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APPROVED
BY THE CITY COUNCIL

AUG 20 1996

OFFICE OF THE
CITY CLERK

DEPARTMENT OF
UTILITIES
ENGINEERING SERVICES

CITY OF SACRAMENTO
CALIFORNIA

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August 8, 1996

City Council
Sacramento, California

Honorable Members in Session:

**SUBJECT: EMERGENCY REPAIRS FOR SACRAMENTO WATER TREATMENT PLANT;
COUNCIL APPROVAL OF SUPPLEMENTAL AGREEMENT #1 WITH JDC
ASSOCIATES FOR THE SEISMIC RETROFIT TANKS PROJECT (ZD91)**

LOCATION AND COUNCIL DISTRICT:

This project is at the Sacramento River Water Treatment Plant (SRWTP), located north of the Southern Pacific Railyard and south of Richards Boulevard (District 1).

RECOMMENDATION:

Staff recommends that the City Council approve the attached resolution authorizing the City Manager and City Clerk to sign and execute Supplemental #1 to City Agreement CA96-082 with JDC Associates for a not-to-exceed amount of \$100,000.

CONTACT PERSON: Candace A. McGahan, Senior Engineer, 433-6617
Jim Sequeira, Director, 433-6607

FOR COUNCIL MEETING OF: August 20, 1996

SUMMARY:

A consultant services agreement with JDC Associates for a not-to-exceed amount of \$90,000 was negotiated and approved by City Council on July 2, 1996. The scope of the agreement provides services for destructive testing, laboratory testing and analysis, structural analysis, a comprehensive investigation report, and for construction contract documents to repair the headhouse at the SRWTP.

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After extensive investigation, it is apparent that needed repairs are more extensive than originally believed. Staff is therefore requesting an additional \$100,000 to stabilize the water piping and filter gallery at the Sacramento River Water Treatment Plant. Authorization for the City Manager and City Clerk to execute the agreement is recommended. Supplemental #1 to the existing agreement will be for the following:

- Demolition of salt gallery walls and floor slabs
- Stabilization of the 54-inch sedimentation basin to filter pipe which will include specialized demolition, epoxy and fiber wrap of pipe, steel rib and cribbing for mechanical protection and installation of additional pipe supports.
- Further concrete testing to below headhouse basement floor.

COMMITTEE/COMMISSION ACTION:

Not applicable.

BACKGROUND INFORMATION:

In September 1993, the SRWTP headhouse, which houses the filter wash water storage tank and the plant control room, was inspected as part of project scoping for a State Bond Act grant application. The following structural deficiencies were noted:

- Headhouse, due to the weight of water in the storage tank, out of compliance with current seismic building requirements.
- Steel reinforcement and concrete in basement columns and walls significantly cracked, spalled and corroded due to past manufacture of chlorine.
- Failures of repair work performed earlier.
- Hoop and rivet stresses for the wash water tank in excess of allowable stress.

The State did not fund the grant, and no further formal investigation was done. However, deterioration of the headhouse has continued and, in the last year, at an accelerated rate. Additional deficiencies that have surfaced are:

- Further corrosion of concrete columns and cross walls in the basement.
- Corroded and loose basement ladders, hand railing and other miscellaneous metal work.
- Loose clay tile roofing due to corrosion or lack of connectors.
- Cracks in basement walls and in a concrete pipe due to possible differential settlement.

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- Corrosion of electrical conduit and encased grounding in concrete.
- Significant leakage in headhouse piping.

These deficiencies create a safety hazard to plant operators and maintenance personnel, and severely jeopardize continuous operation of the plant.

Following July 2, 1996 City Council authorization, JDC Associates was hired to investigate and design corrective action. This initial contract was for \$90,000. As JDC Associates proceeded with their investigation it became apparent that the damage is much more severe and threatening than originally thought. We now anticipate that an additional \$100,000 is needed to complete the most urgent repairs. As the problem area is an integral part of the treatment facility, these repairs should be made in a timely manner.

FINANCIAL CONSIDERATIONS:

Funding for this consultant services agreement is available in Water Fund Capital Improvement Program 413-500-ZD91. As of August 8, 1996, the unobligated amount was \$1,995,399. The agreement with JDC Associates will now be for an amount not to exceed \$190,000.

ENVIRONMENTAL DETERMINATION:

An environmental determination is not applicable to JDC's specific agreement. However, the construction project resulting from the headhouse investigation will be exempt from environmental review pursuant to CEQA Section 15301 (b) regarding repair and maintenance of public utility facilities.

POLICY CONSIDERATIONS:

The firm of JDC Associates was selected on a sole source basis to perform the investigation and produce construction contract documents for the following reasons:

- JDC Associates can fast track the project to allow for completion of permanent repairs during the SRWTP 1996/97 winter shutdown due to knowledge gained during work on the State Bond Act application.
- JDC Associates has a team of experts available in the multiple disciplines required for the project.

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MBE/WBE:

JDC Associates is meeting the City's goals for minority business enterprise (MBE) participation with the City certified MBE subconsultant, Alternative Structural Technology.

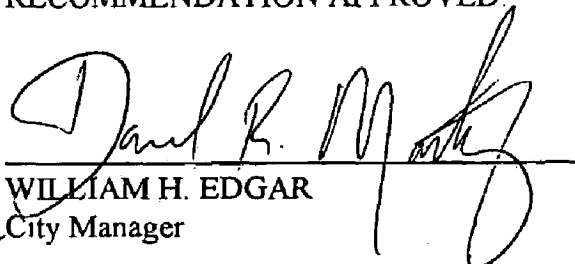
The women business enterprise (WBE) goal of 9.5% will not be met. However, the total level of MBE/WBE participation achieved by the Department of Utilities as of the first quarter of FY 1997 is 13.23% MBE and 8.82% WBE.

Respectfully submitted,



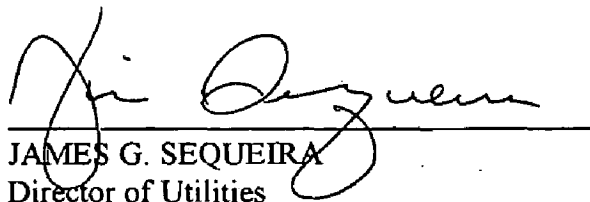
Gary A. Reents
Engineering Services Manager

RECOMMENDATION APPROVED:


WILLIAM H. EDGAR
City Manager

for:

APPROVED:


JAMES G. SEQUEIRA
Director of Utilities

APPROVED
BY THE CITY COUNCIL
AUG 20 1996
OFFICE OF THE
CITY CLERK

RESOLUTION NO. 96-466

ADOPTED BY THE SACRAMENTO CITY COUNCIL

ON DATE OF _____

RESOLUTION AUTHORIZING THE CITY MANAGER AND CITY CLERK TO SIGN AND EXECUTE SUPPLEMENTAL #1 WITH JDC ASSOCIATES TO PROVIDE ADDITIONAL ENGINEERING SERVICES FOR INVESTIGATION AND DESIGN OF REPAIRS TO THE SEISMIC RETROFIT TANKS PROJECT (PN: ZD91)

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF SACRAMENTO:

That the City Manager and City Clerk are hereby authorized to sign and execute Supplemental #1 for a not-to-exceed amount of \$100,000 with JDC Associates to provide additional engineering services and repair work for destructive testing, laboratory testing and analysis, filter pipe stabilization, and gallery demolition at the Sacramento Water Treatment Plant headhouse.

MAYOR

ATTEST:

CITY CLERK

FOR CITY CLERK USE ONLY

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RESOLUTION NO.: _____

DATE ADOPTED: _____