

SEWER AUTHORITY MID-COASTSIDE
Staff Report

Subject / Title

Authorize the SAM Manager to Enter Into Agreement with SRT Consultants (SRT) for Wet Weather Flow Management Project (WWFMP) Design

Staff Recommendation:

Authorize Manager to Enter Into Agreement with SRT Consultants for WWFMP Design

Fiscal Impact:

Not to exceed \$63,000 for this portion of the proposal. The total estimated cost for this proposal is \$214,500. \$240,000 has been approved by the participating member agencies for this project.

Discussion/Report:

The attached copy of SRT's proposal for the design, bid period services, engineering services during construction, and CDP services for the WWFMP, is hereby presented for Board review and its subsequent authorization to the SAM Manager to enter into agreement with SRT for this first phase of the project. Please note that even though SRT developed the proposal for the entire scope, SAM staff and SRT suggest that the WWFMP Committee authorize the services through the rest of this calendar year in phases, as follows:

1. June 2009 – Consider the First Authorization: proceed with the CDP acquisition, project management, 10-percent design, and field services, including:
 - Subsurface investigations and soils report
 - Phase I and Phase II environmental assessment
 - Surveying and utility location
 - Coastal Development Permit acquisition
 - 10-percent design

Cost not to exceed \$63,000
2. September 2009 - Consider the Second Authorization: Detail of Design; at the September 29, 2009 SAM Board Meeting
Cost not to exceed \$60,000
3. December 2009 - Consider the Third Authorization: Bid Period Services; at the December 28, 2009 SAM Board Meeting
Cost not to exceed \$8,600

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June 17, 2009

Mr. John F. Foley III, Manager
Sewer Authority Mid-Coastside
1000 N. Cabrillo Highway
Half Moon Bay, CA 94019

**RE: Sewer Authority Mid-Coastside Wet Weather Flow Management
Project Design and Services during Construction – SRT Consultants
Proposal**

Dear Mr. Foley,

In response to your request, SRT Consultants (SRT) is pleased to present this proposal to provide design services and services during construction to Sewer Authority Mid-Coastside (SAM) for the Wet Weather Flow Management Project (IWWFMP). This letter includes the proposed scope of work, schedule, and estimated fee to complete the scope of services.

Project Background and Understanding

The proposed project consists of installing two parallel, approximately 700-foot-long, 60-inch-diameter reinforced concrete storage pipes to temporarily store excess sewage during peak flows or a storm event land across Obispo Road from the existing Portola Pump Station. As the peak flows subside, the sewage would drain from the pipes by gravity to the Portola Pump Station wet well. The storage pipes would be installed immediately east of the Montara interceptor pipeline, and would provide approximately 205,000 gallons of storage. The proposed pipes would connect to a new junction box. An approximately 15-inch-diameter pipeline would begin at the junction box and traverse east to Obispo Road, and then south along Obispo Road for approximately 40 feet to connect with the existing 15-inch Montara Interceptor at Manhole No. 8. The parallel pipes would be sloped at up to 0.5 percent to allow self-draining to the Montara Interceptor. At this slope, sediments (sand and grit) may accumulate over a wet weather season; therefore, the pipes would require annual flushing at the end of each wet weather season.

Scope of Services and Deliverables

As instructed by SAM, the Scope of Services described in this proposal includes field services, design services, bid period services, engineering services during construction, and construction management services for the new underground storage facility located on the Burhnam Strip property near the Portola Pump Station. The assumptions used in preparing this scope and the fee estimate follow.

SRT proposes to provide project management, permitting support, civil, mechanical, structural, instrumentation and controls design services for the proposed new storage facility for the WWFMP. In addition, SRT proposes to provide engineering services during bidding, construction, and inspection services.

Assumptions

1. Assistance to SAM with filing an application for the Coastal Development permit and coordination with the San Mateo County is included at the estimated level of effort of 80 staff hours. No other permits are included and are assumed to be completed by others.
2. The following deliverables and meetings are included:
 - 10-percent design technical memorandum and review meeting with SAM staff
 - 50-percent design drawings and list of specifications and review meeting with SAM staff
 - Peer review of the design package at the 50-percent design level
 - 90-percent design drawings and specifications and review meeting with SAM staff
 - Bid Documents
 - Prebid conference with perspective bidders and addenda
 - Bid review and evaluation
 - Contractor submittals' review
 - Inspection reports
 - As-built documents
3. SRT CADD standards will be utilized for the design work
4. Design will be in accordance with the 2007 California Building Code.
5. One design review meeting and one set of formal responses to SAM's review comments are included for each of the design submittals
6. WWFMP Committee meetings attendance and presentations to the Committee are included
7. An opinion of probable construction cost at the 90-percent design level is included
8. Engineering services during construction shall include one site inspection from each of the disciplines: structural, mechanical, instrumentation and controls
9. Conforming and production of record drawings from Contractor's redlines is included; two sets are included.

10. Survey and development of a site topo; field verification of elevations on existing underground pipes and other features are included
11. Subsurface investigations are included
12. Phase I and Phase II assessments are included for the purpose of supporting the land acquisition process
13. Project duration of 12 months for permitting, design, bidding, and construction is included
14. Each submittal with exception of the bid set will be provided in half-size format. Camera-ready construction documents will be delivered in full-size format. All submittals will also be delivered electronically.

The scope of services will be performed within the following tasks:

Task 1 Project Management

This task includes team coordination, coordination with SAM staff, budget and schedule control, including monthly progress reports and invoicing, and quality assurance/quality control review of the deliverables. One design review workshop and one Board meeting attendance are included in this task for each of the design submittals. In addition, this task includes coordination between disciplines to ensure consistency of bid documents and peer review of the 50-percent design submittal by an outside consultant. Following the design phase, this task will continue into the bidding and construction phases of the project. This task's duration is assumed to be twelve (12) months.

Task 2 Permitting Support

SRT will provide support to SAM with the coastal development permit (CDP) process under the Local Coastal Program (LCP). An allowance of eighty hours of staff time is included for this task in the fee estimate. Should the level of effort exceed 80 hrs, an additional level of effort may be required.

Task 3 Conceptual Design (10-percent level)

This task will result in the design criteria and a Conceptual Engineering technical memorandum development, including conceptual layouts. SAM's comments will be incorporated into the detailed design documents.

Task 4 Detailed Design

This task will include completing the WWFMP design to the construction bid documents level and preparing the project for public bidding. This task is divided into several subtasks, as follows:

- Subtask 4.1 50-percent design
- Subtask 4.2 Design Review and Peer Review Workshop
- Subtask 4.3 WWFMP Committee Meeting Presentation
- Subtask 4.4 90-percent design
- Subtask 4.5 Bid Documents

Task 5 Bid Period Services

This task includes addressing questions from perspective bidders; attending a pre-bid conference and site visit for contractors; bid review and analysis.

Task 6 Engineering Services during Construction

This task includes responding to Requests for Information (RFIs) from the contractor, reviewing submittals, and one site visit by each engineering discipline. Preparation of change orders initiated by SAM is difficult to predict and is not included in the fee estimate. This work can be performed on a time-and-material basis from the proposed contingency on the project.

Task 7 Construction Inspection Services

This task includes inspection services for the construction duration, estimated at full time for three (3) months.

Task 8 Additional Services

Subtask 8.1 Subsurface investigations and soils report

Subtask 8.2 Surveying and utility location

Subtask 8.3 Record Drawings

Subtask 8.4 Opinion of Probable Construction Cost

Subtask 8.5 Phase I and Phase II Assessment and Investigations for land acquisition

Deliverables

Design Phase

- Conceptual Engineering Report: 10-percent design level; five copies and electronically
- 50-percent design drawings: initial layout and details; Table of Contents for specifications; five sets and one set of responses to comments; and electronically
- 90-percent design drawings and specifications: nearly complete plans and specifications; five half-size sets and electronically
- Final submittal: stamped and signed camera-ready set of Contract Documents; design calculations; one set each, and electronically.

Bid Period Services

- Responses to questions from perspective bidders
- Attendance at a pre-bid conference and site visit with bidders
- Review and analyze bids received for compliance with bid documents' requirements

Engineering Services during Construction

- Review up to 15 submittals
- Respond to contractor's Conduct one site visit by each of the disciplines: structural, mechanical, instrumentation and controls.

Construction Inspection Services

- Provide full-time inspection services for the construction duration, estimated at full time for three (3) months.

Preliminary Drawing List

The following presents a preliminary drawing list for the project. We estimate that 14 drawings will be developed for the flow metering vault design package.

- G-1 Drawing Index and Location Map
- G-2 General Notes, Standard Symbols, Abbreviations, and Schedules
- G-3 Standard Piping Details
- C-1 Site Plan
- M-1 Junction Box Sections and Details
- M-2 Details and Piping Schematic
- S-1 Standard Details – Concrete I
- S-2 Standard Details – Concrete II
- S-3 Standard Details – Grating and Cover Plates
- S-4 Standard Details – Ladders and Miscellaneous Metals
- S-5 Sections
- S-6 Sections and Details
- E-1 Wiring and Control Diagram
- E-2 Control Details

Schedule

The completed design is estimated to be submitted approximately six months following a Notice to Proceed from SAM. Bidding and Construction Support would follow.

Project Team

SRT will serve as a prime consultant on this project and provide the following services:

- Project Management and Team Oversight
- Permitting
- Overall QA/QC
- Civil, process/mechanical design and equipment selection
- Engineering Services During Construction
- Construction Inspection

The design team will be complemented by the following subconsultants:

- 1. Romig Engineers, Inc.** will provide subsurface investigations and make recommendations for the design. In addition, they will provide Phase I and Phase II assessment services for land acquisition.
- 2. Advanced Surveying Services, Inc.** will provide surveying services and develop a topo of the project site.
- 3. TJC and Associates, Inc.** will provide structural, instrumentation and controls support.

Estimated Fee

Our proposed fee for the project work described in this letter proposal will be on a time and materials basis with a not-to-exceed amount. Labor rates, direct costs,

and markups shall be paid in accordance with SRT current rate schedule. In summary, the following is the Fee Estimate for the WWFMP design, field services, bid period services, engineering services during construction, and construction management services by category:

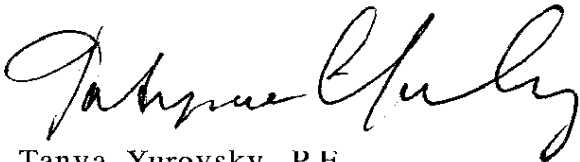
▪ Permitting (Coastal Development Permit)	\$16,000
▪ Design and Bid Period Services	\$68,500
▪ <u>Engineering Services During Construction:</u>	<u>\$30,800</u>
Subtotal Design and Engineering Services during Construction	\$115,300

Other Services

▪ Subsurface investigations and soils report	\$5,000
▪ Surveying and utility location	\$6,000
▪ Construction Inspection	\$38,600
▪ Record Drawings	\$9,000
▪ Opinion of Probable Construction Cost	\$8,000
▪ Bid Set Reproduction	\$5,000
▪ <u>Phase I and Phase II assessment</u>	<u>\$27,600</u>
Subtotal Other Services	\$99,200

The total fee estimated to complete all services for the WWFMP project is \$214,500. We are pleased to be of service to SAM and hope that this proposal meets your approval. We are prepared to proceed with the work immediately upon receiving your authorization. Please contact me at 415-776-5800 with any questions.

Sincerely,



Tanya Yurovsky, P.E.
SRT Consultants