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 propertial Tablian Tabl

1. Name of Property

3. State/Federal Agency Certification

_ request for determination of eligibility meets the documentation standards for registe	
Historic Places and meets the procedural and professional requirements set forth ir	a 36 CFR Part 60. In my opinion, the
roperty X meets does not meet the National Register criteria. I recommend that	this property be considered significant
mationally 👗 staty vide locally. (See continuation sheet for additional comme	ents.)
tatricia UNINVIN DSHPO	4.7-98
gnature of certifying official/Title	Date
STATE HISTORICAL SOCIETY OF IOWA	
tate 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

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:

ntered in the National Register

- \Box 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):

5.15.99

Date

Muscatine County; Iowa Bridge 5. Classification **Ownership of Property Category of Property** Number of Resources within Property (Check as many boxes as apply) (Check only one box) (Do not include previously listed resources in the count) Noncontributing Contributing private \Box building(s) 0 0 public-local □ district buildinas □ public-State □ site 0 0 sites public-Federal structure 0 1 structures □ object 0 0 objects 1 0 Total Number of contributing resources previously listed Name of related multiple property listing (Enter "N/A" if property is not part of a multiple property listing) in the National Register Highway Bridges of Iowa 0 6. Function or Use **Historic Functions Current Functions** (Enter categories from instructions) (Enter categories from instructions) TRANSPORTATION/road-related TRANSPORTATION/road-related 7. Description Architectural Classification Materiais (Enter categories from instructions) (Enter categories from instructions) other: welded steel rigid frame Concrete foundation walls roof Welded steel other

Narrative Description

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

Located 3.3 miles west of West Liberty, the bridge spans an unnamed stream in a rural Muscatine County setting that has changed little since the structure's period of significance. A description of the structure follows:

span number:	1	construction date:	1937
span length:	34.0'	construction cost:	unknown
total length:	35.0'	current condition:	good
roadway wdt.:	19.9'	alterations:	none

superstructure: welded steel rigid frame, skewed substructure: concrete abutments and wingwalls floor/decking: concrete deck other features: concrete post-and-rail guardrails with solid concrete bulkheads and Art Moderne pylons

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

Bridge

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.)

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

Areas of Significance (Enter categories from instructions)

ENGINEERING

Period of Significance

1937

(The period of significance is derived

from the original construction date.)

Significant Dates

1937 (construction date)

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

designer: Iowa State Highway Commission fabricator: unknown builder: Otto Wendling, Muscatine IA

Primary location of additional data:

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

Bridge	
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10. Geographical Data

Acreage of Property less than one acre

UTM References

(Place additional UTM references on a continuation sheet)

1 <u>15 639800 4603000</u> zone easting northing

zone easting

northing

Verbal Boundary Description

(Describe the boundaries of the property)

The nominated property is a rectangular-shaped parcel measuring 22 feet by 35 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.

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

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A USGS map (7th or 15 minute series) indicating the property's location

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

Photographs

Representative biack and white photographs of the property

Additional Items

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

Property Owner					
(Complete this item at	t the request of SHPO or FPO)				
name/title	Muscatine County				
street & number	3610 Park Avenue West	telephone	319-263-6	351	
city or town	Muscatine	state	Iowa	_ zip code _	52761

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 Bridge Muscatine County; Iowa

Located west of West Liberty, this small-scale steel and concrete bridge carries a gravel-surfaced county road over an unnamed stream. The bridge consists of a single-span steel rigidframe structure, supported on a skew by steel posts embedded in concrete abutments. Although its dimensions are modest - spanning only 35 feet - the structural configuration of the bridge is noteworthy. The four slightly arched beams are made up of steel plates welded continuously to form variable depth I-beams, braced by concrete beam diaphragms. The Iowa State Highway Commission designed the structure in the spring of 1937. Using the ISHC design, Muscatine County solicited competitive proposals and in June awarding a contract for this bridge and two others to Otto Wendling of Muscatine. Presumably completed later that year, this structure has functioned in place since, in unaltered condition.

With notable engineers such as Thomas McDonald and Conde McCullough on its staff, the Iowa State Highway Commission was from the beginning a leader among state highway agencies in the standardization of bridge design. Immediately after it re-organization in 1913, ISHC began developing design standards for several short-span structural types. But within this framework of standardization, ISHC was continuously experimenting with innovative applications of existing and new technologies. This diminutive bridge in Muscatine County is evidently the result of ISHC experimentation. It and the other bridges let in the June 1937 contract employed rigid-frame configurations - this one using welded steel beams and the others reinforced concrete beams. Further research is needed to determine the purpose and circumstances of this exercise, but it appears that the bridge is a formative application by ISHC in welded steel technology. It is today distinguished as the oldest welded beam bridge in Iowa - an important transportation-related resource. United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section Number 9 Page 2 Bridge Muscatine County; Iowa

Iowa Department of Transportation, Structure Inventory and Appraisal, Structure No. 258410.

Iowa State Highway Commission, Weekly Letting Report 25:23 (9 June 1937), Weekly Letting Report 25:24 (16 June 1937), on file at Iowa Department of Transportation, Ames, IA.

Field inspection by Clayton Fraser, 15 December 1992.