



AGENDA REPORT

Meeting Date: January 29, 2008
Item Number: F-9
To: Honorable Mayor & City Council
From: Alan Schneider, Director of Project Administration
Subject: APPROVAL OF THE AWARD OF A CONTRACT TO AIR CONDITIONING SOLUTIONS, INC. FOR THE CENTRAL PLANT CHILLER REPLACEMENT;
AND APPROVE A PURCHASE ORDER IN THE AMOUNT OF \$697,005 TO AIR CONDITIONING SOLUTIONS, INC. FOR THE CONTRACT WORK

Attachments:

1. Agreement
2. EIG Letter (SCE Rebates)
3. Categorical Exemption

RECOMMENDATION

Staff recommends the approval of the award of a contract to the lowest responsible bidder, Air Conditioning Solutions, Inc. for Central Plant Chiller Replacement ("Project") in the amount of \$667,005; approval of the construction contingency of \$30,000; approval of the plans and specifications for the Project, dated November 5, 2007, which are adopted and approved with respect to design criteria; approval of the purchase order in the amount of \$697,005; and approval of an appropriation of funds in the amount of \$97,005 which shall be appropriated as set forth in the agenda report.

INTRODUCTION

The Central Plant was constructed in 1988 and is located at B level of the Police Facility. The plant includes two chillers and a chilled water thermal storage tank, and provides chilled water to City Hall, Library and Police Facility. The proposed contract will address a number of plant deficiencies.

DISCUSSION

The existing chillers in the Central Plant have reached the end of their useful life and are currently not able to adequately serve the Civic Center loads during peak cooling demand periods. Specifically, the existing McQuay chillers have the following operational issues that need to be addressed at this time:

- The chillers have lost capacity over time and are currently unreliable. Recent periods of extremely hot weather have exposed the reduced cooling capacity to maintain a comfortable indoor temperature.
- The control panels on the chillers are obsolete and repair parts are currently not available.
- The chillers utilize R-500 refrigerant that is CFC (chlorofluorocarbons). This refrigerant, under the trade name Freon is expensive and only available as reclaimed product.
- The chillers are extremely noisy and cause disruptions to City functions in the Civic Center plaza.

The current plant is also not energy efficient and upgrading to current technologies will realize significant long-term energy savings for the City.

The plans and specifications for the Central Plant Chiller Replacement ("Project"), dated November 5, 2007, were approved by a duly authorized California licensed engineer. Staff from Public Works and Transportation finds that the plans and specifications will safely implement the Project. The contract documents specified the base bid work, which includes the following scope of work:

Replace the existing McQuay chillers with two new chillers utilizing the state of art energy efficient Turbocor compressor technology; install variable speed drives on the Central Plant chilled water pumps; reconfigure the existing chilled water piping to allow for dedicated pumps for each chiller; and integrate the chiller control interface into the existing Honeywell Automation System.

In addition to the base bid, seven alternate bid items were included in the bid package as follows:

- Bid alternate 1: Provide a by-pass filter system for the chilled water tank to address foreign materials that have accumulated in the tank
- Bid alternate 2a: Re-build the existing sustaining valves
- Bid alternate 2b: Replace the sustaining valves
- Bid alternate 3: Replace valves on supply air fans
- Bid alternate 4a: Replace existing 10 HP chilled water pump with 20 HP pump
- Bid alternate 4b: Provide variable frequency drive to control 20 HP pump
- Bid alternate 5: Provide extended five-year warranty in lieu of standard one-year warranty

Six firms attended the mandatory job walk and obtained bid documents for this project. The project was advertised in the local Beverly Hills newspapers, and the construction trade plan room, McGraw-Hill Construction Information Group (Dodge Report).

On November 28, 2007, four bids were received. The bids results are as follows:

	<u>Base Bid</u>
Air Conditioning Solutions, Inc.	\$559,000
Emcor	\$572,980
Allison Mechanical	\$683,500
Los Angeles Air Conditioning	\$710,743

The low bidder, Air Conditioning Solutions, Inc., submitted a responsive bid, and as reported by the State Contractors Licensing Board, their license is current and in good

standing. Review of the firm's references indicates that the firm has successfully executed similar work.

The staff's cost estimate was \$600,000 not including the bid alternates, and is within the range of the base bids received.

In consideration of the bids submitted, staff in consultation with the City's HVAC contract services provider, ABM Engineering Service, recommends that the base bid and the following bid alternates be accepted as the contract work to achieve the highest degree of energy efficiency for the Central Plant:

- Bid alternate 1: Provide the by-pass filter system for the chilled water tank
- Bid alternate 2b: Replace the sustaining valves
- Bid alternate 3: Replace valves on supply air fans
- Bid alternate 4a: Replace existing chilled water pump with 20 HP pump
- Bid alternate 4b: Provide variable frequency drive to control 20 HP pump
- Bid alternate 5: Provide extended five-year warranty

The total contract amount is \$667,005 including the above alternate bid items. In addition, a contingency of \$30,000 is recommended for changes due to unforeseen conditions to complete the work.

Besides addressing the aging Central Plant equipment and the need to replace it with reliable equipment to provide necessary cooling for the Civic Center campus, this project will result in a significant reduction in energy consumption and costs. Furthermore, this project qualifies for rebates through Southern California Edison (SCE).

Energy Innovation Group (EIG) operates the Management Affiliates Program (MAP) for the SCE. The MAP program provides rebates for energy projects with qualifying technologies. EIG has determined that this project qualifies for a rebate amount of \$56,122 for the work specified under the Base Bid. In addition, the work specified under the recommended bid alternates would qualify for an additional rebate estimated in the range of \$10,000 to \$12,000, subject to measurement of the energy savings upon completion of the work. (A copy of EIG letter specifying the SCE rebates for the project is attached for reference). The MAP Program is funded by California ratepayers and administered by Southern California Edison under the auspices of the California Public Utilities Commission.

In addition to the rebate, EIG has estimated the annual energy savings for the base bid work is approximately \$84,000; and an additional \$16,000 to \$20,000 for the bid alternates.

The bid documents specify a 120 calendar day completion period for the work, resulting in completion of the project in May-June 2008.

The Department of Community Development has reviewed the project for environmental impact and concluded that the project qualifies for a categorical exemption under the procedures adopted by the City of Beverly Hills, and no further environmental assessment is necessary.

FISCAL IMPACT

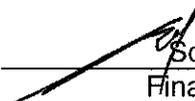
Funding for this contract work in the amount of \$600,000 has been budgeted from the 07-08 Capital Improvement Program (CIP) budget for Central Plant Upgrades, project #0584. Additional funding will be necessary to cover all project costs; therefore, an appropriation of funds is requested.

Total project costs:	\$697,005
Budgeted funds:	<u>\$600,000</u>
Requested appropriation:	\$97,005

Funds in the amount of \$97,005 shall be appropriated for the contract work as follows:

<u>From</u>	<u>To</u>
Capital Improvement Fund	Central Plant Upgrades
Fund Balance (08-30000)	Chiller Replacement (35080584 85040)

As noted previously, the City will receive a rebate of \$56,122 plus an additional \$10,000 to \$12,000 which will offset a large portion of the requested additional appropriation.



Scott G. Miller
Finance Approval



David D. Gustavson *AVR*
Approved By

APPENDIX A

FORM OF CONTRACT

This contract ("Contract") is entered into by and between the City of Beverly Hills ("City"), a California municipal corporation, and AIR CONDITIONING SOLUTIONS, INC., a Corporation, whose address is 11871 Sheldon Street, Suite B, Sun Valley, CA 91362.

In consideration of the agreements herein contained, the parties agree as follows:

1. WORK TO BE PERFORMED. Contractor shall furnish at Contractor's own expense all labor, materials, supplies, equipment, tools, transportation and other items of expense necessary to complete in a workmanlike manner all Work in accordance with the terms and conditions of the Contract, except for the labor, materials, supplies, equipment, tools, transportation and other items of expense as may be required to be furnished by the City. The Work is defined in detail in the Contract Documents, which govern the interpretation and performance of this Contract, but may be generally described as follows:

CENTRAL PLANT CHILLER REPLACEMENT

2. CONTRACT DOCUMENTS. This contract consists of this Form of Contract and the following Contract Documents, including all exhibits, appendices, addenda, drawings, specifications and documents therein and attachments thereto, all of which are by this reference incorporated herein and made a part of this Contract:

SECTION 1: NOTICE INVITING BIDS
SECTION 2: INSTRUCTIONS TO BIDDERS
SECTION 3: SPECIAL CITY REQUIREMENTS
SECTION 4: GENERAL SPECIFICATIONS
SECTION 7: ADDITIONAL FORMS

as contained in City's Bid Document for Bid No. 08-10, dated November 5, 2007 and

SECTION 5: BIDDER'S BID
SECTION 6: SIGNATURE PAGE AND LEGAL STATUS

of Contractor's Bid in response thereto, all of which are incorporated herein by reference, and all of which shall comprise the Contract Documents for this Contract. If any item of the Scope of Work, Payment Schedule, or any other item of the Bid Package is modified by either of the parties or arrived at by negotiation between the parties, that item as finally agreed upon by the parties shall also become a Contract Document, it shall supersede the corresponding item of the Bid Package, if any, and it shall be subject to all terms and conditions of the Contract.

3. PERFORMANCE PERIOD. Contractor shall commence Work after execution of the Contract, and shall complete all Work in 120 calendar days from the date of Notice To Proceed as set forth in the Contract Documents.

4. PAYMENT. City shall pay Contractor as full consideration for the satisfactory performance by Contractor of all Work required under this Contract the sum of SIX HUNDRED SIXTY-SEVEN THOUSAND FIVE Dollars (\$667,005.00), inclusive of Bid Alternate 1, Bid Alternate 2b, Bid Alternate 3, Bid Alternate 4a, Bid Alternate 4b, and Bid Alternate 5, payable as provided in the Contract Documents.

5. The City Manager or his designee shall administer the terms of the Agreement on behalf of the City.

IN WITNESS WHEREOF, the parties hereto have caused this Contract to be executed as of the date stated below.

DATED: _____

DATED: _____

CITY OF BEVERLY HILLS
"City"

AIR CONDITIONING SOLUTIONS, INC.
"Contractor"

JIMMY DELSHAD
Mayor

By: _____
GREG O'NEILL
President

ATTEST:

BYRON POPE
City Clerk

By: _____
JOHN BAKER
Secretary

APPROVED TO FORM:

LAURENCE S. WIENER
City Attorney

APPROVED AS TO CONTENT:

RODERICK J. WOOD
City Manager

DAVID D. GUSTAVSON
Director of Public Works

ALAN SCHNEIDER
Director of Project Administration

KARL KIRKMAN
Risk Manager



3916 Sepulveda Boulevard, Suite 109, Culver City, CA 90230
P: 310-313-1917 F: 310-313-7605 www.energyinnovation.net

*League Partner –
League of California Cities*

December 21, 2007

Alan Schneider
Director of Project Administration
City of Beverly Hills
345 Foothill Road
Beverly Hills, CA 90210

Re: Southern California Edison Rebates for Central Plant Energy Project

Attention: Mr. Alan Schneider:

Energy Innovation Group, LLC (EIG) operates the Management Affiliates Program (MAP) for SCE. The MAP program provides rebates for energy projects with qualifying MAP program technologies. The City of Beverly Hills is contemplating an upgrade of the city's central plant and other HVAC system work as is more fully described in the bid documents, proposal specifications, and the contract award to the selected contractor.

EIG has determined that the City's energy project qualifies for the MAP rebate, to be paid to the City upon the verification of project completion according to the contract specifications. Rebate calculations are determined by independent engineering consultants according to the savings calculation methodology established for the operation of the MAP program.

The work scope qualifying for the rebate is:

Primary Measure:

1. Replacing (2) 240 ton centrifugal water cooled HVAC with (4) 125 ton Turbocor compressor systems.

Additional Measures:

1. Replace the existing central plant Pressure Sustaining Valves with new energy efficient Pressure Independent Control Valves.
2. Replace existing control valves on air handling unit chilled water coils with new energy efficient Pressure Independent Control Valves.
3. Replace existing 10 HP Chilled Water Pump P-13 with a 20 HP pump to match P-11 and P-12.
4. Provide Danfoss Variable Frequency Drive, Model VLT6000, and associated controls in conjunction with the replacement of Chilled Water Pump P-13.

Upon completion of the installation, an inspection is completed to verify completion of work as per the specifications. The net rebate amount due to the City shall total \$56,122 for the primary measure. The City will also be entitled to further rebates for the Additional Measures based on energy savings measurements after completion of installation. It is estimated that the amount of these additional rebates could range between \$10,000 to \$12,000. The City will be notified of the approved rebate amount upon completion of the work and the savings measurements.

The estimated energy savings for the Primary Measure, at a \$0.15 per kWh rate, is approximately \$84,000 per year. The estimated energy savings for the Additional Measures, at a \$0.15 per kWh rate could approximate \$16,000 to \$20,000 per year.

The rebate process is:

- (i) Inspection and verification of operating system and work completion as per specification;
- (ii) EIG prepares documentation package and invoices SCE for the rebate dollars;
- (iii) SCE confirms that all data matches the data used to develop the rebate analysis;
- (iv) Upon SCE acknowledgment of project completion as per specifications, EIG invoices SCE for the rebate due;
- (v) EIG typically receives rebates 30 days after receipt of invoice by SCE; and (vi) EIG issued payment to the City within 5 business day from receipt of payment by SCE. .

We look forward to working with the City for this energy project as well as to assist the City in taking advantage of other opportunities for creating Green Buildings and combating Global Warming through greater energy efficiency and reduced energy use.

Very truly yours,

ENERGY INNOVATION GROUP, LLC



Sidney E. Pelston
Managing Member



455 N. Rexford Drive
Beverly Hills, CA 90210-4817
(310) 285-1123
FAX: (310) 858-5966

www.beverlyhills.org

CITY OF BEVERLY HILLS

Categorical Exemption

NAME OF PROJECT Central Plant Chiller Replacement Project

LOCATION 464 N. Rexford Drive, Beverly Hills, California

TYPE OF BUSINESS (IF COMMERCIAL) City Central Plant

PROJECT DESCRIPTION Replace the existing Central Plant chillers with two new chillers utilizing the state of art energy efficient Turbocor compressor technology.

APPLICANT'S NAME City of Beverly Hills PHONE 310-285-1188

APPLICANT'S ADDRESS Project Administration 345 Foothill Road

CITY Beverly Hills, CA ZIP 90210

IF DIFFERENT, PROVIDE:

AGENT'S NAME _____ PHONE _____

AGENT'S ADDRESS _____

CITY _____ ZIP _____

The undersigned, having received this project for processing, has reviewed it for environmental impact and concluded that the project qualifies for a categorical exemption under the procedures adopted by the City of Beverly Hills and no further environmental assessment is necessary.

Applicable Exemption Class 2 (c)

COMMENTS Replacement of existing utility system with new efficient chillers with negligible or no expansion of capacity.

REVIEWED BY Georgina Melican Date 1/10/08

FEE \$ _____ (See current Planning Department Fee Schedule)