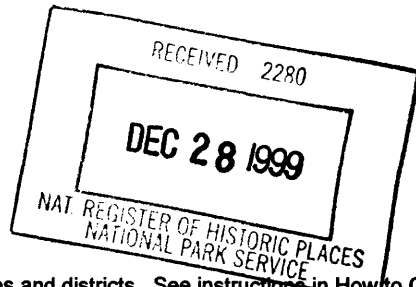


**United States Department of the Interior
National Park Service**

**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 N/A
other names/site number South Dakota Dept of Trans. Br. No. 50-122-155

2. Location

street & number Local road over Skunk Creek not for publication
city or town Brandon Twp. vicinity
state South Dakota code SD county Minnehaha code 099 zip code 57005

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 12-07-99
Signature of certifying official 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 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

for
Wilson H. Seal *1/28/08*

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 N/A

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: Bedstead Pony Truss

Materials (Enter categories from instructions)

foundation Concrete
roof _____
walls _____
other Metal: Steel

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)

Politics/Government
Engineering

Period of Significance

1925-1949

Significant Dates 1925

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

Cultural Affiliation N/A

Architect/Builder State Highway Commission

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

10. Geographical Data

Acreage of Property Less than 1 acre

UTM References

(place additional UTM references on a continuation sheet.)

1	<u>14</u>	<u>670590</u>	<u>4832030</u>	3	_____	_____	_____
	Zone	Easting	Northing		Zone	Easting	Northing
2	_____	_____	_____	4	_____	_____	_____

See continuation sheet

Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet.) See Continuation Sheet

Boundary Justification (Explain why the boundaries were selected on a continuation sheet.) See Continuation Sheet

11. Form Prepared By

name/title Renewable Technologies Inc, and SHPO Staff

organization _____ date June 30, 1999

street & number 510 Metal Bank Bldg telephone 406-782-0494

city or town Butte state MT zip code 59701

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A USGS map (7.5 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 **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 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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National Park Service**

National Register of Historic Places Continuation Sheet

Section number 7 Page 1

Bridge 51-122-155 is located in rural Brandon Township about two miles east of Hartford, where it carries a local unpaved road over Skunk Creek. It was built circa 1925 and is of standard SHC design. Aligned on an east-west axis, the bridge consists of a single riveted, metal bedstead truss main span. Overall length is 90 feet with a deck of 18.3 feet. It carries a 16.3 foot roadway with no sidewalks. The substructure consists of concrete wing-wall abutments with small filled panel concrete tailings over the wing walls. The substructure of the 90 foot span is comprised as follows: the upper cords are built of back-to-back angles with a channel running along the top, forming a "T" section; the vertical end-posts are comprised of paired back-to-back angles, separated at intervals with triple spacer plates, with a continuous steel plated riveted to the exposed outside flanges to form an "I" section; the lower chord and the diagonals are comprised of back-to-back angles separated at intervals with triple spacer plates. All panel intersections are riveted. Cast rocker bearings carry the superstructure on the east abutment. The floor system consists of a concrete deck poured atop the I-beam floor beams with no stringers. The floor beams are riveted to the verticals at the panel intersections with gusset plates. Bottom laterals are angles; sway bracing is accomplished with outside knee braces made of angles. The railings are two channels attached to the inside of the trusses. The bridge retains good integrity.

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National Register of Historic Places

Continuation Sheet

Section number 8 Page 2

Bridge Number 50-122-155 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 "Historic Bridges in South Dakota, 1893-1942" and is classified with the associated property type for iron and steel frame bridges. This bridge is individually eligible for the National Register under Criterion A for its association with the South Dakota Highway Commission (SHC). Bridges designed by the SHC, such as this one, represent the efforts of the state government to improve the quality of bridge construction in South Dakota and break the hold that the bridge building companies had on local government. This bridge is also eligible under Criterion C as a representative example of standardized truss design developed by the SHC. Riveted bedsteads, such as this bridge, were the only pony trusses built in South Dakota after 1919 until roughly 1930. Bridges of this truss type have added significance because they represent the development of a standardized design unique to South Dakota.

Prior to about 1920, South Dakota lacked a coordinated statewide system to control the quality and costs of bridge work in the state. Most of its counties and townships independently carried out their bridge building projects with little coordination except for sharing costs for an occasional county-line road or bridge. Within each county, the commissioners determined the location, need, and plans and specifications for new bridges with little, or as in most cases, no technical expertise themselves or outside technical assistance. Each county seemed to be dominated by a bridge company different from neighboring counties, with the same company receiving bridge contracts in the same county year after year. This was most likely due to illegal pooling arrangements under which various bridge-building firms agreed to divide states among themselves, assigning particular counties to specific firms.

In 1919, however, the state government actively intervened to improve the quality of bridge construction in South Dakota. At this time, the South Dakota State Highway Commission (SHC) established a bridge department, hired a bridge engineer, and gave him responsibility for designing all state and county bridges and supervising the bidding process for bridge construction contracts. The first bridge engineer for the State of South Dakota was John E. Kirkham, a professor of engineering at Iowa State at Ames, and consulting engineer to the Iowa State Highway Commission, among the most innovative state highway departments in the country at the time. In South Dakota, Kirkham sought to reduce the cost of bridge construction and maintenance. He accomplished this in part by developing a series of standardized bridge plans which were especially suited to South Dakota's conditions of climates, terrain, and rural traffic needs.

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One bridge plan devised by Kirkham for the South Dakota SHC was for a bedstead-pony truss. Unique to Kirkham's design was its single-web upper chord in place of the conventional boxed upper chord. To critics, Kirkham argues that his design resulted in cost reductions because it required less material to fabricate both the bridge superstructure and deck. Kirkham's pony truss design also called for concrete abutments with concrete approach guards to protect the ends of the truss. Kirkham believed that vertical end-posts, distinctive of the bedstead truss, with concrete approach guards provided a superior aesthetic design in comparison with other pony truss types. Although SPC pony trusses of Kirkham's design replaced construction of riveted Pratt and Warren pony truss in South Dakota, it was not adopted by other states.

Bibliography:

South Dakota Structure Inventory and Appraisal Sheet, updated September 19, 1986.

Verbal Boundary Description:

The nominated property consists of a rectangle, 23 feet wide by 95 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 the substructure of the bridge itself.