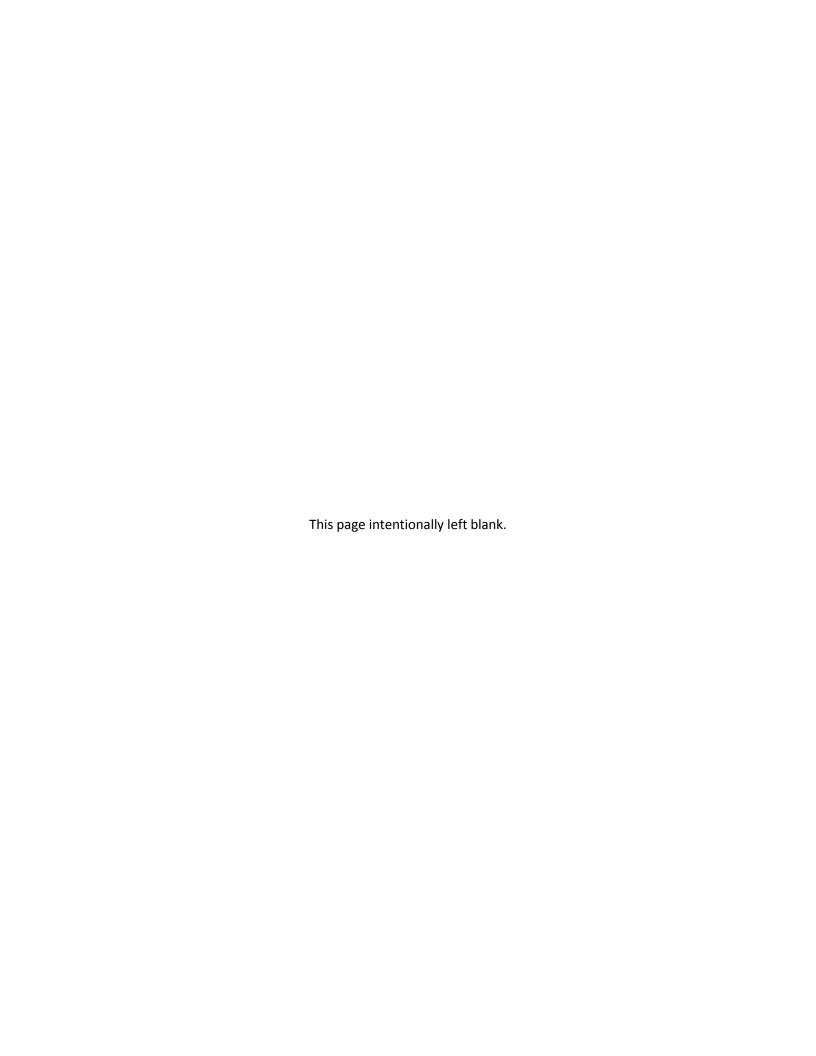
# Appendix D Phase Ia Literature Search



# MINNESOTA ENERGY RESOURCES CORPORATION

# ROCHESTER NATURAL GAS PIPELINE PROJECT, OLMSTED COUNTY, MINNESOTA

# PHASE IA LITERATURE SEARCH

By

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#### **Abstract**

Minnesota Energy Resources Corporation (MERC) proposes to construct an approximately 12- to 14-mile-long pipeline near the City of Rochester in Olmsted County, Minnesota. The Rochester Natural Gas Pipeline Project (Project) will extend between two identified interconnection points on the west and south sides of the City of Rochester. HDR Engineering, Inc. (HDR) was contracted by MERC to complete a Phase Ia Literature Search (Phase Ia) and provide assistance drafting a route permit application that will be submitted to and reviewed by the Minnesota Public Utilities Commission (PUC) and the Minnesota Department of Commerce (DOC).

At this time, federal funding is not anticipated. However, it is likely that federal permits may be required for portions of the Project. These portions could therefore be considered by a federal agency as an "undertaking", which requires consultation under Section 106 of the National Historic Preservation Act of 1966, as amended (Section 106), and its implementing regulations (36 Code of Federal Regulations [CFR] Part 800). Section 106 requires federal agencies to consider the potential effects of undertakings within their jurisdictions on properties listed, or eligible for listing, on the National Register of Historic Places (NRHP). The Project would also require consideration of cultural resources under Section 101(b) of the National Environmental Policy Act (NEPA).

On June 17, 2014, HDR, on behalf of MERC, contacted the Minnesota State Historic Preservation Office (SHPO) to inform them of the proposed Project and request comments. The SHPO is responsible for the review of state agency projects which may affect state archaeological sites (Minnesota Field Archaeology Act of 1963 [Minnesota Statutes 138.40]) and the review of state agency projects which may affect sites listed on the State or National Register of Historic Places (Minnesota Historic Sites Act [Minnesota Statues 138.665, Subd.2]). In a response dated July 1, 2014, the SHPO recommended the completion of a Phase Ia Literature Search. In June and July 2014, HDR, on behalf of MERC, completed the Phase Ia for the proposed Project.

The purpose of the Phase Ia is to determine the location of previously recorded historic properties and surveys (that is, archaeological surveys, archaeological sites, and architectural structures), and to assess the potential for the presence of as yet unrecorded archaeological resources. The Phase Ia includes the review of a Preferred Route and an Alternate Route. The proposed right-of-way (ROW) for each route is estimated at a total of 100 feet (that is, 50 feet off the center of the pipeline). The 100-foot ROW was used to determine if previously identified resources intersect the routes.

In addition, two Study Areas were reviewed for both the Preferred Route and the Alternate Route. The Preferred Route Study Area and the Alternate Route Study Area each include a 1-mile buffer off the two proposed routes. The larger areas were reviewed to provide flexibility during the early Project planning stages.

One previously recorded archaeological site and 13 previously identified architectural properties were identified within the Preferred Route Study Area. The archaeological site and the architectural properties do not transect the Preferred Route ROW and they have not been evaluated for NRHP eligibility.

One previously recorded archaeological site and 13 previously identified architectural properties were identified within the Alternate Route Study Area. The archaeological site and the architectural properties do not transect the Alternate Route ROW and they have not been evaluated for NRHP eligibility.

Based on the data presented in this Phase Ia, the Preferred Route Study Area and the Alternate Route Study Area contain a moderate to high potential for additional cultural resources. As such, HDR recommends developing a Project Area of Potential Effects (APE) that encompasses any areas that will be impacted by Project development. Once an APE is defined, HDR recommends a Phase I archaeological survey and standing structures survey of the APE, along with evaluation of archaeological resources or standing structures receiving impacts, and possible mitigation, if applicable, of significant resources receiving impacts.

In addition, both the Preferred Route Study Area and the Alternate Route Study Area transect several streams and rivers including Cascade, Salem, and Willow creeks and the Zumbro River. The alluvial settings of these stream and river crossings may be conducive to burying and preserving archaeological deposits, indicating there is potential for encountering deeply buried archaeological sites at these locations. Therefore, HDR recommends a geomorphological assessment of the APE be conducted by a qualified geomorphologist to identify portions of the Project with potential for deeply buried archaeological deposits. The geomorphological assessment should be conducted prior to or concurrent with the Phase I archaeological survey.

# **Contents**

Figures Error! E	Bookmark not defined.
List of Appendices	iv
Introduction	1
General Background	3
Environment	3
Minnesota Archaeological Regions	3
Southeast Riverine Archaeological Region	3
Cultural Contexts	4
Paleoindian Tradition (12,000 – 8,000 B.P.)	4
Archaic Tradition (8,000 – 2,500 B.P.)	4
Woodland Tradition (2,500 B.P. – A.D. 1650)	5
Mississippian/Plains Village Tradition	5
Oneota Tradition (A.D. 1200 – 1650)	6
Fur Trade/Contact (1630s – 1858)	6
Early Minnesota Military Activity (1800 – 1890)	7
Early Agriculture and River Settlement (1840 – 1870)	7
Railroads and Agricultural Development (1870 – 1940)	8
Olmsted County History	8
Literature Search	10
Previous Cultural Resources Investigations – Preferred Route Study Area	10
Previous Cultural Resources Investigations – Alternate Route Study Area	11
Previously Recorded Archaeological Sites – Preferred Route Study Area	12
Previously Recorded Archaeological Sites – Alternate Route Study Area	12
Previously Inventoried Architectural Structures – Preferred Route Study Area	12
Previously Inventoried Architectural Structures – Alternate Route Study Area	13
Historic Map Review – General Land Office Research	14
Historic Map Review – Plat Map Research	14
Implications for Project Cultural Resource Activities	16
Precontact Site Potential	16
Historic Site Potential	17

Architectural Property Potential	17
Recommendations	19
References	20
Tables	
Table 1–1. Preferred Route Study Area	1
Table 1–2. Alternate Route Study Area	2
Table 3–1. Previous Cultural Resources Investigations – Preferred Route Study Area	10
Table 3–2. Previous Cultural Resources Investigations – Alternate Route Study Area	11
Table 3–3. Previously Identified Archaeological Sites – Preferred Route Study Area	12
Table 3–4. Previously Identified Archaeological Sites – Alternate Route Study Area	12
Table 3–5. Previously Inventoried Architectural Structures – Preferred Route Study Area	12

# **List of Appendices**

Appendix A. Figures

Appendix B. Preferred Route Study Area - Plat Map Research

Appendix C. Alternate Route Study Area - Plat Map Research

#### Introduction

Minnesota Energy Resources Corporation (MERC) proposes to construct an approximately 12 to 14 mile long pipeline near the City of Rochester in Olmsted County, Minnesota. The Rochester Natural Gas Pipeline Project (Project) will extend between two identified interconnection points on the west and south sides of the City of Rochester. HDR Engineering, Inc. (HDR) was contracted by MERC to complete a Phase Ia Literature Search (Phase Ia) and provide assistance drafting a route permit application that will be submitted to and reviewed by the Minnesota Public Utilities Commission (PUC) and the Minnesota Department of Commerce (DOC).

At this time, federal funding is not anticipated. However, it is likely that federal permits may be required for portions of the Project. These portions could therefore be considered by a federal agency as an "undertaking", which requires consultation under Section 106 of the National Historic Preservation Act of 1966, as amended (Section 106), and its implementing regulations (36 CFR Part 800). Section 106 requires federal agencies to consider the potential effects of undertakings within their jurisdictions on properties listed, or eligible for listing, on the National Register of Historic Places (NRHP). The Project would also require consideration of cultural resources under Section 101(b) of the National Environmental Policy Act (NEPA).

In June and July 2014, HDR, on behalf of MERC, completed the Phase Ia for the proposed Project. The Phase Ia includes the review of a Preferred Route and an Alternate Route (Appendix A, Figure 1). The proposed right-of-way (ROW) for each route is estimated at a total of 100 feet (that is, 50 feet off of the center of the pipeline). The 100 foot ROW was used to determine if previously identified resources intersect the routes.

In addition, two Study Areas were reviewed for both the Preferred Route and the Alternate Route (Tables 1-1 and 1-2 and Appendix A, Figure 1). The Preferred Route Study Area and the Alternate Route Study Area include a 1-mile buffer off the two proposed routes. The larger areas were reviewed to provide flexibility during the early Project planning stages. The purpose of the Phase Ia is to determine the location of previously recorded historic properties and surveys (that is, archaeological surveys, archaeological sites, and architectural structures), and to assess the potential for the presence of as yet unrecorded archaeological resources.

**Sections Township** Range 106N 13W 19 and 30 106N 14W 6-7, 13-14, and 17-36 106N 15W 1-3, 10-15, 23-25, and 36 107N 14W 19 and 29-31 23-26 and 34-36 107N 15W

Table 1-1. Preferred Route Study Area

Table 1-2. Alternate Route Study Area

Township	Range	Sections
105N	14W	5-6
106N	13W	19 and 30
106N	14W	6-7, 13-14, and 17-36
106N	15W	1-3, 10-15, 23-25, and 36
107N	14W	19 and 29-31
107N	15W	23-26 and 34-36

This Phase Ia is divided into four sections. The first section provides a general overview of the environmental and cultural contexts within the Preferred Route Study Area and the Alternate Route Study Area. The second section describes the resources identified during the file search and map review. The third section provides both precontact and historic site potential and site types that may be encountered within the Study Areas. The forth section presents a summary and survey recommendations. The authors of this Phase Ia, Erika Eigenberger and Andrew Kurth, meet the Secretary of the Interior's Professional Qualification Standards for Archaeology as published in 36 Code of Federal Regulations (CFR) 61.

# **General Background**

#### **Environment**

The following environmental history of the region is based on information contained in *Minnesota's Environment and Native American Culture History* (Gibbon et al. 2002), the Minnesota Department of Natural Resources, Ecological Classification System (Minnesota Department of Natural Resources 2014), and the United States Environmental Protection Agency's (EPA) Minnesota Level III and IV Eco-regions (EPA 2014).

The proposed Project transects two ecological regions as defined by EPA. The Project is principally located in the Rochester/Paleozoic Plateau Upland Level IV eco-region of the Driftless Area Level III eco-region. The northwestern portion of the Project is located in the Eastern lowa and Minnesota Drift Plains Level IV eco-region of the Western Corn Belt Plains Level III eco-region.

The Rochester/Paleozoic Plateau Upland Level IV eco-region is characterized by rolling older loess covered plains, predominately used for row crops with some pasture land intermixed. The Eastern Iowa and Minnesota Drift Plains Level IV eco-region is characterized by older till plain and outwash valleys. This region is commonly used for row crops and pasture land.

In general, soils in the both Study Areas are a mix of fine textured forest and prairie soils formed in loess over Palezoic and Cambrian aged bedrock. The average annual precipitation ranges from 28 to 30 inches. The average January high temperature is 23° Fahrenheit and the average July high temperature is 85° Fahrenheit. The frost-free season lasts at least 160 days per year, making it the mildest climate in the state.

Prior to Euro-American settlement, vegetation in the region consisted of tallgrass prairie and bur oak savanna and barrens. Today most of the region is heavily farmed with areas of urban development near the center and along the northern boundary of both Study Areas.

# **Minnesota Archaeological Regions**

The Project falls within the Western portion of the Southeast Riverine Archaeological Region of Minnesota. The following discussion of the archaeological region is summarized from *A Predictive Model of Precontact Archaeological Site Location for the State of Minnesota* (Gibbon et al. 2005).

#### **Southeast Riverine Archaeological Region**

The Southeast Riverine Archaeological Region covers the southeast portion of Minnesota and extends into adjacent corners of Wisconsin and Iowa. This region was not glaciated during the Wisconsin Glacial Period and the area is characterized by stream-dissected, level to gently rolling loess covered Pre-Wisconsinan till plains, with a notable absence of natural lakes. The major river systems in the region extend west from the Mississippi River and include the Cannon, Cedar, Root, and Zumbro rivers.

The Southeast Riverine Archaeological Region contains extensive rock outcroppings of high quality flaking materials. Chert concentrations are found along the Mississippi River Valley and just below the surface is less-dissected areas in the western part of the region.

During the Late Holocene, elm, ash, and cottonwood forests lined the river lowlands with maple, elm, and basswood occupying the uplands near the Mississippi River. Oak barrens, patches of oak groves, were scattered across the western portion of the region in the prairie.

Subsistence resources during the Late Holocene would have included deer, elk, and bison in the uplands and mussels, fish, and waterfowl in the rich bottom lands. Edible plants would have included water lilies and other aquatic flora as well as plants like prairie turnips in the uplands. The Southeast Riverine Archaeological Region would have provided a favorable climate and extensive bottomlands for Woodland horticulture.

#### **Cultural Contexts**

The following summaries of cultural contexts relevant to the proposed Project are based on information found in a series of statewide historic contexts developed by the Minnesota State Historic Preservation Office (SHPO) (Dobbs 1990a; 1990b; and SHPO 1993); 2010 Archaeological Reconnaissance Survey of Olmsted County, Minnesota (Arzigian and Kolb 2011); Investigating the Earliest Human Occupation of Minnesota: A Multidisciplinary Approach to Modeling Landform Suitability & Site Distribution Probability for the State's Early Paleoindian Resources (Buhta et al. 2011); Mn/Model Final Report Phases 1-3, 2002: A Predictive Model of Precontact Archaeological Site Location for the State of Minnesota (Hudak et al. 2002); and Archaeology of Minnesota: The Prehistory of the Upper Mississippi River Region (Gibbon 2012).

#### Paleoindian Tradition (12,000 - 8,000 B.P.)

The earliest human inhabitants of what is now Minnesota entered the area approximately 12,000 years ago as the glacial front of the Late-Wisconsin Glacial Period receded. These peoples, comprising the Paleoindian Tradition, were migratory groups of mobile hunter-gatherers who followed herds of large game animals such as bison, woodland caribou, and mastodon into the tundra, open pine, and oak forests that characterized Minnesota at the end of the Pleistocene.

Archaeological evidence from this period is limited in Minnesota. Paleoindian Tradition sites in the state consist mostly of isolated discoveries of large, distinct projectile points that are characteristic of the tradition. These points are divided into the Early Paleoindian—Fluted Point Pattern (Clovis, Gainey, and Folsom points), and the Late Paleoindian—non-fluted Lanceolate Point Pattern (Plano and Cody complex points). Other lithic tool types associated with the patterns of the Paleoindian Tradition in Minnesota include bifacially flaked knives, simple choppers, adzes, and large scrapers.

#### **Archaic Tradition (8,000 – 2,500 B.P.)**

As Minnesota became warmer and drier, expanses of prairie began to displace the forests that established following the glacial retreat. The retreating glaciers exposed new land surfaces with expansive lakes and large, swift rivers, fed by glacial runoff, unlike any in present-day Minnesota. As the Pleistocene megafauna died out, the human inhabitants of the state had to adapt to the ever-changing landscape. This led to the development of new tool types and subsistence practices.

The Archaic Tradition is distinguished from the Paleoindian Tradition by an increased diversity in tool types, a broader range of raw material utilization, and an increase in the exploitation of a variety of local

animal and plant communities. This diversity is attributed to the adaptation of Archaic Tradition peoples to local resources and a relative abundance of animal and plant resources. The archaeological record of the Archaic Tradition shows evidence of the beginnings of cultural variation in the state. Notched and stemmed projectile points, along with groundstone tools and chipped-stone scrapers, knives, punches, and drills, are found in the Archaic Tradition toolkit. Copper implements appear in archaeological assemblages from approximately 7,000 years ago and continued until approximately 3,500 years ago.

Four distinct Archaic Tradition contexts have been identified in Minnesota: the Shield Archaic, Lake-Forest Archaic, Prairie Archaic, and Eastern Archaic. Site locations from this period tend to be located near water. These sites appear to have been occupied for longer periods of time and tend to produce larger amounts of artifacts than small encampments, which have be found scattered throughout the environment. Small encampments often represent specific resource extraction or use of a location that takes advantage of a seasonal event, such as a bison kill site, a floral resource gathering site, or a waterfowl-breeding site. Artifact deposition at these locations is generally very minimal.

#### **Woodland Tradition (2,500 B.P. - A.D. 1650)**

Beginning approximately 3,000 years ago, Minnesota's climate began to stabilize and resembled the climate that exists in the state today. Expanses of prairie were found in the western portion of the state. A swath of oak savanna, stretching from the northwest to the southeast, separated these prairies from the pine forests of the northeast.

Woodland Tradition cultures exhibit evidence of an increasingly sedentary lifestyle. The domestication of plants, adoption of ceramic technology, re-occurring occupation of long-term seasonal village sites, and construction of mounds emerge in the Woodland Tradition. These innovations were not all adopted in all areas of the state at the same time or necessarily together. Woodland Tradition sites are often identified more than Paleoindian Tradition or Archaic Tradition sites, because they are not as deeply buried. As a result, more is known about the groups of the Woodland Tradition than of the Paleoindian or Archaic traditions.

Woodland Tradition sites can often be associated with a particular group based on distinct ceramic and lithic tool types. In the United States, the Woodland Tradition has been divided into an Early, Middle, and Late chronological framework based on ceramic traditions. In Minnesota, the tradition has also been divided into an earlier Initial Woodland period (including the Early and Middle periods, ca. 2,500 B.P. - 1,500 B.P.) and a later Terminal Woodland period (including the Late Woodland period, 1,500 B.P. - A.D. 1650).

Regional differences in the Woodland Tradition resulted in the identification of distinct regional complexes. The Southeast Riverine region is associated with pottery types such as Marion Thick-like, Havanoid, and Effigy Mound.

#### Mississippian/Plains Village Tradition

Approximately 1,000 years ago, a new tradition developed in southern Minnesota. In the western part of the state, this tradition is known as the Plains Village Tradition, and in the eastern part of the state, it is known as the Mississippian Tradition. These traditions are distinguished from the Woodland Tradition

by an intensification of agriculture, including cultivation of corn, and larger, more complex societies. These traditions spread into southwestern Minnesota from the Missouri River and into southeastern Minnesota from the Mississippi River, with possible ties to cultures of the southern United States and Mexico.

Distinct ceramic styles, large village complexes, greater density of artifacts and community vegetable storage pits distinguish Mississippian/Plains Village Tradition sites. Effigy mounds in the shape of animals such as birds and snakes, as well as flat-topped mounds and villages encircled by protective palisades, were constructed during this period.

#### **Oneota Tradition (A.D. 1200 - 1650)**

The Oneota Tradition emerged approximately 800 years ago and existed until around the time of European contact in southern Minnesota. It is unknown whether the groups of the Oneota Tradition developed out of the Terminal Woodland Traditions of the state or if they migrated to the area from southern parts of the Midwest.

Oneota Tradition sites are widely distributed throughout the prairie and forest regions of southern Minnesota. Like the Mississippian/Plains Village Tradition, the Oneota Tradition is distinguished from the Woodland Tradition by an intensification of agriculture, the establishment of larger village sites, and an increase in social complexity. Sites from the Oneota Tradition are identifiable by their distinct globular shaped shell tempered pottery. Regional and temporal variation in Oneota Tradition pottery has lead to the dissection of two phases, the Blue Earth Phase, and the later, southwestern, Orr Phase. The most common site types found in Minnesota for the Oneota Tradition are village sites and burial mound sites.

#### **Fur Trade/Contact (1630s - 1858)**

By the 1620s, the first European goods may have reached the Upper Midwest through trade with the Ottawa and Huron. The first fur trade contact in this state occurred between 1659 and 1660, when two French explorers named Sieur des Groseilliers and Sieur de Radisson entered present-day Minnesota. Increasing numbers of explorers and fur tradesmen would reach the area in the years to follow. During the time of initial contact, the loway, Santee Dakota, and possibly the Oto occupied the southeastern portion of Minnesota. This period is recognized by the establishment, operation, and adaptation of gathering fur-bearing mammals in exchange for other goods and materials. This exchange linked the Northern Plains to a worldwide economic and political system.

By the late 1670s, a trade agreement had been established between the Dakota and merchants in Quebec and Montreal, Canada. This relationship initiated the French period of exploration and occupation in Minnesota, which lasted into the early 1760s. During this period of French influence, much of the state and the surrounding region was occupied with an extensive network of forts and fur trading posts.

The 1760s (after the Treaty of Paris) brought a half-century of British activity in Minnesota. This period brought further development of the fur trade industry, with more trading posts and consequently major changes in the distribution of Native American people in the region. By 1800, the Ojibwa took control of

the lakes and forests of northern Minnesota, and the Dakota moved south along the Minnesota River Valley.

After a peace treaty with the British in 1763, the United States gained legal possession of the state. The United States exerted control of Minnesota after Zebulon Pike's 1805 to 1807 expedition and with the establishment of Fort Snelling at the junction of the Minnesota and Mississippi rivers in 1819. The changes in Native American life brought about by the French and British presence in Minnesota included migrations of Native American populations from the east, depopulation of native peoples in certain areas because of introduced diseases and warfare, and gradual movement of the Ojibwa into northern Minnesota and of the Dakota into southern Minnesota. The Native American populations in Minnesota began to switch from hunting for subsistence to hunting for trade, and Native American manufacturing materials began to be replaced by European materials.

Travel and settlement of the state were mostly restricted to corridors along larger bodies of water. In 1837, the Dakota, Winnebago, and Ojibwa signed treaties that opened up east-central Minnesota to logging and settlement, and by 1849, Minnesota had become organized as a Territory. When Minnesota gained statehood in 1858, Euro-American settlement increased, bringing a wave of new towns, cities, and non-fur trade-related enterprises.

#### Early Minnesota Military Activity (1800 - 1890)

Beginning in the mid-19th century, Minnesota Territory representatives appealed to the United States Congress to appropriate funds to build and maintain a series of five military roads in the state. Minnesota Territory representatives argued that these roads were justified on the grounds of frontier defense and would aid in territorial settlement and commercial development. In July 1850, the representatives secured funding for road development. Over the next decade, territorial representatives and the War Department's United States Army Corps of Engineers (USACE) of Topographical Engineers would oversee the creation of five original roads that would extend from Fort Snelling to government forts or Indian agencies. Not all of the roads were completed, but the local population used the segments that were completed heavily.

Around 1862, growing tension between the Dakota and the United States government escalated into violence. Over a 6-week period, many lives were lost on both sides of the U.S. - Dakota Conflict, and the violence prompted a large-scale evacuation of settlement areas in southern Minnesota. On December 26, 1862, the United States government rescinded all treaties signed with the Dakota of Minnesota and forcibly removed them from the state. The conflict of 1862 led to major military expeditions by the United States government in 1863, 1864, and 1865 in Minnesota and the adjacent states of North Dakota and South Dakota.

#### Early Agriculture and River Settlement (1840 - 1870)

Some of the earliest agricultural farming practices in the state occurred in southern Minnesota. Treaties with the Ojibwa and Eastern Dakota in the early and mid-19th century allowed for European settlement in certain areas of the state west of the Mississippi River. Acts passed in the state in the mid-19th century fostered an influx of settlers from the eastern states and Europe. These initial settlers came by

steamboat and followed the major rivers and tributaries into the interior of the state. Town sites focused on rivers as a source of transportation and power and often developed according to resource need, company and industry need, or via social and ethnic boundaries. Many towns developed into agricultural processing and distribution centers. Industries such as milling and brewing became widespread throughout southern Minnesota. The initial farming practice of the time was subsistence, but farmers in the state were at the cusp of large-scale farming, and began to grow wheat as a cash crop.

#### Railroads and Agricultural Development (1870 - 1940)

After 1870, railroads were the single most important factor in the rapid growth of agriculture in southern Minnesota because their expansion onto the Great Plains increased the market for cash crops. New railroads in Minnesota opened tillable land to farmers, reduced dependence on risky water transportation, and allowed for the transportation of goods and services away from major river transportation corridors. Railroads had become the primary mover of crops by the late 19th century.

After 1870, an agricultural land boom began in Minnesota as railroads, chambers of commerce, land colonization companies, real estate companies, the State Bureau of Immigration, and other private and public agencies encouraged settlement of the large expanses of land in southern Minnesota. Good soil, a favorable climate, and the low cost of cultivating land made farming profitable. This solidified agriculture as the dominant industry in southern Minnesota. Two of the most important industrial centers for this time became the milling district in St. Anthony Falls and the meat packing operation in South St. Paul. Railroads were paramount in supplying unrefined resources from southern Minnesota to these locations.

#### **Olmsted County History**

The following history of Olmsted County is compiled from 2010 Archaeological Reconnaissance Survey of Olmsted County, Minnesota (Arzigian and Kolb 2011); Handbook of North American Indians (DeMallie 2001); History of Olmsted County (County of Olmsted 2014); History of Olmsted County (Hill 1883); Investigating the Earliest Human Occupation of Minnesota: A Multidisciplinary Approach to Modeling Landform Suitability & Site Distribution Probability for the State's Early Paleoindian Resources (Buhta et al. 2011); Mn/Model Final Report Phases 1-3, 2002: A Predictive Model of Precontact Archaeological Site Location for the State of Minnesota (Hudak et al. 2002); Minnesota Place Names: A Geographical Encyclopedia (Upham 2001); Soil Survey of Olmsted County, Minnesota (Elwell et al. 1928); and Soil Survey of Olmsted County, Minnesota (Poch 1980).

Olmsted County is located in the Driftless Area of southeastern Minnesota. The large sheets of glacial ice that dominated the rest of the region during the Wisconsin Glacial Period and preceding Illinoian Glacial Stage never covered this portion of the state. As a result, the topography of the county is characterized by loess-covered, level to gently rolling pre-Wisconsin till plains. The Zumbro and Root rivers, tributaries of the Mississippi River, dissect the county and no lakes are present. Prior to agricultural development, the county was a mix of oak savanna and barrens, tall grass prairie, and big woods vegetation.

Early Paleoindian, Clovis sites identified in the county (210L0039 and 210L0044) indicate that the area was inhabited by approximately 12,000 B.P. Evidence of the Archaic and Early Woodland Traditions in the county is sparse, but sites identified along the Zumbro and Root rivers and their tributaries associated with these traditions demonstrate habitation of the county.

People of the Oneota Complex inhabited southeastern Minnesota during the Late Woodland and Protohistoric Periods. The people of the Oneota are believed to have lived in large, permanent to semi-permanent village settlements. While, no village sites have been identified in Olmsted County, Oneota village sites identified in La Crosse, Wisconsin, show evidence of prairie resource exploitation into southeastern Minnesota.

Decedents of the Oneota as well as the Eastern Dakota occupied southeastern Minnesota at the time the first French explorers entered the state in the 17th century. By 1750, the Eastern Dakota were well established in the region with villages along the Mississippi River and its tributaries. Olmsted County was part of the Eastern Dakota lands until the treaty of 1851, when all lands occupied by the Eastern Dakota were ceded to the United States government.

The first European to settle in the area was Hiram Thompson in 1853. Thompson settled along the south fork of the Whitewater River near the Village of Dover, approximately 20 miles west of the City of Rochester. The county was established under the Minnesota territorial government in 1855, with Rochester as the County Seat. It was not officially organized into townships however, until 1858. The county is named for David Olmsted, who served on the first Minnesota Territorial Council and was elected the first Mayor of St. Paul in 1854.

The county did not experience much population growth until the Chicago and North Western Railway constructed the first railroad in the county in 1865. The construction of the railroad signified a changed in agricultural practices in the county. Farmers in the area shifted from subsistence farming to the commercial production of wheat and dairy. By the 1920s, 12 creameries, 3 ice cream factories, and 10 cheese factories were in operational within the county.

Following the Great Tornado of 1883, the Sister of St. Francis collaborated with Doctor William Worrall Mayo and his family to construct a hospital in the City of Rochester. This venture would result in the establishment of the Mayo Clinic, which today is one of the world's leading centers for medical care.

#### **Literature Search**

HDR archaeologist Andrew Kurth conducted background research at the Minnesota SHPO and the Minnesota Historical Society (MHS) on June 20 and June 24, 2014. Research gathered included previous cultural resource surveys, previously identified archaeological sites, and previously identified historic properties. In addition, General Land Office (GLO) maps from the 19th century, historic plat maps, and county histories were reviewed.

The Literature Search portion includes a review of the Preferred Route and the Alternate Route, as well as a 1-mile buffer on each route. This 1-mile buffer was used to create the Preferred Route Study Area and the Alternate Route Study Area. The proposed ROW for the two routes is estimated at a total of 100 feet (that is, 50 feet off the center of the pipeline). The 100-foot ROW was used to determine if previously identified resources transect the routes.

As the Preferred Route and the Alternate Route are close to one another, there is a considerable amount of overlap in the data presented. However, as resources within the routes need to be considered separately, previously identified cultural resources investigations, previously identified archaeological sites, and previously identified architectural properties are discussed by both the Preferred Route Study Area and the Alternate Route Study Area.

The GLO map review and the plat map review present a summary of resources that cover both Study Areas. A detailed description of individual resources within each Study Area can be found in Appendix B (Preferred Route Study Area - Plat Map Results) and Appendix C (Alternate Route Study Area - Plat Map Results).

### **Previous Cultural Resources Investigations - Preferred Route Study Area**

The record search identified seven cultural resources surveys within the Preferred Route Study Area (Table 3-1 and Appendix A, Figure 2 A1-D3). These surveys included investigations for natural gas pipelines, a rail line, highway and road projects, and an energy cooperative. Four of the seven previous surveys intersect the Preferred Route.

Table 3-1. Previous Cultural Resources Investigations - Preferred Route Study Area

Report Date	Report Number	Report Title	Author(s)
1995	MULT-95-13*	A Phase I Archaeological Survey of Selected Portions of the Northern Natural Gas Company Rochester Rehab Project Corridor, Dodge, Olmsted, and Steele Counties, Minnesota	Kim C. Breakey and Clark A. Dobbs
1995	MULT-95-18	A Phase I Archaeological Survey of Selected Route Variations on Portions of the Northern Natural Gas Company Rochester Rehab Project Corridor, Dodge and Olmsted Counties, Minnesota	John D. Carter and Clark A. Dobbs
1998	OL-98-01*	Archaeological Investigations at the Proposed TH 63 South Corridor TH 52 to 48th Street SW, Olmsted County, Minnesota	Patrick R. Stewart

Report Date	Report Number	Report Title	Author(s)
2001	OL-01-02*	Supplementary Phase I Cultural Resource Investigations of the Proposed TH63 South Corridor, TH 52 to 48th Street SW, Olmsted County, Minnesota	Vicki L. Twinde and Barbara Kooiman
2007	OL-07-04*	Phase I Cultural Resource Survey for the Olmsted County Road 104/60th Avenue NW Corridor Preservation Study, Olmsted County, Minnesota	Betsy H. Bradley, Laurie S. H. Ollila, Andrew J. Schmidt, and Andrea C. Vermeer
2009	MULT-09-08	Phase I and II Archaeological Investigations of the Minnesota Rehabilitation Segment of the Power River Basin Expansion Project Volume II	Michelle M. Terrell and Andrea C. Vermeer
2012	MULT-13-16	Phase I Archaeological Resources Survey for the People's Energy Cooperative 2013-2016 Work Plan, Olmsted and Wabasha Counties, Minnesota	Peer Halvorsen

<sup>\*</sup>Previous survey intersects the Preferred Route.

# **Previous Cultural Resources Investigations - Alternate Route Study Area**

The cultural resources record search identified six cultural resources surveys within the Alternate Route Study Area (Table 3-2 and Appendix A, Figure 2 A1-D3). These surveys included investigations for natural gas pipelines, a rail line, and highway and road projects. Four of the six previous surveys intersect the Alternate Route.

Table 3-2. Previous Cultural Resources Investigations - Alternate Route Study Area

Report Date	Report Number	Report Title	Author(s)
1995	MULT-95-13*	A Phase I Archaeological Survey of Selected Portions of the Northern Natural Gas Company Rochester Rehab Project Corridor, Dodge, Olmsted, and Steele Counties, Minnesota	Kim C. Breakey and Clark A. Dobbs
1995	MULT-95-18	A Phase I Archaeological Survey of Selected Route Variations on Portions of the Northern Natural Gas Company Rochester Rehab Project Corridor, Dodge and Olmsted Counties, Minnesota	John D. Carter and Clark A. Dobbs
1998	OL-98-01*	Archaeological Investigations at the Proposed TH 63 South Corridor TH 52 to 48th Street SW, Olmsted County, Minnesota	Patrick R. Stewart
2001	OL-01-02*	Supplementary Phase I Cultural Resource Investigations of the Proposed TH63 South Corridor, TH 52 to 48th Street SW, Olmsted County, Minnesota	Vicki L. Twinde and Barbara Kooiman
2007	OL-07-04*	Phase I Cultural Resource Survey for the Olmsted County Road 104/60th Avenue NW Corridor Preservation Study, Olmsted County, Minnesota	Betsy H. Bradley, Laurie S. H. Ollila, Andrew J. Schmidt, and Andrea C. Vermeer
2009	MULT-09-08	Phase I and II Archaeological Investigations of the Minnesota Rehabilitation Segment of the Power River Basin Expansion Project Volume II	Michelle M. Terrell and Andrea C. Vermeer

<sup>\*</sup>Previous survey intersects the Preferred Route.

### Previously Recorded Archaeological Sites - Preferred Route Study Area

Minnesota SHPO files revealed one previously identified archaeological site (210L0023) within the Preferred Route Study Area (Table 3-3 and Appendix A, Figure 2 A1-D3). Site 210L0023 consists of a single Durst Stemmed projectile point associated with the Prairie Archaic Tradition. The site has not been evaluated for NRHP eligibility and it does not intersect the Preferred Route.

Table 3-3. Previously Identified Archaeological Sites - Preferred Route Study Area

Site Number	Site Type	Township	Range	Section	NRHP Recommendations/ Comments
21OL0023	Precontact Isolated Find – Prairie Archaic Tradition	106N	14W	35	Unevaluated

### **Previously Recorded Archaeological Sites - Alternate Route Study Area**

The file search revealed one previously identified archaeological site (210L0023) within the Alternate Route Study Area (Table 3-4 and Appendix A, Figure 2 A1-D3). Site 210L0023 consists of a single Durst Stemmed projectile point associated with the Prairie Archaic Tradition. The site has not been evaluated for NRHP eligibility and it does not intersect the Preferred Route.

Table 3-4. Previously Identified Archaeological Sites - Alternate Route Study Area

Site Number	Site Type	Township	Range	Section	NRHP Recommendations/ Comments
21OL0023	Precontact Isolated Find – Prairie Archaic Tradition	106N	14W	35	Unevaluated

# **Previously Inventoried Architectural Structures - Preferred Route Study Area**

Minnesota SHPO files revealed 13 previously inventoried architectural structures within the Preferred Route Study Area (Table 3-5 and Appendix A, Figure 2 A1-D3). Structures include farmsteads and individual buildings associated with farmsteads or homesteads. None of the previously inventoried architectural structures have been evaluated for NRHP eligibility. In addition, none of the previously inventoried structures intersect the Preferred Route.

Table 3-5. Previously Inventoried Architectural Structures - Preferred Route Study Area

SHPO No.	Property Name	Structure Type	Township	Range	Section	NRHP Status	Comments
OL-CAS-025	Farmstead	Barn	107N 107N	14W 15W	19 24	Unevaluated	Dates from 1870-1940
OL-CAS-026	Farmstead	Farmstead	107N	14W	30	Unevaluated	Dates from 1870-1940
OL-CAS-027	Farmstead	Farmstead	107N	14W	31	Unevaluated	Dates from 1870-1940
OL-CAS-028	Farmstead	Farmstead	107N	15W	36	Unevaluated	Dates from 1870-1940

SHPO No.	Property Name	Structure Type	Township	Range	Section	NRHP Status	Comments
OL-KAL-014	Farmstead	Farmstead	107N	15W	24	Unevaluated	Dates from 1870-1940
OL-KAL-016	Farmstead	Farmstead	107N	15W	24	Unevaluated	Dates from 1870-1940
OL-KAL-019	Farmstead	Farmstead	107N	15W	25	Unevaluated	Dates from 1870-1940
OL-KAL-020	Farmstead	Farmstead	107N	15W	25	Unevaluated	Dates from 1870-1940
OL-KAL-021	Farmstead	Farmstead	107N	15W	36	Unevaluated	Dates from 1870-1940
OL-KAL-022	Farmstead	Farmstead	107N	15W	36	Unevaluated	Dates from 1870-1940
OL-ROT-013	House	Home	106N	14W	23	Unevaluated	Dates from 1950s
OL-ROT-018	Augusta Kemp Farms	Farmstead	106N	14W	22	Unevaluated	Dates from 1870-1940
OL-SLM-009	Farmstead	Farmstead	106N	15W	1	Unevaluated	Dates from 1950s

# Previously Inventoried Architectural Structures - Alternate Route Study Area

Minnesota SHPO files revealed 13 previously inventoried architectural structures within the Alternate Route Study Area (Table 3-6 and Appendix A, Figure 2 A1-D3). Structures include farmsteads and individual buildings associated with farmsteads or homesteads. None of the previously inventoried architectural structures have been evaluated for NRHP eligibility. In addition, none of the previously inventoried structures intersect the Alternate Route.

Table 3-6. Previously Inventoried Architectural Structures - Alternate Route Study Area

SHPO No.	Property Name	Structure Type	Township	Range	Section	NRHP Status	Comments
OL-CAS-025	Farmstead	Barn	107N 107N	14W 15W	19 24	Unevaluated	Dates from 1870-1940
OL-CAS-026	Farmstead	Farmstead	107N	14W	30	Unevaluated	Dates from 1870-1940
OL-CAS-027	Farmstead	Farmstead	107N	14W	31	Unevaluated	Dates from 1870-1940
OL-CAS-028	Farmstead	Farmstead	107N	15W	36	Unevaluated	Dates from 1870-1940
OL-KAL-014	Farmstead	Farmstead	107N	15W	24	Unevaluated	Dates from 1870-1940
OL-KAL-016	Farmstead	Farmstead	107N	15W	24	Unevaluated	Dates from 1870-1940
OL-KAL-019	Farmstead	Farmstead	107N	15W	25	Unevaluated	Dates from 1870-1940
OL-KAL-020	Farmstead	Farmstead	107N	15W	25	Unevaluated	Dates from 1870-1940

SHPO No.	Property Name	Structure Type	Township	Range	Section	NRHP Status	Comments
OL-KAL-021	Farmstead	Farmstead	107N	15W	36	Unevaluated	Dates from 1870-1940
OL-KAL-022	Farmstead	Farmstead	107N	15W	36	Unevaluated	Dates from 1870-1940
OL-ROT-013	House	Home	106N	14W	23	Unevaluated	Dates from 1950s
OL-ROT-018	Augusta Kemp Farms	Farmstead	106N	14W	22	Unevaluated	Dates from 1870-1940
OL-SLM-009	Farmstead	Farmstead	106N	15W	1	Unevaluated	Dates from 1950s

#### **Historic Map Review - General Land Office Research**

Official GLO maps corresponding to the Project area were examined in July 2014. Maps were accessed online through the Bureau of Land Management (BLM) website at http://www.glorecords.blm.gov. GLO survey maps corresponding to the Preferred Route Study Area and Alternate Route Study Area were examined to identify areas with potential for containing historical era cultural resources. Historic archaeological sites may be present in locations where resources have been documented on GLO maps. These maps revealed no evidence of Euro-American settlement at the time of survey (BLM 1854). Natural features, including rivers, streams, and wetlands, are noted on these maps. A large area identified as swamp in Township 106 North, Range 14 West, Sections 27, 28, 32, 33, and 34 is no longer present on the landscape. The watercourses in the Project area do not appear to have been significantly altered since the time of the survey.

#### Historic Map Review - Plat Map Research

Historic plat maps corresponding to the Project area were examined in July 2014. Maps were accessed online through the University of Minnesota Library website at

https://www.lib.umn.edu/borchert/digitized-plat-maps-and-atlases and the MHS website at http://greatriversnetwork.org. Maps from the years 1896 (Geo. A. Ogle & Co.) and 1914 (The Farmer) were examined. These maps portray features associated with the historic development of the Preferred Route Study Area and Alternate Route Study Area. Notable on these maps are the locations of schools, factories, homesteads, quarries, and railways.

The Chicago and Northwestern Railroad is present by 1896 in Sections 35 and 36 Township 107 North, Range 15 West and Section 29, 30, and 31 Township 107 North, Range 14 West. One building, the Olmsted Railroad Station, is identified on the 1896 maps in association with this railroad. An unnamed railroad is present in Sections 24 and 25 Township 106 North, Range 14 West and Section 30 Township 106 North, Range 13 West, on the 1914 maps on the 1914 maps.

Numerous roadways, schoolhouses, and homesteads are located throughout the Preferred Route Study Area and Alternate Route Study Area. Roads in the area tend to follow section lines. A completed description of resources including the locations and descriptions of the structures and railroads can be

found in Appendix B (Preferred Route Study Area - Plat Map Results) and Appendix C (Alternate Route Study Area - Plat Map Results).

# **Implications for Project Cultural Resource Activities**

#### **Precontact Site Potential**

The Phase Ia revealed one previously identified archaeological site (210L0023) within both the Preferred Route Study Area and the Alternate Route Study Area. Site 210L0023 consists of a single Durst Stemmed projectile point associated with the Prairie Archaic Tradition. The site has not been evaluated for NRHP eligibility and it does not intersect the Preferred Route or the Alternate Route.

Although only one site has been identified within the two Study Areas, the report 2010 Archaeological Reconnaissance Survey of Olmsted County, Minnesota provides an overview of all precontact sites identified in the County (as of 2010), additional site types that may be encountered, and probable site locations (Constance and Kolb 2011). Information and predictive modeling in the text was compiled using existing Olmsted County site files, pedestrian survey and shovel testing in specific locations throughout the county, the Minnesota Department of Transportation (MnDOT) Mn/Model, and a geomorphological study. Field survey for the Project was not completed within the two Study Areas; however, the information presented in the text provides valuable information regarding potential precontact site types that may be encountered and their probable locations.

Previously recorded precontact archaeological sites within Olmsted County range from the Paleoindian Tradition to the Woodland Tradition. Paleoindian Tradition sites within Olmsted County include a single Clovis point with additional lithic materials (210L0039), a cache of bifaces and flakes likely associated with Clovis (210L0044), and an isolated lanceolate point (210L0043). These three sites are situated on terraces along three different drainages and in proximity to waterway junctions. In addition, geomorphological testing suggests that archaeological deposits may be identified on low terraces, in vertical accretion alluvium on the floodplains, and in organic sediment in wetlands (Constance and Kolb 2011).

Previously identified Archaic Tradition sites within the county are also found along drainages and waterways. Available data suggests that in addition to being proximal to water, Archaic Tradition sites appear to lie within areas that may not have experienced regular prairie fires. These sheltered areas would have supported trees, edible plants, and attracted wildlife; resources that would have provided raw materials and food sources, thereby attracting people. It is suggested that sheltered areas are situated to the east of landforms and waterways and as the wind typically blows from west to east, the landform and/or water would provide a natural firebreak, thereby protecting areas to the east (Constance and Kolb 2011).

The previously recorded Woodland Tradition sites within Olmsted County are also located adjacent to waterways. In similar fashion to the previously recorded Archaic Tradition sites, the previously identified Woodland Tradition sites are near junctions with another stream or creek. Mounds have been recorded within Olmsted County, however, none have been field verified by a qualified archaeologist (Constance and Kolb 2011).

Based on the Olmsted County text, previously identified precontact sites are relatively small and many consist of single artifacts. Artifact counts appear generally low, with no site containing more than 200 artifacts and most having less than 20. This suggests that precontact sites within Olmsted County may be associated with resource procurement and temporary encampment as opposed to long-term habitation. As the Southeast Riverine Archaeological Region contains outcrops of high quality flaking materials, it is not surprising that most raw materials identified at sites in Olmsted County are local. In counties adjacent to Olmsted, large village sites have been identified and recorded suggesting that precontact peoples may have entered the Olmsted County area to retrieve raw materials and resources, but did not necessarily stay to set up long-term habitation areas (Constance and Kolb 2011).

Based on the available data, Paleoindian, Archaic, and/or Woodland traditions sites may be encountered within the Study Areas. Sites types may include lithic scatters and artifact scatters that may be associated with raw material procurement and short-term habitation. Sites in Olmsted County appear to be concentrated along drainages, and as both the Preferred Route and the Alternate Route transect multiple drainages, streams, and rivers, there is a high probability of encountering precontact archeological sites in these areas. In addition, the alluvial settings of these stream and river crossings may be conducive to burying and preserving archaeological deposits, indicating there is potential for encountering deeply buried archaeological sites. Finally, precontact sites may be identified along uplands in areas with steep topography and deeply incised rivers.

#### **Historic Site Potential**

The Phase Ia did not reveal any previously recorded historic period archaeological sites. The GLO map review revealed many natural features, but did not reveal any cultural resources. A review of early plat maps (1896 and 1914) identified trails, roads, rail lines, and multiple structures. Structures included individual residences and farmsteads as well as commercial properties, religious facilities, and educational facilities.

Historic archaeological properties tend not to follow the same patterns of distribution as other resources since environmental, engineering, and/or socio-cultural values that restrict other properties do not apply to these properties. In general, these types of properties tend to be located along water, railroad, or road transportation routes. Their documented presence along existing railroad or transportation routes may be coincidental, as this is where most historic resource surveys have been conducted. Historic archaeology properties mainly include abandoned farmsteads, abandoned homes, abandoned businesses, and facilities related to railroads. The time periods represented by these properties may run from the Contact period through the modern industrial development period of the 1940s, 1950s, and 1960s. Although no previously identified historic archaeological sites have been identified and the number of previously identified architectural properties is relatively low, there is a moderate to high potential to encounter historic resources.

# **Architectural Property Potential**

The Phase Ia identified 13 previously inventoried architectural structures. Structures include farmsteads and individual buildings associated with farmsteads and homesteads. None of the previously inventoried

architectural structures have been evaluated for NRHP eligibility and none intersect either the Preferred Route or Alternate Route.

Architectural properties, also known as historic standing buildings and built structures, can be found wherever conditions are suitable (as in the case of houses and homesteads on higher elevation sites and sites suitable for agriculture) or areas where structures were necessary (such as a bridge crossing a river or stream, or a road through a swamp). As such, the abundance of architectural properties can only be broadly described. In general, these types of properties tend to be located in areas that have a built environment already and/or are located adjacent to road, railroad, and water transportation routes. Architectural properties mainly include farmsteads, homes, businesses, civic works, religious works, and industry works. The time periods represented by these properties run from the early Euro-American settlement period through the modern industrial development period.

#### **Recommendations**

Resources of particular concern that may be encountered within the Study Areas include:

- Archaeological sites on river terraces, the interfluve between major drainage systems, and near springs and spring fed streams
- Archaeological sites correlated with lithic resource procurement
- Archaeological sites on uplands in areas with steep topography and deeply incised rivers
- Deeply buried archaeological deposits
- Historic sites and/or structures associated with the railroad
- Historic sites and/or structures associated with early settlement of the area
- Historic and/or structures associated with the City of Rochester

HDR recommends developing a Project Area of Potential Effects (APE) that encompasses any areas that will be impacted by Project development. Once an APE is defined, HDR recommends a Phase I archaeological survey and standing structures survey of the APE, along with evaluation of archaeological resources or standing structures receiving impacts, and possible mitigation, if applicable, of significant resources receiving impacts.

In addition, the Study Areas transect several streams and rivers including Cascade, Salem, and Willow creeks and the Zumbro River. The alluvial settings of these stream and river crossings may be conducive to burying and preserving archaeological deposits, indicating there is potential for encountering buried archaeological sites at these locations. Therefore, HDR also recommends a geomorphological assessment of the defined APE be conducted by a qualified geomorphologist to identify portions of the Project with potential for deeply buried archaeological deposits. The geomorphological assessment should be conducted prior to or concurrent with the Phase I archaeological survey.

All work should be conducted in accordance with the SHPO Manual for Archaeological Projects in Minnesota (Anfinson 2001) and the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (National Park Service 1983).

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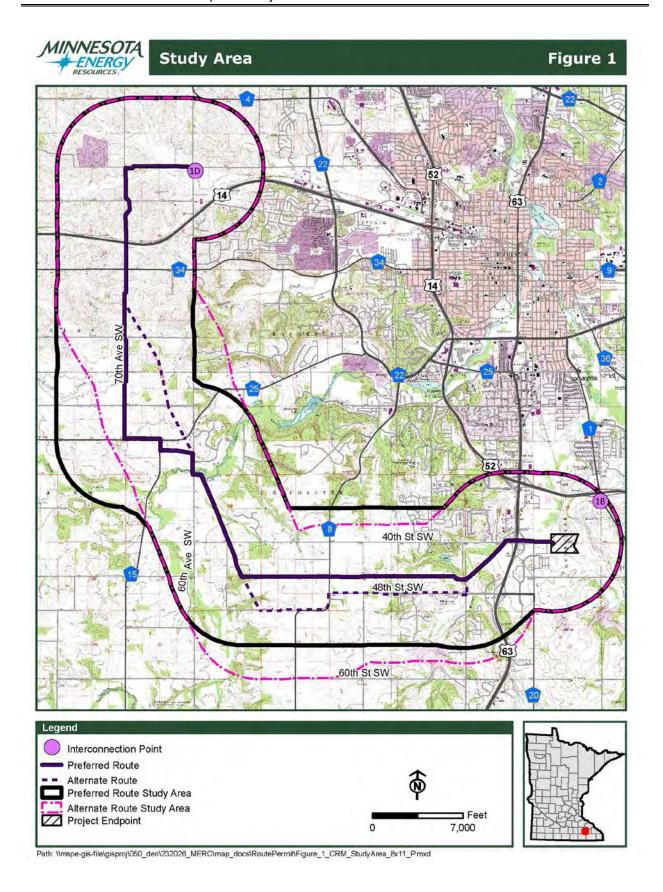
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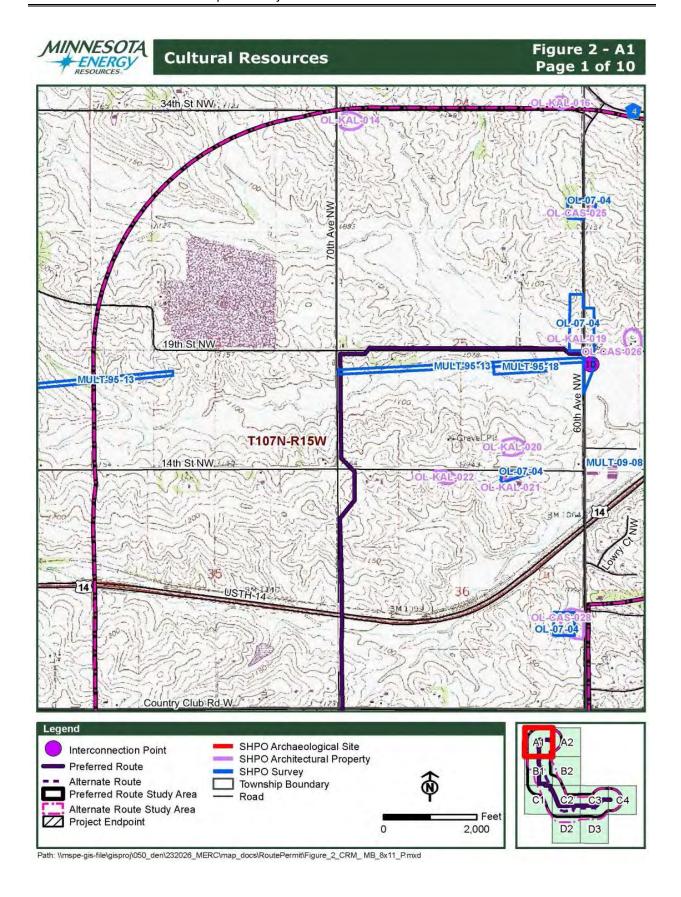
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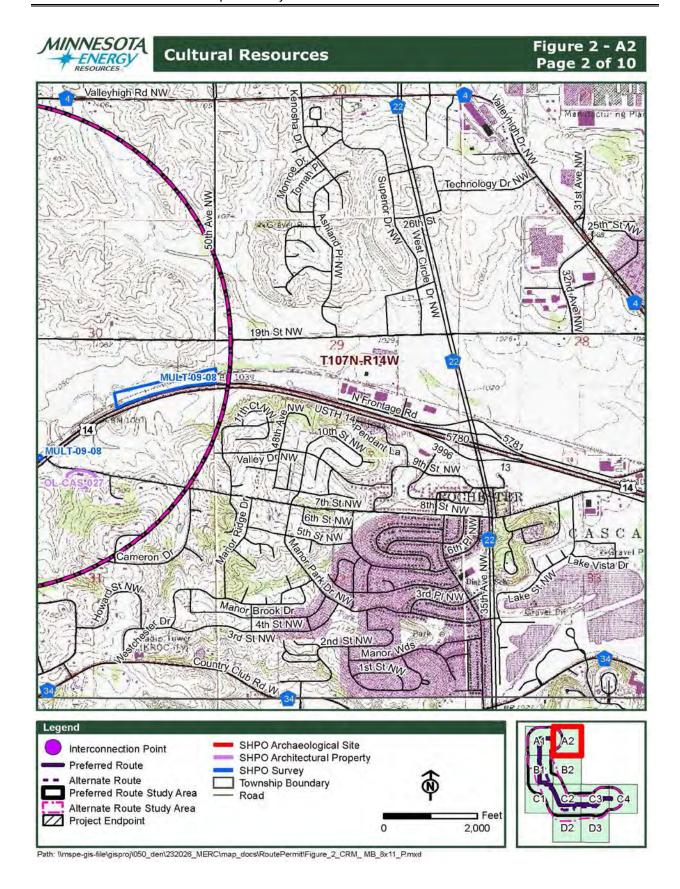
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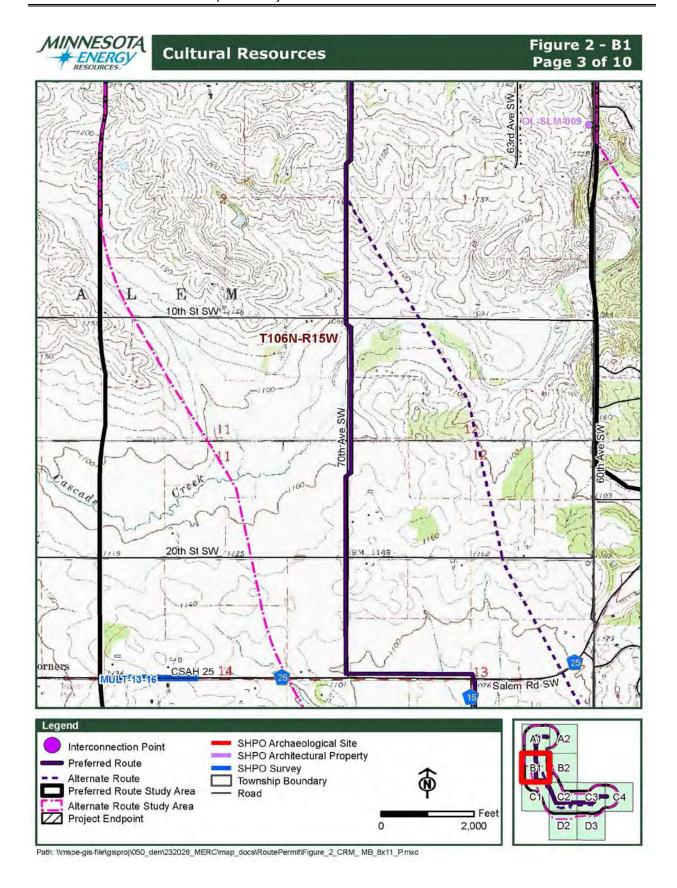
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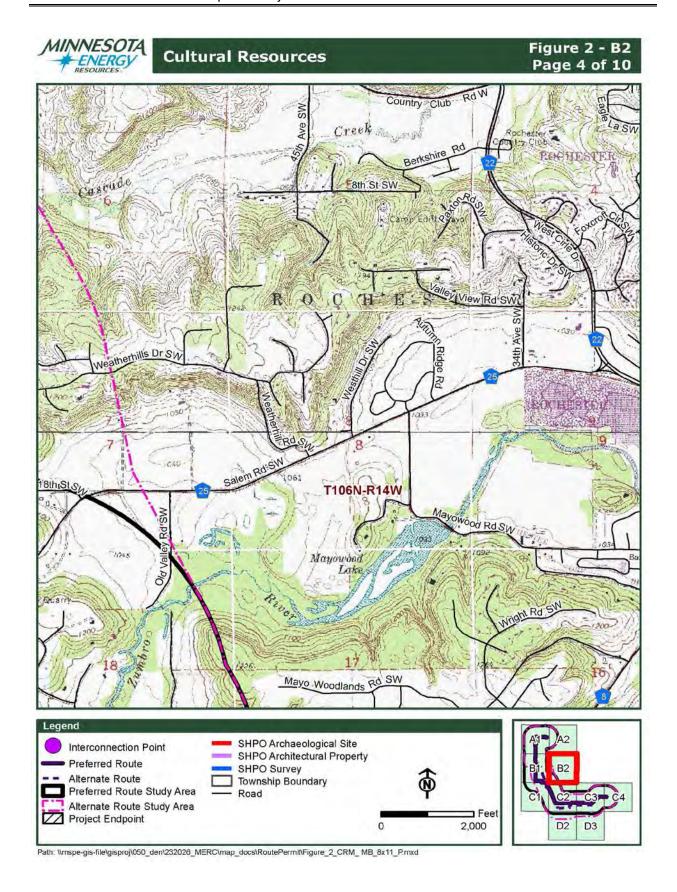
# Appendix A. Figures

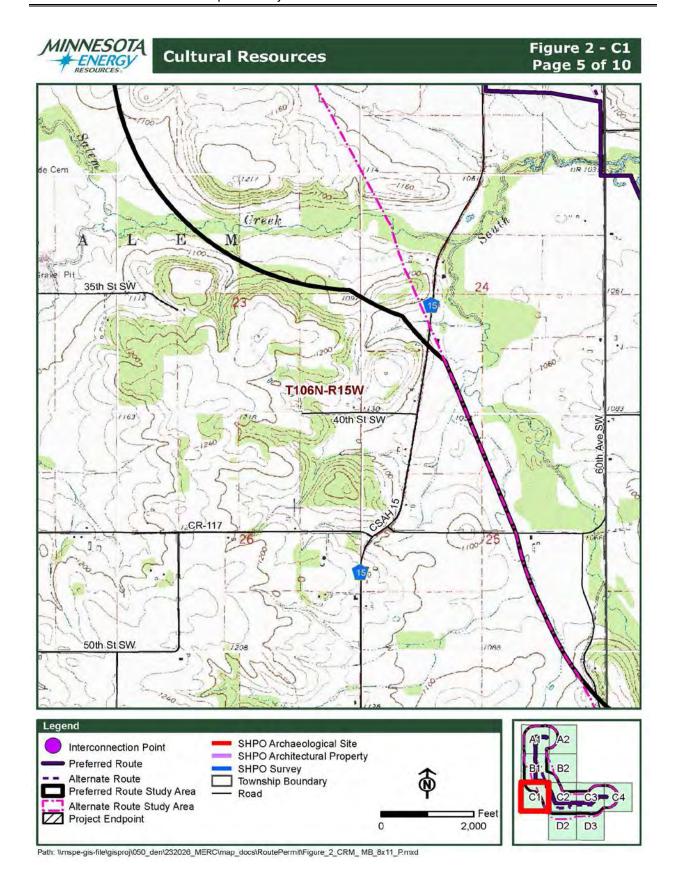


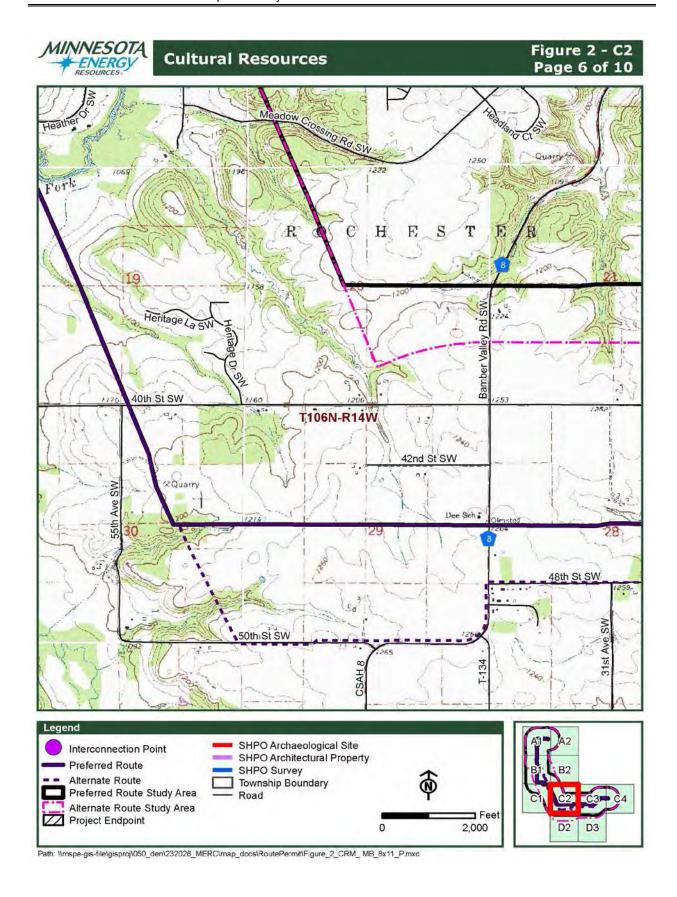


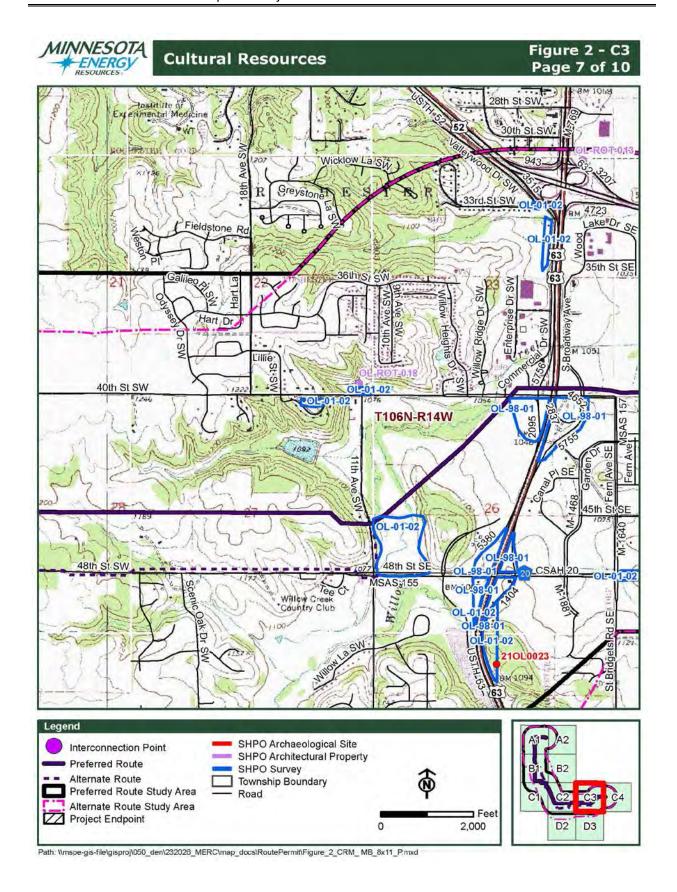


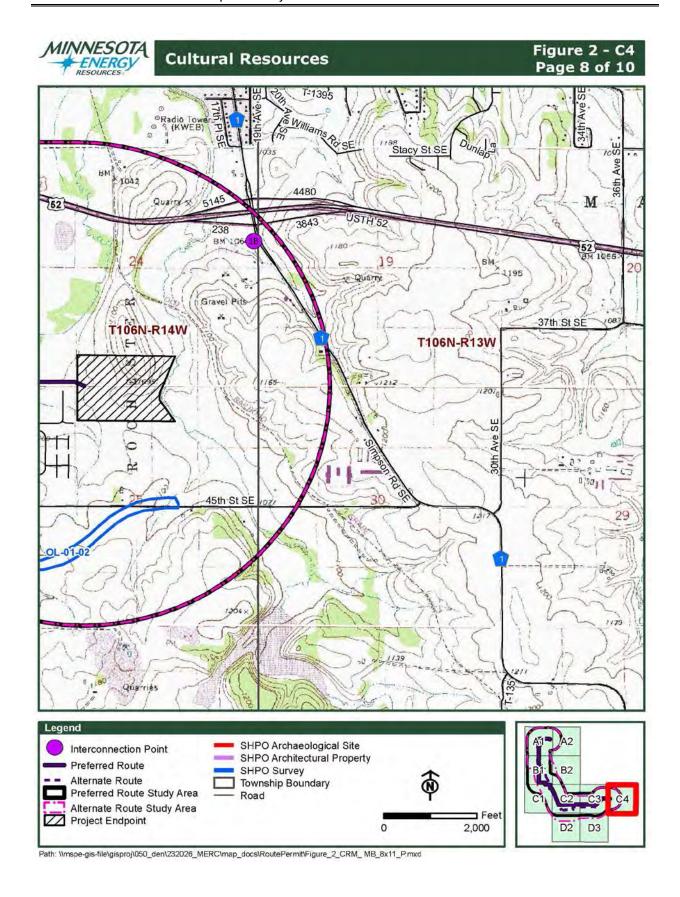


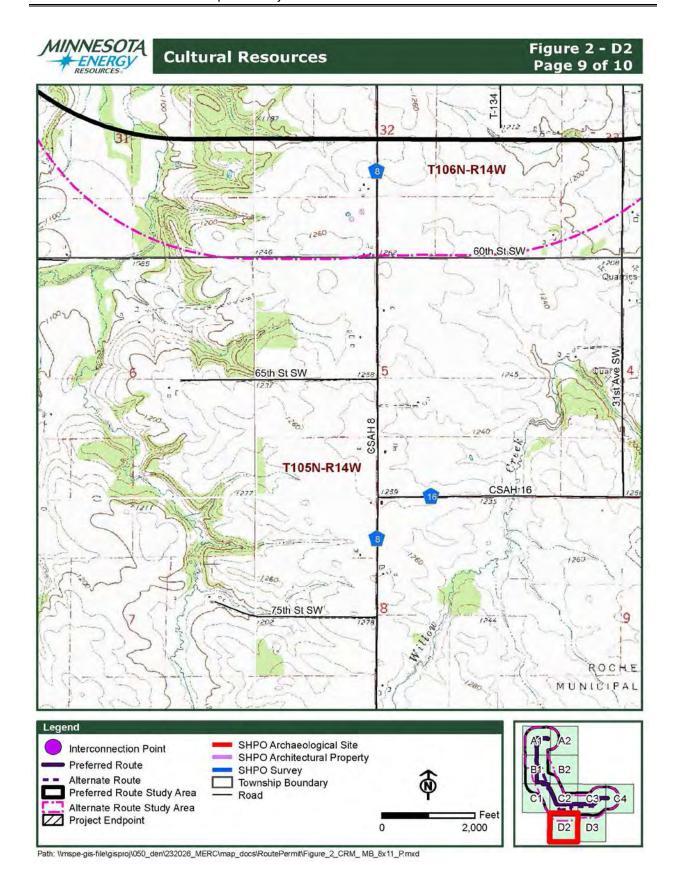


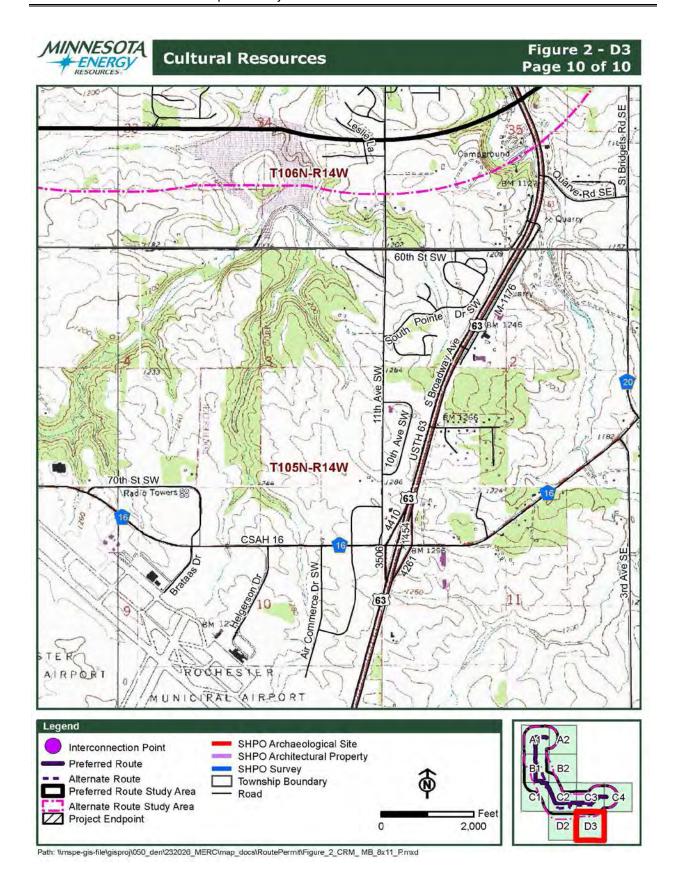












## Appendix B. Preferred Route Study Area - Plat Map Results

County	Township	Range	Section	QQQS	Survey Date	Feature/Location
Olmsted	107N	15W	24	NW1/4, NW1/4, SW1/4	1896 and 1914	Structure, Henry Postier Estate
Olmsted	107N	15W	24	SE¼, SE¼, SE¼	1896 and 1914	Structure, G.W. Waldron Property
Olmsted	107N	15W	25	SE¼, NW¼, NE¼	1896 and 1914	Structure, Joseph Grahm Sr. Property
Olmsted	107N	15W	25	NW1/4, NW1/4, SW1/4	1914	Structure
Olmsted	107N	15W	25	NE¼,NW¼, SW¼	1896	Homestead, Mrs. C.A. Woodward
Olmsted	107N	15W	25	SE14, SE14, NE14	1896 and 1914	Structure, John E. Finn Property
Olmsted	107N	15W	25	SE¼, SW¼, SE¼	1896 and 1914	Structure, G.A. Postier Property
Olmsted	107N	15W	25	SE¼, SE¼, SE¼	1896 and 1914	Schoolhouse No. 58
Olmsted	107N	15W	26	NW1/4, SE1/4, NW1/4	1896	Structure, Isaac Johnson Property
Olmsted	107N	15W	26	NE¼, SE¼, NE¼	1896	Structure, Joseph Graham Sr. Property
Olmsted	107N	15W	26	SE¼, SE¼, SE¼	1896	Structure, Robert Pett Property
Olmsted	107N	15W	35	NW1/4, NW1/4, NW1/4	1896 and 1914	Structure, Richard Dean Property
Olmsted	107N	15W	35	NE¼, NE¼, NW¼	1896 and 1914	Structure, H. Waldron Estate
Olmsted	107N	15W	35	NE¼, NW¼, NE¼	1896 and 1914	Structure, Robert Pett Property
Olmsted	107N	15W	35	SW1/4, SW1/4, SW1/4,	1896 and 1914	Structure, Phoebe Parish
Olmsted	107N	15W	35	SE¼, SW¼, SW¼	1896 and 1914	Structure, Pal Conway Property
Olmsted	107N	15W	35	SE¼, SE¼, SE¼	1896 and 1914	Structure Robert Hall Property
Olmsted	107N	15W	36	NW1/4, NW1/4, NW1/4	1896 and 1914	Structure, Robert Pett Property
Olmsted	107N	15W	36	NE¼, NE¼, NW¼	1896 and 1914	Homestead, Mary E. Waldron
Olmsted	107N	15W	36	NE¼, NW¼, NE¼	1896 and 1914	Structure, Jas Bender Property
Olmsted	107N	15W	36	NE¼, SE¼, NE¼	1896	Olmsted Railroad Station
Olmsted	107N	15W	36	NE¼, NE¼, SE¼	1986,1914	Structure, John McGovern Property
Olmsted	107N	15W	36	SE1/4, SW, SW1/4	1896 and 1914	Structure, N.C. Christiansen Property
Olmsted	107N	15W	36	SE¼, SE¼, SW¼	1896 and 1914	Structure, Daniel Fallen
Olmsted	107N	15W	35-36	See Feature/Location	1896 and 1914	*Chicago & Northwestern Railroad, Extends east—

County	Township	Range	Section	QQQS	Survey Date	Feature/Location
				Description		west through the middle of Sections 35. The railroad continues west—northeast through Section 36
Olmsted	107N	14W	29-31	See Feature/Location Description	1896 and 1914	Chicago & Northwestern Railroad, Extends northeast—southwest through the NW¼ of Section 31 and continues through the SW¼ and SE¼ of Section 30 before running east through Section 29
Olmsted	107N	14W	30	SE14, NE14, NE14	1896 and 1914	Homestead, L.W. Wright
Olmsted	107N	14W	30	SW¼, SW¼, NW¼	1896 and 1914	Cheese Factory
Olmsted	107N	14W	30	SE1/4, SW1/4, NW1/4	1896 and 1914	Structure, A. Anderson Property
Olmsted	107N	14W	30	SW¼, SW¼, NE¼	1896 and 1914	Structure, John Wardlow Property
Olmsted	107N	14W	31	NE¼, NE¼, NW¼	1896 and 1914	Homestead, William Becker
Olmsted	107N	14W	31	SW1/4, NE1/4, NE1/4	1896	Homestead, Mary Ewaldron
Olmsted	106N	15W	1	NE¼, NW¼, NW¼	1896 and 1914	Structure, Bernard Heaton Property
Olmsted	106N	15W	1	NE¼, NE¼, NW¼	1896 and 1914	Structure, Michael Dilworth Property
Olmsted	106N	15W	1	SE¼, SE¼, NE¼	1896 and 1914	Structure, D. Keeler Property
Olmsted	106N	15W	1	SW1/4, SW1/4, NE1/4	1896 and 1914	Structure, Joseph Heaton Property
Olmsted	106N	15W	1	SE14, SE14, SW14	1896 and 1914	Homestead, Thomas McGovern
Olmsted	106N	15W	2	NE¼, NW¼, NW¼	1896	Structure John Conway Property
Olmsted	106N	15W	2	NE¼, NE¼, NW¼	1896 and 1914	Structure, David Fallen Property
Olmsted	106N	15W	2	SW1/4, NE1/4, NE1/4	1896 and 1914	Structure, W&A Hennessy Property
Olmsted	106N	15W	2	SW1/4, SE1/4, NE1/4	1896 and 1914	Structure, J.P. Adamson Property
Olmsted	106N	15W	2	SE14, SE14, SW14	1896 and 1914	Structure, James Mahoney Property
Olmsted	106N	15W	2	SE1/4, SE1/4, SE1/4	1896 and 1914	*Structure, James Montague Property
Olmsted	106N	15W	11	SW¼, NW¼, NW¼	1896 and 1914	Structure, Thomas Donovan Property
Olmsted	106N	15W	11	NE¼, NW¼, NE¼	1896 and	Structure, C. Connelly

County	Township	Range	Section	QQQS	Survey Date	Feature/Location
					1914	Property
Olmsted	106N	15W	11	NE¼, SW¼, SW¼	1896 and 1914	Structure, Anton Johnson Property
Olmsted	106N	15W	11	SW1/4, SE1/4, SW1/4	1896 and 1914	Structure, James Bryan Property
Olmsted	106N	15W	12	NW1/4, NW1/4, NW1/4	1896 and 1914	Schoolhouse No. 26
Olmsted	106N	15W	12	NE¼, SE¼, NW¼	1896 and 1914	Structure, James McGovern Property
Olmsted	106N	15W	12	SE¼, NE¼, NE¼	1896 and 1914	Structure, W.P. Brooks Property
Olmsted	106N	15W	12	NW1/4, SE1/4, NE1/4	1896 and 1914	Hans P. Christianson
Olmsted	106N	15W	12	NW1/4, SW1/4, SW1/4	1896 and 1914	Structure, Thomas Donovan Property
Olmsted	106N	15W	12	SE¼, SW¼, SE¼	1896 and 1914	Structure, John Lulzi Property
Olmsted	106N	15W	13	NE¼, SE¼, NW¼	1896, 1914	Structure, Mary Knusel Property
Olmsted	106N	15W	13	NW1/4, NE1/4, SE1/4	1896 and 1914	Structure, Otto Zander Property
Olmsted	106N	15W	13	SW¼, SE¼, SE¼	1896 and 1914	Homestead, Fred Erike
Olmsted	106N	15W	14	NW1/4, SW1/4, NW1/4	1914	Structure
Olmsted	106N	15W	14	SW1/4, SE1/4, NW1/4	1914	Structure
Olmsted	106N	15W	14	SW1/4, SE1/4, NE1/4	1896 and 1914	Structure, Anton Lulzi Property
Olmsted	106N	15W	14	NW1/4, NE1/4, SW1/4	1896	Homestead, Jens Hensen Property
Olmsted	106N	15W	14	NW1/4, NW1/4, SE1/4	1896 and 1914	Structure, Sarah Smith Property
Olmsted	106N	15W	14	SE¼, NW¼, SW¼	1896 and 1914	Homestead, H.C. Nelson- 1896; R.M. Fuller-1914
Olmsted	106N	15W	14	NE¼, NE¼, SE¼	1896 and 1914	Structure, Mary Knusel Property
Olmsted	106N	15W	24	NW1/4, SE1/4, NW1/4	1896 and 1914	Structure, Z. Holt Estate
Olmsted	106N	15W	24	SE¼, SW¼, NE¼	1896 and 1914	Structure, James Lyons Property
Olmsted	106N	15W	24	SE¼, NE¼, SE¼	1896 and 1914	Structure, John Donovan Property
Olmsted	106N	15W	24	SE1/4, SE1/4, SW1/4	1914	Structure
Olmsted	106N	14W	7	NW1/4, SE1/4, SW1/4	1896 and 1914	Structure, Michael Bannon Property
Olmsted	106N	14W	7	SE1/4, SE1/4, SW1/4	1914	Structure
Olmsted	106N	14W	18	SE¼, SE¼, NW¼	1896 and 1914	Structure, O. McCumber Property

County	Township	Range	Section	QQQS	Survey Date	Feature/Location
Olmsted	106N	14W	18	SW1/4, SE1/4, NE1/4	1896 and 1914	Structure, J.W.Langton Property
Olmsted	106N	14W	18	SW1/4, SW1/4, SE1/4	1896 and 1914	Structure
Olmsted	106N	14W	19	NW1/4, SW1/4, NW1/4	1896 and 1914	Structure, Hannah O'Maley Property
Olmsted	106N	14W	20	NW1/4, NW1/4, SW1/4	1896 and 1914	Structure, Michael Marren Property
Olmsted	106N	14W	20	SE¼, SE¼, SW¼	1896 and 1914	Structure, Michael Marren Property
Olmsted	106N	14W	20	SE¼, SW¼, SE¼	1914	Structure, John Coleman Property
Olmsted	106N	14W	21	NE¼, SE¼, SW¼	1896 and 1914	Structure, Bridget Dolan Property
Olmsted	106N	14W	22	SE¼, NW¼, SW¼	1896 and 1914	Structure, Thos Kelly Property
Olmsted	106N	14W	22	SW1/4, SW1/4, SW1/4	1914	Structure
Olmsted	106N	14W	22	SE¼, SE¼, SE¼	1896 and 1914	Structure, Augusta Kemp Property
Olmsted	106N	14W	23	NE¼, SE¼, SW¼ SE¼, SE¼, SW¼	1896 and 1914	Willow Quarry
Olmsted	106N	14W	23	SW1/4, NE1/4, SE1/4	1896 and 1914	Homestead, A. Lovejoy
Olmsted	106N	14W	24	SE¼, NW¼, SW¼	1896 and 1914	Structure, Thos Feeney Property
Olmsted	106N	14W	24	NE¼, NE¼, SE¼	1896 and 1914	Structure, Martha Finch Property
Olmsted	106N	14W	25	SE¼, SE¼, NW¼	1896 and 1914	Structure, T. Mackey Property
Olmsted	106N	14W	25	NE¼, NW¼, SE¼	1896 and 1914	*Structure, Emil Theal Property
Olmsted	106N	14W	25	SW¼, NW¼, SW¼	1896 and 1914	*Structure, Susan C. Schmid Property
Olmsted	106N	14W	25	SW1/4, SW1/4, SW1/4	1896 and 1914	Schoolhouse
Olmsted	106N	14W	26	NW1/4, NE1/4, NW1/4	1896 and 1914	Homestead, B.E. Pickeit
Olmsted	106N	14W	26	NE¼, NE¼, SW¼	1896 and 1914	Structure, Patrick Convey
Olmsted	106N	14W	26	NW1/4, SW1/4, SW1/4	1896 and 1914	Structure, Thomas Ryan
Olmsted	106N	14W	27	NE¼, NE¼, SE¼	1896 and 1914	Structure, P.M. Tolbart Estate
Olmsted	106N	14W	27	NE¼, SW¼, SW¼	1896 and 1914	Homestead, Irwin W. Tolbert
Olmsted	106N	14W	27	NW1/4, SW1/4, SE1/4	1896 and 1914	Structure, Irwin W. Tolbert Property
Olmsted	106N	14W	28	SE1/4, SE1/4, NW1/4	1896 and	Homestead, Martin Purcell

County	Township	Range	Section	QQQS	Survey Date	Feature/Location
					1914	
Olmsted	106N	14W	28	NE¼, NE¼, SW¼	1896 and 1914	Structure, Jon Dee Property
Olmsted	106N	14W	28	NW1/4, SE1/4, SW1/4	1896 and 1914	Homestead, Catharine Egan
Olmsted	106N	14W	28	NW¼, SW¼, SE¼	1896 and 1914	Structure, Michael Dee Property
Olmsted	106N	14W	29	NE¼, NW¼, NW¼	1896 and 1914	Structure, P. Hannaghan Property
Olmsted	106N	14W	29	NW¼, NE¼, NE¼	1896 and 1914	Structure, Barney Clark Property
Olmsted	106N	14W	29	SE14, SE14, NE14	1896 and 1914	Schoolhouse
Olmsted	106N	14W	29	SE1/4, NW1/4, SE1/4	1896 and 1914	Structure, Thos Coleman Property
Olmsted	106N	14W	29	SE¼, SW¼, SW¼	1896 and 1914	Structure, John C. Fogarty Property
Olmsted	106N	14W	29	SE14, SE14, SW1/4	1896 and 1914	Structure, Jas Coleman Property
Olmsted	106N	14W	30	SW¼, NW¼, NW¼	1896 and 1914	Schoolhouse
Olmsted	106N	14W	30	NE¼, NW¼, NW¼	1896, 1914	Structure, Svend Hatton Property
Olmsted	106N	14W	30	NE¼, NW¼, NE¼	1896 and 1914	Structure, Jas Lynaugh Property
Olmsted	106N	14W	30	SW¼, SW¼, NW¼	1896 and 1914	Structure, Emma Peck Property
Olmsted	106N	14W	30	NW1/4, NE1/4, SW1/4	1896 and 1914	Structure, William Rose Property
Olmsted	106N	14W	30	NE¼, SW¼, SW¼	1896 and 1914	Structure, E. Fitzpatrick Property
Olmsted	106N	14W	30	SE1/4, SW1/4, SE1/4	1896 and 1914	Structure, Geo H. Haven Property
Olmsted	106N	14W	31	NW¼, NW¼, NE¼	1896 and 1914	Structure, John Riley Property
Olmsted	106N	14W	31	NE¼, NE¼, NE¼	1896 and 1914	Structure, John T. Sheldon Property
Olmsted	106N	14W	32	NW1/4, SE1/4, NE1/4	1896 and 1914	Structure, Patrick Norton Property
Olmsted	106N	14W	32	SE¼, SE¼, NE¼	1896 and 1914	Structure, Jas Tierney Property
Olmsted	106N	14W	33	SE¼, SW¼, NW¼	1896 and 1914	Structure, T. Coleman Property
Olmsted	106N	14W	34	NW1/4, NE1/4, NE1/4	1896 and 1914	Structure, James Carr Property
Olmsted	106N	14W	34	SE¼, SE¼, NW¼	1896 and 1914	Structure, J. Mahoney Property
Olmsted	106N	14W	35	SW1/4, SE1/4, NW1/4	1896 and	Structure, Margrat Ryan

County	Township	Range	Section	QQQS	Survey Date	Feature/Location
					1914	Property
Olmsted	106N	14W	24-25	See Feature/Location Description	1914	An unnamed railroad, Extends northwest— southeast through the SE¼ of Section 24 and continues though the northeast corner of Section 25
Olmsted	106N	13W	30-32	See Feature/Location Description	1914	*An unnamed railroad, Extends northwest— southeast through the middle of Section 30 and continues through the northeast corner of Section 31 and the northwest corner of Section 32
Olmsted	106N	13W	19	SE14, NW14, SW1/4	1896 and 1914	Homestead, J.A. Kennedy Property
Olmsted	106N	13W	19	SE14, NW14, SW1/4	1896	Spring east of J.A. Kennedy Homestead

## Appendix C. Alternate Route Study Area - Plat Map Results

County	Township	Range	Section	QQQS	Survey Date	Feature/Location
Olmsted	107N	15W	24	NW1/4, NW1/4, SW1/4	1896 and 1914	Structure, Henry Postier Estate
Olmsted	107N	15W	24	SE¼, SE¼, SE¼	1896 and 1914	Structure, G.W. Waldron Property
Olmsted	107N	15W	25	SE¼, NW¼, NE¼	1896 and 1914	Structure, Joseph Grahm Sr. Property
Olmsted	107N	15W	25	NW1/4, NW1/4, SW1/4	1914	Structure
Olmsted	107N	15W	25	NE¼, NW¼, SW¼	1896	Homestead, Mrs. C.A. Woodward
Olmsted	107N	15W	25	SE¼, SE¼, NE¼	1896 and 1914	Structure, John E. Finn Property
Olmsted	107N	15W	25	SE¼, SW¼, SE¼	1896 and 1914	Structure, G.A. Postier Property
Olmsted	107N	15W	25	SE¼, SE¼, SE¼	1896 and 1914	Schoolhouse No. 58
Olmsted	107N	15W	26	NW1/4, SE1/4, NW1/4	1896	Structure, Isaac Johnson Property
Olmsted	107N	15W	26	NE¼, SE¼, NE¼	1896	Structure, Joseph Graham Sr. Property
Olmsted	107N	15W	26	SE¼, SE¼, SE¼	1896	Structure, Robert Pett Property
Olmsted	107N	15W	35	NW1/4, NW1/4, NW1/4	1896 and 1914	Structure, Richard Dean Property
Olmsted	107N	15W	35	NE¼, NE¼, NW¼	1896 and 1914	Structure, H. Waldron Estate
Olmsted	107N	15W	35	NE¼, NW¼, NE¼	1896 and 1914	Structure, Robert Pett Property
Olmsted	107N	15W	35	SW1/4, SW1/4, SW1/4	1896 and 1914	Structure, Phoebe Parish
Olmsted	107N	15W	35	SE¼, SW¼, SW¼	1896 and 1914	Structure, Pal Conway Property
Olmsted	107N	15W	35	SE¼, SE¼, SE¼	1896 and 1914	Structure Robert Hall Property
Olmsted	107N	15W	36	NW1/4, NW1/4, NW1/4	1896 and 1914	Structure, Robert Pett Property
Olmsted	107N	15W	36	NE¼, NE¼, NW¼	1896 and 1914	Homestead, Mary E. Waldron
Olmsted	107N	15W	36	NE¼, NW¼, NE¼	1896 and 1914	Structure, Jas Bender Property
Olmsted	107N	15W	36	NE1/4, SE1/4, NE1/4	1896	Olmsted Railroad Station
Olmsted	107N	15W	36	NE¼, NE¼, SE¼	1986,1914	Structure, John McGovern Property
Olmsted	107N	15W	36	SE¼, SW, SW¼	1896 and 1914	Structure, N.C. Christiansen Property
Olmsted	107N	15W	36	SE¼, SE¼, SW¼	1896 and 1914	Structure, Daniel Fallen
Olmsted	107N	15W	35-36	See Feature/Location	1896 and 1914	*Chicago & Northwestern Railroad, Extends east—

County	Township	Range	Section	QQQS	Survey Date	Feature/Location
				Description		west through the middle of Sections 35. The railroad continues west—northeast through Section 36
Olmsted	107N	14W	29-31	See Feature/Location Description	1896 and 1914	Chicago & Northwestern Railroad, Extends northeast—southwest through the NW¼ of Section 31 and continues through the SW¼ and SE¼ of Section 30 before running east through Section 29
Olmsted	107N	14W	30	SE¼, NE¼, NE¼	1896 and 1914	Homestead, L.W. Wright
Olmsted	107N	14W	30	SW1/4, SW1/4, NW1/4	1896 and 1914	Cheese Factory
Olmsted	107N	14W	30	SE¼, SW¼, NW¼	1896 and 1914	Structure, A. Anderson Property
Olmsted	107N	14W	30	SW1/4, SW1/4, NE1/4	1896 and 1914	Structure, John Wardlow Property
Olmsted	107N	14W	31	NE¼, NE¼, NW¼	1896 and 1914	Homestead, William Becker
Olmsted	107N	14W	31	SW1/4, NE1/4, NE1/4	1896	Homestead, Mary Ewaldron
Olmsted	106N	15W	1	NE¼, NW¼, NW¼	1896 and 1914	Structure, Bernard Heaton Property
Olmsted	106N	15W	1	NE¼, NE¼, NW¼	1896 and 1914	Structure, Michael Dilworth Property
Olmsted	106N	15W	1	SE¼, SE¼, NE¼	1896 and 1914	Structure, D. Keeler Property
Olmsted	106N	15W	1	SW1/4, SW1/4, NE1/4	1896 and 1914	Structure, Joseph Heaton Property
Olmsted	106N	15W	1	SE1/4, SE1/4, SW1/4	1896 and 1914	Homestead, Thomas McGovern
Olmsted	106N	15W	2	NE¼, NW¼, NW¼	1896	Structure John Conway Property
Olmsted	106N	15W	2	NE¼, NE¼, NW¼	1896 and 1914	Structure, David Fallen Property
Olmsted	106N	15W	2	SW1/4, NE1/4, NE1/4	1896 and 1914	Structure, W&A Hennessy Property
Olmsted	106N	15W	2	SW1/4, SE1/4, NE1/4	1896 and 1914	Structure, J.P. Adamson Property
Olmsted	106N	15W	2	SE1/4, SE1/4, SW1/4	1896 and 1914	Structure, James Mahoney Property
Olmsted	106N	15W	2	SE1/4, SE1/4, SE1/4	1896 and 1914	Structure, James Montague Property
Olmsted	106N	15W	11	NE¼, NW¼, NE¼	1896 and 1914	Structure, C. Connelly Property
Olmsted	106N	15W	12	NW¼, NW¼, NW¼	1896 and	Schoolhouse No. 26

County	Township	Range	Section	QQQS	Survey Date	Feature/Location
					1914	
Olmsted	106N	15W	12	NE¼, SE¼, NW¼	1896 and 1914	*Structure, James McGovern Property
Olmsted	106N	15W	12	SE¼, NE¼, NE¼	1896 and 1914	Structure, W.P. Brooks Property
Olmsted	106N	15W	12	NW14, SE14, NE14	1896 and 1914	Hans P. Christianson
Olmsted	106N	15W	12	NW1/4, SW1/4, SW1/4	1896 and 1914	Structure, Thomas Donovan Property
Olmsted	106N	15W	12	SE¼, SW¼, SE¼	1896 and 1914	Structure, John Lulzi Property
Olmsted	106N	15W	13	NE¼, SE¼, NW¼	1896, 1914	Structure, Mary Knusel Property
Olmsted	106N	15W	13	NW14, NE14, SE14	1896 and 1914	Structure, Otto Zander Property
Olmsted	106N	15W	13	SW1/4, SE1/4, SE1/4	1896 and 1914	Homestead, Fred Erike
Olmsted	106N	15W	14	SW1/4, SE1/4, NE1/4	1896 and 1914	Structure, Anton Lulzi Property
Olmsted	106N	15W	14	NE¼, NE¼, SE¼	1896 and 1914	Structure, Mary Knusel Property
Olmsted	106N	15W	24	NW1/4, SE1/4, NW1/4	1896 and 1914	Structure, Z. Holt Estate
Olmsted	106N	15W	24	SE¼, SW¼, NE¼	1896 and 1914	Structure, James Lyons Property
Olmsted	106N	15W	24	SE¼, NE¼, SE¼	1896 and 1914	Structure, John Donovan Property
Olmsted	106N	15W	24	SE1/4, SE1/4, SW1/4	1914	Structure
Olmsted	106N	14W	7	NW1/4, SE1/4, SW1/4	1896 and 1914	Structure, Michael Bannon Property
Olmsted	106N	14W	7	SE¼, NE¼, SW¼	1896 and 1914	Schoolhouse
Olmsted	106N	14W	7	SE1/4, SE1/4, SW1/4	1914	Structure
Olmsted	106N	14W	18	SE¼, SE¼, NW¼	1896 and 1914	Structure, O. McCumber Property
Olmsted	106N	14W	18	SW1/4, SE1/4, NE1/4	1896 and 1914	Structure, J.W.Langton Property
Olmsted	106N	14W	18	SW1/4, SW1/4, SE1/4	1896 and 1914	Structure
Olmsted	106N	14W	19	NW¼, SW¼, NW¼	1896 and 1914	Structure, Hannah O'Maley Property
Olmsted	106N	14W	20	NW14, NW14, SW1/4	1896 and 1914	Structure, Michael Marren Property
Olmsted	106N	14W	20	SE¼, SE¼, SW¼	1896 and 1914	Structure, Michael Marren Property
Olmsted	106N	14W	20	SE¼, SW¼, SE¼	1914	Structure, John Coleman Property
Olmsted	106N	14W	21	NE¼, SE¼, SW¼	1896 and	Structure, Bridget Dolan

County	Township	Range	Section	QQQS	Survey Date	Feature/Location
					1914	Property
Olmsted	106N	14W	22	SW1/4, SW1/4, SW1/4	1914	Structure
Olmsted	106N	14W	22	SE¼, SE¼, SE¼	1896 and 1914	Structure, Augusta Kemp Property
Olmsted	106N	14W	23	NE¼, SE¼, SW¼ SE¼, SE¼, SW¼	1896 and 1914	Willow Quarry
Olmsted	106N	14W	23	SW1/4, NE1/4, SE1/4	1896 and 1914	Homestead, A. Lovejoy
Olmsted	106N	14W	24	SE¼, NW¼, SW¼	1896 and 1914	Structure, Thos Feeney Property
Olmsted	106N	14W	24	NE¼, NE¼, SE¼	1896 and 1914	Structure, Martha Finch Property
Olmsted	106N	14W	25	SE¼, SE¼, NW¼	1896 and 1914	Structure, T. Mackey Property
Olmsted	106N	14W	25	NE¼, NW¼, SE¼	1896 and 1914	*Structure, Emil Theal Property
Olmsted	106N	14W	25	SW1/4, NW1/4, SW1/4	1896 and 1914	*Structure, Susan C. Schmid Property
Olmsted	106N	14W	25	SW1/4, SW1/4, SW1/4	1896 and 1914	Schoolhouse
Olmsted	106N	14W	26	NW1/4, NE1/4, NW1/4	1896 and 1914	Homestead, B.E. Pickeit
Olmsted	106N	14W	26	NE¼, NE¼, SW¼	1896 and 1914	Structure, Patrick Convey
Olmsted	106N	14W	26	NW1/4, SW1/4, SW1/4	1896 and 1914	Structure, Thomas Ryan
Olmsted	106N	14W	27	NE¼, NE¼, SE¼	1896 and 1914	Structure, P.M. Tolbart Estate
Olmsted	106N	14W	27	NE¼, SW¼, SW¼	1896 and 1914	Homestead, Irwin W. Tolbert
Olmsted	106N	14W	27	NW1/4, SW1/4, SE1/4	1896 and 1914	Structure, Irwin W. Tolbert Property
Olmsted	106N	14W	28	SE¼, SE¼, NW¼	1896 and 1914	Homestead, Martin Purcell
Olmsted	106N	14W	28	NE¼, NE¼, SW¼	1896 and 1914	Structure, Jon Dee Property
Olmsted	106N	14W	28	NW1/4, SE1/4, SW1/4	1896 and 1914	Homestead, Catharine Egan
Olmsted	106N	14W	28	NW1/4, SW1/4, SE1/4	1896 and 1914	Structure, Michael Dee Property
Olmsted	106N	14W	29	NE¼, NW¼, NW¼	1896 and 1914	Structure, P. Hannaghan Property
Olmsted	106N	14W	29	NW1/4, NE1/4, NE1/4	1896 and 1914	Structure, Barney Clark Property
Olmsted	106N	14W	29	SE¼, SE¼, NE¼	1896 and 1914	Schoolhouse
Olmsted	106N	14W	29	SE¼, NW¼, SE¼	1896 and 1914	Structure, Thos Coleman Property

106N 106N 106N 106N 106N	14W 14W 14W 14W 14W	29 29 30 30 30	SE¼, SW¼, SW¼  SE¼, SE¼, SW¼  SW¼, NW¼, NW¼  NE¼, NW¼, NW¼	1896 and 1914 1896 and 1914 1896 and 1914	Structure, John C. Fogarty Property Structure, Jas Coleman Property Schoolhouse
106N 106N 106N	14W 14W 14W	30	SW1/4, NW1/4, NW1/4	1914 1896 and 1914	Property
106N 106N	14W 14W	30		1914	Schoolhouse
106N	14W		NE¼, NW¼, NW¼	1000 1011	
		30		1896, 1914	Structure, Svend Hatton Property
106N	14W		NE¼, NW¼, NE¼	1896 and 1914	Structure, Jas Lynaugh Property
		30	SW¼, SW¼, NW¼	1896 and 1914	Structure, Emma Peck Property
106N	14W	30	NW14, NE14, SW14	1896 and 1914	Structure, William Rose Property
106N	14W	30	NE¼, SW¼, SW¼	1896 and 1914	Structure, E. Fitzpatrick Property
106N	14W	30	SE¼, SW¼, SE¼	1896 and 1914	Structure, Geo H. Haven Property
106N	14W	31	NW1/4, NW1/4, NE1/4	1896 and 1914	Structure, John Riley Property
106N	14W	31	NE¼, NE¼, NE¼	1896 and 1914	Structure, John T. Sheldon Property
106N	14W	32	NW1/4, SE1/4, NE1/4	1896 and 1914	Structure, Patrick Norton Property
106N	14W	32	SE¼, SE¼, NE¼	1896 and 1914	Structure, Jas Tierney Property
106N	14W	33	SE¼, SW¼, NW¼	1896 and 1914	Structure, T. Coleman Property
106N	14W	34	NW¼, NE¼, NE¼	1896 and 1914	Structure, James Carr Property
106N	14W	34	SE¼, SE¼, NW¼	1896 and 1914	Structure, J. Mahoney Property
106N	14W	35	SW1/4, SE1/4, NW1/4	1896 and 1914	Structure, Margrat Ryan Property
106N	14W	24-25	See Feature/Location Description	1914	An unnamed railroad, Extends northwest— southeast through the SE¼ of Section 24 and continues though the northeast corner of Section 25
106N	13W	30-32	See Feature/Location Description	1914	*An unnamed railroad, Extends northwest— southeast through the middle of Section 30 and continues through the northeast corner of Section 31 and the northwest corner of Section 32 Homestead, J.A. Kennedy
1 1 1 1 1 1 1 1	106N 106N 106N 106N 106N 106N 106N 106N	106N 14W	106N 14W 30 106N 14W 31 106N 14W 31 106N 14W 32 106N 14W 32 106N 14W 33 106N 14W 34 106N 14W 34 106N 14W 35 106N 14W 35	106N 14W 30 NE¼, SW¼, SW¼ 106N 14W 30 SE¼, SW¼, SE⅓ 106N 14W 31 NW¼, NW¼, NE⅓ 106N 14W 31 NE⅓, NE⅓, NE⅓ 106N 14W 32 NW¼, SE⅓, NE⅓ 106N 14W 32 SE⅓, SE⅓, NE⅓ 106N 14W 33 SE⅓, SW⅓, NW⅓ 106N 14W 34 NW⅓, NE⅓, NE⅓ 106N 14W 34 SE⅙, SE⅓, NE⅓ 106N 14W 35 SW⅓, SE⅓, NW⅓ 106N 14W 35 SW⅓, SE⅓, NW⅓ 106N 14W 35 SW⅙, SE⅙, NW⅓ 106N 14W 35 See Feature/Location Description	106N         14W         30         NW¼, NE½, SW¼         1914           106N         14W         30         NE¼, SW¼, SW¼         1896 and 1914           106N         14W         30         SE¼, SW¼, SE¼         1896 and 1914           106N         14W         31         NW¼, NW¼, NE½         1896 and 1914           106N         14W         31         NE¼, NE½, NE½         1896 and 1914           106N         14W         32         NW¼, SE¼, NE½         1896 and 1914           106N         14W         32         SE¼, SE¼, NE½         1896 and 1914           106N         14W         33         SE½, SW½, NW½         1896 and 1914           106N         14W         34         NW¼, NE½, NE½         1896 and 1914           106N         14W         34         SE½, SE½, NW½         1896 and 1914           106N         14W         35         SW¼, SE½, NW½         1896 and 1914           106N         14W         35         SW½, SE½, NW½         1914           106N         14W         35         SW½, SE½, NW½         1914           106N         14W         36         SE½, SE½, NW½         1914           106N         14W

County	Township	Range	Section	QQQS	Survey Date	Feature/Location
					1914	Property
Olmsted	106N	13W	19	SE14, NW14, SW14	1896	Spring east of J.A. Kennedy Homestead