NPS Form 10-900
(Rev. 8-86)

OMB No. 1024-0018

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United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

JAN 2 3 1990

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name Walnut Street Bridge
other names/site number 33-3544-012

2. Location

street & number over the Tennessee River — NA ☐ not for publication
city, town Chattanooga — NA ☐ vicinity
state Tennessee code TN county Hamilton code 065 zip code 37402

3. Classification

Ownership of Property	Category of Property	Number of Resources within Property	
		Contributing	Noncontributing
☐ private	☐ building(s)		buildings
☒ public-local	☐ district		sites
☐ public-State	☐ site	1	structures
☐ public-Federal	☒ structure		objects
	☐ object	1	Total

Name of related multiple property listing: NA

Number of contributing resources previously listed in the National Register 0

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, 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. ☐ See continuation sheet.

Herbert L. Harper — 1/19/90
Signature of certifying official — Date

Deputy State Historic Preservation Officer
Tennessee Historical Commission
State or Federal agency and bureau

In my opinion, the property ☐ meets ☐ does not meet the National Register criteria. ☐ See continuation sheet.

Signature of commenting or other official — Date

State or Federal agency and bureau

5. 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:) _____

Entered in the National Register

Helen Bryer — 2/23/90
for Signature of the Keeper — Date of Action

6. Function or Use

Historic Functions (enter categories from instructions)	Current Functions (enter categories from instructions)
TRANSPORTATION: road	NOT IN USE
related (vehicular)	

7. Description

Architectural Classification (enter categories from instructions)

OTHER: modified Camelback truss

Materials (enter categories from instructions)

foundation NA
walls NA
roof NA
other Iron, steel, limestone
WOOD

Describe present and historic physical appearance.

Begun in 1889 and completed in 1891, the Walnut Street Bridge is 2,370 feet long and contains forty-five spans, six pin-connected through modified Camelback trusses and thirty-nine steel stringers. Beginning on the south (or downtown Chattanooga) end are two 210-foot trusses which are thirty-eight feet tall at their highest points, then three 320-foot channel spans which are forty-eight feet tall at their highest points, and then one 210-foot span. The curb-to-curb width is 18.6 feet and sidewalks expand the out-to-out width to thirty feet. The minimum vertical clearance is 19.3 feet at the portal and 20.6 feet at the sway bracing. Each panel is twenty feet in length.

On a national level, the 1885-1895 period was a transition time when bridge manufacturers ceased using iron and began using steel. The Walnut Street Bridge is an excellent example of this transitional period, as generally its compression members are iron and its tension members are steel. The composition of truss members are typical, although due to various repairs there are variations: top chords and end posts are channels with lacing underneath, bottom chords are rectilinear eyebars, verticals are I-beams or angles with lacing, and the diagonals and counters are paired rectilinear eyebars with battens.

The substructure for the truss portion of the bridge consists of one small abutment and six piers, all of grouted limestone masonry resting on bedrock and with concrete caps. All of these piers with the exception of Pier Six (which is on land) have nosings or shoulders on both the upstream and downstream sides. The piers are generally fifty feet wide and twenty feet deep at their base and range in height from 60 to 108 feet. Riverside Drive, a modern transportation facility built in the 1960s, runs perpendicularly (east-west) under the southernmost span. Under span two is a portion of the National Register-listed Bluff Furnace archaeological site (East Tennessee Iron Manufacturing Blast Furnace, NR 5/8/80).

On the north bank of the river is a 780 foot viaduct formed of thirty-nine steel stringers on bents composed of channels connected with lacing. This viaduct was built on a 3.6% grade.

[X] See continuation sheet

Metal truss bridges, such as the Walnut Street Bridge, were the most common type built between 1850 and 1925. The design used many small pieces to make a long truss with the length and strength for a bridge. Most metal trusses are of two basic forms: the Pratt and the Warren. Both forms date from the 1840s and survived into the twentieth century based on their versatility, durability, and economic attractiveness. The basic Pratt truss was patented in 1844. A pin-connected through Pratt is representative of the most common type of early twentieth century truss bridge. The Walnut Street Bridge is a variation of that Pratt configuration, a Parker truss. A sub-category of the Parker is the Camelback truss - a Pratt with an inclined top chord of exactly five sides. These five sides are formed of a flat top chord, two end posts, and two inclined sections connecting them. The inclined sections usually contain two panels, but on shorter spans they may contain only one panel; longer spans may contain three or more panels. Due to their length, the Walnut Street Bridge spans contain a three panel incline. It is the only Camelback bridge in the state to do so.

The Camelback truss design allowed for both standardization of its structural members and better stress distribution. Each of the Camelback trusses contains supplemental substruts and subties common in Petit trusses. The advantage of constructing the bridge in this manner is that it allowed a taller truss height (and thus a longer span) while breaking up the height, which resulted in being stiffer and thus resisted stresses better. While smaller members such as these were less expensive, the overall increase in the amount of metal increased the cost. A more serious problem with this design was that the additional number of individual members also increased the likelihood of mistakes in the shops fabricating the steel members, as well as in the field erecting the bridge. For these reasons, this Petit-derivative variation was not commonly used into the twentieth century.

In an article appearing in Engineering News (1891), the following information about the materials used in the Walnut Street Bridge was provided:

> Masonry specified as 'Class B' was used in all piers from 0 to 6 inclusive, and ranged rubble masonry was used in the north abutment and viaduct pedestals. Class B masonry is the usual first-class masonry, laid in courses of from 12 to 30 in. in thickness, except that concrete was allowed for backing. The projections beyond the pitched lines for face stones were limited to 4 in. in the body of the pier and 2 in. on the pointed ends.

> The copings of piers and starlings, the string course under copings, and the pedestal blocks on top of the copings are bush-hammered.
>
> Louisville quick-setting cement was used for all work under ordinary water level, and 'Howard cement,' which is a good cement, but sets more slowly, was used for all work above that level. Limestone of good quality was used through the work; 3,300 cu. yds. were quarried at Concord...and the balance came from Beck's quarry and Stone Fort, near Chattanooga.

Originally the floor beams and the first floor of the bridge were constructed of creosoted heart pine; with the top floor constructed of two inch oak plank. The timber was supported on alternating timber beams and iron channels. Two lines of street car tracks went across the bridge; the first cars were mule drawn and, later, electric. Back-to-back iron channels with a wood spacer were installed to support the trolley tracks. The original iron channels still remain. The timber stringers were replaced in 1956 with steel wide-flange sections. It is assumed that the existing asphalt-filled steel pans were also installed at that time.

On each side of the bridge are five foot sidewalks constructed of timber planking on timber stringers. This closely resembles the original construction, although the original walk width of almost six and one-half feet has been reduced to the present five feet.

According to the information included in the 1891 Souvenir Programme:

> "the bridge is built to stand a load of seventy-five pounds to the square foot, or 2,400 pounds per lineal foot for the 320 feet spans with a factor of safety of six...it was calculated that the county or the public might possibly some day want to cross over traffic which would amount to be a load of 768,000 pounds to each span, or about fifteen or twenty freight cars...it is really built to stand six times that much...so the timid who weigh less than 100,000 pounds need not have much fear in crossing the bridge."

The bridge was also built to resist a lateral or wind pressure of 200 pounds for the top rails and 350 pounds for the bottom rails, per lineal foot. Today the bridge carries an active sixteen inch water main on the west sidewalk bracket. Abandoned gas and water mains and timber utility boxes also exist under the sidewalks.

Many repairs have been made to the bridge over the last ninety-eight years. Structural reinforcements have been added to the original trusses and knee braces have been added to strengthen the portal braces. All top lateral bracings and sway bracings, originally square rods, have been replaced with steel angles. The rollers in the truss expansion shoes have been replaced. In 1957, steel by-passes were installed at several bottom chord panel points of the short span trusses. In the mid-1970s, steel bands with turnbuckles were installed around several bottom chord eye-bars and a few diagonal eye-bars as further reinforcement. Several of the horizontal struts at the viaduct trestles were replaced with welded steel members; several column bases and floorbeam stiffeners were replaced as well.

The following is a summary of the bridge's major repairs and alterations:

1914 Due to fire, 500 tons of steel girders replaced wooden stringers. Girders twenty-eight inches thick were placed under the four car tracks and fifteen inch thick girders were placed on twenty-eight inch centers to support the bridge floor. Creosoted timbers were laid on the girders and the bridge was paved with creosoted wood blocks.

1938 As a result of a WPA project a Tuthill guard rail was placed on top of the wheel rails as a safety measure and extended 780 feet along the north approach where two fatal accidents had occurred. A new floor with joints allowing for expansion and contraction, an invention of the City Engineer Ashby Black, was also installed.

1948 From the engineering firm of Peerson and Hedman, the following was recommended: reduction of the walk to five feet three inches; reinforcement of the portal bracing (probably the Chevron member visible today on the portal); replacement of expansion rollers; replacement of fixed shoes at south end of span 1; reinforcement of damaged web verticals; cleaning and painting of all structural steel.

1955 The three inch primary wooden subflooring was replaced. New expansion joints were added. The handrails, curb, and verticals were repaired.

1957 Steel wide-flange sections replaced timber stringers in the floorbeams and corrugated metal bridge decking covered with asphalt installed.

1960 The rods were replaced by lattice work girders in the bracing of the superstructure. The pin plates at the joints were repaired and steel handrails cleaned and painted.

1974 Repairs were made to the truss shoes and cracked and bent members. Bracing-wraps were installed on additional counters and lower chords.

1977 Repairs were made on verticals and wraps were added to additional members.

None of these repairs have diminished the bridge's overall integrity of design. On May 11, 1978, after almost ninety years of service the bridge was closed to all traffic.

The Walnut Street Bridge opened in 1891 to meet the needs of a progressive, growing city. Connecting the commercial and residential districts on both sides of the river was the appropriate response of far-sighted individuals interested in Chattanooga's future. Early in 1987, a committee recommended the restoration of this historic structure. Plans are underway to rejuvenate the bridge as a linear park within a larger park complex along the river front. The bridge is currently being rehabilitated. Unobtrusive cables will be added within the diagonals. The trusses will still function as trusses and carry the existing dead loads; new cables will carry live loads. These changes will not adversely affect the integrity of the bridge. Plans are to complete the work for a February 1991 centennial celebration.

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties:

☐ nationally ☒ statewide ☒ locally

Applicable National Register Criteria ☒ A ☐ B ☒ C ☐ D

Criteria Considerations (Exceptions) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G NA

Areas of Significance (enter categories from instructions)	Period of Significance	Significant Dates
Engineering	1891-1917	1891
Transportation		

Cultural Affiliation: NA

Significant Person: NA

Architect/Builder: Thatcher, Edwin, Chief engineer

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

The Walnut Street Bridge is being nominated to the National Register under criterion A for its local significance in the area of transportation. As the only bridge across the river in Chattanooga from 1891 until 1917, it served as a focal point of the City's transportation network, linking two sections of the city and encouraging growth in the northern part. It is also nominated for its statewide significance under criterion C because of its design, which was by prominent engineer Edwin Thacher. The Walnut Street Bridge is a Camelback truss, a variation of the basic Pratt truss which is one of the most commonly used truss types in the country. Of Tennessee's 465 simple pre-1941 truss bridges, 299 are Pratt or Pratt derivations. Of these, thirty are Camelback trusses. The Walnut Street Bridge is the oldest Camelback truss and roughly the thirteenth oldest simple metal truss bridge in the state. The Walnut Street Bridge spans are atypically long for this era in Tennessee since most Camelback trusses in this state are in the 125-200 foot range. Their length would have increased their complexity and probably would not have been attempted by a local engineer, but for someone of chief engineer Edwin Thacher's abilities, it would not have been remarkable. Although long compared to other Tennessee spans, these spans would not have been considered especially unique on a national scale. The Petit-derivative variation was uncommon, but probably essential, due to its length; this variation was used for five of the thirty Camelback trusses in Tennessee.

For Chattanooga, the completion of the Walnut Street Bridge represented a significant step in the city's growth and development. A military bridge constructed early in 1864 collapsed in 1867 under the combined, but not simultaneous, force of twenty-five stampeding mules and a record flood. Thereafter, Chattanoogans crossed the river via a series of cumbersome ferries. The city experienced a tremendous growth during this period. Between 1870 and 1880, the city nearly doubled in population from 6,903 to 12,892. Chattanooga had twenty-two small manufacturing plants in 1860 and seventy-seven "factories" by 1880. Before the railroad lines arrived in the city, the Tennessee River stimulated commerce. Ross' Landing, located

☒ See continuation sheet

9. Major Bibliographical References

[X] See continuation sheet

Previous documentation on file (NPS):

- [ ] preliminary determination of individual listing (36 CFR 67) has been requested
- [ ] previously listed in the National Register
- [X] previously determined eligible by the National Register 11/15/78
- [ ] designated a National Historic Landmark
- [ ] recorded by Historic American Buildings Survey # _____
- [X] recorded by Historic American Engineering Record # TN-11

Primary location of additional data:

- [ ] State historic preservation office
- [ ] Other State agency
- [ ] Federal agency
- [ ] Local government
- [ ] University
- [ ] Other

Specify repository: _____

10. Geographical Data

Acreage of property Approximately 1.6 acres

UTM References

	Zone	Easting	Northing
A	16	654440	3881060
B	16	654350	3880320
C			
D			

[ ] See continuation sheet

Chattanooga 105 SE

Verbal Boundary Description

The boundary for the Walnut Street Bridge includes the substructure, superstructure, and abutments.

[X] See continuation sheet

Boundary Justification

The boundary is sufficient to protect the integrity of the structure.

[ ] See continuation sheet

11. Form Prepared By

name/title Lynn Hulan

organization Hulan Johnson, Inc. date November 1989

street & number P.O. Box 245 telephone 615-389-6131

city or town Wartrace state TN zip code 37183

just a short distance from where the Walnut Street Bridge now stands, was a well-known and important trading center for both Indians and whites. Early commercial properties centered near the river where steamers bringing in mail, goods, and passengers stopped.

Chattanooga was continuing to experience an industrial and population boom during the 1880s. Land brought premium prices, quickly converting from farm to subdivision. Ridgedale, Highland Park, Sherman Heights, St. Elmo (NR4/15/82), Hill City, and East Lake were started during this era. Wealthy individuals from outside the region were sought out and asked to bring their business and financial acumen to benefit Chattanooga. Examples of this were the Chattanooga Land, Coal, Iron and Railway Company and the East End Land Company. Roads were paved, a city sewer system was undertaken, a new market house built, a library was organized, the Iron, Coal and Manufacturers' Association was renamed the Chattanooga Chamber of Commerce, Erlanger Hospital cornerstone was laid in 1891, and there was a plan for electric streetcars to replace the mule-drawn cars. The outlook was optimistic.

By spring of 1882, there was talk of erecting a bridge across the river. From that point on, the idea was refined through a series of committees. A plan was presented to the Hamilton County Court proposing that the county build a free bridge across the river at the foot of Market Street and pay for it with twenty-year bonds. The Court responded by appointing a bridge committee. The committee employed Major S. Whinery to draw up a plan and estimate the cost of a bridge. In October 1884, the committee recommended Whinery's plan to the Court, and a new committee was appointed to implement the project.

The Court delayed immediate action, but the new bridge committee would not be put off. Taking matters in their own hands, the committee decided to organize a stock company, the Chattanooga Bridge Company, to build a toll bridge at the base of Market Street. In 1887, a contract was signed with Edwin Thacher's Decatur Iron Bridge and Construction Company. Thatcher was to build a new bridge within the year at the cost of $200,000.

Thatcher (1839-1920) was a nationally recognized engineer. He worked briefly as an engineer with the Cedar Rapids and Missouri River Railroad in 1863, for the U.S. Military in 1864-65, and for the Louisville, Cincinnati, and Lexington Railroad in 1866-68. From 1868-79 he worked for the Louisville Bridge and Iron Company before working for the Keystone Bridge Company from 1879-87, where he was named chief engineer in 1883. Thatcher was chief engineer and vice-president of the Decatur Bridge Company from

1887-89, when it went into receivership. Thatcher then opened an office in Louisville as a consulting engineer. During this time he became more interested in concrete bridges and became a national leader in concrete bridges during that bridge type's infancy. Thatcher built the world's largest concrete arch of its kind in Topeka in 1894-99. From 1901-12 he and William Mueser were partners in the Concrete Steel Engineering Company of New York City. In the 1880s Thatcher patented the Thatcher Truss and in the 1890s he patented improvements for concrete arch bridges such as the "Thatcher Bar". He was also well known as a mathematician, patenting the Thatcher Cylindrical Slide Rule in 1881 and a flat slide rule in 1900. In addition to the Walnut Street Bridge, he also built the Clinch Avenue Viaduct in Knoxville in Tennessee.

The Decatur Iron Bridge and Construction Company failed to keep their commitment to build a bridge in Chattanooga; the company would soon shut down. The Chattanooga Bridge Company approached the County Court again, and this time an agreement was reached. The company offered to donate $25,000 and its right-of-way and franchises, if the County Court would commit to building a free bridge. A new bridge commission was appointed to procure a bridge plan, secure the services of an engineer, and take bids. Edwin Thacher, who by this time had established a consulting engineer's office in Louisville, was hired as chief engineer and designer of the bridge; J. A. Fairleigh was the resident engineer and Edward Betts was the assistant engineer. Farleigh was a graduate of the Rensselaer Polytechnic Institute. He worked on railroad lines until he came to Chattanooga. Here, he became the city engineer and a partner in the firm of Farleigh and Betts. Betts had worked for civil engineer Robert L. Reed. He worked on the New Orleans and Northeastern Railroad and in 1897 was put in charge of an engineer corps on the Chattanooga and Lookout Mountain Railroad.

The commission solicited bids from bridge companies throughout the country. About twenty bids with full plans were submitted. At the July meeting of the County Court, bids, plans, specifications, surveys, and options on approaches to the river were presented. The Walnut Street location was favored over Market Street because the high bluff eliminated the need for a draw span and required less construction for the southern approach. The work was awarded to Neeley Smith and Company of Chattanooga for the substructure and Smith Bridge Company of Toledo, Ohio, for the superstructure. Robert Smith founded the Smith Bridge Company in 1867. He patented trusses for wood bridges and in 1869 Smith developed a combination wood and iron truss. The company also began to erect iron bridges around this time. Smith's company erected bridges in numerous states, but the Walnut Street Bridge is the only one they erected in Tennessee.

After the bids were let, the commission decided to run two lines of streetcar tracks and the plan was changed to accommodate this. McCauley and Morse of Pittsburgh, to whom Smith Bridge Company had subcontracted the superstructure, did this work. On September 20, 1889 the masonry work began. Erection of the iron and steel superstructure began in May of 1890. Almost two million pounds of iron and steel were used. In addition, there were 666,488 board feet of yellow pine and white oak.

Just before the bridge opened, Thatcher stated that it was the best and most perfect structure of its kind in the South and equalled by few anywhere in this country (Gaston 1987: 118). The first mule-drawn streetcar crossed the bridge on February 17, 1891. Although the Chattanooga and Northside Street Railway had contracted for electrical equipment, the County Court initially disapproved the use of electricity on the bridge. Between 4,000 and 6,000 people attended the formal dedication on February 18. The next day, the Times reported that "all of Hill City, North Chattanooga, and Northside were crossing and re-crossing the new bridge." Another article predicted that the population on the north side of the river would grow from 1,500 to 20,000 by the end of the decade, a prediction indicative of the period's optimism and of the hopes for the bridge's use. Mayor I. B. Merriam's dedication speech noted that the bridge should promote trade and cause the suburb of Hill City to grow. He hoped it would mean better access to natural resources, farm products, and building sites. Immediately after the bridge opened, Hill City, North Chattanooga, and Northside began using the bridge.

During the previous five years, the north side of the river had grown from a few houses to 1,500 people. It was speculated that the northern population would be 20,000 by 1900. The streetcar company continued to promote the use of the bridge and its line. Around 1894 a new suburb, Riverview, was being built. Chattanooga had a total population of 30,154 in 1900.

The bridge was nearly destroyed in 1897 by a fire attributed to a spark from the electric streetcar lines. The fire was discovered by a nearby resident in the early morning and was not brought under control for two and one-half hours. While a span and a half of the bridge floor was almost totally destroyed, the streetcar tracks warped, and the iron handrails twisted, the assistant engineer, E. E. Betts, pronounced no damage to the heavy iron work. The losses were calculated to be around $4,000. The floor suffered most from the fire, constructed as it was of highly flammable creosoted timber. It was the first of many fires; most thought

to be caused by cigarettes thrown on wood sidewalks. Other tragedies that occurred on the bridge over the years included several suicides and lynchings in 1893 and 1901.

When the bridge had served the city for twenty years, the County Court hired an engineer, Major William D. Jenkins, to prepare an extensive study on the condition of the bridge. Jenkins recommended that $250,000 be spent to restore the structure which had "practically served its purpose." In addition, he recommended that the bridge be widened and floored with concrete and that the wooden stringers carrying the floor be replaced. It was not until 1914 that the county had the Walnut Street Bridge reenforced. Five hundred tons of steel girders replaced the wooden stringers, creosoted timbers were laid on the girders, and the bridge was paved with creosoted wood blocks.

Increasing use of automobiles, the growth of North Chattanooga, and the dependence of the nearby communities of Hixon, Soddy, and Sale Creek on the bridge, meant that more strengthening repairs were needed. Even with improvements, the bridge could no longer adequately handle the traffic to and from North Chattanooga. In 1917 the county built another bridge across the river at Market Street. When this new bridge, the John Ross Bridge, was completed, it alleviated some of the problems of the Walnut Street Bridge. Yet the Walnut Street Bridge continued to serve in an important supplementary capacity in the transportation history of the city; streetcars continued to carry passengers across the bridge until the 1930s.

There is no evidence that the Walnut Street Bridge received any major repairs from 1914 to until 1938, when a WPA project, at the cost of $65,000, was undertaken. The City Engineer, Ashby Black, believed the bridge to be in good condition for its age, but still suggested that the maximum load be limited to twelve tons. A new floor, a design of Black's, with joints allowing for expansion and contraction was installed at this time.

An assessment of the bridge's condition was again made in 1948 by the engineering firm of Peerson & Hedman. Their report stated that the bridge could not be considered safe for modern traffic. Their recommendation further suggested that it be closed to all except passenger vehicles, and that access be totally denied when winds reached thirty-five mph. The life of the bridge could be extended for four to five years, however, by an expenditure of $158,000. The city approved a $160,000 contract for the reconditioning and repainting. The bridge was then re-opened for passenger traffic, but trucks were no longer allowed to cross. Repairs were made

again in 1955, 1957, 1960, and 1965. In 1973, the city contracted with a New York engineering firm, Howard, Needles, Tammen and Bergendoff, for an inspection of the bridge. The report made to the City Engineer stated, "It is our judgement that the bridge remain open to traffic for no more than three to six years, only if the repairs and alterations listed in Chapter IX are undertaken immediately. At the end of that period, the bridge should be permanently closed." These repairs were begun in August 1974, and completed at the cost of $178,000. On May 11, 1978, the judgement of Howard, Needles, Tammen and Bergendoff proved prophetic; the bridge closed to all traffic after almost ninety years of active service.

Martha Carver, a historian for the Tennessee Department of Transportation, wrote the sections on the current physical description of the bridge, Edwin Thatcher, and how the bridge fits into statewide context.

MAJOR BIBLIOGRAPHICAL REFERENCES

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United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

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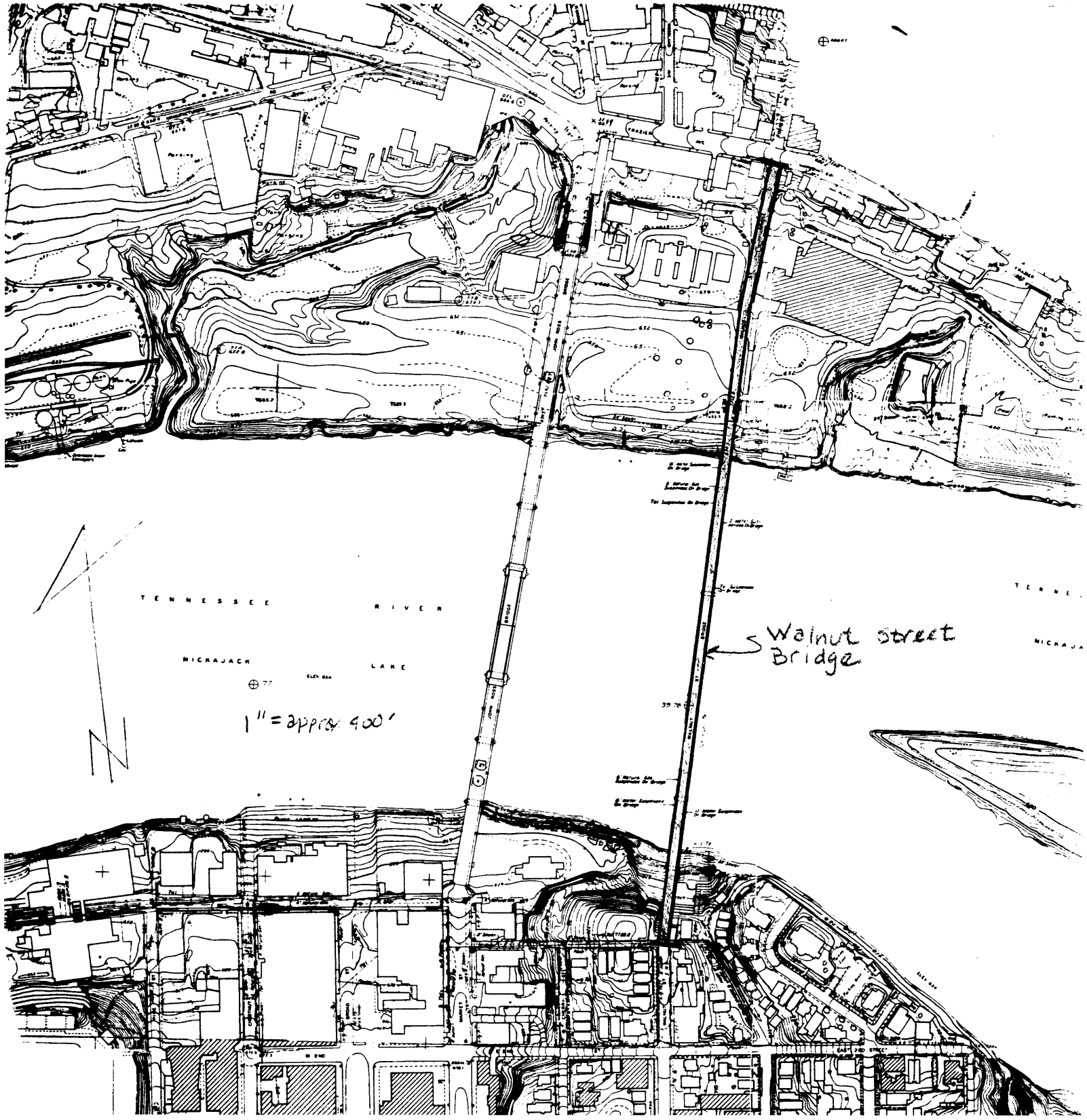

NPS Form 10-900-a
(8-86)

OMB Approval No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number Photos **Page** 1 Walnut Street Bridge

Walnut Street Bridge - Group #1
Chattanooga, Hamilton County, Tennessee
Photo by: Karen Alexander
Date: August 1989
Neg: Tennessee Historical Commission
Nashville, Tennessee

Facing northeast, west elevation
#1 of 8

Facing east, west elevation
#2 of 8

Facing northeast, west elevation
#3 of 8

Facing southeast, toward south approach
#4 of 8

Facing south, north portal
#5 of 8

Facing east, west elevation
#6 of 8

Facing north, south portal
#7 of 8

Facing north, south pier
#8 of 8

Walnut Street Bridge - Group #2
Chattanooga, Hamilton County, Tennessee
Photo by: Karen Alexander
Date: October1989
Neg: Tennessee Historical Commission
Nashville, Tennessee

Facing north, toward Frazier Avenue, south approach
#1 of 16

Facing east, three bridges (Market, Walnut, & Memorial) with McClelland Island beyond
#2 of 16

Facing southeast, northwest elevation
#3 of 16

Facing southeast, northwest elevation
#4 of 16

Facing southeast, northwest elevation
#5 of 16

Detail of pier and substructure
#6 of 16

Detail of truss and substructure, north approach
#7 of 16

Detail of substructure
#8 of 16

Detail of railing, facing east
#9 of 16

Facing northwest, southeast elevation
#10 of 16

Detail of connections
#11 of 16

Detail of railing & superstructure
#12 of 16

Detail of sidewalk
#13 of 16

Detail of truss
#14 of 16

Detail of south approach
#15 of 16

Reproduction of historic photograph, date unknown
#16 of 16