

DATE: August 30, 2022

TO: Orange County Sanitation District
Board of Directors

FROM: James D. Herberg, General Manager
Through: Kathy Millea, Director of Engineering

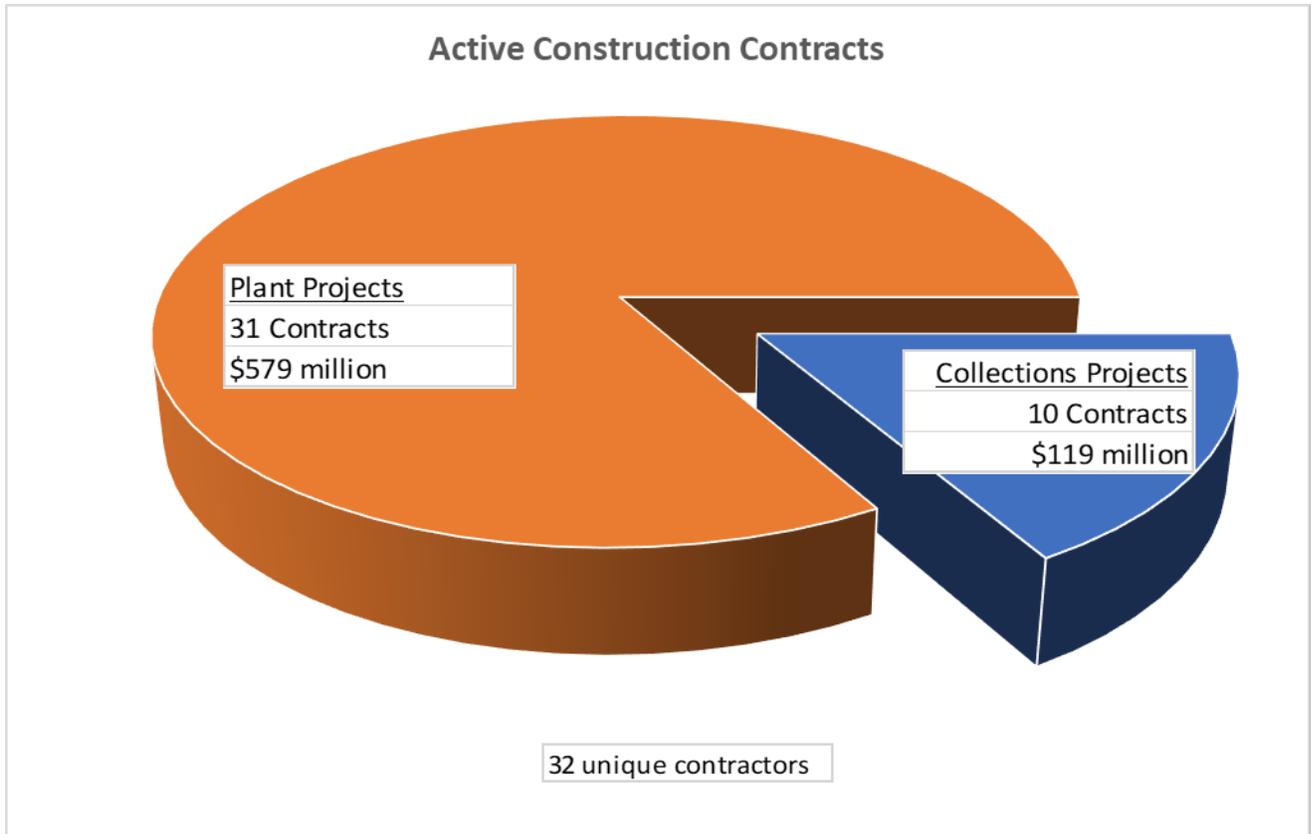
This report summarizes the status, activities, and performance of construction contracts and consultant agreements. This report also identifies the names and status of projects being performed under master budgets for planning studies, research, small construction projects, Operations & Maintenance capital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

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PART 1 - CONSTRUCTION CONTRACTS

Table 1 lists the Board-awarded construction contracts active as of June 30, 2022, 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. The graph below shows the number and total value of projects broken down by plant and collections.



One Board-awarded construction contract was closed in this quarter, as listed in Table 4. No construction contracts awarded by the General Manager or the Operations Committee were closed in this quarter, as shown in Tables 5 and 6.

**Engineering Program Contract Performance Report
for Quarter Ending 6/30/2022
Table 1 - Active Board-Awarded Construction Contracts**

Project/Contract		Contractor	Award Date	Contract Amount				Contingency			
				Award	Change Orders	Current	% Spent	Original	Current	Used	Remaining
2-72B	Newhope-Placentia Trunk Replacement, Segment B	OHL USA	05/23/2018	\$58,242,000	\$5,604,884	\$63,846,884	100.0%	6.5%	12.0%	9.6%	2.4%
3-62	Westminster Blvd Force Main Replacement	Teichert Energy - Utilities Group, Inc.	12/18/2019	\$27,743,000	\$971,036	\$28,714,036	82.5%	10.0%	10.0%	3.5%	6.5%
3-64B	Los Alamitos Trunk Sewer Rehabilitation	Steve P. Rados, Inc.	05/26/2021	\$17,775,000	\$0	\$17,775,000	29.0%	10.0%	10.0%	0.0%	10.0%
7-66	Sunflower and Red Hill Interceptor Repairs	Charles King Company	07/28/2021	\$4,777,000	\$841	\$4,777,841	24.3%	10.0%	10.0%	0.0%	10.0%
FE10-21	Area 02 Craig Regional Park Manhole Improvements	Deark E&C, Inc.	07/28/2021	\$427,400	(\$4,037)	\$423,363	96.9%	10.0%	10.0%	-0.9%	10.9%
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	\$0	\$1,134,000	0.0%	15.0%	15.0%	0.0%	15.0%
FE18-15	Plant Boiler System Relief at Plant No. 2	MMC, Inc.	04/28/2021	\$230,000	\$0	\$230,000	0.0%	15.0%	15.0%	0.0%	15.0%
FE19-01	Pump Station Portable Generator Connectors	Pacific Industrial Electric	09/29/2021	\$1,207,479	\$0	\$1,207,479	1.2%	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	\$0	\$778,000	0.0%	10.0%	10.0%	0.0%	10.0%
FE19-04	Sunflower Pump Replacement at Plant No. 1	GSE Construction Company, Inc.	10/27/2021	\$2,123,200	\$0	\$2,123,200	2.9%	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	\$0	\$854,000	0.0%	10.0%	10.0%	0.0%	10.0%
FE19-08	Secondary Treatment VFD Replacements at Plant No. 2	ACS Engineering	03/23/2022	\$1,433,000	\$0	\$1,433,000	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	\$0	\$793,000	6.5%	10.0%	10.0%	0.0%	10.0%
FE20-07	Santa Ana Trunk Rehabilitation at Plant No. 1	Sancon Technologies Inc.	04/27/2022	\$395,082	\$0	\$395,082	0.0%	20.0%	20.0%	0.0%	20.0%
FR1-0007	Control Center Offices and Day Training Room Remodeling at Plant No. 1	Thomas Solar Energy	05/26/2021	\$256,790	\$0	\$256,790	17.9%	10.0%	10.0%	0.0%	10.0%
FR1-0012	Building B Floor Replacement, Jib Crane, and Forklift Pad	Vicon Enterprise	06/22/2022	\$220,000	\$0	\$220,000	0.0%	10.0%	10.0%	0.0%	10.0%

**Engineering Program Contract Performance Report
for Quarter Ending 6/30/2022
Table 1 - Active Board-Awarded Construction Contracts**

Project/Contract		Contractor	Award Date	Contract Amount				Contingency			
				Award	Change Orders	Current	% Spent	Original	Current	Used	Remaining
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%
FRC-0002	Bay Bridge Pump Station Valve Replacement	Innovative Construction Solutions	11/18/2020	\$598,000	\$250,904	\$848,904	100.0%	55.0%	55.0%	42.0%	13.0%
J-117B	Outfall Low Flow Pump Station	Shimmick Construction	12/19/2018	\$90,200,000	\$1,326,903	\$91,526,903	73.9%	8.0%	8.0%	1.5%	6.5%
J-127	Natural Gas Pipelines Replacement at Plant Nos. 1 and 2	Innovative Construction Solutions	07/22/2020	\$745,500	\$5,784	\$751,284	99.4%	10.0%	10.0%	0.8%	9.2%
J-135A	Central Generation Engine Overhaul at Plant No. 1	Cooper Machinery Services	03/24/2021	\$3,705,932	\$318,840	\$4,024,772	96.7%	20.0%	20.0%	8.6%	11.4%
MP-305	Cengen Supply Air Fan Support Replacement at Plant No. 2	J.R. Filanc Construction Company, Inc.	12/16/2020	\$297,000	\$40,077	\$337,077	100.0%	15.0%	15.0%	13.5%	1.5%
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	\$267,120	\$222,597,120	15.1%	4.0%	4.0%	0.1%	3.9%
P1-128A	Headquarters Complex at Plant No. 1	Swinerton Builders	05/26/2021	\$102,544,973	\$579,344	\$103,124,317	29.4%	5.0%	5.0%	0.6%	4.4%
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	2.4%	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	\$116,485	\$4,513,264	58.1%	10.0%	10.0%	2.6%	7.4%
P1-135	Digester Ferric Chloride Piping Replacement at Plant No. 1	PPM Contracting	02/24/2021	\$515,000	\$0	\$515,000	82.7%	10.0%	10.0%	0.0%	10.0%
P2-122	Headworks Modifications at Plant No. 2 for GWRS Final Expansion	Shimmick Construction	01/22/2020	\$14,487,735	\$581,590	\$15,069,325	86.3%	10.0%	10.0%	4.0%	6.0%
P2-123	Return Activated Sludge Piping Replacement at Plant 2	Shimmick Construction	09/25/2019	\$6,042,110	\$228,873	\$6,270,983	97.2%	10.0%	10.0%	3.8%	6.2%
P2-98A	A-Side Primary Clarifiers Replacement at Plant 2	PCL CONSTRUCTION INC.	05/26/2021	\$111,405,880	\$231,273	\$111,637,153	16.8%	6.0%	6.0%	0.2%	5.8%

**Engineering Program Contract Performance Report
for Quarter Ending 6/30/2022**

Table 1 - Active Board-Awarded Construction Contracts

Project/Contract		Contractor	Award Date	Contract Amount				Contingency			
				Award	Change Orders	Current	% Spent	Original	Current	Used	Remaining
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%
			Total	\$686,685,695	\$10,519,917	\$697,205,611					

**Engineering Program Contract Performance Report
for Quarter Ending 6/30/2022**

Table 2 - Active GM Awarded Construction Contracts

Project/Contract		Contractor	Award Date	Contract Amount			
				Award	Change Orders	Current	% Spent
FE21-02	Lighting Improvements Boiler and Sludge Dewatering Areas at Plant No. 1	Leed Electric	05/03/2022	\$81,897	\$0	\$81,897	4.8%
FR1-0008	Trickling Filter 480 Volt Cable Replacement at Plant No. 1	Baker Electric	12/15/2021	\$251,586	\$15,288	\$266,874	100.0%
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	\$0	\$115,450	0.0%
FRC-0012	Springdale-Relief Concrete Encasement Extension at Wintersburg-Channel	J.F. Shea Construction, Inc.	07/07/2021	\$167,694	\$0	\$167,694	0.0%
MP2-001	Screening Loading Building Exhaust Fan 1 Cable Replacement	Shimmick Construction	10/18/2021	\$97,000	\$0	\$97,000	0.0%
			Total	\$803,127	\$15,288	\$818,415	

**Engineering Program Contract Performance Report
for Quarter Ending 6/30/2022**

Table 3 - Active Operations Committee Awarded Construction Contracts

Project/Contract		Contractor	Award Date	Contract Amount			
				Award	Change Orders	Current	% Spent
FE18-16	Truck Loading Basement Drain Modifications at Plant No. 1	MMC, Inc.	10/06/2021	\$162,500	\$0	\$162,500	18.5%
FE19-13	VFD Replacements at Seal Beach Pump Station	Energy Management Corporation	03/23/2022	\$138,650	\$0	\$138,650	0.0%
FR1-0014	Laboratory Building HVAC Controls Replacement at Plant No. 1	Retrofit Service Company, Inc.	02/02/2022	\$176,847	\$0	\$176,847	85.5%
			Total	\$477,997	\$0	\$477,997	

**Engineering Program Contract Performance Report
for Quarter Ending 6/30/2022**

Table 4 - Closed Board-Awarded Construction Contracts

Project/Contract		Contractor	Award Date	Closed Date	Contract Amount			Contingency		
					Award	Change Orders	Final	Original	Final	Unused
FE18-11	Headworks Explosive Gas Monitoring Systems at Plant No. 1 and No. 2	Baker Electric	03/25/2020	04/27/2022	\$223,984	\$0	\$223,984	10.0%	10.0%	10.0%
				Total	\$223,984	\$0	\$223,984			

**Engineering Program Contract Performance Report
for Quarter Ending 6/30/2022**

Table 5 - Closed GM-Awarded Construction Contracts

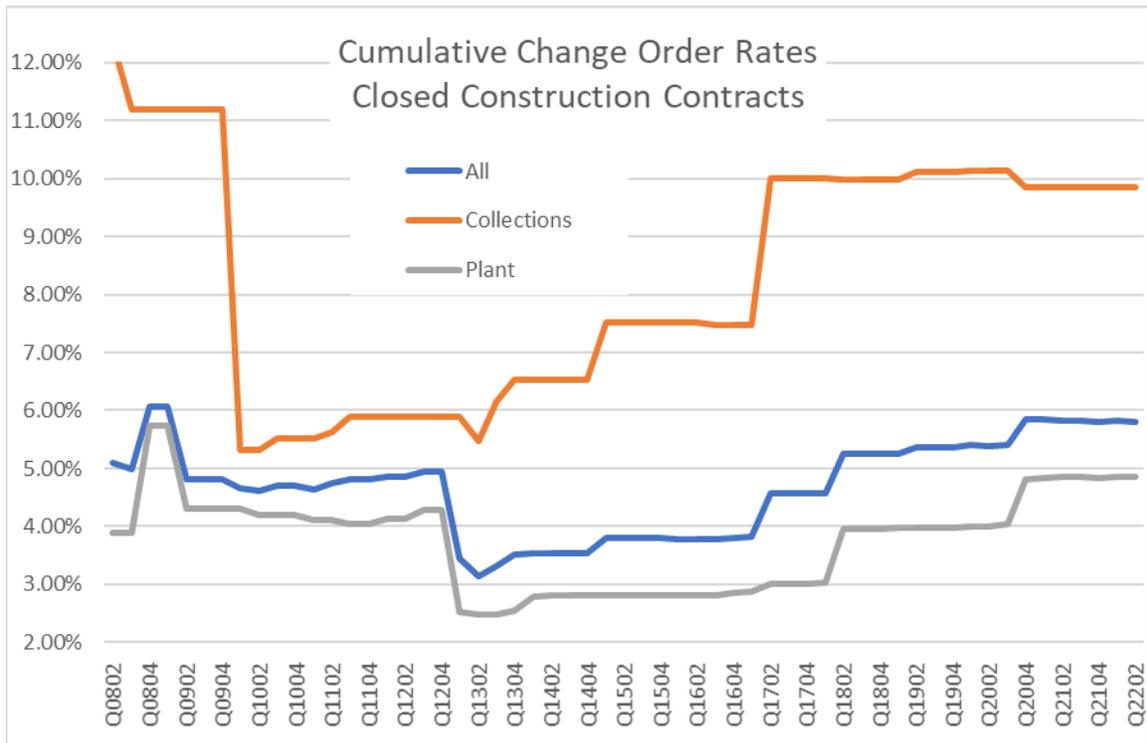
Project/Contract	Contractor	Award Date	Closed Date	Original Award Amount	Change Orders	Final Contract Amount	Final Change Order Rate
No GM-awarded construction contract closed this quarter			Total				

**Engineering Program Contract Performance Report
for Quarter Ending 6/30/2022**

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
No Committee-awarded construction contract closed this quarter			Total				

When the Orange County Sanitation District (OC San) Board 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, the change order performance charts in this report 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 SERVICES 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 16 firms with active engineering services agreements, not including firms with 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 four sets of Master Agreements.

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

The 2017 Master Agreements for Wastewater Treatment Planning Studies and the 2018 Master Design 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.

A status table for all Active Engineering Services Agreements (PDSAs, PCSAs and PSAs) is attached under Table 7 and a status table for all Active Task Orders by Master Agreement is attached under Table 8 (Master Agreements).

**Engineering Program Contract Performance Report
for Quarter Ending 6/30/2022**

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	0%	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	26%	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	70%	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	38%	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	22%	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	\$378,610	\$6,326,460	93%	10.0%	10.0%	6.4%	3.6%
5-67	Bay Bridge Pump Station Replacement	Arcadis U.S., Inc.	PDSA	10/25/2017	\$7,137,000	\$1,750,315	\$8,887,315	41%	10.0%	35.0%	24.5%	10.5%
5-68	Newport Beach Pump Station Pressurization Improvements	Dudek	PDSA	05/27/2020	\$542,988	\$0	\$542,988	84%	10.0%	10.0%	0.0%	10.0%
7-65	Gisler-Red Hill Interceptor and Baker Force Main Rehabilitation	CDM Smith Inc.	PDSA	09/23/2020	\$1,754,000	\$140,312	\$1,894,312	86%	10.0%	10.0%	8.0%	2.0%
7-66	Sunflower and Red Hill Interceptor Repairs	GHD, Inc.	PCSA	07/28/2021	\$166,000	\$0	\$166,000	23%	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	47%	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	86%	N/A	N/A	69.5%	N/A
J-117B	Outfall Low Flow Pump Station	Brown and Caldwell	PCSA	12/19/2018	\$8,563,913	\$0	\$8,563,913	56%	10.0%	10.0%	0.0%	10.0%
J-124	Digester Gas Facilities Replacement	Brown and Caldwell	PDSA	11/15/2017	\$11,770,000	\$1,101,466	\$12,871,466	95%	10.0%	10.0%	9.4%	0.6%
J-98	Electrical Power Distribution System Improvements	Schweitzer Engineering Laboratories, Inc.	PSA	03/25/2020	\$1,296,878	\$0	\$1,296,878	8%	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	84%	10.0%	10.0%	4.1%	5.9%
P1-105	Headworks Rehabilitation at Plant 1	Carollo Engineering Inc.	PCSA	03/02/2021	\$16,500,000	\$0	\$16,500,000	14%	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	0%	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	\$96,700	\$4,996,700	33%	10.0%	10.0%	2.0%	8.0%

**Engineering Program Contract Performance Report
for Quarter Ending 6/30/2022**

Table 7 - Active Engineering Services Agreements

Project/Contract		Consultant	Type	Award Date	Contract Amount				Contingency			
					Award	Amendments	Current	% Spent	Original	Current	Used	Remaining
P1-128A	Headquarters Complex at Plant No. 1	AECOM Technical Services, Inc.	PSA	04/28/2021	\$6,750,000	\$0	\$6,750,000	22%	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	90%	10.0%	10.0%	8.0%	2.0%
P1-133	Primary Sedimentation Basins No. 6-31 Reliability Improvements at Plant No. 1	Carollo Engineering Inc	PCSA	04/26/2022	\$530,000	\$0	\$530,000	0%	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	30%	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	59%	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	93%	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	\$31,177	\$726,177	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	\$1,202,803	\$40,502,803	22%	10.0%	10.0%	3.1%	6.9%
P2-137	Digesters Rehabilitation at Plant No. 2	CDM Smith Inc.	PDSA	03/23/2022	\$2,650,000	\$0	\$2,650,000	0%	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	14%	10.0%	10.0%	0.0%	10.0%
PS18-09	Ocean Outfall Condition Assessment and Scoping Study	Carollo Engineering Inc	PSA	03/25/2020	\$2,744,000	\$885,661	\$3,629,661	70%	10.0%	40.0%	32.3%	7.7%
PS20-02	Collection System Flow Level Monitoring Study	Woodard & Curran, Inc.	PSA	07/28/2021	\$616,562	\$0	\$616,562	18%	0.0%	10.0%	0.0%	10.0%
PS20-05	Cen Gen Pressure Vessel Integrity Assessment at Plant Nos. 1and 2	Pond & Company	PSA	02/23/2022	\$235,133	\$0	\$235,133	0%	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	0%	10.0%	10.0%	0.0%	10.0%
Total					\$171,126,515	\$6,051,311	\$177,177,826					

**Engineering Program Contract Performance Report
for Quarter Ending 6/30/2022**

Table 8 - Active Task Orders by Master Agreement

Agreement/Project		Consultant	Award Date	Original Task Order Value	Amendments	Current Task Order Value	% Spent
2017 Master Agreements for On-Call Planning Studies							
PS19-03	Laboratory Rehabilitation Feasibility Study	HDR Engineering, Inc.	10/20/2020	\$274,888	\$0	\$274,888	70%
2018 Master Professional Design Service Agreements							
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	74%
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	26%
FE18-16	Truck Loading Basement Drain Modifications at Plant No. 1	GHD, Inc.	12/04/2019	\$70,130	\$18,365	\$88,495	90%
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	51%
FE19-03	Trickling Filter Sludge and Scum Pumps Replacement at Plant No. 1	Black & Veatch	09/02/2020	\$244,728	\$55,272	\$300,000	87%
FE19-06	EPSA Motor Cooling Improvements at Plant No. 2	IDS Group, Inc.	05/06/2020	\$88,206	\$0	\$88,206	95%
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%
FE20-02	Digester C, D, F, and G Mechanical Rehabilitation at Plant No. 2	HDR Engineering, Inc.	03/16/2021	\$188,212	\$22,396	\$210,608	86%
FE20-03	Return Activated Sludge Discharge Piping Replacement at Activated Sludge Plant No. 1	GHD, Inc.	06/30/2021	\$249,000	\$0	\$249,000	74%
FE20-04	Cengen Cooling Water Pipe Replacement at Plant No. 2	Dudek	06/01/2021	\$240,000	\$60,000	\$300,000	85%
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	60%
FE20-07	Santa Ana Trunk Rehabilitation at Plant No. 1	GHD, Inc.	05/04/2021	\$100,625	\$0	\$100,625	71%
FE20-08	Olive Sub-Trunk Siphon Rehabilitation at Santa Ana River	Dudek	06/21/2021	\$240,000	\$0	\$240,000	65%
FE20-09	CenGen Smoke Detection Improvements at Plant No. 1 and No. 2	IDS Group, Inc.	06/30/2021	\$63,275	\$0	\$63,275	70%
FR1-0011	VFD Replacements at Plant No. 1	Black & Veatch	04/08/2021	\$283,000	\$17,000	\$300,000	43%
FRC-0009	Bitter Point Trunk Sewer Repair at Bitter Point Pump Station	GHD, Inc.	06/17/2021	\$159,451	\$0	\$159,451	67%
J-127	Natural Gas Pipelines Replacement at Plant Nos. 1 and 2	Black & Veatch	01/21/2019	\$271,964	\$28,036	\$300,000	99%
P1-135	Digester Ferric Chloride Piping Replacement at Plant No. 1	Dudek	02/19/2020	\$127,174	\$0	\$127,174	98%

**Engineering Program Contract Performance Report
for Quarter Ending 6/30/2022**

Table 8 - Active Task Orders by Master Agreement

Agreement/Project		Consultant	Award Date	Original Task Order Value	Amendments	Current Task Order Value	% Spent
2018 Master Professional Design Services Agreement							
FE19-02	Cengen Plant Water Pipe Replacement at Plant No. 1	AECOM Technical Services, Inc.	07/08/2020	\$156,498	\$143,378	\$299,876	40%
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	72%
FE19-13	VFD Replacements at Seal Beach Pump Station	AECOM Technical Services, Inc.	03/24/2021	\$78,033	\$0	\$78,033	57%
FE20-01	Wastehauler Station Safety and Security Improvements	AECOM Technical Services, Inc.	03/16/2021	\$161,012	\$16,247	\$177,259	71%
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	90%
2020 Master Agreements for On-Call Planning Studies							
PS20-01	Collections Yard Relocation Feasibility Study	AECOM Technical Services, Inc.	09/09/2021	\$147,181	\$0	\$147,181	36%
PS20-03	Truck Loading Bay Odor Control Improvements Study at Plant No. 2	Hazen and Sawyer	08/03/2021	\$226,021	\$0	\$226,021	96%
PS20-04	Power Generation Overhaul Feasibility Study	Brown and Caldwell	04/26/2021	\$122,748	\$101,528	\$224,276	90%
PS20-07	College Pump Station Wet Well Condition Assessment Study	HDR Engineering, Inc.	01/18/2022	\$182,297	\$0	\$182,297	2%
PS20-09	Thickening & Dewatering Plant Water Study at Plant No. 1	HDR Engineering, Inc.	04/21/2022	\$219,670	\$0	\$219,670	0%
PS21-03	Process Model for Denitrification Alternatives at Activated Sludge 1	HDR Engineering, Inc.	01/18/2022	\$25,000	\$0	\$25,000	100%
RE20-02	Chemical Resilience Study at Plant No.1 and 2	Hazen and Sawyer	06/02/2021	\$278,784	\$0	\$278,784	94%
2021 Master Professional Design Service Agreements							
FE21-05	Warehouse Stations and Demolition at Plant No. 2	ProjectLine Technical Services, Inc.	04/28/2022	\$228,328	\$28,508	\$256,836	13%
FR2-0023	Activated Sludge Clarifier Entry Improvements at Plant No. 2	AECOM Technical Services, Inc.	01/13/2022	\$120,030	\$79,828	\$199,858	10%
FRC-0010	Warner Avenue Vault Cover Improvements	Kleinfelder, Inc.	07/01/2021	\$205,000	\$0	\$205,000	27%
SC19-06	EPSA Standby Power Generator Control Upgrades at Plant No. 2	Spec Services, Inc.	11/03/2021	\$241,153	\$0	\$241,153	23%
Agreement for Design Installation, Implementation and Maintenance of a Process Control System							
J-120	Process Control Systems Upgrades	ABB, Inc.	09/15/2021	\$11,818,480	\$0	\$11,818,480	0%
			Total	\$18,451,360	\$760,680	\$19,212,040	

PART 3 – MASTER BUDGET PROJECTS

The Board-adopted budget for Fiscal Years 2020-21 and 2021-22 includes master program budgets that allow staff to more quickly initiate, execute, and manage smaller projects that fit within the scope of a particular program. 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.

Master Program Title	Status Table
Planning Studies Program	Table 9
Research Program	Table 10
Small Construction Projects Program	Table 11
Information Technology Capital Program	Table 12
Operations & Maintenance Capital Program	Table 13

**Engineering Program Contract Performance Report
For Quarter Ending 6/30/2022
Table 9 - Planning Studies Status Report**

Project Number	Project Name	Status	Allocated Budget
PS18-06	Go/No-Go Lights and Signage	Active	\$495,000
PS18-09	Ocean Outfall Condition Assessment and Scoping Study	Active	\$4,205,117
PS19-03	Laboratory Rehabilitation Feasibility Study	Active	\$450,000
PS20-01	Collections Yard Relocation Feasibility Study	Active	\$375,000
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	\$383,682
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	\$400,000
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	\$550,000
PS21-02	Public Announcement and Fire System at Plant Nos. 1 and 2	Active	\$500,000
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	\$230,000
PS21-10	Sidestream Nitrogen Management	Active	\$211,000
PS22-02	Onsite Oxygen Generation Feasibility Study at Plant No. 2	Active	\$220,000
Grand Total			\$14,012,017
Number of Chartered Projects			20
Board Approved Program Budget			\$28,652,000
Remaining Unallocated Budget			\$14,639,983

**Engineering Program Contract Performance Report
For Quarter Ending 6/30/2022
Table 10 - Research Program Status Report**

Project Number	Project Name	Status	Allocated Budget
RE19-01	Primary Scum Equipment Evaluation at Plant No. 1	Active	\$69,853
RE20-02	Chemical Resilience Study at Plant No.1 and 2	Active	\$329,996
RE20-04	Holding Digester 6 Solids Shredder Study at Plant No. 1	Active	\$95,000
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	\$6,890,000
Grand Total			\$7,544,849
Number of Chartered Projects			5
Board Approved Program Budget			\$10,000,000
Remaining Unallocated Budget			\$2,455,151

**Engineering Program Contract Performance Report
For Quarter Ending 6/30/2022**

Table 11 - Small Construction Projects Program Status Report

Project Number	Project Name	Status	Allocated Budget
FE10-21	Area 02 Craig Regional Park Manhole Improvements	Active	\$1,359,000
FE17-03	Battery Storage System at Plant No. 1	Active	\$650,000
FE17-05	Plant 1 ICS Network Extension	Active	\$1,050,000
FE18-06	CenGen Instrument Air Compressors Replacement at Plant No. 1	Active	\$1,150,000
FE18-11	Headworks Explosive Gas Monitoring Systems at Plant No. 1 and No. 2	Active	\$605,000
FE18-12	Erosion Control at Santa Ana River and Hamilton Ave	Active	\$445,000
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
FE18-19	12KV Distribution B and East RAS Pump Station Roofing Replacement	Active	\$1,188,000
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	\$6,300,000
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
FE19-09	Newhope - Placentia Trunk Grade Separation Replacement Repairs	Active	\$500,000
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	\$5,380,000
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
FE21-07	Liquid Oxygen Tank A Replacement at Plant No. 2	Active	\$5,200,000
FE21-08	Newhope-Placentia Sewer Manhole Replacements	Active	\$1,225,000
Grand Total			\$75,457,500
Number of Chartered Projects			39
Board Approved Program Budget			\$90,000,000
Remaining Unallocated Budget			\$14,542,500

**Engineering Program Contract Performance Report
For Quarter Ending 6/30/2022**

Table 12 - Information Technology Capital Program Status Report

Project Number	Project Name	Status	Allocated Budget
IT18-09	Records Management Information System	Active	\$290,530
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
IT20-07	Professional Services for Valo/SharePoint (ICE-74_IT20-07) 6520007	Active	\$100,000
IT20-08	Field Computer for Nerissa and Interface with LIMS(ICE-68_IT20-07) 6520008	Active	\$121,000
IT20-09	ITSM Migration (ICE-70_IT20-09) 6520009	Active	\$797,000
IT20-10	Digitize Quality Assurance Tracking Processes /TNI/ELAP Standards(ICE-76_IT20-10) 6520010	Active	\$145,700
IT20-12	Web-based Cloud Proxy Security with an Isolation Platform (ICE-78_6520012)	Active	\$50,000
IT21-01	Access Network Equipment Obsolescence Replacement (ICE-79_IT21-01) 6521001	Active	\$1,249,500
IT21-02	Hyper Converged Infrastructure for Plant 1 ICS network (ICE-80 IT21-02) 6521002	Active	\$610,000
IT21-03	Door Access Control System for P2 Construction Management Trailers (ICE-83_IT21-	Active	\$79,706
IT21-04	Databridge Scale Management Software (ICE - 84_IT21-04)	Active	\$39,263
IT21-05	JD Edwards Server Migration and Upgrade (ICE - 86_IT21-05)	Active	\$88,000
IT21-06	Dig-Smart Fusion (ICE - 89_I6521006_T21-06)	Active	\$27,000
IT21-07	Advanced Email Security (ICE - 90_I6521007_T21-07)	Active	\$50,000
IT22-01	Fortigate Firewall Replacement (ICE - 92_IT22-01)	Active	\$275,000
IT22-02	Two Routers and Two Switches for Dual ISPs (ICE - 94_IT22-02)	Active	\$80,000
Grand Total			\$5,861,699
Number of Chartered Projects			19
Board Approved Program Budget			\$10,000,000
Remaining Unallocated Budget			\$4,138,301

**Engineering Program Contract Performance Report
For Quarter Ending 6/30/2022**

Table 13 - Operations & Maintenance Capital Program Status Report

Project Number	Project Name	Status	Allocated Budget
SC18-05	P1 Laboratory HVAC Boiler Burner Replacement At Plant No.1	Active	\$454,131
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
Grand Total			\$5,204,131
Number of Chartered Projects			4
Board Approved Program Budget			\$15,622,000
Remaining Unallocated Budget			\$10,417,869

PART 4 – SUPPLEMENTAL ENGINEERING SERVICES CONTRACT

In May 2016, OC San Board of Directors approved a \$41 million professional services agreement with Jacobs Project Management Co. to provide supplemental engineering and support staff services for a four-year term with the option of three one-year renewals. 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 is attached under Table 14, and the supplemental engineering services labor summary can be found under Table 15.

Table 14 – Supplemental Engineering Services Contract Status

	Total Fees	Time
Contract	\$41,000,000	86 months ⁽¹⁾
Actuals to Date	\$33,081,064 81%	74 months 86%
Remaining	\$7,918,936 19%	12 months 14%

⁽¹⁾ Assuming one more 1-year extension

Table 15 - Supplemental Engineering Services Labor Summary

	This Quarter	Inception to Date
Labor Hours	14,252	210,607
Full Time Equivalent	31.7	20.6
Labor Costs (no expenses)	\$2,252,212	\$28,181,186
Average Hourly Rate	\$158	\$134

This existing contract can be extended through June 2023. On April 27, 2022, Staff requested and obtained Board’s approval of two new supplemental engineering services agreements. All new resource requests will utilize these two new agreements, while the existing resource requests will either be completed prior under the existing contract or transferred some time in the next year to the new contracts.

PART 5 – 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.

Table 16 lists the contract limits and funds expended to date for each of the agreements which became effective in May 2019 and expired on April 30, 2022 (PSA2019). The contract limit for Ninyo & Moore was increased from \$300,000 to \$600,000 in April 2020 because that firm was conducting all the associated testing for Newhope-Placentia Trunk Sewer Replacement Project, Project No. 2-72 B&C, and the original contract limit was not adequate. For each of these services, OC San typically uses a single firm for a particular construction contract.

Three new sets of contracts (PSA2022) were approved by the Board on March 23, 2022 and expire on April 30, 2025. The status of these contracts is included in Table 17.

**Engineering Program Contract Performance Report
for Quarter Ending 6/30/2022**

Table 16 - On Call Service Agreements Status Report

	Consultant	Contract Limit	Total Costs Incurred	Remaining
PSA2019				
Coating Inspection and Corrosion Testing Services (PSA2019-001)				
	Corrpro Companies, Inc.	\$200,000	\$18,400	\$181,600
	CSI Services, Inc.	\$200,000	\$77,974	\$122,026
	On-Site Technical Services, Inc.	\$200,000	\$0	\$200,000
Materials Testing, Inspection, & Geotech Testing Services (PSA2019-003)				
	Atlas Technical Consultants	\$300,000	\$264,788	\$35,213
	Koury Engineering and Testng, Inc.	\$300,000	\$187,111	\$112,890
	Ninyo & Moore	\$600,000	\$560,955	\$39,045
Surveying Services (PSA2019-002)				
	Bush and Associates, Inc.	\$200,000	\$10,846	\$189,154
	Cannon Corporation	\$200,000	\$110,911	\$89,089
	D.Woolley & Associates	\$200,000	\$71,667	\$128,333
	Michael Baker International, Inc.	\$200,000	\$170,422	\$29,578
	Stantec Consulting Services, Inc.	\$200,000	\$100,527	\$99,473

**Engineering Program Contract Performance Report
for Quarter Ending 6/30/2022**

Table 17 - On Call Service Agreements Status Report

	Consultant	Contract Limit	Total Costs Incurred	Remaining
PSA2022				
Coating Inspection Services (PSA2022-001)				
	CSI Services, Inc.	\$300,000	\$0	\$300,000
	Diversified Project Services Int'l (DPSI)	\$300,000	\$0	\$300,000
Geotechnical Testing Services (PSA2022-003)				
	AESCO	\$400,000	\$0	\$400,000
	Atlas Technical Consultants	\$400,000	\$0	\$400,000
	Koury Engineering and Testng, Inc.	\$400,000	\$0	\$400,000
	MTGL, Inc	\$400,000	\$0	\$400,000
Surveying Services (PSA2022-002)				
	D.Woolley & Associates	\$200,000	\$0	\$200,000
	Michael Baker International, Inc.	\$200,000	\$1,726	\$198,275
	Psomas	\$200,000	\$0	\$200,000
	Stantec Consulting Services, Inc.	\$200,000	\$0	\$200,000