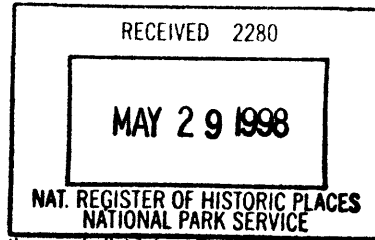


**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Registration Form**



808

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 Mederville Bridge

other names/site number _____

2. Location

street & number _____ county road over Volga River not for publication

city or town Mederville vicinity

state Iowa code IA county Clayton code 043 zip code 52055

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 O'Leary OSHP 5-6-98
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):

John H. Beall 6-25-98

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: concrete open spandrel arch

Materials
(Enter categories from instructions)

foundation Concrete

walls _____

roof _____

other Concrete

Narrative Description

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

Located in Mederville, the Mederville Bridge spans the Volga River in a small-town setting that has changed little since the structure's period of significance. A description of the structure follows:

span number: 1	construction date: 1918
span length: 155.0'	construction cost: \$18,437.92
total length: 156.0'	current condition: good
roadway wdt.: 17.1'	alterations: none

superstructure: concrete open spandrel arch
 substructure: concrete abutments and wingwalls
 floor/decking: concrete deck
 other features: concrete guardrails with slotted cutouts and paneled bulkheads

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

Areas of Significance

(Enter categories from instructions)

ENGINEERING

Period of Significance

1918

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

Significant Dates

1918 (construction date)

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

designer:

Marsh Engineering Co., Des Moines IA

fabricator:

none

builder:

F.E. Marsh and Company, Des Moines IA

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

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 629160 4735590 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 19 feet by 156 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 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** (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 Clayton County
street & number P.O. Box 456 telephone 319-245-1782
city or town Elkader state Iowa zip code 52043

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 **Mederville Bridge** Clayton County; Iowa

This concrete arch bridge crosses the Volga River just outside of Mederville, in Cox Creek Township. Featuring two tapered arch ribs that spring dramatically from concrete pedestals, the bridge spans 155 feet over the deep ravine on the northern edge of the small town. The Mederville Bridge was built as a replacement for an earlier structure at this crossing - a 155-foot, covered timber Howe truss. Designed by Des Moines civil engineer James B. Marsh, its construction was first let for competitive bids in February 1918. When proposals were received in March, the county rejected all as too high. The supervisors re-solicited for bids and in June received proposals from six firms: the Des Moines Bridge and Iron Company, Alfred Olson, Rodies and Bales, the Federal Bridge Company, C.H. Williamson, and F.E. Marsh and Company. After considering the proposals, the supervisors contracted with F.E. Marsh to build the crossing for \$17,454,32, including engineering fees. Presumably completed later that year, the Mederville Bridge has functioned in place since, in unaltered condition.

With the Iowa State Highway Commission and influential Iowa bridge contractors James Marsh and N.M. Stark actively promoting the concrete arch as an economical alternative to the steel truss for wagon bridge construction, Iowa's counties built hundreds of small-scale arches in the 1910s. Few of these structures even approached the 155-foot span necessary for the Mederville crossing, however. For this steep-sided location, James Marsh delineated an open spandrel concrete arch, which was bid competitively with the steel truss designed by the highway commission. By using an open spandrel arch, he could achieve a relatively long span at a reasonable cost, while contributing aesthetically to the small town setting in which the bridge stood. Relatively few open spandrel arches were ever built in Iowa. The Mederville Bridge is technologically noteworthy as one of the earliest open spandrel arches built in the state. It is today exceeded in age by only a couple of open spandrel arches in Des Moines and Iowa City. As it arches gracefully over this wooded valley, the Mederville Bridge is a handsomely proportioned example of this rather uncommon concrete technology.

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

**National Register of Historic Places
Continuation Sheet**

Section Number 9 Page 2 **Mederville Bridge** Clayton County; Iowa

Iowa Department of Transportation, Structure Inventory and Appraisal: Structure No. 119020.

Clayton County Supervisors' Calendar of Causes, Book G: page 106 (7 March 1918), page 111 (5 June 1918) - located at the Clayton County Courthouse, Elkader IA.

Report of the State Highway Commission, 1918, pages 173-74.

Iowa State Highway Commission, **Service Bulletin** 5:7 (July 1918), page 15.

Field inspection by Clayton Fraser, 14 August 1991.