



REPORT TO MAYOR AND CITY COUNCIL

AGENDA ITEM

TO: THE HONORABLE MAYOR
AND CITY COUNCIL

DATE: October 6, 2009

SUBJECT: Beamer Street Pipeline, Well 4 electrical upgrade and Backup generator project (CIP#07-49, 08-30 and 08-31), Approve Plans and Specification and Authorize Bid Advertisement

Report in Brief

This project consists of the installation of approximately 3,000 feet of 12-inch pipe on Beamer Street, the upgrade of the electrical panel and installation of an emergency generator at Well 4. The project is a planned element of the elevated water tank replacement project. The installation of the pipe extends between Frost Drive and West Street on Beamer Street. This pipe work will enhance rapid discharge of water out of the new elevated tank at peak hours. The upgrade of the electrical panel is required to support the proposed Supervisory Control and Data Acquisition System (SCADA) that will be installed on the City's water system shortly. The emergency generator at Well 4 is necessary to provide backup power during an electrical shut down in order to keep the system running.

Staff recommends that the City Council approves plans and specifications and authorize bid advertisement for the Beamer Street pipeline project; and upgrade the Well #4 electrical system, including a backup generator. (CIP#07-49, Elevated Tank, #08-30, Well 4 Improvements, and #08-31, Backup Power for Wells).

Background

West Yost & Associates (WYA) was selected to evaluate the existing water system in relation to the present and future demands. This system evaluation is part of the process to update the City's urban water management plan as well as update our existing water model to plan for future demand. WYA recommended the installation of a parallel line on Beamer Street to improve water flow out of the elevated tank during peak hour.

WYA was also selected to design the installation of an emergency generator on Well 4. This is required to provide power during electrical shut downs, especially in the event of a heavy storm.

Brown and Caldwell Engineering Inc designed the pipeline alignment to conform to the results of the hydraulic modeling presented by WYA.

Pursuant to this, Brown and Caldwell Engineering Inc put together the contract document to solicit one contractor for the Beamer Street pipeline, Well 4 electrical upgrade and the backup generator project with input from WYA. This is aimed at reducing overall construction cost for the projects.

Discussion

A hydraulic model was developed utilizing previous reports, maps, plans, operating records and other valuable data. The model revealed that a new pipeline would be required on Beamer Street to improve system flow during peak demand. In this regard, West Yost engineering staff recommended the installation of a 12-inch pipe between West Street and Frost Drive on Beamer Street. The new pipe line would provide additional capacity during peak hour of approximately 1,500 gallons per minute; this would reduce power cost as well as capital outlay in new wells.

WYA also recommended the upgrade of the existing electrical panel at Well 4 to provide power for the new Supervisory Control and Data Acquisition (SCADA) system, the new radio system for the water meters data acquisition. Additionally, WYA recommended a new emergency backup generator to be installed at Well 4 for emergency power back up.

The California Environmental Quality Act determination for this project is Categorically Exempt based on Article 19, Section 15301(b) Existing Facilities and Section 15304(b) Minor Alterations to Land.

Fiscal Impact

This project is fully funded by water enterprise fund and included in the approved FY 10 capital improvement budget. The total estimated cost of the project is approximately \$895,500 as indicated in Table 1 below.

Table 1

Item	Description	Estimated Construction Cost	Budgeted Available Amount
1	Beamer Street Pipeline (base bid plus alternate)	\$423,500	460,000
2	Well 4 Electrical Upgrade	\$401,000	210,000
3	Well 4 Backup Generator	\$ 71,000	440,000
	TOTAL	\$895,500	\$1,110,000

At the moment, the estimated cost of construction for the Beamer Street Pipeline and the Well 4 back up generator project is within the available budgeted amount. However, the engineer's estimate for the well 4 electrical upgrade project is above the budgeted amount. Depending on the outcome of the bidding process, staff might request the reprogramming of the available budgeted amount for each project to ensure that the projects are implemented within a total budget of \$1,110,000.

The basis of award would be the base bid only plus alternate.

Public Contact

An issue of the "Woodland Water News" prepared by the utility engineering branch has been a source of public communication as it discusses on-going and future projects. Woodland Water News is being distributed to City water customers in their utility bills. The City Council agenda was posted.

Alternative Courses of Action

1. Approve plans and specifications and authorize bid advertisement for the Beamer Street pipeline project and upgrade the Well #4 electrical system, including a backup generator. (CIP#07-49, 08-30 and 08-31).
2. Do not approve plans and specification and authorize bid advertisement and give directions to staff for changes to be made for the Beamer Street pipeline, Well 4 electrical upgrade and Backup generator project (CIP#07-49, 08-30 and 08-31).

Recommendation for Action

Staff recommends that City Council approve Alternative No. 1.

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