1287

ORECEIVED024-0018 NPS Form 10-900 (Rev. 8-86) OCT 25 1993 United States Department of the Interior National Park Service **NATIONAL** NATIONAL REGISTER OF HISTORIC PLACES REGISTER REGISTRATION FORM ______ 1. Name of Property historic name: Chilson Bridge other name/site number: South Dakota Dept. of Trans. Br. No. 24-162-102 2. Location _______ street & number: Local road over Burlington Northern Railroad not for publication: city/town: Edgemont vicinity: X code: <u>047</u> state: SD county: Fall River zip code: <u>57735</u> 3. Classification ________ Ownership of Property: public-local Category of Property: structure Number of Resources within Property: Contributing Noncontributing buildings _ sites structures _ objects Number of contributing resources previously listed in the National

Name of related multiple property listing: Historic Bridges in South

Register: _0___

Dakota

| | | ======== |
|--|---|--|
| 4. State/Federal Agency Certification | | |
| As the designated authority under the Na of 1986, as amended, I hereby certify the request for determination of eligibility standards for registering properties in Historic Places and meets the procedural set forth in 36 CFR Part 60. In my oping does not meet the National Register sheet. Signature of certifying official | nat this nomination nation nation nation nation national Register land professional required nion, the property | n on of irements meets ntinuation |
| State or Federal agency and bureau | | |
| In my opinion, the property meets _ Register criteria See continuation Signature of commenting or other official State or Federal agency and bureau | | National |
| | | |
| T horeby coutify that this 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): | LM Clelland | |
| | Signature of Keeper | Date of Action |

| USDI/NPS | NRHP Registration Form | Chil | son Bridge | Page 3 |
|---|--|---------|---|------------------|
| 6. Function | ====================================== | | ======================================= | |
| Historic: | Transportation | Sub: | road-related | (vehicular) |
| Current : | Transportation | Sub: | road-related | (vehicular) |
| ******* | | | | |
| 7. Descri | ption | | | |
| Architect | ural Classification: | | | |
| Other | | | | |
| | | | | |
| Other Des | cription: Pratt deck truss | | | |
| Materials | : foundation concrete rock walls oth | | al: steel | |
| Describe parts of the parts of | present and historic physica | al appe | aranceX_ S | See continuation |

| 8. Statement of Significance |
|---|
| Certifying official has considered the significance of this property in relation to other properties: |
| Applicable National Register Criteria: C |
| Criteria Considerations (Exceptions) : |
| Areas of Significance: Engineering |
| |
| |
| |
| Period(s) of Significance: 1929 |
| |
| Significant Dates : 1929 |
| Significant Person(s): N/A |
| Cultural Affiliation: N/A |
| Architect/Builder: |
| |
| |
| State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above. _X_ See continuation sheet. |
| 9. Major Bibliographical References |
| |
| _X_ See continuation sheet. |
| 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 # |

| USDI/NPS NRHP Registration Form | Chilson Bridge | Page 5 |
|--|---|-----------------------|
| Primary Location of Additional Data | a: | |
| State historic preservation office x Other state agency Federal agency Local government University Other Specify Repository: South | | <u>Transportation</u> |
| 10. Geographical Data | | |
| Acreage of Property: <u>less than 1 ac</u> | | |
| UTM References: Zone Easting North | | ing |
| A <u>14</u> <u>602620 479798</u> C | <u>во</u> в <u> </u> | _ |
| See continuation | sheet. | |
| Verbal Boundary Description: S | See continuation sheet. | |
| The nominated property consist feet long, whose vertices coincide abutments at each end of the bridge superstructure and substructure. | with the outside corner | s of the bridge |
| Boundary Justification: See co | ontinuation sheet. | |
| Because the bridge is located boundary lines for the ends of the are drawn to encompass only the sup bridge itself. | bridge. Therefore, the | se boundaries |
| 11 Form December 201 | | ========= |
| 11. Form Prepared By | ======================================= | ======== |
| Name/Title: Jennifer Traeger/Histor | ian and Wayne Rosby/Eng | ineer |

Date: <u>August 1990/9-93</u>

State: MT ZIP: 59701

Telephone: (406)782-0494

Organization: Renewable Technologies, Inc.

Street & Number: 510 Metals Bank Bldg.

City or Town: Butte

NPS Form 10-900-a (8-86)

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NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

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Chilson Bridge

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Chilson Bridge is located 4.0 miles east and 1.8 miles north of Edgemont and carries a local road over a Burlington Railroad rail line. This 103 foot pin-connected, Pratt, deck truss sits on square concrete piers. The bridge has two steel stringer approach spans at each end. Each approach span sits on the main span piers, two square concrete piers and a concrete abutment with wing walls. The main span is comprised as follows: the upper chords consist of two steel channel sections riveted with a continuous steel cover plate along their upper flanges and with lacing bars riveted along their lower flanges; the lower chords consist of four punched steel eye-bars on the three center panels and paired, punched eye-bars on the first and second panels of each end; the verticals consist of steel channel sections riveted with lacing bars, except the hip verticals which are paired, punched steel eye-bars; the diagonals are paired punched steel eye-bars, except on the center pane, at which they are paired, forged, round eye-bars with turn-buckles, as are the counters. The end verticals, at the intersection of the lower chords and the inclined end posts, consist of steel I-beams and extend up to support a floor beam; between the I-beam verticals are angle section cross-bracing and an angle section horizontal brace. There are I-beam floor beams bolted, below the pin-connection of the lower chords, with a U-shaped bolt around the pin and I-beam suggesting that this was once a through truss. The end struts, at the lower chords, between the end verticals consist of two channel sections, flat backs out, riveted with lacing bars. The portal struts consist of two steel channel sections riveted with lacing bars, with angle section knee bracing between the portal strut and the inclined end post. The top struts of the sway bracing consist of paired steel angle sections riveted with lacing bars, with angle section knee bracing between the verticals and the top struts. Top and bottom lateral bracing consists of steel, round rods with turnbuckles. The deck, which is concrete with an asphalt wearing surface, is supported by steel I-beam stringers (the outside ones encased in concrete) which are bolted atop Ibeam floor beams. The floor beams of the approach spans are riveted atop vertical steel I-beams which are bolted to the concrete piers. The approach-span verticals have angle-section bracing between; the southwest span has a horizontal brace just above the concrete piles; the northwest span has angle section cross-bracing between the verticals. The railings are solid concrete, running the full length of the deck.

The bridge retains excellent integrity.

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Chilson Bridge Page 7

Bridge no. 24-162-102 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, 1893-1943" 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 C as the only surviving example of a pin-connected Pratt deck truss in South Dakota.

Deck trusses, which have the roadway connected to the superstructure along the upper chords, were rarely used in South Dakota because they are better suited to crossings where the roadway is high above the river bottom. No 19th century deck trusses survive in South Dakota, but there are two early 20th century deck trusses. One of these 20th Century deck trusses is the Chilson Bridge, built in 1929 as a federal aid project for what was formerly US Highway 18.

9. Bibliography

South Dakota State Highway Department, Plan and Profile of Proposed US Highway No. 18, Federal Aid Project No. 209B, February, 1929.

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National Register of Historic Places Continuation Sheet

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SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: see below Date Listed: 12/09/93

Property Name: see below

County: see below State: South Dakota

<u>Historic Bridges in South Dakota MPS</u>

Multiple Name

The following properties are listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.

Signature of the Keeper

December 9, 1993
Date of Action

Amended Items in Nomination:

Section 3/8. State Certification/Statement of Significance. Certifying official has considered the significance of the following properties to be of <u>state</u> significance.

Reference No. Property County

| 93001295 | Capa Bridge | Jones County |
|----------|----------------------|-------------------|
| 93001287 | Chilson Bridge | Fall River County |
| 93001308 | Eighth Street Bridge | Minnehaha County |
| 93001298 | Esmond Bridge | Kingsbury County |
| 93001317 | Hall Bridge | Spink County |
| 93001274 | Hay Creek Bridge | Butte County |
| 93001264 | Kemp Avenue Bridge | Codington County |
| 93001266 | Larson Bridge | Codington County |
| 93001277 | Minnesela Bridge | Butte County |
| 93001268 | Old Cochrane Bridge | Deuel County |
| 93001281 | Red Shirt Bridge | Custer County |
| 93001300 | Redwater Bridge, Old | Lawrence County |

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National Register of Historic Places Continuation Sheet

| Section number3 | Pa | nge2 | |
|-----------------|---------------------|---|---------|
| 93001269 | South 100 | Dakota Dept. of Transportation Bridge No. Beadle County | 03-338- |
| 93001260 | | Dakota Dept. of Transportation Bridge No. | 03-020- |
| 93001261 | South | Beadle County Dakota Dept. of Transportation Bridge No. | 03-327- |
| 93001270 | | Beadle County Dakota Dept. of Transportation Bridge No. | 05-028- |
| 93001271 | 200 South 170 | Bon Homme county Dakota Dept. of Transportation Bridge No. Bon Homme County | 05-032- |
| 93001272 | | Dakota Dept. of Transportation Bridge No. Bon Homme County | 05-138- |
| 93001273 | | Dakota Dept. of Transportation Bridge No. Bon Homme County | 05-255- |
| 93001276 | | Dakota Dept. of Transportation Bridge No. Butte County | 10-112- |
| 93001275 | | Dakota Dept. of Transportation Bridge No. Butte County | 10-109- |
| 93001278 | | Dakota Dept. of Transportation Bridge No. Charles Mix County | 12-503- |
| 93001265 | | Dakota Dept. of Transportation Bridge No. Codington County | 15-210- |
| 93001279 | | Dakota Dept. of Transportation Bridge No. Carson County | 16-570- |
| 93001280 | | Dakota Dept. of Transportation Bridge No. Custer County | 17-289- |
| 93001282 | | Dakota Dept. of Transportation Bridge No. Davison County | 18-040- |
| 93001283 | | Dakota Dept. of Transportation Bridge No. Davison County | 18-060- |
| 93001284 | | Dakota Dept. of Transportation Bridge No. Davison County | 18-100- |
| 93001285 | South | Dakota Dept. of Transportation Bridge No. Davison County | 18-142- |
| 93001286 | | Dakota Dept. of Transportation Bridge No. Deuel County | 20-153- |
| 93001288 | | Dakota Dept. of Transportation Bridge No. Faulk County | 25-218- |
| 93001262 | | Dakota Dept. of Transportation Bridge No. Faulk County | 25-380- |
| 93001289 | | Dakota Dept. of Transportation Bridge No. Gregory County | 27-000- |
| 93001290 | | Dakota Dept. of Transportation Bridge No. Gregory County | 27-060- |

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| Section number | 3 P | age3 |
|----------------|---------------------|---|
| 93001291 | | Dakota Dept. of Transportation Bridge No. 29-221- |
| 93001292 | 060 South 010 | Hamlin County Dakota Dept. of Transportation Bridge No. 29-279- Hamlin County |
| 93001293 | | Dakota Dept. of Transportation Bridge No. 30-257- Hand County |
| 93001294 | South 110 | Dakota Dept. of Transportation Bridge No. 31-115- Hanson County |
| 93001297 | South 070 | Dakota Dept. of Transportation Bridge No. 39-006- Kingsbury County |
| 93001299 | South 100 | Dakota Dept. of Transportation Bridge No. 39-176- Kingsbury County |
| 93001301 | South 220 | Dakota Dept. of Transportation Bridge No. 44-028- McCook County |
| 93001302 | South 090 | Dakota Dept. of Transportation Bridge No. 44-212- McCook County |
| 93001303 | South 363 | Dakota Dept. of Transportation Bridge No. 47-215- Meade County |
| 93001263 | South 389 | Dakota Dept. of Transportation Bridge No. 47-151- Meade County |
| 93001305 | South 204 | Dakota Dept. of Transportation Bridge No. 48-244- Melette County |
| 93001306 | South 190 | Dakota Dept. of Transportation Bridge No. 49-095- Miner County |
| 93001267 | South 035 | Dakota Dept. of Transportation Bridge No. 50-200- Minnehaha County |
| 93001310 | South 096 | Dakota Dept. of Transportation Bridge No. 56-090- Sanborn County |
| 93001312 | South 090 | Dakota Dept. of Transportation Bridge No. 56-174- Sanborn County |
| 93001311 | South 123 | Dakota Dept. of Transportation Bridge No. 56-117- Sanborn County |
| 93001313 | | Dakota Dept. of Transportation Bridge No. 58-010- Spink County |
| 93001314 | | Dakota Dept. of Transportation Bridge No. 58-021- Spink County |
| 93001315 | | Dakota Dept. of Transportation Bridge No. 58-025- Spink County |
| 93001316 | | Dakota Dept. of Transportation Bridge No. 58-062- Spink County |
| 93001318 | | Dakota Dept. of Transportation Bridge No. 58-120- Spink County |
| 63001319 | | Dakota Dept. of Transportation Bridge No. 58-140- |

Spink County

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63001320 South Dakota Dept. of Transportation Bridge No. 58-218-360 Spink County
63001321 South Dakota Dept. of Transportation Bridge No. 62-220-512 Tripp County
63001322 South Dakota Dept. of Transportation Bridge No. 64-061-199 Union County
93001309 Split Rock Park Bridge Minnehaha County
93001304 Stamford Bridge Minnehaha County
93001307 Summit Avenue Viaduct Minnehaha County
93001296 Van Metre Bridge Jones County

Section 8: Applicable Criteria

93001266 Larson Bridge Codington County

Criterion C should be checked and not A to be consistent with bridge's significance in engineering for its method of construction.

Section 8: Period of Significance

93001266 Larson Bridge Codington County

Period of significance is amended to read "1917" to indicate date of construction and to be consistent with significance in engineering.

93001281 Red Shirt Bridge Custer County

Period of significance is amended to read "1943-1944" to cover the period of construction.

93001278 South Dakota Dept. of Transportation Bridge No. 12-503-230 Faulk County

Due to typographical error, period of significance is corrected to read " 1920-1943."

93001265 South Dakota Dept. of Transportation Bridge No. 15-210-136 Codington County

Period of significance is amended to read "1917" since significance is under criterion C in engineering and the date of construction should be entered.

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93001262 South Dakota Dept. of Transportation Bridge No. 25-380-142 Faulk County

Period of significance is amended to read "1902" because the area of significance is engineering and the period of significance should be based on the date of construction. The bridge was moved from its original site in 1955.

Section 8: Date of Significance

93001308 Eighth Street Bridge Minnehaha County

"1977" is deleted because the date lies outside the period of significance.

93001317 Hall Bridge Spink County

"1904" is deleted because bridge is significant under criterion C for engineering and the move in 1904 falls outside the period of significance which is based on the date of construction and does not appear to have particular importance.

93001286 South Dakota Dept. of Transportation Bridge No. 20-153-210 Deuel County

"1960" is deleted because the date lies outside the period of significance.

93001262 South Dakota Dept. of Transportation Bridge No. 25-380-142 Faulk County

"1955" is deleted because the date lies outside the period of significance.

93001302 South Dakota Dept. of Transportation Bridge No. 44-212-090 McCook County

"1960" is deleted because the date lies outside the period of significance.

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|-----------------------|---------|---|
| 93 | 3001267 | South Dakota Dept. of Transportation Bridge No. 50-200-035 Minnehaha County |
| | | i" is deleted because the date lies outside the period gnificance which is based on the date of construction. |
| 93 | 3001311 | South Dakota Dept. of Transportation Bridge No. 56-117-123 Sanborn County |
| | of s | i" is deleted because the date lies outside the period gnificance and does not appear to have particular tance. |
| | | |

Melissa Dirr, architectural historian, of the South Dakota State Historic Preservation Office was notified of the above-mentioned amendments by telephone on December 09, 1993.

DISTRIBUTION:

National Register property file Nominating Authority (without nomination attachment)