

DATE: January 19, 2021

TO: Orange County Sanitation District
Board of Directors

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

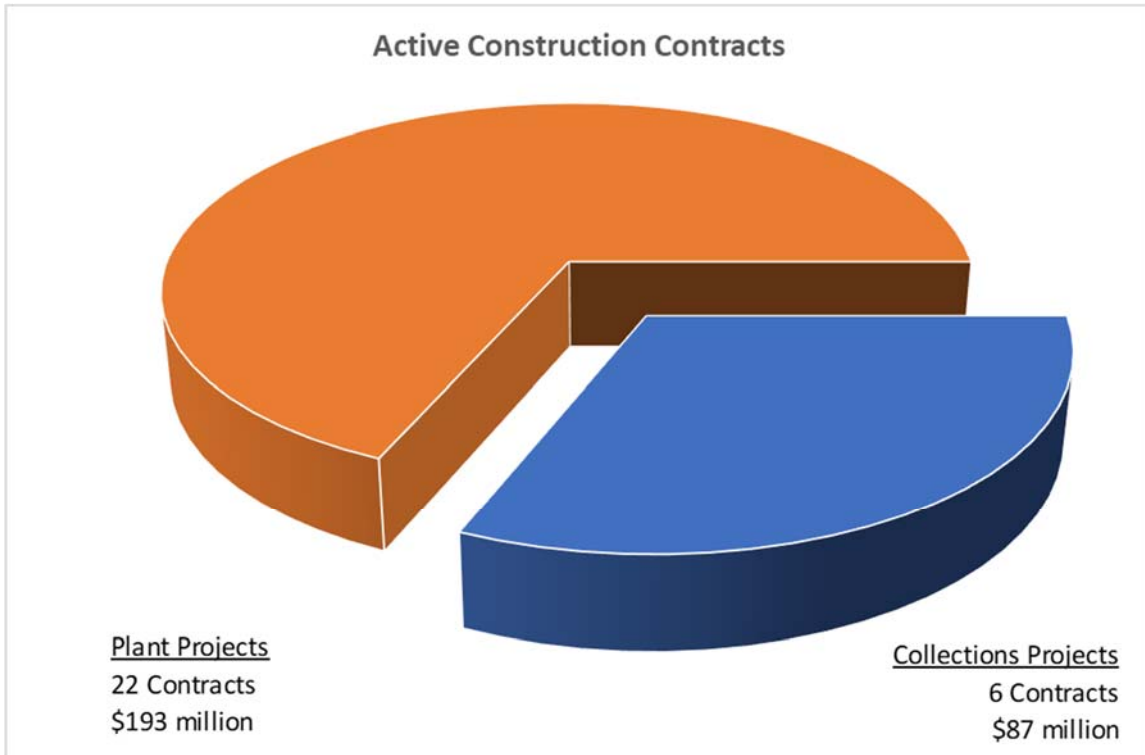
This report summarizes the status, activities, and performance of public works construction contracts and consultant agreements. This report also identifies the names and status of projects being performed under master budgets for planning studies, research, small construction projects, O&M capital projects,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

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PART 1 - CONSTRUCTION CONTRACTS

Table 1 lists the Board-awarded construction contracts active as of December 31, 2020. Table 2 lists active construction projects awarded by the General Manager, either because the contract value is within his signature authority, or because the work is being done under a task order with a \$300,000 limit. The graph below shows the number and total value of projects broken down plant and collections.



Three construction contracts were closed in this quarter, as listed in Table 3.

**Engineering Program Contract Performance Report
for Quarter Ending 12/31/2020**

Table 1 - Active Board-Awarded Construction Contracts as of 12/31/2020

Project / Contract	Contractor	Award Date	Board Award Amount	Change Orders	Current Contract Amount	Original Contingency	Current Contingency	Contingency Used	Contingency Remaining
2-72 Newhope-Placentia Trunk Replacement									
2-72B Newhope-Placentia Trunk Replacement, Segment B	OHL USA, INC.	06/15/2018	\$58,242,000	\$2,577,220	\$60,819,220	6.5%	6.5%	4.4%	2.1%
3-62 Westminster Blvd Force Main Replacement									
3-62 Westminster Blvd Force Main Replacement	Teichert Energy & Utilities Group, Inc.	12/18/2019	\$27,743,000	\$188,603	\$27,931,603	10.0%	10.0%	0.7%	9.3%
J-117 Ocean Outfall System Rehabilitation									
J-117B Outfall Low Flow Pump Station	Shimmick Construction Co., Inc.	12/19/2018	\$90,200,000	\$268,064	\$90,468,064	8.0%	8.0%	0.3%	7.7%
J-126 Safety Improvements Program									
J-126C NFPA 820 HVAC and Electrical Improvements	MMC, Inc.	03/05/2019	\$469,000	\$0	\$469,000	10.0%	10.0%	0.0%	10.0%
J-126JK Stairs, Hatches, Walkway Hazards, Ladders, Guardrails, Roof Fall Protection	Olsson Construction, Inc.	10/24/2018	\$3,637,601	\$264,529	\$3,902,130	10.0%	10.0%	7.3%	2.7%
J-127 Natural Gas Pipelines Replacement at Plant Nos. 1 and 2									
J-127 Natural Gas Pipelines Replacement at Plant Nos. 1 and 2	Innovative Construction Solutions	07/22/2020	\$745,500	\$0	\$745,500	10.0%	10.0%	0.0%	10.0%
P2-92 Sludge Dewatering and Odor Control at Plant 2									
P2-92 Sludge Dewatering and Odor Control at Plant 2	Shimmick Construction Co., Inc.	01/12/2015	\$49,850,000	\$2,539,236	\$52,389,236	5.0%	6.0%	5.1%	0.9%
P2-98 Primary Treatment Rehabilitation at Plant No. 2									
P2-98B B/C-Side Primary Clarifiers Interim Repair at Plant 2	Myers & Sons Construction, LLC	01/23/2019	\$8,665,000	\$402,202	\$9,067,202	10.0%	10.0%	4.6%	5.4%
P1-128 Headquarters Complex									
P1-128C Headquarters Complex Site Preparation	Resource Environmental, Inc.	07/01/2020	\$1,555,000	\$0	\$1,555,000	10.0%	10.0%	0.0%	10.0%
P1-129 Return Activated Sludge Piping Replacement at Activated Sludge Plant No. 1									
P1-129 Return Activated Sludge Piping Replacement at Activated Sludge Plant No. 1	Abhe & Svoboda, Inc.	07/24/2019	\$6,863,092	\$68,360	\$6,931,452	10.0%	10.0%	1.0%	9.0%
P2-122 Headworks Modifications at Plant No. 2 for GWRS Final Expansion									
P2-122 Headworks Modifications at Plant No. 2 for GWRS Final Expansion	Shimmick Construction Co., Inc.	01/22/2020	\$14,487,735	\$37,844	\$14,525,579	10.0%	10.0%	0.3%	9.7%
P2-123 Return Activated Sludge Piping Replacement at Plant 2									
P2-123 Return Activated Sludge Piping Replacement at Plant 2	Shimmick Construction Co., Inc.	09/25/2019	\$6,042,110	\$62,446	\$6,104,556	10.0%	10.0%	1.0%	9.0%
M-FE Small Construction Projects Program									
FE18-11 Headworks Explosive Gas Monitoring Systems at Plant No. 1 and No. 2	Baker Electric	01/22/2020	\$223,984	\$0	\$223,984	10.0%	10.0%	0.0%	10.0%
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	15.0%	15.0%	0.0%	15.0%
FE18-19 12KV Distribution B and East RAS Pump Station Roofing Replacement	O'Connell Engineering & Construction, Inc.	05/27/2020	\$674,800	\$0	\$674,800	10.0%	10.0%	0.0%	10.0%
M-SM-CAP Operations & Maintenance Capital Program									
SC17-03 CenGen Oil Filter Platform	Metro Builders & Engineers Group, Ltd.	12/04/2019	\$134,479	\$10,968	\$145,447	10.0%	10.0%	8.2%	1.8%
SC18-05 P1 Laboratory HVAC Boiler Burner Replacement At Plant No.1	ODC Engineering & Technology	11/20/2019	\$283,000	\$4,932	\$287,932	10.0%	10.0%	1.7%	8.3%
SC19-03 Return Activated Sludge Pump Station Elevator Rehabilitation at Plant No. 2	OTIS	12/16/2020	\$432,400	\$0	\$432,400	20.0%	20.0%	0.0%	20.0%

**Engineering Program Contract Performance Report
for Quarter Ending 12/31/2020**

Table 1 - Active Board-Awarded Construction Contracts as of 12/31/2020

Project / Contract	Contractor	Award Date	Board Award Amount	Change Orders	Current Contract Amount	Original Contingency	Current Contingency	Contingency Used	Contingency Remaining
Operationally Funded Projects									
FE17-06 Tustin Ave Manhole and Pipe Repair	Nuline Technologies, LLC	10/24/2019	\$350,000	\$0	\$350,000	10.0%	30.0%	0.0%	30.0%
FRC-0004 Seal Beach Pump Station Isolation Valve Replacement	J.R. Filanc Construction Company, Inc.	12/16/2020	\$466,830	\$0	\$466,830	20.0%	20.0%	0.0%	20.0%
MP-105 P2 CENGEN Steam Turbine Rehabilitation	Dresser-Rand	03/25/2018	**\$484,220	\$0	\$484,220	20.0%	2.5%	0.0%	2.5%
MP-276 Central Generation Engine Overhauls at Plant No. 1 and Plant No. 2 (see MP-276 as part of SC)	UPS Midstream Services, Inc.	10/23/2019	\$5,636,335	\$16,400	\$5,652,735	20.0%	20.0%	0.3%	19.7%
MP-305 Cengen Supply Air Fan Support Replacement at Plant No. 2	J.R. Filanc Construction Company, Inc.	12/16/2020	\$297,000	\$0	\$297,000	15.0%	15.0%	0.0%	15.0%
MP-638 Activated Sludge Plant Clarifier Inlet Gate Replacement at Plant No. 2	Innovative Construction Solutions	12/18/2019	\$658,300	\$0	\$658,300	10.0%	10.0%	0.0%	10.0%
Total			\$279,275,386	\$6,440,804	\$285,716,190				

** Original Award was \$245,424, and later amended to \$484,220 with a contingency reduction by Board Action on 4/22/20

**Engineering Program Contract Performance Report
for Quarter Ending 12/31/2020**

Table 2 - Active GM-Awarded Construction Contracts as of 12/31/2020

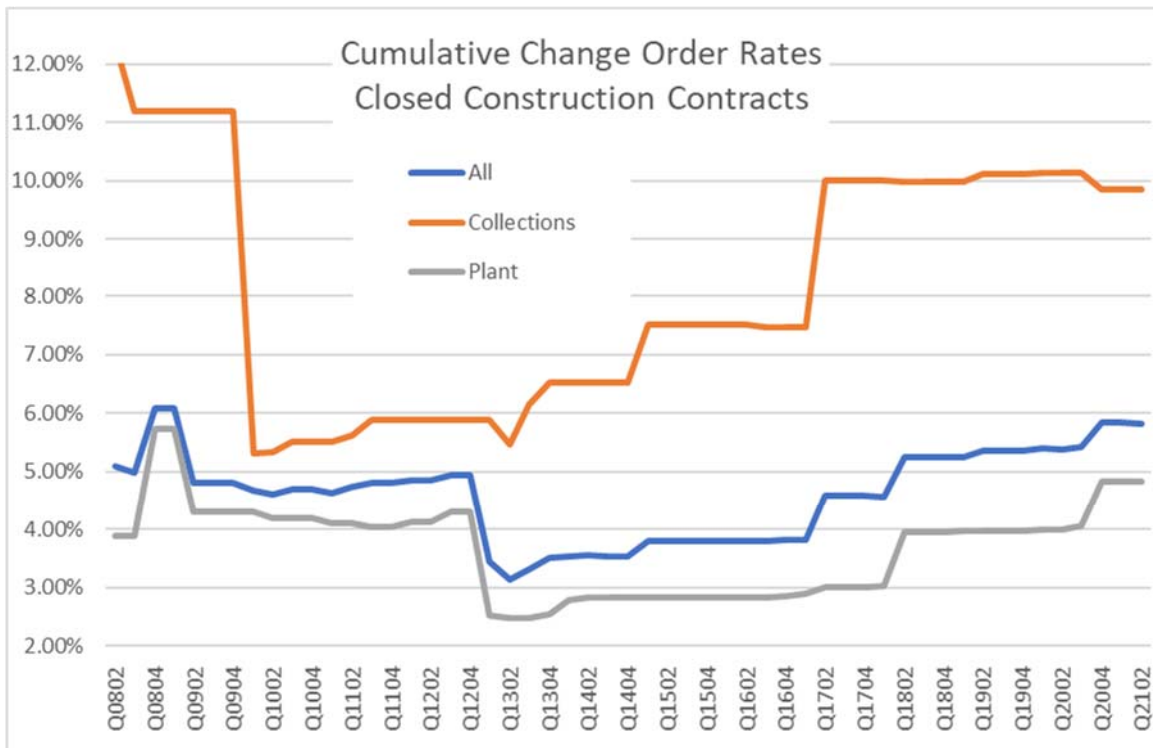
Project / Contract	Contractor	Award Date	Original Award Amount	Change Orders	Current Contract Amount	Change Order Rate
M-FE Small Construction Projects Program						
FE19-09 Newhope - Placentia Trunk Grade Separation Replacement Repairs	Charles King Company, Inc.	09/21/2020	\$298,850	\$0	\$298,850	0.0%
Operationally Funded Projects						
FR1-0009 Laboratory Building HVAC Repair at Plant No 1	Aquis Solutions	10/22/2020	\$89,000	\$0	\$89,000	0.0%
FR2-0019 Digester O Repairs at Plant No. 2	Jamison Engineering	08/28/2020	\$131,000	\$0	\$131,000	0.0%
FRC-0006 480V Feeder Replacement at the Rocky Point Pump Station	Charles King Company, Inc.	06/24/2020	\$90,700	\$0	\$90,700	0.0%
Total			\$609,550	\$0	\$609,550	

**Engineering Program Contract Performance Report
for Quarter Ending 12/31/2020**

Table 3 - Construction Contracts Closed in Last Quarter

Project / Contract	Contractor	Date Closed	Award Date	Board Award Amount	Change Orders	Final Contract Amount	Original Contingency	Current Contingency	Contingency Used	Unused Contingency
M-FE Small Construction Projects Program										
FE18-17 Trunkline Sampler Power Feed at Plant No 2	M. Brey Electric, Inc.	12/4/2020	03/25/2020	\$101,050	\$0	\$101,050	20.0%	20.0%	0.0%	20.0%
M-FR-880 Master Operationally Funded										
MP-248 P2 Secondary Clarifier Repairs (AS Plant)	W. M. Lyles Company	12/4/2020	06/26/2019	\$3,048,000	\$52,189	\$3,100,189	10.0%	10.0%	1.7%	8.3%
MP-509 P2 Headworks Low Voltage Cable Assessment	Mass Electric Construction Co.	12/4/2020	12/18/2019	\$434,327	\$59,484	\$493,811	20.0%	20.0%	13.7%	6.3%
Total				\$3,583,377	\$111,673	\$3,695,050				

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.

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 three or four of the firms and awards a task order to the most qualified consultant. There are currently six sets of Master Agreements.

- 2012 Master Design Agreements (expired)
- 2015 Master Design Agreements (expired)
- 2017 Master Agreements for Wastewater Treatment Planning Studies
- 2018 Master Design Agreements
- 2020 Master Agreements for On-Call Planning Studies

The two Master Design Agreements from 2012 and 2015 and the 2017 Master Agreements for Wastewater Planning Studies 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-52 to \$300,000 per task order. The 2020 Master Agreements for Planning Studies were awarded in September to replace the 2017 Master Agreements for Collection and Wastewater Planning Studies that expired in October 2020.

A status table for all Active Engineering Services Agreements (PDSAs and PCSAs) is attached under Table 4, and a status table for all Active Task Orders by Master Agreement is attached under Table 5 (Master Agreements).

**Engineering Program Contract Performance Report
for Quarter Ending 12/31/2020**

Table 4 - Active Engineering Services Agreements as of 12/31/2020

Project / Contract	Type	Consultant	Award Date	Board Award Amount	Amendments	Current Contract Amount	Original Contingency	Current Contingency	Contingency Used	Contingency Remaining
2-72 Newhope-Placentia Trunk Replacement										
2-72 Newhope-Placentia Trunk Replacement	PCSA	Lee & Ro	03/23/2016	\$3,253,946	\$0	\$3,253,946	10.0%	10.0%	0.0%	10.0%
3-62 Westminster Blvd Force Main Replacement										
3-62 Westminster Blvd Force Main Replacement	PCSA	Stantec Consulting Services, Inc.	12/18/2019	\$1,183,000	\$0	\$1,183,000	10.0%	10.0%	0.0%	10.0%
3-64 Rehabilitation of Western Regional Sewers										
3-64 Rehabilitation of Western Regional Sewers	PDSA	AECOM Technical Services, Inc.	01/27/2016	\$17,639,250	\$1,088,654	\$18,727,904	10.0%	10.0%	6.2%	3.8%
3-67 Seal Beach Pump Station Replacement										
3-67 Seal Beach Pump Station Replacement	PDSA	Lee & Ro	11/20/2019	\$5,947,850	\$0	\$5,947,850	10.0%	10.0%	0.0%	10.0%
5-67 Bay Bridge Pump Station Replacement										
5-67 Bay Bridge Pump Station Replacement	PDSA	Arcadis US Inc.	10/25/2017	\$7,137,000	\$1,750,315	\$8,887,315	10.0%	35.0%	24.5%	10.5%
5-68 Newport Beach Pump Station Pressurization Improvements										
5-68 Newport Beach Pump Station Pressurization Improvements	PDSA	Dudek	05/06/2020	\$542,988	\$0	\$542,988	10.0%	10.0%	0.0%	10.0%
7-65 Gisler - Red Hill Interceptor Rehabilitation										
7-65 Gisler - Red Hill Interceptor Rehabilitation	PDSA	CDM Smith Inc.	09/23/2020	\$1,754,000	\$0	\$1,754,000	10.0%	10.0%	0.0%	10.0%
7-66 Sunflower and Red Hill Interceptor Repairs										
7-66 Sunflower and Red Hill Interceptor Repairs	PDSA	GHD	09/25/2019	\$308,712	\$14,548	\$323,260	10.0%	10.0%	4.7%	5.3%
J-117 Ocean Outfall System Rehabilitation										
J-117B Outfall Low Flow Pump Station	PCSA	Brown and Caldwell	12/19/2018	\$8,563,913	\$346,857	\$8,910,770	10.0%	10.0%	4.1%	5.9%
J-124 Digester Gas Facilities Replacement										
J-124 Digester Gas Facilities Replacement	PDSA	Brown and Caldwell	11/15/2017	\$11,770,000	-\$36,411	\$11,733,589	10.0%	10.0%	0.0%	10.0%
J-126 Safety Improvements Program										
J-126 Safety Improvements Program	PDSA	Arcadis	08/29/2016	**\$3,040,000	\$0	\$3,040,000	10.0%	10.0%	0.0%	10.0%
J-98 Electrical Power Distribution System Improvements										
J-98 Electrical Power Distribution System Improvements	PDSA	Brown and Caldwell	01/29/2020	\$2,240,000	\$0	\$2,240,000	10.0%	10.0%	0.0%	10.0%
J-98 Electrical Power Distribution System Improvements	PSA	SEL Engineering Services, Inc.	02/26/2020	\$1,296,878	\$0	\$1,296,878	10.0%	10.0%	0.0%	10.0%
M-RESEARCH - Research Program										
RE17-02 Biogas Scrubber Evaluation	PSA	Carollo Engineers, Inc.	04/21/2017	\$656,783	\$63,097	\$719,880	15.0%	15.0%	9.6%	5.4%
M-STUDIES Planning Studies Program										
PS15-02 Edinger Pump Station Rehabilitation Study	PSA	Lockwood, Andrews & Newman, Inc.	11/09/2017	\$505,042	\$0	\$505,042	10.0%	10.0%	0.0%	10.0%
PS15-08 Collections Capacity Evaluation Study	PSA	RMC Water & Environment	08/24/2016	\$2,802,675	\$19,372	\$2,822,047	10.0%	10.0%	0.7%	9.3%
PS17-03 Active Fault Location Study at Plant No. 2	PSA	Lettis Consultants International, Inc.	03/06/2019	\$868,286	\$0	\$868,286	10.0%	10.0%	0.0%	10.0%
PS17-08 CEQA - Facilities Master Plan	PSA	Dudek	02/27/2019	\$812,709	\$0	\$812,709	10.0%	10.0%	0.0%	10.0%
PS18-09 Ocean Outfall Condition Assessment and Scoping Study	PSA	Carollo Engineers, Inc.	03/25/2020	\$2,744,000	\$0	\$2,744,000	10.0%	10.0%	0.0%	10.0%
P1-101 Sludge Dewatering and Odor Control at Plant 1										
P1-101 Sludge Dewatering and Odor Control at Plant 1	PCSA	HDR Engineering, Inc.	06/28/2012	\$7,140,000	\$2,453,653	\$9,593,653	8.0%	35.0%	34.4%	0.6%
P1-105 Headworks Rehabilitation at Plant 1										
P1-105 Headworks Rehabilitation at Plant 1	PDSA	Carollo Engineers, Inc.	05/27/2015	\$17,528,957	\$7,902,304	\$25,431,261	10.0%	51.0%	45.1%	5.9%
P1-115 Title 24 Access Compliance and Building Rehabilitation Project										
P1-115 Title 24 Access Compliance and Building Rehabilitation Project	PCSA	Austin Building & Design Inc.	01/02/2014	\$606,622	\$0	\$606,622	10.0%	10.0%	0.0%	10.0%
P1-128 Headquarters Complex										
P1-128 Headquarters Complex	PDSA	HDR Engineering, Inc.	06/22/2016	\$11,785,709	\$1,114,053	\$12,899,762	10.0%	10.0%	9.5%	0.5%
P1-128 Headquarters Complex	PSA	LSA Associates, Inc.	08/11/2016	\$420,927	\$0	\$420,927	10.0%	10.0%	0.0%	10.0%
P1-128C Headquarters Complex Site Preparation	PCSA	HDR Engineering, Inc.	07/01/2020	\$178,000	\$0	\$178,000	10.0%	10.0%	0.0%	10.0%
P1-129 Return Activated Sludge Piping Replacement at Activated Sludge Plant No. 1										
P1-129 Return Activated Sludge Piping Replacement at Activated Sludge Plant No. 1	PCSA	AECOM Technical Services, Inc.	07/24/2019	\$140,000	\$0	\$140,000	10.0%	10.0%	0.0%	10.0%
P1-132 Uninterruptable Power Supply Improvements at Plant 1										
P1-132 Uninterruptable Power Supply Improvements at Plant 1	PDSA	Tetra Tech, Inc.	10/23/2019	\$784,680	\$0	\$784,680	10.0%	10.0%	0.0%	10.0%

**Engineering Program Contract Performance Report
for Quarter Ending 12/31/2020**

Table 4 - Active Engineering Services Agreements as of 12/31/2020

Project / Contract	Type	Consultant	Award Date	Board Award Amount	Amendments	Current Contract Amount	Original Contingency	Current Contingency	Contingency Used	Contingency Remaining
P1-133 Primary Sedimentation Basins No. 6-31 Reliability Improvements at Plant No. 1										
P1-133 Primary Sedimentation Basins No. 6-31 Reliability Improvements at Plant No. 1	PDSA	Carollo Engineers, Inc.	09/25/2019	\$1,219,667	\$0	\$1,219,667	10.0%	10.0%	0.0%	10.0%
P2-92 Sludge Dewatering and Odor Control at Plant 2										
P2-92 Sludge Dewatering and Odor Control at Plant 2	PCSA	Brown and Caldwell	12/17/2014	\$4,798,328	\$0	\$4,798,328	10.0%	10.0%	0.0%	10.0%
P2-98 Primary Treatment Rehabilitation at Plant No. 2										
P2-98 Primary Treatment Rehabilitation at Plant No. 2	PDSA	Black & Veatch	07/27/2016	\$18,141,423	\$1,514,540	\$19,655,963	10.0%	10.0%	8.3%	1.7%
P2-98B B/C-Side Primary Clarifiers Interim Repair at Plant 2	PCSA	Black & Veatch	01/23/2019	\$549,534	\$0	\$549,534	10.0%	10.0%	0.0%	10.0%
P2-110 Consolidated Demolition and Utility Improvements at Plant 2										
P2-110 Consolidated Demolition and Utility Improvements at Plant 2	PCSA	Stantec Consulting Services, Inc.	01/25/2017	\$1,499,839	\$0	\$1,499,839	10.0%	10.0%	0.0%	10.0%
P2-122 Headworks Modifications at Plant No. 2 for GWRS Final Expansion										
P2-122 Headworks Modifications at Plant No. 2 for GWRS Final Expansion	PCSA	CDM Smith Inc.	01/15/2020	\$2,200,000	\$0	\$2,200,000	10.0%	10.0%	0.0%	10.0%
P2-123 Return Activated Sludge Piping Replacement at Plant 2										
P2-123 Return Activated Sludge Piping Replacement at Plant 2	PCSA	SPEC Services, Inc.	09/25/2019	\$252,329	\$0	\$252,329	10.0%	10.0%	0.0%	10.0%
P2-124 Interim Food Waste Receiving Facility										
P2-124 Interim Food Waste Receiving Facility	PDSA	Kennedy/Jenks Consultants	09/05/2018	\$695,000	\$31,168	\$726,168	10.0%	10.0%	4.5%	5.5%
P2-126 Warehouse, Electrical Substation and 12kV Service Center Replacement at Plant No. 2										
P2-126 Warehouse, Electrical Substation and 12kV Service Center Replacement at Plant No. 2	PDSA	Stantec Consulting Services, Inc.	11/18/2020	\$4,876,455	\$0	\$4,876,455	10.0%	10.0%	0.0%	10.0%
P2-128 TPAD Digester Facility at Plant 2										
P2-128 TPAD Digester Facility at Plant 2	PDSA	Brown and Caldwell	06/23/2020	\$39,300,000	\$0	\$39,300,000	10.0%	10.0%	0.0%	10.0%
SP-152 Climate Resiliency Study										
SP-152 Climate Resiliency Study	PSA	Hazen and Sawyer	11/28/2018	\$697,952	\$64,199	\$762,151	10.0%	10.0%	9.2%	0.8%
SP-196 Process Control Systems Upgrades Study										
SP-196 Process Control Systems Upgrades Study	PSA	Stantec Consulting Services, Inc.	03/01/2018	\$1,389,866	\$108,966	\$1,498,832	10.0%	10.0%	7.8%	2.2%
Operationally Funded Projects										
FR1-0007 Control Center Offices and Day Training Room Remodeling at Plant No. 1 (GM Awarded)	PSA	AECOM Technical Services, Inc.	01/15/2020	\$81,351	\$0	\$81,351	0.0%	0.0%	0.0%	0.0%
Total				\$187,353,671	\$16,435,315	\$203,788,986				

** Original Award was \$1,540,000, and later amended to \$3,040,000 by Board Action

**Engineering Program Contract Performance Report
for Quarter Ending 12/31/2020**

Table 5 - Active Task Orders by Master Agreement as of 12/31/2020

Master Agreement / Project	Consultant	Award Date	Original Task Order Value	Amendments	Current Task Order Value	
2012 Master Professional Design Service Agreements (Expired)						
FE10-21 Area 02 Craig Regional Park Manhole Improvements	GHD	10/8/2012	\$58,440	\$41,560	\$100,000	
2015 Master Professional Design Service Agreements (Expired)						
FE14-05 Plant No. 1 Fleet Services UST Leak Remediation	Dudek	9/1/2015	\$86,116	\$73,137	\$159,253	
2017 Master Agreements for Wastewater Treatment Planning Studies						
PS18-11 ETAP Model Updates for Plant Nos 1 and 2	Brown and Caldwell	3/17/2020	\$227,412	\$0	\$227,412	
PS19-03 Laboratory Rehabilitation Feasibility Study	HDR Engineering, Inc.	10/20/2020	\$274,888	\$0	\$274,888	
2018 Master Professional Design Service Agreements						
FR2-0013 Trickling Filter Sludge Pump Room Exhaust Fan Relocation at Plant No. 2	AECOM	11/6/2019	\$75,120	\$0	\$75,120	
FE19-02 Cengen Plant Water Pipe Replacement at Plant No. 1	AECOM	04/30/2020	\$156,498	\$0	\$156,498	
FE19-11 Primary Clarifiers Nos. 6-31 Lighting and Alarm Improvements at Plant No. 1	AECOM	9/15/2020	\$226,685	\$0	\$226,685	
J-127 Natural Gas Pipelines Replacement at Plant Nos. 1 and 2	Black & Veatch	1/21/2019	\$271,964	\$15,162	\$287,126	
FE19-03 Trickling Filter Sludge and Scum Pumps Replacement at Plant No. 1	Black & Veatch	9/1/2020	\$244,728	\$0	\$244,728	
FE18-14 Plant Water Pipeline Replacement in Kinnison, Lindstrom, and Scott Tunnels at Plant No. 2	Dudek	11/6/2019	\$108,308	\$0	\$108,308	
P1-135 Digester Ferric Chloride Piping Replacement at Plant No. 1	Dudek	2/19/2020	\$127,174	\$0	\$127,174	
FE18-16 Truck Loading Basement Drain Modifications at Plant No. 1	GHD, Inc.	12/4/2019	\$70,130	\$18,365	\$88,495	
FE18-13 Redhill Relief Sewer Relocation at State Route 55	GHD, Inc.	3/27/2020	\$168,612	\$54,883	\$223,495	
FE18-19 12KV Distribution Center B and East RAS Pump Station Roof Replacement	HDR Engineering, Inc.	09/16/2019	\$74,771	\$8,672	\$83,443	
FE18-20 Blower Building No. 1 Air Compressors at Plant No. 1	HDR Engineering, Inc.	8/18/2020	\$243,954	\$0	\$243,954	
FE18-15 Plant Boiler System Relief at Plant No. 2	IDS Group, Inc.	10/22/2019	\$23,299	\$0	\$23,299	
FE18-06 CenGen Instrument Air Compressors Replacement at Plant No. 1 and No. 2	IDS Group, Inc.	04/28/2020	\$89,876	\$0	\$89,876	
FE19-06 EPSA Motor Cooling Improvements at Plant No. 2	IDS Group, Inc.	05/05/2020	\$88,206	\$0	\$88,206	
2020 Master Agreements for On-Call Planning Studies						
No Task Orders Issued to Date	--	--	--	--	--	
			Total	\$2,616,181	\$211,779	\$2,827,960

PART 3 – MASTER BUDGET PROJECTS

The Board-adopted budget for Fiscal Years 2018-19 and 2019-20 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 6
Research Program	Table 7
Small Construction Projects Program	Table 8
Information Technology Capital Program	Table 9
Operations & Maintenance Capital Program	Table 10

**Engineering Program Contract Performance Report
for Quarter Ending 12/31/2020
Table 6 - Planning Studies Status Report**

Project Number	Project Name	Status	Allocated Budget
PS15-02	Edinger Pump Station Rehabilitation Study	Active	\$ 971,000
PS15-06	Seismic Evaluation of Structures at Plant Nos. 1 and 2	Closed	\$ 2,899,178
PS15-08	Collections Capacity Evaluation Study	Active	\$ 3,682,000
PS15-10	2017 Facilities Master Plan	Closed	\$ 3,820,824
PS16-01	Stormwater Master Plan	Closed	\$ 1,046,276
PS16-02	SCE Feed Reliability Improvements Study	Active	\$ 293,000
PS17-03	Active Fault Location Study at Plant No. 2	Active	\$ 1,300,000
PS17-08	CEQA - Facilities Master Plan	Active	\$ 1,247,000
PS17-10	Emergency Overflow Weirs, Wing Wall Structural and Geotechnical Investigations	Closed	\$ 382,598
PS18-01	Asset Management Plan Development	Closed	\$ 331,035
PS18-05	Plant No. 2 Future Site Plan Development	Closed	\$ 149,648
PS18-06	Go/No-Go Lights and Signage	Active	\$ 495,000
PS18-09	Ocean Outfall Condition Assessment and Scoping Study	Active	\$ 3,340,000
PS18-11	ETAP Model Updates for Plant Nos 1 and 2	Active	\$ 553,000
PS19-01	Digester 6 Pipe Stress Analysis at Plant No. 1	Closed	\$ 13,762
PS19-02	Circular Primary Clarifier Replacement Phasing Study at Plant No 1	Closed	\$ 43,269
PS19-03	Laboratory Rehabilitation Feasibility Study	Active	\$ 450,000
PS19-04	Chemical Evaluation Study at Plant No 1 and 2	Closed	\$ 977
PS20-01	O&M Complex and Collections Yard Relocation at Plant No. 2	Active	\$ 375,000
PS20-02	Collection System Flow Level Monitoring Study	Active	\$ 575,000
PS20-03	Truck Loading Bay Odor Control Improvements Study at Plant No. 2	Active	\$ 200,000
Grand Total			\$ 22,168,567
Number of Chartered Projects			21
Board Approved Program Budget			\$ 28,652,000
Remaining Unallocated Budget			\$ 6,483,433

**Engineering Program Contract Performance Report
for Quarter Ending 12/31/2020**

Table 7 - Research Program Status Report

Project Number	Project Name	Status	Allocated Budget
RE17-01	Operational Research Technical Support FY18-19	Closed	\$ 656,506
RE17-02	Biogas Scrubber Evaluation	Active	\$ 865,000
RE17-03	Reliant Wet Well Wizard Test	Closed	\$ 45,013
RE17-04	AquaNereda Aerobic Granular Sludge Process	Closed	\$ 19,628
RE17-05	Organica FCR Process	Closed	\$ 15,564
RE17-06	TWAS Pump Reliability Improvement Trials at Plant No. 2	Closed	\$ 10,159
RE17-07	Super Oxygenation System Research at Seal Beach Pump Station	Closed	\$ 80,000
RE18-01	Trickling Filter Bleach Test at Plant No. 1	Closed	\$ 109,068
RE18-02	Protein Matrix Demonstration Study at Plant No 1	Closed	\$ 346,843
RE19-01	Primary Scum Equipment Evaluation at Plant No. 1	Active	\$ 31,000
RE20-01	Co-Thickened Sludge Density Meter Trial at Plant No. 1	Active	\$ 121,000
RE20-04	Holding Digester 6 Solids Shredder Study at Plant No. 1	Active	\$ 95,000
RE20-05	UCI PFAS Study	Active	\$ 50,000
Grand Total			\$ 2,444,781
Number of Chartered Projects			15
Board Approved Program Budget			\$ 8,500,000
Remaining Unallocated Budget			\$ 6,055,219

**Engineering Program Contract Performance Report
for Quarter Ending 12/31/2020**

Table 8 - 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
FE14-05	Plant No. 1 Fleet Services UST Leak Remediation	Active	\$ 1,487,311
FE15-07	Secondary Treatment and Plant Water VFD Replacement at Plant 1	Active	\$ 3,319,600
FE15-10	East Lido Force Main Rehabilitation	Active	\$ 2,228,000
FE16-06	Fuel Cell Facilities Demolition	Closed	\$ 977,972
FE16-10	East Basin Distribution Box Repair	Closed	\$ 1,013,850
FE16-11	Lane Channel Crossing	Closed	\$ 328,023
FE16-14	Slater Pump Station Valve Replacements	Closed	\$ 946,940
FE17-01	Carbon Canyon Pipeline Sag Repairs	Active	\$ 873,000
FE17-03	Battery Storage System at Plant No. 1	Active	\$ 612,000
FE17-05	Plant 1 ICS Network Extension	Active	\$ 950,000
FE18-06	CenGen Instrument Air Compressors Replacement at Plant No. 1	Active	\$ 1,450,000
FE18-08	West Trunk Bypass Sewer Realignment	Active	\$ 158,000
FE18-11	Headworks Explosive Gas Monitoring Systems at Plant No. 1 and No. 2	Active	\$ 470,000
FE18-12	Erosion Control at Santa Ana River and Hamilton Ave	Active	\$ 245,000
FE18-13	Redhill Relief Sewer Relocation at State Route 55	Active	\$ 2,840,000
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	\$ 310,000
FE18-16	Truck Loading Basement Drain Modifications at Plant No. 1	Active	\$ 440,000
FE18-17	Trunkline Sampler Power Feed at Plant No 2	Active	\$ 215,000
FE18-18	Portable Generator Connector at Lido Pump Station	Closed	\$ 116,166
FE18-19	12KV Distribution B and East RAS Pump Station Roofing Replacement	Active	\$ 1,188,000
FE18-20	Blower Building No. 1 Air Compressors at Plant No. 1	Active	\$ 1,200,000
FE19-01	Pump Station Portable Generator Connectors	Active	\$ 1,990,000
FE19-02	Cengen Plant Water Pipe Replacement at Plant No. 1	Active	\$ 2,250,000
FE19-03	Trickling Filter Sludge and Scum Pumps Replacement at Plant No. 1	Active	\$ 1,100,000
FE19-04	Sunflower Pump Replacement at Plant No. 1	Active	\$ 6,300,000
FE19-05	Engineering Trailer B Car Chargers at Plant No. 1	Active	\$ 12,000
FE19-06	EPSA Motor Cooling Improvements at Plant No. 2	Active	\$ 550,000
FE19-08	Secondary Treatment VFD Replacements at Plant No. 2	Active	\$ 3,337,000
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	\$ 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	\$ 325,000
FE19-13	VFD Replacements at Seal Beach Pump Station	Active	\$ 690,000
FE20-01	Wastehauler Station Safety and Security Improvements	Active	\$ 830,000
FE20-02	Digester C, D, F, and G Mechanical Rehabilitation at Plant No. 2	Active	\$ 2,800,000
FE20-03	Return Activated Sludge Discharge Piping Replacement at Activated Sludge Plant No. 1	Active	\$ 4,250,000
FE20-04	Cengen Cooling Water Pipe Replacement at Plant No. 2	Active	\$ 3,500,000
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	\$ 621,000
FE20-07	Santa Ana Trunk Rehabilitation at Plant No. 1	Active	\$ 1,240,000
Grand Total			\$ 57,912,862
Number of Chartered Projects			42
Board Approved Program Budget		\$	65,000,000
Remaining Unallocated Budget		\$	7,087,138

**Engineering Program Contract Performance Report
for Quarter Ending 12/31/2020**

Table 9 - Information Technology Capital Program Status Report

Project Number	Project Name	Status	Allocated Budget
IT16-09	iPACS Enhancements	Active	\$ 85,000
IT16-10	LIMS Compliance Improv Project	Closed	\$ 754,800
IT16-11	Business Continuity Plan	Active	\$ 140,000
IT17-06	Printer Obsolescence	Active	\$ 350,000
IT17-07	Safety Management Suite	Active	\$ 106,000
IT17-10	Electronic Operator Round Form	Active	\$ 45,000
IT17-12	Sever/Network Power Improvements	Active	\$ 90,000
IT17-14	Specialized Application Programing & Support	Active	\$ 600,000
IT18-03	Timecard Systems Upgrade	Active	\$ 150,000
IT18-04	Conference Rooms Audio System Replacement	Closed	\$ 90,000
IT18-05	Trusted System Document Management	Active	\$ 100,000
IT18-06	Server Replacement and Obsolescence FY18/19-19/20	Closed	\$ 900,000
IT18-07	Network Equipment FY18/19-19/20	Closed	\$ 850,000
IT18-09	Records Management Information System	Active	\$ 150,000
IT18-10	Board Services Management System	Active	\$ 60,000
IT18-11	IT Security Budget 2018-2019	Closed	\$ 150,000
IT19-01	IT Safety VPP Systems (IT19-01)	Active	\$ 210,000
IT19-02	IT Enterprise Replication (IT19-02)	Active	\$ 90,000
IT19-03	IT HP Plotter (IT19-03)	Closed	\$ 8,200
IT19-04	IT HCI for ICS and ICS-DMZ (IT19-04)	Active	\$ 200,000
IT19-05	IT P1 & P2 Data Refresh (IT19-05)	Active	\$ 500,000
IT20-01	IT Server Replacement and Obsolescence FY20- 6520001	Active	\$ 700,000
IT20-02	IT Network Equipment FY20- 6520002	Active	\$ 500,000
IT20-03	IT Security Budget FY20- 6520003	Active	\$ 150,000
IT20-04	Cyber Security Program (IT20-04) 6520004	Active	\$ 150,000
Grand Total			\$ 7,129,000
Number of Chartered Projects			25
Board Approved Program Budget			\$ 10,000,000
Remaining Unallocated Budget			\$ 2,871,000

**Engineering Program Contract Performance Report
for Quarter Ending 12/31/2020
Table 10 - Operations & Maintenance Capital Program Status Report**

Project Number	Project Name	Status	Allocated Budget
MP-276-1	Central Generation Engine Overhauls at Plant No. 1 and Plant No. 2	Active	\$ 5,900,000
SC16-01	Maint. Storage Area Tool Cage	Closed	\$ -
SC17-01	CENGEN #1 Elevator Rehab	Active	\$ 110,000
SC17-02	P1 CenGen Plant Water Piping Rehabilitation	Closed	\$ 12,656
SC17-03	CenGen Oil Filter Platform	Closed	\$ 260,000
SC17-04	P1 CenGen 12KV Circuit Breaker Replacement	Closed	\$ 220,000
SC17-05	Hidrostal Pump - TEFC Close Coupled Motor #2 (Pump for SALS)	Closed	\$ 261,260
SC17-06	P1 Lab UPS System Replacement	Closed	\$ 290,294
SC18-01	P1 Primary Clarifier Fall Protection Improvements	Active	\$ 50,000
SC18-02	Joint Cen Gen Oil Centrifuge Heater & Controls Rehabilitation (MP-18)	Closed	\$ 120,000
SC18-03	P1 SALS Main Duty Pump & Motor and Installation - Remaining 2 (MP-524)	Closed	\$ 500,000
SC18-04	Edinger UPS Replacement (MP-444)	Closed	\$ 15,000
SC18-05	P1 Laboratory HVAC Boiler Burner Replacement At Plant No.1	Active	\$ 400,461
SC18-06	Pump Station Bypass Parts - Procurement (MP-426)	Closed	\$ 493,953
SC18-08	MacArthur Pump Station - FM Valve Replacement	Active	\$ 55,000
SC18-09	Admin Bldg UPS System Replacement	Active	\$ 81,332
SC19-01	Main Air Compressor Building Electrical Improvements at Plant No. 2	Closed	\$ 359,176
SC19-02	Truck Loading-Conveyors 3&6 (SC19-02)	Active	\$ 205,300
SC19-05	as the Lido PS UPS Replacement	Active	\$ 55,000
SC19-06	EPSA Standby Power Generator Control Upgrades at Plant No. 2	Active	\$ 1,251,500
SC19-07	Sunflower Pump Station Gearbox Swing Unit Purchase	Active	\$ 199,000
Grand Total			\$ 11,729,932
Number of Chartered Projects			23
Board Approved Program Budget			\$ 15,622,000
Remaining Unallocated Budget			\$ 3,892,068

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 11, and the supplemental engineering services labor summary can be found under Table 12.

Table 11 – Supplemental Engineering Services Contract Status

	Total Fees	Time
Contract	\$41,000,000	86 months ⁽¹⁾
Actuals to Date	\$23,637,085 58%	56 months 65%
Remaining	\$17,362,915 42%	30 months 35%

⁽¹⁾ Assuming three 1-year extensions

Table 12 - Supplemental Engineering Services Labor Summary

	This Quarter	Inception to Date
Labor Hours	7,736	176,481
Full Time Equivalentents	17.2	21.0
Labor Costs (no expenses)	\$1,080,450	\$23,159,311
Average Hourly Rate	\$140	\$131