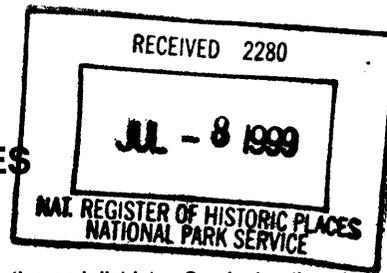


United States Department of the Interior
National Park Service



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 any 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 Dell Rapids Bridge
other names/site number SDDOT Br. No. 50-210-018

2. Location

street & number Local Road over the Big Sioux River not for publication
city or town Dell Rapids vicinity
state South Dakota code SD county Minnehaha code 099 zip code 57022

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, 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.)

Jay D. Vogt
Signature of certifying official

07-01-99
Date

SD SHPO
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 commenting or other official

Date

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:)

Signature of the Keeper Date of Action

John
Edson H. Beall *8.5.99*

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

Contributing	Noncontributing	
<u>0</u>	<u>0</u>	buildings
<u>0</u>	<u>0</u>	sites
<u>1</u>	<u>0</u>	structures
<u>0</u>	<u>0</u>	objects
<u>1</u>	<u>0</u>	Total

Number of contributing resources previously listed in the National Register 0

Name of related multiple property listing (Enter "N/A" if property is not part of a multiple property listing.) Historic Bridges in South Dakota

6. Function or Use

Historic Functions (Enter categories from instructions)

Cat: Transportation Sub: Road-Related

Current Functions (Enter categories from instructions)

Cat: Transportation Sub: Road-Related

7. Description

Architectural Classification (Enter categories from instructions)

Other: Concrete Girder

Materials (Enter categories from instructions)

foundation Concrete
roof _____
walls _____
other Concrete

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

See Continuation Sheets

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.)

- A owned by a religious institution or used for religious purposes.
- B removed from its original location.
- C a birthplace or a 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.

Areas of Significance (Enter categories from instructions)

Engineering _____

Period of Significance

1929 _____

Significant Dates 1929

Significant Person (Complete if Criterion B is marked above)
N/A

Cultural Affiliation N/A

Architect/Builder Designer: Hamilton, Harper J., Builder: Pioneer Bridge Company

Narrative Statement of Significance (Explain the significance of the property on one or more continuation sheets.)

See Continuation Sheets

9. Major Bibliographical References

(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: South Dakota Department of Transportation

Dell Rapids Bridge
Name of Property

Minnehaha County, South Dakota
County and State

Property Owner

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

name _____
street & number _____ telephone _____
city or town _____ state SD zip code _____

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 the 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 Project (1024-0018), Washington, DC 20503.

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Dell Rapids Bridge is located within the city limits of Dell Rapids, adjacent to a park, where it carries a local road over the Big Sioux River. The bridge is aligned on a north-south axis, and consists of five reinforced concrete spans that are termed "cantilever girder" spans on the bridge plans. Overall structure length is 240 feet with a deck width of 31.6 feet. It carries a 24 ft. roadway and a single sidewalk over the Big Sioux River. The two end spans are thirty feet each, the three center spans are sixty feet each. The nine girders are curved on the lower edge, giving the appearance of a false arch. The substructure consists of solid piers and wing-wall abutments with flared, rather than straight, wings on the west side. The east side of each abutment incorporates stairs that give access to and from the sidewalk on the east side of the deck. The railing is a concrete balustrade made of simple cast segments rather than individually turned balusters. Additional aesthetic elements include recessed panels on pilasters above the piers, giving the bridge a general classical revival architectural style. The only alterations include the removal of light standards and a large pipe carried on brackets mounted along the west side of the bridge. The bridge retains excellent integrity.

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The Dell Rapids Bridge is being nominated to the National Register of Historic Places as part of the "Historic Bridges in South Dakota" Multiple Property Nomination. It is related to the historic context of the "Historic Bridges of South Dakota, 1893-1942" and is classified with the associated property type for reinforced concrete highway bridges. This bridge is individually eligible for the National Register under Criterion C as the only example of a reinforced concrete cantilever girder span in South Dakota.

The Dell Rapids Bridge was completed in 1929 and "respectfully dedicated to the early settlers of this community." The bridge was built at a crossing which dates to at least 1874, when the county chartered a ferry at the Dell Rapids crossing of the Big Sioux River. The crossing also had wagon bridges in 1879 and 1883.

The current Dell Rapids bridge was designed by State Highway Commission engineers: J. Harper Hamilton, bridge engineer; L.E. Vercoe, resident engineer; and H.L. Guilliams, inspector. It was constructed by the Pioneer Bridge Company of Mitchell, South Dakota.

The bridge consists of five reinforced concrete spans that are termed "cantilever girder" spans on the bridge plans. The nine girders that make up the bridge are curved on the lower edge, giving the appearance of a false arch. A cantilever girder may be employed to give the appearance of an arch where a true arch construction would not be recommended, and a cantilever may be employed to reduce the depths of the girders at the centers of the spans. In the Dell Rapids Bridge, it may at least be the case that this design provided the aesthetic qualities of an arch for a visible significant location. Additional engineering considerations may also have affected the design choice.

The Dell Rapids Bridge is the only surviving example of a concrete cantilevered girder in South Dakota.

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Bibliography:

Bridge plaque, mounted on bridge and also included in original plans.

Minnehaha County Commissioners Records, February 9, 1874; October 6, 1879; October 1, 1883; and April 1886.

South Dakota State Highway Commission. Plans for "240' Cantilever Girder Bridge...over the Big Sioux River at Dell Rapids, South Dakota" 1928.

George A. Hool and W.S. Kinne, Reinforced Concrete and Masonry Structures (New York: McGraw Hill, 1924), p. 16.

Taylor, Thompson and Smulski, Reinforced concrete Bridges (New York: John Wiley and sons, 1939), Chapter 7, especially pp. 129-132.

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Verbal Boundary Description:

The nominated property consists of a rectangle, 36 feet wide by 245 feet long, whose vertices coincide with the outside corners of the bridge abutments at each end of the bridge, and includes only the bridge superstructure and substructure.

Boundary Justification:

Because the bridge is located on a public road, there are no legal boundary lines for the ends of the bridge. Therefore, these boundaries are drawn to encompass only the superstructure and substructure of the bridge itself.