# 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 National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form.* 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.

#### 1. Name of Property

Historic name: Bridge No. 90646

Other names/site number: Wooddale Avenue Bridge

Name of related multiple listing:

"Iron & Steel Bridges in MN, 1873-1945"

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

#### 2. Location

national

Street & number:	Wooddale Avenue over Minnehaha Creek; 5000 block of Wooddale Avenue			
City or town: Edina	a S	tate: MN	County: Hennepin	
Not for publication	: N/A	Vicinity: N/A		

# 3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this \_\_\_\_\_ nomination \_\_\_\_\_ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property <u>meets</u> does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

local

Applicable National Register Criteria:

statewide

<u>A</u> <u>B</u> <u>C</u> <u>D</u>

Signature of certifying official/Title

Date

State or Federal agency/bureau or Tribal Government

In my opinion, the property <u>meets</u> does not meet the National Register criteria.

Signature of commenting official

Date

Title:

State or Federal agency/bureau or Tribal Government

Bridge No. 90646 Name of Property Hennepin, Minnesota County and State

# 4. National Park Certification

I, hereby, certify that thi	s property is:			
entered in the Na	tional Register			
determined eligit	ole for the Nation	nal Register		
determined not e	ligible for the Na	ational Register		
removed from th	e National Regis	ster		
other (explain:)				
Signature of the Keepe	r		Date of Action	
5. Classification				
<b>Ownership of Prope</b>				
(Check as many boxe	es as apply)			
Private				
Public - Local	Χ			
Public - State				
Public - Federal				
<b>Category of Propert</b> (Check only <b>one</b> box)				
Building(s)				
District				
Site				
Structure	X			

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## Number of Resources within Property

(Do not include previously listed resources in the count.) Contributing Noncontributing

		-	buildings
		-	sites
1		-	structures
		<u>.</u>	objects
1		<u>.</u>	Total

Number of contributing resources previously listed in the National Register N/A

#### 6. Function or Use

Bridge No. 90646

Name of Property

#### **Historic Functions**

(Enter categories from instructions.)

TRANSPORTATION/road-related (vehicular)

## **Current Functions**

(Enter categories from instructions.)

TRANSPORTATION/road-related (vehicular)

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#### 7. Description

Architectural Classification (Enter categories from instructions) OTHER: Multi Plate arch

Materials: (Enter categories from instructions.)

Principal exterior materials of the property: METAL: Steel

STONE: Limestone

CONCRETE

OTHER

## **Narrative Description**

(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

## **Summary Paragraph**

The Wooddale Avenue Bridge, identified as National Bridge Inventory Number 90646, is a single-span, Multi Plate arch bridge that is faced with Platteville limestone. The bridge has a structure length of 21.0 feet, a span length of 18.0 feet, and an out-and-out width of 40.4 feet. The bridge was constructed by the Works Progress Administration (WPA) in 1937 and carries Wooddale Avenue over Minnehaha Creek in Edina, Hennepin County, Minnesota.

#### **Narrative Description**

Bridge No. 90646 is a single-span, Multi Plate arch bridge that carries Wooddale Avenue over Minnehaha Creek in Edina, Hennepin County, Minnesota. The bridge is located in the northeast part of Edina, 230 feet south of the intersection of Wooddale Avenue and West 50<sup>th</sup> Street, and a half-mile east of Trunk Highway 100. The Edina County Club golf course is located directly west of the bridge and St. Stephens Episcopal Church is located directly east of the bridge. The bridge is oriented in a north-south alignment over Minnehaha Creek. At this location the creek is narrow and rocky, and has sloped banks which are covered with dense growth of small trees and shrubs. The bridge has a structure length of 21.0 feet, a span length of 18.0 feet, and an out-and-out width of 40.4 feet.

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The superstructure of Bridge No. 90646 consists of abutments on the north and south ends of the bridge, which anchor the structure into the sloped banks of Minnehaha Creek. The abutments are constructed of reinforced-concrete with Platteville limestone facing. Engaged pilasters, faced in Platteville limestone, project slightly from the abutments. The non-load bearing closed spandrels on the bridge are constructed of reinforced-concrete and are faced with Platteville limestone. The rock-faced, coursed limestone has raked mortar joints. The voussoir stones are rectangular-shaped and are applied perpendicular to the arch. The voussoirs increase in height closer to the center of the arch where an elongated keystone marks the middle. The semi-circular arch and barrel are constructed of Armco Multi Plate corrugated steel plates which are bolted together. The plates of the arch have corrugations 6.0 inches wide and 1.5 inches deep. The arch carries the load of the span. An insulated sewer pipe runs longitudinally through the arch. Short limestone retaining walls extend upstream and downstream from the imposts.

The bridge's spandrel walls extend above the deck to form the railing. The engaged pilasters also extend above the deck forming the railing end posts. The solid railings are slightly arched and are topped with a thin limestone cap that overhangs the width of the railings. The cap features horizontal, narrow limestone pieces interspersed through the cap that slightly rise above the height of the cap. Beyond the endposts are short sections of railing that extend along the approach spans. At both ends of the west railing, only the base of these extensions remains. The deck is 40.4 feet wide and carries a 31.0 foot wide roadway that has a bituminous wearing surface applied over earth fill. A concrete sidewalk extends along the east side of the roadway. A plaque inscribed with "WPA 1937" is located on the inside of the south end of the eastern railing.

# Integrity

Since its construction in 1937, Bridge No. 90646 has remained in its original location, carrying Wooddale Avenue over Minnehaha Creek. The setting is relatively unchanged, as much of the area was developed before and simultaneously with the bridge. As such, Bridge No. 90646 retains excellent integrity of location and setting. The bridge has remained relatively unaltered since its construction, with the replacement of the bituminous wearing surface; a feature that is designed to be replaced, and the loss of the upper portions of the railing extensions on the western railing being the only notable changes to the structure. The bridge exhibits some minor deterioration, including rusting of the bolt connections on the steel arch, spalling and expansion of the Platteville limestone, and deterioration of portions of the parapet walls; however, this has not altered the original design of the bridge or its character-defining features. As such, the bridge retains excellent integrity of design, materials, workmanship, feeling, and association.

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#### 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.)

Х	A.
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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.
- $\underline{X}$  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)

- 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 old or achieving significance within the past 50 years.

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# Areas of Significance

(Enter categories from instructions)

# POLITICS/GOVERNMENT

ENGINEERING

# **Period of Significance**

1937

## **Significant Dates**

1937

## **Significant Person**

(Complete only if Criterion B is marked above)

N/A

## **Cultural Affiliation**

N/A

## Architect/Builder

Fabricator: Lyle Pipe & Culvert Co.

Builder: Works Progress Administration

Designer: Duckett, W. E.

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**Statement of Significance Summary Paragraph** (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

Bridge No. 90646 is locally significant under National Register of Historic Places (NRHP) Criterion A in the area of Politics and Government, and under Criterion C in the area of Engineering, within the historical context "Iron and Steel Bridges in Minnesota, 1873-1945." The bridge is a rare surviving and an outstanding example of a single-span, Multi Plate arch bridge with masonry facing that was constructed by the Works Progress Administration (WPA). As such, Bridge No. 90646 is significant under NRHP Criterion A, public works for bridges, for its exemplification of the types of labor-intensive public works projects undertaken by the WPA during the Great Depression in order to provide work for the unemployed. Bridge No. 90646 is also significant under NRHP Criterion C for its modular, corrugated-metal, Multi Plate arch design, which is a unique engineering achievement; and for its outstanding Rustic Style aesthetics, a style that was considered a hallmark of WPA construction. The bridge is also an unusual example of a WPA Rustic Style bridge constructed with Platteville limestone. The bridge's period of significance is 1937, which corresponds with the year it was constructed, as well as the year it was associated with the work of the WPA.

# Narrative Statement of Significance (Provide at least one paragraph for each area of significance.)

Owned by the City of Edina and constructed in 1937, Bridge No. 90646 is located in the northeast part of Edina, on land that was originally part of a 120-acre farm owned by George W. Baird, a prominent local farmer in the late nineteenth century.<sup>1</sup> Beginning in the 1920s, much of the Baird farmstead was sold for development, including the area along Wooddale Avenue that surrounds the location of present-day Bridge No. 90646. In 1922, the Edina Country Club subdivision was platted just north of the present-day bridge, on the north side of 50<sup>th</sup> Street. The Edina Country Club golf course, located immediately adjacent to the west of the bridge, opened in 1923. The area to the east and south of the bridge site also began to be developed around this time. This development resulted in a growing population and a corresponding increase in automobile and truck traffic.

By the mid-1930s, the steel beam bridge that originally carried Wooddale Avenue over Minnehaha Creek was "no longer wide enough to handle the heavy truck and auto traffic that has been on the increase yearly."<sup>2</sup> Therefore, in 1937, the City of Edina decided to replace the bridge. On March 8, 1937, the Edina City Council reviewed proposals for the construction of a new bridge over Minnehaha Creek at Wooddale Avenue. According to the meeting minutes:

... four different kinds of constructions have been estimated, namely, reinforced concrete, piling with I beams, cresoted wood culverts and inverted multi plate steel arch on concrete base with rubble or boulder stone facings. After discussion it was moved by Willson, that the proposition of the Lyle Culvert & Pipe Company dated March 6, 1937, be accepted and the Recorder be authorized sign [sic] the necessary order insuring present low pric [sic], seconded by Holten and carried.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Robert Vogel, "Wooddale Bridge – Finding of Significance," available at the Edina Heritage Preservation Board, Edina, Minnesota.

<sup>&</sup>lt;sup>2</sup> "New Bridge Like This Will Span 'Haha Creek," *The Crier*, May 1937, 1, available at the City of Edina, Edina, Minnesota.

<sup>&</sup>lt;sup>3</sup> Village of Edina, "Minutes of the regular meeting of the Council of the Village of Edina, held in Edina School Building on March 8, 1937 at 8 PM," Edina City Council, available at the City of Edina, Edina, Minnesota.

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The proposal by the Lyle Culvert & Pipe Company was for an Armco Multi Plate arch bridge, consisting of "5½ - 3 Gauge Plates 40'-4" long – including all necessary bolts and nuts," for a total cost of materials, including freight, of \$1,008.00.<sup>4</sup> The proposal also included a Rustic Style boulder stone facing, which was a common aesthetic treatment for Multi Plate arch spans during this period. The bridge replacement project was partly funded by the federal government through one of the New Deal federal relief programs. The funds were administered by the Department of the Interior and passed through the Minnesota Department of Highways to the Hennepin County Highway Agency.<sup>5</sup> Hennepin County, along with the City of Edina, jointly paid for the construction of the bridge, which cost approximately \$3,500.<sup>6</sup> A local unit of the WPA was employed to construct the bridge.

Construction of Bridge No. 90646 began in late May 1937. Edina's *The Crier* chronicled the construction of the bridge, writing that: "workmen began foundation excavations late in May for the new stone arch bridge at Wooddale avenue [sic] over Minnehaha creek, recently authorized by the village council."<sup>7</sup> Work on the bridge progressed rapidly until July 1937, when it was reported that an aspect of the bridge's design had changed to complement development surrounding the bridge. The article states:

in order that the stone facing of the new Wooddale avenue [sic] bridge over Minnehaha creek [sic] may harmonize with the new edifice of St. Stephen's Episcopal church soon to be built nearby, specifications for the stone have been changed from boulder stone to limestone, Village Recorder Ben B. Moore told the CRIER.<sup>8</sup>

The original drawings for Bridge No. 90646 from April 13, 1937, depict a Rustic Style, single-span, steel Multi Plate arch bridge clad in irregular-coursed boulder stone with an open stone and timber railing. The plans note that the designer was W. E. Duckett.<sup>9</sup> Duckett was a local civil engineer who was employed by Hennepin County as a highway engineer from 1928 to 1938.<sup>10</sup> The determination to change the stone of Bridge No. 90646 to Platteville limestone was an intentional decision to unify the bridge with the design aesthetic of the limestone veneer on the then under-construction St. Stephen's Episcopal Church (completed 1938), which is located directly east of the bridge.

The decision to use Platteville limestone does not appear to have affected the construction schedule of the bridge. *The Crier* reported in August 1937 that the work on the bridge was largely complete, and in September, a photograph of the newly completed bridge graced the cover of the newsletter.

# Multi Plate Arch Bridges

Bridge No. 90646 is a Multi Plate arch bridge. Introduced in 1931 by the Armco Culvert Manufacturer's Association, Multi Plate arch bridges are comprised of galvanized, corrugated, heavy-gauge steel plates that are manufactured in curved segments, which are bolted together in the field to create an arch or circle.<sup>11</sup> According to Lyle Culvert & Pipe Co., Bridge No. 90646 was constructed with "plates [that have] corrugations 6 inches in

<sup>5</sup> Vogel, "Wooddale Bridge – Finding of Significance."

<sup>10</sup> Vogel, "Wooddale Bridge – Finding of Significance."

<sup>&</sup>lt;sup>4</sup> Lyle Culvert & Pipe Co., "Prospective Multi Plate Bridge," on file at the City of Edina Public Works, Edina, Minnesota.

 <sup>&</sup>lt;sup>6</sup> "Workmen Start Bridge Project," *The Crier*, June 1937, 12, available at the City of Edina, Edina, Minnesota.
<sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> "Limestone Face For New Bridge," *The Crier*, July 1937, 5, available at the City of Edina, Edina, Minnesota.

<sup>&</sup>lt;sup>9</sup> "Bridge No 281 Village of Edina, Woodale Avenue & Minnehaha Creek," April 13, 1973, on file at the City of Edina Public Works, Edina, Minnesota.

<sup>&</sup>lt;sup>11</sup> Lyle Culvert & Pipe Co., "Prospective Multi Plate Bridge."

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width and 1½ inches deep. These giant corrugations take advantage of the tremendous strength of the arch principle and combined with thick plates, makes [sic] a tough and enormously strong bridge."<sup>12</sup> Multi Plate arches are typically anchored to concrete abutments with concrete or stone wing walls at each end.<sup>13</sup>

Multi Plate arch bridges were popular during the 1930s as "a viable alternative to reinforced-concrete slab-andgirder construction for short-span bridges."<sup>14</sup> Additionally their modular design was, "more economical than either cast iron pipe or reinforced concrete pipe for small waterways."<sup>15</sup> The prefabrication of the Multi Plate arch made these types of spans popular with New Deal agencies, as the arch was easy to assemble by unskilled laborers. Reflecting this fact, Multi Plate arch bridges were almost exclusively constructed between 1933 and 1942 by New Deal federal relief programs, like the Civilian Conservation Corps (CCC) and the WPA. The simplicity of the design made the Multi Plate arch compatible with using local materials (for non-arch elements) and labor. "Armco shrewdly emphasized these points in its advertising: 'Multi Plate Arches ... Designed to fit any local conditions-- Can use local labor on Work Relief Projects. Use of stone end-walls not only makes attractive structure, but employs local material and labor."<sup>16</sup> When stone is used for the spandrel walls on Multi Plate arch bridges, as is the case with Bridge No. 90646, the bridge takes on the appearance of a stone-arch bridge.<sup>17</sup> The use of stone masonry in conjunction with the Multi Plate arch also reflected "the New Deal agenda of promoting highway beautification, local craft skills, and labor-intensive public works projects."<sup>18</sup> "Instead of eliminating labor costs as in traditional building economics, [the use of stone masonry] was an explicit attempt to make construction projects labor-intensive, thus creating more work."<sup>19</sup> Bridge No. 90646 embodies the WPA philosophy of providing employment through unskilled, but labor-intensive work, as the bridge features an easy-to-construct Multi Plate arch paired with labor-intensive Platteville limestone spandrel walls.

As noted, Multi Plate arch bridges were an economical choice compared to other types of short-length spans. The plates used in the arch construction were shipped in a nesting position, which reduced freight costs. The ease of construction and the use of local materials for non-arch elements, such as the headwalls, also kept construction costs reasonable. Thus from a materials cost perspective, the economic benefits of the Multi Plate arches solidified its popularity with Federal-Relief programs. Multi Plate arch bridges were constructed throughout Minnesota during the Great Depression; however, they have become an increasingly scarce property type in the state. In 1988, there were 35 surviving Multi Plate arch bridges from the New Deal period in Minnesota.<sup>20</sup> Based on a statewide bridge survey completed in 2014, there are approximately eight Multi Plate arch bridges from the New Deal period extant in Minnesota; however, not all of these bridges were constructed as Federal Relief projects.<sup>21</sup> Bridge No. 90646 is the only one of those eight surviving bridges that is located in

<sup>&</sup>lt;sup>12</sup> Lyle Culvert & Pipe Co., "Prospective Multi Plate Bridge."

<sup>&</sup>lt;sup>13</sup> Fredric L. Quivik and Dale L. Martin, "Iron and Steel Bridges in Minnesota," July 1988, National Register of Historic Places Multiple Property Documentation Form, F-10.

<sup>&</sup>lt;sup>14</sup> Ibid, F-10.

<sup>&</sup>lt;sup>15</sup> Ibid, E-19.

<sup>&</sup>lt;sup>16</sup> Ibid, E-20.

<sup>&</sup>lt;sup>17</sup> Ibid, F-10.

<sup>&</sup>lt;sup>18</sup> Ibid, F-10.

<sup>&</sup>lt;sup>19</sup> Robert Frame, "Reinforced-Concrete Highway Bridges in Minnesota," 1989, National Register of Historic Places Multiple Property Documentation Form, E-15.

<sup>&</sup>lt;sup>20</sup> Quivik and Martin, "Iron and Steel Bridges in Minnesota," E-20.

<sup>&</sup>lt;sup>21</sup> Mead & Hunt, and Olson & Nesvold Engineers, "Phase I Results: Minnesota Local Historic Bridge Study," Minnesota Department of Transportation, St. Paul, November 2012, Appendix B.

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Hennepin County and is one of the few still extant that represent Federal Relief, and specifically WPA, construction.<sup>22</sup>

## Works Progress Administration

During the New Deal era, several federal programs were created, including the WPA, in hopes of providing work for the unemployed. The Works Progress Administration, renamed the Work Projects Administration in 1939, was established in 1935 by President Franklin D. Roosevelt. The first function of the WPA was to "operate a nation-wide program of small useful projects designed to provide employment for needy employable workers."<sup>23</sup> Secondly, "it was responsible for coordinating the various activities of the 'Works Program' as a whole."<sup>24</sup> Under the direction of Harry L. Hopkins, the WPA operated from 1935 to 1943 and employed millions in a nationwide effort to offer employment to the unemployed by channeling federal funds to a wide range of public works projects, including construction of public buildings, roads, bridges, and parks. The WPA was also responsible for the construction of swimming pools, auditoriums, airports, post offices, playgrounds, park buildings and other such public facilities nationwide.<sup>25</sup> Projects undertaken by the WPA were intended to be labor-intensive and utilized locally available materials and construction methods. During its existence in Minnesota, the WPA employed 65,713 people.<sup>26</sup>

Bridge design and construction in Minnesota during the New Deal period was largely influenced by the WPA. The WPA did not usually create new engineering methods, but it often influenced the architectural treatment of bridges it funded, requiring that they incorporate Rustic, Classical Revival, or Art Deco style elements.<sup>27</sup> During the WPA's existence, over 78,000 bridges were built nationally, including some 1,400 bridges that were either built or improved in Minnesota.<sup>28</sup> Bridge No. 90646 is a well-preserved example of a Multi Plate arch bridge that exemplifies the types of bridge projects undertaken by the WPA. The bridge manifests the ideals and goals of the WPA program, as it was a labor-intensive project that utilized local laborers for its construction. The bridge represents the impact of New Deal public works programs in Edina and is the only New Deal Multi Plate arch bridge extant in Hennepin County.<sup>29</sup>

#### Rustic Style

With its Platteville limestone walls, Bridge No. 90646 exemplifies the Rustic Style design aesthetic popularized by the WPA. The Rustic Style is a style of architecture that was previously developed by the National Park Service (NPS). Rustic Style buildings and structures were designed to harmonize with the natural environment. The hallmark of buildings and structures constructed in the Rustic Style are that they were built with whatever materials were available locally, utilized labor intensive building methods, and often had a hand-crafted appearance.<sup>30 31</sup> "The National Park Service and the U.S. Forest Service considered rustic architecture the

<sup>27</sup> Frame, "Reinforced-Concrete Highway Bridges in Minnesota," F-6.

<sup>&</sup>lt;sup>22</sup> Mead & Hunt, and Olson & Nesvold Engineers, "Phase I Results: Minnesota Local Historic Bridge Study," (Minnesota Department of Transportation, St. Paul, November 2012), Appendix B.

<sup>&</sup>lt;sup>23</sup> Rolf T. Anderson, "Federal Relief Construction in Minnesota, 1933-1941," 1993, National Register of Historic Places Multiple Property Documentation Form, E-48.

<sup>&</sup>lt;sup>24</sup> Ibid.

<sup>&</sup>lt;sup>25</sup> Anderson, "Federal Relief Construction in Minnesota," E-48.

<sup>&</sup>lt;sup>26</sup> Iric Nathanson, "The WPA in Minnesota: Economic Stimulus during the Great Depression," *MINNPOST*, January 7, 2009, accessed January 31, 2014, http://www.minnpost.com/politics-policy/2009/01/wpa-minnesota-economic-stimulus-during-great-depression.

<sup>&</sup>lt;sup>28</sup> Ibid., E-15.

<sup>&</sup>lt;sup>29</sup> Vogel, "Wooddale Bridge – Finding of Significance."

<sup>&</sup>lt;sup>30</sup> Anderson, "Federal Relief Construction in Minnesota," E-24

<sup>&</sup>lt;sup>31</sup> "Rustic Style Resources in Minnesota State Parks," *Minnesota Historical Society*, accessed March 28, 2014, http://www.mnhs.org/places/nationalregister/stateparks.

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appropriate style for construction in state and national parks and forests" and thus most of the buildings and structures erected by the WPA are Rustic Style in design.<sup>32</sup> As such, Rustic Style resources "are the legacy of the Depression-era work groups, whose efforts helped preserve vast areas of wilderness and created remarkable building and structures ... throughout the United States."<sup>33</sup> Bridge No. 90646 was originally designed to have boulder stone spandrel walls; the use of boulder stone was a common iteration of the Rustic Style in Minnesota. When the bridge was constructed, the boulder stone was deliberately changed to Platteville limestone to harmonize with the design of the nearby St. Stephen's Episcopal Church. This change is in keeping with the design principles of the Rustic Style, as Platteville limestone is a locally available material and the use of it emphasizes the bridge's relationship with its surrounding environment.

The registration requirements for Multi Plate arch bridges within the "Iron and Steel Bridges in Minnesota Multiple Property Documentation Form (MPDF)," state that Multi Plate arch bridges can be eligible for the NRHP if their modular corrugated-metal construction and stone headwalls and spandrels, which are the most notable features of such bridges, are clearly visible and relatively unaltered.<sup>34</sup> Additionally, the requirements state that since Multi Plate arch bridges were most prominently associated with the "New Deal's encouragement of roadside beautification, the bridge's workmanship and design should be on the original site, harmonious with the general setting, of high aesthetic quality, and of New deal vintage."<sup>35</sup> Bridge No. 90646 remains in its original location, retains its modular corrugated metal construction, and its stone headwalls and spandrels walls. The bridge is an outstanding example of a modular corrugated-metal Multi Plate arch bridge designed by the WPA in Edina, and embodies the aesthetics and workmanship of the Rustic Style, which was popular of WPA construction in Minnesota.

# 9. Major Bibliographical References

**Bibliography** (Cite the books, articles, and other sources used in preparing this form.)

- Anderson, Rolf T. "Federal Relief Construction in Minnesota, 1933-1941." August 1993. National Register of Historic Places Multiple Property Documentation Form. On file at the Minnesota State Historic Preservation Office, Minnesota Historical Society, St. Paul, Minnesota.
- Frame, Robert. "Reinforced-Concrete Highway Bridges in Minnesota." September 1989. National Register of Historic Places Multiple Property Documentation Form. On file at the Minnesota State Historic Preservation Office, Minnesota Historical Society, St. Paul, Minnesota.
- "Limestone Face For New Bridge." *The Crier*, July 1937. On file at the Edina Historical Society, Edina, Minnesota.
- Mead & Hunt and Olson & Nesvold Engineers, P.S.C. "Phase I Results: Minnesota Local Historic Bridge Study." Minnesota Department of Transportation, St. Paul, 2012.

<sup>&</sup>lt;sup>32</sup> Anderson, "Federal Relief Construction in Minnesota,"1993, E-24.

<sup>&</sup>lt;sup>33</sup> "Rustic Style Resources in Minnesota State Parks."

<sup>&</sup>lt;sup>34</sup> Quivik and Martin, "Iron and Steel Bridges in Minnesota," F-11.

<sup>&</sup>lt;sup>35</sup> Ibid.

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- Nathanson, Iric. "The WPA in Minnesota: Economic Stimulus during the Great Depression." *MINNPOST*, January 7, 2009. Accessed January 31, 2014. <u>http://www.minnpost.com/politics-policy/2009/01/wpa-minnesota-economic-stimulus-during-great-depression</u>.
- "New 40-Foot Bridge Over Minnehaha Creek." *The Crier*, September 1937. On file at the Edina Historical Society, Edina, Minnesota.
- "New Bridge Like This Will Span 'Haha Creek." *The Crier*, May 1937. On file at the Edina Historical Society, Edina, Minnesota.
- Quivik, Fredric L., and Dale L. Martin. "Iron and Steel Bridges in Minnesota." July 1988. National Register of Historic Places Multiple Property Documentation Form. On file at the Minnesota State Historic Preservation Office, Minnesota Historical Society, St. Paul, Minnesota.
- "Rustic Style Resources in Minnesota State Parks." *Minnesota Historical Society*. Accessed March 28, 2014. http://www.mnhs.org/places/nationalregister/stateparks.
- Vogel, Robert. "Wooddale Bridge Finding of Significance." On file at the Edina Heritage Preservation Board, Edina, Minnesota.
- "Workmen Start Bridge Project." *The Crier*, June 1937. On file at the Edina Historical Society, Edina, Minnesota.

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# 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 #			
recorded by Historic American Landscape Survey #			
rimary location of additional data:			
X State Historic Preservation Office			
Other State agency			
Federal agency			
Local government			
University			
<u>X</u> Other			

Name of repository: City of Edina Heritage Preservation Commission City of Edina Public Works Department

# Historic Resources Survey Number (if assigned): HE-EDC-633

# 10. Geographical Data

Acreage of Property 0.02

Use either the UTM system or latitude/longitude coordinates

## Latitude/Longitude Coordinates

Datum if other than WGS84:\_\_\_\_\_ (enter coordinates to 6 decimal places)

- 1. Latitude:Longitude:2. Latitude:Longitude:3. Latitude:Longitude:
- 4. Latitude: Longitude:

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## Or

**UTM References** 

Datum (indicated on USGS map):

NAD 1927 or	X NAD 1983	
1. Zone: 15N	Easting: 473228.9	Northing: 4973204.7
2. Zone:	Easting:	Northing:
3. Zone:	Easting:	Northing:
4. Zone:	Easting:	Northing:

**Verbal Boundary Description** (describe the boundaries of the property)

The nominated property consists of a rectangle measuring 21.0 feet long by 40.4 feet wide with a center axis that coincides with the centerline of the bridge, whose corners encompass the edges of the bridge's abutments and with a perimeter that encompasses the entire bridge.

**Boundary Justification** (explain why the boundaries were selected)

The boundary encompasses the total bridge superstructure, total substructure, and all other integral abutment and approach elements.

## **11. Form Prepared By**

name/title: Kelli Andre Kellerhals, Historian, and Gregory R.	Mathis, Sr. Preserv	ation Planner	
organization: The 106 Group Ltd.			
street & number: 370 Selby Avenue South			
city or town: St. Paul	State: MN	zip code:55102	
email: kandrekellerhals@106group.com			
telephone: (651) 290-0977			
date: May 2, 2014			

Hennepin, Minnesota County and State

Hennepin, Minnesota County and State

#### **Additional Documentation**

Submit the following items with the completed form:

- Maps: A USGS map or equivalent (7.5 or 15 minute series) indicating the property's location.
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- Additional items: (Check with the SHPO or FPO for any additional items.)

#### **Photographs:**

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

#### **Photo Log**

Name of Property:	Bridge No. 90646		
City or Vicinity:	Edina		
County:	Hennepin	State: Minnesota	
Photographer:	Katherine Haun, Mead & Hunt		

Date Photographed: July 31, 2013

Description of Photograph(s) and number, include description of view indicating direction of camera:

Photo 1 of 10 MN\_HennepinCounty\_BridgeNo.90646\_0001 Bridge No. 90646, east elevation. Facing West

Photo 2 of 10 MN\_HennepinCounty\_BridgeNo.90646\_0002 BridgeNo.90646, west elevation. Facing Northeast.

Photo 3 of 10 MN\_HennepinCounty\_BridgeNo.90646\_0003 Bridge No. 90646, approach and deck. Facing South.

Bridge No. 90646 Name of Property Hennepin, Minnesota County and State

Photo 4 of 10 MN\_HennepinCounty\_BridgeNo.90646\_0004 Bridge No. 90646, deck and west parapet. Facing North. Photographer: Lisa Karlgaard, LHB

Photo 5 of 10 MN\_HennepinCounty\_BridgeNo.90646\_0005 Bridge No. 90646, Multi Plate arch and masonry voussoirs. Facing Southwest.

Photo 6 of 10 MN\_HennepinCounty\_BridgeNo.90646\_0006 Bridge No. 90646, Multi Plate arch. Facing Northeast.

Photo 7 of 10 MN\_HennepinCounty\_BridgeNo.90646\_0007 Bridge No. 90646, west parapet. Facing West.

Photo 8 of 10 MN\_HennepinCounty\_BridgeNo.90646\_0008 Bridge No. 90646, east parapet. Facing Southeast.

Photo 9 of 10 MN\_HennepinCounty\_BridgeNo.90646\_0009 Bridge No. 90646, bridge plate. Facing East.

Photo 10 of 10 MN\_HennepinCounty\_BridgeNo.90646\_0010 Bridge No. 90646, north end of east elevation. Facing Northwest.

**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.460 et seq.).

**Estimated Burden Statement**: Public reporting burden for this form is estimated to average 100 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management. U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.



