



Date: June 17, 2015
To: Mayor and City Council
From: Tim Tucker, City Engineer
Subject: Water Treatment Plant Seismic and Structural Upgrade Project No. C7042

Recommendation

- A. Motion approving a resolution accepting bids for the Water Treatment Plant Seismic and Structural Upgrade Project No. C7042, and awarding the construction contract to Auburn Constructors, Inc. in the amount of \$3,625,300 and allocating \$300,000 of Water System funds to Account No. C7042; and

- B. Motion approving a resolution authorizing the City Manager to amend the Carollo Engineers, Inc. agreement for consultant services for the design of the Water Treatment Plant Seismic and Structural Upgrade Project No. C7042, to include construction phase support services in an amount not to exceed \$280,000.

Background

The City Council approved the Water Treatment Plant (WTP) Master Plan in February of 2012. The plan identified twenty-three projects to be completed over an estimated fifteen year period. One of the highest priority projects was to upgrade certain structural components of the WTP. This project includes the construction of improvements to the following structures/facilities:

- 1967 Filter Control Building
- Clearwell, including modified chemical dosing of the finished water
- Replacement of reinforced concrete pipe (RCP) that serves the clearwell
- Backwash water tank
- Filter gallery pipe supports
- Replacement of the monorail in the finished water pump station

On October 2, 2013, the Council adopted a resolution allocating funds, and authorizing the City Manager to enter into an agreement for consultant services with Carollo Engineers, Inc. to perform the design of the WTP Seismic and Structural Upgrade, Project No. C7042. Carollo Engineers, Inc. was deemed the most qualified firm as a result of a competitive selection process.

On March 19, 2014, the Council adopted a resolution authorizing the City Manager to execute an amendment to the agreement with Carollo Engineers, Inc. to provide additional design services and bid phase support services.

On February 18, 2015, the Council, by motion, directed staff to use the bidder pre-qualification process as part of the contractor procurement process.

Discussion

In April 2015, staff prequalified eight general engineering contractors to bid on the project. Construction bids from two prequalified general engineering contractors were opened at 2:00 p.m. on Wednesday, June 10, 2015 for the construction of Project No. C7042. The bids ranged from \$3,625,300 to \$4,299,300. The engineer's estimate is \$2,900,000.

Auburn Constructors, Inc. of Sacramento is the lowest responsible bidder. The following is a summary of the bid results:

<u>Bidder</u>	<u>Amount</u>
Engineer's Estimate	\$2,900,000
Auburn Constructors, Inc.	\$3,625,300
Aztec Consultants, Inc.	\$4,299,300

An analysis was performed on the bid results, and specifically the difference between the engineer's estimate and the bids received. The results of the analysis concluded the cost differences can be attributed to three primary reasons: 1) perceived project risk, 2) bid market conditions, and 3) shoring and worker safety. The engineer's estimate assumed the City would receive five (5) bids and only two were received. Statistically, a lower number of bidders result's in higher bids. It is a factor typically reflective of the perceived project risk and bid market conditions. Bidder perceived project risk being higher than anticipated may be the result of installing improvements to a facility of an advanced age, the unknowns of coordinating work activities with the activities of another on-site contractor (Electrical Upgrade Project), and stringent shutdown requirements and liquidated damage penalties. Furthermore, bid costs for shoring and worker safety were significantly higher than estimated which can be attributed to higher than anticipated perceived risk and/or conservative assumptions due to tight working spaces and unknown site conditions.

The lowest responsible bid is twenty-five percent higher than the engineer's estimate. However, re-bidding this project will delay important improvements to many critical structures at the Water Treatment Plant, and will not insure more favorable bids will be received. It is recommended the project be awarded to Auburn Constructors in the amount of \$3,625,000.

In order to move the project into construction, the agreement with Carollo Engineers, Inc. needs to be amended to include construction phase support services. The duration of the project support phase is estimated to be 255 working days. On June 16, 2015, Carollo Engineers, Inc. submitted a proposal to provide construction project services, including special inspections, in a not to exceed amount of \$280,000.

Fiscal Impact

The project is budgeted under Account No. C7042 and partially funded. Additional Water System funds in an amount of \$300,000 are required to fully fund the construction project phase. Staff recommends allocating the additional amount to fully fund the project. The current Water System fund balance is approximately \$3.025 million. The project budget and funding is as follows:

<u>Budget</u>	
Design/Bidding	\$800,000
Construction Contract	\$3,625,300
Contingency (10%)	\$369,700
Construction Support Services	\$280,000
Construction Management/Inspection	<u>\$225,000</u>
TOTAL BUDGET	\$5,300,000
<u>Funding</u>	<u>Amount</u>
Water System funds – <i>current funding</i>	\$5,000,000
Water System funds - <i>proposed allocation</i>	<u>\$300,000</u>
TOTAL FUNDING	\$5,300,000

Attachments

- Resolutions

APPROVED BY:



Rob Braulik, City Manager

RESOLUTION NO. -15

**ACCEPTING BIDS FOR THE WATER TREATMENT PLANT SEISMIC AND STRUCTURAL UPGRADE
PROJECT NO. C7042, AND AWARDING THE CONSTRUCTION CONTRACT TO
AUBURN CONSTRUCTORS, INC. IN THE AMOUNT OF \$3,625,300 AND
ALLOCATING \$300,000 OF WATER SYSTEM FUNDS TO ACCOUNT NO. C7042**

WHEREAS, the Capital Improvement Plan includes the Water Treatment Plant (WTP) Seismic and Structural Upgrade, Project No. C7042 (Project); and

WHEREAS, Carollo Engineers, Inc. prepared plans, specifications and estimate for the Project; and

WHEREAS, in April 2015, the City prequalified eight general engineering contractors for purposes of submitting bids for construction of the Project; and

WHEREAS, on June 10, 2015, two bids were publicly opened; and

WHEREAS, Auburn Constructors, Inc. submitted the lowest responsible bid; and

WHEREAS, an additional \$300,000 in funds is required to fully fund the Project; and

WHEREAS, staff recommends authorizing transfers of Water System funds in the amount of \$300,000 to Account No. C7042; and

WHEREAS, it is deemed in the best interest of the public and the City to implement the Water Treatment Plant Seismic and Structural Upgrade Project C7042.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Martinez:

A) The bid from Auburn Constructors, Inc. is hereby accepted in an amount of \$3,625,300 when the required performance bond, labor and materials bond, insurance and other contract documents have been reviewed and approved by the City Attorney, and the City Manager is hereby authorized to execute a contract for said project with the contractor.

B) Should Auburn Constructors, Inc. fail to deliver all contract documents, fully executed and filled out, so they are in the hands of the City within ten calendar days after receipt of notice from the City of the City's acceptance of their bid, then the bid shall be deemed in violation of the contract documents and the bid shall be deemed non-responsive and rejected.

BE IT FURTHER RESOLVED the City Council approves budget transfers from Water System Funds in the amount of \$300,000, to Account No. C7042 to fully fund the Project.

* * * * *

I HEREBY CERTIFY the foregoing is a true and correct copy of a resolution duly adopted by the City Council of the City of Martinez at a Regular Meeting of said Council held on the 1st day of July, 2015, by the following vote:

AYES:

NOES:

ABSENT:

RICHARD G. HERNANDEZ, CITY CLERK
CITY OF MARTINEZ

RESOLUTION NO. - 15

AUTHORIZING THE CITY MANAGER TO AMEND THE CAROLLO ENGINEERS AGREEMENT FOR CONSULTANT SERVICES FOR THE DESIGN OF THE WATER TREATMENT PLANT SEISMIC AND STRUCTURAL UPGRADE PROJECT NO. C7042 TO INCLUDE CONSTRUCTION PHASE SUPPORT SERVICES IN AN AMOUNT NOT TO EXCEED \$280,000

WHEREAS, the Capital Improvement Plan includes the Water Treatment Plant (WTP) Seismic and Structural Upgrade, Project No. C7042 (Project); and

WHEREAS, it is necessary to hire a consultant team with expertise in civil and structural engineering to provide construction support during the construction phase of the Project; and

WHEREAS, Carollo Engineers, Inc. was selected through a competitive selection process and completed the design of the Project improvements; and

WHEREAS, Carollo Engineers, Inc. is most familiar with the design and possesses the base information and knowledge to most cost effectively provide construction phase services support for the Project; and

NOW THEREFORE, IT BE RESOLVED by the Council of the City of Martinez, the City Manager is authorized to execute a contract amendment to the consultant services agreement with Carollo Engineers, Inc. for construction phase support services for the Water Treatment Plant Seismic and Structural Upgrade, Project No. C7042 in the not to exceed amount of \$280,000.

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AYES:

NOES:

ABSENT:

RICHARD G. HERNANDEZ, CITY CLERK
CITY OF MARTINEZ