ERDC/CERL TR-23-21

US Army Corps
of Engineers®
Engineer Research and
Development Center

ERDC
ENGINEER RESEARCH & DEVELOPMENT CENTER

Historic Context for Railroads at Fort McCoy, Wisconsin

Aaron R. Schmidt and Carey L. Baxter

October 2023

Construction Engineering
Research Laboratory

The US Army Engineer Research and Development Center (ERDC) solves the nation's toughest engineering and environmental challenges. ERDC develops innovative solutions in civil and military engineering, geospatial sciences, water resources, and environmental sciences for the Army, the Department of Defense, civilian agencies, and our nation's public good. Find out more at www.erdc.usace.army.mil.

To search for other technical reports published by ERDC, visit the ERDC online library at https://erdclibrary.on.worldcat.org/discovery.

Cover: "Unidentified Workers at the J. J. Connelly Shell Loading Depot, Camp McCoy," no date, photo P1997-13-4001, Monroe County Local History Room, Sparta, WI. Public domain.

ERDC/CERL TR-23-21
October 2023

Historic Context for Railroads at Fort McCoy, Wisconsin

Aaron R. Schmidt and Carey L. Baxter

US Army Engineer Research and Development Center (ERDC)
Construction Engineering Research Laboratory (CERL)
2902 Newmark Drive
Champaign, IL 61822

Final Report

Prepared for Cultural Resource Program
Directorate of Public Works
Fort McCoy, Wisconsin 54656

Under Project 497353, "Historic and Military Railroad Context—Fort McCoy," MIPR 11656312

Abstract

This report provides a historic context for the railroads that operated within the present-day boundaries of Fort McCoy. The objective of this historic context is to deliver a useful reference for future evaluations of railroad-related resources in the installation. Ultimately, the report is intended to save the installation time in determining potential areas of significance for future evaluations. This is accomplished through the creation of a broad historic context for railroading in the Midwest, establishing a survey of railroad history at Fort McCoy, and providing examples of areas of significance and National Register of Historic Places (NRHP) criteria commonly applied to the historic railroad resources of the Midwest. This report does not provide NRHP eligibility recommendations for any specific resources; however, possible research questions for further study are posited in the concluding chapter.

Contents

Figures and Tables

Figures

Tables

Preface

This study was conducted for the Cultural Resources Program, Directorate of Public Works (DPW) at Fort McCoy, Wisconsin, under Project Number 497353 "Historic and Military Railroad Context—Fort McCoy," MIPR 11656312. The technical monitor was Mr. Ryan Howell (cultural resource manager, DPW).

The work was performed by the Training Lands and Heritage Branch, Operational Science and Engineering Division, Engineer Research and Development Center, Construction Engineering Research Laboratory (ERDC-CERL). At the time of publication, Ms. Angela Rhodes was chief, Training Lands and Heritage Branch; Dr. George Calfas was division chief, Operational Science and Engineering Division; and Mr. Jim Allen was the technical director for Operational Science and Engineering. The deputy director of ERDC-CERL was Ms. Michelle Hanson, and the director was Dr. Andrew Nelson.

COL Christian Patterson was commander of ERDC, and Dr. David W. Pittman was the director.

This page intentionally left blank.

1 Introduction

1.1 Background

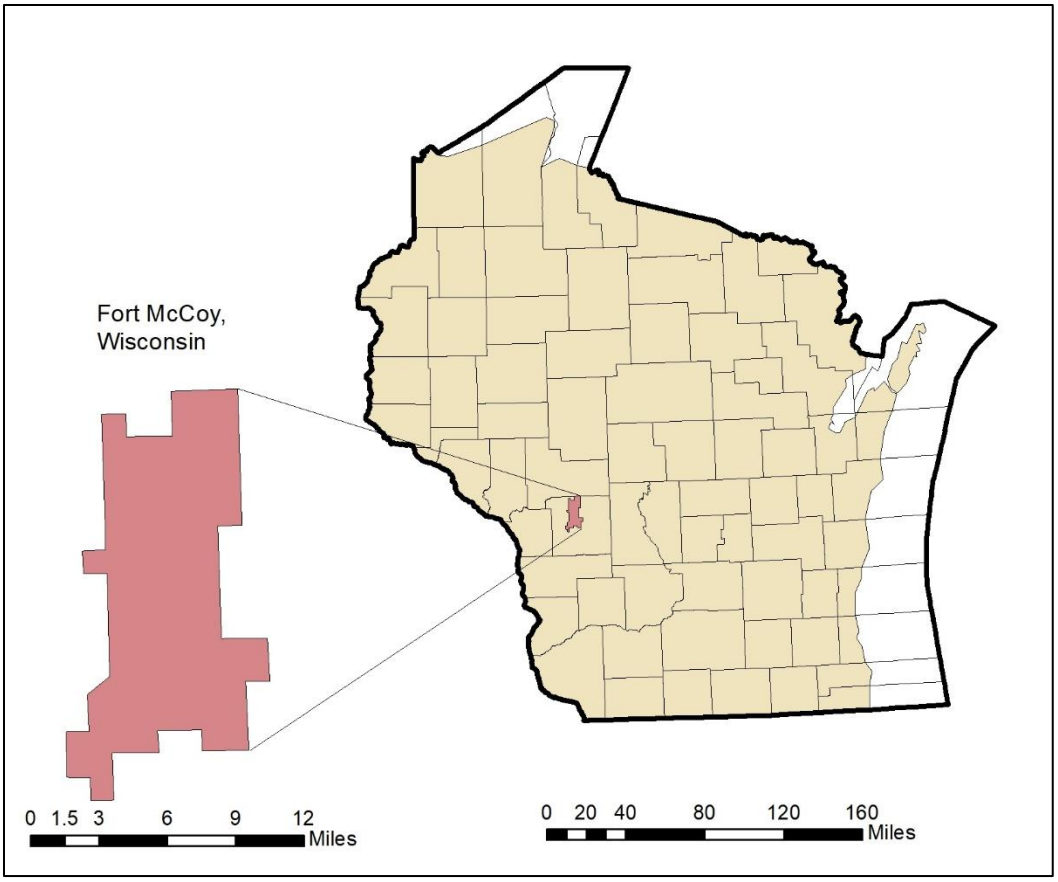
The US Congress codified the National Historic Preservation Act of 1966 (NHPA), the nation's most effective cultural resources legislation to date, in order to provide guidelines and requirements for preserving tangible elements of our nation's past. This preservation was done primarily through creation of the National Register of Historic Places (NRHP). Contained within this piece of legislation are requirements for federal agencies to address their cultural resources, defined as any prehistoric or historic district, site, building, structure, or object. Section 110 requires federal agencies to inventory and evaluate their cultural resources. Section 106 requires the determination of effect of federal undertakings on properties deemed eligible or potentially eligible for the NRHP.[1]

This report provides a historic context for the railroads that operated within the present-day boundaries of Fort McCoy. Fort McCoy is located in west-central Wisconsin, east of La Crosse and between the towns of Sparta and Tomah (general area shown in Figure 1). Fort McCoy lies entirely within Monroe County. The installation began in 1909 as a seasonal maneuver and artillery training ground. It consisted of two camps divided by an existing railroad corridor operated by the Chicago, Milwaukee, and St. Paul Railroad (later known as the Chicago, Milwaukee, St. Paul and Pacific or the CMSTP&P). This latitudinal corridor, completed in 1858, represented one of the earliest railroad lines in Wisconsin and was one of the first to cross the state, connecting Lake Michigan with the Mississippi River. In 1910, the Chicago and Northwestern Railroad (C&NW) began constructing a secondary line parallel to the CMSTP&P tracks in Monroe County. Both railroad companies played a central role throughout the installation's development, remaining one of the primary means of transporting personnel and materiel through WWII. In addition to these standard-gauge railroads, a military narrow-gauge network served the installation in the 1920s and 1930s. This system of portable light rails, complete with miniature locomotives and rolling stock, transported materiel to

1. National Historic Preservation Act, Pub. L. No. 89-665, as amended by Pub. L. No. 96-515, Sections 110, 106 (1966).

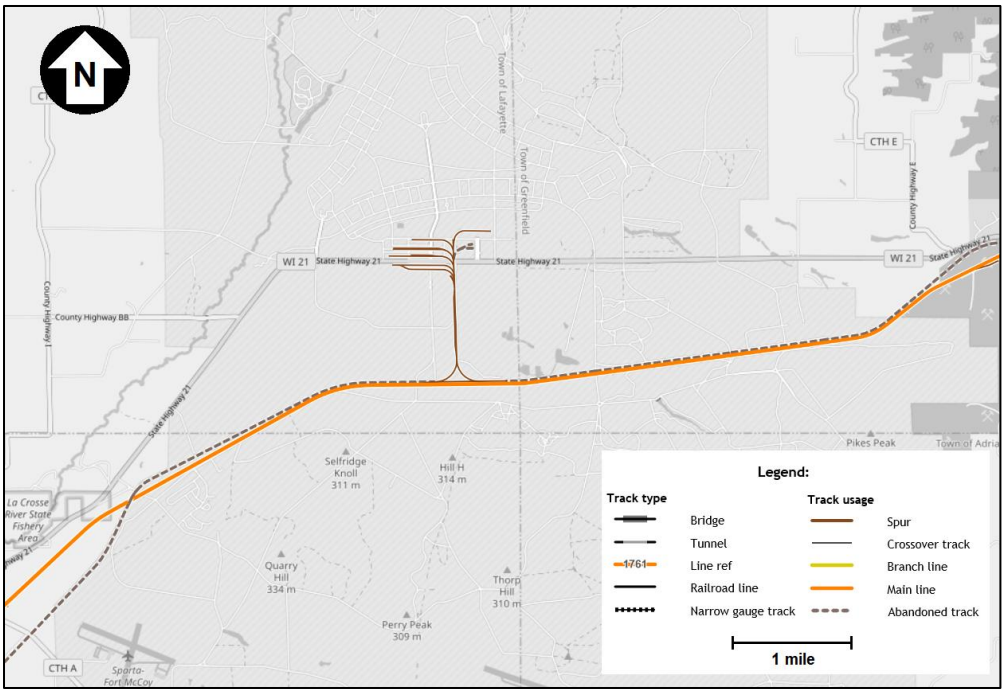
storehouses in the hilly terrain south of the CMSTP&P and C&NW corridor. This narrow-gauge network is no longer extant.

Figure 1. Boundary outline and location of Fort McCoy, in west-central Wisconsin. (Image from Engineer Research and Development Center, Construction Engineering Research Laboratory [ERDC-CERL]. Public domain.)



The C&NW Railroad abandoned its line through Fort McCoy in 1977, and the corridor reverted to federal ownership. In 1985, the Soo Line (a subsidiary of Canadian Pacific [CP]) purchased the bankrupt CMSTP&P Railroad. At present, this corridor remains an active and important line in the CP network (Figure 2). Additionally, the line represents a main thoroughfare in the Railroads National Defense (RND) Program's Strategic Rail Corridor Network (STRACNET), a system of rail lines capable of transporting heavy and tracked vehicles from select defense installations to coastal deployment points.

Figure 2. Current railroad lines within Fort McCoy. The abandoned Chicago and Northwestern (C&NW) tracks are represented by *brown dashed lines*, the Canadian Pacific (CP) main tracks are *orange*, and the government-owned spur tracks are *brown*. (OpenRailwayMap. Map data from OpenStreetMap contributors, 2022. Open Database License.)



1.2 Objective

The objective of this report was to create a historic context for railroads that operated within the present-day boundaries of Fort McCoy. By establishing this background, the report may provide a useful reference for future evaluations of railroad-related resources under Section 110 of the NHPA. The body of the report, and the subsequent reference list, are intended to save the installation time in determining potential areas of significance for future evaluations. This is accomplished through the creation of a broad historic context for railroading in the Midwest, establishing a survey of railroad history at Fort McCoy, and providing examples of areas of significance and NRHP criteria commonly applied to the historic railroad resources of the Midwest. This report does not provide NRHP eligibility recommendations for any specific resources; where possible, research questions for further study are posited in the concluding chapter. Additionally, lidar returns in areas historically associated with railroad development at Fort McCoy can be used to guide future field work along the historic CMSTP&P and C&NW corridor, as well as the narrow-gauge network in the South Post area.

1.3 Researchers

This project was conducted by the US Army Corps of Engineers, Engineering Research Development Center, Construction and Engineering Research Laboratory (ERDC-CERL), based in Champaign, IL. The research team included Aaron R. Schmidt, master of public history with 2 years of experience, as primary researcher and writer and Carey L. Baxter, an archaeologist with 22 years of experience, as the lidar analyst. The project manager and reviewer was Adam D. Smith, master of architecture with 25 years of experience in military architectural history.

1.4 Approach

1.4.1 Site visits

ERDC-CERL personnel made two trips to Fort McCoy in September and October of 2021 to gather information on extant buildings and to conduct archival research.

1.4.2 Archival repositories

ERDC-CERL researchers conducted a review of books, archival repositories, and online resources related to the railroads of the Midwest, Wisconsin, and Fort McCoy. Research trips to Fort McCoy and other repositories happened 27 September through 1 October 2021 and 25 through 29 October 2021. The following places were either contacted or searched:

- historic drawings, maps, photographs, and information were provided by the cultural resources manager at Fort McCoy
- Monroe County Local History Room—site visit for historic maps, photos, and documents
- Fort McCoy History Center—site visit for historic maps, photos, and documents
- Wisconsin Historical Society, Madison—site visit for historic maps, photos, and documents
- Milwaukee Road Archive, Milwaukee—site visit for historic drawings and documents
- Chicago and Northwestern Society—correspondence to receive standard depot drawings
- National Archives and Records Administration (NARA), College Park—site visit (NARA RG-394 and 111-SCA) for historic photos and maps
- elevation and lidar data from the Wisconsin State Cartographer's Office

1.4.3 Analysis

After initial research was completed, the team analyzed the gathered information. Archival information was contained in text documents, photographs, and historic maps. Using archival sources, the research team extracted relevant historical information. The material was then combined to tell the story in both text and images.

1.4.4 Terminology note

During its existence, the name of the Chicago, Milwaukee, St. Paul, and Pacific (CMSTP&P) changed to reflect different phases of its development. Unless describing a transition in the company's development, this report refers to the company as the CMSTP&P for consistency.

2 Midwestern Railroads Historic Context

2.1 Pre–Civil War era, 1830–1861

Early attempts to establish railroads in the United States began in the 1820s, though testing was concentrated in the East and actual implementation was generally limited before 1830.[2] Soon, interest in railroad development emerged in the Old Northwest (Ohio, Indiana, Michigan, Illinois, and Wisconsin), a growing region of the country believed to be a natural extension point for new rail corridors. While canals remained popular artificial channels for direct transportation, many contended that railroads could be constructed more economically and ship goods and passengers more rapidly than canals. Consequently, charters were issued for the construction of railroads in Ohio, Indiana, Michigan, and Illinois as early as the 1830s, though actual construction did not always follow these early contracts.[3]

Throughout most of the 1840s, railroads and canals were largely complimentary entities, and rail construction in the Old Northwest progressed at a measured pace; however, late in the decade, the rate of development increased as railroads began directly linking centers of commerce. Crews reached a significant milestone in 1848 with the completion of a new line connecting Cincinnati with Sandusky, Ohio, expediting transportation between the Ohio River and the Great Lakes.[4] At the same time, new rail lines began to radiate from several Midwestern cities, such as Cleveland, Columbus, and Indianapolis, and diffused "into their tributary agricultural areas."[5]

The creation of new railroad lines demanded large amounts of capital; a situation that individual states attempted to ameliorate through public funding in the 1830s and 1840s. In the Midwest, Indiana, Michigan, and Illinois initially championed public investment for railroad creation; in Illinois, for example, over 90% of public money was reserved for rail

2. Derek Hayes, *The First Railroads: Atlas of Early Railroads* (Buffalo NY: Firefly Books, 2017), 100–106, 230–34.

3 R. Carlyle Buley, *The Old Northwest Pioneer Period: 1815–1840, Vol. I* (Bloomington: Indiana University Press, 1950), 508–18.

4. Frederic L. Paxson, "The Railroads of the 'Old Northwest' Before the Civil War," in *Transactions of the Wisconsin Academy of Sciences, Arts and Letters*, vol. XVII, part I, no. 4 (Madison: Wisconsin Academy of Sciences, Arts and Letters, 1911), 251–55.

5. Paxon, "The Railroads of the Old Northwest," 255.

development; however, a lack of immediate revenue caused a general reversal on state sponsorship and prompted private investment.[6] Perhaps because of such insecurities, the Wisconsin constitution prohibited the state from funding internal improvements, including railroad development, during the pre–Civil War era.[7]

The federal government also aided railroad construction, primarily in the form of land grants. The impact of this support cannot be underestimated, as this "early aid played a major role in the expansion of railroads into the Midwest, and later into the Far West, and only a slightly lesser role in the South."[8] While the government had traditionally issued land grants to encourage other forms of transportation (namely, trails and canals), aid for railroad development first began in 1850 when the government dispensed over 2 million acres of federal land in Illinois for a new line, which was to become the Illinois Central.[9] Through this policy, the government would allocate a 6 to 10 mile strip of federally owned land to a prospective rail line.[10] Within that strip, the railroad company obtained alternating sections of land and the government kept the rest. Following the construction of a new railroad, the government anticipated that land values in their sections would increase and ultimately pay for themselves.[11] By 1900, federal land grants paved the way for a network of rail lines and associated settlement throughout the Upper Midwest (Figure 3).

6 H. Roger Grant, *The Northwestern: A History of the Chicago and Northwestern Railway System* (DeKalb: Northern Illinois University Press, 1996), 5–6.

7. William F. Raney, "The Building of Wisconsin Railroads," *The Wisconsin Magazine of History* 19, no. 4 (1936): 388–89.

8 G. M. Kaitz, *An Economic History of Five Midwestern Railroad*s (Washington, DC: US Department of Transportation, 1976), 4.

9. Kaitz, *An Economic History of Five Midwestern Railroad*s, 3.

10. For a full list of the spelled-out forms of the units of measure used in this document and their unit conversions, please refer to US Government Publishing Office Style Manual, 31st ed. (Washington, DC: US Government Publishing Office, 2016), 248–52, 345–47, https://www.govinfo.gov/content/pkg/GPO-STYLEMANUAL-2016/pdf/GPO-STYLEMANUAL-2016.pdf.

11. Kaitz, *An Economic History of Five Midwestern Railroad*s, 4.

Figure 3. Network of federal land grants for railroads in the Upper Midwest, 1892. (Image from Library of Congress. Public domain.)[12]

In the 1850s, the country's railroad network matured swiftly as crews laid over 20,000 miles of new track.[13] Pre–Civil War growth was particularly pronounced in the Midwest, where burgeoning railroad operations significantly impacted agricultural development. Improved accessibility to railroad lines incentivized cultivation on adjacent and nearby lands, and as overall yields intensified, property values increased as well.[14]

In the years preceding the Civil War, railroad networks soon converged on a rapidly growing market: Chicago. While Lake Michigan provided a natural connection between the East and new agricultural markets in the Midwest, the remarkable growth of Chicago in the mid-nineteenth century is attributable to the construction of artificial transportation corridors. The earliest of these projects, the Illinois and Michigan Canal, was completed in 1848 and markedly enhanced the volume of crops and lumber transported to the city (Figure 4). The advent of rail transport soon became one of the most defining innovations for Chicago and the Midwest. Not long after the opening of the city's first railroad in 1848, the Galena and Chicago

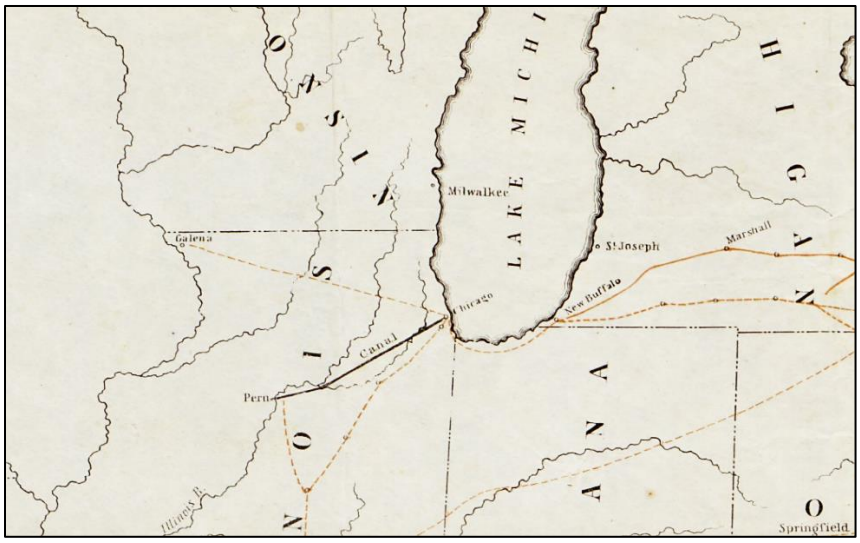
12. United States Army, Quartermaster Corps. *Map of Land-Grant and Bond-Aided Railroads of the United States*. 1892 (Washington, DC: Norris Peters Co.), https://www.loc.gov/item/98688343/.

13. William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York: W. W. Norton & Company, 1991), 68.

14. Jeremy Atack and Robert A. Margo, "The Impact of Access to Rail Transportation on Agricultural Improvement," *The Journal of Transport and Land Use* 4, no. 2 (2011): 5, 16.

Union (an antecedent of the Chicago and Northwestern), the railroad's potential as a more efficient mode of commercial transport became apparent. By the 1860s, the success of some of the Midwest's most important lines, such as the Illinois Central; the Chicago & Rock Island; and the Chicago, Burlington, and Quincy, resulted from their junction at Chicago (Figure 5). Many lines that converged in the city were owned and managed by Easterners, who leveraged the necessary capital for their inception. West of this strategic location, a fan of railroad lines channeled raw materials and produce to Chicago, where they were shipped to the East, primarily New York, for distribution. Manufactured goods from the East, in return, arrived in Chicago by rail and fanned out to consumers west of the city.[15]

Figure 4. A map of prospective railroads in the vicinity of Chicago, 1848. Note the canal between Chicago and Peru, Illinois. (Image from Library of Congress. Public domain.)[16]



15. Cronon, *Nature's Metropolis: Chicago and the Great West*, 66–90.

16. US Senate, *Skeleton Map Showing the Rail Roads Completed and in Progress in the United States, and Those Projected through the Public Lands and Their Connection with the Principal Harbours on the Lakes and on the Seaboard*, [1848] (Washington, DC: C. B. Graham's Lithographers), https://www.loc.gov/item/98688309/.

Figure 5. A map of existing and prospective railroads from 1857. Note how several lines disperse from nucleus cities such as St. Louis, Chicago, and Milwaukee. (Image from Library of Congress. Public domain.)[17]

As the 1850s progressed, railroads assumed a greater presence in the Trans-Mississippi West as new lines from Illinois penetrated Iowa and Missouri.[18] In anticipation of linking the state to Eastern markets, companies in Iowa began laying rails before a bridge even spanned the Mississippi River. The completion of a bridge between Rock Island, Illinois, and Davenport, Iowa, in 1856 officially expanded Midwestern rail commerce beyond the Mississippi River.[19] In Missouri, after the Hannibal and St. Joseph Railroad completed a cross-state line between the namesake cities in 1859, rail transportation pushed even further west, providing Chicago and the East with an important thoroughfare to the Missouri River.[20]

17. William Perris, *A New and Complete Railroad Map of the United States Compiled from Reliable Sources* (New York, 1857), https://www.loc.gov/item/98688323/.

18 G. Woolworth Colton and Rufus Blanchard, *Indiana, Illinois, Missouri & Iowa with Parts of Adjoining States*, map (New York: G. Woolworth Colton and Rufus Blanchard, 1858), Library of Congress, http://hdl.loc.gov/loc.gmd/g4061p.rr001210.

19. Rebecca Conard and Tracy A. Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, National Register Multiple Property Documentation Form (MPDF) (Washington, DC: National Park Service, 1990), E-47, https://npgallery.nps. gov/pdfhost/docs/NRHP /Text/64500143.pdf.

20. Cronon, *Nature's Metropolis: Chicago and the Great West*, 300.

In the pre–Civil War era, railroad construction was more restrained in the Upper Midwest. Development in Michigan and Wisconsin, for example, was primarily limited to the southern portions of each state. Two lines of significance, a track from Detroit to Grand Haven, Michigan, and a line from Milwaukee to La Crosse, Wisconsin, were completed in 1858 and ultimately facilitated transportation to Minnesota.[21]

2.2 Railroads during the Civil War, 1861–1865

The Civil War became one of the earliest conflicts in the world in which railroads played a vital role in transporting troops, materiel, and other reinforcements (Figure 6). The Midwest, and the Northern states as a whole, had a significant advantage over the South because the region possessed a more extensive railroad network and had the industrial capability to produce locomotives, rolling stock, and other railroad infrastructure. The federal government also devised measures to govern the traffic and maintenance of its railroads, something which the Confederacy lacked. In 1862, Congress passed a bill to grant the president "power to requisition any railroad, including buildings, rolling stock, and personnel, when public safety demanded."[22] Additionally, the formation of the US Military Railroads (USMRR) agency facilitated the movement of troops to frontlines and repair of railroad lines and bridges.[23] Centralized authority over the railroads during the Civil War established a precedent that would be repeated in later conflicts.

21. Paxson, "The Railroads of the 'Old Northwest' Before the Civil War," 259.

22. Augustus J. Veenendaal, *American Railroads in the Nineteenth Century* (Westport, CT: Greenwood Press, 2003), 53

23. Veenendaal, *American Railroads in the Nineteenth Century*, 53–54.

Figure 6. A military train passes over Bull Run Bridge in Virginia, 1863. (Image from Library of Congress. Public domain.)[24]

Although the Panic of 1857 temporarily stymied new railroad construction, crews had completed a significant network of tracks in the Midwest by the start of the Civil War. The railroad expedited the movement of Union military troops and equipment, providing the North with a logistical advantage during the conflict.[25] The railroad network also kept the North supplied with agricultural provisions. In Wisconsin, for example, the completion of railroad lines between the Mississippi River and Lake Michigan in the 1850s made it possible to ship grains from Minnesota, Iowa, and Wisconsin to the East through the Great Lakes instead of the Ohio River. As a result, "the volume of freight and grain shipped by rail from Prairie du Chien to Milwaukee . . . increased over sixteen-fold."[26]

2.3 Era of expansion and the golden age of railroading, 1865–1920

As the country's railroad network continued to grow, local and intrastate lines were often subsumed by more powerful companies. This trend of consolidation characterized the development of many powerful railroads in the Midwest, including four major "granger" lines (railroads that served

24. Andrew J. Russell, *First Train across Bull Run Bridge,* photograph, 1863, Library of Congress, https://www.loc.gov/item/ 2005696871/.

25. Paxson, "The Railroads of the 'Old Northwest' Before the Civil War," 264–66.

26. Barbara Wyatt, ed. *Cultural Resource Management in Wisconsin*, vol. 2, *Transportation* (Madison: Historic Preservation Division, State Historical Society of Wisconsin, 1986), 5-1.

agricultural markets) that matured in the post–Civil War period and remained important through much of the twentieth century: the Chicago, Burlington and Quincy (CB&Q), the Chicago, Rock Island & Pacific (Rock Island), the C&NW, and the CMSTP&P, often colloquially referred to as the "Milwaukee Road."[27]

2.3.1 Chicago, Burlington and Quincy (CB&Q)

The inauguration of the CB&Q in 1856 resulted from the merger of four smaller railroads in northern Illinois. Stable management earned the company dependable returns, which allowed the CB&Q to grow throughout the nineteenth century. The company's expansion, which occurred through acquisitions and new construction, pushed the CB&Q's network further west. The CB&Q enjoyed an especially influential role in southern Iowa, northern Missouri, and Nebraska, where the company sold property it had acquired through land grants to settlers. By 1900, the CB&Q controlled 7,600 miles of track, serving agricultural markets from Chicago to Montana.[28]

2.3.2 Chicago, Rock Island and Pacific (Rock Island)

The Chicago, Rock Island and Pacific (initially the Chicago and Rock Island) formed from a charter granted by the state of Illinois in 1851. The company established an eastern terminus in Chicago and proceeded west, reaching Rock Island, Illinois, (on the Mississippi River) by 1854. Two years later, the Rock Island expanded operations into the Trans-Mississippi West with the completion of a bridge to Davenport, Iowa. Like the CB&Q, the Rock Island sold land grant property to settlers as it moved west. The company's growth was generally informed by sound fiscal procedures until the early twentieth century, when a rash expansion campaign sent the Rock Island into receivership.[29]

2.3.3 Chicago, Milwaukee, St. Paul and Pacific (CMSTP&P)

The CMSTP&P was organized in Wisconsin as the Milwaukee and St. Paul Railroad Company in 1863. Over the next few years, the company acquired two of Wisconsin's earliest cross-state lines, the Milwaukee and

27. John F. Stover, *The Routledge Historical Atlas of the American Railroads* (New York: Routledge, 1999), 96–103.

28. Stover, *The Routledge Historical Atlas of the American Railroads*, 96.

29. Stover, *The Routledge Historical Atlas of the American Railroads*, 98.

Mississippi Railroad and the La Crosse and Milwaukee Railroad.[30] Reaching St. Paul by 1869 and Chicago by 1873, the company rebranded itself as the Chicago, Milwaukee and St. Paul Railroad (CM&STP), a moniker it preserved for nearly four decades. The CM&STP became a major agricultural shipping provider in the Upper Midwest, building a sustainable and profitable network containing 5,000 miles of track. The completion of a transcontinental link between South Dakota and Seattle, Washington, in 1909 prompted the company to update its name to the Chicago, Milwaukee, St. Paul and Pacific (CMSTP&P). Unfortunately for the CMSTP&P, this costly route did not generate enough returns to pay for itself, and the company fell into a fiscal slump in the 1920s from which it never fully recovered. Following bankruptcy in the late 1970s, the CMSTP&P sold its remaining assets to the Soo Line in 1985.[31]

2.3.4 Chicago and Northwestern (C&NW)

The C&NW was organized in 1859 by Chicago mayor and railroad tycoon William Butler Ogden. Through the acquisition of the Galena and Chicago Union (the city's oldest railroad) and the construction of new lines branching north and west from the city, the C&NW possessed 5,300 miles of track by 1900. Following a recession in the early twentieth century, the company regained a measure of stability after WWII. After expanding operations into the coal-producing markets of Wyoming and purchasing trackage from the defunct Rock Island Railroad in the late twentieth century, the C&NW was itself purchased by the Union Pacific Railroad in 1995.[32]

2.3.5 The "Granger" movement and the advent of railroad regulation

After the Civil War, American industry was increasingly characterized by unregulated monopolies, and the railroads were among the largest and most pervasive. With total control of the market, growing railroad companies set their own rates without oversight. As a result, regulatory measures were demanded with increasing urgency.[33] Such measures got their start in the Midwest, where farmers and merchants became increasingly dependent on the railroad as a means of transporting agricultural goods. In

30. Raney, "The Building of Wisconsin Railroads," 393.

31. Jeff Wilson, ed., *The Historical Guide to North American Railroads*. 3rd ed. (Waukesha: Kalmbach Books, 2014), 96.

32. Stover, *The Routledge Historical Atlas of the American Railroads*, 100–101.

33. Wilson, *The Historical Guide to North American Railroads*, 10.

the early 1870s, farmers associated with the "Patrons of Husbandry" complained that railroad companies were taking advantage of growers by charging unreasonably high transportation rates. Believing that railroad companies needed to be held accountable for their actions, farmers and merchants in the upper Mississippi valley demanded reform in the grain-trading market.[34] One of the goals of these activists—known as "Grangers"—was to ensure fair freight and passenger rates were regulated through legislative oversight. Soon, the demands of the Grangers reached state legislators, and regulatory laws attempting to restrain railroad rates passed in states throughout the Upper Midwest. In 1874, the Wisconsin legislature ratified the Potter Railroad Law, which became the first railroad regulation measure in the United States.[35] This law principally aimed to curb unrestricted transportation fees through maximum rates imposed by a Board of Railroad Commissioners. Although it initially appealed to the Grangers, the measure was ultimately unsustainable because it did not account for the necessity of rates to be influenced by the market at large. Accordingly, legislators repealed the measure in 1876.[36]

While the revocation of the Potter Railroad Law generally signaled the end of the Granger movement, the precedent for legislative oversight had been established, and "[i]n 1877 the principle of government regulation of railroads was upheld by the Supreme Court."[37] Ten years later, federal legislators passed the Interstate Commerce Act of 1887, which established an Interstate Commerce Commission (ICC) to ensure railroad companies maintained reasonable rates.[38]

In reality, the ICC had limited authority in the late nineteenth and early twentieth centuries. Power remained in the hands of a few railroad monopolies, and the ICC could not devise or enforce reasonable rates, only recommend them. The ICC gained more power under the administration of President Theodore Roosevelt and his successor, William H. Taft, and by 1910, the ICC could establish rates and "suspend for as long as ten months new rates established by a railroad."[39] In addition, the Railroad

34. Cronon, *Nature's Metropolis: Chicago and the Great West*, 138.

35. Kaitz, *An Economic History of Five Midwestern Railroads*, 6.

36. Grant, *The Northwestern: A History of the Chicago and Northwestern Railway System*, 37–38.

37. Kaitz, *An Economic History of Five Midwestern Railroads*, 6.

38. Grant, *The Northwestern: A History of the Chicago and Northwestern Railway System*, 81.

39. Veenendaal, *American Railroads in the Nineteenth Century*, 84.

Valuation Act of 1913 mandated that the ICC compare the value of every American railroad's capital structure with the actual value of their infrastructure, a process which intended to expose fiscal mishandling. By WWI, many railroad companies believed they were overregulated, especially in comparison to the growing vehicular transportation sector. The railroads "had to pay for their own infrastructure [and] were heavily taxed for every square foot of property they owned and for every dollar they earned . . . while the truckers paid little or nothing for the highways they used . . . and had no obligation to maintain unprofitable services and schedules."[40] The inequitable regulatory standards that characterized the railroad industry and the vehicular transportation sector endured through most of the twentieth century and is cited as one reason for the railroad's eventual decline in the United States.[41]

2.3.6 The rise of interurban railroads

Near the end of the nineteenth century, other modes of transportation began to compete with traditional steam-powered locomotives. Most notable among the new alternative modes of transport was the electric streetcar. First made practical in 1888, the electric streetcar (which was originally designed to transport people within an established urban streetscape) soon evolved into a network of electric interurban railroads. The new interurbans "employed rolling stock with smaller dimensions . . . and emphasized local service."[42] In short, these lines provided a more economical way to transport passengers in smaller, regional markets. While some steam railroad companies were unnerved by this development, others realized that interurban lines were, by design, largely relegated to local traffic, "the service steam roads found most expensive to operate."[43]

The Midwest was particularly quick to embrace the interurban railroad, and soon Chicago, Indianapolis, and Cleveland became epicenters for this mode of transportation. In Wisconsin, most electric interurban routes were concentrated around Milwaukee, which became an anchor for regional routes in the eastern portion of the state and to Chicago. The Milwaukee Electric Railroad and Light Company soon dominated the

40. Veenendaal, *American Railroads in the Nineteenth Century*, 85

41. Veenendaal, *American Railroads in the Nineteenth Century*, 85; Kaitz, *An Economic History of Five Midwestern Railroads*, 4–5.

42. Wilson, *The Historical Guide to North American Railroads*, 10.

43. Wilson, *The Historical Guide to North American Railroads*, 10.

interurban market in Wisconsin; by 1928, it owned and operated 198 of the state's 383 miles of interurban track.[44]

2.3.7 World War I and the United States Railroad Administration

By the early twentieth century, the railroad had become a vital industry in the United States. Total track mileage reached its peak in 1916, and that year the railroads transported "98 percent of all intercity passenger business (a billion passengers) and 77 percent of all intercity freight (366,000,000,000 ton-miles)."[45] In particular, the railroad industry had matured in the Midwest, which contained a balance of small, medium, and large carriers. According to railroad historian H. Roger Grant, "By the turn of the century the railroad map of the Midwest was unequaled. Anyone who examined it would quickly sense that this was the vital center of America's massive and far-flung network of steel rails. . . . the Midwest offered more than an agricultural cornucopia; the region benefited from an abundance of the necessary ingredients to sustain industrialization and urban growth."[46]

By the time America entered WWI in 1917, the government considered the railroads strategically important for the movement of goods, troops, and materiel. To ensure maximum efficiently during wartime, the government took control of the nation's railroads in December 1917, ending decades of private operation.[47] To coordinate the plan, the government created the United States Railroad Administration (USRA), which rented the nation's railroads from their respective companies. The USRA promised to compensate the railroad companies with "annual funds equivalent to their average net operating incomes for the preceding three-year period."[48] Duties performed by the USRA "included the discharge of all railroad presidents, elimination of all rail competition, and a flat $20 wage increase for all employees earning less than $46 a month."[49] The USRA also introduced standardized rolling stock and locomotives. Although the government had promised just compensation to railroad companies, the USRA's attempt to

44 H. Roger Grant, "Interurban Transit," In *Encyclopedia of Milwaukee*, University of Wisconsin–Milwaukee, accessed January 19, 2021, https://emke.uwm.edu/entry/interurban-transit/.

45. Veenendaal, *American Railroads in the Nineteenth Century*, 92.

46 H. Roger Grant, *Railroads in the Heartland: Steam and Traction in the Golden Age of Postcards* (Iowa City: University of Iowa Press, 1997), 6.

47. Kaitz, *An Economic History of Five Midwestern Railroads*, 4.

48. Kaitz, *An Economic History of Five Midwestern Railroads*, 4.

49. Wilson, *The Historical Guide to North American Railroads*, 10.

operate the nation's rail lines through centralized authority resulted in significant profit losses. Additionally, railroad operators found the USRA's control burdensome. After disbanding in 1920, the USRA reported compensation earnings $714 million short of their anticipated goal, with damage claims of $677 million.[50]

2.4 Interwar era, 1920–1941

After WWI, the nation's railroads returned to private operation. The railroads maintained their status as the primary transportation system for passengers and freight in the 1920s but faced intensifying competition from motor vehicles and enduring regulatory pressure. In particular, the railroad's passenger sector declined significantly as Americans appreciated the convenience and growing affordability of automobile travel. Between 1916 and 1930, the number of passengers traveling on the nation's railroads fell from 1 billion to 700 million. At the same time, motor vehicle registrations increased from 3 million in 1916 to 23 million in 1929.[51]

After the stock market crash in 1929, railroad service continued to decline. The success of the railroad industry relied upon success in other industries. As businesses across the nation struggled through the Great Depression, the country's railroads transported less freight. As conditions deteriorated, some railroad companies began scrapping unneeded locomotives, and others declared bankruptcy.

In the Midwest, severe drought in the 1930s compounded issues caused by the Great Depression. Agricultural shipments represented a significant percentage of business for Midwestern granger lines, such as the C&NW. Between 1930 and 1935, grain accounted for 10%–15% of the company's freight traffic. Unfortunately, drought reduced the production of grain crops, disrupting this sector of the C&NW's freight revenue. In 1935, the C&NW declared bankruptcy and entered into federal receivership, where it remained until March 1945.[52] The Milwaukee Road, which went bankrupt in 1925 after constructing a costly line to Seattle, declared bankruptcy again in 1935 as the reorganized company struggled to turn a profit.[53]

50. Wilson, *The Historical Guide to North American Railroads*, 10.

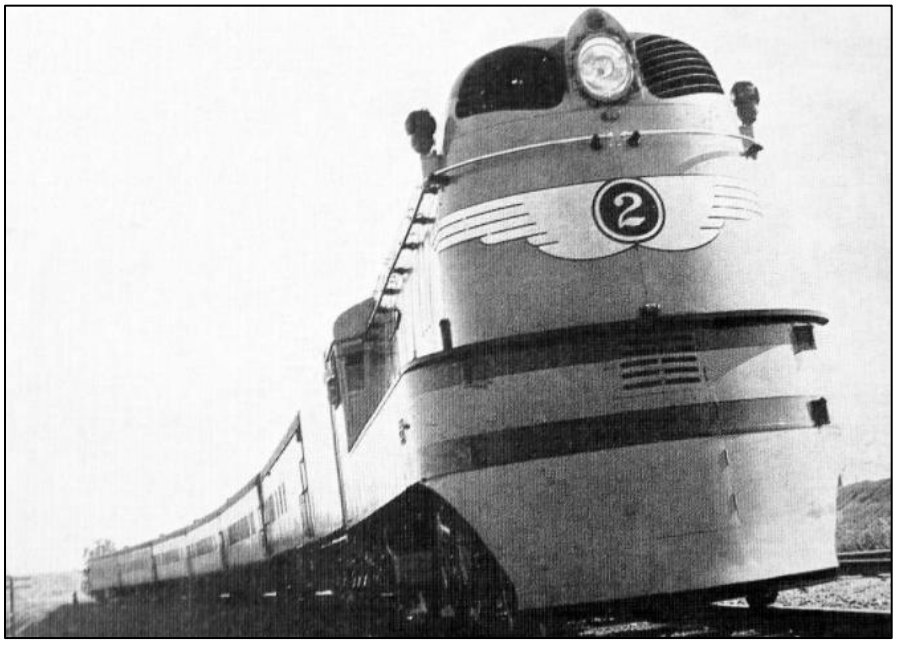
51. Adam Burns, "Railroads in the 1930's: Depression and Streamliners," American Rails, Last revised June 7, 2023, https://www.american-rails.com/1930s.html.

52. Kaitz, *An Economic History of Five Midwestern Railroads*, 26–27.

53. Kaitz, *An Economic History of Five Midwestern Railroads*, 41.

Despite declining passenger and freight revenues, the 1930s was an innovative decade for the railroad industry. To attract business, companies promoted new locomotives with sleek, streamlined bodies. Significantly, some of the new locomotives employed diesel power. These diesel locomotives were capable of reaching high speeds and required no water stops. Midwestern railroad companies, like the CB&Q and the Milwaukee Road, were among the first to adopt streamliners in their inventory. One of the most publicized streamliners of the era, the CB&Q's *Zephyr 9900* impressed the nation in 1934 after completing a trip from Denver to Chicago in 14 hours.[54] The Milwaukee Road's streamlined *Hiawatha* trains, introduced in 1935, remained an iconic part of the company's inventory for decades (Figure 7).[55]

Figure 7. A Chicago, Milwaukee, St. Paul and Pacific (CMSTP&P) Hiawatha streamline locomotive, 1942. (Image from PICRYL Public Domain Media. Public domain.)[56]



2.5 World War II, 1941–1945

Passenger and freight activity increased dramatically during WWII, bringing many Midwestern railroads out of their economic slump. Nationwide,

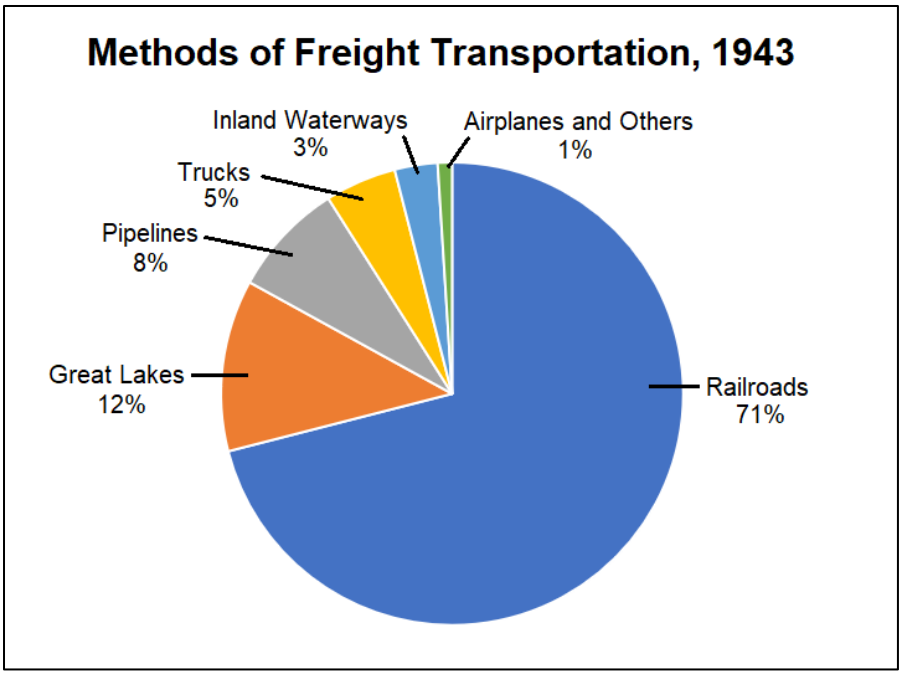
54. Burns, "Railroads in the 1930's: Depression and Streamliners."

55. Adam Burns, "Milwaukee Road's *Hiawatha*," American Rails, February 28, 2022, https://www.american-rails.com/hiawatha.html.

56. *Milwaukee Class A Hiawatha 1942*, 1942 (Milwaukee, WI: E. C. Kropp), PICRYL (website), Public Domain Media, https://picryl.com/media/milwaukee-class-a-hiawatha-1942-69cd32.

the important role of the railroads became immediately apparent as "freight traffic doubled and passenger business quadrupled."[57] Halfway through the war, figures collected in 1943 demonstrated that American railroads were responsible for moving over 71% of intercity freight (Figure 8).[58] A postwar figure suggests that railroads transported 97% of the country's troops and 90% of its freight.[59] American railroad companies performed so well during wartime that they collectively paid off more than $2 billion worth of debt.[60] The C&NW and the CMSTP&P, two important Midwestern lines that declared bankruptcy in the 1930s, benefited greatly from wartime revenue. By 1945, the C&NW operated at a profit again, and the CMSTP&P was able to reorganize.[61]

Figure 8. A graphic depicting methods by which intercity freight moved during WWII, 1943. (Image based on data from *Railroads and the War*. ERDC-CERL, 2023.)[62]



57. Wilson, *The Historical Guide to North American Railroads*, 11.

58. Association of American Railroads, *American Railroads and the War* (Washington, DC: Association of American Railroads, 1943), 2.

59. "A Railroad Crisis is a Defense Crisis," *The Harlowton (MT) Times*, October 12, 1961, repr. in *The Milwaukee Road Magazine*, November–December 1961, 6. Folder: Military, Fort McCoy, General, Monroe County Local History Room, Sparta, WI.

60. Adam Burns, "Railroads During World War 2: Facts And Statistics," American Rails, February 19, 2022, https://www.american-rails.com/world.html.

61. Kaitz, *An Economic History of Five Midwestern Railroads*, 27, 41.

62. Association of American Railroads, *Railroads and the War*, 2.

The absence of total federal control represented a significant difference between railroad operations in WWI and WWII. During WWI, the USRA attempted to manage all of the country's railroad networks, an ambitious task that resulted in significant profit losses. To avoid a similar outcome, the government allowed the nation's railroad companies to manage their own operations during WWII. New technology allowed private companies to coordinate the movement of passengers and freight with fewer trains on reduced trackage. This effort was primarily possible due to a signaling system known as Centralized Traffic Control (CTC). Following widespread implementation, CTC "gave dispatchers complete control over a section of track . . . from a centralized location. Its efficiency enabled single track territory to achieve 75% capacity of a fully double-track corridor."[63]

For the Army, Navy, Marine Corps, and Coast Guard, the government established the Military Transportation Section as a point of contact between the nation's railroads and the military branches they served. Housed in the Pentagon, the Military Transportation Section ensured that the railroad industry had the capability to meet the military's demands. According to the American Railroad Association in 1943, authorities in the Military Transportation Section were responsible for "arranging and coordinating such movements as Prisoners of War being brought to this country, the movement of all members of the British Army and Navy, the Royal Air Force and Canadian troops in the United States, all skilled civilian labor moving under the direction of the War Department, and the women's auxiliary units."[64]

Midwestern railroads, like many American railroads, devoted their energy in support of the war effort. For example, the CMSTP&P sponsored the 757th Transportation Battalion in 1943, a group of 630 men organized to maintain wartime mobilization capabilities abroad (Figure 9). After basic training at the Army Service Forces Center in New Orleans, the 757th travelled to Europe where they established railroad shops and repaired "more than 750 locomotives and 3,000 freight cars of German, French, Italian, Belgian and American manufacture."[65] Following WWII, the War Department retained the 757th and 10 additional railroad units for service. By the

63. Burns, "Railroads During World War 2: Facts And Statistics."

64. Association of American Railroads, *American Railroads and the War*, 28.

65. "The 757th Transportation Battalion—The Army's Only Railway Shop Unit—Prepares for ANACDUTRA," *The Milwaukee Road Magazine*, May–June 1967, 5.

late 1960s, only the CMSTP&P-sponsored 757th remained.[66] At home, the CMSTP&P took unusual measures to keep the domestic network running, such as recruiting high school boys to fill the "draft-depleted ranks" of the railroad's gang and section crews (Figure 10).[67] The company updated employees and shareholders on this and additional wartime activities through *The Milwaukee Magazine* (called *The Milwaukee Road Magazine* after 1950), which championed the important role of railroading in writing and artwork (Figure 11).

Figure 9. Officers of the 757th pose for a photo in October 1943. (Image reproduced with permission from *The Milwaukee Magazine*, May–June 1967.)[68]

66. "The 757th Transportation Battalion—The Army's Only Railway Shop Unit—Prepares for ANACDUTRA," *The Milwaukee Road Magazine*, May–June 1967, 4.

67. "Summer School," *The Milwaukee Magazine*, August 1943, 4–7.

68. "The 757th Transportation Battalion," *The Milwaukee Road Magazine*, May–June 1967, 6.

Figure 10. In Minnesota, high-school boys work under the mentorship of veteran laborers in 1943. (Image reproduced with permission from *The Milwaukee Magazine*, August 1943.)[69]

69. "Summer School," *The Milwaukee Road Magazine*, August 1943, 6.

Figure 11. Patriotic cover art featured in the July 1943 edition of *The Milwaukee Magazine*. (Image reproduced with permission from *The Milwaukee Magazine*, July 1943.)[70]

2.6 Post–World War II decline

While the railroad industry benefited from wartime revenue, that trend did not continue. Through the remainder of the twentieth century, American railroads struggled to compete with other forms of transportation. Because the railroad industry is capital intensive, it requires large-scale,

70. *The Milwaukee Magazine,* July 1943, https://milwaukeeroadarchives.com/MilwaukeeRoadMagazine/1943,%20July.pdf.

dependable investments to sustain its operations.[71] Unfortunately for the railroads, industries such as overland trucking drew away a sizable portion of freight business, and passenger revenues diminished as private automobiles increased in popularity. Creation of improved highways in the early twentieth century and the interstate system in the 1950s and 1960s enabled a transition away from railroad dominance. Additionally, state and federal monies enabled the preservation of the interstate system, while railroads struggled to attract capital to maintain its network.[72]

The financial condition of the CMSTP&P remained steady through the 1950s and 1960s as the company updated its lines with streamliners from the C&NW railroad and constructed a modern station in Milwaukee; however, the company continued to maintain a little-used branch line to the Pacific, undermining company profits. By the 1970s, except "for its double-track Chicago-Twin cities main line, the Milwaukee Road was secondary railroading [and] the lightly constructed branch lines that spider-webbed across Wisconsin, Iowa, Minnesota, and South Dakota carried mostly products of agriculture."[73] After bankruptcy in 1977 and a failed reorganization attempt in the early 1980s, the Soo Line (a current subsidiary of the Canadian Pacific [CN]) bought out the CMSTP&P in 1985 and began trimming its network.[74] Between 1970 and 1986, the CMSTP&P had abandoned 767 miles, or 33% of its total network.[75]

The C&NW remained a significant Midwestern railroad after WWII and began merging smaller railroads into its network. The C&NW did not intend to maintain all of the branch lines from the acquired companies, but rather keep the most strategic routes while shedding the rest.[76] Figures from the 1980s reflect this strategy, showing that the C&NW abandoned 1,143 miles of track, or 50% of its total network, between 1970 and 1986.[77]

71. Kaitz, *An Economic History of Five Midwestern Railroad*s, 12.

72. Kaitz, *An Economic History of Five Midwestern Railroad*s, 12.

73. Wilson, *The Historical Guide to North American Railroad*s, 95–96.

74. Wilson, *The Historical Guide to North American Railroad*s, 96.

75. "Rail Line Abandonments and Disposition, By Line, 1970–Present," March 19, 1986, James P. Kaysen Papers, box 4, folder: Abandonment, Wisconsin Historical Society, Madison, WI.

76. Wilson, *The Historical Guide to North American Railroad*s, 81.

77. "Rail Line Abandonments and Disposition, By Line, 1970–Present," March 19, 1986, Kaysen Papers.

2.7 Historic railroad background in Wisconsin

The Wisconsin Cultural Resource Management Plan (CRMP) identifies two eras into which the state's railroad history and associated resources can be interpreted: the "early railroad era" (1850–1868) and the "later railroad era" (1868–present).

2.7.1 The early railroad era in Wisconsin (1850–1868)

The early era is primarily characterized by the establishment of railroad corridors in the southern third of the state. These early lines were intended to accomplish a couple of objectives: first, to afford a direct connection between Lake Michigan and the Mississippi River, and second, to provide an overland means of shipping mineral and agricultural resources.[78] Mining became an especially attractive impetus for developing a railroad; even before it became a formal territory in 1836, the southwestern region of Wisconsin was renowned for its lead reserves. In the 1820s and 1830s, the area hosted a surging population of miners who supplied most of the country's lead, extracting around 13 million pounds per year.[79] Believing that a railroad would expand the economic potential of the southwestern lead mines, territorial delegate George Wallace secured $2,000 in 1838 to initiate a railroad survey between Milwaukee and Dubuque, Iowa.[80] While nothing materialized from Wallace's survey, his proposal demonstrates that there was interest in developing Wisconsin railroads before statehood, and that this interest generally coincided with early attempts to secure railroads in other Midwestern states.

Chartered in 1847, the Milwaukee and Waukesha Railroad became the first company in the state to construct a rail line, inaugurating service between the namesake cities in 1851.[81] The company's founding represented a significant moment in the history of Milwaukee, occurring at a time when the city was poised to compete with Chicago as a major Midwestern transportation hub. One way to accomplish this goal was by securing a western outlet to the Mississippi River; rebranding itself as the Milwaukee and Mississippi Railroad, the company completed a course to Prairie du Chien

78. Wyatt, *Cultural Resource Management in Wisconsin*, 5-1–5-2.

79. "Lead Mining in Southern Wisconsin: The Birth of the Badgers," Wisconsin Historical Society, **https://www.wisconsinhistory.org/Records/Article/CS408**.

80. Raney, "The Building of Wisconsin Railroads," 387.

81. James P. Kaysen, *The Railroads of Wisconsin: 1827–1937* (Boston: The Railway & Locomotive Historical Society, Inc., 1937), 4, 27; Wyatt, *Cultural Resource Management in Wisconsin,* 5-1.

in 1857 and became the first line in Wisconsin to reach the Mississippi.[82] Though mining was the earliest resource to spark interest in railroad development, by the 1850s, it ceased to be a significant economic driver in Wisconsin.[83] This reality is reflected in the route that the Milwaukee and Mississippi Railroad selected to cross the state. While it had originally intended to serve the southwestern lead mines, the Milwaukee and Mississippi Railroad instead bypassed the mines for a route along the Wisconsin River that posed fewer topographical obstacles.[84]

In 1858, another company, the La Crosse and Milwaukee Railroad, also established a connection between Lake Michigan and the Mississippi River.[85] Beginning in Milwaukee, this corridor followed a northwesterly direction through Portage and terminated at La Crosse. Along the route, the line passed through the middle of Monroe County, transecting the modern-day boundaries of Fort McCoy.[86] With the completion of the La Crosse and Milwaukee Railroad, two Wisconsin lines linked the Great Lakes with the Mississippi River by the start of the Civil War (Figure 12).[87]

82. Hayes, *The First Railroads: Atlas of Early Railroads*, 68.

83. "Lead Mining in Southern Wisconsin: The Birth of the Badgers," Wisconsin Historical Society.

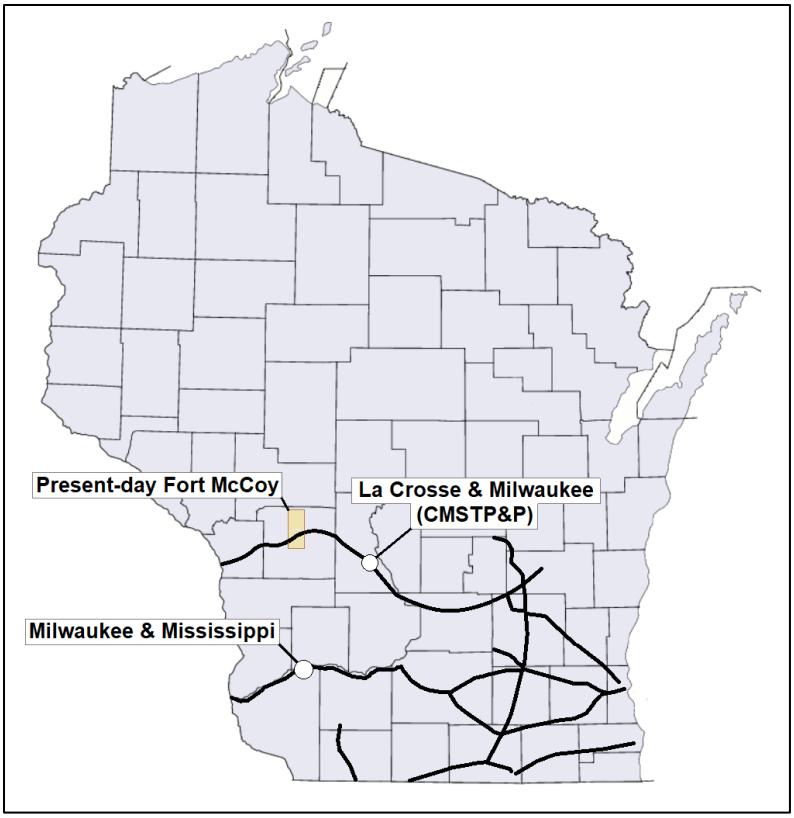
84. Raney, "The Building of Wisconsin Railroads," 392.

85. Raney, "The Building of Wisconsin Railroads," 392.

86. Rufus Blanchard, *Railroad Map of Wisconsin*, [1858] (Chicago: Rufus Blanchard), Wisconsin Historical Society, **https://content.wisconsinhistory.org/digital/collection/maps/id/1139/rec/1**.

87. Wyatt, *Cultural Resource Management in Wisconsin*, 5-1.

Figure 12. Extent of railroad lines in Wisconsin in 1860. (Image created by ERDC-CERL, based on Nesbit 1973. Public domain.)[88]



Mining activity in Wisconsin was eclipsed by agricultural pursuits once miners had depleted the readily accessible ore.[89] Consequently, railroads shifted their primary focus to agricultural transportation as farmers in Iowa, Minnesota, and Wisconsin began producing larger crop yields. Spring wheat became the staple product, and throughout the "1850s, 1860s and 1870s the railroads became the grain gatherers of the Northwest."[90]

In contrast to other Midwestern states, such as Illinois, Michigan, and Minnesota, a provision in Wisconsin's constitution prohibited the state from subsidizing internal improvements, which included early railroad construction. Because capitalists from the East were initially apprehensive to invest money in Wisconsin railroads, a significant share of early financing originated from local farmers and towns. Unfortunately, after the

88. Robert C. Nesbit, *Wisconsin: A History*, revised by William F. Thompson, 2nd ed. (Madison: University of Wisconsin Press, 1989), 321.

89. "Lead Mining in Southern Wisconsin: The Birth of the Badgers," Wisconsin Historical Society.

90. Wyatt, *Cultural Resource Management in Wisconsin*, 5-1.

Panic of 1857 bankrupted the state's railroads, many farmers who mortgaged their properties in exchange for company stock certificates suffered extensive losses, creating short-term mistrust toward railroad companies in the antebellum and Civil War years.[91]

While railroad growth in Wisconsin remained somewhat protracted throughout the 1860s, federal land grants aided steady development.[92] As in other Midwestern and Western states, the government allocated strips of federally owned land to railroad companies, with the railroad securing alternating sections of land and the government maintaining the rest. The government projected a return on their investment since after the construction of a rail line the land values of their sections were expected to increase.[93] In Wisconsin, the total area encompassed by land grants amounted to "2,874,000 acres, or nearly one-twelfth of the area of the state."[94] In the 1850s and 1860s, land was granted to companies that would ultimately become (or consolidate with) some of the most significant railroads in Wisconsin, such as the Wisconsin Central, the CMSTP&P, and the C&NW.[95]

2.7.2 The later railroad era in Wisconsin (1868-present)

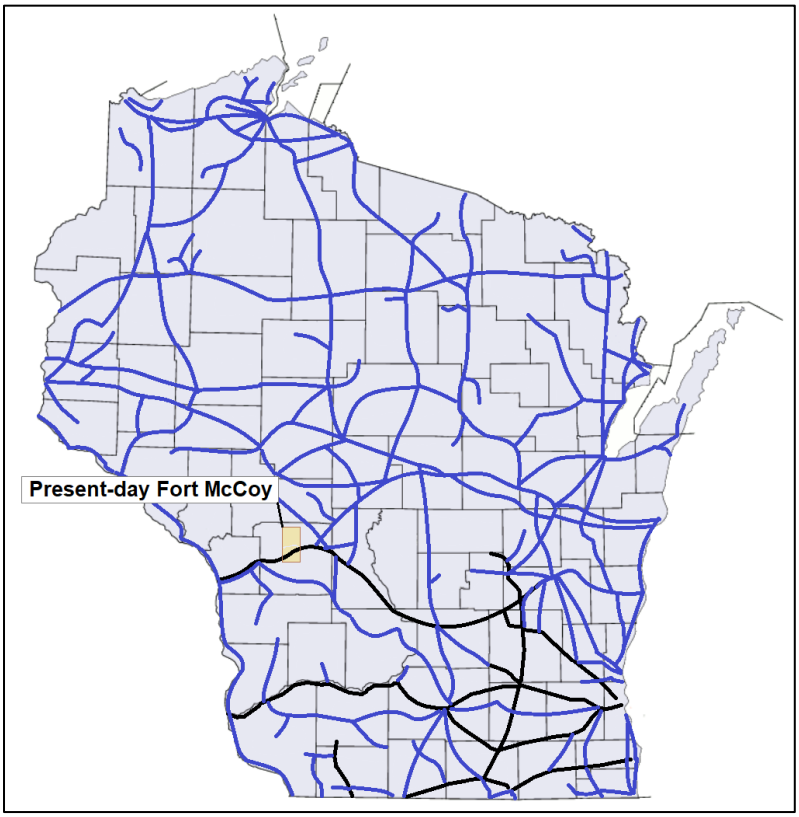
According to the Wisconsin CRMP, the state's later railroad era began around 1868, following a lull in activity during the Civil War years. Historian William Raney attributes the sluggish growth in Wisconsin's railroad industry to three factors: limited labor, depreciated currency, and lack of investment. Capitalists from Milwaukee, who leveraged considerable influence in the arena of railroad development, believed that their long-term prospects would be more successful in the Trans-Mississippi West. Consequently, railroad growth in Wisconsin stalled through most of the 1860s.[96]

Beginning in 1868, railroad development picked up considerably. This may be attributed to increased resource extraction in the northern part of the state; though this portion of Wisconsin was sparsely populated, it supplied a significant quantity of natural resources, such as lumber, copper, and iron ore. Aided by land grants, railroads constructed corridors in the

91. Raney, "The Building of Wisconsin Railroads," 388–89, 391.
92. Raney, "The Building of Wisconsin Railroads," 387, 390.
93. Kaitz, *An Economic History of Five Midwestern Railroads*, 4.
94. Raney, "The Building of Wisconsin Railroads," 390.
95. Raney, "The Building of Wisconsin Railroads," 390–91.
96. Raney, "The Building of Wisconsin Railroads," 388.

north to transport extracted goods.[97] Over the next five years, the number of track miles in Wisconsin doubled, and progress was only stymied by a nationwide economic depression in 1873. The rate of growth continued steadily through the nineteenth century and crested at nearly 7,700 miles by 1916.[98] Expanded railroad access supported the growth of communities throughout Wisconsin, especially in places were multiple lines converged (Figure 13). For example, such was the scenario in La Crosse, where the junction of four lines made it the "largest railroad center between Chicago and Minneapolis" by 1900.[99]

Figure 13. Extent of railroad lines in Wisconsin in 1900. (Image created by ERDC-CERL, based on Nesbit 1973. Public domain.)[100]



According to the CRMP, three companies dominated Wisconsin railroad enterprises during the later railroad era: the Minneapolis, St. Paul and Sault Ste. Marie (known as the Soo Line); the CMSTP&P; and the C&NW. The CMSTP&P and C&NW matured into major Midwestern companies

97. Kaysen, *Railroads of Wisconsin: 1827–1937*, 4; Wyatt, *Cultural Resource Management in Wisconsin*, 6-1.

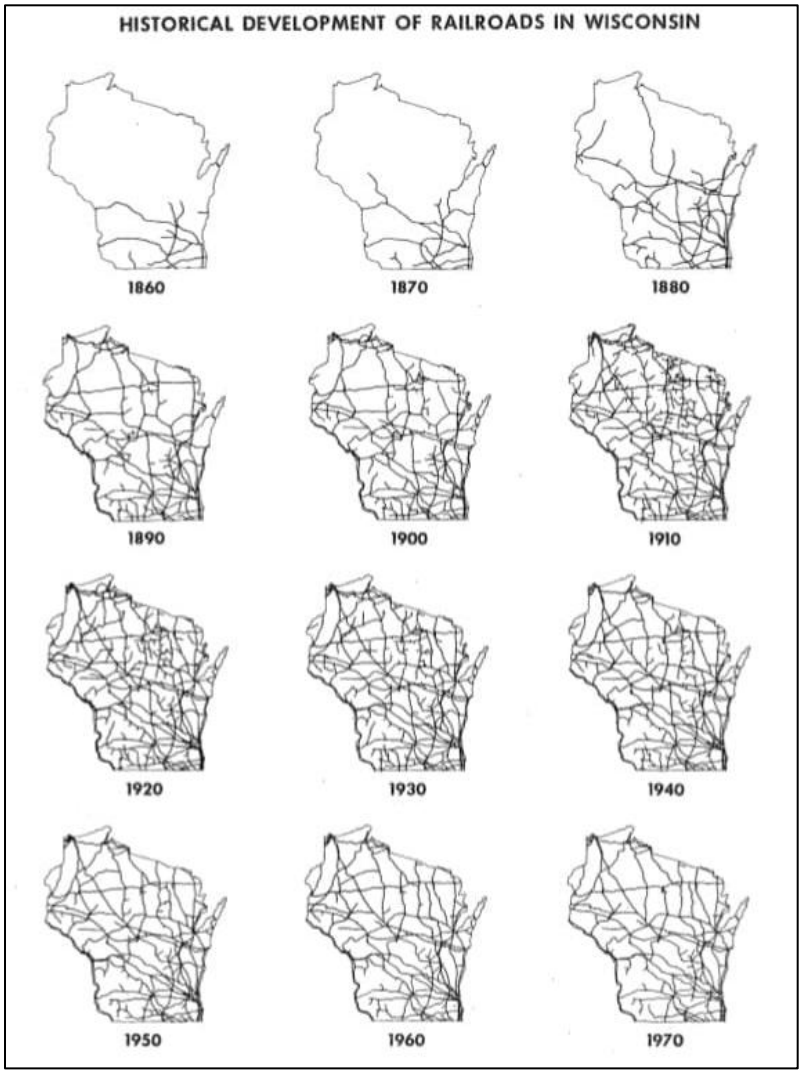
98. Raney, "The Building of Wisconsin Railroads," 388.

99. Wyatt, *Cultural Resource Management in Wisconsin*, 6-2.

100. Nesbit, *Wisconsin: A History*, 327.

during this era, expanding by consolidating regional lines. In the late nineteenth and early twentieth centuries, other local railroads formed a lattice of tracks into Wisconsin's north woods, transporting lumber, copper, and iron ore to lakefront shipping centers (Figure 14).[101]

Figure 14. Growth of railroad lines in Wisconsin between 1860 and 1970. (Image reproduced with permission from Wisconsin Department of Transportation.)[102]



The construction of bridges across the Mississippi River also occurred during the later railroad era and represents one of the most important developments in the state's railroad industry. With bridges connecting to Winona, Minnesota (1869–70), Prairie du Chien (1874, 1885, 1899), and

101. Wyatt, *Cultural Resource Management in Wisconsin*, 6-2.

102. Wisconsin Department of Transportation, "The Wisconsin State Rail Plan" (Madison: Wisconsin Department of Transportation, 1978), V-3.

La Crosse (1875–1876), railroads could transport grain from the Trans-Mississippi West to Milwaukee, where it traveled to Eastern markets via the Great Lakes.[103]

The railroads fueled economic success in established communities across the state and were even responsible for creating others; however, because the industry in Wisconsin mirrored railroad trends in the Midwest and the nation as a whole, a gradual decline in usage began after WWI. According to Wyatt, "reasons for the decline include the depletion of the timber and mineral resources in the north, the development of the automobile, changing social and economic patterns following WWII, and the subsequent rise of the trucking industry."[104]

103. Wyatt, *Cultural Resource Management in Wisconsin*, 6-2.

104. Wyatt, *Cultural Resource Management in Wisconsin*, 6-2.

3 Fort McCoy Railroad History

Fort McCoy's historic railroad context is chiefly associated with two major Midwestern lines, the CMSTP&P and the C&NW. The CMSTP&P already operated a line through the present-day boundaries of Fort McCoy when the antecedent camp was established in 1909, and within a couple of years, the C&NW had laid tracks parallel to the CMSTP&P line. The two railroads were a major asset in the camp's early years and maintained an important role transporting personnel and equipment through every stage of the installation's development. In fact, Randolph A. Richard's *History of Monroe County* (1912) states that the railroad and its accompanying facilities were a primary factor in the site selection process.[105] Given the regional dominance of the CMSTP&P and the C&NW, these two lines provided Fort McCoy and Monroe County expedient access to an intricate rail network in the Midwest and beyond. While the C&NW abandoned its line in the 1970s, the former CMSTP&P line (currently owned by Canadian Pacific) continues to serve Fort McCoy and is designated a STRACNET for defense transportation.[106]

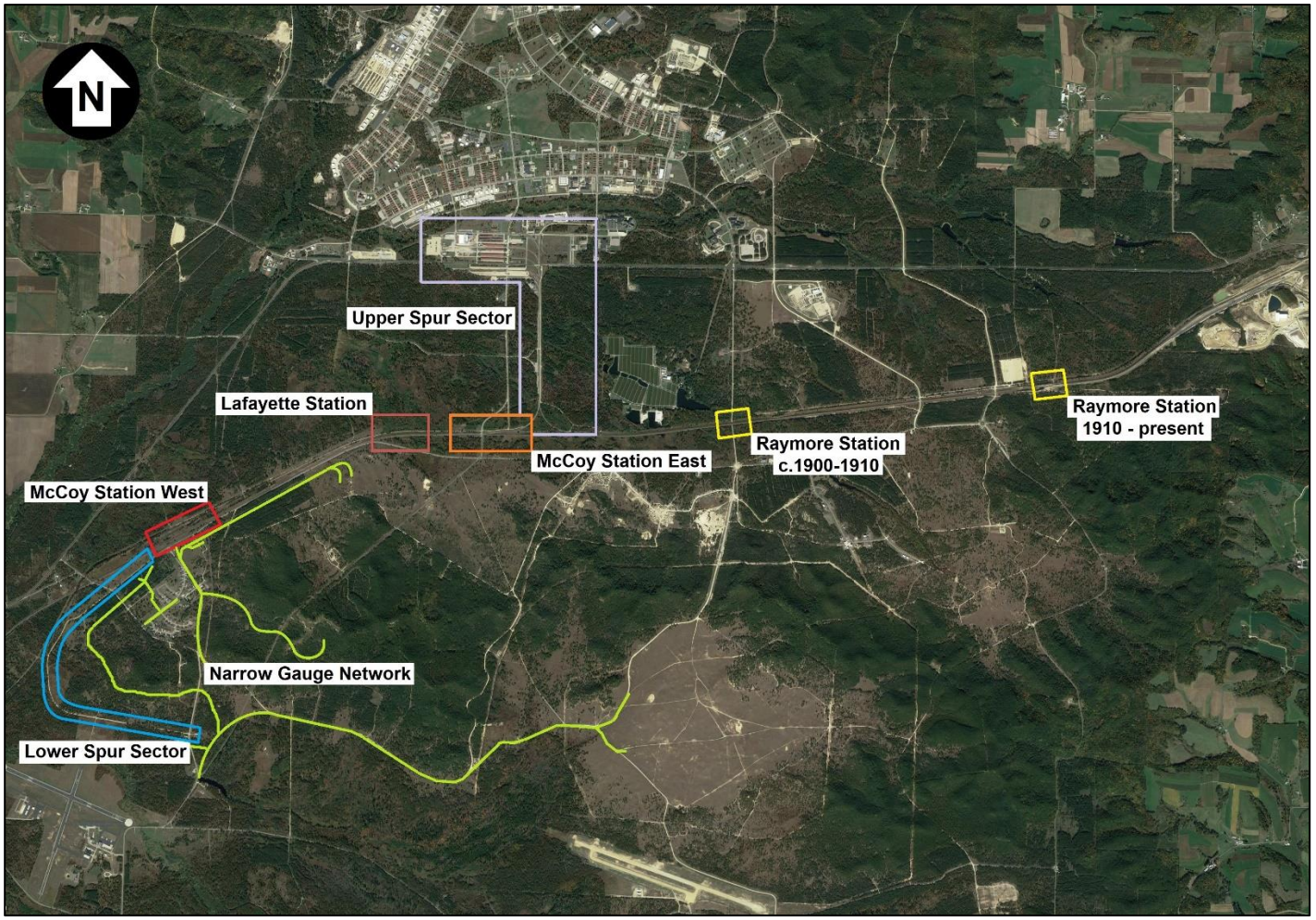
For this historic context report, the background of historical railroads at Fort McCoy will begin with a brief history of the CMSTP&P and C&NW railroads in the immediate region surrounding Fort McCoy and within the boundaries of the installation. Next, a brief accounting of associated infrastructure will be organized and presented based on geographic clusters of railroad activity within the installation's boundaries (Figure 15). There are seven general clusters:

- Lafayette Station
- Raymore Station
- McCoy Station East
- Upper Spur Sector (Lafayette Township)
- McCoy Station West
- Lower Spur Sector (Angelo Township)
- Narrow-Gauge Network

105. Randolph A. Richards, ed., *History of Monroe County, Wisconsin, Past and Present: Including an Account of the Cities, Towns and Villages of the County* (Chicago: C. F. Cooper & Co, 1912), 179.

106. Military Surface Deployment and Distribution Command (SDDC), Transportation Engineering Agency, *Strategic Rail Corridor Network (STRACNET) and Defense Connector Lines* (Military SDDC, Transportation Engineering Agency, 2018), 81.

Figure 15. Historic geographic clusters of railroad activity within Fort McCoy. (Map data: Google, 2013. Modified by ERDC-CERL.)



This organizational method is not designed to provide an itemized inventory of all historic railroad infrastructure, extant and nonextant, within the installation boundaries. Instead, these nodes are provided so that the history of railroad development at Fort McCoy can be interpreted within geographically consistent spaces. Additionally, these areas may form the basis for more focused research in the future. The terms "McCoy Station East" and "McCoy Station West" are not official or historical toponyms. Rather, they are unique terms used in this report to differentiate between two geographic areas consistently associated with station development.

3.1 Historic railroad background at Fort McCoy

The history of railroads within the present-day boundaries of Fort McCoy begins with the history of railroading in Monroe County. During Wisconsin's early railroad era (1850–1868), the La Crosse and Milwaukee Railroad (later the CMSTP&P) was the primary line operating in the county. The La Crosse and Milwaukee Railroad was the first company to construct a rail line in the region, striking a roughly latitudinal route through Monroe County in the late 1850s. As suggested by the name, the company's objective was to connect the growing port city of Milwaukee with La Crosse, creating an overland connection between Lake Michigan and the Mississippi River before the Civil War. In 1858, the La Crosse and Milwaukee became the second railroad to complete an east-to-west span across the state.[107] Before the construction of the La Crosse and Milwaukee railroad, stagecoach lines provided an important means of access into the La Crosse River valley (Figure 16).[108]

107. Wyatt, *Cultural Resource Management in Wisconsin*, 5-1.

108. Chicago and Northwestern Railway, *Map of Stage Coach Routes and Location of Taverns*, 1930, prepared by Theodore T. Brown, Image ID 88478, Wisconsin Historical Society, https://www.wisconsinhistory.org/Records/Image/IM88478.

Figure 16. Nineteenth-century stagecoach lines in Wisconsin. (Image based on *Map of Stagecoach Routes and Location of Taverns* by Chicago and Northwestern Railway. Created by ERDC-CERL, 2023)[109]

Construction of the railroad was largely possible through a program of federal land grants that Congress authorized in 1856;[110] however, the method by which the La Crosse and Milwaukee company acquired their share of federal land grants became the subject of a scandal that ultimately tarnished the company's reputation. After Congress authorized issuance of land grants for railroad construction, the Wisconsin legislature assumed

109. Chicago and Northwestern Railway, *Map of Stage Coach Routes and Location of Taverns*.

110. Richards, *History of Monroe County, Wisconsin, Past and Present*, 82–3; Raney, "The Building of Wisconsin Railroads," 390.

responsibility for determining which company merited the aid. Byron Kilbourn, then president of the La Crosse and Milwaukee Railroad, successfully bribed members of the legislature, the governor, and press editors with company bonds in order to ensure that the La Crosse and Milwaukee was awarded a one-million-acre land grant apportionment. While disclosure of this behavior stained the reputation of Wisconsin's legislature, construction had already been underway, and the company completed its cross-state line in 1858.[111] The railroad through Monroe County operated under the auspices of the La Crosse and Milwaukee Railroad until 1863, when the company was purchased by the newly founded Milwaukee and St. Paul Railroad Company (later renamed the Chicago, Milwaukee, St. Paul and Pacific, or CMSTP&P).[112]

The C&NW struck its first line through Monroe County in 1873, providing the region another expedient link into the growing Midwestern rail network.[113] Built at the beginning of Wisconsin's later railroad era (1868–present), its construction coincided with a period of rapid railroad development in Wisconsin.[114] Upon completion, the C&NW line wended through hill country from Kendall in southeastern Monroe County to Sparta, passing through the communities of Wilton and Norwalk along the way.[115] However, the topography on the route became a considerable obstacle, so the C&NW ultimately constructed three substantial tunnels to penetrate the hilly region.[116] While the C&NW had a presence in Monroe County throughout the end of the nineteenth century, it did not construct any corridors or associated infrastructure within the present-day boundaries of Fort McCoy before the installation's establishment.

Monroe County's hilly terrain required the CMSTP&P and C&NW to construct several railroad tunnels. The CMSTP&P constructed one of the earliest tunnels in 1861. This structure, which was located west of Tunnel City and immediately east of Fort McCoy's present-day boundaries, cut through

111. John M. Bernd, "The La Crosse and Milwaukee Land Grant, 1856," *The Wisconsin Magazine of History* 30, no. 2 (1946): 151–53; Richards, *History of Monroe County, Wisconsin, Past and Present,* 83; Raney, "The Building of Wisconsin Railroads," 390–91.

112. Richards, *History of Monroe County, Wisconsin, Past and Present*, 83.

113. Richards, *History of Monroe County, Wisconsin, Past and Present*, 84.

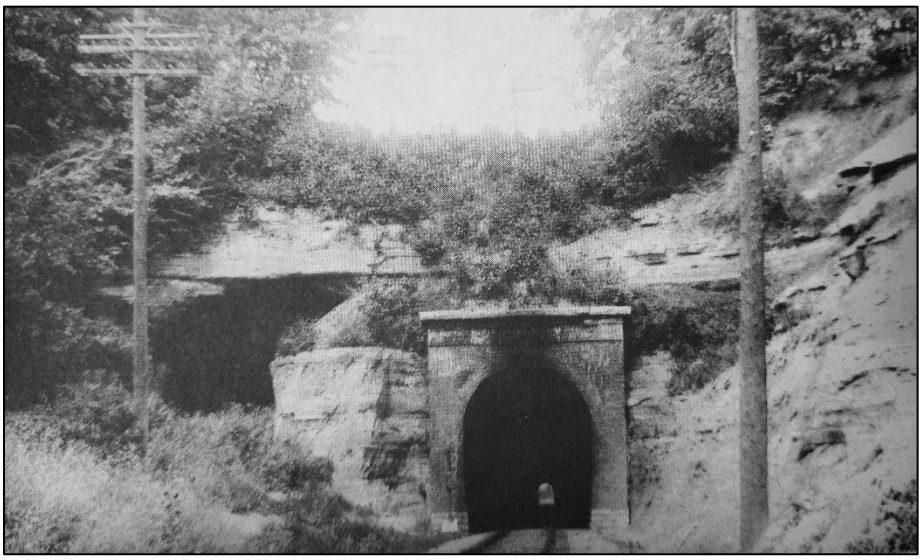
114. Raney, "The Building of Wisconsin Railroads," 388.

115 E. W. Hinckley, *Map of Monroe County, Wisconsin*, [c. 1903], [c. 1:50,688 scale] (Monroe County, WI: E. W. Hinckley), Wisconsin Historical Society, **https://content.wisconsinhistory.org/digital/collection/maps/id/14195/rec/21**.

116. Richards, *History of Monroe County, Wisconsin, Past and Present*, 85.

a ridge known as the Great Divide. The tunnel fell into disrepair in only a decade, requiring the CMSTP&P to construct a new tunnel adjacent to the old structure in 1875 (Figure 17–Figure 18).[117] When the C&NW installed a line parallel to the CMSTP&P in 1910–11, it also constructed a tunnel through the divide (Figure 19). This tunnel lasted until 1973, when it collapsed.

Figure 17. The remains of the 1861 CMSTP&P tunnel on the *left* and the 1875 tunnel on the *right*. No date. (Image reproduced with permission from *Monroe County, Wisconsin Pictorial History* 1976.)[118]



117. There is some discrepancy on the date of construction for the first tunnel; the *Monroe County, Wisconsin Pictorial History* states it was built in 1861, while material in the James P. Kaysen collection at the Wisconsin Historical Society states it was constructed in 1858. Monroe County Historical Society, *Monroe County, Wisconsin Pictorial History* (Tomah, WI: Tomah Journal Printing Company, Inc., 1976), 202, Monroe County Local History Room, Sparta, WI; "Notes on Wisconsin Tunnels," May 22, 1965, James P. Kaysen, W. F. Armstrong to James P. Kaysen. June 5, 1975, Kaysen Papers, box 4, folder: Tunnels. Wisconsin Historical Society, Madison, WI.

118. Monroe County Historical Society, *Wisconsin Pictorial History,* 208.

Figure 18. A close-up of the 1875 CMSTP&P tunnel constructed near Tunnel City. Photo from 1908. (Image reproduced from *La Crosse Tribune*, July 4, 1976. Public domain.)[119]

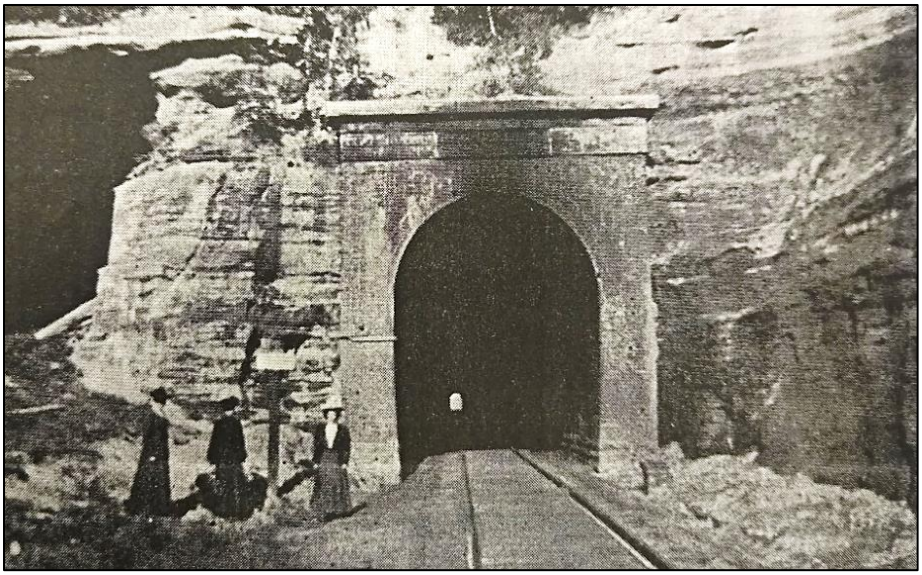


Figure 19. A close-up of the 1911 C&NW tunnel constructed near Tunnel City. No date. (Image reproduced with permission from *Monroe County, Wisconsin Pictorial History* 1976.)[120]

119. *La Crosse Tribune*, July 4, 1976, folder: Railroads, General, Monroe County Local History Room, Sparta, WI.

120. Monroe County Historical Society, *Monroe County, Wisconsin Pictorial History*, 209.

3.1.1 Early installation period (1909–1941): CMSTP&P and C&NW railroads

In the 1880s, military officials began searching for a suitable tract of land on which to establish a training range in western Wisconsin. At that time, State Adjutant General C. P. Chapman was preparing to situate the new reservation near the town of Camp Douglas in Juneau County. During the planning process, Captain George Graham proposed that an equally appropriate site could be established between Tomah and Sparta in Monroe County and suggested developing a tract of land near the Lafayette depot. Captain Graham's proposal was not realized because other officials considered the town of Camp Douglas to possess better railroad facilities.[121] Land was purchased in Juneau County, and the reservation at Camp Douglas began operating in 1888.[122]

In 1906, Secretary of War William Howard Taft called for the development of four large-scale military camps in the country's North, South, East, and West. Toward that end, an appropriation of $150,000 was made to enlarge Camp Douglas and prepare it for use as the North's military reservation. During the planning phase, officials were also shown land between Tomah and Sparta and conveyed favorable reports about the area to the War Department. After landowners near Camp Douglas raised their selling price from $3.00 to $30.00 an acre, negotiators turned their attention toward acquiring some of the land between Tomah and Sparta. Colonel Robert B. McCoy, who already owned 4,000 acres of land in the desired area, convinced officials to redirect the $150,000 appropriation toward the development of a military reservation east of Sparta. Negotiations concluded in the summer of 1909, and the first phase of acquisitions resulted in a 14,206-acre reservation. The existing CMSTP&P tracks divided the reservation into two sections, with an artillery area called Camp Robinson situated south of the line, and a maneuvering area called Camp Emory Upton (sometimes referred to as the "Sparta Maneuvering Tract") located north of it (Figure 20–Figure 21).[123] Preexisting features along the railroad included Lafayette Station in Lafayette Township and Raymore Station in

121. Richards, *History of Monroe County, Wisconsin, Past and Present*, 176.

122 C. O. Cron, "History of Camp Douglas," 1929, 7, Camp Douglas, Wisconsin (website), https://www.campdouglaswi.com/vertical/sites/%7B2C244097-26AE-43EA-BCDB-A420DF1D8991%7D/uploads/History_of_the_Village_of_Camp_Douglas.pdf.

123. Richards, *History of Monroe County, Wisconsin, Past and Present*, 176–79.

Greenfield Township. Additional information concerning the development of these stations can be found in Sections 3.2.1 and 3.2.2, respectively.

Figure 20. A map of Camp Robinson and the west reservation boundaries, c. 1911. (Image from Fort McCoy History Center. Public domain.)[124]

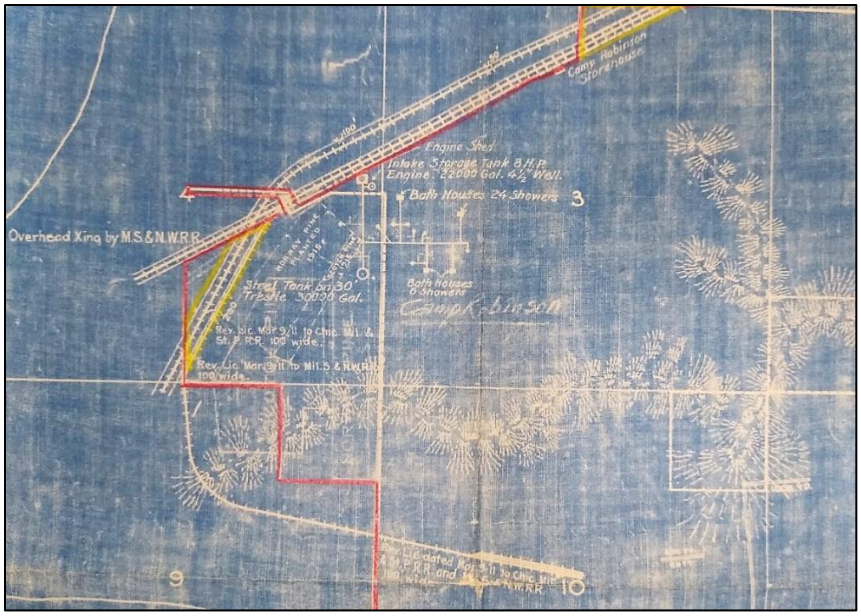
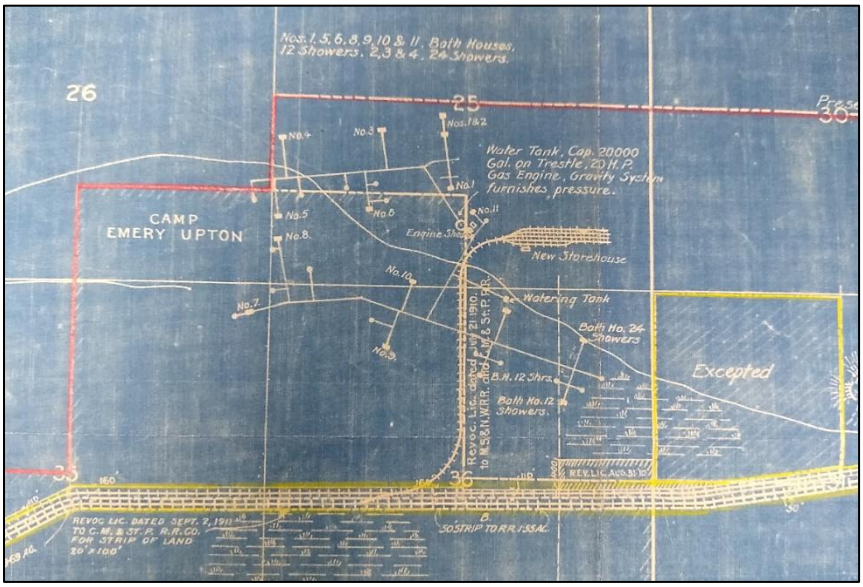


Figure 21. A map of Camp Emory Upton and the north reservation boundaries, c. 1911. (Image from Fort McCoy History Center. Public domain.)[125]

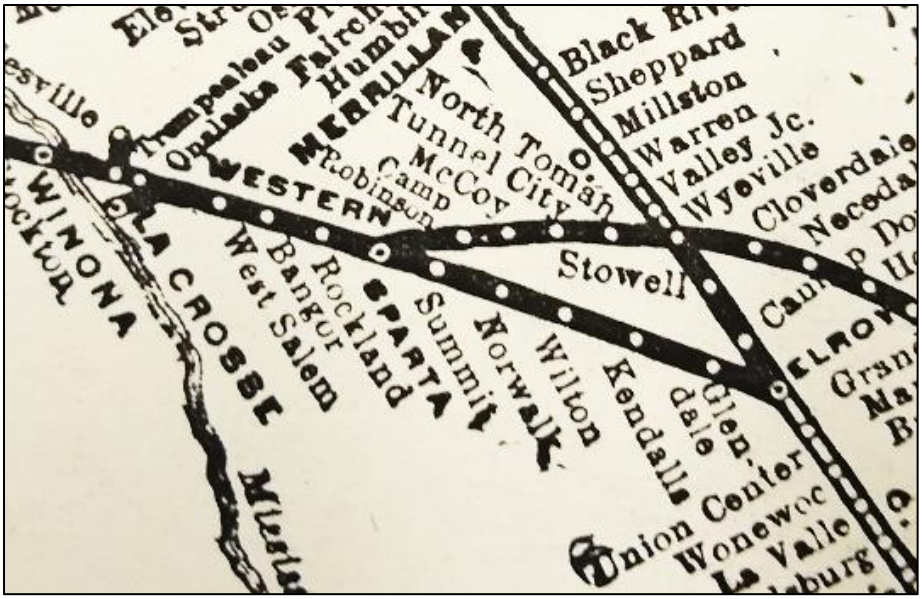


124. *Military Reservation Near Sparta, Wisconsin*, [c. 1911], drawer 1, folder 2. Fort McCoy History Center, Sparta, WI.

125. *Military Reservation Near Sparta, Wisconsin*.

An act of Congress approved on 12 April 1910, authorized the C&NW to build a line through the military reservation, and the secretary of war approved its location on 14 May 1910.[126] The C&NW completed this line between 1910 and 1911, following a parallel route immediately north of the existing CMSTP&P double track. The new C&NW line (known officially as the Milwaukee, Sparta, and Northwestern Railroad, and colloquially as the "Adams Cutoff") was one of many cutoff routes that the company constructed before WWI in an effort to streamline its network.[127] The new route, which connected Lindwerm (near Milwaukee) with Sparta, afforded passengers and freight from Milwaukee a more direct route north to Minneapolis via Wyeville and west to South Dakota via Sparta (Figure 22).[128]

Figure 22. Map of the C&NW Railroad, 1913. This map would have been among the company's earliest to depict stops at Camp McCoy (McCoy Station East) and Camp Robinson. (Image from Monroe County Local History Room. Public domain.)[129]



The CMSTP&P and C&NW railroads began constructing tracks and facilities almost immediately after the camp's establishment. In the 1910s, it

126. Office of the Judge Advocate General, US Army, *United States Military Reservations, National Cemeteries, and Military Parks Title Jurisdiction, Etc.* (Washington, DC: Government Printing Office, 1916), 467.

127. Grant, *The Northwestern: A History of the Chicago and Northwestern Railway System*, 88.

128. Grant, *The Northwestern: A History of the Chicago and Northwestern Railway System*, 66–67, 89.

129. *Chicago and Northwestern*, map, 1913, folder: Railroads, General, Monroe County Local History Room, Sparta, WI.

appears that two stations developed on the installation, one to service Camp Emory Upton and another to service Camp Robinson (Figure 23–Figure 26). The station near Camp Emory Upton contained two depots, one constructed by each railroad, and support structures, such as platforms, a water tank, and a section house. Additional details about the development of this station are provided in the "McCoy Station East" Section (3.2.3). At the same time as this station's construction, the CMSTP&P and C&NW installed a spur line that branched north into Camp Emory Upton. More information about this spur line is found in Section "Upper spur sector" (3.2.4).

Figure 23. This undated photo depicts a section of the CMSTP&P railroad as it skirts the south side of Camp Emory Upton. No date. (Image reproduced with permission from University of Wisconsin–La Crosse, Taylor Brothers Collection.)[130]

130. Taylor Brothers, "Boys at Camp McCoy," n.d., Taylor 446 (Negative 52089), Taylor Brothers Collection, University of Wisconsin–La Crosse, accessed March 18, 2022, https://search.library.wisc.edu/digital/AATK5FSDYQQNUN8R.

Figure 24. A railroad grade, likely the CMSTP&P, passes by a horse corral near Camp Emory Upton, 1910. Note the elevation of the tracks and the sandy composition of the bed. (Image from Monroe County Local History Room. Public domain.)[131]

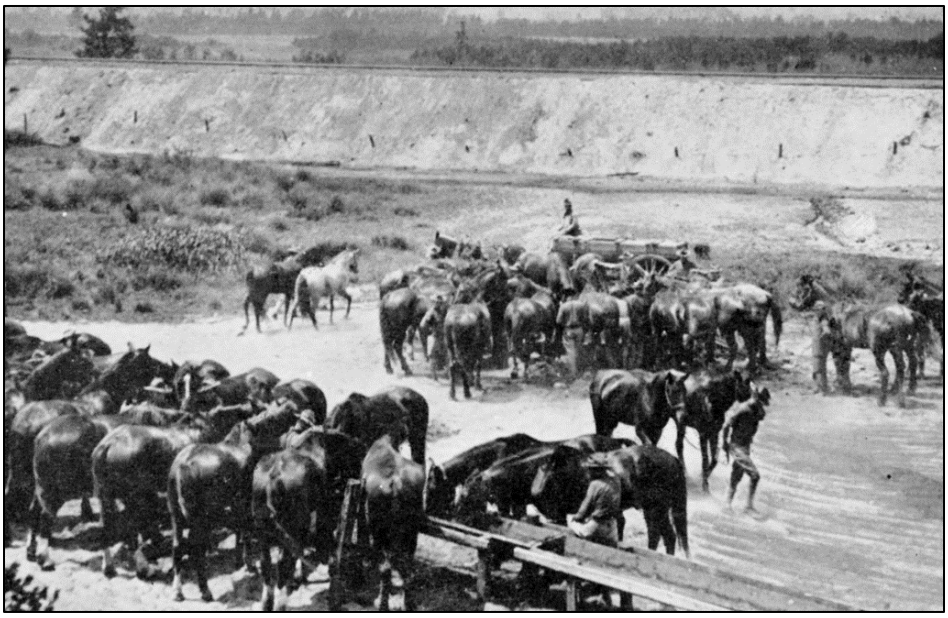


Figure 25. Another view of the railroad grade near Camp Emory Upton, 1910. Note the elevation of the tracks and the sandy composition of the bed. (Image from Monroe County Local History Room. Public domain.)[132]

131. "Camp Emory Upton, 1910," 1910, Monroe County Local History Room, Sparta, WI.

132. "Camp Emory Upton, 1910."

Figure 26. This undated photo depicts a section of the CMSTP&P railroad as it skirts the northwest side of Camp Robinson. No date, facing northeast. (Image courtesy of Fort McCoy cultural resource manager [CRM]. Public domain.)[133]

The CMSTP&P and C&NW provided a second station to service Camp Robinson, which appears to have included two depots, platforms, a freight house, and other support structures by the end of the 1910s. More details concerning this station's development are found in the "McCoy Station West" Section (3.2.5). Below this station, the companies constructed a spur line that branched to the south and east of the main lines before ending in Section 10 of Angelo Township. Crews constructed a concrete ordnance warehouse at the terminus of the spur line (building 6017), which is still extant and represents the oldest building on Fort McCoy.[134] More information on this spur line is located in the "Lower spur sector" Section (3.2.6).

In the 1910s, the railroad played an important role in terms of both transportation and training at the reservation. A description of railroad accommodations for the South Dakota National Guard, who travelled to Camp Emory Upton in the summer of 1910, suggests that the trip itself might have been the most pleasant aspect of the training season. Beginning on a C&NW line in South Dakota, the troops changed tracks at La Crosse and finished their journey on the CMSTP&P. A report to the commander in

133. Digital file from Fort McCoy CRM.

134. Scott Sturkol, "Photo Essay: Fort McCoy's Oldest Building," US Army, February 2, 2021, https://www.army.mil/article/243311/photo_essay_fort_mccoys_oldest_building.

chief of the South Dakota National Guard states, "The cars furnished by the C & NW Ry were in good condition and properly equipped with drinking water and water for the lavatories, a porter was in attendance in each of the sleeping cars. The enlisted men carried 1 days' travel ration in their haversacks and coffee was provided by purchase en route in liquid form; the men making the trip in comfort and being well provided for."[135]

During a training session that summer, troops incorporated the railroad and its associated infrastructure into their tactical exercises. Commanders ordered an infantry battalion, the Minnesota Reds, to protect the CMSTP&P railroad, which simulated an important supply line. Their enemy was the Wisconsin Blues, another battalion ordered to cut the railroad and occupy the CMSTP&P tunnel east of the reservation. During the simulation, the Minnesota Reds assumed responsibility for guarding Raymore Station and sent troops to the tunnel to repel enemy forces.[136]

The railroad did not transport all troops to and from the training grounds in the 1910s. War Department Order No. 79 required infantry troops to march a distance of at least 200 miles on the trip to Sparta or the return trip to their duty station. Artillery and cavalry troops had to march at least 250 miles to or from the training grounds.[137] Still, the train continued to transport some Soldiers, either for the journey to camp or the return trip.[138]

In 1917, crews constructed mobilization buildings to accommodate troops for WWI. This cantonment was situated south of the CMSTP&P tracks near the site of Camp Robinson and McCoy Station West. The construction of mobilization buildings at Camp Robinson coincided with the installation of railroad infrastructure at McCoy Station West. In July 1917, work at that location resulted in the construction of a freight house, ticket office, double water closet, and 15 portable unloading chutes. [139] A reporter for the *La Crosse Tribune* remarked, "Camp Robinson has suddenly been transformed from a little board railroad station set about with a jack pine

135 C. H. Englesby, *Biennial Report of the Adjutant General of the State of South Dakota* (Sioux Falls: Press of Mark D. Scott, 1910), 189.

136. Englesby, *Biennial Report of the Adjutant General of the State of South Dakota*, 195–96.

137. "A Chronicle of Our Past: 1909–1999," *Fort McCoy Triad*, January 1, 1999, 90th Anniversary Commemorative Edition, 4, 6.

138. "A Chronicle of Our Past: 1909–1999," 6.

139. C&NW Valuation Map, 1917, Digital file from office of Fort McCoy CRM.

scrub to one of the most important military nuclei in which Uncle Sam is tirelessly preparing for the grim business of war."[140]

During the war, McCoy Station West likely represented the center of railroad activity at the training grounds, including troop transport and materiel transfer. The CMSTP&P also ran a special train that carried troops from Camp Robinson to Sparta for errands and entertainment. Every day, the train picked up troops from Camp Robinson at 6:10 pm, arrived in Sparta by 6:40, and returned the men to camp at 11:00. "Hundreds come into the city each evening on this train and the streets are thronged with khaki clad men," reported the *La Crosse Tribune*.[141] Additionally, special trains carried Soldiers into Sparta for organized events. For example, on 30 June 1918, a special train transported troops into town for "Soldiers' Day," which included church services and lunches provided by the citizens of Sparta.[142]

In 1919, the camp transitioned from a training reservation to an ordnance storage site. Until 1923, this site became known as the Sparta Ordnance Depot and was tasked with storing and shipping explosive materials. To transport the explosives to scattered magazines in the hills of Angelo and Adrian Township, crews constructed a network of narrow-gauge railroads that connected McCoy Station West with the magazines (more information about this network can be found in Section 3.2.7, "Narrow gauge railroads at Camp McCoy"). From here, "tons and tons and trainloads of powder and high explosives" were carried into the hills.[143] When the Sparta Ordnance Depot closed in 1923, the US Department of Agriculture took possession of the site, and all military activity terminated.[144] Crews from the agricultural department were still busy removing explosives from the site until at least 1925 (Figure 27–Figure 28).[145]

140. "Uncle Sam Teaches Gunners for France at Camp Robinson," *La Crosse Tribune*, July 8, 1917.

141. "Motion Pictures for the Soldiers at Robinson Camp," *La Crosse Tribune*, July 19, 1917.

142. "Soldiers' Day," *La Crosse Tribune*, June 30, 1918.

143. "Camp Robinson to be Training Ground for Artillery Units," *La Crosse Tribune*, January 25, 1925.

144. "Historical Data, Camp McCoy, Wisconsin Post Engineer Office," January 15, 1946, 13, Center for Environmental Management of Military Lands (CEMML), Tomah, Wisconsin.

145. "Camp Robinson to be Training Ground for Artillery Units," *La Crosse Tribune*, January 25, 1925.

Figure 27. Ammunition workers pose with a narrow-gauge switch engine, c. 1920s. (Image from Monroe County Local History Room. Public domain.)[146]

Figure 28. A boxcar on standard-gauge track stationed next to a storehouse. This photograph may have been taken during the Sparta Ordnance Depot era. (Image from Monroe County Local History Room. Public domain.)[147]

The War Department took control of the reservation again in 1925 to resume summer artillery and National Guard training, and it became known

146. "Unidentified Workers at the J. J. Connelly Shell Loading Depot, Camp McCoy," Monroe County Local History Room, Sparta, WI.

147. "Workers Standing at the Side of the Shell Loading Building at Camp McCoy," Monroe County Local History Room, Sparta, WI.

as Camp Sparta.[148] A year later, officials renamed the reservation "Camp McCoy" in honor of General Robert B. McCoy, who passed away in January 1926.[149] From the mid-1920s through the 1930s, Camp McCoy accommodated a variety of operations. In addition to hosting Army regulars and National Guard troops for annual summer training, the reservation contained a Civilian Military Training Camp (CMTC) and a Civilian Conservation Corps (CCC) camp.[150] The area comprising most of Camp McCoy's built environment was located on the former site of Camp Robinson before WWII. Here, officials commenced a construction program to upgrade deteriorating WWI buildings and erect new buildings.[151] Since this area seems to have been the center of activity on the installation throughout the 1920s and 1930s, McCoy Station West likely became the principal loading and unloading point on the railroad for personnel and materiel, perhaps overshadowing the role of McCoy Station East in the interwar years.

The railroad remained an important asset during the interwar years (Figure 29–Figure 31). With regular training resuming in the 1920s, officials prepared to maintain railroad service at Camp McCoy. In 1925, a post office opened at the camp, and trains began making regular stops.[152] That same year, Colonel G. Sturdevant indicated that the C&NW was constructing a spur track into the reservation.[153] It is not clear where a new C&NW spur track may have been located, as cartographic evidence does not suggest crews installed any new spurs into the reservation. Therefore, Colonel Sturdevant's statement may be referring to improvements on the existing spur in Angelo Township (see Section 3.2.6, "Lower spur sector"). In 1927, crews installed a mile of additional sidetrack to facilitate troop unloading.[154]

148. "Historical Data, Camp McCoy, Wisconsin Post Engineer Office," 14.

149. "The Foundation: Robert Bruce McCoy Brings a Vision to Life," *Fort McCoy Triad*, January 1, 1999, 90th Anniversary Commemorative Edition, 9, Monroe County Local History Room, Sparta, WI.

150. "The Foundation: Robert Bruce McCoy Brings a Vision to Life," 9–10.

151. "Fourteen Hundred Men of Illinois Guard at Sparta," *La Crosse Tribune*, June 18, 1927.

152. "Sparta Kiwanians Hosts to Officers at Camp Robinson," *La Crosse Tribune*, May 26, 1925.

153. "Local Citizens at Camp Robinson to Greet Regulars," *La Crosse Tribune*, May 9, 1925.

154. "M'Coy to Be Largest Artillery Camp in Country," *La Crosse Tribune*, June 12, 1927.

Figure 29. A line of troops waits to board a passenger train at Camp McCoy, c. 1920s. Looking northeast. (Image courtesy of Fort McCoy CRM. Public domain.)[155]

Figure 30. Infantry troops cross the CMSTP&P tracks as they arrive at Camp McCoy in 1928. Looking east. (Image reproduced with permission from Bess Bower Dunn Museum.)[156]

155. Photo from digital file, Fort McCoy CRM, n.d.

156. "2 and 6 Inf. Arriving at Camp McCoy, Wis," Fort Sheridan Photo Album no. 2, p. 33, 1928, Bess Bower Dunn Museum of Lake County, IL, http://www.idaillinois.org/digital/collection/zlakecou003/id/142.

Figure 31. A C&NW troop train at Camp McCoy, 1931. (Image courtesy of Fort McCoy CRM. Public domain.)[157]

While regular Army troops usually hiked to Camp McCoy for summer maneuvers, National Guard personnel often arrived on special trains.[158] This arrangement varied depending on the mission, and at times, one part of the journey might take place on foot and the other part by railroad. For example, to prepare for the reopening of the reservation in 1925, some advance detachments of the regular Army hiked to Monroe County and others took the train.[159] To prepare the reservation for summer training in 1931, Batteries D and E from Fort Sheridan hiked to Madison, then finished their trip to Camp McCoy via the railroad.[160] Troops were not the only passengers who travelled by train. Sometimes, work animals also journeyed on the railroad. "Four hundred and eighty horses were shipped here [Camp McCoy] Thursday over the North Western road, and four hundred and five horses will be shipped from Camp Douglas for the use of the

157. Photo from digital file, Fort McCoy CRM, 1931.

158. "Artillery Takes to Road for March to Camp at Sparta," *La Crosse Tribune,* May 20, 1927; "Fourteen Hundred Men of Illinois Guard at Sparta," *La Crosse Tribune*, June 18, 1927; "57th Field Artillery Brigade, Local Troops Included, in Maneuvers," *La Crosse Tribune*, July 9, 1930, "Illinois Guards Pass through City Enroute to Camp," *La Crosse Tribune*, August 2, 1931.

159. "First Troops are Expected at Camp Robinson in April," *La Crosse Tribune,* March 24, 1925.

160. "Sparta," *La Crosse Tribune*, May 17, 1931.

men," remarked a local reporter in 1933.[161] The horses arrived at Camp McCoy in conjunction with troops from the Illinois National Guard.

While Camp McCoy regularly benefited from the railroad during the interwar years, materiel and personnel did not arrive exclusively by train. In the 1930s, an increasing number of trucks began to transport troops and equipment. Sometimes authorities coordinated this effort with the railroad. For instance, when infantry troops from Camp Williams combined with artillery from Camp McCoy for a mock battle, "Rolling kitchens, trucks, flat cars, box cars, horse cars and several trains were used to get the men and equipment from Camp Williams to the Sparta reservation."[162] As the decade progressed, it appears an increasing number of troops arrived at Camp McCoy through truck convoys. In 1935, personnel from the Illinois National Guard anticipated taking "new high speed trucks" to Camp McCoy for field training and "expected to cover the 252 miles in 12 hours at an average of 21 miles an hour, carrying full equipment."[163] This development, which represented a new degree of logistical independence, likely resulted from improved road networks. Regular Army and National Guard troops were not the only beneficiaries of improved truck transportation. After Camp McCoy's CCC unit became the supply base for all of Wisconsin's CCC camps in 1933, authorities primarily employed trucks to distribute clothes, food, and other supplies. Any supplies not delivered by the camp's truck fleet were shipped by the C&NW and CMSTP&P railroads.[164] Despite the increasing role of motor vehicles, the railroad continued to be used regularly in the interwar era, evidenced by a 1935 proposal to spend $85,000 for "repairing railroad track and roads, new loading platforms and tent floors at Camp McCoy."[165]

In the late 1930s, intensifying German and Japanese military aggression increased prospects for another global conflict. In Europe, this aggression culminated with the German invasion of Poland in September 1939, initiating WWII. Although the United States had not yet formally entered the war, the Army conducted large-scale nationwide maneuvers in 1940 to

161. "Illinois National Guard Will Arrive at Camp Saturday," *La Crosse Tribune,* June 30, 1933.

162. "Troops Combine to Stage Battle at Camp M'Coy," *La Crosse Tribune,* July 16, 1930.

163. "C.M.T.C. Youths at Camp McCoy," *La Crosse Tribune*, July 6, 1935.

164. "The Foundation: Robert Bruce McCoy Brings a Vision to Life," *Fort McCoy Triad*, January 1, 1999, 9; "Civilian Camps Obtain Supplies by Truck Service," *La Crosse Tribune*, August 13, 1933.

165. "$726,172 Asked for Williams, McCoy Camps," *La Crosse Tribune*, June 22, 1935.

prepare for impending deployment. At Camp McCoy, maneuvers took place in August and involved 65,000 men from seven states and 1,200 tons of National Guard equipment.[166] The massive operation depended on efficient, mass railroad service to transport personnel and materiel. In anticipation for the maneuvers, the CMSTP&P announced "From Fort Knox, Ky., 179 combat cars, prime movers for 75 mm. howitzers, and half track ambulances will be transported by rail. . . . 312 separate stations some 78 regular or special trains will be formed at rail centers. Field kitchens will be set up in a number of baggage cars. . . . No stops will be made for this purpose."[167]

The CMSTP&P ultimately moved personnel and equipment to Camp McCoy via rail centers in Chicago and Kansas City. The railroad accomplished this coordinated effort in just two days.[168]

The large-scale maneuvers taking place at Camp McCoy piqued the curiosity of area residents. Capitalizing on this local interest, the CMSTP&P organized a special train to transport civilians from La Crosse to Camp McCoy on 18 August 1940. To advertise the advantages of visiting Camp McCoy by train rather than automobile, the CMSTP&P argued that highways into the camp would be congested. As an added incentive, the company remarked that the train would be taken directly "into the camp proper, making it convenient for the travelers."[169] This Sunday excursion accommodated hundreds of patrons, treating them with lunch and refreshments on board the train.

3.1.2 World War II (1941–1945)

With the impending threat of war, military officials prepared to build a new, bigger cantonment at Camp McCoy. In 1941, the architect-engineering firm of Mead, Ward, and Hunt assessed two sites for the potential cantonment, one north of Trunk Road "B" (present-day State Highway 21), and one south of Tarr Creek. Members of the team created layouts for both locations, including the possible arrangement of railroad spurs into the camp. In September, Army officials selected the site north of Trunk Road "B" and approved a triangular cantonment plan, allowing Mead, Ward,

166. "Army Maneuvers at Camp McCoy," *The Milwaukee Magazine*, August 1940, 9.

167. "Army Maneuvers at Camp McCoy," 9.

168. "New Passenger Station Opened at Camp McCoy," *The Milwaukee Magazine*, May 1943, 9.

169. "Many to Take Special Train to Camp McCoy," *La Crosse Tribune*, August 17, 1940.

and Hunt to create specific layouts for the camp's utilities, roads, and railroad access points.[170] After the United States entered the war in December 1941, the Army approved the construction of a new cantonment at Camp McCoy and issued nine contracts for utilities, roads, and railroad spurs.[171]

Thornton Construction Company (later AGT Associates) prepared most of the work for the new cantonment's roads and railroads.[172] The final design featured a government-owned trunk that connected to the C&NW and CMSTP&P main lines in the south.[173] Proceeding north, this trunk branched into multiple spurs on the south-central side of the cantonment. A set of parallel spurs on the west side of the main trunk led to a coal storage area, warehouse sector, and troop boarding point. Here, trains backed into the siding where troops could embark and disembark.[174] Another spur ran north from the main trunk and led to a switch engine house (2163, nonextant). Later, crews constructed a spur that branched off the east side of the main trunk and ran toward the cantonment's station hospital (Figure 32–Figure 33).

170. National Park Service, *Fort McCoy (Camp McCoy) Sparta Vicinity Monroe County Wisconsin*, HABS WI-308 (Washington, DC: National Park Service, 1988), 4–7.

171. Fort McCoy (Camp McCoy) Sparta Vicinity Monroe County Wisconsin, 7–8.

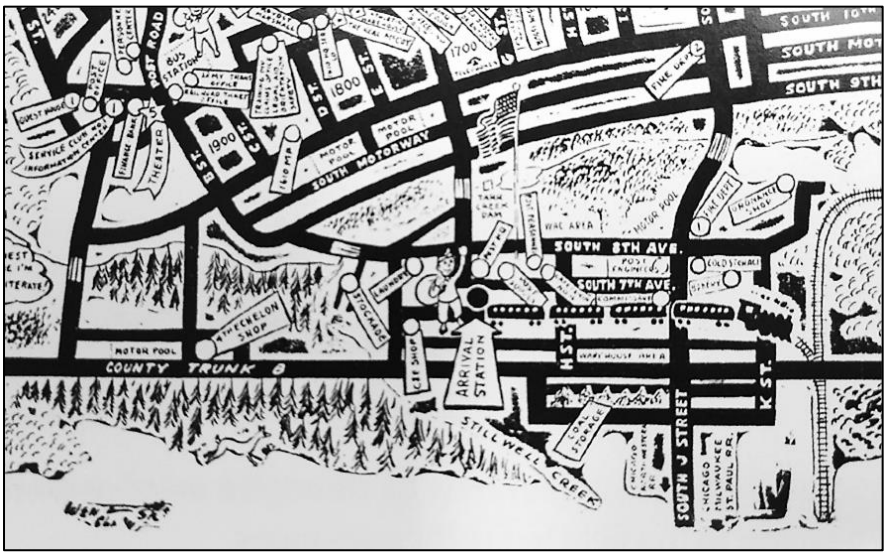
172. Interview with Jim Cote, April 11, 2005, folder: Military, Fort McCoy, General, Monroe County Local History Room, Sparta, WI. 2–4.

173. "Historical Data, Camp McCoy, Wisconsin Post Engineer Office," 87.

174. Cote, interview, 2005, 4.

Figure 32. A 1943 map of Camp McCoy shows new railroad spurs connecting to the south side of the cantonment and the station hospital. (Image from Monroe County Local History Room. Public domain.)[175]

Figure 33. A labelled map of Camp McCoy drawn by a Soldier in the 1940s. Note the illustration of the train backing into the unloading point. (Image from Monroe County Local History Room. Public domain.)[176]



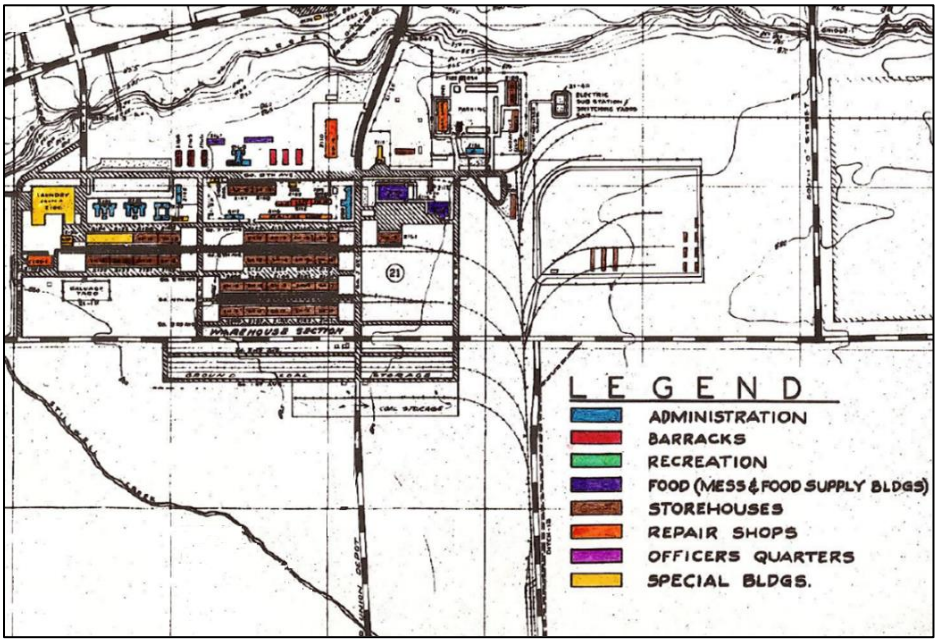
Crews constructed a warehouse and maintenance sector as a separate block in the south-central part of the cantonment (Figure 34). This area

175. *Camp McCoy*, 1943, map, Monroe County Local History Room, Sparta, WI.

176. "Camp McCoy," *Wisconsin Magazine of History*, Summer 2009, folder: Military, Fort McCoy, General, Monroe County Local History Room, Sparta, WI.

was primarily populated with storehouses. Constructed as elongated, one-story buildings with gable roofs, these storehouses were oriented parallel to the railroad tracks. Other buildings in this sector included repair shops, administration buildings, mess supply buildings, and three barracks north of South 8th Avenue. When completed, the warehouse and maintenance sector contained 71 buildings, but 48 have been demolished since WWII, primarily on the western side of the warehouse and maintenance block between South F Street and South H Street. According to a building and landscape review by Sunny Adams et al. (ERDC-CERL TR-20-12), all of the WWII-era storehouses east of South H Street remain today, but the exteriors have been greatly modified.[177] Significantly, most railroad spurs in the present-day warehouse sector follow their original paths (see Section 3.2.4).

Figure 34. A plan of Camp McCoy's new cantonment. (Image from Fort McCoy. Public domain.)[178]



The local railroads gave special attention to Camp McCoy's needs during its construction. This point is exemplified in an oral interview by Jim Cote, a contractor who surveyed the road and railroad networks at Camp McCoy's new cantonment. According to Cote, an administrator at the

177. Sunny E. Adams et al., *Fort McCoy, Wisconsin WWII Buildings and Landscapes* (Champaign, IL: Engineer Research and Development Center, Construction Engineering Research Laboratory, 2020), 396.

178. US Engineer Office, *Master Plan: Camp McCoy Wisconsin*, n.d. (Milwaukee, WI: US Engineer Office)

camp identified as "Red" Velinev had the authority to commandeer freight from trains if it could be used at Camp McCoy.

> [Velinev] had this red telephone on his desk. He picked up that red phone, he depended on, and you should have heard the language that he used. If he wanted twenty carloads of railroad rails, or if he wanted forty carloads, everything was talked railroad then, there was none of these big trucks on the road. And he had the authority to stop any train in the United States that had the material for Camp McCoy that he needed to get to Camp McCoy. That was one of the big reasons that they wanted this railroad in there pretty quick. Because they'd unhook a train going let's say east to west for something, if they needed twenty carloads of lumber was on there or something, just unhook them, and they'd go to Camp McCoy.[179]

As in WWI, railroads played an important role in WWII, transporting 97% of the country's troops and 90% of its freight.[180] Beginning in October 1942, 40,000 troops arrived at Camp McCoy's new cantonment, the majority transported by rail.[181] When the time came for Soldiers to engage in combat, trains transported them to coastal departure points (Figure 35). American Soldiers were not the only personnel who arrived and departed by train. Prisoners of war (POWs) also traveled to and from Camp McCoy via the railroad (Figure 36).[182]

179. Cote, interview, 2005, 7.

180. "A Railroad Crisis is a Defense Crisis," *The Harlowton (MT) Times*, October 12, 1961, repr. in *The Milwaukee Road Magazine*, November–December 1961, 6, folder: Military, Fort McCoy, General, Monroe County Local History Room, Sparta, WI.

181. Cote, interview, 2005, 4.

182. Brandon J. Scott, "The Untold Story of Camp McCoy: Japanese Prisoners of War in the Heart of Wisconsin during the Second World War," (bachelor of arts thesis, University of Wisconsin–Eau Claire, 2010), 3, 6–7, https://minds.wisconsin.edu/handle/1793/44611.

Figure 35. "76th Infantry Division Soldiers Board C&NW Troop Trains at Camp Mccoy for Europe and Points East." (Image and caption reproduced from *Fort McCoy Triad*, January 1, 1999. Public domain.)[183]

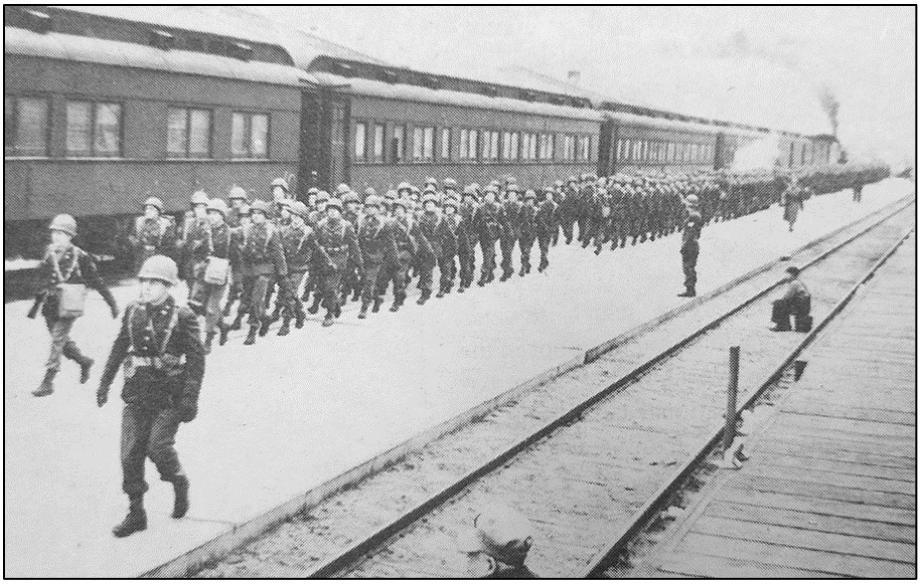


Figure 36. Japanese prisoners of war board a California-bound train at Camp McCoy in 1945. (Image from Fort McCoy Public Affairs Office [PAO]. Public domain.)[184]

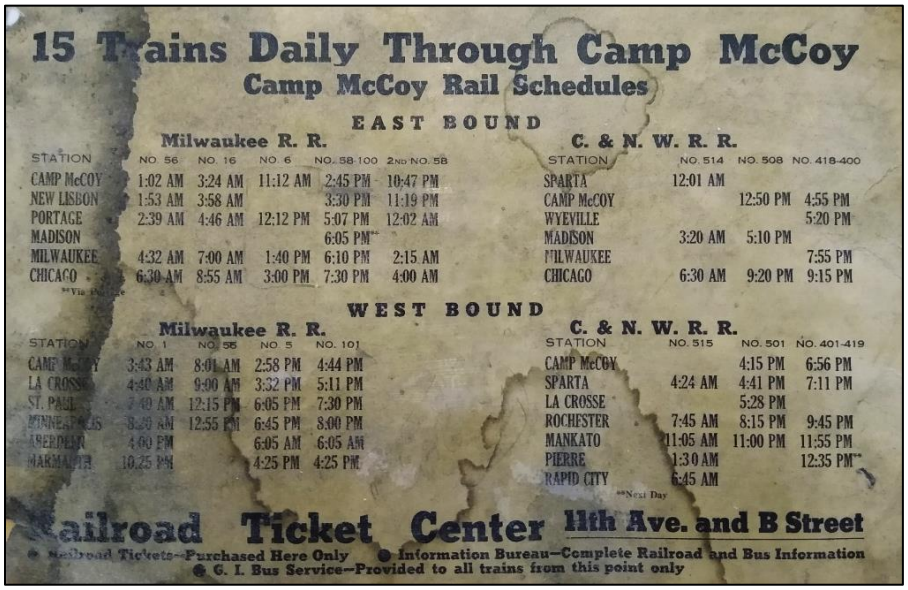
In an effort to prioritize the movement of military personnel to Camp McCoy, local railroads reduced civilian passenger service at designated

183. "The Foundation: Robert Bruce McCoy Brings a Vision to Life," *Fort McCoy Triad*, January 1, 1999.

184. "Japanese POWs Board Train," September 01, 1945, US Army file photo by PPA-OFF US Signal Corps. Photo from Fort McCoy PAO, https://www.dvidshub.net/image/6381894/japanese-pows-board-train.

locations in Monroe County. For example, in June 1943, the C&NW announced that it would reroute daytime passenger trains from Elroy to Sparta, instead directing them to Sparta via Wyeville. Although this amended route supplied Camp McCoy with additional service, it bypassed the communities of Norwalk, Wilton, and Kendall and left them with passenger service "at inconvenient night hours."[185] In an attempt to change the decision, representatives of the towns brought their grievance to the attention of Wisconsin's Public Service Commission; however, their complaint was withdrawn at a hearing in July, "it having been represented to them by officials of the railroad and the military authorities of Camp McCoy that the rerouting [was] necessary to promote the war effort."[186] Following the hearing, authorities arranged to operate express and mail service on the night trains.[187] The CMSTP&P and C&NW reduced service to Sparta as well in order to provide additional stops at Camp McCoy (Figure 37).[188]

Figure 37. An undated timetable of east- and westbound CMSTP&P and C&NW trains passing through Camp McCoy. (Image from Fort McCoy History Center. Public domain.)[189]



15 Trains Daily Through Camp McCoy

Camp McCoy Rail Schedules

EAST BOUND

Milwaukee R. R.

STATION	NO. 56	NO. 16	NO. 6	NO. 58-100	2ND NO. 58
CAMP McCOY	1:02 AM	3:24 AM	11:12 AM	2:45 PM	10:47 PM
NEW LISBON	1:53 AM	3:58 AM		3:30 PM	11:19 PM
PORTAGE	2:39 AM	4:46 AM	12:12 PM	5:07 PM	12:02 AM
MADISON				6:05 PM**	
MILWAUKEE	4:32 AM	7:00 AM	1:40 PM	6:10 PM	2:15 AM
CHICAGO	6:30 AM	8:55 AM	3:00 PM	7:30 PM	4:00 AM

C. & N. W. R. R.

STATION	NO. 514	NO. 508	NO. 418-400
SPARTA	12:01 AM		
CAMP McCOY		12:50 PM	4:55 PM
WYEVILLE			5:20 PM
MADISON	3:20 AM	5:10 PM	
MILWAUKEE			7:55 PM
CHICAGO	6:30 AM	9:20 PM	9:15 PM

WEST BOUND

Milwaukee R. R.

STATION	NO. 1	NO. 55	NO. 5	NO. 101
CAMP McCOY	3:43 AM	8:01 AM	2:58 PM	4:44 PM
LA CROSSE	4:40 AM	9:00 AM	3:32 PM	5:11 PM
ST. PAUL	7:40 AM	12:15 PM	6:05 PM	7:30 PM
MINNEAPOLIS	8:30 AM	12:55 PM	6:45 PM	8:00 PM
ABERDEEN	4:00 PM		6:05 AM	6:05 AM
MARMARTH	10:25 PM		4:25 PM	4:25 PM

C. & N. W. R. R.

STATION	NO. 515	NO. 501	NO. 401-419
CAMP McCOY		4:15 PM	6:56 PM
SPARTA	4:24 AM	4:41 PM	7:11 PM
LA CROSSE		5:28 PM	
ROCHESTER	7:45 AM	8:15 PM	9:45 PM
MANKATO	11:05 AM	11:00 PM	11:55 PM
PIERRE	1:30 AM		12:35 PM**
RAPID CITY	6:45 AM		

**Next Day

Railroad Ticket Center 11th Ave. and B Street

Railroad Tickets—Purchased Here Only ● Information Bureau—Complete Railroad and Bus Information
● G. I. Bus Service—Provided to all trains from this point only

185. Public Service Commission, *Opinions and Decisions of the Public Service Commission of Wisconsin,* vol. 27, *December 1, 1942–November 30, 1943* (Madison WI: Democrat Printing Company, 1944), 301, Hathi Trust, https://babel.hathitrust.org/cgi/pt?id=uc1.b2879652 &view=1up &seq=7&skin=2021.

186. *Opinions and Decisions of the Public Service Commission of Wisconsin*, 301.

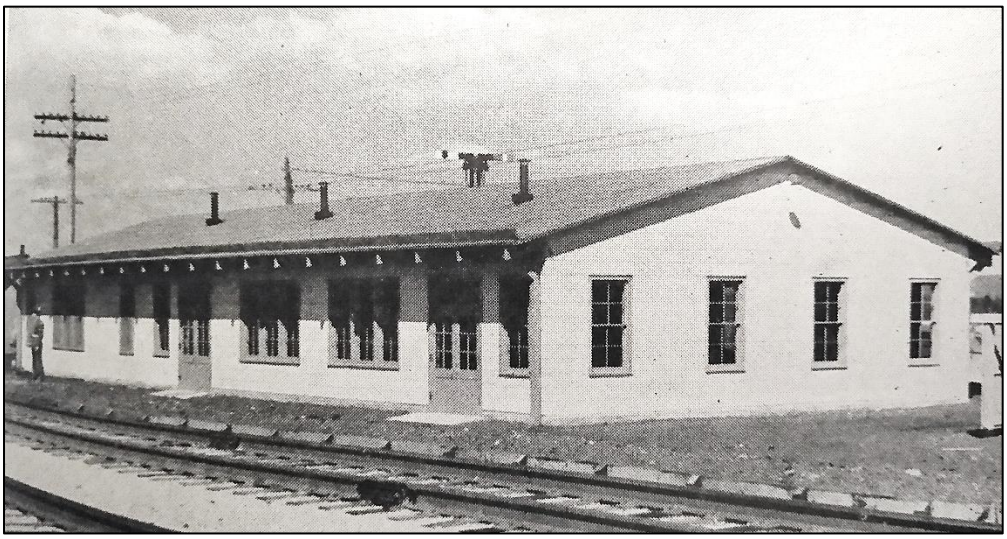
187. *Opinions and Decisions of the Public Service Commission of Wisconsin*, 301.

188. "McCoy Will Get More Train Service," *Wisconsin State Journal,* July 12, 1945.

189. "15 Trains Daily through Camp McCoy," n.d., Fort McCoy History Center, Sparta, WI.

Railroad officials from the CMSTP&P and C&NW also attempted to reduce troop congestion at their stations in Sparta and Tomah. Apparently, personnel from Camp McCoy routinely took cabs or buses to board trains in those communities, even though a railroad depot at "Old Camp McCoy" (McCoy Station West) continued operating. To alleviate traffic at Sparta and Tomah, the CMSTP&P and C&NW decided to construct a jointly operated depot at Camp McCoy (Figure 38).[190] In 1943, the companies built the joint depot south of the new cantonment, where the government-owned spur track departed from the main lines (see Section 3.2.3). The joint depot was located at nearly the same site as the station constructed by the CMSTP&P and C&NW in the early 1910s. It is not known if any of the depots or support structures from the older site survived until WWII.

Figure 38. A view of the jointly owned depot built at Camp McCoy in 1943. Looking northwest. (Image reproduced with permission from *The Milwaukee Magazine*, May 1943.)[191]



Personnel from the 2nd and 76th Divisions often filled the station during furlough, and confusion pervaded on Friday and Saturday nights as men mistakenly boarded the wrong trains. According to the CMSTP&P trainmaster at Camp McCoy, "It was our policy to go out in the waiting rooms and call our trains prior to arrival . . . but at times the noise and din of the huge crowds, made it quite impossible to attract their attention . . . and we regularly experienced Northwestern passengers for their train 418

190. "New Camp McCoy Railroad Station Expected to Relieve Traffic Jams," *La Crosse Tribune*, March 04, 1943.

191. *The Milwaukee Magazine*, May 1943, 9.

Eastbound, boarding our train 101 at Camp McCoy in error."[192] Rail traffic at McCoy Station East remained steady during the war, but an anticipated period of redeployment in July 1945 heightened the concern of passenger surges at the train depot. To remedy the predicted confusion that would result, officials installed a loudspeaker system to direct passengers more efficiently.[193]

Although the railroads maintained an intensive schedule during the war, there were still opportunities to run special excursions. For example, in July 1944, the CMSTP&P dispatched a special train that brought 700 business executives to Camp McCoy (Figure 39). The executives, who came from Illinois, Wisconsin, Minnesota, and Michigan, represented factories that produced equipment for the war effort. As part of the trip, the executives toured Camp McCoy, witnessed infantry demonstrations, and observed how the equipment they produced functioned in the field.[194]

Figure 39. Business executives file into trucks immediately after detraining in July 1944. (Image reproduced with permission from *The Milwaukee Magazine*, July 1944.)[195]

192. Correspondence to W. J. Whalen, June 15, 1945, folder 3765, Milwaukee Road Archives, Milwaukee, WI.

193 H. C. Munsch to J. P. Kiley, July 15, 1945, folder 3765, Milwaukee Road Archives, Milwaukee, WI.

194. "Business Men Become One-Day G.I.'s at Camp McCoy," *The Milwaukee Magazine*, July 1944, 8.

195. *The Milwaukee Magazine*, July 1944, 8.

3.1.3 Post–World War II era (1946–1974)

Near the end of WWII, Camp McCoy accommodated a reception and separation center to reassign and discharge Soldiers. This became a large-scale operation, and the center processed over 245,000 personnel when it closed in 1946.[196] Authorities transported the last POWs from the camp, and training activities decreased significantly. That same year, the Post Engineer Office took inventory of the installation, including its railroad assets. In addition to the CMSTP&P and C&NW tracks bisecting the installation, Camp McCoy contained over 53,000 ft (approximately 10 miles) of government-owned track. Of this government-owned infrastructure, Camp McCoy contained almost 25,000 ft of storage track capable of handling 450 railroad cars. Most of the installation's government-owned railroad infrastructure consisted of spurs and sidetracks built during the war.[197]

In the years immediately following WWII, operations decreased at Camp McCoy. As before the war, activity mainly consisted of summer training for Reserve and National Guard units. Although some officials at Camp McCoy proposed large-scale expansion projects in January of 1947, authorities placed the installation on inactive status in March, suspending full-time training.[198] Even before the inactive statue became official, Camp McCoy's railroad depot announced that it would trim its daily hours of operation. Despite the cut, trains continued to make regular stops at the depot.[199] Summer training continued through the end of the 1940s.[200]

Authorities reactivated Camp McCoy for full-time training in 1950 as the United States became involved in the Korean War. Troops from throughout the Fifth Army area arrived at Camp McCoy, which became a major training center during the war. The amount of activity at the installation was reminiscent of WWII, with a "peak strength reached after the activation [of] about 19,000."[201] This rate of activity did not last long, and in

196. "The Foundation: Robert Bruce McCoy Brings a Vision to Life," *Fort McCoy Triad*, January 1, 1999, 11.

197. "Historical Data, Camp McCoy, Wisconsin Post Engineer Office," 87.

198. "Construction Plans Studied," *La Crosse Tribune*, January 14, 1947; "McCoy will Train Guard," *La Crosse Tribune*, March 31, 1947; "The Foundation: Robert Bruce McCoy Brings a Vision to Life," *Fort McCoy Triad*, January 1, 1999, 11.

199. "Camp Railroad Depot Makes New Schedule," *La Crosse Tribune,* January 21, 1947.

200. "31,850 Soldiers in McCoy Summer Camp," *Monroe County Democrat*, October 20, 1949.

201. "The Foundation: Robert Bruce McCoy Brings a Vision to Life," *Fort McCoy Triad*, January 1, 1999, 13.

November 1952, officials made plans to inactivate the camp again. Although the installation was officially inactivated in February 1953, it resumed summer training for Reserve and National Guard units.[202]

From the late 1940s through the 1960s, the railroad continued moving troops for training and hauling heavy equipment to Camp McCoy (Figure 40–Figure 45); however, it appears other methods of transporting personnel and equipment assumed a greater role during this period. In addition to the railroad, truck convoys were regularly employed. During one training session in the mid-1950s, troops used a variety of methods to transport themselves to Camp McCoy, including the railroad, truck convoys, air passage, and private automobiles.[203] Still, the railroad attempted to remain connected with Camp McCoy in other ways. For instance, on at least one occasion the CMSTP&P chartered a special train to transport troops to Milwaukee for a baseball game between the Milwaukee Braves and New York Giants.[204]

202. "The Foundation: Robert Bruce McCoy Brings a Vision to Life," 13.

203. "Units Arrive at Military Camps in Area," *La Crosse Tribune*, June 12, 1954.

204. "Coulee Region Guards Head For McCoy Training," *La Crosse Tribune*, June 09, 1955.

Figure 40. Colonel Peter C. Bullard and Major R. J. Kantz greet each near a railroad spur on the new cantonment. A C&NW passenger car is visible on the *left*. 1950. (Image from National Archives and Records Administration [NARA]. Public domain.)[205]

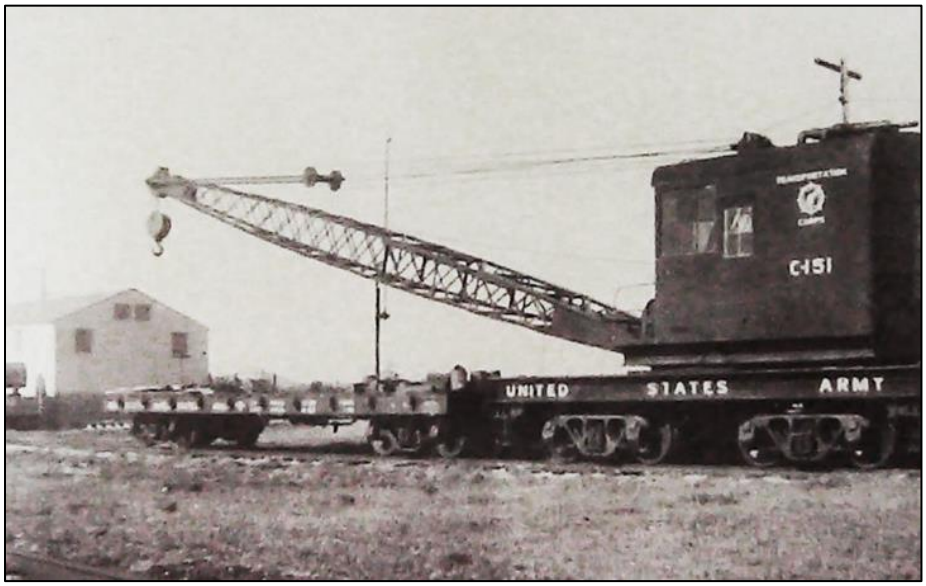
Figure 41. A crane hoists a five-ton crate from an Army flatbed car in 1950. (Image from NARA. Public domain.)[206]

205. Photo no. 356858, 111-SCA-400, McCoy, Camp, Wisconsin—Buildings and Views (McCoy Buildings and Views), US Army Signal Corps Photographs of Military Activity during WWII, Korea, and Vietnam, 1941–81 (Signal Corp Photographs), Records of the Office of the Chief Signal Officer, Record Group (RG) 111, NARA, College Park, MD.

206. Photo 356860, 111-SCA-400, McCoy Buildings and Views, Signal Corp Photographs, RG 111, NARA, College Park, MD.

Figure 42. In Bloomington, Illinois, members of the National Guard prepare to board a train for Camp McCoy. 1951. (Image from the McLean County Museum of History. Public domain.)[207]

Figure 43. A railroad crane at Camp McCoy, no date. (Image courtesy of Fort McCoy CRM. Public domain.)[208]



207. "National Guard Off for Camp McCoy from Bloomington, IL," 1951, Pantagraph Negative Collection 1950–1959, McLean County Museum of History, http://www.idaillinois.org/digital/collection/p16614coll56/id/9466.

208. Photo from digital file, Fort McCoy CRM, n.d.

Figure 44. Flatbeds hauling a series of tanker trucks at Camp McCoy. Note that Southern Pacific rolling stock is being employed. (Image from Monroe County Local History Room. Public domain.)[209]

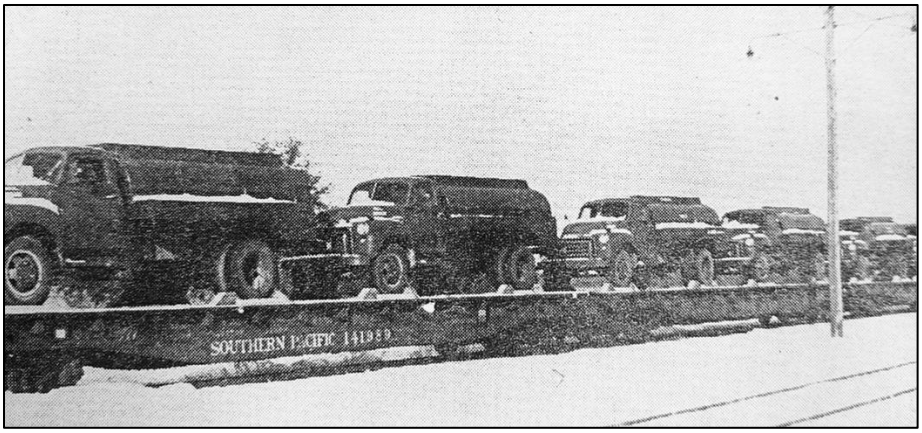


Figure 45. A triple-decked railroad car with a shipment of Jeeps at Fort Carson, Colorado. Officials shipped six carloads of Jeeps, including this one, from Fort Carson to Camp McCoy in 1962. (Image from NARA. Public domain.)[210]

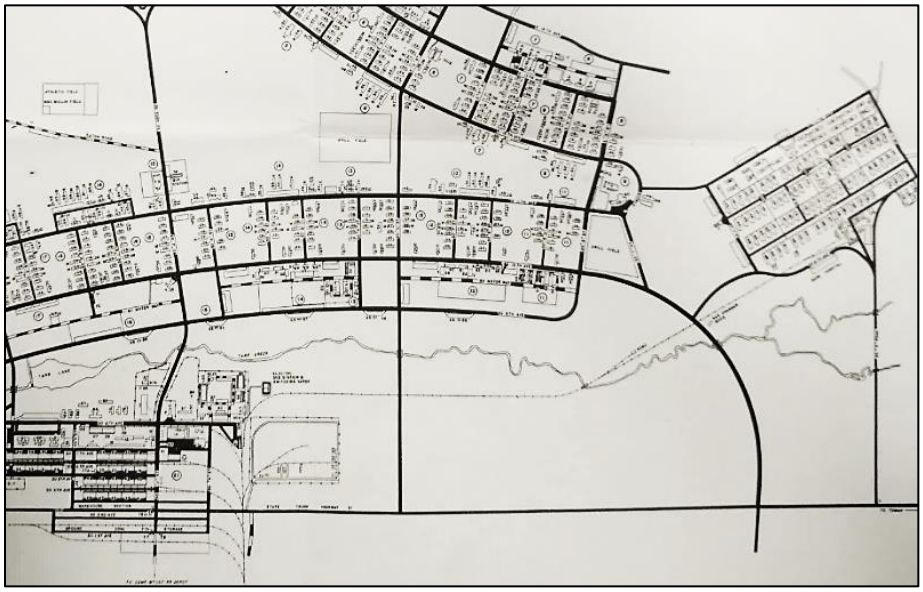
During this period, Camp McCoy retained much of the railroad infrastructure built in WWII, such as the spurs leading into the installation's warehouse sector and the switch engine house (2163, nonextant) (Figure 46–Figure 48). The depot at McCoy Station West continued to be used as well. Revenue figures for the depot in the 1950s, recorded by the CMSTP&P, reflect periods of heightened activity on the installation. The depot brought

209. *The La Crosse Sunday Tribune*, January 11, 1953, folder: Military, Fort McCoy, General, Monroe County Local History Room, Sparta, WI.

210. Photo 593220, 111-SCA-402, McCoy Buildings and Views, Signal Corp Photographs, RG 111

in $1,290,763 in 1951 and $792,447 in 1952 when Camp McCoy conducted training during the Korean War. In the years following deactivation, the depot's revenue fell significantly, earning $100,520 in 1953, $109,135 in 1954, and $69,816 in 1955.[211]

Figure 46. Map of Camp McCoy's cantonment, 1951. The reservation maintained several spur lines near the camp warehouse sector and a single spur line extending east toward the hospital sector. (Image from Monroe County Local History Room. Public domain.)[212]

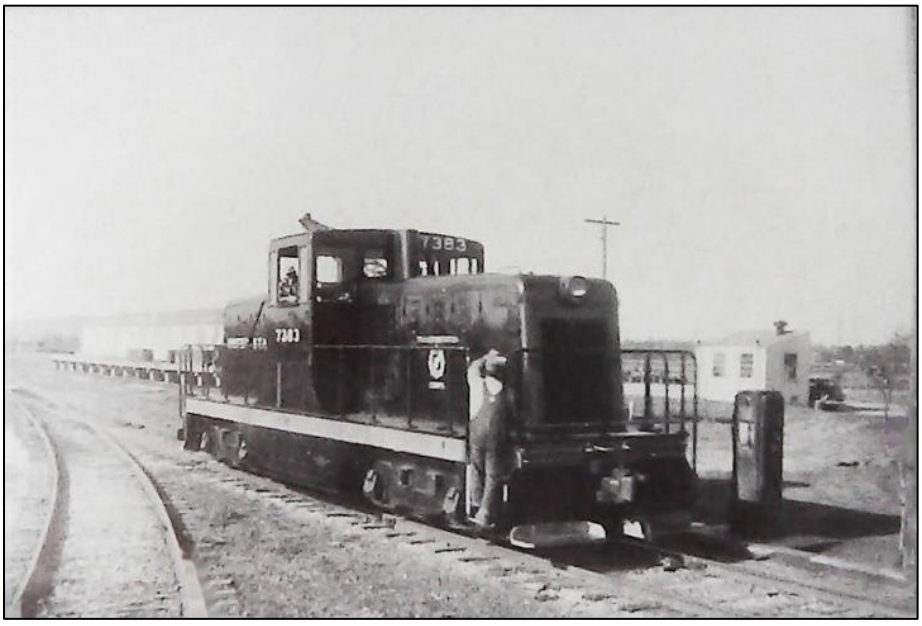


211. "Chicago, Milwaukee, St. Paul and Pacific Railroad Company, Finance and Accounting Department, Station Earnings 1951–1955," 16, Milwaukee Road Archive, accessed September 22, 2023, https://www.milwaukeeroadarchives.com/EconomicStudies/EconomicStudies.htm.

212. *Camp McCoy, Wisconsin*, 1951, 322 Engineer Topo Company Corps, folder: Military, Fort McCoy, General, Monroe County Local History Room, Sparta, WI.

Figure 47. Diesel switch engine 7258 is seen outside the engine house (2163, not extant) in 1952. Looking north. (Image from Monroe County Local History Room. Public domain.)[213]

Figure 48. Diesel switch engine 7383 on one of Camp McCoy's spur tracks, no date. (Image courtesy of Fort McCoy CRM. Public domain.)[214]



In 1961, the railroads had the opportunity to transport troops and equipment for simulated Cold War exercises in Fort Lewis, Washington. This

213. McCoy-1952 1200–001, folder: Military, Fort McCoy, General, Monroe County Local History Room, Sparta, WI.

214. Photo from digital file, Fort McCoy CRM, n.d.

rail operation, the largest since the Korean War, represented the first time in several years that the nation's railroads played a central role in coordinating the mass movement of military personnel and materiel and ultimately aimed to demonstrate that the railroad industry remained relevant and prepared for a national emergency. In total, the expedition required four railroad carriers to transport 20 trainloads of equipment and 17 troop trains. Wisconsin's 32nd National Guard (Red Arrow Division) traveled to Washington via the CMSTP&P, which was responsible for moving 6,000 of the total 10,000 troop force. The CMSTP&P also transported heavy track equipment, some of which departed from Camp McCoy (Figure 49). "The handing of the Red Arrow movement was cited as an example of the railroad's ability to convert quickly to the emergency demands of wartime," remarked an article in *The Milwaukee Road Magazine*.[215] While the CMSTP&P successfully moved the troops and equipment to Washington, a grade crossing accident with a truck and a troop train in Montana resulted in the death of the truck driver and five Pullman crew members.[216]

Figure 49. CMSTP&P flatbeds hauling a series of tanks at Camp McCoy in 1961. (Image from Milwaukee Road Archives. Public domain.)[217]

215. "The Milwaukee Road Moves the Army," *The Milwaukee Road Magazine*, November–December 1961, 5, folder: Military, Fort McCoy, General, Monroe County Local History Room, Sparta, WI.

216. "The Milwaukee Road Moves the Army," 5.

217. Untitled photo, 1961, folder: Traffic, Freight, Military, Milwaukee Road Archives, Milwaukee, WI.

3.1.4 Camp McCoy becomes Fort McCoy (1974–present)

In 1974, Camp McCoy was authorized to become Fort McCoy, the status it maintains today.[218] Although CMSTP&P station earnings records, available through 1977, show that the company continued to record freight charges at its McCoy station through 1977, the 1961 Cold War exercises may have represented one of the last mass movements of military personnel via the railroad. Following the trend of other struggling Midwestern railroads, the C&NW began abandoning uncritical trackage in the 1970s (Figure 50). Eventually, the company abandoned its line through Fort McCoy in 1977, and the corridor reverted back to federal ownership. The abandoned section through Fort McCoy was part of a longer corridor that stretched from Tunnel City to Medary, Wisconsin. In conjunction with state and park officials, the abandoned line east of Fort McCoy transitioned to a hiking and biking trail, joining the existing Sparta–Elroy Trail to the south.[219] The C&NW removed 4,853 ft of track line within Fort McCoy in 1984.[220] In 1985, the Soo Line (a subsidiary of CP) purchased the bankrupt CMSTP&P Railroad.[221] At present, this corridor remains an active and important line in the CP network (Figure 51).

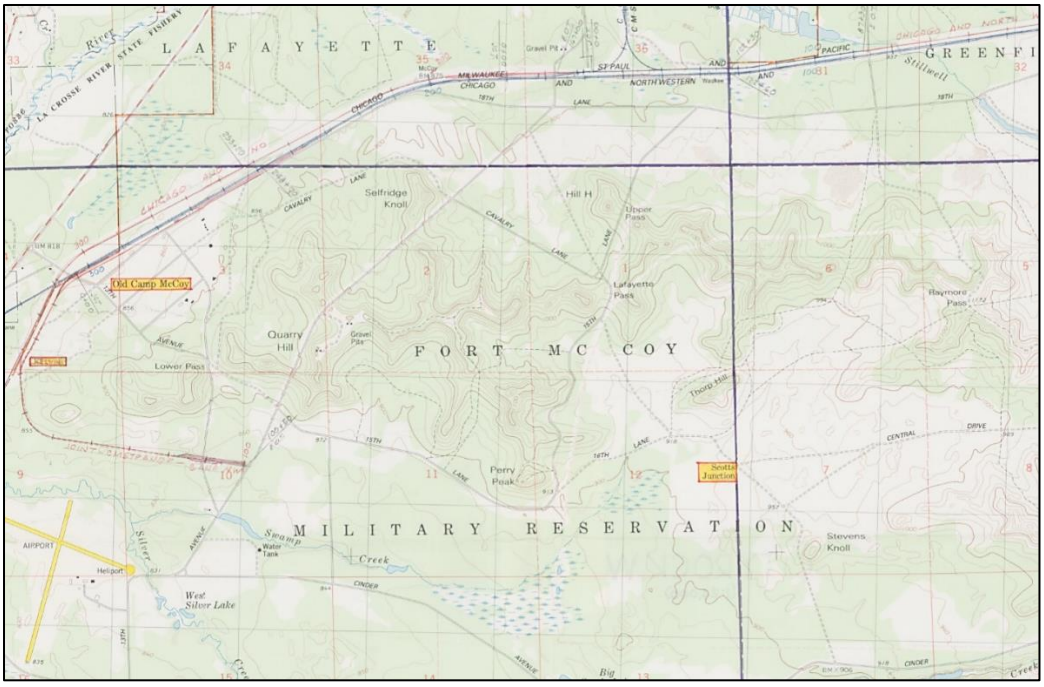
218. "History," US Army Fort McCoy, accessed September 22, 2023, https://home.army.mil/mccoy/about/history.

219. Jerome Rosso, "Purchase of Bike Trail Approved," *La Crosse Tribune*, July 28, 1978; Charles Masters, "State Will Buy Railroad and to Expand Sparta-Elroy Trail," *The Capital Times*, Madison WI, July 31, 1978.

220. US Army Corps of Engineers, *Station Rail Facilities*, 1947, revised 1984, map. Digital file from Fort McCoy CRM.

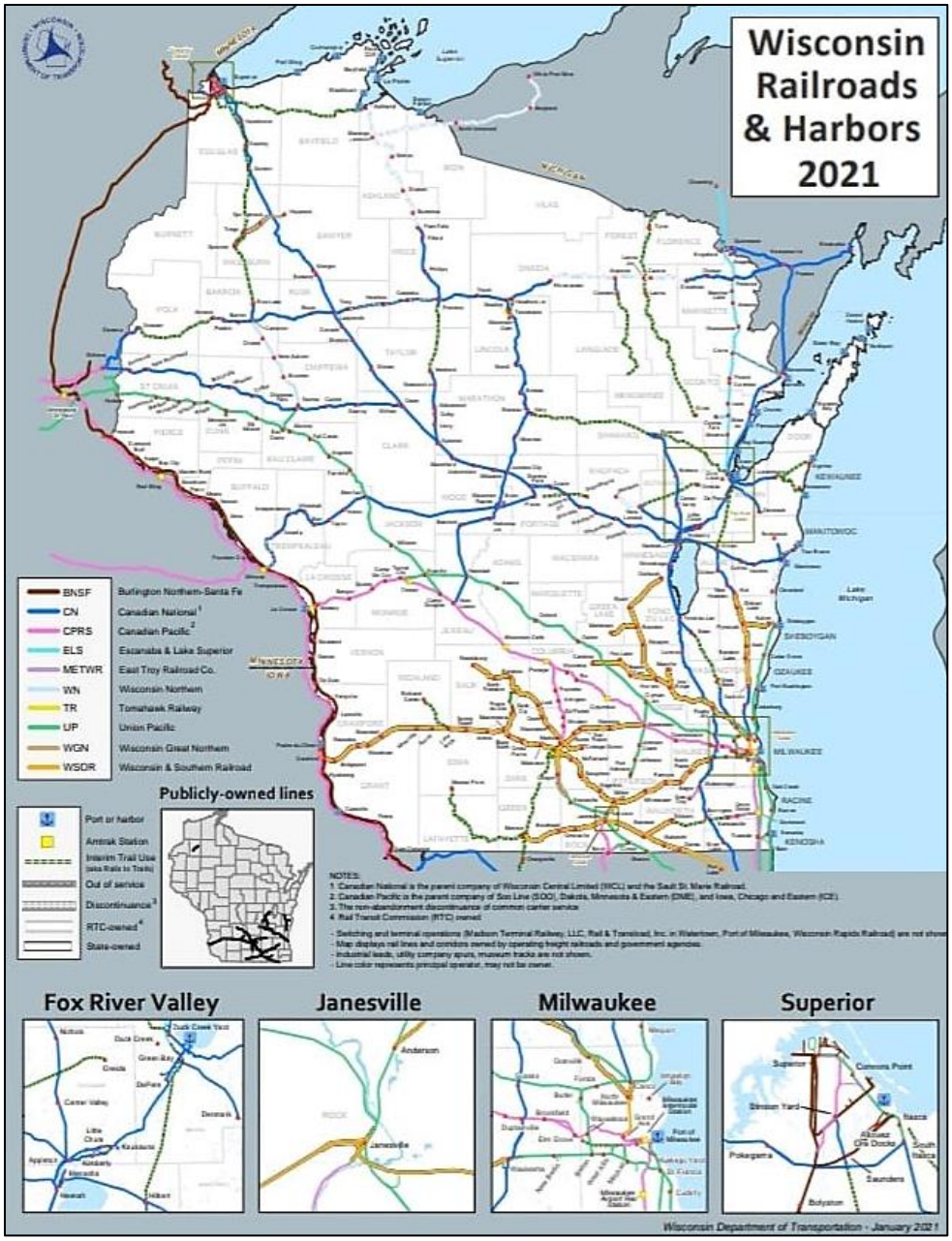
221. Wilson, *The Historical Guide to North American Railroads*, 96.

Figure 50. Railroads through Fort McCoy, with color-coding by historian James Kaysen c. 1980s. *Blue* signifies the CMSTP&P line, and *red* signifies the abandoned C&NW line. (Image from Wisconsin Historical Society. Public domain.)[222]



222. US Geological Survey, *City Rock Quadrangle*, 1983, 7.5-minute topographic map, annotated by James P. Kaysen. Wisconsin Historical Society, Madison, WI.

Figure 51. Railroad corridors in Wisconsin, 2021. (Image reproduced with permission from Wisconsin Department of Transportation.)[223]

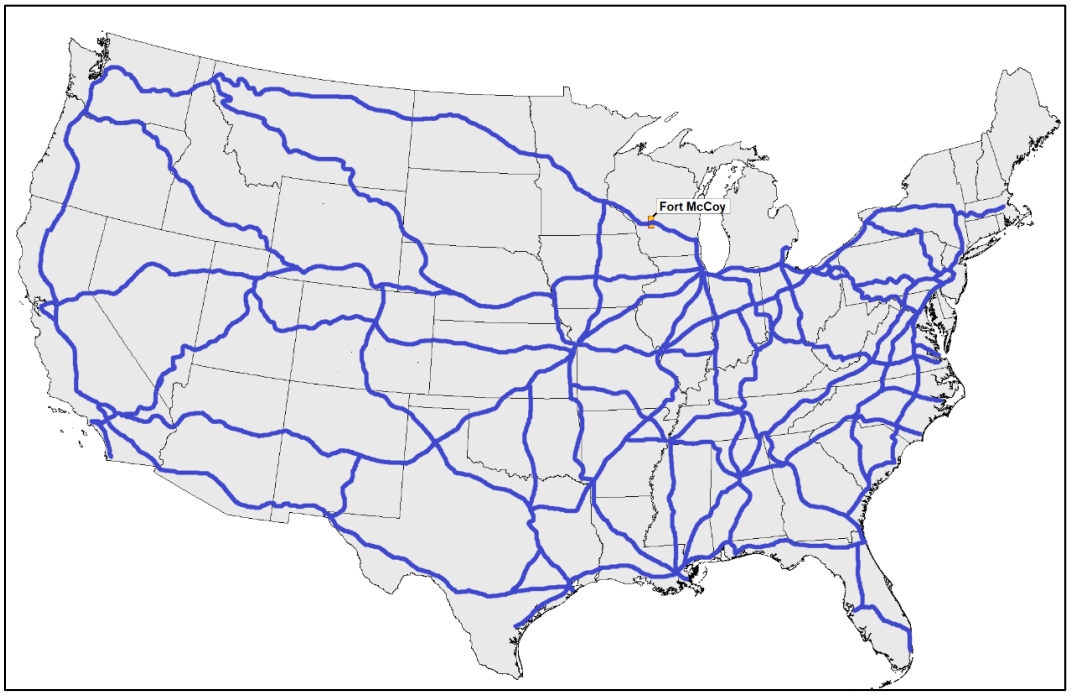


While military installations do not depend on railroads to convey troops as they did in the past, trains have continued to play an important role transporting military materiel, such as heavy and tracked vehicles. In the 1970s, the DoD realized that the deteriorating condition of America's railroads would potentially jeopardize equipment mobilization in a wartime

223. Wisconsin Department of Transportation, "Wisconsin Railroads and Harbors 2021," https://wisconsindot.gov/pages/doing-bus/freight/rail.aspx.

scenario. In response, the DoD established a Railroads National Defense (RND) program "to identify defense rail requirements; assure consideration for national defense in civil railroad policy, plans, standards, and programs; and gain support and responsiveness for defense rail line requirements."[224] As a result of the RND program, authorities designated a STRACNET, identifying critical railroad routes for equipment mobilization. Today, Fort McCoy is one of 40 defense installations situated on a main STRACNET corridor, which utilizes the CP line between Milwaukee and La Crosse (Figure 52).[225]

Figure 52. The main lines along the STRACNET corridor. (Image created by ERDC-CERL, based on STRACNET 2018. Public domain.)[226]



3.2 Geographic clusters of development

3.2.1 Lafayette Station, c. 1858–1910

This section describes Lafayette Station, a railroad stop that closed with the development of Camp Emory Upton. In 1858, the La Crosse and Milwaukee Railroad (which later became the CMSTP&P) finished a cross-

224. Military Surface Deployment and Distribution Command Transportation Engineering Agency, *Strategic Rail Corridor Network (STRACNET) and Defense Connector Lines*, 5.

225. Military Surface Deployment and Distribution Command Transportation Engineering Agency, *Strategic Rail Corridor Network (STRACNET) and Defense Connector Lines*, 12.

226. Military Surface Deployment and Distribution Command Transportation Engineering Agency, *Strategic Rail Corridor Network (STRACNET) and Defense Connector Lines*, 10.

state line between Milwaukee and La Crosse, approximately 7 miles of which transected the present-day parameters of Fort McCoy. Along the route, the railroad passed 1.5 miles south of Best Point, a village in Section 26 of Lafayette Township.[227] Founded in 1856, Best Point included a sawmill, a grist mill, a blacksmith shop, a hotel, and a tavern by the time the railroad passed to the south in 1858. According to Richard's *History of Monroe County, Wisconsin*, the town became a local checkpoint during construction of the La Crosse and Milwaukee line, with "contractors and railroad men for a time making it their headquarters."[228] The town remained productive after the railroad was completed, but within a few years its growth stagnated.[229] Lafayette Station was located in Section 35 of Lafayette Township (Figure 53). Established in the late 1850s, this stop was situated near a crossing grade that led to Best Point.

Figure 53. General location of Lafayette Station. (Map data: Google, 2013. Modified by ERDC-CERL.)

While no railroad depot is depicted on the 1858 Lafayette Township plat map below Best Point, an 1876 map shows the station immediately north of the tracks in Section 35 (Figure 54). An 1877 plat map denotes "Lafayette Station" in the southwest quadrant of Section 35 within a parcel

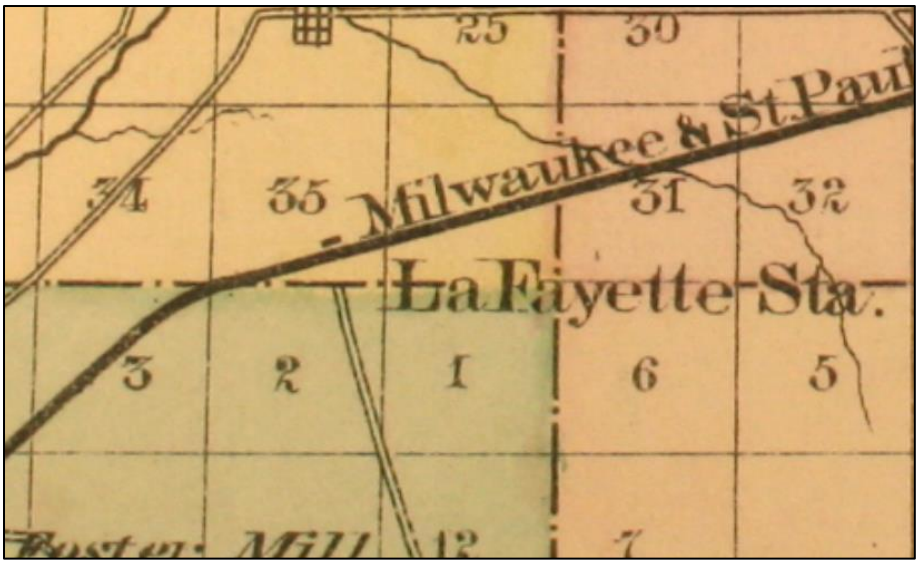
227 G. B. Holden, *Map of Monroe County, Wisconsin, Compiled Principally from Government Surveys by G. B. Holden, Sparta*, 1858 (New York: H. F. Wallings), Wisconsin Historical Society, https://content.wisconsinhistory.org/digital/collection/maps/id/4222/rec/18.

228. Richards, *History of Monroe County, Wisconsin, Past and Present*, 517.

229. Richards, *History of Monroe County, Wisconsin, Past and Present*, 517.

owned by George Runkle (Figure 55). A discrepancy in the location of the Lafayette depot in an 1897 plat map is accompanied by a discrepancy in the path of the rail line, which in 1877 had been depicted as following a southwesterly diagonal through Sections 36 and 35. The 1897 plat map shows the track following a comparatively meandering corridor through Sections 36, 35, and 34, and situates the Lafayette depot near the center of Section 35, within a parcel owned by Mrs. Parmelee (Figure 55).[230] A regional section map from c. 1874 (which does not show Lafayette Station) depicts the rail line following a path similar to the one shown in 1897, indicating that the track on the 1877 plat map may have been drawn based on 1850s survey references rather than the completed route.

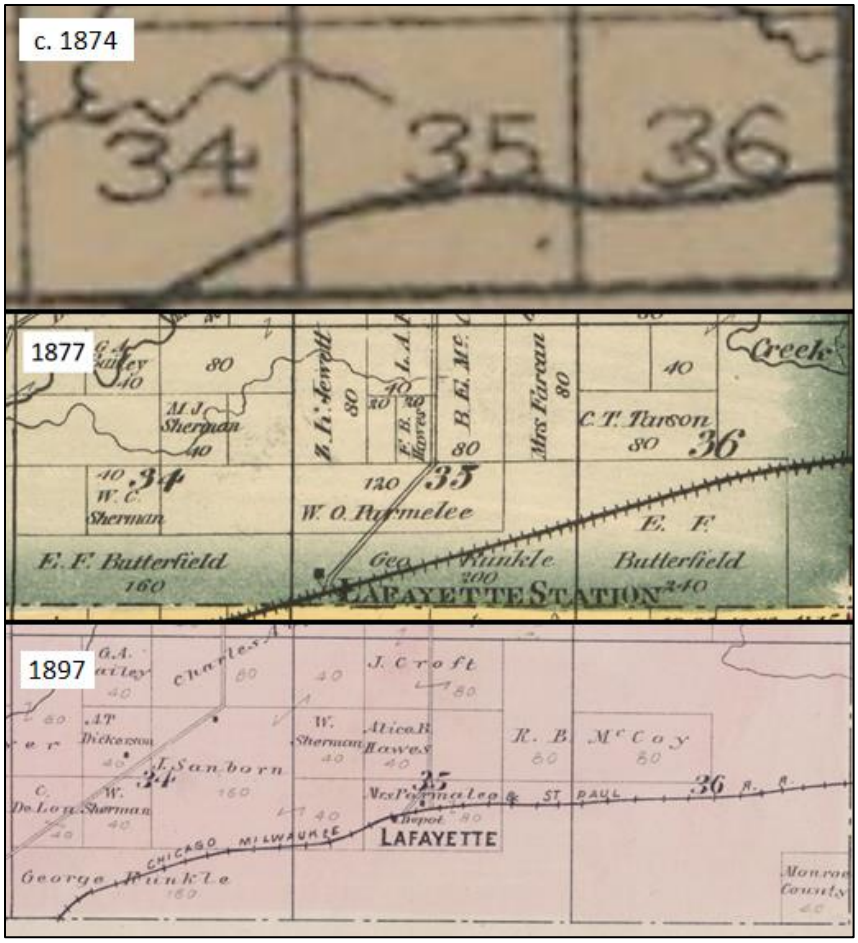
Figure 54. Lafayette Station on an 1876 Monroe County map. (Image from Monroe County Local History Room. Public domain.)[231]



230. George A. Ogle, *Standard Atlas of Monroe County, Wisconsin Including a Plat Book of the Villages, Cities and Townships of the County* (Chicago: Geo. A. Ogle & Co, 1897), Wisconsin Historical Society, https://content.wisconsinhistory.org/digital/collection/maps/id/17151/rec/48.

231 H. F. Walling, *Atlas of the State of Wisconsin, Including Statistics and Descriptions* (Boston: Walling, Tackbury & Co., 1876), 70. Monroe County Local History Room, Sparta, WI.

Figure 55. Comparison of c. 1874, 1877, and 1897 maps. (Images reproduced with permission from Wisconsin Historical Society.)[232]



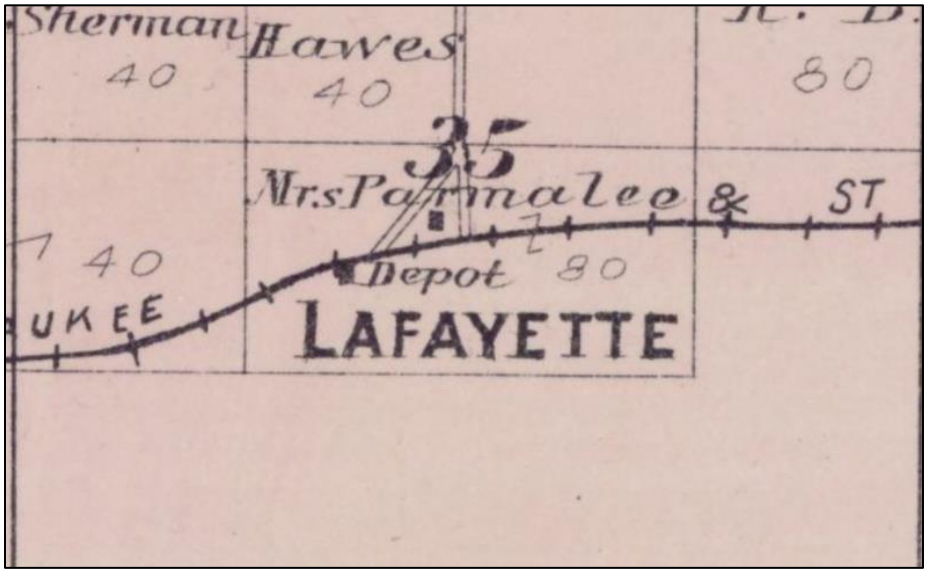
Lafayette Station operated until 1910, when McCoy Station East opened in Lafayette Township, Section 36 (approximately 1,640 feet away).[233] While there is no detailed inventory of railroad facilities at Lafayette Station, at minimum it contained a depot (Figure 56). A section house also existed in the station's vicinity, which burned down on 31 October 1911. An article in the *Sparta Herald* confirms that section men still occupied the house at the time of the fire. According to their investigation, "four families inhabited it, who lost pretty much everything they had, with no insurance. The

232. West Wisconsin Railway Company, *Map Showing the Lands & Location West Wisconsin Railway, a New & Short Route Between St. Paul and Chicago*, [c. 1874], [c. 1:321,869 scale] (West Wisconsin Railway Company), https://content.wisconsinhistory.org/digital/collection/maps/id/1153/rec/10; Warner and Foote, *Map of Monroe County, Wisconsin*, 1877, [1:42,240 scale] (Red Wing MN: Warner and Foote), https://content.wisconsinhistory.org/digital/collection/maps/search/searchterm/monroe/field/county/mode/exact/conn/and; Ogle, *Standard Atlas of Monroe County, Wisconsin Including a Plat Book of the Villages, Cities and Townships of the County*, 1897.

233. "The Milwaukee Station at Raymore," *Cashton Record*, August 19, 1910.

supposition is that the fire caught from cinders from a freight locomotive."[234] It is unknown if this building was a standardized section house constructed by the railroad or an existing structure used as a section house.

Figure 56. Lafayette Station depot on an 1897 plat map. (Image reproduced with permission from Wisconsin Historical Society.)[235]



3.2.2 Raymore Station (c. 1900–1910, Greenfield Township, Section 31), (1910–present, Greenfield Township, Section 33)

On historic maps, the toponym "Raymore" appears along the railroad as it cuts across the southern portion of Greenfield Township; however, depending on the map being referenced, the location of this site appears in two different locations. The oldest references to Raymore Station place the site in Greenfield Township, Section 31, immediately west of the point where the railroad crossed over Stillwell Creek. Later references place Raymore in Section 33 of Greenfield Township, approximately 2 miles east of its former location. The discrepancy reflects a transition that occurred around 1910, when the first Raymore Station (which operated from c. 1900 to 1910) was abandoned and a new location (1910–present) began operating closer to Tunnel City (Figure 57–Figure 58). The first Raymore Station used to contain a depot and ancillary support structures. The second

234. "Building at Old Lafayette Station Burned," *Sparta Herald*, November 5, 1911.

235. Ogle, *Standard Atlas of Monroe County, Wisconsin*.

Raymore Station historically contained an operator's house and ancillary support buildings. It currently serves as an unmanned station.[236]

Figure 57. Locations of Raymore Station over time. Area 1 signifies the site of the first Raymore Station (1900–1910), and area 2 signifies the site of the second Raymore Station (1910–present). (Map data: Google, 2013. Modified by ERDC-CERL.)

Figure 58. Raymore Station as designated on a newspaper map from 1905. (Image reproduced from Brandt 1905. Public domain.)[237]

Another toponym, "Trout Falls," occasionally appeared on maps in the general location of the second Raymore Station (1910–present). This was

236. Timothy N. Dahlen and Stephen C. Wagner, *2010 Cultural Resource Management Activities: NHPA Compliance Projects*, Fort McCoy Archaeological Resource Management Series, Report of Investigations 49 (Fort McCoy, WI: Fort McCoy, June 2011), 530.

237 M. Earle Brandt, "The Artillery in Camp," *Monroe County Democrat*, September 15, 1905.

observed by archaeologists from Colorado State University's Center for Environmental Management of Military Lands (CEMML), who noticed that this label can be found on the 1898, 1900, and 1908 *Official Railroad Maps of Wisconsin*.[238] The name "Trout Falls" is also visible on a 1906 regional railroad map. This label was in reference to a popular early-twentieth-century fishing resort and vacation spot in Lafayette Township (Figure 59).

Figure 59. Route of the CMSTP&P Railroad through Monroe County, 1906. Note the inclusion of a station labeled "Trout Falls," which appears to be just east of Raymore Station. (Image from Brandt 1905. Public domain.)[239]

The first Raymore Station appears to have operated from c. 1900 to 1910.[240] It was located along the CMSTP&P line in Greenfield Township, Section 31. Raymore Station consisted of more than just a depot; it appears to have comprised a small cluster of buildings and structures north and south of the tracks, some of which were directly associated with the railroad and others which were not. The locations of these features are marked with an alphabetical key on a 1907 military map (Figure 60). The depot itself was located at the northwest intersection of the CMSTP&P and an unmarked grade crossing (*h*). South of the tracks and east of the depot,

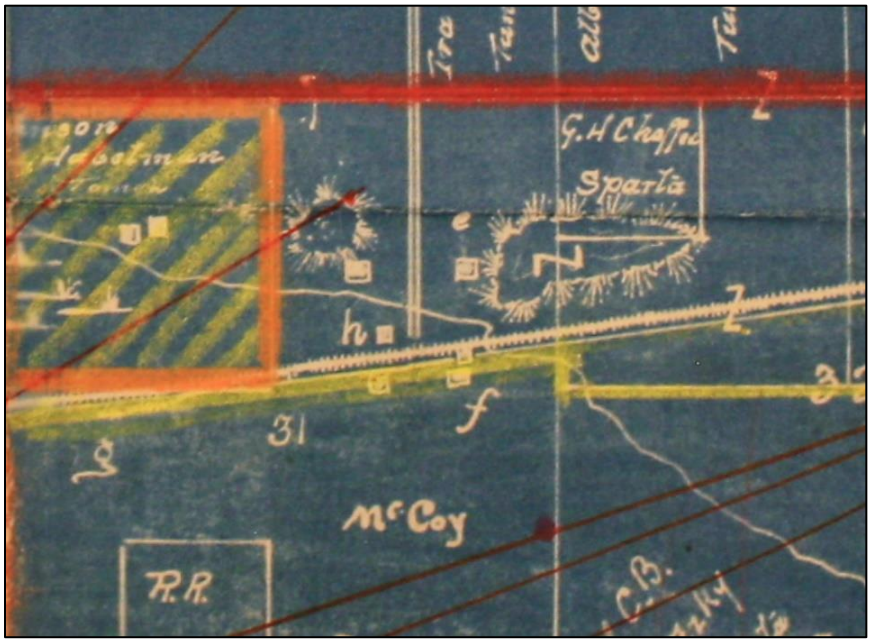
238. Dahlen and Wagner*, 2010 Cultural Resource Management*, 518.

239. M. Earle Brandt, "The Artillery in Camp," *Monroe County Democrat*, September 15, 1905, folder: Military—Fort McCoy Land Purchase. Monroe County Local History Room, Sparta, WI.

240. "The Milwaukee Station at Raymore," *Cashton Record,* August 19, 1910; Dahlen and Wagner*, 2010 Cultural Resource Management,* 530.

there existed a sidetrack and a small number of associated sheds (*g*). The sidetrack accommodated a "pusher engine," a small locomotive that was employed to push trains up the steep grade and through the tunnel west of Tunnel City.[241] According to the map key, the siding was 1,800 ft long. Other structures associated with the railroad included a windmill and a water tank (*f*), which were situated on the south side of the tracks.

Figure 60. Raymore Station as seen on a military map from 1907. According to the map legend, the letter "*e*" corresponds to a schoolhouse, "*f*" represents a water tank and windmill, "*g*" signifies a railroad siding, and "*h*" corresponds to a station (depot). (Image from Monroe County Local History Room. Public domain.)[242]



In addition to these railroad support buildings and structures, the Raymore site also contained a schoolhouse (*e*) and a post office called "Bacon." According to Julia Middleman, who complied a history on Monroe County schools, the schoolhouse at Raymore was established "near the Ed Hableman cranberry marsh. Since the Bruder and Hableman homes were much farther south than the rest of their community, it was planned to have a school at Raymore. . . . The school at Raymore was closed when Sunny Dale School district was established [c. 1910]."[243] The Bacon Post Office

241. Julia E. Middleman, "History of Monroe County Public Schools," 1989, 89–90, Sparta Public Library.

242. *Plot of Ground Near Sparta, Wisconsin*, 1907, map, Monroe County Local History Room, Sparta, WI.

243. Middleman, "History of Monroe County Public Schools," 89–90.

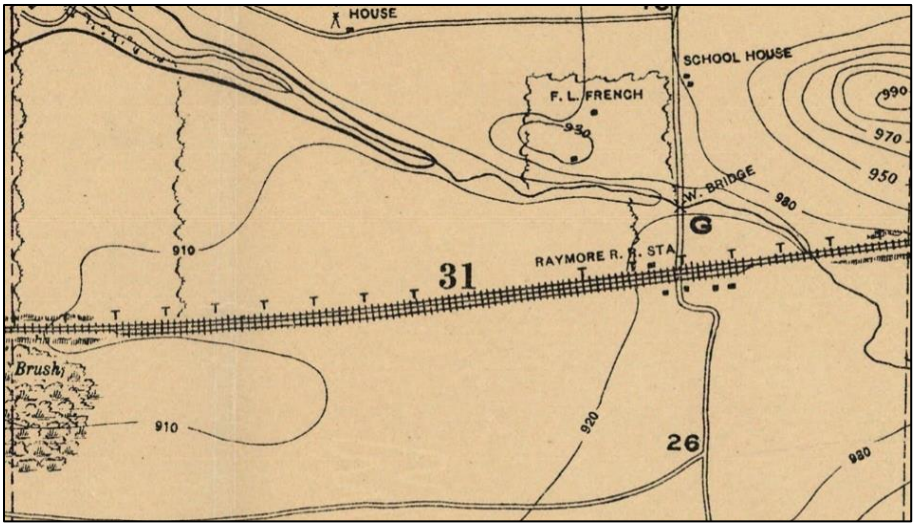
was possibly located within the train station building itself. According to research conducted by CEMML,

> A post office history on file at the Monroe County Local History Room shows a Bacon post office in New Lyme Township from 30 December 1880 until 28 July 1885, and again from 13 March 1902 until 15 June 1921. It's likely that this second period of use actually referred to the post office at Raymore station, so named because William Rosa's wife's maiden name was Bacon (the 1900 census shows Rosa's father in law living with Rosa in Oakdale). The station was not in use as a railway station as late as 1921. It's uncertain whether the post office continued to be at the depot building after the station moved back to Lafayette.[244]

Another military survey map from 1909 also shows a cluster of buildings around Raymore Station (Figure 61). The siding tracks are also clearly visible immediately south of the CMSTP&P tracks. In this depiction, the siding line stretches for nearly 4,000 ft, a significant departure from the 1,800 ft documented in the 1907 map key. The map shows the schoolhouse just north of the station cluster.

244. Dahlen and Wagner, *2010 Cultural Resource Management,* 519.

Figure 61. Raymore Station as seen on a military map from 1909. (Image used with permission from Wisconsin Historical Society.)[245]



None of the railroad buildings or structures at the first Raymore Station survive, and there are no known photographs or detailed plans of the depot, windmill, or water tank; however, drawings for the pusher engine house at Raymore do exist (Figure 62–Figure 64). Constructed in 1900, this building followed a standard plan (Drawing B-6719) that the CMSTP&P Railroad used at Raymore and other stations within their network. The drawings indicate that this was an elongated, frame building topped with a shed roof. The main block contained a 20 × 68 ft rectangular footprint flanked on the north and south sides by a 10 ft, 2 in × 3 ft box bay. The drawings suggest that the building was to be set on eight piers composed of compacted rubble: four under each corner of the building, and four interior piers to support the track and engine. A single track ran down the center of building and a sloping pit paved with bricks was situated under the spot where the engine rested. A large set of double doors on the east elevation provided an entry and exit point for the pusher engine. A retractable smoke jack hovered over the spot where the engine was stationed and allowed the locomotive's smoke to exit the building through a flu in the roof. The tracks inside the engine house presumably connected with the siding tracks immediately south of the CMSTP&P line.

245. US Army Corps of Engineers, *US Military Reservation near Sparta, Wisconsin, Surveyed and Drawn under the Direction of Major Thos. H. Rees, Corps of Engineers, US Army; by A. T. Grohmann, C. E.* 1909, [1:10,560 scale], map (Detroit: US Lake Survey. Wisconsin Historical Society), https://content.wisconsinhistory.org/digital/collection/maps/id/13372/rec/27.

Figure 62. Side elevation plan of the engine house constructed at Raymore in 1900. (Image from Milwaukee Road Archives. Public domain.)[246]

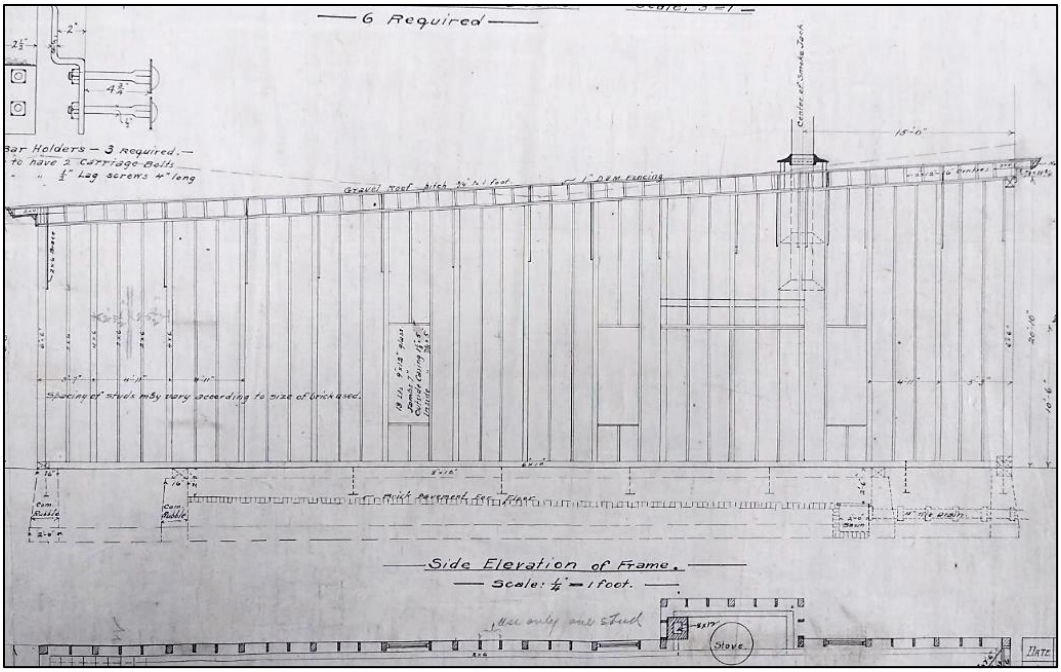
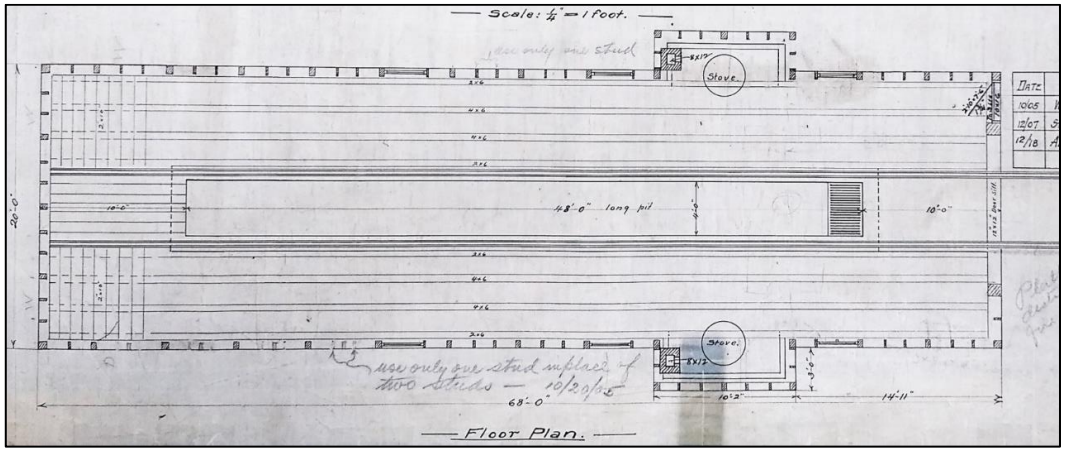


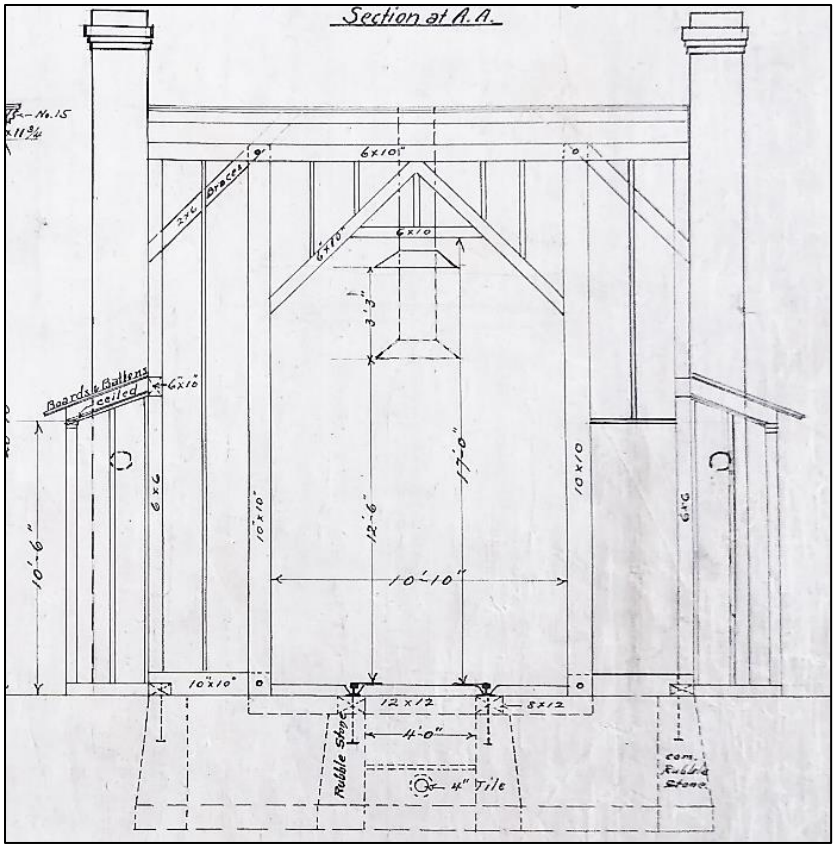
Figure 63. Floor plan of the engine house constructed at Raymore in 1900. (Image from Milwaukee Road Archives. Public domain.)[247]



246. "One Stall Engine House, Drawing No. B-6719," March 20, 1896, CMSTP&P Bridge and Building Department, Milwaukee Road Archives, Milwaukee, WI.

247. "One Stall Engine House, Drawing No. B-6719," March 20, 1896.

Figure 64. Front elevation of the engine house constructed at Raymore in 1900. (Image from Milwaukee Road Archives. Public domain.)[248]



The first Raymore Station appears to have been abandoned around 1910.[249] At approximately the same time, the school building at Raymore was relocated 2 miles north to Section 19 in Greenfield Township, where it became known as the "Sunny Dale School."[250] In all likelihood, the Raymore depot and post office were demolished to make way for the new C&NW line, which was being constructed parallel (north) of the CMSTP&P Railroad around 1910.[251] The CMSTP&P may have made plans for this move in 1909, when the company purchased 36 acres in Greenfield Township, Section 33, the vicinity of the second Raymore Station (Figure 65).[252]

248. "One Stall Engine House, Drawing No. B-6719," March 20, 1896.

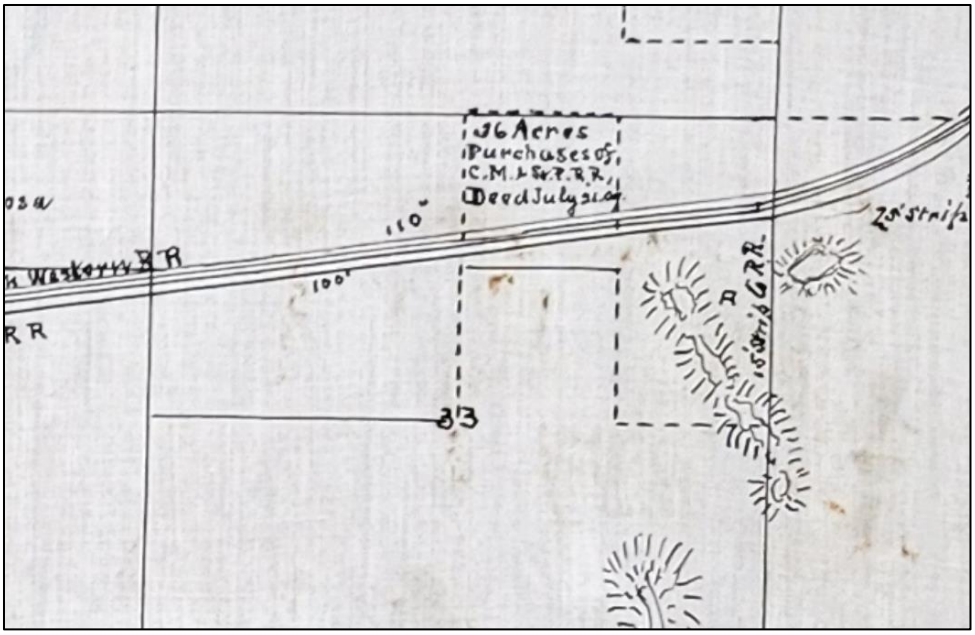
249. "The Milwaukee Station at Raymore," *Cashton Record*, August 19, 1910.

250. Middleman, "History of Monroe County Public Schools," 90.

251. Grant, *The Northwestern*, 88.

252. Office of the Judge Advocate General, *United States Military Reservations*, 467.

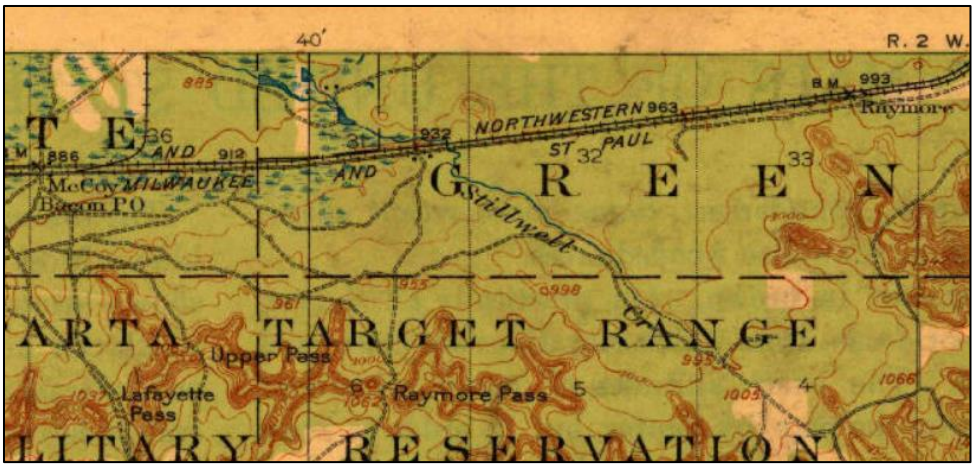
Figure 65. A map showing land purchased by the CMSTP&P on 31 July 1909. (Image from NARA at College Park. Public domain.)[253]



A new Raymore Station was established in Greenfield Township, Section 33, 2 miles east of the old site. A USGS map with survey data from 1914 shows the toponym "Raymore Station" in Section 33 (Figure 66). Additionally, this map contains a label for Bacon Post Office next to the label for McCoy Station (Lafayette Township, Section 36), suggesting that the post office moved to this location after the first Raymore Station was decommissioned.

253. US Army Corps of Engineers, *US Military Reservation near Sparta, Wisconsin, Surveyed and Drawn under the Direction of Major Thos. H. Rees, Corps of Engineers, US Army; by A. T. Grohmann, C. E.* 1909, blueprint file of map, [1:10,560 scale], Camp McCoy, Wisconsin (Camp McCoy), Fortification Construction Plans and Military Reservation Property Surveys, between c. 1895 and c. 1914 (Plans and Surveys), Records of the Office of the Quartermaster General, Record Group (RG) 92, NARA, College Park, MD.

Figure 66. A topographic map shows that Raymore Station had moved to Section 33 of Greenfield Township by 1914. It is not clear if the engine house had moved, as it appears to remain in Section 31. (Image from National Geologic Map Database. Public domain.)[254]



To date, there has been some field work to recover and study the remains of the railroad support buildings at the first Raymore Station. Archaeologists from CEMML investigated the potential windmill and water tank site south of the railroad tracks in 2010 (47M0736).[255] This excavation was organized to evaluate the site for NRHP eligibility. According to their findings, the site "consists of the foundation from a water tank and associated windmill, some remnant architectural material and coal from the water tank, and some artifacts interpreted as rubbish from other areas of the station." The report determined the site to be ineligible for listing in the NRHP because none of the site's above-grade structures were extant, and the material found below grade did not contribute anything meaningful to an overall typology of ancillary railroad infrastructure in Wisconsin.[256]

The second Raymore Station was relocated approximately 2 miles east of the first location around 1910 (Figure 67–Figure 68). It is unlikely that the new Raymore Station contained a depot. Although the depot was abandoned at the first Raymore Station in 1910, local passengers could use the new depot that opened nearby at McCoy Station East (see Section 3.2.3). The second Raymore Station primarily functioned as a maintenance and operations station. According to a 1919 valuation report conducted by the Interstate Commerce Commission (ICC), this Raymore Station contained a

254. US Geological Survey, *Tomah Quadrangle*, surveyed 1914, edition 1916, Map, National Geological Database, https://ngmdb.usgs.gov/topoview/viewer/#6/42.294/-94.887.

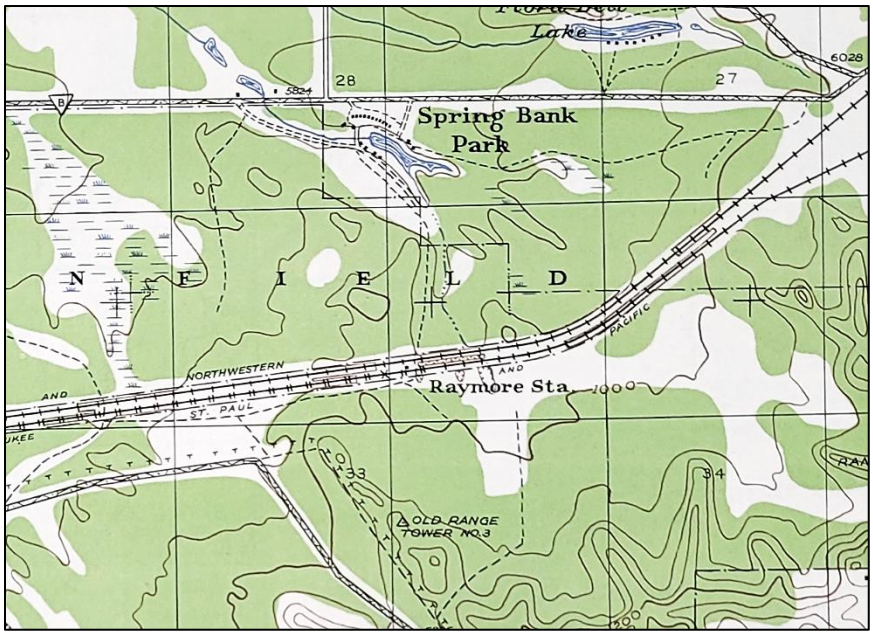
255. Dahlen and Wagner, *2010 Cultural Resource Management*.

256. Dahlen and Wagner, *2010 Cultural Resource Management*, 531.

10 × 10 ft, 6 in. operator's house and several ancillary buildings. These support buildings included a speeder house (primary dimensions: 8 × 7 ft), an oil house (primary dimensions: 8 × 6 ft), a coal house (8 × 16 ft, documented as Drawing 17-507), and an outhouse (4 ft, 6 in. × 4 ft, 6 in., documented as Drawing 17-7).[257] None of these buildings appear to be extant.

Although it no longer encompassed a depot or post office, Raymore Station continued to provided support functions for the CMSTP&P Railroad throughout the twentieth century. Today, it continues to operate as an unmanned support station for the Canadian Pacific Railway.[258]

Figure 67. Raymore Station as designated on a map from 1939. (Image from NARA at College Park. Public domain.)[259]

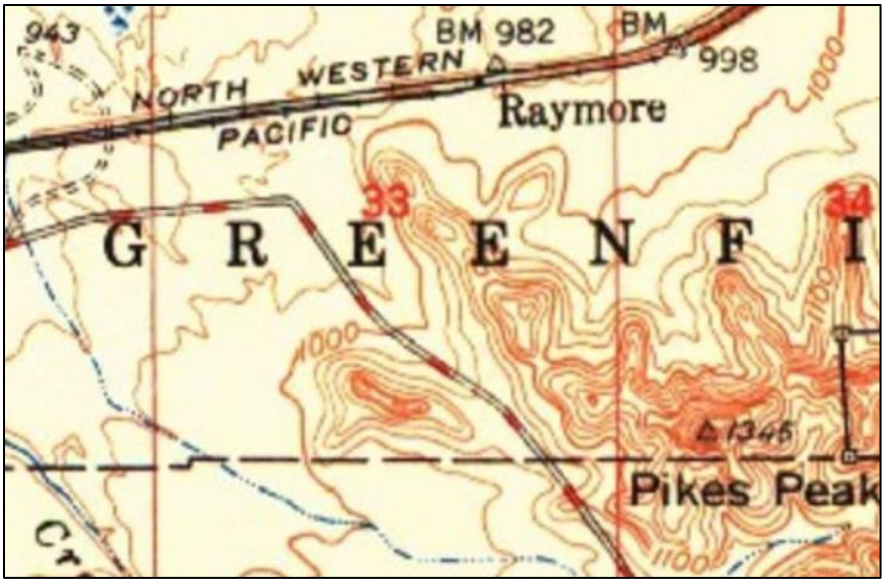


257. "Raymore," July 31, 1919, Interstate Commerce Committee Bureau of Valuation, Valuation Section Wis-3, 115-6, folder: Wisconsin-Structural Notes-Val. Section 3, 1919 (2 of 8), Milwaukee Road Archives, Milwaukee, WI.

258. Dahlen and Wagner, *2010 Cultural Resource Management*, 530.

259. US Army Corps of Engineers, *Terrain Map: Sheet 1. Camp McCoy Grid Zone "C,"* 1939, VI Corps Area Engineers, stack 330, row 22, compartment 27, shelf 2, Records of US Army Continental Commands, RG 394, NARA, College Park, MD.

Figure 68. A 1949 USGS map showing Raymore Station. (Image from National Geologic Map Database. Public domain.)[260]



3.2.3 McCoy Station East (1910–c. 1921; 1942–c. 1977)

For this report, the term "McCoy Station East" refers to a former station site along the CMSTP&P and C&NW tracks in Lafayette Township, Section 36 (Figure 69). When the military reservation was established in 1909, the reservation consisted of two principal areas: Camp Robinson, an artillery training area in Angelo Township, and Camp Emory Upton, a maneuver training ground in Lafayette and Greenfield Townships. The CMSTP&P and C&NW railroads installed infrastructure to support both of these areas. At Camp Emory Upton, the CMSTP&P and C&NW constructed two depots (the CMSTP&P depot on the south side of the tracks and the C&NW depot on the north), platforms, and other ancillary support structures. This site, often notated as "McCoy Station" in historical references, is referred to as "McCoy Station East" in this report to avoid confusion with the other "McCoy Station" built near Camp Robinson, which is referred to as "McCoy Station West" in this historic context (see Section 3.2.5, "McCoy Station West").

260. US Geological Survey, *Tomah Quadrangle*, 1949, 15-minute topographic map, National Geologic Map Database. https://ngmdb.usgs.gov/topoview/viewer/#4/39.98/-100.02.

Figure 69. General location of McCoy Station East. (Map data: Google, 2013. Modified by ERDC-CERL.)

Around 1911, the CMSTP&P Railroad began constructing a permanent depot and loading area to accommodate the arrival and departure of personnel near Camp Emory Upton (Figure 70–Figure 72). The new building, described as "a tasty little depot," was positioned on the south side of the CMSTP&P line, immediately west of a new spur into the maneuver camp (for more on the upper spur sector, see Section 3.2.4).[261]

261. Richards, *History of Monroe County, Wisconsin, Past and Present*, 186.

Figure 70. A 1909 military map with notations (in *blue*) showing the location of the CMSTP&P depot south of the railroad tracks. (Image from Wisconsin Historical Society. Public domain.)[262]

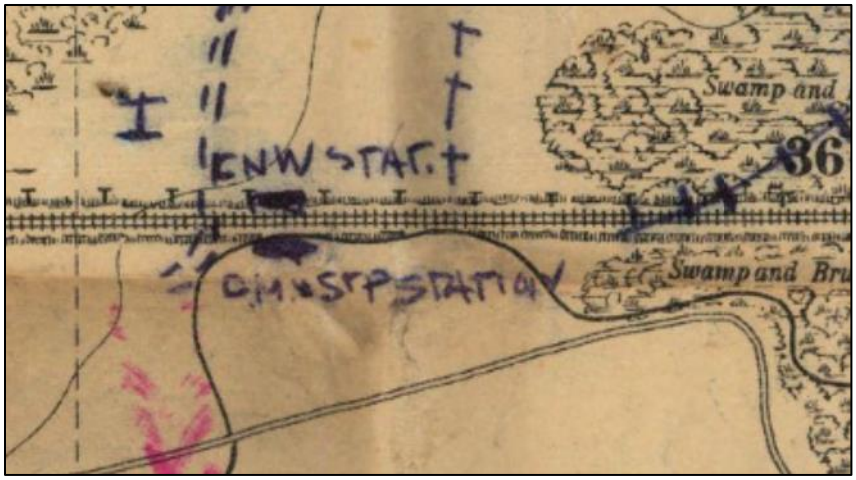
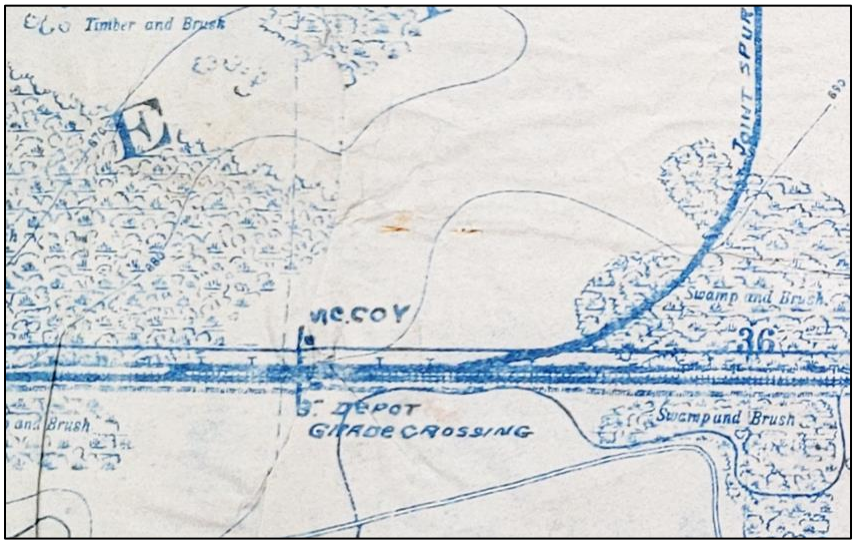


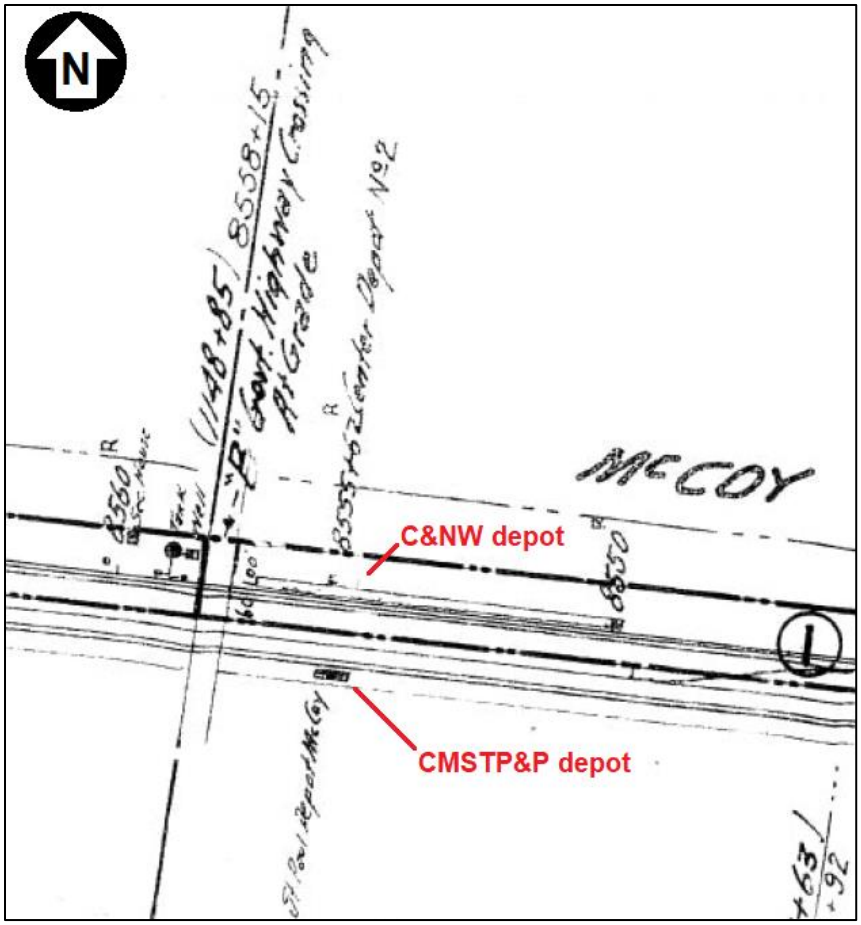
Figure 71. A military map showing the location of McCoy Station in Lafayette Township. (Image from NARA. Public domain.)[263]



262. US Army Corps of Engineers, *US Military Reservation near Sparta*, 1909, map.

263. US Army Corps of Engineers, *US Military Reservation near Sparta, Wisconsin, Surveyed and Drawn under the Direction of Major Thos. H. Rees, Corps of Engineers, US Army; by A. T. Grohmann, C. E.* 1909, blueprint file of map, Camp McCoy, Wisconsin, Fortification Construction Plans and Military Reservation Property Surveys, between c. 1895 and c. 1914, Records of the Office of the Quartermaster General, RG 92. NARA, College Park, MD.

Figure 72. A valuation map from 1917 shows some of the railroad buildings and support structures at McCoy Station East. (Image courtesy of Fort McCoy CRM. Public domain.)[264]

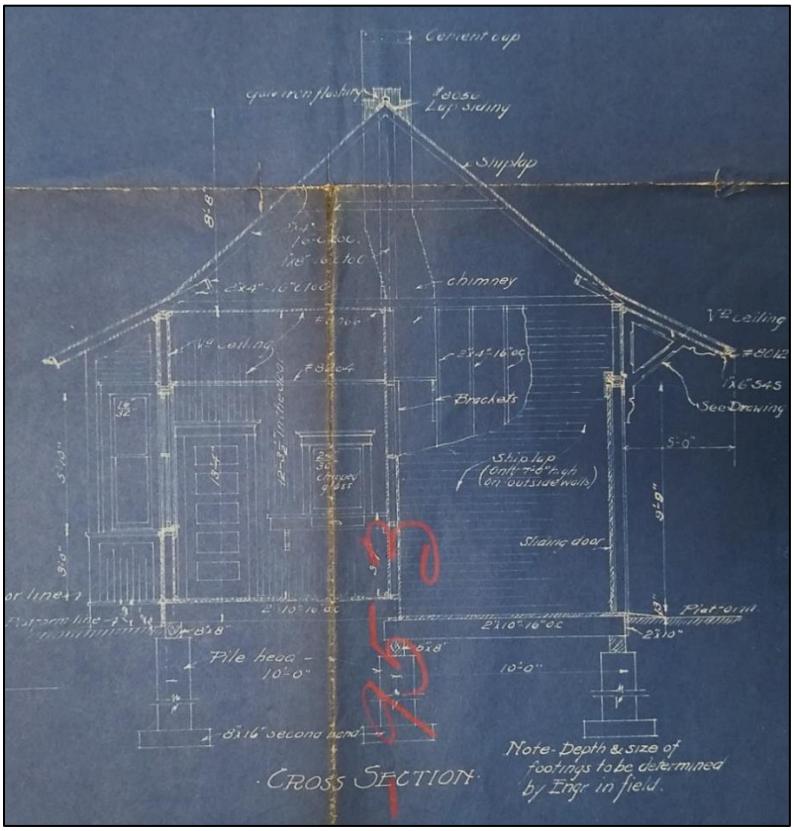


Although there are no known photographs of it, plans showing the intended design of the CMSTP&P depot are still extant. The blueprints indicate that the CMSTP&P depot at McCoy Station East was to be constructed from drawing no. B844, submitted by the company's engineering department on 10 July 1911. These drawings show that the company intended to build a combination depot—a popular, early twentieth century design that contained a waiting area, ticket office, and freight room together in one building. It is important to note that the CMSTP&P depot at McCoy Station East, as actually constructed, may not have followed the drawings exactly; because the depot no longer exists, the blueprints provide the best impression of the kind of building that may have been there.

264. C&NW valuation map, 1917, digital file from Fort McCoy CRM.

The specific plans for this depot are not included in the CMSTP&P's album of standard depot plans.[265] Rather, it appears to be a modified design that borrows features from a library of standardized architectural elements. The final plans show an elongated, one-story frame depot topped with a double-pitched hip roof. The main block of the depot measures 20 × 44 ft and is characterized by an exterior veneer of wainscoting and lap siding. It is principally fenestrated with two-over-two wood sash windows. The roof's wide, overhanging eaves are supported by evenly spaced knee braces (Figure 73–Figure 74).

Figure 73. Cross section of the CMSTP&P passenger depot. (Image reproduced with permission from Loweth et al. 1919.)[266]

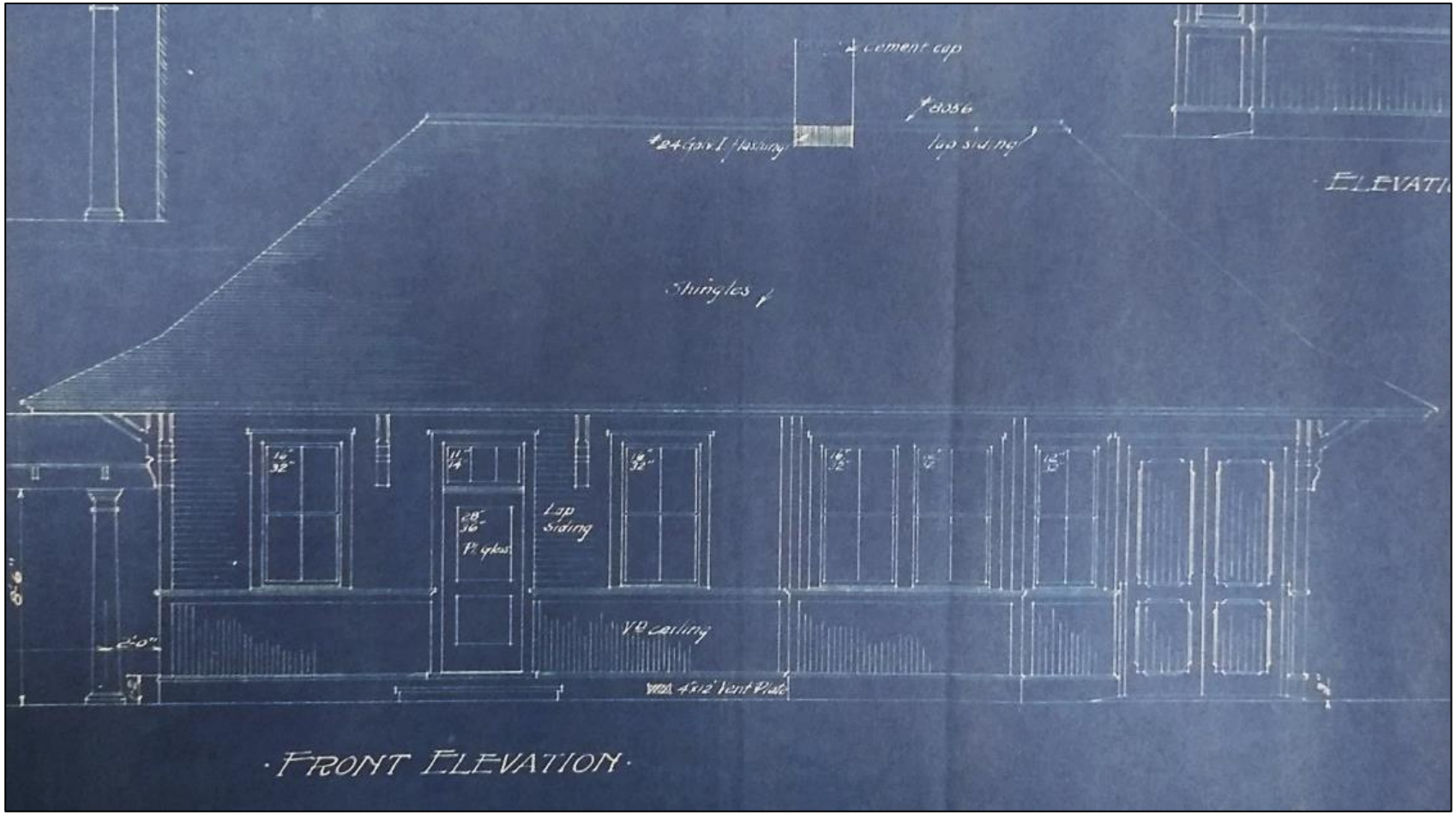


An open pavilion area measuring 10 × 30 ft was adjoined to the side of the building. Doric columns supported a low-pitched gable roof characterized by wide overhanging eaves and exposed rafter tails (Figure 75–Figure 76).

265 C. F. Loweth et al., "Album of Depot Plans Reduced from Detail Drawings on File in Office of Architect," 1919, CMSTP&P RY Engineering Department, Milwaukee Road Archives, Milwaukee, WI, https://content.mpl.org/digital/collection/MilwRoad/id/6167/rec/19.

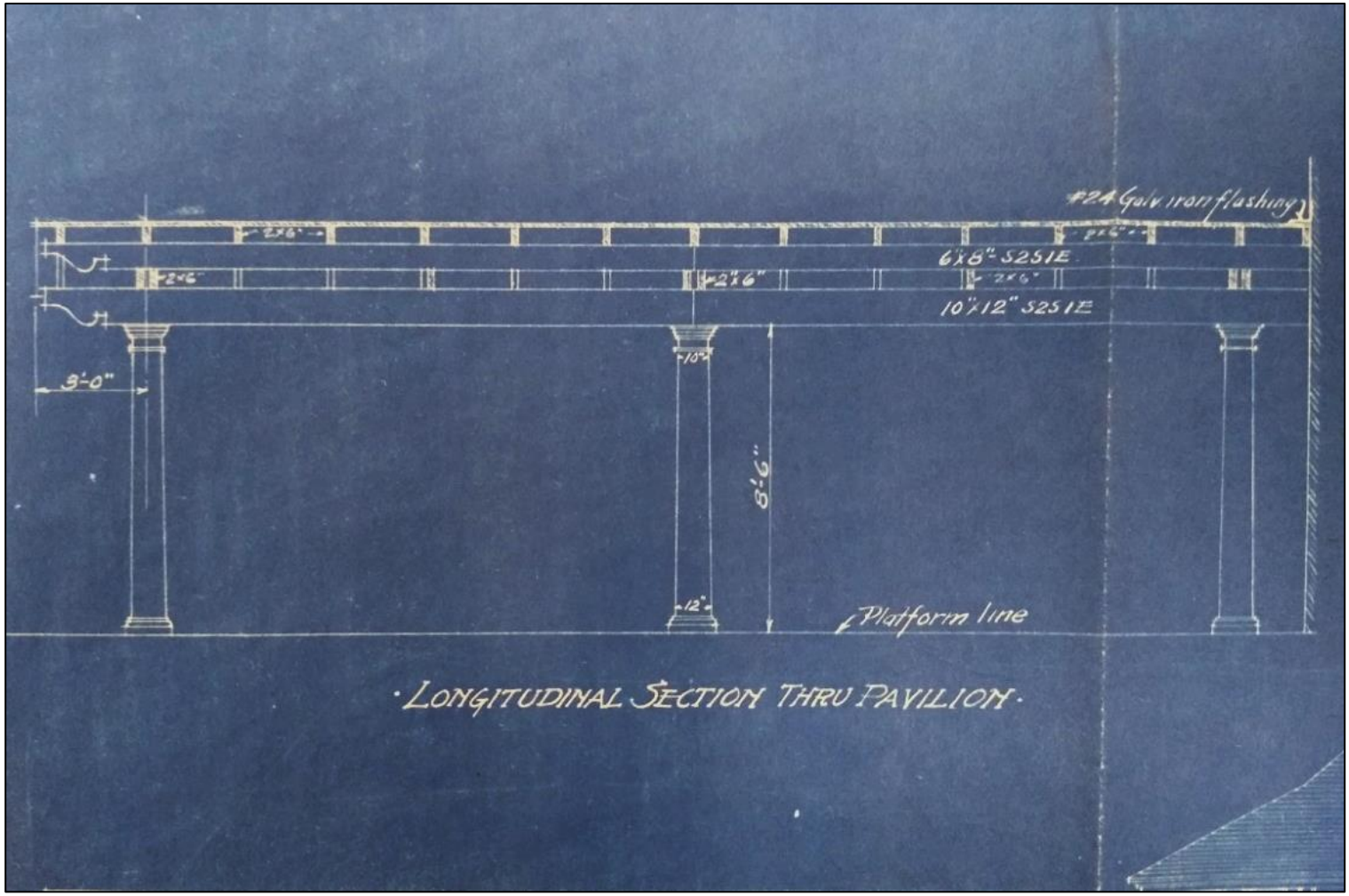
266. "Passenger Depot at McCoy, Wis., Drawing No. B844," June 10, 1911, CMSTP&P Engineering Department, Milwaukee Road Archives, Milwaukee, WI.

Figure 74. Front elevation of the original CMSTP&P passenger depot erected at Camp McCoy in 1911. (Image reproduced with permission from Milwaukee Road Archives.)[267]



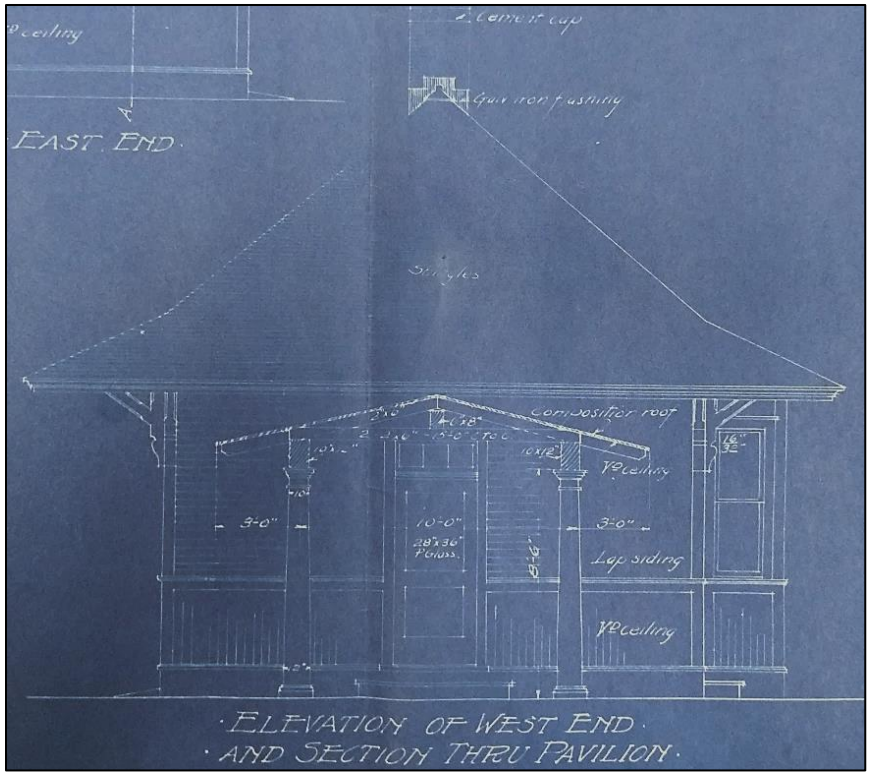
267. "Passenger Depot at McCoy, Wis., Drawing No. B844," June 10, 1911, CMSTP&P Engineering Department, Milwaukee Road Archives, Milwaukee, WI.

Figure 75. Longitudinal elevation of the depot's adjoining open pavilion. (Image reproduced w from Milwaukee Road Archives.)[268]



268. "Passenger Depot at McCoy, Wis., Drawing No. B844," June 10, 1911, CMSTP&P Engineering Department, Milwaukee Road Archives, Milwaukee, WI.

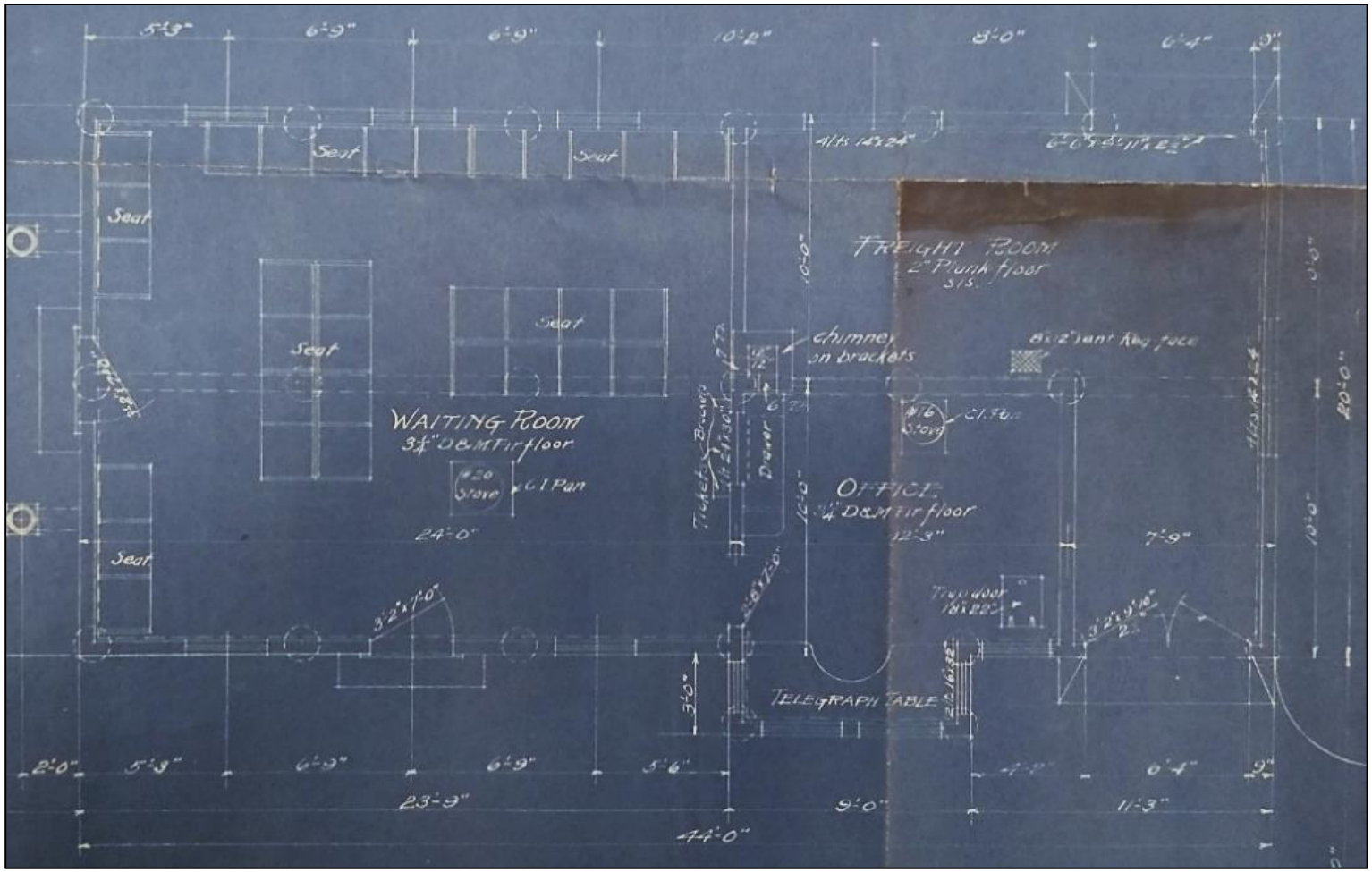
Figure 76. West elevation of the CMSTP&P passenger depot and the adjoining open pavilion. (Image reproduced with permission from Milwaukee Road Archives.)[269]



Half of the interior space accommodated a waiting room, and the other half contained a ticket office and a freight room (Figure 77). The office area included a rectangular bay window that afforded the operator with a clear line of site down the east and west sides of the tracks.

269. "Passenger Depot at McCoy, Wis., Drawing No. B844," June 10, 1911, CMSTP&P Engineering Department, Milwaukee Road Archives, Milwaukee, WI.

Figure 77. Floorplan of the CMSTP&P passenger depot. (Image reproduced with permission from Milwaukee Road Archives.)[270]



270. "Passenger Depot at McCoy, Wis., Drawing No. B844," June 10, 1911, CMSTP&P Engineering Department, Milwaukee Road Archives, Milwaukee, WI.

There are no known photographs or drawings of the C&NW depot on the north side of McCoy Station East. Following precedent, the company likely constructed this depot from standardized plans or developed a modified plan based on a standard design. In the early twentieth century, combination depots (containing passenger waiting areas and freight storage under one roof) were popular, and the C&NW generally employed three standard designs when erecting such depots (identified as "Number One," "Number Two," and "Number Three"). "Number One" depots were the largest facilities, occupying a footprint of 20 × 90 ft and containing men's and women's waiting areas, an office, and a freight room. "Number Two" facilities had dimensions of 20 × 72 ft and contained a common waiting room, an office, and freight area. "Number One" facilities were the smallest of the standardized plans, occupying a space of 16 × 40 ft and encompassing a smaller waiting area, office, and freight room.

An early valuation map depicting assets within the C&NW right-of-way shows the C&NW depot and its accompanying support structures. A notation beside the depot reads "Depot No. 2," which may signify a "Number Two" depot plan or it may be a reference to the fact that it was the second depot the C&NW erected on the installation (the other depot being located at McCoy Station West, see Section 3.2.5).

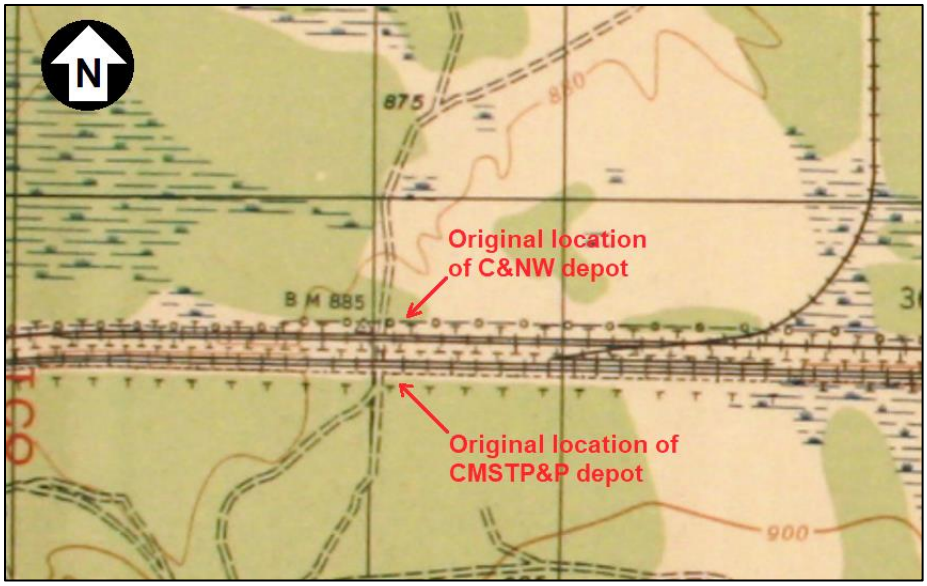
In addition to a depot, the C&NW constructed a platform, water tank, and a section house on the north side of the tracks. Like the depot, these support structures were likely constructed around 1911, when the C&NW completed the accompanying tracks.

It is not clear how long this early railroad infrastructure at McCoy Station East remained in use. Once the United States entered WWI and the installation became a training ground for the war effort, a sizable cantonment was constructed at Camp Robinson (adjacent to McCoy Station West). This cantonment, which in later literature is often referenced as "Old Camp McCoy," appears to have remained the most developed area on the installation until WWII. In the 1920s, Old Camp McCoy was home to the CMTC, and in the 1930s, it became a CCC camp.[271] Since most of the installment's activity appears to have taken place in this area during the 1920s and 1930s, McCoy Station West may have been the main loading

271. "The Foundation: Robert Bruce McCoy Brings a Vision to Life," *Fort McCoy Triad*, January 1, 1999, 90th Anniversary Commemorative Edition, 9–10.

and unloading station for personnel and materiel, perhaps overshadowing the role of McCoy Station East in the interwar years. There is even a possibility that the CMSTP&P and C&NW depots at McCoy Station East had been dismantled by the 1930s; a topographic map from 1933 does not depict any buildings in the vicinity of McCoy Station East (Figure 78). The same map does depict the CMSTP&P and C&NW depots at McCoy Station West (Figure 79); the C&NW side of the tracks had been removed at an unspecified date (Figure 80).

Figure 78. This 1933 topographic map shows no buildings in the vicinity of McCoy Station East. (Image from Monroe County Local History Room. Public domain.)[272]



272. US Army Corps of Engineers, *Wisconsin Monroe County Camp McCoy Grid Zone "C,"* 1933, map, Monroe County Local History Room, Sparta, WI.

Figure 79. This 1933 topographic map does show depot buildings at McCoy Station West. (Image from Monroe County Local History Room. Public domain.)[273]

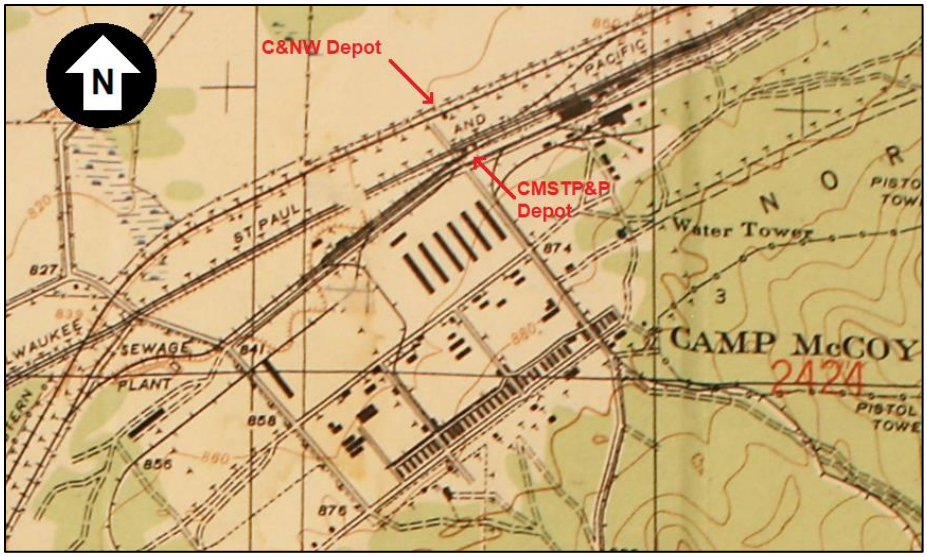
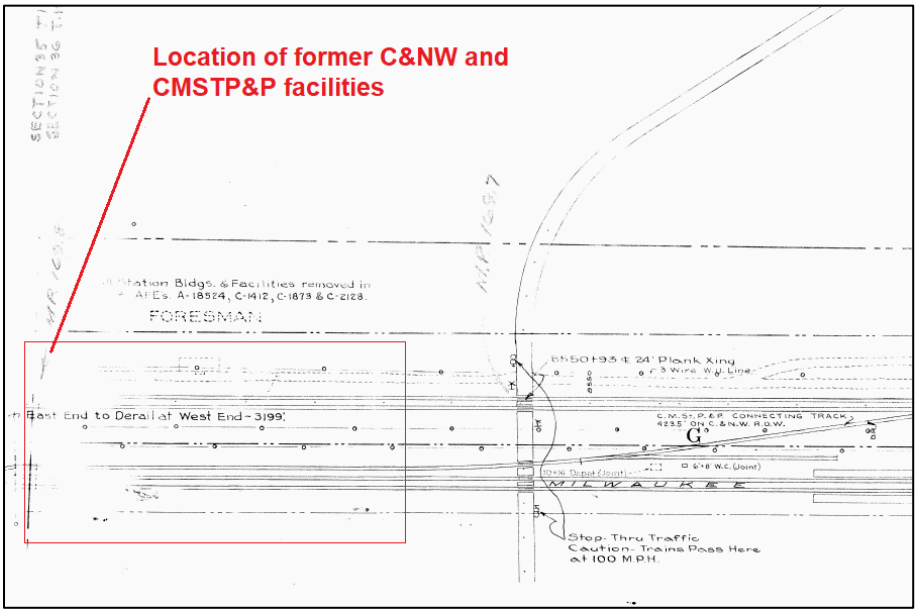


Figure 80. A CMSTP&P valuation map from the 1940s shows the location of former facilities at McCoy Station East. (Image courtesy of Fort McCoy CRM. Public domain.)[274]



Postal operations may offer a clue about when activity ended at McCoy Station East. When Raymore Station moved from Greenfield Township, Section 31, to Section 33 around 1910, the Bacon Post Office operating at that location likely moved directly to McCoy Station East (Figure 81). A

273. US Army Corps of Engineers, *Wisconsin Monroe County Camp McCoy Grid Zone "C."*

274. Camp McCoy station valuation map, revised August 9, 1944, digital file from Fort McCoy CRM.

record of Bacon Post Office in a postal history handbook states that this office closed in 1921.[275] If Bacon Post Office was still associated with McCoy Station East at that time, the date of its closure may correspond with the termination of the original railroad facilities at McCoy Station East too.

Figure 81. Bacon Post Office operated at McCoy Station East in the 1910s. (Image from National Geologic Map Database. Public domain.)[276]

After a period of inactivity at McCoy Station East, the CMSTP&P and C&NW created new railroad facilities in this location during WWII. This effort occurred because Camp McCoy constructed a new cantonment north of the former site of Camp Emory Upton in 1942. In May 1942, as the new cantonment was under construction, the CMSTP&P and C&NW completed a rudimentary 10 × 16 ft depot on the site.[277] However, after the new cantonment opened, the main stop along the CMSTP&P and C&NW was still located at McCoy Station West. Realizing there was a need for improved railroad facilities closer to the new cantonment, the CMSTP&P and C&NW opened a larger, jointly operated depot at McCoy Station East in June 1943 and moved the 10 × 16 ft depot to Rockland, Wisconsin, in October 1943.[278] The new station consisted of a 40 × 100 ft frame depot

275. Frank Moertl, *Wisconsin Post Office Handbook,* 3rd ed. (Hartland, WI: Wisconsin Postal History Society, 1999), 7.

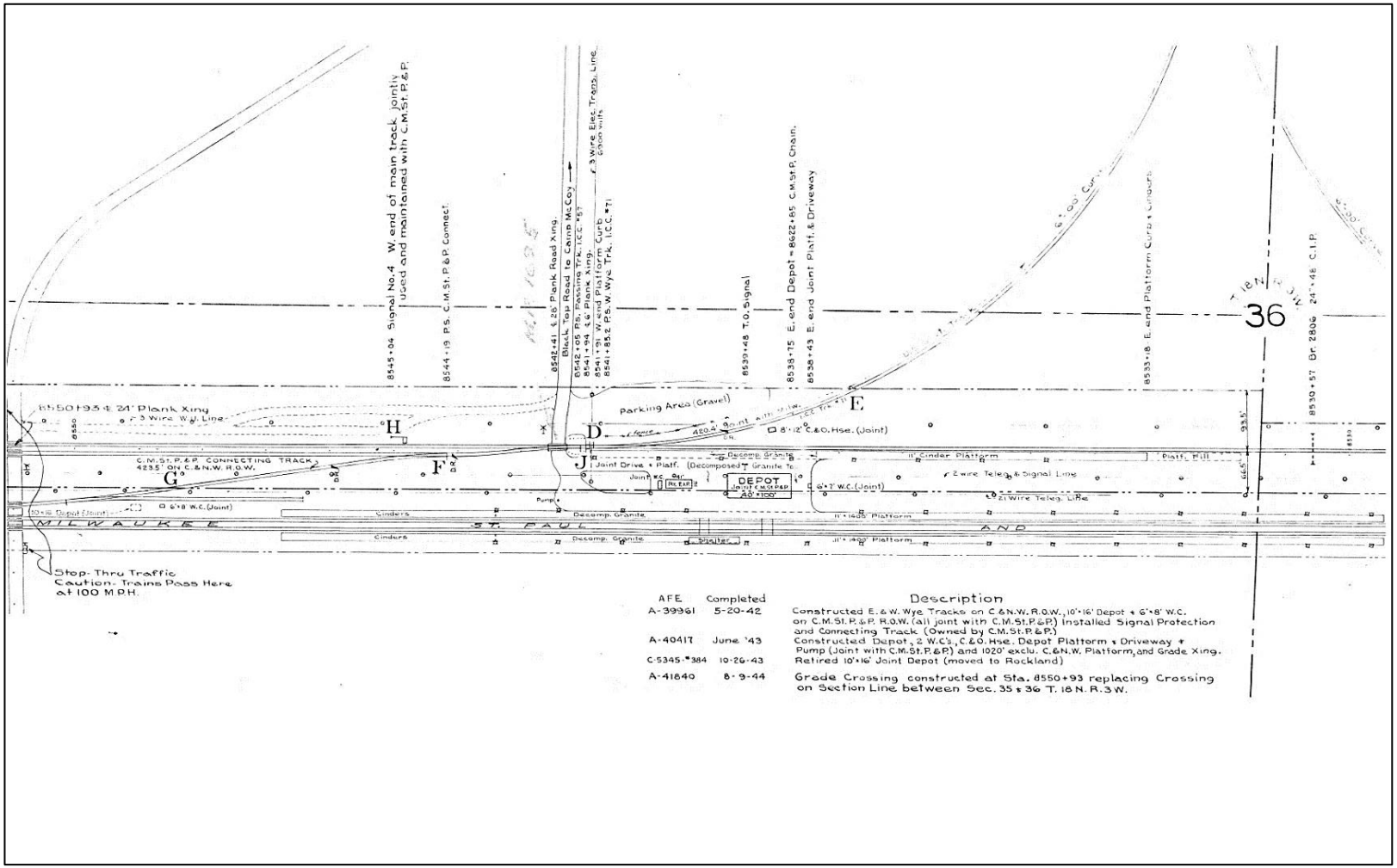
276. US Geological Survey, *Tomah Quadrangle*, 1916.

277. Camp McCoy station valuation map, revised August 9, 1944, digital file from Fort McCoy CRM.

278. "New Camp McCoy Railroad Station Expected to Relieve Traffic Jams," *La Crosse Tribune*, March 04, 1943; Camp McCoy station valuation map, 1944.

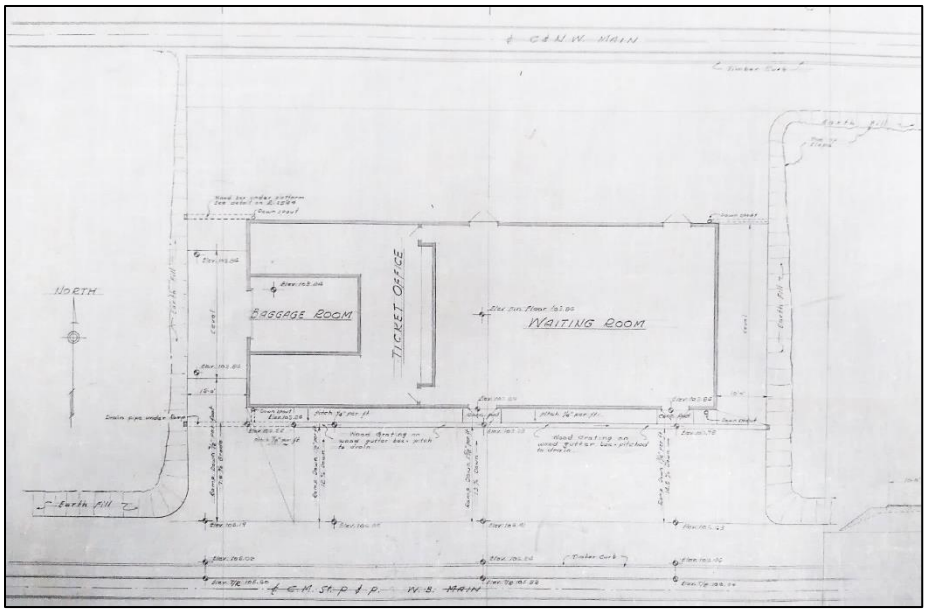
(constructed in a style that complimented the mobilization buildings at the new cantonment), two water closets, an 8 × 12 ft coal and oil house, platforms, and a 16 × 41 ft railroad express building, which was likely used as a place from which to ship and receive items by rail (Figure 82–Figure 84).

Figure 82. McCoy Station East during WWII. (Image courtesy of Fort McCoy CRM. Public domain.)[279]



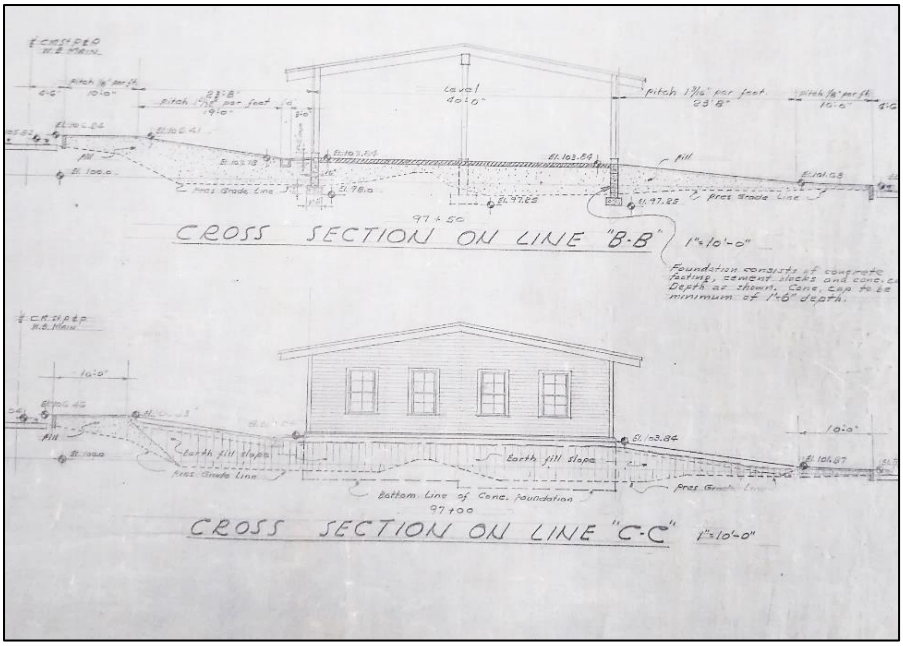
279. Camp McCoy station valuation map, revised August 9, 1944, digital file from Fort McCoy CRM.

Figure 83. Floor plan of the new passenger depot erected at Camp McCoy in 1943. (Image from reproduced with permission from Milwaukee Road Archives.)[280]



280. "East Camp McCoy, Wis., New Passenger Depot Layout of Platform Ramps. Drawing No. B-5454," December 10, 1942, CMSTP&P Bridge and Building Department, Milwaukee Road Archives, Milwaukee, WI.

Figure 84. Cross section and side elevation of the passenger depot erected at Camp McCoy in 1943. (Image reproduced with permission from Milwaukee Road Archives.)[281]



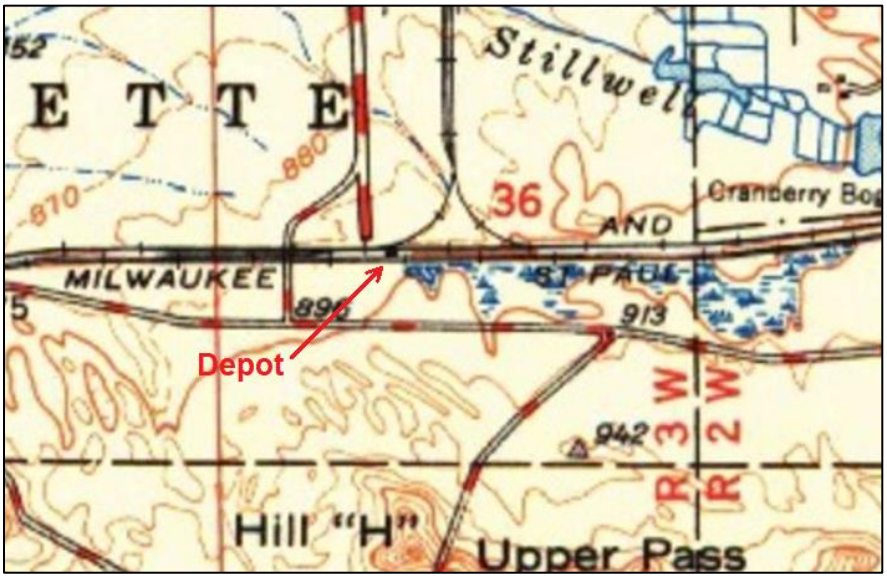
After WWII, it is likely that McCoy Station East represented the only railroad station along the mainline of the C&NW and CMSTP&P. With most activity occurring in the new cantonment area, McCoy Station West was not as necessary as it had been in the 1910s, 1920s, and 1930s. After the war, maps and aerial photography continue to show a depot at the site of McCoy Station East in 1946, 1949, and 1958 (Figure 85–Figure 87). CMSTP&P station earnings records, available through 1977, show that the company continued to record freight charges at its Camp McCoy station through 1977.[282] Although freight revenue is documented through 1977, aerial photographs indicate that the 1943 depot at McCoy Station East had been demolished by 1976 (Figure 88).

281. "East Camp McCoy, Wis., New Passenger Depot Layout of Platform Ramps. Drawing No. B-5454."

282. "Chicago, Milwaukee, St. Paul and Pacific Railroad Company, Station Data, Section 2: 1977, 1976, 1975," 11, Milwaukee Road Archive, Milwaukee, WI, https://www.milwaukeeroadarchives.com/Revenues/RevenueReports197719761975.pdf.

Figure 85. A 1946 aerial depicting the depot and other railroad facilities at McCoy Station East. (Image from USGS Earth Explorer. Public domain.)[283]

Figure 86. A 1949 USGS map showing the depot at McCoy Station East. (Image from National Geologic Map Database. Public domain.)[284]



283. USGS Earth Explorer (Image AR1CX0000040141, 1946).

284. US Geological Survey, *Tomah Quadrangle*, 1949.

Figure 87. A 1958 aerial depicting the depot and other railroad facilities at McCoy Station East. (Image from USGS Earth Explorer. Public domain.)[285]

Figure 88. A 1976 aerial shows that the 1943 depot at McCoy Station East had been demolished. (Image from USGS Earth Explorer. Public domain.)[286]

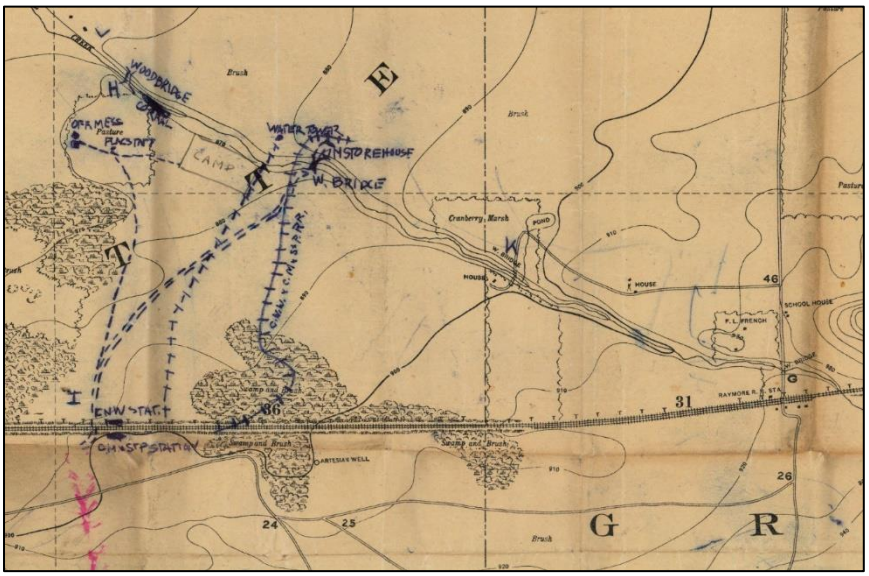
285. USGS Earth Explorer (Image ARA001610101030, 1958).

286. USGS Earth Explorer (Image AR1VDZB00040020, 1976).

3.2.4 Upper spur sector, Lafayette Township (1910–present)

In 1909, the CMSTP&P began building a side line "for unloading purposes near the artillery camps," and plans were in the works to run a spur line into the maneuver camp grounds, complete with "a large amount of side tracks so that troop trains could be handily unloaded."[287] An early iteration of this spur route is depicted with hand-drawn notations on a 1909 military survey map, which shows the feature diverting north of the main line in Section 36 of Lafayette Township. The map depicts the spur terminating in Section 25 in the vicinity of Camp Emory Upton. The notations, which likely date to around 1910, also indicate that the CMSTP&P and C&NW were to be joint operators of the spur (Figure 89).

Figure 89. Excerpt of 1909 military map depicting the CMSTP&P railroad spur and Raymore Station. (Image from Wisconsin Historical Society. Public domain.)[288]



The C&NW and CMSTP&P completed a more detailed map of the proposed spur on 3 June 1910, and on 31 July 1910, the companies received a license to construct the spur.[289] The proposal map from June 1910 and later maps demonstrate that the finished spur line branched off the recently completed C&NW line. The spur diverged from the C&NW line in a sweeping quarter arc, then proceeded directly north for approximately 1 mile before making a final quarter arc to the east. At its termination, the

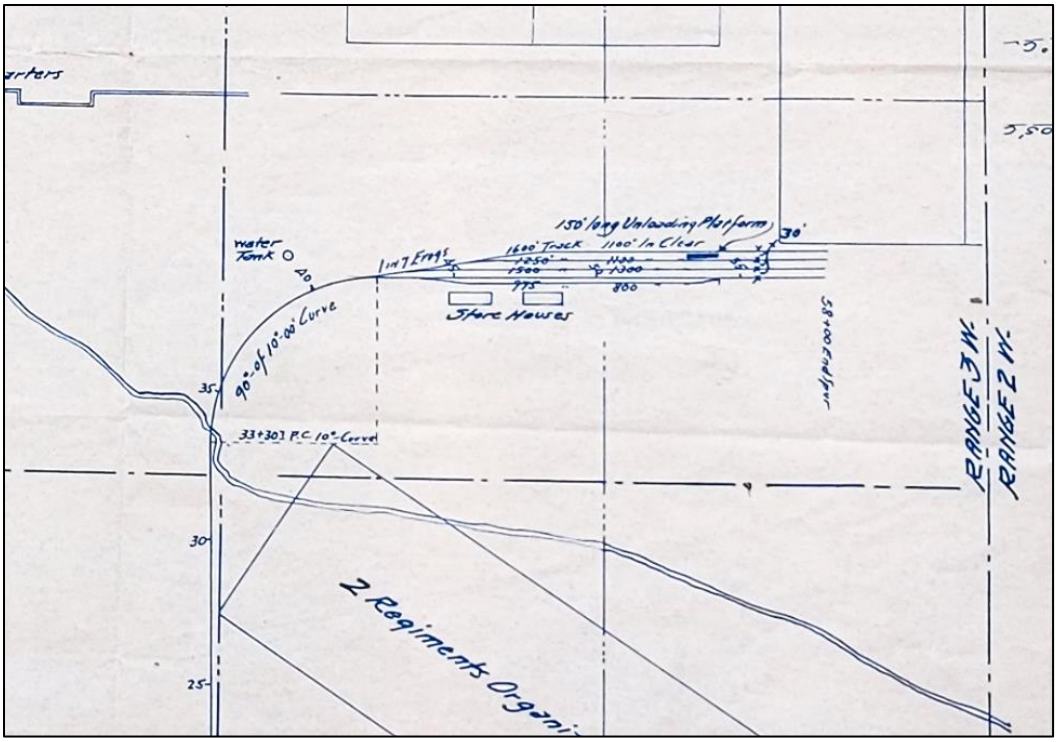
287. Richards, *A History of Monroe County, Wisconsin, Past and Present*, 179.

288. US Army Corps of Engineers, *US Military Reservation near Sparta*, 1909, map.

289. Office of the Judge Advocate General, *United States Military Reservations,* 468.

spur branched into four stub tracks and one sidetrack. At least one 120 × 40 ft government warehouse was situated to the south of the sidetrack, and a platform paralleled the southernmost track.[290] The June 1910 map of the proposed spur area suggests that planners originally envisioned two warehouses; however, valuation maps made by the C&NW and CMSTP&P in the late 1910s only show one warehouse. This may be the 120 × 40 ft galvanized iron warehouse that crews moved to the old Camp Robinson area in 1928 (Figure 90–Figure 94).

Figure 90. A map of the proposed spur at Camp Emory Upton, created June 1910. (Image from NARA. Public domain.)[291]



290. C&NW valuation map, 1917, digital file from Fort McCoy CRM.

291. Milwaukee, Sparta, and Northwestern Railroad (C&NW) and CMSTP&P Railroad, *Proposed Joint Spur to Artillery Range*, 1910, blueprint file of map, Camp McCoy, Wisconsin. Fortification Construction Plans and Military Reservation Property Surveys, between c. 1895 and c. 1914, Records of the Office of the Quartermaster General, RG 92. NARA, College Park, MD.

Figure 91. A military map of the spur at Camp Emory Upton, c. 1911. (Image from NARA. Public domain.)[292]

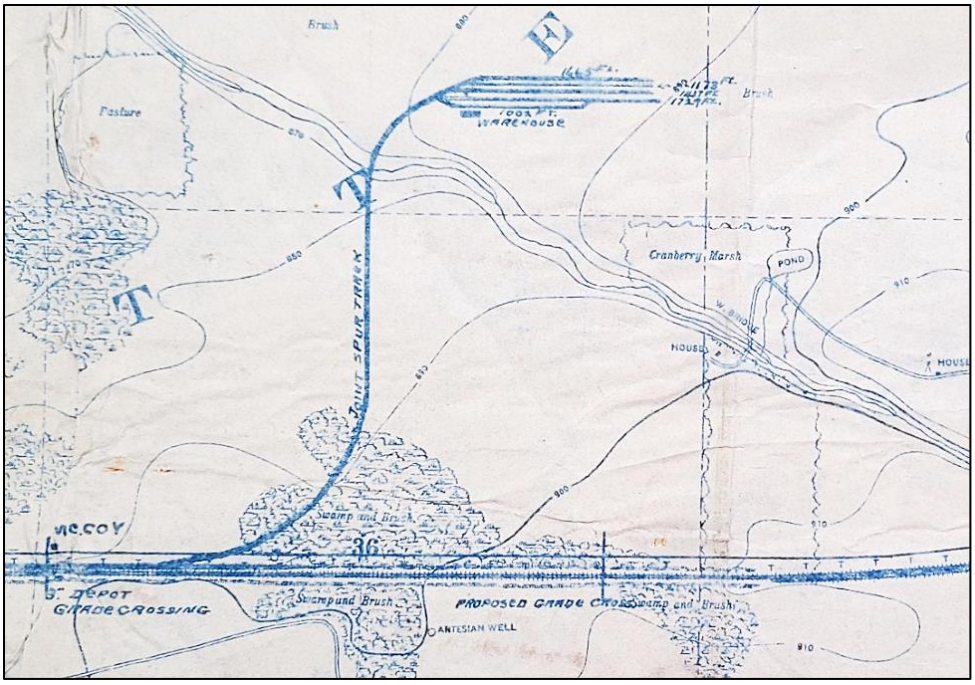
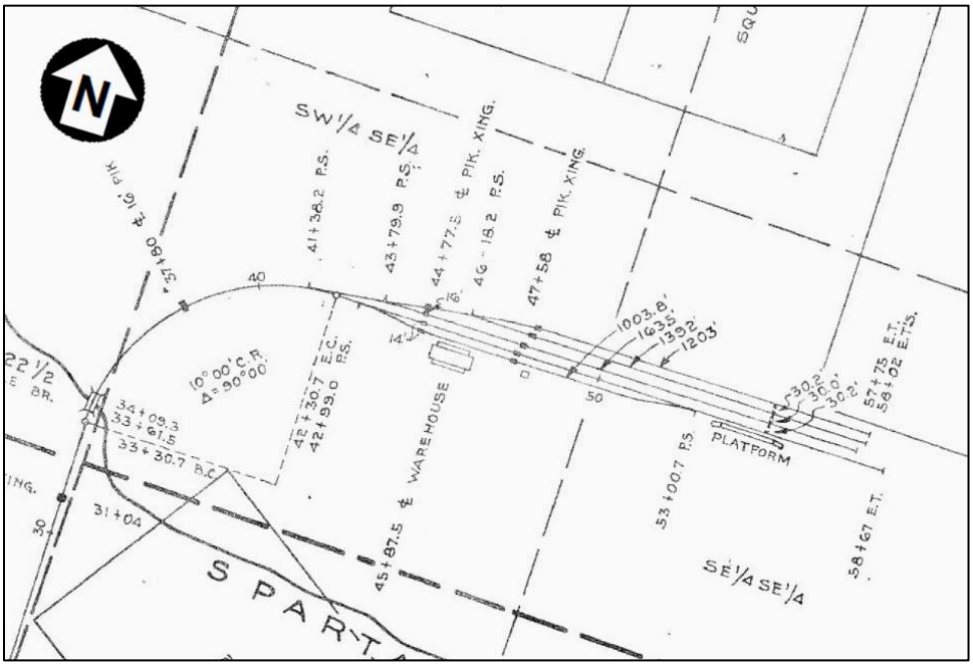


Figure 92. The spur sector at Camp Emory Upton, represented on a CMSTP&P valuation map c. 1920. (Image from Fort McCoy History Center. Public domain.)[293]



292. US Army Corps of Engineers, *US Military Reservation near Sparta, Wisconsin*, 1909, blueprint file of map, Camp McCoy, Plans and Surveys, RG 92, NARA, College Park, MD.

293. CMSTP&P valuation map, c. 1920, digital file from Fort McCoy CRM.

Figure 93. The spur sector at Camp Emory Upton, represented on a C&NW valuation map c. 1920. (Image from Fort McCoy History Center. Public domain.)[294]

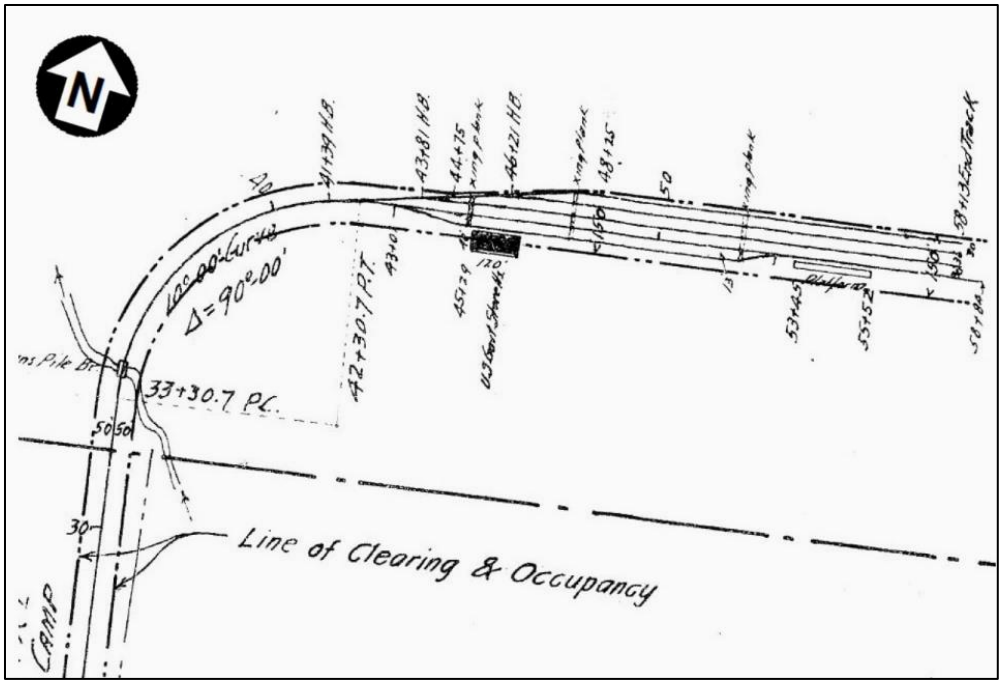


Figure 94. A 120 × 40 ft galvanized iron warehouse constructed at Camp Emory Upton, c. 1910. Image taken after its relocation to Camp Robinson in 1928. (Image from Fort McCoy CRM. Public domain.)[295]

294. CMSTP&P valuation map, c. 1920, digital file from Fort McCoy CRM.

295. "Building No. 7261," Fort McCoy Real Property record, digital file from Fort McCoy CRM.

From the mid-1920s through the 1930s, most of Camp McCoy's built environment was located on the former site of Camp Robinson. This area accommodated a variety of operations after WWI. In addition to hosting Army regulars and National Guard troops for annual summer training, the reservation contained a CMTC and a CCC camp.[296] Because this area seems to have been the center of activity on the installation throughout the 1920s and 1930s, the roles of McCoy Station East and the upper spur sector likely waned in the interwar years. In 1936, crews removed the tracks from the upper spur (Figure 95).[297] The roadbed itself remained, the lower portion of the spur became a template for a new spur leading to Camp McCoy's WWII cantonment.

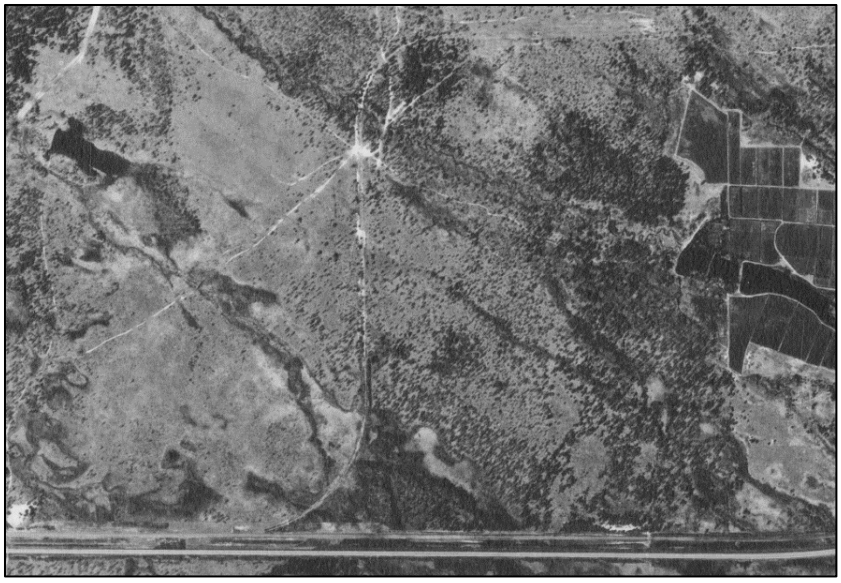
A 2016 archaeological investigation of the 1910-era spurs encountered evidence of railroad ties in this sector (47M00847); however, the site was recommended as not eligible for listing in the NRHP because little cultural remains were present at the site besides the ties.[298]

296. "The Foundation: Robert Bruce McCoy Brings a Vision to Life," *Fort McCoy Triad*, January 1, 1999, 90th Anniversary Commemorative Edition, 9–10.

297. Camp McCoy station valuation map, revised August 9, 1944, digital file from Fort McCoy CRM.

298. Alexander D. Woods et al. *Evaluation of 31 Archaeological Sites at Fort McCoy, Wisconsin,* Vol. 2, Report of Investigations (ROI) 65 (Fort McCoy, 2016), 338–39.

Figure 95. This 1939 aerial shows the roadbed that remained after crews removed tracks at the upper spur. (Image from Wisconsin Historic Aerial Imagery Finder. Public domain.)[299]



Construction of the new spur occurred around 1942. Thornton Construction Company (later AGT Associates) prepared most of the work for the new cantonment's roads and railroads.[300] The final design featured a government-owned trunk that connected to the C&NW and CMSTP&P main lines in the south.[301] Proceeding north, this trunk followed the same path as the old spur line, with two major differences. First, the southern end of the spur contained two quarter-circles forming a Y-shaped connection with the C&NW and CMSTP&P main lines. Second, the main trunk of the new line ran further north than the old spur and branched into multiple spurs on the south-central side of the cantonment. A set of parallel spurs on the west side of the main trunk led to a coal storage area, warehouse sector, and troop boarding point. Here, trains backed into the siding where troops could embark and disembark.[302] Another spur ran north from the main trunk and led to a switch engine house (2163, nonextant). Later, crews constructed a spur that branched off the east side of the main trunk and ran toward the cantonment's station hospital (Figure 96–Figure 98).

299. Monroe County aerial photograph, April 29, 1939, United States Department of Agriculture, roll 6-13. 1:20,000 scale, Wisconsin Historic Aerial Imagery Finder, https://maps.sco.wisc.edu/WHAIFinder/.

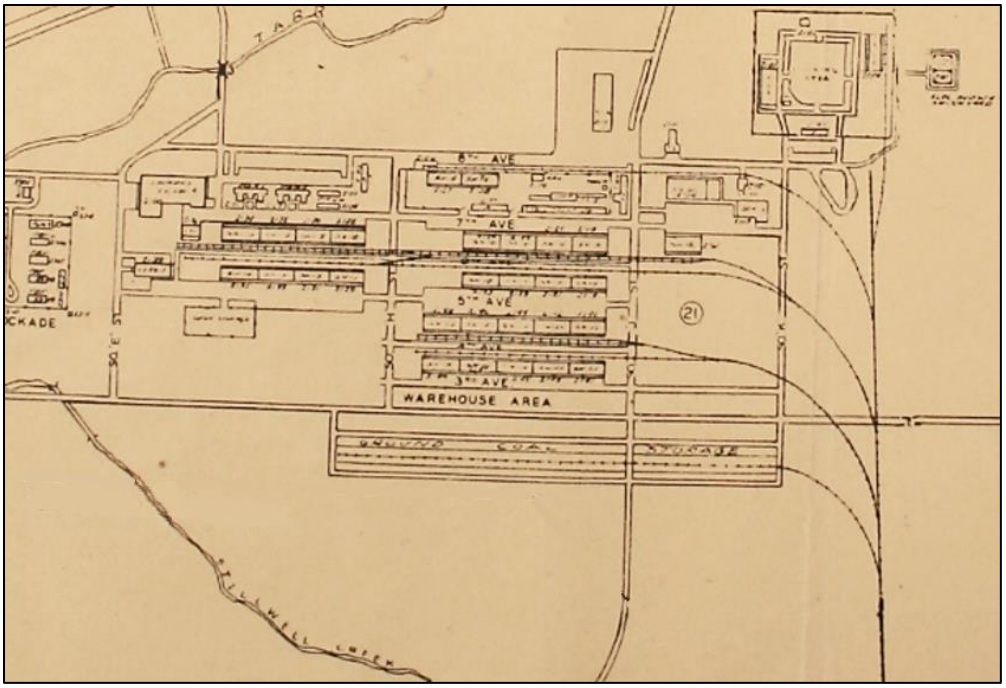
300. Interview with Jim Cote, April 11, 2005, 2–4, folder: Military, Fort McCoy, General, Monroe County Local History Room, Sparta, WI.

301. "Historical Data, Camp McCoy, Wisconsin Post Engineer Office," 87.

302. Cote, interview, 2005, 4.

The trunk itself was equipped with parallel sidetracks for staging and classification use.

Figure 96. A 1942 map of Camp McCoy shows the main trunk line and a series of parallel spurs branching west into the warehouse area. Note the absence of spurs branching east. (Image from Monroe County Local History Room. Public domain.)[303]



303. *Camp McCoy Project*, 1942, Plan 1-L, map, Monroe County Local History Room, Sparta, WI.

Figure 97. A plan of the railroad warehouse area at Camp McCoy's new cantonment. (Image from Fort McCoy. Public domain.)[304]

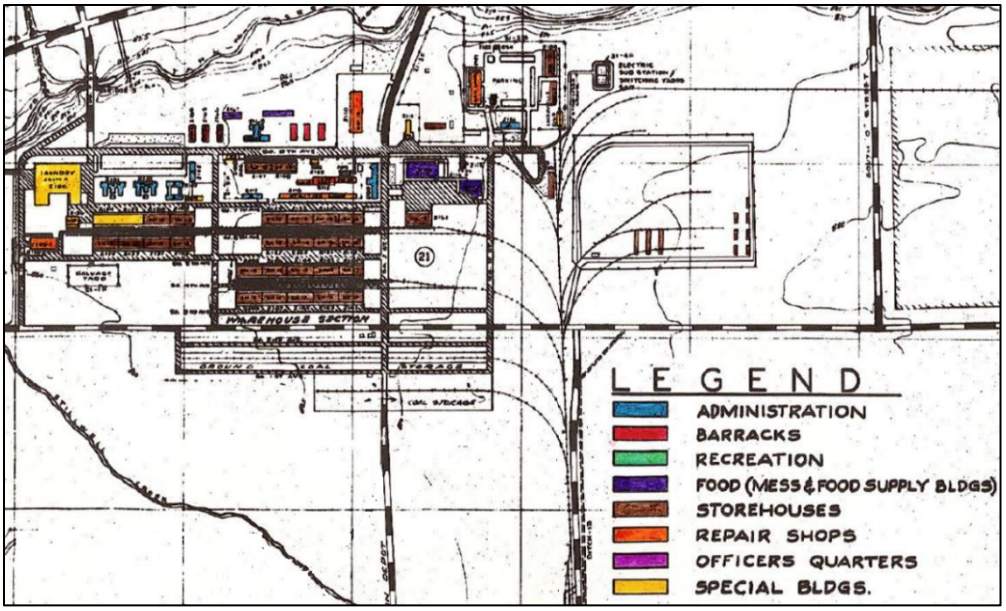
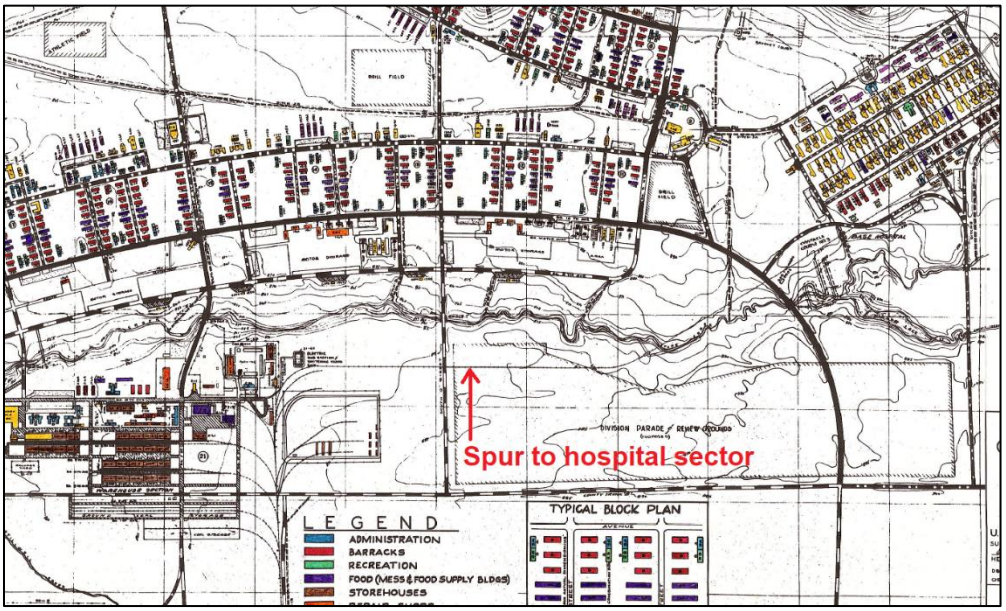


Figure 98. A plan of Camp McCoy's new cantonment showing a line on the upper spur sector branching toward the station hospital. (Image from Fort McCoy. Public domain.)[305]



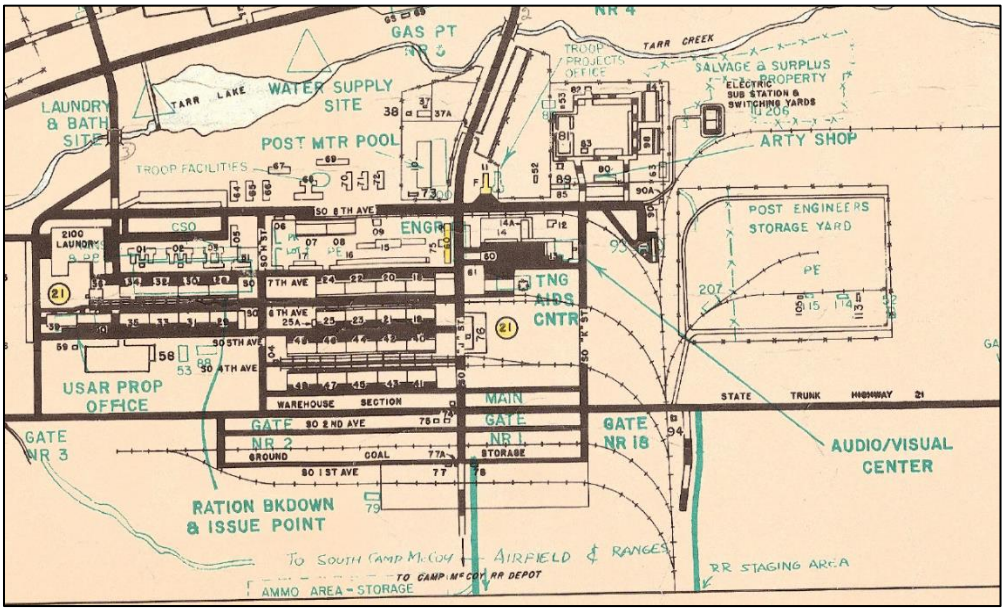
Following WWII, the upper spur sector continued to provide an important connection into the new cantonment area (Figure 99–Figure 100). While it remains the principal railroad access point into Fort McCoy today, there

304. US Engineer Office, *Master Plan: Camp McCoy Wisconsin.*

305. US Engineer Officer, *Master Plan: Camp McCoy Wisconsin*.

are currently fewer spur branches projecting from the main trunk line than originally constructed. One of the first spur tracks removed was Track A. This line, which branched east from the main trunk toward the station hospital area, was eliminated before 1983 (Figure 101).[306] In 1985, Fort McCoy's railroad system received unspecified improvements, likely in the government-owned spur sector.[307] Tracks C and D, which branched east from the main trunk into the post engineer storage yard, were removed in 2002 (Figure 102).[308] The warehouse sector west of the main trunk appears to retain most of its spur lines.

Figure 99. Detail of the warehouse area and the upper spur sector, 1968. (Image from Fort McCoy. Public domain.)[309]



306. US Army Corps of Engineers, *Station Rail Facilities,* 1984.

307. Fort McCoy Archaeology Laboratory, "Fort McCoy Section 110 Survey," (Fort McCoy, WI, 1999–2000), 11.

308. *Camp McCoy*, n.d., hanging map at Fort McCoy History Center, Sparta, WI.

309. US Army, *Camp McCoy, Wisconsin*, 1968 (Fort McCoy, WI: US Army).

Figure 100. The upper spur sector showing a branch line to the station hospital area, 1968. (Image from Fort McCoy. Public domain.)[310]

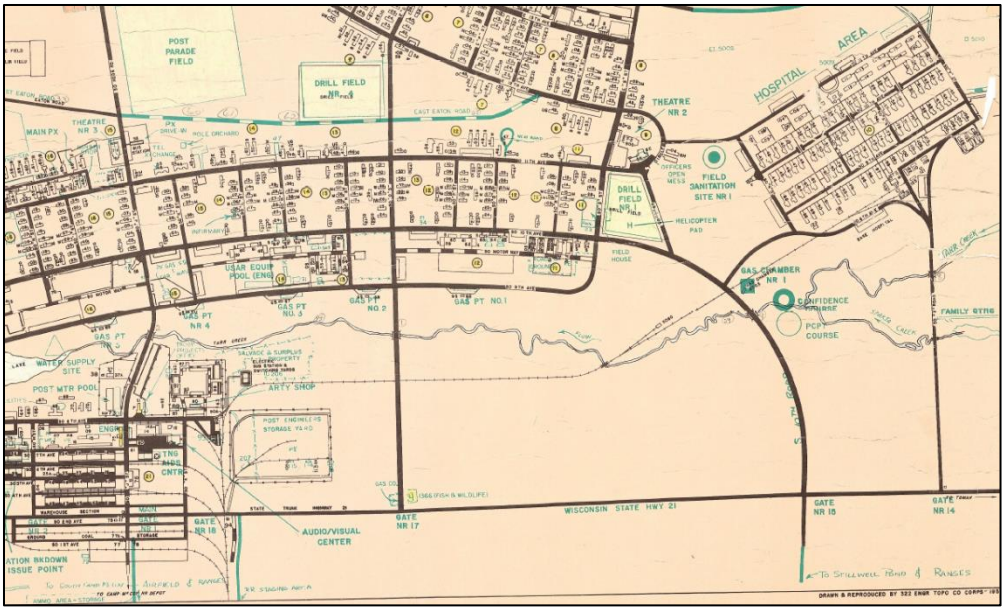
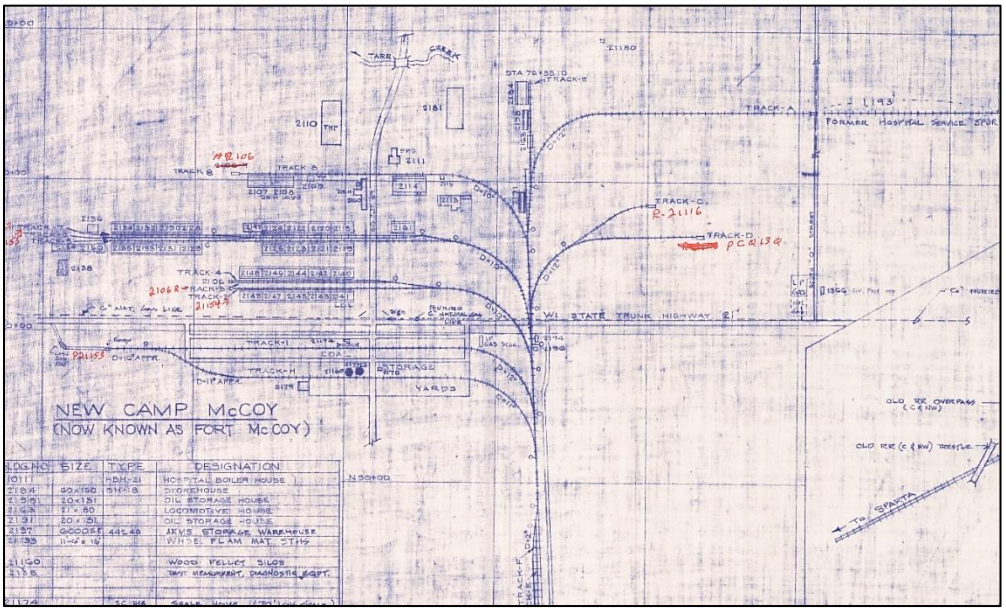


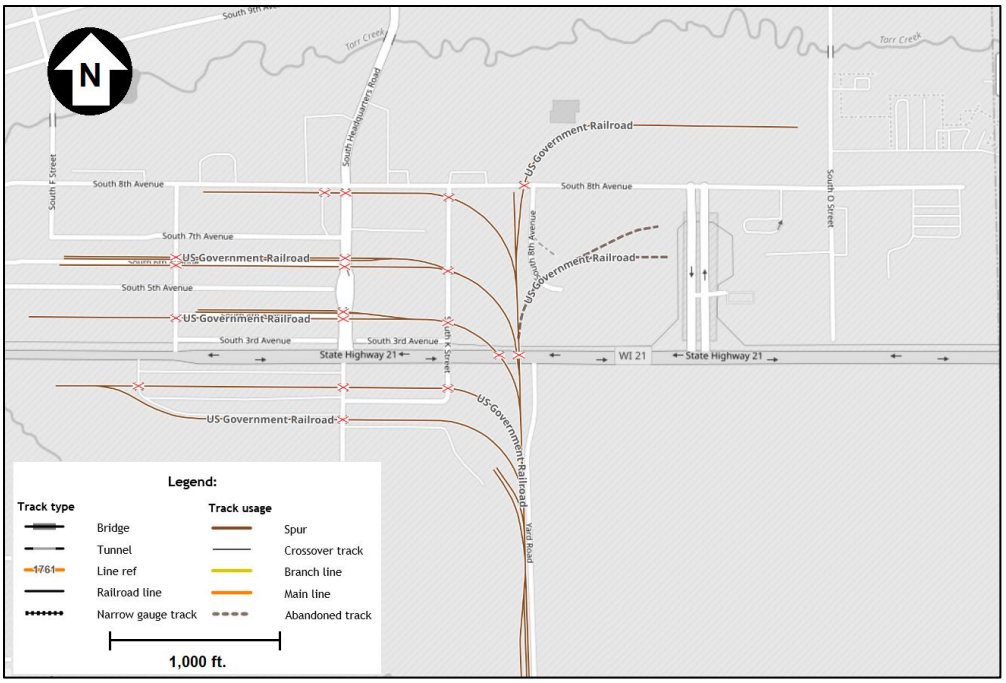
Figure 101. Detail of the warehouse area and the upper spur sector, 1984. (Image from Fort McCoy CRM. Public domain.)[311]



310. US Army, *Camp McCoy, Wisconsin*, 1968.

311. US Army Corps of Engineers, *Station Rail Facilities*, 1984.

Figure 102. Current railroad lines near the warehouse area. Government-owned spur tracks are *solid brown lines*, and the abandoned tracks are represented by *brown-dashed lines*. (OpenRailwayMap. Map data from OpenStreetMap contributors, 2022. Open Database License.)



3.2.5 McCoy Station West (c. 1915–c. 1950)

For this report, the term "McCoy Station West" refers to a former station site along the CMSTP&P and C&NW tracks in Angelo Township, Section 3 (Figure 103). When the military reservation was established in 1909, the reservation consisted of two principal areas: Camp Robinson, an artillery training area in Angelo Township, and Camp Emory Upton, a maneuver training ground in Lafayette and Greenfield Townships. The CMSTP&P and C&NW railroads installed infrastructure to support both of these areas. At Camp Robinson, the CMSTP&P and C&NW constructed two depots (the CMSTP&P depot along the south tracks and the C&NW depot adjacent to the north tracks), platforms, and other support structures. This site is referred to as "McCoy Station West" in this report to avoid confusion with the other "McCoy Station" built near Camp Emory Upton, which is referred to as "McCoy Station East" in this historic context (see Section 3.2.3, "McCoy Station East").

Figure 103. General location of McCoy Station West. (Map data: Google, 2013. Modified by ERDC-CERL.)

The CMSTP&P and C&NW depots, along with other railroad facilities at McCoy Station West, are shown on a C&NW valuation map from 1917. This area of development was located approximately 1 mile northeast of a minor railroad stop known as "Kelvin." A description of Major General Fred D. Grant's visit during a summer encampment in 1909 states that "the General arrived at Colvin [*sic*] station, which was the name given for the stopping place near the artillery camp."[312] This stop was located along the CMSTP&P tracks, perhaps in close proximity to 47Mo920, which has been interpreted as a trash dump for Camp Robinson.[313] A few years later, Kelvin Station relocated approximately 1 mile to the south, near the departure point of the joint CMSTP&P and C&NW spur (see Section 3.2.6). In 1912, the C&NW erected a platform and shelter at the site.[314] This may be the railroad stop referred to in the *La Crosse Tribune's* 1917 article extolling Camp Robinson's transformation "from a little board railroad station set about with a jack pine scrub to one of the most important military nuclei in which Uncle Sam is tirelessly preparing for the grim business of war."[315] Annotations on a 1917 C&NW valuation map state that the shelter at Kelvin had been removed, perhaps

312. Richards, *A History of Monroe County, Past and Present*, 181.

313. Woods et al., *Evaluation of 31 Archaeological Sites at Fort McCoy, Wisconsin*, Vol. I, ROI 65 (Fort McCoy Archaeological Resource Management Series, 2016), 77.

314. C&NW valuation map, c. 1940, digital file from Fort McCoy CRM.

315. "Uncle Sam Teaches Gunners for France at Camp Robinson," July 8, 1917, *La Crosse Tribune*.

indicating that the newer C&NW and CMSTP&P depots at McCoy Station West had become Camp Robinson's primary loading and unloading points (Figure 104–Figure 107).

Figure 104. The stop at Kelvin as depicted in 1909. (Image reproduced with permission from Wisconsin Historical Society.)[316]

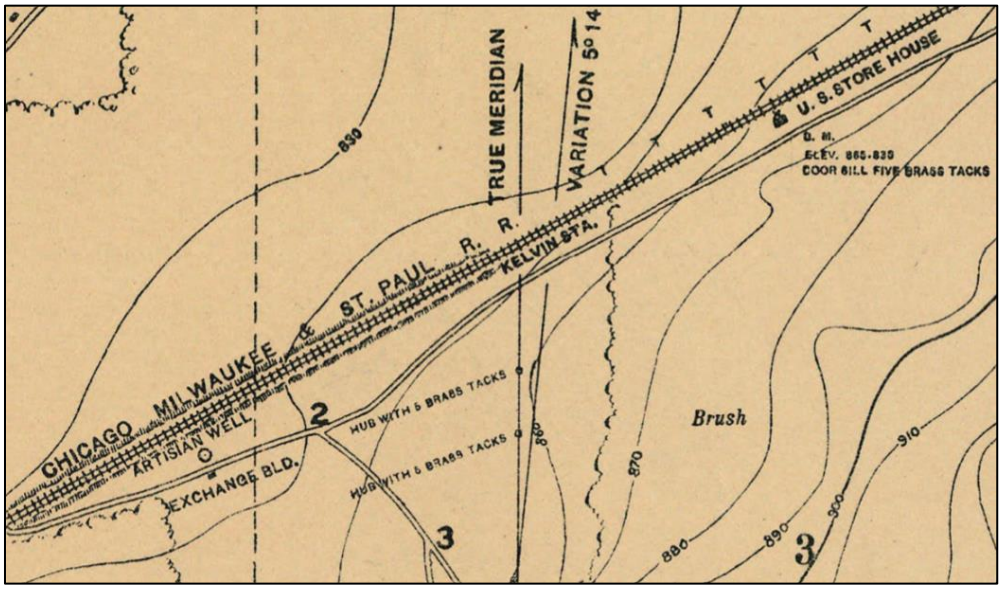


Figure 105. The stop at Kelvin in the 1910s. (Image from National Geologic Map Database. Public domain.)[317]

316. US Army Corps of Engineers. *US Military Reservation near Sparta*, 1909, map.

317. US Geological Survey, *Tomah Quadrangle*, 1916

Figure 106. The location of a former stop known as Kelvin on a map annotated by railroad historian James P. Kaysen. (Image from Wisconsin Historical Society. Public domain.)[318]

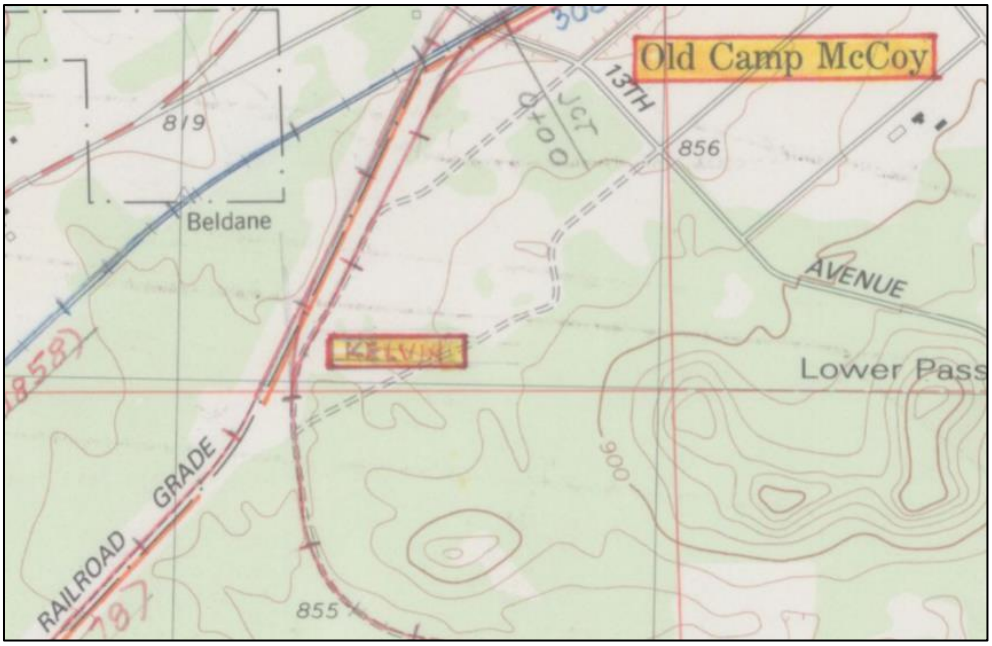
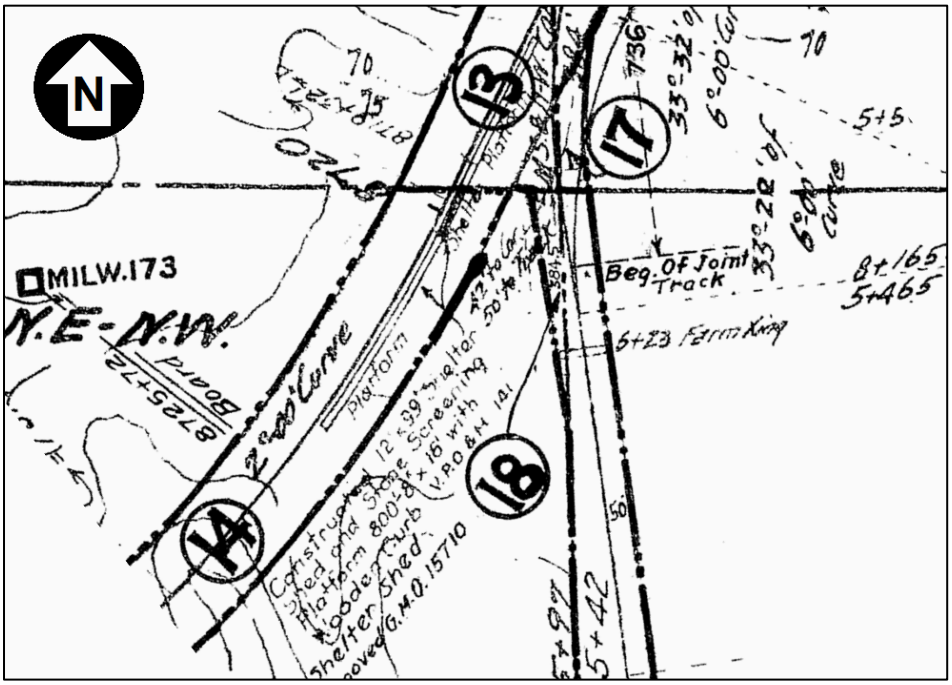


Figure 107. A C&NW valuation map from 1917 shows a platform and shelter around Kelvin Station. (Image from Fort McCoy CRM. Public domain.)

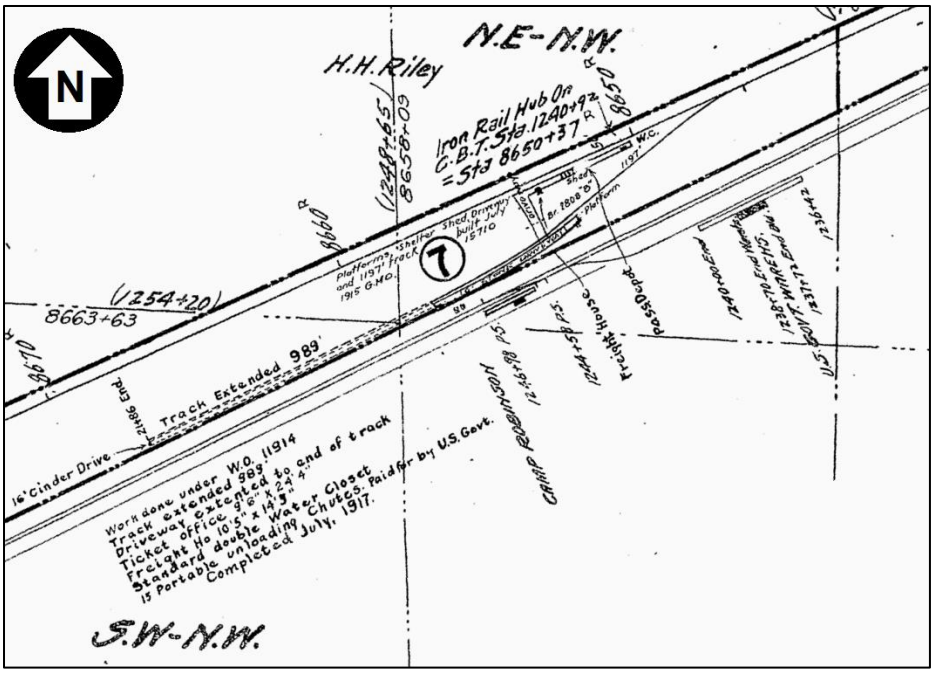


The 1917 valuation map depicts several details on the C&NW side of McCoy Station West, including a ticket office, freight house, platforms,

318. US Geological Survey, *City Rock Quadrangle*, 1983.

shelter shed, and water closet. These were constructed in July 1917 as Camp Robinson was expanding for wartime use (Figure 108). From the mid-1920s through the 1930s, most of Camp McCoy's built environment was located on the former site of Camp Robinson. This area accommodated a variety of operations after WWI. In addition to hosting Army regulars and National Guard troops for annual summer training, the reservation contained a CMTC and a CCC camp.[319] Because most of the installation's activity appears to have occurred in this area in the 1920s and 1930s, McCoy Station West was likely the central loading and unloading point on the railroad for personnel and materiel. Therefore, it would have overshadowed the role of McCoy Station East in the interwar years.

Figure 108. Railroad facilities at McCoy Station West as seen on a C&NW valuation map, 1917. (Image from Fort McCoy CRM. Public domain.)[320]



The layout of railroad facilities at McCoy Station West changed in the late 1920s as the C&NW removed their original passenger depot and put up a depot near Foresman Road, approximately 980 ft to the southwest. Maps of the area from 1929 and 1931 show another depot and freight house at the intersection of the CMSTP&P line and Foresman Road, suggesting that the CMSTP&P also installed these features in the late 1920s (Figure 109–Figure 114). The kind of depot constructed by the CMSTP&P is unknown,

319. "The Foundation: Robert Bruce McCoy Brings a Vision to Life," *Fort McCoy Triad*, January 1, 1999, 90th Anniversary Commemorative Edition. 9–10.

320. USGS Earth Explorer, (Image AR1CX0000040141, 1946).

but the C&NW likely constructed a variation of a standard no. 2 depot, as suggested in a WWII-era photograph (Figure 110).

Figure 109. A C&NW valuation map, c. 1940, showing a new depot at McCoy Station West. (Image from Flora Public Library. Public domain.)[321]

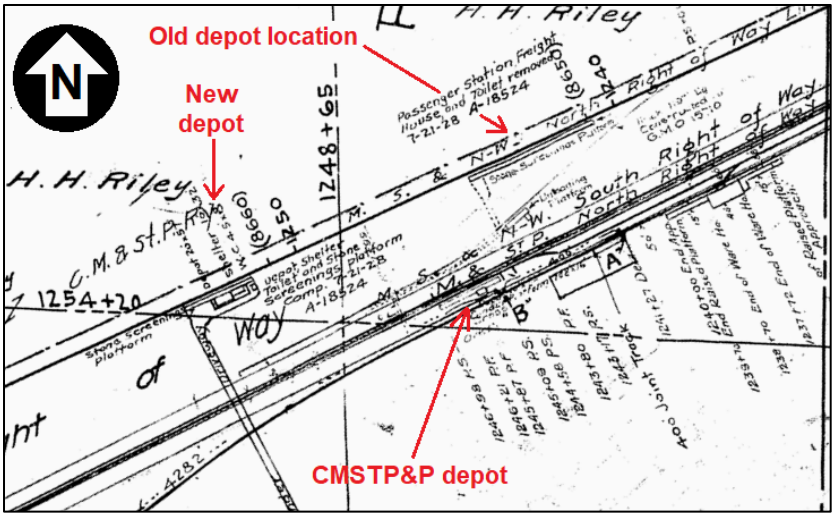


Figure 110. The 1928 C&NW building at McCoy Station West, likely a no. 2 depot. Photo taken in 1943, looking west. (Image from Flora Public Library. Public domain.)[322]

321. C&NW valuation map, c. 1940, digital file from Fort McCoy CRM.

322. "Playing Football," 1943, Charles Overstreet Collection, Flora Public Library. Flora, IL, http://www.idaillinois.org/digital/collection/fpl/id/141.

Figure 111. A map of Camp McCoy at the site of former Camp Robinson, 1929. The map depicts the 1928 C&NW passenger depot (*1*), a CMSTP&P passenger depot (*2*), and a CMSTP&P freight house (*3*). (Image from Fort McCoy History Center. Public domain.)[323]

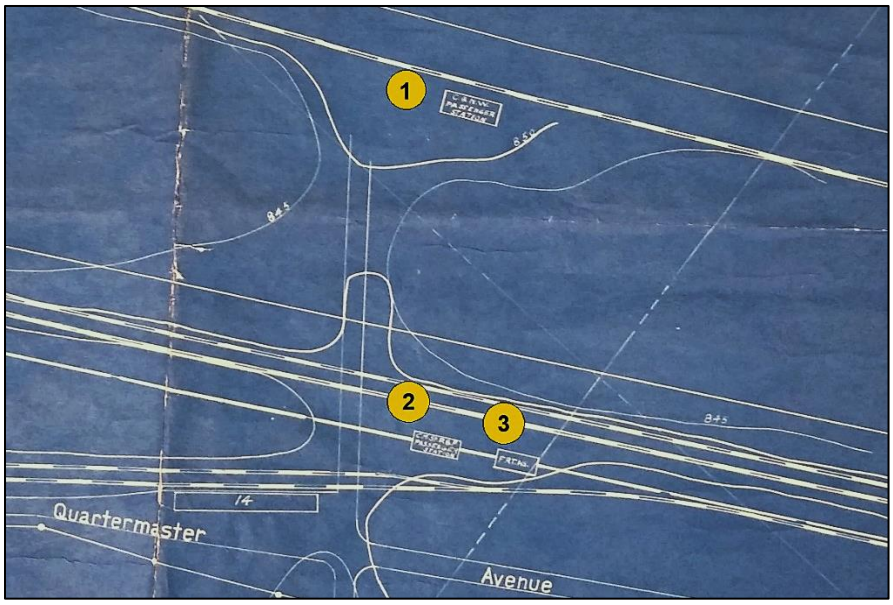
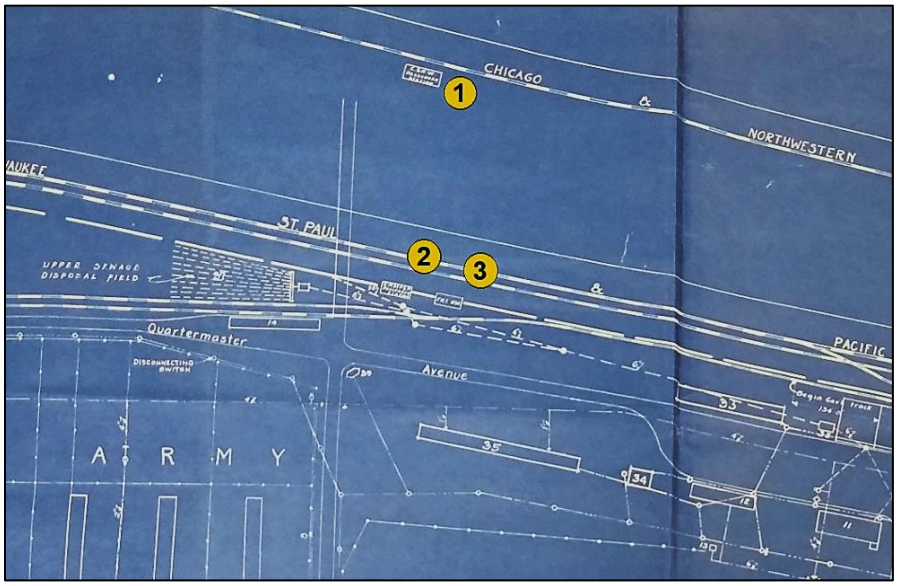


Figure 112. A map of Camp McCoy, 1931, revised 1938. The map depicts the C&NW passenger depot (*1*), the CMSTP&P passenger depot (*2*), and the CMSTP&P freight house (*3*). (Image from Fort McCoy History Center. Public domain.)[324]



323. *Camp McCoy Wisconsin, Developed Area Showing Camp Facilities and Contours*, October 1929, drawer 1, folder 3, Fort McCoy History Center, Sparta, WI.

324. *General Map of Camp McCoy, Sparta, Wisconsin*, December 7, 1931, drawer 1, folder 3, Fort McCoy History Center, Sparta, WI.

Figure 113. A 1939 aerial photo showing the C&NW passenger depot, CMSTP&P depot, and CMSTP&P freight house. (Image from Wisconsin Historic Aerial Imagery Finder. Public domain.)[325]

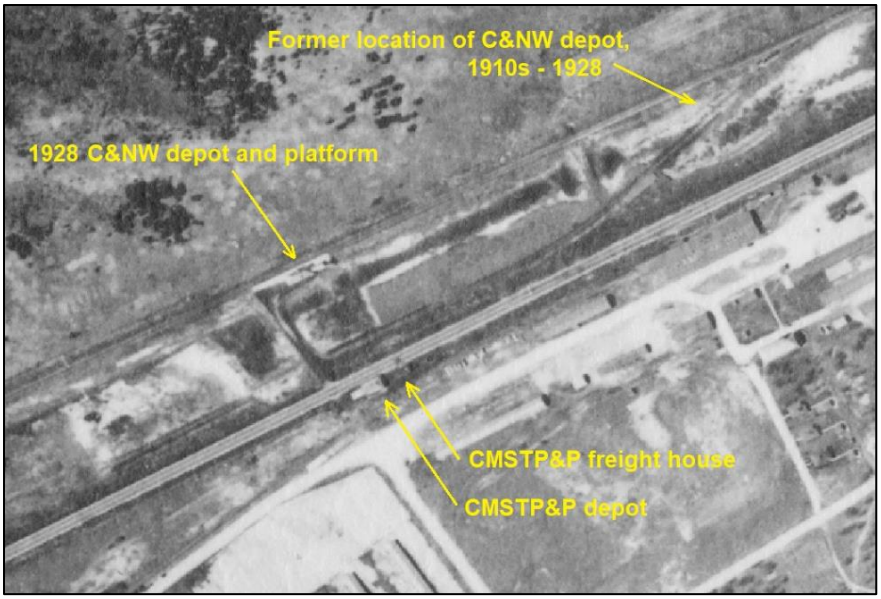
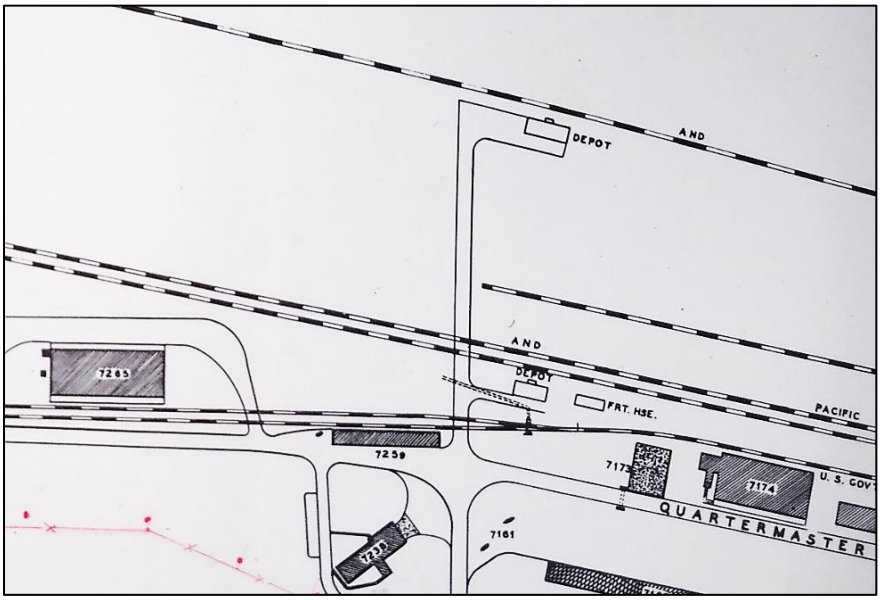


Figure 114. A 1942 map shows the same railroad infrastructure depicted on the 1929 and 1931 maps and 1939 aerial photo. (Image from Fort McCoy History Center. Public domain.)[326]

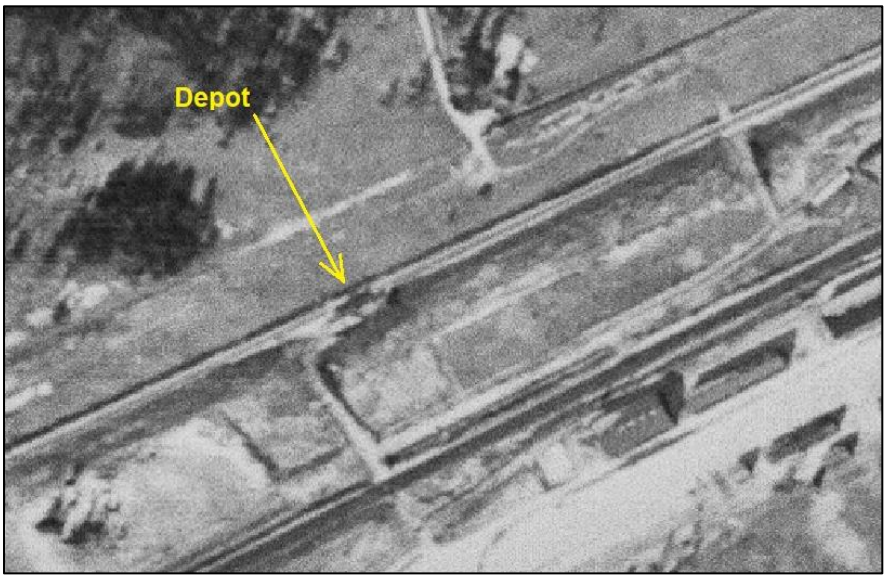


325. Monroe County aerial photograph, April 29, 1939, United States Department of Agriculture, roll 5-69, 1:20,000 scale, Wisconsin Historic Aerial Imagery Finder, https://maps.sco.wisc.edu/WHAIFinder/.

326. *Old Camp McCoy and P. of W. Area*, September 12, 1942, drawer 1, folder 3, Fort McCoy History Center, Sparta, WI.

With most activity occurring in the new cantonment area during and after WWII, McCoy Station West was not as necessary as it had been in the 1910s, 1920s, and 1930s. A 1946 aerial photograph and a 1949 USGS map only show one building, the C&NW depot, at McCoy Station West. Crews had demolished this depot by the time another aerial photograph was taken over the area in 1958, leaving no principal railroad facilities at McCoy Station East by the late 1950s. (Figure 115–Figure 117).

Figure 115. A 1946 aerial shows only the C&NW depot at McCoy Station West. (Image from USGS Earth Explorer. Public domain.)[327]



327. USGS Earth Explorer, (Image AR1CX0000040140, 1946).

Figure 116. A 1949 USGS map indicates the C&NW depot may have remained at McCoy Station West. (Image from National Geologic Map Database. Public domain.)[328]

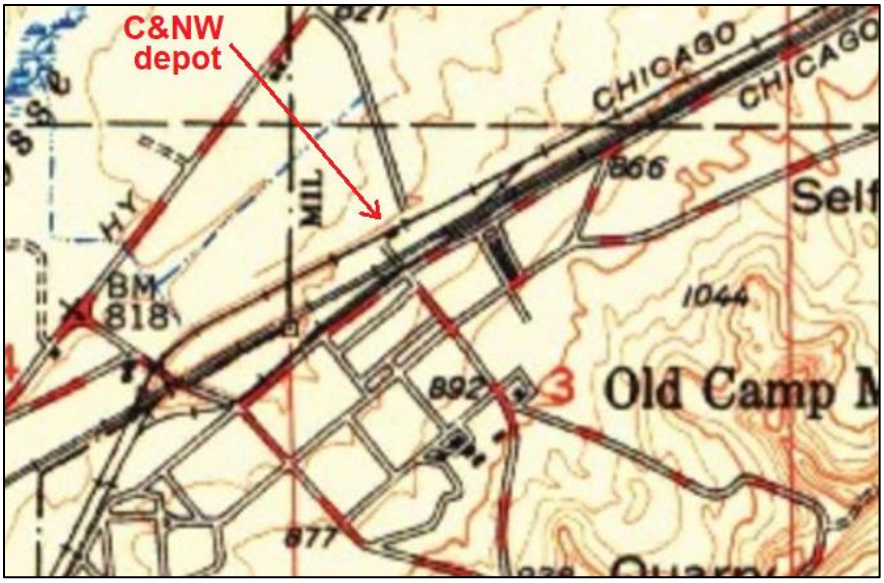
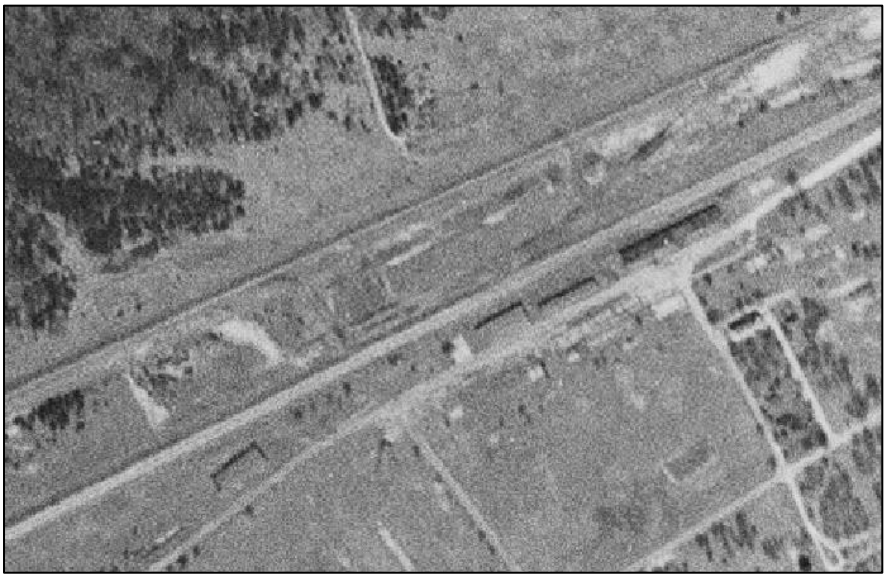


Figure 117. A 1958 aerial shows that the depots at McCoy Station West had been demolished. (Image from USGS Earth Explorer. Public domain.)[329]



328. US Geological Survey, *Tomah Quadrangle*, 1949.

329. USGS Earth Explorer, (Image ARA001610101030, 1958).

3.2.6 Lower spur sector, Angelo Township (1911–1957)

On 9 March 1911, the secretary of war granted a license for the CMSTP&P and C&NW to construct a jointly owned spur into the lower sector of the reservation, below Camp Robinson (Angelo Township, Sections 9 and 10).[330] Property owners Burton S. Hawley and Robert B. McCoy accompanied this action by granting the railroad companies a license to build on their land too, allowing the spur to connect to the C&NW main line.[331] At the terminus of the joint spur, the railroad frayed into a series of parallel tracks. On the south side of the grade, crews associated with the new military reservation completed a concrete warehouse in 1909 (building 6017), which is currently the oldest building at Fort McCoy.[332] During WWI, the railroad companies constructed a platform on the north side of the terminus. A government-owned sidetrack connecting the main lead of the CMSTP&P line with the jointly owned spur was constructed sometime in 1929 (Figure 118–Figure 121).[333]

Figure 118. The lower spur sector in the 1910s. (Image from National Geologic Map Database. Public domain.)[334]

330. Office of the Judge Advocate General, *United States Military Reservations,* 468.
331. C&NW valuation map, 1917, digital file from Fort McCoy CRM.
332. Sturkol, "Photo Essay: Fort McCoy's Oldest Building."
333. C&NW valuation map, c. 1940, digital file from Fort McCoy CRM.
334. US Geological Survey, *Tomah Quadrangle*, 1916

Figure 119. The lower spur sector c. 1911. (Image from NARA at College Park. Public domain.)[335]

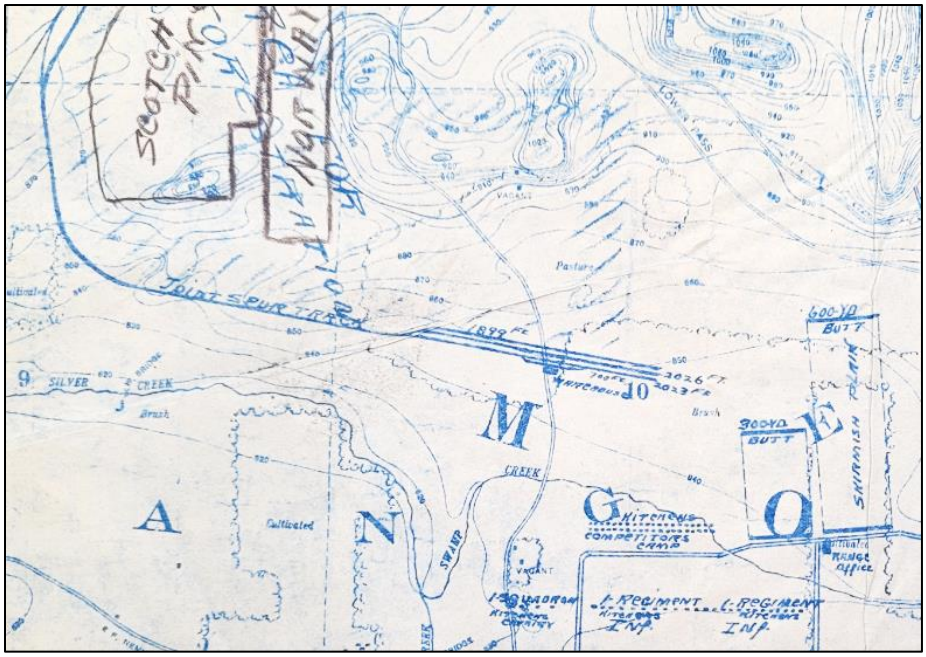
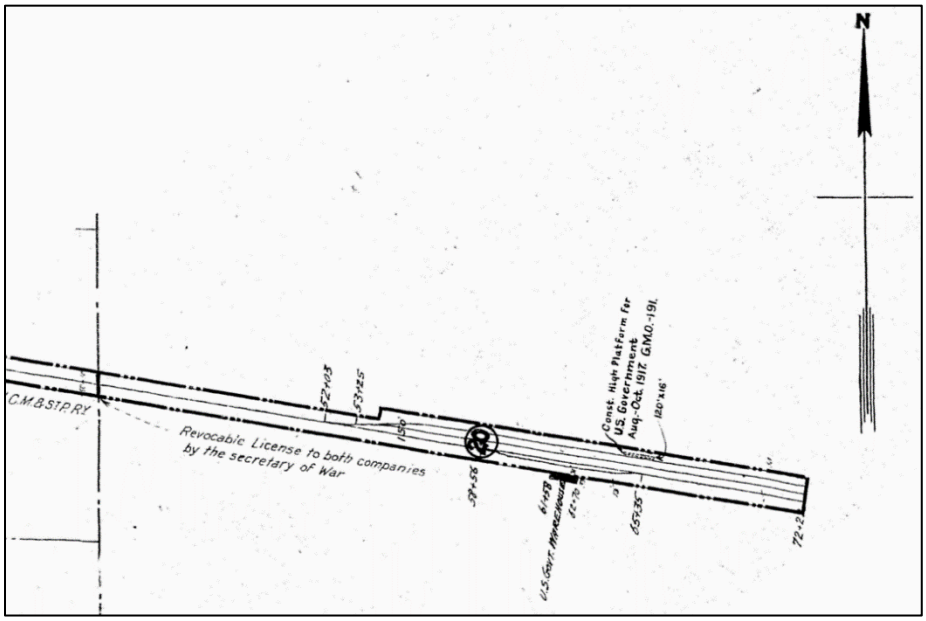


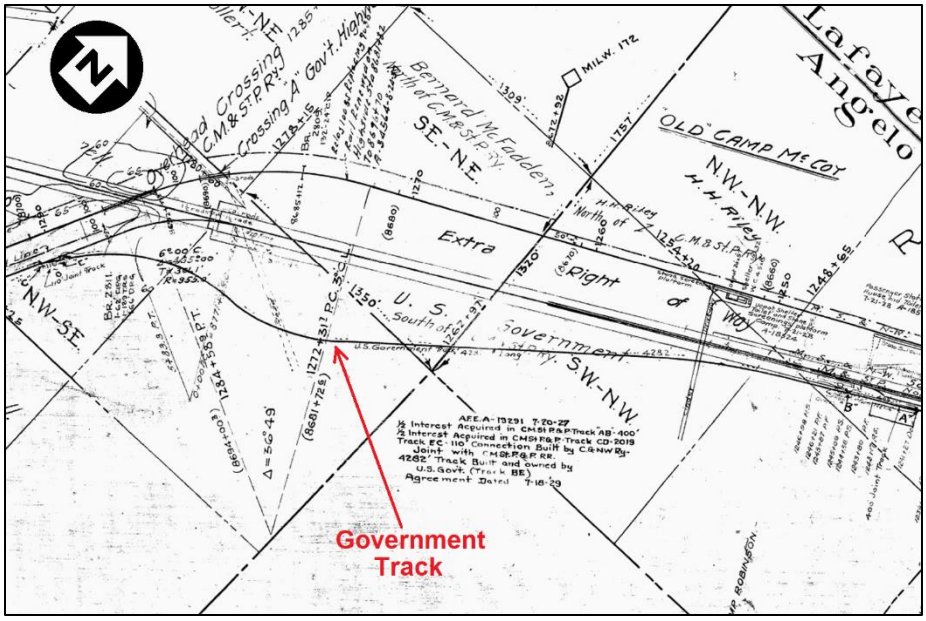
Figure 120. The terminus of the lower spur as depicted in 1917. (Image from Fort McCoy CRM. Public domain.)[336]



335. US Army Corps of Engineers, *US Military Reservation near Sparta*, 1909, blueprint file of map, Camp McCoy, Plans and Surveys, RG 92, NARA, College Park, MD.

336. C&NW valuation map, 1917, digital file from Fort McCoy CRM.

Figure 121. A government-owned sidetrack, constructed in 1929, connected between the CMSTP&P main line and the lower spur track. (Image from Fort McCoy CRM. Public domain.)[337]



The lower spur and the unloading area at its terminus remained through the 1920s and 1930s. At its terminus, the spur interacted with a narrow-gauge railroad connection, which began at the warehouse and paralleled the spur tracks in an eastward direction. The proximity of the lower spur with the narrow-gauge network is seen on a 1931 map and a 1939 map (Figure 122–Figure 123). In August 1940, crews installed a new high platform on the west side of building 6017, which is no longer extant (Figure 124). This installation occurred in time for the Second Army maneuvers in August 1940, suggesting that the lower railroad spur was used in distributing materiel for the event. In 1946, an evaluation of railroad assets made by the Post Engineer's Office recorded that Camp McCoy still retained the government-owned sidetrack and jointly owned lower spur track.[338]

337. C&NW valuation map, c. 1940, digital file from Fort McCoy CRM.

338. "Historical Data, Camp McCoy, Wisconsin Post Engineer Office," 87.

Figure 122. A 1933 military map showing narrow gauges interacting with the lower spur. (Image from Monroe County Local History Room. Public domain.)[339]

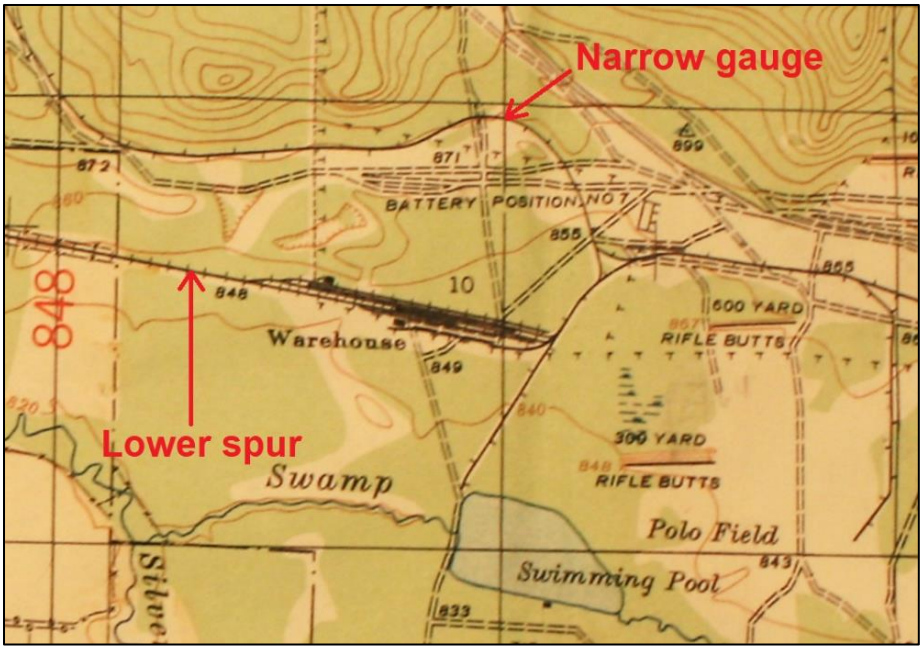
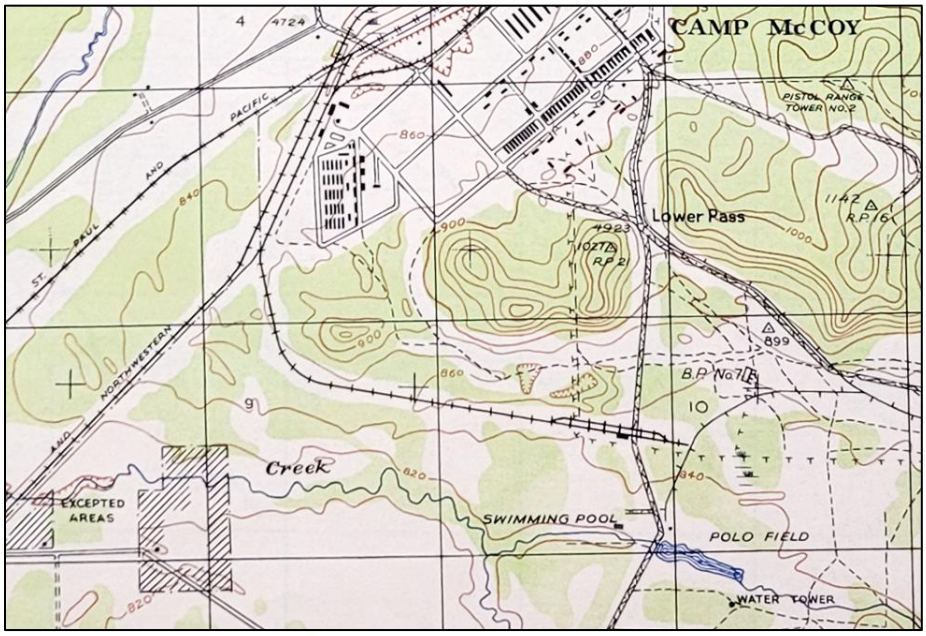


Figure 123. The lower spur as depicted in 1939. (Image from Fort McCoy CRM. Public domain.)[340]



339. US Army Corps of Engineers, *Wisconsin Monroe County Camp McCoy Grid Zone "C."*

340. *Terrain Map: Sheet 2, Camp McCoy Grid Zone "C,"* 1939, US Army Corps of Engineers, RG-394: VI Corps Area Engineers, NARA, College Park, MD.

Figure 124. A 1943 photo of the high railroad platform west of building 6017. (Image from Fort McCoy Directorate of Public Works [DPW]. Public domain.)[341]

After WWII, it is not known how long tracks remained on the lower spur grade, though aerial imagery indicates that the connection with the C&NW and CMSTP&P had been severed by 1976 (Figure 125–Figure 126). Notations on a post rail facility map indicate that 5,772 ft of track had been sold in 1957, and 1.1 miles of spur track were deleted from the record in 1958.[342] While unspecified, 1.1 miles closely reflects the length of the lower spur, suggesting that this is the line referred to in the notations. Today, a gravel road follows the path of the former spur grade.

341. Platform 6016, HR-212-43, Historic real property inventory from Fort McCoy CRM.

342. US Army Corps of Engineers, *Station Rail Facilities,* 1984.

Figure 125. USGS map of the lower spur sector, 1949. (Image from National Geologic Map Database. Public domain.)[343]

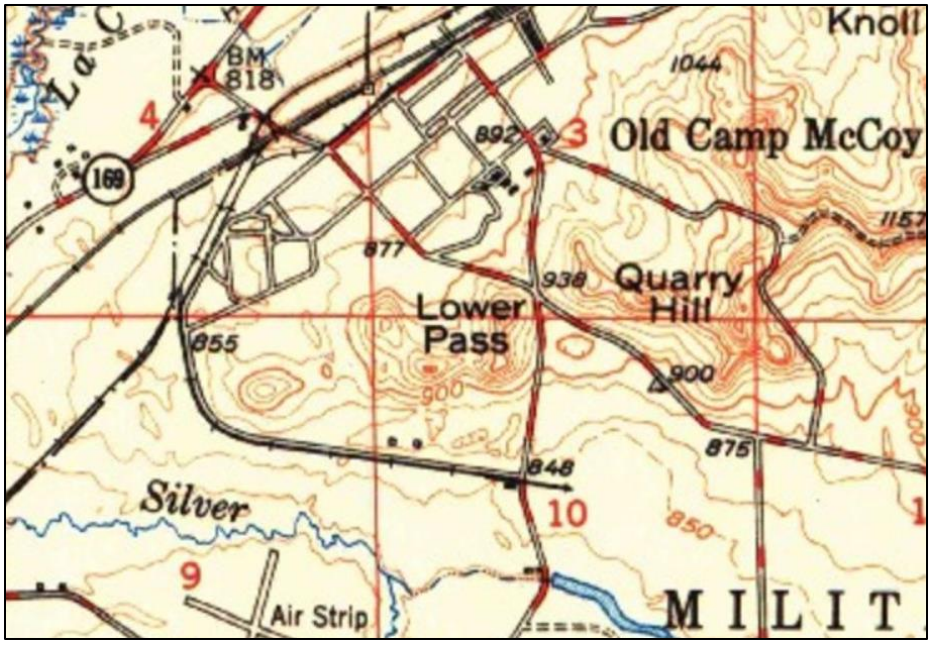


Figure 126. Rail connections with the lower spur had been severed by 1976. (Image from USGS Earth Explorer. Public domain.)[344]

343. US Geological Survey, *Tomah Quadrangle*, 1949.

344. USGS Earth Explorer, (Image AR1VDZB00020006, 1976).

3.2.7 Narrow gauge railroads at Camp McCoy, 1910–1941

Interest in obtaining a narrow-gauge railroad for Camp McCoy can be traced back to the installation's founding. In January 1910, Colonel R. K. Evans included narrow-gauge railroads among the potential assets that could be integrated into the new reservation. The narrow-gauge railways described by Evans had a notable advantage over conventional railroads—portability. According to Evans,

> Light portable railroads are now a recognized part of the necessary transportation equipment of modern armies for war. The leading military powers kept more or less material of this kind in store for war purposes. . . . We read and talk much about the use and value of DeCauville roads in war, but none of our officers have seen one in operation in our territory or know its practical uses and limitations from actual experience. It is believed that this range offers an excellent opportunity for acquiring necessary experience in deciding on a type for such railroads, which up to this time is not definitely decided. Should an emergency arise requiring the use of such roads the material on hand at the Sparta range could be immediately shipped to the point required.[345]

The advent of portable narrow-gauge railroading is attributed to a nineteenth century Frenchman named Paul Décauville, referenced by Evans in the preceding dialogue. Décauville's invention, sometimes referred to as a light field railway, was originally intended to transport heavy agricultural machinery across farmland. The design featured a set of narrow-gauge tracks, approximately 2 ft in width, that could be assembled and disassembled with ease. Although designed for agricultural use, Décauville's light field railroad caught the attention of national militaries across Europe. France, Germany, and Russia soon adapted the light field railroad for use in their respective military training programs. Throughout the late nineteenth century and into the opening decades of the early twentieth century, the narrow-gauge systems were largely kept in reserve until needed.

345 R. K. Evans, "Advisability of Establishing a Range for Field-Firing on the Sparta Reservation for the Three Arms—Artillery, Cavalry, and Infantry, and Machine Guns," January 15, 1910, report excerpt, folder: Military–Fort McCoy Land Purchase. Monroe County Local History Room, Sparta, WI.

Before WWI, France and Germany gained practical experience using narrow-gauge railroads in their conquests and exploitation of African colonies, and the Japanese used the narrow-gauge effectively in their Manchurian campaigns. WWI demonstrated the effectiveness of portable narrow-gauge railroads in a large-scale, modern conflict.[346]

Even before the WWI, Evans was obviously informed about the successful application of narrow-gauge railroads in international military training and campaigns. The quartermaster general's office received a memorandum on 19 January 1910, outlining estimated construction costs for the Sparta reservation. Among the itemized cost estimates, $4,000 was considered for 2 miles of portable railroads. According to the document, "It is estimated that track for the portable railway, with light rails and short sections which can be easily handled will cost about $2,000 per mile. Small cars for handling targets and other supplies would cost from $100 to $200 each."[347]

On 27 June 1910, the quartermaster general recommended that the secretary of war make immediate allotment from appropriation money for the itemized range requests.[348] Although the decision to include light field railroads at the new Sparta reservation was well founded, it is difficult to tell where they were placed before or during WWI. That difficulty, in part, is due to the advertised portability of the light field railroad. The transient nature of this system means that it may not have been cartographically documented during this time, one of the primary means of investigating historical transportation networks.

Definitive evidence showing the locations of narrow-gauge lines at Camp McCoy during WWI has not surfaced yet, but it is possible that they were in use. A photograph from c. 1917, for example, shows a shell shed that appears to be paralleled by a railway (Figure 127). Although it is difficult to ascertain from the photo's vantage point, the low profile of the railroad bed and its proximity to the building suggest that it is narrow gauge; however, because it was common to find narrow-gauge railroads adjacent to

346. John Westwood, *Railways at War* (San Diego: Howell-North Books, 1982), 105–6.

347. Memorandum for the Quartermaster General, January 19, 1910, folder: Military–Fort McCoy Land Purchase, Monroe County Local History Room, Sparta, WI.

348. James B. Aleshire to Secretary of War, June 27, 1910, folder: Military–Fort McCoy Land Purchase, Monroe County Local History Room, Sparta, WI.

shell sheds during the installation's ordnance handling period (1919–1923), it is equally possible that this photo was taken after the war.

Figure 127. A group of men pose next to a shell loading building at Camp Robinson, c. 1917. A set of tracks, possibly narrow gauge, is situated in front of the building. (Image from Monroe County Local History Room. Public domain.)[349]

3.2.7.1 Camp Robinson becomes the Sparta Ordnance Depot, 1919–1923

While there is some uncertainty about the use of narrow-gauge railroads at the reservation before or during WWI, it is certain that they were employed almost immediately after the war. Beginning in 1919, the camp began to transition from a training reservation to an ordnance storage site. From 1919 until 1923, this site became known as the Sparta Ordnance Depot and was tasked with storing and shipping explosive materials. Although residents of Sparta and Tomah objected to the transition, the Sparta Ordnance Depot assumed its new mission rapidly. In total, the installation was charged with handling over 40 million pounds of explosives, including TNT, nitrocellulose, and nitroglycerine. Picric acid cartridges and shells were produced at the installation, which were shipped to farmers

349. "A J Connelly Workers at Camp McCoy," Monroe County Local History Room, Sparta, WI.

interested in clearing land, officials at the Department of Agriculture, and highway departments.[350]

To satisfy its new mission, the Sparta Ordnance Depot installed a system of narrow-gauge railroads to transport ammunition to and from portable magazines that had been established throughout the reservation's training ranges (Figure 128–Figure 131).[351] The narrow-gauge railroad at this installation was unique for a couple of reasons. First, it may have represented one of the last narrow-gauge systems used in Wisconsin (before this time, most narrow-gauge railroads in Wisconsin were presumably employed in the logging industry, well north of Monroe County).[352] Second, it appears the locomotives used on the narrow-gauge system were not steam powered but ran on petrol fuel (Figure 129–Figure 130).[353] While there is some precedence for the use of petrol-fueled, narrow-gauge locomotives in Europe during WWI, if the narrow-gauge system at the Sparta Ordnance Depot used gasoline or diesel-powered engines, it would be among the earliest railroads in Wisconsin to do so.[354]

350. Jim Brown, "An Old Timer Reminisces," *Sparta Herald*, March 12, 2011, 1, folder: Military, Fort McCoy, General, Monroe County Local History Room, Sparta, WI.

351. "Boys Get Good Jobs at Camp Robinson," *Tomah Journal,* June 6, 1919; "History of Fort McCoy," n.d., folder: Military, Fort McCoy, General, Monroe County Local History Room, Sparta, WI.

352. Paul Miller to Audrey Johnson, March 10, 1992, folder: Railroads, General, Monroe County Local History Room, Sparta, WI; James P. Kaysen to Wilfred Beaver, August 18, 1974, James P. Kaysen Papers, M95-226, box 2, folder: Monroe. Wisconsin Historical Society, Madison, WI.

353. Brown, "An Old Timer Reminisces"; Miller to Johnson, 1992.

354. Westwood, *Railways at War*, 162; Miller to Johnson, 1992.

Figure 128. An undated photograph of narrow-gauge tracks passing in front of a shell shed at Camp McCoy. The image appears to show three-foot narrow-gauge track. (Image from Monroe County Local History Room. Public domain.)[355]

Figure 129. Ammunition workers pose with a narrow-gauge switch engine, c. 1920s. (Image from Monroe County Local History Room. Public domain.)[356]

355. "J. J. Connelly Company Workers Standing Next to a Shell Loading Building," Monroe County Local History Room, Sparta, WI.

356. "Unidentified Workers at the J. J. Connelly Shell Loading Depot, Camp McCoy," Monroe County Local History Room, Sparta, WI.

Figure 130. A narrow-gauge locomotive hauling a flatcar with men, no date. (Image from Fort McCoy CRM. Public domain.)[357]

Figure 131. Ordnance crates on an elevated loading platform, c. 1919. The platform likely parallels a railroad spur or siding and may be typical of other platforms that were located throughout the Sparta Ordnance Depot. (Image from Fort McCoy History Center. Public domain.)[358]

357. Photo from digital file, Fort McCoy CRM.

358. "Ordnance Depot," 1919, folder: 870-5b, 1919 pictures, Fort McCoy History Center, Sparta, WI.

There is contention regarding the width of the narrow-gauge system used throughout the Sparta Ordnance Depot. According to local historian Jim Brown, the narrow-gauge tracks were 2 ft wide, the standard size for light field railways in WWI.[359] But, regional historian Paul Miller arrived at a different conclusion. Miller, who had conducted research on the installation's narrow-gauge railroads in the early 1990s, found the physical remains of tracks in the range lands and determined that they were 3 ft in width. This conclusion perplexed Miller because the military used the standard two-foot gauge track during the war and supposedly would have had a surplus of it for postwar use.[360]

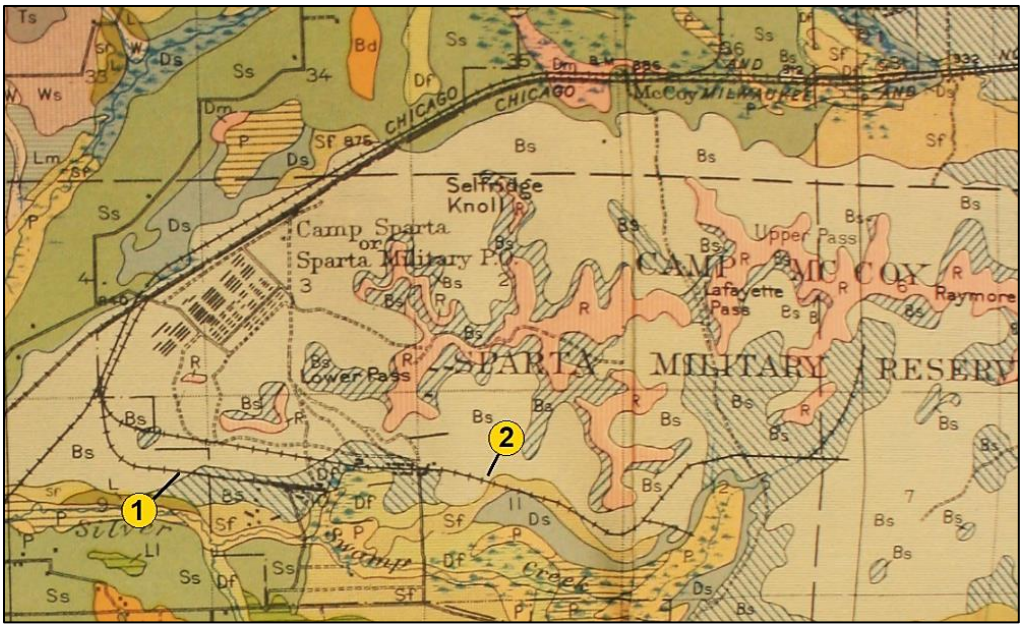
Although there is no definitive evidence, one possible explanation for the discrepancy is that there were two different narrow-gauges used on the installation. These different gauges may not have been used concurrently. For instance, it is possible that one gauge size was in use while the Sparta Ordnance Depot operated at the installation and another gauge size may have been employed when the War Department took possession of the camp again later in the 1920s.

It is difficult to determine conclusively if the two-foot or three-foot gauge was used during the ordnance depot era, or where the railroad was laid since, as previously stated, the transient nature of this system means that the tracks may not have been cartographically documented (at least not in their entirety). A 1923 soil survey of Monroe County does potentially show one branch of the narrow-gauge system that was permanent enough to be represented cartographically. The map depicts a secondary railroad that begins at the CMSTP&P and C&NW jointly owned spur line in Angelo Township, Section 9; the tracks then proceed eastward and terminate in three branches. The first branch ends in Angelo Township, Section 12; the second ends in Adrian Township, Section 7; and the third ends in Adrian Township, Section 6 (Figure 132). This secondary railroad is depicted with the same tick marks as the standard-gauge CMSTP&P and C&NW tracks seen elsewhere on this survey, making it impossible to determine whether the map is representing a two-foot gauge or a three-foot gauge.

359. Brown, "An Old Timer Reminisces," 2011.

360. Miller to Johnson, 1992.

Figure 132. A soil survey map from 1923. In the lower portion of the reservation, the map depicts the jointly owned CMSTP&P and C&NW standard-gauge spur line (*1*) and a secondary railroad that branches into the range land south of Lafayette Pass (*2*). (Image from Monroe County Local History Room. Public domain.)[361]



3.2.7.2 Narrow-gauge railroads at Camp McCoy, 1923–1941

The installation continued to maintain narrow-gauge railroads after the Sparta Ordnance Depot closed in 1923. In 1927, a local reporter observed that "about thirty miles of narrow-gauge tracks traverse the range now, to carry supplies to all parts."[362] In the estimation of Paul Miller, after the War Department took possession of the installation in 1925 and resumed training operations, Camp McCoy retained a network of light field rails until at least the mid-1930s (Figure 133).[363] Special military maps from 1933 and 1939 substantiate Miller's conclusion. The 1933 map provides the most comprehensive cartographic depiction of Camp McCoy's narrow-gauge railroad network (Figure 134). Notations on this map clearly differentiate between standard-gauge railroads and narrow-gauge railroads (represented with full tick marks and alternating half-tick marks, respectively). Unfortunately, the map does not clarify whether the narrow-gauge network was comprised of standard two-foot track or the more unconventional three-foot track.

361. *Soil Map, Monroe County Wisconsin*, 1923, US Department of Agriculture, Bureau of Chemistry and Soils, Monroe County Local History Room, Sparta, WI.

362. "M'Coy to be Largest Artillery Camp in Country," *La Crosse Tribune*, June 12, 1927.

363. Miller to Johnson, 1992.

Figure 133. A group of Soldiers ride on a narrow-gauge flatcar, no date. (Image from Fort McCoy CRM. Public domain.)[364]

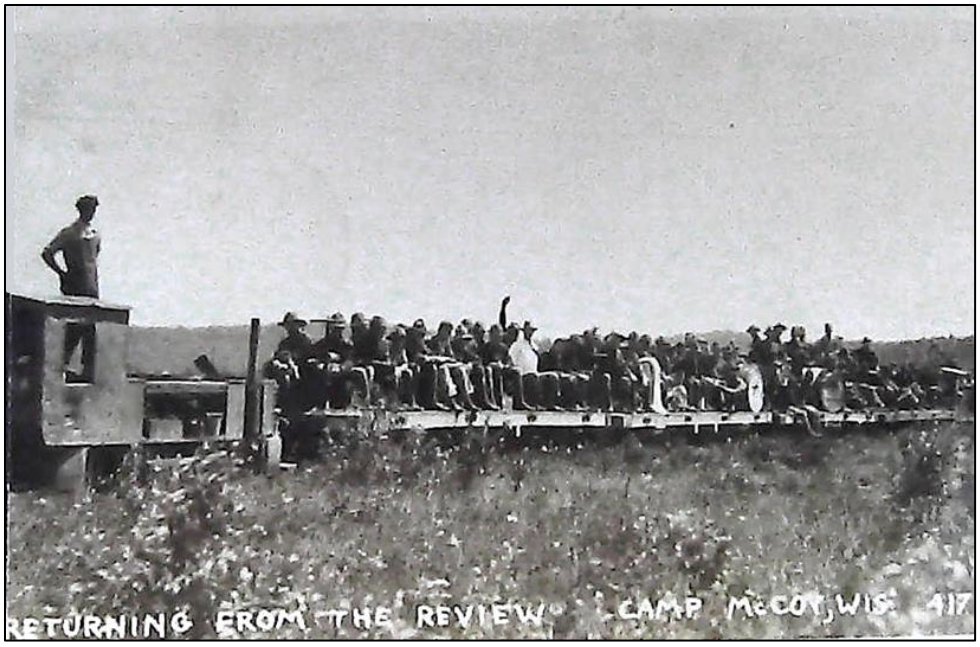
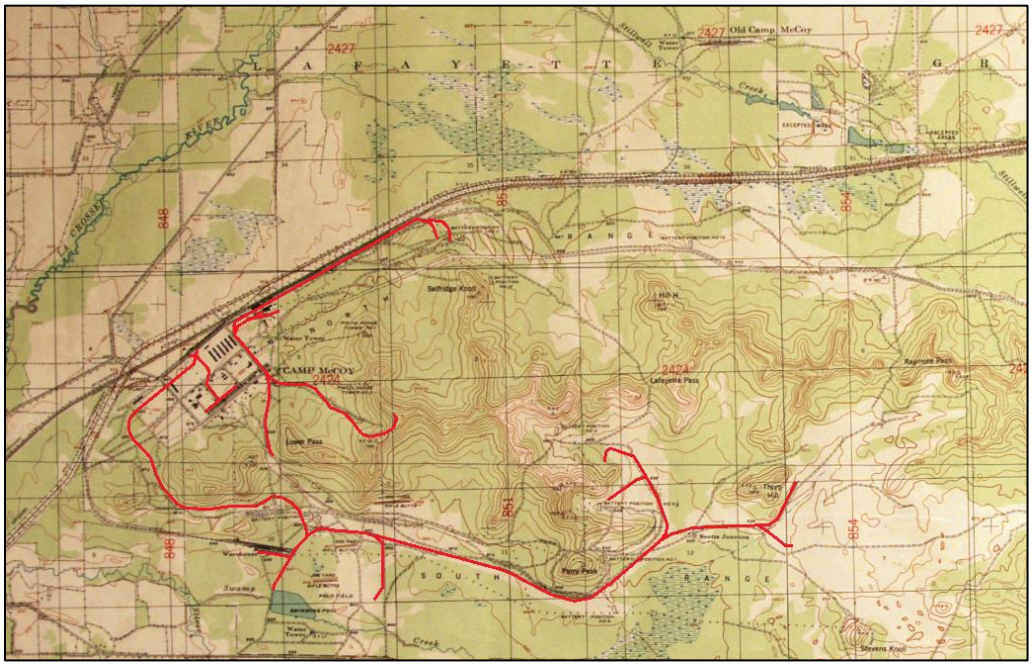


Figure 134. A special military map from 1933 shows a network of narrow-gauge tracks in the lower reservation. These tracks have been highlighted in *red* to better distinguish them. (Image from Monroe County Local History Room. Public domain.)[365]

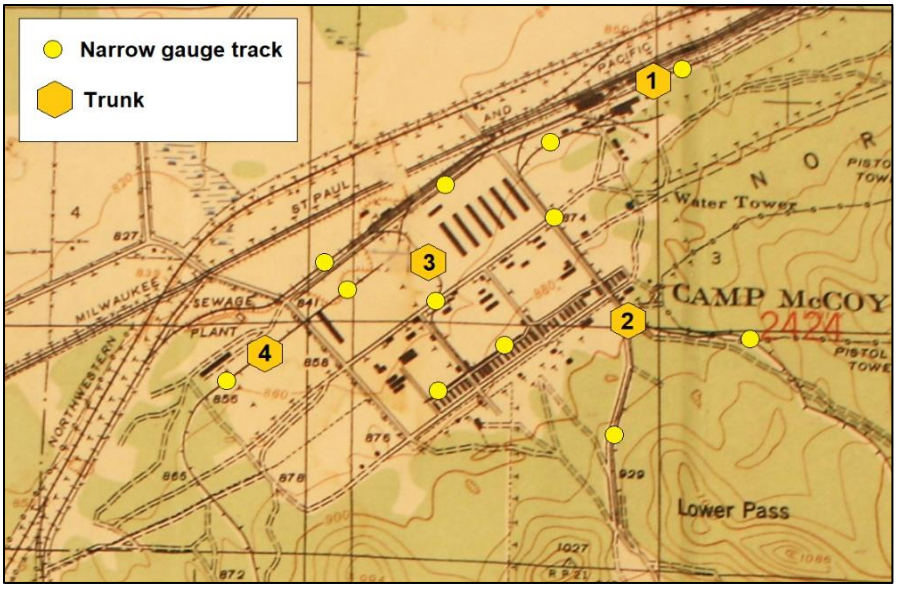


364. Photo from digital file, Fort McCoy CRM.

365. US Army Corps of Engineers, *Wisconsin Monroe County Camp McCoy Grid Zone "C."*

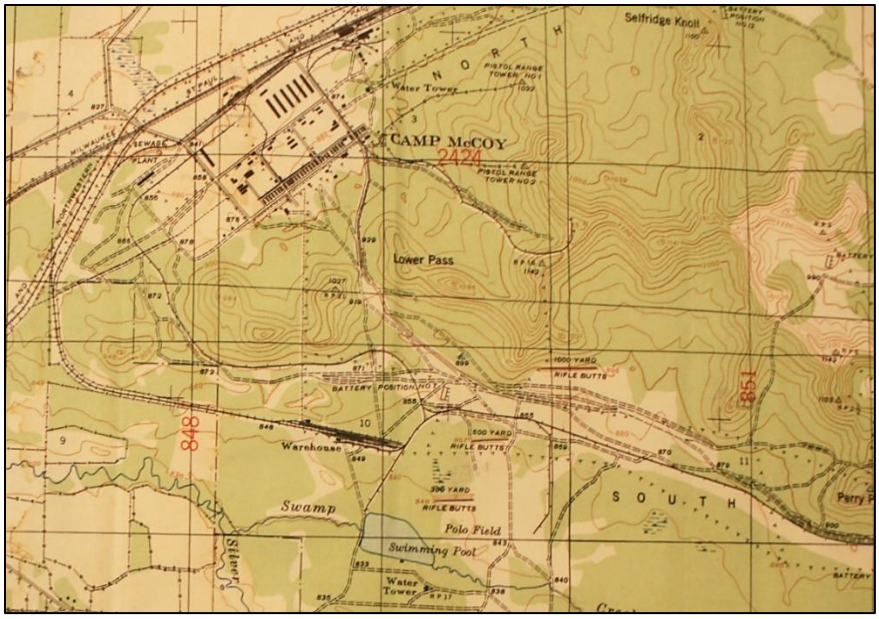
The map shows a system of narrow-gauge tracks characterized by four general trunks: one that paralleled the CMSTP&P tracks to the northeast, one that extended east toward the Lower Pass, one that stayed within the camp, and one that extended east toward Scotts Junction and Thorp Hill. The root of the narrow-gauge system appears to begin immediately north of the camp, paralleling the tracks of the CMSTP&P railroad (Figure 135). This node of the narrow-gauge system may have included shared platforms for unloading items from standard-gauge trains, which could be transferred to storehouses or onto narrow-gauge trains. From here, the second trunk ran in a straight line along the northeastern boundary of the camp. This trunk split into two branch spurs, one proceeding southward and terminating approximately 2,000 ft from camp and another proceeding east, coming to an end approximately 1,000 ft southeast of pistol tower no. 2 (Figure 136). The third trunk remained in the camp; it took the general form of an "H," the outer legs running parallel to the northwest and southeast boundaries of the camp, and the middle leg transecting the center of camp (Figure 135).

Figure 135. A 1933 military map showing narrow gauges within Camp McCoy. There appears to have been four trunks: one that paralleled the CMSTP&P tracks (*1*), one that extended toward the Lower Pass (*2*), one that stayed in the camp (*3*), and one that extended toward Thorp Hill (*4*). (Image from Monroe County Local History Room. Public domain.)[366]



366. US Army Corps of Engineers, *Wisconsin Monroe County Camp McCoy Grid Zone "C."*

Figure 136. A 1933 military map showing narrow gauges around Camp McCoy. (Image from Monroe County Local History Room. Public domain.)[367]



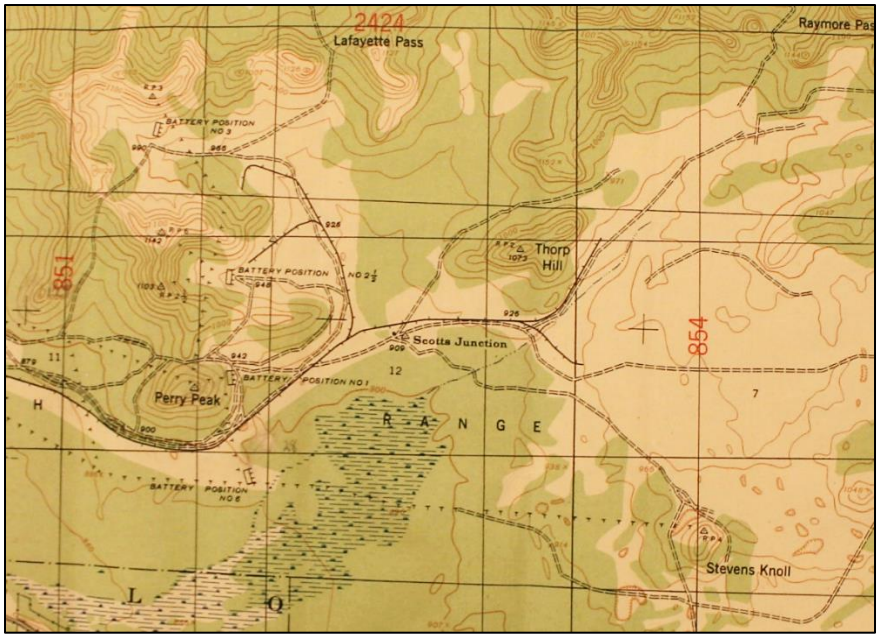
The fourth trunk exited the southwest side of camp and arced to the east. It extended deep into the lower reservation's rangeland, where it split into several branch spurs. At battery position no. 7, one branch proceeded south and split into two lines: one connected to the concrete warehouse (building 6017) and another connected to the Swamp Creek swimming pool (Figure 136). In 1935, a local reporter observed, "C.M.T.C. students at Camp McCoy are enjoying their stay in camp to the extent that not many requests for week-end passes from the camp are made. . . . Swimming is an everyday pastime, as there is a good swimming pool about a mile from the camp, reached by a narrow-gauge railroad. The little train goes out from camp at 2 p.m. and returns at 4."[368]

A second branch proceeded east at battery position no. 7, bending around Perry Peak before splitting into four lines near Scotts Junction. Two lines went north, one terminating at battery position no. 2½ and the other ending approximately 1,500 ft from battery position no. 3. At Scotts Junction, a third line proceeded east before splitting into a "Y" immediately south of Thorp Hill (Figure 137).

367. US Army Corps of Engineers, *Wisconsin Monroe County Camp McCoy Grid Zone "C."*

368. "McCoy Military Students Like the Life; Stay Close to Camp," *La Crosse Tribune*, July 21, 1935.

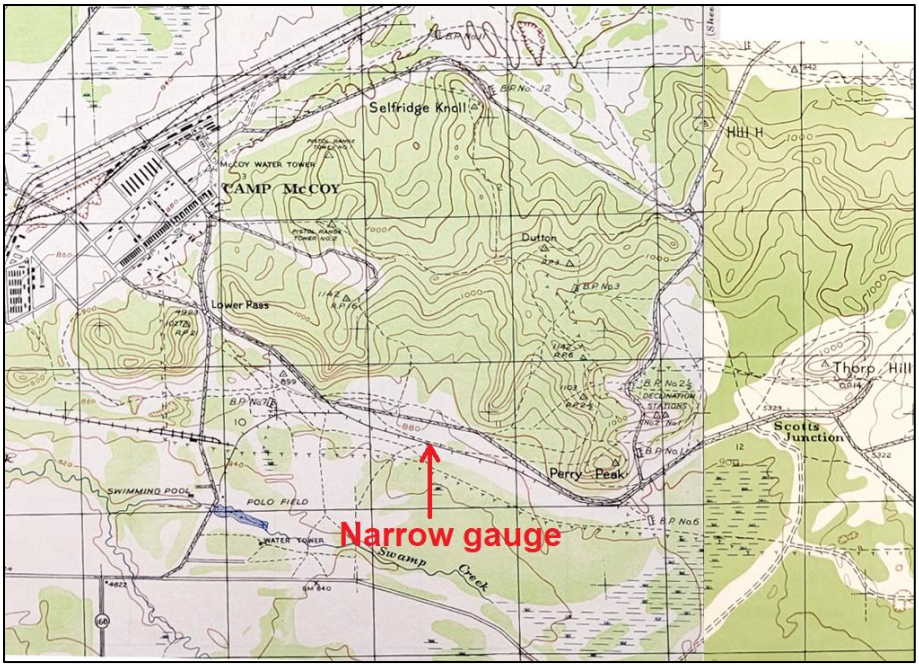
Figure 137. A 1933 military map showing narrow gauges extending into the lower reservation range lands. (Image from Monroe County Local History Room. Public domain.)[369]



Another military map published in 1939 also shows narrow-gauge railroads running throughout the lower post, though the network is not as extensive as the one shown on the 1933 map (Figure 138). There is one main route, with one leg running north out of Camp McCoy parallel to the CMSTP&P tracks and another heading east of camp. The track going east of camp runs through the Lower Pass toward Perry Peak and Scotts Junction. One narrow gauge branches off the main line and proceeds toward the lower spur terminus and a swimming pool near Swamp Creek.

369. US Army Corps of Engineers, *Wisconsin Monroe County Camp McCoy Grid Zone "C."*

Figure 138. A 1939 military map showing narrow gauges extending into the lower reservation range lands. (Image from NARA at College Park. Public domain.)[370]



It is necessary to note that the narrow-gauge routes depicted on the 1923, 1933, and 1939 maps may not represent all of the light field railroads employed on the reservation during the 1920s and 1930s. As previously stated, the portability of the narrow-gauge lines implies that tracks could be laid and removed as needed, giving them much less permanence than conventional railroads. There is always the possibility of recovering evidence of the narrow-gauge network in places where it is not explicitly documented on a military map.

Due to their narrow size, light field railroads had the potential to navigate terrain that would be prohibitive for standard-gauge tracks. In addition, Paul Miller believed that the use of gas- or diesel-fueled, narrow-gauge engines provided another advantage over steam-powered trains; they had the ability to scale the steep grades of Camp McCoy's lower range. "[The] grade on the branch from Old Camp McCoy up to Quarry Hill would have been too steep for steam locomotives," he concluded, adding "the upper

370. US Army Corps of Engineers, *Terrain Map: Sheet 1. Camp McCoy Grid Zone "C,"* 1939, VI Corps Area Engineers, Records of US Army Continental Commands, RG 394, NARA, College Park, MD.

part of that line would have been a grade of nearly eight percent, probably the steepest railroad grade in Wisconsin."[371]

The ability of the narrow-gauge system to navigate restrictive spaces is evidenced in photographs of the old camp cantonment, which shows the tracks traveling between rows of tents (Figure 139–Figure 142). A close examination of the photos also suggests that the rails and ties were laid directly on the ground without any attempt to construct an elevated bed, as is done with conventional railroads. This is likely attributable to the lighter weight of narrow-gauge engines and rolling stock.

Figure 139. Narrow-gauge track wending through Camp McCoy in 1927. (Image from Monroe County Local History Room. Public domain.)[372]

371. Miller to Johnson, 1992.

372. Fort McCoy History Center, Sparta, WI.

Figure 140. Two sets of narrow-gauge track wend past tents at Camp McCoy in 1927. (Image from Monroe County Local History Room. Public domain.)[373]

Figure 141. Narrow-gauge track branches from a frame storehouse at Camp McCoy in 1927. (Image from Monroe County Local History Room. Public domain.)[374]

373. Fort McCoy History Center, Sparta, WI.

374. Fort McCoy History Center, Sparta, WI.

Figure 142. A narrow-gauge line wends through Camp McCoy, c. 1919–1923. (Image from Monroe County Local History Room. Public domain.)[375]

Miller believed that the installation's narrow-gauge network was not removed until the late 1930s. This claim is substantiated by the presence of a narrow-gauge railroad on the 1939 military map. During his investigation of the light field system, Miller concluded that at least some of the narrow-gauge tracks were recycled to construct bunkers and other structures throughout Camp McCoy. Other small sections remained in place and were recovered in the field.[376] Although it does not appear the narrow-gauge tracks survive to the present day, a 1994 investigation suggests that a section of track was extant near the center of Section 10 in Angelo Township.[377] It is not known what happened to the locomotives and associated rolling stock.[378]

375. "Sparta Ordnance Depot," n.d., folder: Military, Fort McCoy, Monroe County Local History Room, Sparta, WI.

376. Miller to Johnson, 1992.

377. Philip H. Salkin, *The Cultural Resources of the Fort McCoy Installation: A Literature and Records Search, Cultural Overview and Management Plan for the Environmental Impact Statement for the Master Plan at Fort McCoy, Wisconsin*, Report of Investigations 742 (Archaeological Consulting Services, 1994), 159.

378. Brown, "An Old Timer Reminisces," 2011.

4 Typical Historic Railroad Resources and Areas of Significance in the Upper Midwest

The Upper Midwest's historic railroad rights-of-way were characterized by a patchwork of infrastructure that facilitated freight and passenger transit. In order to understand what kinds of historic railroad resources in the Upper Midwest might be eligible for NRHP listing, it is necessary to assess how historic railroad resources are typically classified and determine the areas under which each kind of railroad resource might have significance. One approach to this process is to evaluate general areas of resource classification, typical criteria evaluation, and areas of significance that are outlined in existing Multiple Property Documentation Forms (MPDFs). These forms serve, in part, "as a basis for evaluating the NRHP eligibility of related properties. It may be used to nominate and register thematically related historic properties simultaneously or to establish the registration requirements for properties that may be nominated in the future."[379]

Adopting this approach, this chapter is based on an evaluation of existing, state-wide historic railroad MPDFs from four Upper Midwest states: Minnesota, Iowa, South Dakota, and North Dakota (there is currently no MPDF for the historic railroads of Wisconsin). Together, they provide a regional framework for resource classification, typical criteria evaluation, and areas of potential significance. Subsequently, the chapter provides a brief overview of current railroad-related NRHP nominations in Wisconsin. Taken together, this kind of information can be useful for understanding the potential eligibility of historic railroad resources at Fort McCoy.

4.1 Typical criteria and areas of significance for historic railroad resources in the Upper Midwest

According to NRHP procedure, a resource is determined eligible based on its significance within a historic context and retention of enough physical integrity to convey its significance. Significance is determined through a resource's association with an event or a person (Criteria A and B, respectively), for its design or construction qualities (Criterion C), or through its

379. National Park Service, *National Register Bulletin #16B: How to Complete the National Register Multiple Property Documentation Form* (Washington, DC: National Park Service, 1999), 2.

potential to yield historically important information (Criterion D). *National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation* describes these criteria as follows:

> **A. Event**—associated with events that have made a significant contribution to the broad patterns of our history; or
>
> **B. Person**—associated with the lives of persons significant in our past; or
>
> **C. Design/Construction**—embodies the distinctive characteristics of a type, period, or method of construction; or that represents the work of a master; or that possesses high artistic values; or that represents a significant and distinguishable entity whose components may lack individual distinction; or
>
> **D. Information Potential**—yielded, or may be likely to yield, information important in prehistory or history.[380]

A resource's historic context is expressed through thematic areas of significance that are applied in tandem with one or more of the criteria. *National Register Bulletin #15* provides a list of thematic areas of significance:

- Agriculture
- Architecture
- Archeology
  - Prehistoric
  - Historic—Aboriginal
  - Historic—Non-Aboriginal
- Art
- Commerce
- Communications
- Community Planning and Development
- Conservation
- Economics
- Education
- Engineering
- Entertainment/Recreation
- Ethnic Heritage
- Exploration/Settlement
- Health/Medicine
- Industry
- Invention

380. National Park Service, *National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation* (Washington, DC: National Park Service, 1997), 2.

- Landscape Architecture
- Law
- Literature
- Maritime History
- Military
- Performing Arts
- Philosophy
- Politics/Government
- Religion
- Science
- Social History
- Transportation
- Other[381]

While there are exceptions, the following list represents the criteria and areas of significance that are generally discussed in the Upper Midwest historic railroad MPDFs:

Criterion A:

- Transportation
- Exploration
- Commerce/Trade
- Community Development

Criterion B:

- As a general rule, the authors of the MPDFs consider it unlikely for Criterion B to be applied in the evaluation of historic railroad resources.

Criterion C:

- Engineering
- Architecture

Criterion D:

- As a general rule, the authors of the MPDFs (especially the Minnesota and North Dakota documents) consider it unlikely for Criterion D to be applied, unless exhibiting a design anomaly; yielding important supportive or new information about the resource's structural qualities, function, or physical situation in relation to other railroad entities; or containing artifactual remains that can support a research question regarding a way of life.

Integrity:

- According to *National Register Bulletin #15*, integrity is defined as "the ability of a property to convey its significance."[382] There are seven aspects of integrity used in the evaluation of a property: location, setting, design, materials, workmanship, feeling, and association. *Bulletin #15* describes these aspects as follows:

381. National Park Service, *How to Apply the National Register Criteria for Evaluation*, 8.

382. National Park Service, *How to Apply the National Register Criteria for Evaluation*, 44.

Location: "The place where the historic property was constructed or the place where the historic event occurred"
Setting: "The physical environment of a historic property"
Design: "The combination of elements that create the form, plan, space, structure, and style of a property"
Materials: "The physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property"
Workmanship: "The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory."
Feeling: "A property's expression of the aesthetic or historic sense of a particular period of time"
Association: "The direct link between an important historic event or person and a historic property"[383]

National Register Bulletin #15 provides additional explanation and nuance for each aspect of integrity. Integrity considerations vary based on property type and the applied criteria, as outlined in the subsections below.

4.2 Classification of historic railroad resources in the Upper Midwest

Railroad resources are generally organized typologically based on function. This model of classification is employed in Upper Midwest historic railroad MPDFs from Minnesota, North Dakota, and Iowa and is derived from Walter Berg's seminal work *Buildings and Structures of American Railroads*. A variation from this system of organization is found in the South Dakota historic railroad MPDF, which elects to classify railroad resources by physical attribute—that is, service and operation buildings, structural and engineering features, and sites. Broadly speaking, historic railroad resources can be segregated into two groups: individual resources and district resources.

4.2.1 Individual historic railroad resources: Depots

Historic train depots are prevalent in many towns and cities across the Upper Midwest. Although many have been demolished over the years, the large body of surviving depots demonstrate just how widespread the

383. National Park Service, *How to Apply the National Register Criteria for Evaluation*, 44–45.

railroad networks of the Midwest once were. According to historians Mark Hufstetler and Michael Bedeau, "The most visible railroad-related resource in most communities was the depot or station building."[384] Depots were important points along a right-of-way, serving as the node where passengers and freight interacted directly with the railroad. Aside from the trains themselves, the depot was one of the railroad's most significant symbolic assets. Reflecting on the aesthetic characteristics of the depots of the Midwest, railroad historian H. Roger Grant remarks, "[The] Midwest might be correctly viewed as a transitional belt. Clearly those factors that produced richness of design in New England account for some similar buildings in the Midwest."[385] There are four types of depots that commonly appear in the Upper Midwest MPDFs: flag, passenger, combination, and terminal (or union) depots.[386]

4.2.1.1 Flag depots

This subtype, which was often found in rural locations with limited traffic, represents the most basic depot (Figure 143). These buildings were called "flag depots" because patrons were required to flag down a train in order for it to stop. Usually built from standard plans, flag depots were small, open-air structures containing three frame walls and a roof. In the colder climates of the Upper Midwest, these buildings were sometimes totally enclosed. Built at grade or on a small, elevated platform, the depots were located in close proximity to the track. If demand required it, additional rooms (such as an office, baggage area, or waiting room) could be added to a flag depot.[387] According to the authors of the Iowa railroad MPDF, the

384. Mark A. Hufstetler and Michael A. Bedeau, *Historic Railroads of South Dakota* (National Park Service, 1998), F-47, https://npgallery.nps.gov/NRHP/GetAsset/d73fd284-a308-458d-a374-49aefcff8c1e.

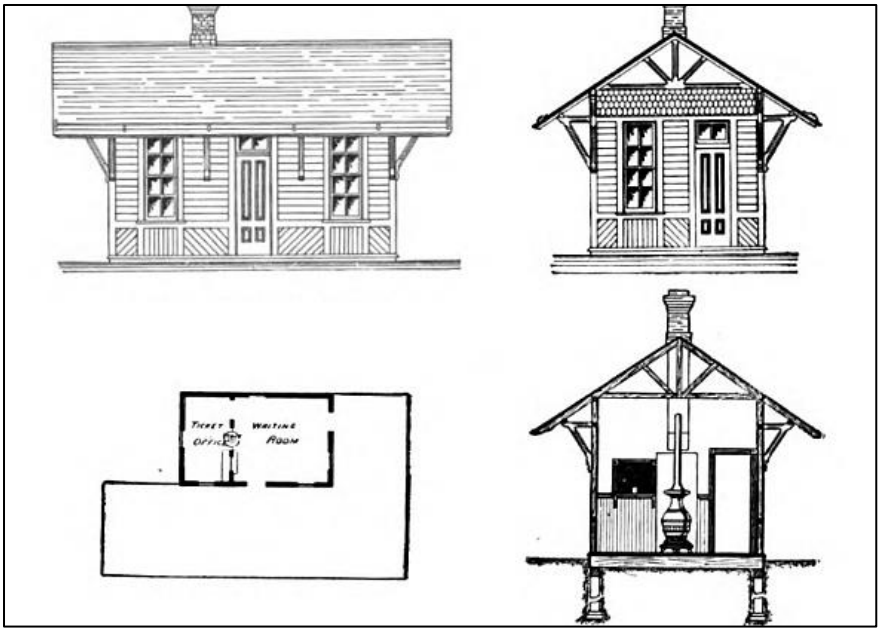
385. Grant, *Railroads in the Heartland*, 8.

386. Rebecca Conrad et al., *The Advent and Development of Railroads in Iowa, 1855–1940*, Multiple Property Documentation Form (Washington, DC: National Park Service, 1990), F-1, https://npgallery.nps.gov/pdfhost/docs/NRHP/Text/64500143.pdf; Andrew J. Schmidt, Andrea C. Vermeer, Daniel R. Pratt, and Betsy H. Bradley, *Railroads in Minnesota, 1862–1956*, Multiple Property Documentation Form (Washington, DC: National Park Service, 2013), F-230, https://www.nps.gov/nr/feature/places/pdfs/64501188.pdf; Andrew J. Schmidt et al., *Railroads in North Dakota, 1872–1956*, Multiple Property Documentation Form (Washington, DC: National Park Service, 2006), F-126, https://www.history.nd.gov/hp/PDFinfo/Railroads%20in%20North%20Dakota,%201872-1956.pdf; Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-47–F-53.

387. Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-9; Schmidt et al., *Railroads in Minnesota, 1862–1956*, 231; Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-127; Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-53.

addition of rooms to existing flag depots can sometimes blur the distinction between flag depots and formal passenger depots.[388]

Figure 143. Elevation, cross section, and ground plan for an enclosed flag station on the Minnesota and Northwestern Railroad. (Image from Walter Berg, *Buildings and Structures of American Railroads.* Public domain.)[389]



4.2.1.2 Passenger depots

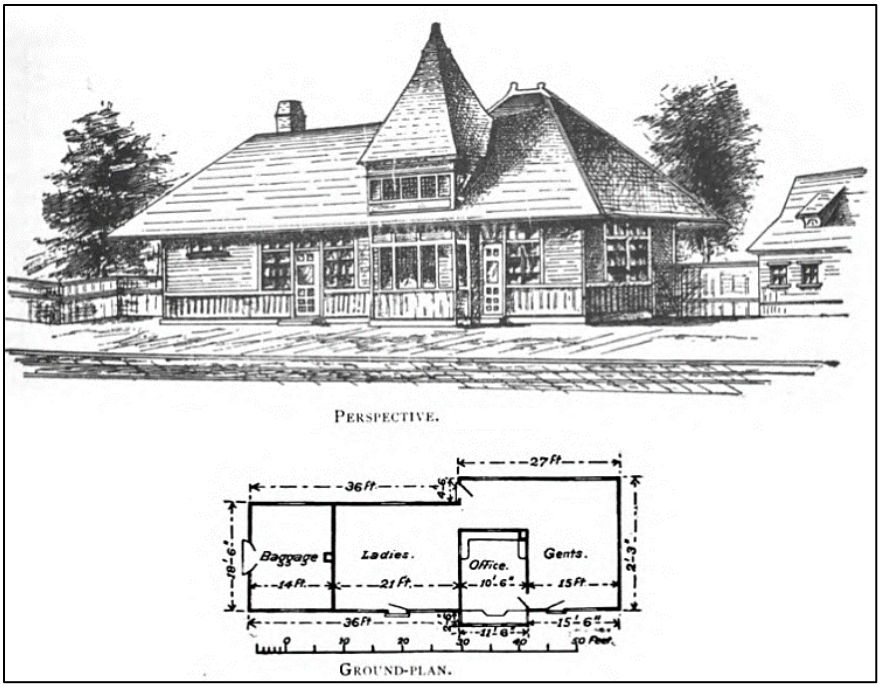
This depot subtype was situated in areas where moderate passenger traffic could be expected on a regular basis. Generally, these buildings were constructed from standard plans (Figure 144). Most local passenger depots were simple in design, though some first-class, larger passenger depots were built from custom plans. Ultimately, size and stylistic embellishment varied based on the volume of traffic at any given station. In the Upper Midwest, a typical passenger depot might be of frame construction and contain a waiting room, ticket booth, and baggage area.[390]

388. Conrad et al., *The Advent and Development of Railroads in Iowa, 1855–1940*, F-9.

389. Walter Berg, *Buildings and Structures of American Railroads: A Reference Book for Railroad Managers, Superintendents, Master Mechanics, Engineers, Architects, and Students* (New York: John Wiley and Sons, 1900), 266, https://babel.hathitrust.org/cgi/pt?id=umn.31951d02161722p&view=1up&seq=33.

390. Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-7–F-8; Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-231; Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-128.

Figure 144. Perspective and ground plan of a local passenger depot on the Michigan Central Railroad. (Image from Walter Berg, *Buildings and Structures of American Railroads.* Public domain.)[391]



4.2.1.3 Combination depots

Combination depots were popular in rural areas of the United States in the late nineteenth and early twentieth centuries, and they represent the most common depot subtype in Minnesota, Iowa, and North Dakota.[392] These buildings were generally constructed "in small rural communities where there was both passenger and freight traffic, but not enough of either to justify the construction of separate buildings."[393] Usually of brick or frame construction and built from standard plans, combination depots housed passenger, ticket, and freight operations under one roof (Figure 145). In a standard design, a centrally placed ticket office was flanked on one side by a passenger waiting room and on the other by a freight room. A bay window almost always projected from the ticket office to give the operator a panoramic view down both sides of the track. Variations to the standard combination depot layout included separate waiting rooms for men and women, the inclusion of a telegraph office, or

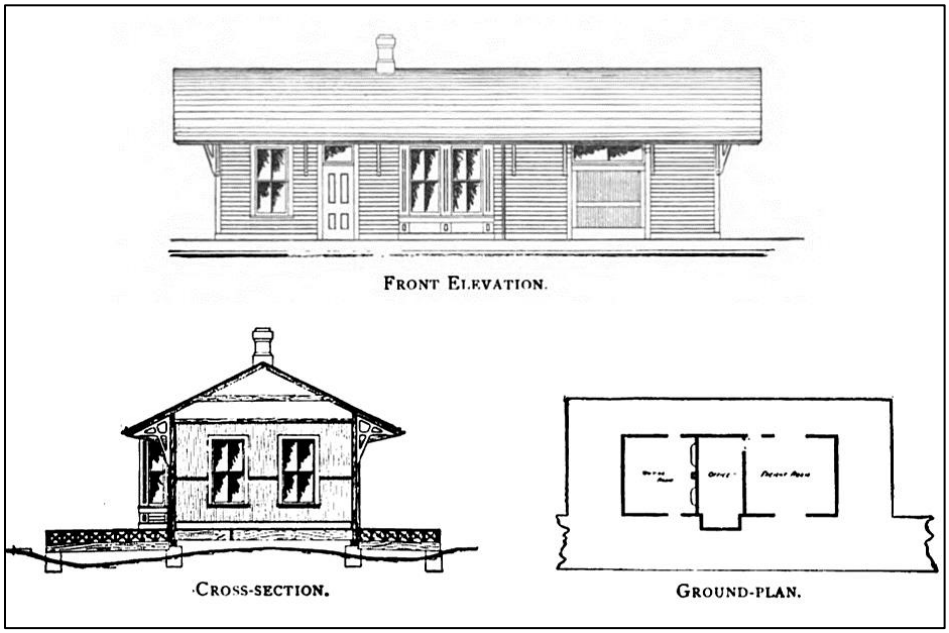
391. Berg, *Buildings and Structures of American Railroads*, 305.

392. Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-2; Schmidt et al., *Railroads in Minnesota, 1862–1956*, 188; Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-103.

393. Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-127.

bathrooms. Additionally, many combination depots in remote parts of the Upper Midwest, such as South Dakota, were outfitted with living quarters for the operator. This space was either incorporated into an extra wing or a second story.[394]

Figure 145. Front elevation, side elevation, and ground plan of a combination depot on the Burlington, Cedar Rapids and Northern Railroad. (Image from Walter Berg, *Buildings and Structures of American Railroads.* Public domain.)[395]



4.2.1.4 Terminal and union depots

These sizable, architect-designed depots were built to serve passenger needs and other support services at important railroad terminals or junctions. Accordingly, most terminal and union depots were constructed in medium- and large-sized cities and designed in the classical revival, Beaux Arts, or Richardsonian Romanesque styles (Figure 146). The average terminal and union depot incorporated many functions in one building, such as "the station master's office, train master's office, a ticket office, express office, telegraph office, baggage rooms, men's and women's waiting rooms, lavatories, newsstands, a restaurant or lunch counter, and hotel facilities."[396] Because they were limited to important railroad terminals or

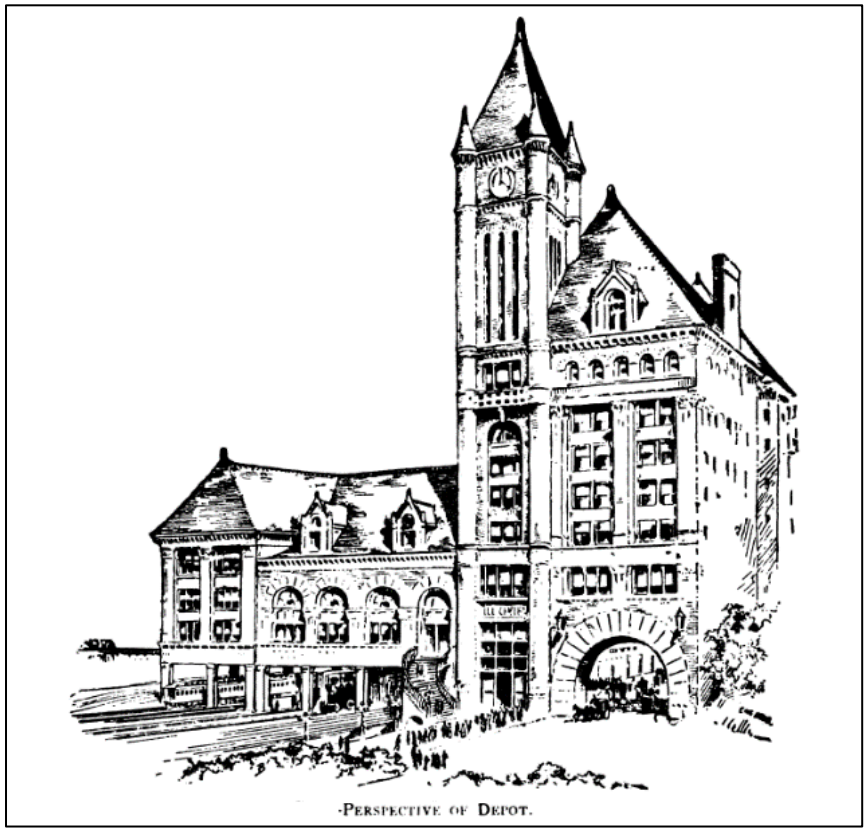
394. Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-127; Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-2; Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-232; Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-50.

395. Berg, *Buildings and Structures of American Railroads*, 254–55.

396. Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-233.

junctions, terminal and union depots were constructed with less frequency than other passenger depots. But since these substantial buildings were often situated in places of prominence and were designed in architectural high styles, many continue to be preserved today.[397]

Figure 146. Front elevation of a proposed terminal depot for the Illinois Central Railroad in Chicago. (Image from Walter Berg, *Buildings and Structures of American Railroads.* Public domain.)[398]



Historically, depots were often one of the earliest buildings constructed along a railroad corridor and became the place in which local or regional railroad operations occurred.[399] Depots were important points along a right-of-way, serving as the node where passengers and freight interacted directly with the railroad. Depots may derive their significance in the area of *transportation* or *architecture*.

397. Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-232–33; Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-1–F-2; Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-48–F-50.

398. Berg, *Buildings and Structures of American Railroads*, 423.

399. Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-10.

The authors of the Minnesota and North Dakota MPDFs affirm that the period of significance for an eligible depot (and any historic railroad building, structure, or historic district) must fall within the respective state's period of significance for historic railroads.[400] Because Wisconsin does not have a historic railroad MPDF, the 1986 Wisconsin CRMP can be used as a baseline for establishing the beginning of the statewide period of significance, which is 1850. Following the precedent of the Iowa, South Dakota, North Dakota, and Minnesota MPDFs, the end of the statewide period of significance should be considered 50 years prior to the current date. The period of significance for individually eligible resources and historic districts will "depend on construction dates, years of operation, and reasons for eligibility."[401]

Criterion A: The authors of the Iowa MPDF state that this criterion may apply to depots associated with a railroad important to the development of a community or associated with division points that were important to the management of a particular railroad.[402] The authors of the South Dakota MPDF include depots in their evaluation of significance for all railroad service and operation buildings. Within this broad category, the South Dakota MPDF states that Criterion A may apply to historic depots that are "surviving representations of the railroad industry of the state, and of its historical pattern of development and operation."[403] The Minnesota and North Dakota MPDFs state that Criterion A may be applied to depots that contributed to the economic development of a community or region, represented an important transportation node for passengers and the distribution of goods, or has a design that is influenced by the "natural, economic, political, or social conditions within its community or region."[404]

Criterion B: This criterion will not be applied.

Criterion C: This criterion may apply to depots that embody the design schemes associated with a specific railroad company, including

400. Schmidt et al., *Railroads in Minnesota, 1862–1956*. F-233; Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-128.

401. Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-128.

402. Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-11.

403. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-64.

404. Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-234; Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-129.

standardized designs; those that are associated with the work of an important architect; those embodying high artistic value; and early, rare, or transitional types of depots.[405]

Criterion D: The authors of the Iowa MPDF state that Criterion D may apply to the ruins and subsurface remains of depots "that have the potential to yield important information concerning the location, use, and spatial arrangement of abandoned stations."[406] This criterion is not addressed in the South Dakota MPDF. Finally, the authors of the Minnesota and North Dakota MPDFs qualify the use of this criterion by clarifying that

> Depots will meet Criterion D if further structural analysis can yield important information about a significant type of construction or the spatial arrangement of depot-related support facilities at important locations along significant corridors. The mere existence, or former existence, of a depot at a particular location does not constitute sufficient important information to warrant eligibility. Rather, the information to be garnered should be supplemental to or in contrast with information available through other sources, such as historical documents or similar buildings. Furthermore, the depot itself must be the source of the information.[407]

Integrity: Integrity of location and setting may vary depending on whether a depot is eligible under Criterion A or individually eligible under Criterion C. In general, integrity of location is required in Criterion A scenarios since the depot must have a visible connection to the railroad corridor with which it was associated. Relocated depots significant under Criterion A may still be eligible under Criterion Consideration B if they are moved to another spot on its associated railroad corridor. Relocated depots that fall under Criterion C may still be eligible "for historically

405. Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-11; Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-64; Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-235; Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-130.

406. Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-11.

407. Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-130.

significant design and construction techniques."[408] A depot retains its integrity of setting if it is situated in an environment similar to the one that surrounded it during the building's period of significance and associated with a railroad corridor. Integrity of design, materials, and workmanship are especially important for depots eligible under Criterion C. Feeling and association often will be satisfied if the other areas of integrity are suitably expressed, especially location, design, and materials.[409]

4.2.1.5 Depots historically within the boundaries of Fort McCoy

Historically, there were depots within the present boundaries of Fort McCoy, none of which are extant (Table 1). Examples include depots at Lafayette Station (c. 1858–1910), Raymore Station (c. 1900–1910), McCoy Station East (1910–c. 1977), and McCoy Station West (c. 1915–c. 1950). The specifications of the depots at Lafayette Station and Raymore Station are unknown. In the 1910s, the CMSTP&P and C&NW constructed four depots within the present boundaries of Fort McCoy, two at McCoy Station East and two at McCoy Station West. The first depot constructed by the CMSTP&P at McCoy Station East in 1911 was a standard combination depot, one of the most typical kinds of depots found in the rural Midwest in the early twentieth century (Figure 74). The specifications of the other three 1910s depots are unknown. In 1928, the C&NW constructed a new depot at McCoy Station West, which a historic photograph indicates may have been a no. 2 combination depot, another standardized plan (Figure 110). The CMSTP&P also provided a new depot at McCoy Station West in the 1940s; however, the specifications of this building are unknown. In 1943, the CMSTP&P and C&NW erected a joint depot at McCoy Station East. This unique building was a one-story, frame building with clapboard siding, exposed rafter tails, and a low-pitched gable roof. Stylistically, it matched the utilitarian look of the mobilization buildings in the new cantonment (Figure 38).

Table 1. Depots.

Location	Builder	Possible Years of Operation	Plans Available?	Photos Available?	Extant?
Lafayette Station	CMSTP&P	c. 1858–1910	No	No	No

408. Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-236.

409. Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-236; Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-131–32.

Location	Builder	Possible Years of Operation	Plans Available?	Photos Available?	Extant?
Raymore Station	CMSTP&P	1900–1910	No	No	No
McCoy Station East	CMSTP&P	c. 1911–c. 1921	Yes	No	No
—	C&NW	c. 1911–c. 1921	No	No	No
—	CMSTP&P and C&NW	1942–1943 (temporary joint depot)	No	No	No
—	CMSTP&P and C&NW	1943–c. 1977 (joint depot)	Yes	Yes	No
McCoy Station West	CMSTP&P	c. 1915–1942	No	No	No
—	CMSTP&P	c. 1942–c. 1950	No	No	No
—	C&NW	c. 1915–1928	No	No	No
—	C&NW	1928–c. 1950	No	Yes	No

4.2.2 Individual historic railroad resources: service buildings and structures

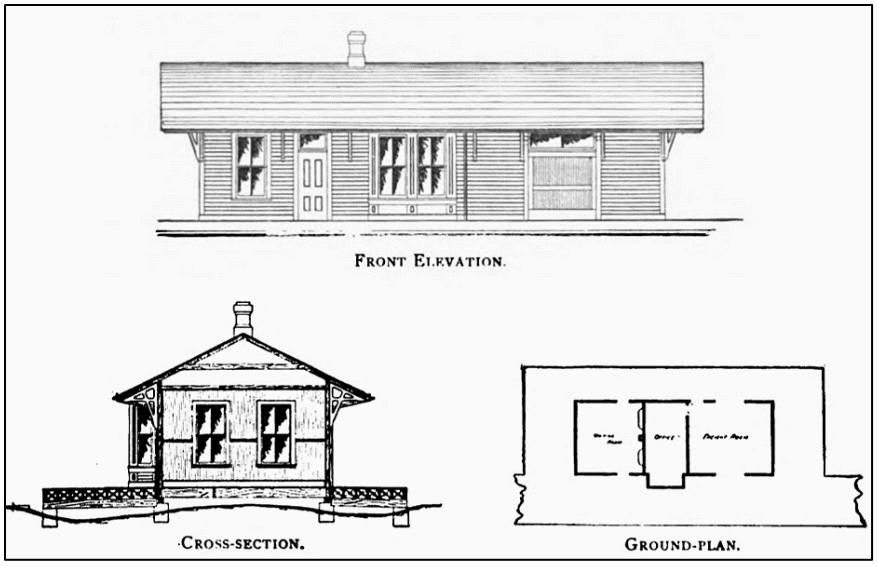
There are several types of service buildings and structures that were historically associated with railroad corridors and railroad stations. Some common service buildings and structures discussed in Midwestern railroad MPDFs are outlined below.

4.2.2.1 Freight houses

A freight house is a stand-alone building that functions as a transfer and storage facility for freight. Freight houses are located close to the tracks and usually contain high platforms to facilitate loading and unloading. Separate freight houses were most common in larger cities, which had high-traffic stations. Here, a freight house could be a substantial structure built to accommodate regular, large-scale shipments. Otherwise, freight houses in low-traffic areas were often small, utilitarian frame structures (Figure 147).[410]

410. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-53; Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-304; Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-190; Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-20.

Figure 147. Front elevation, cross section, and ground plan of a freight house on the Minnesota and Northwestern Railroad. (Image from Walter Berg, *Buildings and Structures of American Railroads.* Public domain.)[411]



4.2.2.2 Freight houses historically within the boundaries of Fort McCoy

Historically, there were freight houses within the present boundaries of Fort McCoy, none of which are extant (Table 2). According to an ICC valuation map, the C&NW built a freight house in the vicinity of McCoy Station West in 1917. This feature measured 10 ft, 5 in. × 14 ft, 5 in. (Figure 148). Construction of the freight house and several surrounding features (such as a water closet, ticket office, and platforms) coincided with the buildup of Camp Robinson during WWI.[412] This freight house was removed in 1928.[413] A military map from 1929 shows a CMSTP&P freight house at McCoy Station West, which likely existed from c. 1920s to the 1950s (Figure 111).[414] Another building closely associated with the freight house category, a 16 × 41 ft railway express building, was constructed c. 1943 at McCoy Station East (Figure 149).[415]

411. Berg, *Buildings and Structures of American Railroads*, 254–55.

412. C&NW valuation map, 1917, digital file from office of Fort McCoy CRM.

413. C&NW valuation map, c. 1940, digital file from Fort McCoy CRM.

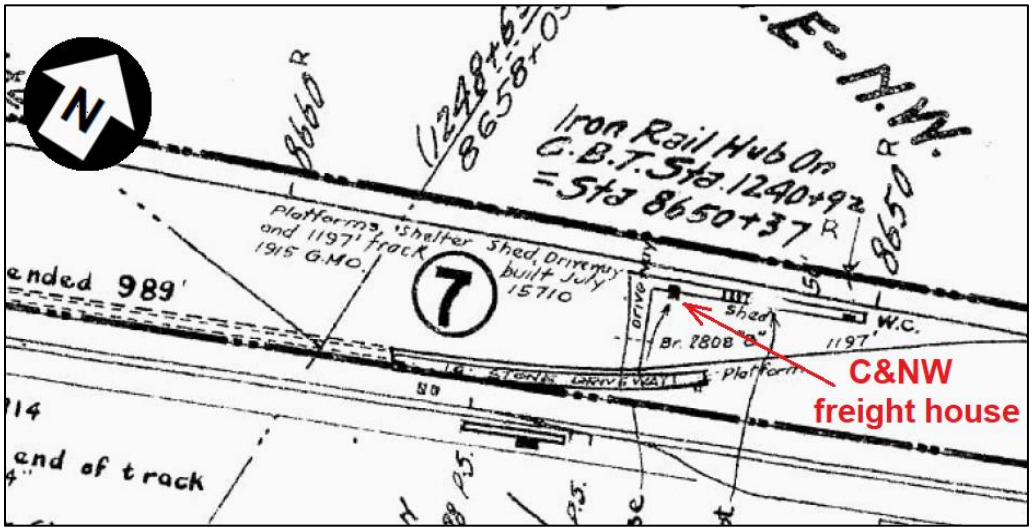
414. *Camp McCoy Wisconsin, Developed Area Showing Camp Facilities and Contours*, October 1929, drawer 1, folder 3, Fort McCoy History Center, Sparta, WI.

415. Camp McCoy station valuation map, revised August 9, 1944, digital file from Fort McCoy CRM.

Table 2. Freight houses.

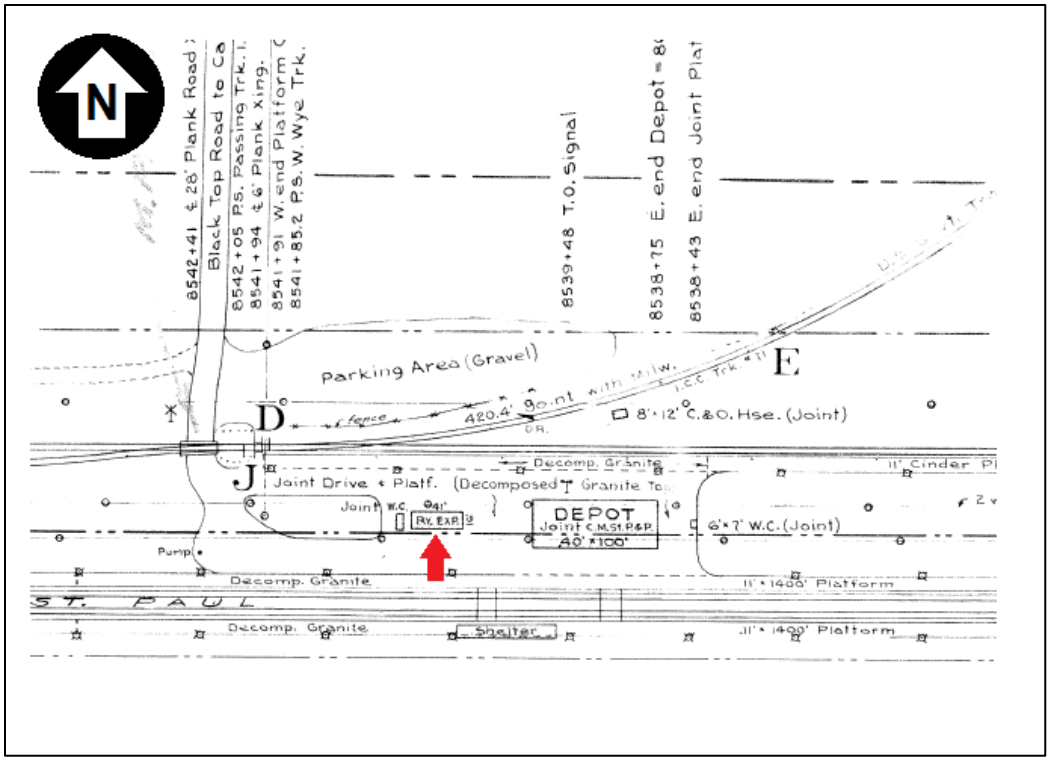
Location	Builder	Possible Years of Operation	Plans Available?	Photos Available?	Extant?
McCoy Station West	C&NW	1917–c. 1920s	No	No	No
McCoy Station West	CMSTP&P	c. 1920s–c. 1950s	No	No	No
McCoy Station East	C&NW and CMSTP&P	c. 1943–c. 1970s	No	No	No

Figure 148. Freight house at McCoy Station West, 1917. (Image from Fort McCoy History Center. Public domain.)[416]



416. C&NW valuation map, 1917, digital file from office of Fort McCoy CRM.

Figure 149. Railway express building at McCoy Station East during WWII. (Image from Fort McCoy CRM. Public domain.)[417]



4.2.2.3 Engine houses

Engine houses are buildings that shelter locomotives and provide a place to service them. They are usually found at railroad stations or railroad yards. Historically, there are two types of engine houses that were commonly associated with Midwestern railroads: roundhouses and square houses. The type of engine house employed at a station or rail yard depended on the anticipated volume of traffic. Roundhouses, the largest type of engine house, were usually built in large rail yards or division points. Typically constructed of brick, roundhouses consisted of multiple service bays oriented in a segmented arc or a full circle. A large turntable allowed locomotives to access the bays.[418]

Square houses were much smaller than roundhouses and usually consisted of only one or two service bays. These buildings could be either frame or

417. Camp McCoy station valuation map, revised August 9, 1944, digital file from Fort McCoy CRM.

418. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-55–F-57; Schmidt et al., *Railroads in Minnesota, 1862–1956*, 191, F-238; Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-133–34; Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-21–F-22.

brick construction and were located in smaller yards or stations. Locomotives approached square houses through a sidetrack or spur track. Wherever there was an engine house, a "variety of ancillary, related structures, including water tanks, oil houses, coaling and fueling stations, and sand houses, could be located nearby."[419]

4.2.2.4 Engine houses historically within the boundaries of Fort McCoy

Historically, there were engine houses within the present boundaries of Fort McCoy (Table 3). Two known examples, the one-bay engine house built at Raymore Station around 1900 and the one-bay engine house built at the new cantonment in 1943 (2163), are no longer extant. The engine house at Raymore Station was of frame construction and contained one bay, matching the description of a typical square house (Figure 150). The engine house at the new cantonment was also a frame building with one bay (Figure 151).

Table 3. Engine houses.

Location	Builder	Possible Years of Operation	Plans Available?	Photos Available?	Extant?
Raymore Station (1900–1910)	CMSTP&P	1900–c. 1910	Yes	No	No
Upper Spur Sector	Unknown, Bldg. 2163	c. 1943–c. 2010	No	Yes	No

419. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-55–F-57.

Figure 150. Side elevation plan of the engine house constructed at Raymore in 1900. (Image from Milwaukee Road Archives. Public domain.)[420]

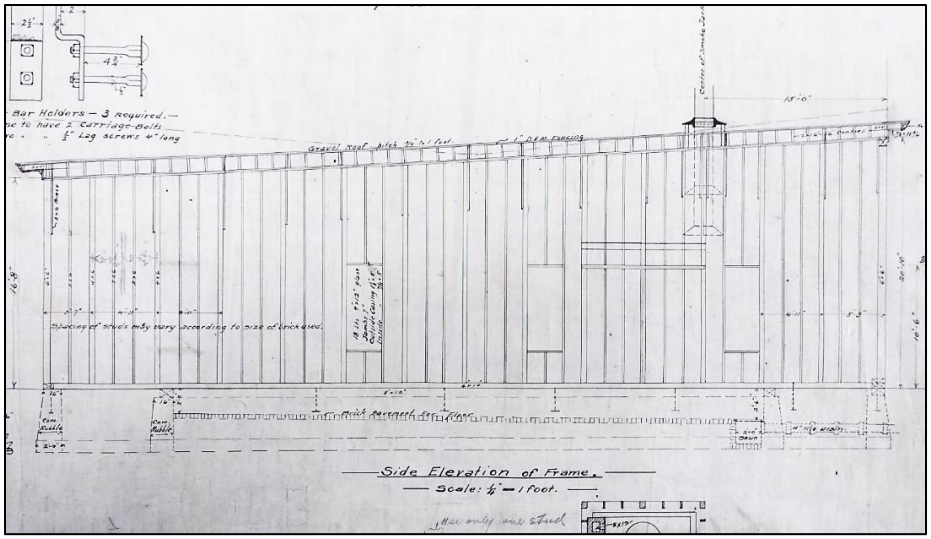


Figure 151. A diesel switch engine is seen outside the engine house (2163) in 1952, looking northwest. (Image from Monroe County Local History Room. Public domain.)[421]

420. "One Stall Engine House, Drawing No. B-6719," March 20, 1896, CMSTP&P Bridge and Building Department, Milwaukee Road Archives, Milwaukee, WI.

421. McCoy–1952 1200–001, folder: Military, Fort McCoy, General, Monroe County Local History Room, Sparta, WI.

4.2.2.5 Tool houses

Tool houses were small, one-story frame buildings used to store hand cars and special maintenance equipment for railroad tracks. Crews generally constructed tool houses from standardized plans and situated these utilitarian buildings near a short sidetrack that allowed hand cars to enter and exit the structure easily. Most railroad companies included a tool house for each track section or regular track gang.[422]

4.2.2.6 Section houses

Railroad companies constructed section houses within the corridor's right-of-way for section crews and other track hands. There were two common types of section houses, those that accommodated families and those that housed a group of men.[423] Section houses were usually of frame construction and built according to standardized plans. These buildings were typically utilitarian in appearance and contained few embellishments.[424]

4.2.2.7 Section houses historically within the boundaries of Fort McCoy

Historically, there were sections houses within the present boundaries of Fort McCoy (Table 4). According to an ICC valuation report from 1919, the CMSTP&P possessed a 10 × 10 ft section house at Raymore Station. Identified as an "operator's house" in the report, this small building may have been constructed after the company relocated Raymore Station to Section 33 of Greenfield Township (sometime between 1910 and 1914), or crews might have transported it from the old location to the new station site. Given the small size of this building, it may have been occupied by a single operator on a rotational basis. Maps indicate that at least one other section house existed within the present-day boundaries of Fort McCoy. This building was situated near the C&NW depot at McCoy Station East and may have been constructed from a standard C&NW section house plan (Figure 152). Finally, a newspaper article in the *Sparta Herald* suggests

422. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-62–F-63. Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-23.

423. Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-30–F-31.

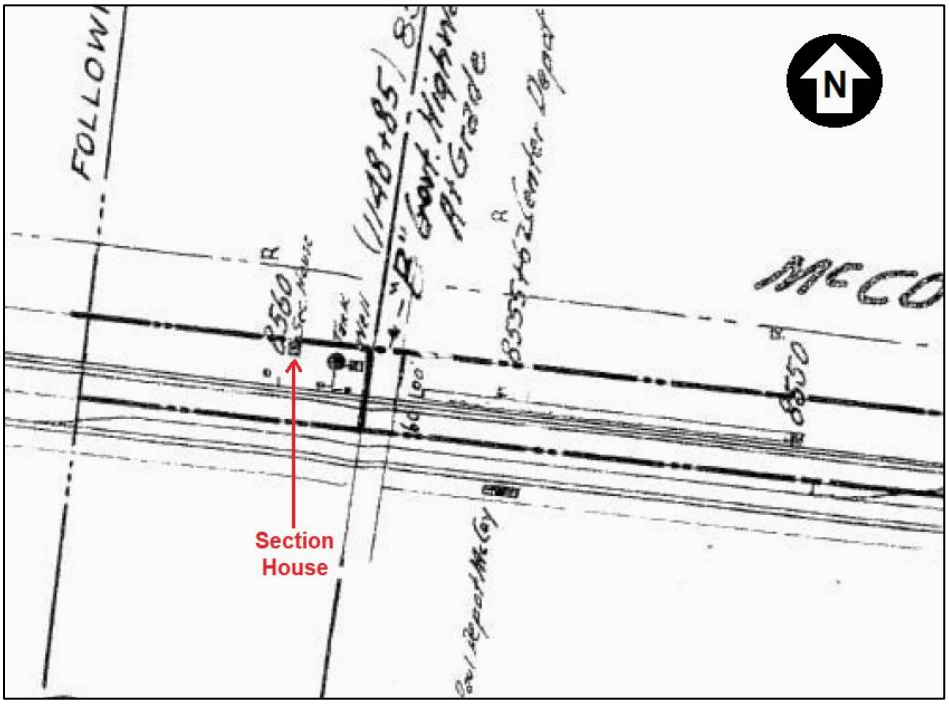
424. Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-30; Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-57–F-59; Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-189.

that a section house existed at Lafayette Station before burning down in 1911.[425] None of these section houses are extant.

Table 4. Section houses.

Location	Builder	Possible Years of Operation	Plans Available?	Photos Available?	Extant?
Raymore Station (1900–1910)	CMSTP&P	1900–c. 1910	Yes	No	No
Lafayette Station	Unknown	Unknown–c. 1911	No	No	No

Figure 152. This valuation map from 1917 depicts a section house on the C&NW side of McCoy Station East. (Image from Fort McCoy CRM. Public domain.)[426]



4.2.2.8 *Water tanks*

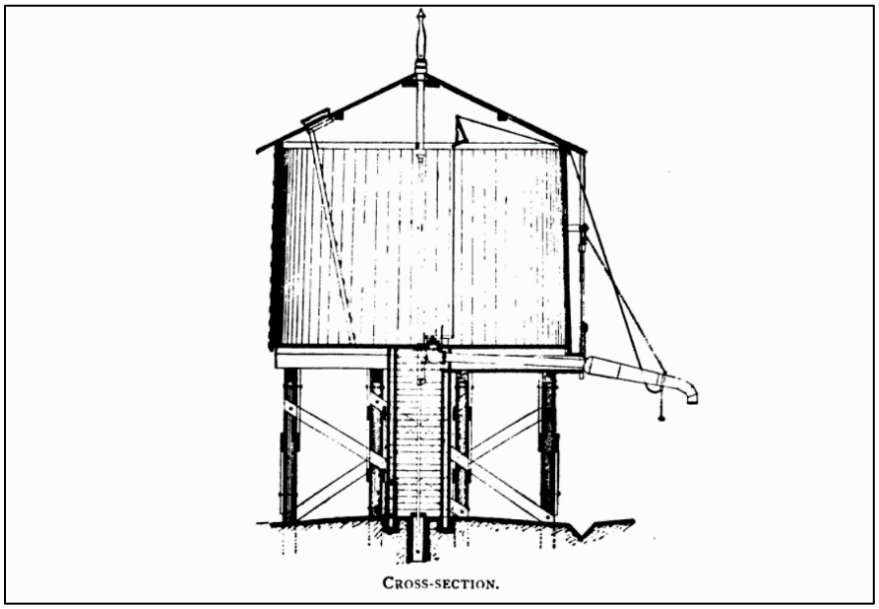
During the steam era, water tanks were a vital component of the railroad. Situated within rights-of-way, water tanks conveyed water to steam engines at strategic points along the line. Many tanks were located at stations, where a locomotive could replenish its water supply while passengers and freight boarded and departed the train. These structures consisted of an elevated wood or metal tank, usually round, with a moveable spout (Figure 153). A windmill, mechanical pump, or local reservoir

425. "Building at Old Lafayette Station Burned." *Sparta Herald*, November 5, 1911.

426. C&NW valuation map, 1917, digital file from office of Fort McCoy CRM.

with a gravity feed generally supplied the tank with water. These structures became obsolete after railroads transitioned from steam engines to diesel engines.[427]

Figure 153. Drawing of a standard water tank on the Chicago, St. Paul, and Kansas City Railroad. (Image from Walter Berg, *Buildings and Structures of American Railroads*. Public domain.)[428]



4.2.2.9 Water tanks historically within the boundaries of Fort McCoy

Historic maps indicate that there were water tanks within the present-day boundaries of Fort McCoy (Table 5). A map of Raymore Station from 1907 depicts a water tank just south of the CMSTP&P tracks, demarcated with the letter "F" (Figure 60). The accompanying legend states that this letter also represents a windmill, indicating that a windmill-pump system may have conveyed water to an adjacent tank. CEMML archaeologists investigated the potential windmill and water tank site south of the railroad tracks in 2010. The report determined the site to be ineligible for listing in the NRHP because none of the site's above-grade structures were extant, and the material found below grade did not contribute anything meaningful to an overall typology of railroad infrastructure in Wisconsin.[429] Another water tank that used to exist within the boundaries of Fort McCoy is

427. Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-26; Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-60; Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-189.

428. Berg, *Buildings and Structures of American Railroads*, 123.

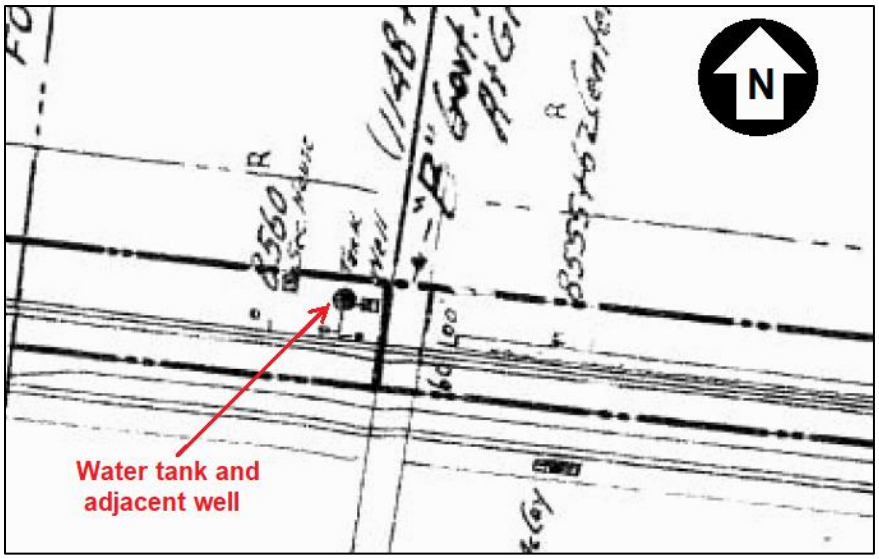
429. Dahlen and Wagner, *2010 Cultural Resource Management*, 531.

depicted on valuation map from the late 1910s. This feature and a nearby well were situated on the C&NW side of McCoy Station East (Figure 154). Neither of the water tanks outlined above are extant.

Table 5. Water tanks.

Location	Builder	Possible Years of Operation	Plans Available?	Photos Available?	Extant?
Raymore Station (1900–1910)	CMSTP&P	1900–c. 1910	No	No	No
McCoy Station East	C&NW	c. 1911–c. 1921	No	No	No

Figure 154. This valuation map from 1917 depicts a water tank and well on the C&NW side of McCoy Station East. (Image from Fort McCoy CRM. Public domain.)[430]



4.2.2.10 Platforms and shelters

Platforms enabled the movement of passengers and freight from train cars, which were elevated a few feet above the ground, to depots, freight houses, and warehouses. This structure had two varieties: low platforms and high platforms. As the name suggests, low platforms were built at grade. Often constructed in brick or concrete, low platforms were common in passenger loading areas and required travelers to enter cars through built-in steps. High platforms were associated with stations transacting passengers and freight. These were often constructed from wood or concrete, rose to a height of approximately 4 ft, and contained ramps to

430. C&NW valuation map, 1917, digital file from office of Fort McCoy CRM.

facilitate hand trucks, carts, and other wheeled devices. Open-air shelters and sheds were located near passenger and freight loading areas.[431]

4.2.2.11 Platforms and open shelters historically within the boundaries of Fort McCoy

Multiple platforms and shelter sheds existed within the present boundaries of Fort McCoy (Table 6). Maps and photographs indicate that platforms were situated at McCoy Station East, McCoy Station West, in the warehouse area south of the new cantonment, and at the terminus of the lower spur sector in Angelo Township. A platform also existed at the Kelvin stop in the early twentieth century (Figure 155–Figure 158). Historic photographs suggest that some of these structures were elevated platforms of frame construction (Figure 124, Figure 131). According to CMSTP&P records, there were also open-air, frame shelters on the installation in the 1910s (Figure 159–Figure 160).

Table 6. Platforms and open shelters.

Location	Builder	Possible Years of Operation	Plans Available?	Photos Available?	Extant?
McCoy Station East	CMSTP&P and C&NW	c. 1910–c. 1920s; 1942–c. 1970s	Yes (shelter)	No	No
McCoy Station West	CMSTP&P and C&NW	c. 1910–c. 1950s	No	No	No
Upper Spur Sector	Likely US Government	c. 1910–c. 1920s	No	No	No
Upper Spur Sector	Likely US Government	1942–present (platforms only)	No	Yes	Some
Lower Spur Sector	Likely US Government	c. 1910–c. 1950s	No	Yes (1)	No

431. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-63; Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-188.

Figure 155. Platforms and shelters at McCoy Station West, 1917. (Image from Fort McCoy History Center. Public domain.)[432]

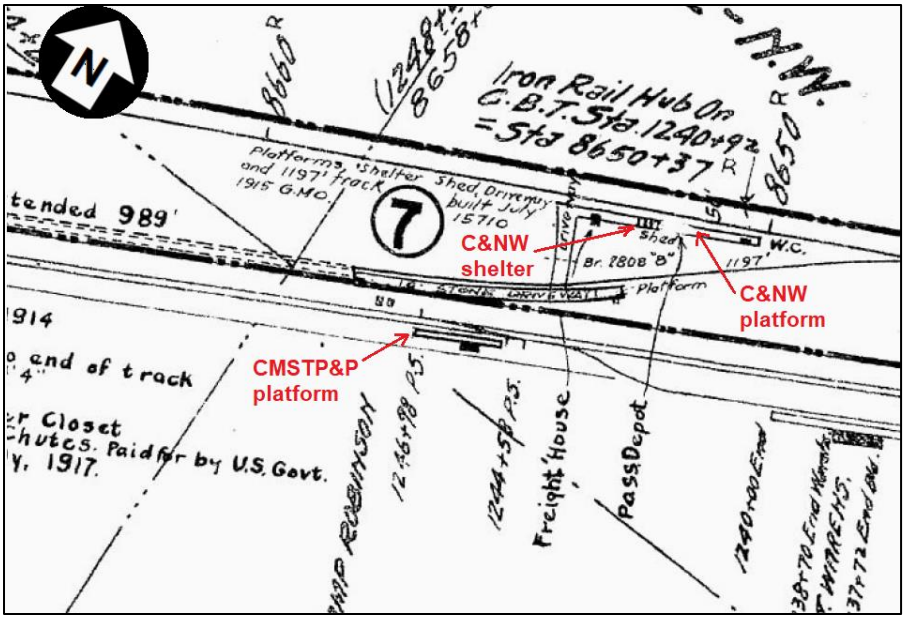
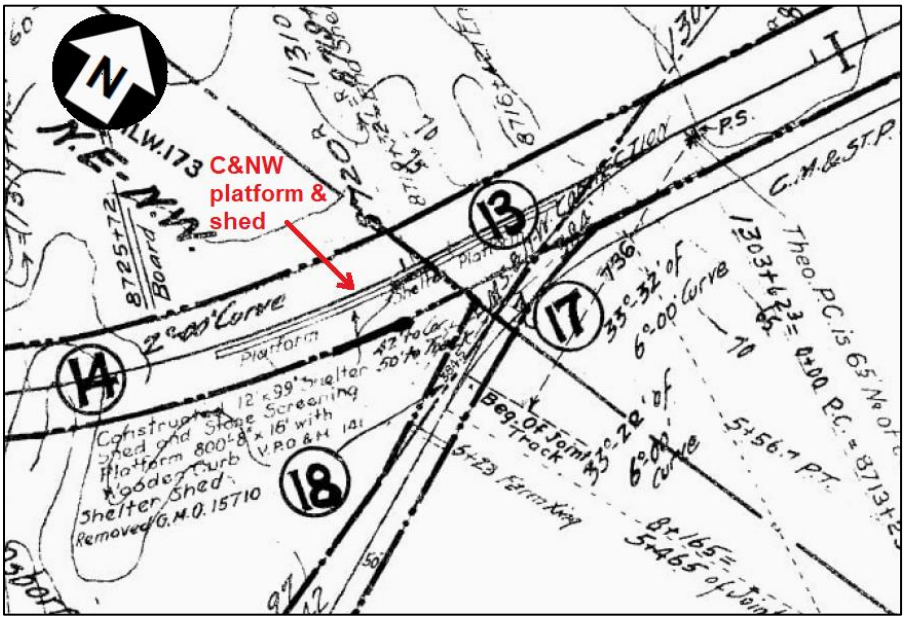


Figure 156. A long platform and shelter shed at the Kelvin stop, 1917. (Image from Fort McCoy History Center. Public domain.)[433]



432. C&NW valuation map, 1917, digital file from office of Fort McCoy CRM.

433. C&NW valuation map, 1917, digital file from office of Fort McCoy CRM.

Figure 157. Platforms and shelters at McCoy Station East, 1917. (Image from Fort McCoy History Center. Public domain.)[434]

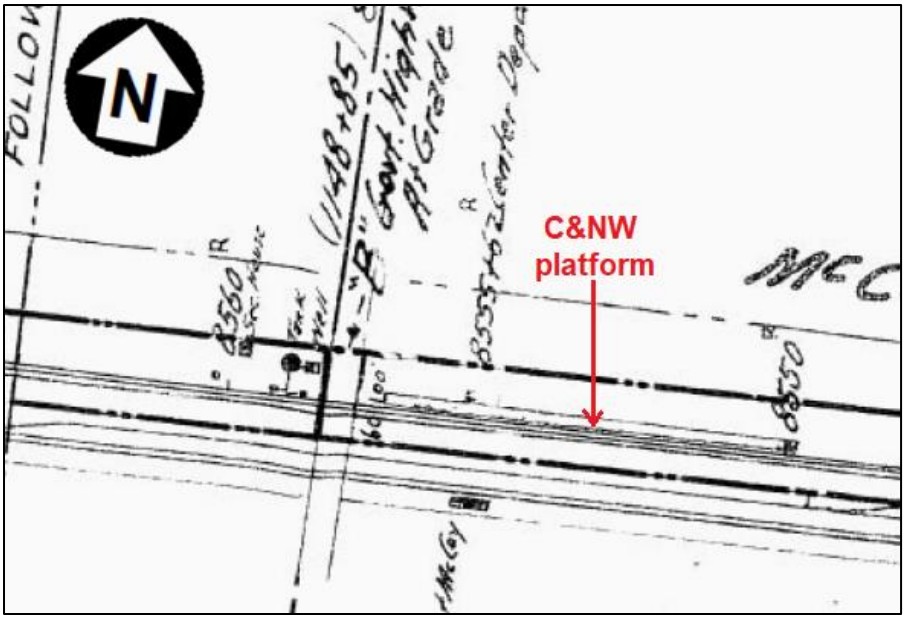
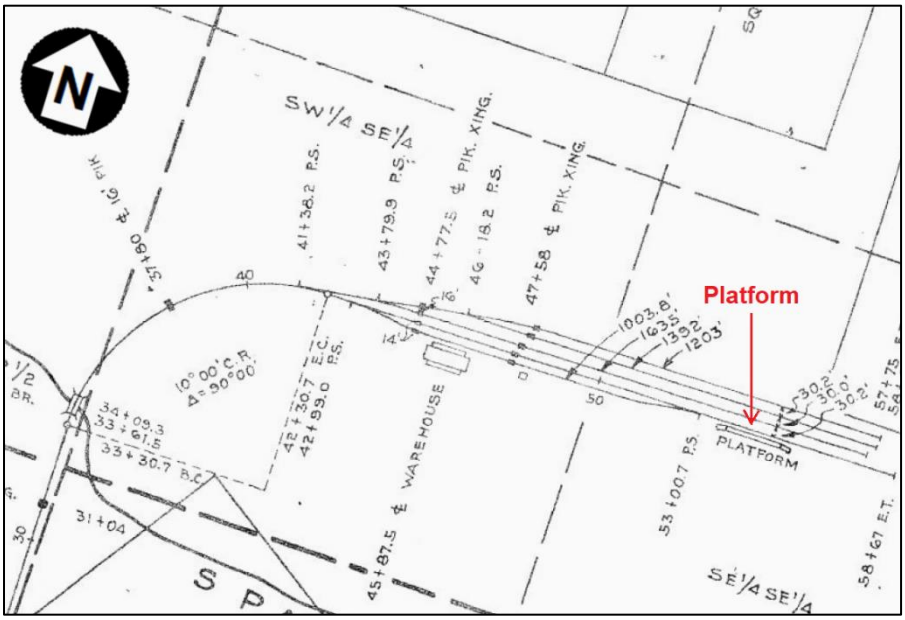


Figure 158. Platform at the upper spur sector, c. 1920. (Image from Fort McCoy History Center. Public domain.)[435]



434. C&NW valuation map, 1917, digital file from office of Fort McCoy CRM.

435. CMSTP&P valuation map, c. 1920, digital file from office of Fort McCoy CRM.

Figure 159. Transverse elevation plan of the passenger shelter sheds erected at Camp McCoy, based on plans used at Herndon, Iowa, 1911. (Image reproduced with permission from Milwaukee Road Archives.)[436]

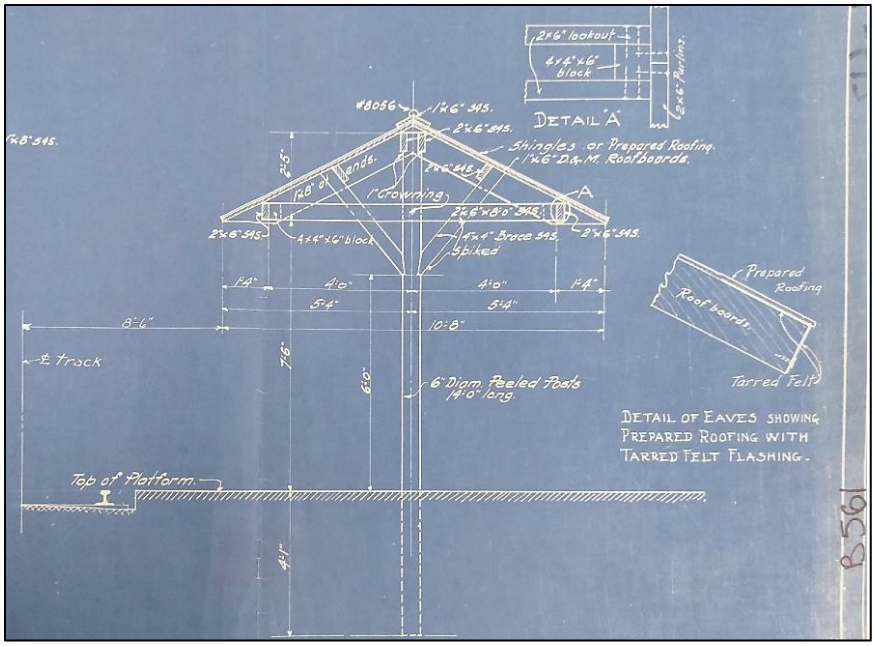
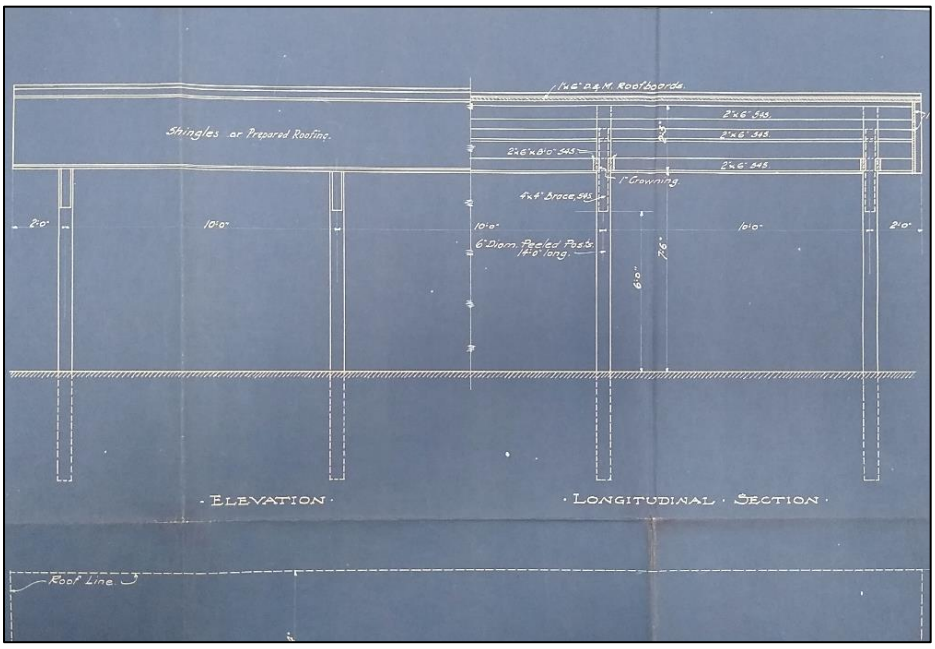


Figure 160. Side elevation plan of the typical passenger shelter sheds erected at Camp McCoy, 1911. (Image reproduced with permission from Milwaukee Road Archives.)[437]



436. "Shelter Shed at Herndon Iowa, Drawing No. B-561," July 27, 1909, CMSTP&P Bridge and Building Department, Milwaukee Road Archives, Milwaukee, WI.

437. "Shelter Shed at Herndon Iowa, Drawing No. B-561," July 27, 1909, CMSTP&P Bridge and Building Department, Milwaukee Road Archives, Milwaukee, WI.

4.2.2.12 Coal houses

Coal houses describe small structures that stored coal. While most of this coal was used to heat railroad buildings "intended for human occupancy, some of these sheds may also have stored coal for locomotive use."[438] These structures were typically of board-and-batten construction and may have contained sliding doors along one I or a hinged access door on the roof. The authors of the Iowa MPDF indicate that coal houses occupied an average space of about 8 × 10 ft.[439]

4.2.2.13 Coal houses historically within the boundaries of Fort McCoy

Historically, there were coal houses within the present-day boundaries of Fort McCoy (Table 7). ICC valuation records from 1919 show that the CMSTP&P possessed a coal house among its assets at Raymore Station. This structure, which was 8 × 16 ft, is no longer extant (Appendix A). Another coal house may have been located at McCoy Station East, where the C&NW possessed a section house. Additionally, a small, 8 × 12 ft coal and oil house was jointly constructed by the CMSTP&P and C&NW in 1943 at McCoy Station East (Figure 161).

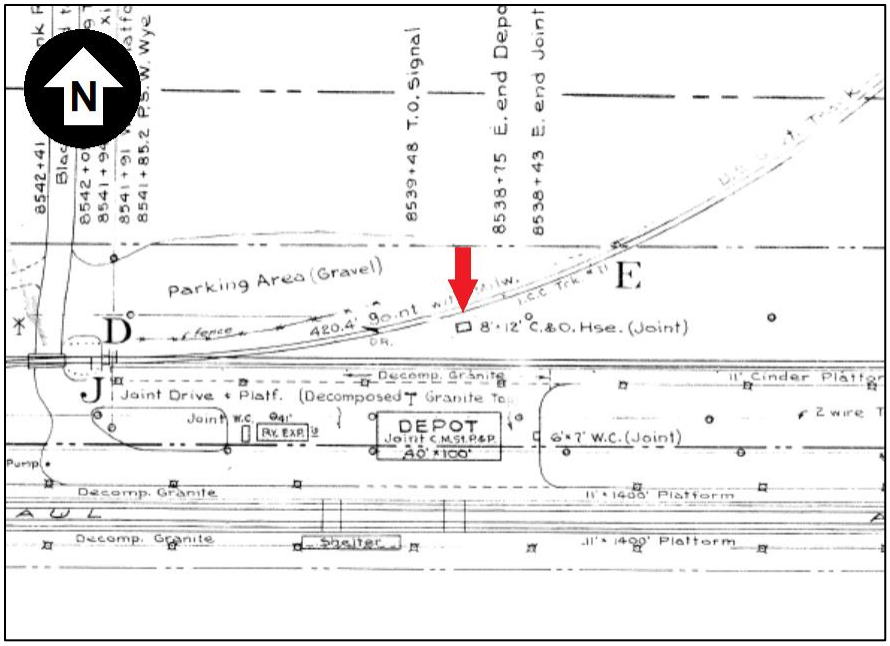
Table 7. Coal houses.

Location	Builder	Possible Years of Operation	Plans Available?	Photos Available?	Extant?
Raymore Station (1910–present)	CMSTP&P	c. 1910–c. 1950s	Written description (Appendix A)	No	No
McCoy Station East	C&NW	c. 1910–c. 1920s	No	No	No
McCoy Station East	CMSTP&P and C&NW	1943–c. 1950s	No	No	No

438. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-63.

439. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-63; Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-28.

Figure 161. Coal and oil house at McCoy Station East during WWII. (Image from Fort McCoy CRM. Public domain.)[440]



4.2.2.14 Coaling stations

During the steam era, coaling stations were important assets along railroad rights-of-way. Usually situated at division points and line stations, a coaling stations employed a variety of methods for transferring coal into a train's tender. Some used stationary cranes to transfer coal from coal cars into the tender. Others, known as clamshell stations, had exposed piles of coal on the ground that crews shoveled directly into the tender. Some coaling stations had more complicated infrastructure for accomplishing this task, such as elevated chutes or hoppers situated over the tracks. These structures became obsolete when railroads transitioned to diesel engines.[441]

4.2.2.15 Coaling stations historically within the boundaries of Fort McCoy

It is unclear how many coaling stations existed within the present-day boundaries of Fort McCoy, though at least one exposed coaling area

440. Camp McCoy station valuation map, revised August 9, 1944, digital file from Fort McCoy CRM.

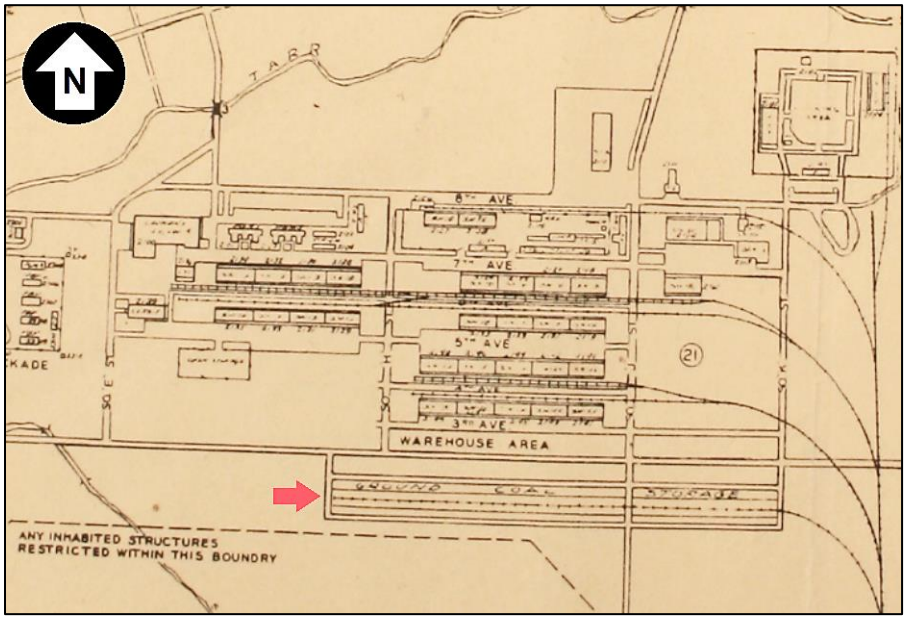
441. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-59; Conard and Cunning," *The Advent and Development of Railroads in Iowa, 1855–1940*," F-27–F-28; Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-188.

existed south of the warehouse sector in the new cantonment (Table 8 and Figure 162–Figure 163).

Table 8. Coaling stations.

Location	Builder	Possible Years of Operation	Plans Available?	Photos Available?	Extant?
McCoy Station East	Unknown	1942–c. 1950s	No	Yes	No

Figure 162. Ground coal storage area south of the new cantonment's warehouse sector, 1942. (Image from Monroe County Local History Room. Public domain.)[442]



442. *Camp McCoy Project General Layout Plan*, 1942, Monroe County Local History Room, Sparta, WI.

Figure 163. Remnants of the ground coal storage area south of the new cantonment's warehouse sector, c. 1960s, looking west. (Image from Library of Congress. Public domain.)[443]

4.2.2.16 Evaluation of railroad support buildings and structures

The way in which the potential eligibility of railroad support buildings and structures are evaluated varies based on the MPDF that is consulted. The Minnesota and North Dakota MPDFs, for example, assess engine houses and section houses as their own property type (although they can be contributing resources in a railroad historic district), while all other support buildings and structures are only considered within the context of a railroad historic district. But the Iowa MPDF evaluates all support structures and buildings on an individual basis. The authors of the South Dakota MPDF include support structures in their evaluation of significance for all railroad-associated structures and buildings, including depots.

Criterion A: This criterion may apply to support structures and buildings associated with a significant railroad route or station that represented a core railroad transportation hub in a community.[444] The authors of the South Dakota MPDF state that historic railroad structures and buildings may fall under Criterion A if they are components of a railroad that "served an important local, civic, commercial, or economic role. This

443. Historic American Buildings Survey, *Fort McCoy, Sparta, Monroe County, WI*, HABS no. WI-308-15, Library of Congress, https://www.loc.gov/item/wi0229/.

444. Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-33.

association may be demonstrated through the building's use by a railroad for a substantial length of time during the historic period, and/or by being a component of an important local railway-centered industrial or business district."[445]

Criterion B: This criterion will not be applied.

Criterion C: This criterion may apply to support structures that are good representations of standardized company plans or exhibit "distinctive architectural elements" related to a specific railroad company.[446]

Criterion D: According to the Iowa MPDF, this criterion might be applied to "building ruins and buried deposits with good potential to document the spatial arrangement, extent, and/or uses of individual structures at historically important locales."[447]

Integrity: Due to their utilitarian and sometimes temporary nature, the condition of railroad support buildings and structures can vary widely, affecting the integrity of materials and design. The smaller size and recyclability of such structures also meant that they were often relocated as needed, which may affect integrity of location and setting. Regarding the integrity of support structures and buildings, the authors of the Iowa MPDF remark,

> Assessing the relative integrity of service buildings is thus problematic, and it is doubtful that many of the remaining structures can meet the standards required for National Register eligibility. Still, if the tracks were the bloodstream of railroads, these utilitarian structures were the vital organs of a smoothly operating line. And the mere fact that railroads no longer require all these buildings housing specialized functions, and consequently most lines have removed them, gives extant service buildings importance as the physical record associated with the era of steam

445. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-72.

446. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-65; Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-33.

447. Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-33.

> railroading. . . . Therefore, consideration should be given to preserving some of the buildings . . . which exemplify an important chapter in the history of railroad architecture.[448]

4.2.3 Individual historic railroad resources: Grade separation structures

Grade separation structures comprise another class of historic railroad resources. A grade separation structure is the "crossing between a railroad corridor and another railroad corridor, a vehicular roadway, a water course, or a topographic feature."[449] This category includes features such as bridges and trestles, tunnels, and culverts.

4.2.3.1 Bridges and trestles

A railroad bridge is a structure that supports track across an open or enclosed span. The earliest railroad bridges were usually constructed from wood or stone and built by "rule of thumb."[450] Scientific methods in bridge-building emerged in the mid-nineteenth century. Around this time, common truss varieties such as the Howe Truss, Pratt Truss, and Warren Truss were patented.[451] Another significant development occurred when civil engineers Wendel Bollman and Albert Fink designed a bridge for the Baltimore and Ohio Railroad constructed entirely from iron. As iron bridges became more common in the late nineteenth century, engineers applied the Howe, Pratt, and Warren truss varieties into their designs. After the Civil War, railroad companies began contracting bridge construction to bridge-building companies, resulting in standardized designs.[452] Another important development occurred in the 1890s, when steel began to replace iron in truss bridges.[453]

Deck plate girder bridges became a popular alternative for railroad truss bridges due to their simple design and ease of construction. First

448. Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-33–34.

449. Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-217.

450. Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-42.

451. Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, 42; Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-218.

452. Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-42.

453. Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-224.

developed in the nineteenth century, they consist of two or more horizontal I beams (plate girders) that rest on abutments or piers. The girders support an open or solid deck consisting of ties, reinforced concrete, or other material.[454]

Trestles are braced frameworks that are generally used to cross gullies, wetlands, or other drainage features. Most trestles are made of capped wood piles that support a bridge deck and are usually employed to cross narrow spans. In some instances, engineers used steel piles in trestles constructed after the early twentieth century.[455]

4.2.3.2 Bridges and trestles historically within the boundaries of Fort McCoy

Historically, there were at least two railroad bridges near the border of present-day Fort McCoy (Table 9). In 1911, the C&NW installed an iron truss bridge over the CMSTP&P tracks near Camp Robinson. The structure was built by the Pennsylvania Steel Company. Stradling the boundary line of Fort McCoy, this bridge consists of three main components: a deck plate girder end section measuring 62 ft, a 189 ft quadrangular lattice truss (a Warren truss variation) spanning the middle, and another deck plate girder end section measuring 66 ft.[456] The truss section is skewed so that the east lattice framework is positioned slightly north of the west lattice framework (Figure 164–Figure 166).

Table 9. Bridges.

Location	Builder	Possible Years of Operation	Plans Available?	Photos Available?	Extant?
Near McCoy Station West	Pennsylvania Steel Co.	1911–c. 1977	No	Yes	Yes
Near McCoy Station West	American Bridge Co.	1926–c. 1977	No	Yes	Yes

454. Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-218–19; Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-42.

455. Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-119; Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, 42.

456. "CNW—Fort McCoy Overpass," Bridge Hunter, accessed March 7, 2022, https://bridgehunter.com/wi/monroe/bh51726/.

Figure 164. Satellite view of the abandoned C&NW truss bridge. (Map data: Google, 2013.)

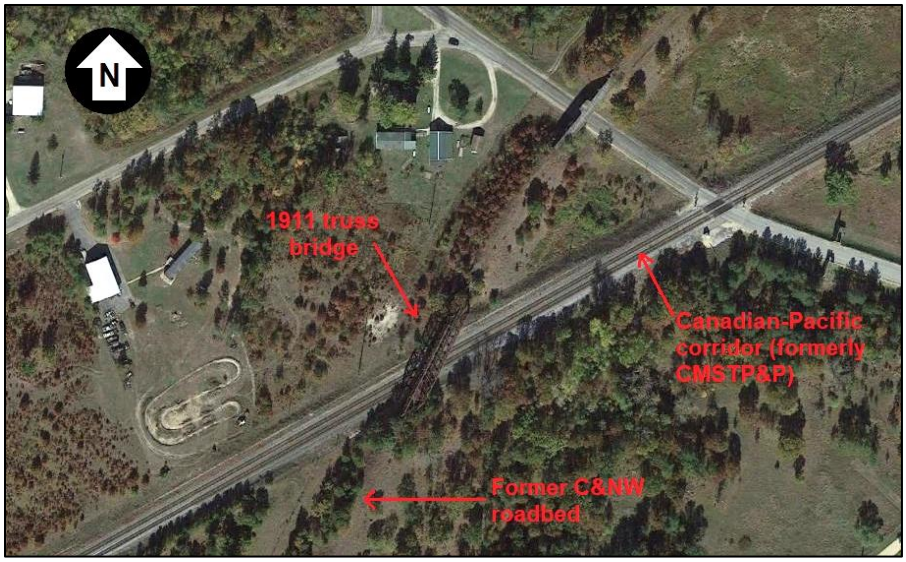
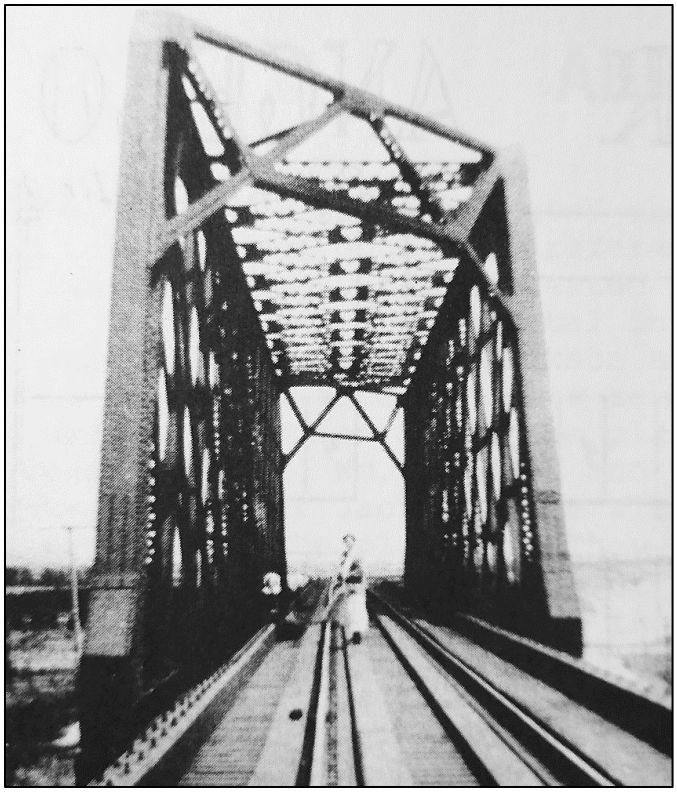


Figure 165. The C&NW truss bridge as seen from the air, c. 1925. Looking west. (Image from Monroe County Local History Room. Public domain.)[457]

457. "Target Range East of Sparta—Now Part of Fort McCoy Property," c. 1925, Monroe County Local History Room, Sparta, WI.

Figure 166. A view of the C&NW steel truss bridge in 1913, two years after its installation. Looking south. (Image from Monroe County Pictorial History. Public domain.)[458]



Further investigation will be needed to establish how much of the bridge is located within the installation boundaries and to determine its potential eligibility. For the purpose of comparative analysis, an online bridge database indicates that there are two lattice truss railroad bridges in La Crosse County to the west and one lattice truss railroad bridge within Juneau County to the east. Another lattice truss bridge straddles the boundary between Juneau County and Adams County.[459] According to the Wisconsin Historical Society, there are currently five bridges in the state listed on the NRHP. These include the Old Wells Road Bridge in Eau Claire County, the Tiffany Stone Bridge in Rock County, Stillwater Bridge in St. Croix County (for automobiles), Soo Line High Bridge in St. Croix County, and the Winona Swing Bridge in Buffalo County. All list *engineering* as an area of significance.[460]

458. Monroe County Historical Society, *Monroe County, Wisconsin Pictorial History*, 202.

459. Bridge Hunter database, accessed March 7, 2022, https://bridgehunter.com.

460. Wisconsin Historical Society, accessed March 7, 2022, https://www.wisconsinhistory.org/.

Another bridge immediately north of the 1911 structure passes over Ginger Road (Figure 167). Constructed in 1926 by the American Bridge Company, this abandoned bridge was also in use by the C&NW. Described as a deck plate girder bridge, it is approximately 150 ft in total length, with the longest span measuring 50 ft.[461] Like the 1911 Warren truss bridge, further investigation will be needed to establish if this bridge and right-of-way is officially within the installation boundaries and to determine its potential eligibility.

Figure 167. Satellite view of the abandoned Ginger Road Bridge. (Map data: Google, 2013.)

4.2.3.3 Tunnels

Although railroad surveyors preferred routes with minimum geographic resistance, they could not always bypass natural obstructions. Occasionally, tunnels became necessary in hilly terrain to operate railroad lines at a manageable grade. Railroad tunnels are rare in the Upper Midwest states of Minnesota, Iowa, South Dakota, and North Dakota;[462] however, Monroe County alone contains several due to the region's hilly terrain. The CMSTP&P constructed the county's first tunnel in 1861, immediately west of the present-day town of Tunnel City. In 1875, the company

461. Bridge Hunter database. Accessed March 7, 2022, https://bridgehunter.com/wi/Monroe/bh53460/.

462. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-67; Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-224; Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-121.

replaced this tunnel with a new 1,300 ft tunnel directly north of the old structure. The C&NW built at least four tunnels in Monroe County, three along the Elroy–Sparta route (near Kendall, Wilton, and Norwalk), and one directly west of Tunnel City. The C&NW finished the Tunnel City structure around 1911, which remained in operation until an inner section caved in in 1973.[463] There are no railroad tunnels within the boundaries of Fort McCoy.

4.2.3.4 Culverts

Culverts are small bridges through which minor drainage courses flow. They generally dissect the bed of a railroad corridor perpendicularly and can take several different forms. Early railroad culverts were often box culverts made of cut masonry or wood. Cast iron culverts developed in the mid-nineteenth century, with corrugated metal pipe and concrete pipe culverts becoming common after 1900. Concrete block culverts and abutments may have become more common around the same time.[464]

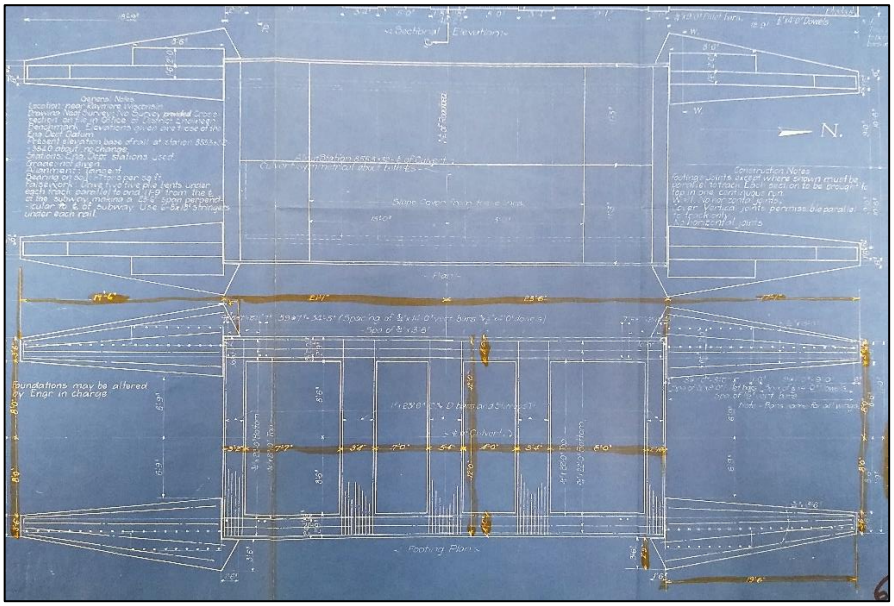
4.2.3.5 Culverts historically within the boundaries of Fort McCoy

Although several railroad culverts historically existed within the present boundaries of Fort McCoy, further investigation is necessary to determine the number, age, and present status of such structures (Figure 168).

463. "Notes on Wisconsin Tunnels," May 22, 1965, James P. Kaysen, W. F. Armstrong to James P. Kaysen. June 5, 1975, Kaysen Papers, box 4, folder: Tunnels. Wisconsin Historical Society, Madison, WI.

464. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-70; Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, E-48; Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-223.

Figure 168. Drawing for a CMSTP&P concrete culvert near Raymore Station, 1910. (Image reproduced with permission from Milwaukee Road Archives.)[465]



4.2.3.6 Evaluation of grade separation structures

According to existing Upper Midwest railroad MPDFs, railroad grade separation structures may be significant in the area of *transportation* or *engineering*.

Criterion A: The Iowa MPDF states that Criterion A may be applied to grade separation structures (specifically bridges) associated with "key crossings in the evolution of major railroad transportation routes" or sites of important events.[466] The authors of the South Dakota MPDF state that historic railroad structures may fall under Criterion A if they are components of a railroad that contributed to the economic growth, agricultural development, or settlement of a particular region or the state itself.[467] In contrast, the authors of the Minnesota MPDF state, "A railroad grade separation structure will meet National Register Criterion A only if it is a contributing element of a railroad corridor historic district, a railroad station historic district, or a railroad yard historic district [outlined below]. The

465. "Reinforced Concrete Subway Located Near Raymore, Wisconsin," October 17, 1910, CMSTP&P Bridge and Building Department, Milwaukee Road Archives, Milwaukee, WI.

466. Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-43.

467. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-72.

period of significance for the grade separation structure and the district must be the same."[468]

Criterion B: This criterion will not be applied.

Criterion C: Criterion C may be applied to highlight grade separation structures that display unique engineering solutions, are representative of an important transitional type, constructed by a master builder, or are comparatively rare. The Minnesota and North Dakota MPDFs state that grade crossing structures, such as bridges, that are representative of a certain type should be evaluated based on additional factors such as age, rarity, distinction of the engineer or contractor, or unique engineering solutions. As a distinction, both the Minnesota and North Dakota MPDFs state that through-truss Pratt and Parker truss bridges and pony-truss Warren bridges are generally not considered eligible under Criterion C.[469]

Criterion D: The Iowa MPDF states that this criterion may apply to bridge ruins that are the only remaining evidence of "a historically important railroad crossing."[470] The Minnesota and North Dakota MPDFs state that this criterion may be applied in special circumstances: "Although unlikely, railroad grade separation structures or their structural remains may meet Criterion D if further analysis can yield important information about a significant type of technology or construction employed as part of the evolution of its class of railroad-related properties. In order to meet Criterion D, the structure itself must be the principal source of the important information."[471]

Integrity: Integrity of location and setting may vary depending on whether a grade separation structure is eligible as a contributing element in a railroad historic district (under Criterion A), or individually eligible under Criterion C. In general, integrity of location and setting are required in Criterion A scenarios, but relocated grade separation structures eligible under Criterion C may qualify under Criterion Consideration B (for moved

468. Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-225.

469. Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-225–27; Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-121–22; Hufstetler and Bedeau, *Historic Railroads of South Dakota*. F-72, F-74; Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*. F-43.

470. Conard and Cunning, *The Advent and Development of Railroads in Iowa, 1855–1940*, F-43.

471. Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-122.

resources). Integrity of materials and design are often important, although components of a grade separation structure may have been updated over time to meet maintenance standards. Integrity of association will be expressed if location, materials, and design remain, and integrity of feeling will be expressed if a structure retains its materials and design.[472]

4.2.4 Typical railroad historic districts, associated criteria, and areas of significance

According to the Upper Midwest historic railroad MPDFs, there are generally three types of railroad historic districts: station districts, corridor districts, and railroad yard districts. The individual buildings and structures that compose such districts have been addressed above.

4.2.4.1 Railroad station historic districts

A railroad station historic district describes the site of a current or former station site involving the transaction of people and freight. Once a common feature in many Midwestern cities, towns, and rural localities, the number of railroad station sites has decreased significantly since the peak of railroading in the early twentieth century. A railroad station historic district generally encompasses a depot and associated support structures and objects, such as the associated railroad roadway, platforms, and sheds. The railroad roadway usually widened at the site of a railroad station site in order to accommodate a through-track and sidetracks for unloading. Boundaries for the historic district may include the historic right-of-way and property boundaries for the buildings and structures associated with the station. [473] According to the Minnesota and North Dakota MPDFs, railroad station historic districts are significant in the area of *transportation*.

The period of significance usually begins when structures other than the depot (for maintenance, storage, and rolling stock) were added to the station area, signifying its growing importance as a transportation node. The

472. Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-123–25; Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-228–29.

473. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-76; Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-204; Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-102.

period of significance usually ends when the railroad company suspended passenger or freight services.[474]

Criterion A: This criterion may apply if the railroad station historic district contributed to the industrial or economic growth of a community or region through the transaction of passengers and freight, was an important transportation node, or represented the growth of the railroad industry in the state[475]

Criterion B: This criterion will not be applied.

Criterion C: The South Dakota MPDF states that railroad station historic districts may be eligible under this criterion as representative examples of industry standard practice in engineering and planning; however, the Minnesota and North Dakota MPDFs state that Criterion C is not applicable to railroad station historic districts because they are usually too "piecemeal" to be associated with a cohesive design strategy. They reflect a "gradual increase of local passenger and freight traffic . . . and not the result of a single design/construction event."[476]

Criterion D: The South Dakota MPDF states that this criterion may be applied because of the high concentration of activity at railroad station historic district sites, contending that artifactual remains may yield information about a period's technology and "domestic artifactual remains may provide clues to the lifestyles of period railroad workers."[477] The Minnesota and North Dakota MPDFs state that this criterion is not likely to be applied unless a station is suspected to yield important supportive or new information concerning a design or its association in a larger system. The authors of the Minnesota report state,

> It is unlikely that a railroad station historic district would meet Criterion D. To do so, further analysis of

474. Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-206–7; Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-104–5.

475. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-78; Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-207; Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-105.

476. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-78; Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-208; Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-106.

477. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-78.

> the station area must be likely to yield important information about significant aspects of the evolution or development of railroad design, operations, or the interrelationships between railroads and the industrial and commercial operations they served. The extant built environment of the railroad station historic 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 historic-period railroad buildings and structures are extant in sufficient number and diversity within a railroad station to yield important new information. Even the buildings that remain within a railroad station, such as a depot or warehouse, are unlikely to provide important new information because railroad buildings in Minnesota typically followed standardized designs to meet standardized functions. Because so many railroad buildings have been demolished over the years, too few historic-period buildings and structures within railroad stations are extant to make an analysis of spatial, organizational, or construction patterns, a likely source of new information regarding railroad properties. 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.[478]

Integrity: A railroad station historic district must retain integrity of location, setting, and design. Integrity of materials is important for contributing resources in the district. Integrity of feeling and association usually will be satisfied if the district retains the areas of integrity mentioned above.[479]

478. Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-208.

479. Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-209; Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-78–F-79.

4.2.4.2 Railroad corridor historic districts

The Minnesota and North Dakota MPDFs identify railroad historic corridors as districts encompassing a roadway (which may consist of cuts and grades alluding to the presence of a track), its right-of-way, and associated structures, such as operations support, depots, bridges, and other structures. It can also encompass railroad station historic districts and railroad yard historic districts. The length of a railroad historic corridor varies but has the potential to be miles long. Boundaries of a railroad corridor historic district usually follow the corridor's historic right-of-way and the property boundaries of associated stations, yards, or individual features. While the roadbed itself needs to be distinct, it may or may not contain ballast and tracks. The corridor may be active or abandoned. A railroad corridor historic district usually will be considered significant for *transportation* or *engineering*.[480]

Criterion A: The railroad corridor historic district may be eligible under this criterion if it represented a significant contribution to the settlement of a region, played a significant role in the transportation of resources, represented a critical link between important rail corridors that led to the development of commerce and industry, or represented an important component or an early route in a state railroad network.[481]

Criterion B: This criterion will not be applied.

Criterion C: A railroad historic district under this criterion needs to be "a significant and distinguishable entity that embodies the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master."[482] According to the Minnesota and North Dakota MPDFs, this criterion will not be applied in these states because "the basic technology of railroad tracks had been established, and railroad engineers had a great deal of experience in designing railroad roadways. As railroad technology and engineering advanced during the late nineteenth century, new components were introduced elsewhere on older, more established

480. Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-183–92; Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-82–92.

481. Schmidt et al., *Railroads in Minnesota, 1862–1956*, F-194–96; Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-92–94.

482. Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-94.

railroad corridors. Furthermore, there are few areas . . . where the steep topography presented engineering challenges."[483]

As mentioned, a historic railroad MPDF has not been completed for Wisconsin, but it is realistic to believe that there are historic railroad corridors in the state that required coordinated planning and engineering to overcome topographical obstacles, as exemplified through the regular use of tunnels on the former C&NW line in southern Monroe County. Therefore, Criterion C may be appropriate for railroad corridor historic districts in Wisconsin.

Criterion D: This criterion is not likely to be applied. The authors of the Minnesota MPDF state,

> 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.[484]

Integrity: The Minnesota and North Dakota MPDFs state that a railroad corridor historic district must retain its integrity of location, design, and materials. Integrity of setting will vary; a lack of contributing buildings and structures along the corridor may be mitigated with an intact roadbed, but integrity of setting diminishes if the corridors lack contributing associated resources and elements of the railroad bed are missing. Workmanship may be expressed in contributing features within the district, such as

483. Schmidt et al., *Railroads in North Dakota, 1872–1956*, F-94.

484. Schmidt et al., *Railroads in Minnesota*, 1862–1956, F-197.

its buildings and grade separation structures. Integrity of feeling and association will be expressed if the other areas of integrity are retained.[485]

4.2.4.3 Railroad yard historic districts

A railroad yard historic district represents a site where internal, nonpublic operations occurred. Railroad yards historically included support facilities and stub tracks for rolling stock maintenance, sorting, and assembly. Layouts varied depending on the size and complexity of the yard, but most contained multiple sets of tracks for storage and classification, engine houses, round houses, fueling facilities, and other maintenance and storage structures. The layout of tracks in a railyard usually included through tracks, parallel yard body tracks, and diagonal tracks. Switch engines were employed to shuttle cars to their designated body tracks and assemble new train sequences. Boundaries for rail yard historic districts usually follow the historic right-of-way of associated tracks and property boundary of the yard. According to the Minnesota and North Dakota MPDFs, railroad yards are significant in the area of *transportation*. The period of significance varies. For some railroad yards, the beginning of the period of significance may correspond to the opening of the yard if most of the critical elements were in place. For others, the upgrade from a simple classification yard to a more complex railroad yard may represent the beginning of the period of significance. The period of significance may coincide with the termination of classification and maintenance services.[486]

Criterion A: This criterion may be applied to historic railroad yards that classified, repaired, and performed maintenance on rolling stock along a historically significant railroad corridor or represented the growth of the railroad industry in the state.[487]

Criterion B: This criterion will not be applied.

Criterion C: The authors of the South Dakota MPDF state that a railroad yard historic district may fall under Criterion C as a representative

485. Schmidt et al., *Railroads in Minnesota*, 1862–1956, F-198–99; Schmidt et al., *Railroads in North Dakota*, 1872–1956, F-96–97.

486. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-75; Schmidt et al., *Railroads in Minnesota*, 1862–1956, F-211–13; Schmidt et al., *Railroads in North Dakota*, 1872–1956, F-108–110.

487. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-78; Schmidt et al., *Railroads in Minnesota*, 1862–1956, F-214; Schmidt et al., *Railroads in North Dakota*, 1872–1956, F-111.

example of industry standard practice in engineering and planning;[488] however, the Minnesota and North Dakota MPDFs state that Criterion C is only applicable if the railroad yard is cohesively designed:

> A railroad yard historic district meets Criterion C if its classification tracks or rolling stock support facilities were designed and built in a single construction episode and represent a type of railroad yard important to the historical development of railroad car classification systems or rolling stock maintenance and repair facilities. If a railroad yard historic district is an important example of a cohesively designed railroad yard system, it will meet Criterion C regardless of whether it is associated with a historically significant railroad line.[489]

Criterion D: The authors of the South Dakota MPDF treat the information potential of railroad yards similarly to historic railroad stations. This document maintains that rail yard historic districts may contain artifacts that convey information about period technology or contain domestic artifacts that convey a way of life;[490] however, the Minnesota and North Dakota MPDFs state that this criterion is not likely to be applied unless there is sufficient reason to believe the railroad yard will yield important supportive or new information about the yard's "spatial, organizational, or construction patterns."[491]

Integrity: A railroad yard historic district must retain integrity of location, setting, design, and materials. The Minnesota and North Dakota MPDFs state that railroad yard historic districts should at least include an engine house and a support building. Even if the tracks are gone, there should be "some visible expression of the yard track areas."[492] Integrity of feeling and association usually will be satisfied if the district retains the areas of integrity mentioned above.

488. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-78.

489. Schmidt et al., *Railroads in Minnesota*, 1862–1956, F-214.

490. Hufstetler and Bedeau, *Historic Railroads of South Dakota*, F-78.

491. Schmidt et al., *Railroads in Minnesota*, 1862–1956, F-215; Schmidt et al., *Railroads in North Dakota*, 1872–1956, F-112.

492. Schmidt et al., *Railroads in Minnesota*, 1862–1956, F-215.

4.2.5 Associated railroad resources identified in the Wisconsin Cultural Resource Management Plan (CRMP): Early railroad era (1850–1868)

An MPDF has not been created for historic railroads in Wisconsin. Therefore, the 1986 Wisconsin CRMP remains the baseline for understanding the potential significance of railroad resources in the state. While this document is not as comprehensive as an MPDF, it provides a basic framework for interpreting the state's historic railroads, separating them into early railroad era resources (1850–1868) and later era resources (1868–present). According to the Wisconsin CRMP, associated resources from the early railroad era may include

> Historic rail routes, passenger depots, freight depots, freight warehouses, turntables roundhouses, engine houses, repair shops control sheds, grain warehouses and grain elevators at terminal cities such as Milwaukee Racine, Kenosha, La Crosse, and Prairie du Chien, bridges, locomotives, equipment tool houses, maintenance sheds, water towers, railroad construction camps, abandoned townsites such as Dover (c. 1842–56) in Iowa County and Newport (c. 1853) on the Wisconsin River located south of Wisconsin Dells in Columbia County, homes of prominent railroad promoters and executives.[493]

The CRMP concludes that many of the above-mentioned resources may be situated near or within early commercial and industrial areas, excluding such features as may be found along the route of a railroad corridor (such as grade-separating structures). The significance of a potentially eligible resource from the early railroad era is likely to be assessed at the local level, "particularly in regard to their role in a community's commercial/industrial development."[494]

There are not many NRHP nominations that represent early railroad era resources in Wisconsin, largely because there are not many extant examples of such resources. When it was published, the CRMP identified one NRHP nomination associated with this period, the Old Railroad Depot in Mineral Point, which was constructed in 1857 as an asset of the Mineral

493. Wyatt, *Cultural Resource Management in Wisconsin*, 5-3.

494. Wyatt, *Cultural Resource Management in Wisconsin*, 5-3.

Point Railroad Company.[495] Since then, another property from this era, the Mazomanie Railroad Depot (1857), has been identified as a contributing resource within the Mazomanie Downtown Historic District. The Mazomanie Depot was built for the Milwaukee and Mississippi Railroad and was an early stop on its cross-state line between Milwaukee and Prairie du Chien.[496]

Currently, there are no early railroad era resources in Monroe County represented in the NRHP.

4.2.6 Associated railroad resources identified in the Wisconsin CRMP: Later railroad era (1868–present)

Statewide, there are currently 43 individual resources listed in the NRHP that represent the later railroad era in Wisconsin (excluding contributing resources in historic districts and streetcar or interurban resources) and one railroad historic district. Of these individual nominations, 36 resources (86%) are classified as depots or stations, 4 are grade-separating structures (bridges), 3 are locomotives, and 1 is a freight house. Of these resources, 15 (36%) are associated with the CMSTP&P Railroad, and 16 (37%) are associated with the C&NW Railroad, an itemization that reflects how prevalent these two companies were in Wisconsin's railroad history.

There is currently one historic district that is specifically dedicated to railroading, the Chicago, St. Paul, Minneapolis, and Omaha Railroad Car Shop Historic District in North Hudson.

4.2.7 Applicability to future NRHP eligibility evaluations at Fort McCoy

Since most historic railroad resources at Fort McCoy may no longer be extant, assessments of potential archaeological significance are likely of special interest; however, Upper Midwest MPDFs only offer cursory guidance surrounding the evaluation of resources under Criterion D, much of which has been outlined above. Additionally, there are few instances of Criterion D being applied in existing railroad-related NRHP nominations. Finally, narrow-gauge railroads are only mentioned in the historic contexts of Upper Midwest MPDFs on a few occasions (such as a reference to narrow-

495. "Local Railroad History," *Mineral Point Railroad Society*, http://mprs.org/.

496. Timothy F. Heggland, "Mazomanie Downtown Historic District," National Register nomination, 1992, https://npgallery.nps.gov/NRHP/GetAsset/NRHP/92000406_text.

gauge lines used in the lumber industry in northern Minnesota) and never discussed in the associated property-type sections.

One of the few NRHP nominations to apply Criterion D to a railroad-related property is the *Milwaukee Railroad Shops Historic District* in Sioux City, Iowa, a former repair shop complex with buildings, structures, objects, and a rail yard. According to the nomination (which is also listed under Criteria A and C at the local and state level), the site is significant under Criterion D "because it has the potential to yield archaeological information about (1) daily activities, (2) spatial use, (3) chronology of construction, (4) use of nonextant buildings and structures, and (5) the experiences of the shopmen who worked here during the period of significance."[497] This determination came after a Phase IA geoarchaeological reconnaissance and Phase I intensive archaeological investigation in 2014 identified 34 archaeological features on the site, 15 of which were deemed contributing to the property's significance.[498]

According to the nomination, the site may yield potential information about the operations of twentieth-century Midwestern railroad repair shops, demonstrate how technological change impacted the operations of such shops, and reveal how working conditions changed within the railroad industry as a whole. The nomination proposes that future research questions may fall under two categories: industry and technology, and patterns of spatial organization and evolution over time. Under the industry and technology category, the following questions are posited:

- What is the chronology of the railroad activity in this district?
- Are discrete historic activity/operational areas preserved at this site?
- Can this resource teach us about historic industrial technology and the skills and experiences of past shopmen and other railroad workers?[499]

Under the patterns of spatial organization and evolution category, the author posits,

497. Lawrence L. Obermeyer, *Milwaukee Railroad Shops Historic District* (National Park Service, 2018), 83. Requested from the Iowa SHPO.

498. Obermeyer, *Milwaukee Railroad Shops Historic District*, 83–84.

499. Obermeyer, *Milwaukee Railroad Shops Historic District*, 84.

- What were the functions(s) of the features at this site?
- How did these functions change over time and affect the resource?
- Can the chronology of construction, alterations, and deconstruction episodes and changes in land use be reconstructed?
- How does the longitudinal design for steam-era railroad repair shops really work in the area?
- Are there any specialized structures not yet identified?
- Do buildings and structures concentrate solely in a longitudinal line along the rail yard? If so, what are the implications for function and status in the site's operational environment?[500]

As made apparent by the research questions, a difference between the information potential at the Milwaukee Railroad Shops Historic District and Fort McCoy is the presence of extant buildings, structures, and objects at the Sioux City site. There, research questions concerning the spatial use and arrangement of nonextant buildings and structures at the site may be informed by the larger body of extant resources. Still, the inquiries mentioned above may be beneficial for understanding the kinds of research questions that apply to railroad resources significant under Criterion D. At Fort McCoy, research questions may focus more on the relationship between railroad resources and the way of life of railroad workers. For example, such questions may focus on the vicinity of the former Lafayette Station (see Section 3.2.1), or further investigation (in addition to 47Mo736) may occur around Raymore Station (3.2.2).

500. Obermeyer, *Milwaukee Railroad Shops Historic District*, 84.

5 Lidar Comparative Analysis

In an effort to determine whether the location of demolished railroad grades and infrastructure are discernable today, the following chapter presents a series of lidar returns focusing on points of interest along the historic CMSTP&P-C&NW railroad corridor and select areas within Fort McCoy's South Post. Specifically, the selected lidar returns concentrate on the seven geographic clusters within Fort McCoy that have historically been associated with railroad infrastructural development. As outlined in Chapter 3, these seven geographic areas are

- Lafayette Station,
- Raymore Station,
- McCoy Station East,
- Upper Spur Sector (Lafayette Township),
- McCoy Station West,
- Lower Spur Sector (Angelo Township), and
- Narrow-Gauge Network (South Post).

In each of these regions, lidar data will be presented alongside historic maps. Comparing the lidar returns and historic maps in these geographic clusters makes it possible to infer with greater confidence whether signatures resembling structural features are associated with railroad infrastructure. Additionally, lidar data can help to determine if there were additional narrow-gauge grades in the South Post area that were not cartographically documented from the 1910s to the 1930s.

The lidar in the following figures was generated from elevation and lidar data from the Wisconsin State Cartographer's Office.[501] Their data are derived from FEMA and the USGS national 3D Elevation Program, which is in the public domain. In the figures below, lidar is displayed with the elevation exaggerated by a factor of three to make features more visible.

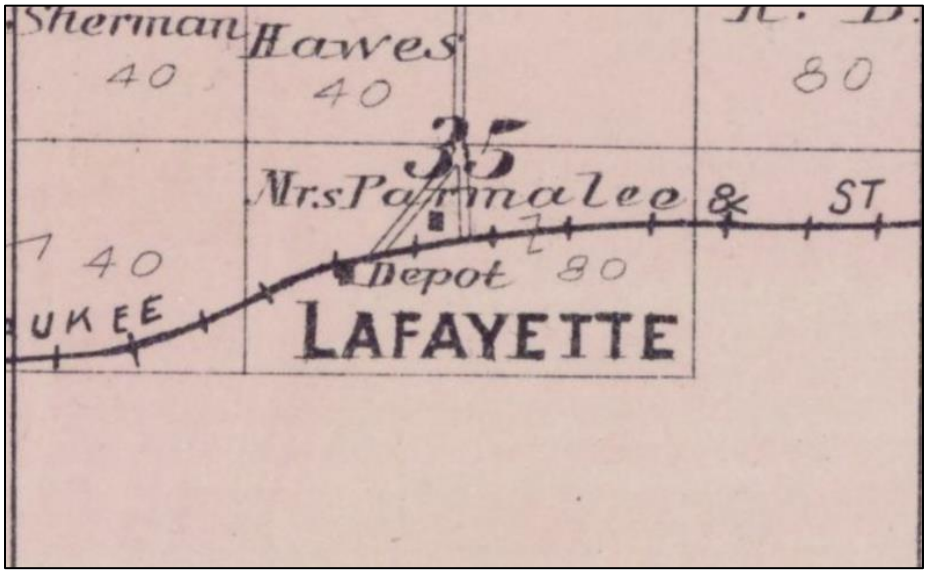
5.1 Lafayette Station (c. 1858–1910)

This station was located along the CMSTP&P railroad corridor in Section 35 of Lafayette Township and operated from c. 1858 until 1910. Although there is no complete inventory of railroad support buildings and structures

501. "Elevation/Lidar Data," State Cartographer's Office, University of Wisconsin–Madison, https://www.sco.wisc.edu/data/elevationlidar/.

at Lafayette Station, at minimum it contained a depot and a section house.[502] The 1897 plat map depicts a depot within a parcel of land owned by Mrs. Parmalee, just south of the CMSTP&P tracks (Figure 169). No buildings from this station appear to be extant. Lidar imagery shows that the ground surrounding the railroad corridor in the vicinity of Lafayette Station has been disturbed, and it is difficult to distinguish any potential signatures from historic railroad structures such as a depot or section house (Figure 170). But it is possible that portions of moved earth near the track corridor indicate areas where structures may have been (Figure 171).

Figure 169. Lafayette Station depot on an 1897 plat map. (Image reproduced with permission from Wisconsin Historical Society.)[503]



502. Evidence of a section house is based on a *Sparta Herald* news story about its destruction via fire in 1911. "Building at Old Lafayette Station Burned." *Sparta Herald*, November 5, 1911.

503. Ogle, *Standard Atlas of Monroe County, Wisconsin*.

Figure 170. Vicinity of the former Lafayette Station as represented with lidar. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)

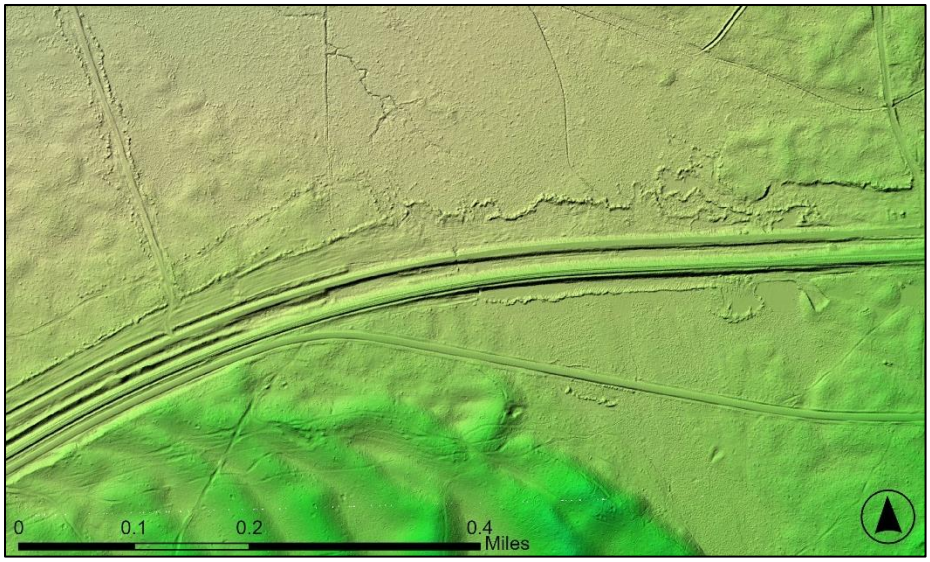
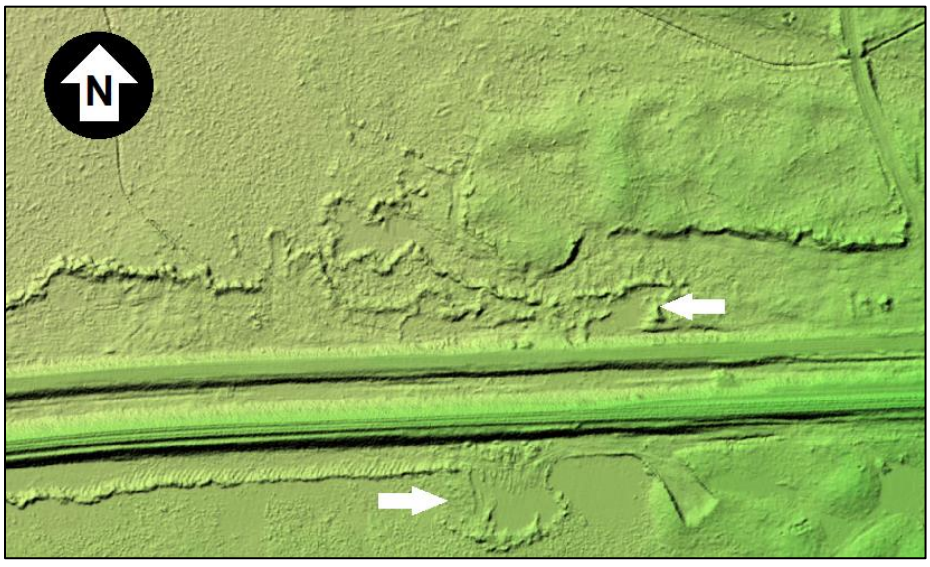


Figure 171. Potential demolition areas in the vicinity of the former Lafayette Station, as represented with lidar. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)



5.2 Raymore Station (1900–1910)

Between 1900 and 1910, Raymore Station was located along the CMSTP&P railroad corridor in Section 31 of Greenfield Township. At minimum, it consisted of a depot, railroad siding, pusher engine house, water tank, and windmill (Figure 60–Figure 61). It is difficult to distinguish any potential signatures from historic railroad structures from lidar (Figure **172**). But a small, rectangular depression south of the railroad corridor may

correspond to the water tank and windmill recorded on the 1907 military map, as well as an archaeological site (47Mo736) that investigated those features (Figure 173).[504]

Figure 172. Vicinity of Raymore Station (1900–1910) as represented with lidar. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)

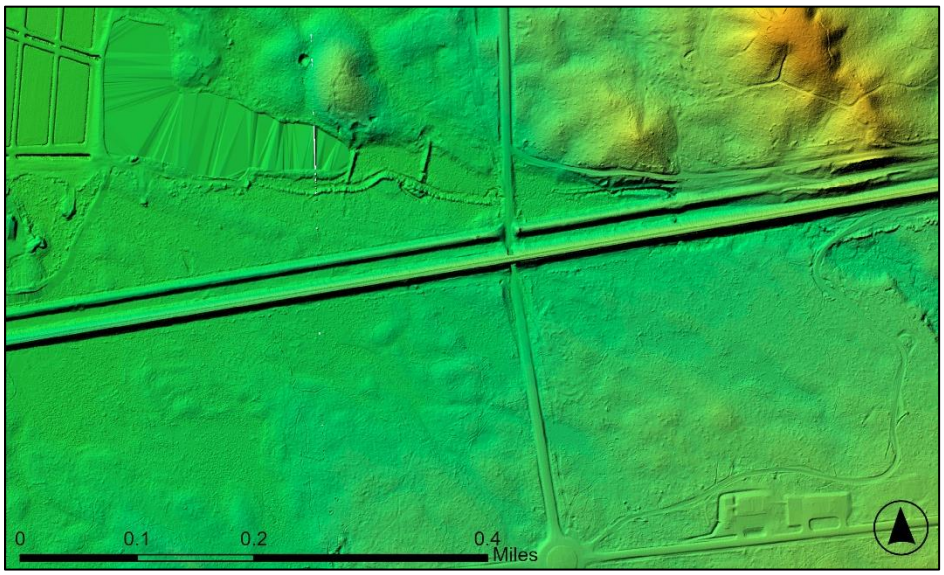
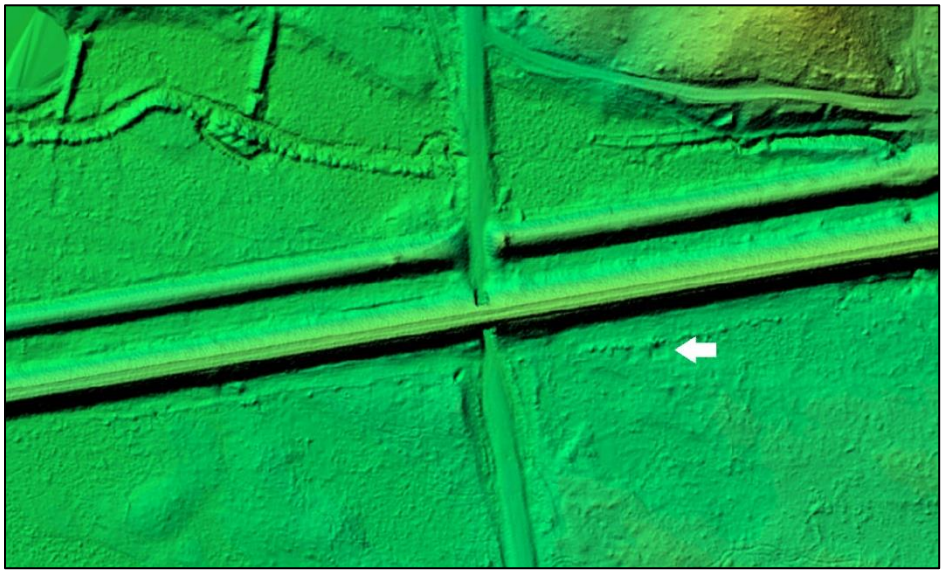


Figure 173. A closer view of the depression that may correspond to a water tank and windmill at Raymore Station (1900–1910), represented with lidar. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)

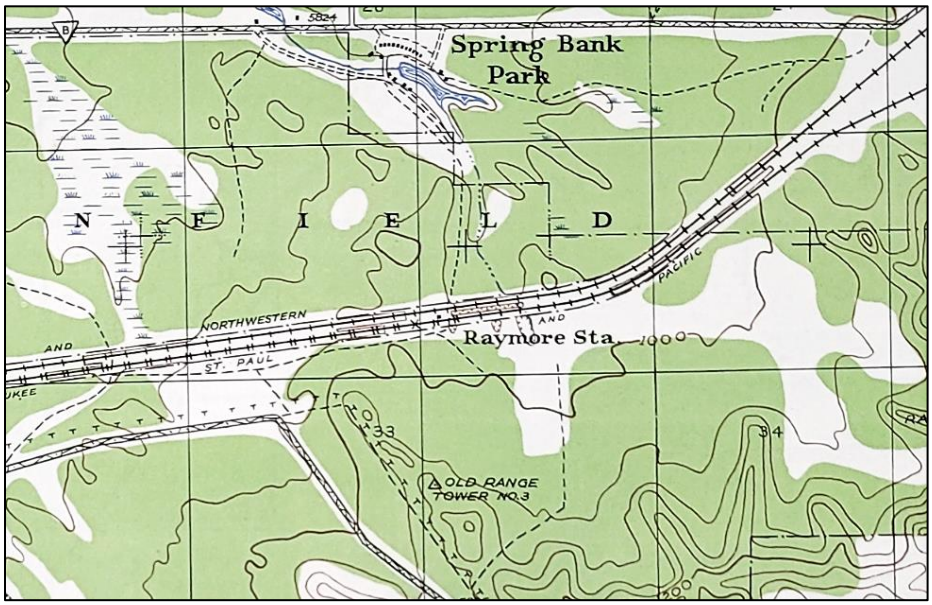


Around 1910, Raymore Station moved 2 miles to the east to Greenfield Township, Section 33, where it primarily functioned as a maintenance and

504. Dahlen and Wagner, *2010 Cultural Resource Management*, 530.

operations station (Figure 174). According to a 1919 valuation report by the ICC, this station contained an operator's house, speeder house (or pusher engine house), oil house, coal house, and an outhouse.[505] None of these structures appear to be extant today. Additionally, it is not likely that signatures of these historic structures will be discernible from lidar returns since the site has continually been used as an unmanned station for decades and the ground at this site is greatly disturbed (Figure 175).

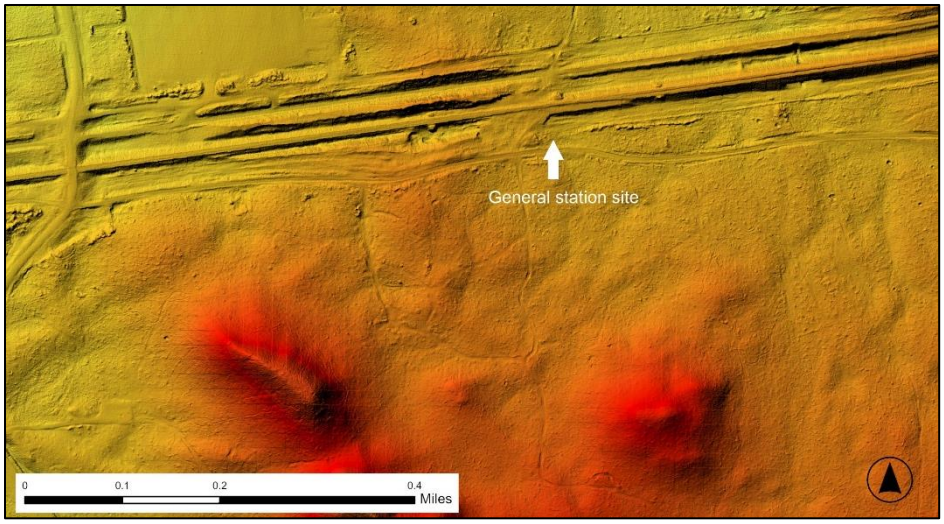
Figure 174. Raymore Station (1910–present) as represented on a map from 1939. (Image from NARA at College Park. Public domain.)[506]



505. "Raymore," July 31, 1919, Interstate Commerce Committee Bureau of Valuation, Valuation Section Wis-3, pp. 115–16, folder: Wisconsin-Structural Notes-Val. Section 3, 1919 (2 of 8), Milwaukee Road Archives, Milwaukee, WI.

506. US Army Corps of Engineers, *Terrain Map: Sheet 1. Camp McCoy Grid Zone "C,"* 1939, VI Corps Area Engineers, Records of US Army Continental Commands, RG 394, NARA, College Park, MD.

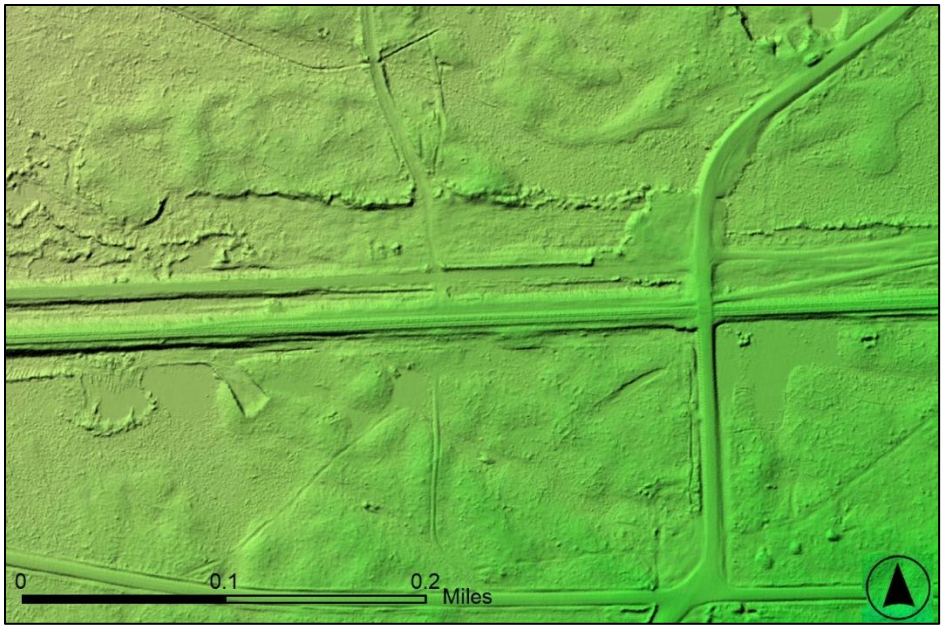
Figure 175. Vicinity of Raymore Station (1910–present) as represented with lidar. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)



5.3 McCoy Station East

McCoy Station East is associated with several phases of development in Fort McCoy's history. The CMSTP&P and C&NW railroads constructed depots and associated support infrastructure to service Camp Emory Upton in the 1910s (Figure 72). These structures may have existed into the 1920s, but they appear to have been demolished by the 1930s. As with the area surrounding the former Lafayette Station, the ground appears disturbed and lidar imagery does not show any signatures associated with railroad support structures from the 1910s to the 1930s (Figure **176**).

Figure 176. Vicinity of McCoy Station East, 1910s–1930s, as represented with lidar. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)



With the construction of Camp McCoy's WWII-era cantonment in the early 1940s, the CMSTP&P and C&NW constructed a new joint depot and support structures where Camp McCoy's upper spur track departed from the main railroad corridor (Figure 82). This station appears in aerial imagery until 1976. Although it is difficult to distinguish structural signatures from the WWII-period, the earthen platform upon which the 1943 CMSTP&P and C&NW joint depot was constructed is clearly visible on lidar. Additionally, it appears that partial foundational outlines for the 1943 joint depot building, railroad express building, and water closet are also discernable (Figure **177**).

Figure 177. A closer view of McCoy Station East on lidar, showing the locations of the depot, express building, and water closet. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)

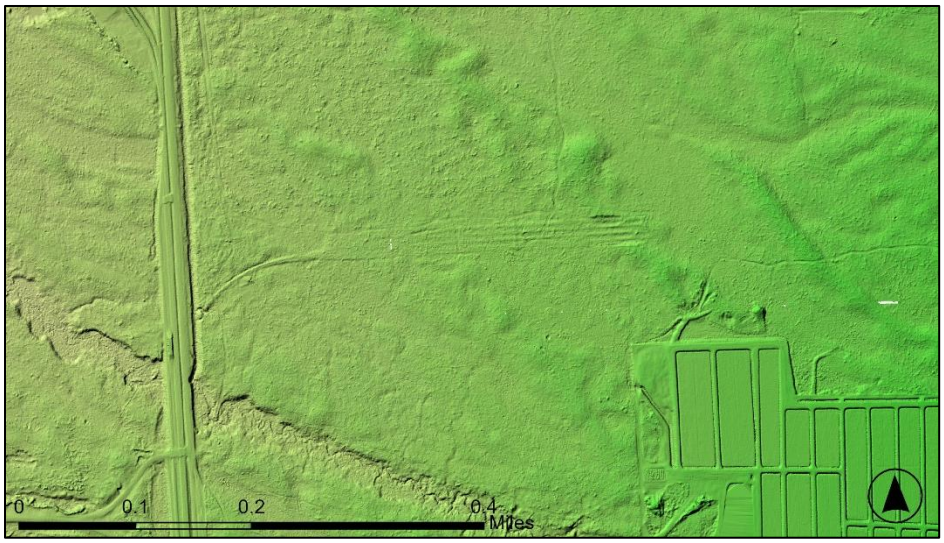
5.4 Upper spur sector (Lafayette Township)

There are two principal periods of development associated with the Upper spur sector. The first occurred in the 1910s, when spur tracks branched off the CMSTP&P and C&NW main corridor to service Camp Emory Upton. Various maps from the 1910s show one to two store houses at the end of the spur tracks, along with an unloading platform (Figure 90–Figure 93). A 2016 archaeological investigation of this site (47Mo0847) encountered some of the early spur tracks, and a 2021 investigation encountered in situ remains of concrete footings that once supported a corrugated-metal store house, constructed c. 1909 for Camp Emory Upton.[507] These early spur tracks, and most associated infrastructure, appear to have been removed by the late 1930s. When Camp McCoy constructed its WWII-era cantonment in the early 1940s, crews constructed a new set of spur tracks that extended further north than the earlier spur tracks. Modern spur tracks in this vicinity of Fort McCoy generally follow the course of the WWII-era tracks. Lidar imagery appears to show between four and five parallel

507. Woods et al., *Evaluation of 31 Archaeological Sites at Fort McCoy, Wisconsin*, Vol. 2, 338–39; Tyler J. Olsen, William W. Thompson, Miranda J. Alexander and Michael E. Bradford, *2019–2021 Cultural Resource Management Activities: Inventory and NHPA Compliance Projects*, Fort McCoy Archaeological Resource Management Series, Report of Investigations 75 (Fort McCoy, WI: Fort McCoy, 2022), 279.

tracks in this spur sector, along with a potential depression showing the location of a government store house from c. 1909 (Figure 178).

Figure 178. Vicinity of the early upper spur sector, as represented with lidar. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)



5.5 McCoy Station West

There are several periods of development associated with the vicinity of McCoy Station West. The earliest phase is associated with the development of Kelvin Station in the 1900s, which likely contained minimal infrastructure, such as open shelters and platforms. The earliest Kelvin Station, seen on a 1909 military map, was located in Section 3 of Angelo Township (Figure 104). In the 1910s, it moved approximately 1 mile south, straddling the boundary of Sections 9 and 10 in Angelo Township (Figure 107). Kelvin Station appears to have been removed by 1917.[508] Lidar returns from Section 3 and from Sections 9 and 10 of Angelo Township do not appear to show any structural signatures associated with Kelvin Station, as development in both locations has been substantial since the 1910s (Figure 179–Figure 180).

508. C&NW valuation map, 1917, digital file from Fort McCoy CRM.

Figure 179. Vicinity of Kelvin in Angelo Township, Section 3 (c. 1909) as represented with lidar. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)

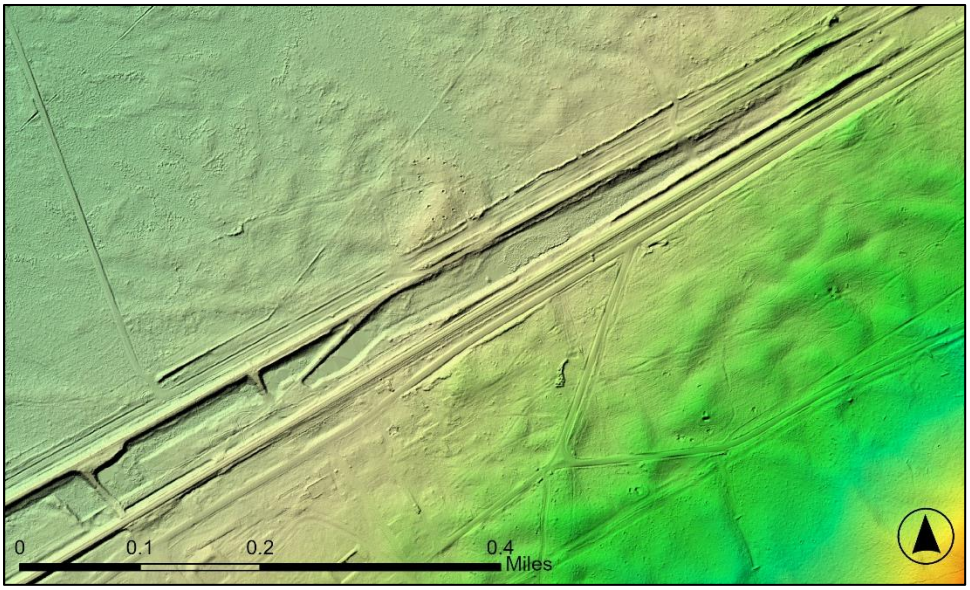
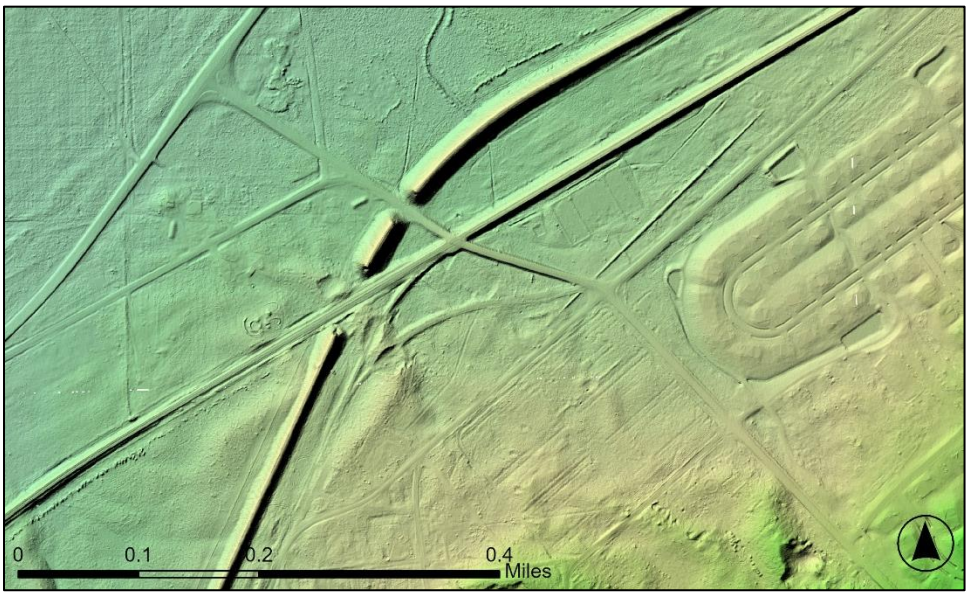


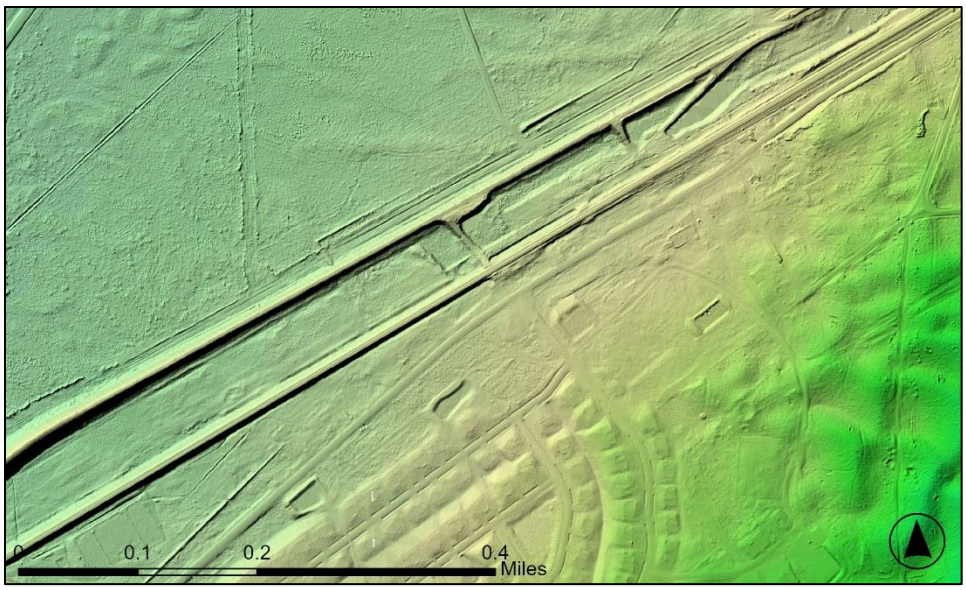
Figure 180. Vicinity of Kelvin in Angelo Township, Sections 9 and 10 (c. 1910–1917) as represented with lidar. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)



With the creation of Camp Robinson, the CMSTP&P and C&NW railroads constructed a more developed station in the 1910s (McCoy Station West), containing two depots and several support structures in Section 3 of Angelo Township. In the 1920s and 1930s, the CMSTP&P and C&NW updated their station with new depots (Figure 109, Figure 112). Aerial photographs from 1946 and 1958 suggest that the infrastructure

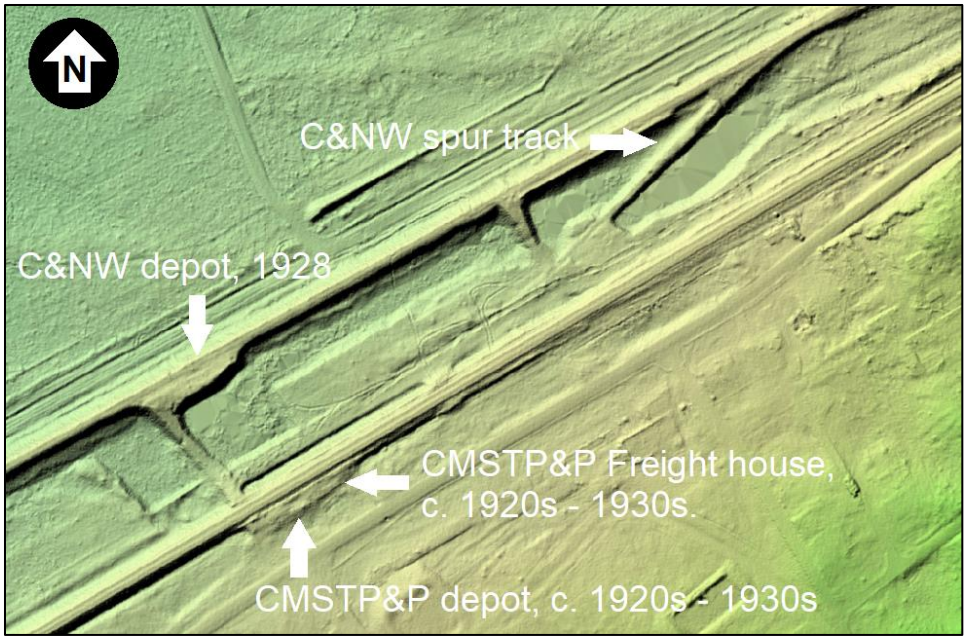
associated with this station was gradually dismantled during that time frame.[509] Lidar returns from the vicinity of McCoy Station West show evidence of C&NW and CMSTP&P activity here. For instance, lidar depicts the location of a C&NW spur track, which ran between the main C&NW and CMSTP&P corridors, and it accentuates the elevated landforms upon which the C&NW and the CMSTP&P constructed their updated depots in the 1920s and 1930s. The faint outlines of the c. 1920s–1930s CMSTP&P depot and freight house also appear to be visible (Figure 181–Figure 182).

Figure 181. Vicinity of McCoy Station West as represented with lidar. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)



509. USGS Earth Explorer, (Image AR1CX0000040140, 1946); USGS Earth Explorer, (Image ARA001610101030, 1958).

Figure 182. A closer view of McCoy Station West on lidar, showing the location of various infrastructure. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)



5.6 Lower spur sector

The CMSTP&P and C&NW constructed a jointly operated spur track below Camp Robinson in 1911. This track began in Section 9 of Angelo Township and terminated in Section 10. At the spur's terminus, the companies constructed a set of parallel sidetracks. Fort McCoy's oldest building, a concrete warehouse (building 6017) constructed in 1909, still stands at the end of the spur (Figure 119–Figure 120)[510] In 1929, crews constructed another government-owned side line that connected the CMSTP&P main tracks with the lower spur tracks.[511] All of the tracks on the lower spur grade appear to have been removed around 1958.[512] Lidar returns of the spur's terminus show faint striations representing the presence of former sidetracks. The outline of a railroad platform constructed west of building 6017 in 1940 is also distinguishable.[513] Additionally, the signature of small narrow-gauge grades branching off the east side of the spur terminus appear to be visible on lidar (Figure 183–Figure 184).

510. Sturkol, "Photo Essay: Fort McCoy's Oldest Building."

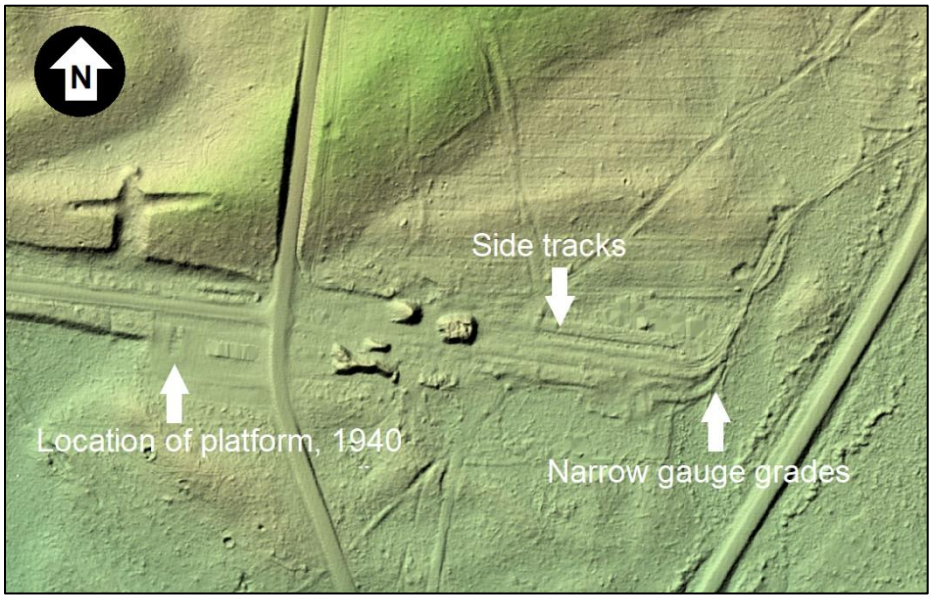
511. C&NW valuation map, c. 1940, digital file from Fort McCoy CRM.

512. US Army Corps of Engineers, *Station Rail Facilities,* 1984.

513. Platform 6016, HR-212-43, Historic real property inventory from Fort McCoy CRM.

Figure 183. Vicinity of the lower spur as represented with lidar. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)

Figure 184. A closer view of the lower spur as represented with lidar. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)



5.7 Narrow-gauge network (South Post)

A network of narrow-gauge tracks first appeared in Fort McCoy's South Post area by the early 1920s, when the Sparta Ordnance Depot employed them to transport ammunition to portable magazines. Due to their portability, the narrow-gauge tracks could be moved as needed. What began as a relatively simple network in the 1920s had expanded significantly by

the early 1930s, then reduced in size by the end of the 1930s (Figure 132, Figure 134, Figure 138).

A compilation map superimposes the outlines of narrow-gauge tracks on the 1923, 1933, and 1939 map (Figure 185). Lidar returns appear to show evidence of narrow-gauge tracks in various locations throughout the South Post area. Those signatures that are distinguishable generally follow the paths of narrow-gauge tracks as depicted on the historic maps from 1923, 1933, or 1939. Lidar returns of the narrow-gauge network are presented in seven views. To better highlight the signatures of narrow-gauge grades on lidar, the figures below contain two versions of each view: one with georeferenced track outlines superimposed over the lidar imagery and another without outlines. Due to minor scale discrepancies while georeferencing the historic maps, the track outlines are slightly offset from their actual location (Figure 186–Figure 199). The last view, number 7, appears to show the signature of a narrow-gauge line extending beyond the terminus of the track as represented on the 1933 map (Figure 198–Figure 199).

Figure 185. General course of the former narrow-gauge network in the South Post area. *Blue* represents track on a 1923 USDA map, *green* represents track on a 1933 military map, and *yellow* represents track on a 1939 military map. The lidar returns of this network are presented in seven views. (Map data: Google. Modified by ERDC-CERL.)

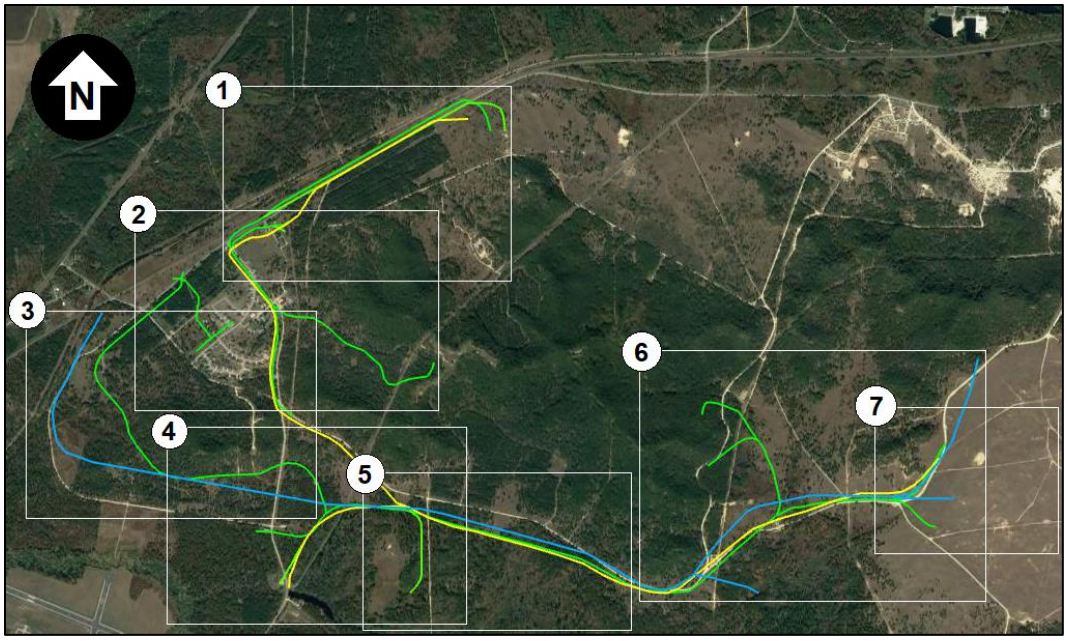


Figure 186. Vicinity of the narrow-gauge network as represented with lidar, view 1 with georeferenced outlines. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)

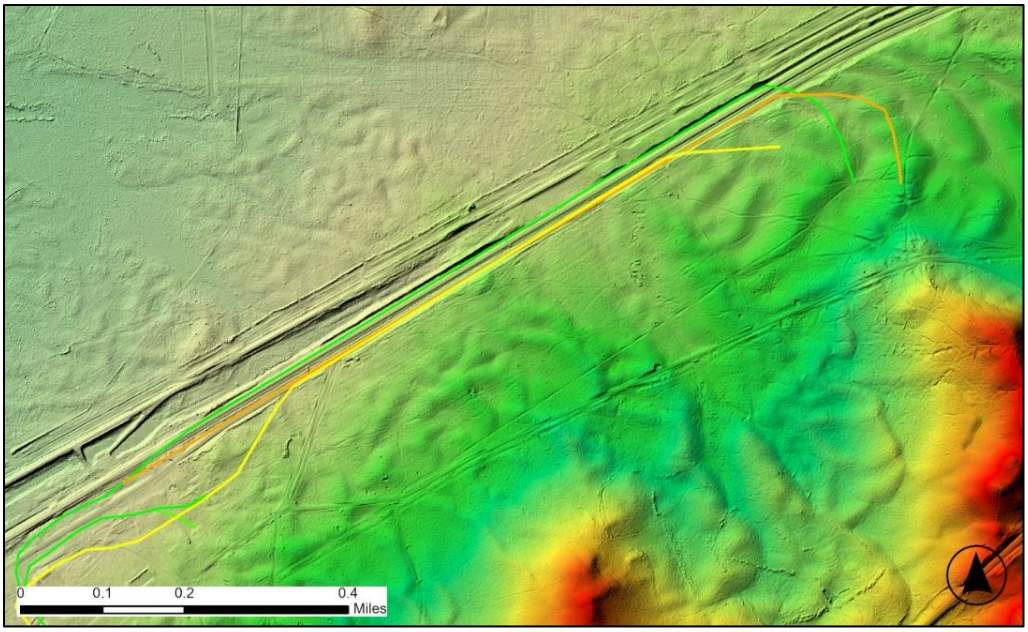


Figure 187. Vicinity of the narrow-gauge network as represented with lidar, view 1 without georeferenced outlines. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)

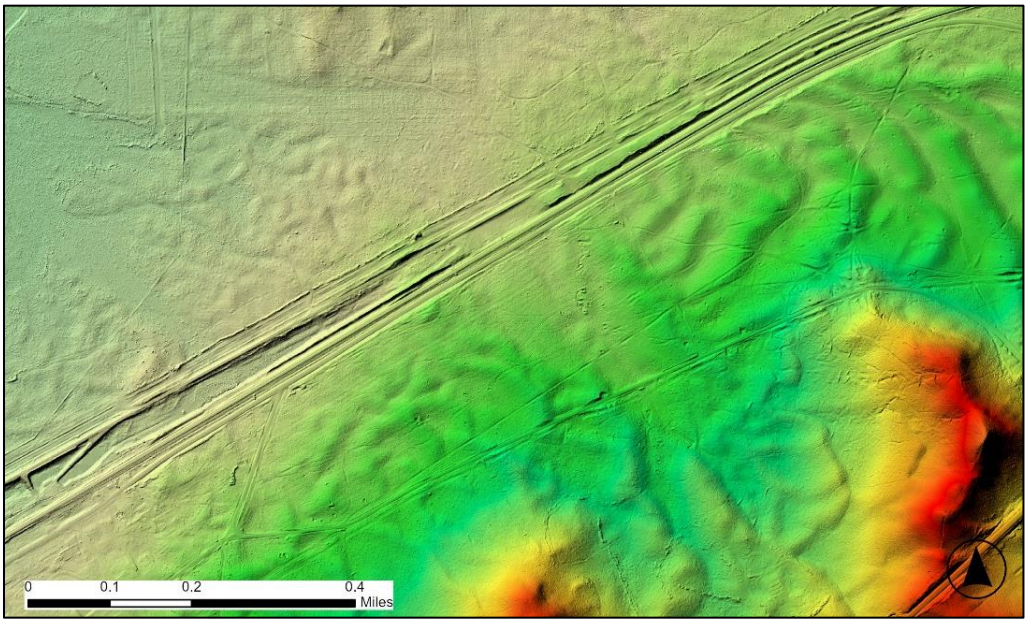


Figure 188. Vicinity of the narrow-gauge network as represented with lidar, view 2 with georeferenced outlines. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)

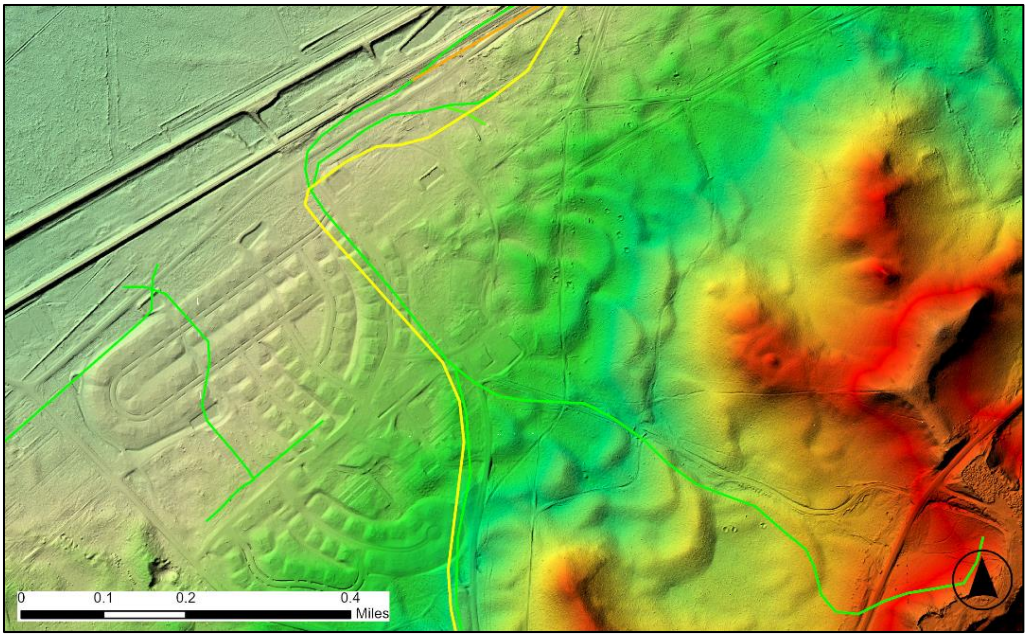


Figure 189. Vicinity of the narrow-gauge network as represented with lidar, view 2 without georeferenced outlines. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)

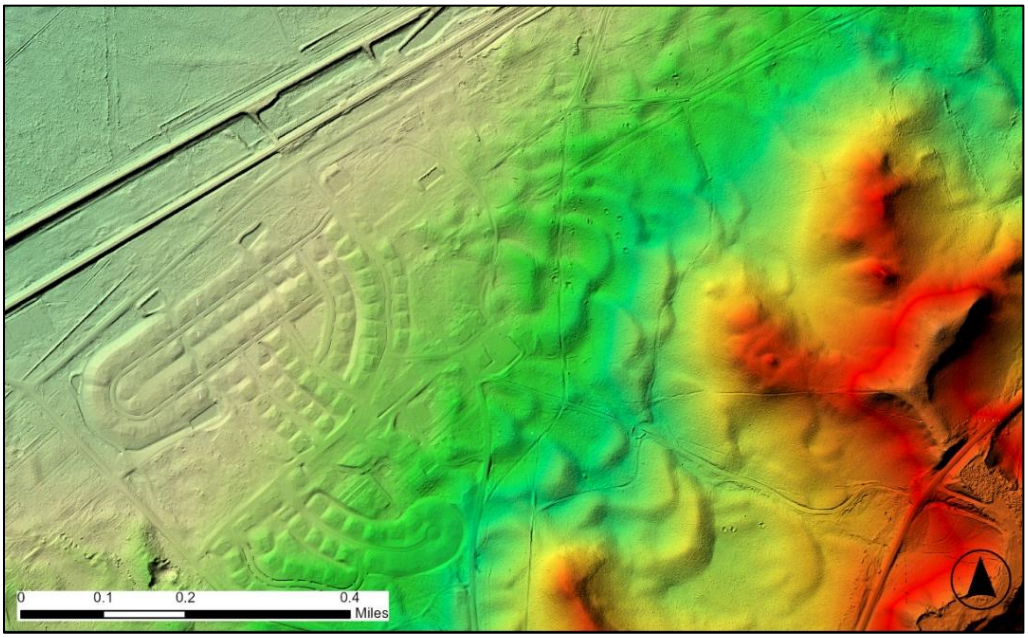


Figure 190. Vicinity of the narrow-gauge network as represented with lidar, view 3 with georeferenced outlines. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)

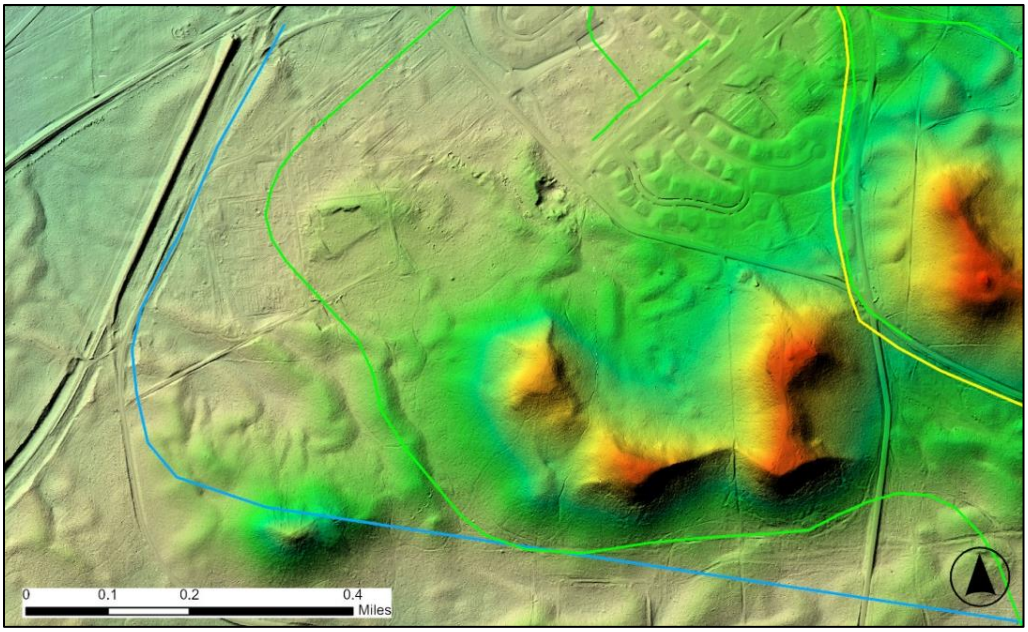


Figure 191. Vicinity of the narrow-gauge network as represented with lidar, view 3 without georeferenced outlines. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)

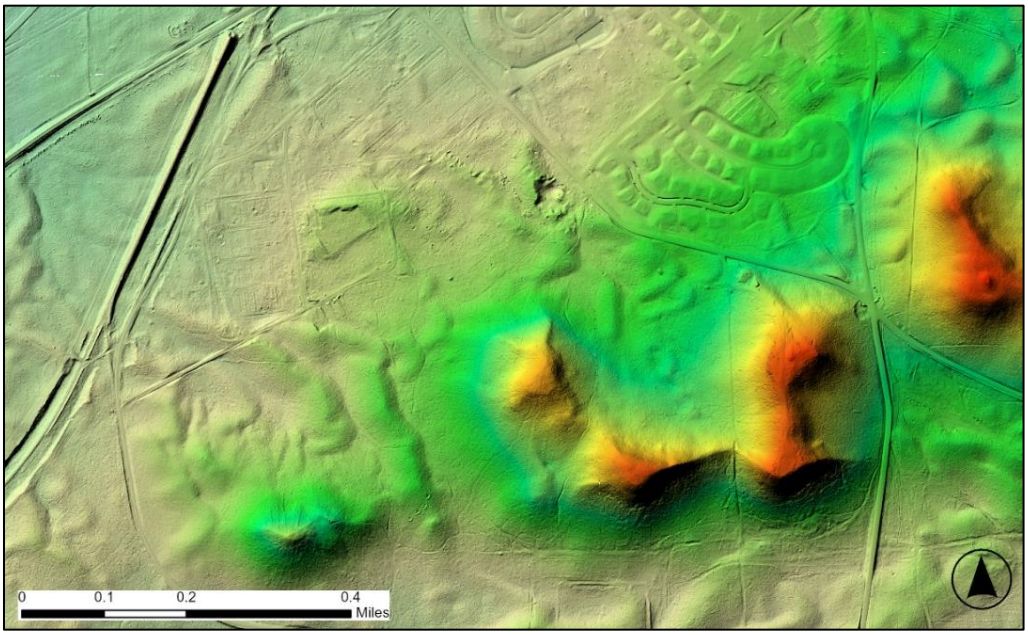


Figure 192. Vicinity of the narrow-gauge network as represented with lidar, view 4 with georeferenced outlines. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)

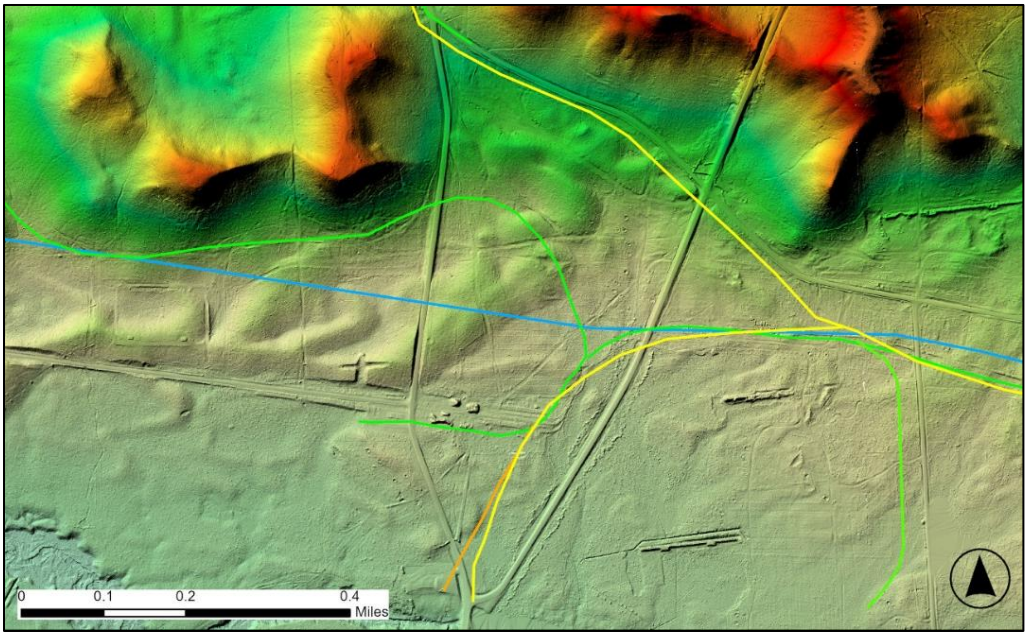


Figure 193. Vicinity of the narrow-gauge network as represented with lidar, view 4 without georeferenced outlines. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)

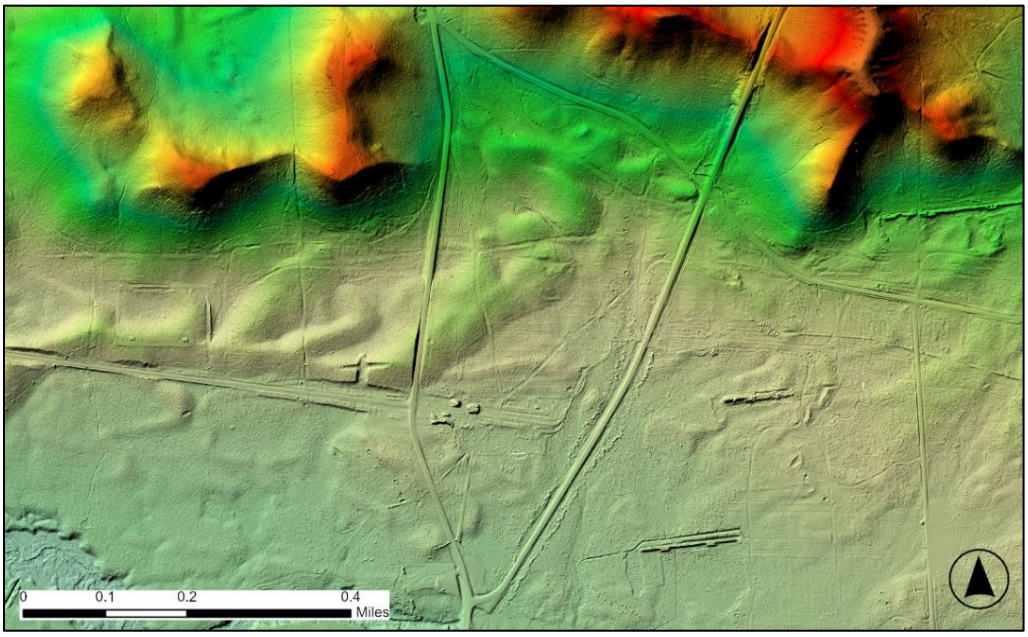


Figure 194. Vicinity of the narrow-gauge network as represented with lidar, view 5 with georeferenced outlines. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)

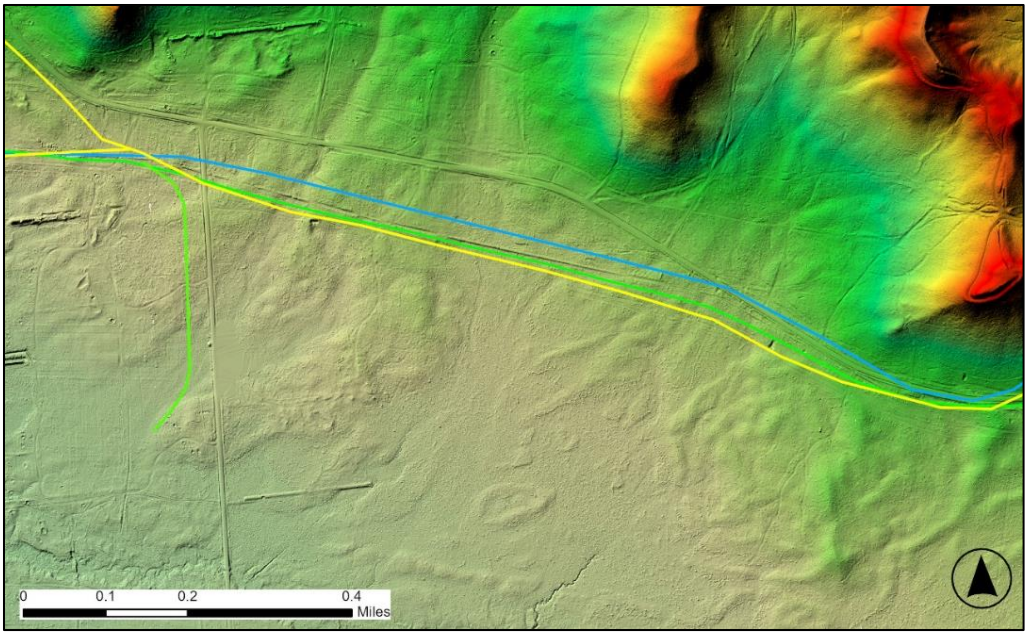


Figure 195. Vicinity of the narrow-gauge network as represented with lidar, view 5 without georeferenced outlines. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)

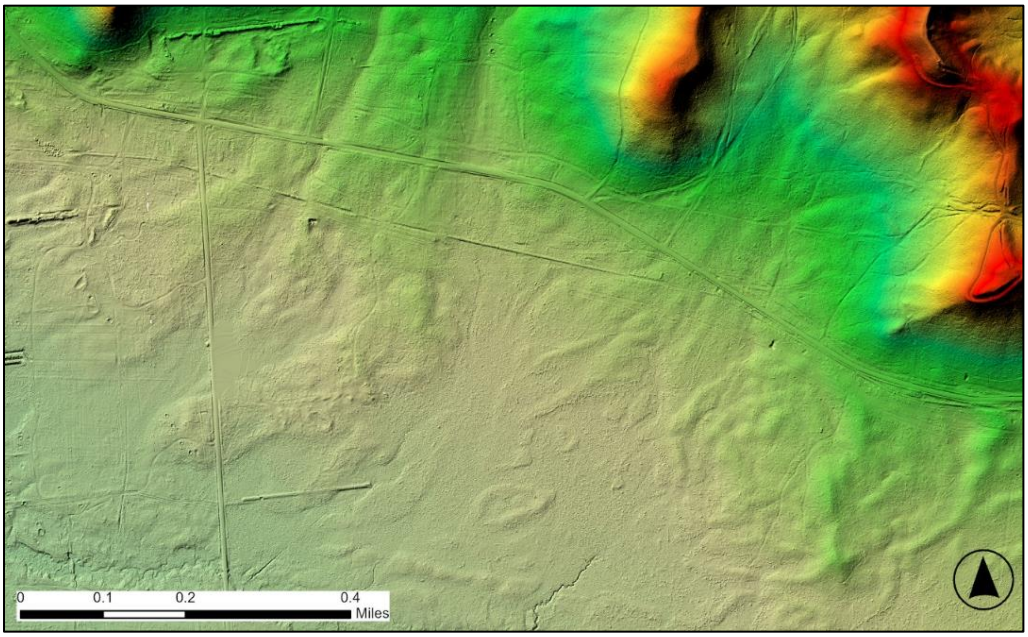


Figure 196. Vicinity of the narrow-gauge network as represented with lidar, view 6 with georeferenced outlines. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)

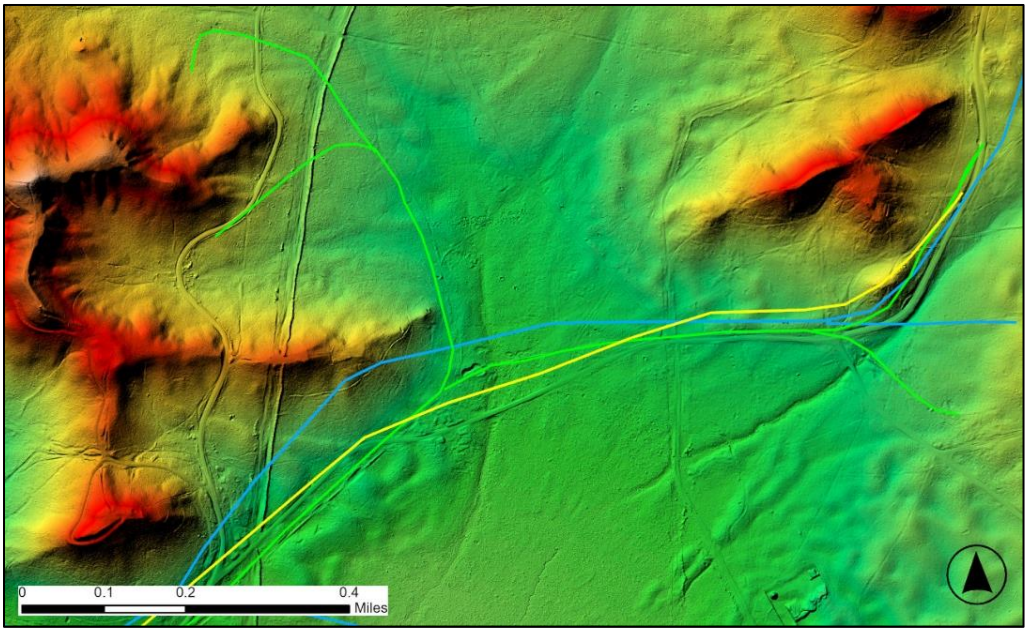


Figure 197. Vicinity of the narrow-gauge network as represented with lidar, view 6 without georeferenced outlines. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)

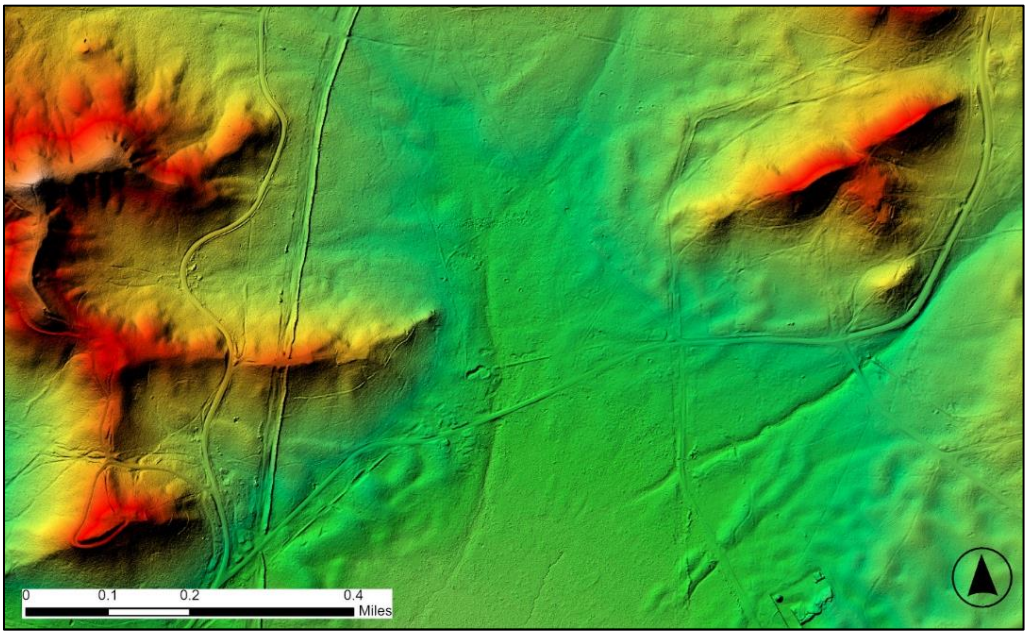


Figure 198. Vicinity of the narrow-gauge network as represented with lidar, view 7 with georeferenced outlines. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)

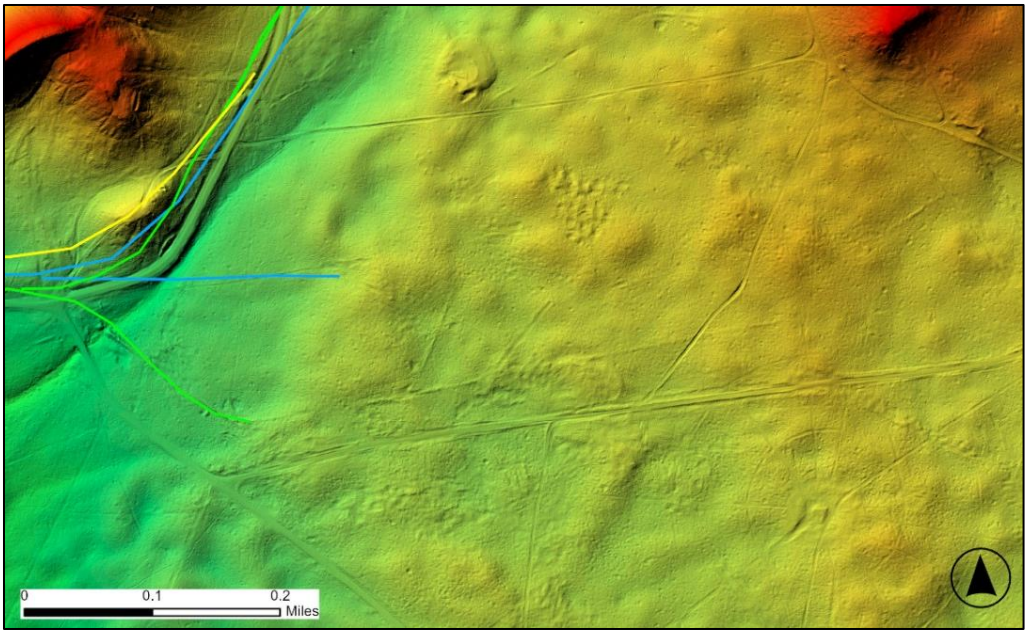
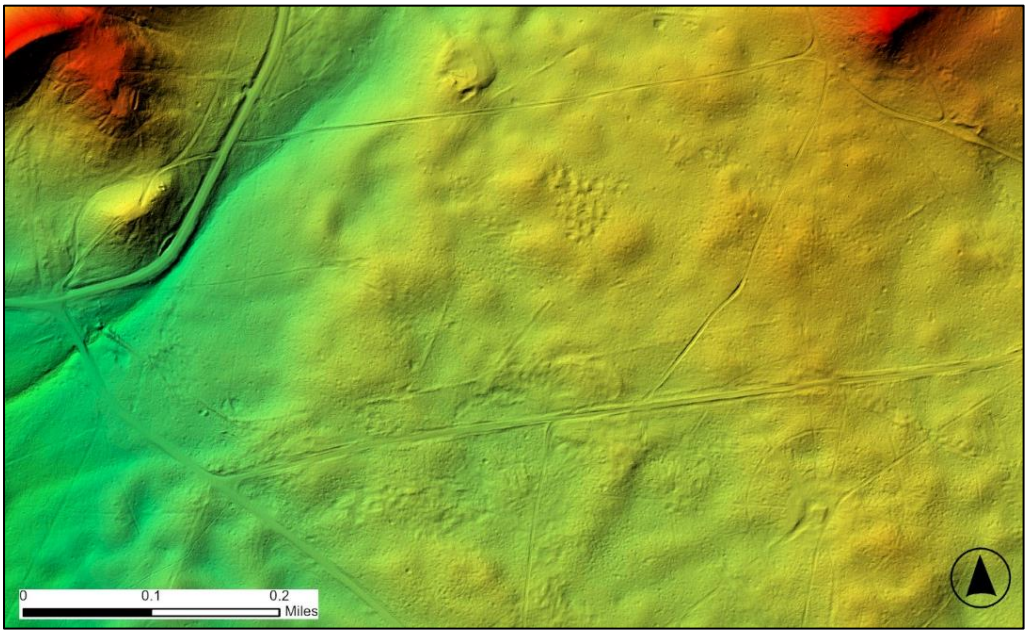
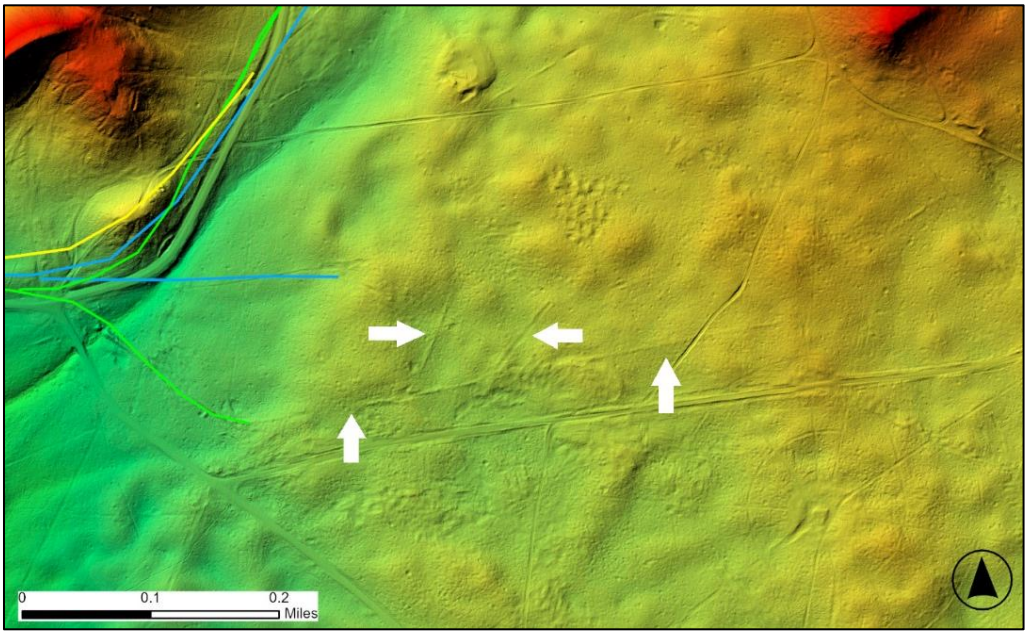


Figure 199. Vicinity of the narrow-gauge network as represented with lidar, view 7 without georeferenced outlines. (Lidar data from Wisconsin State Cartographer's Office. Public domain.)



Based on these lidar returns, it appears that potential narrow-gauge signatures are particularly strong in views 4–7. While the railroad grades generally tend to follow the historic georeferenced routes, it is interesting to note a possible extension to the narrow-gauge network in view 7, which has not been cartographically documented (Figure 200). Further field work is necessary to determine if this linear signature may be associated with the historic narrow-gauge network.

Figure 200. Vicinity of the narrow-gauge network as represented with lidar, view 7, with *arrows* pointing to potential extensions in the narrow-gauge line (Lidar data from Wisconsin State Cartographer's Office. Public domain.)



6 Recommendations

6.1 Recommendations

While the Midwestern railroad MPDFs do not cite Criterion D as a common area of significance, this historic context may justify the creation of research questions concerning railroad activity at Fort McCoy. Future research questions may investigate the information potential of sites identified in this report. For example, the former Lafayette Station site in Lafayette Township may be one of best candidates for this type of investigation. This stop may date to the time of the La Crosse and Milwaukee corridor's construction in the late 1850s, during Wisconsin's early railroad era. According to Richard's *History of Monroe County, Wisconsin*, contractors made the town of Best Point, just north of Lafayette Station, a local headquarters while working on the La Crosse and Milwaukee line.[514] Additionally, a *Sparta Herald* article from 1911 indicates that a section house existed at Lafayette Station, and that section men still occupied the house when it burned down that October.[515] It is unknown if this building was a standardized section house constructed by the railroad, or an existing structure used as a section house. Based on this information, it might be suitable to investigate the following questions:

- Is it possible to establish a chronology for Lafayette Station?
- Did an early station exist at the time of the La Crosse and Milwaukee's construction, and if so, was there a relationship between Lafayette Station and Best Point?
- Does the site yield potential information that would expand our understanding about the way of life for section workers, particularly in Wisconsin's early railroad era?

Other research questions may investigate the information potential of the narrow-gauge networks that existed in the South Post area. Based on Paul Miller's inquiries in the early 1990s, some general questions may include

- Is it possible to establish a more detailed chronology for the development of the narrow-gauge network at Fort McCoy?
- Was the narrow-gauge size universal throughout the South Post area, or did it vary based on location or time of installation?

514. Richards, *A History of Monroe County, Wisconsin, Past and Present*, 517.
515. "Building at Old Lafayette Station Burned." *Sparta Herald*, November 5, 1911.

- Do findings regarding gauge size differ from other historic military narrow-gauge railroads?

Several lidar returns were generated over areas that have historically been associated with railroad development within the boundaries of Fort McCoy. It was of primary interest to ascertain if lidar, in conjunction with historic maps, could confirm traces of the South Post's narrow-gauge network. In many areas, it appears that signatures of narrow-gauge lines are visible with lidar. Further field work is necessary to determine if other linear signatures, such as those generated in view 7, may indicate extensions to the narrow-gauge network that have not been documented in historic maps (Figure 200). While these lidar returns do not suggest there are any training hazards linked to areas of historic railroad infrastructure, this assessment would be fully verified through field work.

6.2 Data table

A variety of infrastructure associated with the CMSTP&P and C&NW railroads historically existed within the boundaries of Fort McCoy. A collective table summarizing the data presented in Chapter 4 is presented here (Table 10). This is not an exhaustive inventory of all historic railroad infrastructure, extant and nonextant, that existed within the installation boundaries. Rather, these represent features that have been observed in historic maps and other documentation over the course of research for this historic context.

Table 10. Historic railroad infrastructure.

Depots					
Location	Builder	Possible Years of Operation	Plans Available?	Photos Available?	Extant?
Lafayette Station	CMSTP&P	c. 1858–1910	No	No	No
Raymore Station	CMSTP&P	1900–1910	No	No	No
McCoy Station East	CMSTP&P	c. 1911–c. 1921	Yes	No	No
—	C&NW	c. 1911–c. 1921	No	No	No
—	CMSTP&P and C&NW	1942–1943 (temporary joint depot)	No	No	No

Table 10 (cont.). Historic railroad infrastructure.

Depots					
—	CMSTP&P and C&NW	1943–c. 1977 (joint depot)	Yes	Yes	No
McCoy Station West	CMSTP&P	c. 1915–1942	No	No	No
—	CMSTP&P	c. 1942–c. 1950	No	No	No
—	C&NW	c. 1915–1928	No	No	No
—	C&NW	1928–c. 1950	No	Yes	No
Freight Houses					
Location	**Builder**	**Possible Years of Operation**	**Plans Available?**	**Photos Available?**	**Extant?**
McCoy Station West	C&NW	1917–c. 1920s	No	No	No
McCoy Station West	CMSTP&P	c. 1920s–c. 1950s	No	No	No
McCoy Station East	C&NW and CMSTP&P	c. 1943–c. 1970s	No	No	No
Engine Houses					
Location	**Builder**	**Possible Years of Operation**	**Plans Available?**	**Photos Available?**	**Extant?**
Raymore Station (1900–1910)	CMSTP&P	1900–c. 1910	Yes	No	No
Upper Spur Sector	Unknown, Bldg. 2163	c. 1943–c. 2010	No	Yes	No
Section Houses					
Location	**Builder**	**Possible Years of Operation**	**Plans Available?**	**Photos Available?**	**Extant?**
Raymore Station (1900–1910)	CMSTP&P	1900–c. 1910	Yes	No	No
Lafayette Station	Unknown	Unknown–c. 1911	No	No	No
Water Tanks					
Location	**Builder**	**Possible Years of Operation**	**Plans Available?**	**Photos Available?**	**Extant?**
Raymore Station (1900–1910)	CMSTP&P	1900–c. 1910	No	No	No
McCoy Station East	C&NW	c. 1911–c. 1921	No	No	No

Table 10 (cont.). Historic railroad infrastructure.

Platforms and Open Shelters					
Location	**Builder**	**Possible Years of Operation**	**Plans Available?**	**Photos Available?**	**Extant?**
McCoy Station East	CMSTP&P and C&NW	c. 1910–c. 1920s; 1942–c. 1970s	Yes (shelter)	No	No
McCoy Station West	CMSTP&P and C&NW	c. 1910–c. 1950s	No	No	No
Upper Spur Sector	Likely US Government	c. 1910–c. 1920s	No	No	No
Upper Spur Sector	Likely US Government	1942–present (platforms only)	No	Yes	Some
Lower Spur Sector	Likely US Government	c. 1910–c. 1950s	No	Yes (1)	No
Coal Houses					
Location	**Builder**	**Possible Years of Operation**	**Plans Available?**	**Photos Available?**	**Extant?**
Raymore Station (1910–present)	CMSTP&P	c. 1910–c. 1950s	Written description (Appendix A)	No	No
McCoy Station East	C&NW	c. 1910–c. 1920s	No	No	No
McCoy Station East	CMSTP&P and C&NW	1943–c. 1950s	No	No	No
Coaling Stations					
Location	**Builder**	**Possible Years of Operation**	**Plans Available?**	**Photos Available?**	**Extant?**
McCoy Station East	Unknown	1942–c. 1950s	No	Yes	No
Bridges					
Location	**Builder**	**Possible Years of Operation**	**Plans Available?**	**Photos Available?**	**Extant?**
Near McCoy Station West	Pennsylvania Steel Co.	1911–c. 1977	No	Yes	Yes
Near McCoy Station West	American Bridge Co.	1926–c. 1977	No	Yes	Yes

7 Conclusion

This report provides a historic context for the railroads that operated within the present-day boundaries of Fort McCoy, highlighting the roles of the former CMSTP&P and C&NW lines as well as the system of portable light rails that once operated in the lower post. The objective of this historic context is to deliver a useful reference for future evaluations of railroad-related resources in the installation. Ultimately, the report is intended to save the installation time in determining potential areas of significance for future evaluations. This is accomplished through the creation of a broad historic context for railroading in the Midwest, establishing a survey of railroad history at Fort McCoy, and providing examples of areas of significance and NRHP criteria commonly applied to the historic railroad resources of the Midwest. Additionally, lidar returns in areas historically associated with railroad development at Fort McCoy can be used to guide future field work along the historic CMSTP&P and C&NW corridor, as well as the narrow-gauge network in the South Post area.

Bibliography

Adams, Sunny E., Megan W. Tooker, and Adam Smith. *Fort McCoy, Wisconsin WWII Buildings and Landscapes*. ERDC-CERL TR-20-12. Champaign, IL: Engineer Research and Development Center, Construction Engineering Research Laboratory, 2020.

Association of American Railroads. *American Railroads and the War*. Washington, DC: Association of American Railroads, 1943.

Atack, Jeremy, and Robert A. Margo. "The Impact of Access to Rail Transportation on Agricultural Improvement." *The Journal of Transport and Land Use* 4, no. 2 (Summer 2011): 5–18.

Berg, Walter. *Buildings and Structures of American Railroads: A Reference Book for Railroad Managers, Superintendents, Master Mechanics, Engineers, Architects, and Students*. New York: John Wiley and Sons, 1900. https://babel.hathitrust.org/cgi/pt?id=umn.31951d02161722.

Bernd, John M. "The La Crosse and Milwaukee Land Grant, 1856." *The Wisconsin Magazine of History* 30, no. 2 (1946): 141–53.

Blanchard, Rufus. *Railroad Map of Wisconsin*. [1858]. Chicago: Rufus Blanchard. https://content.wisconsinhistory.org/digital/collection/maps/id/1139/rec/1.

Brandt, M. Earle. "The Artillery in Camp." *Monroe County Democrat*, September 15, 1905. Folder: Military–Fort McCoy Land Purchase. Monroe County Local History Room, Sparta, WI.

Brown, Jim "An Old Timer Reminisces." *Sparta Herald*, March 12, 2011, 1. Folder: Military, Fort McCoy, General. Monroe County Local History Room, Sparta, WI.

"Building No. 7261." Fort McCoy Real Property record. Digital file from Fort McCoy CRM.

Buley, R. Carlyle. *The Old Northwest Pioneer Period: 1815–1840*. Vol. I. Bloomington: Indiana University Press, 1950.

Burns, Adam. "Railroads During World War 2: Facts And Statistics." American Rails. Accessed February 19, 2022. https://www.american-rails.com/world.html.

Burns, Adam. "Railroads in the 1930s: Depression and Streamliners." American Rails. Accessed February 19, 2022. https://www.american-rails.com/1930s.html.

Burns, Adam. "Milwaukee Road's *Hiawatha*." American Rails. Accessed February 28, 2022. https://www.american-rails.com/hiawatha.html.

C&NW Valuation Map, 1917. Digital file from Fort McCoy CRM.

C&NW Valuation Map, c. 1940. Digital file from Fort McCoy CRM.

Camp McCoy. n.d. Hanging map at Fort McCoy History Center, Sparta, WI.

Camp McCoy. 1942. Plan 1-L. Map collection, Monroe County Local History Room, Sparta, WI.

Camp McCoy. 1943. Map collection, Monroe County Local History Room, Sparta, WI.

"Camp McCoy." *Wisconsin Magazine of History*, Summer 2009. Folder: Military, Fort McCoy, General. Monroe County Local History Room, Sparta, WI.

Camp McCoy Project General Layout Plan. 1942. Map collection, Monroe County Local History Room, Sparta, WI.

Camp McCoy Station Valuation Map. Revised August 9, 1944. Digital file from Fort McCoy CRM.

Camp McCoy, Wisconsin. 1951. 322 Engineer Topo Company Corps. Folder: Military, Fort McCoy, General. Monroe County Local History Room, Sparta, WI.

Camp McCoy Wisconsin, Developed Area Showing Camp Facilities and Contours. October 1929. Drawer 1, folder 3. Fort McCoy History Center, Sparta, WI.

Cashton Record. "The Milwaukee Station at Raymore." August 19, 1910.

"Chicago, Milwaukee, St. Paul and Pacific Railroad Company, Finance and Accounting Department, Station Earnings 1951–1955." Milwaukee Road Archive. https://www.milwaukeeroadarchives.com/EconomicStudies/EconomicStudies.htm.

"Chicago, Milwaukee, St. Paul and Pacific Railroad Company, Station Data, Section 2: 1977, 1976, 1975." Milwaukee Road Archive. https://www.milwaukeeroadarchives.com/Revenues/RevenueReports197719761975.pdf.

Chicago and Northwestern. 1913. Map. Folder: Railroads, General. Monroe County Local History Room, Sparta, WI.

Chicago and Northwestern Railway. *Map of Stage Coach Routes and Location of Taverns*. 1930. Prepared by Theodore T. Brown. Image ID 88478. Wisconsin Historical Society. https://www.wisconsinhistory.org/Records/Image/IM88478.

Colton, G. Woolworth, and Rufus Blanchard. *Indiana, Illinois, Missouri & Iowa with Parts of Adjoining States*. 1858. Map. New York: G. Woolworth Colton and Rufus Blanchard. Library of Congress. http://hdl.loc.gov/loc.gmd/g4061p.rr001210.

Conard, Rebecca, and Tracy A. Cunning. *The Advent and Development of Railroads in Iowa, 1855–1940*. National Register of Historic Places, Multiple Property Documentation Form (MPDF). Washington, DC: National Park Service, 1990. https://npgallery.nps.gov/pdfhost/docs/NRHP/Text/64500143.pdf.

Correspondence to W. J. Whalen, June 15, 1945. Folder 3765. Milwaukee Road Archives, Milwaukee, WI.

Cron, C. O. "History of Camp Douglas." 1929. Camp Douglas, Wisconsin (website). https://www.campdouglaswi.com/vertical/sites/%7B2C244097-26AE-43EA-BCDB-A420DF1D8991%7D/uploads/History_of_the_Village_of_Camp_Douglas.pdf.

Cronon, William. *Nature's Metropolis: Chicago and the Great West*. New York: W. W. Norton & Company, 1991.

Dahlen, Timothy N. and Stephen C. Wagner. *2010 Cultural Resource Management Activities: NHPA Compliance Projects*. Fort McCoy Archaeological Resource Management Series, Report of Investigations 49. Fort McCoy, WI: Fort McCoy. 2011.

"East Camp McCoy, Wis. New Passenger Depot Layout of Platform Ramps. Drawing no. B-5454," December 10, 1942. CMSTP&P Bridge and Building Department. Milwaukee Road Archives, Milwaukee, WI.

Englesby, C. H. *Biennial Report of the Adjutant General of the State of South Dakota*. Sioux Falls: Press of Mark D. Scott, 1910.

Evans, R. K. "Advisability of Establishing a Range for Field-Firing on the Sparta Reservation for the Three Arms–Artillery, Cavalry, and Infantry, and Machine Guns," January 15, 1910. Report excerpt, folder: Military–Fort McCoy Land Purchase. Monroe County Local History Room, Sparta, WI.

"15 Trains Daily Through Camp McCoy." n.d. Fort McCoy History Center.

Fort McCoy Archaeology Laboratory. "Fort McCoy Section 110 Survey." Fort McCoy, WI, 1999–2000.

Fort McCoy Triad. "A Chronicle of Our Past: 1909–1999." January 1, 1999. 90th Anniversary Commemorative Edition.

Fort McCoy Triad. "The Foundation: Robert Bruce McCoy Brings a Vision to Life." January 1, 1999., 90th Anniversary Commemorative Edition.

General Map of Camp McCoy, Sparta, Wisconsin. December 7, 1931. Drawer 1, folder 3. Fort McCoy History Center.

Grant, H. Roger. "Interurban Transit." In *Encyclopedia of Milwaukee*. University of Wisconsin-Milwaukee. Accessed January 19, 2021. https://emke.uwm.edu/entry/interurban-transit/.

Grant, H. Roger. *The Northwestern: A History of the Chicago and Northwestern Railway System*. DeKalb: Northern Illinois University Press, 1996.

H. C. Munsch to J. P. Kiley, July 15, 1945. Folder 3765. Milwaukee Road Archives, Milwaukee, WI.

The Harlowton (MT) Times. "A Railroad Crisis is a Defense Crisis." October 12, 1961. Reprinted in *The Milwaukee Road Magazine*, November–December 1961. P. 6. Folder: Military, Fort McCoy, General. Monroe County Local History Room.

Hayes, Derek. 2017.*The First Railroads: Atlas of Early Railroads*. Buffalo NY: Firefly Books,

Heggland, Timothy F. "Mazomanie Downtown Historic District." National Register of Historic Places registration form. 1992. https://npgallery.nps.gov/NRHP/GetAsset/NRHP/92000406_text.

Hinckley, E. W. *Map of Monroe County, Wisconsin*. Monroe County. [c. 1903], c. 1:50,688 scale. Monroe County, WI: E. W. Hinckley. Wisconsin Historical Society. https://content.wisconsinhistory.org/digital/collection/maps/id/14195/rec/21.

Historic American Buildings Survey. *Fort McCoy, Sparta, Monroe County, WI*. 1933. Photographs. HABS no. WI-308-15. Library of Congress. https://www.loc.gov/item/wi0229/.

"Historical Data, Camp McCoy, Wisconsin Post Engineer Office," January 15, 1946. Center for Environmental Management of Military Lands (CEMML) Office.

"History of Fort McCoy." n.d. Folder: Military, Fort McCoy, General. Monroe County Local History Room, Sparta, WI.

Holden, G. B. *Map of Monroe County, Wisconsin, Compiled Principally from Government Surveys by G. B. Holden, Sparta*. 1858. New York: H. F. Wallings. Wisconsin Historical Society. https://content.wisconsinhistory.org/digital/collection/maps/id/4222/rec/18.

Hufstetler, Mark A., and Michael A. Bedeau. *Historic Railroads of South Dakota*. National Register of Historic Places, Multiple Property Documentation Form (MPDF). Washington, DC: National Park Service, 1998. https://npgallery.nps.gov/NRHP/GetAsset/d73fd284-a308-458d-a374-49aefcff8c1e.

Interview with Jim Cote, April 11, 2005. Folder: Military, Fort McCoy, General. Monroe County Local History Room, Sparta, WI.

James B. Aleshire to Secretary of War, June 27, 1910. Folder: Military–Fort McCoy Land Purchase. Monroe County Local History Room, Sparta, WI.

James P. Kaysen to Wilfred Beaver, August 18, 1974. James P. Kaysen Papers, M95-226, box 2, folder: Monroe. Wisconsin Historical Society, Madison, WI.

"Japanese POWs Board Train," September 01, 1945. US Army file photo by PPA-OFF US Signal Corps. Photo from Fort McCoy PAO. https://www.dvidshub.net/image/6381894/japanese-pows-board-train.

Kaitz, G. M. *An Economic History of Five Midwestern Railroads*. Washington DC: US Department of Transportation, 1976.

Kaysen, James P. "Notes on Wisconsin Tunnels," May 22, 1965. Kaysen Papers, box 4, folder: Tunnels. Wisconsin Historical Society, Madison, WI.

Kaysen, James P. *The Railroads of Wisconsin: 1827–1937*. Boston: The Railway & Locomotive Historical Society, Inc. 1937.

La Crosse Sunday Tribune, *The*. January 11, 1953. Folder: Military, Fort McCoy, General. Monroe County Local History Room, Sparta, WI.

La Crosse Tribune The. July 4, 1976. *Wisconsin Magazine of History*. Folder: Railroads, General. Monroe County Local History Room, Sparta, WI.

La Crosse Tribune, The. "Artillery Takes to Road for March to Camp at Sparta." May 20, 1927.

La Crosse Tribune, The. "C.M.T.C. Youths at Camp McCoy." July 6, 1935.

La Crosse Tribune, The. "Camp Railroad Depot Makes New Schedule." January 21, 1947.

La Crosse Tribune, The. "Camp Robinson to be Training Ground for Artillery Units." January 25, 1925.

La Crosse Tribune, The. "Civilian Camps Obtain Supplies by Truck Service." August 13, 1933.

La Crosse Tribune, The. "Construction Plans Studied." January 14, 1947.

La Crosse Tribune, The. "First Troops are Expected at Camp Robinson in April." March 24, 1925.

La Crosse Tribune, The. "57th Field Artillery Brigade, Local Troops Included, in Maneuvers." July 9, 1930.

La Crosse Tribune, The. "Fourteen Hundred Men of Illinois Guard at Sparta." June 18, 1927.

La Crosse Tribune, The. "Illinois Guards Pass Through City Enroute to Camp." August 2, 1931.

La Crosse Tribune, The. "Illinois National Guard Will Arrive at Camp Saturday." June 30, 1933.

La Crosse Tribune, The. "Local Citizens at Camp Robinson to Greet Regulars." May 9, 1925.

La Crosse Tribune, The. "M'Coy to be Largest Artillery Camp in Country." June 12, 1927.

La Crosse Tribune, The. "Many to Take Special Train to Camp McCoy." August 17, 1940.

La Crosse Tribune, The. "McCoy Military Students Like the Life; Stay Close to Camp." July 21, 1935.

La Crosse Tribune, The. "McCoy Will Train Guard." March 31, 1947.

La Crosse Tribune, The. "Motion Pictures for the Soldiers at Robinson Camp." July 19, 1917.

La Crosse Tribune, The. "New Camp McCoy Railroad Station Expected to Relieve Traffic Jams." March 04, 1943.

La Crosse Tribune, The. "New Union Railroad Depot." April 18, 1943.

La Crosse Tribune, The. "Soldiers' Day." June 30, 1918.

La Crosse Tribune, The. "Sparta." May 17, 1931.

La Crosse Tribune, The. "Sparta Kiwanians Hosts to Officers at Camp Robinson." May 26, 1925.

La Crosse Tribune, The. "$726,172 Asked for Williams, McCoy Camps." June 22, 1935.

La Crosse Tribune, The. "Troops Combine to Stage Battle at Camp M'Coy." July 16, 1930.

La Crosse Tribune, The. "Uncle Sam Teaches Gunners for France at Camp Robinson." July 8, 1917.

La Crosse Tribune, The. "Units Arrive at Military Camps in Area." June 12, 1954.

Loweth, C. F., C. N. Bainbridge, and C. P. Rawson. "Album of Depot Plans Reduced from Detail Drawings on File in Office of Architect." 1919. CMSTP&P RY Engineering Department. Milwaukee Road Archives, Milwaukee, WI. https://content.mpl.org/digital/collection/MilwRoad/id/6167/rec/19.

Masters, Charles. "State Will Buy Railroad and to Expand Sparta-Elroy Trail." *The Capital Times*, Madison WI, July 31, 1978.

"McCoy," July 31, 1919. Interstate Commerce Committee Bureau of Valuation, Valuation Section Wis-3, p. 114. Folder: Wisconsin-Structural Notes-Val. Section 3, 1919 (2 of 8). Milwaukee Road Archives, Milwaukee, WI.

McCoy–1952 1200–001. Photo. Folder: Military, Fort McCoy, General. Monroe County Local History Room, Sparta, WI.

Memorandum for the Quartermaster General, January 19, 1910. Folder: Military–Fort McCoy Land Purchase. Monroe County Local History Room, Sparta, WI.

Middleman, Julia E. "History of Monroe County Public Schools." 1989. Sparta Public Library.

Military Reservation Near Sparta Wisconsin. 1909, revised 1910. Blueprint file of map. Camp McCoy, Wisconsin. Fortification Construction Plans and Military Reservation Property Surveys, between c. 1895 and c. 1914. Records of the Office of the Quartermaster General, RG 92. NARA, College Park, MD.

Military Reservation Near Sparta, Wisconsin. c. 1911. Drawer 1, folder 2. Fort McCoy History Center, Sparta, WI.

Military Surface Deployment and Distribution Command Transportation Engineering Agency. *Strategic Rail Corridor Network (STRACNET) and Defense Connector Lines*. Military Surface Deployment and Distribution Command Transportation Engineering Agency, 2018.

Milwaukee Class A Hiawatha 1942. 1942. Milwaukee, WI: E. C. Kropp. PICRYL, Public Domain Media. https://picryl.com/media/milwaukee-class-a-hiawatha-1942-69cd32.

The Milwaukee Magazine. May 1943. https://milwaukeeroadarchives.com/MilwaukeeRoadMagazine/1943,%20July.pdf.

The Milwaukee Magazine. July 1943. https://milwaukeeroadarchives.com/MilwaukeeRoadMagazine/1943,%20July.pdf.

Milwaukee Magazine, *The*. "Army Maneuvers at Camp McCoy." August 1940. Milwaukee Road Archive online collection. University of Illinois Main Library.

Milwaukee Magazine, The. "Business Men Become One-Day G.I.'s at Camp McCoy." July 1944. University of Illinois Main Library.

Milwaukee Magazine, *The*. "New Passenger Station Opened at Camp McCoy." May 1943. University of Illinois Main Library.

Milwaukee Magazine, *The*. "Summer School." August 1943.

Milwaukee Road Magazine, The. November–December 1961. Folder: Military, Fort McCoy, General. Monroe County Local History Room, Sparta, WI.

Milwaukee Road Magazine, The. "The Milwaukee Road Moves the Army." November–December 1961. Folder: Military, Fort McCoy, General. Monroe County Local History Room, Sparta, WI.

Milwaukee Road Magazine, The. "The 757th Transportation Battalion–The Army's Only Railway Shop Unit—Prepares for ANACDUTRA." May–June 1967, 5.

Milwaukee, Sparta, and Northwestern Railroad (C&NW) and CMSTP&P Railroad. *Proposed Joint Spur to Artillery Range*. 1910. Blueprint file of map. Camp McCoy, Wisconsin. Fortification Construction Plans and Military Reservation Property Surveys, between c. 1895 and c. 1914. Records of the Office of the Quartermaster General, RG 92. NARA, College Park, MD.

Moertl, Frank. *Wisconsin Post Office Handbook,* 3rd ed. Hartland, WI: Wisconsin Postal History Society, 1999.

Monroe County aerial photograph, April 29, 1939. 1:20,000 scale. United States Department of Agriculture, roll 5-69. Wisconsin Historic Aerial Imagery Finder. https://maps.sco.wisc.edu/WHAIFinder/.

Monroe County aerial photograph, April 29, 1939. 1:20,000 scale. United States Department of Agriculture, roll 6-13. Wisconsin Historic Aerial Imagery Finder. https://maps.sco.wisc.edu/WHAIFinder/.

Monroe County Democrat. "31,850 Soldiers in McCoy Summer Camp." October 20, 1949.

Monroe County Historical Society. *Monroe County, Wisconsin Pictorial History*. Tomah, WI: Tomah Journal Printing Company, Inc., 1976.

"National Guard Off for Camp McCoy from Bloomington, IL," 1951. Pantagraph Negative Collection 1950–1959. McLean County Museum of History, Bloomington, IL. http://www.idaillinois.org/digital/collection/p16614coll56/id/9466.

National Park Service. *Fort McCoy (Camp McCoy) Sparta Vicinity Monroe County Wisconsin*. HABS WI-308. Washington, DC: National Park Service, 1988.

National Park Service. *National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation*. Washington, DC: US Department of the Interior, National Park Service, 1997.

National Park Service. *National Register Bulletin #16B: How to Complete the National Register Multiple Property Documentation Form*. Washington, DC: US Department of the Interior, National Park Service, 1999. https://www.nps.gov/subjects/nationalregister/upload/NRB16B-Complete.pdf.

Nesbit, Robert C. *Wisconsin: A History*. 2nd ed. Revised by William F. Thompson. Madison: University of Wisconsin Press, 1989.

Obermeyer, Lawrence L. *Milwaukee Railroad Shops Historic District*. Washington DC: US Department of the Interior, National Park Service, 2018. Requested from the Iowa SHPO.

Office of the Judge Advocate General, US Army. *United States Military Reservations, National Cemeteries, and Military Parks Title Jurisdiction, Etc.* Washington DC: Government Printing Office, 1916.

Ogle, George A. *Standard Atlas of Monroe County, Wisconsin Including a Plat Book of the Villages, Cities and Townships of the County*. Chicago: Geo. A. Ogle & Co., 1897. *Wisconsin Historical Society*. https://content.wisconsinhistory.org/digital/collection/maps/id/17151/rec/48.

Old Camp McCoy and P. of W. Area, September 12, 1942. Drawer 1, folder 3. Fort McCoy History Center, Sparta, WI.

Olsen, Tyler J., William W. Thompson, Miranda J. Alexander, and Michael E. Bradford, *2019–2021 Cultural Resource Management Activities: Inventory and NHPA Compliance Projects*. Fort McCoy Archaeological Resource Management Series, Report of Investigations 75. Fort McCoy, WI: Fort McCoy. 2022.

"One Stall Engine House, Drawing No. B-6719," March 20, 1896. CMSTP&P Bridge and Building Department. Milwaukee Road Archives, Milwaukee, WI.

"Ordnance Depot," 1919. Folder: 870-5b, 1919 Pictures. Fort McCoy History Center, Sparta, WI.

"Passenger Depot at McCoy, Wis. Drawing No. B844," June 10, 1911. CMSTP&P Engineering Department. Milwaukee Road Archives, Milwaukee, WI.

Paul Miller to Audrey Johnson, March 10, 1992. Folder: Railroads, General. Monroe County Local History Room, Sparta, WI.

Paxson, Frederic L. "The Railroads of the 'Old Northwest' Before the Civil War." In *Transactions of the Wisconsin Academy of Sciences, Arts and Letters*, vol. XVII, part I, no. 4, 243–74. Madison: Wisconsin Academy of Sciences, Arts and Letters, 1911.

Perris, William. *A New and Complete Railroad Map of the United States Compiled from Reliable Sources*. 1857, c. 1:4,500,000 scale. [New York]. https://www.loc.gov/item/98688323/.

Photo 593220, McCoy, Camp, Wisconsin—Buildings and Views. US Army Signal Corps Photographs Of Military Activity During World War II and The Korean Conflict, between 1941–1954, 111-SCA-402. Records of the Office of the Chief Signal Officer, RG 111. NARA, College Park, MD.

Photo no. 356858, McCoy, Camp, Wisconsin—Buildings and Views. US Army Signal Corps Photographs of Military Activity during WWII, Korea, and Vietnam, 1941–81, 111-SCA-400. Records of the Office of the Chief Signal Officer, RG 111. NARA, College Park, MD.

Photo 356860, McCoy, Camp, Wisconsin—Buildings and Views. US Army Signal Corps Photographs of Military Activity during WWII, Korea, and Vietnam, 1941–81, 111-SCA-400. Records of the Office of the Chief Signal Officer, RG 111. NARA, College Park, MD.

"Playing Football," 1943. Charles Overstreet Collection. Flora Public Library. Flora, IL. http://www.idaillinois.org/digital/collection/fpl/id/141.

Plot of Ground Near Sparta, Wisconsin. 1907. Map. Monroe County Local History Room, Sparta, WI.

Public Service Commission. *Opinions and Decisions of the Public Service Commission of Wisconsin*. Vol. 27, *December 1, 1942–November 30, 1943*. Madison WI: Democrat Printing Company, 1944. *Hathi Trust*. https://babel.hathitrust.org/cgi/pt?id=uc1.b2879652&

"Rail Line Abandonments and Disposition, By Line, 1970–Present," March 19, 1986. James P. Kaysen Papers, box 4, folder: Abandonment. Wisconsin Historical Society, Madison, WI.

Railroad Map of Wisconsin. n.d. Kaysen Papers, box 1, folder: Railroad Map of Wisconsin. Wisconsin Historical Society, Madison, WI.

Raney, William F. "The Building of Wisconsin Railroads." *The Wisconsin Magazine of History* 19, no. 4 (1936): 387–403.

"Raymore," July 31, 1919. Interstate Commerce Committee Bureau of Valuation, Valuation Section Wis-3, pp. 115–6. Folder: Wisconsin-Structural Notes-Val. Section 3, 1919 (2 of 8). Milwaukee Road Archives, Milwaukee, WI.

"Reinforced Concrete Subway Located Near Raymore, Wisconsin," October 17, 1910. CMSTP&P Bridge and Building Department. Milwaukee Road Archives, Milwaukee, WI.

Richards, Randolph A, ed. *History of Monroe County, Wisconsin, Past and Present: Including an Account of the Cities, Towns and Villages of the County*. Chicago: C. F. Cooper & Co., 1912.

Rosso, Jerome. "Purchase of Bike Trail Approved." *La Crosse Tribune*, July 28, 1978.

Russell, Andrew J. *First Train across Bull Run Bridge*. 1863. Photograph. https://www.loc.gov/item/2005696871/.

Salkin, Philip H. *The Cultural Resources of the Fort McCoy Installation: A Literature and Records Search, Cultural Overview and Management Plan for the Environmental Impact Statement for the Master Plan at Fort McCoy, Wisconsin*. Report of Investigations 742. Archaeological Consulting Services, 1994.

Schmidt, Andrew J., Andrea C. Vermeer, Daniel R. Pratt, and Betsy H. Bradley. *Railroads in Minnesota, 1862–1956*. National Register of Historic Places, Multiple Property Documentation Form (MPDF). Washington, DC: National Park Service, 2013.

Schmidt, Andrew J., and Andrea C. Vermeer. *Railroads in North Dakota, 1872–1956*. National Register of Historic Places, Multiple Property Documentation Form (MPDF). Washington, DC: National Park Service, 2009. https://www.history.nd.gov/hp/PDFinfo/North-Dakota-Railroads-MPDF-Final-corrected.pdf.

Scott, Brandon J. "The Untold Story of Camp McCoy: Japanese Prisoners of War in the Heart of Wisconsin during the Second World War." Bachelor of arts diss., University of Wisconsin-Eau Claire, 2010. https://minds.wisconsin.edu/handle/1793/44611.

"Shelter Shed at Herndon Iowa, Drawing No. B-561," July 27, 1909. CMSTP&P Bridge and Building Department. Milwaukee Road Archives, Milwaukee, WI.

Soil Map, Monroe County Wisconsin. 1923. US Department of Agriculture, Bureau of Chemistry and Soils. Monroe County Local History Room, Sparta, WI.

"Sparta Ordnance Depot." n.d. Folder: Military, Fort McCoy, Monroe County Local History Room, Sparta, WI.

Sparta Herald. "Building at Old Lafayette Station Burned." November 5, 1911.

Stover, John F. *The Routledge Historical Atlas of the American Railroads*. New York: Routledge, 1999.

Sturkol, Scott. "Photo Essay: Fort McCoy's Oldest Building." *US Army*, February 2, 2021. https://www.army.mil/article/243311/photo_essay_fort_mccoys_oldest_building.

Taylor Brothers. n.d. "Boys at Camp McCoy." Taylor 446 (Negative 52089). Taylor Brothers Collection. University of Wisconsin–La Crosse. Accessed March 18, 2022. https://search.library.wisc.edu/digital/AATK5FSDYQQNUN8R.

Tomah Journal. "Boys Get Good Jobs at Camp Robinson." June 6, 1919.

[2 and 6 Inf. Arriving at Camp McCoy, Wis. Sept-4-1928]. 1928. Fort Sheridan Photo Album no. 2. p. 33. Bess Bower Dunn Museum of Lake County, IL. http://www.idaillinois.org/digital/collection/zlakecou003/id/142.

Untitled map, 1906. Kaysen Papers, box 4. Wisconsin Historical Society, Madison.

Untitled photo, 1961. Folder: Traffic, Freight, Military. Milwaukee Road Archives, Milwaukee, WI.

US Army. *Camp McCoy, Wisconsin*. Fort McCoy, WI: US Army, 1968.

US Army. "History." US Army Fort McCoy. Accessed September 22, 2023. https://home.army.mil/mccoy/about/history.

US Army Corps of Engineers. *Station Rail Facilities*, 1947, revised 1984. Digital file from Fort McCoy CRM.

US Army Corps of Engineers. *Terrain Map: Sheet 1. Camp McCoy Grid Zone "C."* 1939. VI Corps Area Engineers, Stack 330, row 22, compartment 27, shelf 2. Records of US Army Continental Commands, RG 394. NARA, College Park, MD.

US Army Corps of Engineers. *US Military Reservation near Sparta, Wisconsin, Surveyed and Drawn under the Direction of Major Thos. H. Rees, Corps of Engineers, US Army; by A. T. Grohmann, C. E.* 1909. Map. [1:10,560 scale]. Detroit: US Lake Survey. Wisconsin Historical Society. https://content.wisconsinhistory.org/digital/collection/maps/id/13372/rec/27.

US Army Corps of Engineers. *US Military Reservation near Sparta, Wisconsin, Surveyed and Drawn under the Direction of Major Thos. H. Rees, Corps of Engineers, US Army; by A. T. Grohmann, C. E.* 1909. Blueprint file of map. [1:10,560 scale]. Camp McCoy, Wisconsin. Fortification Construction Plans and Military Reservation Property Surveys, between c. 1895 and c. 1914. Records of the Office of the Quartermaster General, Record Group 92. NARA, College Park, MD.

US Army Corps of Engineers. *Wisconsin Monroe County Camp McCoy Grid Zone "C."* 1933. Map. Monroe County Local History Room, Sparta, WI.

US Army Fort McCoy. "Serving America's Armed Forces Since 1909." US Army Fort McCoy. Accessed April 5, 2022.

US Army, Quartermaster Corps. *Map of Land-Grant and Bond-Aided Railroads of the United States*. Washington, DC: Norris Peters Co., 1892. https://www.loc.gov/item/98688343/.

US Engineer Office. *Master Plan: Camp McCoy Wisconsin*. Milwaukee. WI: US Engineer Office, n.d.

US Geological Survey. *City Rock Quadrangle*. 1983. 7.5-minute topographic map. Annotated by James P. Kaysen. Wisconsin Historical Society, Madison, WI.

US Geological Survey. *Tomah Quadrangle*. 1949. 15-minute topographic map. National Geologic Map Database. https://ngmdb.usgs.gov/topoview/viewer/#4/39.98/-100.02.

US Geological Survey. *Tomah Quadrangle*. Surveyed 1914, edition 1916. Map. National Geological Database. https://ngmdb.usgs.gov/topoview/viewer/#6/42.294/-94.887.

USGS Earth Explorer. https://earthexplorer.usgs.gov.

US Senate. *Skeleton Map Showing the Rail Roads Completed and in Progress in the United States, and Those Projected through the Public Lands and Their Connection with the Principal Harbours on the Lakes and on the Seaboard*. [1848]. c. 1:3,400,000 scale. Washington, DC: C. B. Graham's Lithographers. https://www.loc.gov/item/98688309/.

Veenendaal, Augustus J. *American Railroads in the Nineteenth Century*. Westport, CT: Greenwood Press, 2003.

W. F. Armstrong to James P. Kaysen, June 5, 1975. Kaysen Papers, box 4, folder: Tunnels. Wisconsin Historical Society, Madison, WI.

Walling, H. F. *Atlas of the State of Wisconsin, Including Statistics and Descriptions*. Boston: Walling, Tackbury & Co., 1876. Monroe County Local History Room, Sparta, WI.

Warner and Foote. *Map of Monroe County, Wisconsin*. 1877. [1:42,240 scale]. Red Wing MN: Warner and Foote. https://content.wisconsinhistory.org/digital/collection/maps/search/searchterm/monroe/field/county/mode/exact/conn/and.

West Wisconsin Railway Company. *Map Showing the Lands & Location West Wisconsin Railway, a New & Short Route Between St. Paul and Chicago*. c. 1874. [c. 1:321,869 scale]. West Wisconsin Railway Company. https://content.wisconsinhistory.org/digital/collection/maps/id/1153/rec/10.

Westwood, John. *Railways at War*. San Diego: Howell-North Books, 1982.

Wilson, Jeff, ed. *The Historical Guide to North American Railroads*. 3rd Edition. Waukesha: Kalmbach Books, 2014.

Wisconsin Department of Transportation. "The Wisconsin State Rail Plan." Madison: Wisconsin Department of Transportation, 1978.

Wisconsin Department of Transportation, "Wisconsin Railroads and Harbors 2021." https://wisconsindot.gov/pages/doing-bus/freight/rail.aspx.

Wisconsin Elevation/Lidar Data. State Cartographer's Office, University of Wisconsin-Madison. https://www.sco.wisc.edu/data/elevationlidar/.

Wisconsin Historical Society. "Lead Mining in Southern Wisconsin: The Birth of the Badgers." Wisconsin Historical Society. https://www.wisconsinhistory.org/Records/Article/CS408.

Wisconsin State Journal. "McCoy Will Get More Train Service." July 12, 1945.

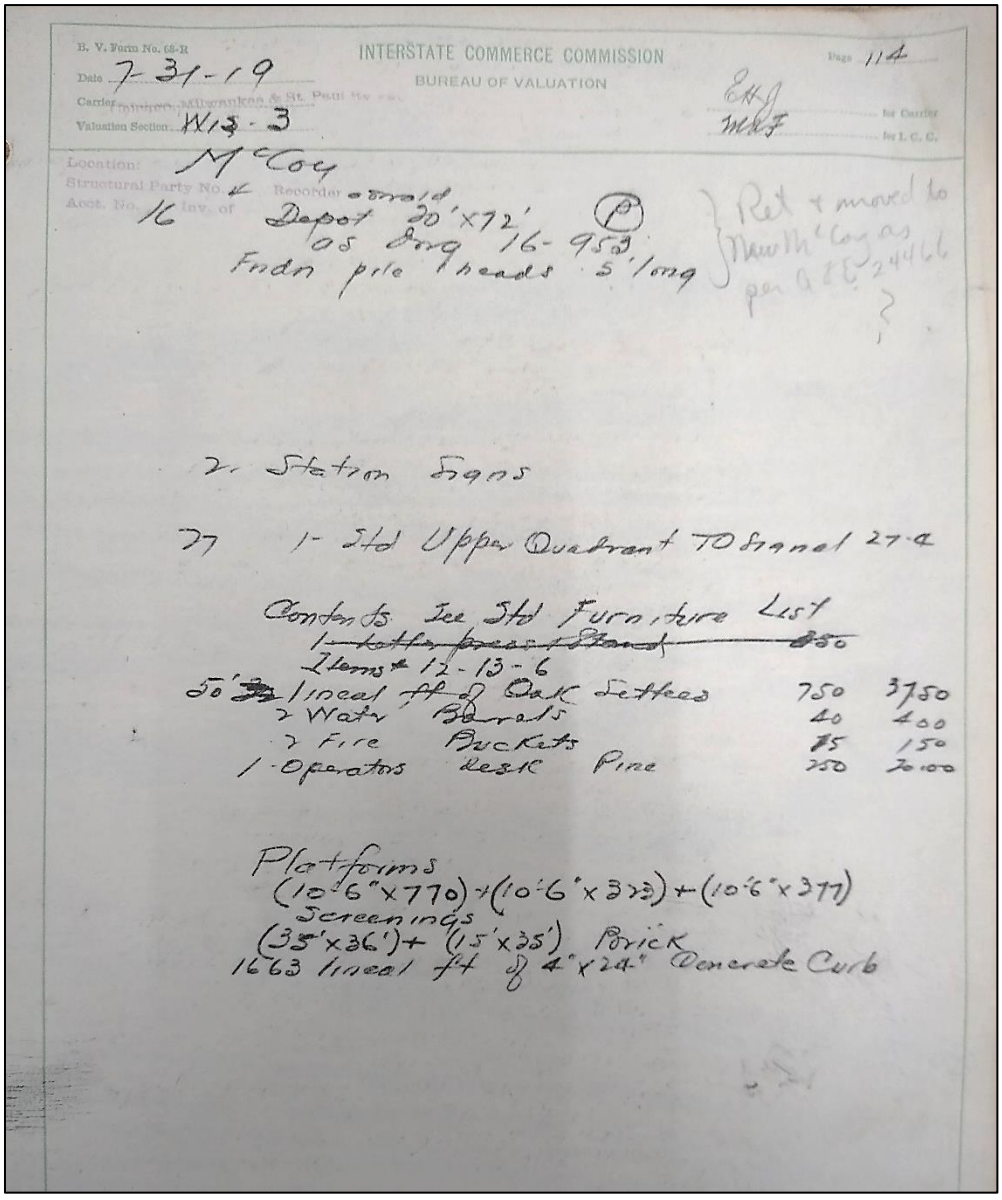
Woods, Alexander D., Tyler J. Olsen, Daan Means, Walker W. Good, Miranda J. Alexander, and Lindsay J. Lents. *Evaluation of 31 Archaeological Sites at Fort McCoy, Wisconsin*. Volume 1. Report of Investigations 65. Fort McCoy Archaeological Resource Management Series, 2016.

Woods, Alexander D., Tyler J. Olsen, Daan Means, Walker W. Good, Miranda J. Alexander, and Lindsay J. Lentz. *Evaluation of 31 Archaeological Sites at Fort McCoy, Wisconsin*. Volume 2. Report of Investigations 65. Fort McCoy, Archaeological Resource Management Series, 2016.

Wyatt, Barbara, ed. *Cultural Resource Management in Wisconsin*. Vol. 2, *Transportation*. Madison: Historic Preservation Division, State Historical Society of Wisconsin, 1986.

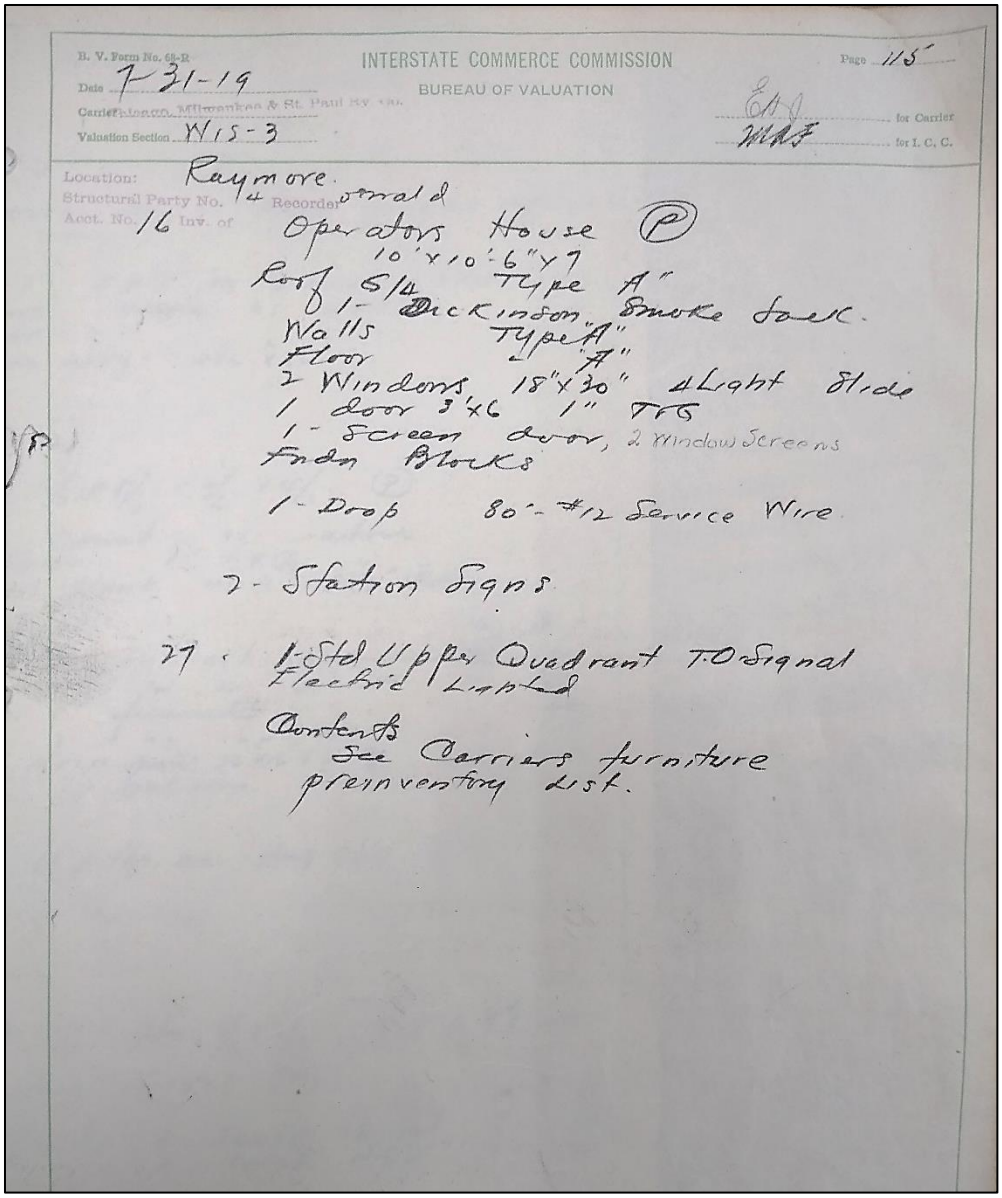
Appendix A: ICC Valuations for CMSTP&P Assets at McCoy Station East and Raymore Station

Figure A-1. First page of a valuation record for the Chicago, Milwaukee, St. Paul and Pacific (CMSTP&P) depot at McCoy Station East, 1919. (Image from Milwaukee Road Archives. Public domain.)[516]



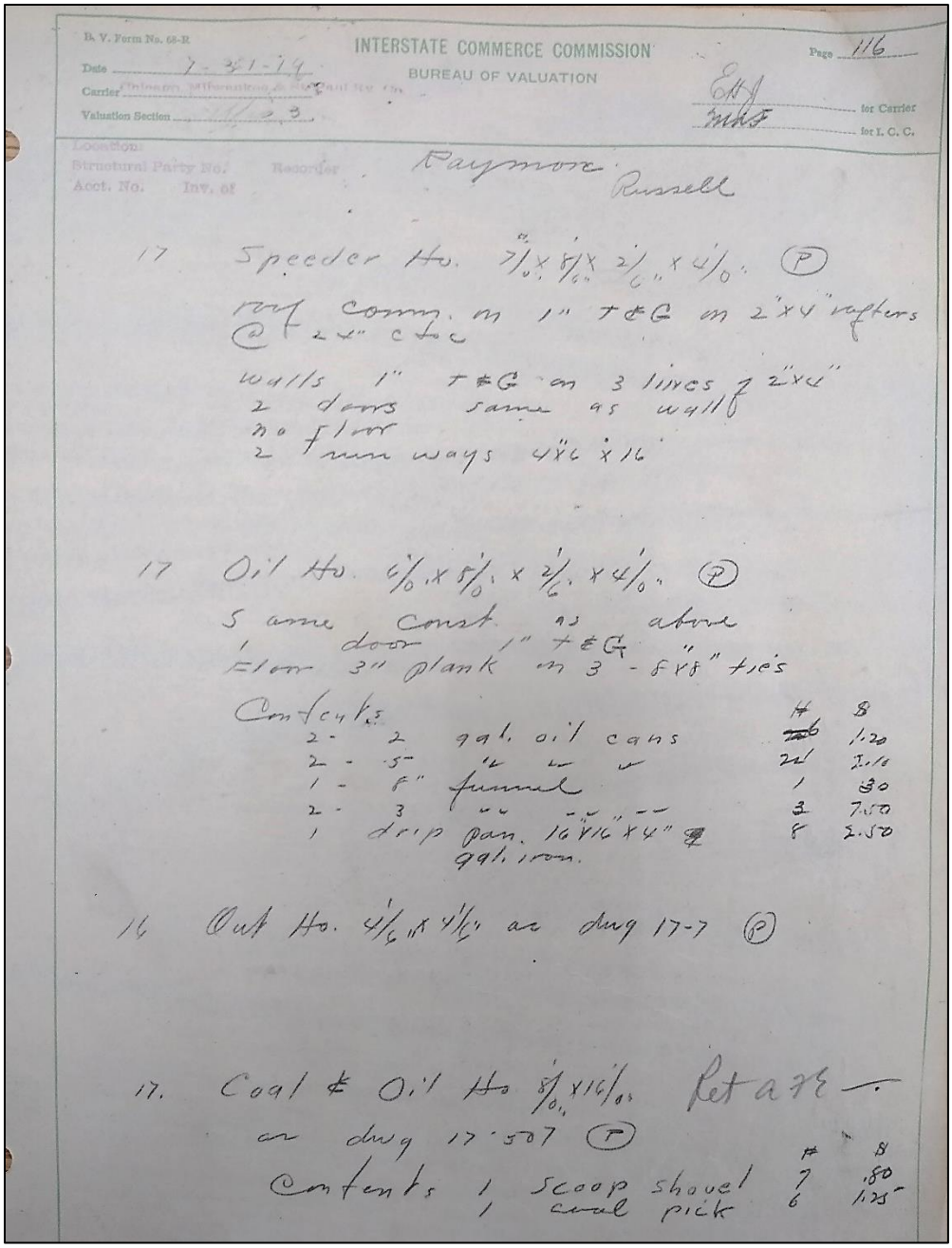
516. "McCoy." July 31, 1919. Interstate Commerce Committee Bureau of Valuation, Valuation Section Wis-3, p. 114. folder: Wisconsin-Structural Notes-Val. Section 3, 1919 (2 of 8). Milwaukee Road Archives, Milwaukee, WI.

Figure A-2. Second page for a valuation record for CMSTP&P assets at Raymore Station, 1919. (Image from Milwaukee Road Archives. Public domain.)[517]


B. V. Form No. 68-R
INTERSTATE COMMERCE COMMISSION
Page 115
Date 7-31-19
BUREAU OF VALUATION
Carrier Chicago, Milwaukee & St. Paul Ry. Co.
for Carrier
Valuation Section Wis-3
for I. C. C.
Location: Raymore
Structural Party No. Recorded
Acct. No. 16 Inv. of
Operators House (P)
10'x10'-6"x7
Roof 5/4 Type A"
1- Dickinson Smoke Jack
Walls Type "A"
Floor "A"
2 Windows 18"x30" 4 Light Slide
1 door 3'x6' 1" TFS
1- Screen door, 2 Window Screens
Fndn Blocks
1- Drop 80'- #12 Service Wire
2- Station Signs
27 1-Std Upper Quadrant T.O Signal
Electric Limited
Contents
See Carriers furniture
preinventory list.

517. "Raymore." July 31, 1919. Interstate Commerce Committee Bureau of Valuation, Valuation Section Wis-3, p. 115. folder: Wisconsin-Structural Notes-Val. Section 3, 1919 (2 of 8). Milwaukee Road Archives, Milwaukee, WI.

Figure A-3. Third page for a valuation record for CMSTP&P assets at Raymore Station, 1919. (Image from Milwaukee Road Archives. Public domain.)[518]


B. V. Form No. 68-R
INTERSTATE COMMERCE COMMISSION
BUREAU OF VALUATION
Page 116
Date 7-31-19
Carrier Chicago Milwaukee & St. Paul Ry Co.
Valuation Section Wis-3
for Carrier
for I. C. C.
Location: Raymore
Structural Party No. Recorder Russell
Acct. No. Inv. of

17 Speeder Ho. 7/0" x 8/0" x 2/6" x 4/0". (P)
roof comm. on 1" T&G on 2"x4" rafters @ 24" c to c
walls 1" T&G on 3 lines of 2"x4"
2 doors same as wall
no floor
2 run ways 4"c x 16'

17 Oil Ho. 4/0" x 5/0" x 2/6" x 4/0". (P)
Same Const as above
1 door 1" T&G
Floor 3" plank on 3 - 8"x8" ties

Contents			#	$
2 -	2	gal. oil cans	~~6~~	1.20
2 -	5	" " "	2	1.10
1 -	8"	funnel	1	.80
2 -	3	" " "	3	7.50
1	drip pan. 16"x16"x4" 9 gal. iron.		8	2.50

16 Out Ho. 4/6" x 4/6" as dwg 17-7 (P)

17. Coal & Oil Ho 8/0" x 16/0" Retaxe — as dwg 17-507 (P)

Contents		#	$
1	scoop shovel	7	.80
1	coal pick	6	1.25

518. "Raymore." July 31, 1919. Interstate Commerce Committee Bureau of Valuation, Valuation Section Wis-3, p. 116. folder: Wisconsin-Structural Notes-Val. Section 3, 1919 (2 of 8). Milwaukee Road Archives, Milwaukee, WI.

Appendix B: Same-Scale Maps

Figure B-1. Map of railroads and stations in 1860. (Map data: Google. Modified by Engineer Research and Development Center, Construction Engineering Research Laboratory [ERDC-CERL].)

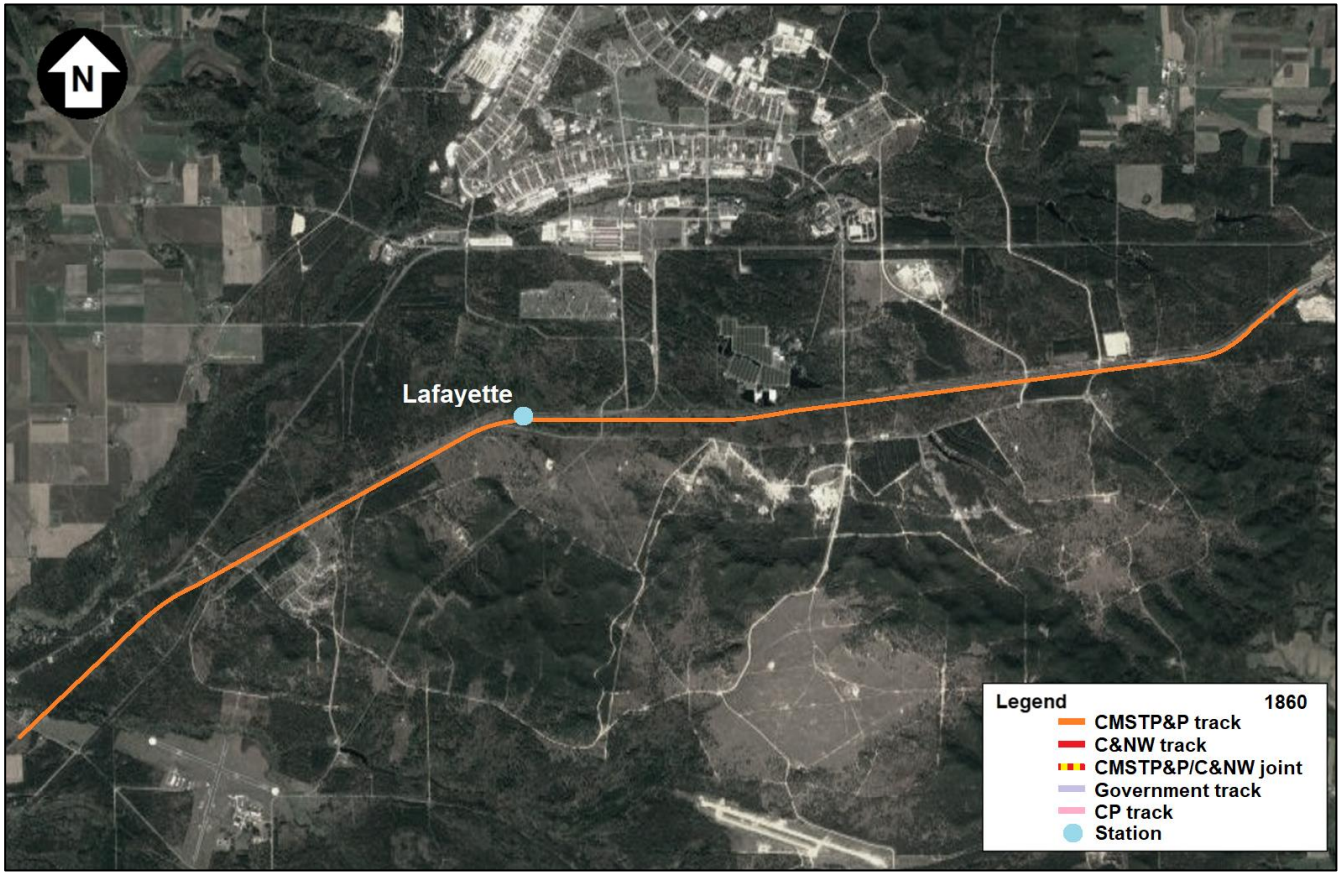


Figure B-2. Map of railroads and stations in 1900. (Map data: Google. Modified by ERDC-CERL.)

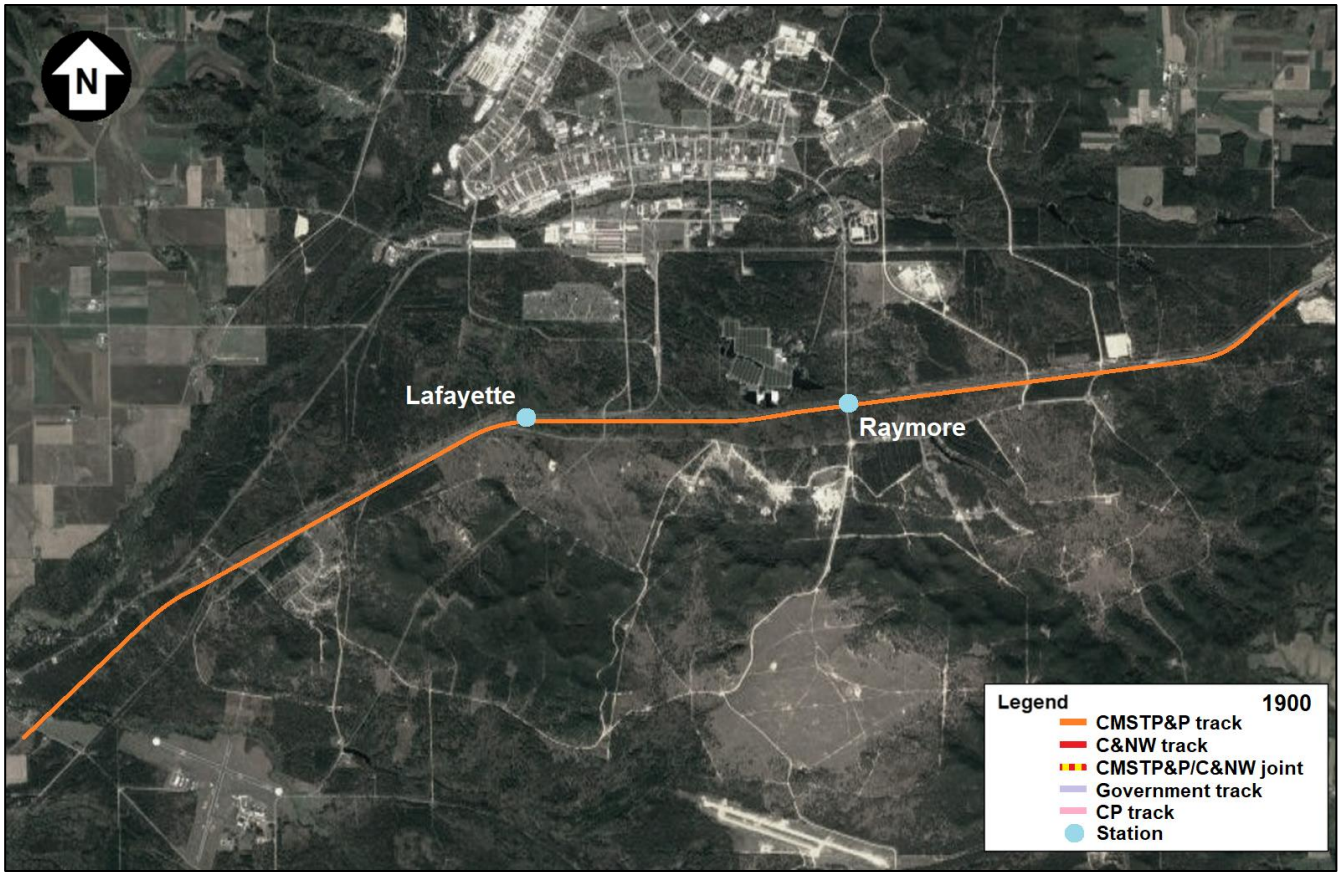


Figure B-3. Map of railroads and stations in 1920. (Map data: Google. Modified by ERDC-CERL.)

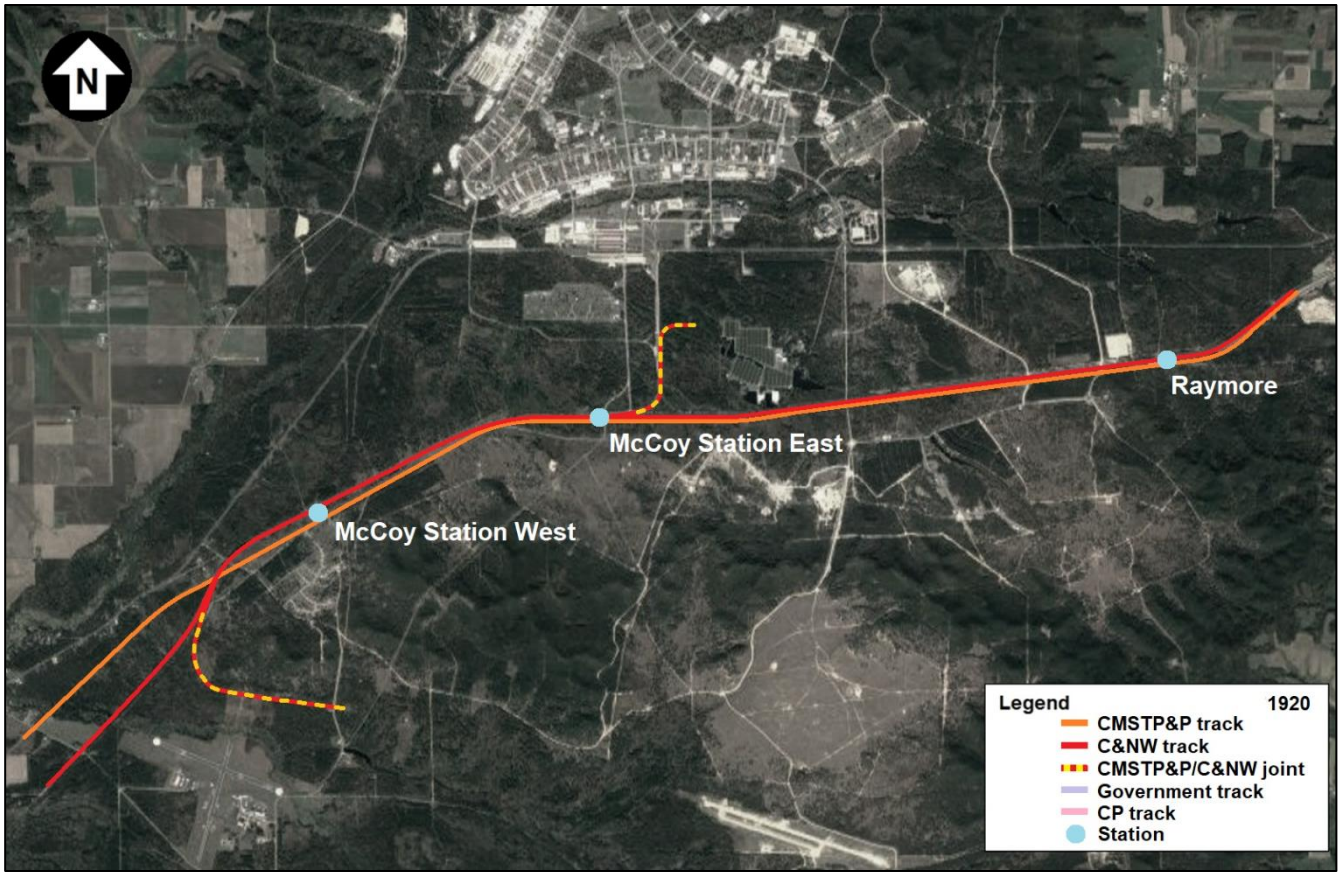


Figure B-4. Map of railroads and stations in 1940. (Map data: Google. Modified by ERDC-CERL.)

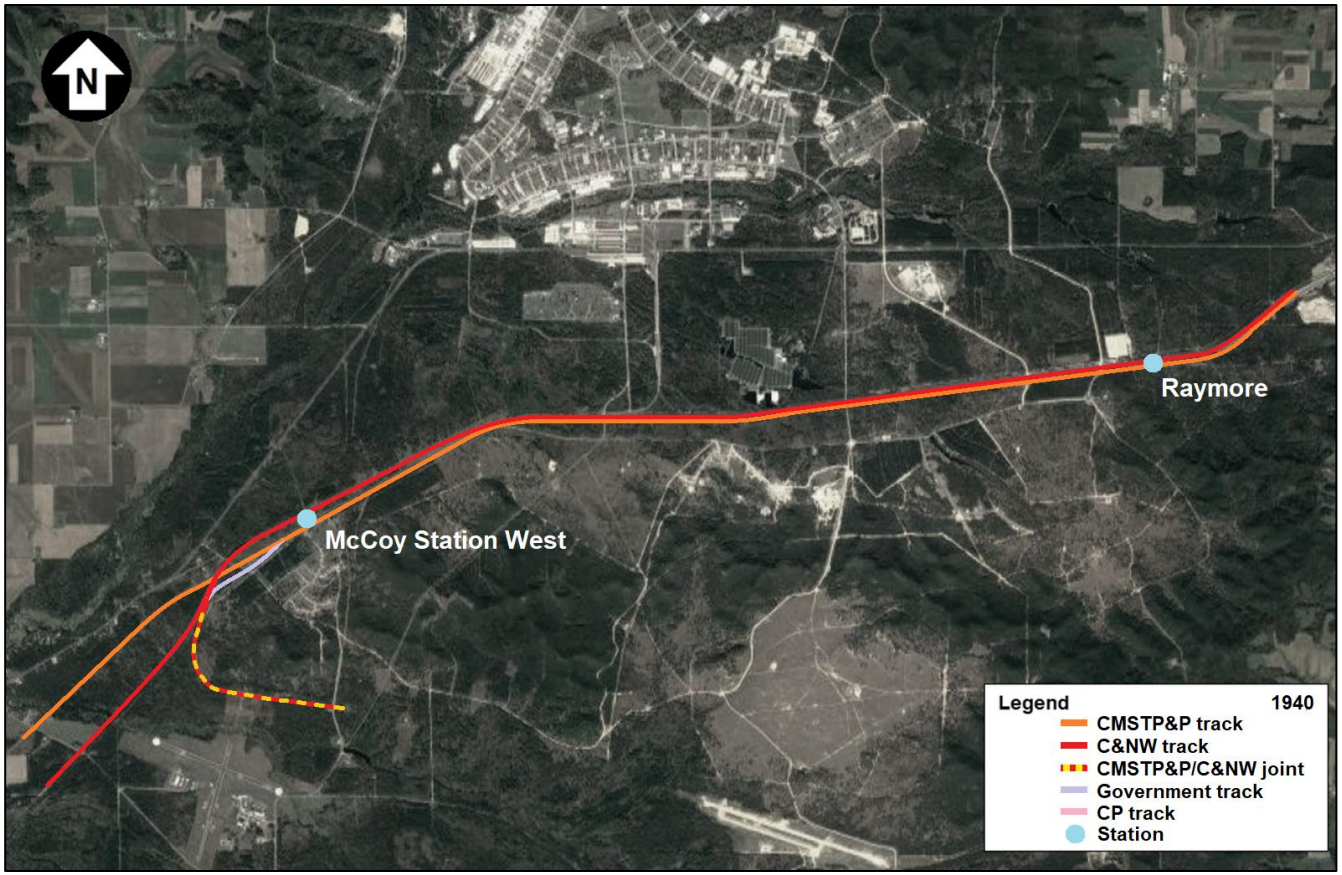


Figure B-5. Map of railroads and stations in 1945. (Map data: Google. Modified by ERDC-CERL.)

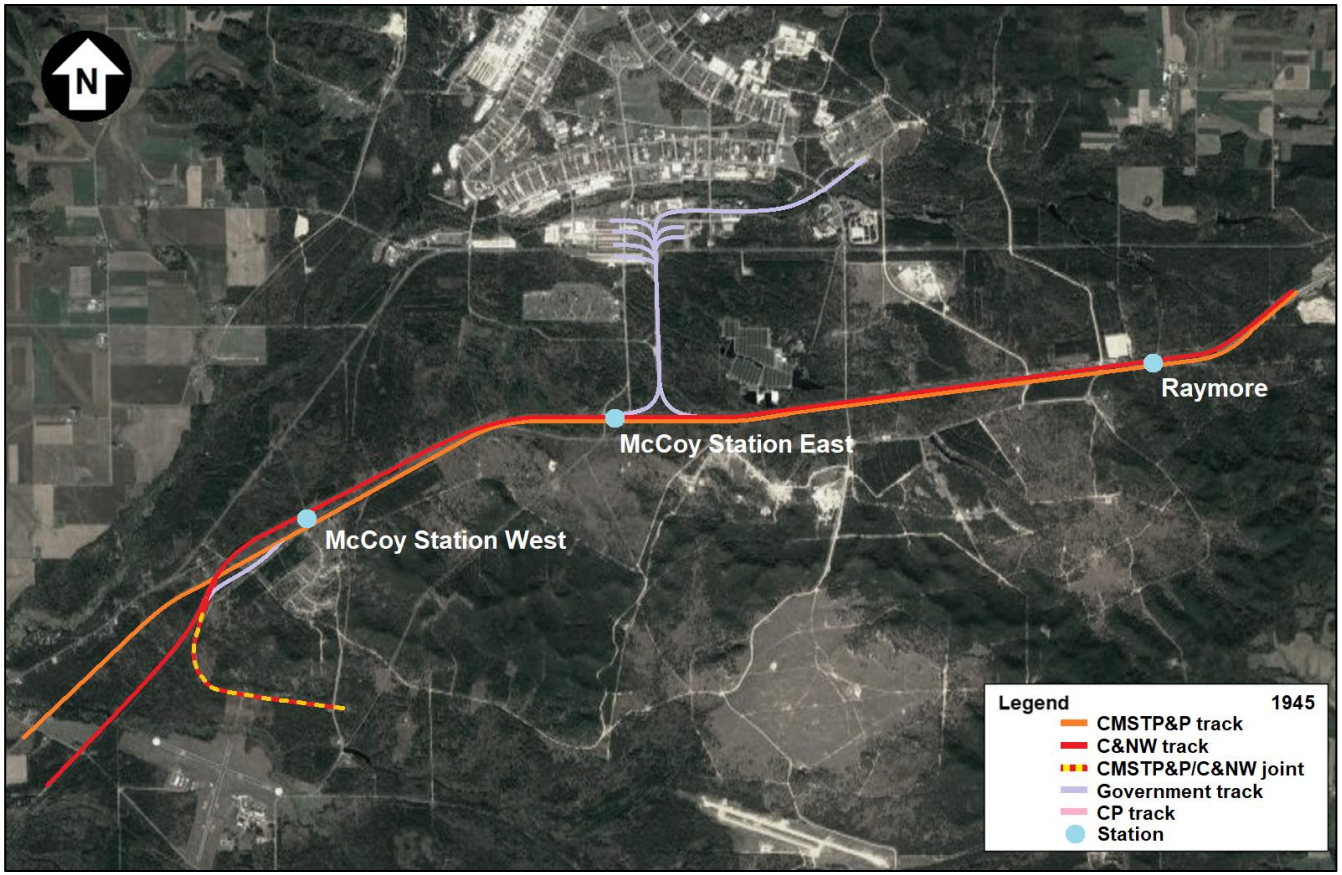


Figure B-6. Map of railroads and stations in 1960. (Map data: Google. Modified by ERDC-CERL.)

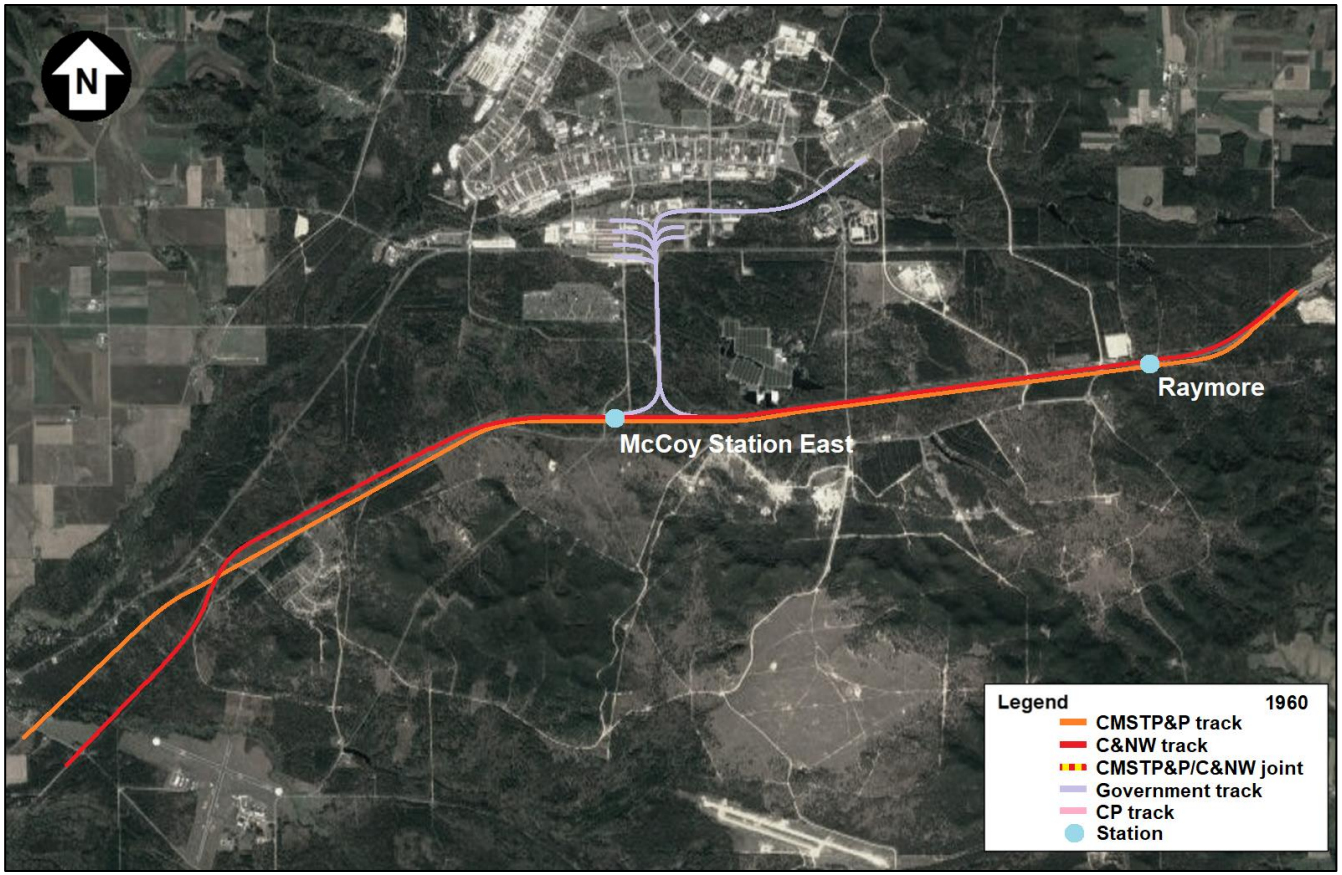


Figure B-7. Map of railroads and stations in 1980. (Map data: Google. Modified by ERDC-CERL.)

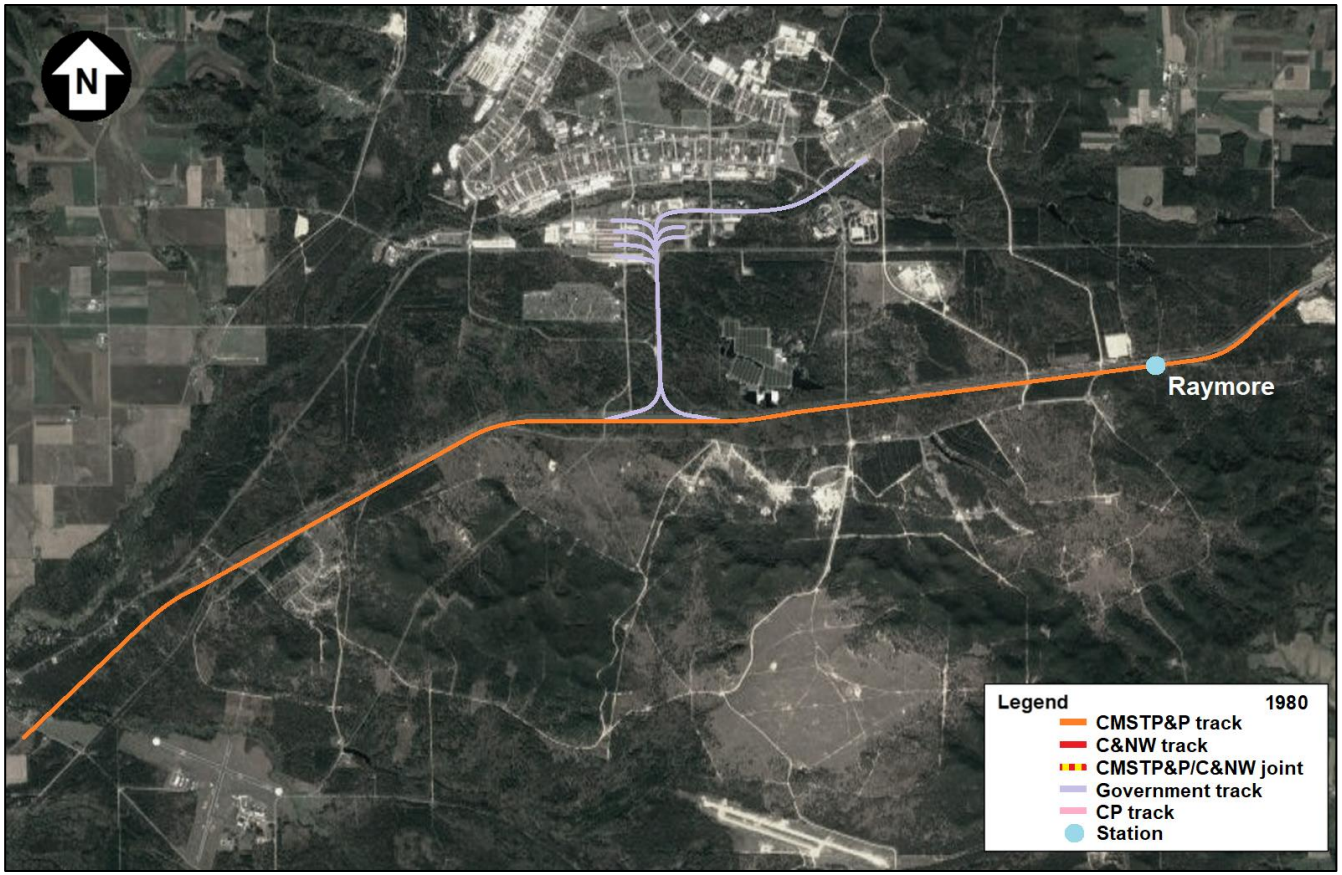
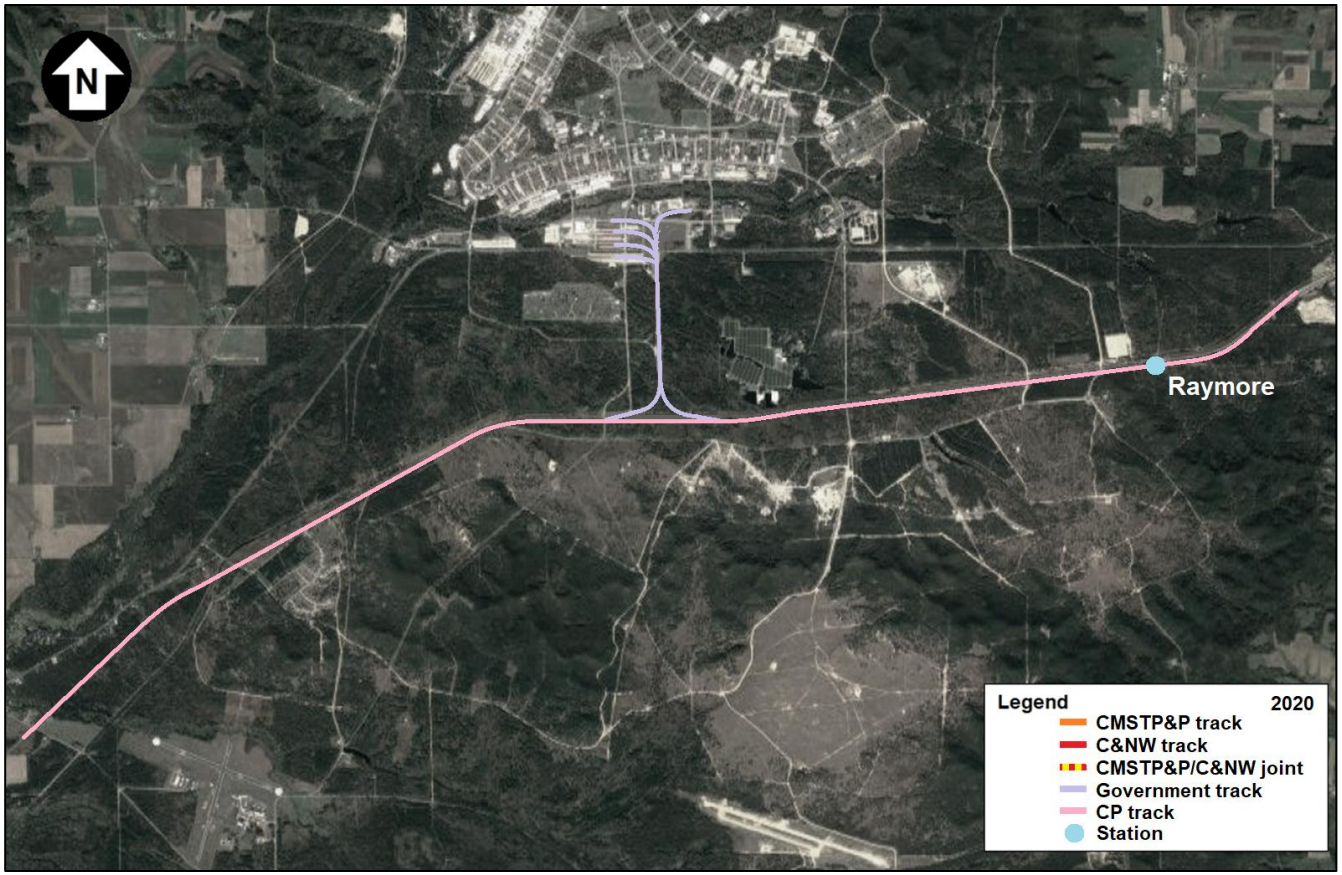


Figure B-8. Map of railroads and stations in 2020. (Map data: Google. Modified by ERDC-CERL.)



Abbreviations

C&NW	Chicago and Northwestern
CB&Q	Chicago, Burlington & Quincy
CCC	Civilian Conservation Corps
CEMML	Center for Environmental Management of Military Lands
CERL	Construction Engineering Research Laboratory
CM&STP	Chicago, Milwaukee and St. Paul
CMSTP&P	Chicago, Milwaukee, St. Paul and Pacific
CMTC	Civilian Military Training Camp
CP	Canadian Pacific
CRM	Cultural resource manager
CRMP	Cultural Resource Management Plan
CTC	Centralized Traffic Control
DPW	Directorate of Public Works
ERDC	Engineer Research and Development Center
ICC	Interstate Commerce Commission
MPDF	Multiple Property Documentation Form
NARA	National Archives and Records Administration
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
PAO	Public Affairs Office
POW	Prisoners of war

RND	Railroads National Defense
STRACNET	Strategic Rail Corridor Network
USMRR	Unites States Military Railroads
USRA	United States Railroad Administration

REPORT DOCUMENTATION PAGE

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED	
		START DATE	END DATE
October 2023	Final	FY 22	FY 23

4. TITLE AND SUBTITLE

Historic Context for Railroads at Fort McCoy, Wisconsin

5a. CONTRACT NUMBER	5b. GRANT NUMBER	5c. PROGRAM ELEMENT
5d. PROJECT NUMBER	**5e. TASK NUMBER**	**5f. WORK UNIT NUMBER**

6. AUTHOR(S)

Aaron R. Schmidt and Carey L. Baxter

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

US Army Engineer Research and Development Center (ERDC)
Construction Engineering Research Laboratory (CERL)
2902 Newmark Drive
Champaign, IL 61822

8. PERFORMING ORGANIZATION REPORT NUMBER

ERDC/CERL TR-23-21

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)	11. SPONSOR/MONITOR'S REPORT NUMBER(S)
Cultural Resource Program Directorate of Public Works Fort McCoy, Wisconsin 54656		

12. DISTRIBUTION/AVAILABILITY STATEMENT

Distribution Statement A. Approved for public release: distribution is unlimited.

13. SUPPLEMENTARY NOTES

Project Number 497353 "Historic and Military Railroad Context—Fort McCoy," MIPR 11656312

14. ABSTRACT

This report provides a historic context for the railroads that operated within the present-day boundaries of Fort McCoy. The objective of this historic context is to deliver a useful reference for future evaluations of railroad-related resources in the installation. Ultimately, the report is in-tended to save the installation time in determining potential areas of significance for future evaluations. This is accomplished through the creation of a broad historic context for railroading in the Midwest, establishing a survey of railroad history at Fort McCoy, and providing examples of areas of significance and National Register of Historic Places (NRHP) criteria commonly applied to the historic railroad resources of the Midwest. This report does not provide NRHP eligibility recommendations for any specific resources; however, possible research questions for further study are posited in the concluding chapter.

15. SUBJECT TERMS

Chicago, Milwaukee, St. Paul & Pacific; Chicago & Northwestern; Fort McCoy (Wis.); Historic context; Historic preservation--Railroad; Milwaukee Road; Narrow gauge

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES
a. REPORT	b. ABSTRACT	C. THIS PAGE		
Unclassified	Unclassified	Unclassified	SAR	273

19a. NAME OF RESPONSIBLE PERSON	19b. TELEPHONE NUMBER (include area code)