TO: HONORABLE CITY COUNCIL
FROM: CITY MANAGER DEPARTMENT: UTILITIES
DATE: DECEMBER 12, 2005 CMR:454:05

SUBJECT: AUTHORIZATION FOR THE CITY MANAGER TO ENTER INTO DISCUSSIONS WITH THE PALO ALTO UNIFIED SCHOOL DISTRICT ABOUT THE POTENTIAL TO CONSTRUCT A 2.5 MILLION GALLON UNDERGROUND EMERGENCY WATER RESERVOIR, PUMP STATION AND WELL AT PALO ALTO HIGH SCHOOL AS PART OF IDENTIFYING PREFERRED SITES FOR STUDY IN THE 8-HR EMERGENCY WATER SUPPLY PROJECT ENVIRONMENTAL IMPACT REPORT PROCESS

RECOMMENDATION

Staff recommends Council authorize the City Manager or his designee to enter into discussions with the Palo Alto Unified School District on constructing a 2.5 million gallon underground emergency water reservoir, pump station and well at Palo Alto High School (Paly) as part of identifying preferred sites for study in the 8-Hr. Emergency Water Supply Project Environmental Impact Report (EIR) process.

BACKGROUND

The City of Palo Alto currently relies on San Francisco Public Utilities Commission (SFPUC) Hetch Hetchy aqueducts for water supply. In 1999, the City completed the Water Wells, Regional Storage, and Distribution System Study (1999 Study). The 1999 Study evaluated how the City could maintain water supply in case of a temporary shutdown of the SFPUC Hetch Hetchy aqueducts, identified deficiencies in the City’s ability to meet water demands during such a shutdown, and evaluated alternatives for correcting the deficiencies. The 1999 Study and subsequent evaluations recommended a suite of capital improvements, known as the 8-Hour Emergency Water Supply Project.

On March 15, 2004, Council approved Amendment No. 1 to the contract with Carollo Engineers for Phase I Water Distribution System Improvements [CMR:164:04] to include all environmental review for the 8-Hour Emergency Water Supply Project; the addition of Boronda and Park Booster Station Improvements; and construction management services for a new reservoir, pump station and well.
Before proceeding with a Draft Environmental Impact Report (DEIR) on the Emergency Water Supply, Staff completed an Environmental Constraints Analysis (ECA) as part of the planning process. The ECA included examination of potential alternatives in the 1999 Study that could meet the City’s emergency water supply goals including:

- Interties with adjacent agencies
- Interconnection with Santa Clara Valley Water District (SCVWD)
- Desalination
- 3 new wells, 1 pump station, and a 2.5 million gallon (MG) reservoir

The ECA is part of the work done to develop an accurate project description for the DEIR and identify a good range of alternatives to be considered in the DEIR that could reduce or avoid adverse environmental impacts.

CEQA Guidelines require EIRs to describe and evaluate a reasonable range of alternatives to a project, or to the location of a project, which would feasibly attain most of the basic project objectives and avoid, or substantially lessen, significant project impacts.

The ECA evaluated two types of alternatives that will be reviewed in the DEIR: (1) means to obtain adequate emergency water supplies other than building a reservoir, wells, and pumping facilities and (2) alternatives of the project that include modified project components, such as alternative locations for a reservoir and one or more wells and pumping facilities.

Public Involvement - Focus Group Meetings

Two focus group meetings (attendee list is Attachment B), one on March 1 and another on March 29, 2005, were held to discuss where to site 1-2 reservoirs and 3 standby wells in Palo Alto. The outcomes of these two previous meetings demonstrate a strong community interest in facilitating the City’s current emergency water supply capital improvement efforts.

DISCUSSION

In addition to the Paly site, other preferred potential reservoir sites currently under consideration as part of the City’s project EIR include El Camino Park, Heritage Park and parking lots near or at the Stanford Shopping Center. A site at Town and Country Shopping Center has been considered previously, but the City has removed this site from further considerations due to construction constraints that could not be mitigated.

Palo Alto High School Site Feasibility

The Paly site appears at this time to have many construction and operational feasibility advantages compared to other sites under consideration for inclusion in the project 8-Hour Emergency Water EIR process. However, studying the site as part of the EIR process is only recommended if the Palo Alto Unified School District (PAUSD) is a willing partner that will allow the construction and operation of emergency water facilities on the Paly site. Stanford
University holds a reversionary interest in a portion of the Paly site (identified as Parcel 1 on the enclosure in Attachment A) and its consent would also be needed to proceed with this alternative.

The Paly site appears to be a large enough area to construct a reservoir, pump station and well, including a contractor's staging area. The City would need to purchase a permanent easement (approximate cost $600,000) for the installation of the reservoir and a temporary construction easement (approximate cost $1,800,000) for the contractor’s staging area and possibly storage of the backfill needed to cover the underground facilities. These appraised values are from a preliminary City appraisal dated October 21, 2005. The final cost of both easements would be determined during the design process of the emergency water facilities on the site. Two different shapes of reservoirs would be considered for construction on the site. A round buried reservoir would be the least expensive and a rectangular reservoir would be more costly. The proximity of the excavation to existing buildings at Paly may present some design and construction challenges. Existing features disturbed during the construction process will need to be replaced or rebuilt.

An advantage of including the Paly site in the DEIR is that this site is near the most northern pressure areas in the City’s water distribution system where additional fire protection and emergency water supplies are needed. The northern portions of the water distribution system would have the low pressure in the event of an extended SFPUC water supply shutdown. Placing a reservoir on the Paly site would provide greater system reliability to fight fires in these northern pressure areas. If widespread distribution system main breaks occurred during an emergency, the Paly site would offer better emergency water supply assurance for northern pressure zones compared with reservoir and well sites located further from this area. The City’s experience with wells and recent ground water table drill analyses have shown that constructing and operating wells in the northern Palo Alto will result in more productive wells for emergency water supplies.

The Paly site also offers some construction feasibility advantages for the City to consider in the project DEIR. The access to the site from El Camino is excellent and located adjacent to an existing City truck route. The Paly site access would not interfere with the traffic flow patterns into and out of Paly’s main access routes for students and parents. The City has nearby existing large diameter water mains, 16” El Camino and 27” Churchill Avenue, to facilitate normal and emergency water operations. The site may afford an additional future consideration of an emergency tie to the 36” SFPUC Palo Alto pipeline. An emergency tie may allow wider distribution of water from the Paly reservoir site to more Palo Alto pressure zones. Staff would investigate the feasibility of using of the SFPUC Palo Alto pipeline during a SFPUC supply interruption if the Paly site is selected after the EIR process is complete.

**NEXT STEPS**

Design work for the improvements could not start until after the EIR is complete. The projected schedule for EIR certification is 9 months after the Notice of Preparation for the DEIR is issued. Staff intends to bring a Notice of Preparation for the project DEIR to Council in January 2006.
RESOURCE IMPACT

Partial funding for this project is included in the Utilities Department Water Capital Improvement Program (CIP) budget. Additional funding for purchase of the easements and construction of the project would be requested if the Paly site is selected by the EIR process.

POLICY IMPLICATIONS

Authorizing the City Manager or his designee to enter discussions with the Palo Alto Unified School District to construct a 2.5 million gallon underground emergency water reservoir, pump station and well at Palo Alto High School as part of the 8-Hr. Emergency Water Supply Project EIR process is consistent with existing City policies, including the Council-approved Utilities’ Strategic Plan, supporting Key Strategy No. 1: Operate distribution systems in a cost effective manner, Objective No. 1: Enhance customer satisfaction by delivery valued products and services, and Objective No. 2: Invest in utility infrastructure to deliver reliable service.

ENVIRONMENTAL REVIEW

The “project” for the purposes of the California Environmental Quality Act (CEQA) includes all of the proposed project components in the 1999 Study. Accordingly, the environmental review will be conducted in order to implement the project design as stated in the amended Phase I Consultant Agreement, CMR:407:05. No decision on whether or where to build a reservoir and associated improvements will be made until the environmental review is complete.

ATTACHMENTS
A: City Proposal letter to the Palo Alto Unified School District
B: Public Meeting Attendee Lists

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