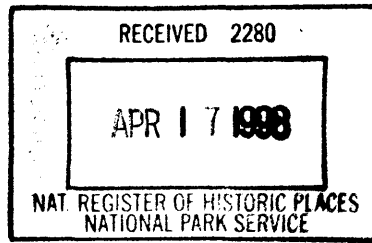


**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Registration Form**



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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 Boone River Bridge

other names/site number _____

2. Location

street & number Buchanan Avenue over Boone River not for publication

city or town 8.5 miles north of Goldfield vicinity

state Iowa code IA county Wright code 197 zip code 50542

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.)

Patricia Orlin DSHPD 4-7-98
Signature of certifying official/Title Date

STATE HISTORICAL SOCIETY OF IOWA
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):

Edson A. Ball 5.15.98

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/road-related

7. Description

Architectural Classification
(Enter categories from instructions)

other: riveted Warren pony truss

Materials
(Enter categories from instructions)

foundation Concrete

walls _____

roof _____

other Steel

Narrative Description

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

Located 8.5 miles north of Goldfield, the Boone River Bridge spans the Boone River in a rural Wright County setting that has changed little since the structure's period of significance. A description of the structure follows:

span number: 1 construction date: 1912
 span length: 96.0' construction cost: unknown
 total length: 128.0' current condition: good
 roadway wdt.: 15.2' alterations: none

superstructure: steel, 6-panel, rigid-connected Warren pony truss with a polygonal top chord; timber stringer approach spans
 substructure: concrete abutments and wingwalls; concrete-filled steel cylinder piers
 floor/decking: timber deck over steel stringers
 other features: upper chord and inclined end post: 2 channels with cover plate and lacing; lower chord: 2 angles with batten plates; vertical: 4 angles with batten plates and outriders; diagonal: 2 angles with batten plates; lateral bracing: round rod with threaded ends; floor beam: I-beam; steel angle guardrails

Other than maintenance-related repairs, the bridge remains essentially unaltered as it continues to carry vehicular traffic. The Boone River 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)

ENGINEERING

Period of Significance

1912

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

Significant Dates

1912 (construction date)

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Bullder

designer:

Iowa Bridge Company, Des Moines IA

fabricator:

Iowa Bridge Co.; Cambria Steel Company

builder:

Iowa Bridge Company, Des Moines IA

9. Major Bibliographical References

Bibliography

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

Previous documentaton 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	<u>15</u>	<u>422700</u>	<u>4745180</u>	2			
	zone	easting	northing		zone	easting	northing

Verbal Boundary Description

(Describe the boundaries of the property)

The nominated property is a rectangular-shaped parcel measuring 17 feet by 128 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 By

name/title	<u>Clayton B. Fraser</u>		
organization	<u>Fraserdesign</u>	date	<u>31 August 1994</u>
street & number	<u>1269 Cleveland Avenue</u>	telephone	<u>303-669-7969</u>
city or town	<u>Loveland</u>	state	<u>Colorado</u> zip code <u>80537</u>

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 location

A Sketch map for historic districts and properties having large acreage or numerous resources

PhotographsRepresentative **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	<u>Wright County</u>		
street & number	<u>P.O. Box 269</u>	telephone	<u>515-532-3597</u>
city or town	<u>Clarion</u>	state	<u>Iowa</u> zip code <u>50525</u>

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 Boone River Bridge Wright County; Iowa

During the first twenty years of the twentieth century, the Iowa Bridge Company was responsible for building most of Wright County's steel bridges. Prior to 1909 the county's board of supervisors awarded contracts for either individual or multiple bridge projects, but in subsequent years the board often issued annual contracts to the Des Moines-based firm. One of the bridges built by IBCo in 1912 was this long-span Warren pony truss, erected over the Boone River north of Goldfield, in Boone Township. Steel for the superstructure was fabricated at the Cambria mills in Pittsburgh; the truss itself was fabricated at IBCo's Des Moines shops. The bridge continues to carry vehicular traffic in its original location, and possesses a high degree of physical integrity.

After about 1910, rigid-connected Warren pony trusses began to supersede earlier pinned Pratt configurations for use on short- to intermediate span highway bridges. Although these bridges displayed variations in their web configurations - some were "pure" Warren configurations without verticals, others had verticals at all or alternate panel points - virtually all of these early Warren trusses featured straight upper chords. A few rigid-connected Warren ponies were fabricated with polygonal upper chords, however. These were comparable to the basic Warren in their load-carrying capacity, but required somewhat less steel in the vertical and diagonal members of the outer panels. As a more materially efficient design, the polygonal-chorded Warren represented a technological refinement over its straight-chorded counterpart. Unlike long-span through trusses, in which the savings of material in a polygonal top chord could be substantial, the relatively modest savings in material in these medium-span pony trusses was more than offset by greater inventory, fabrication and erection costs. As a result, the polygonal-chorded Warren truss never became a mainstay structural type. Those few polygonal-chorded Warrens identified in Iowa have been traced to the Iowa Bridge Company of Des Moines. (The Boone River Bridge in Wright County was built by the firm in 1912.) Soon after the company began fabricating this bridge type, however, the Iowa State Highway Commission issued standardized bridge designs for use on the state's roads. The commission's Warren truss designs, widely adopted by the counties under the directive of the state legislature in 1913, featured straight upper chords. The polygonal Warren configuration was thus rendered obsolete in Iowa soon after it was introduced. The Boone River Bridge is distinguished as a well-preserved example of this uncommon Warren truss subtype.

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

**National Register of Historic Places
Continuation Sheet**

Section Number 9 Page 2 Boone River Bridge Wright County; Iowa

Iowa Department of Transportation, Structure Inventory and Appraisal: Structure No. 359190.

Wright County Board of Supervisors' Minutes, Book 6: page 155 (4 April 1912), located at Wright County Courthouse, Clarion IA.

Field inspection by Clayton Fraser, 15 June 1990.