

Agenda Report

MEETING DATE: 1/19/2021

TO: City Council

FROM: Public Works and Utilities

SUBJECT: Agreement with Carollo Engineers, Inc. for design services for the

Zone 2 Reservoir Project (WA-20-14829) in the amount of \$899,715

from the Water Enterprise Fund

STATEMENT OF ISSUE:

A new reservoir is needed to provide reliability in Zone 2 of the existing City-wide water distribution system. This contract is for professional design services needed to complete the design of the new reservoir.

RECOMMENDED ACTION:

It is recommended that City Council adopt a resolution authorizing the City Manager to execute an agreement with Carollo Engineers, Inc. for design services for a new Zone 2 Reservoir (Project No. WA-20-14829) in the amount of \$899,715 to be paid from rom the Water Utility Enterprise Fund.

DISCUSSION:

The City owns and operates a 3-million-gallon welded steel reservoir tank originally constructed approximately 35 years ago at the end of Emme Street behind Monument Lumber on the City Airport. This reservoir has not been recoated internally since its construction. Recent inspection identified interior corrosion and steel roof rafter damage that will require repair within the next five to ten years. In order to complete the repair and maintenance work, this reservoir would need to be out of service for several months, leaving the City's water system Pressure Zone 2 without water storage. Pressure Zone 2 is one of five pressure zones in the water system and generally serves the northern half of the City.

Additionally, the recently completed water system hydraulic model identified this reservoir as being seismically vulnerable at its current operating water level. The seismic risk could be reduced by significantly reducing the operating storage capacity of this reservoir. However, because this is the only reservoir now available in Pressure Zone 2, the reduction of water level to address seismic risk would make the reservoir unable to meet the storage demands for the City's water distribution system.

To allow for needed maintenance and repairs to the existing reservoir to extend its useful life, mitigate seismic risk to the existing reservoir, and provide operational flexibility in Zone 2, a second Zone 2 reservoir is required to provide reliability in the existing water distribution system. This new reservoir was identified as a priority project in the City's Water Master Plan, completed last year.

Carollo Engineers, Inc., recently completed a feasibility study which determined the best, most cost-effective location for a second reservoir is next to the existing reservoir. The study determined that a second reservoir with approximately 2.38 million gallons operational storage would provide the necessary storage to improve the reliability of Zone 2 of the City water distribution system. This will reduce the seismic risk associated with operating the existing reservoir at its current water level and will help to extend the useful life of the existing reservoir by allowing it to be put out of service for maintenance.

It is estimated that the construction costs for the new reservoir will be approximately \$10 million, and that construction will commence in fiscal year 22/23. Staff intends to investigate financing the project with a Clean Water State Revolving Fund low interest loan.

Staff recommends executing a design services contract with Carollo to develop the feasibility study into a full design for construction of a second Zone 2 reservoir at the Airport. A conceptual design of the proposed new reservoir is attached.

Carollo Engineers was selected in 2018 through a formal Request for Qualifications process as the most qualified consultant for this project based on their extensive knowledge and experience in this specialized field of engineering, as well as their specific experience in Watsonville working on the City's Water and Wastewater Master Plans.

STRATEGIC PLAN:

The project supports strategic goals 03 Infrastructure & Environment by planning for replacement of the Water Treatment and Distribution System aging critical facilities and equipment.

FINANCIAL IMPACT:

The project is included in the current adopted budget funded by account 913-7855-14829 in the Water Utility Enterprise Fund.

ALTERNATIVE ACTION:

Council could elect not to approve this design services contract.

ATTACHMENTS AND/OR REFERENCES (If any):

1. Conceptual Sketch of New Zone 2 Reservoir

CITY COUNCIL ACTION RECOMMENDED:

It is recommended that the Council adopt a resolution to authorize the City Manager to execute a contract with Carollo Engineers, Inc. for design services for the Zone 2 Reservoir (Project No. WA-20-14829) in the amount of \$899,715 from the Water Utility Enterprise Fund.