

ITEM # 44
DATE April 22, 2008

COUNCIL ACTION FORM

**SUBJECT: PHASE II ENGINEERING SERVICES CONTRACT FOR WATER PLANT
RAW WELL WATER TRANSMISSION PIPELINE PROJECT**

BACKGROUND:

In the 2007-2012 Capital Improvements Plan, a raw well water loop line was scheduled to be started in Fiscal Year 2007-08. The City of Ames obtains its water from 22 alluvial wells. Currently, a single 24-inch water line delivers water from 10 wells in the Southeast Well Field and the Hunziker Youth Sports Complex Well Field. With the expansion of wells in those areas over the last two decades, that line is no longer able to adequately carry the full capacity of these wells. This is particularly important during summer months when all available water is needed. The city's water supply is also vulnerable to disruption with only one line to the water treatment plant from these wells. The current line has one rail crossing, one stream crossing, and three major street/road crossings which present likely locations for main breaks and service interruptions. Developing redundancy in delivering this water to the plant is very important since these 10 wells represent 65 percent of the city's current water supply capacity.

Development of a new planned well field proposed in 2010 will add an estimated six million gallons per day (mgd) of raw water that needs to be delivered through this line. This existing line was designed in the early 1980s before the full amount of future well capacity was known and is now undersized for current full production capabilities. A new line will actually increase the productivity of the Southeast and Hunziker Youth Sports Complex Well Fields by approximately one million gallons per day under peak demand simply by reducing pipeline restrictions. The new pipeline will also provide backup redundancy for this supply capacity and will extend the raw water piping system closer to a planned well field expansion.

City staff competitively solicited proposals for engineering services related to the Raw Well Water Transmission Pipeline Project from six area consulting firms. The proposals covered the entire range of engineering services necessary for this project, beginning with preliminary design through construction assistance and project closeout. Proposals were received from four firms. A qualifications-based evaluation of the responding firms was performed and a preliminary fee proposal was requested from each firm to allow staff to better understand the proposed scope of services and their associated costs. The top two firms then made presentations of their proposals to staff, and FOX Engineering of Ames was selected as the preferred design firm.

While finalizing the engineering services agreement with FOX, staff concluded that a detailed description of the final design work could not be prepared without some initial preliminary study. Staff members proposed to break the engineering services

agreement into two phases. Phase 1 was approved by Council on October 23, 2007 in the amount of \$70,000. The scope of work included public meetings with potentially impacted property owners; the route determination for the pipeline; easement acquisition; and securing construction permits from IDNR, IDOT, U.S. Army Corps of Engineers, and Union Pacific Railroad. One change order was executed on March 19, 2008 in the amount of \$9,000 to cover additional work associated with meeting with and evaluating the concerns of affected property owners which staff felt was vital and important to the overall success of the project.

Phase I is currently still in progress. Staff is working to obtain easements for the pipeline, and construction permits have been applied for and currently are pending approval. On March 25, 2008, Council approved the route proposed by staff and authorized staff to proceed with design and preparation of final plans and specifications. Site specific minor changes to the approved route may occur as staff moves into more detailed design. Phase II will include development of final plans and specifications, bidding assistance, construction phase services, and project close-out. A scope of work for Phase II has been developed with FOX Engineering based on the results from Phase I of this project.

The Phase II contract is in an amount not to exceed \$222,500. The total cost for the Raw Well Water Transmission Pipeline Project is estimated at \$4,000,000, with engineering services to total \$301,500 for Phases I and II.

ALTERNATIVES:

1. Approve the contract with FOX Engineering in an amount not to exceed \$222,500 for Phase II engineering services related to the Raw Well Water Transmission Pipeline Project.
2. Do not approve a contract at this time.

MANAGER'S RECOMMENDED ACTION:

City staff competitively solicited proposals for engineering services related to the Raw Well Water Transmission Pipeline Project from six area consulting firms. FOX Engineering was selected to provide engineering services for the entire project. FOX Engineering has worked diligently with City staff to help balance the needs of our customers with those property owners affected by this project and has successfully performed their work under Phase I of this project. During Phase II, City staff anticipates that FOX Engineering will provide the technical expertise and construction oversight necessary to make this a successful project.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby awarding a contract to FOX Engineering in an amount not to exceed \$222,500 for Phase II engineering services related to the Raw Well Water Transmission Pipeline Project.