

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 an 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 Brown County Bridge #36

other names/site number Hickory Hill Road Bridge; Wrightsman Bridge

2. Location

street & number Hickory Hill Road at the North Fork of Salt Creek
N/A not for publication

city or town Nashville vicinity

state Indiana code IN county Brown code 013 zip code 47448

3. State/Federal Agency Certification

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

Patrick R. Roberts

11/2/93

Signature of certifying official/Title

Date

Indiana Department of Natural Resources

State of 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 certifying official/Title

Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:

Signature of the Keeper

Date of Action

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): _____

Brown County Bridge #36
Name of Property

Brown Co., IN
County and State

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
(Do not include previously listed resources in the count.)

Contributing	Noncontributing	
0	0	buildings
0	0	sites
1	0	structures
0	0	objects
1	0	Total

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing.)

N/A

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions
(Enter categories from instructions)

TRANSPORTATION: road related
(vehicular)

Current Functions
(Enter categories from instructions)

TRANSPORTATION: pedestrian-related

7. Description

Architectural Classification
(Enter categories from instructions)

Other: Pratt through truss

Materials
(Enter categories from instructions)

foundation CONCRETE

walls _____

roof _____

other METAL: steel

WOOD

Narrative Description

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

Brown County Bridge #36
Name of Property

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County and State

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.)

Property is:

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

TRANSPORTATION

Period of Significance

1908 - 1943

Significant Dates

1908

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

Pan-American Bridge Company

Narrative Statement of Significance

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

9. Major Bibliographical References

Bibliography

(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: Indiana Historic Sites and Structures Inventory

United States Department of the Interior
National Park Service

**National Register of Historic Places
Continuation Sheet**

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Brown County Bridge #36, Brown County, Indiana

Description

Brown County Bridge #36 crosses the North Fork of Salt Creek on Hickory Hill Road. Located in a rural setting close to Yellowwood State Forest and Brown County State Park, the bridge is used as part of the Ten O'Clock Treaty Line Trail, a horse and bicycle path joining the two parks. It has been closed to vehicular traffic since November, 1990 (Photos 1 and 2).

The Hickory Hill Road Bridge is a ninety-foot pin-connected Pratt through truss span to the north, and a 31'-9" I-Beam approach to the south. The south end of the truss sits upon an earth-filled steel caisson partly embedded in concrete which also serves as a pier for the approach (Photo 3). The south and north abutments are of steel plate. The bridge has a clearance of twenty-one feet and carries an eleven-and-a-half foot wide wood plank deck (Photo 4).

The six-panel span is carried by inclined end posts and horizontal top chords. Eye-bar hip verticals and intermediate verticals of laced channels extend to U-bolted I-floor beams. Bolts laterally connect additional eye-bars acting as lower chords between each floor beam. Eye-bar diagonals stretch towards the center from top to bottom in each panel. Cylindrical eye-bar counters with turnbuckles reinforce the two most central panels. (Photo 5) Laced beams comprise three intermediate struts. Portal struts and sway bracings are pairs of angles pinned to form T-beams. Top and bottom lateral bracings are rods placed diagonally between struts and top chords, and between floor beams and lower chords. Sets of five I-stringer beams attached between the floor beams support the deck (Photo 6).

A latticed guardrail is fastened to each vertical and terminates on the interior side of each inclined end post. A simple rail on I-beam supports, and with no lattice, extends beyond the truss on the south approach of the bridge.

A plaque attached to the south portal truss identifies the bridge. The construction company and location (The Pan-American Bridge Company; Newcastle, Indiana) is surmounted by the names of the contemporary Brown County Auditor and Commissioners (John B. Seitz, John Newmeister, Martin Kleindorfer and William G. Wray respectively). The date of the bridge's construction (1908) crowns the marker (Photo 7).

The Hickory Hill Road Bridge remains intact, but earth compression has affected the vertical alignment of the steel caisson and plate abutment on the Southern embankment, weakening the structure by placing the lower chord in compression instead of in tension (Photo 8). The bridge was condemned and closed in November, 1990, but was reopened to non-vehicular traffic in October, 1991.

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Brown County, IN

Brown County Bridge #36, Brown County, Indiana

Significance

Brown County Bridge #36 is eligible for inclusion to the National Register under Criterion C for its engineering. The bridge is locally significant as the only Pratt through truss remaining in Brown County, and is regionally important as one of the few surviving spans built by the Pan-American Bridge Company.

Hickory Hill Road, on which the bridge is located, developed from an Indian trail. In Brown County, the Ten O'Clock Treaty line (a boundary based on the sun's shadow-line) established the border of lands relinquished by the Delaware, Potawatomi and Miami following the Treaty of Fort Wayne in September, 1809. Pioneers were present in nearby Schooner Valley by 1820, but Indians remained in the area until well into the nineteenth century. Several of the area's earliest settlers, such as the McGuire and Sturgeon families, cleared farms and built homes on Hickory Hill Road shortly after the county was organized in 1836. Prior to the bridge's construction, a ford was used to cross Salt Creek. When built, Bridge #36 provided smooth access on Hickory Hill Road to Schooner Valley to the south and intersected with Duncan Road to the north, a primary east-west route linking Nashville and Bloomington. On a site approximately one hundred yards from the Hickory Hill Road Bridge stood a mill used by local farmers for grinding corn. Because the Wrightsman family operated the mill and lived nearby, the bridge was sometimes known as the Wrightsman Bridge. The Wrightsman family's former home is the sole building remaining in the area.

The bridge reflects the importance of local roads during a shortlived period of timber-processing and agricultural prosperity around the turn of the century. Unfortunately, logging stripped the land and caused erosion. Never as fertile when compared to other Indiana counties, depleted soils accelerated the decline of area farming. These unfavorable conditions helped halve the county's 1880 population by 1930. Development of State Route 26 (now State Route 46) through Schooner Valley in 1920 relocated traffic away from Duncan Road. The bridge's importance further diminished after 1935 when most surrounding farms were purchased for park lands and the buildings demolished under the dictates of the federal Government's Farm Resettlement Administration.

Brown County Bridge #36 is significant as an example of a Pratt through truss. Patented in 1844 by father and son Caleb and Thomas Pratt, the truss is noted for its vertical elements acting in compression and diagonal components acting in tension. As distinguished in an American Association for State and Local History's booklet on identifying bridges, a pin-connected Pratt through truss is "representative of perhaps the most common type of early twentieth century

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Brown County Bridge #36, Brown County, Indiana

truss bridge."(p. 5) Although bridge scholar James L. Cooper identifies over 350 Pratt through trusses remaining in Indiana in his comprehensive study Iron Monuments to Posterity: Indiana's Metal Bridges, 1870-1930, Bridge #36 is important as the only surviving example in Brown County.

The Hickory Hill Road bridge is also significant as an example of the work of the Pan-American Bridge Company. Pan-American is considered by Cooper to be the last of the Indiana firms which dominated state and regional iron bridge manufacturing for a fifteen year period beginning around 1886. Formed in 1902 in New Castle, Indiana, the Pan-American Bridge Company specialized in building beams and trusses during the first decade of the twentieth century and was responsible for a number of spans in the midwest and south. Like its counterparts, the company largely produced bridges up to the first World War. With the growing dominance of reinforced concrete as a bridge building material, Pan-American gradually switched to other types of construction after 1913. The company did not dominate bridge production to the same extent as larger and earlier competitors, and therefore, few of its bridges survive.

The Indiana Historic Bridge Committee has identified seven Pan-American Bridge Company bridges remaining in Indiana. Of these, four are Pratt through trusses. Brown County Bridge #36 has been rated Outstanding or Notable on the Indiana Historic Bridge Inventory because of the rarity of Pan-American Bridge Company spans.

Once nearly ubiquitous, it is estimated that Indiana's metal bridges are disappearing at an annual rate of five percent. Clearly, the Hickory Hill Road bridge deserves recognition as one of a few examples built by the Pan-American Bridge Company, and as the only Pratt through truss in Brown County.

Although currently used as a horse, bicycle and walking path, the bridge faces a questionable future. The county last completed minor repairs to the bridge in 1979 and 1982, and it suffers from excessive rust and compression of some lower chord members. It has been closed to vehicular traffic since November, 1990. A structural report completed in 1991 by Aecon Engineers for the Brown County Commissioners estimated costs of \$42,000 to stabilize the bridge, but lack of funds to repair and restore the bridge will continue to threaten its existence.

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Brown County Bridge #36, Brown County, Indiana

Bibliography

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Comp, T. Allan, & Donald Jackson. "Bridge Truss Types: A Guide to Dating and Identifying." American Association for State and Local History Technical Leaflet 95, 32: 5, pp. 5-6.

Cooper, James L. Iron Monuments to Distant Posterity: Indiana's Metal Bridges, 1870-1930. Indianapolis: Technical Publishing Services, 1987, pp. 30-32, 55, 118.

HABS/HAER Inventory: Brown County Bridge No. 36. (James L. Cooper, 1984)
Original form located at the Department of Natural Resources, Division of Historic Preservation and Archeology, Indianapolis.

Harden Engineers. Brown County Bridge Reinspection Study & Report. Nashville: 1980.

Hohenberger, Frank M. "From Down in the Hills O' Brown County." Indianapolis Sunday Star. September 27, 1925, p.6; December 5, 1925, p.10; September 4, 1926.

Sturm, Pete. Happenings in Brown County Old Time & New. (Nashville): Brown County Historical Society, 1968, pp. 1-2, 4, 9, 29-30.

Verbal Boundary Description

An area in Section 28 of Washington Township, Brown County, Indiana, including the right-of-way of Brown County Bridge #36 and its superstructure, footings and wingwalls. On either side of Bridge #36, include 20' of the approach right-of-way.

Boundary Justification

The boundary includes the steel truss structure, its historic steel abutments, wingwalls and steel caisson pier.