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.

5-53383
N/A □ not for publication
N/A □ vicinity
zip code
nomination al Register of the property t for additional
Λ
Date of Action / 2 - 17-98

Ohio Street Bridge			Vanderburgh IN		
Name of Property	,	County and State			
(Check as many boxes as apply) private	ategory of Property (Check only one box) building	(Do not include po	esources within Propert reviously listed resources in the Noncontributing		
✓ public-local✓ public-State✓ public-Federal	☐ district☐ site☐ structure☐ object☐	0 0 1 0	0 0 0 0 0	sites structures objects Total	
Name of related multiple prop (Enter "N/A" if property is not part of a	-	Number of contribu in the National Regi	ting resources previous ister	sly listed	
N/A		0		×	
6. Function or Use					
Historic Functions (Enter categories from instructions) TRANSPORTATION:	Road-Related (vehicular)	Current Functions (Enter categories from insti		Not in use	
7. Description					
Architectural Classification (Enter categories from instructions)		Materials (Enter categories from ins	structions)		
OTHER:	Pratt through truss	foundation	STONE		
		walls			
		roof			
		other	IRON		

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

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Ohio Street Bridge

The Ohio Street Bridge (Vanderburgh County Bridge Cy3), completed in 1891, is located in Evansville, Vanderburgh County, Indiana. The bridge formerly carried Ohio Street across Pigeon Creek at the point where the creek flows into the Ohio River (photo 1). A replacement bridge was constructed 300 feet upstream in 1996. The historic bridge remains in its original location but is closed to traffic. Immediately adjacent to the bridge to the north is the Louisville and Nashville Railroad Bridge, a Parker through truss built in 1908 by the American Bridge Company (53384).

The Ohio Street Bridge is a single-span, pin-connected, Pratt through truss. The bridge is constructed of steel, with some cast iron elements. It is seated on cut sandstone abutments and wing walls (photos 1, 6). The bridge has a span of 198 feet, a roadway of 24 feet, a vertical clearance of 21 feet and an underclearance of 29 feet. The top chord members and the portal frame diagonal members are compression members and are fabricated of plate and angles riveted together to form rectangular box sections. The top chords are two feet deep and one foot, 10 inches wide (photos 2, 3, 4).

Each truss has eleven 18-foot panels (photo 4). Each of the vertical members that define these panels is fabricated of two structural channels tied together with lattice bars on the flanges. A horizontal strut intersects at the mid-height of the vertical members of each truss. The diagonal tension members in the second, third, ninth, and tenth panels are steel eye bars. The diagonal members in the fourth, fifth, sixth, seventh and eighth panels are round steel rods with eye sockets at each end.

The bottom chord member of the truss are two steel eye bars that are attached to the steel pins at the ends of the floor beams (photo 6). The floor beams are 30-inch deep "I" beams. Eleven floor stringers span 18 feet from floor beam to floor beam and support the steel, open grate deck. The stringers were replaced in 1977. The deck was installed in 1963. The horizontal bracing in the plane of the bottom chord is steel rod "X" bracing. The top chord is strutted at each panel point with an "X" latticed strut. There is horizontal rod "X" bracing in the top chord plane.

There were originally two metal panels each on the portal struts (photos 2, 3). The left panel had the names of the county commissioners in office when the bridge was contracted. The right panel had "PITTSBURGH BRIDGE CO. 1891." The right panels are extant on both portal frames. The left panels have been removed.

The bridge carries a city water line on the south truss, a sewage sludge line on the north truss, and a four-foot, grated, pedestrian walkway on each side. The north walkway (photo 5) has a lattice railing and decorative, cast-iron newel posts. The walkway on the south side (photo 1) is missing its railing. Otherwise, the structure has good integrity and retains most of its original members.

Ohio S	treet Bridge	Vanderburgh IN		
Name of	f Property	County and State		
8. Sta	tement of Significance			
	cable National Register Criteria x" in one or more boxes for the criteria qualifying the property onal Register listing.)	Areas of Significance (Enter categories from instructions)		
	Property is associated with events that have made	ENGINEERING		
⊠ A	a significant contribution to the broad patterns of our history.	TRANSPORTATION		
□В	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.	Period of Significance		
_ D	Property has yielded, or is likely to yield, information important in prehistory or history.			
		Significant Dates		
	ia Considerations " in all the boxes that apply.)	1891		
	Property is:			
_ A	owned by a religious institution or used for religious purposes.	Significant Person (Complete if Criterion B is marked above)		
□В	removed from its original location.	N/A		
C	a birthplace or grave.	Cultural Affiliation		
D	a cemetery.	N/A		
E	a reconstructed building, object, or structure.	N/A		
□F	a commemorative property.			
□G	less than 50 years of age or achieved significance			
	within the past 50 years.	Architect/Builder		
		Pittsburgh Bridge Company		
		Eigenmann & Hollerbach		
Narrat (Explain	tive Statement of Significance the significance of the property on one or more continuation sheets.)			
9. Maj	or Bibliographic References			
Biblio (Cite the	graphy books, articles, and other sources used in preparing this form of us documentation on file (NPS):	n one or more continuation sheets.) Primary location of additional data:		
□ pre CFF	liminary determination of individual listing (36 R 67) has been requested	State Historic Preservation Office		
pre	viously listed in the National Register	Other State agency		
	viously determined eligible by the National gister	Federal agency		
	ignated a National Historic Landmark	Local government		
rec	orded by Historic American Buildings Survey	University		
rec	orded by Historic American Engineering	☐ Other		
Red	cord #	Name of repository:		

Name of Property	County and State
10. Geographical Data	
Acreage of Property <1	
UTM References (Place additional UTM references on a continuation sheet.)	
1	Zone Easting Northing 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 Laura Thayer, Historic Preservation Consultant	, for
organization Evansville Department of Parks and Recreati	on date <u>9-5-97</u>
street & number 3905 N. 500 W.	
	state IN zip code 47201
Additional Documentation	
Submit the following items with the completed form:	
Continuation Sheets	
Maps A USGS map (7.5 or 15 minute series) indicating the	a property's location
A Sketch map for historic districts and properties ha	
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 James A. Hadden, Executive Director, Evansville	Department of Parks and Recreation
street & number 100 E. Walnut Street, Lower Level	telephone 812/424-6921
city or town Evansville	state IN zip code 47713

Vanderburgh

Ohio Street Bridge

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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Ohio Street Bridge

The Ohio Street Bridge is significant under Criterion C, in the area of Engineering; and under Criterion A, in the area of Transportation. The bridge is the longest single-span Pratt through truss in the state, and the oldest of a small number of extant historic iron bridges in Vanderburgh County. From the time of its construction until it was closed last year, it was an important link between the west and east sides of Evansville, which are separated by Pigeon Creek. The Ohio Street Bridge was rated "outstanding" by the Indiana Historic Sites and Structures Inventory, conducted in Vanderburgh County in 1994. The statewide historic metal bridge survey, published in 1987, placed the structure in the Historic Bridge Pool.

History

A ferry, kept by Mrs. Nellie Sweezer, was established at the mouth of Pigeon Creek in 1820. The first bridge was a wooden bridge completed in 1841. The 1841 bridge was replaced by a new wooden bridge in 1850.

In the ensuing years, Evansville became an important shipping and warehousing center as the city's transportation capabilities increased. An Ohio River port since its founding, it attracted several railroad lines starting in the 1850s, and became the terminus for the Wabash and Erie Canal in 1853. By 1870, with a population of 21,830, it had become the second largest city in the state (after Indianapolis), and was known for the manufacture and/or shipping of wholesale drugs, tobacco, hogs, coal, and a myriad of other products.

Additional bridges across Pigeon Creek were completed as the city expanded to the north. Wooden bridges were completed on Franklin Street in 1860 and on Maryland Street in 1870. The three bridges that handled the city's vehicular traffic across the creek were positioned about six blocks apart. In an 1888 bird's eye view, the three are shown as covered wooden bridges. In the same drawing, two iron truss railroad bridges cross Pigeon Creek, illustrating that the railroad companies were ahead of local governments in building iron bridges.

By 1890, the population of Evansville had reached 50,756, more than double the figure recorded for 1870. With such rapid growth, the need for reliable roads and bridges was great. Wooden bridges were frequently in need of repair. In the City Council meetings of 1889, the findings of a bridge inspection committee were recorded. The following except reveals the condition of the old wooden bridge on Ohio Street:

"... we have visited the bridge in company with the city surveyor and made an examination of it. We find that the bridge is in a very bad condition. The trestles are

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Ohio Street Bridge

badly out of line and out of plumb. The lower cords are in a very bad condition and have been spliced in many places. The East abutment is badly cracked and settled. One of the piers was washed out several years since and replaced with a wooden [?]. We find that the City Council condemned the bridge about three years since, it being very unsafe, but it was repaired by the City at considerable expense as the Commissioners would not erect a new bridge on account of a controversy in regard to the location, etc."

The Commissioners now had to concede that a new bridge was necessary. Within the next few months, specifications were prepared by the city surveyor, August Pfafflin (1857-1935). Pfafflin was a local civil engineer who served a number of times during his career as city and county surveyor.

An Evansville company, Eigenmann & Hollerbach, was selected to build the stone abutments for the bridge. John G. Eigenmann (1837-1907) was the senior partner of the firm, which built bridges, locks, dams, and dikes all along the Ohio River, as well as many of the brick streets of Evansville. Eigenmann & Hollerbach's bid for the work was \$30,000.

A large number of companies bid on the structure specified to replace the 1850 bridge. Among them are firms which are familiar names in the history of iron bridge building in Indiana: the King Iron Bridge and Manufacturing Company, the Massillon Bridge Company, and the Wrought Iron Bridge Company. The firm that was awarded the contract, however, was the Pittsburgh Bridge Company, a prolific bridge builder, but not in Indiana, where only a few Pittsburgh bridges were erected.

The present Ohio Street Bridge was completed in 1891. It was in continuous use until 1996. The City currently has plans to rehabilitate the structure and convert it for use as a pedestrian bridge in the proposed Pigeon Creek Greenway Passage. Storyboards illustrating the history and significance of the bridge will be placed in the vicinity. The structure will be named the Joan Marchand Overlook in memory of Ms. Marchand, who made a significant contribution to historic preservation in Evansville.

Transportation Significance

The iron bridge was an important component of transportation improvements on Indiana railroads and highways in the late nineteenth century. Most of the early bridges had been wood. Wooden bridges became inadequate for the longer, faster trains in the late

¹ Report of the Committee on Sewers and Bridges, Minutes of the City Council, Evansville, Indiana, 16 September 1889.

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Ohio Street Bridge

nineteenth century era of railroad expansion. The railroad companies laid the groundwork for the age of the iron bridge, hiring the engineers who designed the trusses, and providing business for the many companies that would be established to fabricate the spans. By 1870, the railroads were building iron bridges to the exclusion of stone or wood bridges.

County commissioners were slower to move from wood to iron. Because of a propensity for elected officials to economize, bridges often took long periods of time to be approved and built on roads under their jurisdictions. Good roads with adequate bridges, however, became a public concern as commerce and industry grew in the late nineteenth century. By the late 1880s, iron bridges were beginning to be preferred over wooden bridges. Between about 1890 and about 1905, nearly all highway bridges were constructed of metal.

Evansville was the second largest city in Indiana at the time the Ohio Street Bridge was constructed, in 1891. The bridge was an important crossing that connected the city's east and west sides. Located at the mouth of Pigeon Creek, it served commerce along the Ohio River, where a large number of industries and warehouses were located. The bridge was important both to vehicular traffic, and as a means for pedestrians to reach their workplaces.

Most pre-World War II spans in Evansville have been replaced. The remaining historic road bridges, in addition to the Ohio Street Bridge, are: the Franklin Street Bridge over Pigeon Creek (53730), a concrete bridge completed in 1932; and the Fifth Avenue Bridge over Pigeon Creek (535050), a Parker through truss built in 1936. The Fifth Avenue Bridge is scheduled for replacement by the County Engineering Department.

Engineering Significance

The Ohio Street Bridge is a significant example of a Pratt through truss in Indiana. At 198 feet, it is the longest single-span highway Pratt through truss in the state. The bridge is also significant as the oldest, and one of a small number, of surviving historic iron truss bridges in Vanderburgh County. The bridge has good integrity and retains most of its original fabric. According to the HABS/HAER inventory form completed by Dr. James Cooper for the bridge in 1984, its "members are especially heavy and its special horizontal member is unique."

Iron truss were first widely used by the railroad companies in the late nineteenth

² U.S. Department of the Interior, HABS/HAER Inventory Form for Vanderburgh County Bridge #3, Evansville, Indiana, 1984.

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Ohio Street Bridge

century. Starting in the 18770s, they were used on Indiana roads as well. Most of the major truss types were designed by civil engineers employed by railroad companies. The truss that would become the most popular type for railroad and highway bridges was designed in 1844 by Caleb and Thomas Pratt.

The Pratt truss resembled the Howe in appearance, but was structurally superior. A Pratt truss could be executed in wood or iron, and bridges of the latter were rare until after the Civil War. Improved variously over the years, the Pratt truss as employed for iron bridges had been perfected by the mid-1870s. A Pratt through truss has two trusses that are connected at the top. Each truss is composed of a top and bottom chord, inclined endposts, vertical posts, and counter bracing.

An inventory of historic metal bridges in Indiana was published in 1987.³ Bridges inventoried were unrated, or given one of the following ratings as a measure of historic significance:

NRL Listed on the National Register of Historic Places

NRD Part of National Register District

NRR Recommended for the National Register

NRC Indiana Historic Bridge Committee Candidate for the National Register

HBP Indiana Historic Bridge Committee Pool

ISN Outstanding or Notable on the Indiana Historic Sites and Structures Inventory

BSN Outstanding or Notable on the Indiana Historic Bridge Inventory

The ratings NRL, NRR, and NRC indicated bridges that appeared to be individually eligible for listing in the National Register of Historic Places. Bridges rated HBP were designated for inclusion in an "Historic Bridge Pool." Bridges in this last category could increase in importance and possibly be eligible for listing on the National Register if additional information became available about the bridge that established a greater degree of significance, or if more significant bridges (bridges with NRL or NRC ratings) were removed.

At the time the historic metal bridge survey was conducted, 350 Pratt through trusses were extant in the state. Three-quarters of the Pratt through trusses surveyed were pinned. They varied in length from about 70 to about 200 feet. The oldest extant Pratt through truss identified was Martin County Bridge #79, which was built in 1877.

³ James L. Cooper, *Iron Monuments to Distant Posterity: Indiana's Metal Bridges*, 1870-1930, Indiana Department of Natural Resources, 1987.

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Ohio Street Bridge

In the survey, 16 Pratt through truss bridges were rated NRL or NRC. (There were no Pratt through trusses rated NRR.) At least eight of these have been removed since the survey was conducted. An additional 19 Pratt through truss bridges were identified in the survey as HBP. At least seven of these have been removed since the survey was conducted. Two additional bridges with the HBP ratings are scheduled for replacement. A table summarizing the status of NRL, NRC, and HBP Pratt through truss bridges is attached.

In Vanderburgh County, the number of historic iron truss bridges of all types has decreased in the past few years. Of 10 such bridges identified in the county survey and/or the historic metal bridge survey, five are extant. Of the five which have survived, two are scheduled for replacement over the next two years: the Fifth Avenue Bridge over Pigeon Creek (53505), and the Maasberg Road Bridge over Buente Creek (05048).

Two historic iron truss bridges in the county – other than the Ohio Street Bridge – have not been replaced and are not now scheduled for replacement. The Heckel Road Bridge over Bluegrass Creek (15078) is a Pratt through truss built in 1893 by the Columbia Bridge Company. It was rated outstanding in the Indiana Historic Sites and Structures Inventory, and BSN in the historic metal bridge survey. The Louisville and Nashville Railroad Bridge over Pigeon Creek (53384) is a Parker through truss built by the American Bridge Company in 1908. It was rated outstanding in the Indiana Historic Sites and Structures Inventory, and HBP in the historic metal bridge survey.

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Ohio Street Bridge

"A. Pfafflin, 77, Engineer, Dies Early Monday," The Evansville Journal, 7 January 1935.

"Barricades Put on Two Bridges," Evansville Press, 23 January 1937.

"Bids Rejected," Evansville Journal, 8 August, 1890.

"Carbuncle Causes Death of Prominent Contractor," *Evansville Journal-News*, 30 April 1907.

Cooper, James L. Iron Monuments to a Distant Posterity: Indiana's Metal Bridges, 1870-1930. Indianapolis: Indiana Department of Natural Resources, 1987.

Evansville City Council Records, 1889.

"Evansville's Popular City Engineer," Evansville Journal-News, 28 April 1912.

Gilbert, Frank M. *History of the City of Evansville and Vanderburgh County, Indiana*. Chicago: The Pioneer Publishing Company, 1910.

Historic Landmarks Foundation of Indiana. *Vanderburgh County Interim Report*. Indianapolis: Indiana Department of Natural Resources, 1994.

History of Vanderburgh County, Indiana. Brant and Fuller, 1889.

Koch, John F.W., "Ohio Street Bridge Description," 16 April 1996.

"The New Ohio Street Bridge," Evansville Journal, 25 July 1890.

U.S. Department of the Interior, HABS/HAER Inventory Form for Vanderburgh County Bridge #3, Evansville, Indiana, 1984.

Vanderburgh County Commissioners' Records, 1839-1854, 1887-1893.

National Register of Historic Places Continuation Sheet

Section No. 10

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Ohio Street Bridge

Verbal Boundary Description

The boundary for the property consists of the 1891 Ohio Street Bridge, abutments, and ten feet beyond the bridge at each end.

Boundary Justification

This is a sufficient boundary to define the resource.

Photographs

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Ohio Street Bridge

Information for all photographs is as follows, except as noted:

- 1. Ohio Street Bridge
- 2. Evansville, Vanderburgh County, Indiana
- 3. Laura Thayer
- 4. April 1997
- Division of Historic Preservation and Archaeology 402 W. Washington Street, Room W274 Indianapolis, IN 46204

Additional information for individual photographs:

Photo 1

- Ohio Street Bridge (Louisville and Nashville Railroad Bridge on left)
- 6. Looking northeast
- 7. 1 of 6

Photo 2

- 1. West Portal
- 6. Looking east
- 7. 2 of 6

Photo 3

- 1. East Portal
- 6. Looking west
- 7. 3 of 6

Photo 4

- 1. Detail of truss
- 6. Looking southeast
- 7. 4 of 6

Photo 5

- 1. North walkway
- 6. Looking west
- 7. 5 of 6

Photo 6

- 1. Detail under north walkway
- 6. Looking southwest
- 7. 6 of 6

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION
PROPERTY Ohio Street Bridge NAME:
MULTIPLE NAME:
STATE & COUNTY: INDIANA, Vanderburgh
DATE RECEIVED: 11/16/98 DATE OF PENDING LIST: 12/01/98 DATE OF 16TH DAY: 12/17/98 DATE OF 45TH DAY: 12/31/98 DATE OF WEEKLY LIST:
REFERENCE NUMBER: 98001523
NOMINATOR: STATE
REASONS FOR REVIEW:
APPEAL: N DATA PROBLEM: N LANDSCAPE: N LESS THAN 50 YEARS: N OTHER: N PDIL: N PERIOD: N PROGRAM UNAPPROVED: N REQUEST: N SAMPLE: N SLR DRAFT: N NATIONAL: N
COMMENT WAIVER: N
VacceptRETURNREJECT12·17·98 DATE
ABSTRACT/SUMMARY COMMENTS: Butered in the Hational Register
RECOM./CRITERIA
REVIEWER DISCIPLINE
TELEPHONE DATE

DOCUMENTATION see attached comments Y/N see attached SLR Y/N



Ohio Street Bridge Evansville, Vanderburgh Co, IN 1 of 6



Ohio Street Bridge Evansville, Vanderburgh Co, IN 2 of 6



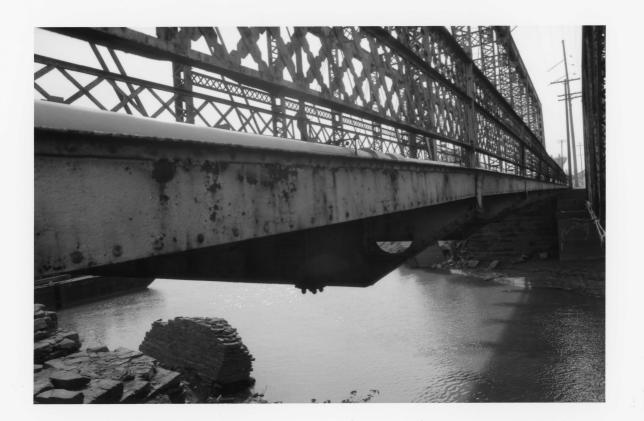
Ohio Street Bridge Evansville, Vanderburgh Co, IN 3 of 6



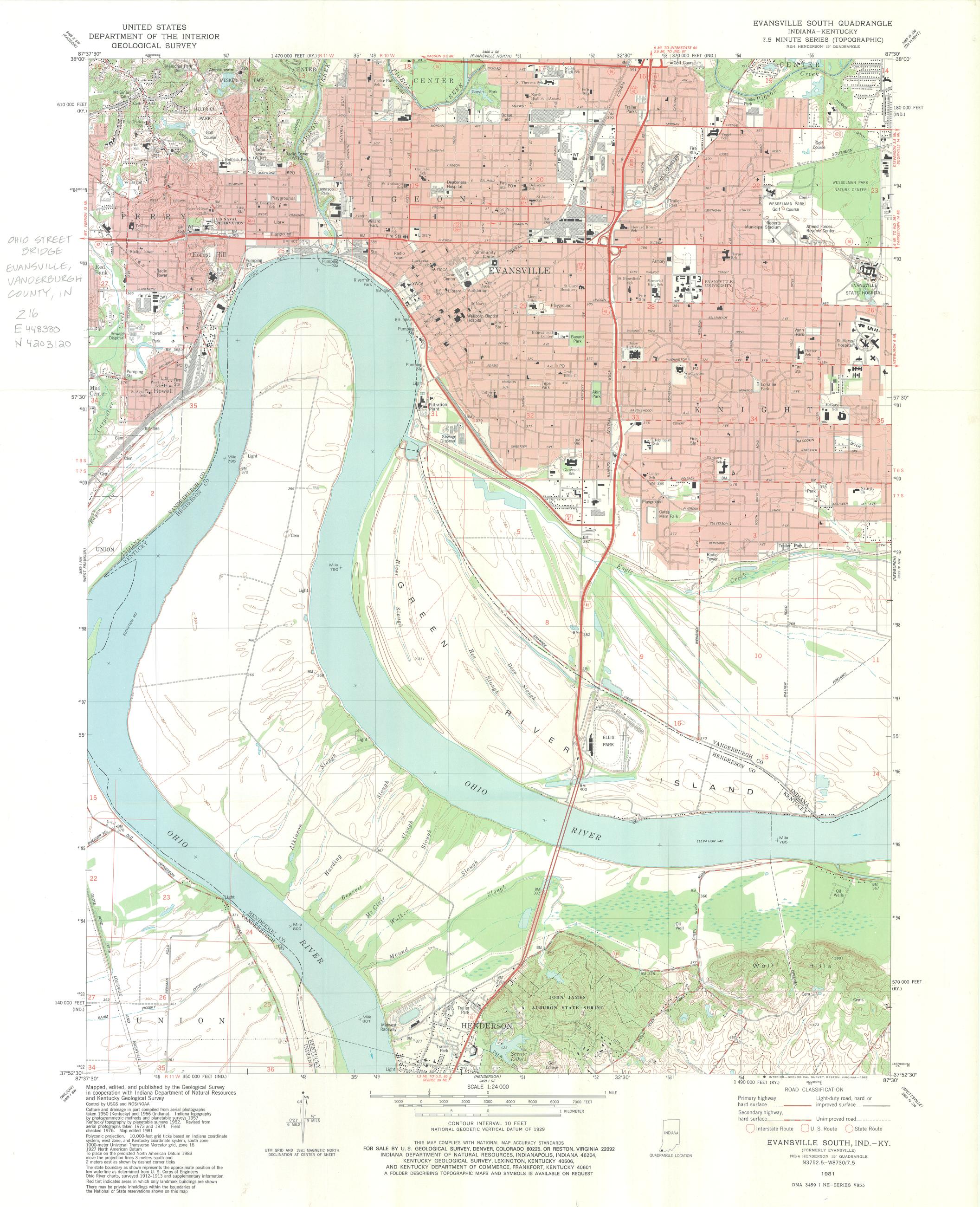
Ohio Street Bridge
Evansville, Vanderburgh Co, IN
4 of 6



Ohio Street Bridge Evansville, Vanderburgh Co, IN 5 of 6



Ohio Street Bridge Evansville, Vanderburgh Co, IN







Indiana Department of Natural Resources

Division of Historic Preservation and Archaeology 402 W. Washington Street, W274 Indianapolis, IN 46204-2748 PH: 317/232-1646 FAX: 317/232-0693 dhpa@dnr. state.in.us

October 19, 1998

Carol D. Shull Keeper of the National Register U.S. Department of the Interior National Park Service Cultural Resources National Register of Historic Places Mail Stop 2280, Suite 400 1849 C Street NW Washington, D.C 20240



Dear Ms. Shull:

Enclosed is a National Register of Historic Places nomination for the Ohio Street Bridge, Vanderburgh County.

The Indiana Historic Preservation Review Board reviewed the nomination and voted to recommend its inclusion in the National Register of Historic Places.

Very truly yours,

Jon C. Smith Director

Division of Historic Preservation and Archaeology

DJF:FDH:jsg

Enclosure