TO: HONORABLE CITY COUNCIL

FROM: CITY MANAGER DEPARTMENT: UTILITIES

DATE: JUNE 23, 2008 CMR: 291:08

SUBJECT: ADOPTION OF A RESOLUTION AUTHORIZING USE OF A DESIGN-BUILD PROJECT DELIVERY METHOD FOR DESIGN AND CONSTRUCTION OF THE ELEANOR PARDEE PARK AND MAIN LIBRARY/COMMUNITY GARDENS WELLS AS PART OF THE EMERGENCY WATER SUPPLY PROJECT WS-08002, AND APPROVAL OF A UTILITIES ENTERPRISE FUND AGREEMENT WITH SIEGFRIED ENGINEERING, INC. IN A NOT TO EXCEED AMOUNT OF $544,367 FOR PRE-DESIGN AND DESIGN-BUILD PROCUREMENT SERVICES FOR THE ELEANOR PARDEE PARK AND MAIN LIBRARY/COMMUNITY GARDENS WELLS/EMERGENCY WATER SUPPLY WELLS PROJECT WS-08002

RECOMMENDATION
Staff recommends that Council:

1. Adopt Resolution (Attachment A) authorizing use of the design-build project delivery method for the design and construction of the Eleanor Pardee Park and Main Library/Community Gardens wells as part of the Emergency Water Supply Project WS-08002; and

2. Approve and authorize the City Manager or designee to execute the attached Agreement with Siegfried Engineering, Inc. (Attachment B) in a not to exceed amount of $544,367 for the Pre-Design and Design-Build Procurement Services for Eleanor Pardee Park and Main Library/Community Gardens Emergency Water Supply wells, as part of the Emergency Water Supply Project WS-08002, which includes $453,639 for basic services and $90,728 for additional services.

BACKGROUND
The Eleanor Pardee Park and the Main Library/Community Gardens Emergency Water Supply Wells Project (EWSWP) is part of the overall Emergency Water Supply Project (EWSP), WS-08002. This project’s purpose is to ensure an adequate emergency water supply source is available to meet the City’s emergency water needs. The project will ensure the City compliance with the California Department of Public Health (CDPH) recommendation to have stand-alone emergency water (including groundwater) sufficient to supply eight hours of usage at the highest
hourly demand plus a reserve for fire fighting. The EWSP will construct a 2.5 million gallon reservoir, three new wells (two new wells as part of the EWSWP and a third new well will be constructed with the 2.5 million gallon reservoir as part of the EWSP), and will rebuild Lytton Pump Station and rehabilitate up to five existing wells and the rebuild the Mayfield Pump Station and supporting pipelines.

On March 5, 2007, at a regular City Council meeting, Council held the final public hearing for the Environmental Impact Report (EIR) for the EWSP, and adopted a resolution certifying its adequacy (CMR:161:07). Also at the March 5, 2007 meeting, Council adopted a second resolution approving the EWSP and designating the project sites, and approved Park Improvement Ordinances for El Camino, Eleanor Pardee, Timothy Hopkins, Rinconada and Peers Parks.

Council’s approval of the attached design-build resolution will allow staff to accelerate the construction of two new emergency supply wells. Council’s approval of the agreement with Siegfried Engineering, Inc. (SEI) will start the pre-design phase of the EWSWP. The purpose of the pre-design is to provide the design-builder with sufficient information to competently bid the project and to ensure that the City obtains a quality designer-builder team.

In the pre-design phase SEI will conduct a geotechnical investigation of the two well sites by drilling two pilot holes for the wells and two smaller holes for soils investigations for the structures. SEI will use the geotechnical data to prepare 30 percent completion level design documents. SEI will incorporate the pre-design into a Request for Proposals (RFP). The responses to the RFP will start the second phase of the project with a design-build contract that will be brought to Council for award. The successful design-build proposer will complete the project design and construct the two new well sites.

DISCUSSION
Description of the Project
This project includes geotechnical investigations for well and structure design, preparation of design-build plans to the 30 percent level and preparation of design-build proposal documents to construct two new standby emergency water wells, one in Eleanor Pardee Park and the other at the Main Library/Community Gardens site (Attachment C). The design-build proposal will be advertised at the completion of this phase of the project. The pump and structure at Eleanor Pardee Park will be designed as an underground structure. The pump building at the Main Library/Community Gardens site will be designed as an above ground structure.

Consultant’s Scope of Services
The consultant will conduct a pre-design study for design-build construction of new wells at Eleanor Pardee Park and the Main Library/Community Gardens site. The consultant will: evaluate hydrogeologic, geotechnical, environmental factors and operational requirements; develop site layout, floor plan, architectural and landscaping alternatives, control strategies and Supervisory Control and Data Acquisition (SCADA) requirements; prepare specifications for key equipment and materials; analyze construction and operation and maintenance (O&M) costs; and prepare a risk management plan to assure quality of materials and construction. The consultant will also prepare a Request for Qualifications (RFQ) and a Request for Proposals
(RFP), and assist staff with procurement of the design-build engineer/contractor. Finally, the consultant will assist with implementation of the design-build contract by facilitating continuity between the pre-design effort and the final design effort during the design-build phase, and will assure conformance of the final design with the construction requirements and design intent set forth during pre-design.

The deliverables will include:
1. A pre-design Engineering Report;
2. A Risk Management Plan;
3. A Request for Qualifications for the design-build contract;
4. A Request for Proposals for the design-build contract;
5. A recommendation on the design-build team based on SEI’s independent review of the proposals submitted.

Attachment B, the Agreement, contains a complete description of the scope of services.

Staff recommends that this work be performed by a consultant in view of the specialized nature of the services, and special equipment and training needed for the hydrogeologic and geotechnical investigations and well design.

### Solicitation Process

<table>
<thead>
<tr>
<th>Proposal Title</th>
<th>Pre-Design and Procurement Services for Design-Build of Eleanor Pardee Park and Library/Community Gardens Water Production Wells for the Emergency Water Supply Project</th>
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<tbody>
<tr>
<td>Proposal Number</td>
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<tr>
<td>Proposed Length of Contract</td>
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<td>Number of Proposals mailed &amp;/or emailed</td>
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<td>Total Days to Respond to Proposal</td>
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<td>Pre-proposal Meeting Date</td>
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<tr>
<td>Number of Company Attendees at Pre-proposal Meeting</td>
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<td>Number of Proposals Received:</td>
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<tr>
<td>Company Name</td>
<td>Location (City, State)</td>
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<tr>
<td>Siegfried Engineering, Inc.</td>
<td>Stockton, CA</td>
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<tr>
<td>Proposal Amount*</td>
<td>$300,000</td>
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</tbody>
</table>

* Based on partial scope of work. See Cost of Services below.

Due to project requirements, consultants who did not submit a proposal expressed more interest in the design-build phase. Consultants in the pre-design phase are excluded from submitting a proposal in the design-build phase.

### Cost of Services

As shown in the table above, SEI submitted a bid for $300,000, however, costs for the exploratory well drilling and the Supervisory Control and Distribution Automation (SCADA) design were not included in SEI’s proposal. Upon questioning by City staff, the proposer stated that their interpretation of the RFP scope of work was that the City would contract separately with a well driller, and that the City intended for the pumps to be locally controlled and not connected to the SCADA system. After receiving SEI’s proposal, staff negotiated costs for
adding the well drilling and SCADA services into SEI’s fee. The final not to exceed budget for the basic services listed in Exhibit A of the Agreement is $453,639. Staff recommends that an additional services amount of $90,728 (20 percent) be added to the contract for unforeseen circumstances related to exploratory well drilling and public outreach at the proposed well sites.

Additional services will be paid on a time and materials basis using the consultant’s Charge Rates schedule shown in Exhibit C to the Agreement. The consultant shall not commence with additional services before the City has obtained an acceptable not-to-exceed price, in writing, for the scope of additional services, and staff has issued a written notice to proceed to the consultant. The total budget amount proposed for the project is $544,367, including $453,639 for the basic services and $90,728 for additional services.

Staff reviewed the consultant’s proposal and qualifications, met with the consultant’s project team and has determined that the consultant has the expertise and experience necessary to perform the work.

Design-Build
Pursuant to City Municipal Code Section 2.30.300(c) regarding alternative project delivery methods, staff recommends that the wells be designed and constructed via a design-build process. In a “design-build” project delivery method, both design and construction services are covered under a single contract, whereas, in a traditional “design-bid-build” project delivery method, the agency contracts with separate entities for both the design and construction of a project. Design-build contracts are usually awarded by a process other than formal competitive bidding, (which mandates award to the lowest monetary bidder) in order to allow consideration of qualitative factors, such as a bidder’s experience and performance on prior jobs, in addition to price.

Although Article VII, Section 6 of the City Charter requires formal bidding and award to the lowest monetary bidder for public works contracts funded by bonded indebtedness of the city, no bond financing will be used for this project since funds are available in CIP WS-08002 Emergency Water Supply Project. Section 2.30.300(c) of the City Municipal Code requires formal bidding for all public works contracts unless Council determines by resolution “that a particular public works project may be solicited and contracted for using alternate project delivery methods, including but not limited to design build, construction manager at risk, or competitive negotiation.” The resolution must include the reasons supporting the use of the alternate project delivery method and describe the solicitation method to be used and the criteria for determining the party to whom the contract should be awarded. A resolution meeting these requirements is attached (Attachment A) and additional discussion is provided below.

A significant difference between design-build contracts and traditional design-bid-build contracts is that in a design-build method, the final design work is done concurrently with construction. As a result, the design-build method can accelerate the project schedule and reduce overall project costs. The design-build method also allows the contractor to begin certain construction activities, such as excavation, before detailed design is completed, and accelerates project progress by eliminating or reducing certain design and/or procurement steps, such as submittal preparation and review. Due to the current deficiency in emergency water supply, staff is recommending that
Palo Alto add capacity to its emergency water supplies as soon as possible. The design-build contract process will accelerate the completion of this project. Specifically, staff estimates that the use of a design-build contract process will:

- Allow the project to be completed 7 months earlier; and
- Result in savings of $300,000.

**RESOURCE IMPACT**
Funds for this project in amount of $544,367 are included in the WS-08002 Emergency Water Supply Project CIP. This pre-design project, and the follow on design-build construction project, is not bond financed. This project will be managed by Utilities Engineering staff.

**POLICY IMPLICATIONS**
This recommendation is consistent with existing City policies, and with Municipal Code Title 2, section 2.30.300, Public Works Contracts, with respect to alternative project delivery methods. The design-build model, however, is a departure from the city’s customary design-bid-build practice.

**ENVIRONMENTAL REVIEW**
The field work, including drilling work, of this pre-design study, as well as the project for construction of wells in Eleanor Pardee Park and at the Main Library/Community Gardens site, are part of the overall project EIR for the Emergency Water Supply Project (SCH #2066022038), which Council certified on March 5, 2007 as being adequate to meet the requirements of the California Environmental Quality Act (CEQA).

**ATTACHMENTS**
A: Resolution
B: Agreement with Exhibits A through E
C: Project Location Map

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