



City of Morro Bay
Water Reclamation Facility Project

QUARTERLY REPORT MARCH 2021

FINAL | May 2021





City of Morro Bay
Water Reclamation Facility Project

QUARTERLY REPORT MARCH 2021

FINAL | May 2021

Contents

Section 1 - PROJECT OVERVIEW	1
1.1 General Project Status Update	1
1.1.1 Water Reclamation Facility	1
1.1.2 Conveyance Facilities	1
1.1.3 Recycled Water Facilities	2
1.2 Quarterly Budget Revision	5
Section 2 - KEY PERFORMANCE MEASURES	9
2.1 Performance Measures	9
Section 3 - PROJECT COSTS	13
3.1 Project Budget	13
3.2 Quarterly Expenditures by Budget Code	13
3.3 Project Cash Flow	15
3.4 Project Cost Summary	15
3.5 Detailed Project Costs	17
3.6 Change Orders	18
3.7 Reimbursement from Funding Agencies	20
Section 4 - PROJECT SCHEDULE	23
4.1 Project Milestones	23
Section 5 - DESIGN AND PROCUREMENT	29
5.1 Design Status	29
5.2 Procurement	29
Section 6 - CONSTRUCTION STATUS	31
6.1 Construction Summary	31
6.2 Upcoming Traffic Control	31
6.2.1 Planned Impacted Areas	31
6.2.2 Hours of Planned Lane/Road Closures	31
6.3 Construction Safety	32
Section 7 - OTHER PROGRAM ACTIVITIES	33
7.1 Public Outreach	33
7.2 Permitting Activities	33

7.3 Funding Status	34
7.4 City Operations Activity	34
Section 8 - PROJECT DETAILS	35
8.1 Water Reclamation Facility	35
8.1.1 Design/Build	35
8.1.2 Project Scope	35
8.1.3 Current Progress	35
8.1.4 Project Challenges	36
8.2 Conveyance Facilities	38
8.2.1 Designer	38
8.2.2 Contractor	38
8.2.3 Project Scope	38
8.2.4 Current Progress	38
8.2.5 Upcoming Activities	38
8.2.6 Project Challenges	39
8.3 Recycled Water Facilities	40
8.3.1 Designer	40
8.3.2 Contractor	40
8.3.3 Project Scope	40
8.3.4 Current Progress	40
8.3.5 Upcoming Activities	41
8.3.6 Project Challenges	41

Tables

Table 1	Project Accomplishments and Challenges	3
Table 2	Budget Revision Summary	7
Table 3	WRF Project Performance Measures	11
Table 4	WRF Project Overall Budget Status (thru March 2021)	13
Table 5	Quarterly Expenditures by Budget Code	14
Table 6	Quarterly Expenditures by Project Component	15
Table 7	WRF Project Cost Fiscal Year Projections	16
Table 8	WRF Project Cost Summary (through March 2021)	16
Table 9	General Project Activities Cost Summary (through March 2021)	17

Table 10	WRF Cost Summary (through March 2021)	17
Table 11	Conveyance Facilities Cost Summary (through March 2021)	17
Table 12	Recycled Water Facilities Cost Summary (through March 2021)	18
Table 13	Summary of Approved Change Orders (Amendment No. 1)	18
Table 14	Summary of Approved Change Orders (Amendment No. 2)	19
Table 15	Summary of Approved Change Orders (Amendment No. 3)	19
Table 16	Summary of Approved Change Orders (Amendment No. 4)	20
Table 17	Summary of Approved Change Orders (Amendment No. 5)	20
Table 18	Summary of Reimbursement Requests	21
Table 19	Time Schedule Order Milestone Summary	23
Table 20	Expanded Milestone Schedule	27
Table 21	Procurement Status (through March 2021)	29
Table 22	Procurement Status (through March 2021)	29
Table 23	Project Construction Costs	31
Table 24	WRF Performance Measures	37
Table 25	WRF Construction Summary	37
Table 26	Conveyance Facilities Performance Measures	39
Table 27	Conveyance Facilities Summary	39
Table 28	Recycled Water Facilities Performance Measures	41
Table 29	Recycled Water Facilities Summary	41

Figures

Figure 1	Project Cash Flow Projections and Actual Expenditures	15
Figure 2	Project Summary Schedule	25

Abbreviations

AFY	acre -feet per year
BNR	biological nutrient removal
BOD	Biochemical Oxygen Demand
Carollo	Carollo Engineers, Inc.
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CPT	Cone Penetration Test
CWSRF	Clean Water State Revolving Fund
DDW	Division of Drinking Water
EACs	estimates and completion
EPA	Environmental Protection Agency
ESCP	Enhanced Source Control Program
EACs	estimates at completion
GMP	Guaranteed Maximum Price
GSI	GSI Water Solutions
IFC	issued for construction
IPR	Indirect Potable Reuse
KPI	Key Performance Indicator
If	linear feet
MBMWC	Morro Bay Mutual Water Company
MBR	Membrane Bioreactor
Narrows	Eastern
NPDES	National Pollution Discharge Elimination System
NTP	notice to proceed
PA	Programmatic Agreement
PCO	Potential Change Order
PPP	Pollution Prevention Plan
Project	Water Reclamation Facility Project
PWAB	Public Works Advisory Board
RFI	Request for Information
RFP	request for proposal
ROW	right of way
RWQCB	Regional Water Quality Control Board
SAA	Stream Bed Alteration Agreement
SHPO	State Historic Preservation Office
SHT	Sludge Holding Tank
SLO	San Luis Obispo

SPI	Schedule Performance Index
TM	Technical Memorandum
TSO	Time Schedule Order
TSS	Total Suspended Solids
UVAOP	Ultraviolet Advanced Oxidation Process
Vistra	Vistra Energy
WIFIA	Water Infrastructure Finance and Innovation Act
WRCB	California State Water Resources Control Board
WRF	Water Reclamation Facility
WRFCAC	Water Reclamation Facility Citizens Advisory Committee
WWE	Water Works Engineers

Section 1

PROJECT OVERVIEW

1.1 General Project Status Update

All components of the Water Reclamation Facility Project (Project) are currently in progress. The general progress update and schedule information presented in this report is current as of March 31, 2021.

1.1.1 Water Reclamation Facility

1.1.1.1 Design

The design for the Water Reclamation Facility (WRF) was completed with the delivery of the Issued for Construction (IFC) drawings and specifications for the WRF on May 22, 2020.

1.1.1.2 Construction

Construction at the WRF site began on March 20, 2020. Activities to date include the following major activities which are discussed in detail in Section 8:

- Completion of major earthwork operations
- Installation of a portion of the major yard piping systems:
- Installation of various electrical infrastructure components.
- Construction progress in the following process areas:
 - Headworks
 - Biological Nutrient Removal (BNR)/Membrane Bioreactor (MBR) treatment
 - Reverse Osmosis (RO)/Ultra Violet (UV)-Advanced Oxidation Process (AOP)
 - Product water facilities
 - Residuals sludge processing
 - Chemical storage and feed
 - Operations building
 - Maintenance building
- City yard facilities

Amendment No. 5 for the WRF construction was approved by City Council in March 9, 2021 with the design-build team that included two (2) contract change orders (CCOs). These include changes to the wildlife exclusion barrier required by the Biological Opinion (BO) issued by the United States Fish and Wildlife Service (USFW) and changes to conduit materials throughout various WRF process areas. The net impact of Amendment No. 5 is \$194,954, and is a credit to the City and a reduction to the guaranteed maximum price (GMP).

1.1.2 Conveyance Facilities

1.1.2.1 Design

Water Works Engineers (WWE) submitted the bid set plans and specifications in May 2020 and the City advertised this component of the Project on June 15, 2020.

1.1.2.2 Construction

The City opened bids for the Conveyance Facilities component of the Project on August 14, 2020. The City received a total of five (5) bids. On November 10, 2020, the City Council awarded a contract for the construction of the Conveyance Facilities in the amount of \$31,493,675 to Anvil Builders, Inc. (Anvil).

City staff issued a notice to proceed (NTP) to Anvil on December 14, 2020. During Q3, Anvil began pre-construction activities (e.g., utility locations and tree removal) in late January 2021. Anvil removed 27 trees along the alignment as identified in the plans. Construction activities at both Pump Station A and Pump Station B commenced in Q3. For Pump Station A, activities included the installation of fencing and demolition of the City's consolidated maintenance building located at the existing WWTP site. At Pump Station B, work included the installation of construction fencing around the site and clearing of vegetation on the open lot. Additionally, traffic control measures were implemented for future pipeline work on Quintana Road.

1.1.3 Recycled Water Facilities

1.1.3.1 Design

The City, Program Manager, and the Hydrogeologist consultant, GSI Water Solutions, have completed the design and specifications of the pilot injection well. GSI has submitted the injection well test plan and the geochemical analysis plan for review. Additionally GSI has initiated the documentation for the aquifer storage and recovery (ASR) and is expected to complete in early May.

Table 1 summarizes some of the key accomplishments and critical challenges identified for the Project through March 31, 2021.

Table 1 Project Accomplishments and Challenges

Project Component	Key Accomplishments	Critical Challenges	Actions to Overcome Challenges	Likely Outcomes
General Project	Continued to support the review of the City's construction loan application by the Clean Water State Revolving Fund (CWSRF) staff (anticipated signed loan agreement in April 2021)			
	Continued development of the Report of Waste Discharge (ROWD).			
Water Reclamation Facility	Continued advancing construction on the South Bay Boulevard site (construction 41.0 percent complete as of March 31, 2021). Completed all major earthwork operations			
	Completed soil slip physical investigation	Due to the recent rain event, another soil slip has occurred on the WRF site.	The City and Program Manager are working with the design-build team to determine an approach for investigation and remediation of the soil slip.	Responsibility for the cost of the investigation and remediation has not yet been determined and could result in a change order resulting in an increase to the guaranteed maximum price (GMP) and the overall Project budget.
Conveyance Facilities	Received concurrence from State Historic Preservation Office of approach to proceed with construction in areas between the bike path and South Bay Boulevard.	Clearance of CA-SLO-16 cultural resources boundary required to continue construction along the bike path and Lift Station 2 alignment	Far Western to conduct investigation cultural resources boundary required and delineate CA-SLO-16.	If investigation confirms impact to CA-SLO-16, Far Western will develop construction mitigation and monitoring plans.
	Continued pre-construction activities along the pipeline alignment (e.g.. tree removal and utility location). Implemented traffic control plans along Quintana Boulevard and near the roundabout.			
Recycled Water Facilities	Performed pre-installation siting investigation with GSI, Far Western, and KMA.			

1.2 Quarterly Budget Revision

The original \$126 million baseline budget was developed in June 2018 (Q4 Fiscal Year 2017/2018). At the beginning of each fiscal year, the budget is updated and used as the measure of performance for the Project during that upcoming fiscal year. The budget is then reviewed and reconciled on a quarterly basis to facilitate comparison to both the current fiscal year and baseline budgets. A summary of the baseline, reconciled quarterly, and fiscal year budgets is provided in Table 2.

Table 2 Budget Revision Summary

Project Component	Baseline (Q4 FY 17/18)	Quarterly Reconciliation (Q3 FY 18/19)	Past Fiscal Year (Q4 FY 18/19)	Quarterly Reconciliation (Q1 FY 19/20)	Quarterly Reconciliation (Q2 FY 19/20)	Quarterly Reconciliation (Q3 FY 19/20)	Current Fiscal Year (Q4 FY 19/20)	Quarterly Reconciliation (Q1 FY 20/21)	Quarterly Reconciliation (Q2 FY 20/21) ⁽¹⁾	Quarterly Reconciliation (Q3 FY 20/21) ⁽¹⁾⁽²⁾
Water Reclamation Facility	\$62,414,000	\$74,059,000	\$72,891,000	\$72,598,000	\$72,231,000	\$71,856,000	\$77,828,000	\$77,082,000	\$77,281,977	\$77,087,023
Conveyance Facilities	\$21,087,000	\$27,108,000	\$28,864,000	\$28,524,000	\$29,224,000	\$29,989,000	\$29,840,000	\$37,355,000	\$37,482,000	\$37,482,000
Recycled Water Facilities	\$8,593,000	\$5,366,000	\$5,250,000	\$5,212,000	\$5,353,000	\$5,526,000	\$5,526,000	\$5,740,000	\$5,968,000	\$5,968,000
General Project	\$24,403,000	\$11,614,000	\$11,801,000	\$11,625,000	\$11,701,000	\$12,964,000	\$13,260,000	\$14,255,000	\$14,445,000	\$14,445,000
Construction Contingency ⁽²⁾	\$9,444,000	\$6,450,000	\$7,132,000	\$7,131,000	\$7,364,000	\$10,264,000	\$4,207,000	\$4,250,000	\$3,414,023	\$3,608,977
Total	\$125,941,000	124,597,000	\$125,938,000	\$125,090,000	\$125,873,000	\$130,599,000	\$130,661,000	\$138,682,000	\$138,591,000	\$138,591,000

Notes:

- (1) Costs shown through Q2 FY 20/21 include the design-build agreement with Filanc/Black & Veatch (Overland), Carollo's Program Management Contract (including subcontracting consultants), and other City consultants. Beginning Q3 FY20/21 this table will reflect updated contract amendments and new adopted budgets.
- (2) Breakdown of the current contingency (\$3,608,977) is as follows: WRF = \$808,977; Conveyance Facilities = \$2,500,000; and Recycled Water Facilities = \$300,000

Section 2

KEY PERFORMANCE MEASURES

2.1 Performance Measures

A set of five (5) Key Performance Indicators (KPIs) were established to readily measure the progress of the Project. These KPIs represent various success factors associated with the WRF project management and delivery that were established by the Program Manager and City staff and are summarized as Table 3.

Table 3 WRF Project Performance Measures

Performance Measure	Data	Baseline (Q4FY 19/20)	Current (Q3 FY 20/21)	Delta	Status	Ⓞ	Ⓢ	Ⓡ
1: Total Project Costs	Total Project Projected Cost at Completion versus the Baseline Budget (budget as of 09/30/20)	\$130.7 M	\$138.59M	\$7.89M	Ⓢ	Estimated cost within 5% of target budget	Estimated cost > 5% above target budget	Estimated cost > 10% above target budget
1.1: WRF Costs	On Site WRF Projected Cost at Completion versus the Baseline Budget (budget as of 09/30/20)	\$77.8 M	\$77.1M	\$(0.7)M	Ⓞ	Estimated cost within 5% of target budget	Estimated cost > 5% above target budget	Estimated cost > 10% above target budget
1.2: Conveyance Facilities Costs	Conveyance Facilities Projected Cost at Completion versus the Baseline Budget (budget as of 06/30/20)	\$29.8 M	\$37.5M	\$7.7M	Ⓡ	Estimated cost within 5% of target budget	Estimated cost > 5% above target budget	Estimated cost > 10% above target budget
1.3: Recycled Water Facilities Costs	Off Site Injection Facilities Projected Cost at Completion versus the Baseline Budget (budget as of 06/30/20)	\$5.5 M	\$5.9M	\$0.4M	Ⓢ	Estimated cost within 5% of target budget	Estimated cost > 5% above target budget	Estimated cost > 10% above target budget
1.4: General Project Costs	General Project Projected Cost at Completion versus the Baseline Budget (budget as of 06/30/20)	\$13.3 M	\$14.45	\$1.15M	Ⓢ	Estimated cost within 5% of target budget	Estimated cost > 5% above target budget	Estimated cost > 10% above target budget
2: Program Manager Earned Value	Ratio of Program Manager Earned Value to Actual Invoiced Cost-to-Date (as of 09/30/20)	1.00	1.0	0.0	Ⓞ	>= 1.00	0.99 to 0.90	< 0.90
3: Schedule Performance Index	Ratio of Planned Percent Complete to Actual Percent Complete (as of 06/30/20)	1.00	1.07	.07	Ⓞ	>=1.00	0.99 to 0.80	<0.80
4: Conveyance Pipeline Installed	Feet of conveyance pipeline installed (thru 06/30/20)	18,500 lf	0	18,500 LF	Ⓞ	<= 5%	> 5% and <=7.5%	> 7.5%
5: Compliance Date Countdown	Days Remaining to Compliance Date (as of 3/31/21)	789 days	694	95	Ⓢ	<= 365 days	364 days and 180 days	> 179 days

Section 3

PROJECT COSTS

3.1 Project Budget

The overall budget status for the Project is summarized in Table 4. Table 4 provides a summary of total estimated Project costs, including original and current estimated costs for the entire Project..

Table 4 WRF Project Overall Budget Status (thru March 2021)

Summary of Total WRF Project Cost	
Original Baseline WRF Project Budget ⁽¹⁾	\$125,941,000
Adopted FY 20/21 WRF Project Budget ⁽²⁾	\$130,596,361
Estimated Total Project Cost (as of 3/31/21) ⁽³⁾	\$138,591,000
Budget Percent Change (Current versus Fiscal Year)	6.1%
Total Expenditures for FY 20/21 Q3 (1/01/21 to 3/31/21)	\$7,155,993
Total Expenditures to Date (thru 3/31/21 invoices)	\$45,782,993
Percent of Current WRF Project Budget Expended	33.0%

Notes:

- (1) Developed in June 2018 as the basis of the approved rate surcharge that took effect in July 2019.
- (2) The budget for the Project is reviewed on an annual basis near the end of each fiscal year (May) and is used as the basis of performance for the Project for the upcoming fiscal year.
- (3) The Project cost is estimated on a quarterly basis (i.e. September 30th, December 31st, and March 31st) and compared to the adopted current fiscal year budget.

3.2 Quarterly Expenditures by Budget Code

The current quarterly expenditures as reported by the City's corresponding budget performance report and according to adopted City budget code designations are summarized below in Table 5, and further summarized by project component in Table 6.

Table 5 Quarterly Expenditures by Budget Code

City Budget Code ⁽¹⁾	Fund Name	Total Q3 FY20/21 Expenditures	Vendor Name	Project Component
4310	Part-Time Pay			
4999	Labor Cost Applied (Salary)			
4910	Employer Paid Benefits		Summarized below	
4911	Pension Normal Cost			
	Total Personnel Services	9,967.48	City of Morro Bay	General Project
5114	Lab Testing Supplies			
5115	Water Distribution System Supplies		Summarized below	
5199	Supplies & Equipment			
	Total Supplies	1694.16	Various	Water Reclamation Facility
6101	Legal Services – General	11,812.50	Aleshire & Wynder	General Project
6107	Advertising	-	-	-
5307	Blueprint/Copy Charges	-	-	-
6220	Postage (Included in 6710)	72.43	-	General Project
6301	Electricity	-	-	-
6303	Water	4,868.50	City of Morro Bay	Water Reclamation Facility
6510	Meetings & Conferences	-	-	-
6513	Meals & Lodging	-	-	-
6514	Travel Expense	-	-	-
6640	Maintenance Contracts	-	-	-
6710	Notices & Publications	-	-	-
	Total Services	16,753.43	Various	Various
6104	Engineering Services	31,998.06	GSI Water Solutions	Recycled Water Facilities
6105	Consultation Services	44.18	The Ferguson Group	General Project
6106	Contractual Services	587,147.50	Anvil Builders	Conveyance Facilities
6152	Outside Lab Testing	16,262.23	Various	General Project
6161	Licenses & Permits	1,533.00	SLO APCD	Water Reclamation Facility
6195	Rate Study	-	-	-
6196	Program Management & DB Procurement	513,223.08	Carollo Engineers and Subconsultants ⁽²⁾	General Project
6197	Grant Support	-	-	-
6198	Government Relations	-	-	-
6640	Maintenance Contracts	-	-	-
	Total Construction Soft Costs	1,150,208.05	Various	Various
7101	Land Acquisition	-	-	-
7103	Design/Build-On-site Improvement Design Phase	-	-	-
7104	Design-Lift Station/Force Main	112,066.27	Water Works Engineers	Conveyance Facilities
7105	Planning & Permitting	4,466.37	Far Western	Conveyance Facilities
7106	Design-Injection Wells & Recycled Water Pipeline	-	-	-
7107	Design/Build-On-site Improvement Build Phase	5,860,637.06	FBV Overland	Water Reclamation Facility
7108	Injection Well Construction	-	-	-
7109	Lift Station/FM Construction Phase	-	-	-
7110	Pilot Well Construction	-	-	-
	Total Construction Costs	\$5,977,169.70	Various	Various
	Total Quarterly Expenditures	\$7,155,792.82		

Notes:

- Budget codes correspond to the City's adopted budget for current fiscal year and paid invoices correspond with the City's budget performance report for those codes. Opportunities to reallocate invoice codes or consolidate codes will be considered in future quarters.
- Carollo Engineers' active subconsultants include the following: Katz & Associates (public outreach), Underwater Resources, Inc. (outfall analysis), Mimiaga Engineering Group (WRF Construction Management), and Yeh and Associates (geotechnical engineer).
- Total expenditures for this quarter are derived from budget performance reports provided by the City two weeks after end of quarter.

Table 6 Quarterly Expenditures by Project Component

Project Component	Expenditures (Q3 FY 20/21)
Water Reclamation Facility	\$5,867,039
Conveyance Facilities	\$703,680
Recycled Water Facilities	\$33,692
General Project	\$551,382
Total	\$7,155,793

3.3 Project Cash Flow

Figure 1 presents the projected and actual expenditures for the Project through March 2021 compared to the Fiscal Year 2020/2021 budget developed at the end of Q4 Fiscal Year 2019/2020. The line graph shows the cumulative values for the Project and the bars show the discrete monthly values. Actual and budgeted expenditures from 2013 to the end of Fiscal Year 2018/2019 have been combined to improve readability. The cumulative actual and cumulative forecasted expenditures show anticipated project costs over the project duration. The milestone markers correspond to the final completion deadline of the WRF and Conveyance elements of the project by February 2023, which coincides with the City being in compliance with the Time Schedule Order (TSO) issued by the Regional Water Quality Control Board (RWQCB) in June 2018.

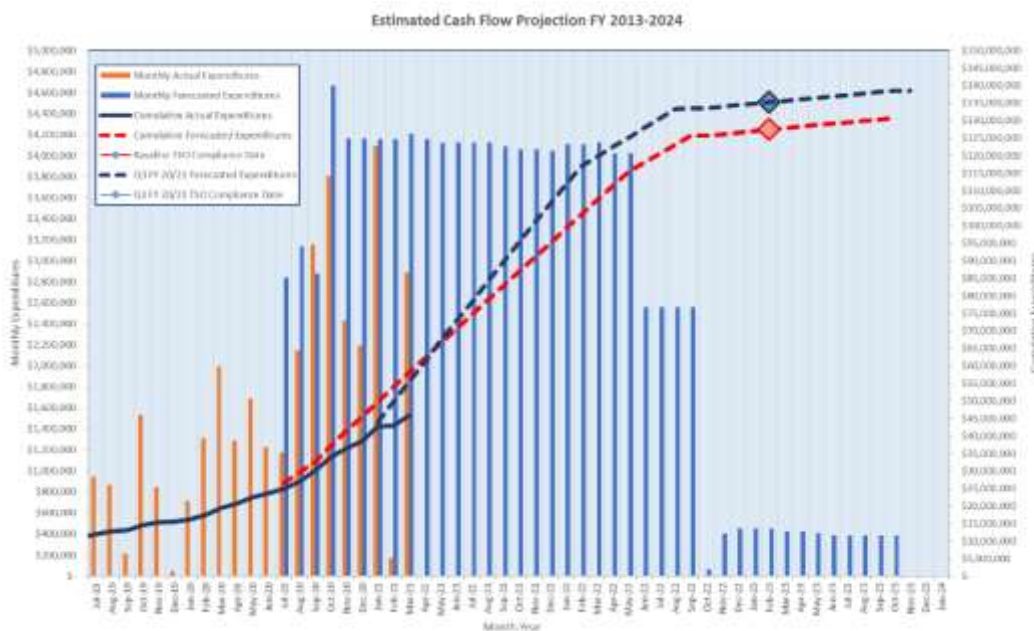


Figure 1 Project Cash Flow Projections and Actual Expenditures

A breakdown of the current Q3 Fiscal Year 2020/2021 budget by fiscal year is included in Table 7.

3.4 Project Cost Summary

Table 8 summarizes the cost-to-date and contracted amounts for each of the elements of the Project. This table also provides the current cost estimate for each project. Detailed information on the individual elements of the Project is provided in Section 7 of this Report.

Table 7 WRF Project Cost Fiscal Year Projections

Project Component	Q2 Actual Expenditures to Date	Actual Expenditures to Date ⁽¹⁾	FY 20/21	FY 21/22 ⁽²⁾	FY 22/23	FY 23/24	Q3 FY 20/21 Total Project ⁽²⁾
WRF	\$24,269,179	\$30,136,218	\$16,042,813	\$31,715,194	\$5,254,325	\$-	\$77,087,023
Conveyance Facilities	\$1,919,121	\$2,622,801	\$15,139,745	\$20,423,467	\$-	\$-	\$37,482,000
Recycled Water Facilities	\$479,233	\$512,915	\$1,052,168	\$420,101	\$2,721,667	\$1,295,000	\$5,968,000
General Project	\$11,959,551	\$12,510,933	\$672,268	\$757,519	\$744,894	\$310,372	\$14,445,000
Contingency	\$-	\$-	\$1,255,636	\$1,796,985	\$261,402	\$100,000	\$3,608,977
Total⁽²⁾	\$38,627,074	\$45,782,867	\$34,162,629	\$55,113,266	\$8,982,287	\$1,705,372	\$138,591,000

Notes:

(1) This table reflects activity through Mar 31, 2021 using the quarterly expenditures by project component allocations shown in Table 6.

(2) The next quarterly report (Q4) will reflect the new FY 21/22 WRF Project budget as adopted by City Council as well as future fiscal year budget projections.

Table 8 WRF Project Cost Summary (through March 2021)

Project	Actual Expenditures to Date	Total Contracted Cost	Contract Expended to Date (%)	Anticipated Total Project Cost	Cost Expended to Date (%)
WRF	\$30,136,218	\$75,566,870	39.9	\$77,896,000	38.7
Conveyance Facilities	\$2,622,801	\$33,546,062	7.8	\$39,982,000	6.6
Recycled Water Facilities	\$512,915	\$1,038,947	49.4	\$6,268,000	8.2
General Project ⁽²⁾	\$12,510,933	\$7,804,221	56.3 ⁽³⁾	\$14,445,000	54.0
Total	\$45,782,867	\$117,956,100	38.8	\$138,591,000	33.0

Notes:

(1) Cost includes the total anticipated cost for each element of the Project.

(2) Costs include prior contracts from previous program consultants that are no longer active.

(3) Actual expenditures to date at end of Q2 FY20/21 are \$34,964,000, General Project expenditures to date at end of Q2 FY20/21 are \$8,115,000.

3.5 Detailed Project Costs

The following tables (9-12) show the detailed costs to date for active contracts for each element of the Project.

Table 9 General Project Activities Cost Summary (through March 2021)

Consultant / Contractor	Actual Expenditures to Date ⁽¹⁾	Total Contracted Cost	Contract Expended to Date (%)
ESA	\$412,080	\$412,320	99.9
Far Western	\$275,944	\$282,014	97.8
Bartle Wells Associates	\$65,580	\$100,800	65.1
JoAnn Head Land Surveying	\$97,693	\$102,644	95.2
JSP Automation	\$43,450	\$63,500	68.4
Cogstone	\$-	\$261,918	-
Kevin Merk & Associates	\$-	\$71,310	-
Yeh and Associates	\$-	\$149,360	-
Carollo Engineers, Inc.	\$4,766,559	\$6,360,378	74.9
Total	\$5,661,306	\$7,804,221	72.5

Notes:

(1) Actual expenditures to date and total contracted cost only includes contracts that are currently active.

(2) Includes all Carollo subcontractors under Program Management Contract.

Table 10 WRF Cost Summary (through March 2021)

Consultant / Contractor	Actual Expenditures to Date	Total Contracted Cost ⁽¹⁾	Contract Expended to Date (%)
Overland Contracting	\$26,341,026	\$75,566,870	34.86
Total	\$26,341,026	\$75,566,870	34.86

Notes:

(1) Total Contracted Cost includes final value for Amendment No. 1 through No. 5 of \$1,636,060, \$63,937, \$5,992,217, and \$(194,154) respectively and the original contract value of \$67,234,512.

Table 11 Conveyance Facilities Cost Summary (through March 2021)

Consultant / Contractor	Actual Expenditures to Date	Total Contracted Cost	Contract Expended to Date (%)
Water Works Engineers (WWE)	\$1,919,121	\$2,052,387	93.5
Anvil Builders	\$587,148	\$31,493,675	1.8
Total	\$2,506,269	\$33,546,062	7.4

Table 12 Recycled Water Facilities Cost Summary (through March 2021)

Consultant / Contractor	Actual Expenditures to Date	Total Contracted Cost	Contract Expended to Date (%)
GSI	\$588,796	\$1,038,947	56.7
Total	\$588,796	\$1,038,947	56.7

3.6 Change Orders

The following Amendments have been approved by City Council and have been incorporated into the design-built team's contract and resulted in a revision of the guaranteed maximum price. (GMP). Tables 13 through 17 lists the change orders associated with each Amendment.

- Amendment No. 1 – January 2020
- Amendment No. 2 – Q3 FY 2019/2020
- Amendment No. 3 – May 2020
- Amendment No. 4 – November 2020
- Amendment No. 5 – March 2021

Table 13 Summary of Approved Change Orders (Amendment No. 1)

Contract	Change Order No.	Description	Value
WRF	01	New Sodium Hypochlorite Feed for Plant Water	\$78,576
WRF	02	Change Architecture of Operations Building	\$(21,623)
WRF	03	Headworks Odor Control	\$18,422
WRF	04	Remove Canopy and Monorail at membrane bioreactor (MBR)	\$(185,434)
WRF	05	Consolidate Chemical Facilities	\$218,978
WRF	06	Modify Chemical Piping	\$(15,856)
WRF	07	Remove Solids Dumpster Lid	\$14,543
WRF	08	Add SAFE Equalization Tank	\$504,116
WRF	09	Instrumentation and Control Changes	\$75,266
WRF	10	Revise Maintenance Building Layout and Size	\$516,583
WRF	11	Influent Piping and Metering	\$411,766
WRF	12	Install Outdoor-Rated Positive Displacement Blowers at BNR Facility	\$(58,210)
WRF	13	Remove Bypass of Coarse Screens	\$(37,137)
WRF	14	SAFE Diversion Box Additions	\$58,304
WRF	15	Size Dewatering as a Building in the Future	\$30,983
WRF	16	Stairs for the Coarse Screens and Grit Basins (total of 4)	\$52,870
WRF	17	Indirect Potable Reuse (IPR) Product Water Tank Bypass	\$(26,087)
Total			\$1,636,060

Table 14 Summary of Approved Change Orders (Amendment No. 2)

Contract	Change Order No.	Description	Value
WRF	65	Davis-Bacon Wage Increases	\$63,937
Total			\$63,937

Table 15 Summary of Approved Change Orders (Amendment No. 3)

Contract	Change Order No.	Description	Value
WRF	16	Modify Outfall Pump Station	\$367,632
WRF	19	Reduce Size of the Product Water Tank	\$(129,681)
WRF	32	Sulfuric Acid System	\$315,652
WRF	37	PLC/SCADA Software Uniformity (MBR, RO, and Headworks Only)	\$201,577
WRF	39	notice to proceed (NTP) Delay	\$1,220,532
WRF	40	Headworks Valve Automation	\$249,946
WRF	41	Perimeter Barbed Wire Fence	\$79,935
WRF	42	UV/AOP System Modifications	\$(33,481)
WRF	44	Tank Access Improvements	\$210,327
WRF	45	Maintenance Ceiling Revisions and Automated Roll-Up Door	\$21,009
WRF	46	Curbed Washdown Areas	\$76,250
WRF	47	Changes to Furnishings and Residential Equipment	\$85,194
WRF	50	Revisions to Water/Sewer Supply Storage Sheds	\$13,142
WRF	52	Analyzer Relocation and Enclosures	\$76,555
WRF	55	Notice of Dispute - PG&E Temporary Power	\$13,163
WRF	56	Impacts of Water Quality Changes	\$282,420
WRF	57	Soil Lateral Earth Pressure	\$116,329
WRF	58	Permanent Exclusion Fencing	\$855,991
WRF	59	Increased Escalation Costs	\$1,232,677
WRF	61	PCO Design Impacts	\$158,172
WRF	62	Conduit Alternative Design	\$(268,400)
WRF	64	Reduce Performance Period	\$(35,450)
WRF	66	Caltrans Intersection Improvements	\$(21,893)
WRF	67	BNR System Modifications	\$742,405
WRF	68	SAFE Equalization Settle Tank Drain Piping	\$62,215
WRF	69	Third Party Inspection and Testing	\$100,000
Total			\$5,992,217

Table 16 Summary of Approved Change Orders (Amendment No. 4)

Contract	Change Order No.	Description	Value
WRF	30	Match Sludge Blowers to MBR Scour Blowers	\$17,426
WRF	71	CDFW Site Access Restrictions	\$254,443
WRF	72	Owner Trailer Utility Hook Ups	\$19,593
WRF	73	Man Gates in Perimeter Fence	\$27,031
WRF	74	Parking Canopy Electrical Receptacles	\$42,346
WRF	75	Security Window at Admin Building	\$11,079
WRF	76	Additional Sodium Bisulfite Pump	\$58,243
WRF	78	Changed Condition - Soil Slip	\$280,013
WRF	79	Modify Water and Collection System Supply Shed	\$10,847
WRF	82	SCADA Uniformity	\$108,887
WRF	86	Water Shut Off Valve in Theresa Road	\$5,189
Total			\$835,097

Table 17 Summary of Approved Change Orders (Amendment No. 5)

Contract	Change Order No.	Description	Value
WRF	84	Alternate Red Legged Frog Barrier (Ref. PCO 58)	\$(467,776)
WRF	87	Modify Alternate Conduit Design Scope (Ref. PCO 62).	\$272,822
Total			\$(194,954)

3.7 Reimbursement from Funding Agencies

In 2017, the City was awarded a \$10.3 million planning loan from the Clean Water State Revolving Fund (CWSRF) program. To date, the City has made three reimbursement requests for the planning loan, which is anticipated to fully exhaust the entire loan amount. In February 2020, the City executed a \$61.7 loan with the Environmental Protection Agency's (EPA's) Water Infrastructure and Innovation Act (WIFIA) program. To date, a total of nine (9) reimbursement requests have been made. A summary of these requests is presented in Table 18.

Table 18 Summary of Reimbursement Requests

Agency	Description	Type	Number	Date	Requested Amount	Approved Amount
WRCB	CWSRF Planning Loan	Loan	01	December 2018	\$289,595	\$217,441
WRCB	CWSRF Planning Loan	Loan	02	November 2019	\$6,431,295	\$5,312,748
WRCB	CWSRF Planning Loan	Loan	03	October 2020 ⁽¹⁾	\$4,783,797	\$-
EPA	WIFIA	Loan	01	May 2020	\$1,100,944	\$1,100,944
EPA	WIFIA	Loan	02	June 2020	\$61,014	\$50,487
EPA	WIFIA	Loan	03	June 2020	\$3,489,409	\$3,489,409
EPA	WIFIA	Loan	04	July 2020	\$2,461,121	\$2,461,121
EPA	WIFIA	Loan	05	August 2020	\$161,636	\$142,863
EPA	WIFIA	Loan	06	October 2020	\$1,635,157	\$1,635,157
EPA	WIFIA	Loan	07	November 2020	\$3,008,623	\$3,008,623
EPA	WIFIA	Loan	08	December 2020	\$3,671,500	\$3,671,550
EPA	WIFIA	Loan	09	January 2020	\$5,553,851	\$5,553,851
Total					\$32,647,942	\$26,644,194

Notes:

(1) Reimbursement No. 3 for the SRF Planning Loan was originally submitted in December 2019 and was resubmitted in October 2020.

Section 4

PROJECT SCHEDULE

A summary of the Project schedule is presented in Figure 2. The light blue bars for each major task represent the planned progress based on the baseline schedule. The dark blue bars represent the current actual progress through March 2021. For each major line item, the schedule performance index (SPI) has been provided as well as an overall SPI for the entire Project. The SPI is a ratio of the planned percent complete versus the current actual percent complete. A SPI of greater than 1.00 indicates that the Project is on or ahead of schedule and a SPI of less than 1.00 indicates the Project is running behind the planned schedule.

4.1 Project Milestones

In June 2018, the City received a TSO from the RWQCB. The TSO requires the City to comply with a time schedule that will, within five years of adoption, allow the City to achieve full compliance with biochemical oxygen demand (BOD) and total suspended solids (TSS) final effluent limitations established in Order No. R3-2017-0050. In addition to the final compliance date, a number of intermediate milestones are provided in Table 3 (Compliance Schedule) of the TSO. Presented in Table 19 are the milestones in the TSO.

Table 19 Time Schedule Order Milestone Summary

Required Actions	Compliance Due Date	Planned Compliance Date	Actual Compliance Date
Release of Public Draft EIR	March 30, 2018	-	March 30, 2018
Release of Updated Rate Study	June 30, 2018	-	July 05, 2018
Proposition 218 Hearing	August 30, 2018	-	September 11, 2018
Certification of Final EIR	June 30, 2018	-	August 14, 2018
Award of Contract for WRF	September 30, 2018	-	October 23, 2018
Develop, Implement, and Submit Pollution Prevention Plan (PPP) for BOD and TSS	December 01, 2018	TBD ⁽¹⁾	-
Award of Contract for Construction of Conveyance Facilities	November 30, 2019	-	November 10, 2020
Completion of WRF Improvements with Completion Report	December 30, 2022	July 05, 2022	-
Full compliance with final effluent limitations	February 29, 2023	July 05, 2022	-

Notes:

- (1) The City and Program Manager have noted this requirement in the previous quarterly progress reports sent to the RWQCB (as required by the TSO). The City has requested that the Enhanced Source Control Program (EHSP) required as part of the Title 22 Engineer's Report be considered acceptable for this requirement in lieu of the PPP identified in the TSO.

Table 20 lists an expanded milestone schedule has also been developed for outstanding Project activities.

Table 20 Expanded Milestone Schedule

Milestone	Baseline Schedule due Date	Planned Completion Date
<u>General Project</u>		
Compliance with the TSO ⁽¹⁾	November 11, 2021	July 05, 2022
<u>Water Reclamation Facility</u>		
Begin Construction	August 08, 2019	March 20, 2020 (Actual)
Deliver 90 Percent Design	October 24, 2019	March 31, 2020 (Actual)
Substantial Completion	November 11, 2021	July 05, 2022
Final Completion	June 09, 2022	August 30, 2022
<u>Conveyance Facilities</u>		
Deliver 90 Percent Design	October 15, 2019	February 10, 2020 (Actual)
Deliver 100 Percent Design	December 17, 2019	June 15, 2020 (Actual)
Bid Advertisement	February 21, 2020	June 16, 2020 (Actual)
Award Construction Contract	May 08, 2020	November 10, 2020 (Actual)
Substantial Completion	September 17, 2021	March 01, 2022
Final Completion	November 19, 2021	April 15, 2022
<u>Recycled Water Facilities</u>		
Select Preferred Injection Area	May 28, 2019	June 17, 2020 (Actual)
Deliver 30 Percent Design	August 04, 2020	December 22, 2021
Deliver 60 Percent Design	November 10, 2020	March 30, 2022
Deliver 90 Percent Design	February 16, 2021	June 15, 2022
Deliver 100 Percent Design	April 27, 2021	September 14, 2022
Award Construction Contract	July 21, 2021	December 07, 2022
Substantial Completion	April 21, 2022	November 11, 2023
Final Completion	June 21, 2022	December 06, 2023

Notes:

(1) The TSO requires compliance with full secondary treatment by February 28, 2023.

Section 5

DESIGN AND PROCUREMENT

5.1 Design Status

No new design contracts for the Project were executed in Q3 Fiscal Year 2020/2021. A summary of the existing design contracts is included in Table 21 below.

Table 21 Procurement Status (through March 2021)

Project Name	Current Contract Amount	Amount Expended	30%	60%	90%	100%	Final
WRF	\$76,566,870	\$27,730,911	✓	✓	✓	✓	NA
Conveyance Facilities	\$2,045,395	\$1,960,574	✓	✓	✓	✓	✓
Recycled Water Facilities	\$0	\$0					

5.2 Procurement

No design or design-build contract procurements were performed in Q3 FY 2020/2021. Table 22 presents a summary of the procurement activity for the Project.

Table 22 Procurement Status (through March 2021)

Project Name	Circulate Request for Proposals	Proposal Opening Date	Council Award Date	Notice to Proceed Date	Consultant
WRF	January 24, 2018	May 8, 2018	October 23, 2018	November 01, 2018	Overland Contracting (Filanc-Black & Veatch)
Conveyance Facilities	January 31, 2017	March 8, 2017	November 14, 2017	November 15, 2017	Water Works Engineers
Recycled Water Facilities	Design Engineer to be Selected in FY 2021/22				

Section 6

CONSTRUCTION STATUS

6.1 Construction Summary

During Q3 Fiscal Year 2020/2021, construction continued for the WRF and commenced for the Conveyance Facilities. Table 23 presents a summary of project construction progress and costs through March 31, 2021.

Table 23 Project Construction Costs

Project Name	Amount Expended	Initial Contract Amount	Current Contract Amount	% Change in Contract Amount
WRF	\$26,341,026	\$67,234,512	\$75,566,870	12.4
Conveyance Facilities	\$587,148	\$31,493,675	\$31,493,675	0.0
Recycled Water Facilities	\$-	\$-	\$-	0.0
Construction Total	\$26,928,174	\$98,728,187	\$107,060,545	8.6

6.2 Upcoming Traffic Control

6.2.1 Planned Impacted Areas

Construction activities for the Conveyance Facilities began in 2021 in several work zones. Starting in late February 2021, the following areas will be impacted for duration of Q3 Fiscal Year 2020/2021:

- Quintana Boulevard from La Loma Avenue to South Bay Boulevard.
- Quintana from Main Street to Morro Bay Boulevard.
- Lift Station A site at existing WWTP.
- Lift Station B location near Highway 1 and Main Street.
- Certain areas along the bike path (for vegetation clearing and grubbing.)

6.2.2 Hours of Planned Lane/Road Closures

Based on Anvil's baseline schedule, construction began on the section of Quintana Boulevard between La Loma Avenue and South Bay Boulevard in February 2021. This segment of Quintana Boulevard will be completely closed to through traffic 24 hours per day with no pedestrian access between early February 2021 and the middle of May 2021. Hard road closures will be established at La Loma Avenue and north of the entrance to Benedict-Retty Mortuary and Crematorium. A soft road closure will be established at South Bay Boulevard and allow local traffic only to the church, mortuary, Black Hills Villas, and Blue Heron Terrace Mobile Home Park. These residences and businesses will only be accessible from South Bay Boulevard during the closure. ***The information provided above was current as of March 31, 2021. The Q4 report will provide an update.***

The community is encouraged to obtain additional information on current road closures/conditions from the WRF website (www.morrobaywrf.com) or by calling the Project hotline at 877-MORROBAYH2O.

6.3 Construction Safety

The Project safety goal is zero reportable incidents. There has been a total of zero reported incidents through March 31, 2021.

Section 7

OTHER PROGRAM ACTIVITIES

7.1 Public Outreach

As the City prepares for construction of the Conveyance Facilities component of the Project, the Program Manager has been engaged in a number of public outreach activities including the following:

- Updated the WRF website with regular construction information on homepage and Construction Information page
- Built out Business Information web page, including structure for monthly virtual community meetings, meeting materials and business informational resources
- Finalized and distributed construction notices for start of construction
- Developed project signage templates for use by contractor
- Coordinated with contractor for distribution of bilingual doorhangers on immediately impacted residences and businesses in area of Main Street and Quintana Road
- Continued to build stakeholder database email list for regular email correspondence
- Developed bi-weekly e-blasts to highlight construction schedule look-ahead information and promote virtual community outreach meetings
- Reviewed talking points regarding construction site theft
- Prepared for and conducted two monthly virtual community outreach meetings via Zoom
- Responded to regular community inquiries from project phone line and email address, and coordinated with team members when necessary

Additional near-term public outreach activities include:

- Developing bi-weekly e-blasts and as-needed construction notices to convey construction look-ahead information to stakeholders and the public
- Planning monthly virtual “office hours” for the community
- Working with contractor to distribute doorhangers to properties with proper lead-time

7.2 Permitting Activities

Permit compliance is an important aspect of the Project. The current permitting activities include:

- Regional Water Quality Control Board
 - In order to obtain a National Pollution Discharge Elimination System (NPDES), the City must submit a ROWD to the RWQCB. The Program Manager began development of the Draft ROWD in January 2021 and is scheduled to deliver the Final Draft in May 2021.
- Division of Drinking Water:
 - The Title 22 Engineering Report is required by Division of Drinking Water (DDW) before the City can receive a potable reuse permit. The Program Manager delivered

an initial Draft of the Title 22 Engineering Report to the City for review in June 2020. The revised draft, including comments from City staff, was submitted to DDW in July 2020. During Q3 Fiscal Year 2020/2021, the City and Program Manager have received comments from DDW and has had several meetings to review their comments.

- The City is working with DDW to obtain a variance from their typical pipeline separation requirements due to the width of the trench for the Conveyance Facilities pipelines and the limited right of way (ROW) for much of the alignment. The City has been coordinating with DDW on this issue since early 2019 and submitted a formal application to DDW in August 2020. Since that time, the City has had a meeting to review the information provided and has provided supplemental information to aid DDW's review. As of March 2021, The City has addressed the majority of DDW's comments and has begun the preliminary development of a monitoring and mitigation plan for the pipeline.
- Caltrans:
 - The City obtained the encroachment permit from Caltrans for construction of the Conveyance Facilities pipelines in August 2020.
- California Department of Fish and Wildlife:
 - The City must have a SAA (as required) from the CDFW before work can begin along certain segments on the bike path for the Conveyance Facilities component of the Project. The City submitted the revised notification in January 2020 and plans to obtain the Draft SAA (as required) in April 2021.
- State Historic Preservation Office:
 - The Programmatic Agreement (PA) negotiated with the SHPO requires that a mitigation and monitoring plan be developed for each element of the project (i.e., WRF, pipelines, and injection wells). The City submitted the mitigation and monitoring plan to EPA for distribution to SHPO in October 2020. The City has received notification from the EPA regarding SHPO's response on March 15th, 2021. The response stated that the City may proceed with construction by implementing the appropriate cultural resources monitoring and mitigation measures for areas along Main St., Quintana road and both lift stations. The City will need to perform additional archeological investigation for areas along the bike path and the lift station 2 alignment.

7.3 Funding Status

- Continued to support CWSRF's technical, legal, and financial reviews. The City anticipates signing a loan agreement with CWSRF during Q4 of FY 2021.
- The United States Department of the Interior Bureau of Reclamation released its WaterSmart Title XVI WIIN Notice of Funding Opportunity in mid-March 2021. The City is actively pursuing grant funding from this program and is preparing an application which is due on April 23rd, 2021.

7.4 City Operations Activity

The current City Operations activities include:

- Significant City Operations activities are not anticipated until start-up of the WRF begins in early 2022.

Section 8

PROJECT DETAILS

8.1 Water Reclamation Facility

8.1.1 Design/Build

In October 2018, the City executed a contract with Overland Contracting consisting of a joint venture of Filanc and Black & Veatch (i.e., design-build team) for design and construction of the WRF located at the South Bay Boulevard site. The WRF will be delivered using the design-build process.

8.1.2 Project Scope

The scope of this element of the Project includes a preliminary, secondary, and advanced treatment facilities. The secondary treatment processes will consist of an MBR and have the ability to exceed the anticipated discharge requirements for the City's new NPDES permit. The advanced treatment facilities include RO and UV-AOP. Purified water from the advanced treatment facilities will be injected into the Lower Morro Groundwater Basin.

8.1.3 Current Progress

The design-build team has continued to progress the construction of the WRF and is on track to reach substantial completion in July 2022. The construction has completed the following items:

Sitework

- Completed filling, compacting, and rough grading the area.
- Completed major earthwork operations in the north portion of site including completing the west fill-slope embankment (adjacent to Canyon Fill area) and completing the north cut-slope near the Vactor Receiving Station.
- Completed excavation of the North Storm Water Basin (adjacent to Maintenance Building).
- Completed installation of the following major yard piping systems:
 - 18" and 14" WWR lines to Headworks (raw sewage influent lines) – completed.
 - RAS piping between MBR system and the BNR basin - completed.
 - WWS piping between SAFE Diversion Box and SAFE Settle Tank - completed.
 - RO/UV system piping including: ROP, ROF, OUVE, ROC, UVE - completed.
 - IPR/ Outfall Pump Station underslab and adjacent piping.
 - Storm Drainage piping, manholes, and storm water basin.
 - Sanitary Sewer collection lines, laterals, and manholes (on site system).
 - Sanitary Sewer Force Main to Headworks discharge location.
 - 18", 6" FPW lines and Hydrants (Fire Water from existing City water system).
 - Other yard piping, branch lines, and ancillary systems.
 - Electrical Subcontractor continues to install conduits, vaults, and other installations.

Headworks

- Headworks process equipment skid by Kusters-Zima Water (Course Screen and Grit Removal) delivered and is being stored on site (north site near Headworks).

BNR/MBR Treatment

- Completed leak testing and backfilling of the BNR water bearing basin.
- Installed and encased RAS and Scum under-slab piping at MBR area.
- Installed and encased Mix Liquor (ML) under-slab piping at MBR area.

RO/UV-AOP

- Completed building slab forming, rebar, in-slab conduits, and concrete placement. Concrete equipment pads at building interior have also been completed.

Product Water Facilities

- Completed Calcite Treatment Facility slab, including concrete placement.
- Completed IPR/Outfall Pump Station slab, including concrete placement.
- Completed Water Storage Tank ring slab and began steel tank erection.
- Completed forming and rebar installation for Balancing Tank slab (concrete next).

Residuals/Sludge Processing

- Contractor has completed leak testing and backfilling of the Sludge Holding Tank (SHT).

Chemical Storage and Feed

- Contractor has excavated and compacted subgrade, started installing rebar and in-slab conduits, and is preparing for concrete placement of lower containment area slab.

Operations Building

- Completed concrete placement of structural slab-on-grade.
- Completed grinding and polishing the Operations Building concrete finished floor.
- Taken delivery of Pre-Engineered Metal Building components. Subcontractor has completed erection of building main structural steel framing.
- Subcontractor has completed the CMU wainscot walls and exterior CMU patio walls.

Maintenance Building

- Completed concrete placement of structural slab-on-grade.
- Taken delivery of Pre-Engineered Metal Building components.
- Subcontractor has begun erection of main structural steel framing.

City Yard Facilities

- Completed concrete placement for Water/Collections Storage Shed slab-on-grade.
- Completed concrete placement for Outdoor Storage Aisles canopy column footings.
- Completed concrete slab and CMU walls for the vehicle Wash Rack structure.
- Excavated and started installing rebar for WRF Parking Canopy column footings

8.1.4 Project Challenges

In late January 2021, following heavy rains (January 27 and 28, 2021), the previously mitigated soil slip reactivated and continues to move. As of the issuance of this report the project Geotechnical Engineering of Record has excavated and logged several test pits and prescribed and undertaken four 30-inch diameter auger-bucket boreholes and has entered/logged the boreholes. The DB Team has provided field data for City review, but the geotechnical engineer has not yet provided its recommendation for the landslide remediation.

The City has completed negotiations with the design-build team of Amendment No. 5 which was approved by City Council on March 9, 2021 and resulted in a credit to the City and reduction to the GMP.

Table 24 WRF Performance Measures

Performance Measures	Target	Current	Status
Construction Cost ⁽¹⁾⁽²⁾	\$67.2M	\$75.6M	●
Construction Contingency ⁽³⁾⁽⁴⁾	\$9.1M	\$0.6M	●

Notes:

- (1) Project budget and current contract amount (≤5% over target = Green, between 5% and 10% over target = Yellow, >10% over target = Red).
- (2) The GMP includes costs for both design and construction of the WRF.
- (3) Project budget and current amount (≤50% of target=Green, between 0% and 50% of target=Yellow, >50% of target=Red).
- (4) The Program Manager initially allocated \$6.2 million for contingency for the WRF component of the project. During Q3 Fiscal Year 2019/2020, an additional \$2.9 million in contingency was added to the budget to cover Amendment No. 3. With execution of Amendment No. 1, 2, 3, and 4 \$8.5 million has been moved from contingency to the GMP leaving \$0.6 million in contingency.

Table 25 WRF Construction Summary

Schedule		
Request for Bid / Bid Advertisement	January 24, 2018	
Bid Opening Date	May 08, 2018	
Contract Award / Council Award Date	October 23, 2018	
Notice to Proceed (Design)	November 05, 2018	
Notice to Proceed (Construction)	March 20, 2020	
Original Final Completion Date	August 23, 2021	
Original Duration (Non-Working Days)	886	
Days Changed by Change Order	8	
Actual Final Completion Date (including Non-Working Days)	August 31, 2022	
Schedule Percent Complete	32.0% (286 days / 894 days)	
Budget		
Engineer's Estimate (Construction Cost + 10% Construction Contingency)	\$73,475,845	
Award Amount (including Design Cost)	\$67,234,512	
Change Order Total	\$8,332,358	
Current Contract Value	\$75,566,870	
Percent Change	12.4%	
Work Completed		
Actual Cost -to-Date	\$26,341,026	
Percent Complete (Percent Expended)	34.9%	
Construction Oversight Statistics		
	PCOs	COs
Total Received	96	N/A
Total Approved	N/A	57 ⁽¹⁾
Total Pending	9	0
Average Turnaround (calendar days)	N/A	N/A

Acronym List:

PCO – Proposed Change Order; CO – Change Order

- (1) 57 PCOs have been approved and are reflected in Amendment No. 1, 2, 3, and 4 to the design-build agreement.

8.2 Conveyance Facilities

8.2.1 Designer

In November 2017, the City executed a contract with WWE for design and engineering support for the facilities necessary to connect the existing WWTP and the new WRF.

8.2.2 Contractor

The City awarded a contract to Anvil for construction of the Conveyance Facilities component of the Project on November 10, 2020. A construction NTP was issued on December 14, 2020 and Anvil began construction in January of 2021.

8.2.3 Project Scope

The Conveyance Facilities include the design of approximately 3.5 miles of pipelines and two (2) lift stations. The pipelines include two raw wastewater force mains, a wet weather/brine discharge force main, and a potable reuse pipeline to the west injection area.

8.2.4 Current Progress

Anvil continued pre-construction activities for portions of the Conveyance Facilities and began construction in January of 2021. The following pre-construction activities were completed in Q3 FY 20/21:

- Mobilization of major pieces of equipment and construction material.
- Construction material submittal and review with Waterworks Engineers.
- Pot-holing existing utility verification along the pipeline alignment.
- Clearing and grubbing trees and vegetation.
- Approval of traffic control plans through the City.
- Installing traffic control measures along Quintana Road.
- Delineation and installation of environmentally sensitive area (ESA) fencing to delineate cultural resources.
- Demolition of the existing maintenance building at the City's existing corporation yard to facilitate construction of Pump Station A.

8.2.5 Upcoming Activities

Anvil is scheduled to complete the following activities during Q4 FY 20/21:

- Installation of pipelines in Quintana Avenue between La Loma Avenue and South Bay Boulevard.
- Installation of pipelines in Main Street to Quintana Road.
- Shoring installation for Pump Station A and B excavation.
- Begin construction of Pump Station A.
- Begin construction of Pump Station B.






The information provided above was current as of March 31, 2021. The Q4 report will provide an update.

8.2.6 Project Challenges

The conveyance facilities project must undergo consultation by government agencies associated with the impacted project resources. The project underwent consultation by SHPO to review the potential impact on cultural resources from the conveyance facilities construction activities. Due to an extension of the standard review time provided to SHPO by EPA, project construction was delayed by 35 days. After SHPO’s review period the contractor received notification on March 15, 2021 that they may proceed with construction in areas outlined in the PA. The City and Program Team are still coordinating with the EPA, SHPO, and Far Western to proceed with developing a cultural resource monitoring and mitigation plan for the remaining components of the conveyance facilities project.

The City and Program Manager are focused on keeping the community informed of construction activities and will continue to use print media and the WRF website to present the most up to date information. As construction begins on the first segments of the pipeline, the City, Program Manager, and Anvil will continuously improve its approach for future segments of pipeline construction. The Project team is committed to implementing these lessons learned with the goal of minimizing impacts to the City’s residents, businesses, and visitors.

Table 26 Conveyance Facilities Performance Measures

Performance Measures	Target	Current	Status
Construction Cost ⁽¹⁾	\$24.2M	\$31.5M	
Construction Contingency ⁽²⁾	\$2.5M	\$0.0M	
Number of Feet of Pipelines Constructed ⁽²⁾	18,500 lf	0 lf	
Number of Days of Full Road Closures ⁽¹⁾	0 Days	0 Days	
Number of Hours of Night Work	0 Hours	0 Hours	

Notes:

- (1) Project budget and current contract amount (≤5% over target=Green, between 5% and 10% over target=Yellow, >10% over target=Red).
- (2) Project budget and current amount (≤50% of target = Green, between 0% and 50% of target=Yellow, ≤0% of target=Red).

Table 27 Conveyance Facilities Summary

Schedule	
Request for Bid / Bid Advertisement	June 15, 2020
Bid Opening Date	August 14, 2020
Contract Award / Council Award Date	November 10, 2020
Notice to Proceed for Construction	December 14, 2020
Original Final Completion Date	NA
Original Duration (Non-Working Days)	435
Days Changed by Change Order	0
Actual Final Completion Date (including Non-Working Days)	NA
Schedule Percent Complete	0%

Budget				
Engineer's Estimate (Construction Cost + 10% Construction Contingency)	\$26,657,000			
Award Amount	\$31,493,675			
Change Order Total	\$0			
Current Contract Value	\$31,493,675			
Percent Change	0%			
Work Completed				
Actual Cost -to-Date	\$1,766,551			
Percent Complete (Percent Expended)	5.61%			
Length of Pipe Installed (actual to date / planned total)	0 lf / 18,500 lf			
Construction Management Statistics				
	RFIs	Submittals	PCOs	COs
Total Received	37	146	2	0
Total Responded To	30	126	0	0
Total Pending	7	20	0	0
Average Turnaround (calendar days)	NA	NA	N/A	N/A

Acronym List:

RFI – Request for Information; PCO – Proposed Change Order; CO – Change Order

8.3 Recycled Water Facilities

8.3.1 Designer

Procurement activities for the final design of the Recycled Water Facilities have not yet begun. The Program Manager also anticipates beginning preliminary design in early 2021 along with the pilot injection testing. Phase 1 and Phase 2 of the hydrogeological work has been completed by GSI and work on Phase 3 (i.e., pilot injection testing) will be completed in June 2021.

8.3.2 Contractor

This element of the Project is being delivered via a conventional design-bid-build procurement process. The Recycled Water Facilities will begin construction in late 2022/early 2023.

8.3.3 Project Scope

Since the potable reuse pipeline from the WRF to the selected injection site was moved into WWE's scope for design of the Conveyance Facilities, this element of the Project consists primarily of full-scale injection wells at the west injection site.

8.3.4 Current Progress

GSI has completed Phase 1 and is currently working on Phase 2 of the hydrogeological work, which has culminated in the selection of the west injection area and preliminary siting of the injection wells.

8.3.5 Upcoming Activities



The next phase of hydrogeological work is pilot injection testing, which consists of the following elements:

- Design of the pilot injection well (Completed February 2021).
- Permitting for installation of the pilot injection well (March 2021 ongoing).
- Construction of the pilot injection well (Anticipated June 2021).
- Conducting pilot testing (Anticipated June to July 2021).

8.3.6 Project Challenges

At the moment, this portion of the project will also need to be cleared by SHPO prior to any ground disturbing activities to confirm that the installation of the pilot and final injection wells will not negatively impact any cultural resources if present.

Table 28 Recycled Water Facilities Performance Measures

Performance Measures	Target	Current	Status
Construction Cost ⁽¹⁾	TBD	\$0.0M	
Construction Contingency ⁽²⁾	\$0.3M	\$0.0M	

Notes:

(1) Project budget and current contract amount (≤5% over target = Green, between 5% and 10% over target = Yellow, >10% over target = Red).

(2) Project budget and current amount (≤50% of target = Green, between 0% and 50% of target = Yellow, ≤0% of target = Red).

Table 29 Recycled Water Facilities Summary

Schedule	
Selection of the Injection Site	NA
Request for Bid / Bid Advertisement	NA
Bid Opening Date	NA
Contract Award / Council Award Date	NA
Notice to Proceed for Construction	NA
Original Final Completion Date	NA
Original Duration (Non-Working Days)	NA
Days Changed by Change Order	0
Actual Final Completion Date (including Non-Working Days)	NA
Schedule Percent Complete	0%
Budget	
Engineer's Estimate (Construction Cost + 10% Construction Contingency)	\$3,300,000
Award Amount	\$0
Change Order Total	\$0
Current Contract Value	\$0
Percent Change	0%

Work Completed					
Actual Cost -to-Date					\$0
Percent Complete (Percent Expended)					0%
Work Completed					
	RFIs	Submittals	PCOs	COs	
Total Received	0	0	0	0	
Total Responded to	0	0	0	0	
Total Pending	0	0	0	0	
Average Turnaround (calendar days)	NA	NA	N/A	N/A	

Acronym List:

RFI – Request for Information; PCO – Proposed Change Order; CO – Change Order