St. W. McCoy-Jorgensen House, main entrance detail; the south wall is at right (facing NW)

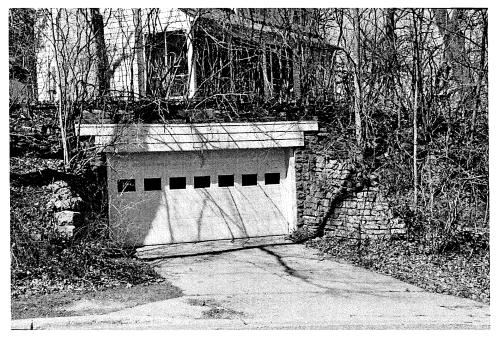


Fig. 295. 1400 6th St. W. McCoy-Jorgensen House, garage tucked into the bluff (facing W)





Prep by Gemini Research 12-2013





surveyed property

GD-RWC-739 413 Bluff St Hist Name: Anderson House

Built:

ca. 1875

NR Status:

Not Indiviually Eligible

The Anderson House at 413 Bluff Street, built circa 1875, was moved to this site in 1977 after its former site (across the street to the west) was cleared for a supermarket (now Runnings).

The house is a two-story, woodframe, Italianate style building with boxlike massing, a hipped roof, and a concrete block foundation. The footprint of about 25' x 50' includes an original, intact, gable-roofed rear wing.

The exterior of the house has been covered with stucco. A decorative band of wood encircles the house at the level of the second-floor window sills. The eaves of the hipped roof have a deep overhang. There is a wide frieze board and brackets and dentils. The rear wing has gable returns.

The house's window openings have ornate segmental-arched surrounds. The openings on the first story have original 4/4 sash and those on the second story have 1/1 replacement sash. The main and rear entrances, all single-leaf, have transom lights.

According to Sanborn insurance maps, the original front porch spanned the main facade. It was replaced by the current front porch sometime between 1910 and 1917. The current porch has a hipped roof and short Tuscan columns that rest on a solid, stucco-covered balustrade. The house was converted to apartments by the early 20th century.

Historical Background

The house was built circa 1875. For the first 95 years it was owned by a succession of three Swedish immigrant families.

Charles and Sophia Anderson. The original owners were Charles and Sophia Anderson, who bought the lot in 1865. Anderson was a carpenter and likely built the house. The couple sold the property in 1880 after living in the house about five years.

Charles was born in Sweden circa 1832 and Sophia was born there circa 1837. The couple was living in Red Wing with an infant son by the time of the 1857 census. Charles was working as a carpenter. By the time of the 1875 state census – the approximate year this house was built – Charles and Sophia Anderson were living with two sons; their eldest son was no longer at home.

Charles Anderson garnered a brief listing in the biographical sketch section of an 1878 history of Red Wing. Although the entry gave only his name and occupation, the 1878 history lists only a subset of men in Red Wing, suggesting he was perhaps well-known or highly-regarded (*History* 1878: 493).

Carl P. and Ellen Peterson. In 1880, about five years after the house was built, the property was sold to the second owner, Carl Peter Peterson, who owned the house for about 28 years, until 1908.

Carl P. Peterson was born in Sweden, emigrated as a young man in 1866, and came immediately to Red Wing. Carl was a blacksmith and worked for many years C. A. Erickson's wagon shop.

His first wife, Ellen, was also born in Sweden. She immigrated in 1869 at age 24 and the couple married circa 1870. They bought this house about ten years later. The 1900 federal census lists Carl (age 59) as a "landlord" and Ellen (age 54) as a hairdresser. Two single male boarders were living with the couple.

By the time of the 1905 state census, Carl Peterson had remarried. His wife Matilda was the daughter of Swedish immigrants. In 1905 the couple was living in this house with their five-year-old son. In 1908 the couple sold the house and moved to Potter Street nearby.

Charles A. and Anna C. Hanson. Charles A. and Anna C. Hanson bought the house in 1908. After 52 years, the Hanson family sold it to new owners in 1960.

Both Charles and Anna Hanson immigrated from Sweden as children. They married around 1897 and had two sons. Charles was the long-time proprietor of a grocery store in Red Wing. At the time of the 1910 census the family was living with several boarders including Anna's brother, Harold C. F. Gustafson, who was a 19-year-old railroad office worker.

Charles evidently died circa 1921 and Anna continued to live in the house with a succession of renters. In 1940, for example, the renters were a tannery worker and his wife and two infant children, and a truckdriver.

Recommendation

The Anderson House is an Italianate style house built circa 1875. Moved properties are not usually eligible for the National Register, but this house was relocated only about 400' east of its original location and to a city-block setting similar to its original setting. Because of the house's relatively early construction date and the possibility that historical significance could perhaps mitigate historic integrity issues thereby making the house eligible for the National Register, Gemini Research identified the property for Phase II evaluation

Gemini recommends that the house is not a candidate for National Register eligibility under Criterion C (architecture and construction) because it is not sufficiently distinctive architecturally and because it has sustained alterations. Research conducted in numerous published histories, historic newspapers, and the files of the Goodhue County Historical Society revealed no associations with significant events or themes meriting eligibility under Criterion A (important events or broad patterns). None of the owners' activities or contributions rises to a level of significance that would make the property eligible under Criterion B (important person).

Gemini Research recommends that the property is not eligible for the National Register.



Fig. 296. 413 Bluff St. Anderson House, main facade and north side wall (facing E)

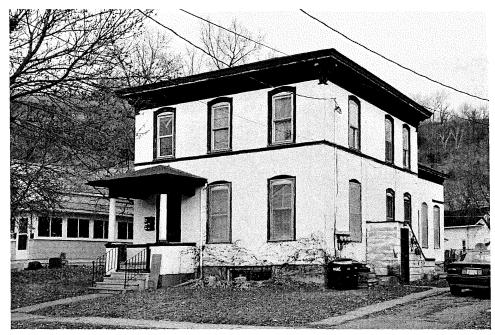


Fig. 297. 413 Bluff St. Anderson House, main facade and south side wall (facing N)

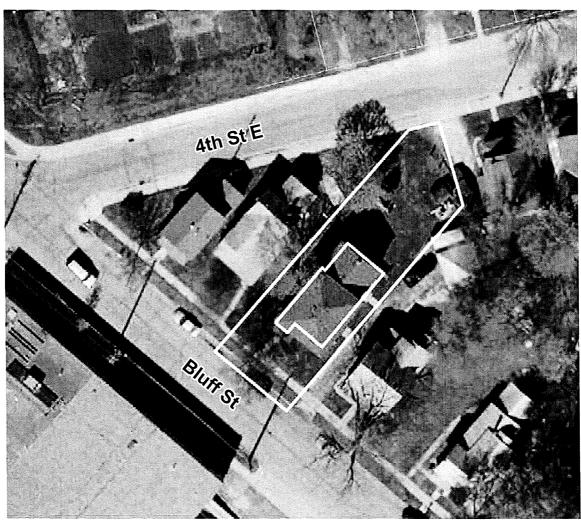


Fig. 298. 413 Bluff St. Anderson House, original rear wing (facing SW)



Fig. 299. 413 Bluff St. Anderson House, early 20th century replacement porch (facing N)





Prep by Gemini Research 12-2013



GD-RWC-1454 1917 Grandview Ave

Hist Name: Olson House

Built: 1938

NR Status: Not Indiviually Eligible

The Olson House, built in 1938, is an example of the Cape Cod variation of the Colonial Revival style. The house is located on Grandview Avenue, a two-block-long street with a stunning view of the Mississippi River Valley, Barn Bluff, and the Eisenhower Bridge.

The house has a symmetrical design with a footprint of about 25' x 25'. The roof is gabled and there are two gabled dormers on the main facade. The central entrance has an original single-leaf door with a 6-pane window. Next to the door is a small multipaned window that lights a small entrance foyer. The house has rectangular window openings with what appears to be original 6/1 sash. The openings are flanked by mock shutters.

Alterations include vinyl siding, replacement front steps made of wood, and a simple shed-roofed porch that shelters the east side door and wraps around the rear (southeastern) corner of the house. Built on the back of the house is a substantial, low wooden deck. Behind the house is a circa 1970s two-car garage with composition board siding.

Historical Background

The Olson House was built in 1938. Five of the seven houses on this blockface of Grandview Avenue were built in 1936-1942 according to county tax records. All but the Olson House have been altered considerably.

The house is located in Red Wing's Fairgrounds neighborhood, which is located west of College Hill and Buchanan Street, and, according to local historian Frederick Johnson, is named for fairs and expositions that were once held in the area. Johnson writes: "The Fairgrounds district is built on former farm fields and pasture that were easily converted to residential lots. Bluff lines to the north and west and the lack of a major roadway help bring a sense of privacy to the residents. Its Grandview Avenue provides one of the best river valley vistas in the city." Johnson also explains, "The Fairgrounds features a generally well-maintained stock of mixed housing ranging from basic 19th century structures, mid-20th century ramblers, and recently constructed homes" (Johnson 2007: 50-51).

The Olson House is a largely intact but fairly standard example of the Cape Cod style houses built in the years before and after World War II. According to McAlesters' *Field Guide to American Houses*, "The Cape Cod is the most common form of one-story [and 1.5 story] Colonial Revival house. As a form, it originated in the early 18th century and continued with few changes through the 1950s." The McAlesters also write that Cape Cod cottages are "loosely patterned after early wooden folk houses of eastern Massachusetts, usually with the addition of Georgian-or Adam-inspired doorways" (McAlester 1988: 339, 322).

Local architectural historian Carrie Conklin Becker writes the following about houses in Red Wing built in the Cape Cod style:

A typical Cape Cod style home was 1 1/2 stories tall with a side-facing gable roof. Dormered windows added light to the second floor. Front elevations featured a central or offset doorway flanked by multipaned windows. Decorative details were drawn from the colonial homes: white clapboard siding, shutters (most often painted green or

black), and simple pedimented door surrounds. For the first time, small garages were often attached directly to the side of the house in a slightly recessed single story ell. In Red Wing, a number of nicely-detailed Cape Cod homes were constructed during the early and mid-1930s. The style persisted but was greatly simplified when home building resumed after World War II (Becker 1997: 53).

Becker also explains that relatively few houses were built in Red Wing in the 1930s:

Depressed economic conditions and World War II had a tremendous impact on home building in Red Wing during the [1930s and 1940s]. Families doubling up to save money created a housing surplus which discouraged most new home construction through the late 1930s. From 1930 to 1934 only 16 new homes were built in Red Wing. Gradually improving economic conditions and a migration of people moving from rural farms into towns and cities spurred a modest boom in new housing during the late 1930s and early 1940s. Most homes erected during this period were small simple structures with few decorative details. Limited numbers of more substantial homes were constructed in the English Cottage and Cape Cod styles but even these were much smaller and more simply detailed than the Classical Revival and Tudor Revival homes constructed in Red Wing during the 1910s.

The start of World War II brought home construction to a virtual halt in the early 1940s. The *Daily Republican Eagle* reported that building activity in Red Wing hit a record low in 1942 with a total outlay of only \$22,895. A federal ban which had gone into effect earlier that year restricted nearly all new construction not directly related to the war effort. The ban remained in effect until 1945. The close of the war and the return of the veterans and their growing young families resulted in a massive housing shortage nationwide during the late 1940s (Becker 1997: 16-17).

Herman L. and Esther I. Olson. The original owners of the house were Herman and Esther Olson. Herman was a well known building contractor and undoubtedly built the house. Herman and Esther were in their early forties when the house was built.

Herman L. Olson was born in Galesville, Wisconsin, and was of Swedish descent. He was raised in Red Wing and served in France during World War I. His father, Ernest Olson, was a carpenter who owned his own building construction business. Herman joined his father's firm.

Esther I. Salmonson was born and raised in Wacouta, Minnesota. She worked at the Red Wing Advertising Company prior to her marriage to Herman Olson in 1919. The couple had two sons, both of whom joined their father's construction business.

After his father died in 1926, Herman Olson continued the family construction business by forming, with partner Monroe Warn, a firm called Warn and Olson Building Company. In 1948, according to a city directory, the business was operated from the Olsons' home. By the early 1960s the third-generation firm was known as H. L. Olson and Sons Construction Company and was headquartered at 1234 W. 4th St. in Red Wing.

In April of 1956, Herman and Esther Olson, along with Monroe and Laura Warn, platted a 12-lot subdivision in Red Wing called "Herman L. Olson's Subdivision" on a bluff-side site just north of Oakwood Cemetery. It was about two miles southeast of the Olson House.

Both Herman and Esther Olson were active in the First United Methodist Church and in several fraternal groups and service clubs.

Recommendation

The Olson House, a modest example of the Cape Cod subtype of the Colonial Revival style built in 1938, is not architecturally distinctive and therefore not eligible under National Register Criterion C (architecture and construction). Research conducted in numerous published histories, historic newspapers, and the files of the Goodhue County Historical Society revealed no associations with significant events or themes meriting eligibility under Criterion A (important events or broad patterns). None of the Olsons' civic contributions or other activities rises to a level of significance that would make the property eligible under Criterion B (important person).

Gemini Research recommends that the property is not eligible for the National Register.

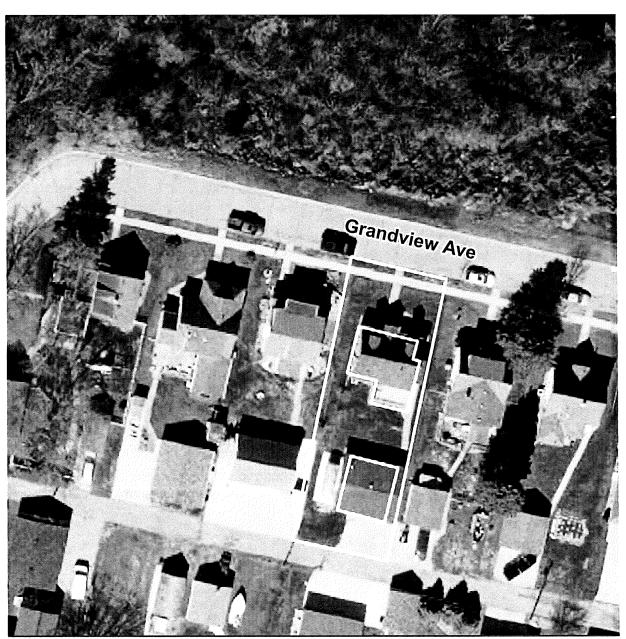


Fig. 300. 1917 Grandview Ave. Olson House, main and west facades (facing SE)



Fig. 301. 1917 Grandview Ave. Olson House, main and east facades (facing SW)





Prep by Gemini Research 12-2013





GD-RWC-1448 Highway 61

Hist Name: Highway 61, Red Wing Segment

Built: 19th-20th c.

NR Status: Not Individually Eligible

Contributing to NRHP-eligible Red Wing Commercial Historic District

Contributing to Red Wing Mall Historic District

Present-day Highway 61 within the current Red Wing city limits is about ten miles long. It is a four-lane highway that is divided by a median for most of its length. (See sketch map.)

Gemini Research also inventoried a related property, the Red Wing Segment of Old Highway 61 (GD-RWC-1434). This is an alignment of Highway 61 in Red Wing that was largely bypassed in 1953 and 1963. See that site.

South of the Red Wing Segment of present-day Highway 61, the highway continues to follow the Mississippi River to the southeastern corner of the state. The 27 miles from Red Wing to Wabasha is two lanes wide while the highway south of Wabasha is four lanes. At La Crescent south of Winona, the state highway – Minnesota Highway 61 – ends, while U.S. Highway 61 continues across the Mississippi River to La Crosse, Wisconsin. From there it continues south to New Orleans.

North of Red Wing, Highway 61 travels west and then north through Hastings. There is an 11-mile stretch south of Hastings that is still two lanes while the rest of the road between Red Wing and St. Paul is four lanes. Highway 61 travels north of St. Paul to Interstate 35 at Wyoming, Minnesota. At Wyoming U.S. Highway 61 ends. Minnesota Highway 61 continues on to Duluth and then follows the North Shore of Lake Superior to the Canadian border.

For the purposes of this inventory, present-day Highway 61 within the Red Wing city limits is divided into five subsections, listed below from west to east. Each subsection is then described:

Subsection	Length	Location
1	2.7 mi	jct CSAH 18 to jct TH 19
2	2.8 mi	jct TH 19 to jct Spring Creek Rd (CR 53)
3	2.5 mi	jct Spring Creek Rd (CR 53) to jct Cedar St
4	0.66 mi	jct Cedar St to jct Potter St
5	1.7 mi	jct Potter St to jct Golf Links Dr

Subsection 1. Subsection 1 is about 2.7 miles long. It extends from the western Red Wing city limits near the junction of Highway 61 and CSAH 18, on the west, to Highway 61's junction with Minnesota TH 19 on the east.

Subsection 1 is a segment of the highway reconstructed in 1994. It is a four-lane divided highway that generally follows an earlier alignment. Subsection 1 includes four modern bridges: Bridge 25018 over the Cannon River (westbound lane, built 1994); Bridge 25021 over the Cannon River (eastbound lane, built 1993); Bridge 25017 over the South Channel of the Cannon River (westbound lane, built 1984); and Bridge 25023 over the South Channel of the Cannon River (eastbound lane, built 1993).

Recommendation. Subsection 1 is not yet 50 years old and is therefore too recent to meet National Register eligibility requirements.

Subsection 2. Subsection 2 is about 2.8 miles long. It extends from the junction of Highway 61 and Minnesota TH 19, on the west, to the highway's junction with Spring Creek Road (CR 53) on the east.

Subsection 2 is a segment of the highway reconstructed in 1983. It is a four-lane divided highway that generally follows an earlier alignment. The subsection includes three bridges: Bridge 25013 over Spring Creek (eastbound lane, built 1982); Bridge 25014 over Spring Creek (westbound lane, built 1983); and Bridge 25019 (a pedestrian bridge over the highway near Johnson Avenue and Anderson Park, built 1986).

Recommendation. Subsection 2 is not yet 50 years old and is therefore too recent to meet National Register eligibility requirements.

Subsection 3. Subsection 3 is about 2.5 miles long. It extends from the junction of Highway 61 and Spring Creek Road (CR 53), on the west, to the highway's junction with Cedar Street on the east.

Subsection 3 was constructed in 1953 and is a four-lane divided highway. The western 1 mile generally follows an earlier alignment, while the eastern 1.5 miles is a 1953 realignment that shifted the highway about 200' to 500' south of its previous alignment, depending on location. The old alignment remained a local street now called Old West Main Street. It was inventoried as part of the Red Wing Segment of Old Highway 61 (see GD-RWC-1434).

The highway in Subsection 3 is comprised of two 24'-wide concrete strips that are divided near the western end of the subsection by a grass median about 22'-24' wide. The grass median ends about 1,700' west of Bench Street where it is replaced by a narrower concrete median. The shoulders were gravel originally and are now bituminous. Today each half of the divided highway has pavement about 42' to 50' wide (including bituminous shoulders and turn lanes). West of about Bench Street, there are two frontage roads (each about 30' wide) separated from the highway by grass medians of 10' to 20', making the whole corridor about 210' wide.

The highway near present-day Withers Harbor Drive was altered in 1982 when the road was widened and Withers Harbor Drive was built, a project that required plugging a 1950 Chicago Great Western railroad tunnel under the highway (Bridge 6482; GD-RWC-855) (RW Republican Eagle, July 29, 1982). The highway in Subsection 3 has also been altered with modern interchanges at Tyler Road and Bench Street. The pavement just west of the Bench Street intersection, for example, is about 110' wide. Several modern traffic signals have been added to Subsection 3.

The subsection has a pedestrian underpass at Buchanan Street, built in 1953 (see photo). Also dating from 1953 is a long retaining wall on the northern edge of the highway at Jefferson Street that is topped by an ornamental railing (see photos). There is a matching section of ornamental railing (also 1953) that serves as a guardrail on the southern side of the highway at Washington Street (about one block east of the Jefferson Street retaining wall). Both sections of ornamental railing match those used on Highway 61 throughout Red Wing in the 1950s-1960s including on Bridge 9103 (GD-RWC-1387), which is the approach bridge to the Eisenhower Bridge over the Mississippi River. It was also used on other bridges in Red Wing built as part of the post-World War II reconstruction of Highway 61 through the city, and just east of the Red Wing city limits on Bridge 6776 (circa 1954) over the former CMSTPP Railroad. Most sections of the railing have been demolished. The same ornamental rail was used on the Hastings Bridge (1951) in Hastings, and on at least one bridge in a southern Twin Cities suburb (noted by Gemini Research).

Highway 61 in Subsection 3 was altered fairly recently at its junction with Old West Main Street. A minor alteration also occurred at Jefferson Street where access to and from the highway from northbound Jefferson Street was removed.

Subsection 3 includes two bridges: Bridge 6483 (GD-RWC-907) which crosses Hay Creek and Withers Harbor Drive (built 1952, altered) and Bridge 6482 (GD-RWC-855), which is an abandoned Chicago Great Western railroad tunnel under the highway (built 1950, altered).

Recommendation. It is recommended that Subsection 3 does not meet National Register requirements due to loss of historic integrity from the accumulation of post-1953 changes described above.

Subsection 4. Subsection 4 is about nine blocks or .66 mile long. It extends from the junction of Highway 61 and Cedar Street, on the west, to the highway's intersection with Potter Street on the east. Highway 61 in this subsection is locally called Main Street.

At Plum Street near the eastern end of the subsection, Highway 61 intersects with Minnesota Highway 58 and U.S. Highway 63, both of which are carried on Plum Street.

Most of Subsection 4 (i.e., the eight blocks from Cedar Street to Plum Street) is also part of another inventoried property, the Red Wing Segment of Old Highway 61 (GD-RWC-1434). (See that property.)

The highway in Subsection 4 is on its historical alignment, an alignment that predates the state highway system. Today the road in this subsection has four traffic lanes and two parallel parking lanes. The road is about 70' wide (curb to curb) west of Broad Street and about 80' wide (curb to curb) east of Broad Street, which is where the densely-developed downtown blocks begin. West of Broad Street there are grass- and tree-planted boulevards on both sides of the highway that have been in existence since 1920. East of Broad Street there are no boulevards and instead downtown Red Wing's sidewalks extend from the building facades to the curb.

Subsection 4 was first paved with concrete in 1919-1920 by the state highway department and the City of Red Wing. The concrete pavement was 27' to 56' wide, depending on location. There was a center median – planted with grass and trees – in the three blocks between Cedar and Franklin streets. (See historic photo in Dosdall and Erickson (2007: 65).) The center median was installed in 1919-1920 and removed in 1953.

In 1930 the highway in Subsection 4 was widened from 27'-56' to about 68'-70' wide. Parking in the downtown area was changed from angled to parallel. At about the same time, curbside gasoline pumps were removed from Highway 61. Red Wing's first traffic signal was installed on Highway 61 at Main and Plum streets. The concrete pavement in this subsection was covered with bituminous in the mid-1960s. More traffic signals were installed in 1962, 1975, and 1976. Eventually Main Street between Broad and Potter streets was widened to its current width of approximately 80'.

Recommendation. It is recommended that Subsection 4 does not meet National Register eligibility criteria. While Highway 61 in this subsection generally retains historic integrity to at least 1940, it is recommended that the 0.66 mile-long subsection is not long enough to convey or represent the significance of Highway 61 as an important transportation route (Criterion A). Further, Subsection 4 is not part of a longer segment of Highway 61 that is eligible for the National Register – segments to the west are altered and too recent, and the segment to the east

has associations that begin in the 1960s (see below). Subsection 4 does not appear to be associated with an important person (Criterion B) and does not have design or engineering significance (Criterion C).

A few blocks of Highway 61 in Subsection 4 are located within, and adjacent to, three historic districts that are listed on, and eligible for, the National Register, and locally designated by the City of Red Wing. See NRHP Eligibility Recommendation below for more details.

Subsection 5. Subsection 5 is about 1.7 miles long. It extends from the junction of Highway 61 and Potter Street, on the west, to the highway's junction with Golf Links Drive (the Red Wing city limits) on the east.

Subsection 5 was constructed in 1963 and is a four-lane divided highway. It represents a 1963 realignment that shifted the highway about 125' to 1,200' north of its previous alignment, depending on location. The old alignment remained a local street called East Seventh Street. The old alignment was inventoried as part of the Red Wing Segment of Old Highway 61 (see GD-RWC-1434).

Subsection 5 was built on the southern flank of Barn Bluff where it met the new Eisenhower Bridge (GD-RWC-909) over the Mississippi, completed in 1960. The highway was built with four 11' to 12' bituminous-surfaced travel lanes. Shoulders were originally gravel but were paved with bituminous in 1982 and are now about 8' wide. The highway is divided by a narrow concrete median for most of the subsection. The median changes to a wider grassy median near the Minnesota State Training School near the eastern end of the subsection. From Barn Bluff eastward, the former CMSTPP Railroad (now Canadian Pacific) runs parallel with, and immediately north of, the highway. The highway may have received a minor alteration near the State Training School's stone entrance gate where cars on East Seventh Street are now blocked by a curb from accessing the highway.

Subsection 5 includes three bridges: Bridge 9103 at the Highway 61/63 junction (built 1960, National Register-eligible, GD-RWC-1387); Bridge 9449 over East Fifth Street (built 1962, railing replaced, GD-RWC-1453); and Bridge 9450 over Nymphara Lane (built 1962, railing replaced, GD-RWC-1362). All three bridges originally had ornamental railings that matched the railings used elsewhere on Highway 61 in Red Wing in the 1950s and 1960s (*RW Republican Eagle*, April 23, 1982 and July 9, 1982). (See Subsection 3 above for the railing.)

Recommendation. It is recommended that Subsection 5 does not meet National Register eligibility criteria. Completed in 1963, the road segment represents the postwar modernization and expansion of Highway 61 to four lanes, but at 1.7 miles long does not have sufficient length to convey this significance or the importance of Highway 61 as a major transportation route (Criterion A). Further, Subsection 5 is not part of a longer segment of Highway 61 eligible for the National Register. There is a potentially eligible segment of Highway 61 immediately to the east, but it differs in character and associations from Subsection 5. The segment to the east is the 27-mile segment of Highway 61 from Red Wing to Wabasha that is still two lanes wide. It is likely eligible for the National Register as a scenic highway significant to auto tourism from circa 1930-1960. With two lanes, narrow shoulders, fairly narrow ditches, and numerous curves, the Red Wing to Wabasha segment is much different in history and appearance than the wider, four-lane, expressway-type Subsection 5 completed in 1963. Subsection 5 does not appear to be associated with an important person (Criterion B) and does not have design or engineering significance (Criterion C).

Historical Background

Pre-1945 History of Highway 61 Through Red Wing. The earliest roads in the Red Wing area were created and traveled by Native Americans, and later used and improved by Euro-Americans when they began to live in the area (see, for example, Angell 1977: 82). The first publicly-built road through Red Wing was the 76-mile-long Mendota to Wabasha Military Road which generally followed the route of today's Highway 61. The road was authorized by Congress in 1850 and built within the next few years. It followed the western bank of the Mississippi River from Wabasha (south of Red Wing) to Mendota (south of St. Paul). A surviving segment of the road in western Red Wing (GD-RWC-846) is listed on the National Register. (See that road segment's National Register nomination.) The Mendota to Wabasha Military Road was eventually lengthened to La Crescent, after which it was called the St. Paul to La Crosse Road. (La Crescent, Minnesota, and La Crosse, Wisconsin, were linked by ferries crossing the Mississippi.)

In 1855 Goodhue County's first commercial stagecoach traveled the military road from Red Wing south to settlements such as Frontenac and, soon, to Lake City. By 1868 there were three stagecoaches daily traveling through Red Wing on the St. Paul to La Crosse Road (Angell 1977: 127). Red Wing was also the hub for stagecoach lines to inland towns farther from the Mississippi.

In 1870 the St. Paul and Chicago Railroad (later the Chicago, Milwaukee, St. Paul, and Pacific) was built along the western bank of the Mississippi River through Red Wing. While the train eventually replaced the steamboat as the dominant form of transportation in the corridor, overland roads remained important. Rural roads were especially critical for hauling lumber, machinery, supplies, mail, and people from Red Wing to inland farms and settlements, and for hauling grain from those farms and villages to Red Wing for marketing and processing.

In 1905 the Minnesota Legislature created a state highway commission and the St. Paul to La Crosse Road was designated State Road 3. As automobile use grew and roads were improved, Highway 3 became an increasingly important route, in large part because it was a link between the Twin Cities and Chicago. In 1921 the highway just west of Red Wing was one of the busiest in the state with traffic volumes of 1,100 vehicles daily (Angell 1977: 293).

In November 1920 Minnesota voters approved the modern state trunk highway system. The highway through Red Wing became Minnesota Highway 3. Highway 3 extended diagonally across the state from La Crescent through the Twin Cities to Breckenridge.

In 1926 Highway 3 through Red Wing became part of the new U.S. highway system and received the number U.S. Highway 61. U.S. Highway 61 was an important north-south route that stretched through the center of the country along the Mississippi River from New Orleans to Canada. It was both a commercial route and tourism artery.

In 1933 Minnesota Highway 3 through Red Wing was renumbered Minnesota Highway 61 so the state and federal numbers would correspond.

State and federal funding increased with the establishment of the trunk highway system. The state highway department began a substantial series of improvements to Highway 61, assisted in some cases by municipal governments such as the City of Red Wing. By the end of 1932 the highway was entirely concrete from the Twin Cities to La Crosse except for 12 miles between Lake City and Wabasha that were paved with bituminous over a gravel base (Angell 1977: 319).

Postwar Construction. By the late 1930s and early 1940s, Highway 61 was carrying so much traffic that the State planned to widen it to four lanes from St. Paul to La Crescent, a distance of about 120 miles, and replace associated bridges over the Mississippi. The first segments to be widened to four lanes were short pieces in St. Paul and La Crescent that were rebuilt in 1937-1941. The widening proceeded incrementally but was delayed by World War II and, after the war, by lack of funding as an expanding system of state and federal roads, including the new federal interstate highway system, competed for resources. The arguments for widening Highway 61 were weakened when a new route to the Twin Cities – Highway 14 from Winona to Rochester and Highway 52 from Rochester to the Twin Cities – was improved and drew truck traffic away from the river-hugging Highway 61. Most widening of Highway 61 occurred between 1947 and the mid-1960s. Today only two significant stretches of the highway south of St. Paul are not four lanes wide: an 11-mile piece from Hastings southward, and a 27-mile segment from the eastern edge of Red Wing to the western edge of Wabasha.

Note: the 27-mile Red Wing-to-Wabasha segment was graded and paved in 1924-1925. The segment was rebuilt and/or realigned in 1952-1954. The 1954 road was intended to be half of a four-lane divided highway but the second half was never built. Today the road has two 11' to 12' bituminous travel lanes. Its gravel shoulders were paved with bituminous in 1982 and are now 8' to 10' wide.

During the two decades after World War II, traffic volume on Highway 61 increased as the economy recovered from the Depression and war, as the use of long-haul trucks increased, and as automobile ownership and recreational travel skyrocketed. By 1948 Highway 61 through Red Wing was "one of the main routes between the Twin Cities and Chicago" and carried considerable through-truck traffic including multiple-axled commercial vehicles. In June 1948 commercial trucks represented more than 18% of vehicles passing through Red Wing on Highway 61 (*Red Wing Traffic* 1948).

See the full inventory form for a list of postwar improvements to Highway 61 between St. Paul and La Crosse.

Improvements in Red Wing. Highway 61 improvements within Red Wing included major reconstruction and realignment through the entire city, and associated construction of the new Eisenhower Bridge over the Mississippi (completed in 1960; GD-RWC-909). While the new bridge was welcomed, much of the realignment west and east of downtown was controversial. West of downtown, residents "felt that the west end business district [now the Old West Main Street commercial area] would be permanently ruined by the relocation," according to Angell. In 1947-1949 the highway department acquired nearly 50 houses, graded a major hill, and filled part of a large swamp near Hay Creek. In the summer of 1949 Red Wing citizens circulated a petition demanding that plans be abandoned and a bypass be built through southern Red Wing, rejoining Highway 61 about six miles east of the city ("Belt Line" Winona Republican Herald, July 25, 1949). The new four-lane west of downtown was eventually completed and opened with a public ceremony in October 1953 (Angell 1977: 350, 363).

At the eastern edge of downtown, work on replacing the 1895 bridge over the Mississippi began in 1956; the Eisenhower Bridge was dedicated in 1960. Realigning Highway 61 from south of the bridge to the eastern city limits occurred from 1958 to 1963. A map in a September 1955 issue of the *Red Wing Daily Republican Eagle* showed the public four possible alignments through East Red Wing ("Which Way?" Sept. 28, 1955). The final route was the northernmost, requiring removal of sizable portions of Barn Bluff, the 325'-tall island mesa that was Red Wing's best-known landmark and a place of cultural significance for centuries. About 87 houses in East Red

Wing would also be removed. Leon Joyce Construction of Rochester began grading in April 1958. Massive amounts of earth were removed from Barn Bluff's western and southern flank and hauled to the Wisconsin end of the new river bridge for fill. A monumental public stairway up the western end of Barn Bluff (said to be the longest in the state) was demolished. In May of 1959 a huge piece of the bluff's towering "Indian head" formation tumbled to the ground, damaging boxcars and a nearby industrial facility and ending hopes that the formation could remain in place above the south end of the new river bridge. The new four-lane in East Red Wing was officially opened in September 1963 ("TH 61 Opening" *Minnesota Highways*, Aug. 1963).

Tourism and Highway 61. Recreational travelers were historically a significant part of Highway 61's traffic. With stunning views of the Mississippi River and its bluffs, the road was one of the most popular scenic highways in the state, especially among the routes within easy reach of Twin Cities residents. Beginning in the mid-1910s the highway was part of several "motor trails" or tourist highways that were named, signed, and promoted by automobile clubs, local business groups, and multistate organizations. Auto trails that included Highway 3/61 through Red Wing were the National Parks Highway (named in 1917), the Yankee Doodle Highway (1918), the Mississippi Valley Highway, the Mississippi River Scenic Highway (1920), the Mississippi River Parkway (1938, later called the Great River Road), the Upper Mississippi River Scenic Drive (1940s), and the Hiawatha Pioneer Trail (1965).

After World War II recreational travel on Highway 61 south of St. Paul increased annually. Businessmen in Red Wing, the second-largest city on the route, played significant roles in promoting tourist traffic. Around 1940 communities from Hastings southward began calling the area the "Hiawatha Valley" in joint advertising. Red Wing was a charter member of the Hiawatha Valley Association, a tourism group that formed in 1940, was reorganized in 1946, and operated until about 1969. Among its marketing strategies was to advertise Highway 61 as the gateway to northern Minnesota for vacationers traveling from Illinois, Iowa, and other states in the southern Midwest. This campaign was largely successful until the mid-1960s when I-94 was built across Wisconsin, providing a faster route between the Chicago area and northern Minnesota.

The Great River Road also played a role in postwar tourism on Highway 61. The Great River Road was a fairly well-known multistate route from New Orleans to northern Minnesota that hugged the Mississippi River on U.S. Highway 61 for much of the way. The road was first conceived in 1938 as the Mississippi River Parkway, but plans for improvement and promotion were delayed by World War II. Interest in the scenic route increased in the 1950s thanks to federal planning studies. Segments of the Great River Road in Minnesota were first marked in the 1960s and the road's real impact on tourism began in that decade. (See Pettis 2009 for information on the Great River Road.) Another postwar tourist route that included Highway 61 through Red Wing was the Hiawatha Pioneer Trail, established in 1965 by the governors of Minnesota and adjacent states.

Recommendation

Highway 61 between St. Paul and La Crescent was historically important as a major Minnesota route heavily used by both commercial and recreational traffic. Most of the highway was widened to four lanes in the 1950s and early 1960s. The historic integrity and National Register eligibility of current Highway 61 and its older bypassed segments between St. Paul and La Crescent have not been comprehensively assessed.

Gemini Research assessed the National Register eligibility of the Red Wing Segment of Highway 61. It is recommended that the Red Wing Segment of the highway does not meet National Register eligibility requirements. The highway is not associated with an important person (Criterion B) and does not possess design or engineering significance (Criterion C). Subsections 1, 2, and 3 (i.e., the portions of Highway 61 west of Cedar Street) were completed in 1953-1994. They are too recent and/or too altered to meet National Register eligibility requirements. Subsection 4, or the nine-block section from Cedar to Potter streets through downtown, is sandwiched between segments that are altered (Subsection 3) and date from 1963 (Subsection 5). The nine-block-long Subsection 4 is not itself long enough to convey or represent the significance of Highway 61 as an important transportation route (Criterion A). Subsection 5, or the highway segment east of Potter Street, was completed in 1963. It represents the postwar modernization and expansion of the highway to four lanes, but at 1.7 miles long does not have sufficient length to convey this significance or the importance of Highway 61 as a major transportation route (Criterion A). Subsection 5 is adjacent to the 27-mile segment from Red Wing to Wabasha that is likely eligible for the National Register, but the Red Wing to Wabasha segment is two lanes wide, while Subsection 5 has a wider, four-lane, expressway-type character and 1960s associations; it does not share the Red Wing to Wabasha segment's appearance and history.

A few blocks of Highway 61 in Subsection 4 are located within, and adjacent to, three historic districts that are listed on, and eligible for, the National Register, and locally designated by the City of Red Wing, as follows:

- The two-block section of Highway 61 from a point just east of East Avenue, on the west, to Plum Street, on the east, is located within and Contributing to the Red Wing Commercial Historic District (GD-RWC-1451), which is eligible for the National Register. The next block of Highway 61 (east of Plum Street) is adjacent to the historic district. The historic district meets National Register Criteria A (broad patterns of history) and C (architecture) in the areas of Architecture, Commerce, Politics/Government, Communications, and Social History. Highway 61 or Main Street is a Contributing element because it forms part of the district's character-defining spacial organization, land use pattern, and circulation system. The district's recommended period of significance is 1858-1945 and the level of significance is State. (See the district inventory, GD-RWC-1451, for boundaries and further information.) The portions of Highway 61 described above are also within and adjacent to the City of Red Wing's Downtown Historic District administered under the purview of the Red Wing Heritage Preservation Commission.
- An approximately 225'-long section of Highway 61 at its intersection with West and East avenues is located within and Contributing to the Red Wing Mall Historic District (GD-RWC-001), which is listed on the National Register. The district was listed under National Register Criteria A (broad patterns of history) and C (architecture) in the areas of Architecture, Community Planning and Development, Education, Industry, and Landscape Architecture. Highway 61 or Main Street is a Contributing element because it forms part of the district's character-defining spacial organization, land use pattern, and circulation system. The district's period of significance is 1853-1941 and the level of significance is Local. (See the district inventory, GD-RWC-001, for boundaries and further information.) A similar segment of Highway 61 about 280' long is located within the City of Red Wing's Historic Mall District administered under the purview of the Red Wing Heritage Preservation Commission.

An approximately 285'-long section of Highway 61 west of Bush Street is adjacent to the St. James Hotel Complex (GD-RWC-004), which is listed on the National Register. The district was listed under National Register Criteria A (broad patterns of history) and C (architecture) in the areas of Architecture, Commerce, Entertainment/Recreation, and Health/Medicine. The level of significance is Local. (See the district inventory, GD-RWC-004, for boundaries and further information.) The same segment of Highway 61 is adjacent to the City of Red Wing's St. James Historic District administered under the purview of the Red Wing Heritage Preservation Commission.

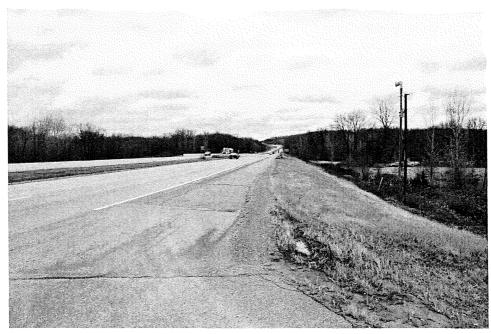


Fig. 302. Highway 61. Highway 61, Red Wing Segment, Subsection 1 completed in 1994; approaching the Cannon River and Bridge 25021 (facing SE)



Fig. 303. **Highway 61**. Highway 61, Red Wing Segment, Subsection 2 completed in 1983; photo taken near junction with Cannon River Avenue (facing SE)



Fig. 304. Highway 61. Highway 61, Red Wing Segment, Subsection 3 completed in 1953; the west end of the subsection is in the foreground (near Carol Lane) (facing NW)

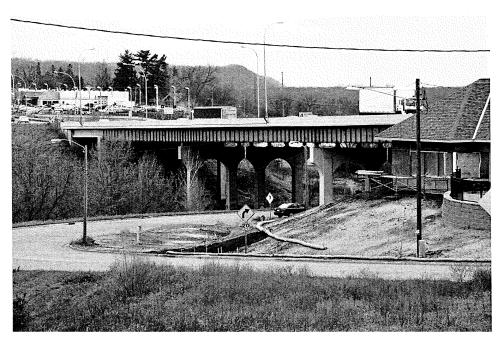


Fig. 305. Highway 61. Highway 61, Red Wing Segment, Subsection 3, Bridge 6483 (1952, altered) carrying the highway over Hay Creek and Withers Harbor Drive (facing S)



Fig. 306. Highway 61. Highway 61, Red Wing Segment, Subsection 3, pedestrian underpass (1953) at Buchanan Street (facing S)



Fig. 307. Highway 61. Highway 61, Red Wing Segment, Subsection 3, 1953 retaining wall and railing on northbound lane at Jefferson Street (facing SE)

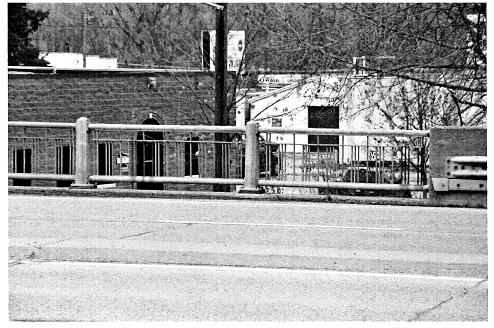


Fig. 308. Highway 61. Highway 61, Red Wing Segment, Subsection 3, 1953 retaining wall and railing on northbound lane at Jefferson Street (facing N)

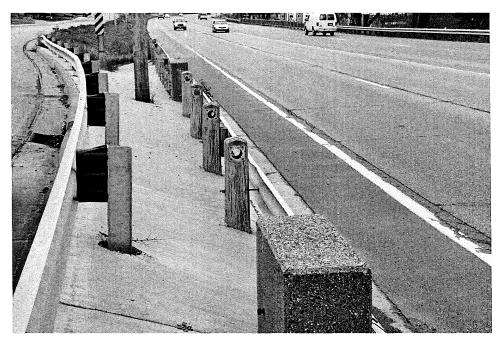


Fig. 309. Highway 61. Highway 61, Red Wing Segment, Subsection 3, 1953 railing remnant on southbound lane at Washington Street (facing W)



Fig. 310. Highway 61. Highway 61, Red Wing Segment, Subsection 4, circa 1945 photo by Minneapolis Star Tribune (Minnesota Historical Society photo) (facing NE)

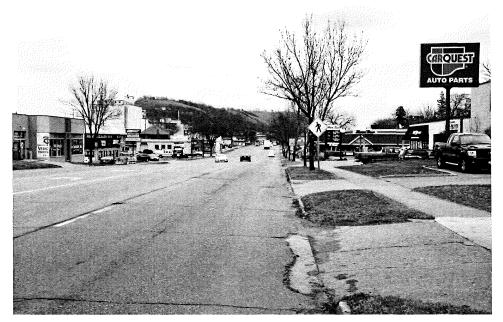


Fig. 311. Highway 61. Highway 61, Red Wing Segment, Subsection 4, near its junction with Pine Street (facing NE)



Fig. 312. Highway 61. Highway 61, Red Wing Segment, Subsection 4, in downtown Red Wing; junction with Bush Street in view (facing SW)

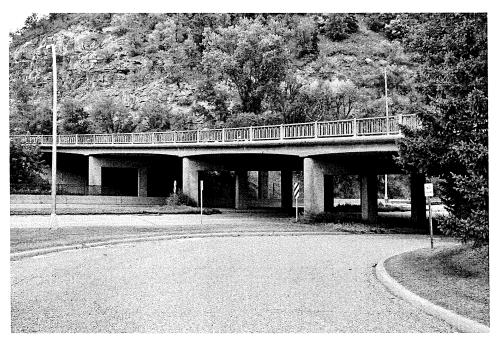


Fig. 313. Highway 61. Highway 61, Red Wing Segment, Subsection 5, Bridge 9103 (built 1960) (GD-RWC-1387) carrying US Hwy 63 over Highway 61 at the east edge of downtown (facing NE)

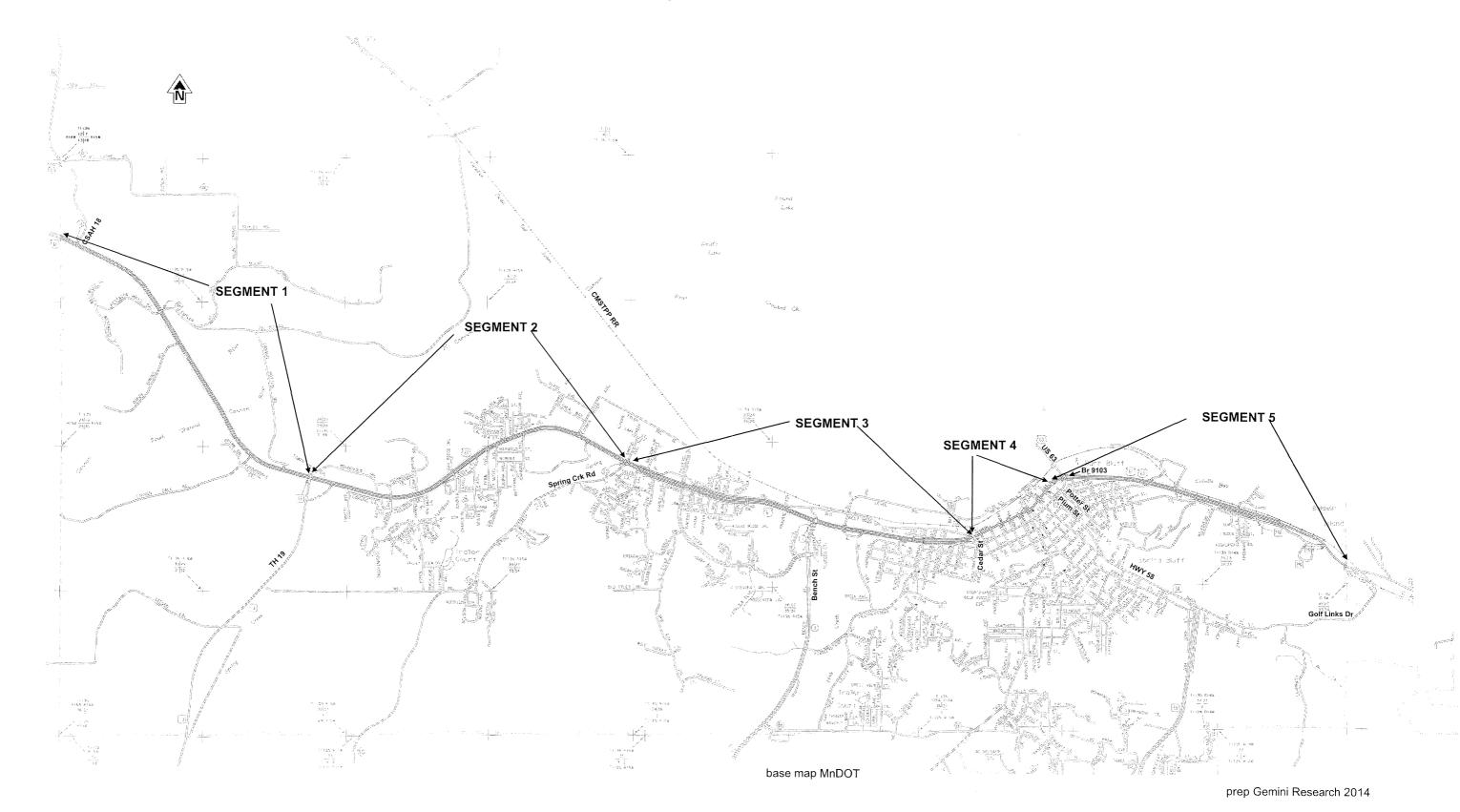


Fig. 314. Highway 61. Highway 61, Red Wing Segment, Subsection 5, traveling through East Red Wing with Barn Bluff at right and E. 4th and Green streets at left (facing NW)



Fig. 315. Highway 61. Highway 61, Red Wing Segment, Subsection 5, Bridge 9450 (built 1962) (GD-RWC-1362) carrying the highway over Nymphara Lane; Old Highway 61 (GD-RWC-1434) in the foreground (facing E)

GD-RWC-1448 Hwy 61, Red Wing Segment



GD-RWC-1453 ca. 500 Highway 61

Hist Name: Bridge 9449

Built: 1962

NR Status: Not Indiviually Eligible

Bridge 9449, built in 1962, carries Highway 61 over E. Fifth Street near the eastern end of Barn Bluff. It was inventoried because it is in the architecture-history Area of Potential Effect for the Red Wing Bridge Project. The bridge is a prestressed concrete beam span bridge built using prestressed concrete l-beams. The bridge is 133' long with a main span of 53'. The bridge is skewed 30 degrees. The deck is 63' wide and carries four lanes of traffic. The bridge's ornamental railing (see Historic Background below) has been replaced with a concrete parapet.

This bridge is part of the Red Wing Segment of Highway 61. The highway itself was inventoried separately; see above and the full inventory form (GD-RWC-1448).

Historical Background

Bridge 9449 was built in 1962 when this section of Highway 61 was reconstructed as a four-lane divided highway. The new construction corresponded with a realignment of the highway east of downtown Red Wing that shifted the road northward to the flank of Barn Bluff from its East Seventh Street alignment. (See Highway 61 above, GD-RWC-1448, for more information.)

Three new bridges were built east of downtown: Bridge 9103 at the Highway 61/63 junction (built 1960, GD-RWC-1387, National Register-eligible); Bridge 9449 over East Fifth Street (built 1962); and Bridge 9450 over Nymphara Lane (built 1962, GD-RWC-1362). Just east of the city limits, Bridge 6776 was built circa 1954 to carry the highway over the CMSTPP Railroad. All four bridges had matching ornamental railings (*RW Republican Eagle*, April 23, 1982 and July 9, 1982). Of the four, only Bridge 9103 retains its railings.

The same railing was used for the reconstruction of Highway 61 west of downtown Red Wing in locations such as on a retaining wall on the northern side of Highway 61 at Jefferson Street, and nearby on the southern side of the highway at Washington Street. (See Highway 61 above.) The same railing was used on the Hastings Bridge (1951) in Hastings.

The prestressed concrete beam bridge was the type of bridge built second-most-often by the Minnesota Department of Highways (MHD) between 1957 and 1970, after steel beams and girders (Mead and Hunt May 2008: 38, 42).

Recommendation

Bridge 9449 lost historic integrity when the ornamental railings were replaced by modern concrete parapets.

MnDOT's statewide bridge study established National Register eligibility criteria for bridges built in the period 1956-1970 (Mead and Hunt June 2008). Bridge 9449 does not meet the requirements for National Register Criteria A (broad patterns of history) or C (engineering significance), and there is no evidence the bridge is significant under Criterion B (important person).

Gemini Research also evaluated the National Register eligibility of the Red Wing Segment of Highway 61 itself (see GD-RWC-1448 above) and recommends that the highway is not eligible.



Fig. 316. ca. 500 Highway 61. Bridge 9449, north side from East Fifth Street (facing SW)

GD-RWC-281 ca. 1300 Levee Rd Hist Name: Red Wing Yacht Club

Built: 1911

NR Status: Not Indiviually Eligible

The Red Wing Yacht Club is located in Lower or Vogel Harbor, also called the Red Wing Small Boat Harbor (and previously called Red Wing Bay), which has been its home since 1911. The property is located on the Mississippi River at the foot of Jackson Street, west of downtown Red Wing.

The Red Wing Yacht Club inventoried property consists of the harbor, its shoreline, and the piers and boathouses of Red Wing Yacht Club. (See sketch map.) The Lower Harbor is also part of another inventoried property, the Red Wing Harbor and Levee (GD-RWC-1424). (See that property.)

Today the booms and boathouses of the Yacht Club fill most of the harbor. Across the northern part of the harbor is open water for boat traffic. In the northeastern part of the harbor are two or three booms owned and operated by Red Wing Marina, a private business. Along the western and southeastern edges of the harbor are miscellaneous docks and slips for about 10 boats (some owned by the Red Wing Yacht Club).

The inventoried property includes a parking area that curves around the southern and eastern sides of the harbor. There are a few mature deciduous trees near the parking area and tall deciduous shrubs separate the parking area from the next property east, the former Burdick Grain Company (see GD-RWC-1383). A modern sign on the edge of the parking lot (eastern side of the harbor) reads: "Arnold F. Vogel. The Red Wing Port Authority Harbor Commission, the Red Wing Yacht Club and the Citizens of Red Wing, dedicate their small boat harbor in his name. May 17, 1999."

In the early 20th century the harbor was accessed by a narrow gravel street called Levee Road that approached from the east. Levee Road was extended westward along the southern edge of the harbor in the late 1950s or early 1960s.

The causeway that forms the western edge of the harbor and supports today's Bay Point Drive was built in 1947. The road on the causeway was used to access the City's Industrial Harbor coal dock. (See Red Wing Harbor and Levee, GD-RWC-1424.) The causeway's current appearance dates from the completion of Bay Point Park in 1982.

The harbor, booms, boathouses, and other elements are described in more detail below:

Harbor (improved 1947). The harbor measures roughly 600' north-south by 1,000' east-west. It is oval in shape with the opening on the east. This configuration is not original, but resulted from a 1947 improvement. Prior to 1947 the harbor was not enclosed on three sides. To the west was open, shallow water, and to the north was a watery, marshy island (1938 aerial photo). When the harbor was dredged in 1947 (see historic background below), the dredge material was dumped in the shallows to the west and north to form solid ground and create an oval area sheltered on three sides.

A 1951 aerial photo shows the new harbor. It was about the same size as today's harbor, but not as regular in shape since the northern, western, and southern edges had not yet been made

even and riprapped. By the time of a 1964 aerial photo, the harbor was approximately its current size and shape.

Harbor Wall (1937). Along the southeastern edge of the harbor is a 325'-long battered, poured concrete retaining wall built in 1937, possibly as a New Deal federal work relief project. The wall is basically unaltered. Part of its purpose was to retain fill material that created Red Wing's Municipal Dock, built in 1937-1938 immediately to the east. The Municipal Dock is now the western part of Red Wing Grain Company (formerly Burdick Grain). (See Burdick Grain, GD-RWC-1383, and the Red Wing Harbor and Levee, GD-RWC-1424, for more information on the Municipal Dock.)

Riprap (ca. 1980s-1990s). Most of the harbor shoreline (except for the part with the 325'-long wall just described) is lined with riprap and/or retaining wall that postdates 1947. The northern and western sides of the harbor are lined with circa 1956 riprap comprised of dry-laid courses of salvaged concrete. The southern side of the harbor has a modern timber piling retaining wall. The southwestern and southeastern edges of the harbor are lined with modern dumped rock riprap. An aerial photo from the mid-1970s shows the banks before the riprap and timber retaining wall were installed. The banks appear to have been simply earthen embankments (Angell 1977 jacket and title page photo).

Today there is also a narrow asphalt boat launching ramp near the midpoint of the southern edge of the harbor. See the Red Wing Harbor and Levee (GD-RWC-1424) for more information on Lower or Vogel Harbor.

Booms or Piers (ca. 1990). Extending north from the southern shore of the bay are six piers or booms dating from circa 1990 (*RW Republican Eagle*, May 21, 1987). The booms are spaced about 100' apart and are about 500' long and lined with boathouses. (See Boathouses below.) The booms are about 4' wide and built with steel frames and wooden plank decking. They are supported by floatation barrels and steel gin poles. A system of electrical and telephone wires is suspended above the boom decks to serve the boathouses. A metal sign at the south end of each pier indicates "RWYC members only" and gives the pier number.

The booms are linked to the southern shore via six gangplanks that each meet a small poured concrete landing on the shoreline. The gangplanks have with circa 1990 metal railings.

Aerial photos indicate changes in the number and arrangement of the booms: In 1938 the club had three booms: an eastern pier aligned north-south, a larger T-shaped pier in the center, and a small western pier aligned east-west.

In 1951 the club had four booms. They were aligned north-south but were not in the same locations as today's booms and were spread farther apart.

In 1964 the club had six booms in the approximate locations as today. However, the eastern pier, rather than having individual boathouses, had boat slips sheltered by arch-roofed steel canopies. In 1972 the eastern pier still had slips with arched canopies according to a Minnesota Historical Society photo.

Gin Poles (ca. 1990). Both the booms and boathouses are held in place by vertical gin poles whose ends are buried in the muddy river bottom. According to a 1987 source, "The original floats [piers or booms] were large ash timbers with a deck nailed on them" (Letter 1987). Until the 1980s most of the gin poles were wood. Today there are more than 720 gin poles. Only

about 10 or 12 poles are wood – tall slender tree trunks – while the rest are steel pipes. In the early 1980s nearly all of the gin poles were still wood according to a 1982 photo at the Goodhue County Historical Society. According to a 1987 writer, "The houses were kept in place by using an ash tree about 4" in diameter and 25' to 30' long. These were found up and down the riverbanks and were cut and floated to the bay whenever one was needed. They were then rammed into the mud at each corner of the house and tied into the house by hangers. . . . These poles are now [in 1987] being replaced by 3"- and 4"-diameter well pipe for more longevity" (Letter 1987).

Boathouses. Today approximately 180 boathouses line the six principal booms. (A 2009 source reported 226 boathouses; see Phillips 2009: 63.) Most of the boathouses have gabled roofs with the boat door in one gable end and a pedestrian door at the end adjacent to the pier. All but 3 or 4 of the 180 houses are one-story tall; 3 or 4 have an upper or attic level, probably for used storage. About 55% of the 180 boathouses are single-width and the rest double- or triple-wide. The small houses measure about $14' \times 20'$ and $16' \times 24'$. The largest houses measure about $30' \times 30'$ and $36' \times 30'$. Many of the houses are mid-sized at about $24' \times 24'$.

Most of the boathouses float on plastic barrels, with about two dozen barrels under a typical house. The floatation barrels were originally wooden, were later metal. After 1980 fiberglass and plastic were increasingly used and today nearly all are made of these materials.

According to a 1987 description: "Fishermen would simply pull their boats up on the [original wooden] floats and turn them over to keep the rainwater out. As time went on, people saw a need to store their gear and began to build a house on the floats. Thus began the boathouse village. With timbers becoming waterlogged after a period of time, the idea of floatation with barrels started to appear. The stringers were notched out so a wooden barrel would ride in the cradle. Whiskey barrels were used as they did not rot but would fall apart after the metal hoops rusted off. Then came the metal barrels which were used up until the last few years [1980s] when plastic barrels became more readily available" (Letter 1987).

The roof and walls of nearly all of the boathouses are covered with corrugated metal panels, most postdating 1960. Much of the steel unpainted. About one-third of the boathouses have exterior corrugated metal panels and other exterior materials that are quite recent. Some exterior metal may be affixed to steel frames.

Originally the houses had wood siding, particularly clapboard and drop siding, according to historic photos from the 1950s-1980s at the Goodhue County Historical Society. One color photo from 1965 shows many of the wood-sided buildings painted barn red. Today none of the boathouses have exposed wood siding. Some wood siding likely still exists under corrugated sheet metal exteriors.

Many of the houses are windowless. A few have four-pane square sash (sometimes called barn sash) that is likely hinged on one edge or simply removed from the frame to open. Some houses now have rectangular windows with post-1960 sliding, awning-type, or 1/1 sash. Some houses have areas of corrugated fiberglass panels that let in light. Some houses have small rectangular or triangular vents at the tops of the gable ends.

About one-third of the boathouses have older boat doors (perhaps dating from the 1930s-1950s) that are either horizontal bi-fold (of the type commonly used in small airplane hangars), double-leaf hinged, or a simple sliding style. About two-thirds of the boathouses have post-1970 roll-up garage-type doors made of, for example, fiberglass. Many of the houses have a post-1960

pedestrian door at the end adjacent to the pier. Some houses have an early house number – a small oval plate of metal bearing an imprinted number – nailed near the pedestrian door.

Most of the boathouses are hooked to the pier's electrical service lines via an extension cord run through steel pipe conduit. About 10 boathouses have TV antennas.

A 1987 source indicates, "Today's houses are becoming larger and more like home. Some houses are double wide, housing two boats. Many are carpeted, have paneled walls, and are furnished with second-hand furniture. The live boxes for the day's catch have been replaced with refrigerators. Some have gone so far as to put in electric garage door openers. Most of the houses now have electric winches installed to lift their boats out of the water when not in use. The village is full to capacity, therefore to build a new house one has to buy one of the existing houses, remove it, and build in its place. A few years ago a person could buy a house for a few hundred dollars. Today a newer house can bring 10 to 12 thousand dollars" (Letter 1987).

Aerial photos indicate the increase in the number of boathouses through time. In 1938 there were about one-third the number of boathouses on the principal booms as there are today. In 1951 there were about half the number there are today. In 1964 there were about 87% the number of houses there are today (Aerial photos 1938, 1951, 1964).

The 1938 photo shows about 66 houses (about 19 on the east pier, about 41 on the center pier, and about 6 on the west pier). In 1951 there were about 91 houses (about 25 on the east pier, about 30 on the next, about 26 on the next, and about 10 on the west pier). In 1964 there were about 157 houses (about 37 on Pier 1, about 38 on Pier 2, about 28 on Pier 3 (these were generally larger and newer than the others), about 33 on Pier 4, and about 21 on Pier 5, the west pier). A 1961 magazine article indicated the "village" had 119 structures housing 250 boats (cited by Phillips 2009: 62).

See the full inventory form for a brief summary of the existing boathouses by pier.

Historical Background

According to local historian Madeline Angell, Red Wing had "a very active boat club" and sculling crew by 1875 (Angell 1977: 146).

Another historian recounts, "From 1890 until World War I, the club was *the* social club of Red Wing. Wooden launches were made to order by the Red Wing Motor Company. Past commodores include the likes of T. B. Sheldon and John Rich, early Red Wing businessmen whose names are on the Auditorium and downtown park, respectively" (*RW Republican Eagle*, Aug. 10, 1976).

The current iteration of the Red Wing Yacht Club was organized in 1903 with 64 members and A. F. Anderson as the first commodore. Frequent activities included regattas (races) for one- and six-horsepower motors. The club also sponsored other events such as a "spectacle" with fireworks and 100 launches for Red Wing's first annual river pageant in 1913 (Angell 1977: 263).

The Yacht Club's first facility for group mooring was a "float" or dock at the foot of Broad Street (formerly Broadway Street) in downtown Red Wing (Bach 1976). This area at the foot of Broad Street was also called the Small Boat Harbor in the late 19th and early 20th centuries.

Sandy Bach, author of a 1976 club history, indicates that, early in the club's history, some people lived in the boathouses, "but it was decided [at some point] that this was too dangerous a practice to continue" (Bach 1976).

Yacht Club boats were moved from Broad Street to the current site in the Lower Harbor around 1904 when improvement of the City's Levee and Levee Park began (*Greetings* 2010: 97). The shifting of boats was perhaps gradual because some sources state that the Yacht Club moved its docks and boats from the foot of Broad Street to the current site around 1911. Bach explains: "By 1911 there were 80 members interested in the 'Boat House Village.' People in the club were, and are still, called 'river rats.' The club was gaining in size and larger space was needed. The City Fathers agreed to rent the land from Franklin Street to the [Red Wing] Motor Company [at the foot of Cedar Street] to us for \$5 a year. Telephones were installed, arc lights were put up, and more booms were purchased. The cost came to \$600. The houses were rearranged to make the best use of the available space. By 1919 there were 205 members, and four booms had been added" (Bach 1976).

The land Bach is referring to is the eastern edge of the harbor which the club leased from the City to gain access to the harbor. The land on the southern edge of the harbor was occupied by the Red Wing Boat Manufacturing Company, later called the Red Wing Motor Company. The company had a ramp to launch boats from its facility into the harbor.

Bach describes the highlights of the next decade, the 1920s: "The 'Bay' was getting muddy, so a petition was sent to Washington asking that the bay be dredged. It was turned down at that time because of the expense and because the [Army Corps] dredge wasn't in this area. The Honorable August Andresen was elected to Congress in 1925 and he agreed to see what he could do for us. Because this is a natural harbor, he felt that the government should help. . . . By 1924-25 we had 12' of mud and 4' of water in the bay area. Green grass was starting to grow [in the shallow water] and it was difficult to get into and out of the bay. Members suggested that Hay Creek be directed our way to raise the water level. High winds and high water hit us in 1929 sending boathouses on the Central Boom down to the vinegar plant" (Bach 1976).

Bach indicates the club incorporated in 1933 with Judge C. H. Hall as commodore. "No Trespassing" signs were erected. Bach notes, "1935 was a good year as boating came into its own and has been going up since" (Bach 1976). He continues, "In 1937 gates were installed on the booms. These were donated by the Goodhue County Bank. A sea wall was also extended in the bay, and lights were officially lit" (Bach 1976; this is paraphrased by Angell 1977:328 who describes the sea wall as a wall built at the edge of the bay, referencing the battered 1937 poured concrete harbor wall described above).

In 1945 Congress authorized improvement of the harbor, then officially known as the Red Wing Small Boat Harbor. The project was completed in 1947 with the federal government paying \$8,700 of the \$11,500 cost. The Yacht Club boats were temporarily moved to the Wisconsin side of the river while the federal dredge *Thompson* deepened the small boat harbor to a depth of 8' (*Red Wing Harbor, Minn.* 1958; Angell 1977: 346). The improved harbor clearly shows on a 1951 aerial photo.

According to a *St. Paul Pioneer Press* article on the harbor improvements, "The Red Wing river village, with its five streets [piers] which project out into the bay, is the only known one of its kind on the Mississippi. Barrels are used for booms and the streets are paved with boards." At the time there were 76 boathouses sheltering more than 100 boats and "many" of the

boathouses "were built at least a half century ago" ("Red Wing" St. Paul Pioneer Press, Oct. 19, 1947).

In 1958, according to Bach, "names were placed on houses, and in 1964 the Boom Directory was made by James Quinn." During the 1950s the Yacht Club purchased land "up river" as a destination for picnicking (Bach 1976).

By the 1960s recreational boat use on the Mississippi River was growing rapidly, along with nearly all recreational pursuits, as Americans had more time away from work and more disposable income.

In 1970, Bach explains, "the club became larger and more space was needed. Discussions were held with the City Council. Rumors had been flying that the Club would be moved into the Upper Harbor [also called the Industrial Harbor]. The Club didn't want to do this unless the coal and salt wharves were moved" (Bach 1976). Bach writes that the club erected another boom in the 1970s at a cost of \$5,775 and in 1976 the club had 250 members (Bach 1976).

In 1987 the Yacht Club had 275 members and 215 boathouses, and was planning to build six new steel piers or booms ("Yacht Club Officers" 1987).

In 1999 the harbor was named for Arnold F. Vogel, a Red Wing attorney and civic leader who was a lifelong boating enthusiast and Yacht Club commodore beginning in the 1930s.

Wet Boathouses Property Type. The Red Wing Yacht Club boathouses are examples of so-called "wet" boathouses – privately-owned "garages" for boats often built along the shores of a lake or river. An article by Christina Slattery on Wisconsin's wet boathouses indicates typical pre-1960 wet boathouses in that state are often one-story woodframe buildings, sometimes with uninsulated seasonal living quarters in a second story. The lower level of the boathouse usually housed oars, life jackets, fishing equipment, and one to three boats that were sometimes lifted above the water on mechanical hoists. Some boathouses were built with form and detailing inspired by the Craftsman and other popular architectural styles. Slattery indicates few were built after 1960 when the advent of economical, free-standing, movable lifts made it easier to move boats in and out of the water for use and storage, and as aluminum and fiberglass boats replaced earlier wooden boats that were heavier and harder to maintain (Slattery 2009: 30-34).

A recent National Register nomination by Erin Hanafin Berg and Charlene Roise describes 140 wet boathouses in Stuntz Bay on Lake Vermillion in along a lakeshore in Minnesota's St. Louis County (Berg and Roise 2007). They are less elaborate than many that Slattery describes and are more like the boathouses in Red Wing.

In a 2009 book on wet boathouses on the Upper Mississippi, Martha Greene Phillips describes several colonies, some dating from the late 19th century. She estimates there are about 180 boathouses in Winona, some occupied year-around. A group moored on Aghaming Island (just over the state line from Winona) particularly resemble those in Red Wing. Phillips also describes groups in Fountain City, Wisconsin (about 18 boathouses), Minnesota City (about 66), LaCrosse (perhaps 100), and elsewhere (Phillips 2009: 50-69). See Phillips for details about boathouse history, construction, and regulation, particularly after 1960.

Recommendation

The Red Wing Yacht Club was inventoried in 2010 by 106 Group, which recommended the property was eligible for the National Register under Criterion A (broad patterns of history) and Criterion C (architecture). 106 Group wrote that the club "is significant within the areas of entertainment/recreation and architecture for its representation of the design and construction of a unique vernacular building type, the wet boathouse," and that the property "is also significant as one of the few surviving vernacular boathouse facilities in the state of Minnesota." 106 Group gives the property a period of significance of 1911-c1964 (Van Erem 2010).

In 106 Group's analysis of the Yacht Club's historic physical integrity, the consultants wrote that the Yacht Club "retains good integrity of location, setting, feeling, and association. Although the arrangement of docks and number of boathouses have changed over time, these changes appear to have occurred during the period of significance [Group defined as 1911 to circa 1964], therefore the property retains its integrity of design, materials, and workmanship" (Van Erem 2010).

In 2012-2013 Gemini Research resurveyed reevaluated the National Register eligibility of the property in association with the Red Wing Bridge Project. Gemini Research recommends that the Red Wing Yacht Club does not retain a sufficient number of resources that are at least 50 years old, or possess historic integrity to a period more than 50 years ago, to be eligible for the National Register. The property's integrity of design, materials, workmanship, feeling, and association have been diminished significantly by many alterations including a change in the shape of the harbor in 1947, significant increases in the number of boathouses (a 100% increase since 1951, for example), a significant increase in the size of the houses, and widespread use of modern materials including plastic floatation barrels, steel pipe gin poles, modern corrugated steel siding and roofing, replacement windows, and modern boat doors. The physical changes substantially reduce the property's ability to convey historic character and significance.

Gemini Research recommends that the Red Wing Yacht Club is ineligible for the National Register due to loss of integrity.

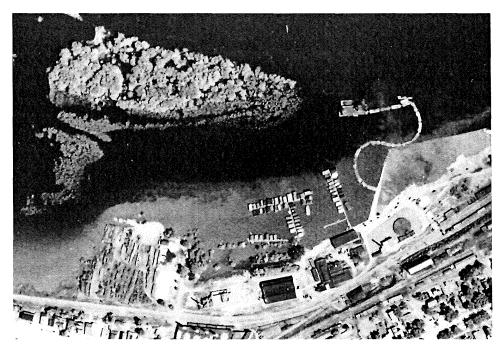


Fig. 317. ca. 1300 Levee Rd. Red Wing Yacht Club, 1938 aerial view before harbor was enclosed (ASCS, Borchert Map Library, University of Minnesota) (facing N)

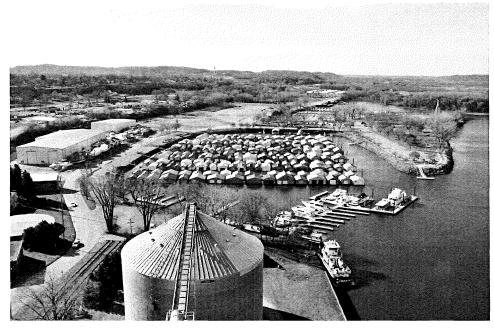


Fig. 318. ca. 1300 Levee Rd. Red Wing Yacht Club, seen from the top of Red Wing Grain (former Burdick Grain) elevator (facing SW)

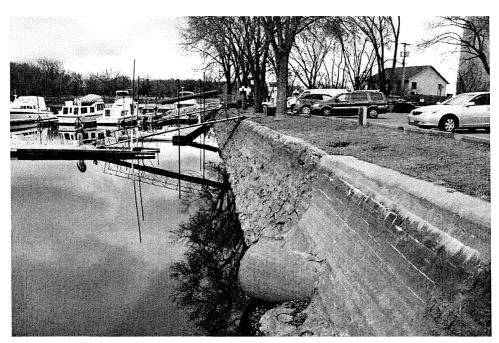


Fig. 319. ca. 1300 Levee Rd. Red Wing Yacht Club, poured concrete wall (1937) with modest concrete repair in foreground at a drainage pipe outlet; eastern parking lot in view (facing NE)

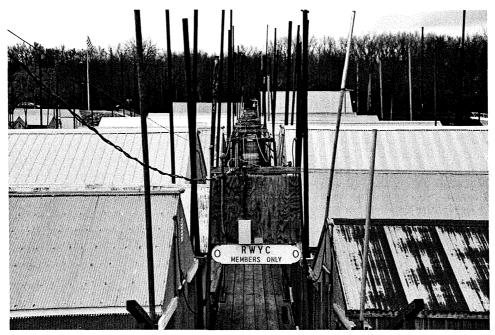


Fig. 320. ca. 1300 Levee Rd. Red Wing Yacht Club, entrance to Pier 0 with roofs, gin poles, and electric lines (facing N)

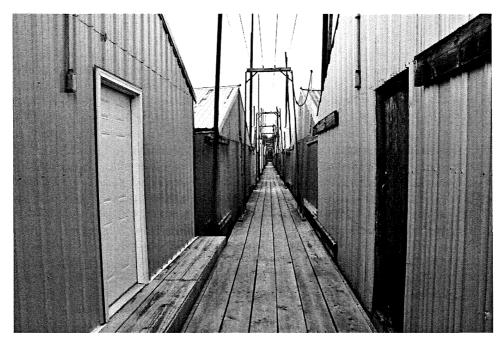


Fig. 321. ca. **1300** Levee Rd. Red Wing Yacht Club, Pier O and typical post-1965 door and siding alterations; a metal oval house number is nailed to the horizontal plank in the upper right corner of the photo (facing N)



Fig. 322. ca. **1300 Levee Rd.** Red Wing Yacht Club, boathouses on the east side of Pier 1 (easternmost pier); most are double-wide; note bi-fold and roll-up doors (facing W)

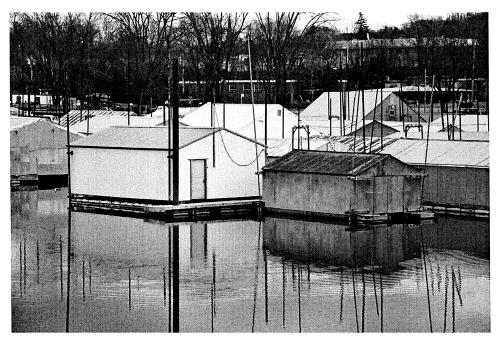


Fig. 323. ca. 1300 Levee Rd. Red Wing Yacht Club, early house at the north end of the west side of Pier 1 (facing NE)

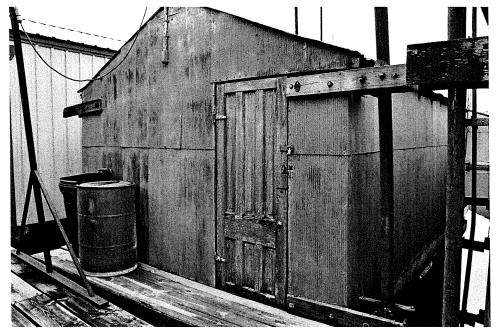


Fig. 324. ca. 1300 Levee Rd. Red Wing Yacht Club, small house with earlier corrugated metal sheet siding, paneled wood door, and metal oval with house number (facing NE)

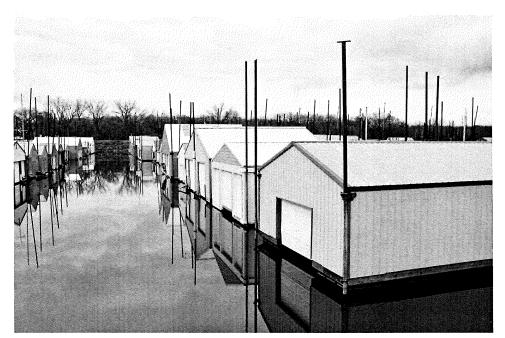


Fig. 325. **ca**. **1300 Levee Rd**. Red Wing Yacht Club, boathouses on the west side of Pier 4, many with recent exterior materials (facing NE)

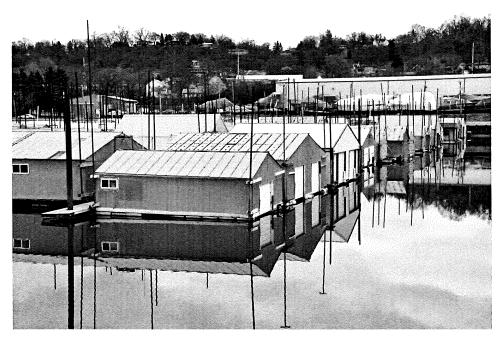
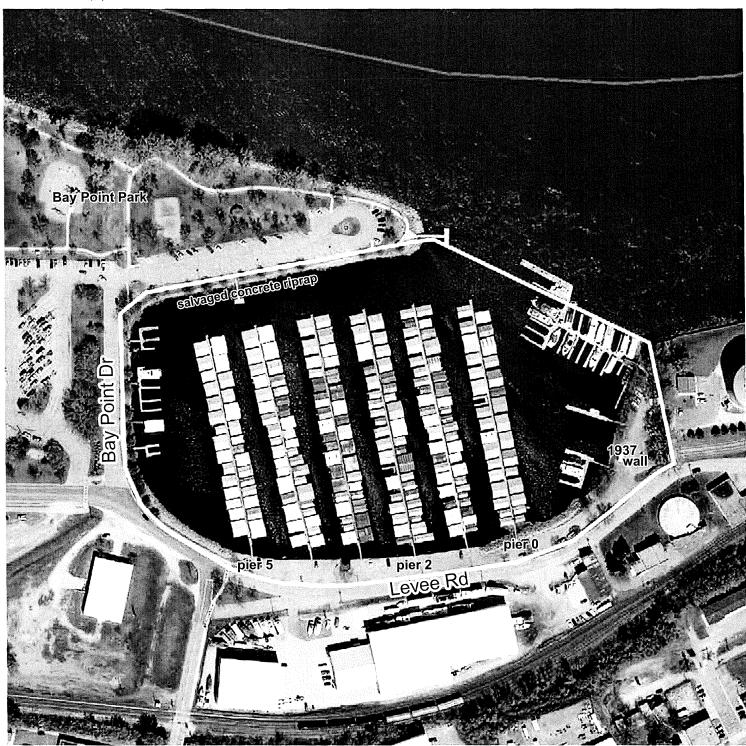


Fig. 326. ca. 1300 Levee Rd. Red Wing Yacht Club, boathouses on the west side of Pier 5 (facing SE)





Prep by Gemini Research 12-2013





GD-RWC-1436 526 Minnesota St Hist Name: Mossberg House

Built: 1938

NR Status: Not Individually Eligible

The Mossberg House, built in 1938, is located at the northwestern corner of Minnesota Street and West Sixth Street. The house is perched on a narrow toe of land on the edge of the College Hill bluff overlooking the Mississippi River Valley and the city below. The land falls off sharply to the north and west. The main facade of the house faces east.

The design of this 1 1/2-story woodframe house is an example of the Cape Cod variant of the Colonial Revival style. It is largely unaltered. It has a steeply-pitched gabled roof with little overhang at the eaves. The main (eastern) and western facades each have two gabled dormers. The foundation is poured concrete with some areas of rockfaced concrete block and small portions faced with brick.

The house is unusual in that the main entrance is not located front and center but rather in the offset gabled form at the southern end of the building. The main door, approached by a curving sidewalk, has a classically-inspired surround. A secondary door closer to the center of the eastern facade lacks a surround. The house has rectangular window openings with 6/6 and 4/4 sash and mock shutters. North of the main entrance is a bank of windows located in a slightly-projecting rectangular bay.

At the southern end of the house is a basement-level single-car garage. The garage door appears to be original or early. The below-grade driveway is protected by a dry-laid limestone retaining wall along the eastern side.

On the northern end of the house, facing the river, is a modestly-sized circa 1960 flat-roofed porch with windows on three sides. It may replace an earlier porch at the same location.

Historical Background

The Mossberg House is a largely intact but fairly standard example of the Cape Cod style houses built in the years before and after World War II. According to McAlesters' *Field Guide to American Houses*, "The Cape Cod is the most common form of one-story [and 1.5 story] Colonial Revival house. As a form it originated in the early 18th century and continued with few changes through the 1950s." The McAlesters also write that Cape Cod cottages are "loosely patterned after early wooden folk houses of eastern Massachusetts, usually with the addition of Georgian-or Adam-inspired doorways" (McAlester 1988: 339, 322).

Local architectural historian Carrie Conklin Becker writes the following about houses in Red Wing built in the Cape Cod style:

A typical Cape Cod style home was 1 1/2 stories tall with a side-facing gable roof. Dormered windows added light to the second floor. Front elevations featured a central or offset doorway flanked by multipaned windows. Decorative details were drawn from the colonial homes: white clapboard siding, shutters (most often painted green or black), and simple pedimented door surrounds. For the first time, small garages were often attached directly to the side of the house in a slightly recessed single story ell. In Red Wing, a number of nicely-detailed Cape Cod homes were constructed during the

early and mid-1930s. The style persisted but was greatly simplified when home building resumed after World War II (Becker 1997: 53).

Becker also explains that relatively few houses were built in Red Wing in the 1930s:

Depressed economic conditions and World War II had a tremendous impact on home building in Red Wing during the next 20 years [the 1930s and 1940s]. Families doubling up to save money created a housing surplus which discouraged most new home construction through the late 1930s. From 1930 to 1934 only 16 new homes were built in Red Wing. Gradually improving economic conditions and a migration of people moving from rural farms into towns and cities spurred a modest boom in new housing during the late 1930s and early 1940s. Most homes erected during this period were small simple structures with few decorative details. Limited numbers of more substantial homes were constructed in the English Cottage and Cape Cod styles but even these were much smaller and more simply detailed than the Classical Revival and Tudor Revival homes constructed in Red Wing during the 1910s.

The start of World War II brought home construction to a virtual halt in the early 1940s. The *Daily Republican Eagle* reported that building activity in Red Wing hit a record low in 1942 with a total outlay of only \$22,895. A federal ban which had gone into effect earlier that year restricted nearly all new construction not directly related to the war effort. The ban remained in effect until 1945. The close of the war and the return of the veterans and their growing young families resulted in a massive housing shortage nationwide during the late 1940s (Becker 1997: 16-17).

The Mossberg Family. The original owners of this house were William A. and Lydia Mossberg. Two successive generations of Mossbergs lived in the home for many decades.

William A. Mossberg "spent practically all of his adult life in the job printing business, starting his career in the trade with the old *Daily Republican*, and then going into business himself, first opening a shop at his home and a short time later by establishing a shop in the downtown district" (*RW Republican Eagle*, Jan. 29, 1954).

William Mossberg served on the Red Wing City Council for eight years (1926-1930, 1932-1934, and 1936-1938). In 1940 he was elected mayor, about a year before the U.S. entered World War II. Mossberg served until resigning while still in office in May 1945.

William Mossberg was born in Red Wing in 1888 of parents born in Sweden and Norway. Lydia Kuehn was born in 1885 in Hammond, Minnesota, to parents born in Germany. The couple married in 1908. They had three children. Both William and Lydia Mossberg were active members of St. Paul's Lutheran Church and involved in local fraternal groups and service clubs. William died in 1954 at age 66. Lydia died in 1957 at the age of 72.

Beginning about 1956 the Mossberg house was owned and occupied by William and Lydia's son Kenneth E. Mossberg and family. Kenneth Mossberg was born in Red Wing in 1908. He married Bernice L. Olson and the couple had one son. Kenneth began practicing dentistry in about 1932. Among his civic involvement was service on the Red Wing Board of Health. Mossberg died in Red Wing in 2002 at age 94. Bernice died the following year at age 91.

Recommendation

The Mossberg House, a Colonial Revival style house built in 1938, is not architecturally distinctive and therefore not eligible under National Register Criterion C (architecture and construction). Research conducted in numerous published histories, historic newspapers, and the files of the Goodhue County Historical Society revealed no associations with significant events or themes meriting eligibility under Criterion A (important events or broad patterns). None of the Mossbergs' civic contributions or other activities rises to a level of significance that would make the property eligible under Criterion B (important person).

Gemini Research recommends that the Mossberg House is not eligible for the National Register.

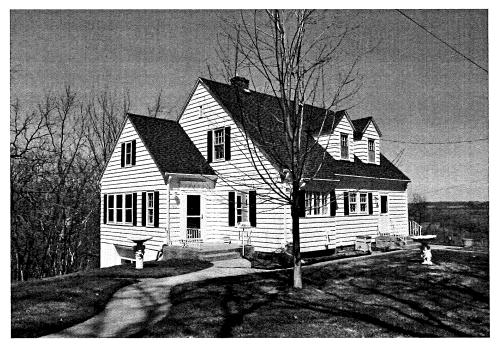


Fig. 327. 526 Minnesota St. Mossberg House, main (east) and south facades; the land drops off sharply west and north of the house (facing NW)



Fig. 328. 526 Minnesota St. Mossberg House, main (east) facade; the flat-roofed porch at right has a panoramic view of the Mississippi valley (facing W)

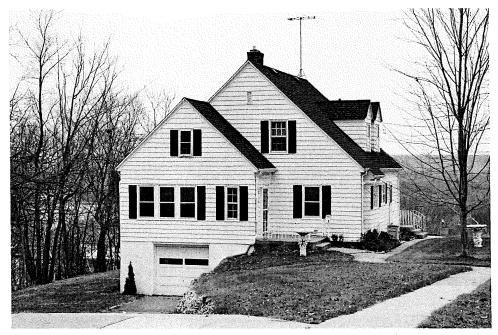
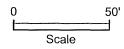


Fig. 329. 526 Minnesota St. Mossberg House, south end with below-grade garage (facing N)





Prep by Gemini Research 12-2013





surveyed property

GD-RWC-1438 1166 Oak St

Hist Name: RW City Hospital & Old People's Home

Other Name: Goodhue County Historical Society

Built: 1910-1924

NR Status: Not Indiviually Eligible

The former Red Wing City Hospital and Old People's Home is located on the edge of the College Hill bluff with an outstanding view of the Mississippi River Valley, Barn Bluff, the Eisenhower Bridge, and the center of the city.

The site is large and wooded. There are three remaining buildings, a long concrete public stairway, and some minor landscape features. The stairway was inventoried separately (see Red Wing City Hospital Stairway; GD-RWC-1423). It is located northeast of the buildings where it descends the steep wooded slope to Fourth Street.

The City Hospital buildings are located on a plateau on top of the bluff amidst mature oaks and spruce trees and mowed turf. The land at the western, northern, and northeastern edges of the property falls off steeply and the slopes are densely wooded. There is a narrow footpath along the upper edge of the bluff through the edge of these woods.

The main entrance to the complex is from Oak Street south of the buildings (see sketch map). The entrance drive, whose current appearance dates from a 1937 WPA landscaping project, is circular and bituminous-paved with a concrete curb. The drive circles a grassy island and the Friedrich Building north of the island. Resting on the island is a commemorative marble bench (see below) and a small, low brick and concrete marker (about 2'x2'x2') whose plaque has been removed. West of the Friedrich Building is a modern treated timber playground structure. North of the Friedrich Building near the edge of the bluff are two interpretive plaques (see below) and a portable picnic table.

Three key buildings have been removed from the complex:

The former *Jennison House* (razed) was a large 19th century woodframe residence that was remodeled into the first hospital building. It later served as the nurses' residence. The Pierce Memorial Building was built onto the western facade of the Jennison House. The Jennison House was replaced in 1924 by the Friedrich Memorial Building.

The *Pierce Memorial Building*, built in 1906 (razed), represented an important modern addition to the facility. It was a two-story building (plus attic) with a hipped roof. It was built onto the western side of the former Jennison House, connected to the woodframe building by a two-story many-windowed link brick link. When the Friedrich Building replaced the Jennison House in 1924, the link remained. In 1950 the Pierce Building contained surgical and treatment rooms, a nursery, and other spaces. The Pierce Building and the two-story link were demolished in December 1969.

The *Nurses' Home/Detention Hospital* (razed) was a fairly small two-story detached woodframe building that stood between the Friedrich Building and the Laundry. It was used as a nurses' home in 1917 and later a detention or quarantine ward.

Three buildings remain and are described below, followed by some ancillary structures. (See also the Hospital Stairway which was inventoried separately, GD-RWC-1423.)

Friedrich Memorial Building (1924). The Friedrich Memorial Building, which faces south, is the northern building in the complex. It was built in 1924 as an eastern addition to the main hospital building, the Pierce Building (1906-1969).

The Friedrich Building is a two-story structure with a restrained Classically-inspired design. It is faced with medium-brown brick, ornamented with limestone (and perhaps concrete) trim, decorative brickwork, and a simple metal cornice at the roof edge.

The main facade is seven bays wide with a central entrance. The entrance has a single-leaf replacement door and a brick and limestone surround with the word "Memorial" incised above a bracketed architrave. The building has regularly-spaced rectangular window openings with 6/6 sash and concrete or limestone sills.

The northern (rear) facade has a one-story enclosed brick entrance with a stepped parapet wall. The western facade has a large area of brick repair dating from the 1969 removal of the Pierce Building. The western facade also has a simple modern fiberglass shelter (ca. 1969?) that encloses a basement entrance. The eastern facade has window and door alterations. There are exterior metal fire escapes on the western and eastern facades.

Around 1950 the Friedrich Building housed 17 patient rooms, a kitchen and commissary, and lobby and office space. After the hospital closed the interior was converted to offices, classrooms, and other community space.

Red Wing Old People's Home (1914, probably Augustus F. Gauger architect). The Red Wing Old People's Home, now the Goodhue County Historical Society, is a two-story brick building in the southeastern corner of the building complex. The building faces south and is positioned closer to Oak Street than the other hospital buildings. It has a 1992 addition that is larger than the original building.

The Old People's Home was built in 1914 by contractor J. C. Johnson of Red Wing. The architect was probably Augustus F. Gauger of St. Paul.

The Old People's Home has a Craftsman style design with a rockfaced coursed ashlar limestone foundation. The building is faced with medium-brown brick, with areas of decorative brick patterning and inset terra cotta tiles. At the roofline is a parapet wall and a large, simple metal cornice supported by substantial corner brackets. The building has rectangular window openings with double-hung sash.

On the main (southern) facade is a two-story sunporch supported by square brick columns. All windows, the main entrance, and the front steps have been removed. (The porch as two new windows sets installed on side walls in 1989-1992.)

On the northern end of the former Old People's Home, built at an angle to the original structure, is a large, two-story, brick-faced addition built in 1992 to serve the Goodhue County Historical Society.

Laundry and Boiler House (1910). The smallest and oldest building in the hospital complex is located in the northeastern corner of the building cluster. The main entrance is on the western facade. The 1992 historical society addition to the Old People's Home is attached to the south facade of the Laundry and Boiler House so the small laundry building is no longer detached.

The building is a one-story, hip-roofed, concrete and brick structure constructed in 1910 as a heating plant and laundry. Window openings are rectangular with brick sills and 2/2 sash. At the northern end is a tall brick chimney and a below-grade coal bin with a poured concrete shed roof. On the roof of the building is a large round metal ventilator. The basement, exposed on the eastern side because of the slope, has a double-leaf entrance.

Marble Bench (1937). A commemorative marble bench stands near the main entrance to the Friedrich Building in the turf island encircled by the hospital drive. Made of smoothly-finished pink-gray marble, the bench has a curved back, thick straight sides, and a flat seat. It was a gift to City Hospital from the estate of Mrs. O. M. Hall in honor of her deceased daughter Pauline Hall.

Interpretive Plaques (1978). Near the edge of the bluff behind the Frederich Building is a pair of interpretive plaques erected in 1978 as a Red Wing Heritage Preservation Commission project. They are made of low natural boulders on which brass plaques are mounted. The plaque entitled "Geology of the Area" indicates it was sponsored by the Red Wing Heritage Preservation Commission and the plaque entitled "The Archaeology of Red Wing" indicates it was sponsored by the Goodhue County National Bank.

Historical Background

Red Wing City Hospital and Old People's Home operated on this site from 1898-1967. The complex has housed various community organizations since 1969-1970.

Red Wing City Hospital traces its roots to Red Wing's first hospital, which was established by Goodhue County in 1884 in a house in downtown Red Wing. In 1898 the hospital board of trustees remodeled the former Samuel Jennison home, a woodframe structure on the current hospital site on the top of College Hill, and moved the hospital into it. The capacity was 15 patients.

City Hospital was one of two hospitals in Red Wing, the other being St. John's Hospital, established in 1903 and operated by the Lutheran Church. St. John's initial building was also a converted residence. St. John's was expanded in the 1910s and in 1918 had a capacity of 85 patients. It was the larger of the two hospitals and also operated a nursing school.

In 1906 the Pierce Memorial Building was built onto the western end of City Hospital's Jennison House, representing an important modernization of facilities. In 1910 the Laundry and Boiler House was built.

In 1914 the Red Wing Old People's Home was built on the southeastern part of the campus. The home was operated by the Red Wing Old People's Home Association which had organized in 1907 after receiving a large donation.

In 1918 the Red Wing City Hospital Stairway was built. (See GD-RWC-1423.) It replaced an earlier wooden stairway in the same location in the northeastern part of the grounds.

Around 1930 City Hospital had 30 beds while St. John's Hospital had 75 beds. The two hospitals were among more than 100 hospitals and sanatoria located in Minnesota communities outside of St. Paul and Minneapolis.

In 1924 the woodframe Jennison House was replaced by the Friedrich Memorial Building. Like the hospital's earlier structures, it was financed by several major donations.

In 1926 City Hospital was taken over by the City of Red Wing. In 1937 laborers hired under the Works Progress Administration (WPA), a federal Depression-era work relief program, constructed a tunnel at the hospital, repaired the Pierce Building, and landscaped the grounds (Irvine 1941: 182).

In 1939 the Old People's Home was taken over by the Northwest Baptist Home Society, which leased the facility from the City of Red Wing. This group, organized in 1930, operated several homes for the aged in the Midwest including a handful in Minnesota.

In 1950, five years after World War II ended, the board of directors launched a major fundraising campaign to build a maternity wing on the western side of the complex and make improvements to the Pierce and Friedrich buildings. The wing was never built. Instead, the process of planning closure of the hospital began.

The Red Wing Old People's Home was closed in 1960. City Hospital closed in 1967 after the community decided the modern hospital facilities were best achieved by merging City Hospital's functions with those of St. John's Hospital and seeking a federal grant for a major expansion of St. John's. City Hospital was closed when the new 115-bed hospital on the St. John's campus opened in February 1967 (Angell 1977: 393-394).

In February 1969 the Goodhue County Historical Society moved into the former Old People's Home. In 1989-1992 the Society remodeled the building and commissioned a large northern addition.

The Pierce Building was demolished in December 1969. In 1970 the Friedrich Building was converted to offices and community space and renamed the Friedrich City Center. Early tenants included the Red Wing Environmental Learning Center (ELC), the Red Wing Art Workshop, and a preschool called Rocking Horse Academy.

Recommendation

The Red Wing City Hospital was the community's public hospital, located on this dramatic bluff top site since 1898. Although some of the buildings have been removed and others altered, Gemini Research identified the property for Phase II evaluation because of the property's long, intact, poured concrete public stairway, and because the Friedrich Memorial Building could conceivably have met National Register integrity guidelines and eligibility criteria if research revealed outstanding historical significance.

During Phase II study, Gemini decided to handle the Red Wing City Hospital Stairway as a separate inventory property; see GD-RWC-1423.

In its evaluation of the hospital itself, Gemini recommends that two buildings – the Old People's Home and Laundry and Boiler House – do not retain sufficient integrity to meet National Register guidelines. The Friedrich Memorial Building could conceivably have met National Register criteria if significantly associated with outstanding historical events, themes, or an important person. Research conducted in numerous published histories, historic newspapers, and the files of the Goodhue County Historical Society revealed no associations with important events, themes, or broad patterns significant enough to merit eligibility under National Register Criterion A, and no

associations with important people significant enough to merit eligibility under Criterion B. The Friedrich Building is not architecturally distinctive enough to merit eligibility under Criterion C.

In summary, it is recommended that the Red Wing City Hospital complex is not eligible for the National Register, nor are any of its individual buildings and structures eligible. An important exception is the Red Wing City Hospital Stairway, which is recommended eligible for the National Register and was inventoried separately (see GD-RWC-1423).



Fig. 330. 1166 Oak St. RW City Hospital & Old People's Home, Pierce Building (1906) on left and former Jennison House on right, circa 1910 (Minnesota Historical Society photo) (facing N)



Fig. 331. 1166 Oak St. RW City Hospital & Old People's Home, Pierce Building (1906) on left and Friedrich Building on right, 1960 photo by Eugene Debs Becker (Minnesota Historical Society) (facing N)



Fig. 332. 1166 Oak St. RW City Hospital & Old People's Home, entrance drive, grassy island with memorial bench, Friedrich Building, and the 1992 addition to the Old People's Home (facing NE)



Fig. 333. 1166 Oak St. RW City Hospital & Old People's Home, south (main) and west facades of the Friedrich Memorial Building (facing NE)



Fig. 334. 1166 Oak St. RW City Hospital & Old People's Home, east and north facades (facing SW)

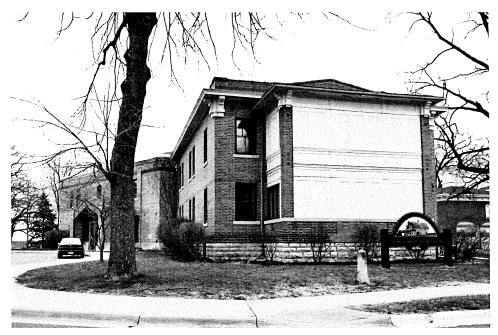


Fig. 335. 1166 Oak St. RW City Hospital & Old People's Home, south (main) facade of the Old People's Home with the 1992 addition at rear (facing N)



Fig. 336. 1166 Oak St. RW City Hospital & Old People's Home, west (main) facade of the Laundry and Boiler House with attached 1992 historical society addition at right (facing E)



Fig. 337. 1166 Oak St. RW City Hospital & Old People's Home, east (rear) facade with poured concrete coal bin at right (facing SW)

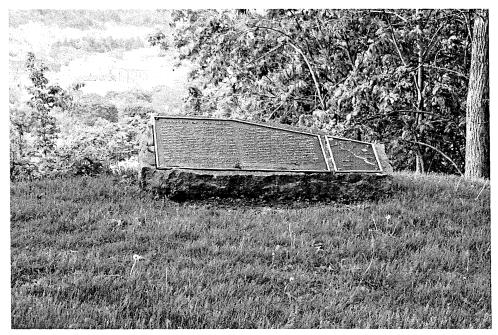
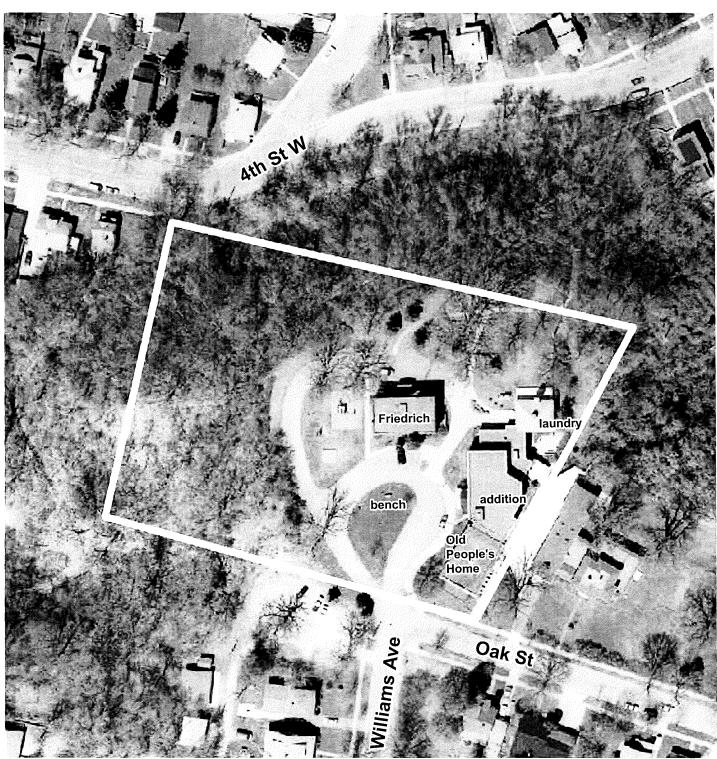


Fig. 338. 1166 Oak St. RW City Hospital & Old People's Home, "Geology of the Area" marker at the bluff edge on the grounds (facing NE)





Prep by Gemini Research 12-2013





GD-RWC-1434 Old Main/Hwy61/7th

Hist Name: Old Highway 61, Red Wing Segment

Built: 19th-20th c.

NR Status: Not Indiviually Eligible

Contributing to NRHP-eligible Red Wing Commercial Historic District

Contributing to Red Wing Mall Historic District

The subject of this inventory form is Old Highway 61 within the current city limits of Red Wing. (See sketch map.) This is an approximately four-mile-long road segment aligned through Red Wing from west to east.

The western portion of the inventoried property is comprised of an early alignment now called Old West Main Street that was returned to local control after it was bypassed by present-day Highway 61 in 1953. The eastern portion of the inventoried property is an early alignment on parts of Plum and East Seventh streets that was bypassed by present-day Highway 61 in 1963. In the center of the inventoried property is an eight-block segment from Cedar to Plum streets through downtown Red Wing that has never been bypassed. This center section is part of both Old Highway 61, Red Wing Segment (GD-RWC-1434) and part of the Red Wing Segment of present-day Highway 61, which was inventoried separately (see GD-RWC-1448).

Note: Farther west near the western Red Wing city limits is a short piece of old Highway 61 that was improved by the state highway department in 1919-1922 but bypassed very early in a 1931 realignment. It has a 22'-wide concrete bridge (Bridge 3481) built by the state in 1922 (Angell 1977: 293). This early road segment is listed on the National Register as the Mendota to Wabasha Military Road, Cannon River Section (GD-RWC-846). (See that National Register nomination for more information.)

The four-mile-long Red Wing Segment of Old Highway 61 begins at the southwestern corner of St. John's Evangelical Lutheran Church Cemetery (west of Bench Street). The segment ends at the eastern end of East Seventh Street near the Minnesota State Training School. West and east of these points, post-World War II reconstruction of Highway 61 has obliterated the earlier highway.

The Red Wing Segment of Old Highway 61 includes parts of the following city streets (listed from west to east):

- all of Old West Main Street which extends about 1.5 miles from the southwestern corner of St. John's Lutheran Cemetery to Cedar Street
- about eight blocks (or about 0.6 mile) of Main Street from Cedar Street to Plum Street
- five blocks (or about 0.4 mile) of Plum Street from Main Street to Seventh Street
- two blocks (about 0.1 mile) of West Seventh Street from Plum Street to Bluff Street, and
- all of East Seventh Street (about 1.3 miles) from Bluff Street to current Highway 61 near the State Training School

Old Highway 61 has concrete pavement, now covered with bituminous, and concrete curb and gutter. Particular segments of the road, listed from west to east, are briefly described below:

Old West Main Street is at the western end of the inventoried property. Old West Main carried Highway 61 until 1953 when the current alignment of Highway 61 was built about 400' to the south. (For the current alignment see GD-RWC-1448.) Old West Main Street was first paved with concrete in 1919-1920. The paving was 18' wide. Today most of the pavement is about

32'-34' wide (curb to curb). The road has two lanes of traffic and a parking lane on one side. In the Old West Main Street commercial area between Jefferson and Minnesota streets, the street is about 75' wide (curb to curb) with angled parking on both sides. Along much of the street (between Bench Street and about Harrison Street), the former Chicago, Milwaukee, St. Paul and Pacific Railroad (now Canadian Pacific) runs parallel with, and immediately north of, the old highway. (It is eligible for the National Register, see GD-RWC-1371.) Along much of Old West Main, the present alignment of Highway 61 – today a busy four-lane highway – is within view a short distance to the south.

Old West Main Street west of about Clay Street is flanked by commercial and industrial properties. At the west end (west of Withers Harbor Drive) many of the buildings are of recent vintage. East of Withers Harbor Drive, at 1997 Old West Main Street, is the red brick factory of the Minnesota Stoneware Company (later called Red Wing Potteries).

Along about four blocks of Old West Main Street, west of about Jefferson Street, there are late 19th and early 20th century houses. This section of the road also has boulevards planted with grass and street trees.

East of this residential area is the three-block-long Old West Main Street commercial area where both sides of the street are lined with late 19th and early 20th century commercial buildings. At the eastern end of the commercial area, Old West Main Street ends at its junction with current Highway 61. (Note that Old West Main Street historically met present-day Highway 61 at an acute angle; this last east-west piece, now a parking area, is part of the inventoried property.) Several years ago the junction of Old West Main and present-day Highway 61 was moved about 250' west of its earlier location so Old West Main would meet present-day Highway 61 at a safer 90-degree angle. This new intersection is not part of the inventoried property.

East of Cedar Street, Old Highway 61 runs on Main Street. This portion of Main Street also carries the present-day Highway 61 alignment. The Main Street Segment of Old Highway 61 was paved with concrete in 1919-1920. The paving was about 27' wide. Today the pavement is about 70' wide (curb to curb) west of Broad Street and about 80' wide east of Broad Street. The road carries four lanes of traffic flanked by two parking lanes. Main Street is mostly lined with commercial properties. There are boulevards planted with grass and trees on both sides of the highway west of Broad Street. Between 1919 and 1953 there was a three-block-long center median, also planted with grass and trees, between Cedar and Franklin streets. (See historic photo in Dosdall and Erickson 2007: 65.)

Main Street was widened by about 10' to 12' in 1939. East of Broad Street, the street originally had angled parking. It was changed to parallel parking about 1939. Around 1950 the first traffic signal in Red Wing was installed at the intersection of Main and Plum streets.

The Plum Street portion of Old Highway 61 extends five blocks from Main Street south to Seventh Street. It was paved with concrete in 1924. The paving was about 27' wide and is now about 56' wide (curb to curb). Plum Street carried Highway 61 until 1963 when the current alignment of Highway 61 was built across the southern flank of Barn Bluff. (For the current alignment see GD-RWC-1448.) The five-block segment of Plum Street is flanked by commercial properties, most of which date from the late 19th and early 20th centuries. The road carries four traffic lanes and two parking lanes. For one block, from Main Street south to Third Street, Plum Street also carries U.S. Highway 63.

The Seventh Street portion is the eastern end of the inventoried property. East Seventh Street was paved with concrete in 1924. The paving was about 27' wide and is now about 40' wide (curb to curb) west of Skyline Drive and about 30' wide east of Skyline Drive. There are boulevards planted with grass and trees on both sides of the road. Seventh Street carried Highway 61 until 1963 when the current alignment of Highway 61 was built near Barn Bluff. (For the current alignment see GD-RWC-1448.) The street now carries two traffic lanes and, in most places, one parking lane. At Skyline Drive the old highway passes the stone gate of Red Wing's Soldier's Memorial Park, a large park that extends up Sorin's Bluff to the south. East of Skyline Drive, present-day Highway 61 is immediately north of Old Highway 61. Old Highway 61 ends at the eastern end of East Seventh Street near the stone gates of the State Training School.

Integrity. In the 1920s most of the four-mile-long Red Wing Segment of Old Highway 61 had concrete pavement 18' to 27' wide, while the Main Street portion was about twice that width. Today the non-downtown portions of Old Highway 61 are 30' to 40' wide and in the downtown area, Main Street is 70' and 80' wide and Plum Street is 56' wide. The road's concrete pavement has largely been covered with bituminous. The old highway's integrity of location has been preserved. Integrity of setting is good in the downtown area. West of downtown, the integrity of setting is strengthened by commercial and residential properties east of about Withers Harbor Drive, but the integrity is diminished west of this cross street where many structures flanking the highway are fairly large, relatively recent industrial and commercial properties. East of downtown, integrity of setting was diminished east of Skyline Drive in 1963 when houses on the northern side of the old highway were removed for the construction of present-day Highway 61.

Integrity of setting and feeling is also diminished by the presence of present-day Highway 61 located very close to Old Highway 61 both west and east of downtown. The close proximity of the wide, busy, four-lane highway along many blocks of Old Highway 61 substantially reduces Old Highway 61's ability to convey its significance as an important – and the sole – roadway passing through Red Wing and hugging the Mississippi River in this important transportation corridor.

Historical Background

The earliest roads in the Red Wing area were created and traveled by Native Americans, and later used and improved by Euro-Americans when they began to live in the area (see, for example, Angell 1977: 82). The first publicly-built road through Red Wing was the 76-mile-long Mendota to Wabasha Military Road which generally followed the route of today's Highway 61. The road was authorized by Congress in 1850 and built within the next few years. It followed the western bank of the Mississippi River from Wabasha (south of Red Wing) to Mendota (south of St. Paul). A surviving segment of the road in western Red Wing (GD-RWC-846) is listed on the National Register. (See that road segment's National Register nomination.) The Mendota to Wabasha Military Road was eventually lengthened to La Crescent, after which it was called the St. Paul to La Crosse Road. (La Crescent, Minnesota, and La Crosse, Wisconsin, were linked by ferries crossing the Mississippi.)

In 1855 Goodhue County's first commercial stagecoach traveled the military road from Red Wing south to settlements such as Frontenac and, soon, to Lake City. By 1868 there were three stagecoaches daily traveling through Red Wing on the St. Paul to La Crosse Road (Angell 1977: 127). Red Wing was also the hub for stagecoach lines to inland towns farther from the Mississippi.

In 1870 the St. Paul and Chicago Railroad (later the Chicago, Milwaukee, St. Paul, and Pacific) was built along the western bank of the Mississippi River through Red Wing. While the train eventually replaced the steamboat as the dominant form of transportation in the corridor, overland roads remained important. Rural roads were especially critical for hauling lumber, machinery, supplies, mail, and people from Red Wing to inland farms and settlements, and for hauling grain from those farms and villages to Red Wing for marketing and processing.

In 1905 the Minnesota Legislature created a state highway commission and the St. Paul to La Crosse Road was designated State Road 3. As automobile use grew and roads were improved, State Road 3 became an increasingly important route, in large part because it was a link between the Twin Cities and Chicago. In 1921 the highway just west of Red Wing was one of the busiest in the state with traffic volumes of 1,100 vehicles daily (Angell 1977: 293).

In November 1920 Minnesota voters approved the modern state trunk highway system. The highway through Red Wing became Minnesota Highway 3. Highway 3 extended diagonally across the state from La Crescent through the Twin Cities to Breckenridge.

In 1926 Highway 3 through Red Wing became part of the new U.S. highway system and received the number U.S. Highway 61. U.S. Highway 61 was an important north-south route that stretched through the center of the country along the Mississippi River from New Orleans to Canada. It was both a commercial route and tourism artery.

In 1933 Minnesota Highway 3 through Red Wing was renumbered Minnesota Highway 61 so the state and federal numbers would correspond.

State and federal funding increased with the establishment of the trunk highway system. The state highway department began a substantial series of improvements to Highway 61, assisted in some cases by municipal governments such as the City of Red Wing. By the end of 1932 the highway was entirely concrete from the Twin Cities to La Crosse except for 12 miles between Lake City and Wabasha which were paved with bituminous over a gravel base (Angell 1977: 319).

Recreational travelers were historically a significant part of Highway 61's traffic. With stunning views of the Mississippi River and its bluffs, the road was one of the most popular scenic highways in the state, especially among the routes within easy reach of Twin Cities residents. Beginning in the mid-1910s the highway was part of several "motor trails" or tourist highways that were named, signed, and promoted by automobile clubs, local business groups, and multistate organizations. Auto trails that included Highway 3/61 through Red Wing were the National Parks Highway (named in 1917), the Yankee Doodle Highway (1918), the Mississippi Valley Highway, the Mississippi River Scenic Highway (1920), the Mississippi River Parkway (1938, later called the Great River Road), the Upper Mississippi River Scenic Drive (1940s), and the Hiawatha Pioneer Trail (1965).

By the late 1930s and early 1940s Highway 61 was carrying so much traffic that the State planned to widen it to four lanes from St. Paul to La Crescent, a distance of about 120 miles. That widening occurred between 1937 and the mid-1960s. Today only two significant stretches of the highway south of St. Paul are not four lanes wide: an 11-mile piece from Hastings southward, and a 27-mile segment from the eastern edge of Red Wing to the western edge of Wabasha.

Note: the 27-mile Red Wing to Wabasha segment was graded and paved in 1924-1925. The segment was rebuilt and/or realigned in 1952-1954. The 1954 road was intended to be half of a four-lane divided highway but the second half was never built. Today the road has two 11' to 12' bituminous travel lanes. Its gravel shoulders were paved with bituminous in 1982 and are now 8' to 10' wide.

During the two decades after World War II, traffic volume on Highway 61 increased as the economy recovered from the Depression and war, as the use of long-haul trucks increased, and as automobile ownership and recreational travel skyrocketed. By 1948 Highway 61 through Red Wing was "one of the main routes between the Twin Cities and Chicago" and carried considerable through-truck traffic including multiple-axled commercial vehicles. In June 1948 commercial trucks represented more than 18% of vehicles passing through Red Wing on Highway 61 (*Red Wing Traffic* 1948).

See the Red Wing Segment of current Highway 61 (GD-RWC-1448) for the modernization of Highway 61 between St. Paul and La Crescent. The inventory form for current highway 61 also describes the postwar reconstruction and realignment of Highway 61 through Red Wing. That realignment moved Highway 61 off of Old West Main Street west of downtown and off of East Seventh Street east of downtown.

After World War II recreational travel on Highway 61 south of St. Paul increased annually. Businessmen in Red Wing, the second-largest city on the route, played significant roles in promoting tourist traffic. Around 1940 communities from Hastings southward began calling the area the "Hiawatha Valley" in joint advertising. Red Wing was a charter member of the Hiawatha Valley Association, a tourism group that formed in 1940, was reorganized in 1946, and operated until about 1969. Among its marketing strategies was to advertise Highway 61 as the gateway to northern Minnesota for vacationers traveling from Illinois, Iowa, and other states in the southern Midwest. This campaign was largely successful until the mid-1960s when I-94 was built across Wisconsin, providing a faster route between the Chicago area and northern Minnesota.

The Great River Road, a fairly well-known multistate route from New Orleans to northern Minnesota, played a role in postwar tourism on Highway 61. The road was first conceived in 1938 as the Mississippi River Parkway, but plans for improvement and promotion were delayed by World War II. Interest in the scenic route increased in the 1950s thanks to federal planning studies. Segments of the Great River Road in Minnesota were first marked in the 1960s. (See Pettis 2009 for information on the Great River Road.) Another postwar tourist route that included Highway 61 through Red Wing was the Hiawatha Pioneer Trail, established in 1965 by the governors of Minnesota and adjacent states.

Recommendation

The Red Wing Segment of Highway 61 is part of an important state and federal highway from St. Paul to La Crescent that was both a commercial and recreational route. Most of the highway was widened to four lanes in the 1950s and 1960s. The highway's historic integrity and National Register eligibility between St. Paul and La Crescent has not been comprehensively assessed.

Gemini Research evaluated the National Register eligibility of the Red Wing Segment of Old Highway 61. Gemini recommends that the four-mile-long former highway segment does not retain sufficient historic integrity to meet National Register eligibility requirements due to an

accumulation of changes. These alterations include pavement widening, changes to setting, and the fact that present-day Highway 61, a wide four-lane expressway, is located close to Old Highway 61 for much of its length. The presence of the new highway substantially reduces the old highway's ability to convey its significance as an important and sole transportation route passing through Red Wing as it served the Mississippi River corridor.

A few blocks of Old Highway 61 are located within, and adjacent to, three historic districts that are listed on, and eligible for, the National Register, and locally designated by the City of Red Wing, as follows:

- Four blocks of Old Highway 61 the two-block piece from a point just east of East Avenue, on the west, to Plum Street, on the east, and the two-block piece on Plum between Main and Fourth streets, are located within and Contributing to the Red Wing Commercial Historic District (GD-RWC-1451), which is eligible for the National Register. The historic district meets National Register Criteria A (broad patterns of history) and C (architecture) in the areas of Architecture, Commerce, Politics/Government, Communications, and Social History. Old Highway 61 is a Contributing element because it forms part of the district's character-defining spacial organization, land use pattern, and circulation system. The district's recommended period of significance is 1858-1945 and the level of significance is State. (See the district inventory, GD-RWC-1451, for boundaries and further information.) The portions of Old Highway 61 described above are also within and adjacent to the City of Red Wing's Downtown Historic District administered under the purview of the Red Wing Heritage Preservation Commission.
- An approximately 225'-long section of Old Highway 61 at its intersection with West and East avenues is located within and Contributing to the Red Wing Mall Historic District (GD-RWC-001), which is listed on the National Register. The district was listed under National Register Criteria A (broad patterns of history) and C (architecture) in the areas of Architecture, Community Planning and Development, Education, Industry, and Landscape Architecture. Old Highway 61 is a Contributing element because it forms part of the district's character-defining spacial organization, land use pattern, and circulation system. The district's period of significance is 1853-1941 and the level of significance is Local. (See the district inventory, GD-RWC-001, for boundaries and further information.) A similar segment of Old Highway 61 about 280' long is located within the City of Red Wing's Historic Mall District administered under the purview of the Red Wing Heritage Preservation Commission.
- An approximately 285'-long section of Old Highway 61 west of Bush Street is adjacent to the St. James Hotel Complex (GD-RWC-004), which is listed on the National Register. The district was listed under National Register Criteria A (broad patterns of history) and C (architecture) in the areas of Architecture, Commerce, Entertainment/Recreation, and Health/Medicine. The level of significance is Local. (See the district inventory, GD-RWC-004, for boundaries and further information.) The same segment of Highway 61 is adjacent to the City of Red Wing's St. James Historic District administered under the purview of the Red Wing Heritage Preservation Commission.

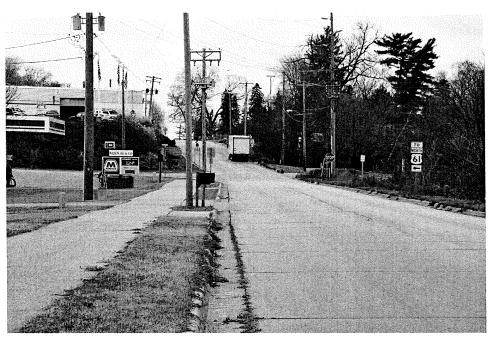


Fig. 339. Old Main/Hwy61/7th. Old Highway 61, Red Wing Segment, Old West Main approaching its junction with Bench Street near Hay Creek (facing W)

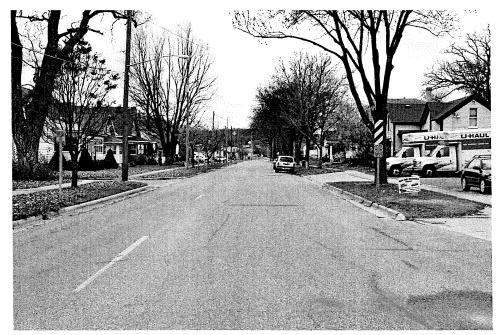


Fig. 340. Old Main/Hwy61/7th. Old Highway 61, Red Wing Segment, Old West Main through residential neighborhood between Jefferson and Third streets (facing W)



Fig. 341. Old Main/Hwy61/7th. Old Highway 61, Red Wing Segment, Old West Main Street commercial area; photo taken from current Highway 61 (facing SW)

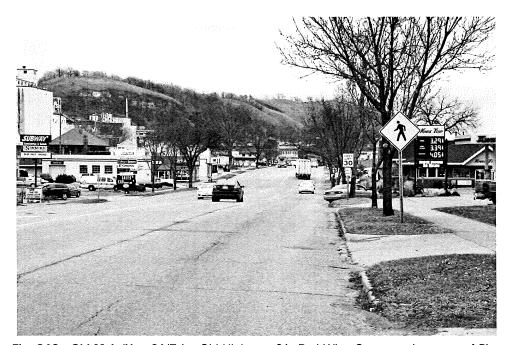


Fig. 342. Old Main/Hwy61/7th. Old Highway 61, Red Wing Segment, just east of Pine Street (facing NE)



Fig. 343. Old Main/Hwy61/7th. Old Highway 61, Red Wing Segment, in downtown Red Wing just west of Plum Street (facing SW)



Fig. 344. Old Main/Hwy61/7th. Old Highway 61, Red Wing Segment, former alignment of the highway on Plum Street (facing NW)



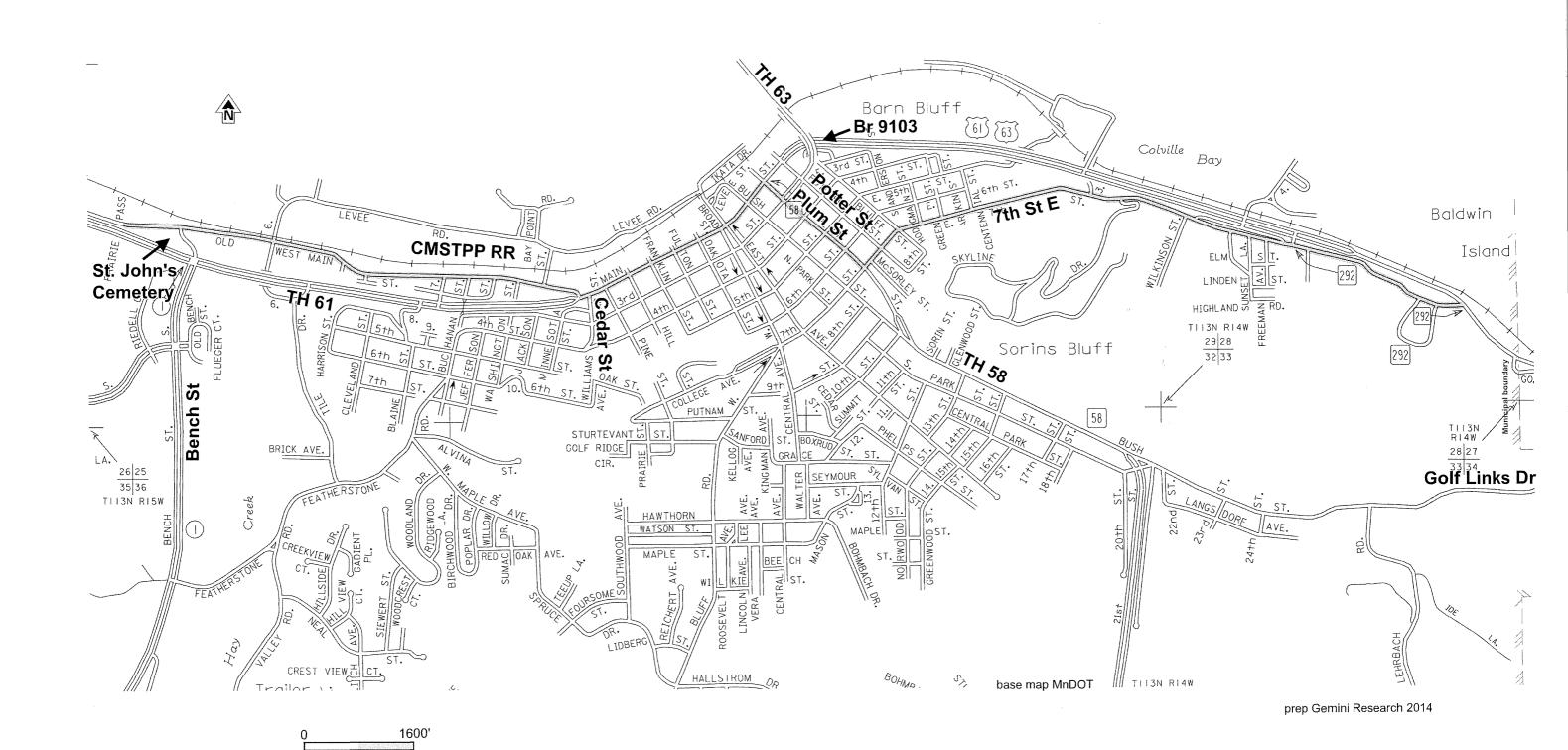
Fig. 345. Old Main/Hwy61/7th. Old Highway 61, Red Wing Segment, East Seventh Street at Nymphara Lane; current alignment and its Bridge 9450 at left (facing E)



Fig. 346. Old Main/Hwy61/7th. Old Highway 61, Red Wing Segment, East Seventh Street west of the State Training School buildings; current Highway 61 at right (facing NW)



Fig. 346. Old Main/Hwy61/7th. Old Highway 61, Red Wing Segment, East Seventh Street west of the State Training School buildings; current Highway 61 at right (facing NW)



GD-RWC-1440 425 Plum St Hist Name: Kohn Grocery

Other Name: Red Wing Laundry & Cleaners

Built: ca. 1905

NR Status: Not Individually Eligible

Kohn Grocery, built circa 1905, is located at the northeastern corner of Plum and Fifth streets in downtown Red Wing. North and east of the building is an L-shaped bituminous parking lot.

This two-story, Neoclassical Revival commercial building is faced with orangish-brown brick with smooth limestone trim. The building has a limestone foundation.

At the upper edge of the parapet wall is a simple metal cornice. The two street-facing facades (west and south) have rectangular window openings with 1/1 sash and continuous limestone sills and lintels. A square opening for a fairly large vent was cut into the southern facade circa 1955. There is a tall door opening with a limestone lintel and a transom near the rear of the southern facade. The door leaf was replaced and the transom light replaced with a vent, both circa 1955. The northern facade has rectangular window openings. The rear (east facade) has segmental-arched window openings, most with 1/1 sash. The building's storefront was evidently remodeled circa 1955 and again more recently.

On the northern side of the building a one-story circa 1955 addition was built to serve as a funeral home entrance. The addition has a cut-out corner entrance supported by one simple steel pole, a typical 1950s design element. The brick addition has an enclosed woodframe porch on the roof. There is also a small woodframe addition on the rear of the brick addition.

The interior of the main store has been altered except that it retains three cast iron columns, aligned east-west down the center of the space, that support a "Y"-shaped iron beam assembly, visible on the ceiling, that in turn supports the second story.

Historical Background

This building was constructed circa 1905 for Henry C. and Emma Kohn who operated Kohn Grocery here from circa 1905-1920. From 1920-1929 Quandt's Food Shoppe was located in the building. From 1929 to at least 1960 it housed Edstrom Funeral Home.

Kohn Grocery. Kohn Grocery was established circa 1899 by Henry C. Kohn and was evidently located in a previous building on this site until the current building was constructed circa 1905. The property is located in part of downtown Red Wing nicknamed "Dutchtown" for its large number of German-owned businesses. (The term "Dutch" derives from German immigrants giving their nationality as "Deutsch".)

Henry C. Kohn was born and raised on a farm outside of Red Wing, the son of German immigrants. In 1890 he and Emma Seebach were married. Emma Seebach was the daughter of Fred and Lydia Seebach; Fred was a well known, German-born Red Wing merchant.

Henry and Emma Kohn had two daughters (May and Maude) and three sons (Clyde, Earl, and Robert). At the time of the 1910 federal census, the Kohn family was living above the store.

Henry Kohn was a well-respected businessman. According to his 1930 obituary, "Mr. Kohn was successfully engaged in the grocery business here for 31 years, retiring ten years ago. He built

up a large business by fair and honest dealings and the building at the corner of Fifth and Plum streets, one of the finest business blocks in the city, which was constructed by him, is a monument to his ability in merchandising." "The deceased was greatly interested in civic affairs and served for a number of years on the city council. He was also a member of the water board . . . [and] a member of the board of directors of the Citizens' Fund Mutual Insurance Company and was interested in other enterprises here (RW Daily Republican Eagle, July 5, 1930).

Quandt's Food Shoppe. From 1920-1929 the storefront was occupied by Quandt's Food Shoppe. Quandt's was a grocery store and bakery operated principally by three sisters, Cora Hernlem Meyer, Conradena "Dena" Hernlem, and Margaret Hernlem Quandt. In 1929 the store was moved one block north into the former Central Hotel. Margaret's husband Courtney W. Quandt managed the hotel, then called the Tepeetonka (Rasmussen 1935: 335).

Edstrom Funeral Home. From 1929 to at least 1960 the building was occupied by Edstrom Funeral Home. Part of the first-floor space was also occupied by other commercial tenants.

Russell F. Edstrom was born in rural Goodhue County. He graduated from the University of Minnesota's School of Mortuary Science. He worked at funeral homes in the Twin Cities before establishing Edstrom Funeral in Red Wing in 1929.

At the time of the 1930 census, Russell F. Edstrom, 29 years old and single, was living above the store. In 1931 Russell Edstrom and Evelyn Dahl of Red Wing were married.

Russell Edstrom was first elected Goodhue County Coroner in 1930 and served for several decades. He was a member of several fraternal groups and service clubs. Around 1960, when Edstrom retired, the mortuary was sold to new owners. The successor firm, Bodelson-Mahn Funeral Home, is still in operation in Red Wing.

Recommendation

While the Kohn Grocery building has been altered, Gemini identified it for Phase II research because the alterations were such that the building could conceivably meet National Register eligibility criteria if research revealed outstanding significance under Criteria A or B that might overshadow the loss of historic integrity.

Gemini recommends that the building is not architecturally distinctive and therefore not eligible under National Register Criterion C (architecture and construction). Research conducted in numerous published histories, historic newspapers, and the files of the Goodhue County Historical Society revealed no associations with significant events or themes meriting eligibility under National Register Criterion A (important events or broad patterns). None of the owners' activities and contributions rises to a level of significance that would make the property eligible under Criterion B (important person).

Gemini Research recommends that the property is not eligible for the National Register.



Fig. 347. 425 Plum St. Kohn Grocery, main and south facades (facing N)



Fig. 348. 425 Plum St. Kohn Grocery, south and rear (east) facades (facing W)



Fig. 349. 425 Plum St. Kohn Grocery, rear (east) and north facades (facing S)

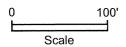


Fig. 350. 425 Plum St. Kohn Grocery, north and main facades (facing E)





Prep by Gemini Research 12-2013





surveyed property

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APPENDIX A: LIST OF HISTORIC PROPERTIES BY STREET ADDRESS

The table below provides a master list of the properties in the architecture-history Area of Potential Effect (APE) that are listed on, or eligible for, the National Register of Historic Places (NRFP) or located in an historic district that is listed on, or eligible for, the National Register. The properties are arranged in order by street address. See Appendix B for the same list arranged in order by SHPO Inventory Number.

There are 20 properties in the architecture-history APE that are individually listed on, or eligible for, the National Register. There are 132 properties in the architecture-history APE that are located in one or more of five historic districts. The two categories, 20 plus 132, total 152. There are only 139 unique properties, however, because some individually-listed or -eligible sites are also in a historic district and a few properties are in more than one overlapping historic district. The five historic districts are listed at the top of the table.

Historic Properties in the Architecture-History APE by Street Address

SHPO Inv #	Address		Historic Name	Indiv Listed or Eligible	In RW Mall Hist Dist	In St. James Hotel Complex	In RW Resid Hist Dist	In CMSTPP RR Hist Dist	In RW Commer Hist Dist
GD-RWC-001	<u> </u>		Red Wing Mall Historic District	Listed		<u> </u>	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·
GD-RWC-004			St. James Hotel Complex	Listed	to the about the second to the second				
GD-RWC-022			Red Wing Residential Historic Dist	Listed					
GD-RWC-1371		and the second of the second o	CMSTPP RR Corr Hist Dist, RW Seg	Eligible	The second section of the second seco				
GD-RWC-1451			Red Wing Commercial Historic Dist	Eligible					
GD-RWC-280		Barn Bluff	Barn Bluff	Listed					
GD-RWC-1371		Canadian Pacif	CMSTPP Railroad, Red Wing Segment	and an arrange of the state of	Contrib	W. STANSON I. ST. STANSON V. W. C. ST.		Contrib	
GD-RWC-1424		Mississippi Riv	Red Wing Harbor and Levee		Contrib	TANAMA CANAMA CANAMA CANAMA			
GD-RWC-1452		Mississippi Riv	Mississippi River 9' Channel, RW Seg	Eligible					
GD-RWC-008	219-221	3rd St. W	Kappel Wagon Works	Listed	 Intermitting matter for configuration of the configuration				Contrib
GD-RWC-1390	223	3rd St. W	RW Creamery Ice Cream Plant						Contrib
GD-RWC-1391	ca. 229	3rd St. W	Dankers Park	Committee of the commit					Noncontr
GD-RWC-324	313	3rd St. W	IOOF Hall (Carlson's)	provide Marco - Triagge is No. Physical and Marco - 1999 (1999)	COLUMN CONTRACTOR CONT				Contrib
GD-RWC-325	318	3rd St. W	Metro Theater (Malmquist)	and the second selections and the second sec	Commence of the control of the contr				Noncontr
GD-RWC-013	319	3rd St. W	Anderson Bldg-Daily Eagle		to a state of the				Contrib
GD-RWC-326	320	3rd St. W	Anderson Shoes (Cut Above Home)	The state of the s					Noncontr
GD-RWC-327	321	3rd St. W	Commercial Bldg (Body and Soul)	The second secon	-				Noncontr
GD-RWC-328	401-411	3rd St. W	Wilkinson Bldg (RW Corner Drug)						Contrib
GD-RWC-329	410-412	3rd St. W	Union Block (Hanish E part)	A	-	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Contrib
GD-RWC-1392	413	3rd St. W	Sherman Grocery (United Way)						Contrib
GD-RWC-331	414-416	3rd St. W	Centennial Blk (Patterson-Hanish)						Contrib
GD-RWC-330	415-419	3rd St. W	Brink-Hawkins-Luce (Shear Perfect)						Contrib
GD-RWC-332	418	3rd St. W	Ahler Electric (Midwest Vision)	The second secon	The second section is a second section of the second section in the second section is a second section of the second section in the second section is a second section of the second section in the second section is a second section of the second section in the second section is a second section of the second section in the second section is a second section of the second section in the second section is a second section of the second section is a second section of the second section is a second section of the second section is a second section of the second section is a second section of the second section is a second section of the second section is a second section of the second section is a second section of the second section is a second section of the second section is a second section of the second section is a second section of the second section is a second section of the second section is a second section of the second section is a second section of the second section is a second section of the section				Contrib
GD-RWC-333	420-430	3rd St. W	Goodhue Co Co-op (Cornerstone)						Contrib
GD-RWC-334	425	3rd St. W	Magnussen's Pharm (Best of Times)						Contrib
GD-RWC-335	427	3rd St. W	Commercial Bldg (Blue Moon)	The state of the s					Noncontr
GD-RWC-1393	429	3rd St. W	Commercial Bldg (Creative Clips)						Noncontr

GD-RWC-337	432-438	3rd St. W	Webster Livery (Kask Electric)		4			Contrib
GD-RWC-336	433	3rd St. W	RW Printing Co (Republican Eagle)					Contrib
GD-RWC-002	443	3rd St. W	Sheldon Memorial Auditorium	Listed	Contrib			
GD-RWC-113	ca. 506	3rd St. W	Broadway Park (Rich Park)		Contrib			
GD-RWC-067	603	3rd St. W	Cliff's Typewriter (Farmers Ins)		Contrib			
GD-RWC-066	607-609	3rd St. W	Smith Duplex		Contrib			
GD-RWC-065	617	3rd St. W	Smith House		Contrib			
GD-RWC-115	702	3rd St. W	Hayes House		<u> </u>		Contrib	
GD-RWC-118	710-712	3rd St. W	Bragg-Olson House				Noncontr	
GD-RWC-121	718-724	3rd St. W	Ahlers Flats				Contrib	
GD-RWC-123	726-728	3rd St. W	Worden Flats				Contrib	
GD-RWC-023	927	3rd St. W	Lawther House	Listed			Contrib	
GD-RWC-142	1008	3rd St. W	Sprague House				Contrib	
GD-RWC-149	1104	3rd St. W	Wilkinson House				Contrib	
GD-RWC-338	312	4th St. W	Monument Works (Walt's)		1			Noncontr
GD-RWC-1394	314	4th St. W	Commercial Bldg (Zibble)	Î				Noncontr
GD-RWC-009	315	4th St. W	Red Wing City Hall	Listed				Contrib
GD-RWC-339	418	4th St. W	Northwestern Bell (Qwest)					Noncontr
GD-RWC-095	454	4th St. W	Masonic Temple	į	Contrib			
GD-RWC-082	508	4th St. W	Christ Church Parish House		Contrib			
GD-RWC-1407	725	6th St. W	Hedin House	Recom Elig				
GD-RWC-746	519	Bluff St.	Luft Doublehouse	Recom Elig				
GD-RWC-109	102	Broad St.	Red Wing Malting (Fleischmann)		Contrib			i
GD-RWC-108	116	Broad St.	State Empl Office (Royal Crown)		Noncontr			
GD-RWC-912	112	Bush St.	Riedell Shoes (Art Reach			Noncontr		
GD-RWC-340	202	Bush St.	Lawther Blk (Uffda Shop N)					Contrib
GD-RWC-341	204-208	Bush St.	Lawther Blk Add (Uffda S)					Contrib
GD-RWC-342	207-209	Bush St.	Lawther Blk (Wise Penny)					Contrib
GD-RWC-343	210	Bush St.	Smith Blk (Subhouse)					Contrib
GD-RWC-344	211-213	Bush St.	Lawther Blk (Life's Little)		1			Contrib
GD-RWC-345	212	Bush St.	Wallower Blk (Great Dragon)			5	A second	Contrib
GD-RWC-346	215-221	Bush St.	Busch Blk (Josephsons)					Contrib
GD-RWC-1413	216-224	Bush St.	Goodhue Co. Nat'l Bank Annex					Noncontr

GD-RWC-350	223	Bush St.	Hoffman Blk (Claydon's N)				Contrib
GD-RWC-351	225-227	Bush St.	Smith-Masonic Block				Contrib
GD-RWC-349	226-228	Bush St.	Goodhue Co. Nat'l Bank				Contrib
GD-RWC-352	301-303	Bush St.	Lawther Post Office (Howe's)		The state of the s	THE RESERVE TO A STATE OF THE PROPERTY OF THE	Contrib
GD-RWC-007	305-313	Bush St.	Gladstone Building	Listed	the state that the same that t	The second section of the second section of the second section of the second section of the second section sec	Contrib
GD-RWC-354	310-314	Bush St.	The Casino (Thunder Clan)	3	The second secon		Contrib
GD-RWC-355	315-317	Bush St.	McCart Livery (Hallstroms)		The state of the s	And the second section of the section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the	Contrib
GD-RWC-012	316-318	Bush St.	Berglund's Stone Blk-AOUW (Kiki)	The second secon	The same of the sa	e chilitical modern madein cellitical modern modern modern madein modern	Contrib
GD-RWC-1414	319-321	Bush St.	Becker Grocery (Aliveo)				Contrib
GD-RWC-356	320	Bush St.	Dunham Beauty Shop (Lori's)	TOTATION AND A see measure to 1779 a deem of 1 many and 497 of her	and the special contract of the second of th	A CONTROL Of Control o	Contrib
GD-RWC-357	325	Bush St.	Chief Theater (Blue Duck)	The art manufacture consistence (PAC) and whether any Pacific PAC and the	oder errere v 1994 i visika mentle pri v v v v der Evendel V dels v pri prilitie ob vedelmenn		Noncontr
GD-RWC-359	327	Bush St.	Swanson Rest (River City Dental)				Noncontr
GD-RWC-358	328	Bush St.	Edblom Conoco (Gernentz)		Mark Committee (Committee Committee		Contrib
GD-RWC-1417	419	Bush St.	Medical Block Clinic	Recom Elig		THE LOCAL COLUMN	
GD-RWC-026	216	Dakota St.	Hewitt Laboratory	Listed		Contrib	
GD-RWC-1420	ca. 215	East Ave.	Studebaker Park Parking Ramp	THE THE TRANSPORT STATES IN THE WAY OF THE A SEC	Noncontr	The second of the most of the second of the	Noncontr
GD-RWC-091	225	East Ave.	Red Wing Public Library		Noncontr		
GD-RWC-093	315	East Ave.	East Avenue Prof (Bergan Dental)		Noncontr		
GD-RWC-1448		Highway 61	Highway 61, Red Wing Segment		Contrib		Contrib
GD-RWC-1387	ca. 100	Highway 63	Bridge 9103	Eligible		AND COMPANIES COMMANDED TO THE COMPANIES CONTRACTOR CON	
GD-RWC-1422	521	Hill St.	Miller House	Recom Elig			
GD-RWC-1380	230	lkata Dr.	Red Wing Sewage Pumping Station	m militari, strate and promover in a sensitive groups and a sensitive promote	Noncontr		
GD-RWC-1383	810	Levee Rd.	Burdick Grain Co. Terminal Elevator	Recom Elig	ann dan inn 1996 gamman ambhrail 1996/1975 An a mainmeannanna - Eirideig a' aine i' man na	mangen en en de me almanen en en den Meren mener ope derendler et en enere en el Mere et et lade an en e	
GD-RWC-005	401	Levee St.	Red Wing Iron Works	Listed	CONTRACTOR CONTRACTOR		
GD-RWC-1373	ca. 416	Levee St.	Chic, Milw & St Paul Pump House		Contrib	Contr	ib
GD-RWC-106	418-420	Levee St.	Chic, Milw & St Paul Pass Depot	The state of the s	Contrib	Contr	ib
GD-RWC-111	432	Levee St.	Levee Park	mellin med Zasa statemen medičiće, straževeće odsti	Contrib	And the second of the second o	
GD-RWC-019	129	Main St. W	Red Wing Shoe Company	Recom Elig			
GD-RWC-1425	ca. 205	Main St. W	Behren's Supply Co. Annex	- Charles Appendix Charles and Appendix An Exchanginate Equipment App	A THE COMMUNICATION AND THE COMMUNICATION OF MANY AND ASSESSMENT OF THE COMMUNICATION OF THE	Milliamente percentiful exercise the fill imment of the Milliament of the control	Noncontr
GD-RWC-299	207-217	Main St. W	RW Creamery (Behren's)				Contrib
GD-RWC-300	223	Main St. W	Kempe Block (Barrel House)	Market delighter planning from the same and speed that the	The second of th		Contrib
GD-RWC-301	301	Main St. W	Sterling's Brick Blk (Ferrin's)	and the second s		A CAMPAGNAMIA CONTRACTOR AND AND AND AND AND AND AND AND AND AND	Noncontr
GD-RWC-302	302-306	Main St. W	Buchholz-Hadler-Moeller (Riverfr)	Control of the Contro	e annual and the second of the second of the second		Contrib

GD-RWC-303	303	Main St. W	Sparrell's Block (Ferrin's)					Noncontr
GD-RWC-304	305	Main St. W	Sterling and Co (Ferrin's)					Noncontr
GD-RWC-305	307-311	Main St. W	J. C. Penney (Sarah's)					Noncontr
GD-RWC-306	308	Main St. W	Day Block (Riverfront Centre)					Contrib
GD-RWC-307	310	Main St. W	Betcher Blk (Riverfront Centre)	5				Contrib
GD-RWC-308	312-316	Main St. W	Wilson-Baker (Riverfront Centre)				and a second second second second second second second second second second second second second second second	Contrib
GD-RWC-1426	315	Main St. W	Red Wing Shoe Store-Museum					Noncontr
GD-RWC-310	318-322	Main St. W	Simmons-Swanson (Riverfront Cent)		A commence of the second section of the section of the sectio	and the same of the contract of the contract of		Contrib
GD-RWC-311	319-321	Main St. W	Smith-McDonald Blk (Inspired)					Contrib
GD-RWC-312	323	Main St. W	Towne Blk (RW Confectionery)					Contrib
GD-RWC-314	325-327	Main St. W	Lawther Block (Confluence)					Contrib
GD-RWC-315	329	Main St. W	Clark and Hawley (Moments)					Contrib
GD-RWC-004	406	Main St. W	St. James Hotel			Contrib		
GD-RWC-006	409	Main St. W	Keystone Building	Listed				Contrib
GD-RWC-1428	412	Main St. W	Medical Block (now pt St. James H)			Contrib		
GD-RWC-317	413-423	Main St. W	Boxrud Bros Blk (Riverbend Mkt)		1		A STATE OF THE STA	Contrib
GD-RWC-1429	416	Main St. W	NSP (now part of St. James Hotel)			Contrib		
GD-RWC-318	420-426	Main St. W	Pioneer Garage (Johnson Tire)					Contrib
GD-RWC-320	433-435	Main St. W	Phelps Block (Brickhouse)		landaria de la companio della companio de la companio de la companio della compan	Magaza ayan asan ara sa san ara san ara may hamada san ara sa san ara san ara san ara san ara san ara sa san a		Contrib
GD-RWC-1430	434	Main St. W	Young Men's Christian Assoc		Noncontr			
GD-RWC-321	437-439	Main St. W	Cogel-Betcher Block		Contrib			
GD-RWC-107	604	Main St. W	Preston's Auto (Taco Johns)		Noncontr			
GD-RWC-1433	621	Main St. W	Econo Foods	Bull to a supplementary and the first of the	Noncontr			
GD-RWC-015	726	Main St. W	Chicago Great Western Depot	Listed		nakanan menerakan kerancan dari berasa berasa berasa berasa berasa berasa berasa berasa berasa berasa berasa b		
GD-RWC-1423	ca. 1162	Oak St.	Red Wing City Hospital Stairway	Recom Elig				1. 1
GD-RWC-1434		Old Main/Hwy 61	Old Highway 61, Red Wing Segment	ili. Li Li Li Li Li Li Li Li Li Li Li Li Li L	Contrib			Contrib
GD-RWC-360	201-207	Plum St.	Lawther-Park Blk (Travel)		Section of Street Street		a program and a program and a second	Contrib
GD-RWC-361	210	Plum St.	Globe Electric Light (Ferrin's)					Noncontr
GD-RWC-362	212	Plum St.	Sterling Block (Ferrin's)	<u> </u>			and the same of the same of the same of the same of the same of the same of the same of the same of the same of	Noncontr
GD-RWC-363	213	Plum St.	Little Green Front (5 de Mayo)			and a summary of a second second second		Noncontr
GD-RWC-364	214	Plum St.	Linne Bldg (Ferrin's)					Noncontr
GD-RWC-365	217-221	Plum St.	Nat'l Guard Armory-Masonic Hall	the second secon	La companya da sa sa sa sa sa sa sa sa sa sa sa sa sa	en de la composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della com		Contrib
GD-RWC-366	302	Plum St.	Greenwood Blk (Liberty's)					Contrib

GD-RWC-368	303	Plum St.	Lyons Brick Blk (Liberty's)		Contrib
GD-RWC-367	304	Plum St.	Lindberg Block (Liberty's)	MMP (MM) of a color of the Market and the color of the co	Contrib
GD-RWC-369	306-308	Plum St.	Boston Block (Liberty's)	enderen et och med ottale et ette ett tilleg er et et tilleg et et et et et et et et et et et et et	Contrib
GD-RWC-370	307	Plum St.	Red Wing Creamery (Red Men)		Noncontr
GD-RWC-371	309-313	Plum St.	Clum Block (Metro Apts)	renten. Himity per nur 1922 zein ega namer garrings un n. 21 unter gebannen. Unter neuen im 1922 et i 1921 et i	Contrib
GD-RWC-372	310	Plum St.	Smith Harness (Roxx)	material particular description of the photography and a summer of the second of the contract and the contract	Contrib
GD-RWC-373	312-314	Plum St.	White Front (B.S. Bar)		Contrib
GD-RWC-375	316	Plum St.	Winters Building		Contrib
GD-RWC-376	318	Plum St.	Peterson Meat (Sorenson)		Contrib
GD-RWC-378	320-324	Plum St.	Salvation Army (Elks N)	Management of the Commission of Management o	Noncontr
GD-RWC-010	325-327	Plum St.	Hotel de Batlo (Eagle House)	markan emineral per mengangan mengangkan perunggan di manangkan perunggan di mengangkan di menggan per mengang	Contrib
GD-RWC-379	326-330	Plum St.	Becker Grocery (Elks S)	te Oral Sent Consumption of Part 2000 Sent and Protesting of Oral Consumption of	Noncontr
GD-RWC-1439	401	Plum St.	First National Bank of Red Wing	Recom Elig	
GD-RWC-064	222	West Ave.	U.S. Post Office	Contrib	and the second s
GD-RWC-068	308-314	West Ave.	Lidberg House	Contrib	
GD-RWC-069	312	West Ave.	Chalet Studio (Red Wing Framing)	Contrib	
GD-RWC-070	320	West Ave.	St. Paul's Evang. Lutheran	Contrib	
GD-RWC-081	321	West Ave.	Christ Episcopal Church	Contrib	

APPENDIX B: LIST OF HISTORIC PROPERTIES BY SHPO INVENTORY NUMBER

The table below provides a master list of the properties in the architecture-history Area of Potential Effect (APE) that are listed on, or eligible for, the National Register of Historic Places (NRFP) or located in an historic district that is listed on, or eligible for, the National Register. The properties are arranged in order by SHPO Inventory Number. See Appendix A for the same list arranged in order by street address.

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Historic Properties in the Architecture-History APE by SHPO Inventory Number

SHPO Inv #	Address		Historic Name	Indiv Listed or Eligible	In RW Mall Hist Dist	In St. James Hotel Complex	In RW Resid Hist Dist	In CMSTPP RR Hist Dist	In RW Commer Hist Dist
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GD-RWC-004			St. James Hotel Complex	Listed					
GD-RWC-022			Red Wing Residential Historic Dist	Listed					
GD-RWC-1371			CMSTPP RR Corr Hist Dist, RW Seg	Eligible					
GD-RWC-1451			Red Wing Commercial Historic Dist	Eligible					
GD-RWC-002	443	3rd St. W	Sheldon Memorial Auditorium	Listed	Contrib				
GD-RWC-004	406	Main St. W	St. James Hotel	- Video de la companie de la compani		Contrib			
GD-RWC-005	401	Levee St.	Red Wing Iron Works	Listed	a state of the second second		ALL CO. III MAN PRANCISCO DE LA CASSACIA		
GD-RWC-006	409	Main St. W	Keystone Building	Listed					Contrib
GD-RWC-007	305-313	Bush St.	Gladstone Building	Listed					Contrib
GD-RWC-008	219-221	3rd St. W	Kappel Wagon Works	Listed	The state of the second				Contrib
GD-RWC-009	315	4th St. W	Red Wing City Hall	Listed					Contrib
GD-RWC-010	325-327	Plum St.	Hotel de Batlo (Eagle House)	ALA II MARANES					Contrib
GD-RWC-012	316-318	Bush St.	Berglund's Stone Blk-AOUW (Kiki)						Contrib
GD-RWC-013	319	3rd St. W	Anderson Bldg-Daily Eagle						Contrib
GD-RWC-015	726	Main St. W	Chicago Great Western Depot	Listed	Committee of the second				
GD-RWC-019	129	Main St. W	Red Wing Shoe Company	Recom Elig	7 min				
GD-RWC-023	927	3rd St. W	Lawther House	Listed			Contrib		
GD-RWC-026	216	Dakota St.	Hewitt Laboratory	Listed			Contrib		
GD-RWC-064	222	West Ave.	U.S. Post Office		Contrib				
GD-RWC-065	617	3rd St. W	Smith House		Contrib				
GD-RWC-066	607-609	3rd St. W	Smith Duplex		Contrib				
GD-RWC-067	603	3rd St. W	Cliff's Typewriter (Farmers Ins)		Contrib	and the second second second second second			
GD-RWC-068	308-314	West Ave.	Lidberg House		Contrib				
GD-RWC-069	312	West Ave.	Chalet Studio (Red Wing Framing)		Contrib				
GD-RWC-070	320	West Ave.	St. Paul's Evang. Lutheran	the secondary of the secondary of the	Contrib				
GD-RWC-081	321	West Ave.	Christ Episcopal Church	THE CONTRACT OF STREET STREET, SAME	Contrib				

GD-RWC-082	508	4th St. W	Christ Church Parish House	the second secon	Contrib	e de la companya del companya de la companya del companya de la companya del la companya de la c	and the second of the second o
GD-RWC-091	225	East Ave.	Red Wing Public Library		Noncontr		
GD-RWC-093	315	East Ave.	East Avenue Prof (Bergan Dental)		Noncontr		
GD-RWC-095	454	4th St. W	Masonic Temple		Contrib		
GD-RWC-106	418-420	Levee St.	Chic, Milw & St Paul Pass Depot		Contrib		Contrib
GD-RWC-107	604	Main St. W	Preston's Auto (Taco Johns)		Noncontr		
GD-RWC-108	116	Broad St.	State Empl Office (Royal Crown)	į.	Noncontr		
GD-RWC-109	102	Broad St.	Red Wing Malting (Fleischmann)	£	Contrib		
GD-RWC-111	432	Levee St.	Levee Park	į	Contrib		
GD-RWC-113	ca. 506	3rd St. W	Broadway Park (Rich Park)		Contrib		
GD-RWC-115	702	3rd St. W	Hayes House			Contrib	
GD-RWC-118	710-712	3rd St. W	Bragg-Olson House		1	Noncontr	
GD-RWC-121	718-724	3rd St. W	Ahlers Flats	or the same of the	Together the state of the second seco	Contrib	er en en en en en en en en en en en en en
GD-RWC-123	726-728	3rd St. W	Worden Flats	98894 (1984) (1984) (1984) (1984) (1984) (1984) (1984) (1984) (1984) (1984) (1984) (1984) (1984) (1984) (1984)	And the second s	Contrib	
GD-RWC-142	1008	3rd St. W	Sprague House			Contrib	
GD-RWC-149	1104	3rd St. W	Wilkinson House			Contrib	
GD-RWC-280		Barn Bluff	Barn Bluff	Listed	\$4000 TAX TAX TAX TAX TAX TAX TAX TAX TAX TAX		
GD-RWC-299	207-217	Main St. W	RW Creamery (Behren's)	The state of the s	AND THE RESIDENCE OF THE PROPERTY OF THE PROPE		Contrib
GD-RWC-300	223	Main St. W	Kempe Block (Barrel House)			A company of the comp	Contrib
GD-RWC-301	301	Main St. W	Sterling's Brick Blk (Ferrin's)		Standard Washington and Art Control of Proceedings of the Standard Control of	1	Noncontr
GD-RWC-302	302-306	Main St. W	Buchholz-Hadler-Moeller (Riverfr)	a temperature to an analysis and the second			Contrib
GD-RWC-303	303	Main St. W	Sparrell's Block (Ferrin's)	The second second is a second	***************************************	9	Noncontr
GD-RWC-304	305	Main St. W	Sterling and Co (Ferrin's)			di masanadi mesi yito menda bambabi sanataremenin kumo. Masa mabbar masali masali sanadi turi T	Noncontr
GD-RWC-305	307-311	Main St. W	J. C. Penney (Sarah's)				Noncontr
GD-RWC-306	308	Main St. W	Day Block (Riverfront Centre)	The state of the s			Contrib
GD-RWC-307	310	Main St. W	Betcher Blk (Riverfront Centre)		agen (1999) de la la la la la la la la la la la la la		Contrib
GD-RWC-308	312-316	Main St. W	Wilson-Baker (Riverfront Centre)		page of another the Same, when the Same of	and with a separate and separate separa	Contrib
GD-RWC-310	318-322	Main St. W	Simmons-Swanson (Riverfront Cent)		age, "a bloom of the control of a good about the state of a company to the second seco		Contrib
GD-RWC-311	319-321	Main St. W	Smith-McDonald Blk (Inspired)			Market Address of the community and for the contract of the co	Contrib
GD-RWC-312	323	Main St. W	Towne Blk (RW Confectionery)	A CONTRACTOR OF THE PROPERTY O		e england - lagrana e e mor man allo se en elo, molt de mar o el c	Contrib
GD-RWC-314	325-327	Main St. W	Lawther Block (Confluence)	1	may be considered and a second residual considered and a second second and a second second and a second second		Contrib
GD-RWC-315	329	Main St. W	Clark and Hawley (Moments)				Contrib
GD-RWC-317	413-423	Main St. W	Boxrud Bros Blk (Riverbend Mkt)	adality for the term of the second second for the first of the second se	gang Papanganan at a madhini sa makan samat ayak mingan manayaya pinin ayasa bira ang simaya 		Contrib

GD-RWC-318	420-426	Main St. W	Pioneer Garage (Johnson Tire)	Contrib
GD-RWC-320	433-435	Main St. W	Phelps Block (Brickhouse)	Contrib
GD-RWC-321	437-439	Main St. W	Cogel-Betcher Block Contrib	
GD-RWC-324	313	3rd St. W	IOOF Hall (Carlson's)	Contrib
GD-RWC-325	318	3rd St. W	Metro Theater (Malmquist)	Noncontr
GD-RWC-326	320	3rd St. W	Anderson Shoes (Cut Above Home)	Noncontr
GD-RWC-327	321	3rd St. W	Commercial Bldg (Body and Soul)	Noncontr
GD-RWC-328	401-411	3rd St. W	Wilkinson Bldg (RW Corner Drug)	Contrib
GD-RWC-329	410-412	3rd St. W	Union Block (Hanish E part)	Contrib
GD-RWC-330	415-419	3rd St. W	Brink-Hawkins-Luce (Shear Perfect)	Contrib
GD-RWC-331	414-416	3rd St. W	Centennial Blk (Patterson-Hanish)	Contrib
GD-RWC-332	418	3rd St. W	Ahler Electric (Midwest Vision)	Contrib
GD-RWC-333	420-430	3rd St. W	Goodhue Co Co-op (Cornerstone)	Contrib
GD-RWC-334	425	3rd St. W	Magnussen's Pharm (Best of Times)	Contrib
GD-RWC-335	427	3rd St. W	Commercial Bldg (Blue Moon)	Noncontr
GD-RWC-336	433	3rd St. W	RW Printing Co (Republican Eagle)	Contrib
GD-RWC-337	432-438	3rd St. W	Webster Livery (Kask Electric)	Contrib
GD-RWC-338	312	4th St. W	Monument Works (Walt's)	Noncontr
GD-RWC-339	418	4th St. W	Northwestern Bell (Qwest)	Noncontr
GD-RWC-340	202	Bush St.	Lawther Blk (Uffda Shop N)	Contrib
GD-RWC-341	204-208	Bush St.	Lawther Blk Add (Uffda S)	Contrib
GD-RWC-342	207-209	Bush St.	Lawther Blk (Wise Penny)	Contrib
GD-RWC-343	210	Bush St.	Smith Blk (Subhouse)	Contrib
GD-RWC-344	211-213	Bush St.	Lawther Blk (Life's Little)	Contrib
GD-RWC-345	212	Bush St.	Wallower Blk (Great Dragon)	Contrib
GD-RWC-346	215-221	Bush St.	Busch Blk (Josephsons)	Contrib
GD-RWC-349	226-228	Bush St.	Goodhue Co. Nat'l Bank	Contrib
GD-RWC-350	223	Bush St.	Hoffman Blk (Claydon's N)	Contrib
GD-RWC-351	225-227	Bush St.	Smith-Masonic Block	Contrib
GD-RWC-352	301-303	Bush St.	Lawther Post Office (Howe's)	Contrib
GD-RWC-354	310-314	Bush St.	The Casino (Thunder Clan)	Contrib
GD-RWC-355	315-317	Bush St.	McCart Livery (Hallstroms)	Contrib
GD-RWC-356	320	Bush St.	Dunham Beauty Shop (Lori's)	Contrib

GD-RWC-357	325	Bush St.	Chief Theater (Blue Duck)				Santa di Santa di Santa di Santa di Santa di Santa di Santa di Santa di Santa di Santa di Santa di Santa di Sa	Noncontr
GD-RWC-358	328	Bush St.	Edblom Conoco (Gernentz)					Contrib
GD-RWC-359	327	Bush St.	Swanson Rest (River City Dental)					Noncontr
GD-RWC-360	201-207	Plum St.	Lawther-Park Blk (Travel)		1 2 			Contrib
GD-RWC-361	210	Plum St.	Globe Electric Light (Ferrin's)	3				Noncontr
GD-RWC-362	212	Plum St.	Sterling Block (Ferrin's)	1				Noncontr
GD-RWC-363	213	Plum St.	Little Green Front (5 de Mayo)					Noncontr
GD-RWC-364	214	Plum St.	Linne Bldg (Ferrin's)					Noncontr
GD-RWC-365	217-221	Plum St.	Nat'l Guard Armory-Masonic Hall				Andrew Control of the	Contrib
GD-RWC-366	302	Plum St.	Greenwood Blk (Liberty's)			The second secon		Contrib
GD-RWC-367	304	Plum St.	Lindberg Block (Liberty's)		i S Anno speciologico de com			Contrib
GD-RWC-368	303	Plum St.	Lyons Brick Blk (Liberty's)		1 			Contrib
GD-RWC-369	306-308	Plum St.	Boston Block (Liberty's)					Contrib
GD-RWC-370	307	Plum St.	Red Wing Creamery (Red Men)					Noncontr
GD-RWC-371	309-313	Plum St.	Clum Block (Metro Apts)					Contrib
GD-RWC-372	310	Plum St.	Smith Harness (Roxx)			A		Contrib
GD-RWC-373	312-314	Plum St.	White Front (B.S. Bar)					Contrib
GD-RWC-375	316	Plum St.	Winters Building					Contrib
GD-RWC-376	318	Plum St.	Peterson Meat (Sorenson)					Contrib
GD-RWC-378	320-324	Plum St.	Salvation Army (Elks N)		in a commence	And the second s		Noncontr
GD-RWC-379	326-330	Plum St.	Becker Grocery (Elks S)					Noncontr
GD-RWC-746	519	Bluff St.	Luft Doublehouse	Recom Elig				
GD-RWC-912	112	Bush St.	Riedell Shoes (Art Reach			Noncontr		
GD-RWC-1371		Canadian Pacif	CMSTPP Railroad, Red Wing Segment	š	Contrib		Contrib	
GD-RWC-1373	ca. 416	Levee St.	Chic, Milw & St Paul Pump House	i i	Contrib	<u> </u>	Contrib	
GD-RWC-1380	230	Ikata Dr.	Red Wing Sewage Pumping Station		Noncontr	and the second second second second second		
GD-RWC-1383	810	Levee Rd.	Burdick Grain Co. Terminal Elevator	Recom Elig		and any commence of the second	and the second s	
GD-RWC-1387	ca. 100	Highway 63	Bridge 9103	Eligible				
GD-RWC-1390	223	3rd St. W	RW Creamery Ice Cream Plant					Contrib
GD-RWC-1391	ca. 229	3rd St. W	Dankers Park					Noncontr
GD-RWC-1392	413	3rd St. W	Sherman Grocery (United Way)				Chinaman and the contract of t	Contrib
GD-RWC-1393	429	3rd St. W	Commercial Bldg (Creative Clips)	j				Noncontr
GD-RWC-1394	314	4th St. W	Commercial Bldg (Zibble)					Noncontr

GD-RWC-1407	725	6th St. W	Hedin House	Recom Elig	and the second design of the second	The second secon	
GD-RWC-1413	216-224	Bush St.	Goodhue Co. Nat'l Bank Annex	and the second s		and the complete and the complete complete complete complete complete complete complete complete complete comp	Noncontr
GD-RWC-1414	319-321	Bush St.	Becker Grocery (Aliveo)			The second of th	Contrib
GD-RWC-1417	419	Bush St.	Medical Block Clinic	Recom Elig	Market Services and Control of		
GD-RWC-1420	ca. 215	East Ave.	Studebaker Park Parking Ramp		Noncontr	a service and service of the control	Noncontr
GD-RWC-1422	521	Hill St.	Miller House	Recom Elig	ory and warmanistic first		
GD-RWC-1423	ca. 1162	Oak St.	Red Wing City Hospital Stairway	Recom Elig	man integripes of Education many and a six of the second	The second secon	
GD-RWC-1424		Mississippi Riv	Red Wing Harbor and Levee	The second second second second second second second	Contrib	The second secon	
GD-RWC-1425	ca. 205	Main St. W	Behren's Supply Co. Annex		Military to the transport of the section of the sec		Noncontr
GD-RWC-1426	315	Main St. W	Red Wing Shoe Store-Museum				Noncontr
GD-RWC-1428	412	Main St. W	Medical Block (now pt St. James H)	and in the Colombia Colombia Colombia and Colombia Colomb	the same that where the same and the same an	Contrib	
GD-RWC-1429	416	Main St. W	NSP (now part of St. James Hotel)			Contrib	
GD-RWC-1430	434	Main St. W	Young Men's Christian Assoc	A STATE OF THE STA	Noncontr		
GD-RWC-1433	621	Main St. W	Econo Foods	The state of the selection of the select	Noncontr		
GD-RWC-1434		Old Main/Hwy 61	Old Highway 61, Red Wing Segment	The state of the s	Contrib		Contrib
GD-RWC-1439	401	Plum St.	First National Bank of Red Wing	Recom Elig	 Albert Marchan (1994) - Albert Andrew (1994) - Albert Andrew (1994) 	e communication and the communication and analysis of the second	
GD-RWC-1448		Highway 61	Highway 61, Red Wing Segment		Contrib		Contrib
GD-RWC-1452		Mississippi Riv	Mississippi River 9' Channel, RW Seg	Eligible			