


## COUNCIL COMMUNICATION

	Number:	<b>21-210</b>	Meeting:	<b>May 10, 2021</b>
	Agenda Item:	<b>10</b>	Roll Call:	<b>21-0675</b>
	Submitted by:	<b>Steven L. Naber, P.E., City Engineer and Jonathan A. Gano, P.E., Public Works Director</b>		

### AGENDA HEADING:

Approving exception to Request for Proposal (RFP) process for good cause and approving the following two (2) Professional Service Agreements (PSA) related to Des Moines Levee Alterations:

- Approving exception to Request for Proposal process for good cause and approving the PSA with Barr Engineering Company for design phase services for Des Moines Levee Alterations – Phases D and E, not to exceed \$3,285,500.
- Approving exception to Request for Proposal process for good cause and approving the PSA with Stantec Consulting Services Inc. for design phase services for Des Moines Levee Alterations – Phases F, G and H, not to exceed \$3,665,100.

### SYNOPSIS:

Recommend approval of exception to the Engineering Department’s RFP process for good cause and approval of the PSA with Barr Engineering Company (John T. Lee, President, 4300 Market Pointe Drive, Suite 200, Minneapolis, Minnesota, 55435), for a total cost not to exceed \$3,285,500, based on hourly rates, to provide design phase services for Des Moines Levee Alterations – Phases D and E.

Recommend approval of exception to the Engineering Department’s RFP process for good cause and approval of the PSA with Stantec Consulting Services Inc. (Gordon A. Johnston, President, 10220 - 103 Avenue NW, Suite 400; Edmonton, AB, Canada T5J 0K4), for a total cost not to exceed \$3,665,100, based on hourly rates, to provide design phase services for Des Moines Levee Alterations – Phases F, G and H.

### FISCAL IMPACT:

Amount: \$3,285,500 for Des Moines Levee Alterations – Phases D & E  
\$3,665,100 for Des Moines Levee Alterations – Phases F, G, & H

Funding Source: 2021-2022 CIP, Page 101, Flood Mitigation Improvements, SM087, State Flood Mitigation funds.

**ADDITIONAL INFORMATION:**

- Following the 2008 Midwest flood, the United States Army Corps of Engineers (USACE) conducted the Des Moines River Regulated Flow Frequency Study (DMRRFFS) to estimate the frequency and magnitude of future reservoir outflows and downstream river flows. Completed in November 2010 and released in January 2011, the results of the DMRRFFS showed flood flow frequencies have increased over previous USACE estimates and floods like the 1993 and 2008 events are more likely to occur than previously estimated. In addition to identifying the higher risk of flooding, the DMRRFFS showed that the existing levees in downtown Des Moines do not meet the standards for Federal Emergency Management Agency (FEMA) accreditation of levees provided in Title 44 of the Code of Federal Regulations (44 CFR) Section 65.10 of the National Flood Insurance Program regulations impacting FEMA flood hazard mapping.
- In March 2011, the City initiated professional services to begin responding to the USACE DMRRFFS by working through the USACE Section 408 requirements to improve the levee system to satisfy FEMA accreditation requirements. The City has worked closely with the USACE Rock Island District staff to prepare a Section 408 Concept Submittal to improve the levee system to meet accreditation requirements with City and Iowa Flood Mitigation Program funding. The Section 408 Concept Submittal was submitted to the USACE in May 2017 for review and the City has received approval of the Section 408 Concept from USACE. Individual (detailed) Section 408 submittals will be required for individual projects.
- Phase 1 Analyses have been conducted and documented to identify deficiencies relative to 44 CFR 65.10 accreditation requirements. The City plans to address these deficiencies by implementing various projects along the levee systems. These projects include levee raises, modification of gatewell and closure structures, pump station modifications, installation of embankment protection, and embankment and foundation stability mitigating features such as cutoff trenches or seepage berms. In accordance with the Flood Mitigation Program Agreement (RC 15-1094, 6/22/2015), the project completion date is December 31, 2024. As projects move forward, the terms of the agreement will be reconciled to match project schedules. The projects will be constructed in multiple phases, generally from upstream to downstream along the system and the phases are identified as Phases A thru H.
- Phase A, which incorporates the upstream reaches of the DM-I and DM-II levee systems along the Des Moines River upstream of the confluence with the Raccoon River, was designed by Stantec Consulting Services Inc. and is currently under construction with anticipated completion in 2021.
- Phase B, which incorporates the reaches of the DM-II and DM-III levee systems along the Raccoon River upstream of SW 3rd Street, is under design (approximately 95% design complete) by Stantec Consulting Services Inc. with anticipated construction starting in 2021 with completion in 2022.

- Phase C, which incorporates the downstream reaches of the DM-I and DM-III levee systems along the Des Moines River from approximately the confluence with Raccoon River to just downstream of SE 14th Street, is under design (approximately 95% design complete, with re-design effort needed to accommodate the Central Iowa Water Trails Phase 1 Project) by Barr Engineering Company with anticipated construction starting in late 2021/early 2022 with completion in 2023.
- Phase D incorporates the downstream reaches of the DM-I and DM-III levee systems along the Des Moines River from approximately SE 14th Street to just upstream of the Des Moines Metropolitan Wastewater Reclamation Facility. Phase D is anticipated to start construction in 2023 and construction is estimated to cost approximately \$3 million.
- Phases E, F, G, and H incorporates the Southeast Des Moines levee system (SEDM), which is part of the Lake Red Rock Remedial Works and is hydraulically connected to the DM-I levee system. SEDM is an eight (8) mile levee system located along the Des Moines River starting just upstream of the Des Moines Metropolitan Wastewater Reclamation Facility to the confluence of Fourmile Creek, then runs along Fourmile Creek to about a quarter mile east of SE 30th Street. Phases F, G, and H are maintained and operated by USACE. USACE is responsible for the maintenance and operation of Phase E along the Des Moines Metropolitan Wastewater Reclamation Facility; however, there is an agreement in place for the City to perform general maintenance along Phase E. Phases E, F, G, and H are anticipated to be constructed in phases starting construction in 2024 with anticipated completion in 2027 and construction is estimated to cost approximately \$21 million.



- In 2018, a RFP for professional services for the Des Moines Levee Alterations Phases A thru C was issued, posted on the City's website, and printed in the newspaper. A selection committee of Engineering and Public Works staff reviewed and rated the seven (7) proposals received in response to the RFP. Stantec Consulting Services Inc. was selected for Phases A and B, and Barr Engineering Company was selected for Phase C based on the selection criteria in the RFP and their extensive understanding of the project objectives and area.
- The two (2) separate teams of Barr Engineering Company and Stantec Consulting Services Inc. have performed well with the professional services for Phases A, B, and C of the Des Moines Levee Alterations. These two (2) consultant teams have demonstrated extensive experience in levee system design and working with the U.S. Army Corps of Engineers and have strong inherent knowledge of the overall levee alterations project.
- Due to the large size of the remaining phases of the Des Moines Levee Alterations, City staff recommend dividing the remaining phases up amongst multiple consultant teams.
- The City Engineer recommends that good cause exists to exempt the procurement of these professional services from the Engineering Department's RFP process, including advertisement, in order to efficiently design and administer construction of the remaining phases of the Des Moines Levee Alterations, including continued coordination and approvals from the U.S. Army Corps of Engineers, and to achieve Federal Emergency Management Agency Accreditation of the levee system.
  - City Engineering Department staff recommends Barr Engineering Company perform professional services for Phases D and E of the Des Moines Levee Alterations based on their extensive experience in levee system design and construction administration, experience working with the U.S. Army Corps of Engineers, and their performance on Phase C of the Des Moines Levee Alterations, including their work with Central Iowa Water Trails Phase 1 project which impacts Phases C and D.
  - City Engineering Department staff recommends Stantec Consulting Services Inc. perform professional services for Phases F, G and H of the Des Moines Levee Alterations based on their extensive experience in levee system design and construction administration, experience working with the U.S. Army Corps of Engineers, their previous work in coordination with the Southeast Connector, and their performance on Phases A and B of the Des Moines Levee Alterations and the overall hydraulic modeling completed as part of the Des Moines Levee Alterations.
  - City Engineering Department staff recommends using the previous selection process as the basis for selecting consultants for Phases D-H. Utilizing different consultants at this point would adversely affect the project and increase the workload for City staff. In addition to familiarity with U.S. Army Corps of Engineers and City expectations, both Stantec and Barr have the current and background information required to most efficiently and successfully complete the required levee work.
- City staff have negotiated a PSA with Barr Engineering Company for a total cost not to exceed \$3,285,500, based on hourly rates, to provide design services for the Des Moines Levee Alterations – Phases D and E.

- City staff have negotiated a PSA with Stantec Consulting Services Inc. for a total cost not to exceed \$3,665,100, based on hourly rates, to provide design services for the Des Moines Levee Alterations – Phases F, G and H.
- Due to the potential of significant losses due to potential design errors and omissions, the insurance requirement for these PSAs is being revised such that the professional liability coverage is being increased from the standard \$1,000,000 to \$10,000,000 per occurrence and in the aggregate. This revision in the professional liability insurance requirement has been reviewed and approved by the City's Risk Manager. This coverage amount had also been included in prior PSAs that pertained to levee design work.

**PREVIOUS COUNCIL ACTION(S):**

Date: January 25, 2021

Roll Call Number: [21-0072](#), [21-0073](#), and [21-0074](#)

Action: Approving the following three Supplemental Agreements to the Professional Services Agreements (PSA) related to the Des Moines Levee Alterations – Phase A, B, and C: (Council Communication No. 21-031)

- (A) [Approving](#) Supplemental Agreement No. 3 to the Professional Services Agreement with Stantec Consulting Services, Inc. for additional professional services for Des Moines Levee Alterations – Phase A, not to exceed \$226,000. Moved by Boesen to adopt. Motion Carried 7-0.
- (B) [Approving](#) Supplemental Agreement No. 2 to the Professional Services Agreement with Stantec Consulting Services, Inc. for additional professional services for Des Moines Levee Alterations – Phase B, not to exceed \$81,000. Moved by Boesen to adopt. Motion Carried 7-0.
- (C) [Approving](#) Supplemental Agreement No. 3 to the Professional Services Agreement with Barr Engineering Company for additional professional services for Des Moines Levee Alterations – Phase C, not to exceed \$260,800. Moved by Boesen to adopt. Motion Carried 7-0.

**BOARD/COMMISSION ACTION(S): NONE****ANTICIPATED ACTIONS AND FUTURE COMMITMENTS:**

Additional Supplemental Agreements for construction phase services and any changes to the U.S. Army Corps of Engineers requirements and pending final resolution of real estate requirements for the Federal SEDM levee.

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).