

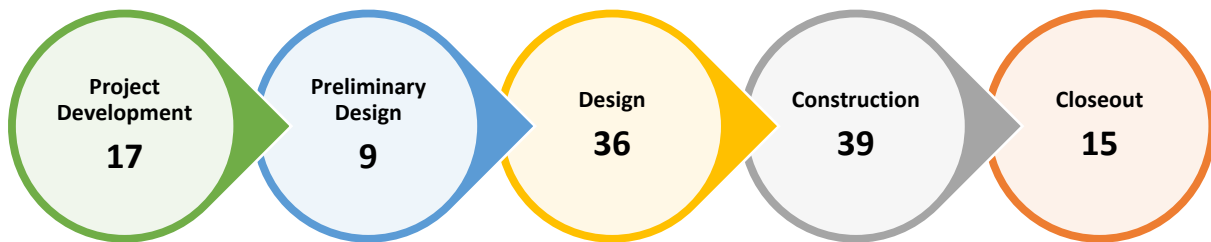
DATE: June 7, 2023

TO: Orange County Sanitation District Board of Directors

FROM: Rob Thompson, General Manager  
Through: Mike Dorman, Director of Engineering

This report summarizes the status, activities, and performance of construction contracts and consultant agreements. This report also identifies the names and status of projects being performed under master budgets for planning studies, research, small construction projects, Operations & Maintenance capital projects and information technology projects.

As of 3/31/2023, Orange County Sanitation District (OC San) Engineering Department manages 116 active projects, with project budgeting totaling close to \$3.3 million. These projects are in various project phases, ranging from Project Development to Closeout. The graphic below shows the number of projects in each of the project phases.



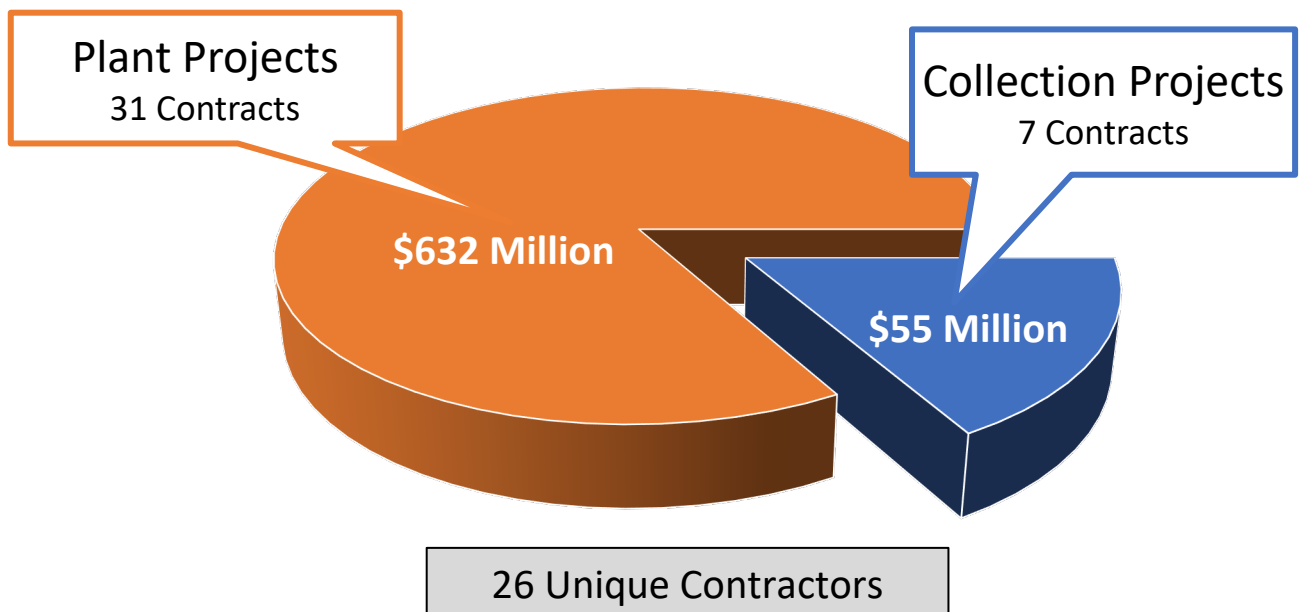
This report is organized into six parts, as follows. Detailed tables can be found in the appendix section of the report.

Part 1 – Construction Contracts	Page 2
Part 2 – Engineering Professional Services Agreements	Page 4
Part 3 – Master Budget Projects	Page 5
Part 4 – Supplemental Engineering Services Contract	Page 6
Part 5 – Programming Professional Services Contract	Page 8
Part 6 – On-Call Services Agreements	Page 10
Appendix (Tables 1 through 13)	Page 11

## PART 1 - CONSTRUCTION CONTRACTS

### Construction Contracts

As shown in the graph below, there are currently thirty-six active construction contracts totaling \$687 Million. Of the thirty-six active construction contracts, twenty-nine are plant projects and seven are collections projects. Table 1 in the appendix lists the Board-awarded construction contracts active as of March 31, 2023, while Tables 2 and 3 list the General Manager-awarded and Operations Committee-awarded construction contracts. The General Manager may award contracts up to \$100,000 and task orders up to \$300,000.

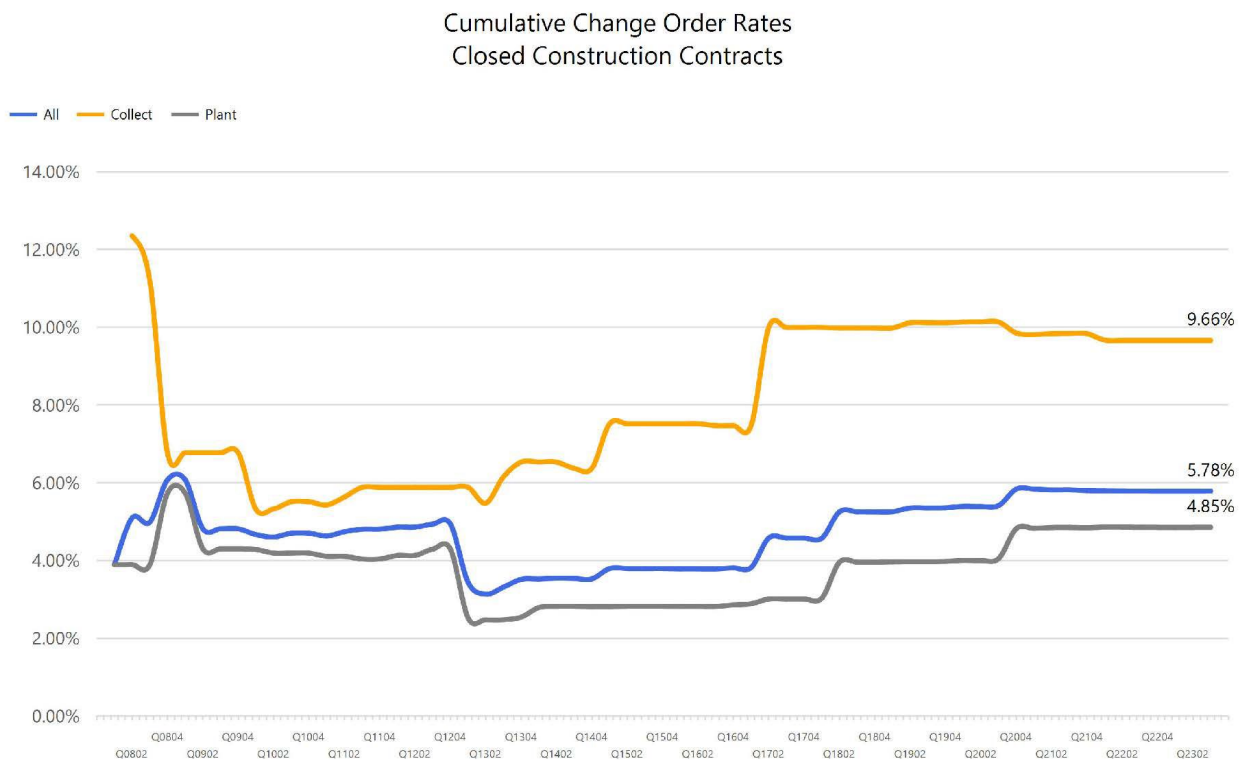


Only two construction contracts were closed during this quarter, both were awarded by the Operations committee. The table below summarizes the number of active and closed construction contracts and total contract amounts. See Tables 4, 5 and 6 in the appendix for a list of the closed contracts.

Type	Contracts	Total Contract Amount
Active Board-Awarded Construction Contracts	32	\$680,847,009
Active GM Awarded Construction Contracts	5	\$6,333,189
Active Ops Committee Awarded Construction Contracts	1	\$138,650
Closed Board-Awarded Construction Contracts	0	\$0
Closed GM Awarded Construction Contracts	0	\$0
Closed Committee-Awarded Construction Contracts	2	\$367,407

## Cumulative Change Order Rates

When the OC San Board of Directors awards a construction contract, they also approve a contingency which allows the General Manager to approve contract change orders up to the amount of the contingency. One purpose of this report is to document how much of the contingency is utilized. A contract's change order rate is only meaningful when the work is completed. As such, this report's change order performance charts are based only on contracts closed since the Board began approving contingencies in 2008. The following chart shows how cumulative change order rates have changed for plant, collections, and all contracts since the contingency system was implemented.



## **PART 2 – ENGINEERING PROFESSIONAL SERVICES AGREEMENTS**

### **Professional Service Agreements**

OC San engages engineering consultants through Professional Service Agreements (PSAs), Professional Design Services Agreements (PDSAs), Professional Construction Services Agreements (PCSAs), and Master Professional Services Agreements (Master Agreements). PDSAs are used to obtain design engineering services, and PCSAs are a subsequent agreement with the design consultant to provide support services during construction. PSAs are used for planning studies and other consultant assignments. There are currently 42 Professional Service Agreements (19 individual firms) with total agreement amount of \$216,053,075. Table 7 in the appendix provides a detailed list of Professional Service Agreements.

### **Master Agreements**

Master Agreements are issued to a pool of pre-qualified consultants for smaller projects. On those smaller projects, OC San solicits task order proposals from interested firms and awards a task order to the most qualified consultant. There are currently five sets of Master Agreements.

- 2017 Master Agreements for On-Call Planning Studies (expired)
- 2018 Master Professional Design Services Agreements (expired)
- 2020 Master Agreements for On-Call Planning Studies
- 2021 Master Professional Design Services Agreements
- Agreement for Design Installation, Implementation and Maintenance of a Process Control System

The 2017 Master Agreements for On-Call Planning Studies and the 2018 Master Professional Design Services Agreements have expired, meaning no new task orders can be issued under them, but previously issued task orders remain active until completed. Task Orders are limited by OC San Ordinance No. OCSD-56 to \$300,000 per task order. Below is a summary of the various master agreements with active task orders. See Table 8 in the appendix for a detailed list of task orders.

<b>Task Order</b>	<b>Contracts</b>	<b>Total Contract Amount</b>
2017 Master Agreements for On-Call Planning Studies	1	\$274,888
2018 Master Professional Design Service Agreements	27	\$4,540,490
2020 Master Agreements for On-Call Planning Studies	10	\$1,608,801
2021 Master Professional Design Service Agreement	12	\$2,370,753

### **PART 3 – MASTER BUDGET PROJECTS**

The Board-adopted budget for Fiscal Years 2022-23 and 2023-24 includes master program budgets that allow staff to initiate, execute, and manage smaller projects that fit within the scope of a particular program more quickly. The projects chartered under these program budgets are referred to as sub-projects and are managed to the same standards as projects specifically listed in the adopted budget. A status table for each of these programs listing the sub-projects is attached in the appendix.

Master Program Title	Status Table	Number of Projects	Total Allocated Budget
Planning Studies Program	Table 9	23	\$15,870,252
Research Program	Table 10	3	\$8,431,025
Small Construction Projects Program	Table 11	33	\$67,360,500
Information Technology Capital Program	Table 12	11	\$3,860,952
Operations & Maintenance Capital Program	Table 13	4	\$9,100,000

#### **PART 4 – SUPPLEMENTAL ENGINEERING SERVICES CONTRACT**

OC San has been utilizing Jacobs Project Management Co. to provide supplemental engineering and support staff services since an initial contract was approved by the Board in 2016. This existing contract will end in June 2023.

In April of 2022, the OC San Board of Directors approved two Professional Service Agreements - one with AECOM Technical Services, Inc. and one with Jacobs Project Management Co. - to provide Supplemental Engineering Services for a three-year period commencing May 1, 2022, through April 30, 2025, with two one-year renewal options. The Board approved the agreements for an amount not to exceed \$29,700,000 per individual agreement.

The benefits of using a supplemental engineering services contract, as opposed to hiring full-time staff or limited-term employees, include rapid mobilization of highly skilled/technical staff, flexibility to change the mix of staff positions on an immediate and as-needed basis, the ability to reduce staff as workloads decrease, access to technical experts to support special tasks, and access to staff with wastewater project experience.

A status table for the supplemental engineering services contract summary for the 2016 Supplemental Engineering Services Contract with Jacobs Project Management Co. and the Supplemental Engineering Services labor summary for the same contract can be found below.

<b>2016 Supplemental Engineering Services Labor Summary (Jacobs)</b>				
	<b>Total Fees</b>		<b>Time</b>	
<b>Contract</b>	\$41,000,000		86 Months	
<b>Actuals to Date</b>	\$38,312,988	93.4%	83 Months	96.5%
<b>Remaining</b>	\$2,687,012	6.6%	3 Months	3.5%

<b>2016 Supplemental Engineering Services Labor Summary (Jacobs)</b>		
	<b>This Quarter</b>	<b>Inception to Date</b>
<b>Labor Hours</b>	8,989	268,250
<b>Full Time Equivalents</b>	19	20
<b>Labor Costs (no expenses)</b>	\$1,527,820	\$37,573,529
<b>Average Hourly Rate</b>	\$170	\$140

Status tables for the supplemental engineering services contract and labor summary for the 2022 Supplemental Engineering Services Contract with AECOM and Jacobs Project Management Co. are included below.

2022 Supplemental Engineering Services Contract Status (AECOM)				
	Total Fees		Time	
<b>Contract</b>	\$29,700,000		60 months	(1)
<b>Actuals to Date</b>	\$581,194	2.0%	11 Months	18%
<b>Remaining</b>	\$29,118,806	98.0%	49 months	82%

(1) Assuming two additional 1-year extensions

2022 Supplemental Engineering Services Labor Summary (AECOM)		
	This Quarter	Inception to Date
<b>Labor Hours</b>	1,201	3,438
<b>Full Time Equivalents</b>	2.6	2.0
<b>Labor Costs (no expenses)</b>	\$183,385	\$562,636
<b>Average Hourly Rate</b>	\$152.69	\$163.65

2022 Supplemental Engineering Services Contract Status (Jacobs)				
	Total Fees		Time	
<b>Contract</b>	\$29,700,000		60 Months	(1)
<b>Actuals to Date</b>	\$1,311,889	4.4%	11 Months	18%
<b>Remaining</b>	\$28,388,111	95.6%	49 Months	82%

(1) Assuming two additional 1-year extensions

2022 Supplemental Engineering Services Labor Summary (Jacobs)		
	This Quarter	Inception to Date
<b>Labor Hours</b>	4540	8543
<b>Full Time Equivalents</b>	9.5	6
<b>Labor Costs (no expenses)</b>	\$651,809	\$1,286,635
<b>Average Hourly Rate</b>	\$145	\$151

## PART 5 – PROGRAMMING PROFESSIONAL SERVICES CONTRACT

In April of 2022, the OC San Board of Directors approved two Professional Service Agreements - one with Enterprise Automation and one with Maverick Technologies - to provide Programming Professional Services for a three-year period commencing May 11, 2022, through May 10, 2025, with two one-year renewal options. The Board approved the agreements for an amount not to exceed \$4,900,000 per individual agreement.

The programming professional services will program, test, commission, maintain, upgrade, and configure programmable logic controllers, HMI graphics, databases, servers, and networks for select projects. The benefits of using a programming professional services contract, as opposed to hiring full-time staff or limited-term employees, include the ability to provide the needed short-term resources during the execution of Project No. J-120, Process Control Systems Upgrades, rapid mobilization of highly skilled technical resources, flexibility to change the mix of needed resources to match project requirements, and the ability to increase or reduce project resources as workloads change.

Status tables for the programming professional services contract and labor summary for the 2022 Programming Professional Services Contract with Enterprise Automation and Maverick Technologies are included below.

2022 Programming Professional Services Contract Status (Enterprise Automation)				
	Total Fees		Time	
<b>Contract</b>	\$4,900,000		60 months	(1)
<b>Actuals to Date</b>	\$530,312	11%	11 Months	18%
<b>Remaining</b>	\$4,369,688	89%	49 months	82%

(1) Assuming two additional 1-year extensions

2022 Programming Professional Services Labor Summary (Enterprise Automation)		
	This Quarter	Inception to Date
<b>Labor Hours</b>	947	2799
<b>Full Time Equivalents</b>	1.8	1.5
<b>Labor Costs (no expenses)</b>	\$186,225	\$530,312
<b>Average Hourly Rate</b>	\$197	\$189



<b>2022 Programming Professional Services Contract Status (Maverick Technologies)</b>				
	<b>Total Fees</b>		<b>Time</b>	
<b>Contract</b>	\$4,900,000		60 months	(1)
<b>Actuals to Date</b>	\$50,490	1%	11 Months	18%
<b>Remaining</b>	\$4,849,510	99%	49 months	82%

(1) Assuming two additional 1-year extensions

<b>2022 Programming Professional Services Labor Summary (Maverick Technologies)</b>		
	<b>This Quarter</b>	<b>Inception to Date</b>
<b>Labor Hours</b>	131	284
<b>Full Time Equivalents</b>	0.3	0.2
<b>Labor Costs (no expenses)</b>	\$22,670	\$50,490
<b>Average Hourly Rate</b>	\$173	\$178

## PART 6 – ON-CALL SERVICES AGREEMENTS

OC San uses three sets of on-call services agreements for coating inspection and corrosion testing; materials testing, inspection, and other geotechnical testing; and surveying. Services are typically requested by inspection supervisors as needs arise, and the work is generally spread among the available firms.

The table below lists the contract limits and funds expended to date for each of the agreements which became effective on March 23, 2022, and will expire on April 30, 2025. For each of these services, OC San typically uses a single firm for a particular construction contract.

Consultant	Contract Limit	Total Costs Incurred	Remaining
<b>Coating Inspection Services (PSA2022-001)</b>			
CSI Services, Inc.	\$300,000	\$8,535	\$291,466
Diversified Project Services Int'l (DPSI)	\$300,000	\$35,461	\$264,539
<b>Geotechnical Testing Services (PSA2022-003)</b>			
AESCO	\$400,000	\$113,184	\$286,816
Atlas Technical Consultants	\$400,000	\$106,592	\$293,408
Koury Engineering and testing, Inc.	\$400,000	\$104,091	\$295,909
MTGL, Inc	\$400,000		\$400,000
<b>Surveying Services (PSA2022-002)</b>			
D.Woolley & Associates	\$200,000		\$200,000
Michael Baker International, Inc.	\$200,000	\$1,726	\$198,275
Psomas	\$200,000		\$200,000
Stantec Consulting Services, Inc.	\$200,000	\$21,200	\$178,800

## **APPENDIX**

## Engineering Program Contract Performance Report

For the Period Ending March 31, 2023

**Table 1 - Board-Awarded Construction Contracts**

Project/Contract		Contractor	Award Date	Contract Amount				Contingency			
				Award	Change Orders	Current	% Spent	Original	Current	Used	Remaining
3-62	Westminster Blvd Force Main Replacement	Teichert Energy - Utilities Group, Inc.	12/18/2019	\$27,743,000	\$1,339,145	\$29,082,145	98.5%	10.0%	14.0%	4.8%	9.2%
3-64B	Los Alamitos Trunk Sewer Rehabilitation	Steve P. Rados, Inc.	05/26/2021	\$17,775,000	\$37,851	\$17,812,851	66.0%	10.0%	10.0%	0.2%	9.8%
7-66	Sunflower and Red Hill Interceptor Repairs	Charles King Company	07/28/2021	\$4,777,000	\$131,751	\$4,908,751	82.2%	10.0%	10.0%	2.8%	7.2%
FE18-13	Redhill Relief Sewer Relocation at State Route 55	SRK Engineering, Inc.	06/22/2022	\$2,213,000	\$0	\$2,213,000	0.0%	15.0%	15.0%	0.0%	15.0%
FE18-14	Plant Water Pipeline Replacement in Kinnison, Lindstrom, and Scott Tunnels at Plant No. 2	MMC, Inc.	12/16/2020	\$1,134,000	\$4,348	\$1,138,348	-4.2%	15.0%	15.0%	0.4%	14.6%
FE18-15	Plant Boiler System Relief at Plant No. 2	MMC, Inc.	04/28/2021	\$230,000	\$24,528	\$254,528	100.0%	15.0%	15.0%	10.7%	4.3%
FE19-01	Pump Station Portable Generator Connectors	Pacific Industrial Electric	09/29/2021	\$1,207,479	\$0	\$1,207,479	40.3%	10.0%	10.0%	0.0%	10.0%
FE19-03	Trickling Filter Sludge and Scum Pumps Replacement at Plant No. 1	Garney Pacific, Inc.	02/23/2022	\$778,000	\$18,317	\$796,317	67.9%	10.0%	10.0%	2.4%	7.6%
FE19-04	Sunflower Pump Replacement at Plant No. 1	GSE Construction Company, Inc.	10/27/2021	\$2,123,200	\$0	\$2,123,200	5.8%	10.0%	10.0%	0.0%	10.0%
FE19-06	EPSA Motor Cooling Improvements at Plant No. 2	MMC, Inc.	09/29/2021	\$854,000	\$21,474	\$875,474	52.3%	10.0%	10.0%	2.5%	7.5%

## Engineering Program Contract Performance Report

For the Period Ending March 31,2023

**Table 1 - Board-Awarded Construction Contracts**

Project/Contract		Contractor	Award Date	Contract Amount				Contingency			
				Award	Change Orders	Current	% Spent	Original	Current	Used	Remaining
FE19-08	Secondary Treatment VFD Replacements at Plant No. 2	ACS Engineering	03/23/2022	\$1,433,000	\$0	\$1,433,000	0.8%	10.0%	10.0%	0.0%	10.0%
FE19-12	Rebuild Shop Fume Extractor Installation at Plant No 1	RAN Enterprises, Inc	10/18/2022	\$217,000	\$0	\$217,000	92.5%	10.0%	10.0%	0.0%	10.0%
FE20-01	Wastehauler Station Safety and Security Improvements	Leed Electric	09/28/2022	\$1,689,788	\$0	\$1,689,788	14.1%	10.0%	10.0%	0.0%	10.0%
FE20-04	Cengen Cooling Water Pipe Replacement at Plant No. 2	Innovative Construction Solutions	12/22/2022	\$3,487,600	\$0	\$3,487,600	0.0%	10.0%	10.0%	0.0%	10.0%
FE20-06	Thickening and Dewatering Building Pipe Support Improvements at Plant No. 1	Garney Pacific, Inc.	02/23/2022	\$793,000	\$5,796	\$798,796	91.1%	10.0%	10.0%	0.7%	9.3%
FE20-07	Santa Ana Trunk Rehabilitation at Plant No. 1	Sancon Technologies Inc.	04/27/2022	\$395,082	\$5,497	\$400,579	100.0%	20.0%	20.0%	1.4%	18.6%
FE21-07	Liquid Oxygen Tank A Replacement at Plant No. 2	J.R. Filanc Construction Company, Inc.	01/18/2023	\$2,608,007	\$0	\$2,608,007	2.0%	0.0%	10.0%	0.0%	10.0%
FR1-0011	VFD Replacements at Plant No. 1	ACS Engineering	03/07/2023	\$1,214,888	\$0	\$1,214,888	0.0%	10.2%	10.2%	0.0%	10.2%
FR1-0016	Waste Sidestream Pump Station VFD replacements at Plant No.1	Leed Electric	03/23/2022	\$344,889	\$0	\$344,889	4.8%	15.0%	15.0%	0.0%	15.0%
FR2-0018	Activated Sludge Clarifier Repairs at Plant No. 2	Garney Pacific, Inc.	10/11/2022	\$5,091,686	\$0	\$5,091,686	13.3%	10.0%	10.0%	0.0%	10.0%

## Engineering Program Contract Performance Report

For the Period Ending March 31, 2023

**Table 1 - Board-Awarded Construction Contracts**

Project/Contract		Contractor	Award Date	Contract Amount				Contingency			
				Award	Change Orders	Current	% Spent	Original	Current	Used	Remaining
J-117B	Outfall Low Flow Pump Station	Shimmick Construction	12/19/2018	\$90,200,000	\$2,985,408	\$93,185,408	80.7%	8.0%	8.0%	3.3%	4.7%
J-120	Process Control Systems Upgrades	ABB, Inc.	09/15/2021	\$11,818,480	\$0	\$11,818,480	10.9%	10.0%	10.0%	0.0%	10.0%
J-135B	Engine and Generator Overhauls at Plant No. 1 and 2	Cooper Machinery Services	07/27/2022	\$29,361,029	\$917,783	\$30,278,812	28.0%	10.0%	15.6%	3.1%	12.4%
MP-307	Bushard Diversion Structure Repair	Abhe - Svoboda, Inc.	06/22/2022	\$1,762,545	\$0	\$1,762,545	0.0%	10.0%	10.0%	0.0%	10.0%
P1-105	Headworks Rehabilitation at Plant 1	Kiewit Infrastructure West Co.	03/24/2021	\$222,330,000	\$516,763	\$222,846,763	24.2%	4.0%	4.0%	0.2%	3.8%
P1-128A	Headquarters Complex at Plant No. 1	Swinerton Builders	05/26/2021	\$102,544,973	\$1,221,007	\$103,765,980	62.2%	5.0%	5.0%	1.2%	3.8%
P1-132	Uninterruptable Power Supply Improvements at Plant 1	Leed Electric	12/15/2022	\$5,765,789	\$0	\$5,765,789	\$0	10.0%	10.0%	0.0%	10.0%
P1-133	Primary Sedimentation Basins No. 6-31 Reliability Improvements at Plant No. 1	Shimmick Construction	02/23/2022	\$6,275,000	\$0	\$6,275,000	26.8%	10.0%	10.0%	0.0%	10.0%
P1-134	South Perimeter Security and Utility Improvements at Plant No.1	Tovey-Shultz Construction, Inc.	07/28/2021	\$4,396,779	\$260,520	\$4,657,299	95.6%	10.0%	10.0%	5.9%	4.1%

## Engineering Program Contract Performance Report

For the Period Ending March 31, 2023

**Table 1 - Board-Awarded Construction Contracts**

Project/Contract		Contractor	Award Date	Contract Amount				Contingency			
				Award	Change Orders	Current	% Spent	Original	Current	Used	Remaining
P2-122	Headworks Modifications at Plant No. 2 for GWRS Final Expansion	Shimmick Construction	01/22/2020	\$14,487,735	\$739,246	\$15,226,981	99.2%	10.0%	10.0%	5.1%	4.9%
P2-98A	A-Side Primary Clarifiers Replacement at Plant 2	PCL CONSTRUCTION INC.	05/26/2021	\$111,405,880	\$321,135	\$111,727,015	25.6%	6.0%	6.0%	0.3%	5.7%
RE21-01	Supercritical Water Oxidation Demonstration at Plant No. 1	Garney Pacific, Inc.	01/10/2023	\$1,172,000	\$0	\$1,172,000	16.6%	10.0%	10.0%	0.0%	10.0%
SC19-03	Return Activated Sludge Pump Station Elevator Rehabilitation at Plant No. 2	OTIS	12/16/2020	\$432,400	\$0	\$432,400	0.0%	20.0%	20.0%	0.0%	20.0%
			<b>Total</b>	<b>\$678,062,229</b>	<b>\$8,550,569</b>	<b>\$686,612,798</b>					

**Table 2 - GM Awarded Construction Contracts**

Project/Contract		Contractor	Award Date	Contract Amount			
				Award	Change Orders	Current	% Spent
FR2-0022	Digester O Structural Repairs at Plant No. 2	Jamison Engineering	03/14/2022	\$89,500	\$0	\$89,500	0.0%
FR2-0025	Digester O-T and Q-R Bridge Repair at Plant No. 2	O'Connell Engineering & Construction, Inc.	03/14/2022	\$115,450	\$38,000	\$153,450	81.4%
FRC-0009	Bitter Point Trunk Sewer Repair at Bitter Point Pump Station	Charles King Company	10/13/2022	\$275,000	\$0	\$275,000	0.0%
MP2-002	Ella Tunnel Walkway Replacement at Plant 2	O'Connell Engineering & Construction, Inc.	10/20/2022	\$49,450	\$0	\$49,450	0.0%
			<b>Total</b>	<b>\$529,400</b>	<b>\$38,000</b>	<b>\$567,400</b>	

**Table 3 - Operations Committee Awarded Construction Contracts**

Project/Contract		Contractor	Award Date	Contract Amount			
				Award	Change Orders	Current	% Spent
FE19-13	VFD Replacements at Seal Beach Pump Station	Energy Management Corporation	03/23/2022	\$138,650	\$0	\$138,650	100.0%
			<b>Total</b>	<b>\$138,650</b>	<b>\$0</b>	<b>\$138,650</b>	



**Table 4 - Closed Board-Awarded Construction Contracts**

Project/Contract		Contractor	Award Date	Closed Date	Contract Amount			Contingency		
				Total						
No Board-awarded construction contract closed this quarter										

**Table 5 - Closed GM-Awarded Construction Contracts**

Project/Contract		Contractor	Award Date	Closed Date	Original Award Amount	Change Orders	Final Contract Amount	Final Change Order Rate
				Total				
No GM-awarded construction contract closed this quarter								

**Table 6 - Closed Committee -Awarded Construction Contracts**

Project/Contract		Contractor	Award Date	Closed Date	Original Award Amount	Change Orders	Final Contract Amount	Final Change Order Rate
FE18-16	Truck Loading Basement Drain Modifications at Plant No. 1	MMC, Inc.	10/06/2021	03/14/2023	\$162,500	\$13,814	\$176,314	8.5%
FR1-0014	Laboratory Building HVAC Controls Replacement at Plant No. 1	Retrofit Service Company, Inc.	02/02/2022	11/17/2022	\$176,847	\$14,246	\$191,093	8.1%
				Total	\$339,347	\$28,060	\$367,407	

# Engineering Program Contract Performance Report

For the Period Ending March 31,2023

**Table 7 - Active Engineering Services Agreements**

Project/Contract		Consultant	Type	Award Date	Contract Amount				Contingency			
					Award	Amendments	Current	% Spent	Original	Current	Used	Remaining
1-23	Santa Ana Trunk Sewer Rehabilitation	Stantec Consulting Services, Inc.	PDSA	04/27/2022	\$3,880,000	\$0	\$3,880,000	26%	10.0%	10.0%	0.0%	10.0%
1-24	Greenville Trunk Improvements	Brown and Caldwell	PDSA	10/31/2022	\$4,730,000	\$0	\$4,730,000	1%	10.0%	10.0%	0.0%	10.0%
2-49	Taft Branch Improvements	Woodard & Curran, Inc.	PDSA	02/24/2021	\$2,200,000	\$55,000	\$2,255,000	62%	10.0%	10.0%	2.5%	7.5%
2-72B	Newhope-Placentia Trunk Replacement, Segment B	Lee & Ro, Inc.	PCSA	03/23/2016	\$3,253,946	\$0	\$3,253,946	72%	10.0%	10.0%	0.0%	10.0%
3-62	Westminster Blvd Force Main Replacement	Stantec Consulting Services, Inc.	PCSA	12/18/2019	\$1,183,000	\$0	\$1,183,000	42%	10.0%	10.0%	0.0%	10.0%
3-64	Rehabilitation of Western Regional Sewers	AECOM Technical Services, Inc.	PDSA	01/27/2016	\$17,639,250	\$195,850	\$17,835,100	63%	10.0%	10.0%	1.1%	8.9%
3-64B	Los Alamitos Trunk Sewer Rehabilitation	AECOM Technical Services, Inc.	PCSA	05/26/2021	\$610,000	\$0	\$610,000	47%	10.0%	10.0%	0.0%	10.0%
3-67	Seal Beach Pump Station Replacement	Lee & Ro, Inc.	PDSA	12/18/2019	\$5,947,850	\$744,435	\$6,692,285	92%	10.0%	12.6%	12.5%	0.1%
5-67	Bay Bridge Pump Station Replacement	Arcadis U.S., Inc.	PDSA	10/25/2017	\$7,137,000	\$1,779,825	\$8,916,825	62%	10.0%	35.0%	24.9%	10.1%
5-68	Newport Beach Pump Station Pressurization Improvements	Dudek	PDSA	05/27/2020	\$542,988	\$0	\$542,988	86%	10.0%	10.0%	0.0%	10.0%
6-20	Fairview Trunk Rehabilitation	Dudek	PDSA	07/27/2022	\$1,200,000	\$0	\$1,200,000	13%	10.0%	10.0%	0.0%	10.0%

## Engineering Program Contract Performance Report

For the Period Ending March 31,2023

**Table 7 - Active Engineering Services Agreements**

Project/Contract		Consultant	Type	Award Date	Contract Amount				Contingency			
					Award	Amendments	Current	% Spent	Original	Current	Used	Remaining
7-65	Gisler-Red Hill Interceptor and Baker Force Main Rehabilitation	CDM Smith Inc.	PDSA	09/23/2020	\$1,754,000	\$175,400	\$1,929,400	98%	10.0%	10.0%	10.0%	0.0%
7-66	Sunflower and Red Hill Interceptor Repairs	GHD, Inc.	PCSA	07/28/2021	\$166,000	\$0	\$166,000	42%	10.0%	10.0%	0.0%	10.0%
7-68	MacArthur Force Main Improvements	Michael Baker International, Inc.	PDSA	05/26/2021	\$500,000	\$0	\$500,000	94%	10.0%	10.0%	0.0%	10.0%
FR1-0007	Control Center Offices and Day Training Room Remodeling at Plant No. 1	AECOM Technical Services, Inc.	PSA	07/24/2017	\$48,000	\$33,351	\$81,351	11%	N/A	N/A	69.5%	N/A
J-117B	Outfall Low Flow Pump Station	SEL Engineering Services Inc.	PSA	11/23/2022	\$1,096,074	\$0	\$1,096,074	61%	10.0%	10.0%	0.0%	10.0%
J-117B	Outfall Low Flow Pump Station	Brown and Caldwell	PCSA	12/19/2018	\$8,563,913	\$692,120	\$9,256,033	62%	10.0%	10.0%	8.1%	1.9%
J-124	Digester Gas Facilities Replacement	Brown and Caldwell	PDSA	11/15/2017	\$11,770,000	\$1,177,000	\$12,947,000	97%	10.0%	10.0%	10.0%	0.0%
J-98	Electrical Power Distribution System Improvements	Schweitzer Engineering Laboratories, Inc	PSA	03/25/2020	\$1,296,878	\$0	\$1,296,878	26%	10.0%	10.0%	0.0%	10.0%
J-98	Electrical Power Distribution System Improvements	Brown and Caldwell	PDSA	02/26/2020	\$2,240,000	\$92,078	\$2,332,078	91%	10.0%	10.0%	4.1%	5.9%

## Engineering Program Contract Performance Report

For the Period Ending March 31, 2023

**Table 7 - Active Engineering Services Agreements**

Project/Contract		Consultant	Type	Award Date	Contract Amount				Contingency			
					Award	Amendments	Current	% Spent	Original	Current	Used	Remaining
P1-105	Headworks Rehabilitation at Plant 1	Carollo Engineers, Inc	PCSA	03/02/2021	\$16,500,000	\$0	\$16,500,000	28%	10.0%	10.0%	0.0%	10.0%
P1-126	Primary Sedimentation Basins No. 3-5 Replacement at Plant No. 1	Black & Veatch	PDSA	04/27/2022	\$14,163,000	\$0	\$14,163,000	4%	10.0%	10.0%	0.0%	10.0%
P1-128A	Headquarters Complex at Plant No. 1	HDR Engineering, Inc.	PCSA	05/26/2021	\$4,900,000	\$452,997	\$5,352,997	60%	10.0%	10.0%	9.2%	0.8%
P1-128A	Headquarters Complex at Plant No. 1	AECOM Technical Services, Inc.	PSA	04/28/2021	\$6,750,000	\$0	\$6,750,000	55%	10.0%	10.0%	0.0%	10.0%
P1-132	Uninterruptable Power Supply Improvements at Plant 1	Tetra Tech, Inc.	PDSA	10/23/2019	\$784,630	\$62,755	\$847,385	96%	10.0%	10.0%	8.0%	2.0%
P1-133	Primary Sedimentation Basins No. 6-31 Reliability Improvements at Plant No. 1	Carollo Engineers, Inc	PCSA	03/23/2022	\$530,000	\$0	\$530,000	19%	10.0%	10.0%	0.0%	10.0%
P1-134	South Perimeter Security and Utility Improvements at Plant No.1	HDR Engineering, Inc.	PCSA	07/28/2021	\$235,000	\$0	\$235,000	40%	10.0%	10.0%	0.0%	10.0%
P1-137	Supports Buildings Seismic Improvements at Plant No. 1	Simpson, Gumpertz, and Heger	PDSA	07/27/2022	\$1,900,000	\$0	\$1,900,000	15%	0.0%	10.0%	0.0%	10.0%

## Engineering Program Contract Performance Report

For the Period Ending March 31, 2023

**Table 7 - Active Engineering Services Agreements**

Project/Contract		Consultant	Type	Award Date	Contract Amount				Contingency			
					Award	Amendments	Current	% Spent	Original	Current	Used	Remaining
P1-140	Activated Sludge-1 and Secondary Clarifier Rehabilitation	HDR Engineering, Inc.	PDSA	03/06/2023	\$18,462,443	\$0	\$18,462,443	1%	10.0%	10.0%	0.0%	10.0%
P2-122	Headworks Modifications at Plant No. 2 for GWRS Final Expansion	CDM Smith Inc.	PCSA	01/15/2020	\$2,200,000	\$0	\$2,200,000	79%	10.0%	10.0%	0.0%	10.0%
P2-123	Return Activated Sludge Piping Replacement at Plant 2	Spec Services, Inc.	PCSA	09/25/2019	\$252,329	\$25,233	\$277,562	100%	10.0%	10.0%	10.0%	0.0%
P2-124	Interim Food Waste Receiving Facility	Kennedy/Jenks Consultants, Inc.	PDSA	09/05/2018	\$695,000	\$31,168	\$726,168	100%	10.0%	10.0%	4.5%	5.5%
P2-128	TPAD Digester Facility at Plant No.2	Brown and Caldwell	PDSA	07/22/2020	\$39,300,000	\$1,467,788	\$40,767,788	41%	10.0%	10.0%	3.7%	6.3%
P2-137	Digesters Rehabilitation at Plant No. 2	CDM Smith Inc.	PDSA	03/23/2022	\$2,650,000	\$0	\$2,650,000	28%	10.0%	10.0%	0.0%	10.0%
P2-98A	A-Side Primary Clarifiers Replacement at Plant 2	Black & Veatch	PCSA	05/26/2021	\$8,400,000	\$0	\$8,400,000	26%	10.0%	10.0%	0.0%	10.0%
PS18-09	Ocean Outfall Condition Assessment and Scoping Study	Carollo Engineers, Inc	PSA	03/25/2020	\$2,744,000	\$2,009,067	\$4,753,067	76%	10.0%	80.0%	73.2%	6.8%
PS20-02	Collection System Flow Level Monitoring Study	Woodard & Curran, Inc.	PSA	07/28/2021	\$616,562	\$0	\$616,562	32%	0.0%	10.0%	0.0%	10.0%

## Engineering Program Contract Performance Report

For the Period Ending March 31,2023

**Table 7 - Active Engineering Services Agreements**

Project/Contract		Consultant	Type	Award Date	Contract Amount				Contingency			
					Award	Amendments	Current	% Spent	Original	Current	Used	Remaining
PS20-05	Cen Gen Pressure Vessel Integrity Assessment at Plant Nos. 1and 2	Pond & Company	PSA	02/23/2022	\$235,133	\$0	\$235,133	25%	10.0%	10.0%	0.0%	10.0%
PS21-01	Exterior Lighting Study at Plant Nos. 1 and 2	IDS Group, Inc.	PSA	10/17/2022	\$151,660	\$0	\$151,660	37%	10.0%	10.0%	0.0%	10.0%
PS21-04	Energy and Digester Gas Master Plan	Brown and Caldwell	PSA	06/22/2022	\$1,438,036	\$0	\$1,438,036	17%	10.0%	10.0%	0.0%	10.0%
RE21-01	Supercritical Water Oxidation Demonstration at Plant No. 1	374Water Systems, Inc.	PSA	01/09/2023	\$5,139,000	\$0	\$5,139,000	40%	0.0%	10.0%	0.0%	10.0%
				<b>Total</b>	<b>\$207,059,638</b>	<b>\$8,994,067</b>	<b>\$216,053,705</b>					

**Table 8 - Active Task Orders by Master Agreement**

Agreement/Project			Consultant	Award Date	Original Task Order Value	Amendments	Current Task Order Value	% Spent
<b>2017 Master Agreements for On-Call Planning Studies</b>								
PS19-03	Laboratory Rehabilitation Feasibility Study		HDR Engineering, Inc.	10/20/2020	\$274,888	\$0	\$274,888	76%
<b>2018 Master Professional Design Service Agreements</b>								
FE18-06	CenGen Instrument Air Compressors Replacement at Plant No. 1		IDS Group, Inc.	04/27/2020	\$89,876	\$0	\$89,876	69%
FE18-13	Redhill Relief Sewer Relocation at State Route 55		GHD, Inc.	03/27/2020	\$168,612	\$105,331	\$273,943	84%
FE18-14	Plant Water Pipeline Replacement in Kinnison, Lindstrom, and Scott Tunnels at Plant No. 2		Dudek	11/06/2019	\$108,308	\$0	\$108,308	96%
FE18-15	Plant Boiler System Relief at Plant No. 2		IDS Group, Inc.	10/22/2019	\$23,299	\$0	\$23,299	55%
FE18-16	Truck Loading Basement Drain Modifications at Plant No. 1		GHD, Inc.	12/04/2019	\$70,130	\$18,365	\$88,495	93%
FE18-19	12KV Distribution B and East RAS Pump Station Roofing Replacement		HDR Engineering, Inc.	09/16/2019	\$74,771	\$8,672	\$83,443	87%
FE18-20	DAFT Air Compressors Replacement at Plant No. 1		HDR Engineering, Inc.	09/02/2020	\$243,954	\$11,982	\$255,936	82%
FE19-02	Cengen Plant Water Pipe Replacement at Plant No. 1		AECOM Technical Services, Inc.	07/08/2020	\$156,498	\$143,378	\$299,876	73%
FE19-03	Trickling Filter Sludge and Scum Pumps Replacement at Plant No. 1		Black & Veatch	09/02/2020	\$244,728	\$55,272	\$300,000	97%
FE19-06	EPSA Motor Cooling Improvements at Plant No. 2		IDS Group, Inc.	05/06/2020	\$88,206	\$0	\$88,206	96%
FE19-10	Digesters C, D, F, G and I Gas Balance Lines Replacement at Plant No. 2		GHD, Inc.	02/03/2021	\$25,000	\$58,000	\$83,000	71%
FE19-11	Primary Clarifiers Nos. 6-31 Lighting and Alarm Improvements at Plant No. 1		AECOM Technical Services, Inc.	09/21/2020	\$226,685	\$6,137	\$232,822	74%
FE19-13	VFD Replacements at Seal Beach Pump Station		AECOM Technical Services, Inc.	03/24/2021	\$78,033	\$0	\$78,033	60%

**Table 8 - Active Task Orders by Master Agreement**

Agreement/Project			Consultant	Award Date	Original Task Order Value	Amendments	Current Task Order Value	% Spent
	FE20-01	Wastehauler Station Safety and Security Improvements	AECOM Technical Services, Inc.	03/16/2021	\$161,012	\$16,247	\$177,259	80%
	FE20-02	Digester C, D, F, and G Mechanical Rehabilitation at Plant No. 2	HDR Engineering, Inc.	03/02/2021	\$188,212	\$22,396	\$210,608	89%
	FE20-03	Return Activated Sludge Discharge Piping Replacement at Activated Sludge Plant No. 1	GHD, Inc.	06/30/2021	\$249,000	\$0	\$249,000	82%
	FE20-04	Cengen Cooling Water Pipe Replacement at Plant No. 2	Dudek	06/01/2021	\$240,000	\$60,000	\$300,000	91%
	FE20-05	Plant Water Piping Replacement at Secondary Clarifiers 1-26 at Plant No. 1	IDS Group, Inc.	06/22/2021	\$186,626	\$0	\$186,626	75%
	FE20-07	Santa Ana Trunk Rehabilitation at Plant No. 1	GHD, Inc.	05/04/2021	\$100,625	\$0	\$100,625	91%
	FE20-08	Olive Sub-Trunk Siphon Rehabilitation at Santa Ana River	Dudek	06/21/2021	\$240,000	\$0	\$240,000	86%
	FE20-09	CenGen Smoke Detection Improvements at Plant No. 1 and No. 2	IDS Group, Inc.	06/30/2021	\$63,275	\$0	\$63,275	80%
	FR1-0011	VFD Replacements at Plant No. 1	Black & Veatch	04/08/2021	\$283,000	\$17,000	\$300,000	83%
	FR2-0013	P2 Trickling Filter Sludge Pump Room Exhaust Fan Relocation at Plant No.2	AECOM Technical Services, Inc.	11/06/2019	\$75,120	\$0	\$75,120	100%
	FR2-0022	Digester O Structural Repairs at Plant No. 2	AECOM Technical Services, Inc.	04/12/2021	\$46,115	\$0	\$46,115	98%
	FRC-0009	Bitter Point Trunk Sewer Repair at Bitter Point Pump Station	GHD, Inc.	06/17/2021	\$159,451	\$0	\$159,451	78%
	J-127	Natural Gas Pipelines Replacement at Plant Nos. 1 and 2	Black & Veatch	01/21/2019	\$271,964	\$28,036	\$300,000	100%
	P1-135	Digester Ferric Chloride Piping Replacement at Plant No. 1	Dudek	02/19/2020	\$127,174	\$0	\$127,174	100%
2020 Master Agreements for On-Call Planning Studies								
	PS19-03	Laboratory Rehabilitation Feasibility Study	Hazen and Sawyer	01/17/2023	\$23,825	\$0	\$23,825	0%



**Table 8 - Active Task Orders by Master Agreement**

Agreement/Project			Consultant	Award Date	Original Task Order Value	Amendments	Current Task Order Value	% Spent
PS20-01	Collections Yard Relocation Feasibility Study		AECOM Technical Services, Inc.	09/09/2021	\$147,181	\$0	\$147,181	100%
PS20-03	Truck Loading Bay Odor Control Improvements Study at Plant No. 2		Hazen and Sawyer	08/03/2021	\$226,021	\$0	\$226,021	100%
PS20-04	Power Generation Overhaul Feasibility Study		Brown and Caldwell	04/26/2021	\$122,748	\$101,518	\$224,266	90%
PS20-07	College Pump Station Wet Well Condition Assessment Study		HDR Engineering, Inc.	01/18/2022	\$182,297	\$0	\$182,297	70%
PS20-09	Thickening & Dewatering Plant Water Study at Plant No. 1		HDR Engineering, Inc.	04/21/2022	\$219,670	\$0	\$219,670	42%
PS21-03	Process Model for Denitrification Alternatives at Activated Sludge 1		HDR Engineering, Inc.	01/18/2022	\$25,000	\$0	\$25,000	100%
PS21-08	Pure Oxygen Activated Sludge Operations Study at Plant No. 2		Hazen and Sawyer	09/22/2022	\$241,791	\$0	\$241,791	74%
PS22-03	CEQA/MMRP Measures Review		HDR Engineering, Inc.	11/28/2022	\$24,963	\$0	\$24,963	52%
RE20-02	Chemical Resilience Study at Plant No.1 and 2		Hazen and Sawyer	06/02/2021	\$278,784	\$15,003	\$293,787	100%
<b>2021 Master Professional Design Service Agreements</b>								
FE21-05	Warehouse Stations and Demolition at Plant No. 2		ProjectLine Technical Services, Inc.	04/26/2022	\$228,328	\$42,953	\$271,281	100%
FE21-08	Newhope-Placentia Sewer Manhole Replacements		GHD, Inc.	02/28/2023	\$235,820	\$0	\$235,820	0%
FE22-01	Platform Modifications for Process Areas at Plant No. 1 and No. 2		ProjectLine Technical Services, Inc.	03/14/2023	\$159,296	\$0	\$159,296	0%
FR1-0017	Trickling Filter Valve Replacement at Plant No. 1		Dudek	08/16/2022	\$101,108	\$0	\$101,108	50%
FR1-0018	Dewatering Centrifuge Diverter Gate Improvements at Plant No. 1		Dudek	08/16/2022	\$140,000	\$0	\$140,000	25%
FR2-0023	Activated Sludge Clarifier Entry Improvements at Plant No. 2		AECOM Technical Services, Inc.	01/13/2022	\$120,030	\$79,828	\$199,858	49%

**Table 8 - Active Task Orders by Master Agreement**

Agreement/Project			Consultant	Award Date	Original Task Order Value	Amendments	Current Task Order Value	% Spent
FR2-0027	Heavy Mechanics Group Office Space Upgrade at Plant No. 2		ProjectLine Technical Services. Inc.	09/13/2022	\$126,153	\$0	\$126,153	32%
FRC-0010	Warner Avenue Vault Cover Improvements		Kleinfelder, Inc.	07/01/2021	\$205,000	\$0	\$205,000	88%
FRC-0014	Magnolia Sewer Manhole Abandonment at Interstate-5		Brown and Caldwell	03/15/2023	\$195,055	\$0	\$195,055	0%
FRJ-0003	Interplant Gas Line Blow Off Vault Repairs		Dudek	09/08/2022	\$165,000	\$0	\$165,000	27%
P2-127	Collections Yard Relocation and Warehouse Demolition at Plant No. 2		ProjectLine Technical Services. Inc.	08/02/2022	\$188,898	\$83,284	\$272,182	67%
SC19-06	EPSA Standby Power Generator Control Upgrades at Plant No. 2		Spec Services, Inc.	11/03/2021	\$241,153	\$58,847	\$300,000	38%
				<b>Total</b>	<b>\$7,862,683</b>	<b>\$932,249</b>	<b>\$8,794,932</b>	

**Table 9 - Planning Studies Status Report**

Project Number	Project Name	Status	Allocated Budget
PS17-03	Active Fault Location Study at Plant No. 2	Active	\$973,007
PS18-06	Go/No-Go Lights and Signage	Active	\$495,000
PS18-09	Ocean Outfall Condition Assessment and Scoping Study	Active	\$5,302,717
PS19-03	Laboratory Rehabilitation Feasibility Study	Active	\$450,000
PS20-01	Collections Yard Relocation Feasibility Study	Active	\$279,867
PS20-02	Collection System Flow Level Monitoring Study	Active	\$743,218
PS20-03	Truck Loading Bay Odor Control Improvements Study at Plant No. 2	Active	\$319,189
PS20-04	Power Generation Overhaul Feasibility Study	Active	\$320,000
PS20-05	Cen Gen Pressure Vessel Integrity Assessment at Plant Nos. 1 and 2	Active	\$269,934
PS20-07	College Pump Station Wet Well Condition Assessment Study	Active	\$365,000
PS20-08	Euclid Trunk Sewer Hydraulic Modeling and Odor Control Analyses	Active	\$500,000
PS20-09	Thickening & Dewatering Plant Water Study at Plant No. 1	Active	\$400,000
PS21-01	Exterior Lighting Study at Plant Nos. 1 and 2	Active	\$345,533
PS21-02	Public Announcement and Fire System at Plant Nos. 1 and 2	Active	\$500,000
PS21-03	Process Model for Denitrification Alternatives at Activated Sludge 1	Active	\$36,787
PS21-04	Energy and Digester Gas Master Plan	Active	\$1,785,000
PS21-05	CAD Design Manual Update for 3D Design	Active	\$758,000
PS21-06	Urban Runoff Optimization Study	Active	\$1,000,000
PS21-07	Process Simulation Model Development for Cen Gen Facilities	Active	\$121,000
PS21-08	Pure Oxygen Activated Sludge Operations Study at Plant No. 2	Active	\$360,000
PS21-10	Sidestream Nitrogen Management	Active	\$211,000
PS22-02	Onsite Oxygen Generation Feasibility Study at Plant No. 2	Active	\$295,000
PS22-03	CEQA/MMRP Measures Review	Active	\$40,000
<b>Grand Total</b>			<b>\$15,870,252</b>
Number of Chartered Projects			23
Board Approved Program Budget			\$28,652,000
Remaining Unallocated Budget			\$12,781,748

**Table 10 - Research Program Status Report**

<b>Project Number</b>	<b>Project Name</b>	<b>Status</b>	<b>Allocated Budget</b>
RE20-02	Chemical Resilience Study at Plant No.1 and 2	Active	\$329,996
RE20-06	Co-Thickened Sludge Pump Trial at Plant No. 1	Active	\$160,000
RE21-01	Supercritical Water Oxidation Demonstration at Plant No. 1	Active	\$7,941,029
<b>Grand Total</b>			<b>\$8,431,025</b>
Number of Chartered Projects			3
Board Approved Program Budget			\$10,000,000
Remaining Unallocated Budget			\$1,568,975

**Table 11 - Small Construction Projects Program Status Report**

Project Number	Project Name	Status	Allocated Budget
FE18-06	CenGen Instrument Air Compressors Replacement at Plant No. 1	Active	\$1,150,000
FE18-13	Redhill Relief Sewer Relocation at State Route 55	Active	\$3,550,000
FE18-14	Plant Water Pipeline Replacement in Kinnison, Lindstrom, and Scott Tunnels at Plant No. 2	Active	\$1,895,000
FE18-15	Plant Boiler System Relief at Plant No. 2	Active	\$560,000
FE18-16	Truck Loading Basement Drain Modifications at Plant No. 1	Active	\$592,000
FE18-20	DAFT Air Compressors Replacement at Plant No. 1	Active	\$1,360,000
FE19-01	Pump Station Portable Generator Connectors	Active	\$2,570,000
FE19-02	Cengen Plant Water Pipe Replacement at Plant No. 1	Active	\$4,165,000
FE19-03	Trickling Filter Sludge and Scum Pumps Replacement at Plant No. 1	Active	\$3,200,000
FE19-04	Sunflower Pump Replacement at Plant No. 1	Active	\$4,300,000
FE19-06	EPSA Motor Cooling Improvements at Plant No. 2	Active	\$1,475,000
FE19-08	Secondary Treatment VFD Replacements at Plant No. 2	Active	\$2,900,000
FE19-10	Digesters C, D, F, G and I Gas Balance Lines Replacement at Plant No. 2	Active	\$1,200,000
FE19-11	Primary Clarifiers Nos. 6-31 Lighting and Alarm Improvements at Plant No. 1	Active	\$1,250,000
FE19-12	Rebuild Shop Fume Extractor Installation at Plant No 1	Active	\$560,000
FE19-13	VFD Replacements at Seal Beach Pump Station	Active	\$520,000
FE20-01	Wastehauler Station Safety and Security Improvements	Active	\$2,671,500
FE20-02	Digester C, D, F, and G Mechanical Rehabilitation at Plant No. 2	Active	\$3,950,000
FE20-03	Return Activated Sludge Discharge Piping Replacement at Activated Sludge Plant No. 1	Active	\$6,840,000
FE20-04	Cengen Cooling Water Pipe Replacement at Plant No. 2	Active	\$5,180,000
FE20-05	Plant Water Piping Replacement at Secondary Clarifiers 1-26 at Plant No. 1	Active	\$1,545,000
FE20-06	Thickening and Dewatering Building Pipe Support Improvements at Plant No. 1	Active	\$1,500,000
FE20-07	Santa Ana Trunk Rehabilitation at Plant No. 1	Active	\$765,000
FE20-08	Olive Sub-Trunk Siphon Rehabilitation at Santa Ana River	Active	\$2,800,000
FE20-09	CenGen Smoke Detection Improvements at Plant No. 1 and No. 2	Active	\$950,000
FE21-01	Plasma Cutting Fume Extractor installation at Plant No. 1 Rebuild Shop	Active	\$277,000
FE21-02	Lighting Improvements Boiler and Sludge Dewatering Areas at Plant No. 1	Active	\$320,000
FE21-04	Thickening and Dewatering Facility Handrail Installation at Plant No. 1	Active	\$230,000
FE21-05	Warehouse Stations and Demolition at Plant No. 2	Active	\$2,200,000
FE21-06	Chemical Dosing Station Installation at Westside Pump Station	Active	\$560,000

**Table 11 - Small Construction Projects Program Status Report**

<b>Project Number</b>	<b>Project Name</b>	<b>Status</b>	<b>Allocated Budget</b>
FE21-07	Liquid Oxygen Tank A Replacement at Plant No. 2	Active	\$3,800,000
FE21-08	Newhope-Placentia Sewer Manhole Replacements	Active	\$1,225,000
FE22-01	Platform Modifications for Process Areas at Plant No. 1 and No. 2	Active	\$1,300,000
<b>Grand Total</b>			<b>\$67,360,500</b>
Number of Chartered Projects			33
Board Approved Program Budget			\$90,000,000
Remaining Unallocated Budget			\$22,639,500

**Table 12 - Information Technology Capital Program Status Report**

<b>Project Number</b>	<b>Project Name</b>	<b>Status</b>	<b>Allocated Budget</b>
IT19-01	IT Safety VPP Systems (IT19-01)	Active	\$210,000
IT19-05	IT P1 & P2 Data Refresh (IT19-05)	Active	\$1,200,000
IT20-05	Client Management Modernization (ICE-69_IT20-05) 6520005	Active	\$99,000
IT20-06	Nintex Workflow Cloud Implementation (ICE-75_IT20-06) 6520006	Active	\$350,000
IT20-08	Field Computer for Nerissa and Interface with LIMS(ICE-68_IT20-07) 6520008	Active	\$121,000
IT20-10	Digitize Quality Assurance Tracking Processes/TNI/ELAP Standards (ICE-76_IT20-10) 6520010	Active	\$145,700
IT21-01	Access Network Equipment Obsolescence Replacement (ICE-79_IT21-01) 6521001	Active	\$1,249,500
IT21-04	Databridge Scale Management Software (ICE - 84_IT21-04)	Active	\$42,752
IT21-05	JD Edwards Server Migration and Upgrade (ICE - 86_IT21-05) 6521005	Active	\$88,000
IT22-01	Fortigate Firewall Replacement (ICE - 92_IT22-01) 6522001	Active	\$275,000
IT22-02	Two Routers and Two Switches for Dual ISPs (ICE - 94_IT22-02) 6522002	Active	\$80,000
<b>Grand Total</b>			<b>\$3,860,952</b>
Number of Chartered Projects			11
Board Approved Program Budget			\$10,000,000
Remaining Unallocated Budget			\$6,139,048

**Table 13 - Operations & Maintenance Capital Program Status Report**

Project Number	Project Name	Status	Allocated Budget
SC19-03	Return Activated Sludge Pump Station Elevator Rehabilitation at Plant No. 2	Active	\$890,000
SC19-06	EPSA Standby Power Generator Control Upgrades at Plant No. 2	Active	\$3,450,000
SC20-02	Ocean Outfall Booster Station Elevator Rehabilitation	Active	\$410,000
SC22-01	EPSA Electrical Building and Distribution Center H HVAC System Replacement at Plant No. 2	Active	\$4,350,000
<b>Grand Total</b>			<b>\$9,100,000</b>
Number of Chartered Projects			4
Board Approved Program Budget			\$15,622,000
Remaining Unallocated Budget			\$6,522,000