SAN JOSÉ/SANTA CLARA TREATMENT PLANT ADVISORY COMMITTEE

SAM LICCARDO, CHAIR
DEBI DAVIS, MEMBER
LAN DIEP, MEMBER
DAVID SYKES, MEMBER
DEV DAVIS, MEMBER
CARMEN MONTANO, MEMBER
KATHY WATANABE, MEMBER
STEVEN LEONARDIS, MEMBER
JOHN GATTO, MEMBER

AGENDA/TPAC

4:00 p.m. April 11, 2019 Room 1734

1. ROLL CALL

2. APPROVAL OF MINUTES

A. March 14, 2019

3. UNFINISHED BUSINESS/REQUEST FOR DEFERRALS

4. DIRECTOR'S REPORT

A. Director's Report (verbal)
- Monthly Progress Report

5. AGREEMENTS/ACTION ITEMS

A. San José- Santa Clara Regional Wastewater Facility Capital Improvement Program Semiannual Status Report

Staff Recommendation:

Accept the semiannual status report on the San José-Santa Clara Regional Wastewater Facility Capital Improvement Program for the period of July 2018-December 2018.

This item is scheduled for consideration by the T&E Committee on April 8, 2019.

B. Actions Related to the Purchase Order for Clarifier Coating Rehabilitation Services

Staff Recommendation:

Adopt a resolution authorizing the City Manager to:

(a) Execute a Purchase Order with Euro Style Management, Inc. (North Highlands, CA) for clarifier coating rehabilitation services at the San

José-Santa Clara Regional Wastewater Facility for an initial twelve-month period, starting on or about May 1, 2019 and ending on or about April 30, 2020, for an amount not to exceed $717,200; and

(b) Exercise up to four one-year options to extend the term of the Purchase Order with the last option year ending on or about April 30, 2024, subject to the annual appropriation of funds.

Desired Outcome: Increase the life expectancy of the Regional Wastewater Facility clarifier tanks.

This item is scheduled for consideration by the City Council on April 23, 2019.

C. Actions Related to the Purchase Order for Sand Blasting and Painting Services

Staff Recommendation:

Adopt a resolution authorizing the City Manager to:

(a) Execute a Purchase Order with Jeffco Painting and Coating, Inc. (Vallejo, CA) for sandblasting and painting services at the San Jose-Santa Clara Regional Wastewater Facility for an initial twelve-month period, starting on or about May 1, 2019 and ending on or about April 30, 2020, for an amount not to exceed $400,000; and

(b) Exercise up to four one-year options to extend the term of the Purchase Order with the last option year ending on or about April 30, 2024, subject to the appropriation of funds.

Desired Outcome: To complete scheduled sandblasting and painting projects at the Regional Wastewater Facility to ensure equipment and infrastructure are preserved.

This item is scheduled for consideration by the City Council on April 23, 2019.

6. OTHER BUSINESS/CORRESPONDENCE

7. STATUS OF ITEMS PREVIOUSLY RECOMMENDED FOR APPROVAL BY TPAC

A. Election of Chair

Committee Members approved Sam Liccardo as Chair.

B. Election of Vice Chair

Committee Members approved Debi Davis.

C. 8716 – South Bay Water Recycling Pump Station 5 VFD Replacement

Staff Recommendation:

Report on bids and award of contract for the 8716 - South Bay Water Recycling Pump Station 5 VFD Replacement project to the low bidder, CESCORP dba CAL ELECTRIC, in the amount of $243,100 and approve a contingency in the amount of $24,300, for a total of $267,400.

This item is was approved by the City Council on March 19, 2019.

8. REPORTS

A. Open Purchase Orders Greater Than $100,000 (including Service Orders)

The attached monthly Procurement and Contract Activity Report summarizes the purchase and contracting of goods with an estimated value between $100,000 and $1.17 million and of services between $100,000 and $290,000.

9. MISCELLANEOUS

A. The next monthly TPAC Meeting is on **May 16, 2019, at 4:00 p.m.**, City Hall, Room 1734.

10. OPEN FORUM

11. ADJOURNMENT

NOTE: If you have any changes or questions, please contact Eva Roa, Environmental Services (408) 975-2547.

To request an accommodation or alternative format for City-sponsored meetings, events or printed materials, please contact Eva Roa (408) 975-2547 or (408) 294-9337 (TTY) as soon as possible, but at least three business days before the meeting/event.

Availability of Public Records. All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at San Jose City Hall, 200 East Santa Clara Street, 10th Floor, Environmental Services at the same time that the public records are distributed or made available to the legislative body.

MINUTES OF THE
SAN JOSÉ/SANTA CLARA
TREATMENT PLANT ADVISORY COMMITTEE
San José City Hall, T-1734
Thursday, March 14, 2019 at 4:02 p.m.

At this time, San José City Attorney Jennifer Pousho advised that since the Chair was not in attendance and no Vice Chair had been elected yet, a motion needed to be made to approve someone as Acting Chair. The Acting Chair would then get the Committee to item 5.A. at which point the Committee would vote on the election of a Chair and Vice Chair and at that time the Chair, or Vice Chair, would take over.

On a motion made by Committee Member Leonardis and a second by Committee Member John Gatto, TPAC recommended nomination of Committee Member Debi Davis as Chair Pro Tem.
Ayes – 7 (Dev Davis, Diep, Gatto, Leonardis, Montano, Sykes, Watanabe)
Abstain 1 (Debi Davis)
Absent – 1 (Liccardo)

1. ROLL CALL

Minutes of the Treatment Plant Advisory Committee convened this date at 4:02p.m. Roll call was taken with the following members in attendance:

Committee Members: Debi Davis, Dev Davis, Lan Diep, John Gatto, Steven Leonardis, Carmen Montano, David Sykes, Kathy Watanabe

Absent: Sam Liccardo

2. APPROVAL OF MINUTES

A. March 14, 2018

On a motion made by Committee Member Gatto and a second by Committee Member Dev Davis, TPAC recommended approval of the minutes.

Ayes – 8 (Debi Davis, Dev Davis, Diep, Gatto, Leonardis, Montano, Sykes, Kathy Watanabe)

Absent – 1 (Liccardo)

3. UNFINISHED BUSINESS/REQUEST FOR DEFERRALS

4. DIRECTOR'S REPORT

A. Director's Report (verbal)

Director Kerrie Romanow gave a verbal update to the committee in addition to the normal CIP update this month. The Pretreatment program will be audited by the EPA at the end of April and the Committee will be updated on how it goes. Director Romanow also gave an update regarding the consideration of a loop trail around Pond A18 prior to the sale to the Santa Clara Valley Water District as part of the Shoreline project that Mr. Dean Stanford spoke about at the February TPAC meeting. Since trail development is overseen by the San José Parks Department, staff reached out to them. Staff found out that the Parks Department has been awarded a grant by the state Coastal Commission to study additional trail connections in the area of the pond and the levy with a report due at the end of June. Director Romanow informed the committee that staff would continue to work the Parks Department and come back at a later date with a workload assessment so that nothing is repeating or contradicting the Parks report that will be released in June.

5. AGREEMENTS/ACTION ITEMS

A. Election of Chair

On a motion made by Committee Member Diep and a second by Committee Member Gatto, TPAC recommended the nomination of Committee Member Sam Liccardo as Chair.
Ayes – 8 (Debi Davis, Dev Davis, Diep, Gatto, Leonardis, Montano, Sykes, Watanabe)
Absent – 1 (Liccardo)

B. Election of Vice Chair

On a motion made by Committee Member Diep and a second by Committee Member Gatto, TPAC recommended the nomination of Committee Member Debi Davis as Vice Chair.
Ayes – 8 (Debi Davis, Dev Davis, Diep, Gatto, Leonardis, Montano, Sykes, Watanabe)
Absent – 1 (Liccardo)

C. 8716 – South Bay Water Recycling Pump Station 5 VFD Replacement

Staff Recommendation:

Report on bids and award of contract for the 8716 - South Bay Water Recycling Pump Station 5 VFD Replacement project to the low bidder, CESCORP dba CAL ELECTRIC, in the amount of $243,100 and approve a contingency in the amount of $24,300, for a total of $267,400.

This item is scheduled for consideration by the City Council on March 19, 2019.

Assistant Director Napp Fukuda gave an overview of why this was needed and was available for questions.

On a motion made by Committee Member Gatto and a second by Committee Member Watanabe, TPAC recommended approval of staff's recommendation for Item 5.C.
Ayes – 8 (Debi Davis, Dev Davis, Diep, Gatto, Leonardis, Montano, Sykes, Watanabe)
Absent – 1 (Liccardo)

6. OTHER BUSINESS/CORRESPONDENCE

A. Golden Shovel Design Competition at San José – Santa Clara Regional Wastewater Facility Information Memo

Assistant Director Napp Fukuda gave an overview of what information this memo contained and was available for questions.

Committee Member John Gatto asked if there had ever been an appraisal on the land that the students would be working on.

Director Romanow answered that an appraisal had been done when working on the Plant Master Plan and that it would be part of the analysis that the students would take into account.

Committee Member Gatto said that it would be nice to know what it would bring if it were sold.

Committee Member Kathy Watanabe asked if the report would be brought to TPAC or how they could find out what the analysis will be.

Director Romanow gave an overview of the process and said she would look into

seeing abbreviated presentations that could be brought to TPAC.

Item 6.A. was approved to note and file
Ayes – 8 (Debi Davis, Dev Davis, Diep, Gatto, Leonardis, Montano, Sykes, Kathy Watanabe)
Absent – 1 (Liccardo)

7. STATUS OF ITEMS PREVIOUSLY RECOMMENDED FOR APPROVAL BY TPAC

A, First Amendment to the Master Consultant Agreements with Kennedy/Jenks Consultants Inc. and MNS Engineers, Inc. for Construction Management and Inspection Services for the San José- Santa Clara Regional Wastewater Facility Capital Improvement Program

Staff Recommendation:
Approve the First Amendment to the Master Consultant Agreement with Kennedy/Jenks Consultants Inc. and MNS Engineers, Inc., for construction management and inspection services for various capital improvement projects at the San José-Santa Clara Regional Wastewater Facility, to allow for overtime pay, as may be required by the City, with no extension to the term or increase to the maximum total compensation.

This item was approved by the City Council on February 26, 2019.

B, Actions Related to the Purchase Order for Digester Dome Coating Rehabilitation Services

Staff Recommendation:

Adopt a resolution authorizing the City Manager to:

1. Execute a Purchase Order with National Coating & Lining Company (Murrieta, CA) for digester dome coating rehabilitation services for the Environmental Services Department at the San Jose-Santa Clara Regional Wastewater Facility for an initial twelve-month period, starting on or about April 1, 2019 and ending on or about March 31, 2020, for an amount not to exceed $240,000; and

2. Exercise up to four one-year options to extend the term of the Purchase Order with the last option year ending on or about March 31, 2024, subject to the annual appropriation of funds.

Desired Outcome: Increase the life expectancy of the Regional Wastewater Facility digesters.

This item was approved by the City Council on February 26, 2019.

8. REPORTS

A. Open Purchase Orders Greater Than $100,000 (including Service Orders)

The attached monthly Procurement and Contract Activity Report summarizes the purchase and contracting of goods with an estimated value between $100,000 and $1.17 million and of services between $100,000 and $290,000.

9. MISCELLANEOUS

A. The next TPAC Meeting is on **April 11, 2019, at 4:00 p.m.**, City Hall, Room 1734.

10. OPEN FORUM

Dean Stanford gave an update to the park proposal that he had brought to a previous meeting.
Committee Member Gatto asked that the update that Mr. Stanford gave today would be sent to the San José Parks Department.

11. ADJOURNMENT

A. The Treatment Plant Advisory Committee adjourned at 4:11 p.m.

Debi Davis, Vice Chair

TREATMENT PLANT ADVISORY COMMITTEE

San José-Santa Clara Regional Wastewater Facility

Capital Improvement Program

Monthly Status Report: February 2019

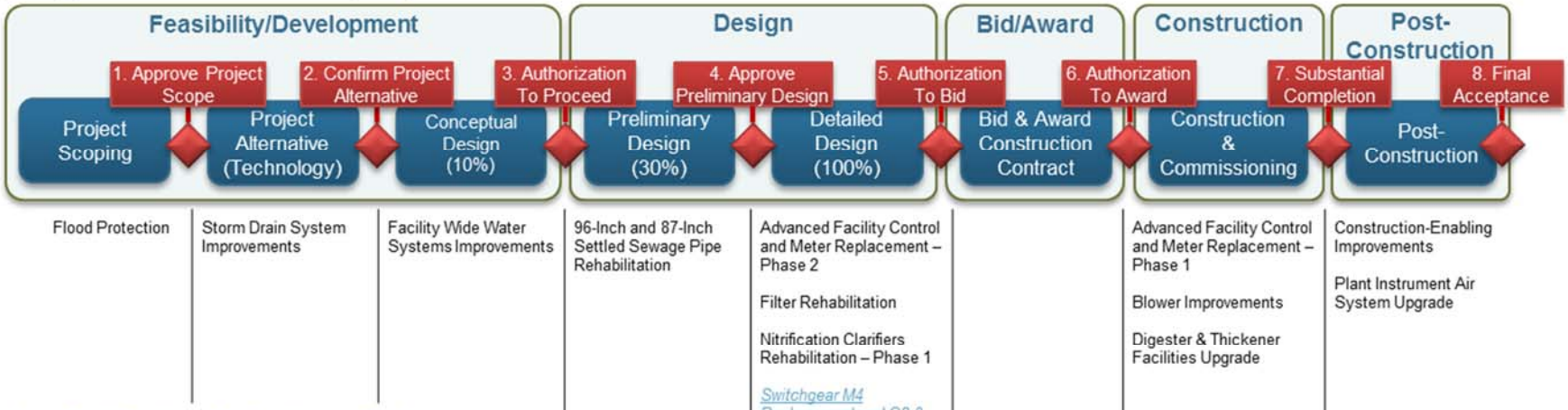
April 4, 2019

This report summarizes the progress and accomplishments of the Capital Improvement Program (CIP) for the San José-Santa Clara Regional Wastewater Facility (RWF) for February 2019.

Report Contents

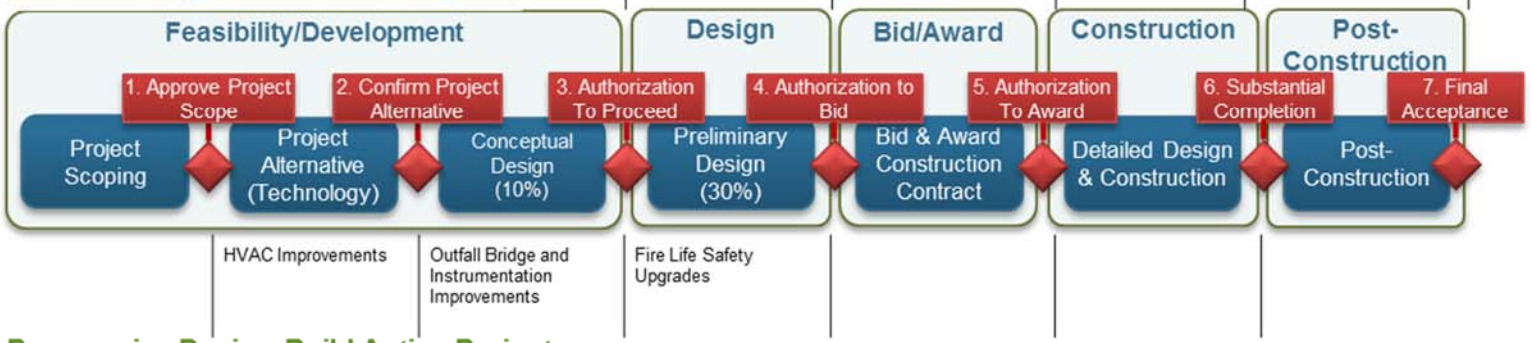
Project Delivery Models

Design-Bid-Build Active Projects



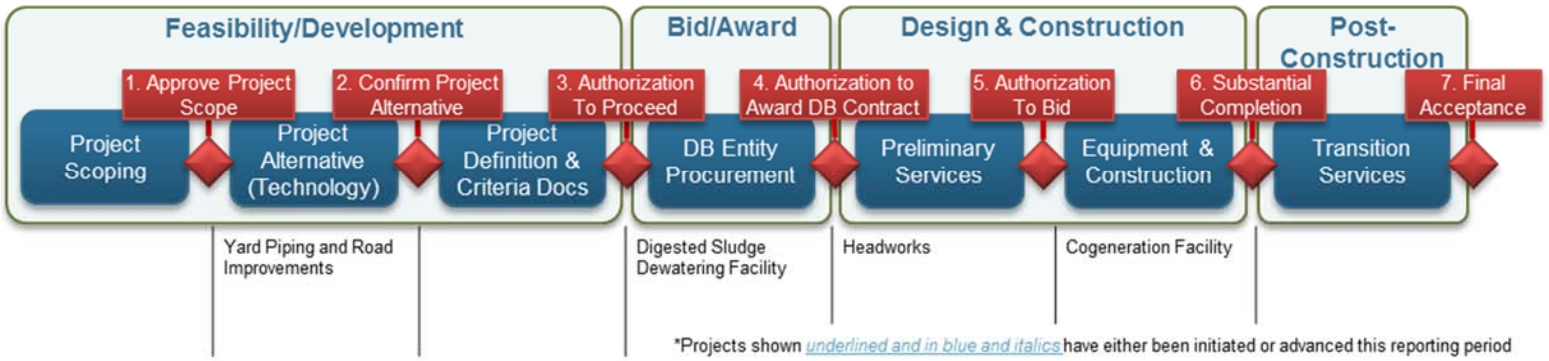
- Flood Protection
- Storm Drain System Improvements
- Facility Wide Water Systems Improvements
- 96-Inch and 87-Inch Settled Sewage Pipe Rehabilitation
- Advanced Facility Control and Meter Replacement – Phase 2
- Filter Rehabilitation
- Nitrification Clarifiers Rehabilitation – Phase 1
- *Switchgear M4 Replacement and G3 & G3A Removal*
- Advanced Facility Control and Meter Replacement – Phase 1
- Blower Improvements
- Digester & Thickener Facilities Upgrade
- Construction-Enabling Improvements
- Plant Instrument Air System Upgrade

Low-Bid Design-Build Active Projects

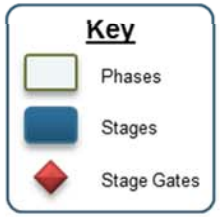


- HVAC Improvements
- Outfall Bridge and Instrumentation Improvements
- Fire Life Safety Upgrades

Progressive Design-Build Active Projects



- Yard Piping and Road Improvements
- Digested Sludge Dewatering Facility
- Headworks
- Cogeneration Facility



*Projects shown *underlined and in blue and italics* have either been initiated or advanced this reporting period

Program Summary

February 2019

In February, the Switchgear M4 Replacement and G3 & G3A Removal Project passed Stage Gate 4: Approve Preliminary Design. The project team began detailed design, the next stage of the Project Delivery Model (PDM), and expects to advertise the project for bid in summer 2019.

The contractor on the Digester and Thickener Facilities Upgrade Project continued concrete roof placement on Digesters 6, 7, and 8. The contractor also completed mechanical testing of the compressed digester gas piping on the elevated pipe rack and removed remaining piping from the temporary settled sewage re-route system.

The Cogeneration Facility Project continued to erect the concrete masonry unit (CMU) walls of the main generator building (Figure 1), with completion at roughly 60 percent of its total height of 40 feet. The Advanced Facility Control and Meter Replacement - Phase 1 Project contractor began receiving delivery of critical equipment that will be installed in the upcoming summer 2019 dry season. The Blower Improvements Project held a formal partnering session with the contractor, Monterey Mechanical, its subcontractors, and project stakeholders. A more detailed update on the four projects currently under construction is covered in the Program Highlight (page 3).

Figure 1: CMU wall construction at the new cogeneration building.

The Headworks Project team reviewed the draft Basis of Design Report (BODR) and returned comments to the design-builder. On the Digested Sludge Dewatering Facility Project, the project team started negotiations with the top-ranked firm selected in the recent request for proposals (RFP) procurement.

The design consultant for the Nitrification Clarifiers Rehabilitation – Phase 1 Project submitted the 90 percent design for City review. The project team also conducted a walkthrough with potential contractors as part of the pre-qualification process and expects to post a list of qualified contractors in April.

Look Ahead

The following key activities are forecast for March and April of 2019:

- The 96-Inch and 87-Inch Settled Sewage Pipe Rehabilitation Project will advertise the contractor pre-qualification package.
- The CIP will hold four stage gates as projects seek approval to advance to the next stage of the PDM. Anticipated stage gates include:
  - 96-Inch and 87-Inch Settled Sewage Pipe Rehabilitation Project - Stage Gate 4: Approve Preliminary Design
  - HVAC Improvements Project - Stage Gate 2: Confirm Project Alternatives
  - Outfall Bridge & Instrumentation Improvements Project - Stage Gate 3: Authorization to Proceed
  - Nitrifications Clarifiers Rehabilitation – Phase 1 Project – Stage Gate 5: Authorization to Bid
- The Blower Improvements Project contractor will perform a pre-assessment of all 10 blowers to establish baseline operating conditions.
- The Filter Rehabilitation Project design consultant will submit the 60 percent design and complete subsurface investigations.
- The Headworks Project design-builder will hold a workshop to review the influent pump station design configuration. Negotiations for a contract amendment for the design-builder to perform subsurface investigations of the proposed site for the new headworks facility will be completed.
- The City will issue Notices of Completion and Acceptance for the Construction-Enabling Improvements and Plant Instrument Air System Upgrade projects.

Program Highlight – Construction Activity Update

Since the last construction update in August 2018, when the four new engine generators arrived on site, the **Cogeneration Facility Project** has made significant progress. The RWF's existing engines are past their useful life, and the project will replace them with new engine generators. Housed in a new building, the generators will produce electricity and heat needed to operate the RWF.

Figure 2: A 330-ton crane was used to set each engine on its base.

On October 23, 2018, design-builder CH2M Hill Engineers (CH2M) poured a massive, two-foot-thick concrete slab for the main engine building. Thanks to excellent coordination, the pour took just nine hours, six hours shorter than originally anticipated. The concrete slowly hardened over several weeks until it was structurally sound and the new, 56-ton engine generators could be installed. Trucks with large beds transported the engines from the storage area to the construction site. A crane placed the engines onto the concrete slab in a single day in November (Figure 2).

The engines are so large that it would be very difficult to construct a building and then move them in. Therefore, the walls (consisting of CMU blocks) are being constructed around the engines. The engine building currently stands at approximately 25 feet at the highest point and will reach over 40 feet when complete. Barring weather delays, the project team anticipates that the engine building roof will be completed by summer 2019.

A new electrical ductbank is under construction to connect power and data transmission to the new electronic control systems for the engines and gas treatment equipment. Navigating this electrical ductbank around existing utilities, and in one case, through existing concrete, is one of the challenges faced by CH2M. After some precision cutting, the new electrical ductbank will run through a large, subterranean pipe gallery and connect to existing electrical vaults.

CH2M has installed various pipes that run from the aeration basins into the future digester gas treatment area. Welders, inspectors, and x-ray technicians spent a great deal of effort to verify that these pipes were properly connected, as they are vital to the cogeneration system. The pipes will ultimately transport biogas from the rehabilitated digesters and process water that facilitate distribution of heat to and from the digesters.

The **Digester and Thickener Facilities Upgrade Project** is now more than halfway complete. Since August 2018, the contractor, Walsh Construction, has made significant progress in several areas:

Figure 3: Roof replacement of Digesters 5-8 in various stages.

78-Inch Pipe Replacement

Replacement of the deteriorated 78-inch primary sludge pipe and wye structure was completed in late September 2018 and the system is in operation. The re-route installed to facilitate the replacement was decommissioned in October 2018.

Handling and Mitigation of PCBs

All PCB-containing caulking, except for a few seams in the walls of Digester 7, has been removed or encapsulated. The remaining work will be completed in June 2019 after the Digester 7 roof and foundation beam are installed. This mitigation was carried out in strict compliance with a federal Environmental Protection Agency (EPA)-approved mitigation plan. A final report will be

submitted to the EPA with a plan for safely maintaining the encapsulated caulking and a deed restriction notifying future property users of the presence of encapsulated PCB-containing caulking.

Primary Sludge Screening Building

Primary sludge will be routed through the new sludge screening building to remove grit and other nonorganic materials. This screening will reduce solids volumes and will also improve the efficiency of later processes that thicken, digest, and dewater the sludge. Since August 2018, the floor slabs, walls, and roof have been completed. Mechanical and electrical equipment are now being installed on the ground floor; piping, pumping equipment, and screens will soon be installed on the upper floors.

Digester Rehabilitation and Conversion

Roof construction on the approximately 110-foot diameter digesters began in October 2018. To accelerate the process, the contractor deployed additional sets of scaffolding, allowing different trades to work concurrently. Each roof is about two feet thick and requires up to five separate concrete pours to construct. The roof of Digester 5 is complete, and the rebar is being installed in Digesters 6 and 8. Installation of mechanical, electrical, and communications equipment is in process.

Dissolved Air Flotation Tank Conversion

Six dissolved air flotation tanks (DAFT) have been enlarged and their efficiency improved. New mechanical mixing equipment has been installed in four of the six tanks. DAFT roofs are planned to allow the odorous air to be filtered before being released.

Figure 4: View of pipe rack and new footings, new flare foundation preparatory work.

Elevated Pipe Rack

The pipe rack (Figure 4) will remove digester gas piping from underground tunnels to meet current code requirements and improve RWF safety and environmental conditions. This nearly 0.75-mile long and 30-foot tall structure includes connections to each of the 12 digesters and will convey digester gas to the cogeneration building. Due to unforeseen underground conflicts, 43 of 144 column foundations had to be moved or redesigned. Currently, 90 percent of the column foundations are complete. The excavation to identify potential utility conflicts for the remaining foundations is nearly complete.

New Gas Flare

If gas production exceeds engine generator requirements, the excess gas is combusted at a high temperature to minimize greenhouse gas emissions. The project rehabilitated the existing flare and is constructing a second flare for redundancy. The existing flare rehabilitation is complete, while foundations for the new flare are under construction (Figure 4).

Program Performance Summary

Seven key performance indicators (KPIs) have been established to measure overall CIP success. Each KPI represents a metric that will be monitored on a regular frequency. Through the life of the CIP, KPIs that best reflect the current program will be selected and measured. KPIs are reset each fiscal year.

Program Key Performance Indicators – Fiscal Year 2018-2019

KPI	Target	Fiscal Year to Date			Fiscal Year End		
		Actual	Status	Trend	Forecast	Status	Trend
Stage Gates	90%	92% 11/12[1]	●	↑	95% 18/19	●	→
Measurement: Percentage of initiated projects and studies that successfully pass each stage gate on their first attempt. Target: Green: >= 90%; Amber: 75% to 90%; Red: < 75%							
Schedule	90%	0% 1/3	◆	→	33% 1/3	◆	→
Measurement: Percentage of CIP projects delivered within 2 months of approved baseline Beneficial Use Milestone.[2] Target: Green: >= 90%; Amber: 75% to 89%; Red: < 75%							
Budget	90%	100% 2/2	●	→	75% 3/4	▲	→
Measurement: Percentage of CIP projects that are accepted by the City within the approved baseline budget.[2] Target: Green: >= 90%; Amber: 75% to 89%; Red: < 75%							
Expenditure	$253M	$269M	●	↑	$295M[3]	●	↓
Measurement: CIP FY18-19 committed costs. Target: Committed cost meets or exceeds 70% of planned Budget. 70% of $361M = $253M. Therefore Fiscal Year End Green: >=$253M; Amber: $199M to $253M; Red: < $199M							
Safety	0	0	●	→	0	●	→
Measurement: Number of OSHA reportable incidents associated with CIP delivery for the fiscal year. Criteria: Green: zero incidents; Amber: 1 to 2; Red: > 2							
Environmental	0	0	●	→	0	●	→
Measurement: Number of permit violations caused by CIP delivery for the fiscal year. Target: Green: zero incidents; Amber: 1 to 2; Red: > 2							
Vacancy Rate[4]	10%	18% 15/83[5]	▲	↓	6% 5/83	●	→
Measurement: Ratio of the number of vacant approved positions to approved positions. Target: Green: <= 10%; Amber: 10% to 20%; Red: > 20%							

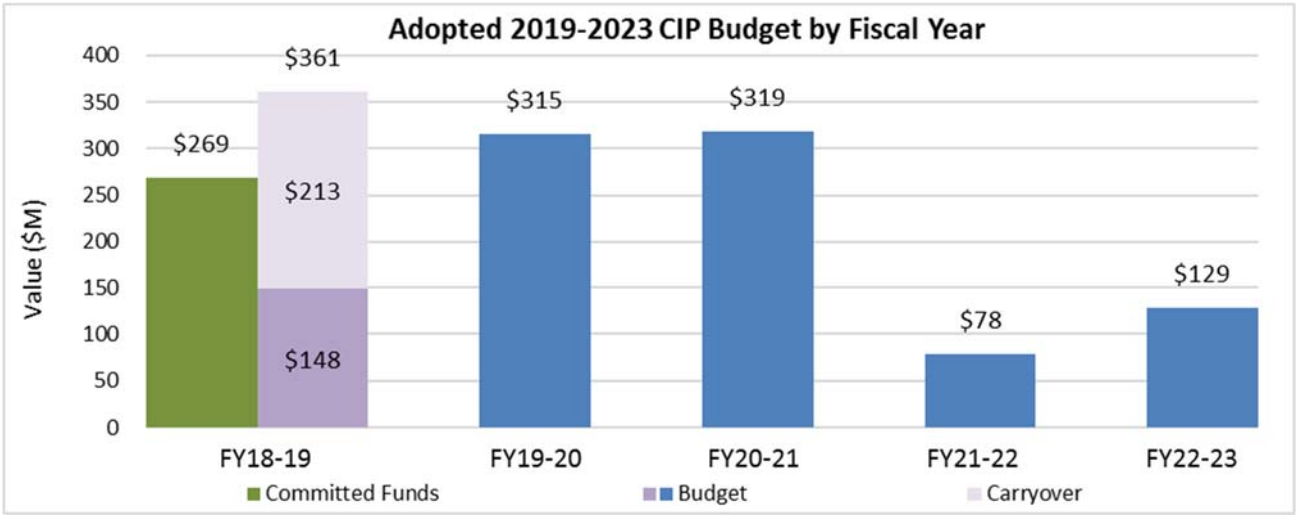
Notes

1. The Switchgear M4 Replacement and G3 & G3A Removal Project passed Stage Gate 4: Approve Preliminary Design.
2. The baseline Beneficial Use date and the baseline budget for each project are established at construction contract award and execution.
3. The forecasted fiscal year-end expenditure decreased because several design awards have moved to next fiscal year.
4. The Vacancy Rate KPI measures CIP-approved positions (ESD and Public Works) and program management consultant full-time staff.
5. The CIP vacancy count decreased by one.

Program Budget Performance Summary

This section summarizes the cumulative monthly budget performance for fiscal year (FY)18-19 based on the Adopted 2019-2023 CIP.

Adopted 2019-2023 CIP Expenditure and Encumbrances



Notes:

Committed Funds: Total of expenditures and encumbrances.

Expenditure: Actual cost expended, either by check to a vendor or through the City's financial system, for expenses such as payroll or for non-personal expenses that do not require a contract.

Encumbrance**:** Financial commitments such as purchase orders or contracts that are committed to a vendor, consultant, or contractor. An encumbrance reserves the funding within the appropriation and project.

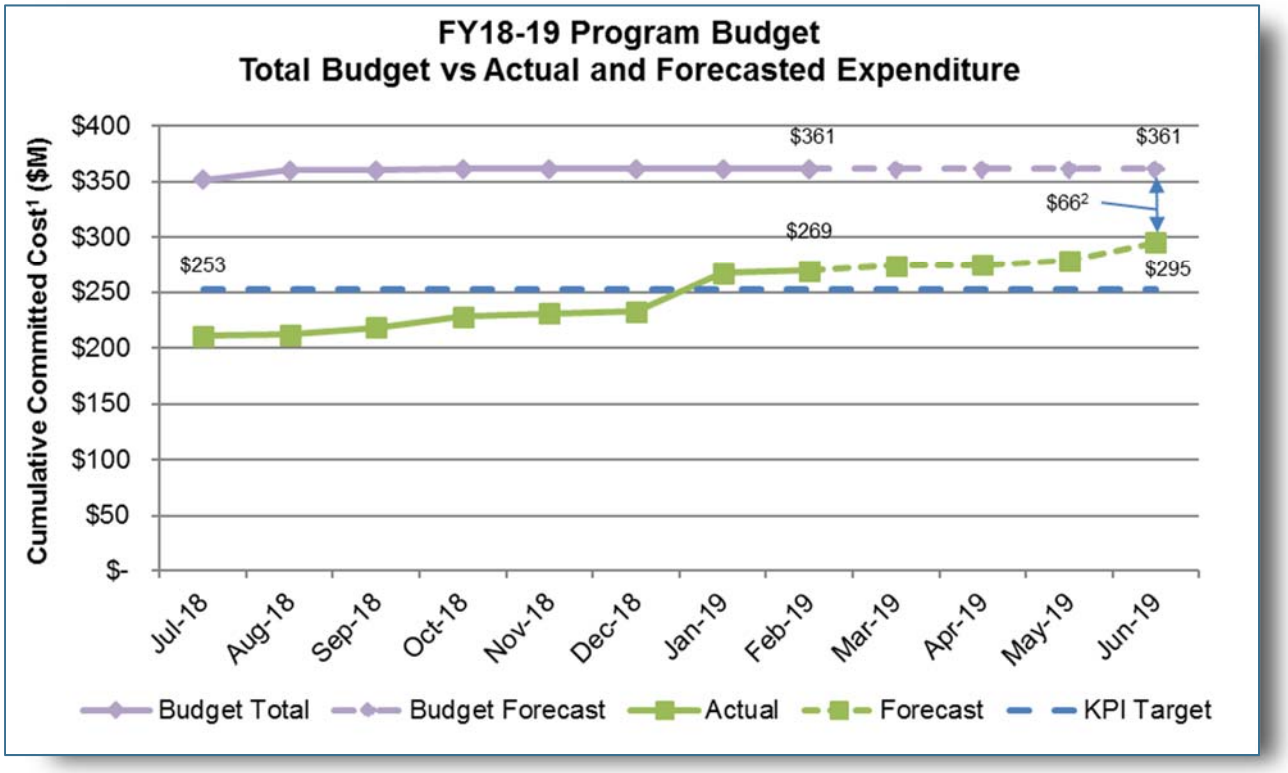
The FY18-19 budget is $185 million, which consists of $131 million in new funds and $54 million in rebudgets. For purposes of this monthly report, the adopted FY18-19 budget is adjusted from $185 million to $148 million due to the exclusion of certain appropriations that are not measured as part of the expenditure KPI. Excluded appropriations include City Hall Debt Service Fund; Clean Water Financing Authority Debt Service Payment Fund; Debt Service Repayment for Plant Capital Improvement Projects (San José only debt service); Equipment Replacement Reserve; Ending Fund Balance; Public Art; SBWR Extension; State Revolving Fund Loan Repayment; and Urgent and Unscheduled Treatment Plant Rehabilitation. Similar adjustments have been made to the budgets for FY19-20 through FY 22-23.

Carryover: Encumbrance balances at the end of the previous fiscal year are automatically carried forward to the current fiscal year as carryover funding to pay invoices for approved construction contracts and consultant agreements. FY18-19 carryover is $213 million.

Budget of $148.3 million and carryover of $213.1 million totals $361.4 million for FY18-19.

Fiscal Year 2018-2019 Program Budget Performance

The FY18-19 CIP budget is comprised of approximately $148 million in new funds, plus encumbered carryover of $213 million for a rounded total of $361 million. This excludes City Hall Debt Service Fund; Clean Water Financing Authority Debt Service Payment Fund; Debt Service Repayment for Plant Capital Improvement Projects (San José only debt service); Equipment Replacement Reserve; Ending Fund Balance; Public Art; SBWR Extension; State Revolving Fund Loan Repayment; and Urgent and Unscheduled Treatment Plant Rehabilitation items. Overall, the forecasted fiscal year-end committed funds exceed the fiscal year-end target by $42 million.



Notes:

1. Committed costs are expenditures and encumbrance balances, including carryover (encumbrance balances from the previous fiscal year).
2. The variance between forecasted budget and forecasted commitments can be primarily attributed to the following factors:
    a. Several construction contracts are now anticipated to be awarded in FY19-20 instead of FY18-19 based on updated schedules:
        i. Fire Life Safety Upgrades Project
        ii. Switchgear M4 Replacement and G3 & G3A Removal Project
    b. Several consultant service orders will not be awarded in FY18-19:
        i. Aeration Tank Rehabilitation Project
        ii. Support Facilities Project
        iii. Tunnel Rehabilitation Project
    c. The Blower Improvement Project construction bids came in under budget.
    d. Several other minor encumbrances for consultant services are either lower than budgeted or are anticipated to be awarded in FY19-20.
    e. Several authorized positions remain vacant, resulting in lower predicted personal services expenses than budgeted.
    f. The FY16-17 payment budgeted for the annual Owners Controlled Insurance Program premium covered the period through FY17-18. Funds rebudgeted from FY17-18 will be programmed in FY19-20.

Project Performance Summary

There are currently six projects in the construction and post-construction phases and an additional 14 projects in feasibility/development, design, bid and award, or design and construction phases (see PDM, page 2). Projects in the construction phase have established cost and schedule baselines and are monitored using the City's Capital Project Management System (CPMS). Green/red icons are included in the table below to indicate whether these projects are on budget and schedule.

Project Performance – Baselined Projects

Project Name	Phase	Estimated Beneficial Use Date[1]	Cost Performance[2]	Schedule Performance[2]
1. Construction-Enabling Improvements	Post-Construction	Aug 2018[3]	◆	◆
2. Plant Instrument Air System Upgrade	Post-Construction	Nov 2018[3]	●	◆
3. Cogeneration Facility	Design & Construction	Sep 2020	●	●
4. Digester and Thickener Facilities Upgrade	Construction	Nov 2020	◆	◆
5. Advanced Facility Control & Meter Replacement - Phase 1	Construction	June 2021	●	●
6. Blower Improvements	Construction	Sep 2022	●	●

Key:

Cost:	● On Budget	◆ >1% Over Budget	**Schedule:**	● On Schedule	◆ >2 months delay

Notes

1. Beneficial Use is defined as work that is sufficiently complete, in accordance with contract documents, that it can be used or occupied by the City. Beneficial Use dates are reviewed as part of project schedule reviews.
2. An explanation of cost and schedule variances on specific projects identified in this table is provided on pages 12 and 13.
3. Actual Beneficial Use date.

Project Performance – Pre-Baselined Projects

Project Name	Phase	Estimated Beneficial Use Date[1]
1. Digested Sludge Dewatering Facility	Bid/Award	Nov 2022
2. 96-Inch and 87-Inch Settled Sewage Pipe Rehabilitation	Design	Oct 2020
3. Switchgear M4 Replacement and G3 & G3A Removal	Design	Feb 2022
4. Fire Life Safety Upgrades	Design	Sep 2022
5. Advanced Facility Control & Meter Replacement - Phase 2	Design	Dec 2022
6. Headworks	Design and Construction	Dec 2022
7. Filter Rehabilitation	Design	Apr 2023
8. Nitrification Clarifiers Rehabilitation – Phase 1	Design	Oct 2023
9. Outfall Bridge and Instrumentation Improvements	Feasibility/Development	Jan 2022
10. Storm Drain System Improvements	Feasibility/Development	Jan 2023
11. HVAC Improvements	Feasibility/Development	Mar 2023
12. Flood Protection	Feasibility/Development	Apr 2023
13. Facility Wide Water Systems Improvements	Feasibility/Development	Aug 2024
14. Yard Piping and Road Improvements	Feasibility/Development	June 2027

Notes

1. Beneficial Use is defined as work that is sufficiently complete, in accordance with contract documents, that it can be used or occupied by the City. Beneficial Use dates are reviewed as part of project schedule reviews.

Project Significant Accomplishments

Biosolids Package

Digester and Thickener Facilities Upgrade

- The City executed a contract change order for the additional work by the contractor, Walsh Construction, related to the structural seismic redesign of the digesters.
- Walsh removed the remaining dissolved air flotation liquid effluent and pressure flow piping from the temporary settled sewage reroute system and turned over the new sampling station to Operations and Maintenance.
- Walsh completed mechanical testing of the compressed digester gas piping on the elevated pipe rack.

Digested Sludge Dewatering Facility

- The project team met with the top-ranked design-builder Walsh Construction, to establish a negotiation schedule. The City anticipates awarding the design-build contract in August 2019.

Facilities Package

96-Inch and 87-Inch Settled Sewage Pipe Rehabilitation

- The project team completed the contractor pre-qualification documents and expects to advertise in March.

Outfall Bridge and Instrumentation Improvements

- Design consultant AECOM submitted the final draft conceptual design report for City review. In March, the project team will present the conceptual design at Stage Gate 3 – Authorization to Proceed for approval to begin preliminary design.

Liquids Package

Advanced Facility Control and Meter Replacement – Phase 1

- Contractor Overaa began receiving critical equipment, including 17 flow meters, and anticipates beginning installation in May 2019.

Blowers Improvements

- The City held a formal partnering session with contractor Monterey Mechanical.
- Monterey Mechanical began mobilization on site. In March, the contractor is scheduled to complete pre-assessment of the 10 blowers being rehabilitated to establish baseline operating conditions.

Filter Rehabilitation

- Design consultant Kennedy/Jenks completed the existing electrical infrastructure verification this month and plans to submit the 60 percent design next month.

Headworks

- The City returned comments to design-builder CH2M on the draft BODR. The final BODR and 30 percent design package are anticipated in May 2019.

Nitrification Clarifiers Rehabilitation – Phase 1

- Design consultant HDR submitted and held a workshop to review the 90 percent design. The 100 percent design is anticipated in April 2019.
- The project team conducted a walkthrough with potential contractors as part of the pre-qualification process and expects to post a list of pre-qualified contractors in April 2019.

Power and Energy Package

Cogeneration Facility

- CH2M completed the hot water loop and biogas piping from the project site to the basin area where the piping will connect with the Digester Thickener and Facilities Upgrade Project pipe rack. CH2M also completed construction of the south half of the electrical ductbank that will connect the cogeneration facility to the RWF power grid.
- CH2M continued to construct the CMU walls for both the engine and operations buildings. The project team anticipates completing the engine building roof by summer 2019.

Explanation of Project Performance Issues

Construction-Enabling Improvements Project

This project was originally scheduled to be substantially complete by mid-February 2017. Due to the extremely wet 2016-17 winter season, contractor Teichert Construction was unable to perform site work on several occasions between October 2016 and April 2017. Teichert was granted extra work days for weather-related delays and for extra work associated with several contract change orders. A new contract completion date of June 8, 2017 was established. However, Teichert's subcontractor, ModSpace, was slow to respond and regularly submitted late and incomplete documentation, which resulted in the portable trailers arriving in January 2018, approximately nine months later than the contract completion date.

Teichert experienced additional delays completing installation of the portable trailers and submitting complete and acceptable documentation for access ramps and canopies. In early August 2018, the contractor completed installation of the electrical, communications, and wastewater utilities. Also in August, the City of San José Building Division issued the Certificate of Occupancy permit for the trailers, and the construction management group issued the Notice of Substantial Completion, which indicated that the project had reached Beneficial Use. The project team provided Teichert with a list of remaining contract work to be completed. The project team has reached agreement with Teichert for liquidated damages and to complete outstanding tasks for project closeout. The project team anticipates accepting the project in April 2019.

Plant Instrument Air System Upgrade Project

Project construction was delayed by seven months due to four issues: 1) The project team discovered that the planned construction site access route crossed a large settled sludge pipeline, requiring an alternative access route to be developed and constructed; 2) the contractor was temporarily unable to install a section of the conduit from the sludge control building to the new compressor building due to other work being performed in the area by a different contractor; 3) development of the 28-day commissioning test procedure took longer than anticipated; and 4) during the eight-hour functioning test the project team discovered oxidized (rusted) carbon steel shavings in an existing condensate tank unrelated to the project construction. The material was removed, and the test was successfully completed. The project achieved Beneficial Use in November 2018. The project team anticipates project acceptance in April 2019.

Digester and Thickener Facilities Upgrade Project

This project encountered numerous unforeseen conditions at the beginning of construction in 2016, described below. In 2017, design modifications were required to address seismic risks, and discovery of hazardous materials required extensive cleanup. Delays for these conditions have amounted to 273 working days. The original construction completion and Beneficial Use date in September 2019 has been delayed to November 2020.

The City has negotiated contract change orders for the following unforeseen conditions discovered in 2016:

- Major corrosion of a below-ground, 78-inch settled sewage pipeline and junction structure delayed the construction of dissolved air flotation tank piping connections, two new pressurization flow boxes, and utility relocation work. The contractor postponed all repairs until a temporary pumping and pipeline system could be designed and safely installed to enable replacement of the pipeline in the 2018 dry season. In May of 2018, the contractor started full-time operation of this temporary pumping and pipeline system and began replacing the 78-inch settled sewage pipeline, which was completed in late September 2018.
- A 36-inch biochemical oxygen demand pipe was found to be obstructing the new sludge screening building foundation. The contractor removed this pipe and relocated several gas drain vaults and associated piping before the foundation construction began.
- Multiple conflicts between contract work and existing utilities required numerous relocations including water, natural gas, digester gas, landfill gas, storm drains, and sanitary sewer pipelines. The contractor completed necessary relocations and rerouting, especially near the new digester gas pipe rack footings. Many of these modifications also required design changes.
- Bay Area Air Quality Management District venting restrictions also delayed digester work. The contractor completed the temporary digester gas connections and the system became operational in February 2018.

The City has negotiated contract change orders for the following issues discovered in 2017 and 2018:

- Digester structural redesign: The design consultant revised the structural drawings to address seismic concerns by enlarging the foundation ring beam at the base of each of the four digesters. The contractor provided a cost proposal associated with this revision and the City issued a final, global change order to cover work activities;
- Distributed control system architectural changes: The design guidelines for the distributed control system were developed after the project plans were completed. Several changes were required for fiber optic cable, electrical wiring, patch panels, converters, communications instrumentation, and emergency power supply. Drawings, color-coding labeling, and process diagrams had to be revised to reflect these changes;

- Fire Department requirements: Fire permit requirements changed after the design was completed. The Fire Marshal required additional alarms and electrical connections. A new electrical fire suppression system was installed to meet current environmental requirements. At one structure, additional time was needed to confirm the fire suppression system was not required;
- Structural issues with the west electrical building, DAFT tank walls, DAFT ceiling slab, and digester feed pump canopy;
- Drainage of one DAFT underground gallery, polymer pad, Main Street drainage; and
- Warranty extensions required that resulted from the construction delays.

The hazardous material mitigation issue is currently being evaluated and is expected to result in additional costs. Testing of soils and concrete for PCBs was completed, and the federal EPA issued a final conditional approval. In compliance with the EPA-approved, risk-based management plan, removal and disposal of all contaminated materials in three of four affected digesters and all tunnel joints has been completed. All contaminated soils have been removed and disposed of and most of the impacted concrete has been encased. The last portion of the work will be finalized once the digester foundation base layers and roof work are complete. The project team anticipates submittal of final work reports to the EPA in June 2019.

In November 2017, Council approved a construction contingency increase of $15 million. The City issued change orders against the increased contingency for delays associated with the conditions discovered in 2016.

In June 2018, Council approved a second construction contingency increase of $25 million for additional costs associated with the seismic redesign, hazardous material remediation, and extended construction duration.

To minimize further delays, the contractor is executing several tasks concurrently that had been planned originally in series.

Project Profile – Headworks

When raw wastewater enters the RWF, it first goes to the headworks facility for preliminary treatment. The headworks facility removes inorganic material such as sticks, stones, grit, and sand from the influent wastewater stream to reduce wear on the downstream process equipment and enhance process performance.

Of the RWF's two separate headworks facilities, the original Headworks 1 includes screens; grit removal through aerated grit chambers; detritors, screenings, and grit handling facilities; and pumping facilities. Headworks 1 has been in operation for more than 50 years and has a rated capacity of 271 million gallons per day (MGD). Headworks 2, commissioned in 2008 with a rated capacity of 160 MGD, includes screens; vortex grit removal units; screenings and grit handling facilities; and a pump station. It was built to supplement Headworks 1 in response to a 1998 storm that resulted in an estimated peak wet-weather flow of 330 MGD.

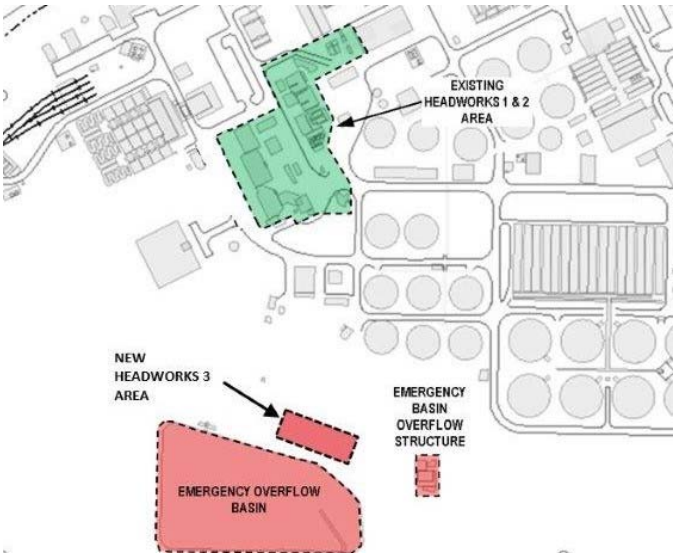


Figure 5: Project Site Map

With the aging Headworks 1 facility requiring regular repairs and rehabilitation, the City's Plant Master Plan recommended decommissioning Headworks 1 and expanding Headworks 2 to handle future anticipated peak flows of up to 400 MGD. Subsequent City evaluations identified the need for a new Headworks 3 facility (Figure 5), instead of an expanded Headworks 2, to replace Headworks 1, and outlined modifications required for Headworks 2 to improve operational reliability and performance. The project scope includes:

- Repairs and modifications to several existing raw sewage influent structures;
- Improvements to the emergency basin overflow structure;
- A new concrete liner for the emergency overflow basin;
- Modifications to the existing headworks-related piping to direct raw sewage and in-plant recycle flows to Headworks 3 and provide additional capacity;
- Installation of infrastructure needed to reroute flows from Headworks 1 to Headworks 3 in preparation for the decommissioning of Headworks 1, which will be completed as a separate project;
- Two new recycle flow pump stations;
- Improvements to Headworks 2 electrical facilities to align with RWF protocols; and
- A new Headworks 3, including new influent piping; a new pump station; screenings (Figure 6) and grit removal systems; and an odor control facility.

In June 2018, Council approved a design-build contract with CH2M for the project. That same month, the City issued a notice to proceed to CH2M to begin preliminary services. As part of these services, the design-builder held a lengthy series of workshops to evaluate the location of the new Headworks 3, process alternatives, engineering design criteria, hydraulics, regulatory requirements, acceptance criteria, construction planning, and costs. Workshop outcomes were summarized in the draft BODR, which was submitted to the City in January 2019.

As currently configured, Headworks 3 will be located in the southwest corner of the RWF site, adjacent to the existing emergency overflow basin (Figure 7). This location was selected to facilitate construction sequencing, reduce the overall construction cost of the project, and improve facility performance by eliminating site constraints that were dictating equipment selection.

The basis of design is predicated on the following criteria:

- Headworks 2 and Headworks 3 will be able to treat the projected year 2040 extreme peak hour wet weather flow of 400 MGD when both facilities are in service.
- Headworks 3 will be the lead headworks facility, normally operating in dry flow conditions and capable of treating the projected year 2040 peak hour dry weather flow of 209 MGD with one train out of service.

Project current estimated total cost is roughly $166 million. Key milestones include completion of subsurface investigations to reduce unknown conditions and risks by July 2019; 30 percent design submittal in May 2019; recommendation of guaranteed maximum price (GMP) not-to-exceed amount to Council and TPAC in September 2019; approval of the GMP by December 2019; construction start in February 2020; and Beneficial Use by December 2022.

Figure 6: New multi-rake bar screens at Headworks 2, installed under the recently completed Headworks Critical Improvements Project. Similar screens are planned to be installed at Headworks 3.

Figure 7: Proposed Headworks 3 layout near the emergency overflow basin.

Regional Wastewater Facility Treatment – Current Treatment Process Flow Diagram

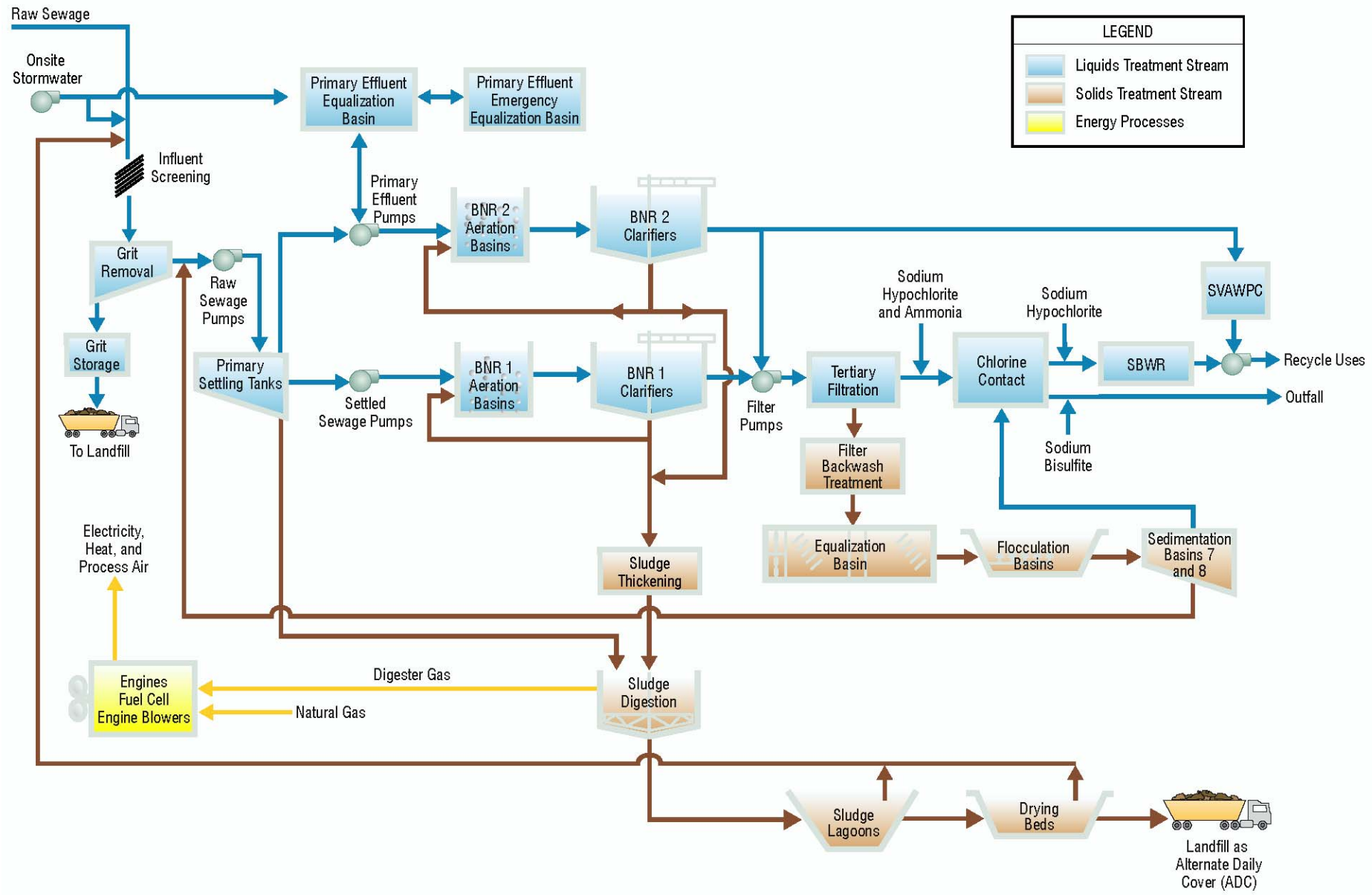


Figure 8 – Current Treatment Process Flow Diagram

Regional Wastewater Facility Treatment – Proposed Treatment Process Flow Diagram

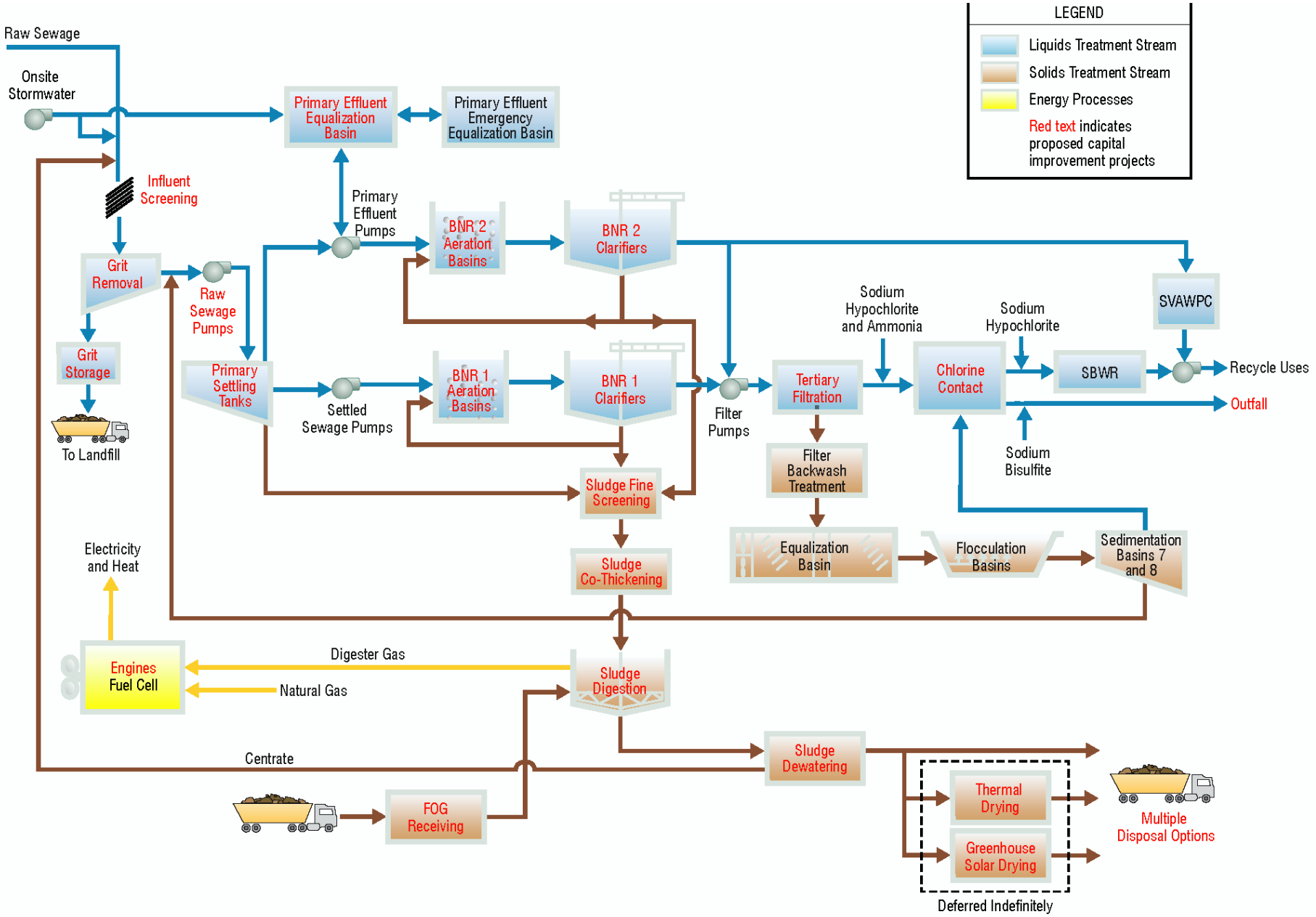


Figure 9 – Proposed Treatment Process Flow Diagram

Active Construction Projects – Aerial Plan

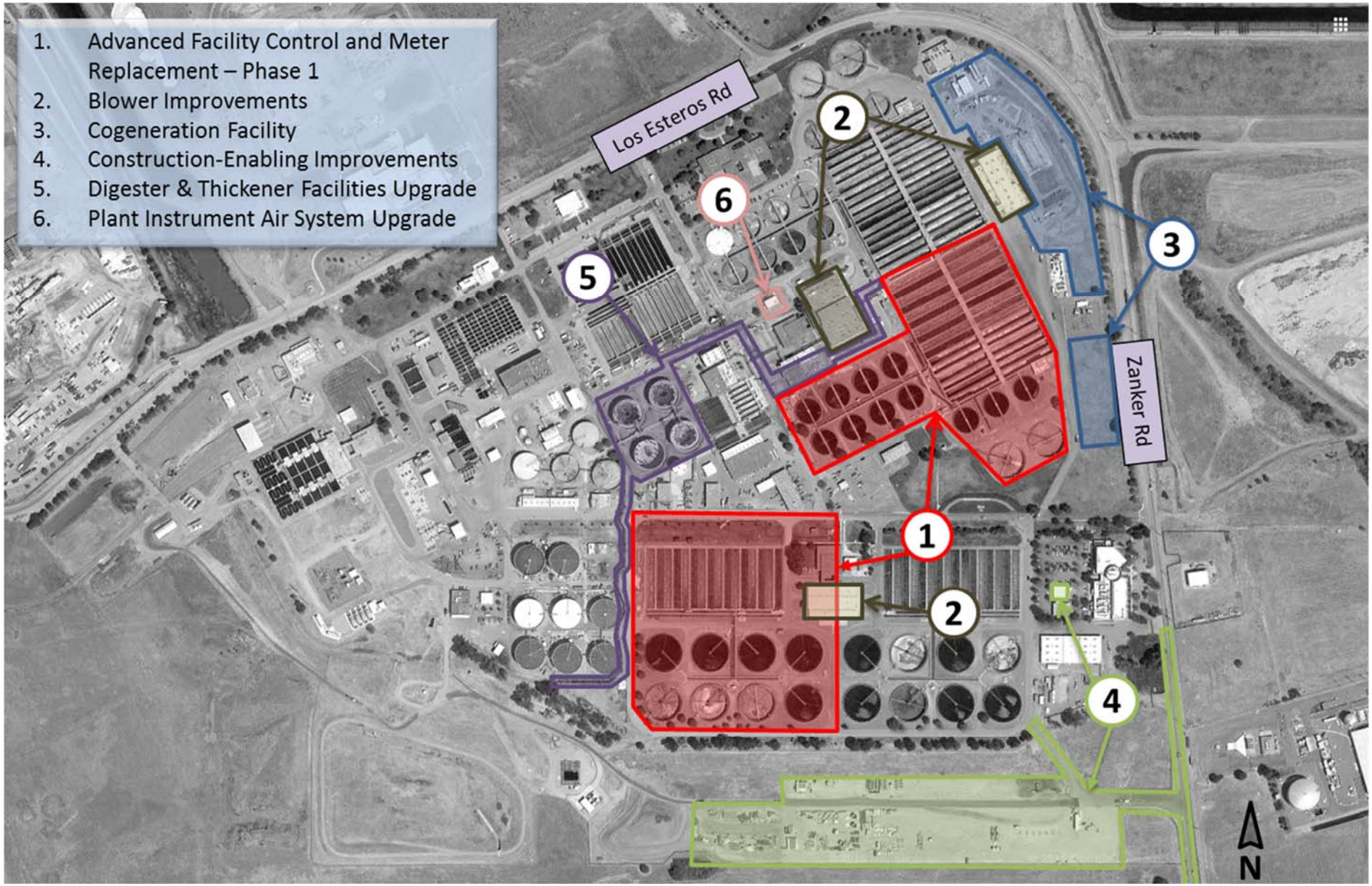


Figure 10: Active Construction Projects

T&E AGENDA: 04/08/2019
ITEM: d(1)

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: TRANSPORTATION AND ENVIRONMENT COMMITTEE

FROM: Kerrie Romanow
Matt Cano

SUBJECT: SEE BELOW

DATE: March 20, 2019

Approved

Date 3-29-19

SUBJECT: SAN JOSÉ-SANTA CLARA REGIONAL WASTEWATER FACILITY CAPITAL IMPROVEMENT PROGRAM SEMIANNUAL STATUS REPORT

RECOMMENDATION

Accept the semiannual status report on the San José-Santa Clara Regional Wastewater Facility Capital Improvement Program for the period of July 2018 through December 2018.

OUTCOME

The purpose of this semiannual status report is to provide an update on the implementation of the Capital Improvement Program (CIP) at the San José-Santa Clara Regional Wastewater Facility[1] (RWF) by highlighting key accomplishments during the first half of fiscal year 2018-2019 to the Transportation and Environment Committee (T&E), the Treatment Plant Advisory Committee (TPAC), and City Council (Council).

BACKGROUND

The San José and Santa Clara City Councils adopted the Plant Master Plan (PMP) in November 2013 and December 2013, respectively. The PMP identified more than 100 capital improvement projects totaling over $2.1 billion to be implemented at the RWF over the next 30 years. A validation process was completed in early 2014 to update and prioritize the recommended PMP projects and additional gap projects into 33 projects to be initiated over 10 years. Beginning in fiscal year 2014-2015, the validation process was used to inform the five-year CIP and ten-year funding strategy. The 2019-2023 adopted CIP includes approximately $1.4 billion in funding, of which approximately $895 million is for construction. To provide visibility and accountability

[1] *The legal, official name of the facility remains San José/Santa Clara Water Pollution Control Plant, but beginning in early 2013, the facility was approved to use a new common name, the San José-Santa Clara Regional Wastewater Facility.*

for this significant CIP effort, staff began providing formal semiannual status reports to T&E, TPAC, and Council in spring 2013.

The first semiannual status report was published in April 2013 and focused on progress and activities from July 2012 through December 2012. This report is the 13th in the report series and highlights key program and project accomplishments from July 2018 through December 2018. This report also complements monthly CIP status reports, which staff began issuing in April 2014 to provide more frequent and time-relevant updates. Through December 2018, 57 monthly reports had been issued. Copies of the monthly reports are available at http://www.sanjoseca.gov/Archive.aspx?AMID=190.

ANALYSIS

Significant progress was made in several program areas from July 2018 through December 2018.

A. *Development of program wide hazardous material testing and mitigation protocol*
In October, staff began developing a programmatic hazardous material testing and mitigation protocol to provide guidance to CIP design consultants for investigating and testing hazardous materials early in the planning and design phase of the project, as well as developing specifications and standard operating procedures for use by CIP construction contractors in remediating construction sites. Early identification enables the project teams to include hazardous materials management methods in the bid documents, plan for potential project schedule impacts and coordinate with regulatory agencies on remediation approval, if needed. The protocol is expected to be completed by spring 2019.

B. *Recruitments*
During the first half of fiscal year 2018-2019, staff successfully filled nine vacant positions: a senior engineer, an environmental services program manager, three sanitary engineers, two senior engineering technicians, a senior office specialist, and an office specialist. The environmental services program manager started in mid-November and will oversee the RWF's biosolids transition. Their first assignment will be leading the biosolids disposition market assessment. Recruiting for entry level and senior technical engineering positions will continue to be a priority during the second half of fiscal year 2018-2019, particularly for Civil Engineer I/II, Sanitary Engineer, and Senior Engineer positions to support CIP project delivery.

C. *Vendor Open House*
In December, CIP staff hosted the program's fifth open house to increase vendor awareness of upcoming construction opportunities. Sixty people representing 48 companies attended, including consultants, contractors, material and equipment suppliers, with one-third of the attendees representing small businesses and approximately half representing local businesses.

On the project delivery front, 22 active projects progressed through various stages of the CIP project delivery model.

A. *Feasibility/Development Highlights*

Eight projects were in the feasibility/development phase during the first half of fiscal year 2018-2019. Key activities completed during this period include the following.

- **Storm Drain System Improvements:** In November, the design consultant completed condition assessments for seven stormwater pump stations. A workshop was held in December to summarize the condition assessment results.
- **Fire Life Safety Upgrades:** The design consultant completed the condition assessment of 11 buildings and began development of the conceptual design.
- **HVAC Improvements:** The design consultant submitted the condition assessment technical memorandum and completed an alternatives analysis that identified improvements to the existing HVAC systems in 18 buildings.
- **Facility-Wide Water Systems Improvements** and **Outfall Bridge and Instrumentation Improvements** project teams completed alternatives analysis and began to develop conceptual design reports.
- **Digested Sludge Dewatering Facility** (progressive design-build): Staff received Statements of Qualifications (SOQs) from four interested design-build firms in August. In October, staff advertised a Request for Proposals (RFP). Three of the four qualified firms submitted proposals in mid-December.
- **Yard Piping and Road Improvements** (progressive design-build)**:** The project team completed condition assessments of various primary and settled sewage pipes.

B. *Design Highlights*

Seven projects were in the design phase during the first half of fiscal year 2018-2019. Key activities completed during this period include the following.

- **96-inch and 87-inch Settled Sewage Pipes Rehabilitation:** The rehabilitation of these two pipes were expedited due to their criticality, and to take advantage of the extensive bypass system that was designed and installed to facilitate the replacement of the 78-inch SES pipeline. The design consultant completed an alternatives analysis and conceptual design and commenced the 50 percent design.
- **Filter Rehabilitation:** The project team completed the 30 percent design in September.
- **Nitrification Clarifiers Rehabilitation:** Upon completion of the 30 percent design in October, the project was packaged into two phases to allow rehabilitation of the most critical elements to proceed within the available budget. The 60 percent design for both phases was completed in December. The project team began developing the 90 percent design and contractor pre-qualification documents for the first phase of work.
- **Headworks** (progressive design-build): The project team and the design-builder held a series of preliminary workshops through the second half of fiscal year 2018-2019. The workshops focused on site selection and scope, site investigation, permitting, risk management, disciplinary systems and process alternatives. The recommendations

and alternatives selected from the workshops will be reconciled in the Basis of Design Report, which is anticipated to be completed in January 2019.
Advanced Facility Control & Meter Replacement – Phase 2: The project team conducted a hazardous materials investigation. The 90 percent design was completed in November.

C. *Construction Highlights*

Seven projects totaling roughly $240 million were in construction during the first half of fiscal year 2018-2019 (see Attachment A). One of the seven projects is being delivered using the progressive design-build method, with the remaining six projects being delivered using the design-bid-build delivery method. Three projects reached Beneficial Use during this period: Construction-Enabling Improvements, Headworks Critical Improvements, and Plant Instrument Air System Upgrade.

Key activities completed during this period include the following.

- **Advanced Facility Control & Meter Replacement – Phase 1:** On July 6, 2018, staff issued the Notice to Proceed (NTP) to C. Overaa & Co. The contractor began mobilizing and preparing construction submittals along with submittals associated with long-lead time equipment. Construction will begin in spring 2019 coinciding with the next dry season.
- **Blower Improvements**: Staff advertised a request for bids in July and received four bids in August. The low bid was five percent below the engineer's estimate. On October 30, 2018, Council awarded the construction contract to Monterey Mechanical Company. Construction will begin in March 2019.
- **Cogeneration Facility** (progressive design-build): The four 3.1 MW cogeneration engines and the exhaust stacks arrived at RWF in August. The design builder completed installation of underground conduits, pipework and poured the base slab of the generator building in October. The four engine-generators (60 tons each) were set on the slab in November. In December, construction of the masonry building walls began. Through December 2018, construction was 27 percent complete.
- **Digester and Thickener Facilities Upgrade**: In July, the general contractor completed the foundation of the new sludge screen building's first floor and began excavating the foundation for the new flare. In August, the canopy, pump pads, conduits and control panels for the thickened sludge pumps were completed. During this period, the contractor poured the first-floor deck in the new sludge screen building; installed the first of two layers of post-tension cables for Digesters 5-8; installed the digester gas pipe rack columns near the new sludge screen building; and installed the dissolved air floatation tanks' mechanical systems and odor control systems. Pouring of the concrete walls for the new sludge screen building continued through December.

78-inch Pipe Replacement – In July, the contractor continued to operate the settled sewage (SES) reroute, allowing for construction of the new wye structure. Installation of the new 78 -inch SES, wye structure and connection to the existing the

96-inch and 87 x 136-inch SES pipes were completed in October. All major work associated with the SES reroute were completed before the wet weather season of 2018.

Seismic Redesign – The Contractor made progress on the ring beam foundation excavations, the roof forms, and gas dome for first of four Digesters 5-8. In September, the first two of four lifts of Digester 5 ring beam foundation were completed. Additionally, the Contractor completed installing the roof forms and placed the steel reinforcement on two of the four digesters.

Handling and Mitigation of PCBs – The Contractor removed and disposed of PCBs-impacted soil around Digesters 5-8. Excavations around Digesters 5 and 6 were completed and work around Digesters 7 and 8 continued through July. Mitigation efforts for all four digesters were completed by October, with the exception of Digester 7 which will have PCB caulking removed from the top interior in the near future.

Through December 2018, construction was 65 percent complete. The project is expected to reach beneficial use in Fall 2020.

Staff, contractors, and consultants continue to work safely and there were no reportable incidents to the State's Division of Occupational Safety and Health (Cal/OSHA) during the first half of fiscal year 2018-2019.

Staff expects to achieve the following during the second half of fiscal year 2018-2019.

1. Issue a final ranking for the design-builder procurement, negotiate with the highest ranked design-builder, and obtain Council approval to award a design-build contract for the Digested Sludge Dewatering Facility.
2. Continue design on four projects: Filter Rehabilitation, Fire Life Safety Upgrades, Headworks, Switchgear M4 Replacement and G3/G3A Removal.
3. Pre-qualify general contractors, complete design, and advertise the 96-inch and 87-inch Settled Sewage Pipes Rehabilitation and Nitrification Clarifiers Rehabilitation – Phase 1 projects for construction bidding.
4. Amend the consultant agreement with Brown and Caldwell for the Digester and Thickener Facilities Upgrade project.
5. Amend the master consultant agreements with Kennedy/Jenks Consultants, Inc. and MNS Engineers, Inc. for construction management services.
6. Amend the master consultant agreements for special inspection and material testing services during construction for various CIP projects.
7. Complete the disposition market assessment for the biosolids management program.
8. Complete a program-wide protocol for the testing and mitigation of hazardous materials during project design and construction.
9. Continue to develop longer term resource and staffing plans, particularly for construction management, in anticipation of increased construction activities in upcoming fiscal years.

10. Continue recruitment activities to fill remaining RWF CIP vacancies.

EVALUATION AND FOLLOW-UP

No follow-up action is required at this time. Staff will continue to provide regular updates to inform T&E, TPAC, and Council of significant changes or issues (particularly as related to rate impacts) as implementation of the CIP progresses. In addition to semiannual presentations, staff will continue to share monthly progress reports with TPAC.

PUBLIC OUTREACH

This memorandum will be posted on the City's website for the April 8, 2019, T&E agenda.

COORDINATION

This report has been coordinated with the Office of the City Attorney and City Manager's Budget Office.

COMMISSION RECOMMENDATION/INPUT

This item is scheduled to be heard at the April 11, 2019, TPAC meeting.

CEQA

Not a Project, File No. PP17-009, Staff Reports, Assessments, Annual Reports, and Information Memos that involve no approvals of any City action.

/s/
KERRIE ROMANOW
Director, Environmental Services

/s/
MATT CANO
Director, Public Works

For questions, please contact Napp Fukuda, Assistant Director, Environmental Services Department at (408) 973-5353.

Attachment A – Projects in Construction: July 2018 – December 2018

Attachment A – Projects in Construction: July 2018– December 2018

#	Project Name	Contractor	Amount Awarded	Date Awarded	Estimated Beneficial Use
1.	7418 - Cogeneration Facility	CH2M HILL Engineers, Inc.	Design-Build GMP: $89,071,932 Contingency: $2,100,068	4/26/16[1]	Summer 2020
2.	7382 – Digester and Thickener Facilities Upgrade	Walsh Construction Company II, LLC	Base Contract: $107,925,000 Contingency: $53,490,625	5/24/2016	Fall 2020
3.	7987 – Construction-Enabling Improvements	Teichert Construction, Inc.	Base Contract: $3,135,910 Contingency: $314,000	6/21/2016	08/15/18[2]
4.	7617 – Plant Instrument Air System Upgrade	Anderson Pacific Engineering Construction, Inc.	Base Contract: $2,848,000 Contingency: $427,200	8/23/2016	11/01/18[2]
5.	8101 – Headworks Critical Improvements	C. Overaa & Co	Base Contract: $1,499,000 Contingency: $224,850	5/23/17	8/16/18[2]
6.	7757 - Advanced Facility Control and Meter Replacement- Phase 1	C. Overaa & Co.	Base Contract: $5,790,000 Contingency: $1,158,000	5/22/18	Summer 2021
7.	8073 - Blower Improvements	Monterey Mechanical Company	Base Contract: $29,498,000 Contingency: $4,425,000	10/30/18	Fall 2021

1. On April 26, 2016, Council approved the design-build contract and authorized the City Manager to negotiate and execute the definitive contract amendment setting the GMP. On May 25, 2018, the City manager approved the amended contract.
2. This is the actual date the contractor achieved substantial completion and the project reached beneficial use.

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

COUNCIL AGENDA: 04/23/19
FILE:
ITEM:

CITY COUNCIL ACTION REQUEST

Department(s): Finance	**CEQA:** Categorically Exempt, File No. PP16-033, CEQA Guidelines Section 15301, Existing Facilities	**Coordination:** Environmental Services Department, City Attorney's Office, City Manager's Budget Office	**Dept. Approval:** /s/ Julia H. Cooper
Council District(s): Citywide			**CMO Approval:** 4-2-19

SUBJECT: ACTIONS RELATED TO THE PURCHASE ORDER FOR CLARIFIER COATING REHABILITATION SERVICES

RECOMMENDATION:

Adopt a resolution authorizing the City Manager to:

(a) Execute a Purchase Order with Euro Style Management, Inc. (North Highlands, CA) for clarifier coating rehabilitation services at the San Jose-Santa Clara Regional Wastewater Facility for an initial twelve-month period, starting on or about May 1, 2019 and ending on or about April 30, 2020, for an amount not to exceed $717,200; and

(b) Exercise up to four one-year options to extend the term of the Purchase Order with the last option year ending on or about April 30, 2024, subject to the annual appropriation of funds.

Desired Outcome: Increase the life expectancy of the Regional Wastewater Facility clarifier tanks.

BASIS FOR RECOMMENDATION:

Clarifier tanks are an essential part of the San Jose-Santa Clara Regional Wastewater Facility operations and are used to separate biomass solids from the processed liquids prior to the filtration and disinfection process to provide clean water for the San Francisco Bay and the recycled water distribution system. As part of ongoing maintenance at the facility, these tanks must be rehabilitated and painted every ten years.

A competitive Request for bid was facilitated by the Finance Department to procure these services. Five bids were submitted and no protests were received. Staff recommends award to Euro Style Management, Inc., as the lowest responsive and responsible bidder pursuant to the formal bidding procedures of the San Jose Municipal Code, Section 4.12.310B.

Input from a Board or Commission: The Treatment Plant Advisory Committee is scheduled to consider this item on April 11, 2019.

This Council item is consistent with the City's 2018-2019 Adopted Budget City Service Area's Delivery Framework Mission Statement: "To provide environmental leadership through policy development, program design, and reliable utility services."

COST AND FUNDING SOURCE:

Fund #	Appn #	Appn. Name	Total Appn.	Amt. for Recommendation	2018-2019 Adopted Operating Budget Page	Last Budget Action (Date, Ord. No)
513	0762	Non Personal/Equipment - Environmental Services	$28,229,334	$717,200	X-79	2/12/2019, 30223

FOR QUESTIONS CONTACT: Jennifer Cheng, Deputy Director of Finance at 408-535-7059

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

COUNCIL AGENDA: 04/23/19
FILE:
ITEM:

CITY COUNCIL ACTION REQUEST

Department(s): Finance	**CEQA:** Categorically Exempt, File No. PP19-021, CEQA Guidelines Section 15301, Existing Facilities	**Coordination:** Environmental Services Department, City Attorney's Office, City Manager's Budget Office	**Dept. Approval:** /s/ Julia H. Cooper
Council District(s): Citywide			**CMO Approval:** 4-2-19

SUBJECT: ACTIONS RELATED TO THE PURCHASE ORDER FOR SAND BLASTING AND PAINTING SERVICES

RECOMMENDATION:

Adopt a resolution authorizing the City Manager to:

(a) Execute a Purchase Order with Jeffco Painting and Coating, Inc. (Vallejo, CA) for sandblasting and painting services at the San Jose-Santa Clara Regional Wastewater Facility for an initial twelve-month period, starting on or about May 1, 2019 and ending on or about April 30, 2020, for an amount not to exceed $400,000; and

(b) Exercise up to four one-year options to extend the term of the Purchase Order with the last option year ending on or about April 30, 2024, subject to the appropriation of funds.

Desired Outcome: To complete scheduled sandblasting and painting projects at the Regional Wastewater Facility to ensure equipment and infrastructure are preserved.

BASIS FOR RECOMMENDATION:

Sandblasting and painting services are required as part of general maintenance at the San Jose-Santa Clara Regional Wastewater Facility. Work may include, but is not limited to, preparation, sandblasting, and painting of existing equipment and infrastructure that covers motors, pumps, piping, tanks, interior and exterior of buildings, and secondary containment structures.

A competitive Request for bid was facilitated by the Finance Department to procure these services. Three bids were submitted and no protests were received. Staff recommends award to Jeffco Painting and Coating, Inc., as the lowest responsive and responsible bidder pursuant to the formal bidding procedures of the San Jose Municipal Code, Section 4.12.310B.

Input from a Board or Commission: The Treatment Plant Advisory Committee is scheduled to consider this item on April 11, 2019.

This Council item is consistent with the City's 2018-2019 Adopted Budget City Service Area Mission Statement: "To provide environmental leadership through policy development, program design, and reliable utility services."

COST AND FUNDING SOURCE:

Fund #	Appn #	Appn. Name	Total Appn.	Amt. for Recommendation	2018-2019 Adopted Operating Budget Page	Last Budget Action (Date, Ord. No)
513	0762	Non Personal/ Equipment – Environmental Services	$28,229,334	$400,000	X-79	02/12/2019 30223

FOR QUESTIONS CONTACT: Jennifer Cheng, Deputy Director of Finance at 408-535-7059

City Manager's Contract Approval Summary

For Procurement and Contract Activity between $100,000 and $1.17 Million for Goods and $100,000 and $290,000 for Services

MARCH 1, 2019 - MARCH 31, 2019

	Description of Contract Activity [1]	Fiscal Year	Req#/ RFP#	PO#	Vendor/Consultant	Original $ Amount	Start Date	End Date	Additional $ Amount	Total $ Amount	Comments
1	CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES FOR DIGESTER AND THICKENER FACILITIES UPGRADE	18-19		AC27745	KENNEDY/JENKS	$3,662,753	5/30/18	12/31/19	$547,660	$4,210,413	SERVICE ORDER #03 FIRST AMENDMENT (MASTER AGREEMENT TERM 6/26/16-6/30/24, $8M)