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



## **National Register of Historic Places Registration Form**

NATIONAL REGISTER

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

| 1. Name of Property  |   |                                       |  |
|--|---|---------------------------------------|--|
| historic name<br>other name/site number  | Burwell Bridge<br>North Loup River Bridge; NEHBS Nur  | nber GF00-13                          |  |
| 2. Location  |   | <u> </u>                              |  |
| street & number city, town state NE county   | State Highway 11 over the North Lou<br>north edge of Burwell<br>Garfield  | •                                     | /A not for publication<br>/A vicinity<br>zip code 68823                                  |
| 3. Classification  |   | · · · · · · · · · · · · · · · · · · · |  |
|  | Nebraska Department of Roads structure  ources previously listed in the National Register:  | Contributing 0 0 1 0 1                | urces within Property Noncontributing O buildings O sites O structures O objects O Total |
|  | operty listing: Highway Bridges in Nebras   | ska, 18/0-1942<br>                    |  |
| 4. State/Federal Agence  | cy Certification  |                                       |  |
| Register of Historic Places property meets  Signature of certifying official  State or Federal agency and be   | for determination of eligibility meets the documentate and meets the procedural and professional requirer does not meet the National Register Criteria. | ments set forth in 36 CFR             |  |
| Signature of commenting or of  | ther official   |                                       | Date   |
| State or Federal agency and b  | pureau  |                                       | _  |
| 5. National Park Servi   | ce Certification  |                                       | The the  |
| I, hereby, certify that this present on the Nation see continuation determined eligible fragister see condetermined not eligible National Register removed from the National Register other (explain:) | nal Register ion sheet for the National ontinuation sheet   | Byen                                  | 6/29/92  |
|  | Signature of the Keeper   |                                       | Date of Action   |

## 7. Description Architectural Classification (enter categories from instructions) OTHER / steel stringer bridge foundation N/A walls N/A roof N/A

other

Current Function (enter categories from instructions)

TRANSPORTATION/road-related

N/A

Describe present and historic physical appearance.

Historic Function (enter categories from instructions)

TRANSPORTATION/road-related

6. Function or Use

The Burwell Bridge spans the North Loup River on the northern edge of Burwell. Other than maintenance-related repairs, the bridge remains essentially unaltered as it continues to carry vehicular traffic. The Burwell Bridge today retains a high degree of integrity of location, design, setting, materials, workmanship, feeling and association. A description of the structure follows:

span number: 3 construction date: 1940-41 span length: 110.0' construction cost: \$44,763.28 total length: 290.0' current condition: excellent none

superstructure: steel cantilevered stringer, skewed

substructure: concrete abutments, wingwalls and spill-through piers

floor/decking: concrete deck over steel stringers other features: guardrail: steel, with concrete curbing

## 8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties:

statewide

Applicable National Register Criteria

C Criteria Considerations (Exceptions) N/A

Areas of Significance

Engineering

Period of Significance

1940-41 (The period of significance is derived from the original con-

struction date.)

Significant Dates Cultural Affiliation 1940-41 N/A

Significant Person

N/A

Architect/Builder (Designer)

Nebraska Bureau of Roads and Bridges

(Fabricator)

Omaha Steel Works, Omaha NE

(Builder)

W.A. Biba Engineering Company, Geneva NE

State significance of property, and justify criteria, criteria considerations and areas of significance noted above.

On June 25, 1939, floodwaters washed out the existing Highway 11 bridge over the North Loup River on the northern edge of Burwell. No effort was made to replace the structure until the following winter, when in March 1940 engineers for the Nebraska Department of Roads and Irrigation designed a new steel bridge. The bureau let the project out for competitive bid under Project No. 322-E(1) and in June awarded the construction contract to the W.A. Biba Engineering Company of Geneva, Nebraska. The structure consisted of three steel stringer spans, supported by concrete abutments and piers. With a 30-degree skew, the Burwell Bridge featured a 73-foot span in the center suspended by cantilevered arms from the outside spans, for a maximum span of 109 feet. The structure was massive, consuming some 365,430 pounds of superstructural steel and costing \$44,763.28, including grading and gravel work on the approaches. Biba obtained steel from the Omaha Steel Works, and completed work on the 290-foot structure early in 1941. Since its completion, the bridge has carried vehicular traffic on Highway 11 - Garfield County's principal north-south artery - in essentially unaltered condition.

Just five feet shorter than the Cairo Bridge in Howard County, the Burwell Bridge represents one of the longest cantilevered beam structures identified in the statewide bridge inventory. It is technologically significant for its representation of long-span beam bridge experimentation conducted by the state engineer's office in the 1930s.

For further contextual information regarding bridge building in Nebraska, registration requirements, and property types, see related multiple property listing "Highway Bridges in Nebraska, 1870 - 1942."

| 9. Major Bibliographical References  |
|--|
| Nebraska Department of Roads, Structure Inventory and Appraisal: Structure Number S011 09274 "Special Design for 1-109' and 2-90'6" Cantilevered Spans, Deck Steel Girders, Garfield County Project 322-E (1) 17," original construction drawing by Nebraska Bureau of Roads and Bridges, March 1940 located at Nebraska Department of Roads, Lincoln, Nebraska; Twenty-third Biennial Report of the Department of Roads and Irrigation, Part I, 1939-1940, pp.49, 50, 52, 151; field inspection by Clayton Fraser, 7 July 1989. |
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| See continuation shee  |
| 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 precorded by Historic American Buildings Survey #  Cother State historic preservation office Other State agency Federal agency Local government University Other (specify repository:)  |
| 10. Geographical Data  |
| Acreage of Property less than one acre   |
| Cadastral Reference S13/14, T21N, R16W   |
| USGS Quadrangle Burwell (7.5 Minute Series, 1952) UTM References latitude: 41° 46' 4" longitude: 99° 07' 31"   |
| See continuation shee  |
| Verbal Roundary Department   |
| Verbal Boundary Description  The nominated property is a rectangular shaped parcel measuring 290 feet by 26 feet, which is centered on the coordinates listed above. Included within this rectangular parcel are the bridge's superstructure, substructure, floor system, and approach spans.  |
| See continuation shee  |
|  |
| Boundary Justification 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 this bridge.  |
| See continuation sheet   |
| 11 Form Prepared By  |

## Clayton B. Fraser, Principal Fraserdesign and Hess, Roise and Company 1269 Cleveland Avenue Loveland name/title 30 June 1991 303-669-7969 organization date street & number telephone Colorado zip code 80537 city or town state