NPS Form 10-900
(Oct. 1990)

OMB No. 10024-0018

United States Department of the Interior
National Park Service

FINAL

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Middletown Bridge

other names/site number Shelby County Bridge #149

2. Location

street & number CR 450S over Conn's Creek N/A ☐ not for publication

city or town Middletown ☒ vicinity

state Indiana code IN county Shelby code 145 zip code 46182

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this ☒ nomination ☐ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ☒ meets ☐ does not meet the National Register criteria. I recommend that this property be consider significant ☐ nationally ☐ statewide ☒ locally. (☐ See continuation sheet for additional comments.)

Signature of certifying official/Title Date

Indiana Department of Natural Resources
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 certifying official/Title Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is: Signature of the Keeper Date of Action

☐ entered in the National Register.
☐ See continuation sheet

☐ determined eligible for the National Register.
☐ See continuation sheet

☐ determined not eligible for the National Register.

☐ removed from the National Register.

☐ other, (explain:)

Middletown Bridge
Name of Property

Shelby County, IN
County and State

5. Classification

Ownership of Property
(Check as many boxes as apply)

- ☐ private
- ☒ public-local
- ☐ public-state
- ☐ public-Federal

Category of Property
(Check only one box)

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

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

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

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

N/A

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions
(Enter categories from instructions)

TRANSPORTATION: road-related

Current Functions
(Enter categories from instructions)

TRANSPORTATION: road-related

7. Description

Architectural Classification
(Enter categories from instructions)

Other: Stone Arch Bridge

Materials
(Enter categories from instructions)

foundation Stone: limestone
walls Stone: limestone
roof
other

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

Middletown Bridge
Name of Property

Shelby County, IN
County and State

8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for the 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, method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

☐ **D** Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations
(Mark "x" in all the boxes that apply.)

Property is:

☐ **A** owned by a religious institution or used for religious purposes.

☐ **B** removed from its original location.

☐ **C** a birthplace or grave.

☐ **D** a cemetery.

☐ **E** a reconstructed building, object, or structure.

☐ **F** a commemorative property.

☐ **G** less than 50 years of age or achieved significant within the past 50 years.

Areas of significance
(Enter categories from instructions)

ENGINEERING
TRANSPORTATION

Period of Significance

1903-1929

Significant Dates

1903, 1913, 1929

Significant Person
(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

Avery, William

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 if individual listing (36 CFR 67) has been requested
☐ previously listed in the National Register
☐ previously determined eligible by the National Register
☐ designated a National Historic Landmark
☐ recorded by Historic American Buildings Survey #_____
☐ recorded by Historic American Engineering Record #_____

Primary location of additional data:

☑ State Historic Preservation Office
☐ Other State agency
☐ Federal agency
☐ Local government
☐ University
☐ Other
Name of repository:

Middletown Bridge
Name of Property

Shelby County, IN
County and State

10. Geographical Data

Acreage of Property Less than one acre

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

	Zone	Easting	Northing
1	16	615980	4368710
2			
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 Shawn Edward Niemi, Graduate Assistant

organization Ball State Center for Historic Preservation date October 2008

street & number 650 W. Minnetrista Blvd. telephone 765/213-3540 Ext. 228

city or town Muncie state IN zip code 47303

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A **USGS map** (7.5 0r 15 minute series) indicating the property's location.

A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional items
(Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of SHPO or FPO.)

name Shelby County Commissioners

street & number 25 W. Polk St., Rm 206 telephone 317/392-6330

city or town Shelbyville state IN zip code 46176

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 listings. Response to this request is required to obtain a benefit in accordance to the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.)
Estimated Burden Statement: Public reporting burden for this 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 the 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.

Section 7 – Narrative Description

The Middletown Bridge is located in Shelby County, approximately 1000 feet northwest of Middletown, Indiana. The Shelby County Commissioners now recognize it as Bridge #149.[1] It spans Conn's Creek along C.R. 450 S and runs in an east-west orientation. The bridge was built in 1903 to support traffic along the Michigan Road. However, the one-lane bridge was outpaced by increased traffic density, necessitating rerouting of the Michigan Road and the construction of a wider, more modern concrete bridge less than a quarter mile to the northeast in 1929. The Michigan Road as a whole was superseded with the construction of I-74, which parallels much of the Michigan Road in this part of Indiana. The Middletown Bridge serves as the southern access to approximately six houses and farms along the original segment of the Michigan Road, which became CR 450S.

The Middletown Bridge was built in 1903 with Indiana Blue limestone and is constructed as a four-arch, semicircular design (photograph 1, 2, 3 and 4). The semicircular, voussoir arches are formed of individual, rough-face limestone blocks with a subtly visual, wedge-shaped keystone at the crown. The arch's voussoirs spring to support rough-face limestone spandrels and parapet walls laid in ashlar coursing, which contain the infill and contemporary bituminous deck. The bridge is 140.8 feet in length and 16 feet wide. The parapet walls each are 2 feet wide, making the total width 20 feet.

The span rests on two abutments, both fourteen feet long, and three piers. The two easternmost piers support the convergent voussoir arch system and spring from a limestone footing. The base of intersection of the arches is three feet wide. The third westernmost pier supports the springing of the arches, but is larger at five feet wide. The wider pier creates a break in rhythm, which is visually more noticeable in the truncated westernmost arch forming a design more representative of a gothic pointed arch rather than the wholly semicircular construction of the eastern three arches (photograph 5). Both the wider pier and pointed arch were the result of reconstruction following flood damage in 1913. Based on visual inspection, approximately a third of the western pier was lost or replaced following the flood of 1913. The partially reconstructed western pier supports a triangular-shaped nosing on the upstream face rising to a point nearly half the height of the arch (photograph 6).

[1] "Structure Inventory and Appraisal Report, Shelby County, Bridge #149," 2006 (accessed at Shelby County Courthouse Annex, Shelby County Highway Department).

The flat spandrel sits atop the voussoir arch. The spandrel rises forming an approximately 18 inch tall parapet wall, which is then capped by large 5-inch thick limestone slabs. The cap or coping is wider than the wall creating a 4 inch reveal on both sides.

The bridge has a high degree of integrity and is in good condition. The original craftsmanship is readily apparent and dominates the bridge visually. Much of the bridge has remained intact from its original construction in 1903 and partial reconstruction in 1913. A small subsequent repair having occurred at an unknown time is visible at the central basal convergence of the two central arches on the downstream side (photograph 7). Here, smaller infill limestone blocks rest atop the pier before transitioning to what is believed to be original ring stone material. Additionally, recent stabilization efforts to the pier nosing, though obvious on the upstream side, are not so overwhelming as to overshadow the structure as a whole (photograph 8, 9 and 10). These efforts are visible on the eastern and central piers with concrete either encapsulating the remnants of the nosing or replacing damaged and missing nosing in 2007 and 2006 respectively. The modern bituminous paving is a necessity of vehicular use, although not original to the structure. Although some limestone blocks have weathered with age and repointing is needed, the bridge is in overall good condition.

Section 8 – Statement of Significance

The 1903 Middletown Bridge is eligible for the National Register of Historic Places under Criterion A for its association with transportation, as it once supported traffic on the original Michigan Road. The Michigan Road was an important settlement and trade route created in the 1830's. The Middletown Bridge is also eligible for listing under Criterion C as a representative example of stone arch bridge construction from the turn of the 20th century in Indiana. It embodies masonry design and construction methodology indicative of the time. The period of significance is 1903 to 1929, after which road planners bypassed the bridge and it ceased to serve Michigan Road traffic.

Indiana Roads

Following statehood in 1816 and the relocation of the state capitol from Corydon to Indianapolis in 1821, it became evident that Indiana needed a system of roads connecting the interior.[2] In 1821, state legislation defined a program for funding and construction of a series of state roads to meet this need.[3] Among these, an old Indian trail leading to Indianapolis and passing through Middletown, Indiana, was developed and became the Lawrenceburg State Road.[4] Several years later, the road became part of the more extensive Michigan Road.

Planning for the Michigan Road began in 1828, with a vision of connecting the Ohio River and the Great Lakes.[5] It was defined as three sections: 1) connecting Madison, Indiana, on the Ohio River to the centrally-located Indianapolis, 2) joining Indianapolis to Logansport in the north central area of the state, and 3) linking Logansport to Michigan City on Lake Michigan. Begun in 1830, construction continued into the 1840's. Upon completion, the road was over 260 miles in length.[6]

After its completion, the Michigan Road proved regionally significant as a means of transportation. Acting as a conduit for settlement, emigrants entered from the southern entryway, traveled north along the road, and disseminated east and west.[7] Once settlement had occurred, the Michigan Road then proved an important avenue for moving crops and other wares. It was used by interior settlers to move crops and merchandise to northern or southern

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[2] Marsha Poucher Beal, *History of Road Development Knox County, Indiana, from 1840 to 1860,* dissertation (Ball State University: 1994), 8.

[3] Ibid., 10-12.

[4] Ibid., 12.

[5] Ibid., 17.

[6] Ibid., 18.

[7] Geneal Prather, "The Building of the Michigan Road" (master's Thesis, Indiana University, 1941), 133.

waterways.[8] St. Joseph County local historian, Judge Timothy E. Howard, remarked that the road was "one of the most important public improvements known in the history of Indiana."[9]

In general prior to 1850, most roads throughout the state were simple dirt roads. The construction and maintenance of these roads was left largely to locals within immediate proximity to the roads. It had been assumed by local governments, that since the local farmers and mill operators livelihood depended upon the quality of the adjacent roads, they would be more apt to ensure their proper upkeep.[10] However, the quality of local roads varied greatly, even with local officials requiring "a certain number of days of labor or a cash equivalent on road and bridge upkeep each year."[11]

Following the pattern of other states, the Indiana General Assembly of 1849 passed legislation leading to a time of rapid expansion for Indiana roads. The legislation permitted road construction through private undertakings, thus removing some of the burden from the public sphere.[12] Consequently, private companies charged a toll for travel over their roads in order to offset maintenance costs.[13]

Early examples of privately maintained roads tended to be planked. The planking offered some consistency versus the often rutted earthen roads, but it was likely susceptible to freeze-thaw cycles creating constant upkeep. As a result, planking was rather short lived and supplanted by other less costly and more consistent paving methods.

Beginning in the 1860's, gravel, then macadam, came to dominate road construction.[14] Early occurrences undoubtedly were restricted to toll roads or the streets in the more prosperous urban towns and cities.[15] As time went on, however, these paving systems would extend to even remote rural communities.

Paralleling rapid expansion of Indiana roads in the 1850's, two acts of legislation were passed in 1852 framing the context for bridge construction and repair. The first occurred in March, stating that "a company could build a structure wherever and charge whatever

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[8] Ron Hamilton, "Michigan Road Was Important Link," *Over the Years: A Collection of Historical Articles Volume I* (Shelbyville, IN: R.K. Hamilton, 2004), 7.

[9] Prather, 133.

[10] Wayne E. Fuller, *RFD: The Changing Face of Rural America* (Bloomington, IN: Indiana University Press, 1964), 177-179.

[11] James Cooper, *Iron Monuments to Distant Prosperity: Indiana's Metal Bridges, 1870-1930* (Greencastle, IN: DePauw University, 1987), 1.

[12] *History of Shelby County, Indiana* (1887: repr., Knightstown, IN: Eastern Indiana Publishing Co., 1968), 285.

[13] Beal, 204-208.

[14] Ibid., 50.

[15] Ibid., 276.

toll...county commissioners approved."[16] Following in May of 1852, a second act of legislation allowed township trustees provisions for constructing and repairing bridges. The trustees then were permitted to use treasury funds and even impose taxation as a means to bridge construction and maintenance. Other than an amendment in 1855, which shifted power from the township trustees to the county commissioners, the 1852 legislation guided bridge construction for the next half-century.[17]

However, it was not until the late 1870s similar legislation was adopted for road development. Until that time, the construction of roads resulted largely from requests made to the township trustees by local property owners. Recognizing certain inherent limitations within this provision, the Indiana General Assembly sought to streamline the process. As a result, they passed legislation which stated that the responsibility to build and maintain roads could be left to county commissioners.[18]

Coupled with the earlier legislation, several movements greatly impacted both road and bridge construction in Indiana and culminated in the closing days of the nineteenth century. They effectively reversed a trend which had begun in the mid 1850s, whereby road improvements had a diminishing role in the wake of rapid railroad expansion in Indiana.

The first of these resulted from steadily increasing agricultural and industrial production throughout the last half of the century and the recognition that well-maintained roads and bridges were vital to moving goods. This was demonstrated as early as 1876 when scientific experiments were conducted to determine the extra force required on various types of roads, ranging from earthen to stone to macadam. Subsequently, the information was promoted as a means to improve roads, thus facilitating the trafficking of goods. Jeremiah Jenks, a political scientist in support of road improvements, wrote in 1889, "...the character of a nation's roads is a good test of its civilization."[19]

During the early 1890's, another important step for road development resulted from the "good road movement." Surprisingly, a bicycling organization called the American League of Wheelman was instrumental, along with railroad officials, in lobbying for increased federal legislation designated toward better roads.[20] Though their combined efforts were somewhat limited, in 1896, an unrelated program forever changed road history in the United States.

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[16] Cooper, *Iron Monuments to Distant Prosperity: Indiana's Metal Bridges, 1870-1930,* 2.

[17] Ibid.

[18] Laura Thayer, "Collin's Ford Bridge," National Register of Historic Places Registration Form, 23 October 1994, 3 (accessed at Ripley County Historical Society, Versailles, Indiana).

[19] Jeremiah W. Jenks, "Road Legislation of the American State," *Publications of the American Economic Association* Vol. 4, No.3 (May, 1889), http://www.jstor.org (accessed 31 March 2008).

[20] Francis Parker, e-mail message to author, March 31, 2008; Fuller, 182.

After 1896, as the result of the federally created rural free delivery (RFD) program, road construction was never the same, not just in the Indiana, but across the entire United States. Prior to the RFD program anyone living in the rural community and wishing to receive their mail had to visit the local post office which may have been located miles away. Moreover, it may require arduous travel over poorly maintained dirt roads. Therefore, it was not uncommon for some to delay the trek depending upon weather and other unfavorable circumstances.[21]

Consequently, between the fall of 1896 and the spring of 1897, 82 pioneer routes were selected in 28 states and the Arizona territory.[22] Early routes were at least twenty-five miles long and serviced at least 100 families.[23] Popularity for the program rapidly grew amongst farmers, and other test routes quickly followed. One example was described in 1897 by the *New York Times,* which highlighted test routes from four post offices in Delaware County, Indiana.[24] Later, tests were conducted that designated county-wide delivery. By the early months of 1903, Indiana had 14 counties with complete rural mail service.[25] It was later written, "...that RFD was the best thing the government had ever done for the farmers."[26]

In 1899, looking to expand the program, the Post Office Department stipulated that unless a route was passable year round, it would not be considered for rural mail delivery.[27] As a result, "farmers were out in force...building new bridges and culverts in order to secure new routes and maintain old ones."[28] So, by 1908, the program was linked to an estimated $72,000,000.00 of improvements to roads, culverts, and bridges nationwide through local, state, and federal endeavors.[29]

Indiana Stone Arch Bridges

Stone arch bridge construction has never dominated in Indiana. Instead, that distinction is shared between wood, steel and concrete. Wood construction largely occurred early in the 19th century.[30] This was then followed by the rise of iron and then steel truss systems in the late

[21] Fuller, 67-68.
[22] Ibid., 37.
[23] Ibid., 44.
[24] "Rural Free Delivery: A Post Office Experiment to be Tried in Indiana," *The New York Times*, 6 November 1897, http://www.nytimes.com/ (accessed 31 March 2008).
[25] Fuller, 69-71.
[26] Ibid., 17.
[27] Ibid., 182.
[28] Ibid., 71.
[29] Ibid., 184.
[30] Cooper, *Iron Monuments to Distant Prosperity: Indiana's Metal Bridges, 1870-1930,* 1.

stages of the 19th century which carried well into the 20th century. Ultimately, they all gave way to the use of concrete, beginning in the early 20th century.[31]

Nonetheless, stone arch bridges were used locally in several areas of Indiana throughout the 19th and early 20th centuries. Dating back to the 1820's and 1830's, they were seen along such major highways as the National Road.[32] Here, they were likely used "to carry only...loads represented by horse drawn wagons and pedestrians."[33] In the 1870's, their role shifted when their true prowess was recognized as a means to support the newer, heavier trains associated with railroad expansion. While in a narrow thirty year window, between 1885 and 1915, they were effectively employed along roads mostly in counties where limestone was easily accessible.[34] However, by the mid 20th century, concrete bridge construction was so dominant that stone arch bridge construction was increasingly limited to ornamental structures in a park setting.[35]

Today, approximately 100 stone arch bridges have been identified across the state. Most of these occur in southeastern Indiana where the Blue or Laurel limestone formations are easily accessible. For example, Decatur and Ripley Counties respectively have forty-two and thirteen stone arch bridges. And, of these, even fewer have four or more arches, with Decatur having five and Ripley only two.[36] Their survival today is a testament to the craftsmen who "builded [sic] better than they knew."[37] This is ever apparent with what bridge historian James Cooper terms the "neglect to destruction" approach often with only "modest maintenance and repair" following World War II.[38] Regardless, in some instances the employed techniques of the masons have endured.

Indiana stone bridge builders used the same principles and techniques developed and mastered by the Romans hundreds of years ago.[39] Once the site was chosen, local craftsman tried to place the substructure of the bridge upon bedrock. If, however, this was not possible, a system of pilings or wooden rafts was used. This method was followed by the construction of timber falsework to support the overbearing load before the arch system was fully in place and able to support its own load.

Once completed, the arch system transfers the vertical force of the deck laterally from the crown through the haunch and ultimately distributes it to the piers or abutments. Indiana bridge historian James Cooper points out, "You always need the line of pressure to go through the

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[31] Thayer, 2.
[32] Ibid., 1.
[33] Archibald Black, *The Story of Bridges* (New York: McGraw-Hill Book Company, Inc., 1936), 52.
[34] James Cooper, e-mail message to author, 2 April 2008.
[35] Thayer, 2.
[36] James Cooper, e-mail message to author, 24 March 24 2008.
[37] Black, 54.
[38] James Cooper, e-mail message to author, 2 April 2008.
[39] Thayer, 1.

center portion of the ring stones."[40] Thus, this allows for maximum dispersion of compression forces. Similarly, Archibald Black wrote:

> For stone arch construction requires sufficient depth and curvature to provide a "wedging" effect when all of the arch stones are in place. Indeed, if the arch stones are carefully fitted, a well designed stone arch would support itself and carry its load without the necessity of cement to fasten the stones together.[41]

Adding to this, James Cooper notes - construction is "easiest to guarantee and manage in the semicircle (form)."[42] He goes on to suggest that although the local stone masons were adept at their trade, it was more empirically based rather than scientific. He also proposes, "that segmental and elliptical rings come later than semi-circular ones - that there are special design/construction issues here, especially for the artisanal masons ubiquitous before the age of professionalization."[43] In support, he adds, "Segmental and elliptical rings require more figuring and stronger substructures, given the direction of thrust at the springing."[44] As a result, it is understandable for the greater occurrence of the semicircular design.

Despite their endurance, some stone arch bridges possess an innate weakness only later realized. Stemming from a cost saving measure, whereby, an orientation perpendicular to the stream required fewer materials, it is not uncommon to encounter a curve leading to or a T-intersection terminating the approach of a bridge. Seemingly, this was of little concern when horse and buggy were commonplace. However, as time went on and the automobile came to dominate, many of the bridges were lost over the years, not only to neglect, but because contemporary standards called for wider decks and safer approaches.[45]

Middletown Stone Arch Bridge

The Middletown Bridge lies in a rural setting just north of Middletown, Indiana, in Liberty Township, Shelby County. The small town has an early and rich history stemming from its geographic location between the county seats of Shelbyville in Shelby County and Greensburg in neighboring Decatur County. The town held an early distinction as "one of the

[40] James Cooper, e-mail message to author, 2 April 2008.
[41] Black, 57.
[42] James Cooper, e-mail message to author, 22 March 2008.
[43] James Cooper, e-mail message to author, 21 March 2008.
[44] Ibid.
[45] James Cooper, e-mail message to author, 2 April 2008.

most important trading centers in the county."[46] Thus, the routing of the Michigan Road through the area likely was an easy choice following the path of the earlier Lawrenceburg and Indianapolis State Road.[47]

During the 1840s, the town's importance was nearly cemented; rumors of a pending railroad line to be platted through the town were circulating. As speculation took hold, an explosion of construction took place anticipating future growth and prosperity. However, the town's heightened expectations were quickly erased with the rerouting of the rail line through neighboring Waldron.[48] Though the recovery of the town was never realized, it did act to support travelers of the Michigan Road during the latter part of the 19th century as "it was the only community of any size for several miles around."[49] In 1880, the town consisted of "one church, two dry-goods stores, two groceries, one drug store and a blacksmith-shop."[50]

In 1903, further efforts were made to support traffic along the Michigan Road with the construction of a sturdy bridge.[51] Shelby County Commissioners posted a letting for "the erection of a stone arch bridge over Conn's Creek, on the Michigan Road, near Middletown, in said county, the same to be done and completed according to plans, profiles and specifications therefore now on file in the Auditor's office..."[52] The sealed bids were received on June 4th, 1903 with the award for the bridge construction going to William Avery. The contract stated the "bridge shall be completed on or before Sept 1-1903." Also, the contract stated that he was permitted "to use the stone now laid in the abutments to the foot bridge," suggesting possibly a smaller wood bridge. It goes on to state that upon completion of half of the work, William Avery would receive $1000 of his total $2585 bid amount, with the remainder paid upon completion.[53] In agreement with the contract, the Commissioners authorized a partial payment

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[46] Vicky Fischer, "*How the Railroad Can Affect the Growth of a Town*," Shelby County: 150 Years 1822-1972 (unpublished, Shelbyville-Shelby County Public Library: Genealogy and History Room).

[47] Kenneth D. Sever, *The Waldron Story or Conn's Creek Reflections* (Shelbyville, IN: Shelby Printing, 1976), 88.

[48] *History of Shelby County, Indiana from the earliest time to the present, with biographical sketches, notes, etc., together with a short history of the Northwest, the Indiana Territory and the State of Indiana* (1887; repr., Knightstown, IN: Eastern Indiana Publishing Co., 1968), 445.

[49] Fisher, 64.

[50] *Atlas of Shelby Co. Indiana; To Which Are Added Various General Maps, History, Statistics, Illustrations, Etc.,* (1880; repr., Evansville, IN: Unigraph, Inc., 1979), 14.

[51] Shelby County *Commissioners Record* 1903, 395-96, 436, 452, 495, 537 (Shelby County Auditor's Office, Shelby County Courthouse Annex).

[52] "Notice of Bride Letting," *The Shelby Republican,* 15 May 1906, p.7.

[53] *Commissioners Record* 1903, 395-96.

to William Avery of $1000 on August 3, 1903,[54] followed by subsequent payments on September 8, 1903,[55] August 3, 1903[56], and December 23, 1903.[57]

William Avery was active throughout the community. Born on February 17, 1860 in Noble Township, Shelby County, he was raised on a farm, attended the local school and went on to study at the Danville Normal School to become a teacher. After completing his studies, he taught for thirteen years in several local schools in Shelby County. Eventually, he became a principal for the Waldron schools. He held the position for five years, before pursuing business as a self-employed contractor for bridges and macadamized roads.[58] Eventually, relocating to Indianapolis, he was still identified as a contractor in the industry of road building in the 1930 Federal Census.[59] In 1936, he died in Indianapolis.[60]

Still a resident of Waldron, William Avery likely witnessed the aftermath of the 1913 flood, including the partially washed out Middletown Bridge. Records indicate snowfall for the month of March was 8.25 inches with rainfall adding another 9.34 inches of precipitation. Nearly three quarters of the days in March that year were marked by some form of precipitation.[61]

As a result, the nearly constant precipitation flooded areas throughout Shelby County. The quiet farm communities saw much of their land transformed into lakes as creeks breached their banks. March 24th and 25th marked the crest of the floodwaters. Local resident Dr. W. T. Shrout was quoted as saying, "On the 24th of March the biggest flood ever was known visited Waldron and county washing out everything in its reach....The water ran two feet down Main Street."[62] As a result, hundreds of residents were helpless as the waters rose. Worse yet, some local residents perished while trying to reach safety.

The following days, as the waters slowly retreated, evidence of the destructive force of the flooding became apparent. A blanket of mud, six inches deep in some instances, "covered everything the water had touched."[63] Also, vital transportation routes stood impassable; many of

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[54] Ibid., 436.
[55] Ibid., 452.
[56] Ibid., 494.
[57] Ibid., 537.
[58] Edward H. Chadwick, *Chadwick's History of Shelby County, Indiana* (Indianapolis: B.F. Bowen & Co., 1909), 685.
[59] "William Avery," Ancestry.com, http://www.ancestry.com/ (accessed February 2, 2008).
[60] Ron Hamilton, "Middletown Stone Arch Bridge is Reminder of Another Era," *Over the Years: A Collection of Historical Articles Volume III* (Shelbyville, IN: R.K. Hamilton, 2004), 142.
[61] Kenneth D. Sever, *The Waldron Story or Conn's Creek Reflections* (Shelbyville, IN: Shelby Printing, 1976), 88.
[62] Ibid., 89.
[63] Ibid.

the county's bridges were either damaged or gone altogether.[64] Early estimates following the flood for the cost of repairs to the county's roads and bridges was in excess of $100,000. The extent and severity of damages to the central district of the county was reportedly explained, "The west end of the Middletown Bridge is gone and thirty-six feet of the grade."[65]

Following the assessment of the extent of the damages in the county, the first task was to address the most critical areas. The Middletown Bridge was viewed as an integral part of the Michigan Road. So, in a special session by the Board of Commissioners, on July 5, 1913, William Avery was again awarded a contract for the repair of the Middletown Bridge.[66] He won the contract with a bid of $1992.00.[67] The contract stipulated the work to be completed as per plans and specifications before September 1, 1913.[68] To date, these records have not been located. However, based upon visual inspection it seems as though every effort was made to salvage as much of the original construction as possible. As a result, the westernmost pier was widened, reducing the available space for the arch; hence, the truncation of the westernmost arch.

Continued importance of the Middletown Bridge is illustrated on a 1909 map of Shelby County. The map was produced by the United States Post Office Department and depicts the RFD routes in the county. Although, it would be pure speculation as to whether the bridge was built for the route itself, it does demonstrate the bridges continued importance along a RFD route.[69]

As the one lane bridge stood originally, the eastern approach required a sharp turn from the more southeastern-northwestern oriented Michigan Road.[70] This combination of narrow width and unsafe entry/exit, likely, was not an issue in the early years. However, the functionality of the bridge was outpaced as the automobile grew in popularity and traffic patterns increased overall. As a result, a new bridge was built a short distance to the northwest in 1929. More modern in design, the newer bridge stands as a "three-span concrete structure" and is able to safely handle current day traffic flow along the Michigan Road.[71]

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[64] "Bridges and Grades in Deplorable Condition," *The Shelbyville Democrat,* 1 April 1913.

[65] Ibid.

[66] *Commissioners Record* 1913, 251.

[67] "Award Bridge Contracts," *The Shelbyville Republican,* 5 July 1913.

[68] *Commissioners Record* 1913, 251.

[69] U.S. Post Office, *Map of Reply County Showing Rural Delivery Service*, np, Washington, D.C., August 6, 1909 (accessed Indiana State Library, Indianapolis, IN).

[70] Google Maps, http://maps.google.com/?ie=UTF8&ll=39.46224,-85.651538&spn=0.005616,0.009978&t=h&z=17 (accessed 31 March, 2008).

[71] Hamilton, "Middletown Stone Arch Bridge is Reminder of Another Era," *Over the Years: A Collection of Historical Articles Volume III*, 142.

Still in use today, the Middletown Bridge stands as a testament to its engineering and craftsmanship. It survives in good condition and is the only four-arch stone bridge remaining in Shelby County. Likewise, there is only one other stone arch bridge in the county.[72] Recently, it has undergone repairs stabilizing the effects of scour to the pier nosing. The most recent occurrence was in 2007 to the eastern pier and 2006 to the central pier.[73] However, the bridge has endured but does show evidence of wear and tear. The bridge has cracking requiring repointing. Additionally, missing stones need replaced.[74] At this time, there are no plans addressing these issues. Rather, it will likely continue in use till safety concerns dictate its closure.[75]

The Middletown Bridge is significant for its association with transportation development in Indiana as an important contributor to the Michigan Road. The Michigan road was vital to the growth and development of the state. Additionally, the bridge is an exceptional and increasingly rare example of stone arch bridge construction dating from the early 20th century in Indiana.

[72] James Cooper, e-mail message to author, March 24, 2008.

[73] Kem Anderson, Shelby County Highway Superintendant, interviewed by author, Shelbyville, IN, January 2008.

[74] "Structure Inventory and Appraisal Report, Shelby County, Bridge #149," 2006 (accessed at Shelby County Courthouse Annex, Shelby County Highway Department).

[75] Anderson.

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U.S. Post Office. *Map of Shelby County Showing Rural Delivery Service.* np, Washington, D.C., August 6,1909 (accessed Indiana State Library, Indianapolis, IN).

VERBAL BOUNDARY DESCRIPTION

This nomination includes Middletown Bridge, its superstructure, abutments, wing walls, deck, and a line 20' away from the furthest point of the bridge on Shelby County Road 450 South on the east and west sides. The north and south boundary lines are parallel to but 10' away from the sides of the structure.

BOUNDARY JUSTIFICATION

The boundary includes the significant resource and its immediate environment.

The following information is the same for photographs 1 – 10:

1. IN_ShelbyCounty_MiddletownBridge
2. Shawn Niemi
3. 4 September 2008
5. Division of Historic Preservation and Archaeology (DHPA), 402 West Washington Street, Room W-274, Indianapolis, Indiana 46204

Other information for individual photographs:

Photograph 1
6. View looking north of south elevation.
7. 1 of 10

Photograph 2
6. View looking east of west approach.
7. 2 of 10

Photograph 3
6. View looking southeast of north elevation.
7. 3 of 10

Photograph 4
6. View looking west of east approach.
7. 4 of 10

Photograph 5
6. View looking south of truncated western arch which was rebuilt in 1913 following flood.
7. 5 of 10

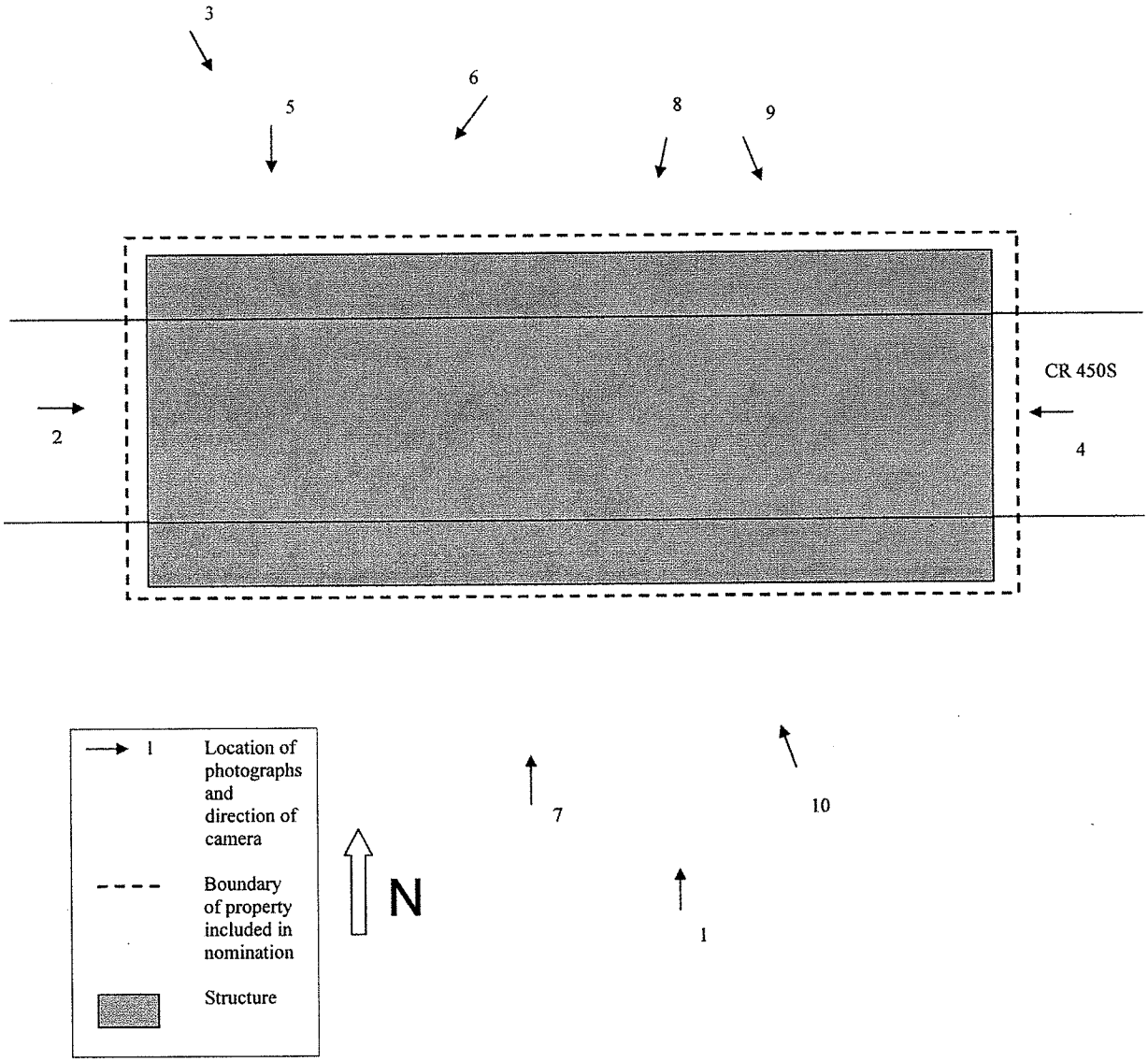
Photograph 6
6. View looking north of southeast elevation.
7. 6 of 10

Photograph 7
6. View looking north of central pier with repair at the junction or pier and arches.
7. 7 of 10

Photograph 8
6. View looking southwest at central pier concrete stabilization.
7. 8 of 10

Photograph 9
6. View looking southeast at eastern pier concrete stabilization.
7. 9 of 10

Photograph 10
6. View looking northwest at pier stabilization from downstream side.
7. 10 of 10


3
6
5
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9
CR 450S
2
4
1 Location of photographs and direction of camera
Boundary of property included in nomination
Structure
N
7
10
1

Middletown Bridge, Shelby Co., IN photo # 1

Middletown Bridge, Shelby Co., IN photo # 6