United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section number _____ Page _____

SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 89002188

Jack Creek Kingpost Property Name Phillips County

Date Listed: $1/4/9\emptyset$

KS **State**

Metal Truss Bridges in Kansas 1861--1939 MPS Multiple Name

ے ہے ہے بار سے پر جاری کے بیر جاری کے بیر بیر بیر کا اور سے بندی کا بیر کا بیر کا بیر کا ہے کا حال کا دیا ہے بند کا کا بیر کا ہے جاری کر ہے کا ہے جاری کر ہے کا ہے جاری کر ہے کا ہے ج

This property is 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.

Beth Boland

Signature of the Keeper

1/4/90 Date of Action

Amended Items in Nomination:

Item #2, Location: The correct county code is 147.

Item #7, Description: Materials include 1) Metal: wrought iron
or steel; and 2) Wood.

Item #8, Significance: The applicable area of significance is engineering only.

United States Department of the Interior National Park Service

2188

NOV 2 8 1989

National Register of Historic Places Registration Form

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.

| (Form 10-900a). Type all entries | • | | | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------|--------------|-------------|-------------|---------------|----------------------------------------------------------------------------------------------------------------|---------------------------|-----------------|--------------|
| 1. Name of Property | | | | | | | | |
| historic name Jack Cr | | | | | | | | |
| other names/site number J | ack Creel | k Kingpost | | | | | | |
| 2. Location 3.2 miles | couth 1 | milo wort | and 2 mil | on south of | intersection of | 11C 202 C | EAC EDE | |
| | d county | | | es souur or | Intersection of | | for publication | |
| | u councy | LUAU | | | | | | |
| city, town Long Island state Kansas | | KS | | Dhillipo | | | | (7(17 |
| SIBIO NALISAS | code | <u></u> | county | Phillips | eboo | 67 | zip code | <u>67647</u> |
| 3. Classification | | | | | | | | |
| Ownership of Property | | Category of | of Property | | Number of Resources within Property | | | |
| private building(| | q(s) | | Contributing | Nonc | ontributing | | |
| x public-local | | district | | | U | | buildings | |
| public-State | | site | | | the second s | | sites | |
| public-Federal | | × structu | re | | 1 | | structures | |
| | | object | | | | | objects | |
| | | | | | 1 | | Total | |
| Name of related multiple prov | oortu lietir | | | | Alumber of ea | ntributing a | esources previo | |
| Name of related multiple property tal Truss Brudges in Kans | Sas | ıg. | | | listed in the N | | | Jusiy |
| | | | | | insted in the M | ational Re | gister | |
| 4. State/Federal Agency | Certifica | ation | | | | | | |
| Signature of certifying official | | Pe | men | | | N Dat | e. 16,19 | <u>89</u> |
| State or Federal agency and I | bureau | | | | | | | |
| In my opinion, the property | / 🗌 meel | s 🗌 does n | ot meet the | National Regi | ster criteria. | ee continuati | on sheet. | |
| Signature of commenting or o | ther officia | l | | | | Date | 3 | |
| State or Federal agency and I | oureau | | | | | | | |
| 5. National Park Service | Certifica | tion | | | | | | |
| I, hereby, certify that this prop | perty is: | | | | | | | |
| entered in the National Re See continuation sheet. determined eligible for the Register. | National | | Bitt | Bolard | ر . | ngan aka sa ang ggyada ag | 1/4/90 | |
| determined not eligible for National Register. | | | | | | · · | | |
| removed from the Nationa other, (explain:) | - | | | | | | | |

| 6. Function or Use | | | |
|----------------------------------------------------------------------|--------------------------------------------------------|--|--|
| Historic Functions (enter categories from instructions) | Current Functions (enter categories from instructions) | | |
| Transportation: Road Related (Vehicular) Bridge | Transportation Road Related (Vehicular) Bridge | | |
| | | | |
| 7. Description | | | |
| Architectural Classification (enter categories from instructions) | Materials (enter categories from instructions) | | |
| | foundation | | |
| Other: Kingpost Truss | walls | | |
| | roof | | |
| | other <u>Metal: Wrought Iron or Steel</u> | | |
| | | | |

Describe present and historic physical appearance.

The Jack's Creek bridge, erected ca. 1900, is a rivited King Post pony truss. The single span is 39 feet long and 15 1/2 feet wide. The deck rises 9 feet above the stream bed. The bridge is located on a slight bend of the road and sits on a slight northeast-southwest alignment. This is often true with early bridges as this misalignment allowed a right angle approach to the river and a saving of money in both bridge length and amount of fill required.

The members of a truss bridge are designated either as chord members or web members. Chord members are those mainly defining the outlines of the structure and they are termed lower or upper chord members depending on whether they are found at the bottom or the top of the structure. Members between the chords are web members. They are called posts or ties if they sustain compression or tension respectively.

In the King Post truss, the end posts and top chord merge to form two sides, and the lower chord completes the triangle. The end post and top chord sides are in compression while the lower chord side is in tension. The top chords of the Jack Creek bridge are fabricated from sections of channel iron, tied together by single bar lacing. The girders thus formed are topped with an iron cover plate. The king post is made up of angle iron, tied together by bar lattice. The bottom chord is constructed similar to the top chords. One floor beam is attached to the king post. The bridge does not use any sway brace. The floor beam supports the metal beams running the length of the structure. A bar lattice railing runs the full length of the panels, and although somewhat damaged is still intact. The bridge retains a high degree of its structural integrity

| 8. Statement of Significance | | |
|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------|
| Certifying official has considered the significance of this prop nationally | perty in relation to other properties: \mathbf{x} statewide locally | |
| Applicable National Register Criteria | D | |
| Criteria Considerations (Exceptions) | D DE DF DG | 4.7 |
| Areas of Significance (enter categories from instructions) Engineering Transportation | Period of Significance Ca. 1900 Ca. 1900 | Significant Dates Ca. 1900 Ca. 1900 |
| | Cultural Affiliation N/A | |
| Significant Person N/A | Architect/Builder Canton Bridge Company | |

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

The King Post is one of the oldest truss designs, serving well in many medieval buildings. As is evident they served as well as bridges into the 20th century. Its simplicity also establishes its limit. As the length increases so must the height, at the same ratio. It is therefore only practical in short spans.

In Kansas eight King Posts still exist. Although the longest span is 56 feet, the average is closer to 40 feet. Six of the remaining bridges are located in Washington and Phillips counties. Single representatives are located in Brown and Labette counties. This would suggest that the design was more popular in the northeast portion of the state.

No actual construction history of the Jack Creek King Post has presently been located. Such structures were generally quite inexpensive and received little public notice. Bridges of similar design do exist in Phillips county with a builder's plate that identify the structure as having been built by the Canton Bridge Company in Canton, Ohio. The company was heavily marketing small spans of the King Post and Lattice design in the late 19th century. It was selected to be nominated because its all rivited construction suggests that it was a late example of the design, retains an outstanding degree of its integrity, and is a good representative of the class.

The Kansas Department of Transportation (KDOT) carried out a statewide inventory of historic bridges between 1980 and 1983. The bridges to be included were identified through computer printouts developed by KDOT, from information supplied by the counties (since almost all of the historic bridges were located on secondary rather than the primary road system), and by direct observation by field personnel. All bridges were inspected by KDOT personnel to verify the data on file. That information was jointly evaluated by representatives of KDOT, Kansas State Historical Society, and the State Historic Preservation Officer.

See continuation sheet

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section number __8 Page _1

Each structure was evaluated using a points rating system adapted from the points evaluation rating developed by the Ohio Department of Transportation and Ohio Historic Preservation Office. Consideration was given to areas such as age, builder, number of spans, length, special features, history, integrity, surviving numbers, and preservation potential.

In many instances there is little information about individual structures. Often bridge plaques which may have contained information have been removed, or the county's records are not complete or have been destroyed. Due to the large numbers of similar structures there is often little to choose from in differentiating among individual bridges other than condition and the likelihood of preservation.

The purpose of the KDOT study and subsequent evaluation was to identify a representative selection of bridges of each class. Through this approach KDOT and KSHS hope to preserve for posterity some examples of each type.

| Victor C. Darnell, <u>American Bridge Build</u> Society for Industrial Archeology O | ing Companies, Washington, DC: ccasional Publication 4, 1984. |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| David Weitzman, <u>Traces of the Past: A Fi</u> New York: Charles Schribner's Sons, | <u>eld Guide to Industrial Archeology</u> , 1980. |
| James L. Cooper, <u>Iron Monuments to Dista</u> F.H.W.A., Indiana Dept. of Highways N.P.S., 1987. | <u>nt Posterity</u> , DePauw University, , Indiana Dept. Natural Resources, |
| Dan G. Deibler, <u>A Survey and Photographi</u> <u>in Virginia</u> , Charlottesville: Virg Research Council, 1975. | inia Highway & Transporation |
| | 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 # | Primary location of additional data: State historic preservation office Other State agency Federal agency Local government University Other Specify repository: Kansas State Historical Society |
| | |
| 10. Geographical Data | |
| Acreage of property less than one acre | |
| UTM References A [1_4] [4] 6, 2 3 9 5 [4_4]2_1 0, 4_0 Zone Easting Northing C | B L Zone Easting Northing |
| | See continuation sheet |
| Verbal Boundary Description The nominated property is located on the section 26, township 1 south, range 19 we 15 1/2' whose northeast corner is represe the bridge. Beginning at the northeast of southwest, 15 1/2' northwest, 39' northea point of beginning. | est on a tract measuring 39' x ented by the northeast corner of corner, the boundary proceeds 39' |
| Boundary Justification | annan an annan a' annan a' an an an a' a' 1896. Annan 1866 7 agus a' tha dhinn an annan an annan tao a' fhinn Paiste. |
| The boundary includes only that area that the nominated property. | is historically associated with |
| | See continuation sheet |
| 11. Form Prepared By | |
| name/title Larry Jochims | |
| organizationKansas State Historical Society | dateSeptember 20, 1989 |
| street & number <u>120 W. 10th</u> | |
| city or townTopeka | |