



Chain Lakes Bridge

**United States Department of the Interior
National Park Service**

**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 *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an 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 entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Chain Lakes Bridge

other names/site number _____

2. Location

street & number pedestrian trail over Cedar River not for publication

city or town 4.0 miles west of Hiawatha vicinity

state Iowa code IA county Linn code 113 zip code 45302

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, 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. I recommend that this property be considered significant ___ nationally ___ statewide ___ locally. (___ See continuation sheet for additional comments.)

Signature of certifying official/Title _____

Date _____

State or Federal agency and bureau _____

In my opinion, the property ___ meets ___ does not meet the National Register criteria. (___ See continuation sheet for additional comments.)

Signature of certifying official/Title _____

Date _____

State or Federal agency and bureau _____

4. National Park Service Certification

I hereby certify that the property is:

- entered in the National Register _____
 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): _____

5. Classification

Ownership of Property
(Check as many boxes as apply)

- private
- public-local
- public-State
- public-Federal

Category of Property
(Check only one box)

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

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

Contributing	Noncontributing	
0	0	buildings
0	0	sites
1	0	structures
0	0	objects
1	0	Total

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

Highway Bridges of Iowa

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions
(Enter categories from instructions)

TRANSPORTATION/road-related

Current Functions
(Enter categories from instructions)

TRANSPORTATION/pedestrian-related

7. Description

Architectural Classification
(Enter categories from instructions)

other: pinned Pratt through trusses

Materials
(Enter categories from instructions)

foundation N/A
walls N/A
roof N/A
other N/A

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets)

Located west of Hiawatha, the Chain Lakes Bridge spans the Cedar River in a rural setting that has changed little since the structure's period of significance. A description of the structure follows:

span number: 2 construction date: 1884
span length: 165.0' construction cost: unknown
total length: 370.0' current condition: good
roadway wdt.: 15.0' alterations: chain link fence railings added

superstructure: wrought iron, 9-panel, pin-connected Pratt through trusses, with 2 timber stringer approach spans to the north

substructure: stone (south) and timber (north) abutments and wingwalls with stone and timber pile bent piers

floor/decking: timber deck over timber stringers

other features: upper chord and inclined end post: 2 channels with cover plate and lacing; lower chord: 2 punched rectangular eyebars; vertical: 2 channels with lacing; diagonal: 2 punched rectangular eyebars; center panel counter: 2 looped round eyerods with turnbuckles; adjacent panel counter: 1 looped round rod with turnbuckle; floor beam: tapered "fish-tail" plate girder, U-bolted to superstructure; top and bottom lateral bracing: round rod; portal bracing: 2 angles with bar lattice and diagonals; sway bracing: 2 channels/lacing

Other than maintenance-related repairs and alterations noted above, the bridge remains essentially unaltered as it continues to carry vehicular traffic. The Chain Lakes Bridge today retains a high degree of integrity of location, design, setting, materials, workmanship, feeling and association.

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.

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 of age or achieved significance within the past 50 years.

Narrative Statement of Significance

(Explain the significance of the property on continuation sheets.)

Areas of Significance

(Enter categories from instructions)

TRANSPORTATION

Period of Significance

1884

(The period of significance is derived from the original construction date.)

Significant Dates

1884 (construction date)

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

designer:

Wrought Iron Bridge Company, Canton OH

fabricator:

Wrought Iron Bridge Company, Canton OH

builder:

Wrought Iron Bridge Company, Canton OH

9. Major Bibliographical References

Bibliography

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

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

Primary location of additional data:

- State Historic Preservation Office
other State agency
Federal agency
Local government
University
other
name of repository:

10. Geographical DataAcreage of Property less than one acre**UTM References**

(Place additional UTM references on a continuation sheet)

1 15 601340 4655800
zone easting northing2 15 601340 4655910
zone easting northing**Verbal Boundary Description**

(Describe the boundaries of the property)

The nominated property is a rectangular-shaped parcel measuring 17 feet by 370 feet, which is centered on the UTM point(s) listed above. Included within this rectangular parcel are the bridge's superstructure, substructure, approach spans and floor system.

Boundary Justification

(Explain why the boundaries were selected)

The nominated structure includes the bridge's superstructure, substructure, floor system, any approach spans and the property on which they rest. These boundaries encompass, but do not exceed, all of the property that has been historically associated with the bridge.

11. Form Prepared Byname/title Robert Hybben, Charlene Roise and Michelle Crow-Dolbyorganization Fraserdesign date 31 August 1994street & number 1269 Cleveland Avenue telephone 303-669-7969city or town Loveland state Colorado zip code 80537**Additional Documentation**

Submit the following items with the completed form:

Continuation Sheets**Maps**A **USGS map** (7½ or 15 minute series) indicating the property's locationA **Sketch map** for historic districts and properties having large acreage or numerous resources**Photographs**Representative **black and white photographs** of the property**Additional items**

(Check with the SHPO or FPO for any additional items)

Property Owner

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

name/title Linn County Conservation Commissionstreet & number 1890 County Home Road telephone 319-398-3505city or town Marion state Iowa zip code 52302

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. 470 *et seq.*).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 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 Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects (1024-0018), Washington, DC 20503.

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Section Number 8 Page 1 Chain Lakes Bridge Linn County; Iowa

The Chain Lakes Bridge is a substantial two-span structure over the Cedar River northwest of Cedar Rapids, just south of the small community of Palo. The bridge now serves pedestrians visiting a nature area maintained by the Linn County Conservation Board. A picnic area and boat landing are near the bridge's south approach; the northern bank is heavily wooded. County board minutes are somewhat unclear about the history of this bridge, but planning for it apparently began in the early 1880s. In June 1880 the Board of Supervisors appropriated \$20,000.00 for this two-span, pinned Pratt truss on massive stone abutments and piers. Information regarding bridge construction is not included in subsequent board minutes. Recent file notations, apparently made by the county engineer's office, record the contractor as the Wrought Iron Bridge Company of Canton, Ohio, and the date of erection as 1884. This information came from a now-removed bridge plate. The Wrought Iron Bridge Company was organized by David Hammond in 1864, and incorporated in 1871. It was active in Linn County from at least 1879, receiving contracts for a number of bridges. In 1900, the company was absorbed by the American Bridge Company.

With virtually all of the in-state and national bridge companies promoting it, the pin-connected Pratt through truss was the steel bridge of choice for medium- and large-scale crossings in Iowa in the late 19th century. Thousands of such spans were erected on the state's road system during this period of intense bridge construction activity, and today they remain the most populous structural type remaining from the 19th century. The Chain Lakes Bridge is distinguished among these for its two-span configuration, its early erection date and its outstanding state of preservation.

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**National Register of Historic Places
Continuation Sheet**

Section Number 9 Page 2 Chain Lakes Bridge Linn County; Iowa

Iowa Department of Transportation, Structure Inventory and Appraisal: Structure No. 221850.

Linn County Bridges, Supervisors' Proceedings, 1843-1900: page 149 (July 1879), page 152 (June 1880), and page 164 (June 1881), located at the Linn County Engineer's Office, Cedar Rapids IA.

Victor C. Darnell, *Directory of American Bridge-Building Companies, 1840-1900* (Washington, D.C.: Society for Industrial Archeology), page 48.

Field inspection by Charlene K. Roise, 27 September 1991.