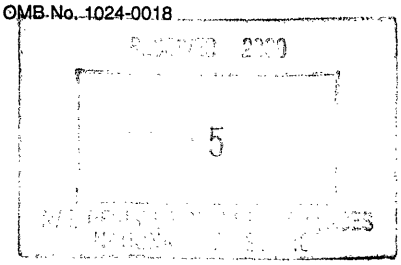
NPS Form 10-900
(Rev. 10-90)

OMB No. 1024-0018

363/364



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 any 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 Newport and Cincinnati Bridge

other names/site number Louisville and Nashville (L&N) Bridge (CP-N-153)

2. Location

street & number Spans Ohio River n/a ☐ not for publication

city or town Newport and Cincinnati n/a ☐ vicinity

state Kentucky/Ohio code KY/OH county Campbell/Hamilton code 037/061 zip code 41071/45202

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of1986, 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.)

Barbara Pierce Dept. Head, Planning, Inventory & Registration December 28, 2000

Signature of certifying official Date

Ohio Historic Preservation Office -- OH SHPO

State or 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 commenting or other official Date

State or Federal agency and bureau

4. National Park Service Certification

I, hereby certify that this 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): _____

Signature of Keeper Date of Action 4/19/01

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	
		buildings
		sites
1		structures
		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

N/A

6. Function or Use

Historic Functions
(Enter categories from instructions)

Transportation: rail-related

Current Functions
(Enter categories from instructions)

Transportation: road-related
not in use

7. Description

Architectural Classification
(Enter categories from instructions)

Other: subdivided Pratt truss

Materials
(Enter categories from instructions)

foundation quarried limestone
roof
walls
other metal (steel) and brick

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

See attached

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 a 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
1868-1950

Significant Dates
1868-1872; 1896-1897

Significant Person
(Complete if Criterion B is marked above)

Cultural Affiliation

Architect/Builder
M. J. Becker, chief engineer
Edge Moor Bridge Company, trusswork
Jutte and Foley, masonry

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: Louisville & Nashville Archives, University of Louisville

10. Geographical Data

Acreage of Property less than one

UTM References
(Place additional UTM references on a continuation sheet)

	Zone	Easting	Northing
1	16	716150	4330740
2	16	716680	4330070
3			
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 Adrienne Cowden and Stephen C. Gordon

organization for City of Newport date August, 2000

street & number 998 Monmouth Street telephone (606) 292-3666

city or town Newport state KY zip code 41071-2184

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 the SHPO or FPO.)

name (see continuation sheet)

street & number _____ telephone _____

city or town _____ state _____ zip code _____

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 the 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.0. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

LOUISVILLE AND NASHVILLE BRIDGE /NEWPORT AND CINCINNATI BRIDGE
Hamilton County, OH & Campbell County, KY

The Louisville and Nashville (L&N) Bridge spans the Ohio River between the Daniel Beard (I-471) Bridge to the east and the Taylor-Southgate Bridge to the west, linking the cities of Newport, Kentucky and Cincinnati, Ohio. Eligible for listing in the National Register of Historic Places under Criteria A and C, the structure possesses the unique status of being the only bridge designed and built for dual highway and railroad use in the Commonwealth of Kentucky. Its present configuration consists of both adjacent and connected roadway and railway trusses with a pedestrian walkway suspended between them. Presently, the L&N Bridge carries vehicular and pedestrian traffic on the west, or downstream, section over: Riverboat Row and Second Street in Kentucky; the Ohio River; and Sawyer Point Park in Ohio (Figure 1). The bridge approaches intersect with Third and Saratoga streets in Newport and Pete Rose Way and Third Street in Cincinnati. The upstream, or eastern, section of the bridge once carried a single railroad track over the same areas; the track was removed when CSX took the bridge out of service in 1984.

The Newport and Cincinnati Bridge Company carried out construction on the current bridge in an extraordinarily short period of time, from August 1896 to February 1897. M.J. Becker, chief engineer of the Louisville & Nashville Railroad, supervised the design of the bridge. The superstructure was built and erected by the Edge Moor Bridge Company of Wilmington, Delaware, and the masonry contractors were Jutte and Foley of Pittsburgh, Pennsylvania. The only portion of the earlier 1872 structure retained were the limestone piers.

The L&N Bridge comprises a masonry approach, a series of steel bents and a brick arcade at each end, three steel deck trusses, four main through spans and a channel span. Including the approaches, the L&N Bridge measures 2,760.71' in length (Figure 1). The roadway width varies from 17.2' to 37'. The bridge deck over the full length of the Ohio River bows upwards, serving the dual purpose of providing maximum clearance for the channel span and bringing the ends down at approximately the same grade of the approaches that descend to street level in both Cincinnati and Newport (Condit 1977:106). The elevation of low steel over the sea level is 533.32' for the channel span, 529.73' at the Kentucky pier and 529.87' at the Ohio pier.

In Newport, the bridge approach is supported by massive regularly coursed masonry retaining walls. This approach leads up to a 177' long red brick arcade and steel plate girders supported by steel bents and/or stone abutments (Spans N, O and P). Seven archways, each with a barrel vault, define the arcade. The east and west walls are constructed of brick laid in common bond pattern. Five courses of rowlocks define the archivolts and the spandrels feature simple decorative stonework. The barrel vaults are lined with soldier courses with the exception of the northernmost archway; a thick concrete lining has been installed in this archway, presumably to support the vault. As part of the Newport on the Levee development, the Newport arcade was repaired, stabilized and repointed in the summer of 2000. Originally, the arcade rested directly on the ground with no foundation. To prevent further settling, reinforced concrete footers were placed under each abutment. The new

footers are not visible above the ground. For all the repointing work, the mortar mix/color and joint profiles were matched to the existing mortar joints. Similarly, any new brick introduced into the arcade matched the existing brick as closely as possible in color, size and dimensions.

Spans N, O & P comprise two separate steel plate girders. The railway section of the bridge exhibits a steel plate girder supported by steel bents. A plaque is attached to the west side of the girder that reads "BUILT BY VIRGINIA BRIDGE IRON CO. ROANOKE, VA. 1923," indicating that all or part of the girder was replaced in that year. In 1977, the highway section of the bridge underwent a major reconstruction to replace and/or strengthen the steel floor beams, stringers and girders in these spans. Physical inspection supports the conclusion that the plate girder was entirely replaced in 1977.

On the opposite side of the Ohio River in Cincinnati, there are two approaches. The original sharply curved approach is mostly gone; the only remnants appear to be a single steel bent and masonry abutments. A walkway leading up to the L&N Bridge from Sawyer Point Park as well as the approach from Pete Rose Way are partially supported by the remaining masonry elements of the original approach. Otherwise, the superstructure and substructure of the Pete Rose Way approach dates to the 1970s. The second approach leading from Third Street is entirely new, also erected in the 1970s.

Both approaches lead up to a 140' long red brick arcade. Similar in its overall design concept to the Newport arcade, the Cincinnati arcade has three archways, each with a barrel vault. The abutments of the railway section are constructed of brick laid in a Flemish bond while the highway section rests on regularly coursed rock-faced stone abutments. The barrel vaults all appear to have originally been lined with running bond brick. In 1988, as part of the City of Cincinnati's bicentennial, the arcade was repaired and stabilized. As part of this work, the entire eastern wall was covered with a running bond brick facing and large portions of the abutments and barrel vaults were parged with concrete.

The eight steel bridge spans (comprising spans 1-6, C and D) each consist of two pairs of identical trusses. Spans 1, C, and D are deck trusses (Figure 1). Span 1 has six panels and is 137.39' in length. Spans C and D are notably smaller; they have five panels each and are 92.26' and 95.73' in length respectively. Spans 2 through 6, including the channel span, are through Parker trusses. A Parker truss is a subdivided Pratt form with a polygonal top chord with more than five slopes. The arched top chord makes a Parker truss stronger than a regular Pratt truss while using the same amount of material. However, the sizes of members in a Parker truss are not as uniform as those in a Pratt and, as a result, a Parker truss is more expensive to manufacture (Comp and Jackson, 1977). The channel span (Span 2) is 510' in length while the four main through spans (Spans 3-6) each measure approximately 202'.

LOUISVILLE AND NASHVILLE BRIDGE /NEWPORT AND CINCINNATI BRIDGE
Hamilton County, OH & Campbell County, KY

The trusses are subdivided Pratts, in which the tension members including all diagonals, lower halves of intermediate posts, and bottom chords are comprised of multiple eyebars arranged in parallel series (Condit 1977:109; *Engineering Record* 37:448). The portals are formed by the inclined end posts of each truss and pairs of plate girders featuring decorative (and functional) lacing bars. A large rectangular plaque is affixed to the southern portal that reads: "NEWPORT & CINCINNATI BRIDGE COMPANY. 1896. M.J. BECKER CHIEF ENGINEER."

Regularly coursed limestone piers support the steel trusses over the Ohio River. The eastern, or upstream, portion of the piers date to 1872; they originally formed part of the substructure of Newport and Cincinnati Railroad and Wagon Bridge. In 1896-97 when the existing L&N Bridge was erected, the piers were enlarged by half to the west to support the roadway portion. The abutments are visually divided into two sections, a base and a top that is stepped back from the base. Each base has a triangular upstream and a rounded downstream face and simple decorative caps.

LOUISVILLE AND NASHVILLE BRIDGE
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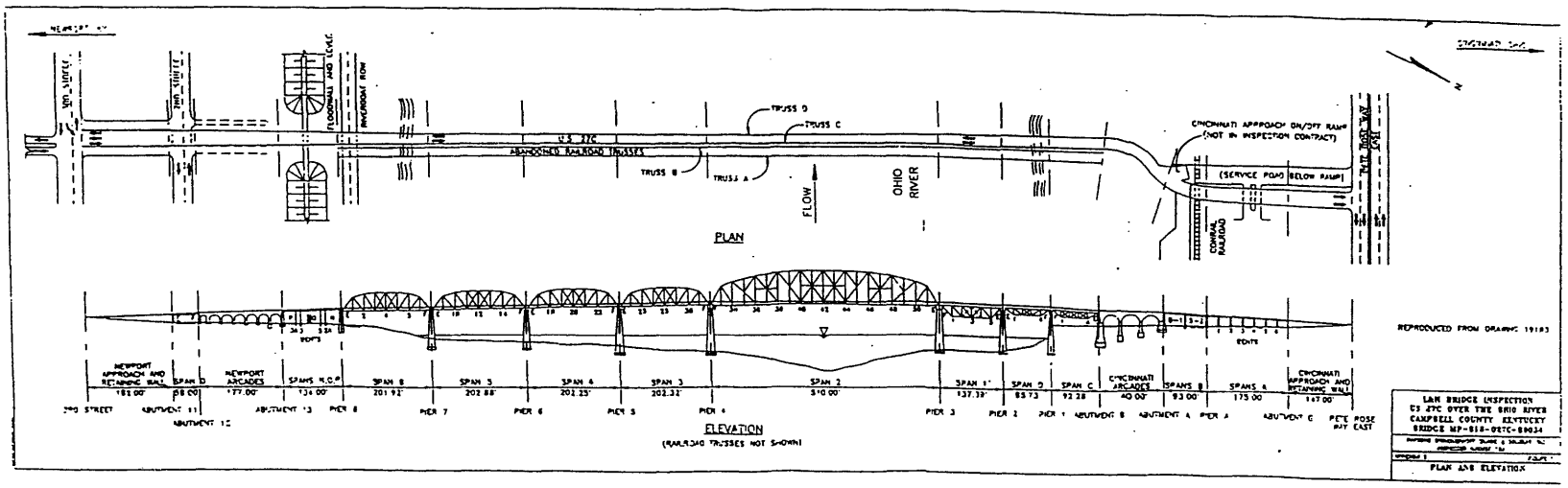
Figure 1: Plan and Elevation of the L&N Bridge (L&N Bridge Inspection).



LOUISVILLE AND NASHVILLE BRIDGE /NEWPORT AND CINCINNATI BRIDGE
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> From henceforth, if not in the past, this bridge will become a landmark to not only the citizens of northern Kentucky, but the greater Cincinnati area as well.
>
> *(Chamber of Commerce of Campbell County 1941:np)*

INTRODUCTION

The Newport and Cincinnati Bridge, also known as the Louisville and Nashville (L&N) Bridge, is significant under Criterion A as it represents a strategic transportation rail link between the nation's southern rail system, particularly the eastern Kentucky coal fields, and the industrial heartland, with Cincinnati as its northern gateway. At the turn-of-the-century Cincinnati's importance as a rail hub ranked first in Ohio and stood only behind Chicago and St. Louis in the number of freight cars passing through the switching district (Condit 1977:109). Under Criterion C, the bridge is significant within the theme of engineering as it embodies the distinctive and remarkably intact characteristics of a subdivided Pratt steel truss. With a 510' channel span, the L&N Bridge stands as one of the nation's oldest extant, long-span, simple truss bridges. The bridge is also important as the oldest and last remaining 19th century railroad bridge spanning the Ohio River between Pittsburgh and Cairo, Illinois, a distance of 978 miles (*Ohio River Guide*: D75-D79). The bridge's significance is also derived from its association with Max J. Becker (1828-1896), a notable German-born railroad engineer whose professional career in the United States spanned 45 years, and included work on the Steubenville Bridge, the first railroad bridge built over the Ohio River. Becker, elected president of the American Society of Civil Engineers in 1889, died in 1896 as construction began on the L&N Bridge.

BRIDGING THE OHIO

During much of the 19th century the Ohio River posed a formidable barrier to interstate commerce. As early as the 1830s John Roebling and Ithiel Town had proposed plans for suspension bridges at Cincinnati and Louisville, respectively. In 1849 Charles Ellet's suspension bridge successfully crossed the Ohio River at Wheeling, but it was not until 1865 that construction of a new suspension span actually began at Cincinnati. On New Year's Day, 1867, the Covington and Cincinnati Suspension Bridge formally opened over the Ohio River, linking the south and the north (NHL, 1975).

Both the Wheeling and Cincinnati suspension bridges were built for wagon and pedestrian use. By the late 1850s, however, railroad lines in Ohio had expanded their networks and were poised to cross the Ohio River. The first railroad span over the Ohio River was built in 1863-1865 by the western division of the Pennsylvania Railroad, the Pittsburgh, Cincinnati and St. Louis, between Steubenville, Ohio and Weirton, West Virginia. Soon after the Civil War four additional railroad bridges were constructed over the Ohio: The Louisville and Nashville Bridge at Louisville (1867-1870), designed by Albert Fink; the Baltimore and Ohio's bridge serving the main line between Bellaire, Ohio and

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Benwood, West Virginia (1868-1871) the Baltimore and Ohio's Whipple-Murphy bridge betweeen Belpre, Ohio and Parkersburg, West Virginia (1871); and the Newport and Cincinnati Bridge (1868-1872). The latter three spans were designed by Jacob Linville, the nation's foremost railroad bridge engineer of the post-Civil War era.

Following the Civil War Cincinnati emerged as a strategic transshipment center between the Kentucky and West Virginia coalfields and the industrial Midwest. Recognizing the potential for greater commercial expansion, Newport, Kentucky and Cincinnati City Councils passed ordinances to improve railroad facilities and "promote a southern railroad connection." In 1867 the Louisville, Cincinnati and Lexington Railroad, or "Louisville Short Line," was completed to Cincinnati, and the following year acts were passed by both the Kentucky and Ohio legislatures that incorporated and granted charters to the Newport and Cincinnati Bridge Company. According to specifications issued by the United States War Department, the new bridge was to be built with a continuous or unbroken channel span no less that 400 feet in length. Jacob Linville, Chief Engineer of the L&N, designed the new bridge, and the Keystone Bridge Company of Pittsburgh fabricated the superstructure. In April 1872 the "Newport and Cincinnati Railroad and Wagon Bridge," the first combined rail and roadway span over the Ohio at Cincinnati, and the only rail span over the Ohio between Bellaire, Ohio and Louisville, Kentucky, was completed. An imposing Whipple-Murphy truss design, the main channel span was nearly 100' longer than its Steubenville predecessor (Figure 2).

During the fertile ten-year period from 1886-1897, four bridges over the Ohio River at Cincinnati were constructed or rebuilt. A network of streetcar lines was ready to cross the river and as Cincinnati's railroad freight tonnage and locomotive weights increased so did the need for heavier, wider bridge spans. The Chesapeake and Ohio Bridge (1886-1888; demolished 1968), designed by William H. Burr, consisted of a series of subdivided Pratt trusses, the channel span then being the world's longest simple truss span. This celebrated bridge became the forerunner of the long span steel railroad bridges of the 20th century, and undoubtedly influenced the design of the soon-to-be built Newport and Cincinnati Bridge (Condit 1977:99). Frank J. Osborn's Central Bridge (1890; demolished 1996) was also built to accommodate roadway and streetcar traffic, while in 1895 the Suspension Bridge was renovated by the installation of additional cables and a large Warren stiffening truss.

By 1890 the Louisville and Nashville Railroad had acquired the Kentucky Central line and established a second direct entry into the Cincinnati market. Through the purchase of other Kentucky roads and the extension of its own line to Chattanooga, the L&N penetrated the eastern Kentucky coalfields. Freight tonnage of the L&N increased 20 percent in the two years following the acquisition of the Kentucky Central. By the mid-1890s the Newport Bridge of 1872 could no longer accommodate the increased loads of freight and passenger traffic. Propitiously, the decision to replace the superstructure of the Newport and Cincinnati Bridge was made in 1895 with construction underway by August 1896 (Condit 1977:103-106).

NEWPORT AND CINCINNATI BRIDGE

In May 1895, the Secretary of War approved plans for rebuilding and widening the 1872 Newport bridge in order to meet demands for increased freight traffic. The plans placed the railroad section north (upriver side) and the vehicular section on the south (downriver) side of the bridge with a pedestrian walkway separating the two. Contracts also were let to operate streetcars over the bridge (Figure 3-6). The Newport and Cincinnati Bridge Company was chartered as a subsidiary of the Pittsburgh, Cincinnati, Chicago and St. Louis RR (PCC & St.L), which operated freight and passenger stations at East Pearl and Butler Streets in Cincinnati. In April 1904 the Louisville and Nashville Railroad Company acquired the entire capital stock of the bridge company from the Pennsylvania Railroad. Upon completion of the Cincinnati Union Terminal in 1933 passenger trains no longer crossed the bridge. Toll collections by the Kentucky State Department of Highways, begun in 1933 ceased on "Liberation Day," November 11, 1941 (Chamber of Commerce of Campbell County 1941:np).

The bridge was designed under the guidance of M.J. Becker, chief engineer of the line and is clearly reminiscent of the truss design introduced by William Burr for the C&O Bridge a decade earlier. The superstructure was manufactured by the Edge Moor Bridge Company of Wilmington, Delaware. Edge Moor's chief engineer was C. W. Bryan and the masonry contractors were Jutte and Foley of Pittsburgh. Edge Moor Bridge Company fabricated bridges from 1873 until 1900 when the firm was acquired by the American Bridge Company (Darnell 1984:6).

The L&N Bridge superstructure consists of two pairs of duplicate steel trusses for each of the eight spans (Figure 1). Five of the spans are subdivided Pratts with curved top chords, in which the tension members are composed of multiple eyebars arranged in a parallel series; the remaining three spans feature simpler deck Pratt trusses (Condit 1977:109; *Engineering Record* 37:448). Within the context of Ohio River railroad bridges the Newport Bridge is significant as it represents a precursor to the heavier cantilever spans of the early 20th century and also as a rare surviving 19th century multiple span structure over the Ohio River. At 510' the L&N's channel span exceeds the Cincinnati Southern's (1922: 500'), and that of the recently demolished Central Bridge (1890: 502'). The Chesapeake and Ohio Bridge, built in 1928, has the longest channel span of Cincinnati's historic cantilever/simple truss bridges at 645'.

HISTORY OF THE PRATT TRUSSES

The first metal bridges designed, initially fabricated of iron and later of steel, resembled the wood trusses they were intended to replace. For example, Bowstring Arch bridges exhibited the same graceful curve as the much earlier wood Burr Arch trusses. By the 1880s, however, bridge

technology began to move beyond arched forms towards a geometric truss. This change was precipitated by several factors: the growth of engineering schools, the ever-increasing demands and loads of railroad traffic, and a desire to use metal as efficiently and economically as possible (Saldibar, Indiana DNR). During the last half of the nineteenth century, numerous different types of trusses were developed; but it was the Pratt and Warren trusses that ultimately became the dominant forms, displaying an optimal level of versatility, durability and economy (Comp and Jackson, 1977).

The basic Pratt truss form was patented in 1844 by Thomas and Caleb Pratt. Pratt trusses are constructed of a series of structural triangles, with the vertical members acting in compression and the diagonals acting in tension. This design feature reduced the length of the compression members, helping to prevent them from bending or buckling. A single span could be used to cross a smaller stream while a series of two or more spans could span larger waterways.

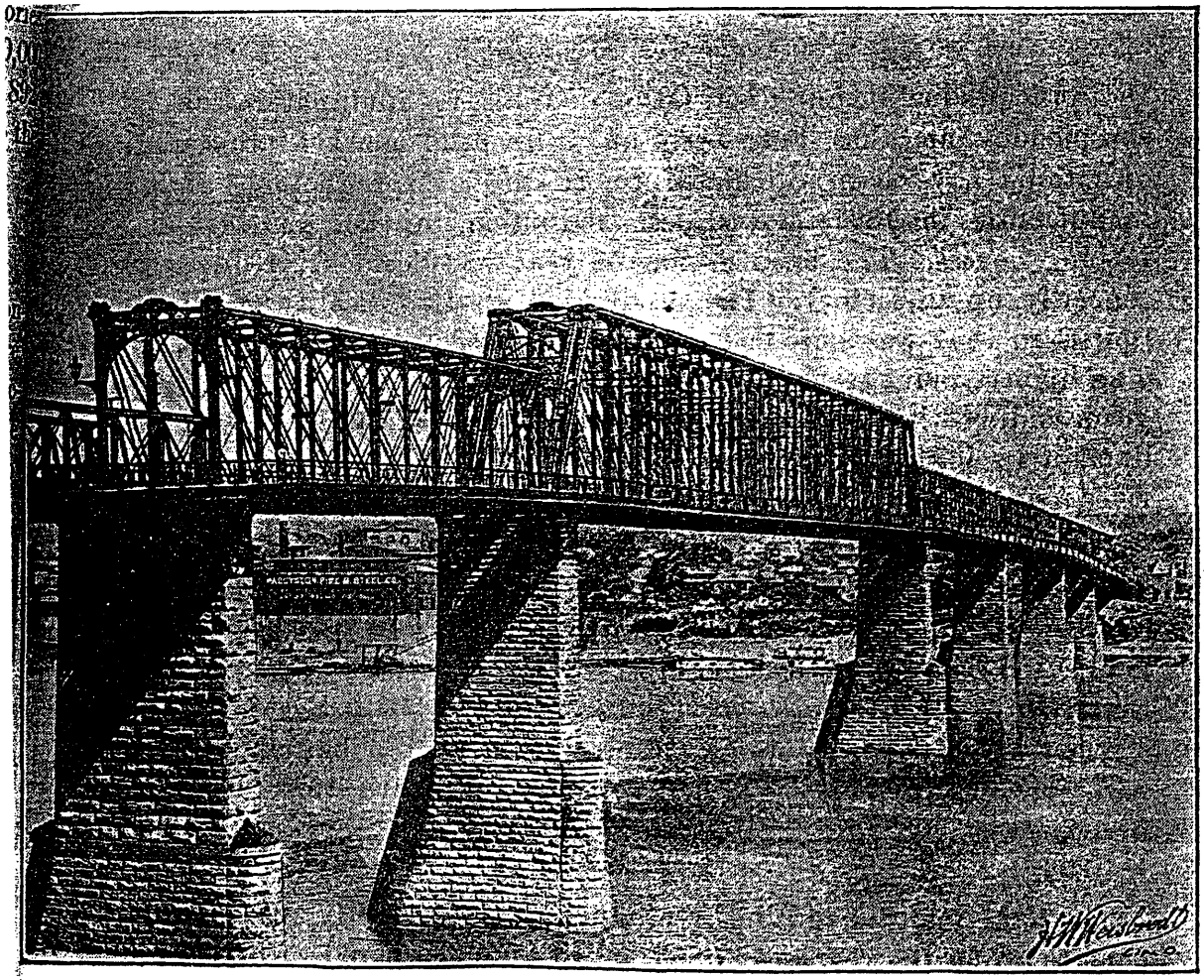
Considering the economic and political power wielded by railroad companies in the nineteenth century, it is not surprising that they were at the forefront of bridge design. With each passing year, railroads carried more and more passengers and freight, and bridges proved to be the weak link in all railroad lines. As railroads increased the size and weight of their locomotives and rolling stock during the latter part of the nineteenth century, bridge failures occurred regularly. In the 1870s and 1880s, it was common to have one bridge failure for every 5,000 miles of track (Saldibar, Indiana DNR).

To prevent further catastrophic failures, bridge engineers were forced to develop an all-metal truss bridge capable of safely carrying heavy moving loads. A major advance came in the 1870s when the standard Pratt truss was modified with sub-struts and sub-ties. The sub-struts and sub-ties served to stiffen the structure, allowing heavier loads to be carried safely across the length of the bridge. In 1871, the Baltimore & Ohio Railroad introduced the Baltimore truss; this truss form subdivided the panels and added a system of secondary trussing to carry heavier loads. The Pennsylvania truss, designed by the Pennsylvania Railroad Company, is another modified Pratt truss. Pennsylvania trusses utilized sub-struts and sub-ties combined with a polygonal top chord. The arched upper chord gave the truss greater strength in the middle, where stresses were the greatest, without wasting steel on the truss ends, where the stresses were lighter (Saldibar, Indiana DNR). The arched, polygonal top chord quickly caught on because it saved metal and money. The Camelback truss (a top chord with five slopes) and the Parker truss (a top chord with more than five slopes) quickly surpassed the Baltimore and Pennsylvania trusses. The Parker truss as exhibited by the L&N Bridge was a particularly strong design and was used in bridge construction until the 1940s (Saldibar, Indiana DNR).

MAX JOSEPH BECKER (1828-1896)

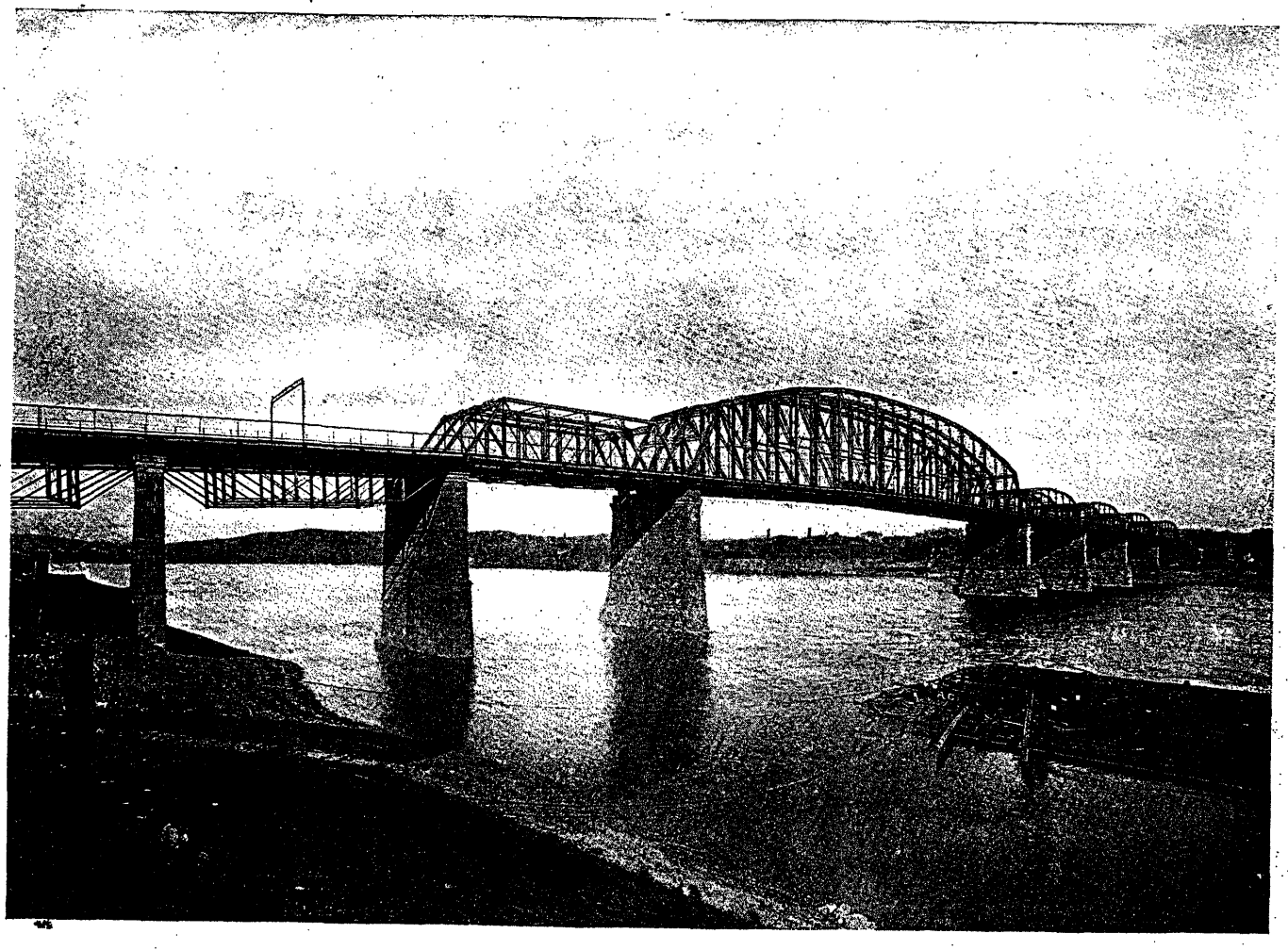
Born in Coblenz, Germany in 1828, Max Becker came to the United States in 1850, arriving in New York City. In 1851 he was employed by the Steubenville and Indiana Railroad at Steubenville, Ohio, serving as a draftsman and then resident engineer. Subsequently, Becker held the position of resident engineer on the Ohio Canal, and from 1859-1861 he was resident engineer on the Marietta and Cincinnati Railroad in large of location and construction. From 1863-64 Becker was placed in charge of construction of the Steubenville bridge, the first railroad span over the Ohio River. Becker subsequently assumed responsibility of overseeing construction of the Marietta and Cincinnati Railroad until 1867, when he was appointed chief engineer of the Steubenville and Indiana line, later the PCC & St.L. Becker held this position until just before his death in 1896 on Mackinac Island, Michigan (*Proceedings* 22:146).

Figure 2: View of the 1872 Louisville & Nashville Railroad Bridge (*Cincinnati Commercial Review*, 1895).



L. & N. R. R. BRIDGE.

Figure 3: View of the 1895-97 L&N Bridge from Cincinnati (*Book of Views of Cincinnati, Ohio*, 1904).



LOUISVILLE & NASHVILLE RAILROAD BRIDGE Photo by Young & Carl

Foot of Butler Street; railroad and highway bridge. Length 1,649 feet. Cost $3,000,000. Date of construction 1872; remodeled 1895-97, and Cincinnati entrance extended to Pearl Street.

LOUISVILLE AND NASHVILLE BRIDGE /NEWPORT AND CINCINNATI BRIDGE
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Figure 4: View of the L&N Bridge (*Timeline*, March-April 1996:40).
Photo prior to September, 1947.

The *Queen* slides under the Louisville and Nashville Railroad Bridge and heads up the Ohio River to Coney Island.
Cincinnati Historical Society

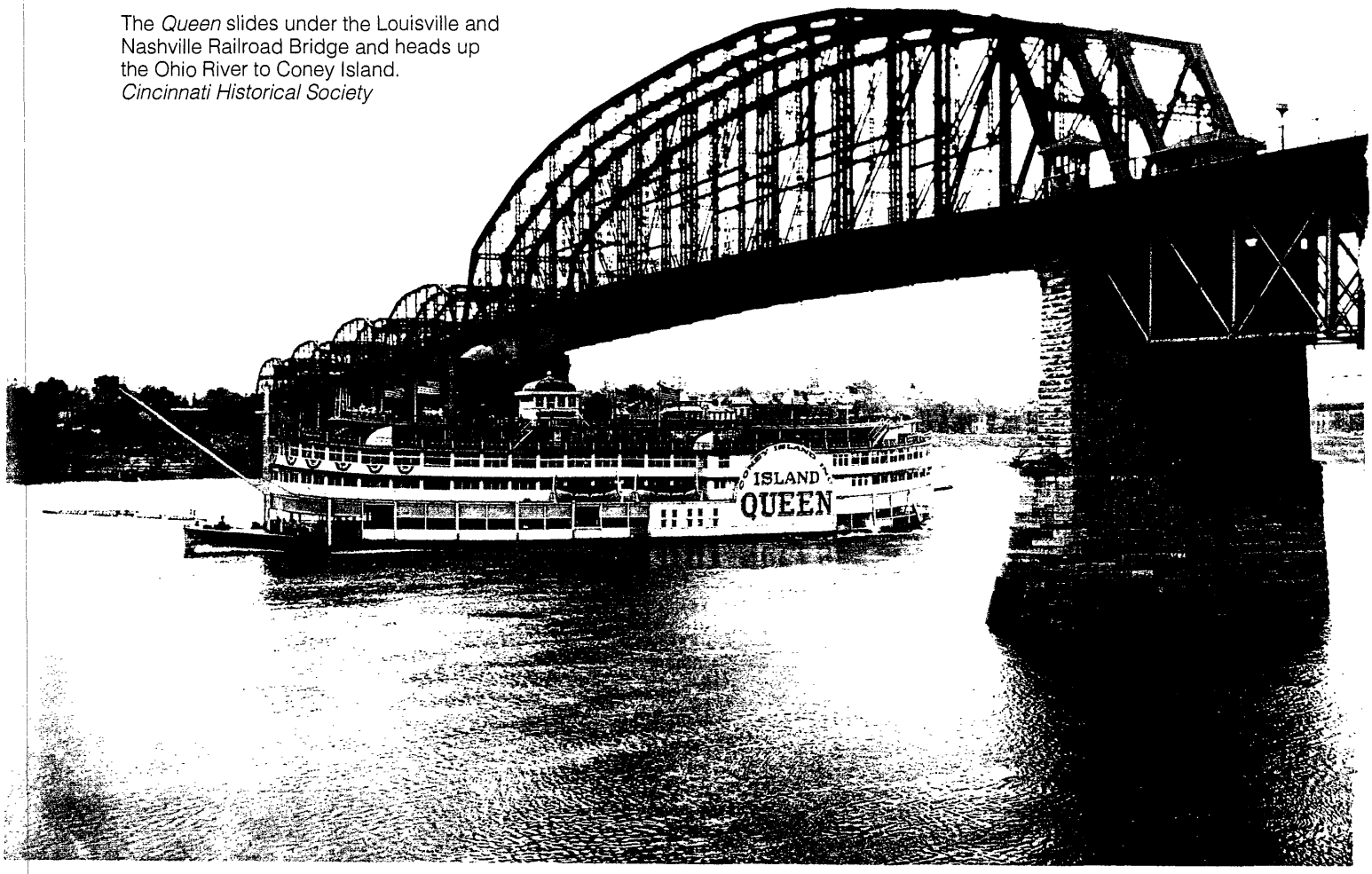

Figure 5: View of the East Elevation of the L&N Bridge (Condit, 1977:107).

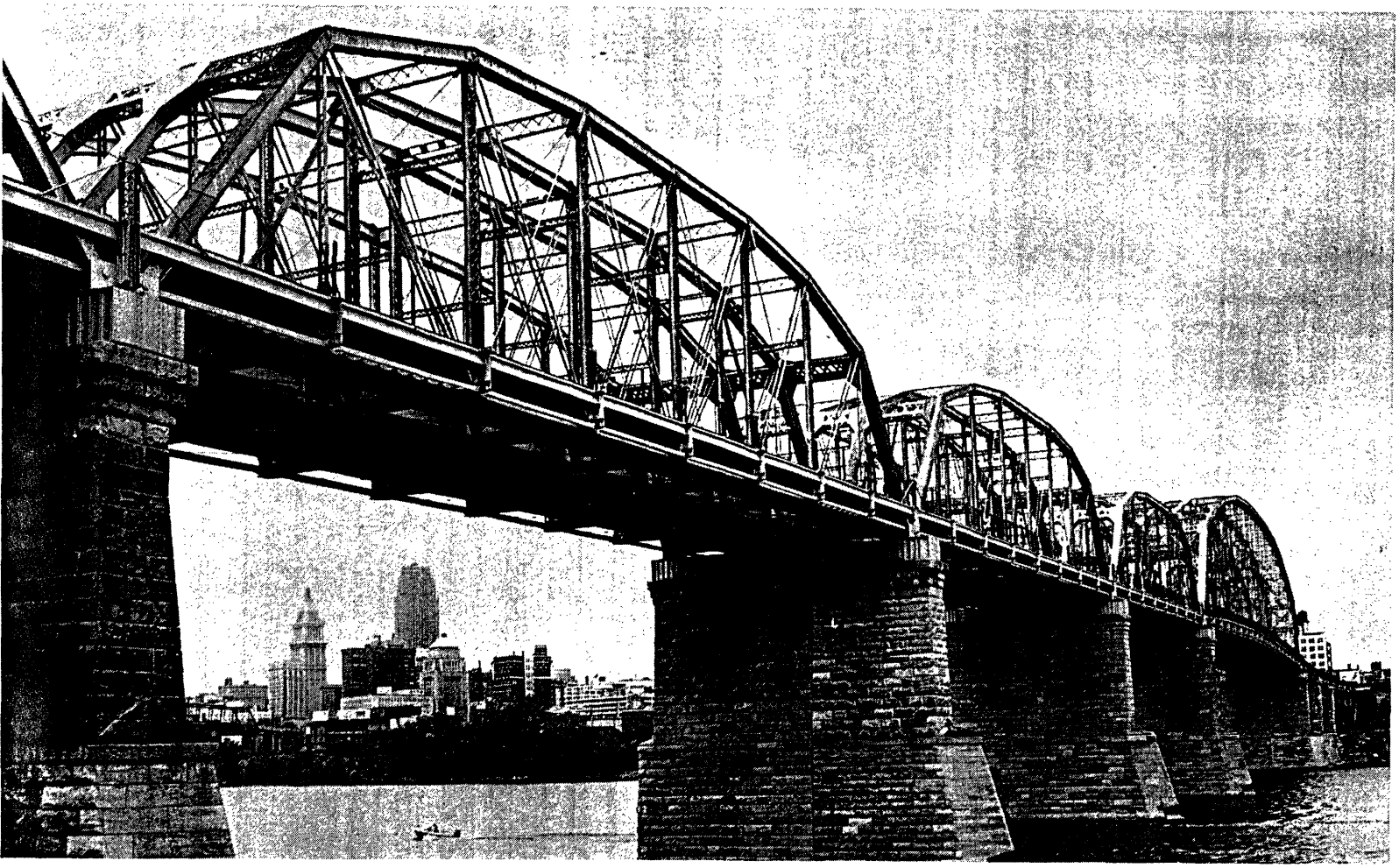

Figure 6: View of the L&N Bridge Showing the Brick Arcade from Newport, c. 1901 (***The Book of Ohio*** 7).

MOUNT ADAMS FROM NEWPORT, KENTUCKY.

LOUISVILLE AND NASHVILLE BRIDGE /NEWPORT AND CINCINNATI BRIDGE
Hamilton County, OH & Campbell County, KY

American Society of Civil Engineers. *Proceedings* 22 (September 1896): 146.

The Book of Ohio 7

Book of Views of Cincinnati, Ohio. Portland, Maine: L. H. Nelson Co., 1904.

"Bridge Superstructure." *Engineering News* 6 (28 June 1879): 206.

The Cincinnati Commercial Review 1 (September 1895): 17.

Condit, Carl W. *The Railroad and the City: A Technological and Urbanistic History of Cincinnati.* Columbus: Ohio State University Press, 1977.

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UTM Coordinates: Covington, KY. – Ohio Quadrangle; Newport, KY. – Ohio Quadrangle

	Zone	Easting	Northing	
1	16	716150	4330740	(north terminus) Covington, KY. – Ohio
2	16	716680	4330070	(south terminus) Newport, KY. – Ohio

Boundaries and Legal Description

The property boundaries, as defined in this National Register Nomination, extend 10' on either side of the L&N Bridge and include the bridge in its entirety, including the southern (Newport, Kentucky) approach and the two brick arcades as well as the land and riverbed of the Ohio River which the bridge, southern (Newport, Kentucky) approach and both arcades rest on or pass over. The northern approaches in Cincinnati, Ohio have been excluded from the National Register boundaries. Built after the identified period of significance in the 1970s, the northern (Cincinnati, Ohio) approaches are not part of the original L&N Bridge as constructed in 1896-1897.

Title to the L&N Bridge, and the real property upon which it sits having been conveyed to the Louisville and Nashville Railroad Company, a Kentucky Corporation, by virtue of a deed recorded at Deed Book 88, page 553. Title to the "Highway Portion" of the Bridge, and the real property upon which it sits, having been conveyed to The State Highway Commission of Kentucky at Deed Book 174, page 283, and to the Department of Highways of the Commonwealth of Kentucky at Deed Book 183, page 313. All references being to the Campbell County Clerk's records at Newport, Kentucky.

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CONTINUATION SHEET

Additional Documentation

LOUISVILLE AND NASHVILLE BRIDGE /NEWPORT AND CINCINNATI BRIDGE
Hamilton County, OH & Campbell County, KY

Note: All photographs taken by Adrienne Cowden. Original negatives archived in the collection of Adrienne Cowden.

1. View of L&N Bridge Showing Newport Portal, Facing N
   May 2000

2. View of L&N Bridge Showing Newport Portal and Former Railroad Approach, Facing NW
   May 2000

3. View of L&N Bridge Showing Newport Approach, Brick Arcade and Portal, Facing NE
   May 2000

4. View of L&N Bridge Showing Newport Approach, Facing NW
   May 2000

5. Detail of East Elevation of Newport Brick Arcade, Facing NW
   May 2000

6. Detail of East Elevation of Brick Arcade and Plate Girder, Newport, Facing SW
   May 2000

7. Detail of East Elevation of Steel Plate Girder and Bent, Newport, Facing NW
   May 2000

8. Detail of Steel Bent, Newport, Facing NW
   May 2000

9. Detail of Steel Plate Girder, Newport, Facing E
   May 2000

10. Detail of West Elevation of Newport Brick Arcade, Facing SE
    May 2000

11. View of L&N Bridge From Newport Floodwall, Facing NW
    May 2000

12. View of L&N Bridge From Sawyer Point, Cincinnati, Facing SW
    July 2000

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Additional Documentation

LOUISVILLE AND NASHVILLE BRIDGE /NEWPORT AND CINCINNATI BRIDGE
Hamilton County, OH & Campbell County, KY

13. Overview of L&N Bridge From Sawyer Point, Cincinnati, Facing SE
    July 2000

14. Detail of Channel Span and Deck Girder (Span 1) From Sawyer Point, Cincinnati, Facing SE
    July 2000

15. Detail of Stone Pier, Facing SE
    July 2000

16. Detail of Deck Girder (Span C), Facing W
    July 2000

17. View of L&N Bridge Showing Cincinnati Portal, Facing S
    July 2000

18. View of L&N Bridge Showing Cincinnati Portal, Facing SW
    July 2000

19. Overview of L&N Bridge from Sawyer Point, Cincinnati, Showing Approaches, Brick Arcade and Portal, Facing S
    July 2000

20. Overview of L&N Bridge North Approaches, Cincinnati, Facing N
    July 2000

21. Detail of East Elevation of Cincinnati Brick Arcade, Facing SW
    July 2000

22. Detail of West Elevation of Cincinnati Brick Arcade, Facing E
    July 2000

23. Detail of Steel Bent North of Brick Arcade, Cincinnati, Facing SE
    July 2000

24. View of L&N Bridge Cincinnati Approaches, Facing NE
    July 2000

25. View of L&N Bridge Approaches, Cincinnati, Facing SE
    July 2000