



**FALLBROOK PUBLIC UTILITY DISTRICT
MEETING OF THE ENGINEERING & OPERATIONS COMMITTEE**

AGENDA

**FRIDAY, FEBRUARY 14, 2020
2:00 P.M.**

**FALLBROOK PUBLIC UTILITY DISTRICT
990 E. MISSION RD., FALLBROOK, CA 92028
PHONE: (760) 728-1125**

If you have a disability and need an accommodation to participate in the meeting, please call the Secretary at (760) 999-2704 for assistance so the necessary arrangements can be made.

Writings that are public records and are distributed during a public meeting are available for public inspection at the meeting if prepared by the local agency or a member of its legislative body or after the meeting if prepared by some other person.

I. PRELIMINARY FUNCTIONS

CALL TO ORDER / ROLL CALL

PUBLIC COMMENT

II. ACTION / DISCUSSION------(ITEMS A – C)

- A. SCADA PROGRAMMING SERVICES FOR SMRCUP
- B. LOWER SANTA MARGARITA WATER SUPPLY RELIABILITY PILOT PROJECT
- C. WATER RECLAMATION PLANT HEADWORKS COVER REPLACEMENT

III. ADJOURNMENT OF MEETING

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DECLARATION OF POSTING

I, Lauren Eckert, Executive Assistant/Board Secretary of the Fallbrook Public Utility District, do hereby declare that I posted a copy of the foregoing agenda in the glass case at the entrance of the District Office located at 990 East Mission Road, Fallbrook, California, at least 72 hours prior to the meeting in accordance with Government Code § 54954.2.

I, Lauren Eckert, further declare under penalty of perjury and under the laws of the State of California that the foregoing is true and correct.

February 11, 2020
Dated / Fallbrook, CA

/s/ Lauren Eckert
Executive Assistant/Board Secretary

M E M O

TO: Engineering & Operations Committee
FROM: Aaron Cook, Senior Engineer
DATE: February 14, 2020
SUBJECT: SCADA Programming Services for SMRCUP

Description

A SCADA Programming consultant is needed to provide programming for the instrumentation and controls of the new groundwater treatment plant being constructed for the SMRCUP.

Purpose

As part of the SMRCUP Facilities currently under construction, the instrumentation and control system will need to be programmed to operate the new treatment plant and pump stations. The project was designed by Infrastructure Engineering Corporation (IEC) and is being constructed by Joint Venture J.R. Filanc and Alberici. The necessary controls hardware and software were specified in the design, and the contractor is procuring the equipment as part of the construction contract. The development and implementation of the SCADA system is to be completed by the District. To complete that task, a request for professional services was issued to four reputable SCADA programming consultants. Two proposals were received, one from Zak Controls Inc, the other from Enterprise Automation, and the two teams were interviewed by a technical review team consisting of the District's Senior Engineer, Operations Manager, Senior Instrumentation and Controls Specialist, and Construction Manager. Based on this review, the proposal from Zak Controls was identified as the best value to the District. The District has had a positive experience working with Zak Control's designated Project Manager on past projects.

Budgetary Impact

No budgetary impact beyond what was already planned as part of the SMRCUP. The State SRF loan for the construction of the SMRCUP Facilities included \$400,000 allocated for SCADA programming and integration services.

Recommended Action

That the Committee recommend that staff seek authorization from the Board for a Professional Services Agreement with Zak Controls for an amount not to exceed \$301,738.

M E M O

TO: Engineering & Operations Committee
FROM: Aaron Cook, Senior Engineer AC
DATE: February 14, 2020
SUBJECT: Lower Santa Margarita Water Supply Reliability Pilot Project

Description

The Lower Santa Margarita Water Supply Reliability Pilot Project will determine the feasibility of developing advanced purification facilities to treat existing recycled water from both Camp Pendleton and the District to increase the availability of local supplies.

Purpose

In an effort to diversify its water resources, the District is currently collaborating with Camp Pendleton to construct the Santa Margarita River Conjunctive Use Project (SMRCUP) Facilities. These facilities will enhance the ability to divert surface flows from the Santa Margarita River for storage in the groundwater basin where they can be extracted, treated, and delivered to FPUD and CPEN customers.

Both FPUD and CPEN also currently operate water reclamation plants within the Lower Santa Margarita River Basin which treat effluent to a tertiary level for use as recycled water. Excess water from both agencies that is not utilized as irrigation is discharged to the ocean. If the treated effluent were to be diverted to the existing Upper Ysidora Percolation Ponds and infiltrated into the groundwater basin, it could be utilized to augment SMRCUP yields for both FPUD and CPEN. This pilot project will determine the most effective non-RO treatment process for and feasibility of utilizing reclaimed water currently discharged to the ocean as groundwater augmentation in the Lower Santa Margarita River Basin.

The pilot project will consist of two pilot facilities and a tracer study. One pilot facility will be located at the District's Water Reclamation Plant and will be designed for live stream discharge to Fallbrook Creek. The other pilot facility will be located at CPEN's Southern Region Tertiary Treatment Plant and will be designed to convey treated water to the percolation ponds.

District staff prepared a request for proposals soliciting professional services to design the pilot treatment systems, assist with complex regulatory compliance, provide oversight to the operations of the pilot system, and produce a feasibility report based on the results of the pilot study. Three proposals were received and reviewed by an evaluation committee consisting of the District's Senior Engineer, Camp Pendleton's Environmental Engineer, Rancho Water's Assistant General Manager, and Rainbow Water's Associate Engineer. Based on their review, the two best proposal teams,

Trussell Technologies Inc. and Hazen and Sawyer, are scheduled for an interview on February 11.

Budgetary Impact

The approved capital budget for FY2019/20 included \$350,000 for the pilot project, with an additional \$350,000 planned for FY2020/21. The estimated total cost of the project is approximately \$1,380,000, half of which will be covered by an IRWM grant. The final professional services agreement will be within the budgeted amount.

Recommended Action

That the Committee recommend that staff seek authorization from the Board for a Professional Services Agreement with the consultant determined to be the best value after interviews are conducted.

M E M O

TO: Engineering & Operations Committee
FROM: Aaron Cook, Senior Engineer AC
DATE: February 14, 2020
SUBJECT: Water Reclamation Plant Headworks Cover Replacement

Description

The existing headworks cover at the Water Reclamation Plant (WRP) has deteriorated and is in need of replacement.

Purpose

The headworks is a concrete structure where all influent wastewater is collected and the initial stage of the treatment process begins. The existing cover, which provides both safety and odor control functions, has deteriorated over time due to the extremely corrosive environment. District staff prepared a bid package for a replacement cover and solicited for general contractor construction bids, which are due on Wednesday February 12.

Budgetary Impact

The budgetary impact is unknown until bids are received and evaluated. Funds for the cover replacement were allocated in the approved capital budget for FY2019/20 as part of the \$240,000 intended for WRP Improvements.

Recommended Action

That the Committee recommend that staff seek authorization from the Board for award of the headworks cover replacement to the lowest responsible bidder.