

Council Communication

Office of the City Manager

Date March 9, 2009

Agenda Item No. 46
Roll Call No. 09Communication No. 09-151

Submitted by: Jeb E. Brewer, P.E.

City Engineer

AGENDA HEADING:

Hearing on Ashworth Pool Filter Replacement: Resolution approving plans, specifications, form of contract documents, engineer's estimate, receive and file bids, and designating lowest responsible bidder as Bergstrom Construction, Inc., Tom Gorgas, President, 1719 Hull Avenue, Des Moines, IA, 50313, \$263,700.

SYNOPSIS:

This is a public hearing to allow for public input on the Ashworth Pool Filter Replacement and to take the necessary actions as required by Iowa Code to authorize a contract for construction of the proposed project. This project provides for the replacement of the existing vacuum sand filter system, which is near the end of its useful life and is not in compliance with current Iowa Department of Health Standards, with a pressure sand filter system. Replacement of the filter system should improve water clarity in the pool and should reduce the frequency and staff time required to backwash the filters. Construction will occur after the swimming pool closes for the season next fall.

FISCAL IMPACT:

Amount: \$263,700 Construction Contract (\$285,000 City Engineer's Estimate)

<u>Funding Source</u>: 2009-2010 CIP, Page Parks-28, Swimming Pools and Aquatic Infrastructure, PKS153, Being: G. O. Bonds, with a transfer of \$263,700 in G. O. Bonds from Park Redevelopment,

Page Parks-19, PKS100

ADDITIONAL INFORMATION:

Reconstructed in 1983, the Ashworth Pool is similar to many pools constructed during the time, consisting of an L-shaped structure with diving and an adjacent shallow wading area. The filter system for Ashworth Pool is the original vacuum sand filter, located in the adjacent filter building at an elevation below the pool water level.

Concerns regarding the Ashworth pool include operational issues and the capacity of the filter to maintain the pool water quality. The filter requires frequent backwashing, which is also ineffective. A key issue with vacuum sand filters is the potential for "air binding". When air binding occurs, air bubbles accumulate within the filter sand bed. The air bubbles fill the small gaps between sand grains, thus preventing dirt and debris from having a place to be captured within the filter. The filter bed can become so filled with air bubbles that the filter cannot function properly. The backwashing process forces the air bubbles to leave the filter.

The existing filter system was designed for pool recirculation and water treatment standards that were appropriate for 1983 which included an eight-hour turnover period (time that it takes to effectively remove, filter, and chemically treat the entire volume of water for the pool). However, the standards have changed since the date of construction decreasing the turnover period to six-hours for the lap pool and two-hours for the shallow wading area. Decreasing the pool turnover period requires an increase in the rate of recirculation and filtration. The existing filter system does not have the capacity to meet the current standards.

A new filter system would meet the current standards, improve the water clarity, and reduce the maintenance required. The proposed system includes above-grade pressure tanks located to the north of the filter building. The internal components of the existing vacuum sand filter would be removed and the vessel would be utilized as a surge tank.

On January 26, 2009, under Roll Call No. 09-060, the City Council received and filed plans, specifications, form of contract documents, and City Engineer's estimate for the construction of the Ashworth Pool Filter Replacement. Before the City Council can enter into a contract, it must hold a public hearing and approve the proposed plans, specifications, and form of contract documents and engineer's estimate for the construction of the Ashworth Pool Filter Replacement, 11-2009-008. The improvement includes replacement of the existing vacuum sand filter system with a pressure sand filter system, demolition and structural modifications to the filter building, painting, mechanical, electrical, concrete work, clean up and debris disposal all in accordance with the contract documents including Plan File Nos. 495-1/21 at Ashworth Swimming Pool, 102 45th Street, Des Moines, Iowa.

Sealed bids for said improvement were submitted by the following bidders:

Bergstrom Construction, Inc., Des Moines, IA
C. L. Carroll Co., Inc., Des Moines, IA - Bid read under advisement
Peterson Construction, Webster City, IA
Brocon Services LLC, Johnston, IA
Weidner Construction, Inc., Marshalltown, IA - Bid not read
Munro Construction Co., Johnston, IA - Bid not read

The bids were received and opened at a public meeting presided over by the City Engineer in the City Council Chambers, 2nd Floor, City Hall, 400 Robert D. Ray Drive, Des Moines, Iowa at 11:00 a.m. on February 24, 2009.

The City Engineer has determined that the lowest responsive, responsible bid for the construction of said improvement was submitted by Bergstrom Construction, Inc. in the amount of \$263,700, and said bid should be accepted. The Finance Director has determined that funds are available for said improvement as stated above.

PREVIOUS COUNCIL ACTION(S):

Date: January 26, 2009

Roll Call Number: 09-060

<u>Action</u>: <u>Ordering</u> construction of Ashworth Pool Filter Replacement – Receiving of bids, (2-24-09), and Setting date of hearing, (3-9-09). (Construction Estimate - \$285,000). (Council Communication

No. 09-039) Moved by Vlassis to adopt. Motion Carried 7-0.

BOARD/COMMISSION ACTION(S): NONE

ANTICIPATED ACTIONS AND FUTURE COMMITMENTS:

Partial payments to the contractor and final acceptance of work.

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