

 <p style="text-align: center;">Council Communication Office of the City Manager</p>	Date:	January 27, 2014
	Agenda Item No.	9
	Roll Call No.	<u>14-0116</u>
	Communication No.	<u>14-022</u>
	Submitted by:	Jeb E. Brewer, P.E., City Engineer

AGENDA HEADING:

Approving Professional Services Agreement with Shuck-Britson, Inc., for the Des Moines River Downtown Bridges Evaluation not to exceed \$171,397.

SYNOPSIS:

Recommend approval of the Professional Services Agreement with Shuck-Britson, Inc., Timothy J. Monson, President, 2409 Grand Avenue, Des Moines, Iowa, 50312, for a total cost not to exceed \$171,397, based on hourly rates, to provide structural evaluation reports with construction cost estimates and traffic evaluation services for the Des Moines River Downtown Bridges Evaluation.

FISCAL IMPACT:

Amount: \$171,397

Funding Source: 2013-14 CIP, Page Bridge-5, BR003, City-wide Bridges

ADDITIONAL INFORMATION:

The rehabilitation of the Grand Avenue Bridge over Des Moines River was identified as a high priority project in the 2011 City-Wide Bridge and Structure Evaluation. A Request for Proposal (RFP) was issued and three (3) proposals were received. Shuck-Britson, Inc. was chosen for the work on May 6, 2013, by Roll Call No. 13-0697. The structural evaluation report prepared by Shuck-Britson, Inc. discovered the Grand Avenue Bridge to be in worse condition than originally anticipated. As part of the evaluation, destructive testing was completed on the Grand Avenue Bridge. Fifty (50) concrete cores were taken to determine chloride ion concentrations with representation across different areas of the bridge and small air hammers were used to assess the extent of concrete delamination, and spalling on the underside of the bridge arches. The consultant evaluated the initial construction costs and life cycle costs for four (4) repair options and one (1) replacement option, and found that initial construction costs were similar for the repair and replacement options, but that the replacement option had the lowest life cycle cost. It was recommended that the bridge be replaced rather than rehabilitated.

This agreement for professional services is to provide an in depth evaluation of the remaining downtown bridges on Locust Street, Walnut Street, and Court Avenue over the Des Moines River and for development of a comprehensive vehicular and pedestrian corridor study. These evaluations will provide a cohesive approach to document the current structural condition of these structures and will provide a systematic approach to evaluating the geometric and capacity needs for these critical downtown bridges.

The structural evaluations and construction cost estimates will provide better information for the City to properly program these bridges for future rehabilitation or replacement. Similar to the Grand Avenue Bridge, destructive testing will be performed on these structures. Concrete core samples will be taken and small air hammers will be used to document the extent of concrete delamination and spalling. An underside bridge inspection unit will be deployed to gain access to the bridge underside for inspection and testing purposes.

In addition to providing current structural evaluations, a key component in providing a systematic approach to evaluating these critical downtown bridges is providing a comprehensive vehicular and pedestrian corridor study. This study will review vehicular, parking, bicycle, and pedestrian elements for each bridge and will prepare recommendations for future bridge geometric layout needs based on traffic demand models and recreational elements. In addition, traffic circulation and flow impacts will be analyzed to develop recommendations for scheduling lane or bridge closures relating to future rehabilitation or replacement efforts.

Staff has negotiated a Professional Services Agreement with Shuck-Britson, Inc., for a total cost not to exceed \$171,397, based on hourly rates, to provide structural evaluation reports with construction cost estimates and traffic evaluation services.

This scope of services will be used in preparation for a Transportation Investment Generating Economic Recovery (TIGER) grant application.

PREVIOUS COUNCIL ACTION(S): NONE

BOARD/COMMISSION ACTION(S): NONE

ANTICIPATED ACTIONS AND FUTURE COMMITMENTS:

Normal Council actions on consultant services for design and construction administration, and construction contracts.

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