



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

AGENDA

**WEDNESDAY, JANUARY 22, 2020
8:30 A.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 – E)

A. UPS BATTERY REPLACEMENT & MAINTENANCE

B. AMI METER SERVICE REPLACEMENT PROGRAM

C. MORRO RD SEWER EXTENSION REPAYMENT AGREEMENT FRAMEWORK

D. DISCUSSION ON CONTRACT AMENDMENT FOR ADDITIONAL TREATMENT
FOR THE SANTA MARGARITA CONJUNCTIVE USE PROJECT
(SUPPLEMENTAL MATERIALS)

E. PARKING AREA REMODEL

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.

January 16, 2020
Dated / Fallbrook, CA

/s/ Lauren Eckert
Executive Assistant/Board Secretary

M E M O

TO: Engineering & Operations Committee
FROM: Devin Casteel, System Operations Supervisor
DATE: January 22, 2020
SUBJECT: UPS Maintenance & Battery Replacement

Purpose

To present to the E&O Committee for consideration of award to S&C Electric Company to perform routine maintenance and replace all batteries on the Uninterruptible Power Supply (UPS) unit at the Red Mountain UV Treatment Facility, for the amount of \$48,515.

Summary

The function of UPS is to supply temporary power to the UV Treatment Plant during emergency SDG&E power failures and during power failures caused by Public Safety Power Shutoff (PSPS) events. The UPS provides power during the time it takes the emergency generator to come online and warm up. This prevents critical plant outages that could result in water quality violations and/or interruption in service. This work is performed, as recommended by the manufacturer, as part of a 5-year routine maintenance cycle. Because much of the equipment is being serviced is proprietary, this is a sole source item.

Budgetary Impact

This item was budgeted for in the FY 19/20 Capital Budget for the amount of \$60,000. There is no budgetary impact.

Recommended Action

That the E&O Committee recommend the purchase of S&C's proposal for the amount of \$48,515.

MEMO



TO: Engineering & Operations Committee
FROM: Steve Stone, Field Services Manager
DATE: January 22, 2020
SUBJECT: AMI Meter Service Replacement Program

Purpose

To inform the Engineering & Operations Committee of a request to purchase required meters and associated equipment to complete the transition for existing drive by radio read Automatic Meter Reading (AMR) meters to fixed network Advanced Metering Infrastructure (AMI) meters that allow real time tracking and monitoring of water use.

Summary

In July 2015 the Board approved starting a 5 year program to replace existing drive-by Automatic Meter Reading (AMR) meters and associated radio based endpoints (ERT) that are exceeding their reliable lifespan and recommended replacement frequency with Advanced Metering Infrastructure (AMI) meters that allow for real time tracking. The replacement of these meters ensures that the District continues to have accurate readings of water usage by customers and also allows the District to utilize newer meter technology with real time tracking, which will provide additional tools to customers along with the implementation of Water Smart software to track water use and identify leaks.

Meter Replacement

In 2002, the District purchased Hersey Water Meters with Itron Encoder Receiver Transmitter (ERTs). Upon installation of the new meters and ERTs, the meter reading system was converted to a drive-by system. The drive-by system provided the District with more accurate reads and reduced the amount of staff needed to collect meter reads.

The District budget includes costs to transition from the drive-by meters to a real time fixed network for the vast majority of District customers over by the end of Fiscal Year 2020/21. Currently 7,186 meters out of 9,270 have been replaced or 78 percent. Meter inventory is low and it is necessary to get new meters ordered to maintain the schedule to complete the replacement by 2020/21. The meter replacement is being done using District staff. Staff is working with Itron and Water Smart in order to bring customers with the new meters on-line with real time tracking and monitoring.

The District conducted testing and surveyed other agencies and determined the badger meters with Itron ERTs are the best solution for the District. The District worked with the manufacturers to ensure the pricing was competitive compared to other meter systems and other Districts' pricing. The proposed pricing for the meters, ERTs and associated

fixed network infrastructure is attached – these items are proprietary to these vendors and cannot be sourced from any other supplier.

Budgetary Impact

\$675,000 was budgeted for Meter Replacement CIP in FY 19-20. Of that, a total of \$202,578.47 has been spent, leaving \$452,489.13 available.

The total cost of materials requesting to be purchased for the remainder of FY 19-20 is \$270,347.98. This would leave an available balance of \$182,141.15 for labor.

FPUD staff anticipates remaining within budget for Meter Replacement CIP in FY 19-20.


Recommended Action

The Engineering & Operations Committee recommend that the Board approve the purchase of Badger meters (National Meter and Automation Inc.) per attached for \$173,144.55 (including sales tax) and Inland Water Works Supply Co. for 100W ERTs and Antennas per attached for \$97,203.43 (including sales tax) in order to replace existing drive-by radio read meters that have reached the end of their useful life with fixed network AMI meters that will provide additional real time water usage monitoring tools for the District customers.

INLAND ORDER			
QUOTE PRICES GOOD UNTIL			
QTY	PRODUCT DESCRIPTION	UNIT PRICE	AMOUNT
608	Itron 100W + ERT- Water Endpoint Radio	\$80.50	\$48,944.00
696	Anntenna	\$51.75	\$36,018.00
700	Gopher Wire	\$7.50	\$5,250.00
		SUBTOTAL	\$90,212.00
		SALES TAX	\$6,991.43
		TOTAL	\$97,203.43

NATIONAL METER			
QUOTE PRICES GOOD UNTIL			
QTY	PRODUCT DESCRIPTION	UNIT PRICE	AMOUNT
420	Badger Meter M-35 3/4" x 7.5" NSF 61 Brz, Brz Bttm, SS Thrust Roller, Less Connections, HRE 8 Encoder US Gallons, PL Lid & Shroud, Keyed Seal Screw, Itron ILC w/Cable Armor, 5' Lead	\$181.00	\$76,020.00
120	Badger Meter M-55 1" x 10.75" NSF 61 Brz, Brz Bttm, Less Connections, HRE 8 Encoder US Gallons, PL Lid & Shroud, Keyed Seal Screw, Itron ILC w/Cable Armor, 5' Lead	\$238.00	\$28,560.00
30	Badger Meter M-120 1.5" x 13" NSF 61 Brz, Elliptical Long Drilled, w/Test Plug, Less Connections, HRE 8 Encoder US Gallons, PL Lid & Shroud, Keyed Seal Screw, Itron ILC w/Cable Armor, 5' Lead	\$475.00	\$14,250.00
19	Badger Meter M-170 2" x 17" NSF 61 Brz, Elliptical Long Drilled, w/Test Plug, Less Connections, HRE 8 Encoder US Gallons, PL Lid & Shroud, Keyed Seal Screw, Itron ILC w/Cable Armor, 5' Lead	\$654.00	\$12,426.00
4	Badger Meter T-450 3"x 12" NSF 61 Brz, Elliptical Long Drilled, w/Test Plug, Less Connections, HRE 8 Encoder US Gallons, PL Lid & Shroud, Keyed Seal Screw, Itron ILC w/Cable Armor, 5' Lead	\$1,012.00	\$4,048.00
5	Badger Meter T-450 3"x 12" NSF 61 Brz, Elliptical Long Drilled, w/Test Plug, Less Connections, HRE 8 Encoder US Gallons, PL Lid & Shroud, Keyed Seal Screw, Itron ILC w/Cable Armor, 5' Lead (RECYCLE)	\$1,070.00	\$5,350.00
3	Badger LF1000 4" Bronze Turbo Meter w/Test Plug, Badger M1000 HR-E 8-Dial Encoder w/Itron ILC Connection, 5' Lead, Cable Armor & Keyed Seal Screw in Gallons	\$1,398.00	\$4,194.00
4	Badger LF1000 4" Bronze Turbo Meter w/Test Plug, Badger M1000 HR-E 8-Dial Encoder w/Itron ILC Connection, 5' Lead, Cable Armor & Keyed Seal Screw in Gallons (RECYCLE)	\$1,456.00	\$5,824.00
1	Badger LF2000 6" Bronze Turbo Meter w/Test Plug, Badger M2000 HR-E 8-Dial Encoder w/Itron ILC Connection, 5' Lead, Cable Armor & Keyed Seal Screw in Gallons	\$3,301.00	\$3,301.00
2	Badger LF2000 6" Bronze Turbo Meter w/Test Plug, Badger M2000 HR-E 8-Dial Encoder w/Itron ILC Connection, 5' Lead, Cable Armor & Keyed Seal Screw in Gallons (RECYCLE)	\$3,359.00	\$6,718.00
11	Price Adder for Reclaim Option On All Turbo Series Meter Configurations	\$58.00	\$638.00
608	Total Meters	SUBTOTAL	\$160,691.00
		SALES TAX	\$12,453.55
		TOTAL	\$173,144.55

M E M O

TO: Engineering and Operations Committee
FROM: Aaron Cook, Senior Engineer 
DATE: January 22, 2020
SUBJECT: Morro Road Sewer Extension Repayment Agreement Framework

Description

Per Administrative Code Section 23.3, sewer or water improvements provided by others which benefit owners fronting upon but not contributing toward the cost at the time of construction may be subject to a privately financed extension agreement for the collection and refunding of part of the cost. See attached Administrative Code Section 23.3.

Purpose

GRK Developers is constructing 2,498 linear feet of 8-inch sewer main to serve a new 4-lot subdivision on Joseph Street. The new sewer main will tie into the nearest existing downstream manhole on South Morro Road, and the alignment will front 12 existing parcels not currently adjacent to a sewer main. If any of the land owners adjacent to the new sewer main connect to the sewer within 10 years of construction, a Repayment Agreement will enable the District to refund the financing owners the proportionate contribution funds that are collected. The final repayment agreement will be based on the actual cost to construct the sewer main, and will require approval by the Board of Directors for execution.

The effected parcels are listed in the table on the following page. The District is obligated to fund the infrastructure improvements to the first two parcels based on existing Remote Service Agreements that were pre-paid by the customers. The third parcel listed (106-152-41) is required to connect to the new sewer main at the customers cost based on an existing Temporary Service Agreement (Doc 2005-0333132). The other parcels are eligible to be included in the Repayment Agreement at the listed percent of total project cost.

Parcel	Portion of Alignment Required to Serve the Parcel		
	Linear Feet	Percent	Notes
106-152-53	237'	9.5%	FPUD Funded
106-152-54	362'	14.5%	FPUD Funded
106-152-41	168'	6.7%	Existing Agreement Requires Connection
106-152-43	192'	7.7%	
106-152-42	134'	5.4%	
106-152-01	112'	4.5%	
106-140-41	178'	7.1%	Project Partner
106-140-37	285'	11.4%	Project Partner
106-140-38	150'	6.0%	
106-140-36	150'	6.0%	
106-140-35	87'	3.5%	
106-140-34	80'	3.2%	

Budgetary Impact

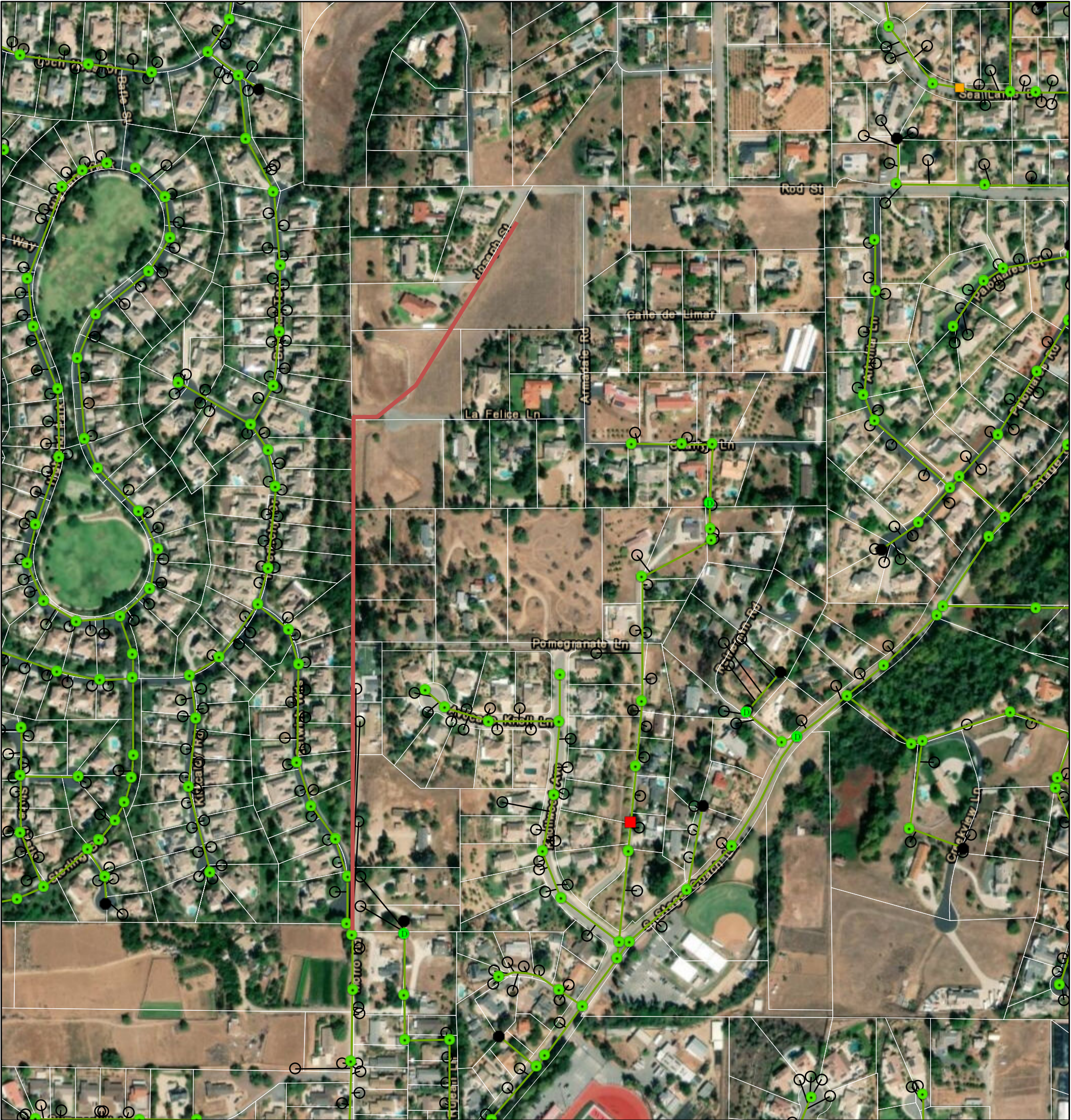
The total estimated project cost is \$375,000. The District will be obligated to fund 24% of that cost for the first two parcels listed.

Recommended Action

For information only at this time. The final Repayment Agreement will be drafted and recommended for approval after construction is complete, which is expected to occur later this fiscal year.

Attachment A

S Morro Sewer Extension



1/15/2020 11:55:06 AM

SEWER_TROUBLE_SPOTS

3 MONTH

6 MONTH

MANHOLE

DISTRICT CO AND DROP

DROP

DIST CO

MH

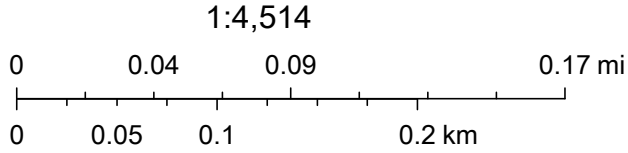
SEWER MAIN

GRAVITY

CUSTOMER CLEANOUT

SEWER LATERAL

PARCELS



Esri, HERE, Garmin, (c) OpenStreetMap contributors, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and

Attachment B

Sec. 23.3 Repayment Agreements - Water and Sewer Line Improvements.

Improvements provided by others which benefit owners fronting upon but not contributing toward the cost at the time of construction may be subject to a privately financed extension agreement for the collection and refunding of part of the cost. The Agreement consists of the following:

- a) The District will have title to the improvements and will operate and maintain them as a part of the District's system.
- b) The District agrees to collect a proportionate contribution for the cost of the improvements to provide service to those adjoining lands benefiting from them for a period of 10 years or until all proportionate charges have been collected and refunded, whichever period is less.
- c) The District agrees to refund to the financing owners the proportionate contribution funds that are collected.
- d) The District will have the sole authority to permit connections to or extensions from and service connections to said privately financed improvements.
- e) The basis upon which proportions of the cost of the improvement(s) shall be computed for each privately financed extension agreement shall be negotiated by the Board of Directors with the financing owners and shall generally consist of practicable front footage, acreage, number of service connections, or such other basis as may be determined by the Board of Directors to be equitable to the financing owners and other benefiting property owners.
- f) The improvement(s) will be installed in an easement granted to the District free of liens and encumbrances.

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M E M O

TO: Engineering & Operations Committee
FROM: Kevin Collins, Purchasing/Warehouse Supervisor *K.C.*
DATE: January 22, 2020
SUBJECT: Informational Item on Parking Area Remodel

Description

This informational item is to educate the Engineering & Operations Committee on a future project to remodel the parking area at the main FPUD offices.

Purpose

Due to failing pavement and lifted/cracked concrete sidewalks caused by tree roots, the main FPUD parking area needs repair. As part of the repair process, the following items will be changed, in order to better align the parking lot with customer needs and to bring the handicap parking into compliance with current ADA and state requirements. Many of the changes come as a result of a site accessibility evaluation conducted on 10/7/2019 by ADA Compliance Team, Inc.:

- All asphalt will be sealed and all parking spaces will be re-striped.
- All curbing (cracks) will be repaired or replaced (if necessary).
- In the north-east corner, the v-ditch will be repaired for better drainage.
- The center of the lot will reserve 14 specially marked spaces for FPUD customers only.
- The northern-most island will add 2 concrete pads to allow staff to walk over the island without disturbing landscaping.
- The northern-most island will have 4 concrete legs removed (from middle and west sides).
- One concrete leg will be removed from the east side of the lot.
- The southern-most island will have repairs done to sidewalk.
- The east lot entrance will add curbing to match the rest of the entry-way.
- The entire main sidewalk along the south side of the parking lot will be repaired as-needed.
- Handicap spaces will be moved in order to accommodate ADA grading requirements.
- The handicap spaces will have new signage.
- The handicap spaces will have elevated ramps removed and replaced with cut-in ramps.
- Two bollards near the gate entry pedestal will be removed.
- Motorcycle parking will be added in the southwest corner of the lot.
- As part of this project, an electric vehicle charging station will be added. By installing this equipment concurrently with the project, the installation costs are

estimated to be under \$500. Any ongoing costs are expected to be recovered by fees charged to end users of the station.

Budgetary Impact

District yard improvements CIP had budgeted \$220,000 for FY 19-20. To date, \$105,630.83 has been spent on the following:

- Tree removal in main parking area and behind equipment yard building.
- Equipment yard carport roof repair.
- Replacement fencing along the northwest parking area.

With these projects complete, a balance remains of \$114,369.17. Staff anticipates this project will be completed within that budget.

Recommended Action

Not needed at this time.