Minnesota Statewide Historic Railroads Study Project Report

Submitted to the **Minnesota Dept. of Transportation**

Submitted by Andrew J. Schmidt Summit Envirosolutions, Inc. and Daniel R. Pratt ARCH³, LLC.



June 2007



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MINNESOTA STATEWIDE HISTORIC RAILROADS STUDY PROJECT REPORT

FINAL

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Authorized and Sponsored by: Minnesota Department of Transportation

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On the cover: *Railroad Station and Train at Plainview*, circa 1890, MHS Photograph Collection, Location Number MW1.9 PL p1

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MANAGEMENT SUMMARY

The Minnesota Department of Transportation's Cultural Resources Unit (Mn/DOT CRU) identified the need for a study that would examine the significance of railroad corridors throughout Minnesota, identify their roles in the development of the state, and provide guidelines on how to evaluate the National Register eligibility of these resources. The Mn/DOT CRU contracted with Summit Envirosolutions, Inc. (Summit) and ARCH³, LLC to complete a statewide historic railroads study. The two objectives of the study were the preparation of a Multiple Property Documentation Form (MPDF) for railroads in Minnesota and the application of the MPDF registration requirements to selected railroad corridors via an accompanying project report. Andrew J. Schmidt and Daniel R. Pratt served as co-Principal Investigators for the project.

The current project report expands on information contained in "Section H. Summary of Identification and Evaluation Methods" of the MPDF in describing the study's methodology and constraints, and it is intended to inform future MPDF users as to how the study was completed, decisions that were made, and resources that were studied or not studied.

In addition, the current report uses the MPDF registration requirements to evaluate the National Register eligibility of four railroad corridors:

- Sleepy Eye to Redwood Falls Branch of the Chicago and North Western;
- Minneapolis Northfield and Southern;
- Carlton to Cloquet Branch of the Northern Pacific; and
- Great Northern corridor from East Grand Forks to the state line near Wrenshall.

The railroad corridors were evaluated at the Phase II level. The evaluations were conducted in accordance with the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, and *Mn/DOT's CRU Project Requirements*.

The Phase II evaluations included additional research and local context development, survey fieldwork, and application of the registration requirements in the Railroads MPDF. The railroad corridors were surveyed via sampling rather than 100 percent coverage. The survey work was completed during March 29 and April 4-6, 2007. The results of the evaluations are that the Great Northern corridor from East Grand Forks to the state line near Wrenshall, the Carlton to Cloquet Branch corridor, and a segment of the Minneapolis Northfield and Southern corridor are recommended as eligible for listing in the National Register. The Sleepy Eye to Redwood Falls Branch railroad corridor and portions of the Minneapolis Northfield and Southern railroad corridor are recommended as not eligible for listing in the National Register.

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1.0 INTRODUCTION

Thousands of miles of historical-period railroad corridors are potentially eligible for listing in the National Register of Historic Places (National Register), and these corridors are regularly affected by Federal Highway Administration-funded roadway and trail projects (Figure 1). The ubiquity of railroad lines, their interstate nature, varying degrees of historic integrity, and variety of purpose make them a challenging resource for agencies to evaluate and manage. The Minnesota Department of Transportation's Cultural Resources Unit (Mn/DOT CRU) identified the need for a study that would examine the significance of railroad corridors throughout Minnesota, identify their roles in the development of the state, and provide guidelines on how to evaluate the National Register eligibility of these resources. The Mn/DOT CRU, in consultation with the Minnesota State Historic Preservation Office (SHPO), determined that a National Register Multiple Property Documentation Form (MPDF) was the most appropriate documentary format for organizing existing historical information regarding Minnesota's historic railroads and providing contexts and registration requirements for their evaluation.

The Mn/DOT CRU contracted with Summit Envirosolutions, Inc. (Summit) and ARCH³, LLC to complete a statewide historic railroads study. The two objectives of the study were the preparation of a National Register MPDF for railroads in Minnesota and preparation of a project report to accompany the MPDF which would apply the MPDF registration requirements to selected railroad corridors and would describe in detail the methods of the MPDF. The resulting documents are *Railroads in Minnesota*, 1862-1956 *Multiple Property Documentation Form* (Railroads MPDF) and *Minnesota Statewide Historic Railroads Study Project Report* (Project Report).

The Project Report expands on information contained in "Section H. Summary of Identification and Evaluation Methods" of the Railroads MPDF by describing the study's methodology and constraints, and it is intended to inform future users of the Railroads MPDF as to how the study was completed, decisions that were made, and resources that were studied or not studied.

In addition, the Project Report uses the Railroads MPDF registration requirements to evaluate the National Register eligibility of four railroad corridors:

- Sleepy Eye to Redwood Falls branch of the Chicago and North Western in Brown and Redwood counties;
- Minneapolis Northfield and Southern in Hennepin, Dakota, and Rice counties;
- Carlton to Cloquet branch of the Northern Pacific in Carlton County; and
- Great Northern corridor from East Grand Forks to the state line near Wrenshall in Polk, Clearwater, Hubbard, Cass, Itasca, Aitkin, St. Louis, and Carlton counties.

The railroad corridors were evaluated at the Phase II level. The evaluations included additional research and local context development, fieldwork, and the application of the registration requirements in the Railroads MPDF.



Railroads Figure 1. Chicago Milwaukee and St. Paul ---- Great Northern **MINNESOTA RAILROADS - 1930** ---- Canadian Northern Illinois Central Minneapolis Northfield and Southern Chicago and Northwestern EXAMPLE Chicago Burlington and Quincy Minneapolis St. Paul and Sault Ste. Marie Minnesota Dakota and Western Chicago Great Western Chicago Rock Island and Pacific — Minnesota Transfer Minnesota Statewide Historic Railroads Study - Duluth and Northeastern - Northern Pacific **Project Report** 0 35 Duluth Missabe and Northern Miles 1 inch equals 35 miles

Map adapted from the MN DNR divison of Fish and Wildlife 100k Lakes and Rivers and 100k Hydrography, Railroad Commissioners Map of Minnesota, 1930 and MN DOT Abandonded Railroads GIS data.

Plot Date: 6/28/2007

2.0 METHODS

2.1 MULTIPLE PROPERTY DOCUMENTATION FORM

The Railroads MPDF was developed in order to analyze railroad resources within the context of entire railroad corridors, to analyze railroad corridors within statewide contexts, and to develop property types and National Register registration requirements for railroad-related historic resources. Work on the Railroads MPDF was completed during January 2006 through June 2007. Project work during that time consisted of three main tasks: historical research, development of historic contexts, and establishment of property types and National Register registration requirements.

2.1.1 Historical Research

The Railroads MPDF was intended to be a study, not a survey, of railroad resources. A significant amount of primary source information had been previously analyzed by railroad historians, and a review and synthesis of secondary sources constituted the majority of the study's research effort. Secondary sources included both published works and unpublished studies on railroad-related topics—books, journal articles, and project-specific cultural resources reports.

State and local databases were searched for railroad-related information. In particular, research was completed at the following repositories: Minnesota Department of Transportation (project files); Minnesota State Historic Preservation Office; Minnesota Historical Society library and archives; Wilson, Walter, and Architecture libraries at the University of Minnesota; and Minneapolis and St. Paul public libraries. The main sources consulted included previous railroad studies (books, articles, and cultural resources management reports); railroad engineering and architectural manuals from the late nineteenth and early twentieth centuries; other completed National Register nomination forms; railroad company annual reports; and historical-period maps, particularly the *Railroad Commissioner's Map of Minnesota* (1930).

Railroad-related books and articles by both academic scholars and avocational railroad historians were useful sources for developing historic contexts and establishing dates of construction and reconstruction of railroad resources, but they generally did not help to develop National Register property types or registration requirements. Project historians also consulted previously completed cultural resources management evaluation reports of railroad resources in Minnesota and statewide railroad-related MPDFs for states other than Minnesota. Those studies provided a useful starting point but also had limitations (see discussion below).

2.1.2 Historic Contexts

The historic contexts are derived from the historical research. The contexts are divided into six statewide thematic contexts and 14 railroad company-related contexts. Each of the contexts for the 14 railroad companies includes the company's charter/purpose, a brief company history, and the chronological development of its railroad lines in Minnesota. In addition, these contexts link the companies and the railroad corridors

within which they operated with important events and trends further discussed in the statewide contexts.

The 14 companies selected represent the railroad corporations operating railroads in Minnesota as of 1960, as listed in Richard Prosser's *Rails to the North Star* (1966), and which is near the end of the period of significance of the MPDF. An exception is the Illinois Central railroad, which operated only a small amount of right of way in Minnesota. These 14 companies represent combinations of railroad companies that may have been originally independent, and subheadings for predecessor companies are provided within the contexts. For this reason, some railroad companies that had long histories of independent operations are grouped with parent corporations. For example, the Chicago St. Paul Minneapolis and Omaha railroad and the Minneapolis and St. Louis railroad were both subsumed by the Chicago and North Western system, and they are included in the Chicago and North Western context. Railroad corridors not associated with the 14 selected railroad companies can be evaluated and nominated within the MPDF, but additional contextual information will be required.

A new statewide context was developed specifically for the Railroads MPDF, *Railroad Development in Minnesota*, 1862-1956. The other five statewide contexts described in the Railroads MPDF follow previously established statewide contexts in Minnesota but specifically link events and trends within those contexts to railroad transportation. Those contexts include the following:

- Railroads and Agricultural Development, 1870-1940
- Urban Centers, 1870-1940
- Minnesota Tourism and Recreation in the Lake Regions, 1870-1945
- Northern Minnesota Lumbering, 1870-1930s
- Minnesota's Iron Ore Industry, 1880s-1945

Because transportation was the function of railroads, the statewide contexts in the MPDF are focused on the development of the railroad network in Minnesota and on the interplay of railroad transportation during the nineteenth and early twentieth centuries with other aspects of Minnesota's economy, such as industry, commerce, urban development, and procurement of commodities. Those contexts focus on state and regional themes, thus additional local research may be necessary when evaluating railroad corridors, corridor segments, or other property types; for example, the *Railroads and Agricultural Development* context would become unwieldy if it attempted to identify the location and date of every townsite platted along a railroad in Minnesota. That level of detail in research should be completed as needed at the local level during future surveys and evaluations of railroad resources.

2.1.3 **Property Types and Registration Requirements**

The Railroads MPDF takes an approach to property types that is different than that of other railroad studies. Previous National Register evaluation reports in Minnesota often focused on immediate project areas rather than on whole corridors, and they typically did not define the contributing elements or the periods of significance of the railroad

corridors. Numerous railroad-related MPDFs have been prepared in other states, including Arizona, Arkansas, Colorado, Florida, Iowa, and Kansas. Those MPDFs tend to split out the railroad buildings and structures as separate property types but do not address railroad resources holistically—no provisions are made for historic railroad districts. Some MPDFs identify districts of railroad-oriented properties, such as commercial buildings and warehouses, but do not identify districts of properties owned and operated by the railroads. None explicitly identifies the character-defining features of property types and thus do not clearly define what components or elements must be present for historic railroad properties to be eligible.

In the Railroads MPDF for Minnesota, a railroad corridor includes the entire railroad right of way, not just the railroad bed or individual buildings. The railroad corridor as a historic district may be composed of many elements, including at minimum the railroad roadway (tracks, railroad bed, elevated or depressed grades, and ditches), and also contributing bridges, depots, and maintenance, operations, and commercial structures within railroad stations and yards.

Although initially the study authors sought to distinguish between railroad mainlines and branch lines, the property types and registration requirements in the MPDF do not make such a distinction. A railroad corridor can be eligible for the National Register regardless of its status as a mainline or branch line. In addition, railroad companies defined "mainline" variously, depending on volume of freight, priority on operations time tables, and other factors.

The property types identified in the Railroads MPDF are limited to resources that were owned and operated by the railroads and that may be eligible for the National Register. Only properties or districts that could be eligible for the National Register are designated as property types within the MPDF. Properties outside of the railroad right of way are not property types considered or included within the Railroads MPDF. They can, however, contribute to the setting of a railroad property or district. Property types identified in the Railroads MPDF are also based on function. Because all railroad buildings and structures functioned in combination with other railroad buildings and structures, individual resources are grouped into a limited number of district property types: railroad corridor historic district, railroad station historic district, and railroad yard historic district. When a railroad corridor historic district is present, many buildings and structures may contribute to the district. When a railroad corridor historic district is not present, groups of buildings and structures may form a railroad station or railroad yard historic district.

Logging railroads and industry spurs are not included as potential railroad corridor districts because they were owned and operated by commodities or manufacturing companies rather than railroad companies, or when operated by railroad companies, they were within easements rather than dedicated railroad rights of way. Railroad resources can contribute to a larger historic district well beyond the limits of the right of way, such as a commercial or warehouse district, but those types of historic districts are not considered within the Railroads MPDF.

When no railroad historic district is present, some properties may be eligible individually, including railroad depots, railroad bridges, and engine houses. Those resources were also assigned property types.

For the purposes of evaluating National Register eligibility, potential railroad corridor historic districts may be divided into segments to facilitate analysis. The segments can be based on construction episodes and historical operating patterns or on historic integrity. When applying the registration requirements for significance, the railroad corridor should include all right of way between terminal or major transfer points or to the Minnesota state line, unless a segment of the corridor was built and operated during an earlier period by a predecessor company. For example, the Great Northern's railroad corridor between Grand Forks, North Dakota and Superior, Wisconsin is evaluated in the report as a corridor from East Grand Forks to the state line near Wrenshall in Minnesota, completed in 1900. In addition, segments of that corridor are evaluated for significance independent of the through corridor, such as East Grand Forks to Crookston (1875 and 1879), which was an early Red River Valley railroad corridor.

When the historic integrity of a potential railroad corridor historic district is evaluated, the corridor may be divided into contributing and non-contributing segments based on integrity. In relation to the larger railroad corridor historic district, those segments would be similar to the contributing and non-contributing buildings of a commercial or residential historic district.

The study authors identified only two National Register areas of significance applicable to the Railroads MPDF: *transportation* and *engineering*. In the case of depots, *architecture* may be substituted for *engineering* as a potential area of significance. Although railroads operated within a number of different historic contexts, the significance of railroad resources within National Register Criterion A lies in the important transportation connections they made between resource procurement areas, railroad terminals.

2.1.4 Criterion D and Railroad Districts

Railroad corridor historic districts, railroad station historic districts, and railroad yard districts¹ include buildings, structures, and objects, all of which are properties that may be evaluated for significance under Criterion D.² The Railroads MPDF, however, requires that the significance of a railroad district be evaluated based on the district as a whole; the satisfaction of one of the National Register Criteria by an individual element within the district does not render a district significant. This requirement led to the question of whether railroad districts could be significant under Criterion D, that is, whether railroad districts can provide important historical information.

¹ For ease of reference, railroad corridor historic districts, railroad station historic districts, and railroad yard districts will be subsumed under the term "railroad districts" within this section.

² Archaeological resources are not considered or included in the *Railroads in Minnesota*, 1862-1956 MPDF.

An examination of the indices to the journals *Historical Archaeology* and *IA*, *The Journal* of the Society for Industrial Archaeology was conducted to identify articles on railroadrelated studies, with the hope that these would lead to previously identified research needs related to railroad properties and, hence, what types of information might be considered important. The term "railroad," however, was not an entry in the index to *Historical Archaeology*, and while five articles were listed under "Railroads" in the index to *IA*, a review of these articles revealed that they were technological or property histories based on documents and not concerned with extant physical elements.

A search of the limited abstracts available online for the *Industrial Archaeology Review*, the journal of Britain's Association for Industrial Archaeology identified two relevant studies. These studies discussed the archaeological study of early wooden railway remains with regard to information such as how the railway systems evolved, an in-depth analysis of their construction, and the relationship of a railway to a colliery (a coal mine and accompanying structures). These abstracts, therefore, pointed to the possibility that information might be garnered from relatively minimal expressions of a railroad district, such as the railroad corridor. Still, the abstracts provided only a vague sense of potential research needs related to railroad resources in other countries and included analysis of archaeological resources.

As noted earlier in this report, previously completed railroad-related MPDFs and cultural resources reports generally fail to address railroad resources holistically. Such documents, therefore, provide little guidance for the evaluation of the significance of railroad districts under National Register Criterion D, which has typically not been addressed with regard to railroad-related properties in Minnesota. Without, therefore, a previously established model for the evaluation of railroad districts under Criterion D, the guidelines that apply to all property types as provided in the National Register Bulletin *How to Apply the National Register Criteria for Evaluation* (National Park Service 2002) were the only previous guidance for evaluating such districts in Minnesota under Criterion D.

These guidelines, based on their application to all property types, indicate that railroad districts will meet Criterion D if their physical elements, either independently or in conjunction with historical documentation, will yield important historical information associated with the contexts developed in Section E of the Railroads MPDF. Per the National Register guidelines, historical information "is considered 'important' when it is shown to have a significant bearing on a research design that addresses such areas as: 1) current data gaps or alternative theories that challenge existing ones or 2) priority areas identified under a State or Federal agency management plan" (National Park Service 2002).

Such a research design has not yet been developed for railroad districts, or even individual railroad properties in Minnesota, specifically or generally, which has precluded the identification of data gaps or theories that may be challenged. Further, the current study included very limited fieldwork, which did not provide a thorough sampling

of extant railroad-related buildings, structures, or objects, and did not include identification of likely types of archaeological sites. Due to the constraints on the fieldwork, combined with the lack of previous studies addressing railroad districts holistically, especially with regard to Criterion D, not enough data were available to compile a complete list of research questions for evaluation under Criterion D within the Railroads MPDF. Despite these limitations, it has been established that the extant built environment of a railroad district is unlikely to provide important new information.

In order for a railroad district to meet Criterion D, further analysis of the corridor must be likely to yield important information about significant aspects of the evolution or development of railroad design, operations, or the inter-relationships between railroads and the industrial and commercial operations they served. The extant built environment of the railroad district must be the principal source of the important information— archaeological resources are not considered or included in the *Railroads in Minnesota*, *1862-1956* MPDF. It would be an extremely unusual set of circumstances by which railroad corridor to yield important new information. Even the railroad roadway itself, the single essential element of a railroad corridor historic district, is unlikely to provide important new information based on its extant physical features, due to the alteration or dismantling of railroad roadways in the course of railroad operations or abandonment.

Because so many railroad buildings have been demolished over the years, too few historic-period buildings and structures within railroad corridors are extant to make an analysis of the spatial, organizational, or construction patterns of only the extant built environment a likely source of new information regarding railroad properties. This is particularly so because railroad corridors generally were well documented by the railroad companies. Future studies, however, in which archaeological analysis is combined with analysis of the extant built environment, could provide important new information significant under Criterion D.

2.2 RAILROAD CORRIDOR EVALUATIONS

Four railroad corridors were selected for Phase II evaluation of their National Register eligibility. These corridors were intended to be test cases of the registration requirements defined in the Railroads MPDF. As test cases, the corridors selected were intended to represent a variety of geographic areas, historic contexts, and size and type of railroad service areas. The Sleepy Eye to Redwood Falls corridor was a branch line of the Chicago and North Western that hauled primarily wheat to its mainline connection and terminated in a small market, Redwood Falls. The Minneapolis Northfield and Southern corridor was built in multiple stages and operated first as a mainly passenger route, then as a transfer railroad around the west edge of the Twin Cities urban center. The Carlton to Cloquet corridor was a branch line of the Northern Pacific that hauled primarily lumber to its mainline connection and terminated at an early northern Minnesota sawmilling center, Cloquet. Finally, the Great Northern corridor was a heavily used through route that crossed the state east-to-west, was associated with multiple historic contexts, and connected the Grand Forks and Duluth-Superior urban centers.

The four railroad corridor evaluations represent a change from the research design. Initially, Phase I assessment of potential National Register eligibility was planned for 14 railroad corridors, and Phase II evaluations were to be completed for four corridor segments. Rather than use that two-tiered approach, four complete railroad corridors were selected for Phase II evaluation.

The railroad corridor evaluations required additional historical research and local context development, survey fieldwork, and application of the Railroads MPDF registration requirements. Additional archival research was conducted at the Minnesota Historical Society and county historical societies to tailor the statewide historic contexts specific to the corridors evaluated and the areas they served. Sources consulted include published railroad and local histories, company annual reports, county atlases and other historical maps, aerial photographs, and newspaper articles. The Principal Investigators conducted field survey of the rights of way of each of the four railroad corridors. Due to access limitations to railroad property and to surrounding private property, the survey work was limited to portions of the railroad corridors that crossed or paralleled highways and city and township roads. Due to the large areas covered by the survey, the characteristics of the corridors are described generally, and both the typical elements and unusual features of the corridors are discussed. Digital photography was used to record a sample of the characteristic elements within each of the railroad corridors.

Using the information gathered through fieldwork and research, the Principal Investigators applied the registration and integrity requirements from the Railroads MPDF to the four railroad corridors. This effort did not include evaluation of historic districts or individual buildings separate from the potential railroad corridor historic districts.

Due to the scale of the railroad corridors being evaluated, particularly the Great Northern, the fieldwork was completed as reconnaissance survey. The properties were recorded with photographic sampling and field notes regarding general patterns in the railroad built environment and the surrounding landscape, as well as distinctive features. The field survey was limited at times by a lack of access to the railroad corridors. In areas where roads do not closely parallel the railroad corridors, the corridors could only be viewed at crossings or from a distance. Because of these two factors, not every potentially contributing element within the corridors could be identified or recorded. That type of inventory should be completed at the project level, when much smaller survey areas would make the resulting data more manageable.

Despite the limitations in the field survey, the Principal Investigators applied the aspects of integrity to the railroad corridors as defined in the Railroads MPDF. Because the railroad corridors were evaluated as potential historic districts, the integrity was assessed for each corridor as a whole. Individual buildings and structures within the corridors, however, were not assessed for integrity.

Future survey and evaluation of railroad properties, completed for Section 106 compliance-driven projects within much smaller geographical areas defined by the

project area of potential effect, should document the properties in a format compatible with the Mn/DOT and SHPO databases. Because the data produced by such documentation efforts will need to be entered into MnModel and the SHPO database, procedures must be developed for naming conventions, types of locational information to be provided, and assignment of inventory numbers. Additional inter-agency consultation will be necessary to establish these procedures.

3.0 CORRIDOR EVALUATION: SLEEPY EYE TO REDWOOD FALLS BRANCH OF THE CHICAGO AND NORTH WESTERN

3.1 HISTORICAL BACKGROUND

The historical development of Brown and Redwood counties is intertwined with the railroad corridors crossing through them. The Winona and St. Peter (W&StP, and after 1900 Chicago and North Western [C&NW]) and the Minneapolis and St. Louis (M&StL, and after 1960 C&NW) operated numerous lines in the two counties beginning in the early 1870s (Figures 1 and 2). Although settlement began much earlier in the Minnesota River Valley in both counties, the railroads influenced settlement patterns, townsite development, and agricultural practices.

Prior to the coming of railroads, Euro-American settlement in Redwood and Brown counties was river oriented. The six communities settled prior to railroad development were on rivers. New Ulm, which was platted on the Minnesota River in 1857, was an early population and commercial center for both counties. After the Dakota Conflict of 1862, the Lower Sioux Reservation, which encompassed the northwestern portion of Brown County and the northeastern portion of Redwood County, was opened to Euro-American settlement. Redwood Falls was platted in 1866 near the falls of the Redwood River about one mile upstream from the Minnesota River to take advantage of the water power potential. Redwood Falls was the only town in Redwood County until the W&StP built its mainline through the southern portion of the county in 1872. Euro-American farmers settled in both counties prior to the coming of railroads, though on a limited scale. Typical of other areas in Minnesota, those farmers typically grew wheat and hauled it to river shipping points. As the W&StP built through the counties in 1872, on observer noted that the population thinned west of New Ulm, stating "Only here and there is found a settler" (*St. Peter Tribune*, July 1872, quoted in Webb 1964:133).

The W&StP Railroad Company had incorporated in 1862. The railroad completed its first 11 miles from Winona to Stockton by the end of 1862, making it the second operational railroad in Minnesota. Crossing the bluffs west of Winona, the W&StP reached Rochester in 1864, then connected with the Minnesota Central railroad (later Chicago Milwaukee and St. Paul [CM&StP]) at Owatonna in 1866. In 1867, the C&NW, seeking to expand its influence north and west from its Illinois base, acquired controlling interest in the W&StP. The W&StP continued building west and reached the Minnesota River Valley in 1870. This line was an important early transportation route across southern Minnesota, connecting the river-oriented communities of Winona and Mankato/St. Peter.

During the period from 1870 to 1873, the W&StP continued building westward. The line gained access to Mankato in 1870 through a subsidiary, the Winona Mankato and Northern Railroad, then built north to St. Peter in 1871. After reaching St. Peter, the W&StP built westward, and crossed the Minnesota River into New Ulm in 1872. Building southwest from New Ulm through Brown and Redwood counties, the line

turned sharply northwest at Tracy, continued into Dakota Territory, and reached Lake Kampeska and Watertown in 1873. Due to the economic depression of the mid 1870s, investment capital dried up, and new construction was delayed until later in the decade.

The W&StP resumed construction in the late 1870s. In 1879, the railroad built a second line directly west from Tracy into Dakota Territory. Between 1878 and 1881, four feeder lines were built from the W&StP mainline, helping to fill in the rail network and to solidify the company's service area. Although separate companies built the branch lines, the C&NW controlled all of them through stock ownership. In 1881, the W&StP merged all four of the branch lines into its operations. Later, in 1900, the W&StP itself would be merged into the C&NW (Grant 1996:45-46; Luecke 1990:113-115; Prosser 1966:120, 156-157).

One of the four W&StP branch lines was the Minnesota Valley Railway Company (MVR), which was a 24.4-mile railroad line from Redwood Junction on the W&StP mainline (west of Sleepy Eye in Brown County) to Redwood Falls in Redwood County (Figure 2). Although incorporated in 1876, the company delayed building the railroad for two years until crop production recovered from the grasshopper infestation of the mid-1870s. Construction began in April of 1878 and was completed in July, and the branch line began passenger service on August 1. Later in August, the MVR hauled the first carload of wheat on the line, shipped from the Whitcomb elevator, which was still under construction in Redwood Falls. The MVR was a proprietary railroad whose stock was owned by officers of the C&NW, and the construction was primarily financed through the sale of bonds (Chicago and North Western Railway Company 1879; Luecke 1990:117; Webb 1964:157).

Shortly after completion of the MVR, the Wisconsin Minnesota and Pacific railroad, which was operated by the M&StL railroad, built a line in 1884 across the far northern portion of Redwood County. Three new towns were platted along this railroad line, including North Redwood, just north of Redwood Falls, in 1885. The C&NW completed the railroad network in Redwood County with the construction of two more branch lines by subsidiary companies. In 1899, the Minnesota and Iowa railroad built a line from Sanborn on the W&StP mainline to Vesta, and in 1902, the Minnesota Western railroad constructed a line from Evan in Brown County, across Redwood County, and on to Marshall in Lyon County.

Railroads influenced both townsite and agricultural development in Brown and Redwood counties. Of the six Euro-American communities established in the two counties during the 1850s and 1860s, only Redwood Falls and New Ulm, both of which gained railroad connections, remained by the 1880s. New townsites were platted at regular intervals along the railroad corridors in both counties. By the late 1870s, Sleepy Eye (1872), Walnut Creek (1874), Springfield (1877), and Lamberton (1878) were platted on the W&StP. Prior to completion of the MVR, residents of the Redwood Falls area hauled their wheat south to the W&StP or north to the St. Paul Minneapolis and Manitoba railroad, or seasonally they could ship wheat on the Minnesota River. Soon after the MVR was completed, the towns of Morgan (1878) and Paxton (1879) were platted at the



Map adapted from the MN DNR divison of Fish and Wildlife 100k Lakes and Rivers and 100k Hydrography, Railroad Commissioners Map of Minnesota, 1930 and MN DOT Abandonded Railroads GIS data.



locations of planned railroad stations, while Evan was platted nine years later in 1887. All three towns were platted by private investors or local landowners.

Although settlement and economic development in the northeastern part of the county increased after the MVR was constructed, growth was slow and uneven. Redwood Falls had a brief surge in 1879 as the population grew from about 500 to 900, two grain elevators and two lumber yards were established, and houses and commercial buildings were constructed. A railroad boxcar initially served as the depot in Redwood Falls, and a permanent depot was completed shortly after the railroad line began operation (Curtiss-Wedge 1916:232).

Redwood Falls settled into a slow-growth pattern during the 50 years following 1880 the population reached 1,660 in 1900 and 2,550 in 1930. During this period, the MVR, which became the Sleepy Eye to Redwood Falls branch of the W&StP after 1881, provided a transportation service to Redwood Falls and stimulated development of a commercial shipping corridor along the south edge of town. By the turn of the twentieth century, the railroad corridor in Redwood Falls included the through tracks plus three sidings; a combination depot; a single-stall engine house, turntable, and water tank (built in 1887); four grain elevators; stockyards for cattle, hogs, and poultry; and numerous coal sheds and warehouses (Follmar 1996:15 and 127; Sanborn Map Company 1899).

Morgan grew slowly after its 1878 platting and included only a railroad siding, two stores, and a post office in the early 1880s. The town grew during the 1880s, as the general population and agricultural output of Redwood County grew and generated more commercial activity. In 1886, the community had grown sufficiently that the W&StP built a wood-frame combination depot. By 1890, Morgan had incorporated as a village and had grown to a population of about 300 (Chicago and North Western Railway Company 1886:13; Webb 1964:159, 170).

Despite being a railroad stop and a platted townsite, Paxton never developed into a town. In 1879, Paxton included a railroad siding, a store, a blacksmith shop, and post office, but by the early 1880s, the commercial enterprises had been largely abandoned. By the early 1890s, Paxton was no longer a designated stop on the Redwood Falls Branch. The plat of Paxton was formally vacated in 1917 (Webb 1964:158-159).

Evan, originally platted as Hanson Station in 1887, was the last townsite platted along the Redwood Falls branch. The town served a small service area, grew slowly, and reached a population of 112 in 1910 (Frische 1916:336).

As the railroads established a transportation network in Redwood and Brown counties during the late nineteenth century, wheat was the predominant crop. The railroad lines established during the 1870s and 1880s encouraged farmers to expand wheat production by providing relatively fast, reliable, and efficient transportation. In Redwood County during the 1890s, the population jumped from 9,386 at the beginning of the decade to 17,261 in 1900. Many of the new residents lived on farms and many of them grew wheat: the percentage of land farmed in the county increased from 46 percent in 1890 to 90 percent in 1900, and wheat represented one-third of the improved acreage. The wheat harvest in Redwood County alone in 1900 was 2.5 million bushels (Webb 1964:143, 175-176). This expansion of wheat production, in turn, encouraged the railroads to build additional branch lines, leading to the second wave of railroad construction in the area during 1898 through 1902. Wheat production, however, peaked around the turn of the twentieth century, and over the next several decades, farmers in Redwood and Brown counties diversified their crop production and raised more livestock.

After about 1920, the Redwood Falls branch faced competition from automobiles and trucks for passengers and freight, like most railroads throughout Minnesota. Passenger service on the Redwood Falls branch was discontinued in the late 1930s. Freight traffic dwindled during the years following World War II, and by the early 1960s, the railroad reduced freight service to three round trips between Sleepy Eye and Redwood Falls per week (Webb 1964:380). The branch line was abandoned in 1977. Nonetheless, even as its railroad connection scaled back operations, Redwood Falls continued growing during the post World War II era, and its population reached 3,810 in 1950 and 4,770 in 1970.

3.2 DESCRIPTION

The Sleepy Eye to Redwood Falls railroad corridor (Redwood Falls corridor) was built as a single-track branch line between Redwood Junction on the W&StP/C&NW (now Dakota Minnesota and Eastern [DM&E]) mainline just west of Sleepy Eye and its terminal point is Redwood Falls. The topography between the end points of the corridor is relatively level, and little cutting and filling would have been necessary during construction or subsequent reconstruction of the railroad. Since the corridor was abandoned in 1977, most elements of the railroad roadway have been removed, except for a short segment at the south end and some wood trestle bridges. Some railroad support buildings, such as grain elevators and warehouses, are extant within each of towns formerly served by the railroad. Those buildings and structures, however, have been converted to truck-oriented uses since abandonment of the railroad. Six wood trestle bridges, which carried the railroad over drainage ditches, are located along the railroad corridor, five of which are within the abandoned portion of the corridor.

At Redwood Junction, the Redwood Falls corridor diverges from the DM&E mainline on a right-hand turnout located in the NW ¼ of the NE ¼, Section 36, T110N, R33W. The corridor runs in a northwesterly direction. The DM&E maintains an approximately ¼mile segment of the original corridor as an active railroad, which serves a single industrial facility. The railroad roadway portion of this segment consists of a slightly raised railroad bed overlaid with 1½ to 2 feet of granite ballast supporting modern wood cross ties and steel rails. The right of way is relatively narrow, and there are no drainage ditches. A wood trestle, built of four piling bents and wood abutments, carries the tracks over a drainage ditch (Figures 3 and 4).

Beyond the extent of the active railroad, there are no surface expressions of the former railroad roadway. Rails, ties, and ballast have been completely removed, and the railroad

bed has been plowed over. Only remnant associated buildings, structures, and landscape elements remain from the Redwood Falls corridor.

In the segment between Redwood Junction and Evan, the only suggestion of the former railroad corridor is a power line that runs on an easement parallel to the former railroad right of way, and occasional gaps in tree lines (Figure 5). In Evan, whose main street extends at a 45 degree angle from the railroad tracks, some railroad-related structures remain, including a grain elevator complex; however, a modern corrugated metal, round grain bin has been built adjacent to the elevator on the site of the former railroad roadway Between Evan and Morgan, the former railroad corridor is vaguely (Figure 6). identifiable—the land is plowed parallel to the corridor, whereas the surrounding lands are generally plowed perpendicular to it (Figure 7). In addition, in some areas, the rightof-way fence remains (barbed wire and metal poles). Such patterns on the landscape, however, are not sufficient to evoke a historic railroad corridor. In Morgan, grain elevator complexes and railroad-oriented warehouses remain; however, modern storage bins and buildings have been built over the former railroad roadway (Figures 8 and 9). Northwest of Morgan, the corridor is similar to the southeast (Figure 10). Five singlespan wood trestle bridges that carried the railroad over drainage ditches are present between Evan and Redwood Falls. Although the bridges are extant, the railroad corridor approaching them from both directions is not (Figures 11 and 12).

At Gilfillan, although the railroad roadway is gone, several buildings illustrate the former railroad stop that served the Gilfillan Farm. A small grain elevator, a warehouse, two granaries, and multiple round metal bins are all oriented along the location of the former railroad tracks (Figures 13 and 14).

In Redwood Falls, like elsewhere, the railroad roadway has been removed. The railroad corridor is only defined by several remaining buildings and structures between Halvorson Street and U.S. 71. Remaining elements include two storage buildings, a warehouse, a cold storage building, two elevators, a coal shed, and a tool shed (Figures 15 and 16). Structural remains of the old turntable may be present—access was not gained to the property.

3.3 STATEMENT OF SIGNIFICANCE

The Sleepy Eye to Redwood Falls railroad corridor (Redwood Falls corridor) is associated with two of the contexts identified in the MPDF *Railroads in Minnesota*, 1862-1956 (Railroads MPDF): *Railroad Development in Minnesota*, 1862-1956 and *Railroads and Agricultural Development*, 1870-1940. It is not, however, associated in a significant way with any of the historic themes within those contexts, and the corridor does not meet any of the registration requirements described in the MPDF.

The Redwood Falls corridor was constructed as a branch line off of the W&StP mainline (see Figure 2). The branch line was intended to provide transportation to an existing population node, to draw additional freight and passengers onto the W&StP, and to help protect the territory of the C&NW south of the Minnesota River from other railroad

companies. By the late 1870s, the St. Paul Minneapolis and Manitoba railroad's mainline ran approximately 40 miles north of the Minnesota River, the CM&StP's Hastings and Dakota railroad was building its line through Renville County 10 to 15 miles north of the Minnesota River, and the M&StL was poised to continue building west from Winthrop in Sibley County, which it did in the early 1880s.

Euro-Americans settled in the northern part of Brown County along the Minnesota River in the mid 1850s, in the northern part of Redwood County along the Minnesota River after the reservation lands opened up in the mid 1860s, and in the southern part of both counties after the W&StP was built in the early 1870s. The Redwood Falls line primarily connected those two existing settlement areas but also promoted settlement between them along its railroad line. Before the Redwood Falls line was built in 1878, the existing W&StP railroad, approximately 25 miles south of Redwood Falls, and the St. Paul Minneapolis and Manitoba railroad, roughly 40 miles to the north, were within a day's travel of Redwood Falls. The branch line provided convenient freight and passenger service, and it encouraged additional agricultural production. It did not, however, open up a new area to settlement or to agriculture.

At the time the Redwood Falls railroad corridor was built, wheat was the primary agricultural product of Redwood and Brown counties, and the Minneapolis milling district was on the verge of becoming the world's largest milling district. The Redwood Falls corridor hauled wheat to the W&StP mainline, from which the grain was shipped directly to Chicago or to Minneapolis via a transfer at Mankato onto the Chicago St. Paul Minneapolis and Omaha railroad. In this way, the Redwood Falls corridor contributed in a general way to the development of the Minneapolis milling district and to wheat commodity markets. Its contribution, however, was small compared to other railroad markets.

During the early twentieth century, Redwood and Brown counties transitioned to diversified agriculture much like the rest of southwestern Minnesota, and the Redwood Falls railroad corridor hauled the agricultural freight. The railroad corridor within Redwood Falls during the early twentieth century included a typical mix of agriculture-oriented facilities, such as grain elevators, stockyards, and a produce warehouse. Redwood Falls and the other towns along the line, however, did not develop significant agricultural processing industries, nor were they particularly large exporters of major agricultural products.

Although the terminal points for the Redwood Falls corridor were the existing towns of Sleepy Eye and Redwood Falls, the railroad was a catalyst for the platting of three townsites: Morgan, Paxton, and Evan. The townsite at Paxton never developed much commercial or residential presence, it ceased to function as a railroad station by the early 1890s, and the plat was vacated in 1917. The other two sites, Morgan and Evan, developed into small commercial centers serving their immediate vicinities. Thus, the Redwood Falls corridor did not play a significant role in townsite development.

According to the Railroads MPDF, to meet National Register Criterion A, a railroad corridor historic district must have significant and demonstrable association with the *transportation* area of significance. The Redwood Falls corridor does not meet any of the four significance requirements specified in the Railroads MPDF.

- 1. The corridor did not open a region of the state to new settlement; it connected an existing town (Redwood Falls) to an existing railroad line (the W&StP). Furthermore, although transportation on the Minnesota River was seasonal, the river provided an alternate form of transportation in the area.
- 2. The corridor was not a dominant carrier in the wheat-growing region of southwestern Minnesota, nor did it connect with important transfer points or terminal markets for wheat or other agricultural commodities.
- 3. The corridor was not a particularly early or influential component of Minnesota's transportation network. The W&StP and the Omaha railroads both served southwestern Minnesota by the early 1870s, and the Hastings and Dakota railroad was building westward just north of the Minnesota River by 1878. Furthermore, with no through connection, the corridor did not make important connections within the transportation network.
- 4. The corridor did not provide a critical link or junction in the state's transportation network that supported commerce and industry. Although the corridor supported some commercial development within Redwood Falls, Morgan, and Evan, due to the limited levels of commerce in those towns, the corridor was not a critical transportation link.

The Redwood Falls corridor has poor historic integrity. Beyond the approximately ¹/₄mile segment at Redwood Junction, all elements of the railroad roadway have been removed. In the cities of Evan, Morgan, and Redwood Falls, commercial facilities, such as grain elevators and warehouses, remain within the former railroad right of way. Those facilities are now oriented to trucking and, in some cases, modern buildings have been built over the former right of way. Between the cities, the only extant railroad structures are wood trestles that once carried the railroad over drainage ditches.



Figure 3. Redwood Falls Corridor, wood trestle near Redwood Jct., looking southeast



Figure 4. Redwood Falls Corridor, north of Redwood Jct., looking south



Figure 5. Redwood Falls Corridor, typical segment south of Evan, looking northwest



Figure 6. Redwood Falls Corridor, Evan, looking south



Figure 7. Redwood Falls Corridor, typical segment south of Morgan, looking northwest



Figure 8. Redwood Falls Corridor, Morgan, looking south



Figure 9. Redwood Falls Corridor, Morgan, looking south



Figure 10. Redwood Falls Corridor, typical segment north of Morgan, looking northwest



Figure 11. Redwood Falls Corridor, typical abandoned trestle, looking west



Figure 12. Redwood Falls Corridor, trestle deck, looking north



Figure 13. Redwood Falls Corridor, Gilfillan, looking west



Figure 14. Redwood Falls Corridor, Gilfillan, looking northwest


Figure 15. Redwood Falls Corridor, Redwood Falls, looking east



Figure 16. Redwood Falls Corridor, Redwood Falls, looking west

4.0 CORRIDOR EVALUATION: MINNEAPOLIS NORTHFIELD AND SOUTHERN

4.1 HISTORICAL BACKGROUND

The Minneapolis Northfield and Southern Railway Company (MN&S) was incorporated by Harry E. Pence in 1918, "to acquire, maintain and operate a railroad between Minneapolis and Northfield, and to make extensions to other points in Minnesota" (Prosser 1966:144). The railroad to be acquired was the Minneapolis St. Paul Rochester and Dubuque Electric Traction Company (MStPR&D), more popularly known as the Dan Patch Electric Line. It was under this company that nearly all of the future MN&S trackage was constructed.

Despite their use of the same trackage, these two railroad companies followed very different paths with regard to their operational goals and financial successes. The MStPR&D began as an all-passenger line that ended up in receivership. The Minnesota Northfield and Southern, though it continued to service passengers for some time, focused primarily on industrial freight traffic, and it was profitable in this market for several decades. Due to these differences, the significance of the railroad corridors associated with these companies was evaluated under two separate contexts. The first, "Tourism and Recreation at Lake Marion, Dakota County, 1870-1916" is based in the Minnesota statewide context *Minnesota Tourism and Recreation in the Lake Regions, 1870-1945*. The second, "Minneapolis and Its Western Suburbs, 1918-1956" is based in the Minnesota statewide contexts *Railroads and Agricultural Development, 1870-1940* and *Urban Centers, 1870-1940*.

4.1.1 Tourism and Recreation at Lake Marion, Dakota County, 1870-1916

Responding to increased urbanization and the crowded and unhealthy conditions it engendered in cities, recreation-seekers of the mid to late nineteenth century sought countryside activities, which were promoted as restorative to one's health because they incorporated the intake of fresh air and clean water. As part of this movement, excursions to suburban or rural areas for recreational activities increased in popularity throughout Minnesota and the United States.

Initially, during the 1870s, the time and expense required to attain rural recreational destinations were available only to the wealthy, who could afford the then-expensive train fares or other modes of transportation and had enough leisure time to travel and make the journey worthwhile. Recreational hotspots throughout the country therefore saw the establishment of resorts, where great hotels and associated cottages were constructed to attract the business of the well-to-do, who came to these places on a weekend or seasonal basis with relaxation in mind. These resorts, frequently located on a body of water, afforded the opportunity to picnic, sunbathe, yacht, sail, or fish, while back at the hotel, guests could enjoy private tennis courts, golf clubs, plays, horse shows, art museums, libraries, and other leisure activities (Aslet 1990:239-240).

By the early twentieth century, however, as railroad connections increased and became quicker and more affordable, country-bound excursions were opened to a broader clientele, and "daytripping," taking excursions for all or part of a day, came into vogue for all socioeconomic classes. Railroad and electric streetcar companies saw the potential in accommodating the daytripper market and developed a new form of entertainment to tap into it: amusement parks served by their rail lines. The first permanent amusement park in the United States was built in 1895, and after electric street railway companies began to build such parks to supplement their passenger traffic, they became a firmly established recreational institution. The idea was to

...create a lure at the end of the line, a pleasure park for leisure enjoyment. Beginning as shady picnic groves often located near a body of water, the parks rapidly expanded with the addition of regular entertainments, mechanical amusements, dance halls, sports fields, boat rides, restaurants, and other resort facilities. Various sources report the existence of between 1,500 and 2,000 amusement parks in the United States by 1919 [Adams 1991:57].

The success of the parks in generating profits for the rail companies was such that all major urban centers in the United States were associated with at least one electric railway park during the early twentieth century. In the Midwest, these parks were modeled after those at Coney Island, so that "[b]y 1910, almost every amusement park had a carousel, a Ferris wheel, a roller coaster, a penny arcade, and fireworks displays. The parks emphasized band concerts and other entertainment such as balloon ascensions, and some boasted massive dance halls" (Adams 1991:59). Amusement parks were among the top tourist destinations of the day; in 1911, for example, Kansas City's Electric Park and Forest Park attracted over five times as many visitors as the population of the city in a four-month period (Adams 1991:65).

The popularity of amusement parks, however, was inextricably linked to that of rail travel. Amusement parks were desirable destinations that brought large numbers of passengers down rail lines throughout the country during the first two decades of the twentieth century, but their desirability was due in large part to their accessibility. The mass shift toward automobiles in the 1920s opened up a world of alluring new alternatives to the American public, which challenged the appeal of the parks. With the decline, therefore, of rail travel came the decline of the amusement park. A number of additional conditions compounded the drop in attendance during the early 1920s: the absence of automobile parking at parks that had been served by the railroad, Prohibition, a 1921 railroad strike, poor weather during the on-season during three years in the early 1920s, and the transference of many parks to private ownership. By the mid 1920s, the heyday of the amusement park as a recreational destination was past (Adams 1991:66).

Tourism and recreation at Lake Marion, formerly Prairie Lake, in Dakota County, Minnesota, exhibited the broader pattern of rural and suburban tourism and recreation occurring throughout the United States between the end of the Civil War and the 1920s. Lake Marion's first resort was Weichselbaum's Resort, which began as a fishing spot

created on the south side of Prairie Lake by John Weichselbaum shortly after the Civil War. Between 1870 and 1890, it grew into a complex of lake cabins and a two-story hotel that contained a dining room for 100 people. Wealthy travelers from the Twin Cities often stayed for the summer, as did those from Missouri and Kansas, who were seeking a reprieve from the southern heat. These travelers, who came via horse and buggy along Dodd Road or on the Chicago Milwaukee and St. Paul (CM&StP) rail line, enjoyed tennis, fishing, hiking, berry picking, swimming, boating, and card and board games (Schreier 2003:161). In the 1890s, the CM&StP built a flag depot on their line in present-day Lakeville to serve the passengers traveling to the resort, establishing Weichselbaum Station, and during the early 1900s, 11 new cottages were built by the resort for general visitors. Additionally, three wealthy families in the Lakeville area built private cottages at the resort for their personal use (Mako 1978:35).

Although the early 1900s were the heyday of the Weichselbaum resort, the creation of an amusement park, Antlers Park, brought in numbers to the Lake Marion area which had not been paralleled by the earlier lakeside attraction alone. Antlers Park was established by the MStPR&D to draw traffic to its passenger line, the construction of which began south from Minneapolis in 1908 (see below). The park was part of a 237-acre property located next to the Weichselbaum property on Prairie Lake, a portion of which was a picnic ground frequented by locals for its picturesque quality and access to swimming and boating. In 1908, the MStPR&D purchased the property, which also included farmland, and around this time, Prairie Lake was renamed Lake Marion for Marion Savage, president of the railroad company. Savage platted the farmland into lots for residential or business development but reserved 40 acres of the property for an amusement park to draw passenger traffic from the Twin Cities.

Antlers Park, completed and opened to the public in May of 1910, was typical of the end of the line amusement park of this era. The original farm house on the grounds had been converted into a refreshment store, while the original barn was remodeled into one of the park's biggest attractions, a lavish dance pavilion, "30 by 140 feet, handsomely decorated, with a gleaming oak dance floor" (Mako 1978:37). The farm's granary was relocated to the railroad spur used to access the park to serve as its depot. The park's landscaped grounds featured over 3,000 shrubs and flowers that served as the setting for a children's playground, a baseball diamond, tennis courts, picnic kitchens, a band concert promenade, and arbors, to which were added a miniature railroad, a clubhouse and café building, a bath house, and a boat house. Water-based recreation included swimming, rowing, canoeing, sailing, and a tall water slide, or bather's chute, set up in the lake. The 250 changing rooms in the bath house are indicative of the numbers of patrons who took advantage of the park's proximity of Lake Marion. Using one of the gas-electric coaches to generate electricity, Savage added 50 arc lights and 1,200 incandescent lights to the park's buildings and foliage to illuminate the park in the evenings. The effect of the lights was amplified in 1913 when Savage set up one of the park's most popular attractions, the 120-foot-high illuminated aerial swing that he purchased from Wonderland amusement park in Minneapolis when it closed the previous year (Schreier 2003:162-166).

The MStPR&D brought thousands of people to the Lake Marion area each week, individually and as excursion groups. The railroad's self-powered gas-electric cars accommodated 91 passengers, and these pulled trailer cars, each of which held 106 additional passengers, on a 40-minute route between Minneapolis and Antlers Park. By 1912, the railroad had nine of the self-powered cars and six passenger trailers, and it made 19 daily scheduled stops at the park (Mako 1978:35; Olson 1976:504). Railroad records indicate that its passenger traffic steadily increased until it tripled over the years between 1911 and 1915 (MStPR&D 1911, 1912, 1913, 1914, 1915). Much of this traffic likely went to Antlers Park, as only one other tourist destination, the barn where Savage's legendary racehorse Dan Patch was kept, was present along the line. Even if only half of the railroad's general passenger revenue (i.e., not including privately chartered cars) resulted from the \$0.45 fare to Antlers Park, that would put nearly 170,000 visitors in the Lake Marion area in 1915, making Lake Marion a recreational hub. Although some of these passengers slipped off to Weichselbaum's Resort for fine dining or fishing, the majority were destined for Antlers Park. As with most amusement parks of the early twentieth century, therefore, the history of Antlers Park is inextricable from that of its owner, the MStPR&D.

4.1.2 The Minneapolis St. Paul Rochester and Dubuque Electric Traction Company

The incorporation of the MStPR&D was the one unprofitable link in a chain of business ventures developed by Colonel Marion W. Savage, which were related to his race horse, Dan Patch, and ultimately his livestock food supplement and mail order business, the International Stock Food Company. The International Stock Food Company was started by Savage in 1890, at which time the operation was located in a warehouse on Washington and Second avenues in Minneapolis. Savage's prowess in advertising was unmatched as were the dollars he was willing to spend to promote his company. The returns outweighed the expense, and the International Food Stock Company grew and profited exponentially (Brady 2006:78-79).

With the wealth accumulated through this business venture, in the summer of 1902, Savage purchased a 750-acre property in the town that would come to be named for him. There he built a house and farm with large barn to accommodate his race horses, including Dan Patch, who he purchased in December of 1902. Already internationally renowned for having tied the world pacing record, Dan Patch would soon grace the stock books and advertising prints of the International Stock Food Company. As Savage advertised Dan Patch's racing successes with the International Stock Food Company, many people believed the products of the International Stock Food Company were responsible. Savage then used Dan Patch to market a host of other products. These included, among others, a sugar feed developed by Savage's chemists, manure spreaders, sewing machines, thermometers, gasoline engines, watches, knives, washing machines, and incubators for chicken eggs, patent medicines, lithographs, cigars, smoking tobacco, toys, grooming supplies, and sheet music for the "Dan Patch Two Step" (Brady 2006:164; Middleton 1959). Dan's selling power was cemented as he repeatedly broke his world pacing record, setting his best time in 1905 with a 1:55.25 mile. Two years

later, Savage launched yet another business venture, the MStPR&D, which he marketed as the Dan Patch Electric Line (Olson 1976:502; Brady 2006:182, 195-196).

Initially, the plan for this line was to serve only passenger traffic, and originally it was to connect Minneapolis, where the International Stock Food Company was now headquartered in the Exposition Building, to the city of Savage at a point that would allow excursionists to walk over to visit Dan Patch and Marion Savage's farm. Ambitious as he was, at the time of the incorporation of the MStPR&D in 1907, Savage decided that the line should extend beyond his namesake into northern Iowa and Dubuque, then east to Chicago. Pushing the idea of "the People's Railroad," Savage sold stock at 25 dollars a share and marketed to residents along the line, who were primarily farmers. In this way, he secured enough capital to begin construction south from the intersection of 50th Street and Nicollet Avenue in Minneapolis in 1908, along a line that in Dakota and northern Rice counties would be west of and less direct than the CM&StP (formerly Minnesota Central Railway) connection constructed during the 1860s between Minneapolis and Northfield, which in turn was west of and parallel to the CGW (formerly Minnesota Central Railroad and Minnesota and North Western) connection constructed during the 1880s between St. Paul and Northfield (Prosser 1966; Olson 1976; Brady 2006) (Figure 17).

Once construction began, Savage quickly realized that, although Dan Patch provided a passenger destination in the city of Savage, no tourist attractions were present to encourage passenger traffic beyond that point. To remedy this situation, Savage built Antlers Park, a 40-acre amusement center on Lake Marion (see above). Antlers Park opened in the summer of 1910 and was immensely popular. Profits from passenger traffic to and from the park fueled construction south from Savage, and the Dan Patch line reached Northfield on December 1, 1910 (Brady 2006:198-199).

Although in 1911, the portion of the line extending along Nicollet Avenue from 50th to 54th streets in Minneapolis was sold to the Minneapolis Street Railway, the years 1910 to 1913 were primarily years of additions to the MStPR&D system. In 1910, the railroad constructed a small depot at Orchard Gardens, now listed on the National Register "as a rare example of the diminutive 'flag stop' railroad depot" (Reynolds 1979). Located in present-day Burnsville, Orchard Gardens was a subdivision of five- to ten-acre plots created by Savage from several thousand acres of land that he had purchased and established for the purpose of agriculture and as a source of commuter traffic (Middleton 1959:18). The year 1910 also witnessed the construction of a two-stall carhouse in Northfield, and the following year, a car storage building was built at 60th Street and Nicollet Avenue in Minneapolis. Sometime in 1910 or 1911, a waiting room, ticket office, and wye were constructed at Savage. Grading began in 1911 of 13 miles for railway extending south from Northfield toward Faribault (Olson 1976:504).

Passenger and tourist traffic on the Dan Patch line was in full swing during this period, with passenger revenues tripling during the period between 1911 and 1915 (Minneapolis St. Paul Rochester and Dubuque Electric Traction Company 1911, 1912, 1913, 1914, 1915). By 1912, the MStPR&D purchased more rolling stock predicated on the success



Antlers Park had in expanding this market. From 1912 to 1913, the company built a passenger terminal at 54th Street and Nicollet Avenue, including a passenger station, dispatcher's tower, and turntable; repair shops to complement the car storage building at 60th Street and Nicollet Avenue, including an engine house and repair shop, a paint shop, and a storage shed; and two-stall carhouses at Faribault and Mankato. In 1913. construction began on a 15-mile track extension north from the Auto Club near Savage's home in Bloomington. This line ran through the lightly populated western suburbs of Minneapolis, Edina, and St. Louis Park to Luce Line Junction, where the Dan Patch would gain a connection to downtown Minneapolis via an Electric Short Line Terminal Company line (Olson 1976:504; Brady 2006:208-209). At this time, a "spur track ending at a turntable was constructed off the Auto Club Junction wye" (Olson 1976:504). Between the Auto Club Junction extension, the Luce Line connection, and the mainline, Savage had managed to "create a virtual belt line, which intersected no less than a half a dozen major trunk lines radiating west and south from the Twin Cities" (Middleton 1959:19), including the Chicago Great Western, Chicago and North Western, CM&StP, Great Northern, and Minnesota Western (Figure 18).

Despite Savage's initial success in financing his railroad, however, trouble loomed ahead. Savage could not convince the city of Faribault, the next major stop planned for the MStPR&D, to grant right-of-way through the city. The company found itself unable to shoulder the costs of constructing the Auto Club Junction extension, and in 1914 was required to bring in an outside brokerage firm to help sell the bonds necessary to complete it. In an attempt to finance the purchase of right-of-way through Faribault and additional construction, the railroad began carrying significant amounts of freight (having previously carried only light freight). In 1915, the company leased trackage rights to Faribault and Owatonna from the Chicago Great Western, but this agreement proved unprofitable. Although the Auto Club Junction extension was completed in 1915, and an associated depot constructed in 1916 at North Seventh Street and Third Avenue North in Minneapolis (to be jointly owned by the MStPR&D and the Electric Short Line Terminal Company), these were not signs of renewed vigor for the railroad (Olson 1976:505; Brady 2006:211).

By early 1916, the MStPR&D was deep in debt. Perhaps signifying an acceptance that Faribault was not attainable, the Faribault carhouse was moved to Northfield, and rails were never constructed on the 13-mile segment graded between Northfield and Faribault. Stockholders, already frustrated by a lack of dividends, refused to purchase additional stock. Later in 1916, the railroad's owner and the horse that was once one of its major attractions died within days of each other. One week later, the road went into receivership. In 1917, Antlers Park and the 15-mile extension from Auto Club Junction were sold, Antlers Park to a former employee of the MStPR&D and the Auto Club Junction extension to C. T. Jaffray and Associates, which represented the bondholders' committee (Olson 1976:504-505, 507; Brady 2006:209, 218, 221). The following year, the MStPR&D mainline and Auto Club Junction extension were purchased by the newly organized Minneapolis Northfield and Southern Railway Company.



4.1.3 Minneapolis and Its Western Suburbs, 1918-1956

By the time that the MN&S purchased the MStPR&D, the city of Minneapolis was a well-established urban and industrial center served by several major trunk line railroads, three of which were transcontinental. Within two years, its 380,582 residents constituted 91 percent of the population in Hennepin County. The concentration of people in this location was related directly to the concentration of resources, for transportation, employment, and the like, within the city. The surrounding towns, including those traversed by the Auto Club Junction extension of the MN&S, remained rural in character in 1920 (Roberts 1988; Stark et al. 2004).

After 1920, the increasing availability and affordability of the automobile, in combination with previously constructed electric streetcar lines, led to nodes of residential development in western suburbs such as St. Louis Park and Edina. Overall, however, suburban infrastructure was not such that it could sustain large population centers, thus with the exception of the residential clusters, areas west of Minneapolis were primarily rural locales with agriculture-based economies. After World War II, increasing population, a shortage of housing, and widespread automobile ownership sent construction outward from urban centers (Smith 1978). Aerial photographs of the area surrounding the MN&S line in the western suburbs of Minneapolis in 1937 and 1945 depict a railroad lined by agricultural fields, interrupted only by the occasional small suburban residential development, as in St. Louis Park and Edina, and encountering light industrial development only where it crosses other major transportation corridors.

Indeed, significant suburban growth did not occur in Crystal or Golden Valley until the 1950s (Roberts 1988:42, 50). By this decade, the area occupied by the MN&S was equally, if not better served by highways, though generally a proximity to both types of corridors was required to encourage industrial development in the western suburbs. Even as such development occurred outside of the city, however, the urban center of Minneapolis remained the primary source of business for the rail line (Borchert 1960).

4.1.4 The Minneapolis Northfield and Southern Railway Company

In June of 1918, Harry E. Pence organized the Minneapolis Northfield and Southern Railway Company, and two months later, this new company purchased the MStPR&D at foreclosure (Gjevre 1990:62). Subsequently, the MN&S purchased back the Auto Club Junction extension from Jaffray. In 1921, a new lease agreement was made with the Chicago Great Western, allowing the MN&S the use of trackage from Northfield to Mankato and Randolph, which promoted renewed passenger traffic between Mankato and Minneapolis (Olson 1976:507). In addition, in 1927, the MN&S leased the Luce Line, with which it already connected to enter downtown Minneapolis, to gain access to markets in western Minnesota.

While diversifying its markets helped the MN&S, freight traffic was the key to its success. Pence, realizing the positive implications of having a belt line that could quickly route freight around Minneapolis, connected the road to two more major lines in 1927 by constructing a branch to connect Soonor, near Luce Line Junction, to the Soo Line in

Crystal, approximately 6 miles to the north. By obtaining trackage rights from the Soo Line for the line between the end of the Soonor extension and the Soo Line's Shoreham yard in north Minneapolis, a connection was made with the Northern Pacific (Olson 1976:507) (Figure 19).

The MN&S beltline promoted industrial development, which in turn provided a reliable source of freight. By using the MN&S to connect to the larger railroads, local industrial concerns were able to avoid delays caused by shipping freight through the terminal switching yards in Minneapolis and St. Paul. Additionally, the larger railroads often found a competitive benefit in using the MN&S over the Minnesota Transfer yards. The Great Northern, for example, was a frequent user of the MN&S to facilitate interchanges around Minneapolis for freight that ranged from potatoes to automobiles; although the amount of freight shipped through the MN&S did not approximate the amount shipped through the MN&S did not approximate the Minnesota Transfer yards, during the 1920s, the Great Northern often routed a few to several hundred cars per month on the smaller road, as did the Northern Pacific (Great Northern Railway Company 1921-1930). Within a couple of years of the completion of the Soonor extension, the Soo Line was faced with a space crisis at their Shoreham yard. Although the MN&S is not mentioned specifically, a 1930 letter to the Soo Line's General Superintendent noted:

The facilities at Shoreham are inadequate to handle the business we [the Soo] now have. Box cars, stock cars, wheat, and loads for industries located on the west side which must be moved from Shoreham to Humboldt as soon as possible after arrival in Shoreham yard, *in order to make room for transfers pulling in with cars from connections* [emphasis added].

Clearly, the MN&S had found a niche in Twin Cities industrial rail traffic (Middleton 1959:19-20; Olson 1976:507).

Finding this niche was important because by the late 1920s, the MN&S was forced to move still further away from Marion Savage's vision of an all-passenger railroad. Increased bus service in the 1920s resulted in a significant drop in railway passenger traffic, and by 1931, the MN&S had discontinued passenger service between Northfield and Randolph, Faribault and Mankato, and Northfield and Faribault (Olson 1990:125). In 1942, passenger traffic ceased altogether, but was likely of little concern given the boost to the industrial sector provided by World War II. Furthermore, with the development of Port Cargill in Savage during World War II, the MN&S became an intermodal transfer railroad, serving the barge traffic from Cargill and other shippers. During the Postwar period, the MN&S continued to be "a vital transfer road with access to 130 or more industries" (Gjevre 1990:62), and in 1957, it shipped 81,850 carloads of freight (Middleton 1959:19). It was purchased by the Soo Line in 1982, which was purchased by the Canadian Pacific in the early 1990s.



Today, Progressive Rail operates those portions of the former mainline of the MStPR&D from South Minneapolis to Auto Club Junction in Bloomington and from Lakeville to Northfield, but the remainder of the line is inactive.

4.2 DESCRIPTION

The original MStPR&D mainline corridor, which ran from Northfield, where it connected with the CM&StP, to south Minneapolis, where it connected with the streetcar system at 54th Street and Nicollet Avenue, currently follows the original route. The railroad corridor currently ends at about 60th Street in Minneapolis, just short of its original terminus. Between Northfield and Minneapolis, the railroad corridor passes through a variety of landscapes, including small urban areas, agricultural fields, low density suburban, and high density urban. The topography is generally flat to gently rolling hills, but the railroad corridor also crosses through the Minnesota River Valley. In the active portions of the corridor, the railroad roadway is relatively well maintained, and the railroad bed ranges from slightly depressed to slightly raised to raised on fills as high as 20 feet. Generally, no drainage ditches are present within the railroad roadway. The ballast, ties, and rails are generally modern, but there may be areas with historical-period materials, particularly on the lesser-used sidings and spurs. The segment south of Lakeville includes a number of grade separation structures, primarily wood trestles or concrete culverts, that carry the railroad over creeks and drainage ditches. North of Lakeville, the corridor includes a limited number of more substantial bridges, including wood trestle, and steel or concrete deck girder. The bridge over the Minnesota River is a Pratt through-truss swing-span bridge.

In Northfield, the MStPR&D corridor terminates at a junction with the Canadian Pacific railroad (formerly CM&StP) about ¹/₂ mile northeast of the original junction. In the segment between the original and the current terminus, the MStPR&D southern ran on a corridor that paralleled the CM&StP (Figures 20 and 21). From the current junction, the MStPR&D corridor runs north-northwest out of Northfield to Lakeville. Land uses between Northfield and Lakeville are agricultural, rural residential, and industrial. The railroad right of way is only slightly wider than the railroad roadway within this segment. The railroad bed is slightly raised with gentle side slopes and is either flanked by shallow drainage ditches or slopes down to the ground surface. The ditches are overgrown with natural vegetation, and in many areas, the edge of the right of way is marked by a row of trees. Atop the railroad bed is an approximately 2-foot-thick layer of granite or aggregate ballast. The railroad bed supports a single track, which consists of wood crossties and heavy-weight steel rails (Figures 22-24). At road crossings, the railroad bed rises on fill to the elevation of the county highway or township road. Where the tracks cross the road, planked wood or concrete grade crossings are present, and warnings consist of lights and crossing arms or stop signs and railroad crossing signs (Figures 25 and 26). Grade separations at creeks and drainage ditches consist of concrete culverts or wood trestles (Figure 27).

In Lakeville, little relationship exists between the railroad corridor and the older downtown area. Historically, the downtown grew along the former CM&StP railroad, while the MStPR&D passed along the west edge of town. Currently, the railroad corridor

is surrounded by modern residences, but a distinct railroad corridor remains because the houses are set well back from the right of way, which is also lined by trees (Figure 28). The railroad roadway profile is similar here as the segment to the south.

Antlers Park is located just west of the railroad corridor on Lake Marion. Although the park remains on the original location of Antlers Park, it has been redeveloped into a modern park. Much of the area is devoted to grassy fields, and a picnic pavilion and tables are located by the lakeshore. A large parking lot is located on the east side of the park. A field and a row of trees separates the railroad corridor from Antlers Park (Figures 29 and 30).

North of Lakeville, the corridor continues on a north-northwesterly route, curving as necessary to avoid lakes or take advantage of natural grades. The topography transitions to rolling hills interspersed with lakes and wetlands. As a result, the railroad bed is generally built up on fill or situated within shallow cuts (Figures 31 and 32). As the corridor passes through wetlands between Orchard Lake and Kingsley Lake, the railroad bed is built up on roughly 20 feet of fill with steel side slopes (Figures 33 and 34). Although the corridor appears to be maintained at a lower level than the segment to the south, the ballast, ties, and rails remain intact. In Burnsville, the suburban development around the railroad corridor is more intense, but the railroad corridor remains intact and is buffered from much of the modern construction by topography and trees. Of particular note in Burnsville, the National Register-listed Orchard Gardens Flag Depot is located immediately adjacent to the railroad corridor at County Road 5 and 155th Street (Figure 35).

Continuing north, the railroad corridor descends into the Minnesota River Valley and passes through Savage. Several grade separations are located in Savage, including a 1926 concrete deck girder bridge over Lynn Avenue; a wood trestle with steel beams over Quentin Avenue; a multiple span bridge with six steel deck girder spans over Highway 13; a steel viaduct over the Union Pacific (former Chicago and North Western) railroad; and a wood trestle approach span. Of particular note, as described above, is the swing-span bridge over the Minnesota River (Figures 36 and 37).

North of the Minnesota River, the MStPR&D railroad corridor climbs out of the river valley and within one-half mile, reaches Auto Club Junction (Figure 38). At the junction, the original mainline corridor historically turned northeast, while the Auto Club Extension ran north to form a wye. An east-to-west-running connection just north of the junction formed an additional connection across the top of the "Y." Although the east leg of the wye, which served the original mainline, has been abandoned and the tracks removed, the railroad bed remains visible.³ In addition, the north connector of the wye remains active and makes a connection with the still-active original mainline to the northeast. Multiple sidings at the junction remain extant (Figure 39).

³ Note: access to the Auto Club Junction area was limited and could only be viewed from a distance.

The MStPR&D railroad corridor runs northeast through Bloomington, turns due north at about 92nd Street, and passes through Richfield and into Minneapolis. The railroad corridor passes through a mix of land uses in this segment. Some mid twentieth-century warehouse and industrial facilities remain along the corridor, and some of them appear to use the railroad for shipments (Figures 40-42). In other areas, the setting of the corridor has been overwhelmed by modern suburban commercial development (Figure 43). In still other areas, the corridor passes through 1950s residential developments, which though later than the period of significance, are evocative of the MStPR&D connection to south Minneapolis farther north (Figures 44 and 45). The railroad bed through this segment is generally at grade with the surrounding streets, though stretches of it are slightly raised.

The Auto Club Junction Extension runs northwest from Auto Club Junction to its junction with the Canadian Pacific (former Soo Line) railroad in Crystal. The railroad roadway in this segment is similar to the Bloomington and Richfield segment: generally it is slightly raised with shallow side slopes, though more substantial fills with steep side slopes are present (Figures 46-48). The roadbed carries modern ballast, ties, and rails. Numerous bridges carry the railroad over streets, and grade separations are much more common in this corridor than in the mainline corridor (Figure 49). The setting ranges from mid to late twentieth-century residential, commercial, and industrial.

4.3 STATEMENT OF SIGNIFICANCE

4.3.1 Minneapolis St. Paul Rochester and Dubuque Railroad Corridor Historic District

Minneapolis to Lakeville

The MStPR&D railroad corridor from 54th Street and Nicollet Avenue in Minneapolis to Lakeville connected Twin Cities-area travelers with the tourist area of Lake Marion, particularly the railroad-constructed amusement park known as Antlers Park. In this way, the railroad corridor established a transportation connection between a historically significant class of resource, passengers from the Twin Cities, and an important terminal market (in this case, tourist destination), Lake Marion and Antlers Park. Furthermore, the railroad connection was followed by a significant expansion of the commercial practices of tourism and recreation at Lake Marion. This expansion reflected a broader national pattern by which urban dwellers sought suburban or rural excursion destinations. Although some tourists came from south of Lakeville, the majority were Twin Cities residents seeking an escape to the countryside; therefore, the connection relevant to the line's significance was between the Twin Cities passenger market and Antlers Park.

While it may be suggested that Antlers Park, and not the rail line, was responsible for the boom in tourism at Lake Marion, the construction of the rail line was inherent in the success and existence of the park. Without the MStPR&D, the park would not have been established, nor would it have incorporated the accessibility that made it a success. Further, because the park was owned and operated by the railroad company, it can be considered part of the railroad corridor historic district in the same manner as other

railroad-owned commercial/industrial facilities, such as a company-owned grain elevator, with its contributing or non-contributing status dependent on its integrity.

The portion of the MStPR&D mainline from 54th Street and Nicollet Avenue in Minneapolis to Antlers Park in Lakeville is associated with the broad pattern of tourism and recreation in the lake regions of Minnesota, specifically at Lake Marion in Dakota County, during the period between 1910 and 1916. This segment of the MStPR&D railroad corridor meets the Railroads MPDF Registration Requirement Number 2 under Criterion A.

The period of significance for the Minneapolis St. Paul Rochester and Dubuque Railroad Corridor historic district begins in 1910 with the construction of the railroad and Antlers Park, and it ends in 1916, with the decline of Antlers Park and the death of Marion Savage.

The Minneapolis St. Paul Rochester and Dubuque Railroad Corridor historic district retains good historic integrity. The corridor has not been relocated since the end of the period of significance and has good integrity of location. Although some materials, such as rails, ties, ballast, and signage have been replaced, the railroad roadway includes an easily identifiable railroad bed built up on fill ranging from about 2 to 20 feet in height or located in a slightly depressed grade. The district therefore retains integrity of materials and design. In addition, the ballast, ties, and rails are similar to the track structures that would have been present during the period of significance, and they enhance the integrity of design and feeling. Much of the broad lanscapes through which the railroad corridor passes have been extensively altered from agricultural lands to suburban residential and commercial development. Nevertheless, the railroad right of way is intact and in many areas buffers such as topography and trees are present between the railroad corridor and surrounding development; therefore, the compromised setting does not compromise the overall integrity of the railroad corridor historic district. Finally, the district retains the overall feeling and association with a historic railroad corridor.

Antlers Park, however, does not retain integrity. All elements of the built environment from the early twentieth century have been removed, and the landscaping has been redeveloped. Furthermore, a large parking lot separates the park from the railroad corridor. Only the lakeside location remains from the historic period. Due to its lack of historic integrity, the park does not contribute to the district.

The Minneapolis St. Paul Rochester and Dubuque Railroad Corridor historic district is recommended eligible for listing in the National Register. The historic district encompasses the railroad right of way between the point where it crosses Dodd Road in Lakeville and the current terminus of the railroad at 60th Street in Minneapolis. All buildings, structures, and objects within the right of way that date to the period of significance and retain historic integrity will contribute to the historic district. Contributing elements of the historic district include the railroad roadway; railroad bridges, trestles, and culverts; and the Orchard Gardens Flag Depot.

Auto Club Junction Extension and Lakeville to Northfield

The remainder of the mainline did not likely connect a significant source of passenger traffic to Lake Marion during this period. The Auto Club Junction Extension, which terminated between St. Louis Park and Minneapolis, was not completed until near the end of the peak of Antlers Park's popularity and would not have tapped into a new passenger market. The Lakeville to Northfield portion of the mainline and the Auto Club Junction Extension were of relatively late construction; therefore, they were not early and influential components of the state's railroad network and they did not open a region of the state to Euro-American settlement. While these lines made connections with other railroads, the connections were made in the attempt by the MStPR&D to survive financially; they were not critical or important to the roads to which the MStPR&D connected. Neither of these lines, therefore, made important connections or critical links within the state's railroad network. For these reasons, the MStPR&D mainline south of Lakeville and the Auto Club Junction Extension are not significant under Criterion A for the period between 1910 and 1916.

For the period, therefore, between 1910 and 1916, the Auto Club Junction extension and the portion of the mainline between Lakeville and Northfield are recommended as not eligible for listing in the National Register.

4.3.2 Minneapolis Northfield and Southern

During the post-1916 period, the areas connected by the lines of the MN&S were linked by multiple, much larger railroad lines and later, highways. The connection that the MN&S made by constructing its 6-mile Soonor extension was to existing major railroad corridors. None of the MN&S lines established a transportation connection to expand an industrial, commercial, or agricultural practice, nor were any of them dominant corridors between a historically significant class of resource or commodity and important transfer points or terminal markets. Although the belt line created by the combined MN&S lines provided some convenience to other railroad companies, it did not become the dominant route for interchanging freight in Minneapolis, and such interchange would have been easily accomplished without it. None of the MN&S lines constituted a critical link in the state's transportation network to support commerce or industry. For these reasons, the MN&S mainline, Auto Club Junction extension, and Soonor extension are not significant under Criterion A for the period after 1916.



Figure 20. MStPR&D Corridor, Northfield abandoned segment, looking north



Figure 21. MStPR&D Corridor, Northfield junction with CP, looking south



Figure 22. MStPR&D Corridor, typical roadway north of Northfield, looking south



Figure 23. MStPR&D, typical roadway north of Northfield, looking north



Figure 24. MStPR&D Corridor, industrial spur, looking east



Figure 25. MStPR&D Corridor, typical highway crossing, looking northwest



Figure 26. MStPR&D Corridor, typical street crossing, looking southeast



Figure 27. MStPR&D Corridor, typical culvert, looking east



Figure 28. MStPR&D Corridor, roadway in Lakeville, looking south



Figure 29. MStPR&D Corridor, Antlers Park, looking northwest



Figure 30. MStPR&D Corridor, Antlers Park, looking east



Figure 31. MStPR&D Corridor, typical roadway north of Lakeville, looking north



Figure 32. MStPR&D Corridor, typical roadway north of Lakeville, looking north



Figure 33. MStPR&D Corridor, raised roadway, looking northeast



Figure 34. MStPR&D Corridor, roadway at Orchard Lake, looking south



Figure 35. MStPR&D Corridor, Orchard Gardens Depot, looking northeast



Figure 36. MStPR&D Corridor, Lynn Avenue Bridge, Savage, looking south



Figure 37. MStPR&D Corridor, bridge over Highway 13 and UP, looking east



Figure 38. MStPR&D Corridor, roadway south of Auto Club Jct., looking north



Figure 39. MStPR&D Corridor, Auto Club Jct., looking north



Figure 40. MStPR&D Corridor, industrial setting in Richfield, looking north



Figure 41. MStPR&D, industrial setting, Richfield, looking south



Figure 42. MStPR&D Corridor, terminal point in Minneapolis, looking northwest



Figure 43. MStPR&D Corridor, suburban setting in Bloomington, looking northeast



Figure 44. MStPR&D Corridor, residential setting in Bloomington, looking north



Figure 45. MStPR&D Corridor, residential setting in Richfield, looking northeast



Figure 46. Auto Club Extension, typical roadway, facing southwest



Figure 47. Auto Club Extension, typical roadway, looking northwest



Figure 48. Auto Club Extension, typical bridge at road crossing, looking west



Figure 49. Auto Club Extension, typical roadway, looking north

5.0 CORRIDOR EVALUATION: CARLTON TO CLOQUET BRANCH OF THE NORTHERN PACIFIC

5.1 HISTORICAL BACKGROUND

Carlton County was formed from the southern portion of St. Louis County in 1857. The first formal roadway in the county was the military road linking St. Paul and Duluth, which became the primary transportation corridor for shipping between the two cities. Not surprisingly, the first railroad built through the area, the Lake Superior and Mississippi Railroad Company (LS&M), followed the same general route.

The LS&M was established to connect the Lake Superior shipping ports to the commercial waterways of the Mississippi and St. Croix rivers. Construction began in 1868, with track laid between St. Paul and Wyoming. The following year, the line was completed to Hinckley, and in 1870, track was extended to the Duluth docks. In February of that year, construction of the Northern Pacific Railroad began from a junction with the LS&M at Northern Pacific Junction, located approximately one mile west of present-day Carlton, Minnesota. In 1877, the LS&M's routes were purchased by the St. Paul and Duluth Railroad (StP&D).

The systematic logging of Minnesota's North Woods began in the late 1870s and required the establishment of remote worker's camps to feed cut timber into streams and rivers, water-borne "booms" to float the logs downstream, and sawmills to process the logs into standard lumber and other products (Williams 1990:152-157). Minnesota's rapidly developing railroad system supported the expansion of North Woods logging, particularly in the large forests drained by the St. Louis and Cloquet rivers.

The initial railroad land grants to the LS&M included extensive stands of timber and the StP&D commonly carried logs and milled lumber, and even extended spurs into adjacent forests to convey cut timber to nearby rivers, sawmills, or other common carriers; thus in 1878, when Charles D. Harwood erected a 50,000 board-foot per day sawmill at the village of Knife Falls five miles up the St. Louis River from Northern Pacific Junction, the StP&D was prepared to extend railroad service to the site.

The Knife Falls Branch of the StP&D was constructed in 1879 between Carlton and Cloquet (Figure 49). The line extended northward from a junction with the Northern Pacific in the SE 1/4 of Section 1 (Twin Lakes Township); swung west of swampy terrain in Section 36 (Perch Lake Township) and followed the eastern foot of a low escarpment; passed in a northeasterly direction through Section 25 (Perch Lake Township); ran north through Section 30 (Thomson Township); passed through Section 19 (Thomson Township) just east of the area that would become the village of Scanlon in Section 24 (Thomson Township); and looped in a northwesterly arc that terminated at the lumber mills in Sections 13 and 14 (Cloquet Township). Two decades later in 1900, the StP&D, including the Knife Falls route, would be acquired by the Northern Pacific (Prosser 1966:159).



With rail transportation now established, the local lumber industry boomed. In 1880, James Paine and Co. built a water-powered sawmill with a 100,000 board-foot per day production capacity, and C. N. Nelson Lumber Co. built two steam sawmills that produced 350,000 board feet per day. By 1883, the village of Knife Falls that had developed around the mills had been platted and incorporated (Upham 2001). The same year, the Knife Falls Lumber Co. rebuilt the local Harwood sawmill, increasing its daily capacity to 180,000 board feet, then sold it to Renwick, Crossett & Co. in 1884. In 1885, the major milling interests in what was now called the village of Cloquet included the C. N. Nelson Lumber Co., Renwick, Shaw and Crossett's, and the Water Power Company (Sanborn 1885). By the end of the decade, the StP&D's first competitor, the Duluth and Winnipeg Railroad (D&W) had begun construction from Duluth through Carlton and Cloquet and northeast to Deer River. The D&W's line was complete by 1892, effectively ending the StP&D's monopoly on Cloquet lumber shipping. The D&W went into receivership in October 1894, was reorganized as the Duluth Superior and Western Railway (DS&W), and was subsequently purchased by James J. Hill through the Eastern Railway Company of Minnesota in 1898. The Eastern was in turn absorbed into the Great Northern Railroad Company in 1907.

During the 1890s, Frederick Weyerhaeuser and other lumbermen developed new alliances with lumbering and processing firms that concentrated capital and influence. Weyerhaeuser and associates purchased the remaining portion of the Northern Pacific land grant in 1890, and that transaction shifted extensive tracts of lumber into private hands. Weyerhaeuser's group established sawmilling operations closer to the cuttings, at Little Falls, Cloquet, and Virginia. The economic Panic of 1893 was only a temporary set-back for the lumber industry—six years later, sawmill production in Minnesota reached an all-time peak. Weyerhaeuser continued his consolidation of the Cloquet mills, purchasing the C. N. Nelson Lumber Co. in 1896 (King 1981:88).

Minnesota sawmill operators began modernizing their operations in the 1890s. As a result, in 1900, three of the four sawmills in the United States that produced more than 100 million board feet per year were located in Minnesota. Although investments in the lumbering industry decreased after 1900, forest products industries expanded and Cloquet became a multi-faceted forest products center served by two trunk rail lines. New companies included the Cloquet Box Company (1904); the Berst Company (1905; manufacturing clothespins, toothpicks, and tongue depressors); and the Diamond Match Company (1905).

After low river levels interfered with St. Louis River log driving in 1902, a consortium built the Great Northern Power Company Dam at Thomson (just east of Carlton) during 1905-1907. As a result, lumber companies could take advantage of more consistent St. Louis River water levels for upstream boom shipping, and the abundant hydroelectric power allowed Cloquet sawmills to convert to less expensive electric saws. The Carlton to Cloquet railroad corridor facilitated the construction of this project.

In addition to regulating the water flow on the St. Louis River, the Weyerhaeuser interests began surveying an extension of the Duluth and Northeastern Railroad between

Cloquet and active logging operations 25 miles to the northeast near Rush Lake. Weyerhaeuser's focus on extending the logging railroad system deeper into the North Woods contributed to the company's growth over the next fifteen years.

By October 1918, when Cloquet was completely destroyed by fire, three Weyerhaeuser lumber companies operated five local sawmills that generated 250 million board feet annually. After the fire, the city rebounded as the center of forest products industries. Weyerhaeuser maintained an interest in wood products manufacturing and established the Wood Conversion Company in Cloquet in the early 1920s. Throughout the decade, Cloquet firms shipped large quantities of lumber, lath, shingles, and other products by rail (Carroll 1987:150-152; Hartsough 1925:190-191). Despite plans in the 1920s to log large tracts of far northern Minnesota, the regional logging railroads were beginning to abandon their trackage. By the 1940s, the Minnesota logging railroads were extinct.

5.2 DESCRIPTION

The Knife Falls railroad corridor extends northward from a wye junction with the original Northern Pacific mainline (currently BNSF): the eastbound leg of the wye in the SE¹/₄ of the SE¹/₄ of Section 1, Township 48 North, Range 17 West (Twin Lakes Township) and the westbound leg of the wye in the SW¹/₄ of the SW¹/₄ of Section 6, Township 48 North, Range 16 West (Silver Brook Township) in Carlton County. From a point near present-day Walnut Avenue, the corridor runs nearly due north from the wye, turning slightly to the north-northwest and then resuming its northerly trajectory. The corridor runs northward to Scanlon (just north of I-35), then bears northwest, joining with the broad railroad corridor shared with the Great Northern (BNSF).⁴ The corridor then runs due westward through Cloquet, where the right of way widens dramatically to accommodate the former spurs that served the lumber mills. The Knife Falls Branch then continues to the northwest, parallel to the St. Louis River, before curving toward the river shoreline in the NE ¹/₄ of Section 15 in Cloquet Township.

The 1879 construction of the line required surface grading and filling of wetlands to achieve a level grade. Minor surface preparation for the roadway would have been required in the vicinity of Northern Pacific Junction at Carlton and on the St. Louis River floodplain west of the current Sappi Paper Company facility. North of Carlton, blasting was likely used to remove shale exposures in the right-of-way as well as to excavate the depressed approach grade located east of Scanlon and north of the grade separation with I-35. Most of the corridor in Sections 25 and 36 (Township 49 North, Range 17 West) was brought to level grade by filling wetlands.

Evidence for the westbound portion of the Knife Falls railroad corridor's wye at Northern Pacific Junction consists of a slightly raised roadbed visible between the existing BNSF right-of-way and State Highway 210, roughly parallel to Chestnut Ave (Figure 51). No direct evidence exists for the eastbound leg of the wye other than the absence of buildings and structures on the 400-foot former right-of-way between Walnut Avenue and North

⁴ The Great Northern corridor also runs north-south between Carlton and Cloquet to the west of the Knife Falls branch. The Great Northern corridor is evaluated in Chapter 6, below.
Avenue (Figure 52). This portion of the former corridor is currently used for parking or access to Walnut Avenue. North of Walnut Avenue, the railroad bed is well-preserved. The railroad bed surface is level or slightly raised above the adjacent natural ground surface, and is drained by shallow, excavated ditches (Figure 53). The railroad bed runs parallel and in proximity to residential streets on the north side of Carlton. The railroad corridor is visible only as a break in the vegetation between Cedar Avenue and the commercial parking lot located immediately south of County State Aid Highway (CSAH) 3. The parking lot itself has completely destroyed any surface expression of the railroad bed (Figure 54).

North of CSAH 3, the railroad bed is raised above the natural ground surface on low fills with gentle side slopes (Figure 55). the corridor enters an undeveloped area characterized by intermittent, perched wetlands and exposures of weathered, vertically-planed shale. As a result, the railroad corridor comprises a raised railroad bed with the suggestion of blasting where the right-of-way crosses the shale exposures (Figure 56). As the corridor continues northward, it crosses through more extensive wetlands and outcroppings. As a result, the railroad bed is raised up on much more extensive fills in places, well above adjacent wetlands, and in other places, it is within depressed grades cut 3 to 8 feet into shale bedrock (Figure 57). Continuing north, the ground elevation begins to drop into a consistently lower wetland region, and the railroad bed resumes a low fill profile with shallow drainage slopes (Figure 58). Just south of I-35, the Knife Falls railroad corridor into Cloquet (Figures 59 and 60).

After passing under I-35, the railroad corridor broadens, and the Knife Falls portion consists primarily of graded roadway with gently sloping drainage on its eastern margin. After the line passes under State Highway 45, it enters a depressed corridor, excavated into the slate bedrock to a depth of 5 to 10 feet (Figure 61). This portion of the corridor likely required the largest amount of blasting and debris removal during the original construction of the branch line. It is not clear whether the Eastern widened the roadway cut during construction of its parallel line in 1898. The Knife Falls and Great Northern railroads continue on a shared corridor northwest then west into Cloquet. The configuration of main tracks and spur tracks within the shared corridor has been modified over the years, but the overall right of way remains (Figures 62 and 63).

5.3 STATEMENT OF SIGNIFICANCE

Significance

The Carlton to Cloquet railroad corridor of the Northern Pacific (Knife Falls corridor) is associated with two of the historic contexts identified in the Railroads MPDF: *Railroad Development in Minnesota*, 1862-1956 and Northern Minnesota Lumbering, 1870-1930s. The Knife Falls corridor is significant for its association with the historic themes described in those contexts and meets the registration requirements for railroad corridor historic districts as described in the Railroads MPDF.

At the time of the Knife Falls corridor's construction in 1879, Minnesota's primary railroad mainlines were complete, and numerous branch lines were being built to provide an interconnecting transportation network. In addition to other commodities, these branch lines hauled the prodigious amounts of lumber produced by the state's numerous sawmills. In the midst of population growth and economic development, a hierarchy of urban centers and small cities and towns developed within the railroad network to serve as distribution centers for raw commodities and manufactured goods. The Knife Falls corridor was constructed as a branch line of the existing StP&D railroad between the Twin Cities and Duluth and was the first to provide critical railroad shipping to an economically significant node of the state's growing logging industry in Cloquet.

The corridor is thus a historically significant example of a branch line that established a transportation connection between a historically significant class of commodity (logging resources and lumber) and important transfer points (the Northern Pacific Junction) and terminal markets (the Twin Cities markets and Duluth ports). In addition, the construction of the branch and its connection both to the state's main shipping port and the transcontinental Northern Pacific (after 1883) was followed by a significant expansion of the logging and milling industry in northeastern Minnesota.

According to the Railroads MPDF, to meet National Register Criterion A, a railroad corridor historic district must have significant and demonstrable association with the *transportation* area of significance. The Knife Falls corridor meets three of the four significance requirements specified in the Railroads MPDF.

2. The Knife Falls corridor served as the first and until 1892 the only railroad connecting the historically significant Cloquet lumber mills and the Minneapolis-St. Paul and Duluth markets. In addition, the construction of the corridor was followed by a significant expansion of the lumber industry in the northern Minnesota forests within the St. Louis and Cloquet rivers' watershed.

3. The Knife Falls corridor was an influential early component of the state's transportation network, having been constructed in 1879. Later railroads, including the Great Northern, Duluth and Northeastern, and Canadian National, attempted to compete with the Knife Falls corridor by constructing alternate (sometimes parallel) lines into Cloquet. In addition, the railroad corridor provided an inter-modal connection between the logging industry's river shipping on the St. Louis and Cloquet rivers and the expanding Northern Pacific transcontinental line and StP&D line between the Twin Cities and Duluth.

4. The Knife Falls corridor provided a critical link in Minnesota's transportation network that served the early and historically significant lumber industries in Cloquet. Cloquet served as the terminus for the river-shipping of logs on the St. Louis and Cloquet rivers; a processing center for the production of lumber; and a transfer point for the railroad shipping of lumber to the Twin Cities market and the docks in Duluth.

Integrity

The Knife Falls Railroad Corridor historic district retains sufficient historic integrity to convey its historic significance. The essential physical feature of this railroad corridor is the linear railroad roadway, comprising both the railroad bed and the right-of-way through which the railroad bed passes. Some physical changes have been made to the railroad corridor since its abandonment, including the removal of ties, rails, and signage; the obscuring of a short segment of railroad bed at the branch's junction with the former Northern Pacific mainline in Carlton; minor erosion of the roadbed surface from all-terrain vehicle use; and encroachment of vegetation on the shoulders of the roadbed. None of these changes, however, significantly interfere with the line's overall integrity and its ability to convey its historic identity as a railroad corridor.

The Knife Falls Railroad Corridor historic district retains its integrity of location because it follows its original route on the landscape and conforms to the horizontal and vertical alignments present at the end of its period of significance in 1888. The district also retains its integrity with respect to materials and design. The railroad bed, fills, cuts, and ditches of the district conform to their historical configurations, retaining sufficient visual presence to convey their historic functions and reflect the conscious engineering decisions made during the original conception and planning of the railroad. Although there has been minor erosion of the railroad bed, and it has been worn down from recreational use, the overall configuration of the raised bed remains visible. Much of the railroad corridor south of CSAH 3 in Carlton is no longer visible because of the construction of asphalt parking lots, and only remnants of the railroad bed remain at the western leg of the wye at Northern Pacific Junction. The railroad bed of the eastern leg of the wye is no longer visible.

The Knife Falls Railroad Corridor historic district retains its integrity of setting with respect to the surrounding environmental and topographic features of the St. Louis River drainage, passing through landscapes similar to those of the late nineteenth century, including wetlands, exposed bedrock uplands, dense conifer forests, rural settlement, and industrial development. Although some encroachment of vegetation on the shoulders of the railroad bed has occurred, it does not obstruct the linear visual character of the roadway, has not altered the overall profile of the railroad bed, and is not sufficient to obscure the line's essential physical features. The district retains its original design, materials, and relationships to local environments that are similar to those of the period of significance. It therefore retains integrity of feeling. Finally, the location, design, materials, and setting of the district effectively convey the railroad corridor's historic character and contribute to the property's ability to retain its integrity of association.

The Knife Falls Railroad Corridor historic district is recommended as eligible for listing in the National Register under Criterion A. The period of significance of the district begins in 1879 with the construction of the railroad between Carlton and Cloquet, and it ends in 1892 when the Eastern Railway Company of Minnesota (Great Northern) completed its railroad between Duluth and Deer River. The Eastern railroad not only provided direct competition for shipping the products of Cloquet's sawmills, it also opened up railroad access to the forests north and west of Cloquet. The Knife Falls Railroad Corridor historic district encompasses the railroad right of way between Carlton and Cloquet. On the north end, the district terminates at the historic terminus of the railroad in the NE ¹/₄ of Section 15 in Cloquet Township. On the south end the district terminates at the CSAH 3 crossing in Carlton. Although the Knife Falls Branch historically connected with the Northern Pacific in downtown Carlton, there are gaps where the current railroad corridor maintains no visual presence south of CSAH 3 and only minimal visual expression at the historic junction. As a whole, however, the railroad corridor historic district conveys the historic connection between Carlton and Cloquet.



Figure 51. Knife Falls Corridor, west wye at NP Junction, looking northwest



Figure 52. Knife Falls Corridor, east wye at NP Junction, looking southeast



Figure 53. Knife Falls Corridor, looking south from Cedar Avenue



Figure 54. Knife Falls Corridor, looking south from CSAH 3



Figure 55. Knife Falls Corridor, looking north from CSAH 3



Figure 56. Knife Falls Corridor, cut through rock outcropping, looking north



Figure 57. Knife Falls Corridor, typical railroad bed, looking south



Figure 58. Knife Falls Corridor, typical railroad bed, looking north



Figure 59. Knife Falls Corridor (left) and GN Corridor (right), looking south



Figure 60. Knife Falls Corridor and GN Corridor (left), looking north at I-35



Figure 61. Knife Falls Corridor and GN Corridor (left), looking north to CSAH 45



Figure 62. Knife Falls Corridor and GN line (left), excavated bedrock, looking north



Figure 63. Knife Falls Corridor, east Cloquet railroad yard, looking west



Figure 64. Knife Falls Corridor, looking west from Broadway Avenue, Cloquet

6.0 GREAT NORTHERN: EAST GRAND FORKS TO STATE LINE NEAR WRENSHALL

6.1 HISTORICAL BACKGROUND

The Great Northern Railway Company corridor from East Grand Forks to the state line four miles east of Wrenshall (referred to below as state line) in Carlton County is the sum of several construction episodes by four predecessor companies (Figure 65).

- The **Red River Valley Railroad Company** constructed railroads from Crookston to Fisher's Landing (1875) and from Fisher's Landing to East Grand Forks in 1879.
- The St. Paul Minneapolis and Manitoba Railway Company (Manitoba) constructed a railroad from Crookston to Fosston in 1888.
- The **Duluth and Winnipeg Railroad Company** constructed a railroad from Cloquet to Deer River between 1888 and 1892.
- The **Eastern Railway Company of Minnesota** (Eastern) constructed railroads from the state line to Cloquet in 1898 and from Deer River to Fosston in 1899-1900.

The entire railroad corridor, when completed in 1900, served as the Great Northern through route between the Red River Valley and the Duluth-Superior port. In addition, segments of the larger railroad corridor were built to serve specific functions and operated as distinct railroad corridors well before the whole Duluth to Grand Forks railroad corridor was completed.

6.1.1 Development of the East Grand Forks to State Line near Wrenshall Railroad Corridor

Crookston to East Grand Forks, 1875 and 1879

On June 12, 1875, the Red River Valley Railroad Company was incorporated by James J. Hill and Donald Kittson to "construct and operate a railroad from Breckenridge to Glyndon and other lines in the Red River Valley" (Prosser 1966:157). Truly, however, its purpose was to link the St. Vincent extension at Crookston to Fisher's Landing (near present-day Fisher), which was located on the Red Lake River about 12 miles west of the rail line and about 13 miles southeast of its confluence with the Red River (Figure 66). The point of this link was to provide a shorter connection to freight carried by Kittson and Hill's steamboat operation, the Red River Valley Transportation Company, much of which came to the Northern Pacific line at Moorhead from Winnipeg via the Red River. By diverting their steamboats to the new line, Kittson and Hill could transport the freight traffic on their own railroads, providing themselves with a source of revenue and taking one away from the Northern Pacific. To avoid charges of monopoly, Hill and Kittson did not sit on the board of directors of the new company. Instead, they paid Jesse Farley, an Iowa railroad man who had worked for several eastern roads, to construct the railroad, which he did in the fall of 1875. By May of 1876, the Red River Valley Transportation





Map adapted from the MN DNR divison of Fish and Wildlife 100k Lakes and Rivers and 100k Hydrography, Railroad Commissioners Map of Minnesota - 1930, and MN DOT Abandonded Railroads GIS data.



Company, which was the only steamboat company operating on the Red River from Winnipeg south, established Fisher's Landing as the southern terminus for all of its traffic and as an important transfer point between Winnipeg and St. Paul (Martin 1976:83, 121; Luecke 1997:32-33).

As Hill and Kittson moved to take over the St. Paul and Pacific railroad in 1878, they were elected to the board of directors of the Red River Valley Railroad Company (Hidy et al. 1988:31). Because the completion of the St. Vincent extension in December of 1878 brought Winnipeg's freight traffic directly to the Manitoba, freight transfer at Fisher's Landing became obsolete. Under Hill and Kittson's direction, therefore, the company began construction of a railroad from Fisher's Landing to Grand Forks in April of 1879, this time to take advantage of the predicted wheat traffic coming from Dakota Territory. The line reached East Grand Forks in October of that year, and shortly thereafter the Red River Valley Railroad Company was subsumed by the Manitoba (Prosser 1966:157; Hidy et al. 1988:39; Luecke 1997:41-42) (Figure 67).

Cloquet to Deer River, 1888-1892

The Cloquet to Deer River portion of the state line to East Grand Forks corridor is the only portion constructed by a company, the Duluth and Winnipeg, not linked to James J. Hill. This company, incorporated in 1878, performed minor construction along the St. Louis River to the south of Duluth in 1881, then was resurrected in 1888, at which time it began to build west from Cloquet with the goal of serving the lumber industry in the northern part of Minnesota. Hill, sensing the potential for heavy competition if the railroad connected the cities of Duluth and Winnipeg (and the Canadian Pacific railroad), ordered the construction of the Crookston to Fosston branch of the Manitoba (see below). Despite Hill's tactic, the Duluth and Winnipeg railroad continued construction and reached Deer River in 1892 (Figure 68).

By January of 1893, the president of the Canadian Pacific railroad, William C. Van Horne, gained control of the Duluth and Winnipeg railroad. The Panic of 1893 and ensuing economic depression reduced freight and revenues for the railroad. To make matters worse, the Duluth Missabe and Northern railroad, which had been using the Duluth and Winnipeg railroad between Duluth and Cloquet to transport iron ore since 1892, terminated its lease agreement and built its own line to Duluth. The loss of iron ore traffic pushed the Duluth and Winnipeg railroad into bankruptcy and receivership in October of 1894. Stockholders of the Duluth and Winnipeg railroad banded together to save the company, and their efforts resulted in the December 1896 incorporation of the Duluth Superior and Western Railway. Though the new railroad was chartered with a route that extended west to the Red River Valley instead of north to Winnipeg, it was still in Canadian Pacific hands; its new route therefore did nothing to allay Hill's fears of competition.

Hill began to push Van Horne to sell the road. It took two years and added pressure from Hill and Kittson's associates, Baron Mount Stephen and Donald Smith, before Van Horne acquiesced, and then only in return for "significant traffic agreements" (Hidy et al.



Map adapted from the MN DNR divison of Fish and Wildlife 100k Lakes and Rivers and 100k Hydrography, Railroad Commissioners Map of Minnesota - 1930, and MN DOT Abandonded Railroads GIS data.

Legend

- Red River Valley Railroad Co. 1879 (GN)
- Red River Valley Railroad Co. (GN)
- ---- St. Paul and Pacific Railroad Company (GN)

Northern Pacific



Figure 67. RED RIVER VALLEY RAILROAD COMPANY - 1879

Minnesota Statewide Historic Railroads Study Project Report



Map adapted from the MN DNR divison of Fish and Wildlife 100k Lakes and Rivers and 100k Hydrography, Railroad Commissioners Map of Minnesota - 1930, and MN DOT Abandonded Railroads GIS data.

Plot Date: 4/5/2007

1988:87). On June 22, 1898, Hill purchased the Duluth Superior and Western through the Eastern.

Crookston to Fosston, 1888

The Crookston to Fosston portion of the corridor was one of a series of lines constructed between 1886 and 1905 by the Manitoba. Built in 1888, its main purpose was to serve as a foundation for building east toward Duluth to offset potential competition by the Duluth and Winnipeg (see above), should that company carry out its goal of connecting the terminal points indicated by its name. A turntable was constructed in Fosston, which remained the end of the line until 1900 (see below) (Figure 69).

State Line to Cloquet, 1898, and Deer River to Fosston, 1899-1900

In 1898, shortly after the Eastern's purchase of the Duluth Superior and Western railroad, the former Duluth and Winnipeg railroad from Cloquet to Duluth was taken up and replaced by a line from Cloquet to Superior via Carlton (Figure 68). The following year, the Eastern extended the former Duluth and Winnipeg railroad from Deer River to Cass Lake, moving toward a connection of the Twin Ports with the Red River Valley. This connection was completed in 1900 with the construction of the railroad from Cass Lake west to Fosston, which joined the Manitoba railroad running west from Fosston to the Red River Valley (Prosser 1966:133-134; Martin 1976:468; Hidy et al. 1988:86-87; Luecke 1997:95-97) (Figure 70).

East Grand Forks to State Line Railroad Corridor, Post 1900

The Great Northern railroad corridor between East Grand Forks and the state line near Wrenshall was a major transportation corridor for the northern Minnesota lumber industry at the turn of the twentieth century. The Great Northern corridor traveled through some of Minnesota's most productive stands of pine, it was the mainline into which numerous branch lines and logging railroads funneled loads of cut logs, and it connected with sawmilling and distribution centers at several locations, including Duluth, Bemidji, Cloquet, and Crookston. The railroad corridor also served as the mainline onto which several iron range branch lines transferred thousands of tons of iron ore per year to be hauled to the Duluth-Superior port. Finally, the railroad corridor connected the Duluth-Superior metropolitan center with the Grand Forks-East Grand Forks and with Winnipeg via the St. Vincent Extension. Although this was not the first connection between those commercial centers, it was the shortest and most direct railroad corridor. In this capacity, the railroad hauled significant volumes of wheat from North Dakota and the Red River Valley to the Lake Superior port for shipment to Buffalo, New York. In addition, the railroad hauled processed food and manufactured goods from the port to Grand Forks and Winnipeg for distribution. The themes of agriculture, logging, iron ore mining, and development in Duluth are further discussed in the contexts below.

When the Soo Line completed its Wheat Line into North Dakota and its Plummer Extension to Duluth-Superior in 1910, it competed directly with the Great Northern's East Grand Forks to state line railroad corridor. Nonetheless, the Great Northern remained a major carrier of agricultural commodities, logs and milled lumber, iron ore, and manufactured goods across a broad swath of northern Minnesota through the 1920s.





By the late 1920s, the railroad corridor faced competition from other modes of transportation, particularly automobiles and trucks. In 1926, U.S. Highway 2 was designated as an east-west route across northern Minnesota parallel to the railroad corridor. Although it would be years before an integrated highway corridor would be completed, signage along the route and road improvements began shortly after designation. In addition to this competition, by 1930, most of Minnesota's pine forests had been depleted, and the Great Depression had severely reduced demand for iron ore and cause prices to drop precipitously for agricultural commodities. Thus, the main types of freight hauled by the railroad corridor were greatly reduced. Although freight traffic, particularly iron ore, would recover during World War II, the significance of the railroad corridor was effectively diminished. It was one of multiple transportation options, it did not open up new resource procurement areas, and it no longer contributed to the creation of new industries or major expansions.

6.1.2 Railroads and Agricultural Development in the Red River Valley

The agricultural potential of the Red River Valley was recognized 60 years ahead of railroad construction in that area, yet it took the arrival of the railroads for that potential to be realized. Beginning in 1811, farming occurred in a limited capacity on the Canadian end of the valley in colonies established on riverside lots. In general, these colonies comprised subsistence farmers who initially produced only enough to sustain themselves, and later to supply the fur trade with flour, potatoes, dairy products, and meat. Despite favorable reports from American surveyors, however, few farmers settled in the Red River Valley until the 1870s. In addition to hindrances placed on agriculture by the Hudson Bay Company, which perceived it as a threat to the profitability of the fur trade, the reliance of the area on slow and inefficient oxcarts for transportation isolated its residents and reduced the appeal and practicality of attempting larger-scale commercial agriculture (Murray 1967).

During 1860s, prior to the 1871 arrival of the Northern Pacific and St. Paul and Pacific railroads at the Red River, steamboats and stagecoaches were used to augment the transportation of goods between the Red River Valley and St. Paul. Although these transportation methods were still not sufficient for supporting a significant amount of settlement throughout the valley, by 1860, the cluster of northern farming colonies "had become the major center of population and trade beyond [northwest of] St. Paul" (Murray 1967:48). Railroad officials realized that the expansion of settlement in this area would lead to additional markets and profits. With the goal, therefore, of realizing these profits, the Northern Pacific and the St. Paul and Pacific railroads began building west to the valley in the late 1860s (Murray 1967).

Although speculation over where the railroads would build into the Red River Valley resulted in the platting of townsites in various locations along the Red River during the 1860s and the establishment of small settlements at its confluences with other rivers in 1870, it was the completion of the Northern Pacific and St. Paul and Pacific railroads to Moorhead and Breckenridge, respectively, that led to the first substantial wave of Euro-American settlement on the United States end of the Red River Valley, with 2,529 recorded new residents arriving in Wilkin, Clay, and Polk counties between 1870 and

1875. These residents were primarily farmers, and while some settled along the tributaries of the river, many obtained lands along the railroads. In large part, these early settlers were European immigrants who took advantage of incentives and property offered by the railroad companies (Murray 1967).

During the 1870s, a number of changes, in addition to the growing population, affected economic activity in the Red River Valley. The production of wheat increased, with more farmers planting the crop on tracts of land significantly larger than the old riverside lots, often 160-acre homesteaded land. New farming technologies emerged, and many of the farmers wanted to take advantage of them, creating a steady market for agricultural implements. Winnipeg became an urban center, with lumber and flour milling as its major industries, and a population that grew to 5,000 by 1875 (Murray 1967:92). Merchants, businessmen, and professionals came in larger numbers to service the growing population of the area, and they required supplies to carry out their trades. These changes set in motion repeating cycles of population and economic growth that would require the continued expansion of the railroad system in the Red River Valley. Prior to this expansion of the railroad network, transshipment points between steamboats and railroads were important links in the transportation system of the Red River Valley. Without a direct railroad connection, the quickest way to bring goods and handle large amounts of freight to and from Winnipeg was via steamboat. Townsites such as Moorhead, Glyndon, Crookston, and Fisher's Landing were established at junctions between steamboat and railroad (Murray 1967).

As construction of the St. Vincent extension was renewed in 1877 and completed at the end of 1878, it was accompanied by additional settlement and an emergent commercial grain trade. Growth of the flour milling industry, particularly in Minneapolis, created a seemingly unlimited market for wheat raised in the Red River Valley, and grain merchants found a good business in exporting it to locations internationally. Large-scale farms were established to facilitate this trade, and the financial payoff for owning such a farm drew still more settlers to the valley. The landscape quickly changed with the wheat trade, as grain elevators, warehouses, and other related facilities began to sprout up along the railroads. With these conditions in place at the time that westward settlement reached the Red River Valley, combined with the efforts by railroad land and immigration agents to draw settlers into the region, the valley was positioned for rapid economic and population growth (Murray 1967; Hidy et al. 1988).

The years between 1879 and 1885 were those of the Red River Valley's fastest growth. This growth was due in large measure to the ongoing expansion of the railroad system, which connected the urban centers to rural food supplies, connected the rural areas to the building materials, barbed wire, windmills, and agricultural implements needed on the farms, and provided the level of transportation necessary to the operation of that era's bonanza farms. In addition, the expanded railroad network facilitated the growth of urban centers. Grand Forks, for example, was a major market and supply center by the early 1870s, with a repair shop for Hill and Kittson's steamboats, a Hudson's Bay Company warehouse, and an influx of Scandinavian families along the Red, Goose, and Park rivers. Grand Forks gained direct connections to St. Paul and Winnipeg when the

Crookston to Fisher's Landing line was extended northwest to become the city's first railroad in 1879. A second railroad followed in 1881, when the Manitoba completed its line from Barnesville via Fargo. These lines secured the prominence of Grand Forks and its Minnesota counterpart, East Grand Forks, in the Red River Valley's agriculturaleconomic network. Between 1880 and 1890, the population of Grand Forks grew from approximately 1,700 to 5,000 (Murray 1967).

By the mid 1880s, the population of the Minnesota and North Dakota portions of the valley had increased to 137,867. Over one billion acres of public land had been purchased or filed upon, easily over one million of which were in successful bonanza farms (Murray 1967:93, 110). Numerous new technologies had been brought to these and smaller farms, and in 1885 alone, 16 million bushels of wheat were produced in the United States part of the Red River Valley. By that year, nearly the entire valley was within 15 miles of a railroad loading station. The series of events facilitated by railroad transportation had transformed the Red River Valley into a populous, prosperous region and laid the groundwork for continued agricultural expansion into North Dakota and Montana (Murray 1967).

6.1.3 Lumbering on the East Grand Forks to State Line Corridor

When the Crookston to Fisher's Landing line was completed in 1875, Crookston, no longer the connection between the steamboats and the railroad, suffered a temporary setback. Over the next decade, however, new settlers arrived in the Crookston area in by the thousands, and the Red Lake River Boom and Water Power Company established a sawmill in Crookston (McLellan 1928:58-61; Crookston Diamond Jubilee Committee 1954:23). After the Manitoba railroad from Crookston to Fosston was built, lumber stores were set up in adjacent townsites, such as McIntosh, and lumberjacks took up residence in at least four camps established at Fosston, as timber there and to the east was plentiful. They furnished Crookston's sawmill with logs and received supplies from Crookston and locations farther north and west via the Manitoba railroad (Jesness and Mark 1983:4, 129; Ingman 1989:26-27).

While Crookston enjoyed moderate success as a sawmilling center, the lumber industry was booming in northeastern Minnesota. Because it was surrounded by vast white pine forests and was situated on Lake Superior, the Duluth-Superior port was a natural site for early lumbering and for many years did not require railroads to make the trade profitable. Once the Northern Pacific arrived in Duluth-Superior, however, it created a stronger market for lumber there and gave the first major boost to sawmilling and other lumber-related industrial activities. In the mid 1880s, at least 11 sawmills were added to those existing in Duluth, and Duluth and Superior combined cut more than 10 million board feet of lumber per year. The cities' lumber industry, however, had plenty of room for growth, and in 1892, the year that the Duluth and Winnipeg railroad between Duluth and the pine forests of St. Louis and Itasca counties was completed, lumber shipments out of the area increased by 40 percent. The following year, they quadrupled. As of 1894, Duluth had 15 sawmills and Superior had 17, which contributed to Minnesota's standing that year as third in the nation in lumber production (Minnesota Historical Society 1997).

The volume of lumber milled in Duluth continued to increase and reached 443 million board feet in 1902 (Koop and Morris 2006:E7-E8).

Providing competition to Duluth was Cloquet, which as of 1885 had three major sawmills: the Renwick, Shaw & Crossett Lumber Company mill, the C. N. Nelson Lumber Company mill, and the Water Power Company mill. The Renwick and Water Power mills were purchased by the Cloquet Lumber Company in 1886, and three years later, C. N. Nelson relocated his Stillwater sawmill to Cloquet. In 1894, a fifth sawmill, the Johnson-Wentworth Lumber Company mill, was established in Cloquet. Two years later, the Nelson interests were purchased by lumber magnate Frederick Weyerhaeuser, solidifying Cloquet's position as a well-established, major lumbering center whose products could be shipped to the Duluth-Superior port on two railroads (Fahlstrom 1997).

Many of the towns along the Duluth and Winnipeg railroad were already logging centers prior to its arrival. Those towns relied on access to the Mississippi River to transport logs to sawmills to the south: Deer River, via White Oak Lake, Swan River via the Swan River, and Grand Rapids directly to the Mississippi. The transportation of these logs, however, was often subject to the whims of water levels, weather, or obstructions. In addition by the 1880s, pine stands near the Mississippi and other waterways suitable for transportation were growing scarce. The construction of railroads by railroad and logging companies allowed logs to be hauled out of the procurement areas to mills directly or to waterways or major railroads, such as the Manitoba/Eastern, which led to the mills. Railroad transportation facilitated an industry boom that peaked at the turn of the twentieth century. In 1895, for example, logs obtained via the logging road in Swan River were banked for the spring drive down the Mississippi at a rate of 400,000 board feet per day (Deer River Centennial Commmittee 1998:16; Boese 1991:13; Hawkinson and Jewett 2003:64, 70-71).

As towns gained direct access to major markets in and through the Duluth-Superior port, and Minnesota's economy stabilized after the Panic of 1893, some were able to attract sawmilling interests. Swan River, for example, had two sawmills after 1893, and though these were not large, their products were sold in locations as distant as New York. In 1896, the Itasca Lumber Company purchased the logging operations of the Akeley Lumber Company in Deer River, then constructed a sawmill on White Oak Lake, after which they built several spur lines to access unharvested timber. The company continued to float logs down to Minneapolis, but also cut up to 100,000 feet of lumber per day. It maintained 17 lumber camps for 3,000 men per year in the area around the town. Other mills would join the Itasca Lumber Company's on White Oak Lake after the turn of the twentieth century (Deer River Federated Woman's Club 1973:7, 13; Trunt 1993:35).

It was around the turn of the twentieth century that the familiar signs of development related to the success of the logging industry—a major railroad, sawmills, and logging railroads—appeared in the north-central part of the state. As the Eastern made its way from Deer River to Fosston, it connected with existing towns and encouraged development of new towns in the north-central white pine forests. The railroad made large-scale transportation of logs and lumber from the region easier and more profitable,

and it encouraged milling and logging companies to establish or expand their facilities and associated infrastructure there.

Bemidji was representative of this process at a level greater than that experienced by the other towns along the Deer River to Fosston portion of the railroad. Although originally a small, scattered settlement with a trading house that received supplies via a wagon trail leading from the end of the railroad line at Fosston, Bemidji had become by the mid 1890s home to a population of approximately 200. Commerce included two general stores, two hotels, a hardware store, a meat market, a few blacksmith shops, a drugstore, a restaurant, a saloon, several livery stables, and a post office (Hagg 1942:27).

The first sawmill was constructed by a resident of the Bemidji area in 1895 and was used primarily to provide lumber for local construction (Hagg 1942:25; Amble 1996a:35). Two other small sawmills had joined it in the town by 1898 (Hagg 1942:32). After 1900, however, large sawmill operations were also established in Bemidji. The Crookston Lumber Company's Sawmill #1, for example, was opened in 1903. Employing 450 mill workers in an operation that ran 24 hours a day, the mill in its first year was reported to have processed 40 million board feet of lumber (Amble 1996b:13). The Bemidji Lumber Mill was constructed two years later, and in 1906 was purchased by the Crookston Lumber Company to serve as their Sawmill #2. The products of Bemidji's sawmills not only went to major markets via the Manitoba/Eastern railroad, they also supplied the numerous local retailers of lumber and other wood products that had sprung up throughout the town (Amble 1996b). Bemidji had become a major lumbering center.

In the western part of Minnesota, East Grand Forks also found success in the lumbering industry at the turn of the twentieth century. With a new direct connection to the Duluth market at hand, the Grand Forks Lumber Company opened a steam-powered sawmill in 1899. The mill, which received its logs via the Red Lake and Red rivers and the Manitoba railroad, operated until 1907. In 1901 alone, it sawed approximately 38 million board feet of logs (Vandersluis 1986:52).

The widespread practices related to the lumber industry, however, led to the depletion of northern Minnesota's timber resources, so that by 1930, and in many areas earlier, most sawmilling operations in places like Bemidji and Cloquet had closed, or associated companies had been reinvented to manufacture paper or other forest products. Although these occurrences spelled the demise of railroads exclusive to the logging industry, other railroads, such as the Great Northern, continued to serve the new forest-products industries into the 1950s and beyond.

6.1.4 The East Grand Forks to State Line Corridor in Minnesota's Iron Ore Industry

When construction on the Duluth and Winnipeg railroad began in 1888, iron ore had not yet been discovered on the Mesabi Range, and the railroad company was looking for ways to expand and serve the lumber industry of northern Minnesota. Although the railroad would certainly achieve that goal, as soon as it was completed in 1892, it went into service for the iron ore industry, with the Duluth Missabe and Northern railroad using it to transport iron ore from its rail head into Duluth. As discussed above, this service was short-lived. Beginning in 1895, however, the Duluth and Winnipeg railroad hauled iron ore to Duluth from its connection at Swan River with the Duluth Mississippi River and Northern railroad, which hauled from the Mahoning Mine to Swan River (Downing 2001:2). When the Duluth and Winnipeg railroad come under the ownership of the Duluth Superior and Western railroad, it likely continued the arrangement until purchased by the Eastern in 1898.

Although the Eastern may have taken over the ore traffic of the Duluth Superior and Western and its 10,000 acres of iron-range land in 1898, the railroad found its niche in Iron Range traffic after 1899. In that year, the Eastern (after 1907, the Great Northern) purchased the Duluth Mississippi River and Northern (DMR&N) railroad, which came with 25,000 acres of iron ore-bearing land. Over the next decade, the Eastern proceeded to build a system of lines that connected Mesabi Range mines with the East Grand Forks to State line corridor, and thereby to the Duluth-Superior port. This system included a loop created by railroads between Gunn and Ellis, Ellis and Brookston, and the portion of the East Grand Forks to State line corridor between Gunn and Superior, with cutoffs between Kelly Lake and Fermoy and between Swan River and Hibbing on the former DMR&N line. In general, iron ore was transported south and east along the loop, while empty cars were returned traveling north and west. The East Grand Forks to State line corridor carried empty cars from Superior to mines at Kelly Lake and east via the DMR&N line, and from Superior to mines on the western end of the range. Similarly, the East Grand Forks to state line corridor was used to haul ore from mines on the western end of the range to Lake Superior via its connection at Gunn, which decongested the traffic at Kelly Lake (Luecke 1997:104-105; Prosser 1966:136).

The construction of the Kelly Lake to Fermoy cutoff in 1907 incorporated easier grades, allowing the use of trains with greater tonnage, which in turn allowed the Great Northern to move significantly more iron ore. After the last portion of the iron ore run between Gunn and Nashwauk was completed in 1909, an even greater increase in that movement occurred, with a 58 percent increase between 1908 and 1910. In the latter year, the Great Northern carried 8,436,387 tons of ore, and that number steadily increased over the next three years to reach over 13 million tons in 1913. The tonnage hauled fluctuated from year to year, with a significant downward deviation during the Great Depression. In general, however, iron ore traffic was heavy, especially during the period between World War II and 1957; in 1953 and 1955, the Great Northern hauled over 36 million tons of iron ore (Hidy 1988:116-117; Luecke 1997:109). Overall, approximately 45 percent of the total Mesabi Range iron ore moved over the Great Northern, and the remaining 55 percent moved over the Duluth Minnesota and Iron Range railroad (Downing 2001:2).

6.1.5 Duluth-Superior Urban Center

Situated on the shore of Lake Superior, the location that would come to be the Duluth-Superior port was naturally suited to be a hub of commerce and associated transportation. Initially the location of fur trade posts, by the middle of the 1850s, Duluth and neighboring Superior had been platted as townsites. During this period, the lumber industry found its footing in the future cities. With logging and associated shipments

from the port already in swing, Duluth's first sawmill was constructed in 1855 and several others constructed very shortly thereafter. These, along with local planing mills, as well as sash, door, lath, and shingle mills provided the necessary materials for Duluth and Superior's first building boom. While the Panic of 1857 reduced Duluth's sawmills to two, the coming of railroads shifted Duluth and Superior's lumber industry into high gear, where it remained for the next several decades (see above) (Koop and Morris 2006:E6).

After suffering another reversal of fortunes which lasted approximately five years after the Panic of 1873, the Duluth-Superior port was revived by railroad connections to the Red River Valley and west. Wheat from the prairie was shipped by rail to Duluth-Superior, from where ships would convey it to any number of locations, but particularly, Buffalo, New York. Grain shipping was a solid enterprise in Duluth-Superior prior to 1884, but it grew rapidly after construction of the Sault locks between lakes Superior and Huron in 1884. In 1885, the Duluth-Superior harbor shipped out 18 million bushels of wheat. By this time, Duluth was not only a major grain shipment center, it was also a major grain storage center, with 13 elevators that could hold close to nine million bushels (Koop and Morris 2006:E5-E6, E13).

The grain industry, lumber industry, shipping industry, railroad network, and urban center grew symbiotically. The economic successes garnered from transportation connections out from Duluth and Superior promoted the establishment of industrial and warehousing facilities, an influx of commercial businesses and service professions, and the improvement of infrastructure within the cities. The lumber-products, grain-storage, and other industrial facilities on the Duluth side of the harbor co-existed with jobbing warehouses that imported and manufactories that made goods for further distribution, and the increase in these industrial and manufacturing interests at the harbor was complemented by the rapid evolution of Duluth's downtown business district after 1880. By 1887, Duluth's population reached 30,000—nearly 15 times what it had been before railroads reached the western wheat fields in 1878. The growth of the economic center and shipping port was fueled further by the discovery of iron ore on the Mesabi Range in 1891, and Duluth reached a population of 53,000 by the end of the century and 99,000 by 1920 (Koop and Morris 2006:E6, E10, E13).

The 1920s were among Duluth's strongest economic years, with a peak 10,000 ships coming through the harbor in 1929, but the port's growth tapered off after that. Although some materials, such as coal and grain, continued to be a consistent source of freight traffic, the Great Depression led to a significant decrease in the overall shipment of other materials; iron ore shipments, for example, dropped from 50 million tons in 1929 to around 2 million tons in the early 1930s. The effects of the Great Depression were compounded by the depletion of Minnesota's white pine forests, an economic staple for the harbor and surrounding cities. Finally:

Even though the Duluth shipping business continued strong with the industrial stimulus of World War II, the rapid growth it sustained in the first decades of the twentieth century ended in the 1920s. The port's

importance, based in significant part on the bulk shipment of raw materials during the years of the nation's industrial growth, declined with that growth in the second half of the twentieth century [Koop and Morris 2006:E12].

6.2 DESCRIPTION

The railroad corridor between East Grand Forks and state line passes through a variety of landscapes, including agricultural, forested, and urban. The topography ranges from flat to kettle-and-knob to steep-sided valleys. As an active corridor, the railroad roadway is well maintained, and the railroad bed ranges from slightly raised to raised on 20-foot fills. Generally, no drainage ditches are present within the railroad roadway, or the roadway shares a ditch with a highway. The ballast, ties, and rails are generally modern, but historical-period materials may be present in some areas, particularly on the lesser-used sidings and spurs. Numerous grade separation structures dating from the historical period are present within the corridor; typical types include steel deck or through plate girders, concrete deck girders, wood or wood and steel trestles, and concrete box or round culverts. Notable bridges are described below.

The following description of the railroad corridor is organized geographically west to east and grouped roughly by construction episode.

6.2.1 East Grand Forks to Crookston

This segment crosses through the Red River Valley, from the bridge over the Red River to the former Great Northern division point at Crookston. The topography is flat and gently slopes up to the east. Land uses are generally agricultural, with small urbanized areas approximately every 10 miles that represent the former railroad stations along the corridor. U.S. Highway 2 runs parallel to the railroad corridor, and for much of this segment, the highway right of way is adjacent to the railroad right of way. Occasionally, modern rural residences or industrial facilities are within the setting of the railroad corridor, and they are oriented to the highway.

The railroad roadway within this segment appears to correspond with the right of way (Figure 70). The railroad bed is slightly raised above the ground surface, with gentle side slopes at approximately 3-to-1 slopes. On the north side, the railroad roadway includes a shallow ditch shared with U.S. Highway 2, whereas on the south side, the railroad bed slopes directly down to the ground surface. Atop the railroad bed rests a 3-foot-thick combined layer of granite ballast and aggregate sub-ballast. Most commonly within this segment, the railroad bed supports a single track, which consists of wood crossties and 132-pound steel rails. In the areas of former railroad stations, the number of tracks increases to two or more. At the smaller stations, where the trains no longer stop, the additional sets of tracks function as passing sidings, but in cities where the railroad still serves industrial or commercial facilities, multiple siding and spur tracks are present. The spur tracks often include older rails more than 50 years old. At road crossings, the railroad bed rises on fill to the elevation of the county highway or township road. Where the tracks cross the road, planked wood or concrete grade crossings are present, and

warnings consist of lights and crossing arms or stop signs and railroad crossing signs (Figure 71).

In East Grand Forks, the corridor begins at the Red River with a railroad bridge, which is a 1956 steel plate-girder structure with 10 short spans supported on poured-in-place concrete piers and abutment on the Minnesota side and stone piers and abutment on the North Dakota side (Figure 72). The railroad roadway approaches the bridge on raised fill. Otherwise, the railroad roadway is only slightly raised above the street level. Most railroad oriented buildings on the former Great Northern corridor in East Grand Forks have been removed, including the depot. On the east side of the city, a railroad yard operates as a classification yard only, i.e., no maintenance or repair operations occur. The railroad yard includes five sets of tracks parallel to the main corridor plus multiple spurs running to the north to serve industrial uses. A number of warehouses and industrial plants are located in the vicinity of the railroad yard (Figures 73-74). East of Grand Forks, the railroad roadway narrows to encompass a single set of tracks, and the corridor runs east-southeast to the town of Fisher (Figure 75).

In Fisher, the railroad corridor widens. The railroad roadway includes two sets of tracks plus a siding serving a grain elevator complex and two warehouses (Figure 76). No other railroad-related buildings exist in Fisher. In the elevator complex, several elevators that appear to be of wood crib construction with corrugated metal siding are present, as are two modern metal cylindrical bins. East of Fisher, the railroad corridor runs to Crookston with a single set of tracks.

Although Crookston grew as a railroad town and served as a Great Northern division point during the late nineteenth and early twentieth centuries, little relationship exists between the railroad corridor and the downtown—the railroad serves as a through corridor operating on a single set of tracks (Figure 77). No railroad-related buildings are within or adjacent to the right of way. A single-span, Pratt through truss bridge with stone abutments carries the railroad over the Red Lake River just south of downtown (Figure 78). South of that bridge are several grain elevators and warehouses served by multiple sets of tracks (Figure 79). The roundhouse and shops formerly located in this area have been removed.

6.2.2 Crookston to Fosston

The railroad corridor segment between Crookston and Fosston is similar to the segment between East Grand Forks and Crookston. It passes through the eastern Red River Valley, and surrounding lands are generally agricultural. Within the railroad corridor, the railroad bed is mainly supported on low fills with gentle slopes, and where there are ditches at all, they are typically only on one side of the railroad bed. The railroad corridor also crosses some low-lying wetlands, and portions of the corridor in this area include roadbeds built up on steeply sloped fill as high as 10 feet above the ground surface (Figure 80). The railroad is mainly single tracked, but there is a double-tracked passing siding in the vicinity of Benoit (Figure 81). The track structures are similar to those within the corridor segment east of Crookston. Mentor is a small town east of Crookston. It no longer serves as a railroad stop, and no remaining railroad-related buildings are within or adjacent to the railroad corridor. A notable feature is a stone-arch bridge that carries the railroad over Maple Creek (Figure 82).

The town of Erskine is also a former railroad stop, and the railroad roadway accommodates two sets of tracks. The only railroad building in town is the former depot, which appears to be used by BNSF as a field office space (Figure 83). The depot shed roof has a shed roof and overhang, but it has been altered though infilling of windows and doors. East of Erskine, the roadway narrows and is single-tracked.

McIntosh includes a grain elevator, a small freight house, and large warehouse (Figure 84). Within the railroad roadway are two sets of tracks plus a spur that serves the elevator, freight house, and warehouse. East of McIntosh, the roadway narrows and is single-tracked.

Fosston includes a grain elevator complex, consisting of two wood-crib elevators with corrugated metal siding and multiple modern round corrugated-metal bins. Within the railroad roadway are two sets of tracks plus a spur that serves the elevators (Figure 85).

6.2.3 Fosston to Deer River

East of Fosston, the railroad corridor leaves the Red River Valley, and the topography becomes hillier. The landscape transitions from agricultural to forested. Although the trees are second or third growth and represent a different mix than the trees present at the turn of the twentieth century, the landscape remains evocative of the pine forests that dominated the region historically. In order to maintain gentle grades and to cross wetlands or lakes, more preparation of the ground surface for the railroad bed was necessary in this area than to the west. In some portions of the corridor, extensive fill as high as 20 feet with steep side slopes is present (Figures 86 and 87). In addition, unlike the segment west of Fosston, this segment of the railroad corridor includes cuts in high spots to further reduce the grade. Because the railroad bed is generally raised above the ground surface, no drainage ditches exist within this segment of the railroad corridor. The track structures are similar to those within the corridor segment east of Crookston.

Bagely is approximately 18 miles east of Fosston. Within the railroad corridor are two sets of tracks plus a siding that serves a grain elevator and a warehouse. The elevator is wood cribbed with corrugated metal siding, and two round metal bins are present. In addition, a railroad water tanks remains within the corridor (Figure 88). The tank is a riveted-steel, hemispherical-bottom, four-post water tank. East of Bagley, the railroad roadway narrows and is single tracked.

Bemidji was once the railroad hub of north-central Minnesota. A relatively intact railroad station area is located within the Great Northern railroad corridor, and the former Soo Line railroad corridor, which was not surveyed, runs parallel to and just north of the Great Northern. The railroad roadway in Bemidji widens considerably and has three sets of tracks plus additional spur tracks. The former Great Northern depot is intact, appears to be in its original location within the railroad corridor, and maintains a relationship with the railroad tracks (Figure 89). The hip-roofed, brick combination depot has gable-roofed projecting bays, round-arched openings with keystones, and a high, concrete loading platform. In addition to the depot, multiple warehouses, a mill, and a grain elevator are located within or adjacent to the railroad corridor (Figures 90 and 91). East of downtown, the railroad roadway narrows and is single tracked. As the railroad corridor runs along Lake Bemidji, the railroad bed is raised on substantial fill (Figure 92).

In Cass Lake, minimal relationship exists between the town and the railroad corridor, and no railroad buildings remain. The railroad roadway, however, widens to three sets of tracks to form a railroad yard that appears to serve as a small classification yard (Figure 93). East of Cass Lake, the railroad roadway narrows and is single tracked (Figure 94). In Bena, no railroad buildings remain, and the railroad corridor serves as a through corridor.

At Deer River, the railroad corridor widens to three sets of tracks, and a large warehouse is located on the west side of town. East of Deer River, the railroad roadway narrows and is single tracked (Figure 95).

6.2.4 Deer River to State Line

East of Deer River, the railroad corridor runs southeast to the St. Louis river, follows the river to Cloquet, runs south to Carlton, then southeast to the Minnesota-Wisconsin state line. Between Deer River and the St. Louis River, the topography is similar to that of the segment west of Deer River. From the St. Louis River to the state line, the changes in topography become sharper, and the railroad corridor is subject to steeper grades, particularly near the state line. The landscape is forested and is similar to that of the segment west of Deer River. The railroad bed is generally built up on fill, with some areas of heavy fill with steep slopes, and extensive cuts are present in some areas.

Active railroad facilities are located in Grand Rapids. West of downtown, the railroad corridor expands: on the north side of the main tracks is a small classification yard with five or six sets of tracks, and south of the main tracks, a spur track serves the Blandin facility. A single set of tracks runs through the downtown area (Figure 96). The railroad depot is intact, and it appears to be in its original location (Figure 97). The gable-roofed, wood-frame combination depot has gabled wall dormers, stucco and false half-timbering in the gables, and decorative brackets in the eaves. The siding and platform that served the depot have been removed. A semaphore-type railroad signal remains within the railroad roadway, just northwest of the depot. The setting of the corridor in Grand Rapids is good; the McAlpine Block to the south and a brick warehouse to the north of the corridor illustrate the commercial connection between the railroad and the city (Figure 98).

Southeast of Grand Rapids is a notable railroad bridge over the Prairie River (Figure 99). The bridge consists of a steel Pratt deck truss main span with steel plate girder approach spans supported on steel piers with concrete pilings. Further southeast on the railroad corridor is a wye junction with the Gunn branch line, which runs north to the western

Mesabi Iron Range, and just southeast of the wye, the railroad roadway widens to three sets of tracks.

At Floodwood, the railroad corridor widens to two sets of tracks, and a grain elevator and a warehouse are located on the east side of town (Figure 100). The railroad depot is intact and remains near the railroad corridor, but it has been moved out of the railroad right of way and placed on a raised concrete-block foundation (Figure 101). The depot, which contributes to the setting of the railroad corridor, has a gabled roof, gabled wall dormers, a brick watertable, and stucco veneer with false half-timbering in the gables. Southeast of Floodwood, the railroad roadway narrows and is single tracked. The railroad corridor follows the St. Louis River, generally running along the river terrace on the south side of the river (Figure 102).

At Brookston, the railroad corridor widens to two sets of tracks. Because the town is located on a broad, flat river terrace, the railroad bed is minimal. No railroad buildings remain (Figure 103). Southeast of Brookston, the railroad roadway narrows and is single tracked, and it continues to run along the south side of the St. Louis River.

At Cloquet, the railroad corridor widens considerably to accommodate multiple sets of tracks and industrial spurs. There are currently fewer sets of tracks than during the historic period, but the broad, at-grade roadbed that accommodated the tracks remains (Figure 104). There are currently no railroad support buildings within the right of way, but spur tracks serve industrial facilities, such as paper plants. East of downtown, there are multiple sets of tracks that appear to serve as a small classification yard (Figure 105). The railroad corridor in Cloquet was shared by the Great Northern and the Northern Pacific Knife Falls Branch. The corridor runs east-west through Cloquet, then turns southeast, diverging from the St. Louis River and narrowing. South of I-35, the Great Northern and Northern Pacific corridors split, with the Great Northern turning southwest on a single-track configuration.

Between Cloquet and Carlton, the railroad corridor is similar to other segments: generally a slightly raised roadbed; areas of extensive filling in wetlands or cuts through bedrock outcroppings; and no drainage ditches present (Figures 106 and 107).

At Carlton, the railroad corridor widens to accommodate multiple sets of tracks. Like in Cloquet, the Great Northern historically shared the corridor with the Northern Pacific, in this case the transcontinental mainline. There are currently only two sets of tracks with industrial spurs branching off of them, but the broad, at-grade roadbed that accommodated the tracks remains. There are currently no railroad support buildings within the right of way. The corridor runs east-west through Carlton, then the Great Northern turns southeast, diverging from the Northern Pacific.

Between Carlton and the Minnesota-Wisconsin state line, the topography becomes steeper, causing the railroad corridor to travel steeper grades. In addition, the corridor includes more extensive cuts and fills to help reduce some of the grades (Figures 110 and 111).

6.3 STATEMENT OF SIGNIFICANCE

6.3.1 East Grand Forks to State Line near Wrenshall Railroad Corridor Historic District

When the railroad corridor between East Grand Forks and the state line near Wrenshall was completed in 1900, it was the culmination of a process begun 25 years earlier. The Red River Valley railroad between Crookston and Fisher's Landing was completed in the fall of 1875, and Hill and Kittson diverted all steamboat traffic to the railroad. This was, therefore, the only railroad making a direct connection with steamboats on the Red River, which at that time served as the dominant mode of commercial transportation for wheat and other goods coming from Winnipeg into the United States. The railroad connected with the St. Vincent Extension at Crookston, which in turn connected to Minneapolis and St. Paul. The Fisher's Land corridor therefore made an important connection within the state's transportation network, linking the railroad and steamboat modes of transportation and thereby the urban centers of Winnipeg and St. Paul.

The extension of the line to Grand Forks in 1879 was an influential component of the state's railroad network because it was part of the early railroad network in the Red River Valley which facilitated the boom of 1879 to 1885. In the process, it established the first connection between Minneapolis-St. Paul and the future urban center of Grand Forks. The railroad corridor hauled substantial amounts of wheat that came through Grand Forks to Minneapolis and equally substantial amounts of goods and supplies from the Twin Cities to Grand Forks and west.

At the east end of the corridor, the Duluth and Winnipeg railroad connecting Duluth and Deer River was the first railroad corridor to connect the timber resources of St. Louis and Itasca counties west of Cloquet directly to the important milling centers of Cloquet and Duluth. Because it was the only line into north-central Minnesota at that time, it served as the dominant corridor between the resource and the important transfer points/terminal market. Furthermore, the completion of this corridor was followed by the significant expansion of logging northwest of Cloquet. Although the Duluth (later Superior) to Deer River line was not solely responsible for the significant increase in Duluth's lumber production after 1892, it was one of the few that transported the larger amounts of logs to Duluth-Superior, which made possible Duluth-Superior's lumber industry boom and its growth as an urban center. In addition, Cloquet was an important milling center and transfer point, with a direct connection to St. Paul via the Northern Pacific. The Deer River to Cloquet line connected Cloquet to the logs of north-central Minnesota, particularly by making connections within the railroad network to logging railroads, which freed Cloquet mills from their dependence on the St. Louis River to obtain logs and contributed to the continued significant expansion of the lumber industry that occurred in Cloquet throughout the 1890s.

Construction of the railroad corridor from Crookston to Fosston and from Fosston to Deer River, and the re-routing from Cloquet to Superior connected previously disparate elements into a single railroad corridor. This railroad corridor established direct transportation connections between the agricultural goods of the Red River Valley coming through Grand Forks and the important transfer point/terminal market of Duluth-Superior. Furthermore, the railroad corridor connected previously untapped timber in north-central Minnesota with the sawmilling and lumber distribution centers of Cloquet and Duluth-Superior, and significantly contributed to the growth of the lumber industry in Bemidji. The railroad corridor connected those centers to the important transfer point/terminal market of Grand Forks. In addition, the railroad corridor made an important connection between the metropolitan center of Duluth-Superior and the smaller wholesale-distribution urban center of Grand Forks by providing the shortest and most direct connection between these points. Additionally, it continued to make an important connection to marine transportation out of the Duluth-Superior harbor.

The portion of the railroad corridor southeast of Deer River provided important connections for the iron ore mining industry. Beginning in 1892, the railroad corridor made important early connections between iron range railroads and the Duluth-Superior port, and later served as the mainline for several Great Northern branch lines into the Mesabi Range. After 1909, the portion of the railroad corridor from Gunn to the state line formed a particularly critical link in the Great Northern's western Mesabi Range ore run in support of the iron ore industry. The ore run expanded the amount of ore that could be transported and the frequency with which it could be transported, both by allowing heavier loads to be transported and by removing traffic congestion in the area around the mines. The segment of the railroad corridor southeast of Gunn was also the dominant corridor by which ore from the western Mesabi Range reached the docks at Superior.

The East Grand Forks to State Line near Wrenshall Railroad Corridor historic district is significant under National Register Criterion A for its significant association with agricultural development in the Red River Valley, the expansion of logging operations in north-central Minnesota, the development of mining operations in the Mesabi Iron Range, and the development of commercial and industrial operations in Duluth-Superior and Grand Forks-East Grand Forks. The district meets several of the registration requirements established in the Railroads MPDF, including Numbers 2 and 3 and, for the segment southeast of Gunn, Number 4. The district provided transportation between several significant classes of resources/commercial nodes and the important Duluth Such a railroad connection through north-central transfer and terminal market. Minnesota did not previously exist. The district was also an influential component of Minnesota's railroad network. It served as a mainline for numerous branch lines, it made an important connection between the Great Northern's St. Vincent Extension and Duluth, and it hauled all three of Minnesota's major commodity classes: iron ore, timber, and agricultural products. In addition, the Crookston to Fisher's Landing and Grand Forks segment of the district provided an important early connection between steamboats and railroads in 1875 and facilitated the agricultural boom in the Red River Valley during the 1880s. Finally, the segment of the district southeast of Gunn also served as a critical link in the state's transportation network in support of significant operations in industry through the establishment in 1909 of the Great Northern ore run loop.

The period of significance for the East Grand Forks to State Line near Wrenshall Railroad Corridor historic district begins in 1875 with the establishment of the Crookston to Fisher's Landing segment, and it ends in 1930, when the corridor's significance was diminished by competition and declining freight.

The East Grand Forks to State Line near Wrenshall Railroad Corridor historic district retains excellent historic integrity. The corridor has not been relocated since the end of the period of significance and has good integrity of location. Although some materials, such as rails, ties, ballast, and signage have been replaced, the railroad roadway includes an easily identifiable railroad bed built up on fill ranging from about 2 to 20 feet in height, and many historic period bridges and culverts are intact; thus, the district retains integrity of materials and design. Because the railroad corridor passes through landscapes that are very much compatible with those of the historical period, including agricultural fields, forested areas, and small urban areas, the district retains integrity of setting. Finally, the district retains the overall feeling and association with a historic railroad corridor.

The East Grand Forks to State Line near Wrenshall Railroad Corridor historic district encompasses the railroad right of way between the bridge over the Red River in East Grand Forks and the Minnesota-Wisconsin state line. All buildings, structures, and objects within the right of way that date to the period of significance and retain historic integrity will contribute to the historic district. Contributing elements of the historic district include the railroad roadway; railroad bridges, trestles, and culverts in multiple locations; the railroad station area in Bemidji, including the depot; depots in Grand Rapids and Floodwood; grain elevators and warehouses within the right of way in multiple locations, and the railroad water tower in Bagely.

6.3.2 Other Potential Historic Districts and Properties

Within the East Grand Forks to State Line near Wrenshall Railroad Corridor historic district are railroad corridors, railroad stations, railroad depots, railroad bridges, and a railroad water tank that may be eligible for the National Register separate from the larger railroad corridor district. All of those elements are contributors to the larger railroad corridor historic district, but if, at some point in the future, the National Register eligibility of the whole railroad corridor historic district is compromised, each of those elements may remain eligible.

Crookston to Fisher Railroad Corridor

As stated above, when the Red River Valley railroad between Crookston and Fisher's Landing was completed in the fall of 1875, it made an important connection within the state's transportation network, linking the railroad and steamboat modes of transportation and thereby the urban centers of Winnipeg and St. Paul. It was an important transportation connection in this regard until steamboats ceased to be used for freight transportation on the Red River after the St. Vincent extension was completed to the international border in December of 1878. For this reason, the Crookston to Fisher's Landing Railroad Corridor meets National Register significance Criterion A, under

Registration Requirement 3 of the Railroads MPDF. The period of significance is between 1875 and 1878.

This potential railroad corridor historic district would be comprised of the railroad right of way from Crookston to Fisher. Buildings and structures contributing to the historic district would include the railroad roadway, railroad bridges, trestles. and culverts, and grain elevators and warehouses within the right of way.

Crookston to East Grand Forks Railroad Corridor

The extension of the railroad corridor to Grand Forks was an influential component of the state's railroad network because it was part of the early railroad network in the Red River Valley that facilitated the boom of 1879 to 1885. In the process, it established the first connection between Minneapolis-St. Paul and the future urban center of Grand Forks, allowing for the transportation of the substantial amounts of wheat that came through Grand Forks to Minneapolis and of the equally substantial amounts of goods and supplies from the Twin Cities to Grand Forks and west. The Crookston to East Grand Forks corridor meets National Register significance Criterion A, under Registration Requirement 3 of the Railroads MPDF. Because the Northern Pacific completed a roughly parallel route between St. Paul and Grand Forks in 1887, after that year, the importance of the Manitoba corridor between Crookston to East Grand Forks diminished. For this reason, the period of significance for the Crookston to East Grand Forks Railroad Corridor is from 1879 to 1886.

This potential railroad corridor historic district would be comprised of the railroad right of way from Crookston to East Grand Forks. Buildings and structures contributing to the historic district would include the railroad roadway, railroad bridges, trestles, and culverts, and grain elevators and warehouses within the right of way.

Deer River to State Line Railroad Corridor

The Duluth to Deer River line of the Duluth and Winnipeg was the first railroad line to connect the timber resources of St. Louis and Itasca counties west of Cloquet directly to the important milling centers of Cloquet and Duluth. Because it was the only railroad into north-central Minnesota at that time, it served as the dominant corridor between the resource and the important transfer points/terminal market. The completion of this corridor was followed by the significant expansion of logging, which was due to the construction of logging railroads into procurement areas in connection with the Duluth to Deer River corridor, then the only direct connection between the timber of north-central Minnesota and Duluth-Superior. Due to the falls and rapids of the St. Louis River east of Cloquet, the logs from this area could not otherwise have reached Duluth-Superior (Fahlstrom 1997:39); thus although the Duluth (later Superior) to Deer River line was not solely responsible for the significant increase in Duluth's lumber production after 1892, it was one of the few that transported the larger amounts of logs to Duluth-Superior, which made possible Duluth-Superior's lumber industry boom and its growth as an urban center.
In addition, the line made important connections with other modes of transportation, the logging railroads of north-central Minnesota and marine transportation at Lake Superior, and in doing so made a critical link in the state's transportation network in support of commerce and industry. For all of these reasons, the railroad corridor, even as rebuilt from Cloquet to Superior, would have been significant beginning in 1892 until timber from north-central Minnesota ceased to be a historically significant resource in about 1930.

This potential railroad corridor historic district would be comprised of the railroad right of way from Deer River to the Minnesota-Wisconsin state line. Buildings and structures contributing to the historic district would include the railroad roadway, railroad bridges, trestles, and culverts, the Grand Rapids and Floodwood railroad depots, and grain elevators and warehouses within the right of way.

Bemidji Railroad Station and Depot

The Bemidji Railroad Station, as described above, is significant for its association with the East Grand Forks to State Line near Wrenshall railroad corridor and for its association with the commercial and industrial development of Bemidji. In addition, the 1912 Great Northern Depot in Bemidji is currently listed in the National Register. Buildings and structures contributing to the historic district would include the railroad roadway of the Great Northern, the depot and associated platform, and warehouses, mill, and grain elevator within the right of way. The boundaries of the district likely would include the railroad right of way within the Bemidji city limits. In addition, the historic district boundaries potentially could be expanded to include the former Soo Line right of way and associated railroad roadway, depot, and commercial buildings and structures.

Grand Rapids Railroad Depot

As described above, the circa 1898 Grand Rapids Railroad Depot is significant for its association with the East Grand Forks to State Line near Wrenshall railroad corridor and for its association with the commercial development of Grand Rapids. The historic integrity of the depot is good and its period of significance would be 1898 to 1930.

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Figure 71. Great Northern Corridor, typical roadway east of Grand Forks, looking east



Figure 72. Great Northern Corridor, typical at-grade crossing, looking west



Figure 73. Great Northern Corridor, bridge over Red River, looking northwest



Figure 74. Great Northern Corridor, East Grand Forks railroad yard, looking southwest

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Figure 75. Great Northern Corridor, East Grand Forks railroad yard, looking east



Figure 76. Great Northern Corridor, typical roadway, looking northwest



Figure 77. Great Northern Corridor, Fisher, looking southeast



Figure 78. Great Northern Corridor, Crookston, looking south



Figure 79. Great Northern Corridor, bridge over Red Lake River, looking southwest



Figure 80. Great Northern Corridor, Crookston elevators, looking northeast



Figure 81. Great Northern Corridor, typical raised grade east of Crookston, looking northwest



Figure 82. Great Northern Corridor, typical roadbed, looking northeast



Figure 83. Great Northern Corridor, stone-arch culvert, looking southwest



Figure 84. Great Northern Corridor, Erskine depot, looking northeast



Figure 85. Great Northern Corridor, McIntosh, facing southeast



Figure 86. Great Northern Corridor, Fosston, looking southwest



Figure 87. Great Northern Corridor, typical roadway East of Fosston, looking southeast



Figure 88. Great Northern Corridor, typical roadway east of Fosston, looking southwest



Figure 89. Great Northern Corridor, Bagley water tower, looking southeast



Figure 90. Great Northern Corridor, Bemidji depot, looking southwest



Figure 91. Great Northern Corridor, Bemidji station, looking west



Figure 92. Great Northern Corridor, Bemidji station, looking southwest



Figure 93. Great Northern Corridor, raised roadbed near Bemidji, looking northwest



Figure 94. Great Northern Corridor, Cass Lake rail yard, looking southeast

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Figure 95. Great Northern Corridor, typical roadway east of Cass Lake, looking southeast



Figure 96. Great Northern Corridor, Deer River, looking southeast



Figure 97. Great Northern Corridor, Grand Rapids, looking southeast



Figure 98. Great Northern Corridor, Grand Rapids depot, looking northeast



Figure 99. Great Northern Corridor, Grand Rapids, looking northeast



Figure 100. Great Northern Corridor, Prairie River bridge, looking east



Figure 101. Great Northern Corridor, Floodwood, looking northeast



Figure 102. Great Northern Corridor, Floodwood depot, looking northeast



Figure 103. Great Northern Corridor, St. Louis River terrace, looking northeast



Figure 104. Great Northern Corridor, Brookston, looking southeast



Figure 105. Great Northern Corridor, Cloquet, looking west



Figure 106. Great Northern Corridor, Cloquet, looking west



Figure 107. Great Northern Corridor, typical roadway south of Cloquet, looking south



Figure 108. Great Northern Corridor, typical roadway south of Cloquet, looking north



Figure 109. Great Northern Corridor, Carlton, looking northwest



Figure 110. Great Northern Corridor, Carlton, looking east



Figure 111. Great Northern Corridor, typical roadway south of Carlton, looking east



Figure 112. Great Northern Corridor, state line, looking east

7.0 SUMMARY AND RECOMMENDATIONS

The Mn/DOT CRU identified the need for a study that would examine the historical significance of railroad corridors throughout Minnesota, identify their roles in the development of the state, and provide guidelines on how to evaluate the National Register eligibility of these resources. The Mn/DOT CRU contracted with Summit and ARCH³ to complete a statewide historic railroads study, which included preparation of an MPDF for railroads in Minnesota and the application of the MPDF registration requirements to selected railroad corridors via an accompanying project report.

The current project report expands on information contained in "Section H. Summary of Identification and Evaluation Methods" of the MPDF in describing the study's methodology and constraints.

In addition, the current report uses the MPDF registration requirements to evaluate the National Register eligibility of four railroad corridors.

1. The Sleepy Eye to Redwood Falls Branch of the Chicago and North Western railroad corridor in Brown and Redwood counties is recommended as not eligible for listing in the National Register.

2. The Minneapolis Northfield and Southern railroad corridor is located in Hennepin, Dakota, and Rice counties. The segment of the corridor between Minneapolis and Lakeville is recommended as eligible for listing in the National Register as a railroad corridor historic district. The segment of the corridor between Lakeville and Northfield, and the later extensions to Golden Valley and Crystal are recommended as not eligible.

3. The Carlton to Cloquet Branch of the Northern Pacific railroad corridor, located in St. Louis County, is recommended as eligible for listing in the National Register as a railroad corridor historic district.

4. The Great Northern railroad corridor from East Grand Forks to the state line near Wrenshall is located in Polk, Clearwater, Hubbard, Cass, Itasca, Aitkin, St. Louis, and Carlton counties. The entire corridor is recommended as eligible for listing in the National Register as a railroad corridor historic district. In addition, the Crookston to Fisher railroad corridor, Crookston to East Grand Forks railroad corridor, Deer River to state line railroad corridor, Bemidji railroad station and depot, and Grand Rapids railroad depot are contributors to the larger railroad corridor historic district and may be eligible for the National Register separate from that district.

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APPENDIX A: RESEARCH DESIGN

RESEARCH DESIGN:

MINNESOTA STATEWIDE HISTORIC RAILROADS STUDY

This research design provides a framework for the collection and analysis of data for the Minnesota Statewide Historic Railroads Study. This study will include preparation of a Multiple Property Documentation Form (MPDF) for Minnesota railroads and an accompanying study report. The research design is divided into four sections: Background, Objectives, Methods, and Expected Results. The Background section summarizes the purpose and need for the project and explains the basis for the MPDF. The Objectives states the goals of the study. The Methods section describes the research and field survey methods to be utilized to address the research problem and how the MPDF will address that problem. The Expected Results section describes the anticipated final products of the project and their intended use.

Background

There are thousands of miles of historic-period railroad grades with potential NRHP eligibility that are regularly affected by Federal Highway Administration-funded roadway and trail projects. The ubiquity of rail lines, their interstate nature, their varying degrees of integrity, and variety of purpose make them a challenging resource for agencies to evaluate and manage. The Minnesota Department of Transportation's Cultural Resources Unit (Mn/DOT CRU) identified the need for a study that would examine the significance of railroad corridors throughout Minnesota and identify their roles in the development of the state and provide guidelines on how to evaluate the NRHP eligibility of these resources. The Mn/DOT CRU, in consultation with the Minnesota State Historic Preservation Office (SHPO), determined that a National Register of Historic Places (NRHP) MPDF was the most appropriate documentary format for organizing existing historic information regarding Minnesota's historic railroads and providing contexts and registration requirements for their evaluation. The MPDF will include a historic context related to the development of railroads nationally and statewide, and will elaborate on the significance of railroads within the existing Minnesota statewide contexts.

When the MPDF is completed, an accompanying study report will be prepared. The report will expand on information contained in "Section G. Geographical Data" and "Section H. Summary of Identification and Evaluation Methods" of the MPDF in describing the study's methodology and constraints, and it will be intended to inform MPDF users what rail lines were not included in the study and the rationale for those exclusions. The report will include a discussion of how rail lines not addressed in the MPDF will be addressed in the future. This research design also will be included in the study report.

The report will also apply the MPDF registration requirements to develop NRHP eligibility statements for the mainline corridors of the railroad companies discussed in the MPDF contexts. In addition, the report will provide NRHP evaluations for four specific mainline segments that will be selected by the study's steering committee (Mn/DOT CRU and SHPO staff). No specific properties will be formally nominated to the NRHP as part of this study.

Objectives

The two objectives of the statewide historic railroads study are the preparation of an MPDF for railroads in Minnesota and the application of the MPDF registration requirements to selected

railroad corridors via an evaluation report that will accompany the MPDF. The MPDF will establish a historic context related to railroad development in Minnesota, further develop existing statewide contexts as they relate to railroads, define railroad-related property types, and set NRHP registration requirements. Development of the registration requirements and evaluation of NRHP eligibility of the state's mainline corridors will inform future evaluations of railroad lines and associated properties and will provide a consistent rationale for use in historic preservation planning and compliance with federal and state laws governing the protection of historic properties.

Methods

MPDF Preparation

Historical Research. A significant amount of primary source information has already been synthesized by railroad historians, and the review and synthesis of such secondary sources will constitute the majority of the study's research effort. Secondary sources will include both published works and unpublished studies on railroad-related topics – books, journal articles, and project-specific cultural resources reports. Limited historical research in primary sources (e.g., company correspondence, construction records, and valuation documents) may be necessary to produce the MPDF.

Secondary research sources will include:

- General railroad histories;
- Academic railroad histories in peer-reviewed journals;
- Railroad corporate histories;
- Existing NRHP nominations and eligibility studies for Minnesota railroad properties on file with the Mn/DOT CRU and SHPO;
- MPDF documentation of railroad resources prepared for other states or regions;
- Historical summaries in Poor's Manual of Railroads of the United States;
- Railroad manuals and guidebooks, particularly related to engineering and architecture.

Research will be conducted at, but not necessarily limited to, the following repositories: Minnesota Historical Society Library; University of Minnesota Libraries; regional and local libraries and historical societies; the Minnesota Transportation Museum; and specialized libraries, such as the James J. Hill Reference Library. Supporting research in primary documents may be conducted to address specific research questions that may arise. Primary sources may include historic photographs and aerial photographs, historic maps and atlases, railroad company annual reports and other records, and railroad valuation reports.

According to the "Railroad Lines Constructed, End of 1920" map in Richard Prosser's *Rails to the North Star* (1966), 14 railroad companies owned or operated nearly all of the railroad lines in Minnesota when rail mileage was near its peak in the state. Therefore, historical background information for these companies will be compiled because those major line histories will illuminate the purpose and patterns of development and how they supplement the statewide contexts. Due to funding constraints, the study cannot address every rail line constructed or every railroad company that owned track within Minnesota, but it will provide an understanding of the significant patterns of railroad development in Minnesota so that their future evaluation will be possible. The 14 railroad companies to be studied include:

- Canadian Northern
- Chicago Burlington and Quincy
- Chicago Great Western
- Chicago and North Western
- Chicago Milwaukee St. Paul and Pacific
- Chicago Rock Island and Pacific
- Duluth Missabe and Iron Range
- Duluth and Northeastern
- Great Northern
- Minneapolis Northfield and Southern
- Minneapolis St. Paul and Sault Sainte Marie
- Minnesota Dakota and Western
- Minnesota Transfer
- Northern Pacific

Historic Contexts. Historic contexts will be developed for Section E of the MPDF. This section will begin with an overview of national and statewide trends, linking railroad development and operations with Minnesota statewide contexts. Toward accomplishment of that purpose, brief company histories for the 14 railroad companies will be prepared and will include each company's charter/purpose and the chronological development of its railroad lines in Minnesota. Following the company histories, the contexts will be developed to discuss the role of railroads in the historic events and patterns identified in the statewide contexts. From a national perspective, the contexts will describe impacts resulting from the development of the national rail network, profile significant persons, and summarize historically significant railroad design and engineering approaches or construction practices. From a state perspective, the contexts will describe the railroads impact on the state of Minnesota's settlement, agriculture, industry, economic development, transportation, and the general built environment, as well as profile associated persons and construction/design developments of statewide historical significance. The following is a proposed outline for the contexts discussion:

Railroad Development in Minnesota, 1862-[to be determined]
Setting the Stage: Early Railroads
The Golden Age: 1865 through World War I
System Building
Mature Railroad Systems
Competition between Transportation Modes: 1920-1960
Railroad Engineering and Architecture
Major Railroad Lines in Minnesota
Company histories of the 14 railroad companies operating lines in
Minnesota as of 1920 including charter/purpose and building episodes for the rail lines.

Railroads and Agricultural Development, 1870-1940 King Wheat Diversification and Industrialization of Agriculture Immigration and Settlement Town Site Development Food Processing

Urban Centers, 1870-1940 Manufacturing and Distribution Population Smaller Urban Centers

Minnesota Tourism and Recreation in the Lakes Region, 1870-1945

Northern Minnesota Lumbering, 1870-1930s

Minnesota's Iron Ore Industry, 1880s-1945

Associated Property Types and Registration Requirements. The study will identify significant railroad-associated property types and outline their NRHP registration requirements for "Section F. Associated Property Types" of the MPDF. Section F will describe the identifying characteristics and range of physical features for each property type and will explain their functions within railroad operations. The relationship of each property type to the historic contexts also will be discussed. Registration requirements will provide specific conditions for the eligibility of each property type under NRHP Criteria A, B, C, and D, as well as the Criteria Considerations and the seven Aspects of Integrity. These requirements will describe significant associations with the historic contexts, character-defining features of property types, and thresholds of historical integrity required to illustrate the historical significance of each. It is expected that such thresholds will be determined in frequent discussion with the study's steering committee.

In order to provide a meaningful focus within the time and budgeting constraints of the study, property types will be limited to those typically owned by the railroad in support of rail line operations and located within railroad rights of way.

Study Parameters and Limitations. Short-lived, product-specific rail lines will not be addressed as a separate property type in the MPDF. Rather, it is assumed that they will be categorized within the general property "Railroad Line," though they may be defined as a subtype. Specific lines of this nature will only be addressed, however, if they relate to the 14 companies listed above. The process used in identifying property types and developing NRHP registration requirements will be discussed in the methods section (Section H). This section will also contain discussion of study limitations and constraints, elucidation of how the study's conclusions were reached, and discussion of what needs and issues may require further study and how they may be resolved.

Study Report

In addition to the MPDF and in a separate report, the statewide railroads study will include the preparation of NRHP eligibility statements for the mainlines of each of the 14 railroad companies included in the study. The statements will address the eligibility of each mainline as a whole based on the contextual information and application of the MPDF registration requirements. The evaluations of the mainlines will not include definition of all contributing elements or delineation

of historic district or historic property boundaries. As a supplemental analysis, the report will evaluate the contributing status of four segments of eligible main lines, and for each segment, it will define the contributing elements and boundaries. The four segments will be selected in consultation with Mn/DOT CRU and SHPO staff forming the study's steering committee. The application of the MPDF's registration requirements to property types within these segments is intended to serve as a planning tool for future evaluations of individual railroad segments and associated property types.

The study report will also discuss in detail information contained in sections G and H of the MPDF, including the study's methodology, constraints, decision-making rationale, and how unresolved issues and concerns raised in the study will be addressed in the future.

Expected Results of the Study

The large volume of existing primary and secondary historical material related to the growth and development of Minnesota's railroad networks is expected to be adequate to support the significant level of documentary research necessary to produce an informative and effective MPDF. There have been several exhaustive analyses of railroad-related buildings and structures that will serve as a basis for the discussion of associated property types.

The study will synthesize the historic contexts, property type descriptions, and NRHP registration requirements and present them in MPDF format per the U.S. Department of the Interior's guidelines and standards. The MPDF will include all associated historic contexts, periods of significance, geographical data, a summary of the identification and evaluation methods used in the study, a list of major bibliographical references, and any additional documentation required for clarity. The MPDF will provide a consistent rationale for the evaluation of railroad properties in Minnesota, will aid in federal and state compliance, and will provide historic preservation tools for the identification and evaluation of railroad-related properties. In addition, the study report will provide more detailed discussion of the study's methodology, constraints, and the process by which the study reached its conclusions. The report will also demonstrate application of the historic contexts and registration requirements developed in the MPDF to mainline corridors and to selected segments of those corridors.

APPENDIX B: LIST OF PROJECT PERSONNEL

PROJECT PERSONNEL

Project Manager

Co-Principal Investigators

Project Historians

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