

United States Department of the Interior  
National Park Service

National Register of Historic Places  
Continuation Sheet

Section number \_\_\_\_\_ Page \_\_\_\_\_

SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 92000775 Date Listed: 6/25/92

Bridge No. 1482      Rock      MN  
Property Name:      County:      State:

Iron and Steel Bridges in Minnesota MPS  
Multiple Name

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This property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.

Patricia Anders  
Signature of the Keeper

9/2/92  
Date of Action

=====

Amended Items in Nomination:

The nomination form provides an inconsistent location for the bridge - Section 7 of the form notes that it is located west of US 75, while Section 8 and the USGS map show it east of US 75. Susan Roth with the MN SHPO says that it is east of the highway. The form is officially amended by this clarification.

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DISTRIBUTION:

National Register property file  
Nominating Authority (without nomination attachment)

RECEIVED  
MAY 18 1992

United States Department of the Interior  
National Park Service

National Register of Historic Places  
Registration Form

NATIONAL REGISTER

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name Bridge No. 1482  
other names/site number N/A

2. Location

street & number U.S. Highway 75 (Schoneman Park) N/A  not for publication  
city, town Luverne Township Luverne  vicinity  
state Minnesota code MN county Rock code 133 zip code 56156

3. Classification

Ownership of Property	Category of Property	Number of Resources within Property	
<input type="checkbox"/> private	<input type="checkbox"/> building(s)	Contributing	Noncontributing
<input checked="" type="checkbox"/> public-local	<input type="checkbox"/> district	_____	_____ buildings
<input type="checkbox"/> public-State	<input type="checkbox"/> site	_____	_____ sites
<input type="checkbox"/> public-Federal	<input checked="" type="checkbox"/> structure	<u>1</u>	_____ structures
	<input type="checkbox"/> object	_____	_____ objects
		<u>1</u>	<u>0</u> Total

Name of related multiple property listing: Iron and Steel Bridges in Minnesota  
Number of contributing resources previously listed in the National Register \_\_\_\_\_

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this  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  meets  does not meet the National Register criteria.  See continuation sheet.

Signature of certifying official Ian R. Stewart, Deputy State Historic Preservation Officer Date 5/12/92

State or Federal agency and bureau Minnesota Historical Society

In my opinion, the property  meets  does not meet the National Register criteria.  See continuation sheet.

Signature of commenting or other official \_\_\_\_\_ Date \_\_\_\_\_

State or Federal agency and bureau \_\_\_\_\_

5. National Park Service Certification

I, hereby, certify that this property is:

entered in the National Register. Patrick Andrus 6/25/92  
 See continuation sheet.

determined eligible for the National Register.  See continuation sheet.

determined not eligible for the National Register.

removed from the National Register.

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

**6. Function or Use**

Historic Functions (enter categories from instructions)

TRANSPORTATION: road-related (vehicular)

Current Functions (enter categories from instructions)

TRANSPORTATION: pedestrian-related

**7. Description**

Architectural Classification

(enter categories from instructions)

Materials (enter categories from instructions)

foundation concrete abutments

walls \_\_\_\_\_

roof \_\_\_\_\_

other deck: concrete

steel truss members

OTHER: Steel, single-span, king-post,  
pony truss

Describe present and historic physical appearance.

**8. Statement of Significance**

Certifying official has considered the significance of this property in relation to other properties:

nationally     statewide     locally

Applicable National Register Criteria     A     B     C     D

Criteria Considerations (Exceptions)     A     B     C     D     E     F     G

Areas of Significance (enter categories from instructions)

Engineering

Period of Significance

N/A

Significant Dates

1908

Cultural Affiliation

N/A

Significant Person

N/A

Architect/Builder

Hewett Bridge Company

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

See continuation sheet

**9. Major Bibliographical References**

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 # \_\_\_\_\_

See continuation sheet

Primary location of additional data:

- State historic preservation office
- Other State agency
- Federal agency
- Local government
- University
- Other

Specify repository: \_\_\_\_\_

**10. Geographical Data**

Acreeage of property less than one acre

UTM References

A 

14
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7	2	5	0	8	0
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4	8	3	4	2	7	0
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 Zone Easting Northing

B 

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 Zone Easting Northing

C 

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D 

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See continuation sheet

Verbal Boundary Description

See continuation sheet

Boundary Justification

See continuation sheet

**11. Form Prepared By**

name/title Charlene K. Roise and Robert M. Hybben  
 organization Hess, Roise and Company date September 1991  
 street & number 710 Grain Exchange Building telephone 612/338-1987  
 city or town Minneapolis state Minnesota zip code 55415

United States Department of the Interior  
National Park ServiceNational Register of Historic Places  
Continuation SheetSection number 7 Page 1Bridge No. 1482  
Luverne Township, Rock County, Minnesota

## Description

The 29.8-foot, steel, single-span, king-post pony truss bridge is located in a rural setting in Schoneman County Park, just west of U.S. Highway 75. Roadway width is 15 feet; overall width is 15.7 feet. The structure is oriented on a northeast-southwest axis across a shallow channel by a small pond. Most connections are riveted. Verticals, however, are attached by pins top and bottom.

Steel for the bridge was provided by Cambria and Inland Steel. Steel members are painted green, the bridge's original color.<sup>1</sup> The upper chord consists of two back-to-back channels covered by a plate on top and connected by battens below. Two looped, rectangular-section bars make up the bottom chord. Verticals are a pair of looped, square rods, encircling a pin at each end. Diagonal bracing stretches from the top chord to a plate at the lower end of the vertical. The single floor beam, a rolled I-beam, is connected to the lower vertical pin by a U-bolt. I-beam stringers are bolted to the floor beam. Continuous curved sections of corrugated metal provide bracing between the stringers. The metal apparently served as formwork to facilitate pouring the concrete deck. Bands of steel and low concrete curbs edge the deck. Two angles form the railings. The bridge is braced at the verticals by outriggers formed from back-to-back angles. The superstructure rests on concrete abutments surrounded by dirt. No builder's plate is attached to the bridge, although a modern, free-standing sign near the southeast abutment describes the history of the bridge.

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<sup>1</sup>Letter, Charles W. Nelson, Historical Architect, State Historic Preservation Office, to Arnold W. Johnson, Rock County Highway Engineer, 27 June 1990.

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National Park ServiceNational Register of Historic Places  
Continuation SheetSection number 8 Page 1Bridge No. 1482  
Luverne Township, Rock County, Minnesota

## Significance

Bridge 1482 in Rock County, Minnesota, is eligible for the National Register of Historic Places under Criterion C of the multiple properties listing "Iron and Steel Bridges in Minnesota," as a rare statewide example of a king-post truss bridge. One of the few built in Minnesota during the late nineteenth and early twentieth centuries, Bridge 1482 provides a fine example of that style's distinctive A-shaped truss configuration. It retains excellent integrity of design, materials, workmanship, feeling, and association. The bridge, originally erected over the Rock River on a rural road between section 35 of Luverne Township and section 2 of Clinton Township, was moved to its present location in 1990. While the new location is in Schoneman Park, bounded to the west by two-lane U.S. Highway 75, the setting remains quite rural. The bridge is situated at the northern end of the park, which is relatively undeveloped. The structure is approached by an unpaved road, and surrounded by trees. Farm fields are adjacent to the east. Registration requirements for metal truss bridges under Criterion C specifically allow relocation of a bridge to a compatible new setting where the structure can span "a channel or body of water, railroad tracks, or some other barrier to vehicular travel." The registration requirements also highlight the Hewett Bridge Company, the firm responsible for construction of Bridge 1482, as an important Minnesota bridge builder.<sup>1</sup>

Bridge 1482 was built during a period of great bridge-building activity in Rock County. The supervisor of Luverne Township, encouraged by a 1907 Minnesota law which required counties to pay half of the cost of any bridge built within their borders, petitioned the county board for its construction on 13 July 1908. The board accepted the petition and awarded the contract to the Hewett Bridge Company of Minneapolis one week later. According to the 31 July 1908 Rock County Herald, the contract specified a bridge with "steel piers and frames and [a] cement [concrete] floor." The newspaper also noted that the bridge, approved as one of a group of six new bridges, would give the county twenty new bridges for 1908, one of the largest yearly totals in its history.<sup>2</sup> When it became necessary to replace the bridge in 1990, the Rock County Highway Department, in deference to the structure's historic significance, moved it to Schoneman Park in section 23 of Luverne Township.<sup>3</sup>

The king post ranks among the oldest truss-bridge forms. While originally built entirely of wood, the style adopted new materials as they were introduced to bridge construction. In the mid- to late nineteenth century, cast and wrought iron members created timber and metal structures known as "combination" bridges. By the late 1890s, king posts were built of steel, as were virtually all truss bridges by that time. Despite the design's flexibility, however, it fell victim to intensifying economic pressure. Writing in 1916, J.A.L. Waddell, a prominent bridge engineer and historian, noted that "for many years American bridge-designers exercised their ingenuity in devising new forms of trusses and girders, the principal object of their endeavors being to find forms involving the use of the smallest amount of metal." As a result, the "A" truss (another name for the king-post) was among those that had become "antiquated."<sup>4</sup> Indeed, in

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<sup>1</sup>Jeffrey A. Hess, "Final Report of the Minnesota Historic Bridge Survey," Part 2, prepared for the Minnesota Historical Society, August 1988, pp. F-8 and F-9.

<sup>2</sup>Rock County Commissioners' Records, 13 July 1908; "Six New Steel Bridges," Rock County Herald, 31 July 1908.

<sup>3</sup>Memorandum of Agreement. January 1990.

<sup>4</sup>J.A.L. Waddell, Bridge Engineering, vol. 1 (New York: John Wiley & Sons, 1916), 468.

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Bridge No. 1482  
Luverne Township, Rock County, Minnesota

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1909, only a year after Bridge 1482 was built, a popular engineering text observed that the king-post truss was "formerly employed for highway bridges of very short span" but was "now rarely seen."<sup>5</sup> Waddell singled out the Pratt and the Warren as among the few truss designs that "survived the test of time." These styles were embraced by the Minnesota Highway Commission for their initial standard plans early in the twentieth century, while the Commission never promulgated plans for the king post. Only seven metal king-post trusses are known to survive in Minnesota, making Bridge 1482 an extremely rare and valuable example of an important early truss type.<sup>6</sup>

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<sup>5</sup>Mansfield Merriman and Henry S. Jacoby, A Text-book on Roofs and Bridges, Part I: Stresses in Simple Trusses (New York: John Wiley & Sons, 1909), 52.

<sup>6</sup>Interview with Matt Lang, Minnesota Department of Transportation, 29 July 1991.



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National Park Service

# National Register of Historic Places Continuation Sheet

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Bridge No. 1482  
Luverne Township, Rock County, Minnesota

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## Bibliography

- Hess, Jeffrey A. "Final Report of the Minnesota Historic Bridge Survey." Minnesota Historical Society, August 1988.
- Lang, Matt. Minnesota Department of Transportation. Interview, 29 July 1991.
- Memorandum of Agreement. January 1990. State Historic Preservation Office, Minnesota Historical Society, Saint Paul, Minnesota.
- Merriman, Mansfield, and Henry S. Jacoby. A Text-book on Roofs and Bridges, Part I: Stresses in Simple Trusses. New York: John Wiley & Sons, 1909.
- Nelson, Charles W. Historical Architect, State Historic Preservation Office, Minnesota Historical Society. Letter to Arnold W. Johnson, Rock County Highway Engineer, 27 June 1990.
- Rock County Commissioners' Records. 13 July 1908. Rock County Auditor's Office, Luverne, Minnesota.
- "Six New Steel Bridges." Rock County Herald. 31 July 1908, c. 6, p. 1; c. 4, p. 7.
- Waddell, J.A.L. Bridge Engineering. 2 vols. New York: John Wiley & Sons, 1916.

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National Park Service

# National Register of Historic Places Continuation Sheet

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Bridge No. 1482  
Luverne Township, Rock County, Minnesota

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## Verbal Boundary Description

The general area is a rectangle 15.7 feet by 29.8 feet, whose long central axis is parallel to the centerline of the bridge.

## Boundary Justification

This boundary encompasses the entire historic resource.