



# Rancho Murieta Community Services District

FY 2021-22

Proposed Capital Improvement  
Plan





**RANCHO MURIETA COMMUNITY SERVICES DISTRICT**  
**FY 2021-22 Proposed Budget**  
**New Capital Improvement Projects**

| <b>Project Number</b>       | <b>Project Description</b>                 | <b>Total Budget</b> | <b>Funding Source</b>       |
|-----------------------------|--|---------------------|-----------------------------|
| <b>Water</b>                |  |                     |                             |
| 22-01-01                    | Replacement Vehicle #214                   | 50,000              | Water Fund Reserves         |
| 22-02-01                    | Replacement Vehicle #218                   | 40,000              | Water Fund Reserves         |
| 22-03-01                    | Rio Oso Pump Replacement                   | 100,000             | Water Fund Capital Reserves |
| 22-04-01                    | Water Treatment Plant Back Left Drying Bed | 90,000              | Water Fund Capital Reserves |
|                             | <b>Water Total</b>                         | <b>280,000</b>      |                             |
| <b>Wastewater</b>           |  |                     |                             |
| 22-05-02                    | Replacement of Sewer Jetter                | 80,000              | Sewer Fund Reserves         |
| 22-06-02                    | Fix Reynosa 6" Wastewater line             | 232,000             | Sewer Fund Reserves         |
| 22-07-02                    | Automote East & West DAF Sludge Valves     | 35,000              | Sewer Fund Capital Reserves |
|                             | <b>Wastewater Total</b>                    | <b>347,000</b>      |                             |
| <b>Drainage</b>             |  |                     |                             |
|                             | No new projects                            |                     |                             |
| <b>Security</b>             |  |                     |                             |
| 22-08-04                    | Replace Jeep Patrol vehicle                | 35,000              | Security Reserve            |
| <b>2021-22 Grand Totals</b> |  | <b>662,000</b>      |                             |



# Rancho Murieta Community Services District

Water Reserves

**PROJECT TITLE: REPLACE WATER VEHICLE #214 ¾ TON**



**CAPITAL PLAN**

WATER FUND RESERVES

**CIP #**

22-01-01

**PROJECT BASIS:**

Vehicle 214 is a 1997 F-250 that is far beyond its expected life cycle and is now more cost effective for replacement vs continued maintenance.

**DESCRIPTION:**

Vehicle is utilized by staff for transport of personnel and equipment to and from job sites and towing of equipment.

**ENVIRONMENTAL OR REGULATORY ISSUES:**

N/A

**RISK ASSESSMENT:**

N/A

**PROJECT BUDGET:**

\$50,000 estimated

**BASIS OF COST EST:**

Budgetary estimate from vendors, included service body, lumber rack, 30-amp inverter, and decals.

**PROJECT TITLE: REPLACE WATER VEHICLE #218 ½ TON**



|  |  |
|--|--|
| <b>CAPITAL PLAN</b>                        | WATER FUND RESERVES  |
| <b>CIP #</b>                               | 22-02-01   |
| <b>PROJECT BASIS:</b>                      | Vehicle 218 is a 2004 F-150 that has countless runs hours on it with well over 92,000 miles, needs several thousand dollars of repairs. It is more cost effective to replace the vehicle instead of continued maintenance. This vehicle was originally purchased from the Water Fund for \$19,621. |
| <b>DESCRIPTION:</b>                        | Vehicle is utilized by staff for transport of personnel and equipment to and from job sites and towing of light equipment.   |
| <b>ENVIRONMENTAL OR REGULATORY ISSUES:</b> | N/A  |
| <b>RISK ASSESSMENT:</b>                    | N/A  |
| <b>PROJECT BUDGET:</b>                     | \$40,000 estimated   |
| <b>BASIS OF COST EST:</b>                  | Budgetary estimate from internet sites for comparable truck.   |

**PROJECT TITLE: RIO OSO PUMP REPLACEMENT**



**CAPITAL PLAN** WATER FUND CAPITAL RESERVES

**CIP #** 22-03-01

**PROJECT BASIS:** These pumps provide water in the pressure zone system to about 800 homes. These pumps run 24 hours a day 7 days a week to keep constant pressure in the lines. The current pumps that are there are very old and have been repaired multiple times. They are obsolete and cannot get parts for anymore. Both pumps need to be replaced.

**DESCRIPTION:** Purchase pumps from Muniquip and have them installed, leveled and laser calibrated. Will need to hire outside contractor to help with installation.

**ENVIRONMENTAL OR REGULATORY ISSUES:** N/A

**RISK ASSESSMENT:** N/A

**PROJECT BUDGET:** \$100,000

**BASIS OF COST EST:** Estimate for pumps, motors, installation, calibration and start-up.

**PROJECT TITLE: WATER TREATMENT PLANT – BACK LEFT DRYING BED REHABILITATION**



**CAPITAL PLAN** WATER FUND CAPITAL RESERVES

**CIP #** 22-04-01

**PROJECT BASIS:** The “Back-Left” drying bed is a major part of the water treatment plant operations. To operate at full capacity during summer months this drying bed needs to perform as designed. There was an attempt to repair the piping infrastructure by District staff in 2020. However, our efforts did not solve the problems. In spite of our work, the new sand and rock installed quickly become impacted with sludge which inhibits the drying bed to function. This drying bed needs to be completely rehabilitated. We are planning to issue a Request for Proposal (RFP) in order to complete this work.

**Description:**

- 1) Remove sludge haul to wastewater plant drying bed #1
- 2) Remove sand and gravel haul to wastewater plant

- 3) Install temporary plug as needed to block water intrusion from the adjacent drying bed.
- 4) Remove and dispose of existing 4" terra cotta drain tiles. If possible modify and potentially reuse drainpipe installed in 2020.
- 5) Clean surfaces of existing drying bed inspect substrate for damage, and perform repairs as needed. Off-haul excavated material to stockpile at RMCSO WWTP.
- 6) Furnish, place, and compact new 9" layer of class II aggregate base.
- 7) Furnish and install new 4" C900 perforated drain laterals in fabric wrapped gravel envelope.
- 8) Furnish and place new 12" layer of Silica Products #20 filtration sand.

**ENVIRONMENTAL OR  
REGULATORY ISSUES:**

N/A

**RISK ASSESSMENT:**

N/A

**PROJECT BUDGET:**

\$90,000

**BASIS OF COST EST:**

Estimated from the same work completed in the smaller right-rear drying bed in May 2021.





Rancho Murieta  
Community Services  
District

Sewer Reserves

**PROJECT TITLE:   REPLACEMENT OF SEWER JETTER**



**CAPITAL PLAN**

SEWER FUND RESERVES

**CIP #**

22-05-02

**PROJECT BASIS:**

2002 Sewer Jetter needs replacement as engine is failing, doesn't meet air quality control standards which puts a limit on its run hours, and electrical control panel is barely operable.

**DESCRIPTION:**

Jetter is towed to work sites and is utilized for cleaning sewer lines of grease and debris to keep them free flowing.

**ENVIRONMENTAL OR REGULATORY ISSUES:**

Failure to maintain sewer collection system pipes will result in sewer backups and spills. They may cause environmental harm and fines by the SSWRB and/or DFWF.

**RISK ASSESSMENT:**

N/A

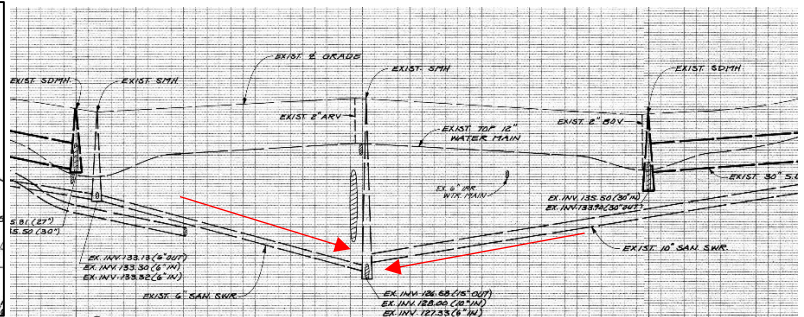
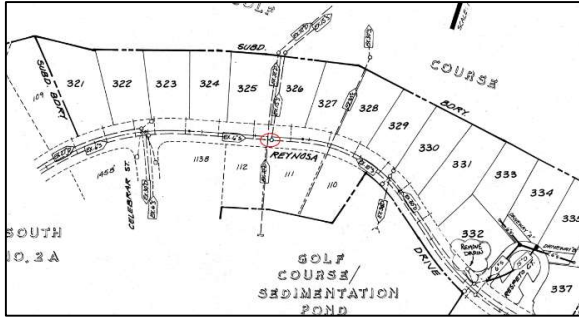
**PROJECT BUDGET:**

\$80,000 estimated

**BASIS OF COST EST:**

Quote from vendor.

**PROJECT TITLE: FIX REYNOSA 6 INCH SEWER LINE**



**CAPITAL PLAN**

**SEWER FUND RESERVES**

**CIP #**

**22-06-02**

**PROJECT BASIS:**

Need for free-flowing sewers that will not create back up and overflow issues. This will be additionally impacted with future Riverview development flows on the 10inch line.

**DESCRIPTION:**

Issue is with 6-inch sewer flowing easterly and entering manhole at a lower point than the 10-inch line entering from the opposite direction. This causes the 6-inch line to back up with materials deposition as flow from the 10-inch line in opposite direction hydraulically pushes back on 6-inch line's flow. Sewer collection lines need engineering to determine a solution and a project to implement the solution.

**ENVIRONMENTAL OR REGULATORY ISSUES:**

Potential for sewer spills.

**RISK ASSESSMENT:**

High. Work will require active bypass system to be in place 24hrs/day during project.

**PROJECT BUDGET:**

\$232,000 estimated

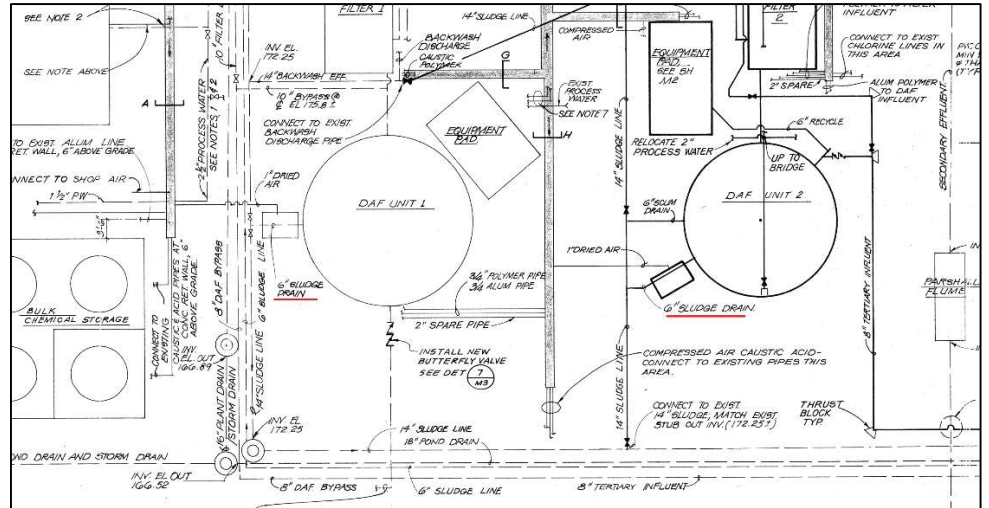
**BASIS OF COST EST:**

Budgetary estimate from Coastland Engineering.

It appears this area mistakenly installed the 10" sewer to drop in the manhole that impedes the flow of the 6" sewer line coming from Celebrar, hydraulically backing up the 6", when the manhole should have been deepened or a separate manhole built to feed the 15" going to the lift station for the 10".

which may be to intercept 6-inch line upstream and sweep or fix run somehow to avoid this issue.

**PROJECT TITLE: AUTOMATE EAST & WEST DAF SLUDGE VALVES**



**CAPITAL PLAN**

**SEWER FUND CAPITAL RESERVES**

**CIP #**

22-07-02

**PROJECT BASIS:**

Staff currently needs to manually operate sludge valves multiple times a day for each Dissolved Air Flotation tank to drain settled solids from the DAF to the drying beds. Tertiary system operates 24hrs/day during reclamation season and staff is not present overnight. Not adequately removing settled solids may create process upsets and excessive filter backwashing.

**DESCRIPTION:**

Procure and install two automated valves, route and tie-in power to operate valves, route and connect telemetry control wiring to PLC for SCADA control, update SCADA graphics and control to allow automated and manual operation via SCADA.

**ENVIRONMENTAL OR REGULATORY ISSUES:**

N/A

**RISK ASSESSMENT:**

N/A

**PROJECT BUDGET:**

\$35,000

**BASIS OF COST EST:**

Estimate for valves, wiring, and electrical, controls and SCADA work.



Rancho Murieta  
Community Services  
District

Security Reserves

**PROJECT TITLE:                    REPLACEMENT SECURITY VEHICLE #521**



|  |  |
|--|--|
| <b>CAPITAL PLAN</b>                        | SECURITY FUND RESERVES   |
| <b>CIP #</b>                               | 22-08-04   |
| <b>PROJECT BASIS:</b>                      | Security vehicle #521 is a 2015 Jeep Patriot and it is now more cost effective for replacement vs continued maintenance. Vehicle is subject to continual use as mobile offices for Security Patrol staff and therefore a lot of wear and tear. |
| <b>DESCRIPTION:</b>                        | Vehicle is utilized by staff for patrol activities.  |
| <b>ENVIRONMENTAL OR REGULATORY ISSUES:</b> | N/A  |
| <b>RISK ASSESSMENT:</b>                    | N/A  |
| <b>PROJECT BUDGET:</b>                     | \$30,000 estimated   |
| <b>BASIS OF COST EST:</b>                  | Budgetary estimate includes decals and outfitting for laptop stand and radio.  |