Design PWO Amendment 2 & Construction Management Contract Approval

C00284 – LTP Disinfection and Diversion Project

BPU Contract Review Subcommittee

October 20, 2020

Mark Kasraie, PE

Supervising Engineer



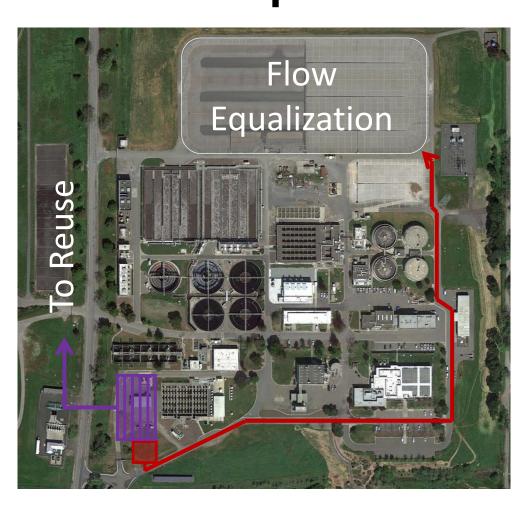
OUR FUTURE IN EVERY DROP

Presentation Outline

- Project status update
- PWO Amendment No. 2 for engineering services during construction
- PSA for construction management and inspection
- Recommendation for Subcommittee support



Project Purpose and Description



- The existing UV system at LTP has been de-rated to 48.5 MGD by the Division of Drinking Water and is also beyond its useful service life (at 22 years old)
- Project will replace existing UV system with a new 70 MGD system and will install an onsite diversion system and 42" pipeline

Project Status Update

We are preparing for design completion and are approaching construction – seeking contracts for engineering services during construction and construction management

- August 2019 Approval of design contract amendment 1
 - Finalizing 90% design
- August 2020 Approval of MOU and PSA with Calgon Carbon for UV equipment
 - Finalizing UV equipment design submittal

Carollo Project Work Order

- Original PWO Carollo selected after competitive solicitation due to unparalleled expertise in UV system design (\$2.8M)
- PWO Amendment No. 1 provided additional budget to address project delays and scope changes (\$1.6M)
- PWO Amendment No. 2 planned amendment for design engineering services during construction (\$2.1M)

PWO Amendment No. 2 Scope

- Design engineering services during construction
- Review and respond to contractor submittals and RFIs
- Change orders and design clarifications
- Record drawings, start-up, and O&M Manuals
- Project Closeout

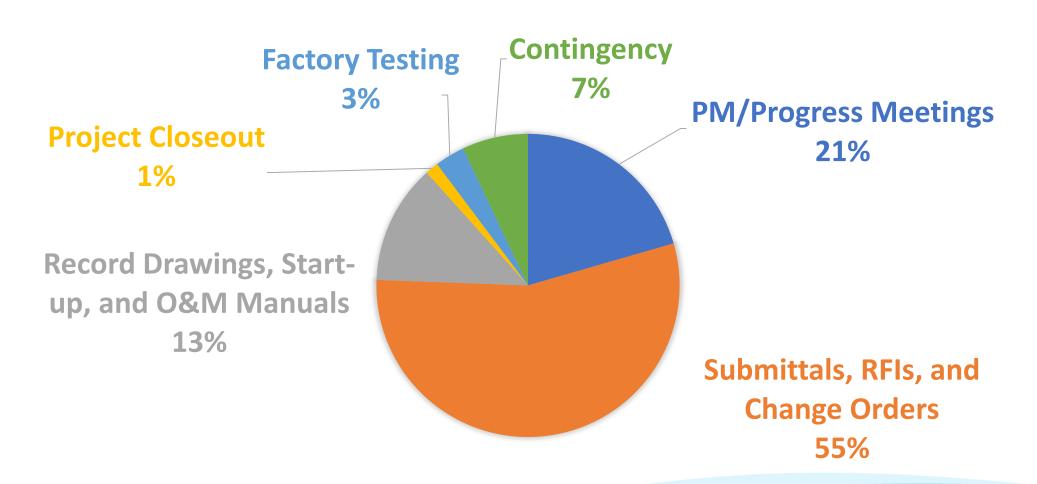


PWO Amendment No. 2 Fee

PWO Amendment No. 2 Tasks	Task Description	Fee (\$)
Tasks 1-2	PM/Progress Meetings	437,447
Tasks 3-5	Submittals, RFIs, and	1,173,414
	Change Orders	
Tasks 6-8	Record Drawings, Start-up,	272,040
	and O&M Manuals	
Task 9	Project Closeout	30,014
Task 10	Factory Testing	68,218
Task 11	Contingency	150,000
Total PWO Amendment	<u>2.1M</u>	

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PWO Amendment No. 2 Fee



CM & Inspection RFP Process and Criteria

- RFP Released August 17 for construction management and inspection services
- Key selection criteria:
 - Responsiveness to RFP
 - Qualifications of Project Team
 - Work plan and scope of services
 - Experience with UV installations
 - Demonstrated Technical Abilities
 - References



REQUEST FOR PROPOSALS

CONSTRUCTION MANAGEMENT AND CONSTRUCTION INSPECTION SERVICES UNDER PROFESSIONAL SERVICES AGREEMENT

. Introduction

The City of Santa Rosa (City) is seeking proposals from qualified firms to provide agency construction management and construction inspection services for C00284 – Laguna Treatment Plant Disinfection and Diversion Improvements Project under a Professional Services Agreement (PSA).

To be considered, the proposal and the fee proposal must be submitted by <u>both</u> of the following methods by the due date:

- A PDF file via emailed to the Contact Person listed below (with fee proposal in a separate PDF file), and
 Six (6) hard copies of the proposal (with fee proposal in a separate sealed envelope) to
 - Mark Kannin I Supervising Engineer

Mark Kasraie | Supervising Engineer City of Santa Rosa Transportation and Public Works Department 69 Stony Circle Santa Rosa, CA 95401

(707) 543-3857 mkasraie@srcity.org

II. Background

The City of Santa Rosa Water Department operates and maintains the Laguina Treatment Plant (ITP) for treating wastewater and distributes recycled water through the reclamation system. LTP provides wastewater treatment for the cities of Santa Rosa, Rohnert Park, Sebastopol, and Cotali and the South Park Santiation District (Regional Parters). The Plant produces districted entary recycled water as defined by Title 22 of the California Code of Regulations, has an average daily dry weather flow of 15.5 million galons per day (mgd), and is permitted for 21.34 mgd average daily dry weather flow of 15.5 million palons per day (mgd), and is permitted for 21.34 mgd average daily dry weather flow.

The reciamation system delivers approximately 7.5 billion gallons of recycled water per year for urban and agricultural irrigation and for the Geysers Recharge Project. Depending on the amount of rainfall in any given year, between 90 and 100 percent of the Subregional System's wastewater is recycled.

Disinfection System

Ultraviolet light (UV) is the primary disinfection process for LTP while hypochlorite is currently used for algae control. The existing UV system includes 3 channels each with Trojan UV4000 medium pressure lamps. In 2013, callfornia Department of Public Health, now known as the Division of Drinking Water (DDW), re-evaluated the LTP disinfection capacity. Based on DDW criteria, the LTP UV system was re-tratlet from a capacity of 57-mdy, with redundancy, to a

CM & Inspection Proposal Selection

Review Panel:

- (1) Deputy Director
- (1) Superintendent
- (2) Supervising Engineers
- (1) Civil Engineering Technician III

Three (3) proposals received

Two (2) short-listed & Interviewed

Psomas selected:

- Strongest qualifications and experience
- Greatest time commitment to project
- Best references

Contract Fee

- Not to exceed fee of \$4,471,746
- Consistent with City staff estimate

CM & Inspection Proposal Selection

- Psomas' Proposal Demonstrated:
 - Core team had seven (7) relevant wastewater treatment plant projects with UV components ranging in cost from \$15M to \$110M and flows as high as 30 MGD
 - Strongest time-commitment to Santa Rosa UV Project:
 - Project Manager 60 Hours per month
 - Construction Manager 144 hours per month
 - Resident Engineer and Inspector Full-time
 - Excellent references...

CM & Inspection Proposal Selection

 Psomas – Successful history with many municipalities:

I would highly recommend them For CM & inspection work

Works well with operations staff

When things go wrong, PSOMAS works quickly to produce a cost-effective solution

A particular strength of looking ahead and working closely with everyone to prepare

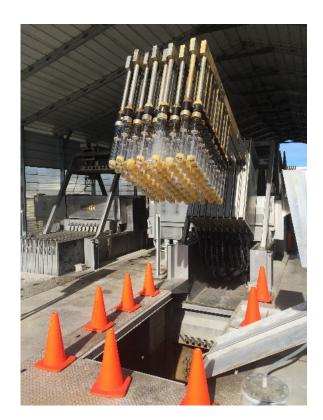
All our CM firms have done well, But not as well as PSOMAS

Estimated Consultant Delivery Costs

Consultant Services Task	Fee	% of Total Construction	City Budget % of Total Construction
Design Services	\$4.4M	9.3%	13%
Engineering Services During Construction	\$2.1M	4.5%	5%
CM & Inspection	\$4.5M	9.6%	12%
Total	\$11M	23.4%	30%

Estimated Total Project Costs

UV Disinfection	\$35M
Non-compliant Diversion	\$12M
Total Construction Cost	\$47M
Project Delivery Costs (1)	\$16.5M
Estimated Total Project Cost	\$63.5M



(1) Project Delivery Cost represents 35% of Total Construction Cost, and Includes: Design, ESDC, CM/Inspection, Fees, In-House Labor, Overhead, and Overall Contingency

Impacts and Schedule

Fiscal Impact

Approval of these contracts has no impact on the budget.
 Funds have already been appropriated.

Environmental Impact

 Pursuant to CEQA, an addendum to the Incremental Recycled Water Program EIR has been prepared.

Schedule

- Should BPU approve these contracts, we estimate complete design Spring 2021.
- Construction estimated to begin Summer 2021 and last 30 – 36 months

Next Steps

- Late November 90% Design workshop
- November 19 BPU Consideration
 - Project Environmental (CEQA),
 - Design PWO Amendment No. 2
 - Construction Management & Inspection
- Future Board Meeting Sole-source approval of specific equipment at LTP
- Summer 2021 Award Construction Contract

Recommendation

It is recommended by the Transportation and Public Works Department and the Water Department, that the Contract Review Subcommittee support:

- Design PWO Amendment No. 2, engineering services during construction for the Laguna Treatment Plant Disinfection Improvements Project in the amount not to exceed \$2,131,132.
- 2. A Professional Services Agreement with Psomas, for construction management and inspection in the amount not to exceed \$4,471,746.

Thank You

