

MINUTES OF A MEETING OF THE
ENGINEERING/EQUIPMENT COMMITTEE
OF THE VALLECITOS WATER DISTRICT
MONDAY, JANUARY 11, 2021 AT 3:00 P.M.
VIA TELECONFERENCE

Director Elitharp called the meeting to order at the hour of 3:00 p.m.

Present: Director Hernandez
Director Elitharp
General Manager Pruim
District Engineer Gumpel
Capital Facilities Senior Engineer Morgan
Capital Facilities Engineer Santos
Asset Management Supervisor Bowman
Administrative Secretary Johnson

ITEM(S) FOR DISCUSSION

ENGINEERING COMMITTEE MEETING FREQUENCY AND WORK PLAN

General Manager Pruim asked the Committee how often they want to meet and if there were any specific topics they would like addressed at future meetings.

Director Elitharp stated he preferred the Committee meet monthly if there are enough items to support this frequency, or at a minimum, every other month. He requested development and Capital Improvement Program (CIP) project updates regularly with focus on the larger projects. Director Hernandez concurred with Director Elitharp on the frequency of meetings, stating that a monthly meeting could be cancelled if there are no agenda items or updates. General Manager Pruim suggested the development updates continue to be provided quarterly.

This Committee will meet once a month on a Monday to be determined from 3:00 p.m. to 5:00 p.m.

DEVELOPMENT UPDATE

General Manager Pruim announced that Development Services Senior Engineer Rob Scholl recently left the District for an opportunity at Vista Irrigation District.

District Engineer Gumpel provided a brief update on development projects and explained that projects fall into three categories: 1) projects currently in active construction that are certain to be completed for which capital facility fees have been collected or will be collected within a year or two, three years at most; 2) projects in the plan check process that are from three to five years away from construction; and 3) planned projects which are beyond five years or may never be completed.

District Engineer Gumpel stated that proposed capacity fees for projects in construction total approximately \$3.3 million for water and \$7.6 million for sewer. Regarding capacity

fees already paid, almost \$2 million is yet to be collected for water. The majority of capacity fees for sewer has already been collected, mostly because the Kaiser Hospital project has already paid all of their fees. Some of the smaller projects paid their sewer capacity fees early ahead of the fee increase. For active projects in plan check, proposed capacity fees total approximately \$4.7 million for water and \$9 million for sewer.

General Manager Pruim noted that he received a letter from a Newland Sierra representative confirming that the District has stopped all processing of their project as the proposed development was voted down in a recent referendum.

DIRECT POTABLE REUSE SCOPING WITH RENEWAL/EXTENSION OF THE RECYCLED WATER AGREEMENTS

District Engineer Gumpel stated he has been working on the scope and fee for a direct potable reuse study for the District's Meadowlark Reclamation Facility (MRF) to determine how much potable reuse could be generated and used, infrastructure needed, regulatory constraints, and other options such as the size of the system. He is also working on grant funding for a study which will include environmental aspects.

District Engineer Gumpel further stated staff will be pursuing the District's existing recycled water agreements with Olivenhain Municipal Water District and the City of Carlsbad which will expire in 2025. The City of Carlsbad is interested in renewing their contract with changes.

SEPTAGE HAULING UPDATE

District Engineer Gumpel provided background on the septage hauling study that was performed which showed that septage haulers were willing to pay approximately 12 to 14 cents per gallon compared to the District's break-even charge of 18 cents per gallon. Sedron Technologies, a pacific northwest company, contacted the District about installing a septage hauling facility at the District's Mahr Reservoir that would produce high quality recycled water as a byproduct. There would be no cost to the District, and Sedron Technologies would give a portion of the income to the District in exchange for allowing them to use the District's property and facilities. Staff has had multiple discussions about this project with the Regional Water Quality Control Board (RWQCB).

District Engineer Gumpel stated that Sedron Technologies has never done a project such as this in California and staff referred them to the RWQCB. Sedron Technologies would have to comply with a great deal of regulatory issues and testing. District Engineer Gumpel will be speaking with Sedron Technologies later this month to determine if they are interested in moving forward with this project.

2020 URBAN WATER MANAGEMENT PLAN CONTRACT AWARD

General Manager Pruim stated the District is required to create an Urban Water Management Plan (UWMP) every five years. Staff will work with a consultant to produce the 2020 UWMP which is due by June 30, 2021.

District Engineer Gumpel stated that in 2010 and 2015, staff created the District's UWMPs in house with a consultant reviewing the documents. Due to former Development Services Senior Engineer Scholl's departure from the District, additional assistance will be needed to complete the 2020 UWMP. HDR, a consultant that has assisted the District with past UWMPs, has been selected to assist with the 2020 UWMP. District Engineer Gumpel reviewed HDR's scope which includes project management, data collection and review, and water demand and supply. The District's UWMP dovetails off the San Diego County Water Authority's (SDCWA) plan which is also due on June 30, 2021. The SDCWA strives to complete their UWMP earlier so the District can insert the SDCWA's water supply numbers into the District's UWMP.

District Engineer Gumpel stated staff will be asking the Board to award a contract to HDR in the amount of \$76,900 to complete the District's 2020 UWMP. That amount is in line with what other local agencies are paying their consultants.

General Manager Pruim noted that the Committee may hear about controversy regarding the SDCWA's water demand numbers in relation to their regional conveyance project.

Director Elitharp stated that during the preparation of the District's current UWMP, there was controversy regarding how water supply availability before and after conservation was presented in the UWMP, particularly with the Newland Sierra project, and he asked if this will be addressed differently in the 2020 UWMP like how other agencies present this information. District Engineer Gumpel stated that the State sent out letters to other agencies asking them to modify their information to show it similar to the District's UWMP; however, the District's UWMP was accepted with no modifications. Staff will work with HDR to ensure the water availability and conservation tables are correct and easier to understand.

SECOND QUARTER CAPITAL IMPROVEMENT PROGRAM UPDATE

Capital Facilities Senior Engineer Morgan briefly demonstrated where quarterly updates for Capital Improvement Program (CIP) projects can be accessed on the District's website and the types of information that is available. He provided a presentation on Capital Projects – 2020/2021 Second Quarter Update which included the San Marcos Interceptor Phase II and District-wide solar construction progress.

INTERCEPTOR PHASE II CONSTRUCTION PROGRESS

Capital Facilities Senior Engineer Morgan stated the San Marcos Interceptor Phase II project is over 50% complete. The 16-inch diameter micro tunnel in San Marcos Boulevard at the Pacific Street intersection was completed in late December. Construction in San Marcos Boulevard should be completed at the end of January or early February. Staff is coordinating with the City of San Marcos Creekside Improvement Project on a weekly basis as these two projects are near each other. It is anticipated project construction will be completed in June 2021. The cost to date is \$7,314,00. It is anticipated the cost will not exceed the \$8,500,000 project budget.

DISTRICT-WIDE SOLAR CONSTRUCTION PROGRESS

Capital Facilities Senior Engineer Morgan stated the District issued a Notice to Proceed on December 2, 2020 to begin work at the Lift Station No. 1 site. Crews have been installing solar racking, ballasts, and arrays. It is anticipated that construction at Lift Station No. 1 will be completed in February. An amendment is forthcoming from the solar provider to extend the commercial operation deadline to a date in March.

Capital Facilities Senior Engineer Morgan further stated staff is waiting for San Diego Gas & Electric to complete their work, design, and coordination with their contractor on their utility service upgrade at the Twin Oaks Reservoir site.

BIO SELECTOR/AERATION BASIN IMPROVEMENTS AWARD

Capital Facilities Engineer Santos stated the District's next project to begin construction is the Biological Selector/Aeration Basin Improvement Project at the District's Meadowlark Reclamation Facility (MRF). The existing aeration basin panels are no longer manufactured, are failing, and cannot be repaired. One of two existing basins is moderately operating and may be problematic going into the summer months when production and treatment of wastewater is higher than usual. One alternative is to replace the aeration basins and panels with three aerobic zones. Another option, a bio selector, is to replace basins and panels with one anaerobic zone and two aerobic zones which would be more efficient and would reduce the cost of treatment.

Capital Facilities Engineer Santos further stated this project went out to bid in October 2020. Six competitive bids were received. The low bid bio selector option was very attractive to the District as well as the District's customers, Olivenhain Municipal Water District (OMWD) and the City of Carlsbad. Staff recommends this option and will present it at the January 20 Board meeting for contract award. Construction is anticipated to take place from April/May through September, with project completion and acceptance in October. The approved budget for this project is \$1.7 million with an anticipated budget surplus of approximately \$330,248. Roughly \$400,000 of the cost of the bio selector itself will be reimbursed to the District from OMWD and the City of Carlsbad through the District's recycled water rates.

Capital Facilities Senior Engineer Morgan provided a brief overview of Capital Facilities projects that are in construction, out to bid, or in final design.

ASSET MANAGEMENT/CONDITION ASSESSMENT PLAN UPDATE

Asset Management Supervisor Bowman facilitated a presentation, Asset Management Roadmap, an update from her presentation to the Committee in March 2020, as follows:

- Asset Management Benefits
- Asset Management Guidance and Standards
- Asset Management Business Risk Exposure
 - Likelihood of Failure

- Consequence of Failure
- Ductile Iron Pipes
- Asset Management Activities Progression

District Engineer Gumpel stated that numerous workshops with Maintenance & Operations, Management, and the Board will be held to define the District's asset management program along with hiring a consultant to finalize it.

LAND OUTFALL WEST CONDITION ASSESSMENT AWARD

Asset Management Supervisor Bowman stated the existing Land Outfall West sewer pipeline was installed in 1986 and connects the District's Lift Station No. 1 to the Encina Water Pollution Control Facility. This project will evaluate the condition of approximately 16,700 feet of pipeline ranging in size from 30-inch to 54-inch in diameter using closed-circuit television and sonar technology. Much of the pipeline has not been assessed since 1986. Results of the condition assessment will be evaluated to determine which segments of the pipeline require cleaning, rehabilitation, and/or replacement.

Asset Management Supervisor Bowman further stated outside assistance will be necessary to perform the condition assessment. After reviewing bids from four as-needed engineering firms, staff has selected Hoch Consulting as the most qualified consultant with a total fee of \$149,800 for planning, design, engineering, and inspection services. Cost sharing is in place for this section of the pipeline. The District is responsible for 58.03% of the contract costs. The City of Carlsbad and Buena Sanitation District are responsible for 23.98% and 17.99% respectively. Both of those agencies participated in the selection process for the consultant. Staff will present this project for contract award at the January 20 Board meeting. It is anticipated the condition assessment will be completed by the end of the current fiscal year.

CALIFORNIA PUBLIC UTILITIES COMMISSION'S SELF-GENERATION INCENTIVE PROGRAM (TESLA BATTERIES) UPDATE

Asset Management Supervisor Bowman provided a presentation, Tesla/California Public Utilities Commission Self Generation Incentive Program (SGIP), which included the following:

- Background and Purpose
- Battery Systems
- Eligibility and Site Selection
- Financial Benefits to Vallecitos
- Specifications and Cost Savings

Asset Management Supervisor Bowman stated this program is funded by electric utility ratepayers. Its purpose is to provide resiliency during Public Safety Power Shutoff events such as high winds that require San Diego Gas and Electric to turn off electricity to prevent wildfires. The District is partnering with Tesla to put this energy backup program in place at the District. Tesla will install power or mega pack battery systems

at locations throughout the District and will take care of permits and anything associated with their battery backup system. Eligible sites must be in a high fire threat district, must be a critical facility, and must serve communities designated as a disadvantaged community or low-income census tract. The District headquarters and San Elijo Hills Pump Station sites were originally selected for the power pack systems. An additional four sites were selected to receive the mega pack systems. Those sites are the Twin Oaks Reservoir/North Twin Oaks Pump Station, Palos Vista Pump Station, Meadowlark Reclamation Facility, and Double Peak Pump Station.

The total value of the batteries being donated to the District is over \$6.7 million. The program will provide resiliency at the six sites for many years to come. All engineering, design, operations, and maintenance costs will be covered by the ten-year SGIP contract. Tesla has calculated, based on today's rates, that the District may save approximately \$1,615,836 in energy costs over the ten years of the program. After ten years, the District has several options which include recycling the batteries, selling them, contracting with Tesla for an extended maintenance agreement, or assuming maintenance responsibilities. Tesla's contractors will begin site surveys next week.

District Engineer Gumpel stated the District's grant application for the SGIP program is currently being reviewed. There is a placeholder for the District in the grant funding approval process during which the District is not incurring any costs from Tesla. The six sites will be independently evaluated, and the Board will be informed as sites are approved for grant funding.

OTHER BUSINESS

None.

PUBLIC COMMENT

None.

ADJOURNMENT

There being no further business to discuss, the meeting was adjourned at the hour of 4:42 p.m.