CITY OF
HAYWARD
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DATE: November 16, 2010

TO: Mayor and City Council

FROM: Director of Public Works

SUBJECT: Seismic Retrofit of D Street Reservoir Project: Approval of Plans and Specifications and Call for Bids

RECOMMENDATION

That Council adopts the attached resolution approving the plans and specifications for the Seismic Retrofit of D Street Reservoir Project and calling for bids to be received on December 14, 2010.

BACKGROUND

The D Street Reservoir, built in 1931, is a 1.0 MG, partially-buried, reinforced concrete reservoir with a redwood roof. It is a critical component of the Hayward water system, providing additional water for fire fighting and emergency storage. In 1995, Dames & Moore completed a Seismic Retrofit Study that recommended completion of a detailed seismic evaluation of the D Street Reservoir to estimate the seismic performance of the tank walls and roof, and to evaluate the need for seismic strengthening. In the 2003 Seismic Vulnerability Assessment, G&E Engineering Systems Inc. determined that the roof would likely be exposed to slosh loads under the strong ground shaking that would occur during a magnitude 7.1 earthquake on the Hayward Fault. In 2008, the Water System Reservoirs Project by Carollo Engineers stated that replacing the tank would be prohibitively expensive. Therefore, the City sought to retrofit the tank so that it can stay in service following a major earthquake.

In March 2010, the City entered into a professional service agreement with consultant Simon Wong Engineering for evaluation, design and construction administration services for the seismic upgrades to the D Street Reservoir.

DISCUSSION

In their evaluation, Simon Wong Engineering compared two alternatives for replacing the roof: retrofitting the existing wood roof or replacing it with a lighter aluminum roof. They also considered two alternatives for strengthening the concrete tank to provide better performance during

an earthquake event: installing an inner concrete wall by casting it in place or using Shotcrete (sprayed-on concrete). The recommended solutions were to replace the roof with an aluminum roof and install a cast-in-place inner concrete wall.

Simon Wong Engineering has prepared a bid package to complete the tank strengthening and removal of the old wood roof. As part of the project, staff will require the contractor to remove the large wood roof beams and provide them to the City for future reuse. Since the City recently completed a competitive bid process for a purchase order contract to provide a similar aluminum roof for the High School Reservoir earlier this year, staff requested a proposal from the same contractor, Temcor, to install the D Street Reservoir roof as a separate purchase order contract for this project. Temcor quoted the new aluminum roof $13,000 less than the High School Reservoir project, which in turn was twenty-five percent lower than the next lowest bid on that project. Staff determined this was also the most cost effective way to procure the roof for this project.

The project is categorically exempt from environmental review under the California Environmental Quality Act (CEQA). The Public Resources code states that CEQA does not apply to any project involving the maintenance, repair, restoration, reconditioning, replacement, removal, or demolition of an existing pipeline or drinking water facility.

FISCAL IMPACT

The estimated project costs are as follows:

Design and Construction Administration Services – Consultant	$ 130,000
Design Administration – City Staff	20,000
Construction Contract – Tank	510,000
Separate Purchase Order Contract - Roof	352,000
Inspection and Testing	50,000
Total:	$ 1,062,000

The FY 2011 Capital Improvement Program includes $1,000,000 for the Seismic Retrofit of D Street Reservoir Project in the Water System Capital Improvement Fund. At time of award for the tank construction contract, staff will request an additional appropriation if needed.

PUBLIC CONTACT

All the installation work will be done inside the reservoir property and will not involve any ground excavation. However, the construction will have parking and noise impacts to the adjacent residences. Prior to construction, staff will set up a neighborhood meeting to discuss the project and potential impacts on area residents. To limit the impact to the adjacent residences, the contractor will have sound control restrictions between the hours of 8:00 a.m. and 7:00 p.m. during weekdays.

Prior to start of construction, staff and/or the contractor will provide notices to affected residents, property, and business owners to inform them of the nature and purpose of the work, potential impacts, work schedule, and City contact for additional information.

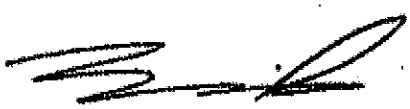
SCHEDULE

Open Bids	December 14, 2010
Award Contract	January 11, 2011
Begin Work	February 8, 2011
Complete Work	October, 2011

Prepared by: Alex Ameri, Deputy Director of Public Works

Recommended by: Robert A. Bauman, Director of Public Works

Approved by:



Fran David, City Manager

Attachments:

Attachment I: Draft Resolution
Attachment II: Project Location Map

ATTACHMENT I

HAYWARD CITY COUNCIL

RESOLUTION NO. 10-

Introduced by Council Member

RESOLUTION APPROVING PLANS AND SPECIFICATIONS FOR THE SEISMIC RETROFIT OF D STREET RESERVOIR PROJECT, PROJECT NO. 7161, AND CALL FOR BIDS

BE IT RESOLVED by the City Council of the City of Hayward as follows:

1. That those certain plans and specifications for the Seismic Retrofit of D Street Reservoir Project, Project No. 7161, on file in the office of the City Clerk, are hereby adopted as the plans and specifications for the project;

2. That the City Clerk is hereby directed to cause a notice calling for bids for the required work and material to be made in the form and manner provided by law;

3. That sealed bids therefor will be received by the City Clerk's office at City Hall, 777 B Street, Hayward, California 94541, up to the hour of 2:00 p.m. on Tuesday, December 14, 2010, and immediately thereafter publicly opened and declared by the City Clerk in Conference Room 4D, City Hall, Hayward, California;

4. That the City Council will consider a report on the bids at a regular meeting following the aforesaid opening and declaration of same.

IN COUNCIL, HAYWARD, CALIFORNIA _____, 2010

ADOPTED BY THE FOLLOWING VOTE:

AYES: COUNCIL MEMBERS:
MAYOR:

NOES: COUNCIL MEMBERS:

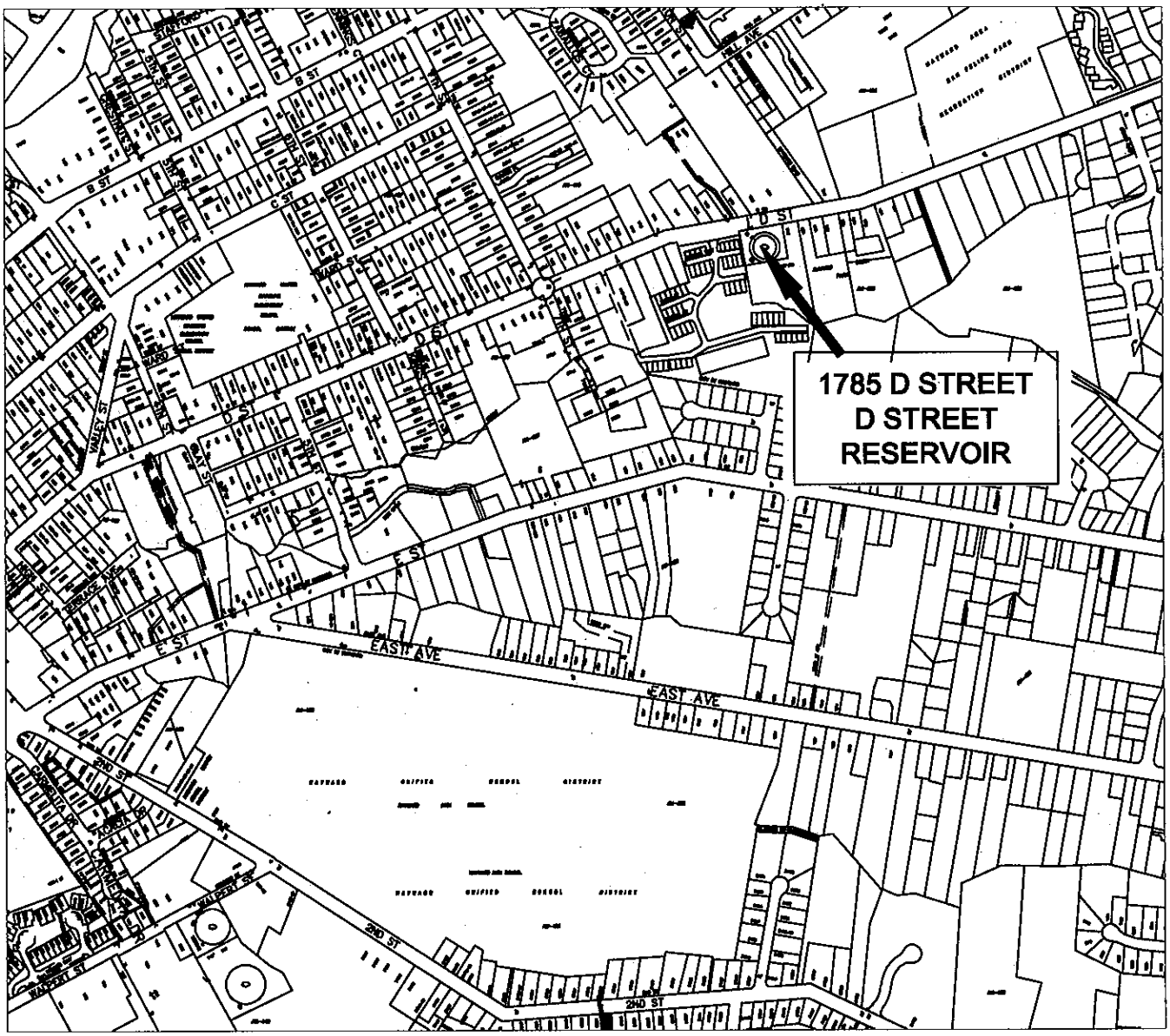
ATTEST: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

ATTEST:_____
City Clerk of the City of Hayward

APPROVED AS TO FORM:

_____
City Attorney of the City of Hayward



SEISMIC RETROFIT OF D STREET RESERVOIR - PROJECT NO. 622-7161

LOCATION MAP