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United States Department of the Interior
National Park Service

National Register of Historic Places
Registration Form

OCT 24 1994

INTERAGENCY RESOURCES DIVISION
NATIONAL PARK SERVICE

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 County Line Bridge

other names/site number Hancock County Bridge #105

2. Location

street & number County Road 900E over Big Blue River N/A not for publication

city or town Morristown vicinity

state Indiana code IN county Hancock code 059 zip code N/A

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 10-20-94
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:
- 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:)

for
Edson H. Ball
Signature of the Keeper

Entered in the National Register 11.25.94
Date of Action

County Line Bridge
Name of Property

Hancock County, Indiana
County and State

5. Classification

Ownership of Property
(Check as many boxes as apply)

Category of Property
(Check only one box)

Number of Resources within Property
(Do not include previously listed resources in the count.)

- private
- public-local
- public-State
- public-Federal

- building(s)
- district
- site
- structure
- object

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.)

Number of contributing resources previously listed in the National Register

N/A

0

6. Function or Use

Historic Functions
(Enter categories from instructions)

Current Functions
(Enter categories from instructions)

TRANSPORTATION/road-related

TRANSPORTATION/road-related

7. Description

Architectural Classification
(Enter categories from instructions)

Materials
(Enter categories from instructions)

Other: Parker through-truss

foundation CONCRETE

walls N/A

roof N/A

other METAL/iron

ASPHALT

Narrative Description

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

County Line Bridge
Name of Property

Hancock County, Indiana
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.

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 # _____

Areas of Significance

(Enter categories from instructions)

Engineering

Period of Significance

1916

Significant Dates

1916

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

Cameron, Adolphus

Burk Construction Company

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

County Line Bridge
Name of Property

Hancock County, Indiana
County and State

10. Geographical Data

Acreage of Property less than one acre

UTM References

(Place additional UTM references on a continuation sheet.)

1 | 1 | 6 | | 6 | 1 | 7 | 1 | 8 | 0 | | 4 | 3 | 9 | 6 | 2 | 3 | 0 |
Zone Easting Northing
2 | | | | | | | | | | | | | | | | | |

3 | | | | | | | | | | | | | | | | | |
Zone Easting Northing
4 | | | | | | | | | | | | | | | | | |
 See continuation sheet

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title Guy Booth - Community Services Intern

organization Historic Landmarks Foundation of Indiana date 2-18-94

street & number 340 W. Michigan Street telephone 317-639-4534

city or town Indianapolis state IN zip code 46202

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 SHPO or FPO.)

name Hancock County Commissioners

street & number 9 E. Main Street telephone 317-462-1106

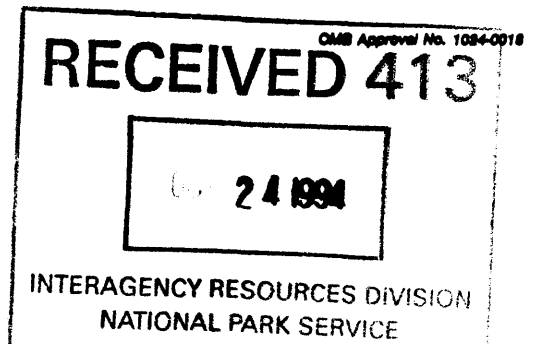
city or town Greenfield state IN zip code 46140

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 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 Projects (1024-0018), Washington, DC 20503.

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National Park Service

National Register of Historic Places Continuation Sheet



Section number 7 Page 1

County Line Bridge, Hancock County, Indiana

County Line Bridge (Hancock County Bridge #105) crosses the Big Blue River in the southeastern portion of the county and services the north-south road that is the line between Hancock and Rush county lines. The bridge is still used by vehicular traffic and is currently the object of a rehabilitation project, still in the planning phases, undertaken by the Hancock County Commissioners. The bridge is a 200 foot Parker through-truss with a clearance of 15' 5" and is considered a single lane bridge because its width is four inches short of the state's minimum required eighteen feet. An engineer's report has pointed out some problems with rust and some members that have separated from the deck, but that the bridge is a good candidate for rehabilitation.

The trusses are comprised of ten panels: each twenty feet wide. (Photo 1) The top chords of the bridge are made of iron I-beams and have seven different slopes. The first slope of the chord is the inclined endpost and changes slope at the second panel. The slope changes again at the third panel, but remains constant through the fourth. The fifth and sixth panels also share the same slope, which is parallel to the bottom chord, and the top chord then descends in the same order as it rises. The bottom chord of the truss is comprised of four pieces of angle iron, riveted together to form an "H" channel. (Photo 2) The verticals in the trusses are made from pairs of I-beams that are connected diagonally by iron straps. This changes between the first and second, and corresponding ninth and tenth, panels where the verticals are made of two pieces of angle stock attached with shorter iron straps. (Photo 3) The diagonals in the trusses are made in the same way as these particular verticals. The outer diagonals, for panels 2, 3, 8, and 9, stand alone, whereas the middle four panels have two diagonals that cross. The verticals and diagonals are connected to the bottom chord by large iron gusset plates, that also serve as the connection points for the floor beams to the chord. (Photo 2) The top chords are connected by panels where the horizontal struts are made from two lengths of angle stock connected by diagonal iron lacing, and individual lengths that cross for the diagonals. (Photo 4)

The 17' 8" wide deck is comprised of 3.5" square timbers that are directly supported by six I-beam and two "C" channels stringers that run the length of the bridge. The deck, at some point, has been asphalted over. The stringers are supported by nine large I-floor beams that are connected to the trusses by the gusset plates. The guard-rails for the bridge are latticework-connected angle stock that are bolted to angles that are riveted to the I-beam verticals. (Photo 5) The bridge is seated into large concrete abutments that are supported by wood pilings.

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Section number 7 Page 2 County Line Bridge, Hancock County, Indiana

The bridge is in good condition, but the engineer's analysis noted a problem with general rust along the stringers and some of the lateral bracing has deteriorated to the point of falling off. The same rust problem has been noted about the floor beams, but the connections to the gusset plates have remained clean. A large amount of dirt and debris has accumulated in the members of the bottom chord, due to their arrangement. The general alignment of the bridge has remained satisfactory, even with the weakened lateral bracing. The bearing seats for the trusses are in good condition, but the north abutment has undergone scour and has exposed the wood pilings. (Photo 6) The report filed by the engineer was used in consideration of the rehabilitation of the bridge.

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Continuation SheetSection number 8 Page 3 County Line Bridge, Hancock County, Indiana

County Line Bridge (Hancock County Bridge #105) is eligible for inclusion to the National Register under Criterion C for its engineering. The bridge is extremely significant as the longest, still surviving Parker through-truss bridge built before the First World War, in Indiana. It is also locally important as the only example of its type found in Hancock County. The bridge is also representative of the advances made in the bridge construction industry around the turn of the century with its notable lack of I-beams, replaced with angle stock, much of which was manipulated and riveted in the field.

The north-south county line road, separating Hancock and Rush counties, notably absent from the 1876 atlas of the state of Indiana, was a significant road, nonetheless, due to the fact that the bridge servicing it previous to 1916 was constructed of iron which required a large investment indeed. During the flooding of January 1916, the bridge, which was deteriorated by some accounts, was washed out. The loss of the bridge concerned the Rush County Commissioners more than their counterparts in neighboring Hancock County. When asked for a joint meeting of the two groups, the Hancock Commissioners elected to have the session two months later in April. In the interim, the Rush County fathers had the county engineer, Adolphus Cameron, draw up plans and specifications for the new bridge, and the group also allocated \$15,000 for its construction. When the two commissions finally met, the Hancock commissioners quickly agreed to accept their directives.

After bids were gathered, the firm chosen to build the new bridge was the Burk Construction Company of New Castle, Indiana. The Burks' bid of \$11,000 was the lowest and they agreed to have the bridge completed by October 1, of that same year. The actual designer of the bridge is still a bit of conjecture. Adolphus Cameron did draw up the preliminary plans, and with a degree in Civil Engineering from Purdue University, he was probably able to come up with a fairly specific design. The Burks', having the Pan-American Bridge Company as their home-base fabricator, had a good designer, Warren Converse, working with them. It is probably the case that both Cameron and Converse's knowledge and talent were combined to design this large, complicated bridge.

The County Line Bridge is an example of a Parker through-truss - the only one found in Hancock County, and one of less than thirty that still survive in Indiana. The Parker truss is essentially a modified Pratt truss. The Pratt truss is noted for its vertical components acting in compression and the diagonals in tension, and the Parker truss has the same features, but the top chord is polygonal rather than straight.

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County Line Bridge, Hancock County, Indiana

James L. Cooper, author of the comprehensive survey Iron Monuments to Posterity: Indiana's Metal Bridges, 1870 - 1930, noted, in a separate history of this particular bridge, a few unusual design elements. The width of the panels, at twenty feet, is just eight inches short of the longest panel width of all of Indiana's extant pre-1930 Parker through-trusses. At the same time, the top chord of the bridge, at the middle two panels, is parallel to the bottom chord which is a feature more normally associated to the five slope chord of the Camelback bridge.

It is Cooper's history that also brings to light the important advances in bridge construction. The foremost of these is the lack of I-beams in the design of the bridge. The majority of these components are found in the deck of the bridge, and the only truss I-beams are found in the top chords and the verticals. The rest of the truss, including all bracing and webbing, are made of various sizes of angle and flat stock. At the same time, the trusses of this bridge were too long to have been completely constructed at the shop and then transported to the site. Therefore, the entire length of the trusses must have been field-riveted. As Cooper notes, "...while field-riveting was not unusual by 1916, riveting connections for trusses as long and heavy as these on the site was still a tricky business for highway bridge erectors." (pg. 6)

While the sheer length of this bridge added to its age makes it a remarkable example of excellent engineering, the additional advances in bridge fabrication it represents clearly denotes a need for recognition. In November of 1993, the Hancock County Commissioners voted to rehabilitate this important bridge.

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**National Register of Historic Places
Continuation Sheet**

Section number 9 Page 5 County Line Bridge, Hancock County, Indiana

Barker, James. Inspection Report: Hancock County Bridge #105.
Unpublished, 1993.

Cooper, James L. County Line Bridge over the Big Blue River (Hancock
County Bridge #105). Unpublished, 1993.

---. Iron Monuments to Distant Posterity: Indiana's Metal Bridges,
1870-1930. Indianapolis: Pierson Printing, 1987.

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National Register of Historic Places Continuation Sheet

Section number 10 Page 6 County Line Bridge, Hancock County, Indiana

Verbal Boundary Description:

The County Line Bridge is located on County Road 900E which is the county line between Hancock and Rush county. The bridge is approximately 4000 feet north of the Hancock - Shelby county line. The boundaries include the bridge in its entirety and an additional fifteen feet of road on each side of the bridge, starting from the bottom of the endposts.

Boundary Justification:

These boundaries have been chosen to ensure the inclusion of the entire bridge and any below-ground sections of the concrete abutments.