



Due Diligence Archaeological Survey of the Marshall Mega Site, Calhoun County, Michigan

Marshall Area Economic Development Alliance

Project No. 134707

1/11/2023



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prepared for

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prepared by

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ABSTRACT

This report describes the results of a due diligence archaeological survey of the Marshall Mega Site Project for the Community Development Director, Calhoun County, Michigan. The cultural resources investigation was conducted within the areas of highest potential to contain intact cultural resources and the areas of previously recorded sites within the 1,786-acre Project Area. Three previously recorded sites were revisited, and seven historic-age farmsteads were recorded. All ten sites are recommended not eligible for inclusion in the National Register of Historic Places (NRHP). All work was conducted to professional standards and guidelines in accordance with the *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44742) and in accordance with the *Secretary's Standard for Identification* (48 FR 44720-44723).

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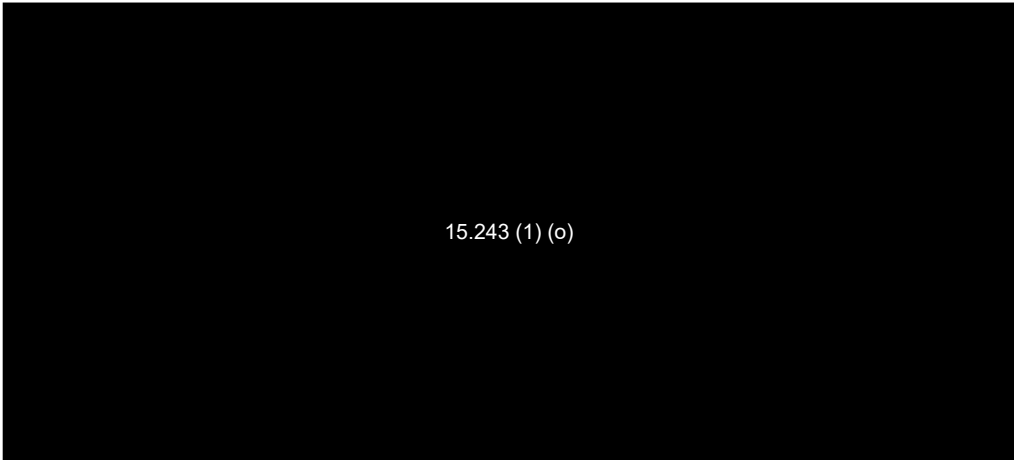
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LIST OF ABBREVIATIONS

<u>Abbreviation</u>	<u>Term/Phrase/Name</u>
APE	Area of Potential Effect
B.P.	before present
Burns & McDonnell	Burns & McDonnell Michigan, Inc.
GLO	General Land Office
NRHP	National Register of Historic Places
SHPO	State Historic Preservation Office
SSURGO	Soil Survey Geographic Database
USGS	U.S. Geological Survey

1.0 INTRODUCTION

This report describes the results of the due diligence cultural resources survey of the Marshall Mega Site Project for the Community Development Director, Calhoun County, Michigan. The cultural resources investigation was conducted within the areas of highest potential to contain intact cultural resources (75 acres) and the areas of previously recorded sites within the 1,786-acre Project Area. The Project is along the north bank of the Kalamazoo River, between Marshall and Ceresco, Calhoun County, Michigan.

Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) conducted the archaeological investigations to professional standards in accordance with the *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44742) and in accordance with the *Secretary's Standard for Identification* (48 FR 44720-44723).

1.1 Personnel and Schedule

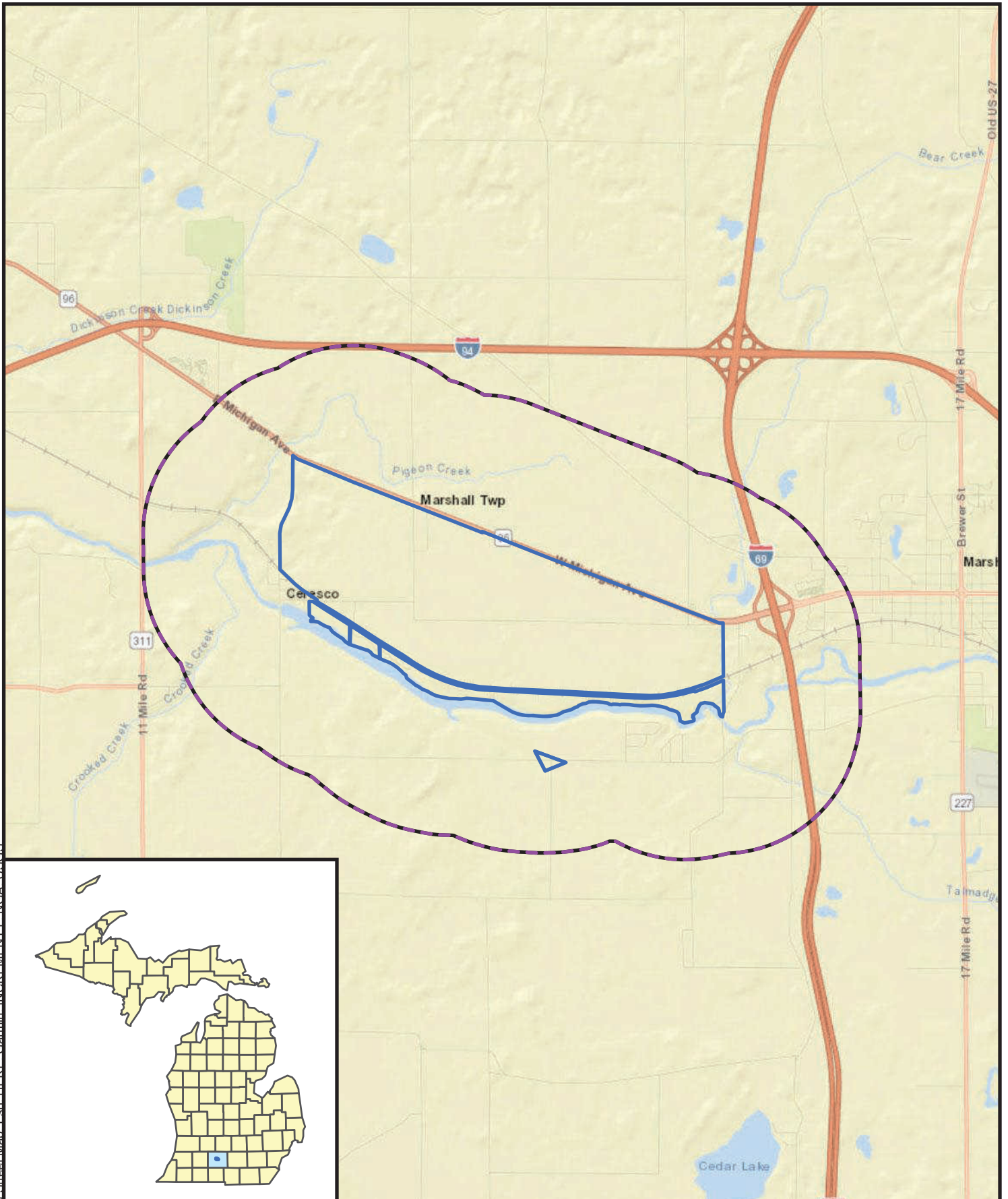
The background research was conducted by Mark Latham through the Michigan Historic Preservation Office, Lansing, Michigan. A request for the data relevant to the Project was submitted on September 8, 2021, and the data was supplied on September 22, 2021. Mr. Latham acted as Principal Investigator and report author for the investigation. The archaeological field survey was conducted by Mr. Latham from September 20 through 24, 2021 and December 19, 2022. The report figures were produced by Kim House.



1.2 Report Format

This report is consistent with the Burns & McDonnell standard report format. Chapter 2 provides an overview of the regional and local environmental context. Chapter 3 establishes the cultural context by providing a brief overview of local prehistory and history. Chapter 4 outlines the methods that guided the investigation and presents the research objectives. Chapter 5 includes a discussion of previously identified cultural resources in and around the Survey Area and provides a summary of local archaeological site potential, and the findings of the current investigation. Chapter 6 includes the conclusions and recommendations each of the sites recorded. The references cited in Chapter 7 are consistent with the Style Guide for *American Antiquity*. Two appendices contain Survey Area maps and site maps:

- Appendix A: Survey and site distribution Maps
- Appendix B: Site maps

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Service Layer Credits: World Street Map: Esri HERE Garmin INCREMENT P NGA USGS



-  1-Mile Study Area
-  Project Boundary

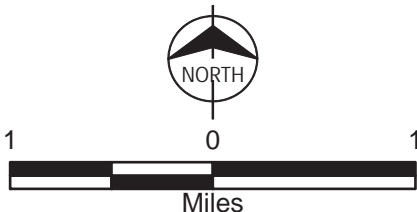


Figure 1-1
General Location
Marshall Mega Site Project
Calhoun County, MI

2.0 ENVIRONMENTAL SETTING

This chapter gives a brief overview of the environmental setting, including discussion of some of the important natural resources used by prehistoric and historic-era peoples in the area.

2.1 Physiography

The Project is within the Battle Creek Hills, which is a physiographic unit within the Southern Lower Peninsula Hills and Plains of the Central Lowlands physiographic region. The region is distinguished primarily by sandy and loamy sediment on a mix of glacial hills and rolling landscapes that were associated with lobes of the Laurentide ice sheet.

2.2 Soils

The Natural Resources Conservation Service's Soil Survey Geographic Database (SSURGO) digital data indicate that the Survey Area crosses five soil types mapped in 14 soil units (Natural Resources Conservation Service 2009). The parent material of these soil types is related to the glacial activity of the area. The soil types are listed in Table 2-1.

Table 2-1: Soil Map Units in the Project Area

Map Unit Symbol	Map Unit Name	Parent Material (abridged)
AdraaA	Adrian muck, 0 to 10 percent slopes	Herbaceous organic material over sandy glaciofluvial deposits
12D	Coloma loamy sand, 12 to 18 percent slopes	Sandy drift
13B	Spinks loamy sand, 0 to 6 percent slopes	Sandy drift
13C	Spinks loamy sand, 6 to 12 percent slopes	Sandy drift
13D	Spinks loamy sand, 12 to 18 percent slopes	Sandy drift
16B	Oshtemo sandy loam, 0 to 6 percent slopes	Loamy drift
16C	Oshtemo sandy loam, 6 to 12 percent slopes	Loamy drift
17B	Boyer sandy loam, 6 to 12 percent slopes	Loamy and/or sandy outwash
17C	Boyer sandy loam, 6 to 12 percent slopes	Loamy and/or sandy outwash
17D	Boyer sandy loam, 12 to 18 percent slopes	Loamy and/or sandy outwash
23B	Hixton silt loam, 0 to 6 percent slopes	Loamy alluvium
25A	Kalamazoo loam, 0 to 2 percent slopes	Loess and gravel outwash
25B	Kalamazoo loam, 2 to 6 percent slopes	Loess and gravel outwash
25C	Kalamazoo loam, 2 to 6 percent slopes	Loess and gravel outwash

Source: NRCS 2016

2.3 Drainage

The Project is along the northern bank of the Kalamazoo River and flanked on the east and west by tributary streams. Just east of the Project is Bear Creek and Pigeon Creek is to the west. A branch of Pigeon Creek and a large area of marsh land lies to the north of the Project.

2.4 Flora

Vegetation in the Survey Area has undergone substantial change over the last 12,000 years. During the Late Pleistocene, sedges and shrubs were the most common tundra plants in the Great Lakes region. Typically, as glaciers retreated, spruce forest was replaced by a plant community dominated by tamarack, aspen, and birch. Hardwoods such as elms, oaks, maples, hornbeam, and ironwood succeeded the tamarack-aspen-birch woods as deglaciation continued (Bonnicksen 2000). During the early historic period, much of Kalamazoo County was covered in woodlands, but also included large prairies and marshes. Agriculture is the primary land use today.

2.5 Fauna

A variety of terrestrial species would have been present in and around the Project from prehistoric through early historic times. Many of these species were important food resources for the prehistoric groups, historic-era Native Americans, and early European travelers and settlers in the region. Some of the mammals native to the area included elk, white-tailed deer, black bear, bobcat, gray fox, raccoon, cottontail rabbit, gray squirrel, fox squirrel, striped skunk, swamp rabbit, and many small rodents and shrews.

3.0 CULTURAL HISTORY OVERVIEW

Archaeologists generally divide the prehistoric cultural sequence of the Great Lakes into two preceramic periods and two ceramic periods. This cultural chronology is presented in terms of years before present (B.P.) with “present” being the year 1950. This convention was established by geologists for presenting the results of radiocarbon dating but has been co-opted to some extent by archaeologists. The year 1950 was established as the baseline year because the radiocarbon dating method was established at about that time. Because the “present” would otherwise continue to change, a set reference date was required.

3.1 Paleoindian (11,000-10,000 B.P.)

Based on the current data, most archaeologists identify the Paleoindian period as the earliest stage of human occupation in the Midwest and Great Lakes. Sites assigned to this period are best known by the presence of particular styles of projectile points, the most recognizable of which are the fluted varieties. Two deeply stratified sites in eastern North America, Meadowcroft Rockshelter (Adovasio et al. 1983) and Thunderbird (Gardner 1974), produced fluted points in radiocarbon-dated contexts of 13,170 to 11,300 BCE (Dragoo 1997).

The Clovis culture is the earliest widely accepted archaeological manifestation of the Paleoindian period, though evidence for pre-Clovis occupations is growing (Hoffman and Graham 1998). Defined by fluted, lanceolate projectile points, Clovis has a continent-wide distribution. The appearance of Clovis in Michigan correlates with the final retreating stages of the Wisconsin glaciation of the Late Pleistocene (13,500 to 12,000 BCE), a time that saw rapid climatic changes (Kapp 1999). The earliest inhabitants of the region would have encountered a boreal parkland environment with spruce, fir, pine, and aspen as well as megafauna species such as mastodon, mammoth, giant sloth, caribou, moose-elk, and possibly bison (Kraft 1977; Ogden 1977; Shott and Wright 1999). Subsistence strategies during this period were the exploitation of both migratory game and plant resources (Fitting 1965; Ritchie and Funk 1973, Tankersley 1998).

Paleoindian sites in the western Lake Erie Basin have been identified almost entirely due to surface finds recorded on uplands, bluff edges, and floodplain areas. Sites such as those found at Silver Lake, Holcombe, and Burning Tree Mastodon in Newark, exhibited much data on megafauna exploitation, but little is known about non-durable goods. Griffin (1967) noted that non-durable material, such as bone, wood, and hides, were probably fashioned into many different kinds of tools, although they are rarely found at Paleoindian sites in the eastern United States (Tankersley 1998).

The earliest site reported in Michigan is the recently investigated Belson site, which located in southwest Michigan (Talbot et al. 2021). This small campsite has been identified as dating to the Clovis period and in the most northwestern of such sites known in the Great Lakes region. The Squaw Creek Drain site (20CA183) is a possible late Paleoindian site located along the Kalamazoo River just upstream from the Project. The withdrawal of the Wisconsin ice sheet caused a gradual shift in the distribution of floral communities across the landscape, as it left sandy plains with numerous marshes found the kettle lakes and glacial channels. At the beginning of the Paleoindian period, the climate in southern Michigan was sub-arctic, with vegetation dominated by grasslands with some small woodlands. By the end of the period, the climate was warmer, and the landscape dominated by mixed boreal-deciduous forests (Shott and Wright 1999).

3.2 Archaic Period (10,000-2,500 B.P.)

The Archaic period in the Midwest has been divided arbitrarily into three subdivisions: Early Archaic (10,000 to 8,000 B.P.), Middle Archaic (8,000 to 5,000 B.P.), and Late Archaic (5,000 to 2,500 B.P.). The Early Archaic is generally viewed as a continuation of the lifestyle traditions established during the late Paleoindian period. As the climate continued to shift, a broader range of ecological niches was exploited. Even though temporally diagnostic artifacts of the Early Archaic are not uncommon in Michigan, very few such sites have been recorded or investigated (Shott 1999). Also, many sites from the period are now likely submerged by the waters of the Great Lakes. Lake levels were much lower during the Early Archaic than during the present, and it is postulated that most of the sites dating to this period were located along ancient lake shores and are now submerged deep below modern lake levels (Monaghan and Lovis 2005).

The environment continued to shift throughout the Middle Archaic, resulting in continued changes in vegetation. The climate continued to become drier, causing vegetation to continually change, and areas of seasonal exploitation became more heavily used (Stothers et al. 2001). The Middle Archaic is poorly understood in Michigan, as only a few sites have been excavated and few large systematic surveys of localities have been undertaken. The recorded site density is low, and much of the current understanding of the period is inferred from more intensely studied sites and localities in neighboring regions (Lovis 1999).

By the beginning of the Late Archaic period, the vegetation communities were similar to the composition of historic age to modern species composition. The southern portion of the Lower Peninsula of Michigan was dominated by oak-hickory forest (Cushing 1965). Late Archaic occupations are marked by further expansion of the toolkits. Groundstone tools that became common during this period include three-quarter

grooved axes, bannerstones, plummets, hammerstones, pestles, and manos. The increased number of pestles and manos is thought to reflect the increased exploitation of wild seeds and nuts. During the terminal Late Woodland period, ceramic technology began to develop (Robertson et al. 1999).

Architectural evidence is rare for the Late Archaic, with only the Rock Hearth site (20BE306) containing the remains of a structure: a small, rectangular house (Clark 1994).

3.3 Woodland Period (2,500-800 B.P.)

In the Midwest, the Woodland period has also been divided arbitrarily into three subdivisions: Early Woodland (2,500 to 2,000 B.P.), Middle Woodland (2,000 to 1,500 B.P.), and Late Woodland (1,500 to 800 B.P.). The Woodland period is characterized by a trend toward increased sedentism, intensified horticultural activity, and other changes in subsistence patterns. Additionally, researchers have documented evidence of regional exchange networks and the elaboration of ceremonial activities and mortuary practices (Brashler et al. 1999; Garland and Beld 1999; Griffin 1967; Kingsley et al. 1999; Stothers and Abel 1993). The origin of these trends can be traced to the Late Archaic, but the elaboration of cultural elements became the hallmark of the time. These developmental trends form the basis for distinguishing the Early, Middle, and Late Woodland substages. Regional variations in the timing and extent to which these traditions were expressed, however, make this three-part subdivision difficult to apply in certain areas. The invention of pottery is generally associated with the beginning of the Early Woodland; the timing of its appearance seems to vary spatially across the landscape (Garland and Beld 1999; Stothers and Abel 1993).

The Middle Woodland period is characterized by the refinement of ceramic technology, by mound building, and by the appearance of semi-permanent villages (Kingsley et al. 1999). This period is also associated with the Hopewellian Interaction Sphere, which is marked by specific design motifs on pottery vessels, “elite” burial mounds, and the exchange of exotic materials (Caldwell and Hall 1964). The Hopewellian Interaction Sphere connected distant Middle Woodland groups through a highly developed socio-religious organization (Struever 1964). Large regional centers, which exhibit conical-shaped burial mounds, were the focal points for Hopewellian activities.

The beginning of the Late Woodland period was marked by a reduction in interregional trade, a decrease in the complexity of ceremonial/mortuary practices, and a reduction in the elaborateness of ceramic decoration (Brashler et al. 1999; Stothers 1999). Otherwise, the period did not differ much from earlier Woodland times in terms of subsistence practices and settlement systems. The introduction of the bow and arrow was an important technological development.

3.4 Upper Mississippian/Oneota Period (800-360 B.P.)

Mississippian culture emerged in the region as Late Woodland people were influenced strongly by cultures based in southern Ohio (Stothers et al. 1994). Mississippian cultural phases are identified based primarily on decorative pottery attributes that are transitional from Late Woodland into Mississippian types, as well as by the introduction of crushed mussel shell as a tempering agent added to ceramic paste. The Emergent Mississippian period is defined by a shift from maize as a garden crop to a storable commodity, and the societal changes associated with that shift. Viewed as permanent agrarian communities, Emergent Mississippian sites range in size from 0.1 to 10 hectares and contain faunal and floral assemblages that emphasize maize but are also quite diversified and particularly reliant upon fish as a source of protein (Cremin and De Fant 1987; McAllister 1999).

3.5 Historic Period

Early historic maps indicate there were Native American villages and trails along the Kalamazoo River within and adjacent to the Project. The 1825 GLO survey map depicts an “old village” along the north bank of the Kalamazoo River within the eastern portions of the Project. Another village is plotted in the 1931 *Michigan Archaeological Atlas* along the north side of the river and to the west of the Project. Several trails are also depicted in and around the Project (Hinsdale 1931). Several Pottawatomie villages dating to around 1831 are depicted along the Kalamazoo River (Tanner 1987).

Early histories and maps of Calhoun County first characterize the Project area as a rural and the population was focused on subsistence farming and logging. The economy has been linked closely to agriculture from before the county was established in 1829. The town of Marshall was established in 1830 and was named for Chief Justice John Marshall (Gardner 1913; MIGenWeb n.d.). When Marshall was established, there were several well-established trails that crossed through the area, indicating the area had been lightly populated, yet intricately connected (Hinsdale 1931).

The town of Ceresco began with the establishment of a sawmill along the banks of the Kalamazoo River in 1838 followed by the establishment of a grist mill the following year. The town was named after the Roman goddess of harvest (Ceres) and the “co” added to the end of the name was for “company”, in honor of the mills that led to the formation of the community. After the coming of the railroad, the community grew fast, as there were several businesses in addition to the mills. By the late nineteenth century these businesses began fading away and now Ceresco is a cluster of houses, although many date back to the mid-nineteenth century (MIGenWeb n.d.).

He studied the area as part of the 1820 Cass Expedition and identified the ancient garden beds in the area (Durant 1880). The most prominent features of the cultural landscape in the vicinity of the Project are farmsteads and small towns dating to the historic period.

The Conrail railroad parallels the Kalamazoo River along the southern border of the Project. this railroad corridor was originally constructed in 1844 by the Michigan Central Railroad. The 1873, 1894, and 1916 county atlases show it was the same railroad into the twentieth century. labeled it the Michigan Central Railroad (Atlas Publishing company 1894; Beers 1873; Ogle 1916). In 1894 it was it was the connecting Vicksburg and Schoolcraft also parallels the Survey Area and crosses it at one point. It was named the Peninsular Railroad and was built in 1871 (Vicksburg Historical Society 2017). It connected Valparaiso, Indiana and Lansing, Michigan and was consolidated with the Grand Trunk Michigan in 1879 (Durant 1880). The Peninsular Railroad was a predecessor of the Grand Trunk Railroad. On the 1890 plat map the railroad was named the Chicago and Grand Trunk Railroad (Sauer 1890). The 1910 plat map and the 1922 to 1967 topographic maps list the name of the railroad as the Grand Trunk Western Railroad (Ogle 1910; U.S. Geological Survey [USGS] 1922, 1944, 1950, 1967, 1973, 1979). The railroad is still present and in operation. The Project spans it once just south of East W Avenue about 1.25 miles west of the Village of Vicksburg.

In the early to mid-20th century, one of the major industries of the Kalamazoo County area was paper production. In 1904, the Lee Paper Company established a paper mill on the western edge of the village of Vicksburg. Vicksburg was selected because it was centrally located among potential markets, it had two railroads, and plenty of available fresh water. The mill was for the production of rag-content paper (Vicksburg Historical Society 2017). The Lee Paper Company Mill Complex is now a NRHP-listed historic district, and is discussed further in Section 5.5.2.11, below.

4.0 RESEARCH DESIGN AND METHODS

The investigations were guided by contract requirements and objectives as outlined in the scope of work, topographic and vegetation conditions in the Survey Area, and the level of the proposed effort. Using NRHP criteria of significance, the investigation focused on locating and assessing all cultural resources found within the Survey Area. The level of effort used in this Project is typically referred to as an archaeological due diligence survey with preliminary NRHP site evaluation.

4.1 Archival Research

Prior to the beginning of the 2021 field investigations, a review of archaeological and historical literature relevant to the Survey Area was conducted. This review included examination of site inventory records on file at the Michigan SHPO. These records document the identified cultural resources in and around the Survey Area. The review also garnered information regarding cultural history and environmental setting, as these pertain to site distribution and the evaluation of cultural resources. In addition, the archival research effort included an examination of previous archaeological investigations conducted in the vicinity. In conjunction with NRHP significance criteria, this information established a context within which all cultural resources could be evaluated.

In addition to the archaeological site records and previous project reports, other archival sources that were consulted are listed below.

- General Land Office survey notes and plat maps
(<http://www.glorerecords.blm.gov/SurveySearch/Default.asp?>)
- NRHP list
(<http://nrhp.focus.nps.gov/natreghome.do?searchtype=natreghome>)
- USGS National Map (<http://nationalmap.gov/>)
- County historical plat maps

Reviews of available historic-era maps was undertaken for both the 2021 and 2022 investigations to determine land use history and the potential for historic-era sites and structures in or near the Survey Area. The maps selected for review were those depicting the locations of houses, other types of buildings, and cultural features that would illustrate the land use history of the Survey Area. Reviewed maps include General Land Office (GLO) maps (GLO 1825), county and township plat maps (Beers 1873; Sauer 1890; Ogle 1910) and the Schoolcraft topographic quadrangles (USGS 1922, 1944, and 1950) and the Vicksburg topographic maps (USGS 1967, 1973, and 1979). The density of the houses found along the

Survey Area is presented in Table 5-2. Only one historic-age house was depicted within the Survey Area, although two others were very close. All three of these houses are no longer present and are considered likely archaeological sites.

4.2 Field Methods

During the 2021 investigations most of the Survey Area was located in cultivated fields with ground surface visibility exceeding 50 percent. Areas with high potential for containing intact prehistoric and historic archaeological resources or High Probability Areas (HPAs) were identified using data from previous investigations, topographic maps, and available historic maps. These HPAs were systematically surveyed in 5- to 15-meter transects. Where cultural materials were observed, the ground surface was examined visually using parallel transects at 5-meter intervals to determine the areal extent of any artifact scatter and to determine the presence of any cultural features that might be exposed or indicated on the ground surface.

In 2022, the Project was increased in size and included 20 tentatively identified HPAs. Most of these HPAs were historic-era buildings mapped on the historic maps reviewed. The December 19, 2022, revisit to the Survey Area included a visual inspection from public road rights-of-way to determine the nature of these newly identified HPAs. Fourteen of the HPAs were eliminated from consideration, as they contained extant buildings and therefore no longer considered HPAs. Access was not granted to the remaining six HPAs, which are all in the northwest corner of the Survey Area.

5.0 RESULTS OF INVESTIGATIONS

The investigations included pre-fieldwork research, fieldwork, and post-fieldwork analysis, research, and reporting. This section includes a review of the previously recorded cultural resources, which is limited to archaeological sites, previous investigations, and the newly recorded sites. The only above ground resource recorded in the Project Area was an Italianate house (P49614) along the south side of C North Road. During the due diligence investigation, it was determined that this house is no longer present in the Project Area.

5.1 Previously Recorded Archaeological Sites Near the Survey Area

The review of the previously recorded archaeological sites identified eight sites within one mile of the Project Area or Study Area (Appendix A: Figure A-1). Six of the sites were recorded by archaeologists from Western Michigan during a four-year long study of the archaeology of the Kalamazoo River valley (Cremin and Dinsmore 1981). These five prehistoric sites were small, with the largest being only 200 square meters, with low artifact densities. Three of the sites only had a single chipped stone artifact and the highest recorded number were the seven flakes found at 20CA17. None of the sites were evaluated against the NRHP criteria of significance and therefore remain unevaluated. Because of evidence of cooking or heating activities in the form of fire-cracked rock (FCR), three sites were considered campsites, with one considered a possible village. Site 20CA17 was near the area of an Indian village reported in the *Michigan Archaeological Atlas* (Hinsdale 1931), and Cremin and Dinsmore (1981) postulated that it was related to the village site. Four of the sites (20CA17, 20CA18, 20CA20, and 20CA183) are located within the Project Area, although it appears that the mapped area of 20CA183 is larger than the site, as it is described as located on the south side of the river and outside the Project Area. Plus, the 2013 survey found no evidence of the site in the Project Area (Espenshade 2013).

Table 5-1: Previously Recorded Archaeological Sites within One Mile of Survey Area

Site Number	Site Name	Component(s)	Site Type	Number Artifacts Recorded	Size (square meters)
20CA17	15.243 (1) (o)	Unknown prehistoric	Campsite or Village	7 flakes and FCR	200
20CA18		Unknown prehistoric	Isolated find	1 projectile point base	1
20CA19		Middle to Late Woodland	Isolated find	1 expanding stem projectile point	1
20CA20		Unknown prehistoric	Campsite	1 projectile point tip and 3 flakes and FCR	24

Site Number	Site Name	Component(s)	Site Type	Number Artifacts Recorded	Size (square meters)
20CA35	15.243 (1) (o)	Middle Woodland	Isolated find	1 corner-notched projectile point	1
20CA37		Unknown prehistoric	Campsite	1 utilized flake and FCR	100
20CA183		Paleoindian and Late Archaic	Unknown	Unknown	Unknown
20CA185		Historic 1930s-1940s	Trash dump	Unknown	Unknown

The only historic age site recorded as a historic age trash dump was recorded along the southern bank of the Kalamazoo River, south of Ceresco. It was determined that this site was not eligible for the NRHP.

5.2 Previous Cultural Resource Investigations within One Mile of Survey Area

Only three previously conducted cultural resources investigations have been reported in the Study Area. Portions of all three were within the Project Area. In the late 1970s and early 1980s a series of agricultural fields were surveyed for cultural resources in the vicinity of the Survey Area. These surveys were part of a study Western Michigan University archaeologists were conducting during their study of the prehistoric occupation of the Kalamazoo River and resulted in the recording of all the sites previously recorded in the Study Area (Cremin and Dinsmore 1981).

The two large survey projects that have been conducted within the Project Area have several flaws that would not meet current archaeological survey standards. The 1976 to 1980 investigation did not record the transect width they used, so we don't know how thoroughly they covered the area (Cremin and Dinsmore 1981). The 2008 survey report indicates they surveyed the area and found additional artifact scatters not reported in the 1981 report. However, they did not record these prehistoric and historic sites (Anonymous 2008).

Table 5-2: Previous Archaeological Surveys within the Study Area

Project ID	Date	Title	Author(s)
-	1981	<i>An Archaeological Survey of Calhoun and Jackson Counties, Michigan: 1980 Multiple Transect Survey in the Upper Kalamazoo River Valley.</i> Archaeological Report No. 10. Western Michigan University, Department of Anthropology	Cremin, William M. and Rebecca E. Dinsmore

Project ID	Date	Title	Author(s)
ER08-474	2008	<i>Phase IA Archaeological Assessment of the VW Michigan Assembly Plant Site, Calhoun County, Michigan.</i> ECS Mid-Atlantic, LLC.	Anonymous
ER10-746	2013	Field Visit Memo: 1930s Trash Deposit. Commonwealth Cultural Resources Group, Inc.	Espenshade, Chris

A 2013 investigation along the Kalamazoo River in 2013 included several areas along the southern edge of the Project Area. One area included the northern portions of the mapped location of site 20CA183, but no evidence of this site was identified. Site 20CA87 was found just downstream of the project, but none were found within the Project Area (Espenshade 2013).

5.3 Historic Map and Aerial Imagery Review

A review of historic-era maps and aerial images shows dwelling locations in the Project Area with the earliest dating to 1825. The 1825 GLO map depicts an Indian village along the north bank of the Kalamazoo River along the southern edge of the Project Area. Later historic maps show the railroad corridor, which was first built in 1844, paralleling the Kalamazoo River and passing through the southern portions of the Project Area. The railroad appears to pass through the center of the 1825 Indian village.

The historic map review showed several farmsteads and historic dwellings along the county roads within the Project Area (Atlas Publishing Company 1894; Beers 1973; NETR 2021; Ogle 1916; USGS 1918, 1932, 1942, 1950, 1955, 1962, and 1873). The residential density along C Drive North, which crosses through the center of the Project Area, between Marshall and Ceresco was steady through the late 19th century into the mid-20th century (Table 5-3). During the late 20th century and into the early 21st century, several farmsteads that dated back the 19th century were razed and most of those areas are part of the large agricultural fields that define the Project Area. The areas of these farmsteads and few that were razed earlier were identified as being HPAs.

Table 5-3: House Density Along C Drive North within Project Area

Project Area	1873	1894	1916	1918	1932	1942	1950	1955	1962	1973	2021
Section 28	4	4	4	4	4	4	5	5	6	6	3
Section 29	6	4	4	4	4	4	4	4	7	8	4

Project Area	1873	1894	1916	1918	1932	1942	1950	1955	1962	1973	2021
Section 30	4	5	3	3	3	3	3	3	3	3	2
Total	14	13	11	11	11	11	12	12	16	17	9

5.4 Archaeological Site Potential

Based on a review of the previously recorded archaeological sites and their distribution, previous cultural resource survey results, previous land use, and historic-era maps, the archaeological site density of the Project Area appears to be low. However, there are an unknown number of prehistoric and historic artifact scatters present that were not recorded. The five prehistoric sites that have been recorded within and adjacent to the Project Area are small, with most being isolated artifacts, and all are confined to the plowzone. Elevated, level landforms overlooking the river appear to have the highest potential, although some of the isolated finds were recorded on broad, level plains some distance from the river but near marshy lowland areas. Many of the prehistoric HPAs along the Kalamazoo River have been surveyed in recent years and no archaeological sites were identified (Espenshade 2013). One of the HPAs that was surveyed in 1979 and 2008, and a portion in 2013, was the Indian village plotted on the 1825 GLO map. Most of the Survey Area was under cultivation throughout the 20th century. Additional prehistoric HPAs were identified in the northwest corner of the Survey Area. Several of these were inspected in 2021, but the six that were identified in the areas added to the Project in 2022 have not been inspected (Figure A-2).

According to the maps and aerial images reviewed, there were 9 to 17 house sites within the Project Area along C Drive North and an additional 14 areas of interest along State Highway 96. The fluctuation in the number of occupied dwellings along C Drive North indicates there are several areas that likely contain historic era sites. The 14 areas of interest were visually inspected from the public road rights-of-way and determined not likely to contain archaeological sites. The presence of other historic era artifact scatters are likely found throughout the area, especially along old fence lines, are likely trash dumps. These dumps are typically not considered eligible for the NRHP, so the historic HPAs were limited to those areas that were once farmsteads along C Drive North.

5.5 Survey Results

A systematic visual assessment was completed within the identified HPAs within which seven archaeological sites were recorded (15,243 (1) (o)). Nearly all portions of the HPAs surveyed were within cultivated fields that afforded excellent ground surface visibility (Figures 5-1 and 5-2). The yards and barnyards of occupied dwellings were not surveyed. If the project requires a federal permit,

which would make this a Section 106 investigation, the historic age buildings will need to be recorded and evaluated as architectural resources within the Project area and the view shed or indirect area of potential effect (APE). In addition, the SHPO comments on the 2008 archaeological investigation report included the recommendation that the entire parcels be resurveyed. Because this is a due diligence project, our investigation focused on the HPAs, but if a federal permit is required the entire Project Area will need to be surveyed for archaeological resources.

Figure 5-1 Overview of the southern edge of Project Area, view to the southeast



Figure 5-2 Overview of north end of Project Area, view to the south

The following sections discuss the archaeological sites documented during the investigation. The three previously recorded sites (20CA17, 20CA18, and 20CA20) were revisited and a summary of these sites along with the current findings is included in the following sections. Details of the seven newly recorded sites are also presented below.

5.5.1 Site 20CA17 15.243 (1) (o)

Summary Data

Site Type:	Isolated find
Component:	Unknown prehistoric
Site Area:	200 sq. meters
Legal Location:	15.243 (1) (o)
Topography:	Level terrain
Elevation:	880 feet AMSL
Soil Type:	Oshtemo sandy loam, 6 to 12 percent slopes
Nearest Water:	15.243 (1) (o)
Field Method:	Visual inspection
Site Condition:	Poor
NRHP Status:	Recommended not eligible

5.5.1.1 Site Description

Site 20CA20 was a light lithic and fire-cracked rock scatter of unknown prehistoric cultural affiliation that was recorded in 1979 by archaeologists from Western Michigan University (Appendix A; Figure A-

2) (Cremin and Dinsmore 1981). The site was on the floodplain, about 15 meters north of the Kalamazoo River. an agricultural field that was described as having good ground surface visibility and situated on a level bench overlooking the north bank of the Kalamazoo River. The small site only had seven flakes. The size of the site was recorded as only 200 square meters. During the current investigation no evidence of the low-density lithic scatter was observed.

The current investigation included 5 to 10 meter transects in the mapped site area. The field was afforded 80 percent ground surface visibility, but no evidence of the prehistoric occupation was observed.

5.5.1.2 Site Summary, Site 20CA17

The aspects of the site are described below, in addition to the significance and recommendations.

5.5.1.2.1 Horizontal and Vertical Extent of Cultural Deposit

The site appears to be confined to the plowzone within the Survey Area.

5.5.1.2.2 Site Integrity

The find spot could not be relocated and therefore it appears to lack integrity.

5.5.1.2.3 Site Function

The function of the site was likely related to biface reduction and heating and cooking activities.

5.5.1.2.4 Cultural Affiliation

Based on the artifact identified, the prehistoric site is of unknown cultural affiliation.

5.5.1.2.5 Presence of Subsurface Features

No evidence of subsurface features was identified at the site.

5.5.1.2.6 Site Significance

The site has poor integrity, and it is the opinion of the Principal Investigator that the Phase I investigation has exhausted the research potential of the site.

5.5.1.2.7 Impact

The proposed project would have no impact on significant cultural resources at this site.

5.5.1.2.8 Recommendations

No further archaeological investigations are recommended for the site.

5.5.2 Site 20CA18 15.243 (1) (o)**Summary Data**

Site Type:	Isolated find
Component:	Unknown prehistoric
Site Area:	1 meter by 1 meter, 1 sq. meters
Legal Location:	15.243 (1) (o)
Topography:	Level terrain
Elevation:	920 feet AMSL
Soil Type:	Kalamazoo silt loam, 0 to 2 percent slopes
Nearest Water:	15.243 (1) (o)
Field Method:	Visual inspection
Site Condition:	Poor
NRHP Status:	Recommended not eligible

5.5.2.1 Site Description

Site 20CA18 was an isolated find of unknown prehistoric cultural affiliation that was recorded in 1979 by archaeologists from Western Michigan University (Cremin and Dinsmore 1981). The find was on a level terrain 15.243 (1) (o)

15.243 (1) (o) The survey conditions were described as having good surface visibility in an agricultural field. The find was a projectile point base that was identified by type.

The current investigation included 5 to 10 meter transects in the mapped site area. The field was in standing corn that afforded 80 percent ground surface visibility. No evidence of the prehistoric occupation was observed.

5.5.2.2 Site Summary, Site 20CA18

The aspects of the site are described below, in addition to the significance and recommendations.

5.5.2.2.1 Horizontal and Vertical Extent of Cultural Deposit

The site appears to be confined to the plowzone within the Survey Area.

5.5.2.2.2 Site Integrity

The find spot could not be relocated and therefore it appears to lack integrity.

5.5.2.2.3 Site Function

The function of the find was likely related to hunting activities.

5.5.2.2.4 Cultural Affiliation

Based on the artifact identified, the prehistoric find is of unknown cultural affiliation.

5.5.2.2.5 Presence of Subsurface Features

No evidence of subsurface features was identified at the site.

5.5.2.2.6 Site Significance

The site has poor integrity, and it is the opinion of the Principal Investigator that the Phase I investigation has exhausted the research potential of the site.

5.5.2.2.7 Impact

The proposed project would have no impact on significant cultural resources at this site.

5.5.2.2.8 Recommendations

No further archaeological investigations are recommended for the site.

5.5.3 Site 20CA20

15.243 (1) (o)

Summary Data

- Site Type:** Artifact scatter
- Component:** Unknown prehistoric
- Site Area:** 24 sq. meters
- Legal Location:** 15.243 (1) (o)
- Topography:** Level bench
- Elevation:** 880 feet AMSL
- Soil Type:** Hixton loam, 0 to 6 percent slopes; Spinks silt loam, 6 to 12 percent slopes
- Nearest Water:** 15.243 (1) (o)
- Field Method:** Visual inspection
- Site Condition:** Poor
- NRHP Status:** Recommended not eligible

5.5.3.1 Site Description

Site 20CA20 was a light lithic and fire-cracked rock scatter of unknown prehistoric cultural affiliation that was recorded in 1979 by archaeologists from Western Michigan University

15.243 (1) (o)

15.243 (1) (o)

The site was in an agricultural field that was described as having good ground surface visibility and situated on a level bench overlooking

15.243 (1) (o)

15.243 The small site only had three artifacts, including two flakes and a projectile point tip. The size of the site was recorded as only 24 square meters. During the current investigation no evidence of the low-density lithic scatter was observed.

5.5.3.2 Site Summary, Site 20CA20

The aspects of the site are described below, in addition to the significance and recommendations.

5.5.3.2.1 Horizontal and Vertical Extent of Cultural Deposit

The site appears to be confined to the plowzone of a 24-square meter area within the Project Area.

5.5.3.2.2 Site Integrity

No evidence of the site could be relocated during the current investigation and there it appears to lack integrity.

5.5.3.2.3 Site Function

Based on the artifacts previously identified at the site it was labeled an artifact scatter.

5.5.3.2.4 Cultural Affiliation

Based on the artifact identified, the prehistoric occupation was of unknown cultural affiliation.

5.5.3.2.5 Presence of Subsurface Features

No evidence of subsurface features was identified at the site.

5.5.3.2.6 Site Significance

The site has poor integrity, and it is the opinion of the Principal Investigator that the Phase I investigation has exhausted the research potential of the site.

5.5.3.2.7 Impact

The proposed project would have no impact on significant cultural resources at this site.

5.5.3.2.8 Recommendations

No further archaeological investigations are recommended for the site.

5.5.4 Site 20CA199

15.243 (1) (o)

Summary Data

Site Type:	Farmstead
Component:	Mid-19th to early 21st century
Site Area:	28 meters (north-south) by 42 meters (east-west), 1,012 sq. meters (0.25 acres)
Legal Location:	15.243 (1) (o)
Topography:	Slight knoll
Elevation:	920 feet AMSL
Soil Type:	Kalamazoo silt loam, 0 to 2 percent slopes
Nearest Water:	15.243 (1) (o)
Field Method:	Visual inspection
Site Condition:	Poor
NRHP Status:	Recommended not eligible

5.5.4.1 Site Description

Site 20CA199 is a mid-19th to early 21st century farmstead on a low-lying hill

15.243 (1) (o)

15.243 (1) (o)

The site was within an HPA identified through historic map review and at the time of the investigation it was in a field of standing corn (Figure 5-3). The ground surface visibility between the rows of corn was about 90 percent. The site boundaries were defined by the extent of the surface artifact scatter (Appendix B; Figure B-1).

A review of available late 19th and 20th century maps found evidence that this site was a farmstead from the mid-19th to early 21st century farmstead. The 1873 county atlas depicts a house at the site location,

15.243 (1) (o)

The house is still present on the 1894

county atlas,

15.243 (1) (o)

The

1916 atlas shows a house was still present

15.243 (1) (o)

15.243 (1) (o) A house was depicted in the site area on the 1918, 1932, 1942, 1962, and 1973 USGS topographic maps, and a house with a large barn to the east were depicted in the site area on the 1950 and 1955 topographic maps (USGS 1918, 1932, 1942, 1950, 1955, 1962, and 1973).

The 1946 and 1955, aerial imagery reviewed showed the house was

15.243 (1) (o)

a square-shaped barn at the eastern end. The barn was no longer shown on the 1961, 1972, 1981, and

1999 images, but the site is connected by way of grassy trail to the newly established farmstead

immediately to the west (Site 20CA201).

15.243 (1) (o)

and the yard was cleared of all

surface features by 2011. In 2012 the former residence was under cultivation and part of the large agricultural field that flanked it on the east, north and south in previous years (NETR 2021).

■ **Figure 5-3 Overview of 20CA199, view to the north**



5.5.4.2 Artifact Descriptions

A total of 145 artifacts, which represented four artifact classes, were identified at the site. The site also included several pieces of modern household debris. The architectural and domestic types accounting for 97 percent of the assemblage. The 42 architecturally related items were primarily fragments of red brick (n=33), but also included several pieces of concrete and wire nails (n=3). The only production date range established for the architectural debris were the four shards of flat window glass, which postdate 1917 (Fowle 1924), and two wire nails, which postdate 1880 for general use (Adams 2002).

The 98 domestic artifacts included vessel glass (n=43), stoneware (n=19), and whiteware (n=36) and most were found in the northwest position of the site where the house once stood. Four colors of glass were identified, including clear (n=31), aqua (n=7), blue (n=3), and white or milk (n=2). Production date ranges were established for the aqua, blue, and milk glass shards. The aqua glass shards likely date to before the 1930s, which is when aqua jars were most common (Lindsey 2016). The cobalt blue shards included two body and one base. The body shards likely from a medicine or cosmetic container that dates from the 1890s to the 1960s (Fike 2006). The two milk glass shards were canning jar lid liners, which postdate 1871 (Whitten 2013).

Manufacturing date ranges were determined for all the whiteware and stoneware items. The 36 whiteware sherds postdate 1840 (Miller 1993). The stoneware sherds included 14 Bristol glazed, which postdates

1915 (Greer 2005), and 5 with both Bristol and Albany glazing. Both glazes have well-established production date ranges and from ca. 1884 to ca. 1920, Bristol and Albany glazes were commonly used in combination with one another (Greer 2005).

The one farm related activity item was a piece of metal shank that was found in the area around the outbuilding locations. The four pieces heating and cooking debris were in the form of clinkers and were found between the house and the outbuildings.

5.5.4.3 Site Summary, Site 20CA199

The aspects of the site are described below, in addition to the significance and recommendations.

5.5.4.3.1 Horizontal and Vertical Extent of Cultural Deposit

15.243 (1) (o)

5.5.4.3.2 Site Integrity

The site appears to have poor integrity.

5.5.4.3.3 Site Function

Based on the historic-age map and aerial image review and artifact density and diversity, the site functioned as a farmstead.

5.5.4.3.4 Cultural Affiliation

Based on the historic map review, archival research, aerial imagery, and artifact assemblage, the site dates from the mid-nineteenth to early twenty-first century.

5.5.4.3.5 Stratigraphic Placement of Components

The site appears to be confined to the plowzone.

5.5.4.3.6 Presence of Subsurface Features

No evidence of subsurface features was identified at the site.

5.5.4.3.7 Site Significance

The surface site lacks research potential because the historic are mixed with modern domestic debris and the surface resource has been razed and extensively cultivated since 2012. None of the individuals potentially associated with the site maintain transcendent local significance nor do the remnants exhibit significant or distinctive architectural characteristics. As a result, the site is not recommended for NRHP

inclusion under Criteria A, B, C, or D. It is the opinion of the investigator that the current investigation has exhausted the research potential of the site.

5.5.4.3.8 Impact

The proposed project would have no impact on significant cultural resources at this site.

5.5.4.3.9 Recommendations

No further archaeological investigations are recommended for the site.

5.5.5 Site 20CA200

15.243 (1) (o)

Summary Data

- Site Type:** Farmstead
- Component:** Mid-19th to early 21st century
- Site Area:** 15.243 (1) (o)
- Legal Location:** 15.243 (1) (o)
- Topography:** Level plain
- Elevation:** 920 feet AMSL
- Soil Type:** Kalamazoo silt loam, 0 to 2 percent slopes
- Nearest Water:** 15.243 (1) (o)
- Field Method:** Visual inspection
- Site Condition:** Poor
- NRHP Status:** Recommended not eligible

5.5.5.1 Site Description

Site 20CA200 is a mid-19th to early 21st century farmstead on 15.243 (1) (o) 15.243 (1) (o).

The site was within an HPA identified through historic map review and at the time of the investigation it was in a field of standing corn 15.243 (1) (o)

15.243 The ground surface visibility between the rows of corn was about 90 percent. The site boundaries were defined by the extent of the surface artifact scatter (Appendix B; Figure B-2).

Review of available late 19th and 20th century maps found evidence that this site was a farmstead from the mid-19th to early 21st century farmstead. The 1873 county atlas depicts a house at the site 15.243 (1) (o)

15.243 (1) (o) 15.243 (1) (o)

15.243 (1) (o) The southern boundary of both parcels was the Kalamazoo River (Beers 1973). The house is still present on the 1894 county atlas, 15.243 (1) (o)

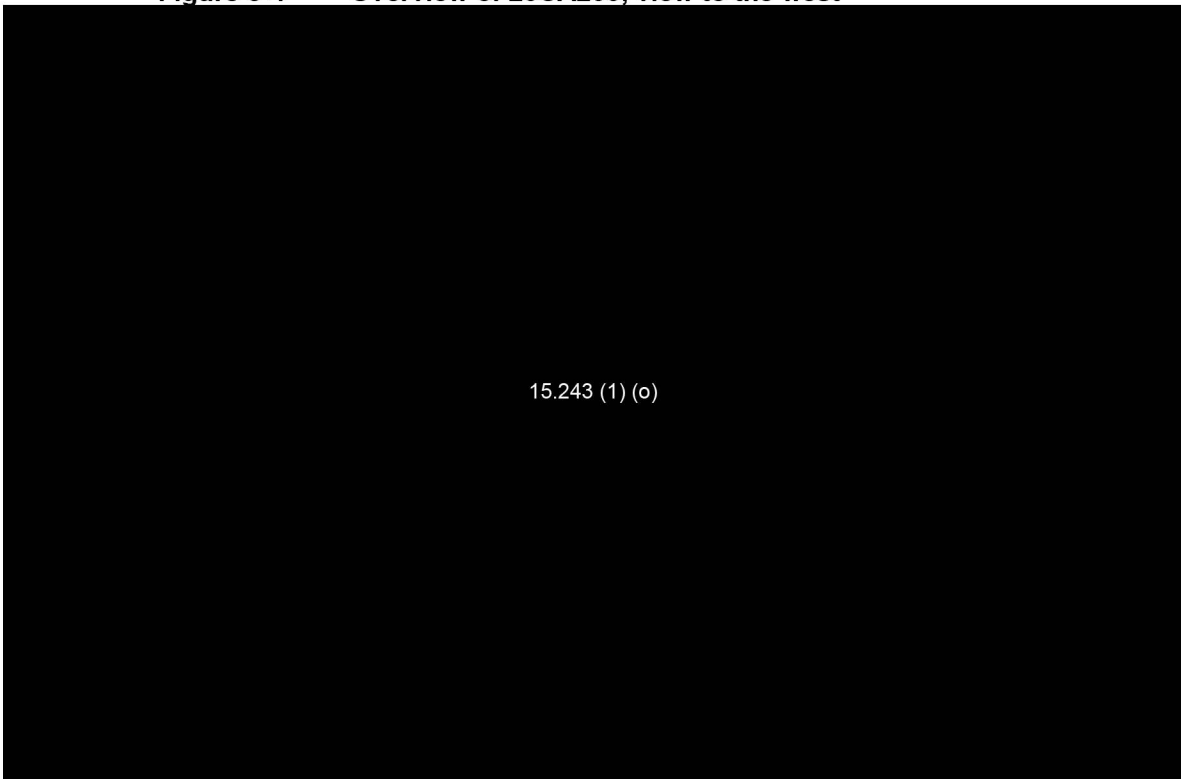
15.243 (1) (o) The 1916 atlas shows a house in the same general area as the previous atlases depicted it. 15.243 (1) (o)

15.243 (1) (o) A house was depicted in the site area on the 1918, 1932, 1942, 1962, and 1973 USGS topographic maps, 15.243 (1) (o)

15.243 (1) (o)

The 1946 and 1955, aerial imagery reviewed showed 15.243 (1) (o) no longer shown on the 1961, 1972, 1981, and 1999 images, but the site is connected by way of grassy trail to the newly established farmstead immediately to the west (site 20CA201). The house was removed by 2010 and the yard was cleared of all surface features by 2011. In 2012 the former residence was under cultivation and part of the large agricultural field that flanked it on the east, north and south in previous years (NETR 2021).

Figure 5-4 Overview of 20CA200, view to the west



5.5.5.2 Artifact Descriptions

A total of 328 artifacts were identified at the site, representing three artifact classes, with architectural and domestic types accounting for 95 percent of the assemblage. The site also included several pieces of modern household debris that were not included in the artifact assemblage. The 163 architecturally related items were primarily fragments of red brick (n=103), but also included 52 pieces of concrete, pieces of tin sheeting (n=2), and wire nails (n=6). The only production date range established for the architectural debris were the wire nails, which postdate 1880 for general use (Adams 2002).

The 148 domestic artifacts included vessel glass (n=109), stoneware (n=26), and whiteware (n=13). Five colors of glass were identified, including clear (n=67), light green (n=22), aqua (n=12), blue (n=4), and white or milk (n=4). Production date ranges were established for the aqua, blue, and milk glass shards. The aqua glass shards likely date to before the 1930s, which is when aqua jars were most common (Lindsey 2016). The cobalt blue shards included three body and one base, which are likely from a medicine or cosmetic container that dates from the 1890s to the 1960s (Fike 2006). The milk glass shards were canning jar lid liners, which postdate 1871 (Whitten 2013).

Manufacturing date ranges were determined for all the whiteware and stoneware items. The 13 whiteware sherds postdate 1840 (Miller 1993). The stoneware sherds included 8 Bristol glazed, which postdates 1915 (Greer 2005), and 18 with both Bristol and Albany glazing. Both glazes have well-established production date ranges and from ca. 1884 to ca. 1920, Bristol and Albany glazes were commonly used in combination with one another (Greer 2005).

The heating and cooking debris 17 clinkers and were found scattered throughout the site.

5.5.5.3 Site Summary, Site 20CA200

The aspects of the site are described below, in addition to the significance and recommendations.

5.5.5.3.1 Horizontal and Vertical Extent of Cultural Deposit

15.243 (1) (o)

5.5.5.3.2 Site Integrity

The site appears to have poor integrity.

5.5.5.3.3 Site Function

Based on the historic-age map and aerial image review and artifact density and diversity, the site functioned as a farmstead.

5.5.5.3.4 Cultural Affiliation

Based on the artifacts present, the site dates from the late 19th to early 20th century.

5.5.5.3.5 Presence of Subsurface Features

No evidence of subsurface features was identified at the site.

5.5.5.3.6 Site Significance

The surface site lacks research potential because the historic artifacts were mixed with modern debris remaining at the site and the surface resource has been razed and extensively cultivated since 2012. None of the individuals potentially associated with the site maintain transcendent local significance nor do the remnants exhibit significant or distinctive architectural characteristics. As a result, the site is not recommended for NRHP inclusion under Criteria A, B, C, or D. It is the opinion of the investigator that the current investigation has exhausted the research potential of the site.

5.5.5.3.7 Impact

The proposed project would have no impact on significant cultural resources at this site.

5.5.5.3.8 Recommendations

No further archaeological investigations are recommended for the site.

5.5.6 Site 20CA201

Summary Data

Site Type:	Farmstead
Component:	Mid-20th to early 21st century
Site Area:	[REDACTED]
Legal Location:	15.243 (1) (o)
Topography:	Level plain
Elevation:	920 feet AMSL
Soil Type:	Kalamazoo silt loam, 0 to 2 percent slopes
Nearest Water:	15.243 (1) (o)
Field Method:	Visual inspection
Site Condition:	Poor
NRHP Status:	Recommended not eligible

5.5.6.1 Site Description

Site 20CA201 was identified as a mid-20th to early 21st century farmstead [REDACTED] 15.243 (1) (o)

[REDACTED] 15.243 (1) (o)

15.24 (1) (o) The site was found within a [REDACTED] 15.243 (1) (o) The yard included [REDACTED] 15.243 (1) (o)

[REDACTED] 15.243 (1) (o) A shallow,

rectangular depression in the grassy yard, north of the trees, was evidence of where the farmhouse once stood. The site boundaries were defined by the artifact scatter in the cornfields to the east and west of the old farmyard, both of which afforded 80 percent ground surface visibility (Appendix B; Figure B-3). [REDACTED] 15.243

[REDACTED] 15.243 (1) (o)

Review of available late 19th and 20th century maps found evidence that this site was a farmstead dating from the mid-20th to early 21st century. The site is on [REDACTED] 15.243 (1) (o) on any maps until maps until 1962 and the aerial images until 1961 (Atlas Publishing Company 1894; Beers 1973; NETR 2021; Ogle 1916; USGS 1918, 1932, 1942, 1950, 1955, 1962). Aerial images from 1961 through 2014 show [REDACTED] 15.243 (1) (o). The 2015 aerial image shows that all the farmstead related building are gone from the site and [REDACTED] 15.243 (1) (o) are present [REDACTED] 15.243 (1) (o)

Figure 5-5 Overview of 20CA201, view to the northeast



5.5.6.2 Artifact Descriptions

A total of 11 historic-age items representing two artifact classes, were identified at the site. Architectural debris accounted for nine of the artifacts, which included three fragments of red brick and six chunks of mortar. The remaining two artifacts were domestic items, both of which were shards of clear vessel glass. No production date ranges were established for any of the historic-age artifacts identified.

5.5.6.3 Site Summary, Site 20CA201

The aspects of the site are described below, in addition to the significance and recommendations.

5.5.6.3.1 Horizontal and Vertical Extent of Cultural Deposit

[REDACTED] 15.243 (1) (o)

5.5.6.3.2 Site Integrity

The site appears to have poor integrity.

5.5.6.3.3 Site Function

Based on the historic-age map and aerial image review, the site functioned as a farmstead.

5.5.6.3.4 Cultural Affiliation

Based on the historic-age map and aerial image review, the site dates from the mid-20th to early 21st century.

5.5.6.3.5 Presence of Subsurface Features

No evidence of subsurface features was identified at the site.

5.5.6.3.6 Site Significance

The surface site lacks research potential because of the paucity of historic artifacts mixed with modern debris remaining at the site and the surface resource has been razed and [REDACTED] 15.243 (1) (o)

[REDACTED] 15.243 (1) (o)

None of the individuals potentially associated with the site maintain transcendent local significance nor do the remnants exhibit significant or distinctive architectural characteristics. As a result, the site is not recommended for NRHP inclusion under Criteria A, B, C, or D. It is the opinion of the investigator that the current investigation has exhausted the research potential of the site.

5.5.6.3.7 Impact

The proposed project would have no impact on significant cultural resources at this site.

5.5.6.3.8 Recommendations

No further archaeological investigations are recommended for the site.

5.5.7 Site 20CA202

[REDACTED] 15.243 (1) (o)

Summary Data

Site Type:	Farmstead
Component:	Mid-19th to early 21st century
Site Area:	[REDACTED] 15.243 (1) (o)
Legal Location:	[REDACTED]
Topography:	Level plain
Elevation:	920 feet AMSL
Soil Type:	Kalamazoo silt loam, 0 to 2 percent slopes
Nearest Water:	[REDACTED] 15.243 (1) (o)
Field Method:	Visual inspection

Site Condition: Fair
NRHP Status: Recommended not eligible

5.5.7.1 Site Description

Site 20CA202 is a large, mid-19th to early 21st century farmstead which had several 15.243 (1) (o)

15.243 (1) (o) 15.243 (1) (o)
15.243 (1) (o) Most of the site area is in grass and forbs and the ground surface was covered with gravel (Figure 5-6). An extant house is found in the 15.243 (1) (o) which was 15.243 (1) (o) and therefore the yard was not investigated (Appendix B; Figure B-4). The 15.243 (1) (o) shown on the 15.243 (1) (o). The complex was comprised of a series 15.243 (1) (o) c 15.243 (1) (o). The complex measured 15.243 (1) (o) by 15.243 (1) (o) east-west. It is currently 15.243 (1) (o)

The site boundaries were defined by the extent of the surface artifact scatter. The ground surface visibility in the grassy area was about 40 percent, while it was 90 percent in the corn fields to the east, south and west.

Review of available late 19th and 20th century maps found evidence that this site was a farmstead from the mid-19th to early 21st century farmstead. 15.243 (1) (o)

15.243 (1) (o)
15.243 (1) (o) 15.243 (1) (o)
15.243 (1) (o) 15.243 (1) (o) 15.243 (1) (o)
15.243 (1) (o) 15.243 (1) (o)
15.243 (1) (o) 15.243 (1) (o)
15.243 (1) (o) 15.243 (1) (o)

area on the 1918, 1932, 1942, and 1950 USGS topographic maps. A second 15.243 (1) (o) immediately to the east of the original house on the 1955, 1962, and 1973 topographic maps. A 15.243 (1) (o)

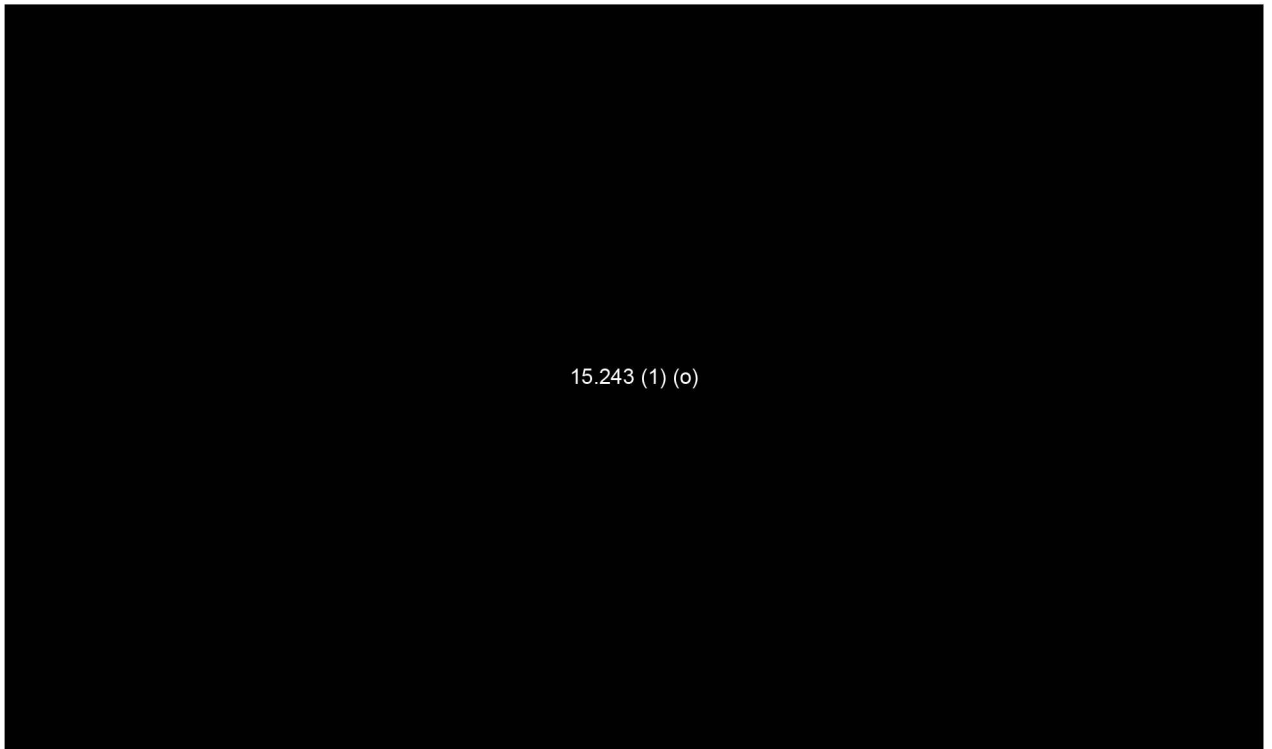
15.243 (1) (o)
15.243 (1) (o) 15.243 (1) (o)

15.243 (1) (o)

Figure 5-6 Overview of 20CA202, view to the south



Figure 5-7 Western house remaining at Site 20CA202, view to the southeast



5.5.7.2 Artifact Descriptions

The site included a plethora of architectural debris and few domestic items. The architectural debris present was estimated at over 1,000 items and the few domestic artifacts observed were over 30 shards of clear vessel glass.

5.5.7.3 Site Summary, Site 20CA202

The aspects of the site are described below, in addition to the significance and recommendations.

5.5.7.3.1 Horizontal and Vertical Extent of Cultural Deposit

15.243 (1) (o)

5.5.7.3.2 Site Integrity

A portion of the site remains intact, however the majority of it has been disturbed. The site appears to have fair integrity.

5.5.7.3.3 Site Function

Based on the historic-age map and aerial image review and artifact density and diversity, the site functioned as a farmstead.

5.5.7.3.4 Cultural Affiliation

Based on the artifacts present, the site dates from the mid-19th to early 21st century.

5.5.7.3.5 Presence of Subsurface Features

No evidence of subsurface features was identified at the site.

5.5.7.3.6 Site Significance

The surface site lacks research potential because of the paucity of historic artifacts mixed with modern debris remaining at the site and the surface resource has been razed and much of the site graded and other portions extensively cultivated for at least three years, and a small portion left intact. None of the individuals potentially associated with the site maintain transcendent local significance nor do the remnants exhibit significant or distinctive architectural characteristics. As a result, the site is not recommended for NRHP inclusion under Criteria A, B, C, or D. It is the opinion of the investigator that the current investigation has exhausted the research potential of the site.

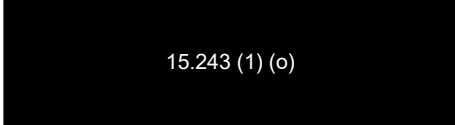
5.5.7.3.7 Impact

The proposed project would have no impact on significant cultural resources at this site.

5.5.7.3.8 Recommendations

No further archaeological investigations are recommended for the site.

5.5.8 Site 20CA203



15.243 (1) (o)

Summary Data

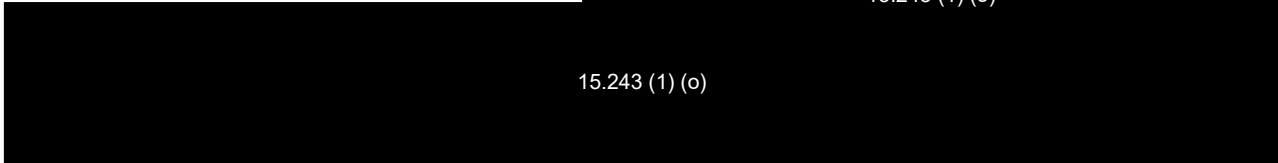
Site Type: Farmstead
Component: Mid-19th to late 20th century
Site Area: 15.243 (1) (o)
Legal Location: 15.243 (1) (o)
Topography: Level Plain
Elevation: 920 feet AMSL
Soil Type: Kalamazoo silt loam, 0 to 2 percent slopes
Nearest Water: 15.243 (1) (o)
Field Method: Visual inspection
Site Condition: Poor
NRHP Status: Recommended not eligible

5.5.8.1 Site Description

Site 20CA203 is a mid-19th to late 20th century

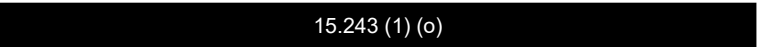


15.243 (1) (o)

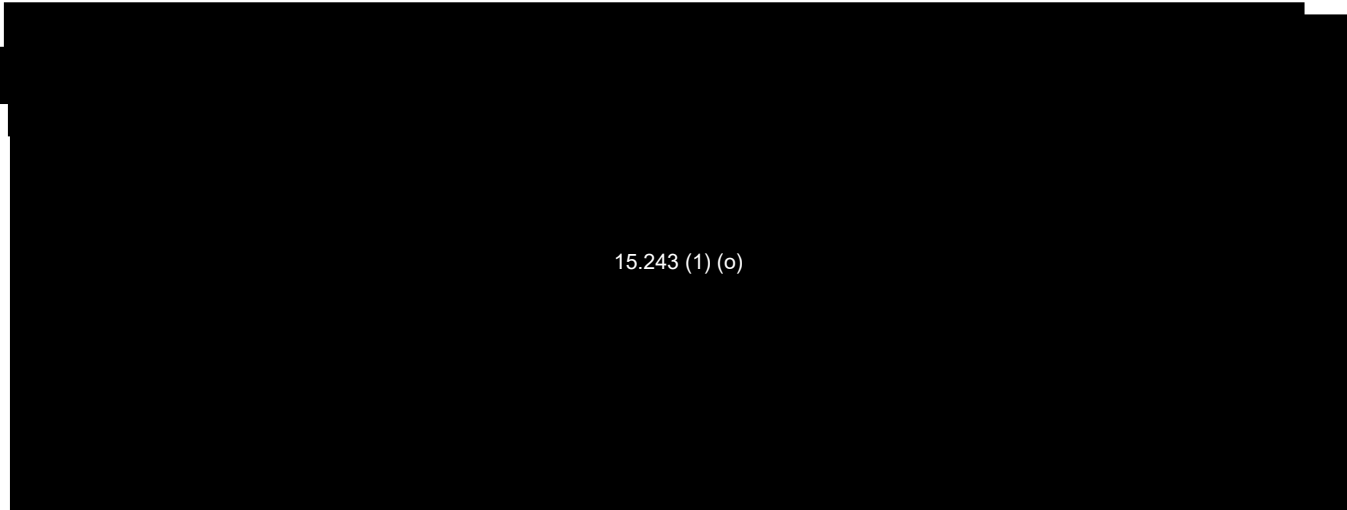


15.243 (1) (o)

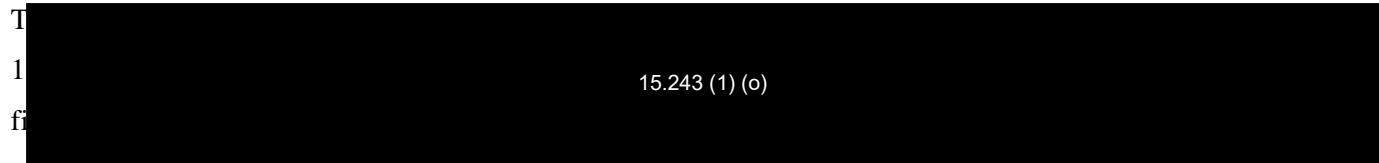
Review of available late 19th and 20th century maps found evidence that this site was a farmstead from the mid-19th to late 20th century farmstead.



15.243 (1) (o)



15.243 (1) (o)



15.243 (1) (o)

Figure 5.8 Overview of 20CA203, view to the south

5.5.8.2 Artifact Descriptions

A total of 43 artifacts were identified at the site mixed with modern trash items. The historic artifacts represented two artifact classes, with architectural accounting for just over half of the assemblage. The 22 architecturally related items were fragments of red brick (n=9), mortar (n=4), concrete (n=5), and flat or window glass (n=4). The only production date range established for the architectural debris were the seven shards of flat window glass, which postdate 1917 (Fowle 1924).

The 21 domestic artifacts included vessel glass (n=15), stoneware (n=2), and whiteware (n=6). Four colors of glass were identified, including clear and aqua. Two shards of clear pressed glass postdate 1865 (Jones 2000), while the aqua glass shards likely date to before the 1930s, which is when aqua jars were most common (Lindsey 2016).

Manufacturing date ranges were determined for all the whiteware and stoneware items. The whiteware sherds postdate 1840 (Miller 1993). The stoneware sherds had Bristol glazing, which postdates 1915 (Greer 2005).

5.5.8.3 Site Summary, Site 20CA203

The aspects of the site are described below, in addition to the significance and recommendations.

5.5.8.3.1 Horizontal and Vertical Extent of Cultural Deposit

15.243 (1) (o)

5.5.8.3.2 Site Integrity

The site appears to have poor integrity.

5.5.8.3.3 Site Function

Based on the historic-age map and aerial image review and artifact density and diversity, the site functioned as a farmstead.

5.5.8.3.4 Cultural Affiliation

Based on the historic-age map and aerial image review and the artifacts present, the site dates from the mid-19th to early 21st century.

5.5.8.3.5 Presence of Subsurface Features

No evidence of subsurface features was identified at the site.

5.5.8.3.6 Site Significance

The surface site lacks research potential because the historic artifacts were mixed with modern debris and the surface resource has been razed and extensively cultivated since 1985. None of the individuals potentially associated with the site maintain transcendent local significance nor do the remnants exhibit significant or distinctive architectural characteristics. As a result, the site is not recommended for NRHP inclusion under Criteria A, B, C, or D. It is the opinion of the investigator that the current investigation has exhausted the research potential of the site.

5.5.8.3.7 Impact

The proposed project would have no impact on significant cultural resources at this site.

5.5.8.3.8 Recommendations

No further archaeological investigations are recommended for the site.

5.5.9 Site 20CA204

15.243 (1) (o)

Summary Data

Site Type: Farmstead
Component: Mid-19th century to early 21st century

Site Area: 15.243 (1) (o)

Legal Location:
Topography: Rolling upland
Elevation: 920 feet AMSL
Soil Type: Kalamazoo silt loam, 0 to 2 percent slopes; Oshtemo sandy loam, 0 to 12 percent slopes

Nearest Water: 15.243 (1) (o)

Field Method: Visual inspection

Site Condition: Poor

NRHP Status: Recommended not eligible

5.5.9.1 Site Description

Site 20CA204 is a 15.243 (1) (o)

Review of available 19th and 20th century maps and aerial imagery found that the site was a farmstead occupied from the mid-19th to early 21st century. 15.243 (1) (o)

15.243 (1) (o)

The 1946, 1961, 1972, 1981, and 1999 aerial imagery reviewed showed the house was in the area of the 15.243 (1) (o)



Figure 5-9 Overview of 20CA204, view to the west



5.5.9.2 Artifact Descriptions

A total of 73 artifacts were identified at the site, divided into three artifact classes, with architectural and domestic types accounting for about 99 percent of the assemblage. Several items were observed that date to the late twentieth century and were not included in the artifact assemblage. The 55 architecturally related items were primarily fragments of red brick, but also included several pieces of concrete in the northeast portion of the site where the outbuildings stood.

The 17 domestic artifacts included vessel glass and whiteware, of which most were found in the central portion of the site where the house once stood. Three colors of glass were identified, including clear (n=10), aqua (n=2), and white or milk (n=1). Production date ranges were established for the aqua and milk glass shards. The aqua glass shards likely date to before the 1930s, which is when aqua jars were most common (Lindsey 2016), and the milk glass shard was likely produced between the 1870s and early twentieth century (Lindsey 2016). The four whiteware sherds postdate 1840 (Miller 1993).

The lone farm related activity item was a harrow tooth that was found in the area where the outbuildings stood.

5.5.9.3 Site Summary, Site 20CA204

The aspects of the site are described below, in addition to the significance and recommendations.

5.5.9.3.1 Horizontal and Vertical Extent of Cultural Deposit

15.243 (1) (o)

5.5.9.3.2 Site Integrity

The site appears to have poor integrity.

5.5.9.3.3 Site Function

Based on the historic-age map and aerial image review and artifact density and diversity, the site functioned as a farmstead.

5.5.9.3.4 Cultural Affiliation

Based on the historic-age map and aerial image review and the artifacts present, the site dates from the mid-19th to early 21st century.

5.5.9.3.5 Presence of Subsurface Features

No evidence of subsurface features was identified at the site.

5.5.9.3.6 Site Significance

The surface site lacks research potential because the historic artifacts were mixed with modern debris remaining at the site and the surface resource has been razed and extensively cultivated since 2016. None of the individuals potentially associated with the site maintain transcendent local significance nor do the remnants exhibit significant or distinctive architectural characteristics. As a result, the site is not recommended for NRHP inclusion under Criteria A, B, C, or D. It is the opinion of the investigator that the current investigation has exhausted the research potential of the site.

5.5.9.3.7 Impact

The proposed project would have no impact on significant cultural resources at this site.

5.5.9.3.8 Recommendations

No further archaeological investigations are recommended for the site.

5.5.10 Site 20CA205

15.243 (1) (o)

Summary Data

Site Type: Farmstead
Component: Mid-19th century to early 20th century
Site Area: [Redacted]
Legal Location: 15.243 (1) (o)
Topography: Level plain
Elevation: 920 feet AMSL
Soil Type: Kalamazoo silt loam, 0 to 2 percent slopes
Nearest Water: 15.243 (1) (o)
Field Method: Visual inspection
Site Condition: Poor
NRHP Status: Recommended not eligible

5.5.10.1 Site Description

Site 20CA205 was identified as a mid-19th to early 20th century farmstead

15.243 (1) (o)

[Redacted]

15.243 (1) (o)

15.243 (1) (o)

Figure 5-10 Overview of 20CA205, view to the southwest

5.5.10.2 Artifact Descriptions

A total of 85 artifacts were identified at the site, divided into four artifact classes, with architectural and domestic types accounting for 95 percent of the assemblage. The 63 architecturally related items were primarily fragments of red brick, but also included several pieces of concrete in the center portion of the site. The only production date range established for the architectural debris were the four shards of flat window glass, which postdate 1917 (Fowle 1924).

The 18 domestic artifacts included vessel glass, stoneware, and whiteware and most were found in the northern half of the site where the house once stood. Four colors of glass were identified, including clear (n=5), aqua (n=2), dark green (n=1), and white or milk (n=2). Production date ranges were established for the aqua and milk glass shards. The aqua glass shards likely date to before the 1930s, which is when aqua jars were most common (Lindsey 2016), and the milk glass shards were likely produced between the 1870s and early twentieth century (Lindsey 2016).

Manufacturing date ranges were determined for all the whiteware and stoneware items. The whiteware sherd postdates 1840 (Miller 1993). The three stoneware sherds had Bristol and Albany glazing, which were common from ca. 1884 to ca. 1920 (Greer 2005).

The two farm related activity items were concentrated in the area around the outbuilding locations in the southern portions of the site. The two heating and cooking pieces debris were clinkers and were primarily found between the house and the outbuildings.

5.5.10.3 Site Summary, Site 20CA205

The aspects of the site are described below, in addition to the significance and recommendations.

5.5.10.3.1 Horizontal and Vertical Extent of Cultural Deposit

15.243 (1) (o)

5.5.10.3.2 Site Integrity

The site appears to have poor integrity.

5.5.10.3.3 Site Function

Based on the historic-age map and aerial image review and artifact density and diversity, the site functioned as a farmstead.

5.5.10.3.4 Cultural Affiliation

Based on the historic-age map and aerial image review and the artifacts present, the site dates from the mid-19th to early 20th century.

5.5.10.3.5 Presence of Subsurface Features

No evidence of subsurface features was identified at the site.

5.5.10.3.6 Site Significance

The surface site lacks research potential because the surface resource has been razed and extensively cultivated for over 100 years. None of the individuals potentially associated with the site maintain transcendent local significance nor do the remnants exhibit significant or distinctive architectural characteristics. As a result, the site is not recommended for NRHP inclusion under Criteria A, B, C, or D. It is the opinion of the investigator that the current investigation has exhausted the research potential of the site.

5.5.10.3.7 Impact

The proposed project would have no impact on significant cultural resources at this site.

5.5.10.3.8 Recommendations

No further archaeological investigations are recommended for the site.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The objectives of this cultural resources investigation were to identify, record, and provide a preliminary assessment of the cultural resources found within the Survey Area. Two previously recorded prehistoric archaeological sites were revisited, and seven historic age farmstead sites were recorded during the current investigation (Table 6-1). No evidence of the three previously recorded sites or the 1824 village site plotted on the GLO map could be found. The Squaw Creek Drain Site (20CA183) is mapped as extending into the Project Area, but the site description indicates that is actually to the south of the river and outside the Project Area. The seven historic-age farmstead sites recorded are recommended as not eligible for inclusion in the NRHP. Due to lack of access to six prehistoric HPAs, in the newly added portions of the Survey Area, they were not visited during the 2022 investigations (Figure A-3). If the areas of the six newly identified HPAs will be impacted by ground disturbing, it is recommended that they be visited by a professional archaeologist prior to these activities to determine if intact cultural resources are present. Based on the lack of significant archaeological resources identified in the remaining portions of the Project Area, Burns & McDonnell recommends no further archaeological work, with the following stipulations:

1. If a federal permit is required for this project, an archaeological Phase I survey of the project area or portions of it may be required.
2. If a federal permit is required for this project, an historic architectural survey of the indirect area of Potential Effect may be required.
3. If the configuration of the Project within the Survey Area is changed, additional Phase I investigations may be necessary.
4. If buried cultural resources are encountered during Project construction, land-disturbing activities in the immediate area should be halted, a professional archaeologist should be notified. Then the exposed cultural resources can be evaluated for their significance.

Table 6-1: Recommendations for Marshall Mega Archaeological Sites

Site	Site Type	Identified Component	Site Integrity	NRHP ¹ Status Recommendation	Recommend
20CA17	Isolated find	Unknown prehistoric	Poor	Not eligible	No further investigation
20CA18	Artifact scatter	Unknown prehistoric	Poor	Not eligible	No further investigation
20CA20	Isolated find	Unknown prehistoric	Poor	Not eligible	No further investigation

Site	Site Type	Identified Component	Site Integrity	NRHP¹ Status Recommendation	Recommend
20CA199	Farmstead	Historic-age mid-19th to early 21st century	Poor	Not eligible	No further investigation
20CA200	Farmstead	Historic-age mid-19th to early 21st century	Poor	Not eligible	No further investigation
20CA201	Farmstead	Historic-age mid-20th to early 21st century	Poor	Not eligible	No further investigation
20CA202	Farmstead	Historic-age mid-19th to early 21st century	Fair	Not eligible	No further investigation
20CA203	Farmstead	Historic-age mid-19th to late 20th century	Poor	Not eligible	No further investigation
20CA204	Farmstead	Historic-age mid-19th to early 21st century	Poor	Not eligible	No further investigation
20CA205	Farmstead	Historic-age mid-19th to early 20th century	Poor	Not eligible	No further investigation

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APPENDIX A - SURVEY AND SITE DISTRIBUTION MAPS

15.243 (1) (o)

15.243 (1) (o)

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APPENDIX B - SITE MAPS

15.243 (1) (o)

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Redaction Log

Redaction Reasons by Exemption

Reason	Description	Pages (Count)
15.243 (1) (o)	Information that would reveal the exact location of archaeological sites. The department of natural resources may promulgate rules in accordance with the administrative procedures act of 1969, 1969 PA 306, MCL 24.201 to 24.328, to provide for the disclosure of the location of archaeological sites for purposes relating to the preservation or scientific examination of sites.	4(2) 5(1) 18(1) 19(1) 21(1) 23(3) 25(5) 26(7) 27(3) 28(8) 29(2) 30(1) 31(16) 32(4) 33(1) 34(10) 35(6) 36(5) 37(28) 38(2) 39(2) 40(12) 41(2) 42(1) 43(8) 44(3) 45(1) 46(6) 47(2) 48(1) 58(1) 59(1) 60(1) 61(1) 63(2) 64(2) 65(2) 66(2) 67(2) 68(1) 69(1)