



ENGINEERING COMMITTEE

AGENDA

Committee Meeting:
Tuesday, August 6, 2019
2:00 PM (Board Room)

Calaveras County Water District
120 Toma Court / P.O. Box 846
San Andreas, California 95249

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Administration Office at (209) 754-3028. Notification in advance of the meeting will enable CCWD to make reasonable arrangements to ensure accessibility for this meeting. Any documents that are made available to the Committee before or at the meeting, not privileged or otherwise protected from disclosure, and related to agenda items, will be made available at CCWD for public review.

ORDER OF BUSINESS

CALL TO ORDER / PLEDGE OF ALLEGIANCE

1. **PUBLIC COMMENT**

At this time, members of the public may address the Committee on any non-agendized items. The public is encouraged to work through staff to place items on the agenda for consideration by the Committee. Comments are limited to three (3) minutes per person.

2.* **APPROVAL OF MINUTES**

- Date of Prior Minutes July 9, 2019

3.* **NEW BUSINESS**

3a Presentation/ Discussion regarding Geographic Information System (GIS) Updates
(Sam Singh, Engineering Technician)

4. **OLD BUSINESS**

Nothing to report

5. **FUTURE AGENDA ITEMS**

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6. **NEXT COMMITTEE MEETING**

Tentative, Tuesday, September 3, 2019 at 2:00 p.m.

7. **ADJOURNMENT**

*Paperwork included in package

CCWD ENGINEERING COMMITTEE
CALAVERAS COUNTY WATER DISTRICT
July 9, 2019

The Engineering Committee of CALAVERAS COUNTY WATER DISTRICT met at the CCWD Offices in San Andreas, California, at approximately 2:00 p.m.

The following Directors/Committee Members were present:

Jeff Davidson
Russ Thomas

Also present:

Michael Minkler	General Manager
Charles Palmer	District Engineer
Alesia Danner	Administrative Technician
Jesse Shaw	Toma and Associates
Robert Bettencourt	CRV
Vickey Mills	
Peter Martin	Mgr. Water Resources
Mike Lemke	Miramont Homes
Dennis Mills	District 5, County Supervisor
Bob Godwin	Senior Engineer
Robert Creamer	Engineering Analyst
Sam Singh	Engineering Technician
Jesse Hampton	Plant Operations Manager
Damon Wyckoff	Director of Operations

1. PUBLIC COMMENT:

There was no public comment.

2. APPROVAL OF MINUTES:

The May 2, 2019 Minutes were approved as presented by a motion from Director Thomas, and seconded by Director Davidson.

3. NEW BUSINESS:

- 3a Presentation / Discussion Regarding Gold Creek Estates Unit 3 Water And Wastewater Facilities Agreement
(Charles Palmer, District Engineer)

Mr. Palmer provided a PowerPoint presentation on the water and wastewater facilities agreement for the Gold Creek Estates Unit 3 subdivision which was originally part are AD604. Items of discussion included moving the sewer main, grading easements to be issued and the need of a local or regional lift station. The AD604 map is inaccurate now due to the County updated General Plan, will need to re-align the boundaries. An RFP is going out to re-validate the costs shares.

Public comment was provided by Supervisor Mills confirming that the revised County General Plan will be reviewed by the Calaveras County Board of Supervisors at the end of July thru early August for possible approval.

Director Davidson advised staff to address all areas of development based on the new draft Calaveras County General plan with focus on the land use map and to research if a new lift station could be established on the east side of Hwy 26 to encompass all upcoming development in Valley Springs.

Director Thomas advised staff to provide an engineering report detailing current system flow versus future increased flow to determine if the current system can handle the increase or does CCWD need to add a new lift station.

3b Presentation / Discussion of Copper Town Square- Historical Timeline
And Future Water and Wastewater Facilities
(Charles Palmer, District Engineer)

Mr. Palmer provided a PowerPoint presentation providing a table of the history of the formation of Copper Town Square. Peter Martin provided supporting comments. The original temporary sewer is still in existence, will need to come up with a permanent solution. Conceptual plans include the completion of a new pump station.

Director Davidson advised staff to provide information on the current Copperopolis treatment plant; Can it handle the increased capacity from the Copper Town Square area? Does this area need an independent treatment plant?

4. OLD BUSINESS:
There was nothing to report.

5. FUTURE AGENDA ITEMS:

6. NEXT MEETING

Tentatively Scheduled: Tuesday, August 6, 2019 @ 2:00 p.m.

7. ADJOURNMENT

There being no further business, the meeting adjourned at approximately 3:00 p.m.

Respectfully submitted,

Alesia Danner
Administrative Technician

Agenda Item

DATE: August 1, 2019

TO: Engineering Committee/ General Manager

FROM: Sam Singh, Engineering Technician

SUBJECT: Presentation/ Discussion regarding Geographic Information System (GIS) Updates

RECOMMENDED ACTION:

For Discussion purposes only.

SUMMARY:

There will be a presentation regarding improvements that staff has made in relation to Geographic Information System (GIS) implementation at the district to replace paper mapping practices and its use as an analytical tool to aid in decision making process.

The District has assets spread throughout Calaveras County (County) that leads to records and information spread out as much. With GIS, The District plans to establish a two-way flow of information between field and office.

The District started the initiative to move all our assets to GIS five months ago to have better recording schema, ESRI provided with the necessary tools and best practices to establish a working geodatabase. Staff has been able to utilize the model provided by ESRI and make changes to fit districts needs both with field staff and office staff. District has standing GIS Memorandum of Understanding with the County that allows to coordinate and share data. Using data available from the County GIS system for the parcels and roads, district has associated customer data to individual parcel APNs since that is the most static attribute (barring mergers and splits of parcels lead to new number assignment). With development of the District database of fire hydrants, it will be shared with county GIS department and various Fire Districts.

The District has migrated all the data from system maps for water services in areas of Jenny Lind, Copperopolis and Ebbetts Pass except West Point service area. As the progress is made to wrap up data migration in the remaining service area, staff has started initiative for data collection in field using applications available through ArcGIS Online. In this due time District has acquired a GNSS receiver from Trimble Navigation Ltd. to use with ArcGIS applications, this will require coordination between field staff and GIS staff at the office to work in tandem to collect and validate data points. In the current state, distribution staff in Ebbetts Pass area is equipped with tablets that have

published interactive maps. As more tablets are being deployed to the field staff, they will be provided with digital maps using GIS.

The District has experienced some infrastructure failures in Rancho Calaveras area for the past years due to age of the facilities/high pressure. After passing along all the information collected by customer call-ins to the GIS, it yielded a map with points representing each closed-out service request. After refining through data and using tools in GIS, a heat map was created that represented the areas with highest density of failures. This led to operations and engineering staff to make a valued assessment of the infrastructure in the area and develop a project to counter/fix the failing assets.

The District has been searching to set up a Computerized Maintenance Management System (CMMS) to improve the efficiency of workflow within departments, interdepartmental task assignments, data collection. CMMS software relies on GIS to provide and update data for its background operation. After various discussions and evaluation of district needs, there's only three companies that staff has determined to be a good fit for the district ecosystem.

FINANCIAL CONSIDERATIONS:

None at this moment. As we move forward with addition of CMMS and have improved database to perform more stastical or spatial analysis, more resources will be needed in form of manpower, software.