PHASES I AND II ARCHITECTURAL HISTORY STUDIES FOR THE TRUNK HIGHWAY 23, BRIDGE 5468 PROJECT WRENSHALL TOWNSHIP, CARLTON COUNTY, MINNESOTA

S.P. No. 0901-62
MnDOT Agreement No. 1002144
Summit Project No. 1727-0047

Authorized and Sponsored by:
Minnesota Department of Transportation
Federal Highway Administration

Prepared by:
Summit Envirosolutions, Inc.
1217 Bandana Boulevard North
St. Paul, Minnesota 55108

PHASES I AND II ARCHITECTURAL HISTORY STUDIES FOR THE TRUNK HIGHWAY 23, BRIDGE 5468 PROJECT WRENSHALL TOWNSHIP, CARLTON COUNTY, MINNESOTA

S.P. No. 0901-62
MnDOT Agreement No. 1002144
Summit Project No. 1727-0047

Authorized and Sponsored by:
Minnesota Department of Transportation
Federal Highway Administration

Prepared by:
Summit Envirosolutions, Inc.
1217 Bandana Boulevard North
St. Paul, Minnesota 55108

Principal Investigator and Author: Andrew J. Schmidt

August 2016

MANAGEMENT SUMMARY

This bridge removal and roadway improvements project is located on Trunk Highway (TH) 23 at Bridge No. 5468, which carries a recreational trail (former Soo Line railroad) over TH 23. The bridge is located approximately 0.75 mile northeast of the intersection with Carlton County Road 1 in Wrenshall Township. The project includes: removal of Bridge No. 5468; grading associated with the bridge removal; grading and widening TH 23 approximately 500 feet either side of the bridge; and grading the trail to create an at-grade crossing over the highway.

The project will receive Federal Highway Administration (FHWA) funds, and therefore, will need to comply with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR 800). As part of its responsibilities to identify and evaluate historic properties that may be affected by this project, the Minnesota Department of Transportation (MnDOT) Cultural Resources Unit (CRU) contracted with Summit Envirosolutions, Inc. (Summit) to complete a Phase I architectural history survey of the project area, as well as a Phase II evaluation of TH 23.

The project area is located in the SE ¼ of Section 21, T47N, R16W. The area of potential effects (APE) for this segment of the project was defined by CRU as the area of construction for the bridge and roadway and the properties adjacent to the construction. In addition to a Phase I survey of the APE, the CRU asked Summit to evaluate the National Register of Historic Places (NRHP) eligibility of TH 23 to aid in their review of the project. The survey area comprises 20.174 acres (8.164 hectares).

Andrew Schmidt served as Principal Investigator for the Phases I and II studies. The field work was conducted on May 12, 2016. Standard architectural history documentation methods were utilized during field work, including architectural descriptions and digital photographs. Two properties were evaluated at the Phase II level. As a result of the Phase II evaluations, it is recommended that Bridge No. 5468 (CR-WRT-002) is not eligible for listing in the NRHP. It is further recommended that the TH 23 corridor in Pine, Carlton, and St. Louis Counties, also known as Evergreen Memorial Drive, is not eligible for listing in the NRHP (XX-ROD-007).

TABLE OF CONTENTS

LIST OF FIGURES

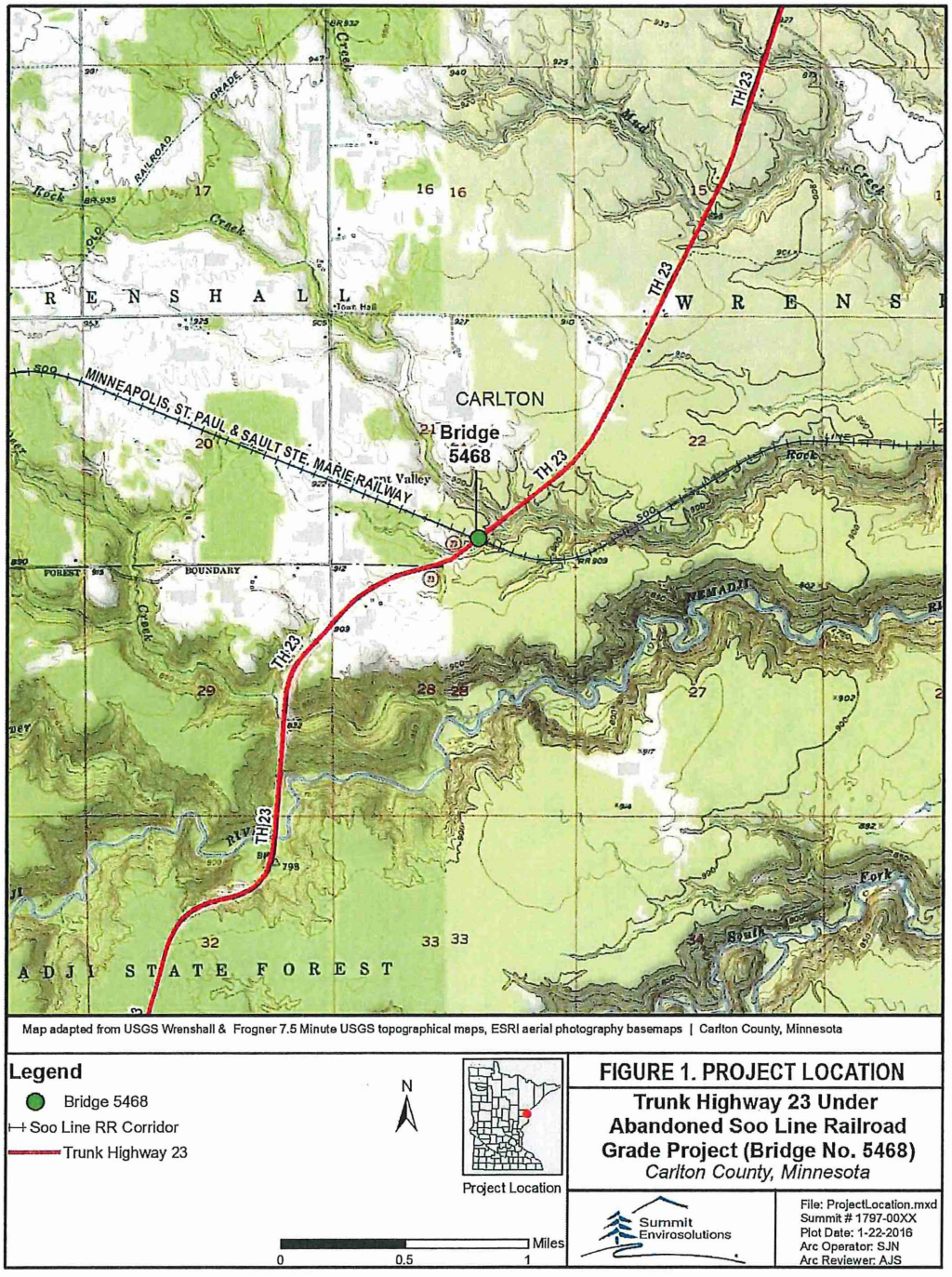
1.0 INTRODUCTION

This bridge removal and roadway improvements project is located on Trunk Highway (TH) 23 at Bridge No. 5468, which carries a recreational trail (former Soo Line railroad) over TH 23 (Figure 1). The bridge is located approximately 0.75 mile northeast of the intersection with Carlton County Road 1 in Wrenshall Township. The project includes: removal of Bridge No. 5468; grading associated with the bridge removal; grading and widening TH 23 approximately 500 feet either side of the bridge; and grading the trail to create an at-grade crossing over the highway.

The project will receive Federal Highway Administration (FHWA) funds, and therefore, will need to comply with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR 800). As part of its responsibilities to identify and evaluate historic properties that may be affected by this project, the Minnesota Department of Transportation (MnDOT) Cultural Resources Unit (CRU) contracted with Summit Envirosolutions, Inc. (Summit) to complete a Phase I architectural history survey of the project area, as well as a Phase II evaluation of TH 23.

The project area is located in the SW ¼ of the SW ¼ of the SE ¼ of Section 21, T47N, R16W. The area of potential effects (APE) for this segment of the project was defined by CRU as the area of construction for the bridge and roadway and the properties adjacent to the construction. In addition to a Phase I survey of the APE, the CRU asked Summit to evaluate the National Register of Historic Places (NRHP) eligibility of TH 23 to aid in their review of the project. The project APE comprises 20.174 acres (8.164 hectares). The UTM coordinates (NAD 83) for the project are as follows: Easting: 548139.884 Northing: 5153671.3762

Figure 1. Project Location



2.0 METHODS

2.1 Objectives

The principal objectives of the architecture-history studies were twofold: to identify all previously recorded buildings and structures within the architecture-history APE that are listed in or are eligible for listing in the NRHP and to identify other NRHP-eligible resources within the APE. The studies included a Phase I survey of the APE as well as a Phase II evaluation of TH 23. This evaluation consisted of application of the NRHP eligibility criteria, based on the registration requirements and integrity requirements of the statewide historic context, *Minnesota Trunk Highways (1921-1954)* (Highways Context) (Mead & Hunt 2015a).

Summit's investigation was guided by the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716) and *MnDOT's Cultural Resources Unit Project Requirements* (MnDOT 2008). Fieldwork, research, and preparation of the final report with recommendations were accomplished or directly supervised by an architectural historian who meets the standards set forth in 36 CFR 61.

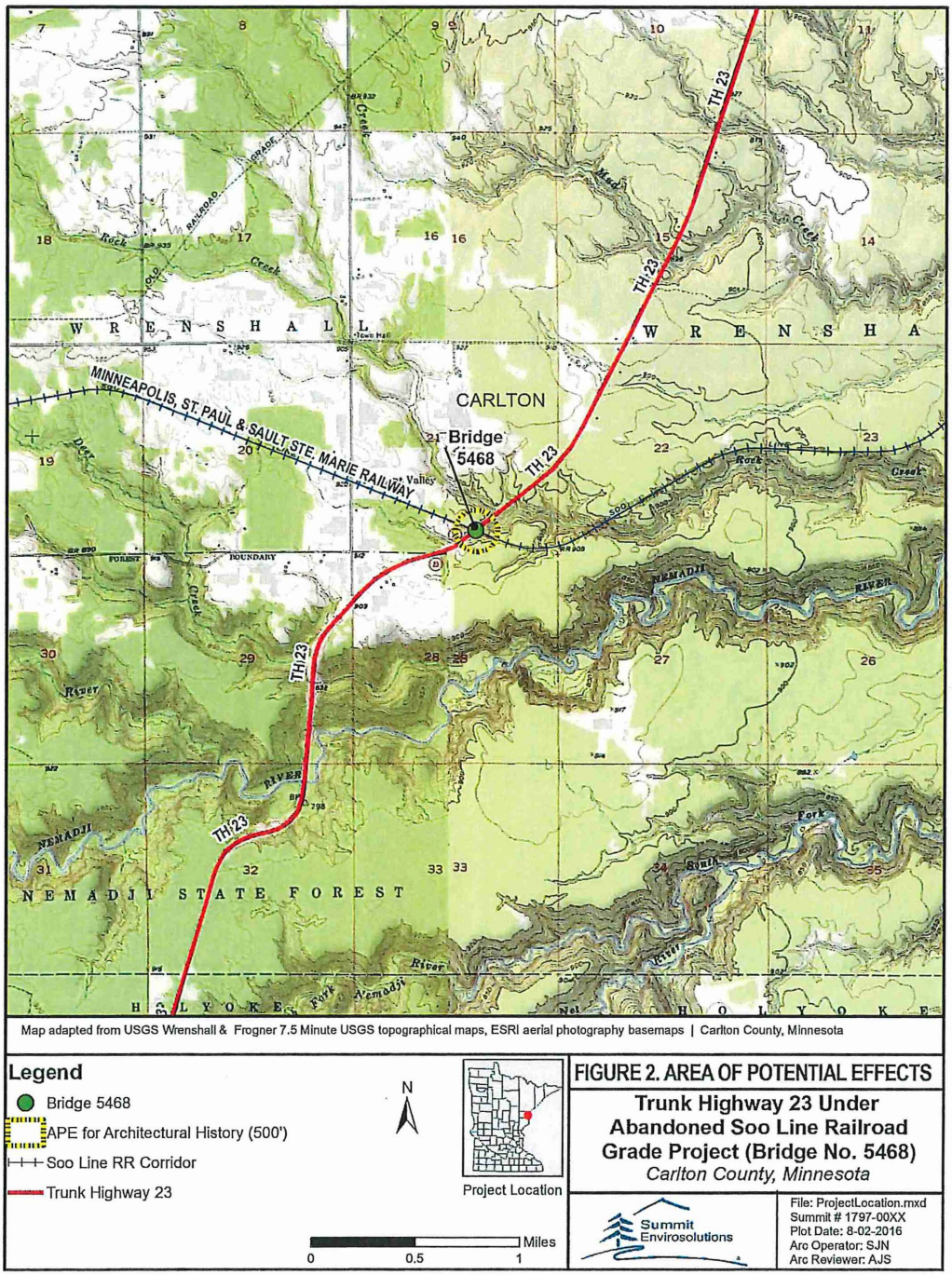
2.2 Methods

During a cultural resources review of the TH 23, Bridge 5468 project area, CRU staff identified a portion of a Minneapolis St. Paul and Sault Ste. Marie (Soo Line) railroad corridor within the project area, as well as TH 23 itself. Both of these transportation corridors were built during the historic period. Background research revealed that the Soo Line corridor, known as the Brooten Branch Line, was previously evaluated in 2010 and found to be not eligible for listing in the NRHP as a railroad corridor historic district (see Previous Studies below). TH 23, however, has not been previously evaluated as a potential historic highway corridor, and therefore, Summit completed a Phase II evaluation of the highway.

Summit staff completed background research at the Minnesota State Historic Preservation Office (SHPO) in January of 2016. The purpose of the research was to identify previously recorded cultural resources and cultural resource surveys previously conducted in the vicinity of the project area. In addition, aerial photographs, historical maps, and county histories held at the Minnesota Historical Society (MHS) and University of Minnesota (U of M) were consulted to obtain historical information about the APE and its potential to contain previously unidentified historic resources.

CRU staff defined the APE for the project as the construction area for the bridge removal and highway improvements, as well as adjacent segments of the railroad corridor and properties adjacent to the highway. Bridge No. 5468 carries the former Soo Line railroad corridor, which has been abandoned and is used as recreational trail, over TH 23 (Figure 2).

Figure 2. Area of Potential Effects



Summit staff completed background research at the Minnesota Historic Preservation Office (MnHPO), the Minnesota Historical Society (MHS) library, the MnDOT Library, and the University of Minnesota libraries. Reports of previous historical surveys in the vicinity of the APE and other secondary sources, particularly the Highways Context (Mead & Hunt 2015a), were reviewed to develop historic contexts for the project area. In addition, staff completed research regarding TH 23. Particularly useful were historic highway maps and Minnesota Highway Department (MHD) records archived at the MnDOT and MHS libraries.

The Phase I architecture-history field investigation consisted of survey of all buildings and structures within the APE. No buildings and structures 45 years in age or older were identified within the APE, based on background research and professional judgment during field work. Therefore, no buildings or structures were recorded within the APE.

One property, TH 23, had potential to be eligible for listing in the NRHP, and therefore, a Phase II evaluation was completed for the highway corridor. Additional historical research was conducted related to the development of the trunk highway system in Minnesota and the construction of TH 23. In addition, previous studies were consulted, particularly the Highways Context and a previous evaluation of TH 75 in Wilkin County (Mead & Hunt 2015a; Schmidt and Justin 2014). With this information, a historic context was developed for trunk highway construction in Minnesota and for the construction of TH 23. An intensive survey of the TH 23 corridor within the Project APE was conducted. In addition, to better understand the TH 23 corridor, a reconnaissance survey was completed for the portion of highway between TH 61 and Duluth. Other portions of the highway in the state were analyzed using maps and aerial photographs. With the historical information and the field results, the Principal Investigator then applied the NRHP criteria of significance to the TH 23 corridor.

3.0 LITERATURE SEARCH RESULTS

3.1 Previous Studies

Summit staff completed background research related to the Brooten Line, a branch of the Soo Line within the project APE. The Brooten Line was previously evaluated for NRHP eligibility in 2010 as part of the Dairyland Trail project in Stearns County (Schmidt 2010). This railroad corridor runs from Brooten in Stearns County to Carlton County, where it crosses into Wisconsin on the way to Superior. Based on the recommendation of this study, the CRU found that the Brooten Line was not eligible for listing in the NHRP.

Bridge No. 5468 (CR-WRT-002) was built in 1939 to carry the Brooten Line over TH 23. According to the MnDOT Bridge Inventory Report, Bridge No. 5468 is considered not eligible for listing in the NRHP. However, the bridge has not been evaluated according to the statewide historic railroads Multiple Property Documentation Form (MPDF) (Schmidt et al. 2007) or as a contributor to the potentially historic TH 23 highway corridor.

In addition, Summit staff conducted background research regarding TH 23 in Carlton, Pine, and St. Louis Counties. Three features within the TH 23 corridor were previously evaluated for NRHP eligibility as part of the 1998 statewide study of historic roadside structures (Granger et al. 1998).

- Bridge 5757 (SL-DUL-2416) was recommended as eligible for its association with the following contexts: federal relief construction in the 1930s; the history of roadside development; and National Park Service Rustic Style. Concurrent with the study, the bridge was listed in the NRHP in 1998 under the Multiple Property Documentation Form, "Iron and Steel Bridges in Minnesota, 1873-1943" (Hess 1998).
- New Duluth Overlook (SL-DUL-2430) was recommended as not individually eligible due to lack of historic integrity. Because the property lacked integrity, the study did not specify if it had significant historic associations.
- Wrenshall Overlook (CL-TLK-004) was recommended as not individually eligible due to lack of historic integrity. In addition, the property had been found not eligible in 1991 as part of a Section 106 review.

Fond du Lac Boulevard (SL-DUL-3139) is a segment of TH 23 located in Fond du Lac within MnDOT Control Section 6910, between Station 0+0.00 and Equation 42+75.6/42+66.5. Designed and built as a parkway during 1937-1939, with later improvements in 1941 and 1955-1956, this segment was previously evaluated as a potential historic district (Mathis and Miller 2014). The potential district included the following components.

- Roadway (Fond du Lac Boulevard/TH 23)
- Landscaping
- Bridge No. 5757 (SL-DUL-2416)
- Bridge No. 6313 (SL-DUL-2656)
- Historical marker (SL-DUL-2429)

Despite potential significance in the areas of Transportation and Landscape Architecture (both as a designed landscape and as a work of Arthur R. Nichols), Fond du Lac Boulevard was recommended as not eligible for the NRHP due to a lack of significant historic associations and historic integrity.

Several statewide studies of historic highways were also consulted. A statewide historic context was developed for trunk highways in Minnesota for the period 1921-1954, as well as for bridges 1955-1970, which includes a highways context (Mead & Hunt 2013 and 2015a). In addition, studies of historic highways, bridges, and road-related resources that have been completed in other states, including Texas (Jensen 2015), Oklahoma (Mead & Hunt 2015b), Maryland (Bruder 2011), New Jersey (KSK 2011), Iowa (Ingalls 2009), and Colorado (Autobee and Dobson-Brown 2003), offered useful contexts and frameworks.

The statewide historic context for Minnesota trunk highways provides a discussion of the development of the trunk highway system during the 1920s to 1950s, and it defines NRHP eligibility criteria and integrity considerations for historic highways (Mead & Hunt 2015a). When evaluating a trunk highway, generally, its entire length should be considered. Trunk highways that have "direct and important" associations with historic events or patterns may meet NRHP Criterion A in the areas of Transportation, Entertainment/Recreation, Agriculture, Industry, and Politics/Government. In addition, trunk highways that reflect important design features or construction practices may meet NRHP Criterion C in the areas of Engineering and Landscape Architecture. Trunk highways are not likely to meet Criteria B or D. This study further identifies the components of a trunk highway that are likely to comprise its essential physical features. To retain historic integrity, a historic trunk highway must retain its essential physical features.

The historic context in the document *Minnesota Bridges 1955-1970* (Mead & Hunt 2013) focuses on bridges, and it also provides evaluations of several trunk highways. Evaluations were conducted for six trunk highway routes that were upgraded to expressway standards and are significant in the area of transportation during this period (TH 23 is not one of them). According to the eligibility guidelines, a road should be evaluated within the context of the broader transportation network, and the road's features, termini, and integrity should be considered. It also notes that individual structures, such as bridges, are not likely to convey this significant theme unless they stand out within the larger transportation network.

3.2 Historic Context: Trunk Highways in Minnesota

Early Highway Construction in Minnesota

During the nineteenth century, the State of Minnesota's involvement in road building was extremely limited by the state constitution, and because nearly all long distance transportation was via railroads, roads were a local concern. Although the federal government funded some road building and counties could establish roads running in more than one township, nearly all of the roads were built and maintained by the townships. By the 1890s, a growing interest in improving roads brought changes in how

they were financed, built, and maintained. A diverse coalition formed during the 1890s to support the improvement of local roads: bicycle enthusiasts wanted better roads to ride on; groups of merchants sought improved roads to expand their trade territories; and farmers wanted better "farm to market" roads. Even railroad companies, who viewed roads as feeders to their railroads, supported local road building. In response to the growing demand for road improvements, an amendment to the state constitution was adopted in 1898 that allowed state participation in road building (Minnesota Highway Department [MHD] 1942:6-7).

By the early twentieth century, good roads supporters included a new constituency: automobile makers and users. Development of the automobile by the turn of the twentieth century and its mass production by the 1910s led to an unprecedented demand for improved roadways, both local and long distance. Although the automobile was first exhibited in Minnesota in 1895, the general public was slow to adopt them over the next decade, and by 1909, there were only 7,065 motor vehicles registered in the state. As Ford Motor Company pioneered mass production and, thereby, reduced prices, and as roads were improved, automobiles grew increasingly popular after 1910. The number of vehicles registered in Minnesota increased to 200,000 in 1917, then to 330,516 in 1920, and to 744,271 in 1930 (MHD 1942:8).

Farmers had begun using motor vehicles in large numbers during the 1910s because the vehicles helped them haul products from farm to market and helped ease social isolation. By 1920 more than 30 percent of farmers owned at least one car or truck (Granger and Kelly 2005:3.44, 3.51). Although farmers were buying cars and trucks, rural roads and highways were not ready for the new traffic. A nationwide road census conducted in 1904 found that only about seven percent of roads were surfaced, typically with gravel (Flink 1970:203). Particularly in rural areas, the unimproved dirt roads often were little more than rutted tracks that drained poorly and flooded regularly. Therefore, despite their general opposition to new taxes, farmers were typically supporters of road improvements (Granger and Kelly 2005:3.51).

The State of Minnesota's participation in road building during the nineteenth century was limited to distributing federal grants. With growing public support for road improvements by the late 1890s, the State needed a means for funding road work. New Jersey passed a State Aid Highway Act in 1891, authorizing state funding of road building (KSK 2011:59-60). Following an amendment to the Minnesota constitution in 1898 and enabling legislation in 1906, the State began distributing state-aid funds to local governments and overseeing the use of those funds. From 1906 to 1917, oversight was conducted by a three-member Highway Commission and engineering and administrative staff, which along with funding, increased over the years (MHD 1945:15-19).

Nineteenth-century roads in rural areas typically consisted of an eight-foot wide roadway with a single lane, requiring vehicles to pull over for passing, a minimal grade, and packed earth or, rarely, gravel surfacing. These roads, which typically followed the existing topography and curved around obstacles, were sufficient for the relatively light and slow-moving horse-drawn wagons and carriages of the nineteenth century. As

automobiles grew in popularity during the first two decades of the twentieth century, new roadway standards were needed. The heavier and faster moving cars and trucks stirred up dust and led to faster degradation of the road surface. In addition, the sharp curves and steep grades common to nineteenth-century roads were more hazardous to traffic moving at higher speeds (KSK 2011:56-57).

By the late 1910s, improvements in cars and trucks increased their utility for long distance travel and for hauling freight. These new uses, combined with the growing number of motor vehicles, created a demand for regional highways that connected principal centers of population. With state funds being distributed to local governments for local road projects, however, there was no system for uniform improvement, maintenance, and marking of highways. The private sector responded by forming auto trail associations to mark routes or "trails" with distinctive signs along roads and highways through a region of the state, or even across multiple states. In addition to marking the trails, the associations typically issued maps of the routes. By the late 1910s, numerous trails associations had been established in Minnesota. In 1917, Minnesota began to require trail associations to register trails, and by the early 1920s, there were 32 registered trails in the state (Henning 2004:5.3).

Although auto trails designations resulted in limited roadway improvements, their popularity demonstrated the growing demand and utility of regional highways. Cars and trucks were not only used for "farm to market" trips but for long-distance travel and transport as well. To address the shifting transportation patterns, in 1916, the federal government passed a highway bill that provided funding to states to improve their road networks, provided they had a state highway department to control the funding and development. To qualify for federal funds, the Minnesota legislature passed a highway bill in 1917 that abolished the old State Highway Commission and replaced it with the Minnesota Highway Department (MHD), to be led by a single Commissioner of Highways. The new commissioner was Charles Babcock, a merchant from Elk River who was a long-time promoter of good roads and had been a member of the Highway Commission.

Limited federal funding and private efforts, however, were not enough to provide a system of highways that were consistently improved, maintained, and signed. In 1920, Minnesota adopted another constitutional amendment that created a trunk highways system of 70 designated state routes to be located, built, and maintained by the State. Because these routes were designated in the amendment, they were referred to as the constitutional routes. This system of state highways consisted of 6,877 miles and connected all of the county seats and other population centers in a statewide network of roads and bridges (Henning 2004:4.4). The MHD was charged with: planning, construction, and maintenance of the trunk highways; distributing and overseeing funding to the counties for county and local roads; and distributing federal highway funds. In addition, to encourage improvement of the designated routes, the amendment required that 75 percent of those routes be built and permanently improved before new routes could be added (with the exception of providing connections for new county seats) (MHD 1945:30).

Passage of Minnesota's 1920 constitutional amendment presaged the requirements of the Federal Highway Act of 1921. This law provided federal highway funding and required that, in order to receive the federal highway funds, each state must designate a system of federal-aid highways representing at least 7 percent of the state's roadways. This Act continued the federal policy of providing funding to state agencies to build highways, rather than a federal agency managing road construction (Seely 1987:59-62). The federal aid, which required a match from the states, encouraged further investment by state highway departments in road building. Although federal funding remained steady between the early 1920s and 1930, the share of federal aid in the overall state roads budgets during this period declined from 20 percent to just over 8 percent due to increased state funding (Seely 1987:73).

During the early 1920s, the MHD adopted standard designs and methods of road construction. The department was required to follow minimal federal standards on federal-aid highways, and used those standards for state-funded roadwork as well. In designing highways, MHD considered the alignment and the subgrade to be critical. While driving surfaces may change over time, completing a subgrade that could be "adapted to the constantly increasing traffic, and upon which it would be consistent to construct in the future, the more permanent types of pavements" would provide "the foundation for future highway development" (MHD 1945:51).

The MHD considered several factors when developing highway alignments: "first, to secure the shortest line possible commensurate with other governing factors, second, to provide easy grades, and third, to provide safety in operation of vehicles" (MHD 1945:51). Highway improvement projects were intended to eliminate sharp curves, steep grades, blind intersections, narrow road surfaces and bridges, and unprotected embankments.

In addition to improved alignments, highway standards called for substantial grading, which could be obtained by excavating wide ditches and using the excavated soils to build up the grade. This construction method would result in, "raising the roadway above the general level of the surrounding ground, thereby minimizing the trouble from snow, raising the roadbed above flood stages, [and] providing ample ditches for drainage" (MHD 1945:52). Although some routes were paved with concrete, during the first half of the 1920s trunk highways typically were surfaced with gravel because this allowed for a greater number of miles to be surfaced, rather than focusing resources on paving a few high-traffic routes. Initially, the standard for highway drive surfaces was 18 feet wide, but this was widened to 20 feet in 1928. The improved highways generally had earthen shoulders flanking the drive surfaces (MHD 1945:59).

By the mid 1920s, maintenance problems with gravel-surfaced highways were becoming apparent. With heavier traffic travelling at higher speeds, gravel highways were constantly losing their surface materials and often formed rhythmic corrugations or "chatter bumps." Dust was also a problem for surrounding landowners. Due to the cost of concrete paving, MHD began experimenting in 1925 with tars and asphaltic oils to

bond gravel surfaces. Although MHD continued paving trunk highways with concrete through the 1930s, the department also began using bituminous surfacing in 1930 (MHD 1945:52, 59).

In 1925 the American Association of State Highway Officials (AASHO) created the system of designating "U.S. highways" to provide consistent interstate routes that would facilitate interregional automobile travel. The U.S. highway designations replaced the earlier auto trails, often overlaid on the same routes. Generally, north-to-south highways were odd-numbered, with lower numbers in the east and progressively higher numbers to the west. East-to-west highways were typically even-numbered, with the lower numbers in the north and higher numbers toward the south. Major north–south routes have numbers ending in '1' while major east–west routes have numbers ending in '0'. (U.S. 2 was so designated to avoid a U.S. 0.) (Weingroff 1997). When the U.S. routes were approved in 1926, U.S. highway markers were posted in Minnesota, but MHD treated the new U.S. routes as a separate system from the existing constitutional routes. Although Minnesota's trunk highway system overlapped with the U.S. highways, in some cases, such as TH 23, there are no comparable U.S. highways.

Although demand for additional trunk highway routes grew during the 1920s as more and more people owned motor vehicles, this demand could not be met by law until the existing system was 75 percent improved. A legislative study in 1929, however, determined that only about 43 percent of the trunk highway miles could be considered permanently improved. In response, between 1929 and 1932, MHD undertook a campaign of improvements to the existing trunk highways. The miles of trunk highways that were graveled and paved increased from 407 miles in 1929 to 1,665 miles in 1932. At the end of 1932, the Commissioner of Highways reported that 75 percent of the trunk highway mileage had been permanently improved (MHD 1945:31-32, 59).

Highway Construction and Federal Relief

The mileage of trunk highways that were improved increased greatly during the Depression years of the 1930s due to the availability of federal relief funding for roads projects. Following the stock market crash in 1929, the U.S. economy plunged into a depression that would last through the 1930s. As funding from President Franklin Roosevelt's New Deal programs became available, many of the federal relief projects were for road construction and improvements. During the 1930s, the MHD completed many grade and alignment improvements as well as gravel and paved surfaces on nearly all trunk highways in Minnesota.

As noted above, by the end of 1932, the MHD had reached the threshold of 75 percent of Minnesota's trunk highways being permanently improved, and therefore, the original trunk highway system could be expanded. In 1933, the state legislature re-designated 4,500 miles of county roads to trunk highway status, adding 140 new routes and bringing the system to 11,371 miles (Figure 3). Despite this 65 percent increase in trunk highway mileage, in 1933 the state appropriation for trunk highway funding decreased from the previous year. Because the economic depression had caused state revenues to drop sharply and the funding previously approved for trunk highway improvements had been

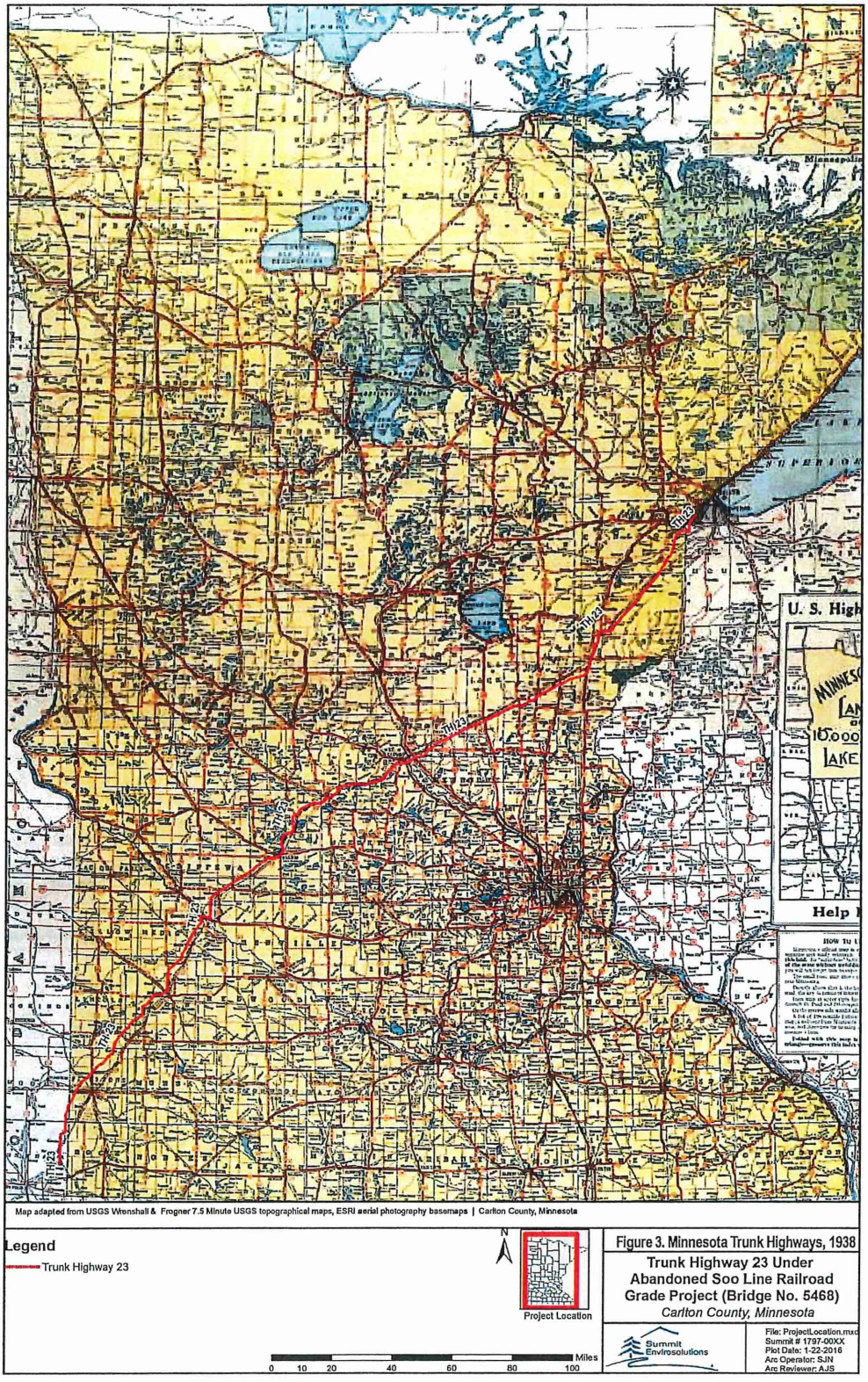
spent, the number of miles graveled and paved in 1933 dropped significantly from the previous year (Mead & Hunt 2015a:31-32).

After being inaugurated in 1933, President Franklin Roosevelt ushered in a series of work relief programs, known collectively as the New Deal, to address the nation's 25 percent unemployment rate and crushing poverty. New Deal programs typically funded projects that were both useful and provided work to as many people as possible. Roadway projects became particularly popular because they could be spread out (virtually every county in Minnesota had road improvement needs), they provided jobs to local laborers, and the upgrades to infrastructure were a benefit to the ever-increasing number of drivers. Starting with the National Industrial Recovery Act in June 1933, a variety of agencies would fund road construction projects over the rest of the decade, including the Federal Emergency Relief Administration (FERA), Public Works Administration (PWA), the Civilian Conservation Corps (CCC), and the Works Progress Administration. So extensive were the road projects that between 35 and 45 percent of all workers on federal relief projects built roads. For example in 1935-1936, the MHD secured 56 National Recovery Administration Work Relief projects, most of which were for gravel surfacing or roadside improvements but also included clearing and grubbing, grading, and drainage structures (Mead & Hunt 2015a:32-34).

As MHD made improvements to trunk highways during the 1930s, it enhanced the roadway designs through new materials, additional grade separations, and improved alignments. Starting in 1928, MHD adopted a 20-foot standard width for trunk highways and began surfacing some routes with bituminous treatments, which provided an all-weather surface at lower cost than concrete paving. By 1934, including the trunk highway mileage added in 1933, over half of the trunk highway system had all-weather surfacing, and only about 5 percent was unimproved (Mead & Hunt 2015a:35). In addition, highway engineers began to design "superhighways," which included median separation between travel directions, more gentle curves and grades, limited-access entry and exit, and grade separated crossings. Early examples of these new highways in Minnesota include TH 100 (Lilac Way) in St. Louis Park (1934-1941) and US 10 between Elk River and Anoka (1937-1938) (this roadway was not limited access, however).

MHD undertook improvements to trunk highways during the 1930s for greater safety and to slow the degradation to unimproved and graveled highways caused by increases in traffic. In addition, highway improvements were touted as a means of supporting tourism. Despite the Depression, tourism was an important industry in Minnesota during the 1930s, ranking among the three most profitable industries in the state. In addition to connecting destinations within Minnesota, most trunk highways also connected with surrounding states, facilitating interstate travel. In addition to increasing access to tourist destinations, such as the lake regions, improvements to trunk highways were designed to enhance the aesthetics of driving "to the lake."

Figure 3. Minnesota Trunk Highways, 1938



By 1929, MHD had begun to "preserve native trees along roads wherever possible, to seed or sod roadside slopes, to collaborate with the state forestry service to plant roadside trees, and to regulate public utilities within the right of way" (Granger and Kelly 1998:3.2-3). Meanwhile, local groups, such as city and county governments, civic clubs, and business associations, began developing wayside rests along trunk highways and lobbying MHD to build roadside improvements. In 1933, federal funding for trunk highways required 1 percent for roadside amenities, and roadside development became more common on trunk highways. Typical roadside developments during the 1930s, which were overseen by the Roadside Development Division (RDD) of MHD, included parking and picnic areas, scenic overlooks, historical markers, and landscaping.

In addition, during the 1930s the RDD began partnering with other organizations to develop roadside amenities. For example, MHD undertook numerous roadside development projects in partnership with federal relief agencies, such as the CCC and National Youth Administration. Local groups, including tourism and resort groups, chambers of commerce, garden clubs, service organizations, and property owners, also became increasingly involved in roadside improvements. From the 1930s through the 1950s cooperation was common between MHD and local groups to develop roadside facilities, including roadside parks, parking areas, and historical markers.

After the United States entered World War II, federal funding for road construction declined dramatically. As resources shifted to the war effort, roads funding was limited to routes deemed essential to transporting personnel and materials for defense purposes. By 1943, between military service and military industrial production, the unemployment crisis of the Depression was over, and all federal relief programs had ended. Although road construction and maintenance was largely curtailed, MHD continued its planning efforts so that roadwork could resume following the war.

Post World War II Trunk Highway Construction

Although the wartime ban on non-essential construction was lifted at the end of World War II in 1945, road construction and maintenance was slow to resume due to labor and materials shortages. By the late 1940s, however, the trunk highway system was the recipient of substantial federal and state funding and broad public support, and MHD undertook a vigorous construction program. Through the 1950s, the focus of MHD was to bring all trunk highways to department standards, to plan and build freeways and expressways, and to upgrade heavily travelled routes to four-lane divided highways.

Transportation patterns in Minnesota had begun to shift from primarily railroads to primarily motorized vehicles prior to World War II. The number of registered automobiles nationwide grew from about 3.5 million in 1916 to 23 million by 1929. During that time, railroads' share of commercial passenger traffic dropped from 98 percent to 75 percent, and intercity buses captured about 18 percent by 1930. In addition, due to the increasing availability of private automobiles, non-commercial automobile traffic carried six times more passengers than the railroads. As the 1930s progressed, a similar trend began for freight traffic. Improvements in truck design and upgrades to

highways allowed trucking to increase its share of intercity freight from about 4 percent in 1930 to 10 percent in 1940 (Stover 1961:212-213, 238).

The shift toward automotive transportation continued and accelerated following World War II. From the late 1940s to the late 1950s, steady economic growth coupled with a rapid population increase led to a period of prosperity in the United States. During this time, automobile ownership became nearly universal in Minnesota households, which had one of the highest automobile ownership rates in the country (Mead & Hunt 2015a:47). By the late 1950s, railroads had slipped to third place among passenger carriers, behind automotive and aircraft. Furthermore, the railroads' percentage of intercity freight had dropped to 44 percent (Stover 1961:238).

As a result of the shift from railroads to highways during the post-World War II era, transportation decentralized and specialized. During the earlier heyday of the railroads, traffic movement was hierarchical: it focused on distribution centers and ultimately flowed toward the major terminal hubs that collected and redistributed passengers and freight. With automobiles and trucks, people could travel and ship goods and materials much more directly between smaller cities and towns. By the 1950s, for example, nearly all timber for paper mills was hauled on trucks, and in agriculture, farmers increasingly hauled their animals and produce on highways to processing centers. Manufacturing plants, once concentrated along railroad corridors, began to disperse, seeking room to expand in sprawling single-story facilities.

As with passenger travel in general, Minnesota's tourism industry increasingly relied on automobile transportation during the postwar years. For example, whereas railroads had performed well in areas with concentrated amenities, such as Lake Minnetonka, central and northern Minnesota's many lakes, each one representing a potential tourist destination, could be accessed more readily by motor vehicle. As Minnesota's tourism industry grew – it was valued at approximately $200 million annually by the early 1950s – the central and northern lake regions were an important draw, spurring more ever more automobile travel (Mead & Hunt 2015a: 52).

The growing automobile and truck traffic during the late 1940s and 1950s placed unprecedented demand on Minnesota's roadways and on the trunk highway system in particular. During the late 1940s, for example, trunk highways carried nearly half of the state's total traffic volume even though they made up less than 10 percent of the total roadway mileage. To address increasing traffic congestion on trunk highways, MHD focused much of its planning and construction on the most heavily traveled routes. In 1946, MHD began construction on nine major projects, all of which extended or connected US highways and trunk highways that had been previously paved and were heavily traveled.

During the postwar era, the ideal design for heavily traveled trunk highways was the freeway or expressway concept developed during the 1930s, with four-lane, divided roadways with grade separations and limited or controlled access. Due to the expense of building these "superhighways," however, by the mid 1950s, few roadways had been

upgraded to this status: mainly highways in and around the Twin Cities and US 10 between Anoka and St. Cloud. Other trunk highways with lesser traffic were not planned for freeway/expressway status but warranted four-lane divided status to improve traffic flow. For example, between 1954 and 1956, segments were upgraded on US 61, US 52, US 65, and US 169 (Mead & Hunt 2015a:50-51). In addition to the high-traffic routes, MHD upgraded trunk highways connecting communities in rural areas, which were increasingly dependent on highways that MHD considered deficient. Due to heavier vehicles, higher traffic volumes, and higher travel speeds, highways surfaced with gravel had become obsolete by the late 1940s.

To address the issue of unpaved trunk highways, as well as those with older concrete pavements that no longer met department standards, MHD averaged 200 miles of new concrete pavement per year during the late 1940s (Mead & Hunt 2015a: 48). During this time, MHD also completed numerous projects for grading, base stabilization, and bituminous surfacing on trunk highways. Because MHD focused on upgrading the highways themselves, construction of new roadside development sites was prohibited during the initial postwar years. By the late 1940s, however, the RDD re-established a program for roadside development on trunk highways. This work mainly consisted of carrying out designs developed during the federal relief era prior to the war, and by the early 1950s, new designs generally included simpler structures and landscaping than the earlier designs (Granger and Kelly 1998: 3.18-20).

3.3 Historic Context: Carlton and Pine Counties in the Twentieth Century

At the turn of the twentieth century, Carlton and Pine Counties had established railroad connections, a logging-based economy that was transitioning to agriculture, and a network of town sites. The railroad connections had been established in 1870, when the Northern Pacific railroad built its main line west from Carlton, and the Lake Superior & Mississippi (St. Paul & Duluth/Northern Pacific) railroad built a line south-southwest from Duluth to St. Paul. In 1882, the St. Paul, Minneapolis and Manitoba (Great Northern) built a line from St. Cloud to Hinckley on the St. Paul & Duluth, and then in 1887, the Eastern Railway (Great Northern) built from Hinckley to Superior, Wisconsin. The railroad network was completed in 1910 when the Minneapolis, St. Paul and Sault Ste. Marie (Soo Line) Brooten and Plummer lines converged in Moose Lake and built to Superior.

The expansion of railroads, along with a seemingly insatiable demand for lumber, supported the expansion of lumbering after 1870 in Carlton and Pine Counties. The counties were part of Minnesota's North Woods, a combined coniferous and deciduous forest located north and east of the Mississippi River. The stands of white pine in this vast forested area were the most highly prized and aggressively logged off. The railroads, combined with the many streams that drained into the St. Louis and St. Croix Rivers, led to a steady increase in logging through the 1880s and 1890s. After a peak in lumbering at the turn of the twentieth century, the industry declined during the following decades.

The logging landscapes in Carlton and Pine Counties passed relatively quickly from operations that relied on rivers, log drives, and boom operations to operations that combined water and rail transport. With the railroad lines built during the 1870s and 1880s, logging and sawmilling operations were centered at locations where the railroad lines intersected log-carrying streams. In Carlton and Pine Counties, town sites grew into cities at Pine City, Hinckley, Sandstone, and Moose Lake. In northern Carlton County, Cloquet became a sawmilling center and by 1900 was diversifying into a multi-faceted forest products center including paper production. Smaller towns developed as railroad stops, such as Askov, Bruno, and Kerrick on the Great Northern line. Logging also impacted Pine and Carlton Counties in an unintended way: forest fires destroyed large swaths, including the cities of Hinckley (1894) and Cloquet (1918). These fires were caused by a combination of accumulated logging slash (branches cut from downed trees), drought, and intense heat.

During the early twentieth century, logging towns suffered economic challenges when sawmilling operations were moved or closed down as the forests in the vicinity were cleared. In some cases, the forest products industries, tourism, and agriculture sustained the former sawmill towns. While investments in the lumbering industry decreased after 1900, forest products industries expanded, and Cloquet became a multi-faceted forest products center well-served by two railroad lines. Although the massive forest fire that burned Cloquet in 1918 destroyed the facilities of the last active lumber milling operation, the city rebounded as the center of forest products industries (Carroll 1987:150-152).

After 1900, Carlton and Pine Counties, like much of northeastern Minnesota, had become a landscape reflecting logging depletion with large expanses of cutover lands dotted with stumps and slash piles. The extent of this land, and the need to revive its economic usefulness, resulted in the collaboration among timber companies, railway companies, and local governments to promote settlement and farming in the cutover areas (Williams 1990:158-59). Despite the challenges of marginal-quality land, short growing season, and the need to clear the land of stumps and rocks, settlers came to the cutover areas, acquired land, and began to farm. From about 1900 to 1925, immigrants, former loggers, and city dwellers settled on cutover lands, seeking to own a farm (Granger and Kelly 2005: 3.63-3.65).

Between the growth of the forest products industry and settlers on cutover lands, the populations of Carlton and Pine Counties grew during the early 1900s. For example, the Carlton County population grew from 10,017 in 1900 to 17,559 in 1910 and reached 21,232 in 1930. During this period, Cloquet accounted for about one-third of the county population. In Pine County the population grew from 11,546 in 1900 to 21,117 in 1920 before tapering off slightly to 20,264 in 1930 (United States Census Bureau 1900-1970).

Due to the challenges of farming on the cutover lands, the farms remained small and averaged about 100 acres by the end of the 1930s, well below the statewide average. During this period, farmers typically raised dairy cows and small numbers of other livestock, and grew mainly oats and potatoes. For many families, the farming was

subsistence level, and they moved on to other opportunities. After about 1925, the number of farms began to decline, though the average farm size did not increase (Granger and Kelly 2005: 3.66-3.69). After 1940, the population of Pine County began a 30-year decline, dropping from 21,478 to 16,821 in 1970. Carlton County fared a little better and saw a modest increase in population during the same period, fueled in part by Cloquet (United States Census Bureau 1900-1970).

The cutover landscape evolved in other ways during the early twentieth century, as different plants succeeded the forest trees, and new forests were planted as part of the conservation movement. For example, a local chapter of the Daughters of the American Revolution donated land to the state in 1929 and began replanting forest land in what would become the DAR Memorial State Forest northeast of Askov in Carlton County.

In the years following World War II, changes in transportation patterns in Carlton and Pine Counties mirrored changes throughout the state. As described in the trunk highways context above, railroad service declined following the war, and automobile and truck transport grew substantially. In the years immediately prior to the war and in the 20 years after, the MHD and counties undertook extensive new road building and concrete or bituminous surfacing of existing roads. As a result, county and state highways were converted from unimproved roads to modern, paved highways. Many other roads were paved or at least surfaced with gravel. The state highways 210, 73, 23, and 33 were all improved, and TH 61 was redesigned as a four-lane divided highway from Scanlon (near Cloquet) to Duluth in the 1950s. TH 61 was effectively replaced in the 1960s by Interstate 35 (I-35), which connected Duluth and the Twin Cities through a limited-access, divided freeway. I-35, serviced by the vastly improved state and county road system, became the backbone of the transportation system in Carlton and Pine Counties (Carroll 1987: 321).

3.4 Duluth and the New Duluth and Fond du Lac Neighborhoods

Although New Duluth and Fond du Lac were platted as villages separate from Duluth, the larger city annexed these communities in the 1890s, and they developed as industrial suburbs. With its natural harbor and location at the western end of the Great Lakes, the St. Louis Bay was a natural site for a future city. Numerous town sites were platted in the area, and along with the established town of Superior, Wisconsin, settlements reached a population of about 2,000 in early 1857. Fond du Lac, a trading post of the American Fur Company during the early nineteenth century, was platted in 1857, and was the farthest southwest of 11 town sites platted in the Duluth vicinity. Nearly wiped out by the Panic of 1857 and the ensuing economic crisis, Duluth recovered during the 1860s, spurred by construction of the Northern Pacific and Lake Superior and Mississippi (St. Paul and Duluth) railroads. Duluth was granted a city charter in 1870 and, in that year, annexed Fond du Lac. The population of the city was 3,500 in 1870 and 5,000 in 1873. Following the Panic of 1873, however, Fond du Lac reverted to independent status, which it would remain until it was annexed again by Duluth in 1895.

During the 1880s, Duluth and Superior developed as a major shipping port, first for lumber and wheat and then iron ore. With its railroad connections to the west and south, Duluth became a primary shipping point for wheat. For example, fed by the Red River Valley's bonanza wheat farms, Northern Pacific railroad shipments of wheat to the Duluth-Superior harbor increased more than five-fold from the late 1870s to the early 1880s. Lumber further fueled Duluth's growth. During the 1880s, lumbermen were drawn to the pine forests of northern Minnesota, and timber flowed from the forests to the Duluth-Superior waterfront, where it was milled and readied for shipment. By the early 1890s, iron ore mined from the Mesabi and Vermillion Iron Ranges was being shipped through Duluth to steel mills in Pittsburgh and Cleveland in such great quantities, it transformed the city. The population of Duluth jumped from 3,300 in 1880 to 33,000 in 1890 and then to 53,000 in 1900 (Beck and Labadie 2004: 47-52, 62-68, 78; Eubank 1991: 19-21). During this time, new town sites were platted and Duluth subsequently annexed them along with established town sites.

The west end of Duluth consists of neighborhoods that were originally platted as separate town sites, including Oneota, West Duluth, New Duluth, and Fond du Lac. As noted above, the settlement at Fond du Lac pre-dates Duluth. The community of New Duluth was platted in 1890 and incorporated as a village in 1891 with the plan of attracting manufacturing plants and residential developers. Duluth annexed the village in 1895. A furniture factory and railroad car factory were the only manufacturers to locate in New Duluth during the 1890s. Beginning in 1907, however, development of the Minnesota Steel Mill (later Duluth Works), which was owned by U.S. Steel, as well as other manufacturers in neighboring West Duluth spurred residential growth in the new Morgan Park neighborhood and in existing neighborhoods like New Duluth.

From 1900 to 1920, Duluth continued its rapid growth, fueled by iron ore, wheat, and lumber, as well as a growing manufacturing, wholesale, and retail base. The population of the city during this period nearly doubled from about 53,000 to 99,000. Duluth began a period of slow growth, however, from the 1920s through the 1950s, followed by a period of population loss. After rising rapidly during the previous several decades, the population of Duluth changed little over the 40 years after 1920, from about 99,000 to just under 107,000 by 1960. This change in Duluth's fortunes resulted from several factors, including: the Panama Canal shifted some shipping away from the Great Lakes, northern Minnesota timber was depleted, and iron ore production fluctuated and eventually declined.

4.0 RESULTS

The APE for architecture-history was determined in consultation with the MnDOT CRU project manager and is described in Section 2.2. Andrew Schmidt served as Principal Investigator. Phase I field work was conducted on May 12, 2016. During the survey, all buildings, structures, and objects 45 years in age or older within the APE were recorded. The survey population consisted of the TH 23 right of way (as a transportation corridor) and the former Soo Line Railroad Bridge (Bridge No. 5468) over TH 23 (Figure 4). In addition, the former Soo Line railroad corridor is within the APE. Although the segment of the former railroad corridor within the APE has not been previously inventoried, the corridor as a whole was previously evaluated as not eligible for listing in the NRHP (see 3.1 Previous Studies). No properties within the APE have been listed in the NRHP or have been previously determined eligible for listing.

4.1 Phase II Evaluation of Bridge No. 5468

Bridge No. 5468 (CR-WRT-002) is a former railroad bridge that crosses over TH 23 in Wrenshall Township about 6 miles southeast of the city of Wrenshall. It is located in the SW ¼ of the SW ¼ of the SE ¼ of Section 21, T47N, R16W.

The bridge measures 42 feet in length and crosses TH 23 at a 45 degree skew. The bridge consists of a single, steel-beam span that is 38.6 feet in length with a 19-foot wide deck supported by a superstructure of four steel I-beams with concrete girder fascia. The bridge has an earthen deck with remnants of stone ballast; the tracks of the former railroad line have been removed. The span is supported by poured-concrete piers and wingwall abutments. The ends of the beams rest on steel bed plates positioned on a deep ledge in each abutment (Figure 5).

Bridge No. 5468 over TH 23 was built in 1939. The bridge was built as part of improvements to TH 23, and it provided a grade separated crossing for the railroad and highway. See TH 23 evaluation below for additional historical background regarding the highway planning and construction and evaluation of eligibility related to the highway.

Because Bridge No. 5468 over TH 23 is not within a railroad corridor historic district it was evaluated individually as a grade separation structure according to the guidelines of the Minnesota railroads MPDF. Because it crosses TH 23, it was also evaluated as a potentially contributing element to the TH 23 corridor (see evaluation of TH 23 below).

According to the Minnesota railroads MPDF, railroad grade separation structures will not individually meet NRHP Criterion A or B (Schmidt et al. 2007: F-225). The MPDF furthermore describes 19 conditions under which a railroad grade separation structure may meet Criterion C (Schmidt et. al 2007: F-226). Bridge No. 5468 does not meet any of those conditions. The span does not represent an early use of steel I-beams, it is not a long span, and in crossing the highway, it required no unusual engineering considerations. For these reasons, the bridge does not meet Criterion C. Finally, because the bridge is a relatively common design, and because steel I-beam spans are a relatively

Figure 4. Architecture-History Survey Results

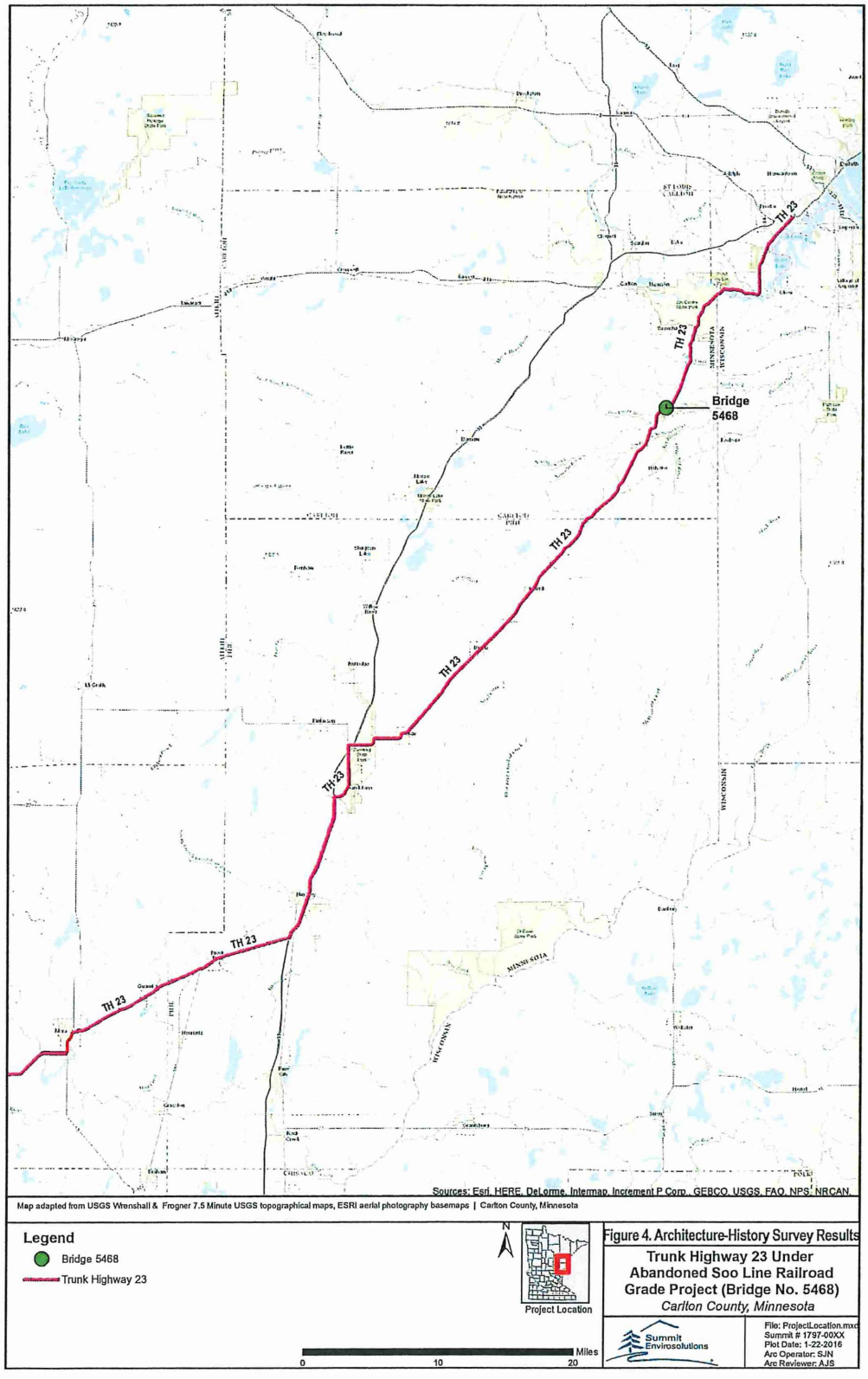
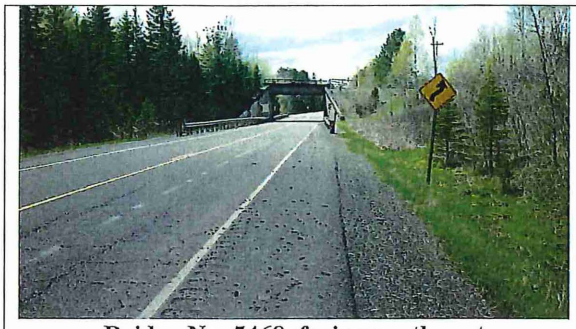
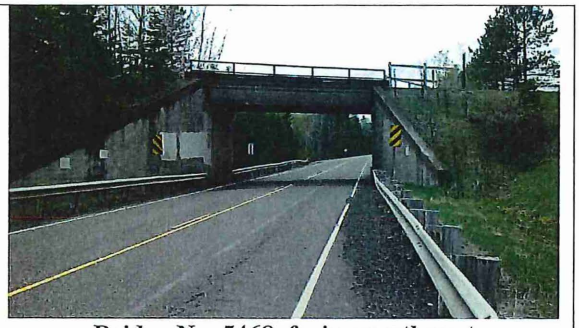


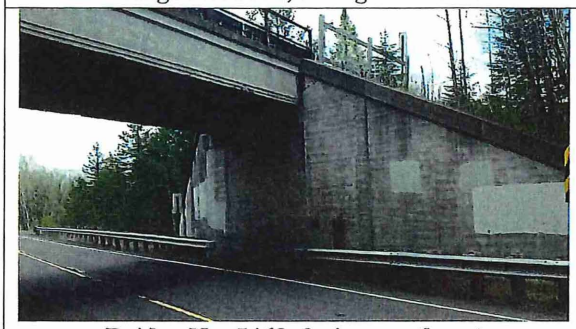
Figure 5. Bridge No. 5468 Photographs



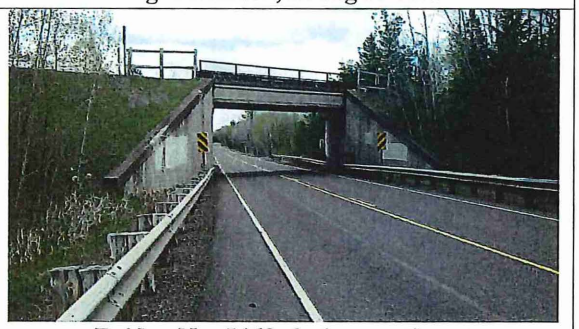
Bridge No. 5468, facing southwest



Bridge No. 5468, facing southwest



Bridge No. 5468, facing northeast



Bridge No. 5468, facing northeast

well-documented property type, the bridge is not likely to provide significant new information and does not meet Criterion D. For these reasons, Bridge No. 5468 is recommended as not individually eligible for listing in the NRHP.

4.2 Phase II Evaluation of Trunk Highway 23

A portion of TH 23 is within the Project APE, and because this portion was built in 1939 as part of broader highway corridor improvements, it was considered for potential NRHP eligibility. Although the entire TH 23 corridor extends nearly 344 miles, the highway can be split into distinct segments. The original segment of the highway was designated in 1920 between Paynesville and TH 61 (Route 1 at the time, now approximately I-35), and improvements were made starting in the 1920s. The segment east of TH 61 in Pine, Carlton, and St. Louis Counties was designated a trunk highway in 1933 and improvements were made beginning in 1935. This segment is further distinguished from TH 23 west of TH 61 because it was designated as Evergreen Memorial Drive and was noted for its scenic qualities. For these reasons, the Principal Investigator judged the segment of TH 23 between TH 61 and Duluth as having potential significance separate from the rest of TH 23 and completed the Phase II evaluation for this segment only. An inventory number was assigned for TH 23/Evergreen Memorial Drive within Carlton, Pine, and St. Louis Counties: XX-ROD-007.

4.2.1 Description

The portion of TH 23 within the Project APE crosses under the former railroad grade in Wrenshall Township about 6 miles southeast of the city of Wrenshall. It is located in the SW ¼ of the SW ¼ of the SE ¼ of Section 21, T47N, R16W (see Figure 4).

TH 23, which extends across the state southwest to northeast, is the second longest state highway in Minnesota. Currently, TH 23 directly serves Pipestone, Marshall, Granite Falls, Willmar, Paynesville, Cold Spring, St. Cloud, Foley, Milaca, Mora, Hinckley, Sandstone, and Duluth. Portions of the highway have been upgraded to a four-lane expressway, including approximately 9 miles in the Marshall area; approximately 14 miles from Willmar to northeast of New London; the Paynesville Bypass (though the two-lane section of highway through town is intact); and from Richmond in Stearns County to Foley in Benton County (roughly from 20 miles west of St. Cloud to 20 miles east). In addition, TH 23 has been rerouted to bypass nearly all of the cities and towns southwest of St. Cloud. TH 23 crosses the Minnesota River at Granite Falls, and the Mississippi River in St. Cloud, over the Granite City Crossing bridge.

TH 23 between Paynesville and TH 61 was designated Route No. 23 in 1920 with the original group of trunk highways. The segment between TH 61 and Duluth (including the Project APE) was designated as a trunk highway in 1933 and, along with the route southwest of TH 61, was designated TH 23 in 1934 (Figure 6). TH 23 between TH 61 and Duluth was designated Evergreen Memorial Drive in 1947, and in 1986, the highway was designated Veterans' Evergreen Memorial Drive.

Veterans' Evergreen Memorial Drive is located in Pine, Carlton, and St. Louis Counties in northeastern Minnesota, and a short segment is located in Douglas County in northwestern Wisconsin. The setting of the highway in southern St. Louis County and eastern Carlton County is marked by river valleys and ravines formed by the St. Louis and Nemadji Rivers and their tributaries. Land use is primarily low-land forest of mixed deciduous and coniferous trees with interspersed small-scale agricultural operations and rural residences. In Pine County, the land is much flatter with mixed deciduous and coniferous forests, wetlands, small-scale agricultural operations, and rural residences. The highway generally runs parallel with a former Great Northern railroad line through Pine County. Railroad-oriented town sites are located on or near TH 23, the largest of which is the city of Sandstone near its intersection with I-35.

Within the Project APE, TH 23 is a two-lane minor arterial highway. The vertical alignment is gently inclined to the southwest, and the horizontal alignment is on a relatively straight northeast to southwest line. Southwest of the APE, the horizontal alignment curves west-southwest. The roadway corridor within the APE consists of substantial ditches, varying between 5 and 10 or more feet deep, that flank a raised roadbed grade approximately 44 feet between shoulder edges. The roadway is paved with bituminous surfaces, including two 12-foot travel lanes; 8-foot shoulders are also paved with bituminous surfaces, and 2 feet of additional shoulders are surfaced with gravel. The shoulders are lined with steel guard rails with wood posts as the highway

approaches the bridge, and the shoulders narrow to accommodate the abutments. The lands flanking the highway are rolling hills that have been reforested.

Beyond the APE, the TH 23 corridor between TH 61 and Duluth was subdivided into segments based on the roadway configuration, topography, and setting (Figures 6a-d).

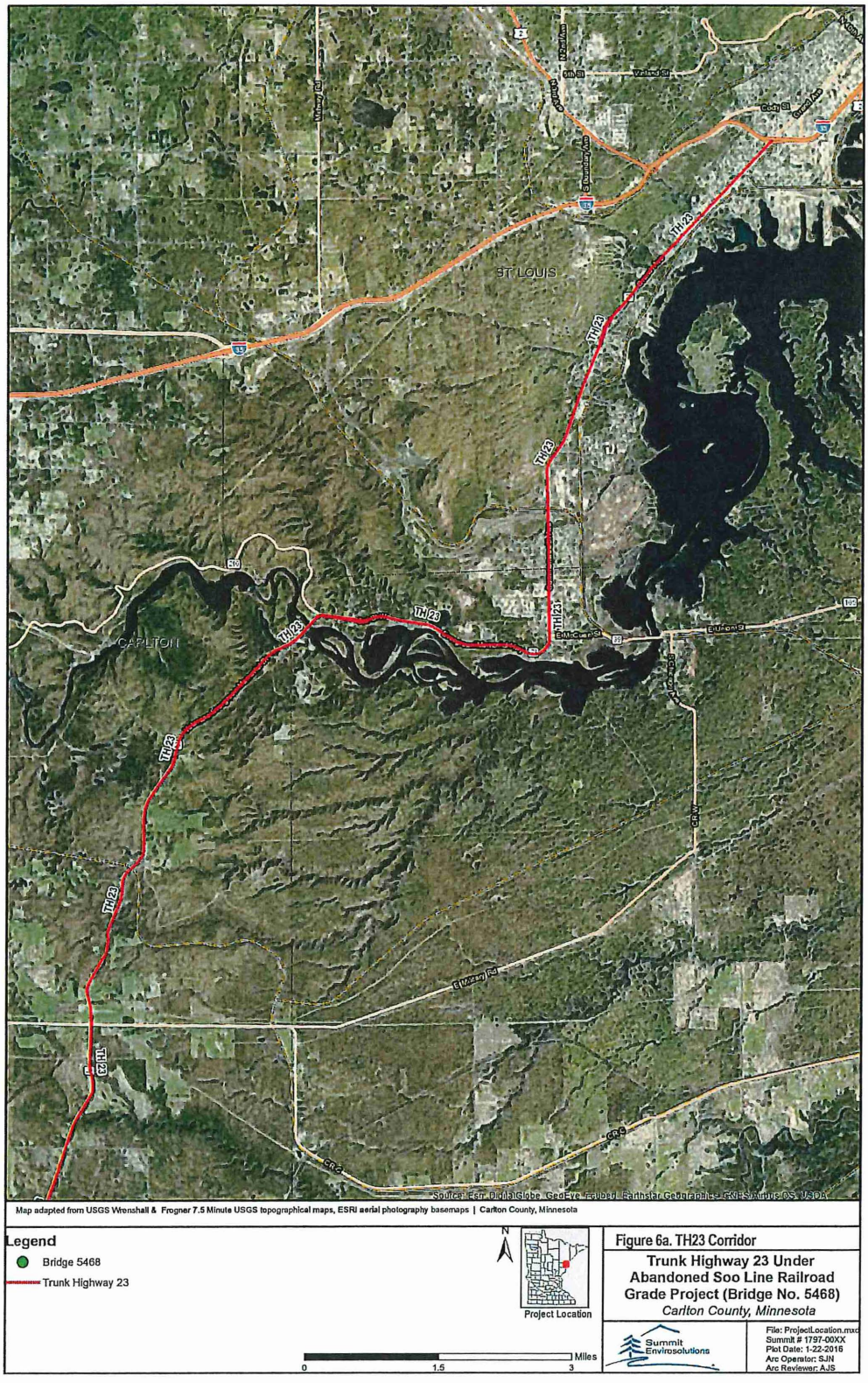
West Duluth to Gary – New Duluth. This segment of the highway is within urbanized neighborhoods of Duluth, including West Duluth, Morgan Park, and Gary – New Duluth, and it generally runs parallel with the St. Louis River on a southwest or south alignment. The roadway is paved with a bituminous surface and consists of two 12-foot travel lanes with a 12-foot center turn lane and 10-foot parking lanes flanking the drive lanes. The roadway is flanked by concrete curbs and sidewalks. The properties adjacent to TH 23 are a mix of recent light industrial buildings and historic-period commercial buildings and houses (Figure 7).

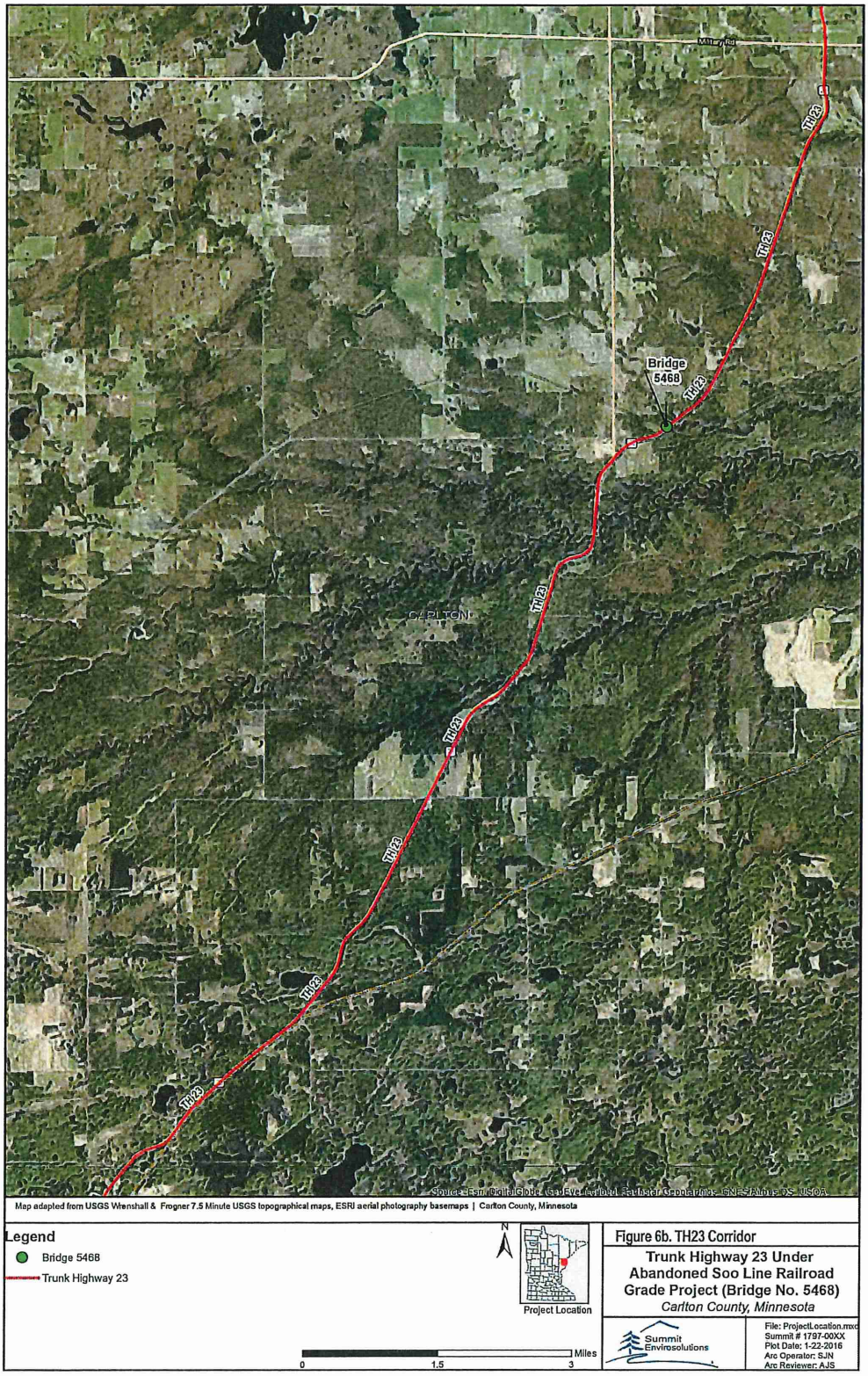
Veterans Memorial wayside is located at the northwest corner of the intersection of Commonwealth Avenue (TH 23) and E. Stowe Street. This small park, which dates to 1952, initially was dedicated to the veterans who served in World War II and later added tributes to veterans of the conflicts in Korea and Vietnam. The park includes two large monuments and multiple smaller features. The park is organized with a pair of walkways angled from the northeast and southeast corners toward the main monument at the center; a second large monument is located northwest of the main monument. Both monuments are rectangular, approximately 10 feet tall, and composed of rough-cut granite with limestone trim. Brass plaques are attached to each face. Other features include granite entry posts, a flag pole, and recent signage and benches.

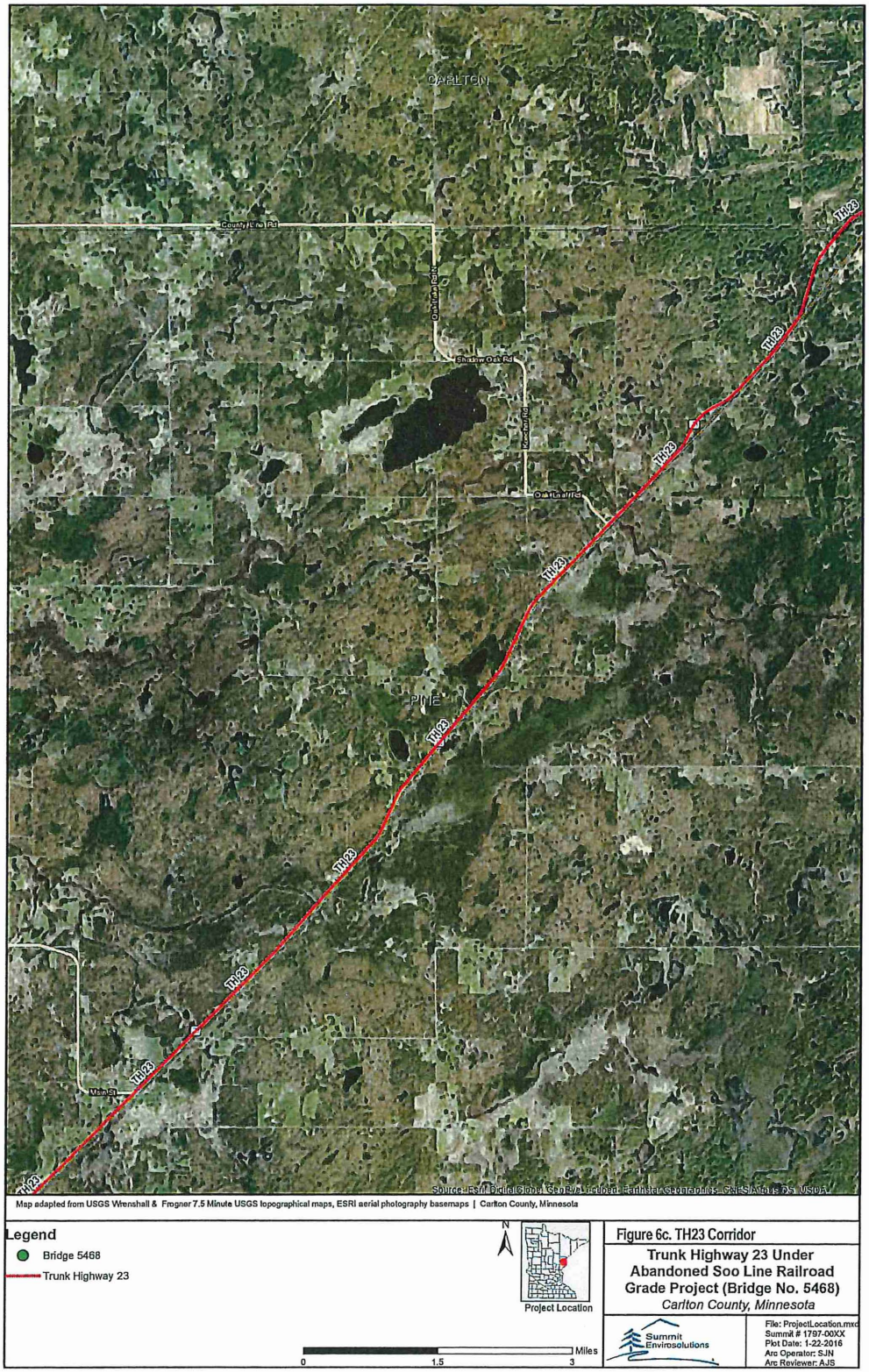
New Duluth to Fond du Lac. Following the St. Louis River, TH 23 turns west toward Fond du Lac as it leaves New Duluth (Figure 7). The highway transitions from an urban roadway to a rural highway and is signed as "Veterans' Evergreen Memorial Drive." The surrounding lands have been reforested, and there are occasional rural residences. As the highway drops into the St. Louis River Valley, its horizontal alignment becomes curvilinear. Although the vertical alignment generally follows the topography, which is characterized by valleys and ravines of tributaries to the St. Louis River, the roadway is built up on a substantial engineered grade (Figure 7). The roadbed is approximately 44 feet between shoulder edges. The roadway is paved with bituminous surfaces, including two 12-foot travel lanes flanked by 8-foot shoulders.

New Duluth Overlook (SL-DUL-2430): A scenic overlook, located on the south side of TH 23 about 600 feet west of Sargent Creek, consists of a bituminous surfaced parking area overlooking the St. Louis River Valley (Figure 7). Accessed via a short driveway off of TH 23, the parking area measures approximately 200 feet by 65 feet. A low concrete concourse marks the bluff edge on the south side of the parking area. The bluff edge is further marked by boulders placed along the concourse and wooden posts, which extend around the perimeter of the parking area. One square, granite-and-mortar post is located near the southwest corner. Constructed circa 1958, this overlook was previously evaluated as not eligible for individual listing in the NRHP, as noted in Previous Studies.

Figure 6a - 6d. TH 23 Corridor




Military Rd
TH23
Bridge
5468
CARLTON
Source: Esri, DigitalGlobe, Earthstar Geographics, CNES/Airbus DS, USDA
Map adapted from USGS Wrenshall & Frogner 7.5 Minute USGS topographical maps, ESRI aerial photography basemaps | Carlton County, Minnesota
Legend
Bridge 5468
Trunk Highway 23
N
Project Location
0
1.5
3
Miles
Figure 6b. TH23 Corridor
Trunk Highway 23 Under
Abandoned Soo Line Railroad
Grade Project (Bridge No. 5468)
Carlton County, Minnesota
Summit Envirosolutions
File: ProjectLocation.mxd
Summit # 1797-00XX
Plot Date: 1-22-2016
Arc Operator: SJN
Arc Reviewer: AJS


CARLTON
PINE
County Line Rd
Oakridge Rd
Shadow Oak Rd
Pine Rd
Oak Leaf Rd
Main St
TH23
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA
Map adapted from USGS Wrenshall & Frogner 7.5 Minute USGS topographical maps, ESRI aerial photography basemaps | Carlton County, Minnesota
Legend
Bridge 5468
Trunk Highway 23
N
Project Location
0
1.5
3
Miles
Figure 6c. TH23 Corridor
Trunk Highway 23 Under
Abandoned Soo Line Railroad
Grade Project (Bridge No. 5468)
Carlton County, Minnesota
Summit Envirosolutions
File: ProjectLocation.mxd
Summit # 1797-00XX
Plot Date: 1-22-2016
Arc Operator: SJN
Arc Reviewer: AJS

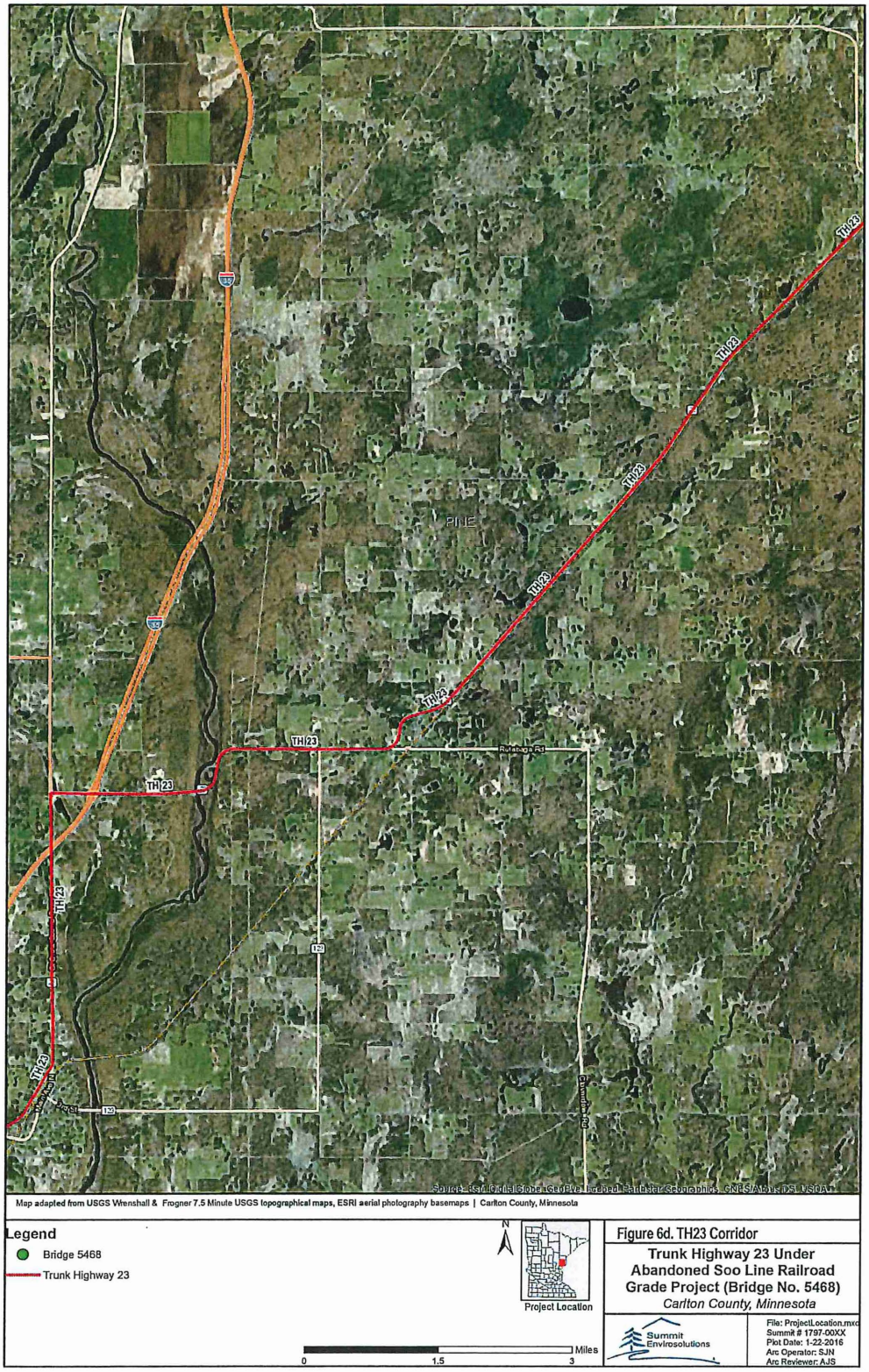
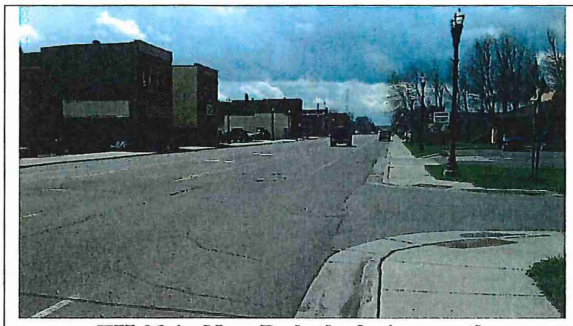
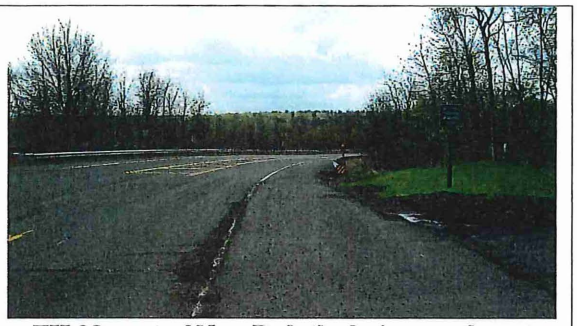

TH23
PINE
Rutabaga Rd
Scanlon
Map adapted from USGS Wrenshall & Frogner 7.5 Minute USGS topographical maps, ESRI aerial photography basemaps | Carlton County, Minnesota
Legend
Bridge 5468
Trunk Highway 23
Project Location
Miles
0
1.5
3
Figure 6d. TH23 Corridor
Trunk Highway 23 Under Abandoned Soo Line Railroad Grade Project (Bridge No. 5468)
Carlton County, Minnesota
Summit Envirosolutions
File: ProjectLocation.mxd
Summit # 1797-00XX
Plot Date: 1-22-2016
Arc Operator: SJN
Arc Reviewer: AJS

Figure 7. TH 23 Photographs

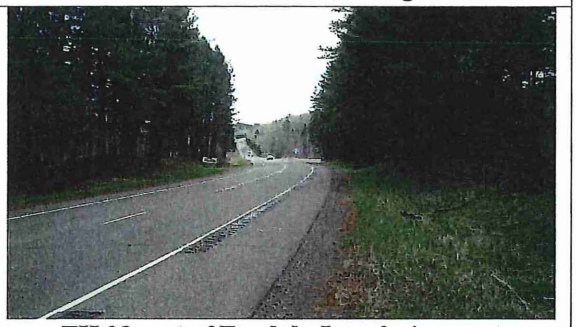


TH 23 in New Duluth, facing south



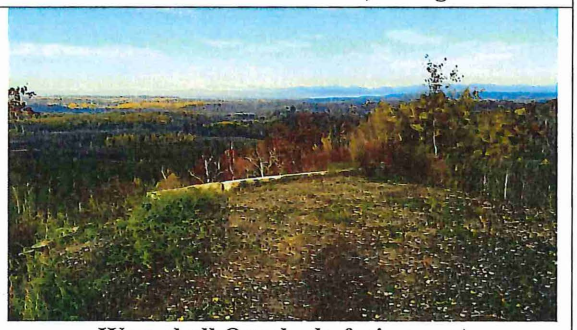
TH 23 west of New Duluth, facing southwest

New Duluth Overlook, facing south



TH 23 east of Fond du Lac, facing west

Veterans' Overlook, facing southwest

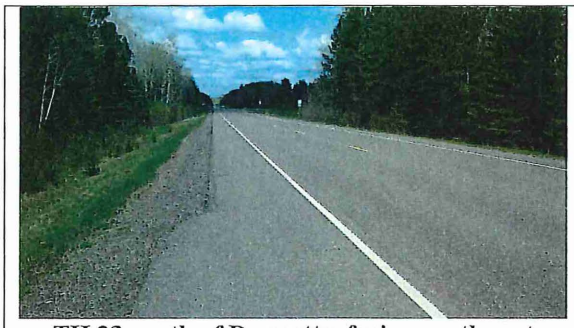


Wrenshall Overlook, facing west

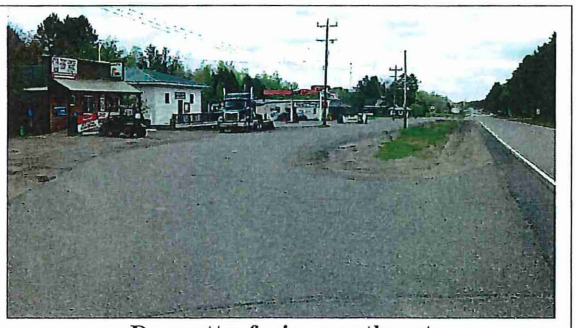
TH 23 showing engineered grade

TH 23 southwest of Bridge 5468, facing southwest

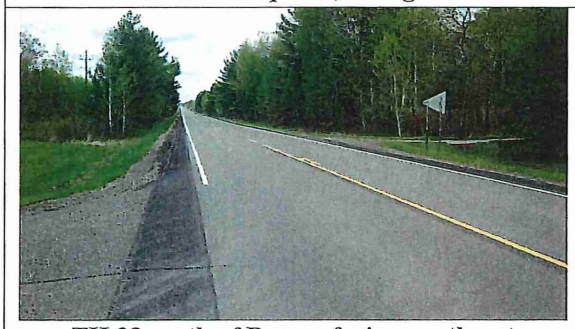
TH 23 Photographs (Continued)



TH 23 north of Duquette, facing southwest



Duquette, facing northeast



TH 23 south of Bruno, facing northeast

DAR Wayside, facing west

Fond du Lac Boulevard (SL-DUL-3139). Within Fond du Lac, a segment of TH 23, located between Bridge No. 6313 over the St. Louis River and 0.62 miles to the east, has been previously evaluated as a potential historic district (Mathis and Miller 2014). The potential district, recommended as not eligible, included the roadway itself, accompanying landscaping, two bridges, and a historical marker. The roadway in this segment is configured as a parkway: "the east and westbound traffic lanes split and widen into a four-lane, tree-lined urban boulevard with the east and westbound lanes separated by a 40-ft. wide center boulevard…" (Mathis and Miller 2014: 2).

A wayside rest in Fond du Lac, located at approximately Sta. 33+50 (just east of 131st Avenue West), consists of a bituminous surfaced pull-off parking area measuring approximately 175 feet by 35 feet. A historical marker, located along the north edge of the parking area, consists of a limestone base with an inclined face and bronze plaque. Dated 1956, the plaque describes the history of Fond du Lac.

Carlton County (and Wisconsin Segment). Within Carlton County, TH 23 northeast of the APE is similar in layout and setting to the segment within the APE (Figure 7). The vertical alignment is gently rolling and generally follows the topography, and the horizontal alignment ranges from relatively straight to curvilinear. The roadway corridor in some segments includes substantial raised roadbed grades exceeding 10 feet above the surrounding lands. The roadway is paved with bituminous surfaces, including two 12-foot travel lanes and 6-foot shoulders, and 2 feet of additional shoulders are surfaced with gravel. The lands flanking the highway are rolling hills that have been reforested. The

Wisconsin segment is similar to the Carlton County segment, except the shoulders are narrower – 4 feet paved with bituminous surfaces and 2 feet with gravel.

Veterans' Scenic Overlook (Wrenshall Overlook, CL-TLK-004), located at Sta. 2108+69, consists of a bituminous surfaced parking area with two overlook areas with views of Jay Cooke State Park and the St. Louis River Valley (Figure 7). The parking area is accessed via short driveways off TH 23 at the northeast and southeast corners and measures approximately 100 feet by 50 feet. A 10-foot wide concrete median/walkway along the east side separates the parking area from TH 23, and a 12-foot wide concrete walkway runs along the west side. Branching off the west walkway, a circular concourse or "pedestrian court" is located near the bluff edge and provides a viewing location for the scenic overlook. The concourse is ringed by a low (approximately 2 ½ feet) wall composed of rough-faced concrete blocks. The wall has an opening on its east side, which provides access from the walkway, and is punctuated by five three-foot tall stone lectern-style pedestals, each with a bronze marker. Recent picnic tables are located north and south of the concourse. This overlook was remodeled to its current configuration in 1991, when it replaced an earlier overlook that is located to the southwest and accessed via a pedestrian trail. The trail connects to the south side of the parking area and leads approximately ¼ mile to the other overlook area, which is located within Jay Cooke State Park. This overlook has a similar circular concourse and rectangular parking area and was formerly accessed via an approximately 0.1 mile driveway that is visible in aerial photos but not from TH 23.

West of the overlook and leading up to the project APE, TH 23 crosses hilly terrain. The highway's vertical alignment has steep gradients, and the horizontal alignment has sharp curves. In addition, the roadway rests on substantial engineered grades, often exceeding 10 feet in height. The layout and materials of the roadway are the same as in the segments to the east. West of the Nemadji River, the terrain becomes flatter, and as a result, the vertical and horizontal alignments of TH 23 have fewer hills and curves. Approximately three miles north of the Carlton-Pine Counties line, a roadside parking area off of TH 23 is located near Graham Lake. Accessed via an approximately 450-foot long bituminous surfaced driveway, the parking area is bituminous surfaced and measures approximately 100 feet by 60 feet.

Pine County. Within Pine County, TH 23 mainly runs parallel with the former Great Northern railroad corridor, and passes through the former railroad towns of Nickerson, Duquette, Kerrick, Bruno, and Askov (Figure 7). The highway generally follows a northeast to southwest alignment through the county. The terrain is generally flatter than in Carlton County, particularly toward the southwest, and the horizontal and vertical alignments of the highway accordingly have fewer curves and lesser gradients. The roadway of the highway is narrower in Pine County, consisting of two 24-foot travel lanes surfaced with bituminous paving and flanked by 4-foot bituminous shoulders.

Although TH 23 generally follows the railroad line through Pine County, the highway diverges approximately 1/3 mile west of the railroad in the vicinity of Nickerson. Although the railroad town of Nickerson is non-extant, the Nickerson Bar and Motel is

located along the highway. In Duquette, railroad related development is no longer evident, but a few commercial buildings along TH 23, including the Duquette General Store and gas station, provide a sense of the former town site. Unlike the other two towns, Kerrick retains a few railroad oriented commercial buildings, including a bank building and false-front store building, as well as some highway related commercial buildings.

Bruno retains a distinguishable town site and is an incorporated city with a population of 100 persons. Although most of the town site is located east of the railroad, some commercial buildings are located west of TH 23, as is Bruno Park. Located in the triangle of land between Burns and Maple Streets north of Main Street, Bruno Park is accessed via an unpaved frontage road and includes a short loop driveway. At the center of the loop, a stone pedestal monument has a bas-relief panel with the face of the Statue of Liberty and a plaque dedicating the monument to veterans "who served in World War I, World War II, Korea and Vietnam." A stand of pine trees and a picnic shelter are located south of the loop, and there is playground equipment to the north.

A roadside development is located north of Askov that is associated with the Daughters of the American Revolution State Forest (Figure 7). There is a short bituminous-paved driveway, though the pull-off/parking area is overgrown with grass and is blocked from vehicular access by boulders. A white marble pedestal type monument is located on the west side of the former parking area and has a bronze plaque that reads, "This tract reforested in the interest of conservation by the Minnesota Chapter of the Daughters of the American Revolution 1940."

In Askov, TH 23 bypasses the business district on a curvilinear route to the west. When designed in 1934, the bypass around Askov was intended to have a 32-foot roadway and to be planted with a mix of deciduous and coniferous trees and shrubs to screen buildings from views along the highway. Although none of the vegetation along this stretch of TH 23 appears to be 80 years old, currently there is a mix of trees that screen buildings from the highway, consistent with the design intent. The roadway consists of two 12-foot drive lanes with four-foot shoulders, all paved with bituminous surfaces.

Southwest of Askov, TH 23 runs on a westerly course, crossing the Kettle River and I-35 and intersecting with the former TH 61, now designated TH 23 to the south and TH 18 to the north. The intersection conforms to a layout from 1953: a T intersection with a ramp for northbound traffic turning east onto TH 23. To the south, TH 23 is on a wider roadway, with two 12-foot travel lanes and 8-foot shoulders, all paved with bituminous surfaces. TH 23 travels south to the outskirts of Sandstone, where it turns southwest running parallel with the former Great Northern railroad opposite downtown Sandstone. TH 23 then intersects with TH 123 and turns west to I-35, with which it merges until a point south of Hinckley.

4.2.2 Historical Background

Early Development of TH 23

TH 23 was planned and developed in distinct segments. The earliest portion, from Paynesville northwest through St. Cloud and connecting with TH 61, was among Minnesota's original trunk highways that were designated in 1920. The segment in Carlton and Pine Counties between TH 61 and Duluth was named a trunk highway in 1933 as part of the second group of trunk highways.

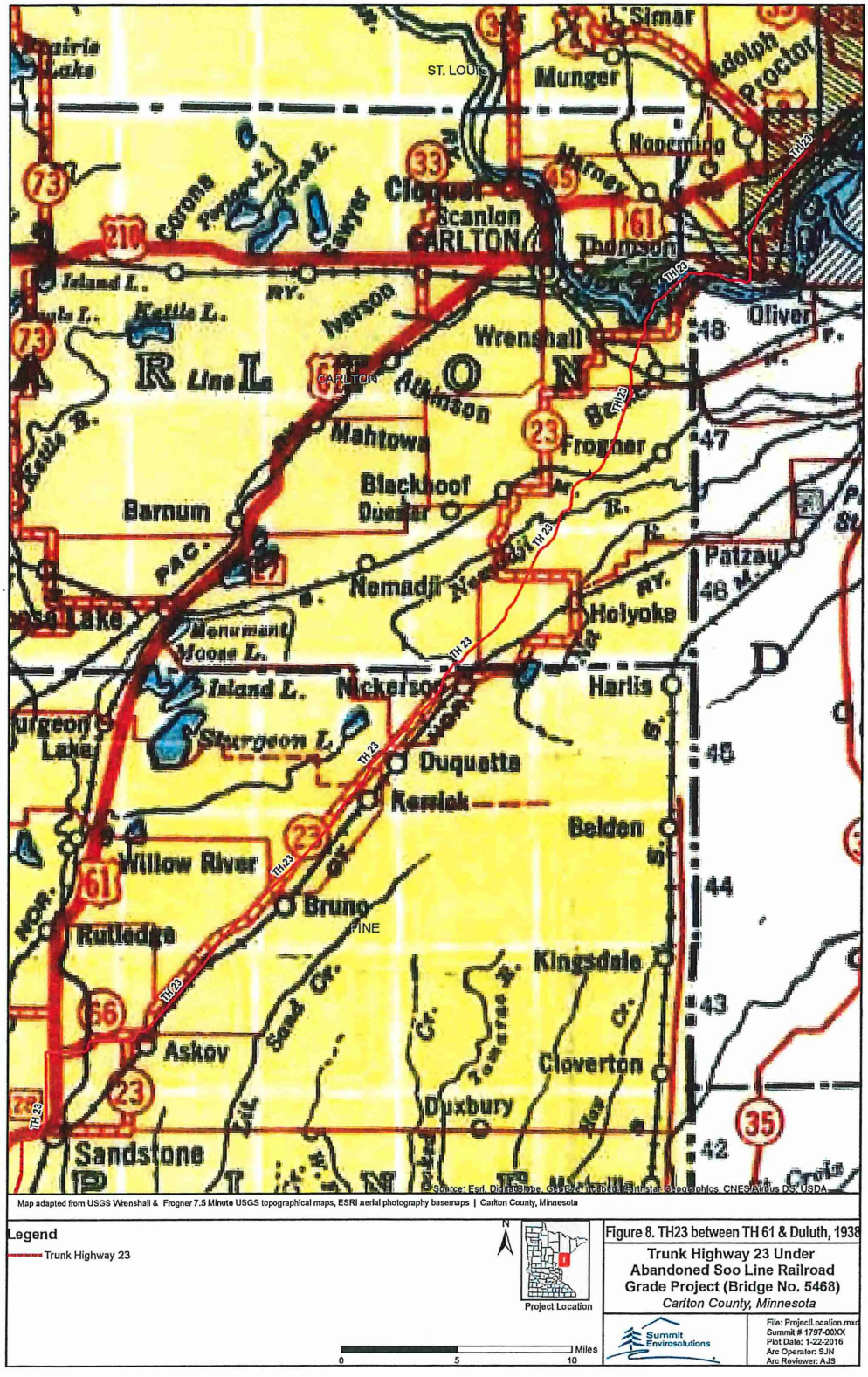
TH 23, originally known as Route No. 23, was one of the 70 trunk highways designated by the Minnesota Legislature in 1920 as recommended by Commissioner Babcock. The designated Route No. 23 began at Route No. 4 (TH 4/55) in Paynesville and extended northeast, roughly paralleling a Great Northern railroad line, to connect with Route No. 1 (TH 61) at Mission Creek, just south of Hinckley (Riner 2012). The new route was intended to afford Paynesville, St. Cloud, Foley, Milaca, Ogilvie, Mora and Route No. 1 south of Hinckley with "a reasonable means of communication" (Minnesota Office of the Revisor of Statutes 2015). Most of the newly designated route was located on existing roadways (Minnesota Highway Department 1920). In 1924, Route No. 23 extended from Quamba to Mission Creek, and portions of the earlier roadways had been realigned (Minnesota Highway Department 1924). By 1928, segments of the highway had been improved to varying degrees: some sections were paved with concrete; others were surfaced with bituminous treatments or gravel; and some segments were unimproved earthen surfaces (Minnesota Highway Department 1927).

In 1933, the Minnesota Legislature approved an act that established 141 new routes to be added to the trunk highway system. One of the new trunk highways, Route No. 185, began "at a point on Route No. 1 at Sandstone, thence extending in a northeasterly direction to a point on Route No. 103 as herein established in Duluth" (Mason et al. 1934: 235, quoted in Mathis and Miller 2014:7). Initially designated separately, in 1934 Route No. 185 was redesignated, along with the rest of Route No. 23 and an extension to the west (later southwest) of Paynesville, as TH 23. From Mission Creek, the new TH 23 utilized TH 61 through Hinckley to Sandstone, then diverged and followed existing roads to Duluth (Figure 8). This segment would provide a trunk highway connection to Askov, Bruno, Kerrick, Duquette, Nickerson, Holyoke, Nemidji, Blackhoof, and Wrenshall. The new route would then cross the northwest corner of Wisconsin in order to use an existing bridge over the St. Louis River to reach Fond du Lac, Minnesota (Minnesota Highway Department 1934). Because MHD was not authorized to construct roads outside of Minnesota, the Legislature also provided MHD the authority to build a state-owned highway outside the state.

After the designation of the expanded TH 23 in 1934, MHD began an on-going program to develop the southwest to northeast diagonal route across the central portions of the state. Initially, the route for TH 23 mainly utilized existing roads.

> A re-arrangement of route numbers was effected and a definite program laid out for the development into such a route of T.H. 23 from a point in the extreme southwestern part of the state to link up with other improved highways at Duluth,

Figure 8. TH 23 between TH 61 and Duluth, 1938



> intersecting and connecting routes extending generally in a southwesterly-northeasterly direction (Minnesota Highway Department 1942).

By the early 1940s, however, MHD was grading and surfacing new, more direct, routes for TH 23. For example, TH 23 was rerouted southwest of Paynesville. Instead of extending west to Benson, TH 23 was rerouted along a southwesterly alignment from New London through Willmar, Granite Falls, Marshall, Pipestone, and Manley in the far southwest corner of the state. As part of this realignment, the segment of TH 23 between New London and Benson was renamed TH 17 (Minnesota Highway Department 1941). This work also included TH 23 northeast of TH 61.

> On the northeasterly section of T.H. 23, between Askov and Duluth, a major portion of the construction needed to provide an all-weather surface also has been completed. With the completion of this work an alternate route will be provided for traffic between Sandstone and Duluth, thus also relieving the congestion on T.H. 61 between these points (Minnesota Highway Department 1942).

The segment of TH 23 between TH 61 and Duluth in Pine and Carlton Counties was among the last segments of the highway to be improved. Although dedicated as a trunk highway in 1933, TH 23 east of TH 61 largely followed existing township roads and, therefore, was not a direct route and had varying states of improvement during the 1930s. As late as 1941, while improvements were in progress, TH 23 between Hinckley and Fond Du Lac was among the least travelled trunk highways in Minnesota, averaging fewer than 200 vehicles daily (Minnesota Highway Planning Survey 1942: Appendix III).

Between 1934 and 1942, MHD undertook numerous projects to improve TH 23 between Askov and Fond du Lac, including rerouting, grading, establishing a stable base, and surfacing. During 1935-1936, the Pine County portion (Control Section [CS] 5803) of the roadway was graded to a standard width of 32 feet, plus ditches of varying width, and Bridge Nos. 5549 and 6074 were constructed in 1936. In addition, the segment of highway from a half mile west of Askov (Sta. 174+42) to 2 miles northeast (Sta. 175+29) was realigned to its current alignment, which bypasses Askov to the west and north, and was surfaced with gravel to a width of 24 feet. In 1937 the portion of this segment of the highway in Askov (Sta. 201+75 to Sta. 58+10) was landscaped with evergreen and deciduous trees and shrubs both to prevent erosion and to screen undesirable view. This roadside development project near Askov was designed by prominent landscape architect Arthur R. Nichols, who is listed on plans as "Consulting Landscape Architect" (Minnesota Highway Department 1937).

Additional relocations and realignments of the Pine County portion of TH 23 during 1935-1936 and 1940 (related to construction in Carlton County) resulted in shortening the route by approximately 3.7 miles, from 25.85 to 22.15. In 1937, the portion of the highway in Askov was treated with a bituminous surface to a width of 24 feet, and in 1940, the rest of CS 5803 (east of Askov) was surface-treated with bituminous paving to a width of 22 feet. In 1942, despite the U.S. involvement in World War II, the entire length of CS 5803 was resurfaced with mixed bituminous paving to a width of 26 feet.

Two years later in 1944, construction on the western 10.25 miles corrected a deficient subgrade, repaired the gravel base, and resurfaced with mixed bituminous paving (Minnesota Highway Department CS 5803 n.d.). This construction program included bridges and culverts. For example, in 1936 concrete box culverts were built on TH 23, including culverts were built over the Little Willow River (Bridge 6074) and the Upper Nemadji River (Bridge 8101).

TH 23 in Carlton County, CS 0901, was gravel surfaced to a width of 12-14 feet by the County during the 1920s and early 1930s prior to the route being named a trunk highway in 1934. This roadway originally followed a very different alignment than the current route, and relocations and realignments of the highway between 1936 and 1940 resulted in shortening the route by 11.48 miles, from 31.98 to 20.51. During this time the new alignment was graded and surfaced with gravel to a width ranging from 42 to 44 feet. During 1942 and 1943, all of CS 0901was resurfaced with a 38-foot-wide gravel base and 26-foot-wide bituminous surface. Improvements were limited to a bituminous seal coat and base and surface spot repairs until 1956 when guard rails and mile posts were added. Since that time, the highway has remained on the same alignment with essentially the same dimensions: over the years, improvements have been limited to periodic mill and bituminous overlays, aggregate surface on the shoulders in 1973, a slight widening of the roadway to 36 feet in 1998, and a bituminous surfacing of the shoulders in 2004 (Minnesota Highway Department CS 0901 n.d.).

TH 23 within St. Louis County, seen as the gateway to Duluth, was provided with additional improvements beyond grading and surfacing. The segment within Fond du Lac was named Fond du Lac Boulevard and intended to be a parkway. The reasons for the development of Fond du Lac Boulevard as a scenic parkway or boulevard: "The first and overriding factor was the rise of automobile tourism in Minnesota in the 1920s. The second factor was a desire of Duluth to create a grand scenic boulevard around the city," that would consist of a "high-line" boulevard, which would become Skyline Parkway, and a "water-level" route, which would complete a loop through the city (Mathis and Miller 2014: 8-9). The Park Department suggested that the water-level route follow an existing road between Fond du Lac and New Duluth, which would be designated as part of Minnesota Route No. 185 in 1933 and TH 23 in 1934. In 1935, the MHD identified a proposed route for TH 23 from downtown Duluth through Fond du Lac. During 1937-1938, MHD made improvements to this route, including construction in Fond du Lac of a six-block long boulevard with center median, known as Fond du Lac Boulevard.

A number of bridges and culverts were built on TH 23 in Carlton County during the 1930s. By 1931, prior to the designation of TH 23, the County constructed a number of bridges including Bridge Nos. 4279, 6314, X-733, 4277, and 4278, but there are no MnDOT records of these bridges. Because much of TH 23 was realigned during the 1930s, it is likely that these bridges are not within the current TH 23 corridor. Bridge No. 5470, a steel-beam span, was built in 1936 to carry TH 23 over the Great Northern railroad (previously not eligible). A series of six culverts was constructed in 1939 (including Bridge Nos. 8499, 8500, 8501), and Bridge 5553 (concrete box culvert over South Fork Nemadji River) and 5468 were built in 1940. Bridge No. 5469 (no record)

was constructed in 1937 over the Northern Pacific railroad and Bridge No. 5554 (no record) was built in 1940 over the Nemadji River.

Development of Evergreen Memorial Drive

Following World War II, TH 23 between TH 61 and Duluth was designated as the Evergreen Memorial Drive, and in the years that followed, landscaping, scenic overlooks, and parking areas were installed along the route. Plans for beautification of the TH 23 corridor began prior to its designation as a memorial highway: in 1940, the MHD, in cooperation with the Askov Garden Club, redesigned the T intersection between "TH 66 & 23, 1 mile west of Askov" to include 35 elms around the intersection and a center island landscaped with evergreen shrubs (Minnesota Highway Department 1940). In addition, the segment of TH 23 in Fond du Lac, known as Fond du Lac Boulevard was improved as a four-lane parkway with a center planted median and flanking trees and shrubs. As with the previous roadside development work near Askov, Arthur R. Nichols was the consulting landscape architect for the work near Askov and in Fond du Lac.

By 1947, TH 23 from Fond du Lac to TH 61 had been realigned and paved (see above), and the route was considered to be the "new blacktop short-cut [from Duluth] to Minneapolis" (*Duluth News Tribune* 1947a: 2-1). In addition to being an alternate to TH 61, the highway was considered to be a scenic route through the Nemadji River and St. Louis River valleys. In 1947, the Minnesota Legislature designated this segment of TH 23 as Evergreen Memorial Drive.

The designation of roadways as memorials was not a new concept in 1947. By that time, Victory Memorial Parkway in Minneapolis had been dedicated, and three state routes had been designated by the Legislature with names in addition to their trunk highway numbers. Victory Memorial Parkway was established during the 1910s to link the Minneapolis Grand Rounds from Glenwood (now Wirth) Park to Camden (now Webber) Park. Land for the parkway was acquired in 1910-1911, and as a result of the United States' involvement in World War I, the planned parkway was dedicated Victory Memorial Drive and construction began in 1919. The first state highway to be officially dedicated as a named route was the Capitol Highway in 1927, which began on TH 10 in Anoka County, ran through Minneapolis and St. Paul, and extended south on TH 56 to the Iowa border.

Beginning in the 1930s, the Legislature began designating highways as "memorial" routes. The first of these was the Colville Memorial Highway, which was established in 1933 on TH 19 from Red Wing to Gaylord as a memorial to William Colville, who led the First Minnesota Regiment at the Battle of Gettysburg in 1863. A portion of TH 55 between Minneapolis and Glenwood was named Floyd B. Olson Memorial Highway in 1937 in honor of Floyd B. Olson, Governor of Minnesota who died in office in 1936. By the late 1950s, four additional highways had been designated by the Legislature: Evergreen Memorial Drive (1947); Theodore Christianson Memorial Drive (1953); P.H. McGarry Memorial Drive (1957); and the Yellowstone Trail (1959). Other highways during the 1940s and 1950s were unofficially recognized as memorial routes, such as the Victory Highway (TH 22) in Blue Earth County, which was lined with trees during the

late 1940s by the Mankato Garden Club and provided with a rest area by the MHD in 1948 (*Minnesota Highways* 1959: 3, 6; Granger et al. 1998; Roise and Peterson 2011: 24-25).

After World War II, designation of Evergreen Memorial Drive was initiated by the Askov Garden Club, which had previously worked with MHD in 1940. The designation was actively supported by numerous women's clubs in Duluth and in Carlton and Pine Counties, and a committee of club women proposed the name and requested that the highway be dedicated to the veterans of the world wars (*Duluth News Tribune* 1947a). Evergreen Memorial Drive was established by the 1947 Minnesota Legislature: "That portion of Road No. 185, known as trunk highway 23 in St. Louis, Pine and Carlton Counties, is hereby named and designated as 'Evergreen Memorial Drive' in memory of the World War veterans of St. Louis, Pine, and Carlton counties" (Minnesota Office of the Revisor of Statutes 1947). TH 23 between Duluth and Brook Park (southwest of Hinckley) was dedicated in a ceremony at Chambers Grove in Fond du Lac, highlighted by the presentation of a bronze plaque in memory of Minnesota veterans of World Wars I and II: "Evergreen Memorial Drive, dedicated October 5, 1947 in grateful memory of all men and women from Carlton, Pine, and St. Louis Counties, who served in the armed forces of our country during the world wars."

Although designated as a veterans' memorial, Evergreen Memorial Drive also was generally recognized for "the beauty of the pine clad rolling country in Pine, Carlton, and St. Louis counties" through which it passed (*Minnesota Highways* 1959: 3). At the time of the dedication of Evergreen Memorial Drive, the *Duluth News Tribune* declared this roadway to be "one of America's most scenic highways" (*Duluth News Tribune* 1947b: 8). A later publication described the roadway: "Through pine and aspen forests, over the rolling terrain of the Namadji [sic] and St. Louis River valleys, it winds its course away from the congestion and noise of the more populous traffic lanes" (*Minnesota Highways* 1961: 2)

In addition to the natural qualities of its setting, Evergreen Memorial Drive was developed as a scenic route. The local committee of women's groups worked with MHD officials on "plans for protecting and further beautifying the highway," and organizers got agreements from "nearly all affected property owners to bar signs from their roadside property" (*Minnesota Highways* 1959: 2-3). Petitions signed by property owners then were submitted to the State Legislature to demonstrate support for sign restrictions. The 1947 legislation decreed that "'no advertisement or sign shall be displayed within a distance of 300 feet from the center line of the travelled part of Evergreen Memorial Drive' except in a municipality or in the case of highway traffic signs" (Minnesota Office of Revisor of Statutes 1947). Furthermore, the Commissioner of Highways was empowered to remove any sign prohibited by the act. Although the Minnesota Legislature had prohibited advertising within trunk highway right of way in 1923, this section of TH 23 was the only trunk highway in Minnesota that prohibited advertising beyond the right of way. To further enhance the scenic qualities, the MHD seeded and reforested areas along Evergreen Memorial Drive that had been disturbed by grading, and utility companies cooperated in moving their poles to the edges of the right of way.

In 1947-1948, the MHD Roadside Development Division designed the scenic overlook southwest of Fond du Lac and east of Wrenshall (described above), as well as the intersection of TH 23 and County Road 18 (leading to Wrenshall). The intersection design included a large center island planted with spruce and "rustic" guard rails along the roadway (Minnesota Highway Department 1948a and 1948b). In 1949, beautification plans for TH 23 along the 6 miles between West Duluth and Fond du Lac included planting ornamental shade trees and flowering shrubbery. The Department of Highways proposed to install the plantings, provided the City would agree to future maintenance (*Duluth News Tribune* 1949:2).

By the mid 1950s, roadside development along Evergreen Memorial Drive included parking areas at Askov, the DAR forest 1 ½ miles north of Askov, Graham Lake near Kerrick, Veteran's Memorial Overlook, and an overlook 1 ½ miles south of Fond du Lac (*Minnesota Highways* 1955: 5). In addition, the MHD redesigned the T intersection of TH 23 and TH 61, 2 miles west of Askov, to include a center island planted with arborvitae and ash trees and the roadsides planted with arborvitae, ash, spruce, and weeping willows (Minnesota Highway Department 1953). Many of these roadside developments began as local initiative by garden clubs and civic organizations and then were designed and built by the MHD. These local organizations were also active in helping maintain the scenic qualities of the highway. For example, in 1957 and 1958, about 150 residents of Pine County participated in a spring cleanup of accumulated trash along Evergreen Memorial Drive. Participants ranged from mayors and bank officials to farmers from the communities of Askov, Bruno, Kerrick, Duquette, and Nickerson (*Minnesota Highways* 1957: 6 and 1958: 9).

Initially, Evergreen Memorial Drive was marked only at its termini, but in 1959 identification signage was added along its entire length (*Minnesota Highways* 1959:3). Since the 1950s, the highway has remained on the same alignment with essentially the same dimensions. Over the years, improvements have been limited to periodic mill and bituminous overlays, aggregate surface on the shoulders in 1973, a slight widening of the roadway to 36 feet in 1998, and a bituminous surfacing of the shoulders in 2004 (Minnesota Highways Department n.d.).

4.2.3 Evaluation of Eligibility

The historic context study, *Minnesota Trunk Highways (1921-1954)* provides guidance for applying the NRHP Criteria of Significance to trunk highways, as well as for assessing the integrity of historic highways (Mead & Hunt 2015a:54-63). The areas of significance applicable to trunk highways are:

- Criterion A: Transportation, Entertainment/Recreation, Agriculture, Industry, and Politics/Government
- Criterion C: Engineering, Landscape Architecture, and Work of a Master.

To meet the criteria, a trunk highway must demonstrate significant association with at least one area of significance, as discussed in the historic context study. It is not expected that Criterion B or D would apply to trunk highways.

Criterion A

The portion of TH 23 west of TH 61 was among the original trunk highways named in 1921, and the portion east of TH 61 was designated a trunk highway in 1933. This eastern portion of TH 23 was an alternate route to TH 61 into Duluth and provided local access in Pine and Carlton Counties. Although TH 23 as a whole was an "important trans-state highway" (*Minnesota Highways* 1963: 3-4) and was the only southwest to northeast trunk highway, the primary route east of the TH 23/61 intersection was on TH 61. Therefore, while TH 23 provided a more direct southwest-to-northeast route across Minnesota, the portion within Pine and Carlton Counties was not an important connection within the trunk highway system. In fact, as noted in the contexts above, this segment had one of the lowest traffic volumes in the trunk highway system during the early 1940s (Minnesota Highway Planning Survey 1942).

TH 23 in Pine and Carlton Counties did not make a significant economic contribution. TH 23 did not open previously inaccessible areas for industry or agriculture, nor did it serve as a principal route for industry or agriculture. Promoted as a scenic route, TH 23 was not intended for heavy freight traffic. Furthermore, its construction during the late 1930s and improvements during the 1940s did not lead to an increase in population, or agricultural or industrial production. Likewise, the highway did not open access to new or previously inaccessible recreational or tourism areas. Access to the North Shore of Lake Superior via Duluth was already provided by TH 61 when the segment of TH 23 to Duluth was designated a trunk highway. Although TH 23 was touted as a scenic route to Duluth, particularly after it was designated as Evergreen Memorial Drive, it was an alternate, not primary, route.

TH 23 was not an important example of a federal relief trunk highway construction project during the Depression. TH 23 was realigned, with new bridges and gravel surfacing, during 1935-1937, and received federal relief funds to assist with this work. However, roadway projects were the most common type of federal relief work; for example, it has been estimated that 35-45 percent of all workers on federal relief projects built roads (Mead & Hunt 2015a: 33). Furthermore, the statewide MPDF, "Federal Relief in Minnesota, 1933-1941," does not list TH 23 as an example of a large or important federal relief project in Minnesota, and TH 23 does not meet the registration requirements for Transportation Systems (Anderson 1989).

TH 23/Evergreen Memorial Drive does not have significant associations with the areas of Transportation, Entertainment/Recreation, Agriculture, Industry, or Politics/Government and for this reason does not meet Criterion A.

Criterion C

TH 23 could meet the following eligibility requirement from the statewide trunk highways context. "A Trunk Highway may be eligible under Criterion C in the area of Landscape Architecture if it: demonstrates high artistic value through an overall design aesthetic applied to… a Trunk Highway where it can be demonstrated that its design or construction specifically took into account the natural setting or scenery adjacent to the route in its design" (Mead & Hunt 2015a: 56). When TH 23 was designated as

Evergreen Memorial Highway in 1947, the highway had already been realigned during the mid- to late-1930s. Although the highway passed through the scenic valleys of the Nemadji and St. Louis Rivers, there is no evidence that its design or construction specifically took into account this setting. After it was designated as a trunk highway in 1933, TH 23 utilized existing local roads until a dedicated roadway was graded and surfaced in the mid- to late-1930s. The new alignment was straighter and more efficient, utilizing engineered grades rather than following natural topographic features.

By the late 1940s, when TH 23 was designated as Evergreen Memorial Drive, the route's scenic qualities began to be praised, and roadside development was undertaken in a piecemeal fashion. For example, locally sponsored landscaping was completed in Askov in the late 1930s, and MHD built scenic overlooks in 1948 and 1958. Meanwhile, Fond du Lac Boulevard was designed as a parkway in the late 1930s and completed in the mid-1950s. This roadside development, however, was not part of an overall plan for the beautification of TH 23 or Evergreen Memorial Drive.

Several of the roadside features along TH 23 were designed by noted landscape architect Arthur R. Nichols, including the intersection of TH 23 and TH 61, landscaping along TH 23 in Askov, and the Wrenshall/Veteran's Overlooks. These roadside features were small-scale developments, and Nichols did not design an overall landscaping or development plan for the highway. These features do not represent an important aspect of Nichols' design portfolio, and they are among over 60 roadside developments along trunk highways in Minnesota designed by Nichols.

TH 23 does not represent an important variation or evolution in MHD Trunk Highway design, policy, or practice, nor was it designed as an expressway. As designed, TH 23 was built on a graded roadway that, in some places, includes substantial grades, but was not an unusual engineering challenge. Initially gravel surfaced, the roadway was surfaced with bituminous paving during the early 1940s, which was not early or unusual for a trunk highway. At the time TH 23 was designated Evergreen Memorial Drive, the legislation included a prohibition on signage within 300 feet of the right of way. Although this was a variation in policy at the time, it did not lead to broader change in policy or practice in trunk highway planning.

TH 23/Evergreen Memorial Drive does not have significant associations with the areas of Engineering or Architectures, and the roadway is not a significant example of the work of a master. For these reasons, the highway does not meet Criterion C.

5.0 SUMMARY AND RECOMMENDATIONS

The bridge removal and roadway improvements project is located on TH 23 at Bridge No. 5468, which carries a recreational trail (former Soo Line railroad) over TH 23. The bridge is located approximately 0.75 mile northeast of the intersection with Carlton County Road 1 in Wrenshall Township. The project includes: removal of Bridge No. 5468; grading associated with the bridge removal; grading and widening TH 23 approximately 500 feet either side of the bridge; and grading the trail to create an at-grade crossing. As part of its Section 106 responsibilities to identify and evaluate historic properties that may be affected by this project, MnDOT Cultural Resources Unit contracted with Summit to complete a Phase I survey and Phase II evaluations of Bridge No. 5468 and TH 23.

Andrew Schmidt served as Principal Investigator. The field work was conducted on May 12, 2016. Standard architectural history documentation methods were utilized during field work, including architectural descriptions and digital photographs. Two properties were evaluated at the Phase II level. As a result of the Phase II evaluations, it is recommended that Bridge No. 5468 (CL-WRT-002) is not eligible for listing in the NRHP. It is further recommended that the TH 23 corridor in Pine, Carlton, and St. Louis Counties, also known as Evergreen Memorial Drive, is not eligible for listing in the NRHP (XX-ROD-007).

5.0 REFERENCES

Anderson, Rolf T.
1989 "Federal Relief Construction in Minnesota, 1933-1941." Multiple Property Documentation Form, on file at the Minnesota Historic Preservation Office, St. Paul.

Autobee, Robert, and Deborah Dobson-Brown
2003 "Colorado State Roads and Highways Multiple Property Documentation Form." Prepared by Associated Cultural Resource Experts for the Office of Archaeology and Historic Preservation, Colorado Historical Society, Denver, CO.

Beck, Bill, and C. Patrick Labadie
2004 *Pride of the Inland Seas: An Illustrated History of the Port of Duluth-Superior.* Afton Historical Society Press, Afton, Minnesota.

Bruder, Anne E.
2011 "'Tomorrow's Roads Today': Expressway Construction in Maryland, 1948-1965." Prepared by the Maryland State Highway Administration, Baltimore.

Carroll, Francis M.
1987 *Crossroads in Time: A History of Carlton County, Minnesota.* Carlton County Historical Society, Cloquet.

Duluth News Tribune
1947a "'Evergreen' Name Picked for New Memorial Highway." February 19.
1947b "Highway Dedication Set Sunday." October 4.
1949 "Plans Discussed for Highway 23." February 16.

Eubank, Nancy
1991 "The Zenith City of the Unsalted Sea: Duluth Historic Contexts Study." Unpublished manuscript prepared for the Duluth Heritage Preservation Commission.

Flink, James J.
1970 *America Adopts the Automobile, 1895-1910.* MIT Press, Cambridge, MA.

Granger, Susan, and Scott Kelly
2005 *Historic Context Study of Minnesota Farms, 1820-1960.* Gemini Research. Submitted to the Minnesota Department of Transportation, St. Paul.

Granger, Susan, Scott Kelly, and Kay Grossman
1998 "Historic Roadside Development Structures on Minnesota Trunk Highways." Prepared by Gemini Research for the Minnesota Department of Transportation, St. Paul.

Hess, Jeffrey A.
1998 "Bridge 5757." National Register of Historic Places Registration Form.

Henning, Barbara J.
2004 Phase II Investigation, Trunk Highway 61, Duluth to Canadian Border. Prepared by Rivercrest Associates for the Minnesota Department of Transportation, St. Paul, MN.Ingalls, Marlin R.

Henning, Barbara J.
2009 "Iowa's Historic Automobile Roads: A National Register Study of Pre-1948 Arterial Highways." Highway Archaeology Program, University of Iowa, Iowa City, Iowa.

Jensen, Bruce
2015 "Historic Road Infrastructure of Texas, 1866-1965." National Register of Historic Places Multiple Property Documentation Form. Accessed online: http://www.txdot.gov/inside-txdot/division/environmental/compliance-toolkits/historic-resources.html.

KSK Architects Planners Historians, Inc.
2011 "New Jersey Historic Roadway Study." Prepared by KSK for the New Jersey Department of Transportation, Trenton, NJ.

Mason, William H., W. H. Mason, Jr., R. O. Mason, and J. S. O'Brien
1934 "1934 Supplement to Minnesota Statutes, 1927 (Superceding Mason's 1931 Supplement)." Citer-Digest, St. Paul.

Mathis, Greg, and Saleh Miller
2014 "Bridge 5757 Alternatives Analysis." Minnesota Architecture-History Inventory Form for Third Street West/Fond du Lac Boulevard Historic District (SL-DUL-3139).

Mead & Hunt
2013 "Evaluation Report and Historic Context: Minnesota Bridges, 1955-1970." Prepared for the Minnesota Department of Transportation, St. Paul.

2015a "Minnesota Trunk Highways (1921-1954): Historic Context and National Register Evaluation and Integrity Considerations." Prepared for the Minnesota Department of Transportation, St. Paul.

2015b "Oklahoma Depression-Era Bridges and Road-Related Resources, 1933-1945." Prepared for the Oklahoma Department of Transportation.

Minnesota Highway Department
1920 "State Road Map of Minnesota." McGill-Warner, St. Paul.
1924 "State Road Map of Minnesota." McGill-Warner, St. Paul.

Minnesota Highway Department

1927 "1928 Map of Trunk Highway System, State of Minnesota." McGill-Warner, St. Paul.

1934 "1934 Map of Trunk Highway System, State of Minnesota." McGill-Warner, St. Paul.

1937 "Roadside Development Plans, Trunk Highway No. 23 in Askov." State Project No. 23-185-21-3A.

1940 "Island Arrangement, in Cooperation with Garden Club of Askov." State Project No. 5803-01

1941 "1941 Official Roadmap of the State of Minnesota: Showing the State Highway System and Main Secondary Roads." State of Minnesota, Department of Highways, St. Paul.

1942 "Biennial Report of the Commissioner of Highways of the State of Minnesota." Minnesota Department of Highways, St. Paul.

1945 History and Organization of the Department of Highways. On file at the Minnesota Historical Society Archives, St. Paul, MN.

1948a "Roadside Development Plans, Trunk Highway No. 23 between 3 Miles East of Wrenshall and 810 Feet Northwesterly." State Project No. 0901-23

1948b "Roadside Development Plans, January 1948." State Project No. 0901-43.

1953 "Roadside Development Project, Jct. T.H. No. 61 & T.H. No. 23." State Project Nos. 5807-19 and 5809-08.

n.d. "Construction Project Log Record, Control Section 0901, Trunk Highway 23" prepared by Highway Planning Survey, Department of Highways, St. Paul.

n.d. "Construction Project Log Record, Control Section 5803, Trunk Highway 23" prepared by Highway Planning Survey, Department of Highways, St. Paul.

Minnesota Highway Planning Survey

1942 "Minnesota Highway Facts: A Summary of the Findings of the Minnesota Highway Planning Survey." Minnesota Highway Department, St. Paul.

Minnesota Highways

1955 "Evergreen Drive, Scenic Treat, Is Free of Signs." October.

1956 "Public Active to Boost Highway Scenic Values." April.

1957 "Residents along T.H. 23 Will Conduct Spring Cleanup." April.

1958 "Cleanup Day Conducted on T.H. 23." May.

1959 "Now We'll Know Them: Markers for Memorial Routes." December.

1961 "Cover Picture." February.

1963 "Willmar District Pushes Highway Improvements." October.

Minnesota Office of the Revisor of Statutes

1947 "Minnesota Session Laws." Chapter 419, Section 160.65. Accessed online at: https://www.revisor.mn.gov/laws.

2015 "Minnesota Statutes, Section 161.114 Constitutional Trunk Highways." https://www.revisor.mn.gov/statutes.

Riner, Steve
2012 "Explore Minnesota Highways: Details of Routes 1-25." Accessed online at: http://www.steve-riner.com/mnhighways/r1-25.htm.

Roise, Charlene, and Penny Peterson
2011 "Phase I/II Architectural History Investigation for the Proposed Interchange Project, Hennepin County." Prepared by Hess Roise and Company for the Hennepin County Regional Rail Authority.

Schmidt, Andrew J.
2010 "Phase II Architecture-History Evaluation for the Dairyland Trail, Stearns County." Prepared by Summit Envirosolutions, Inc. for the Minnesota Department of Transportation.

Schmidt, Andrew J. and Michael A. Justin
2014 "Phases I and II Cultural Resources Investigations for the Kent Bypass Project, Trunk Highway 75, McCauley Township, Wilkin County." Prepared by Summit Envirosolutions, Inc. for the Minnesota Department of Transportation.

Schmidt, Andrew J., Daniel R. Pratt, Andrea C. Vermeer, and Betsy H. Bradley
2007 "Railroads in Minnesota, 1862-1956, National Register of Historic Places Multiple Property Documentation Form." Prepared by Summit Envirosolutions, Inc. and Arch3 LLC. for the Minnesota Department of Transportation.

Seely, Bruce E.
1987 *Building the American Highway System: Engineers as Policy Makers*. Temple University Press, Philadelphia, PA.

Stover, John F.
1961 *American Railroads*. The University of Chicago Press, Chicago.

United States Census Bureau
1900-1970 Census of Population and Housing. Accessed online at http://www.census.gov/prod/www/decennial.html.

Weingroff, Richard F.
1997 From Names to Numbers: The Origins of the U.S. Numbered Highway System. In *AASHTO Quarterly*, Spring, accessed at: http://www.fhwa.dot.gov/infrastructure/numbers.cfm.

Williams, Michael
1990 "The Clearing of the Forests." In Michael P. Conzen, ed., *The Making of the American Landscape*. Unwin Hyman, Inc., Boston.