

 <p style="text-align: center;"><b>Council Communication</b> Office of the City Manager</p>	<b>Date:</b>	April 6, 2015
	<b>Agenda Item No.</b>	<b>12</b>
	<b>Roll Call No.</b>	<b><u>15-0572</u></b>
	<b>Communication No.</b>	<b><u>15-173</u></b>
	<b>Submitted by:</b>	<b>Pamela S. Cooksey, P.E., City Engineer</b>

**AGENDA HEADING:**

Approving Revised Design Concept for Grand Avenue Bridge over Des Moines River.

**SYNOPSIS:**

Recommend approval of the revised design concept for Beam Bridges with Higher Level Aesthetics for the Grand Avenue Bridge over Des Moines River.

**FISCAL IMPACT:**

Amount: \$9,000,000

Funding Source: 2015-16 Capital Improvement Program (CIP), Page Bridge – 10, BR047, Grand Avenue Bridge over the Des Moines River

**ADDITIONAL INFORMATION:**

The Grand Avenue Bridge over Des Moines River was originally evaluated in 2013 as a rehabilitation project. During the extensive evaluation, and preliminary rehabilitation design, it was determined that the deterioration of the bridge was significant, and that a total replacement was the most economical option.

At the April 7, 2014, City Council Workshop, four (4) design concept options were presented to the City Council. Subsequently, a public meeting was held on April 14, 2014 to present the four (4) design concept options. In addition, an electronic survey was conducted with over 300 responses. The public input showed a majority favoring the design concept called the “Beam Bridge with Higher Level Aesthetics.” The concept rebuilds the Grand Avenue Bridge, using standard pre-stressed concrete beams, and adds a cast-in-place panel on the exterior formed to resemble an arch similar to the original bridge. This design concept was estimated to cost \$1.9 million more than the “Beam Bridge No Aesthetics” option. On April 21, 2014, by Roll Call No. 14-0652, City Council established the “Beam Bridge with Higher Level Aesthetics” as the selected design concept, and directed the City Manager to progress the final design concept. The CIP was adjusted to reflect the increased cost.

An aesthetic review committee was formed to help guide the aesthetics of the downtown bridges. City Council’s approved design concept and budget were the starting point for the committee. The committee is a cross section of stakeholders, including:

- |                    |   |  |
|--------------------|---|--|
| Ryan Carpenter     | - | Riverfront Development Authority, Principal Financial        |
| Steve King         | - | Deputy State Historic Preservation Officer                   |
| Amy Lego           | - | Downtown Community Alliance                                  |
| Jesse Lewis        | - | Retired Landscape Architect                                  |
| Andy McCoy         | - | Historic East Village Neighborhood Association               |
| Kimball Olson      | - | Iowa DOT - Bridges & Structures, Aesthetic Bridge Specialist |
| Erin Olson-Douglas | - | City of Des Moines Economic Development                      |
| Ken Quinn          | - | World Food Prize   |
| Dennis Reynolds    | - | Urban Design & Review Board member,                          |
| Jessica Rowe       | - | Downtown Neighborhood Association                            |
| Jason Van Essen    | - | City of Des Moines Community Development                     |
| Greg Wattier       | - | City of DSM Planning & Zoning Rep, Slingshot Architecture    |

At the first meeting, the committee voiced concerns with the selected design theme with the appearance of faux arches along the exterior of the bridge. Additional concerns included pier size, shape and number, use of standard lighting, roadway geometry, such as number of lanes, widths, sidewalk and bike lanes, railing.

Substance Architecture was brought onto the project design team to assist with architectural design and facilitate group discussion. The discussions were productive and resulted in a group consensus of a general bridge design concept. Unfortunately, the resulting bridge was estimated to cost more than twice the project budget. This led the design team to review and develop other designs influenced by previous committee feedback. The resulting bridge designs included two (2) bridge aesthetic concepts within the established budget. The aesthetic review committee met, for the fourth time, to review and discuss these concepts. The general committee consensus was to proceed with the “metal panel scallop” design concept. This design concept includes creating a scalloped edge, along the length of the bridge, by attaching metal panels to the outside of the concrete beams.

#### **PREVIOUS COUNCIL ACTION(S):**

Date: April 21, 2014

Roll Call Number: [14-0652](#)

Action: [Approving](#) design concept for Grand Avenue Bridge over Des Moines River. ([Council Communication No. 14-182](#)) Moved by Hensley to adopt. Motion Carried 6-1. Nays: Moore.

Date: January 27, 2014

Roll Call Number: [14-0117](#)

Action: [Approving](#) Professional Services Agreement with Shuck-Britson, Inc. for Design and Construction Phase Services for the Grand Avenue over Des Moines River Bridge Replacement, not to exceed \$626,169. ([Council Communication No. 14-019](#)) Moved by Mahaffey to adopt. Motion Carried 5-2.

Date: May 6, 2013

Roll Call Number: [13-0697](#)

Action: [Approving](#) Professional Services Agreement with Shuck-Britson, Inc. for evaluation, design, and construction phase services for the Grand Avenue over Des Moines River Bridge Rehabilitation, not to exceed \$273,947. ([Council Communication No. 13-216](#)) Moved by Mahaffey to adopt. Motion Carried 7-0.

**BOARD/COMMISSION ACTION(S):**

Board: Urban Design Review Board

Date: April 15, 2014

Resolution Number: N/A

Action:

- The downtown bridges are a civic landmark and a signature of downtown Des Moines; we have a responsibility to recreate them with a higher level of aesthetics for the next century.
- The aesthetic options presented do not reflect today's technologies and ability to create material details. As design develops, explore the quest for arches within the processes, materials and technologies available now; do not attempt to recreate and veneer the details from 100 years ago. The new bridges should be a reflection of the historical context and today's structures and aesthetics.
- The bridges are an opportunity for traffic calming and enhancing the pedestrian, bike and auto experience and connectivity in downtown. Consider the number of lanes needed, lane width, lighting, parking, sidewalk dimensions.
- The budget should allow for creating quality civic infrastructure that enhances connections between the East Village, western downtown, and the Riverwalk.
- Maintain the public discourse; the downtown bridges are significant pieces of public infrastructure and this bridge will set a precedent for work on the other bridges.

**ANTICIPATED ACTIONS AND FUTURE COMMITMENTS:**

Normal Council actions for design and construction administration, and construction contracts.

For more information on this and other agenda items, please call the City Clerk's Office at 515-283-4209 or visit the Clerk's Office on the first floor of City Hall, 400 Robert D. Ray Drive. Council agendas are available to the public at the City Clerk's Office on Thursday afternoon preceding Monday's Council meeting. Citizens can also request to receive meeting notices and agendas by email by calling the Clerk's Office or sending their request via email to [cityclerk@dmgov.org](mailto:cityclerk@dmgov.org).