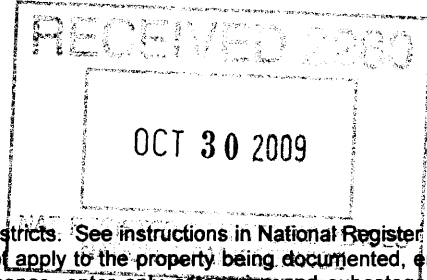


United States Department of the Interior  
National Park Service

1070



# National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form*. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional certification comments, entries, and narrative items on continuation sheets if needed (NPS Form 10-900a).

### 1. Name of Property

historic name Dodd Ford Bridge  
other names/site number Bridge No. 1461

### 2. Location

street & number County Road 147 over Blue Earth River  not for publication N/A  
city or town Shelby Township Amboy  vicinity  
state Minnesota code MN county Blue Earth code 013 zip code 56010

### 3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,  
I hereby certify that this X nomination \_\_\_ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.  
In my opinion, the property X meets \_\_\_ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

national statewide X local

Britta L. Bloomberg 10/22/09  
Signature of certifying official Britta L. Bloomberg Date

Deputy State Historic Preservation Officer Minnesota Historical Society  
Title State or Federal agency/bureau or Tribal Government

In my opinion, the property \_\_\_ meets \_\_\_ does not meet the National Register criteria.

\_\_\_\_\_  
Signature of commenting official Date  
\_\_\_\_\_  
Title State or Federal agency/bureau or Tribal Government

### 4. National Park Service Certification

I, hereby, certify that this property is:

- entered in the National Register  determined eligible for the National Register
- determined not eligible for the National Register  removed from the National Register

other (explain): \_\_\_\_\_

Patrick Andrews 12/09/2009  
Signature of the Keeper Date of Action

**5. Classification**

**Ownership of Property**  
(Check as many boxes as apply)

**Category of Property**  
(Check only one box)

**Number of Resources within Property**  
(Do not include previously listed resources in the count.)

- private
- public - Local
- public - State
- public - Federal

- building(s)
- district
- site
- structure
- object

Contributing	Noncontributing	
		buildings
		district
		site
1		structure
		object
1		<b>Total</b>

**Name of related multiple property listing**  
(Enter "N/A" if property is not part of a multiple property listing)

**Number of contributing resources previously listed in the National Register**

Iron and Steel Bridges of Minnesota, 1873-1945

N/A

**6. Function or Use**

**Historic Functions**  
(Enter categories from instructions)

**Current Functions**  
(Enter categories from instructions)

TRANSPORTATION: road-related (vehicular)

VACANT: not in use

**7. Description**

**Architectural Classification**  
(Enter categories from instructions)

**Materials**  
(Enter categories from instructions)

Pratt through-truss (camelback)

foundation: (substructure): stone and concrete  
walls:  
roof:  
other: (superstructure): steel and wood

**Narrative Description**

(Describe the historic and current physical appearance of the property. Explain contributing and noncontributing resources if necessary. Begin with a **summary paragraph** that briefly describes the general characteristics of the property, such as its location, setting, size, and significant features.)

**Summary Paragraph**

Dodd Ford Bridge (No. 1461) is located in the northwest quarter of section 27, Township 105 North, Range 28 West (Shelby Township), in southern Blue Earth County, Minnesota. Aligned on a north-south axis, it carries County Road (CR) 147 over the Blue Earth River in a rural agricultural area, approximately one mile southwest of the City of Amboy. Erected in 1901, it is a single-span, steel, pin-connected, Pratt type through-truss in a camelback configuration with exactly five upper-chord slopes. The overall structure length is 148.0 feet with an out-to-out (deck) width of 18.7 feet.

Shelby Township is a rural agricultural area with cultivated farm fields in the area of the bridge. The river corridor around the bridge is moderately wooded and, with the exception of the shallow river ravine, the surrounding terrain is flat. There are no houses or buildings within sight of the bridge. CR 147 north of the bridge and toward Amboy is surfaced with asphalt; south of the bridge it is surfaced with gravel. Reflecting the rural setting of the bridge, the Average Daily Traffic (ADT) was 115 in 2005, the last year of available data. As of spring 2009, the bridge is owned by the county and closed to vehicular traffic.

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**Narrative Description**

See Continuation Sheet, Section 7 page 1.

**8. Statement of Significance**

**Applicable National Register Criteria**

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

- A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B Property is associated with the lives of persons significant in our past.
- C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D Property has yielded, or is likely to yield, information important in prehistory or history.

**Areas of Significance**

(Enter categories from instructions)

Transportation \_\_\_\_\_

Engineering \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Period of Significance**

1901 \_\_\_\_\_

\_\_\_\_\_

**Significant Dates**

1901 \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Significant Person**

(Complete only if Criterion B is marked above)

\_\_\_\_\_

**Cultural Affiliation**

\_\_\_\_\_

\_\_\_\_\_

**Architect/Builder**

Johnson, Lawrence Henry (designer, builder) \_\_\_\_\_

Carlstrom Brothers (masons) \_\_\_\_\_

\_\_\_\_\_

**Criteria Considerations**

(Mark "x" in all the boxes that apply)

Property is:

- A Owned by a religious institution or used for religious purposes.
- B removed from its original location.
- C a birthplace or grave.
- D a cemetery.
- E a reconstructed building, object, or structure.
- F a commemorative property.
- G less than 50 years old or achieving significance within the past 50 years.

**Period of Significance (justification)**

The period of significance (1901) reflects the year the Dodd Ford Bridge was built. Its erection represents the culmination of Blue Earth County's public transportation efforts during the Progressive Era to complete a direct farm-to-market route for farmers to the growing city of Amboy, Minnesota, and to its railroad connection.

**Criteria Considerations (explanation, if necessary)**

**Statement of Significance Summary Paragraph** (provide a summary paragraph that includes level of significance and applicable criteria)

Dodd Ford Bridge (No. 1461) is significant under National Register Criterion C and the Area of Significance of Engineering as an example of the work of Lawrence Henry Johnson, an engineer important to the history of bridge building in Minnesota. It is also significant under Criterion A and the Area of Significance of Transportation. With its key location near Amboy, Minnesota, the bridge is a central example of the unprecedented government funding of public works projects in Blue Earth County that occurred during the Progressive Era, a time of substantial community development throughout the United States. The Dodd Ford Bridge is being nominated under the Multiple Property Documentation Form (MPDF), "Iron and Steel Bridges in Minnesota 1873-1945" and relates to the statewide context of "Railroad and Agricultural Development 1870-1945." The bridge is locally significant and its completion in 1901 represents the culmination of the Blue Earth County government's effort to provide a vital transportation link between the growing city of Amboy and the farming community it served.

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**Narrative Statement of Significance** (provide at least one paragraph for each area of significance)

See Continuation Sheet, Section 8, page 1.

Developmental history/additional historic context information (if appropriate)

9. Major Bibliographical References

Bibliography (Cite the books, articles, and other sources used in preparing this form)

See Continuation Sheet, Section 9, page 1.

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67 has been Requested)
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey # \_\_\_\_\_
- recorded by Historic American Engineering Record # MN-73

Primary location of additional data:

- State Historic Preservation Office
- Other State agency
- Federal agency
- Local government
- University
- Other

Name of repository: Minnesota Historical Society Library

Historic Resources Survey Number (if assigned): \_\_\_\_\_

10. Geographical Data

Acreage of Property Less than 1 acre  
(Do not include previously listed resource acreage)

Amboy, Minn., 1967

UTM References

(Place additional UTM references on a continuation sheet)

1	<u>15</u>	<u>404590</u>	<u>4858620</u>
	Zone	Easting	Northing
	Datum 1927		

3	_____	_____	_____
	Zone	Easting	Northing

2	_____	_____	_____
	Zone	Easting	Northing

4	_____	_____	_____
	Zone	Easting	Northing

**Verbal Boundary Description** (describe the boundaries of the property)

The nominated property consists of a rectangle, approximately 150 feet long and 35 feet wide, whose corners coincide with the outside corners of the bridge abutments and wingwalls at each end of the bridge. It includes only bridge superstructure and substructure.

**Boundary Justification** (explain why the boundaries were selected)

Because the bridge is located on a public road, there are no legal boundary limits for the ends of the bridge. These boundaries, therefore, are drawn to encompass only the superstructure and substructure of the bridge itself.

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**11. Form Prepared By**

name/title Emily Ganzel, Public Historian  
organization N/A date 8 September 2009  
street & number 5317 14<sup>th</sup> Avenue South telephone 612-824-9960  
city or town Minneapolis state MN zip code 55417  
e-mail emily@ganzelworks.com

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**Additional Documentation**

Submit the following items with the completed form:

- **Maps:** A **USGS map** (7.5 or 15 minute series) indicating the property's location.  
A **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- **Continuation Sheets**
- **Additional items:** (Check with the SHPO or FPO for any additional items)

**Photographs:**

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map.

**Name of Property:** Dodd Ford Bridge

**City or Vicinity:** Amboy

**County:** Blue Earth **State:** Minnesota

**Photographer:** Robert M. Frame III

**Date Photographed:** 6 September 2009

**Description of Photograph(s) and number:**

1 of 4. Dodd Ford Bridge perspective view, looking southeast.

2 of 4. Dodd Ford Bridge north portal, looking south.

3 of 4. Dodd Ford Bridge south portal, looking north.

4 of 4. Dodd Ford Bridge below deck, looking southeast.

**Property Owner:**

(complete this item at the request of the SHPO or FPO)

name \_\_\_\_\_

street & number \_\_\_\_\_ telephone \_\_\_\_\_

city or town \_\_\_\_\_ state \_\_\_\_\_ zip code \_\_\_\_\_

**Paperwork Reduction Act Statement:** This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

**Estimated Burden Statement:** Public reporting burden for this form is estimated to average 18 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management, U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.



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National Register of Historic Places Continuation Sheet

Name of Property  
**Dodd Ford Bridge**

County and State  
**Blue Earth County, Minnesota**

Name of Multiple Property Listing (If applicable)  
**Iron and Steel Bridges in Minnesota,  
1873-1945**

Section number: 7 page: 1

NARRATIVE DESCRIPTION<sup>1</sup>

The Dodd Ford Bridge superstructure is comprised of two trusses with nine panels each. The upper chord is fabricated with riveted, back-to-back, rolled channel-sections with a cover plate on top and batten plates beneath. The lower chord is comprised of paired punched eyebars. The compression verticals are riveted, back-to-back channels with V-lacing front and back. The tension verticals are eyerods. The diagonals and counters are punched eyebars or forged, looped, eyerods with turnbuckles. The truss connections are pinned at the panel points. Secondary connections are riveted except for two bolted field splices in each upper chord.

The upper lateral bracing between trusses is comprised of widely spaced transverse angle sections connected by widely spaced diagonals riveted to small gusset plates, creating an appearance of open V-lacing between trusses. Top lateral bracing members are diagonally crossed rods.

The floor beams are rolled I-beams that are suspended below the lower chord pins by hanger plates riveted to the floorbeam ends.<sup>2</sup> Diagonally crossed rods between floorbeams are utilized for lower lateral bracing. Wood stringers rest on the floorbeams and support a timber-plank deck that has a 15-foot-wide, longitudinal, timber-plank wearing surface forming the single traffic lane. The railings on each side consist of two horizontal angle sections bolted to simple vertical angle-section posts and to truss vertical members. The railing is continued off the bridge at the north and south approaches with short sections of modern W-type guardrail. A utility conduit runs along the east side of the bridge deck.

Three of the four bridge bearings are buried in soil and gravel and not visible. The southeast expansion bearing is a partially visible roller-nest bearing, which is an original element.

The bridge substructure consists of abutments with wingwalls at the north and south ends. The north abutment, which is taller and protrudes into the river, has its original stone-masonry abutment face and west wingwall. The northeast wingwall was rebuilt in concrete sometime prior to 1962, according to Mn/DOT records. The south abutment, which is shorter and out of the river, has its original stone-masonry west wingwall and abutment face. The southeast wingwall was rebuilt in concrete in 1993 when high water caused severe damage to the south abutment.

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Several repairs to the bridge were completed in recent decades. The repairs include: lower chord reinforcement with threaded rod assembly in one panel section; steel external encasement reinforcement to two compression members (one end diagonal member and one vertical member); a replacement lower chord eyebar with a lapped welded repair; and two wood stringers reinforced with a steel channel-section and an additional wood member.<sup>3</sup>

The repairs do not compromise the historical design integrity of the bridge. With the exception of the replacement eyebar, the repairs are reversible because they supplement the original members, which remain in place. They are placed adjacent to, or around, original members and do not penetrate historic fabric. The eyebar has been replaced in-kind and can be replaced again in the future if necessary. The repairs do not alter the original design or construction. It is unlikely that any wood members in the floor system are original to the 1901 construction because wood members typically are replaced in-kind as they deteriorate over time. The Mn/DOT 2005 Inspection Report suggests that the stringers were replaced in the 1970s.

In addition to the repairs, the bridge has approximately ten bent or misaligned truss members, primarily eyerods and eyebars, and various bent railing members and bottom lateral bracing members. These elements do not compromise the historical design integrity of the bridge.

Steel bridge members exhibit surface corrosion and some pack rust. The last year the bridge was painted is not identified in available records.

When the current condition of the bridge is compared with a historic photograph of the bridge from the early twentieth century, it is clear that the bridge retains almost complete historical integrity.<sup>4</sup>

The bridge has not been moved from its original site over the Blue Earth River and therefore retains complete integrity of location.

There is complete integrity in the bridge's original engineering design of a steel Pratt camelback through-truss. The truss repairs described above do not diminish the bridge's integrity because they either retain the original design function or they are reversible. The surface corrosion and minor bent members reflect the normal wear of a bridge with over a century of vehicular use and do not

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affect the design integrity. Abutment repairs are not uncommon for a bridge of this age and it is notable that over half of the original stone masonry remains in place.

The bridge retains the integrity of its setting in a rural agricultural landscape. No modern buildings or structures can be seen from the bridge or in the immediate vicinity. While the road north of the bridge is paved, the road south remains unpaved and graveled. The few traffic signs required by state code on and near the bridge are the only apparent modern intrusions. Large barriers were placed at each end of the bridge when it was closed to vehicular traffic in 2009, but the barriers do not touch the structure and can be removed.

The integrity of the bridge materials is retained, with the exception of the concrete abutment repairs noted above and the replacement of the original railing, which appears in the historic photograph to be made of wood. The later steel railing is of similar design.

The bridge retains its pin-connected construction and the use of rivets to fabricate members and for secondary field connections. Taken together, these elements reflect the integrity of the workmanship used at the time of the bridge's erection.

Given the integrity of its design, setting, materials, and workmanship, the bridge continues to evoke the feeling of rural road transportation in early twentieth-century Blue Earth County, particularly during the Progressive Era when the Dodd Ford Bridge was built. The historic photo depicts the bridge of today, except for the "weight-limit" and "clearance" signage from the latter part of the twentieth century.

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<sup>1</sup> See Additional Documentation pages 1-2 for diagrams of bridges and structural terminology from T. Allan Comp and Donald Jackson, "Bridge Truss Types: A Guide to Dating and Identifying," *Technical Leaflet*, Historic American Engineering Record (HAER), National Park Service, (Nashville, TN: American Association of State and Local History, 1977).

Dimensions and statistics for the bridge that are cited here are from the Minnesota Department of Transportation (Mn/DOT) Structure Inventory Report (2009) and from Jeffrey A. Hess, "Dodd Ford Bridge," HAER No. MN-73 (Denver: HAER, 1993).

<sup>2</sup> This hanger-plate design element was not used after 1912, according to a 2005 Mn/DOT inspection report. See Pete Wilson, "In-Depth Fractural Critical Bridge Inspection Report, Bridge #1461 'Dodd Ford Bridge,'" Mn/DOT, 2005. A copy is available at Mn/DOT Bridge Office, Oakdale, Minnesota, and Blue Earth County engineer's office, Mankato, Minnesota.

<sup>3</sup> The repairs cited in this description were observed in 2009 by the preparer of this document and correspond to repairs identified in the Mn/DOT 2005 Inspection Report cited above. See the table for Field Inspection Notes (unnumbered pages) at the end of the 2005 report for location details of all repairs and bent members discussed in this description.

<sup>4</sup> See Additional Documentation page 3 for a scan of the historic photograph. The photograph is scanned from page 503 of *Heritage of Blue Earth County* (Dallas, TX: Curtis Media Corporation, 1990).

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**Blue Earth County, Minnesota**

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NARRATIVE STATEMENT OF SIGNIFICANCE

The Dodd Ford Bridge is located in Shelby Township, approximately one mile southwest of Amboy in Blue Earth County, Minnesota. Prior to the construction of the bridge, the site was a ford for crossing the Blue Earth River and was known as the Dodd Ford—the Dodd family owned seven acres south of the river.<sup>1</sup> In 1896, petitioners from Amboy requested “the location and establishment”<sup>2</sup> of a county road that would cross the river at the Dodd Ford. The road petition was approved by the Blue Earth County commissioners. Five years later, the current steel bridge was built on the site. It was in continuous use from 1901 to May 2009, when it was closed to vehicular traffic.

**The Progressive Era**

Defined as the period between the 1880s and the end of World War I, the Progressive Era was a reaction to the laissez-faire, hands-off government policies of the Gilded Age. Progressive advocates argued that those earlier policies led to poor working and living conditions in an increasingly industrialized and urbanized America. They urged greater government involvement in providing essential community services, including transportation and utilities, and increased funding of public works. Their efforts coincided with the development of the automobile and the telephone, both of which dramatically improved communication within and between communities.<sup>3</sup>

With Progressive Era policies, road construction in the U.S. by the end of the nineteenth century led to over 1.5 million miles of mostly county-funded rural roads.<sup>4</sup> By 1915, nearly two of every three cities had city-owned utilities.<sup>5</sup> And between 1880 and 1910, the number of telephones in use increased from 50,000 to seven million in the U.S. alone.<sup>6</sup>

**Road Improvement in Blue Earth County**

With the Progressive Era came the emergence of the Good Roads Movement in the U.S. and in Minnesota. As Robert M. Frame explains in his 1985 report “Historic Bridge Project,” the introduction of the popular low-wheeled “safety bicycle” in 1885 encouraged cyclists to advocate for better roads for bicycles. Railroad companies supported the movement as well, since dependable, “farm-to-market” roads would facilitate the transportation of farmers’ goods to the railroad at all times of the year.<sup>7</sup>

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The impetus for Progressive Era road improvement also came from Congress. In 1893, it appropriated \$10,000 for what the American Public Works Association has called "an experimental program of rural mail delivery." Since the Post Office had determined that mail would be delivered only on good, well-maintained roads, hundreds of counties, including Blue Earth in Minnesota, made substantial road improvements to ensure mail delivery to their rural areas.<sup>8</sup> To pay for the improvements, Blue Earth County approved a "general road and bridge tax."<sup>9</sup>

Between 1890 and 1904, nearly 50 petitions were submitted to Blue Earth County commissioners for the "laying out" or "establishing" of new county roads. From just one petition in 1891, the annual number of petitions reached a peak of nine in 1898.<sup>10</sup>

The improved roads meant that the postal service could be extended throughout the county. It began in Amboy. Thomas Hughes wrote in the *History of Blue Earth County* that in 1900, the first rural mail route in Blue Earth County "started from Amboy and embraced 36 square miles of territory and served a population of 660 persons."<sup>11</sup>

At the end of 1900, Amboy's post office receipts far exceeded those of nearby Lake Crystal and Mapleton. Amboy grossed \$3,986.08; Lake Crystal, \$2,660.92; and Mapleton just \$2,333.85.<sup>12</sup>

In November 1901, the *Blue Earth County Enterprise* reported that the expansion of rural mail routes was championed by the local daily newspapers hoping to expand their delivery areas.<sup>13</sup> Two additional mail delivery routes were announced for Amboy in December 1901.<sup>14</sup>

**Expanded Public Works and Services in Blue Earth County**

Public road improvement was part of a general expansion of public works in Blue Earth County during the Progressive Era. In October 1901, for example, the village of Mapleton approved the construction of a sewer system for the community at an estimated cost of \$4,555. The village council determined that this project was a priority over the proposed new city hall and jail.<sup>15</sup> The *History of Blue Earth County* reported other infrastructure improvements in the county as well, including a new water system in Amboy, put in by "the Railway company" in the summer of 1901.<sup>16</sup>

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Telephone service also expanded countywide, including—as reported in the *Blue Earth County Enterprise*—the Willow Creek Telephone line extension in March 1900, the installation of a line from Good Thunder to Garden City in October 1901, and construction of a telephone exchange by the Citizens Telephone Company in August 1901 that included Amboy. The newspaper devoted an entire page of its August 16, 1901, edition to list all the citizens who had telephone service through this exchange.<sup>17</sup>

The importance of telephone communication in serving the public was recognized by the Blue Earth County Commissioners who voted, in November 1900, to have Northwestern Telephone Exchange Company install a telephone at the county coroner's office at a cost of \$15 per year.<sup>18</sup>

#### The Development of Amboy, Minnesota

In many ways, the development of Amboy epitomizes the Progressive movement's success. Founded in 1879 to create a townsite for the Saint Paul and Sioux City Railroad Company, Amboy flourished as a transportation center for grain, livestock, flax, and produce. It was incorporated June 11, 1887. Fourteen years later, in 1901, it boasted four churches, a school, four grain elevators, a flour mill, and a creamery.<sup>19</sup>

Amboy's community development coincided with its tremendous population growth. The *History of Blue Earth County* notes that from 1890 to 1905, Amboy more than doubled in size, from 215 people to 490, making it the fastest-growing community in Blue Earth County.<sup>20</sup> The county itself grew from 29,210 in 1890 to 32,263 in 1900, an increase of nine percent.<sup>21</sup>

Amboy's growth exemplifies a farm-nonfarm population shift that was taking place across the United States during this time. As geographer John R. Borchert explains in *America's Northern Heartland*, "the region's nonfarm population rose 300 percent . . . in 20 years, while the farm population rose only 150 percent."<sup>22</sup>

By the late nineteenth century, a system of railroads in the Midwest was taking advantage of the area's rich, fertile land. Trunk lines radiated like spokes on a wheel from railroad hubs, and branch lines were needed to link these trunk lines as the distance between them grew.<sup>23</sup> The railroad running north and south through Amboy became part of a larger railroad network. In 1895, it was the Elmore Branch line for the Chicago St. Paul Minneapolis and Omaha Railroad Company.<sup>24</sup>

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With Jackson Lake creating an obstacle due east of the community, the most direct route to Amboy and the railroad was from the west.<sup>25</sup> On February 28, 1896, a road petition was submitted by 41 petitioners in Amboy for a road just southwest of Amboy. One of the owners of the land through which the road would pass was listed as "Thos. Dodd Est" and one of the petitioners was Elizabeth Dodd, presumably a relative of Thomas Dodd. The County commissioners approved the petition on May 8, 1896.<sup>26</sup> That road became part of what is now County Road 147, the road on which the Dodd Ford Bridge is located.

In 1909, more than 80 bridges built and owned by Blue Earth County were listed in the *History of Blue Earth County*.<sup>27</sup> Of the 80, fourteen were built between 1900 and 1905 alone. Today, Dodd Ford Bridge from 1901 is believed to be one of only a few of the 80 still in existence, and the only metal truss bridge on the county system.<sup>28</sup>

#### **The Building of Dodd Ford Bridge**

Amboy's population boom had led to increased traffic on the 1896 county road. On September 5, 1900, the Blue Earth County Board of Commissioners unanimously approved that a committee of commissioners view "a proposed bridge site for the location of a new iron bridge across the Blue Earth river southwest corner of section 22, town of Shelby, known as the Dodd Ford." The committee was authorized to have the county surveyor survey the site and "have plans and specifications made at once for the stone piers and an iron bridge with estimate of cost."<sup>29</sup>

The committee's findings reflect the consequences of Amboy's growing population. On November 8, 1900, the committee reported back that "owing to increased travel over this road and the danger of crossing [fording] the river during high water the public needs a bridge over said river to accommodate the constant travel." The committee's recommendation was adopted.<sup>30</sup>

On December 6, 1900, the Board of Commissioners opened bids for the bridge and selected Carlstrom Bros. to build two stone piers (abutments) for the Dodd Ford Bridge for \$1,975 to be completed by May 1, 1901. Lawrence Henry Johnson of Minneapolis was selected to build a 150-foot bridge for \$2,948, to be completed by June 1, 1901. Both contractors were the low bidders for the project.<sup>31</sup>

In June 1901, the bridge was apparently successfully completed, since the commissioners approved the payment of the balance due to Carlstrom Bros., payment of \$21 to W.F. Brooks for "work on Dodds Ford [sic] Bridge," and payment of \$2,948 to "L.H. Johnson, contract price of bridge at Dodd's [sic] Ford."<sup>32</sup>



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Name of Property  
**Dodd Ford Bridge**

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County and State  
**Blue Earth County, Minnesota**

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**Lawrence Henry Johnson, Bridge Builder**

Born in Flensburg, Germany in 1863, Lawrence Henry Johnson immigrated to New York when he was nine years old. In 1884, at the age of 21, he moved to Minneapolis.<sup>33</sup> In the Historic American Engineering Record (HAER) documentation for the Dodd Ford Bridge (1993), Jeffrey A. Hess traces Johnson's professional career, starting with his first job in Minneapolis at Jones and Hewett, the only firm then listed in the city directory under "Bridge Builders."

In 1888, Johnson became a sales agent for the Wisconsin Bridge and Iron Company in Milwaukee, which operated throughout Wisconsin and eastern Minnesota, supplying highway bridges to county and township governments. Among the bridge designs attributed to Johnson during his tenure at the Wisconsin Bridge and Iron Company is the legendary and now-demolished Spiral Bridge in Hastings, Minnesota.<sup>34</sup>

In 1898, Johnson created a bridge-building firm in Minneapolis under his own name. The "L.H. Johnson" firm continued until 1905. The Dodd Ford Bridge (1901) is one of only two bridges built by Johnson during this period that is known to survive today.<sup>35</sup> (The other is the 1903 Delhi Bridge, described by historian Denis P. Gardner as "a steel, pin-connected Parker through truss,"<sup>36</sup> built across the Minnesota River between Redwood and Renville Counties.)

In the HAER documentation, Hess provides the following description of the erection of the Dodd Ford Bridge:

As contractor for the Dodd Ford Bridge, Johnson . . . undoubtedly turned to an established bridge fabrication shop, possibly the Wisconsin Bridge and Iron Company, with which he had been associated earlier. In addition to engineering drawings and steel members, the fabrication shop also may have supplied a field erection crew, or Johnson may have hired and supervised the labor himself.<sup>37</sup>

In 1905, Johnson reorganized his company as the Hennepin Bridge Company. He served as its president until he retired in 1932.<sup>38</sup>

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Shortly after the completion of the Dodd Ford Bridge, Johnson was elected to the Minnesota House of Representatives. He served from 1902 (just after completing the bridge) to 1910 and was Speaker of the House in 1907.<sup>39</sup> His professional career during this time included a request from the State Highway Commission to speak to the Road Makers Association about "Bridge Construction and Contracting"<sup>40</sup> and being named an assignee of two U.S. Patents for a railway tie-rod and a railway spike.<sup>41</sup>

His professional association with Blue Earth County also continued. In 1909, Walter F. Brooks, county surveyor for Blue Earth County, asked Johnson to inspect two bowstring truss bridges to be repaired.<sup>42</sup>

Johnson died in Minneapolis in 1947 at the age of 84.<sup>43</sup>

#### Summary

The Dodd Ford Bridge's significance makes it eligible for the National Register within the historic context of "Iron and Steel Bridges in Minnesota." In this MPDF, historians Fredric L. Quivik and Dale L. Martin provide a list of qualifications that make a bridge eligible for the National Register under Criterion C and the Area of Significance of Engineering. Included as a qualification is that the bridge is "built by an important Minnesota bridge builder." In this category, Lawrence Henry Johnson is identified as one of seven builders who were "very important to the construction of bridges in Minnesota."<sup>44</sup>

Quivik further explains the importance of Johnson and his Hennepin Bridge Company in the 1984 *IA Journal of the Society for Industrial Archeology* article "Montana's Minneapolis Bridge Builders," describing how a "family" of Minneapolis bridge companies—including Johnson's—were part of the economic development of the Montana frontier.<sup>45</sup>

The Dodd Ford Bridge stands as an example of Johnson's accomplishments. Its steel, pin-connected construction exemplifies the popular design for truss bridges at the beginning of the twentieth century.<sup>46</sup> One of only two extant bridges designed by Johnson when he first began working independently as "L.H. Johnson," it remains as one of only a few early twentieth-century, Pratt through-trusses in Minnesota.<sup>47</sup> As a camelback variation on the Pratt design, it is unusual and uncommon.

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Eligible under Criterion A and the Area of Significance of Transportation, the bridge illustrates the unprecedented government funding for improvements in public infrastructure in Blue Earth County which emerged during the Progressive Era. Without the bridge, high water in the Blue Earth River would require travelers to trek approximately two and half miles north or south and attempt to cross the river at the Joseph Bussman property (to the north) or the W.F. Lewis property (to the south).<sup>48</sup> With its erection, an increasing number of travelers had efficient farm-to-market access from the west to the growing community of Amboy and the railroad.

End Notes:

The *Blue Earth County Enterprise* (Mapleton, Minnesota) newspaper is cited as BECE, with publication date and page number (when available). The Blue Earth County Commissioners' Official Proceedings were published in the *Enterprise* and are cited as CCOP.

<sup>1</sup> *The Standard Historical and Pictorial Atlas and Gazetteer of Blue Earth County, Minnesota* (Minneapolis: Central Publishing Company, 1895), 52-55.

<sup>2</sup> Blue Earth County (Minnesota) Auditor, *Petition for County Road*, 28 February 1896. State Archives, Minnesota Historical Society, St. Paul.

<sup>3</sup> Elizabeth Israels Perry and Karen Manners Smith, *The Gilded Age and Progressive Era, A Student Companion* (New York: Oxford University Press, 2006), 37, 272, 362.

<sup>4</sup> American Public Works Association, *History of Public Works in the United States, 1776-1976* (Chicago: American Public Works Association, 1976), 65.

<sup>5</sup> Perry and Smith, 273.

<sup>6</sup> Perry and Smith, 362.

<sup>7</sup> Robert M. Frame III, "Historic Bridge Project: A Report to the State Historic Preservation Office of the Minnesota Historical Society and the Minnesota Department of Transportation" (Saint Paul: Minnesota Historical Society, 1985), 15-16.

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<sup>8</sup> American Public Works Association, 75.

<sup>9</sup> In July of both 1900 and 1901, the CCOP included the approval of such a tax. (CCOP in BECE, 27 July 1900, p. 8; 19 July 1901, p. 8.)

<sup>10</sup> Blue Earth County Auditor, *Road Petitions*.

<sup>11</sup> Thomas Hughes, *History of Blue Earth County* (Chicago: Middle West Publishing Company, 1909; reprint, Walsworth Publishing Company, Inc., 1976), 216-217.

<sup>12</sup> BECE, 21 December 1900.

<sup>13</sup> BECE, 15 November 1901, p. 1; 22 November 1901, p. 1.

<sup>14</sup> BECE, 27 December 1901, p. 1.

<sup>15</sup> BECE, 4 October 1901, p. 5; 18 October 1901, p. 1.

<sup>16</sup> Hughes, 218.

<sup>17</sup> BECE, 2 March 1900, p. 8; 16 August 1901, p. 1; 25 October 1901, p. 4.

<sup>18</sup> CCOP in BECE, 30 November 1900, p. 1.

<sup>19</sup> Kelly Dethloff Reuter, *Amboy, Minnesota: A Heritage Rooted in Rural America* (Amboy: Centennial Celebration, 1979), 71, 74-75.

<sup>20</sup> Hughes, 306.

<sup>21</sup> BECE, 30 November 1900, p. 7.

<sup>22</sup> John R. Borchert, *America's Northern Heartland* (Minneapolis: University of Minnesota Press, 1987), 44.

<sup>23</sup> Borchert, 41-44.

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<sup>24</sup> In 1880, the year after Amboy was founded as a townsite for the Saint Paul and Sioux City Railroad Company, the railroad company combined with the Saint Paul Stillwater and Taylor's Falls Railway Company, the West Wisconsin Railway Company, and the North Wisconsin Railway to create the Chicago St. Paul Minneapolis and Omaha Railroad Company. See Richard S. Prosser, *Rails to the North Star* (Minneapolis: Dillon Press, 1966; Minneapolis: University of Minnesota Press, 2007), 20.

<sup>25</sup> *Atlas*, 52.

<sup>26</sup> Blue Earth County Auditor, *Petition for County Road*, 28 February 1896.

<sup>27</sup> The 80 bridges include the Kern Bridge (1873), the Kennedy Bridge (1883), and the Zieglers Ford Bridge (1904), all listed on the National Register.

<sup>28</sup> Hughes, 307. Minnesota Department of Transportation (Mn/DOT) records for Blue Earth County bridges are available online through the Mn/DOT website and were accessed in March 2009. These include the Blue Earth County Bridge Roster, Structure Inventory Report (for bridges), and the Bridge Management Unit's "Bridges That Have Been Removed in Blue Earth County." A comparison was made between the 80 bridges listed in Hughes and those bridges listed in the Mn/DOT records. The evidence suggests that almost all of the bridges from Hughes' list in 1909 have been removed and, according to the Mn/DOT records, some of their replacements have also been removed. The County Bridge Roster of 193 bridges indicates that the Dodd Ford Bridge (Bridge No. 1461) is one of the oldest bridges and is the only extant metal truss bridge in the county currently on the system.

<sup>29</sup> CCOP in BECE, 21 September 1900, p. 8. While the CCOP and the 1895 *Atlas* both indicate the Dodd Ford Bridge location as the southwest quarter of section 22, the USGS map shows it to be in the northwest quarter of section 27.

<sup>30</sup> CCOP in BECE, 30 November 1900, p. 1.

<sup>31</sup> CCOP in BECE, 14 December 1900, p. 8. While both the CCOP in original manuscript and the published newspaper transcript give the correct location for the construction of the stone piers (Dodd Ford), they mistakenly refer to the location of the bridge itself as "section 6 [not 22], township of Shelby" when referencing Johnson's winning bid. The CCOP from June 14, 1901, however, indicates that Johnson was paid \$2,948 for building the bridge at Dodd Ford. The CCOP original manuscript is in the County Auditor's Office, Blue Earth County Courthouse, Mankato, Minnesota.

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<sup>32</sup> CCOP in BECE, 14 June 1901, p. 4. The CCOP in original manuscript (and the published newspaper transcript) refer to the bridge site with different names. Officially known as the Dodd Ford Bridge, the punctuation and spelling variants "Dodd's Ford" and "Dodds Ford" occasionally appear.

<sup>33</sup> "L.H. Johnson, 84, Dies in Mill City," *St. Paul Pioneer Press*, 2 December 1947, 1.

<sup>34</sup> "Deaths," *Minneapolis Star*, 2 December 1947, 19; and Dakota County Historical Society (MN) website: [www.dakotahistory.org/county/hastings.asp](http://www.dakotahistory.org/county/hastings.asp).

<sup>35</sup> Jeffrey A. Hess, "Dodd Ford Bridge," Historic American Engineering Record (HAER) No. MN-73 (Denver: HAER, 1993), 6-8.

<sup>36</sup> Denis P. Gardner, *Wood, Concrete, Stone, and Steel, Minnesota's Historic Bridges* (Minneapolis: University of Minnesota Press, 2008), 190.

<sup>37</sup> Hess, 7.

<sup>38</sup> Hess, 7; and *Minneapolis Star*, 2 December 1947, 19.

<sup>39</sup> Lawrence H. Johnson Papers, Minnesota Historical Society, St. Paul.

<sup>40</sup> Johnson Papers, letter from George W. Cooley to L.H. Johnson, 2 December 1908.

<sup>41</sup> U.S. Patent Office, Patent No. 948,496 (Railway Tie-Rod), patented 8 February 1910; and Patent No. 1,001,612 (Railway Spike), patented 29 August 1911.

<sup>42</sup> Johnson Papers, letter from Walter F. Brooks to L.H. Johnson, 18 June 1909.

<sup>43</sup> *Minneapolis Star*, 2 December 1947, 19; and *St. Paul Pioneer Press*, 2 December 1947, 1.

<sup>44</sup> See Section F, p. 9, Fredric L. Quivik and Dale L. Martin, "Iron and Steel Bridges in Minnesota," National Register of Historic Places Multiple Property Documentation Form, prepared by Renewable Technologies, Inc., Butte, MT for State Historic Preservation Office, Minnesota Historical Society, 1988.

<sup>45</sup> Fredric L. Quivik, "Montana's Minneapolis Bridge Builders," *IA Journal of the Society for Industrial Archeology* 10, no. 1 (1984): 35-54.

<sup>46</sup> Frame, 19.

<sup>47</sup> Hess, 9.

<sup>48</sup> *Atlas*, 52.

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BIBLIOGRAPHY

PUBLISHED SOURCES

American Public Works Association. *History of Public Works in the United States, 1776-1976*. Chicago: American Public Works Association, 1976.

Borchert, John R. *America's Northern Heartland*. Minneapolis: University of Minnesota Press, 1987.

Gardner, Denis P. *Wood, Concrete, Stone, and Steel, Minnesota's Historic Bridges*. Minneapolis: University of Minnesota Press, 2008.

*Heritage of Blue Earth County*. Dallas: Curtis Media Corporation, 1990.

Hughes, Thomas. *History of Blue Earth County*. Chicago: Middle West Publishing Company, 1909. Reprint. Walsworth Publishing Company, Inc., 1976.

*Minneapolis Star*, December 1947.

Perry, Elizabeth Israels, and Karen Manners Smith. *The Gilded Age and the Progressive Era, A Student Companion*. New York: Oxford University Press, 2006.

Prosser, Richard S. *Rails to the North Star*. Minneapolis: Dillon Press, 1966; Minneapolis: University of Minnesota Press, 2007.

Quivik, Fredric L. "Montana's Minneapolis Bridge Builders." *IA Journal of the Society for Industrial Archeology* 10, no. 1 (1984): 35-54.

Reuter, Kelly Dethloff. *Amboy, Minnesota: A Heritage Rooted in Rural America*. Amboy: Centennial Celebration, 1979.

*St. Paul Pioneer Press*, December 1947.

*The Standard Historical and Pictorial Atlas and Gazetteer of Blue Earth County, Minnesota*. Minneapolis: Central Publishing Company, 1895.

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UNPUBLISHED SOURCES

Blue Earth County (Minnesota) Auditor. *Road Petitions, 1875, 1890-1928, 1933*. State Archives, Minnesota Historical Society, Saint Paul.

Comp, T. Allan, and Donald Jackson. "Bridge Truss Types: A Guide to Dating and Identifying," *Technical Leaflet*, Historic American Engineering Record, National Park Service. American Association of State and Local History, Nashville, 1977.

Dakota County Historical Society (MN) website: [www.dakotahistory.org/county/hastings.asp](http://www.dakotahistory.org/county/hastings.asp). Accessed 7 August 2009.

Frame, Robert M., III. "Historic Bridge Project: A Report to the State Historic Preservation Office of the Minnesota Historical Society and the Minnesota Department of Transportation." Minnesota Historical Society, Saint Paul, 1985.

Hess, Jeffrey A. "Dodd Ford Bridge," Historic American Engineering Record (HAER) No. MN-73. HAER, Denver, 1993.

Johnson, Lawrence H. Papers. Minnesota Historical Society, Saint Paul.

Minnesota Department of Transportation (Mn/DOT). "Bridge No. 1461," Structure Inventory Report. Mn/DOT, March 2009.

Quivik, Fredric L., and Dale L. Martin. "Iron and Steel Bridges in Minnesota 1873-1945," National Register of Historic Places Multiple Property Documentation Form, 1988. State Historic Preservation Office, Minnesota Historical Society.

U.S. Patent Office, Patent No. 948,496 (Railway Tie-Rod), patented 8 February 1910; and Patent No. 1,001,612 (Railway Spike), patented 29 August 1911.

Wilson, Pete. "In-Depth Fracture Critical Bridge Inspection Report, Bridge #1461 'Dodd Ford Bridge,'" Mn/DOT, 2005.



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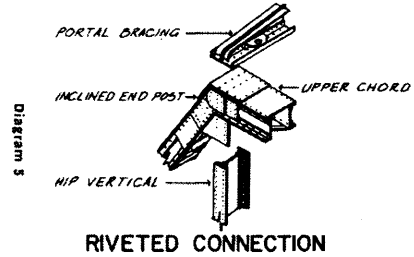
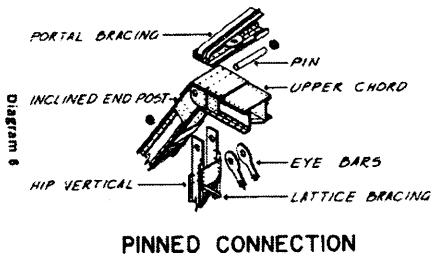
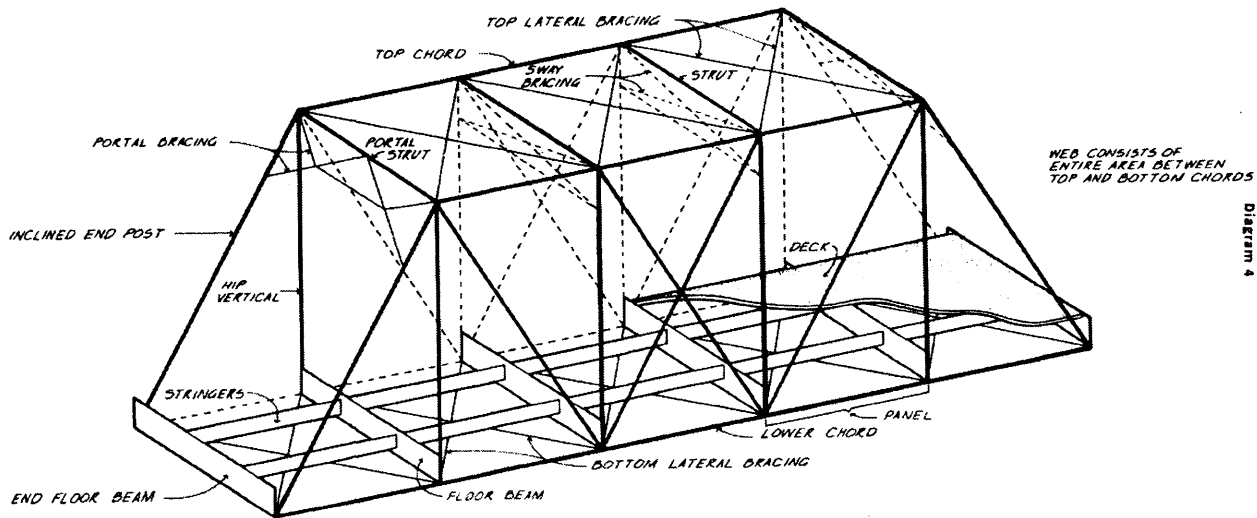
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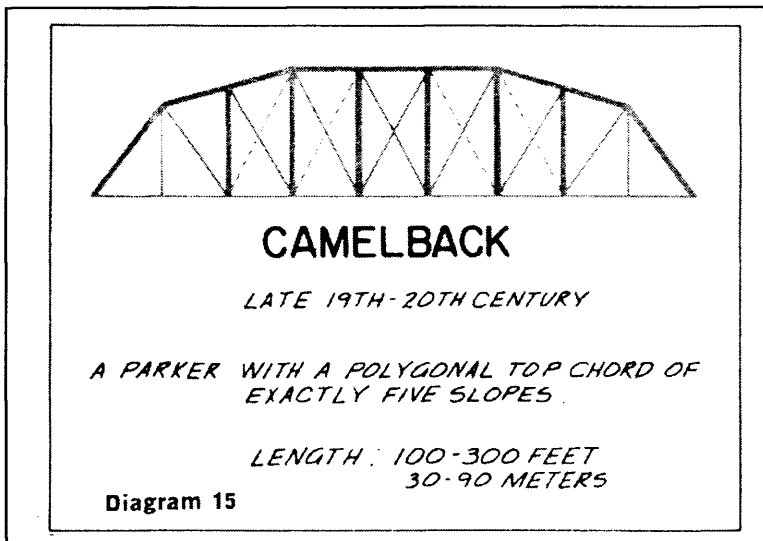
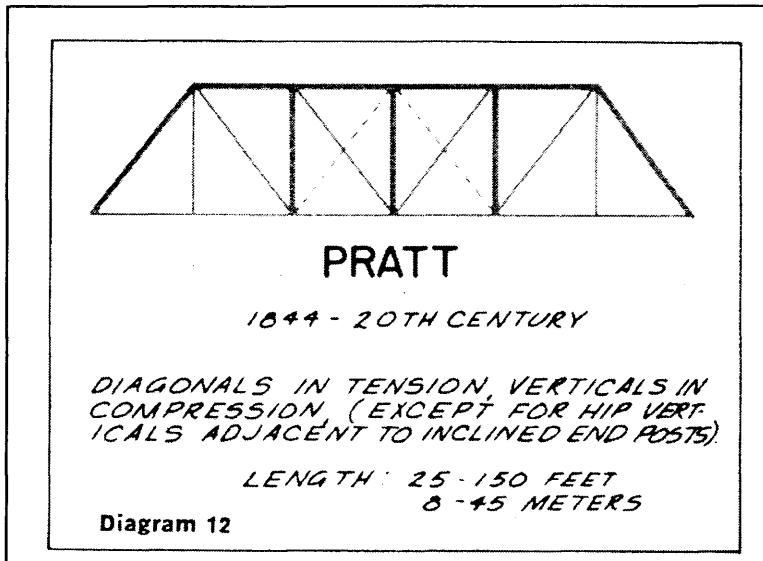
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UNDATED HISTORIC PHOTO OF DODD FORD BRIDGE FROM *HERITAGE OF BLUE EARTH COUNTY*, PAGE 503

