FALLBROOK PUBLIC UTILITY DISTRICT
MEETING OF THE ENGINEERING AND OPERATIONS COMMITTEE

AGENDA

TUESDAY, FEBRUARY 19, 2019
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–B)

A. EVALUATION OF CURRENT AND PROPOSED ENTERPRISE ASSET MANAGEMENT SYSTEMS

B. REASSIGNMENT OF VEHICLE # 1116

III. ADJOURNMENT OF MEETING

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DECLARATION OF POSTING

I, Mary Lou West, Secretary of the Board of Directors 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, Mary Lou West, further declare under penalty of perjury and under the laws of the State of California that the foregoing is true and correct.

February 14, 2019
Dated / Fallbrook, CA

Mary Lou West
Secretary, Board of Directors

A

MEMO

TO: Engineering and Operations Committee
FROM: Jason Cavender, Operations Manager JC
DATE: February 19, 2019
SUBJECT: Evaluation of Current and Proposed Enterprise Asset Management Systems

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Purpose

To discuss current District approach to evaluate and compare the effectiveness of the current maintenance management system, to a more efficient and technologically advanced Enterprise Asset Management (EAM) software package.

Summary

The core function of EAM software is to help manage assets, schedule maintenance, and track and monitor service orders and work orders. This results in a reduction of maintenance costs, improved equipment performance, extended life of cycle of critical assets, and more efficient customer service response. EAM is a critical tool commonly used by utilities to track costs and resources to help improve overall efficiency. Other potential uses for EAM include:

1. Inventory control
2. Labor tracking
3. Budgeting
4. Work requests
5. Scheduling and planning
6. Asset history recording
7. Provide data for analysis
8. Support Key Performance Indicators (KPIs)

The District currently utilizes Maintenance Connection as its primary preventative maintenance system. Although Maintenance Connection has adequately served its purpose over the last five years, the software is not up to date, has limited functionality, and is mostly paper based. District staff has been assessing the need to upgrade to a more powerful and efficient software system.

As part of the District's evaluation process, staff has been working closely with Valley Center Municipal Water District (VCMWD) to assess our current and future asset management needs. VCMWDs maintenance management process is currently paper based, requiring labor intensive documentation and reporting. Because VCMWD and the District are of similar size, and largely operate using similar process and computer applications (GIS, Springbrook, etc.), our EAM needs are very similar. Since November of 2018 both agencies have evaluated at how EAM is used at other agencies, including

Vallecitos MWD, Rainbow MWD, East Valley MWD, and the City of Escondido. Based on our finding we have developed a summary of the limitations of the current system compared to expected benefits of completing an upgrade to the EAM system is summarized in Table 1.

Current Maintenance System	Modern EAM System
Assets stored in a computer database, but work orders are 100% paper based. Requires hand written entry by field crews, and manual entry into database.	Fully computer based. All functions are paperless. Greatly increases work order processing time.
Complex and limited computer interface with no mobile application. Requires significant staff time to update and maintain.	More user friendly interface. Provide overall efficiency improvements once implemented. Reduce staff time associated with managing and updating system.
No integration with other system such as GIS and Springbrook.	Integration with GIS and other software systems. Reduce duplication of data entry.
Maintains records of planned maintenance and documents that maintenance has been performed, but very limited reporting options. Does not provide significant efficiency improvements.	Ability to reduce manual process and improve efficiency of overall operation. Reduce time in receiving, distributing and schedule work orders. Provides detailed reports of maintenance activity and identifies deficiencies.
Low initial cost.	Higher initial cost to implement. On-going cost to be evaluated.

Table 1 – Comparison Current Maintenance System versus Upgraded EAM system.

With the recent rehabilitation of the Fallbrook Water Reclamation Plant, and the addition of the Santa Margarita Treatment Plant (SMTP) schedule for 2020, staff has determined that our current processes for maintenance management are limited, labor intensive, and overall inefficient. To effectively perform, monitor, and track maintenance activities the District requires a more robust EAM system.

Staff had previously evaluated support from a consultant to help make the EAM product selection. In lieu of this approach staff is working jointly with VCMWD to make the initial product selection and then is looking to develop a joint contract with VCMWD and a consultant to help with product implementation. This approach will make sure we have the necessary outside expertise to efficiently implement the system, but will also allow us to save money by sharing common costs with VCMWD. Staff is working with VCMWD to finalize this approach and identify the total implementation costs. We currently pay an annual software fee of $9,000 for maintenance connection. The estimated annual license fee for the more robust EAM system is $15,000 to $20,000. There will also be costs to implement the new system. Once the recommended approach and total costs are finalized, staff will provide an update to the committee.

Recommended Action

That the Committee support the continued joint evaluation of implementing an improved Enterprise Asset Management system with VCMWD.

B

MEMO

TO: Engineering and Operations Committee
FROM: Todd Lange, System Service/Shop Supervisor
Jason Cavender, Operations Manager
DATE: February 19, 2019
SUBJECT: Reassignment of Vehicle # 1116

Purpose

To present to the Committee a request to reassign Vehicle # 1116, a Chevy 3500, equipped for valve maintenance, to a moderately used, low mileage application.

Summary

Vehicle # 1116 has been in service as the Valve Maintenance truck as of 2007. The primary purpose for this truck, in order of importance, has been:

1. Routine main line valve exercising and maintenance
2. Main line isolation for leaks and main breaks, both during and after normal working hours
3. Valve exercising and main line isolation for planned shutdowns

Although this truck met the needs of the District at the time it was purchased, the increase in Capital Improvement Program (CIP) pipeline and valve replacement projects has required use of this vehicle for shutdown preparation and main line shutdowns. As a result of these requirements, maintenance staff is not able to meet the target for routine valve exercising and maintenance.

The Board recently approved the purchase of a new valve truck and it is recommended to utilize the old truck in low use to help address the combined maintenance and CIP needs. The anticipated average use of this truck in low use is two full days a week, making it a moderately used, low mileage vehicle.

There are a number of options that could be used for the existing vehicle that are Listed below with estimated annual maintenance costs and additional capital costs or (savings):

Options	Annual Maintenance	Capital Cost
Current Use (4 days/week)	$11,000	$0
Low Mileage Use (2 days/week)	$5,500	$0
Auction	$0*	($2,500)
Purchase New Truck & Valve Turning Equipment	$12,000	$111,000

*Productivity for valve turning activities will be 50% or less for crews operating without the truck

Retiring the truck will bring an estimated $2500 at public auction. Purchasing a new truck and valve turning equipment will cost $120,000.
By keeping the existing unit in service at reduced capacity, staff will increase capacity to both respond to main line breaks and planned shutdowns, as well as dedicate the required time to valve maintenance. Additionally, during main line breaks that require a large area to be isolated, both Valve Maintenance vehicles can be put into service, thereby reducing the valve isolation time and minimizing potential flooding damage to properties. The assistance of a second truck will also minimize the risk of breaking valves due to manual operation. Estimated cost to replace a single broken valve is $15,000, so one broken valve a year from manual operation would off-set the annual maintenance cost of the existing vehicle in low use.

Recommended Action

That the Committee support the request to reassign Vehicle # 1116, a 2007 Chevy 3500 in order to accomplish the goals listed above. The annual cost to maintain this truck and actual utilization of the vehicle will be re-evaluated after one year.