



City of Sunnyvale

Agenda Item-No Attachments (PDF)

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REPORT TO COUNCIL

SUBJECT

Award of Contract for Professional Design Services Associated with the Secondary Treatment and Dewatering Project at the Water Pollution Control Plant in an Amount Not to Exceed \$17,746,116 (F17-086), with a 10% Design Contingency of \$1,599,533, and Approve Budget Modification No. 8

REPORT IN BRIEF

Approval is requested to award a contract to Carollo Engineers of Walnut Creek in an amount not to exceed \$17,746,116 for professional design services associated with the Secondary Treatment and Dewatering Process for the Sunnyvale Clean Water Program and 10% for design contingency on the base services in the amount of \$1,599,533.

EXISTING POLICY

Consistent with the provisions of Chapter 2.08 of the Sunnyvale Municipal Code, civil engineering work is solicited through a Request for Proposals (RFP) process, unless otherwise exempt from the competitive bidding process. Contracts resulting from RFPs are awarded based on best value to the City, rather than the lowest bid price as in the case of an Invitation for Bids (IFB).

Pursuant to Chapter 2.08 of the Sunnyvale Municipal Code, City Council approval is required for contracts exceeding \$100,000.

ENVIRONMENTAL REVIEW

This award is for the design phase and construction support services therefore the action being considered does not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15378(a) as it has no potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment. However, it is expected that a CEQA memorandum will be filed, which documents the activities, impacts, and mitigation measures presented in the Sunnyvale Clean Water Program's approved Programmatic Environmental Impact Report (RTC No.16-0663) that are applicable to this project. It is anticipated that the project will have no effects beyond those analyzed in the PEIR and that no new environmental document or public notice will be required. If the CEQA memorandum prepared identifies new effects not analyzed and mitigated in the Program's PEIR, an Initial Study will be prepared leading to a Negative Declaration. The consultant will review all CEQA documentation as part of their design review.

BACKGROUND AND DISCUSSION

The Sunnyvale Clean Water Program is working to rebuild the existing Water Pollution Control Plant (WPCP or Plant), which was initially built in 1956. With additions over the subsequent 15-20 years it has grown to a tertiary treatment facility with an average dry weather flow rate of 14 million gallons per day (MGD) and a permitted average dry weather flow rate of 29.5 MGD. An asset condition

assessment conducted in 2006 identified several critical Plant structures as at-risk and in need of immediate rehabilitation. Based on this assessment, the City began implementing several rehabilitation projects and also developed a long-term Strategic Infrastructure Plan (SIP) to serve as a road map for the physical improvements and process enhancements needed to maintain a high level of treatment and to meet current and expected regulatory requirements and stewardship objectives. In 2013, to help implement the SIP, the City secured the professional services of Carollo Engineers to develop a comprehensive Master Plan, which included the “basis of design” development for the various process areas to be rebuilt and a programmatic environmental impact report (PEIR). The Master Plan was adopted by City Council in 2016.

The Master Plan consists of more than 30 capital improvement projects. This design project is made up of four individual projects included in Phase 2 of the overall Sunnyvale Clean Water Program and includes (1) Secondary Treatment Improvements - Stage 1, (2) Maintenance Building, (3) Thickening and Dewatering Facility - Stage 1, and (4) Digester Supernatant Pump Station and Drainage Piping Upgrades. Given the magnitude of the Plant reconstruction program and the many individual projects that will be undertaken at any given time, it was determined best to combine these four projects under one design team. These projects all have specific interrelationships and project constraints or sequences that are best managed by one designer. As the design develops, a workshop with City staff, design team members, and Program Management consultants will evaluate if the City should solicit one or two bid packages for the project(s) depending on the bid climate, contractor availability, and site constraints. The second bid package is included in the optional services as noted below.

The secondary treatment improvements involve implementing the first stage of Conventional Activated Sludge (CAS) secondary treatment facilities. The flow will be split between the existing secondary treatment process at the Plant (oxidation ponds, fixed growth reactors, and air flotation tanks) and the CAS system proposed in this project. The new, approximately 8,400 SF maintenance building will include a maintenance shop, staff space, warehouse, and storage areas. The new Maintenance Building will replace the functionality of the existing Maintenance Shop, Maintenance Storage Yard, Instrumentation Shop, and Primary Control Building. As a result, these buildings will be demolished as part of this project. The thickening and dewatering facility will thicken secondary sludge produced by the new secondary treatment improvements implemented in this project and dewater digested biosolids produced by the anaerobic digestion process.

A Request for Proposal (RFP) process was utilized to solicit proposals to design the project. The RFP specifications were prepared by Public Works and Purchasing staff. The RFP was directly distributed to ten Bay Area design firms and posted on the Demandstar public procurement network. Proposals were received on April 12, 2017. Two responsive proposals were received: (1) Carollo Engineers in association with CH2M and (2) Hazen and Sawyer.

Proposals were reviewed by an evaluation team consisting of Public Works Engineering and Environmental Services Department staff. The firms were evaluated on qualifications, experience, project overview, project approach, and innovation. Following the proposal evaluation process, both firms were invited to provide a presentation during a formal interview. Following the interview and deliberation, the City selected the Carollo/CH2M team as the highest ranked consulting team with the most relevant experience and best understanding of the reconstruction of the Plant.

The City engaged Carollo Engineers in discussions to clarify the level of effort and proposed project scope against the City’s intended requirements. These discussions resulted in a cost decrease from

\$21,799,125 to \$18,618,068. The revised cost amount, which includes the project design and optional services, was subsequently negotiated downward to \$17,746,116 through critically evaluating redundancies between Carollo Engineers and its subconsultants, negotiating hourly rates, and reducing the level of consultant support for certain tasks (without compromising project scope). Additionally, Carollo Engineers and its subconsultants (a total of eight) agreed to hold hourly rates through December 31, 2017, at which point the hourly rate will increase 2% annually for the final years of the agreement. A 10% design contingency in the amount of \$1,599,533 for the base scope of services is also being requested which is within industry standards for projects like this. The design costs were estimated based on a conceptual scope of work and the contingency is included to account for any changes that may need to be made based on further design development, equipment changes, or redesigns during construction due to unforeseen conditions.

Optional Services

The scope of work has been written to allow the consultant to recommend several design concepts and treatment process alternatives for the project which could add \$1,750,784 in project costs. Since there is a potential that adding some of these items may reduce construction costs, site conflicts, increase wastewater treatment performance, change environmental clearances and/or meet future regulatory requirements, it is recommended that these options be included in the contract. These alternatives, titled Preparation of Tiered Negative Declaration, Electrical Improvements to Migrate Existing Processes to New 12 kV Backbone, Second Bid Package, Perimeter Wall Design, Chemically Enhanced Primary Treatment (CEPT) Design are detailed as subtasks in each element of design of the contract's Scope of Work (Exhibit A of Attachment 1). Each item is listed separately and has a cost estimate associated with it, shown in Exhibit C of Attachment 1.

The design consultant will only proceed with these items if directed in writing by the City. If through the conceptual and preliminary design process, it is determined that some of these items are not sufficiently beneficial, then the use of the funds will not be authorized.

Staff recommends awarding a contract for the Design of the Secondary Treatment and Dewatering Improvements, including the base and optional services, for a total of \$17,746,116.

FISCAL IMPACT

Project costs are as follows:

Project design (including bid and construction support)	\$15,995,332
Optional Services	<u>\$1,750,784</u>
Contract Amount	\$17,746,116
Contingency (10% on the base services only)	<u>\$1,599,533</u>
Total Cost	\$19,345,649

The costs for design services are budgeted in several projects in the Wastewater Management Fund. The allocation of the recommended design services contract by capital project are listed below:

833140 (SCWP Secondary Treatment Improvements - Stage 1) \$13,039,006
833150 (SCWP Digester Supernatant Pump Station & Piping) \$160,255
833160 (SCWP Thickening & Dewatering - Stage 1) \$5,345,256
833180 (SCWP Maintenance Building) \$801,132

Total Design Funds including 10% Contingency = \$19,345,649

Budget Modification No. 8 is recommended to aggregate these four projects into one project. Upon further analysis of the design and potential bid packages, administrative efficiencies would be gained by combining the budgets for these projects. These projects were originally separated as part of the Sunnyvale Clean Water Program Master Plan. The figures below represent the full cost of the project over the 20-Year Financial Plan as represented in the 2017/18 Adopted Budget.

**Budget Modification No. 8
FY 2017/18**

	Current	Increase/ (Decrease)	Revised
Wastewater Management Fund			
<u>Expenditures</u>			
Project 833140 - SCWP Secondary Treatment Improvements-Split Flow CAS Stage 1	\$115,460,000	\$52,780,000	\$168,240,000
Project 833150 - SCWP Digester Supernatant PS and Drainage Piping Upgrades	\$1,130,000	(\$1,130,000)	\$0
Project 833160 - SCWP Thickening and Dewatering Facility - Stage 1	\$45,180,000	(\$45,180,000)	\$0
Project 833180 - SCWP Maintenance Building	\$6,470,000	(\$6,470,000)	\$0

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall, at the Sunnyvale Senior Center, Community Center and Department of Public Safety; and by making the agenda and report available at the Sunnyvale Public Library, the Office of the City Clerk and on the City's website.

RECOMMENDATION

1) Award a contract in substantially the same form as Attachment 1 to the report in an amount not to exceed \$17,746,116 for Professional Design Services Associated with the Secondary Treatment and Dewatering at the Water Pollution Control Plant and authorize the City Manager to execute the contract when all necessary conditions have been met; 2) approve a 10% contract contingency on the base services in the amount of \$1,599,533; and 3) approve Budget Modification No. 8.

Prepared by: Gregory Card, Purchasing Officer
Reviewed by: Timothy J. Kirby, Director of Finance
Reviewed by: Manuel Pineda, Director of Public Works

Reviewed by: Kent Steffens, Assistant City Manager
Reviewed by: Walter C. Rossmann, Assistant City Manager
Approved by: Deanna J. Santana, City Manager

ATTACHMENT

1. Draft Consultant Services Agreement