SAN JOSÉ/SANTA CLARA TREATMENT PLANT ADVISORY COMMITTEE

SAM LICCARDO, CHAIR
PAT KOLSTAD, VICE CHAIR
LAN DIEP, MEMBER
DAVID SYKES, MEMBER
DEV DAVIS, MEMBER
MARSHA GRILLI, MEMBER
DEBI DAVIS, MEMBER
STEVEN LEONARDIS, MEMBER
JOHN GATTO, MEMBER

AMENDED AGENDA/ TPAC

4:00 p.m. June 14, 2018 Room 1734

1. ROLL CALL

2. APPROVAL OF MINUTES

A. May 17, 2018
B. June 4, 2018

3. UNFINISHED BUSINESS/REQUEST FOR DEFERRALS

4. DIRECTOR'S REPORT

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

5. AGREEMENTS/ACTION ITEMS

A. 8753 – Master Consultant Agreements With Construction Testing Services, Inc.; Signet Testing Labs, Inc.; And Consolidated Engineering Labs For Special Inspection And Materials Testing Services For The San José-Santa Clara Regional Wastewater Facility Capital Improvement Program

Staff Recommendation:

Approve Master Consultant Agreements with Construction Testing Services, Inc.; Signet Testing Labs, Inc.; and Consolidated Engineering Labs for special inspection and materials testing services for various capital improvement projects at the San José-Santa Clara Regional Wastewater Facility, from the date of execution through December 31, 2023, in a total amount not to exceed $3,000,000 for each agreement, subject to the appropriation of funds.

This item is scheduled for consideration by the City Council on June 19, 2018.

B. Approval of A Design-Build Contract With Ch2m Hill Engineers, Inc. For The Headworks Project At The San José-Santa Clara Regional Wastewater Facility

Staff Recommendation:

1. Adopt a resolution adopting the Addendum to the Environmental Impact Report for the San José-Santa Clara Regional Wastewater Facility in accordance with the California Environmental Quality Act (CEQA), as amended, and adopting a related Mitigation Monitoring and Reporting Program.

2. Approve the design-build contract with CH2M Hill Engineers, Inc. for the Headworks Project at the San José-Santa Clara Regional Wastewater Facility in an amount not to exceed $5,666,354 for the performance of preliminary services under the contract.

3. Approve a design contingency in the amount of $566,635 for City-approved changes to the scope of preliminary services.

4. Adopt a resolution authorizing the City Manager or his designee to:

    a. Negotiate and execute a separate amendment to the contract to allow CH2M Hill Engineers, Inc. to proceed with subsurface investigations prior to the City's execution of the definitive contract amendment in an amount not to exceed $1,000,000;

    b. Approve a construction contingency in the amount of $1,000,000 for City-approved changes to the scope of the subsurface investigations.

    c. Execute change orders in excess of $100,000 up to the amount of the approved contingency for changes to the scope of the preliminary services work or subsurface investigations.

This item is scheduled for consideration by the City Council on June 19, 2018.

C. Report On Bids And Award Of Contract For 8684– Pond A18 South Gate Levee Repair

Staff Recommendation:

Report on bids and award of a construction contract for 8684 Pond A18 South Gate Levee Repair to the apparent low bidder Sweetwater Construction, Inc. for the base bid in the amount of $217,493 and approval of a construction contingency of 15 percent in the amount of $32,624.40.

This item is scheduled for consideration by the City Council on June 19, 2018.

6. OTHER BUSINESS/CORRESPONDENCE

7. STATUS OF ITEMS PREVIOUSLY RECOMMENDED FOR APPROVAL BY TPAC

A. Report On Bids And Award Of Construction Contract For 7757 – Advanced Facility Control And Meter Replacement - Phase 1 Project At The San José-Santa Clara Regional Wastewater Facility

Staff Recommendation:

(a) Report on bids and award of a construction contract for 7757-Advanced Facility Control and Meter Replacement - Phase 1 Project to the low bidder, C. Overaa & Co., for the base bid and Add Alternate Nos. 1 to 4, in the amount of $5,790,000, and approve a 20 percent construction contingency in the amount of $1,158,000.

(b) Adopt a resolution authorizing the Director of Public Works to negotiate and execute one or more change orders in excess of $100,000 for the duration of the project, not to exceed the total contingency amount approved for the project.

The proposed recommendation was approved by the City Council on May 22, 2018.

B. Five- Year 2019-2023 Proposed Capital Improvement Program

Staff Recommendation:

Staff Recommendation: TPAC approval of the San José/Santa Clara Regional Wastewater Facility Proposed Five-Year 2019-2023 Capital Improvement Program.

The proposed recommendation was approved by the City Council on May 22, 2018 and will be adopted on June 19, 2018.

C. 8641– South Bay Water Recycling Pump Station HVAC Project

Staff Recommendation:

Report on bids and award of contract for the 8641 - South Bay Water Recycling Pump Station Heating, Ventilation, and Air Conditioning Project to the low bidder, Blocka Construction Inc., in the amount of $406,000 and approve a contingency in the amount of $40,600.

The proposed recommendation was approved by the City Council on May 22, 2018.

D. Discharge Regulations and Future Impacts on the San José- Santa Clara Regional Wastewater Facility

Staff Recommendation:

Accept the annual update on regulatory items related to the San José-Santa Clara Regional Wastewater Facility.

This item was accepted by the Transportation and Environment Committee on May 7, 2018, and is scheduled to be considered by the City Council at a date to be determined.

E. 2018-2019 Proposed Operating Budget

Staff Recommendation: TPAC approval of the San José/Santa Clara Regional Wastewater Facility Proposed Operating Budget.

The proposed recommendation was approved by the City Council on June 12, 2018 and will be adopted on June 19, 2018.

F. Construction Contingency Increase for the 7382- Digester and Thickener Facilities Upgrade Project at the San José-Santa Clara Regional Wastewater Facility

(a) Approve a $25,000,000 increase to the construction contingency amount of $28,490,625 for a revised total contingency amount of $53,490,625 and increasing the contract not-to-exceed amount from $136,415,625 to a total revised contract amount not-to-exceed $161,415,625 for the 7382 – Digester and Thickener Facilities Upgrade Project.

(b) Adopt the following 2017-2018 Appropriation Ordinance Amendments in the San José- Santa Clara Treatment Plant Capital Fund:
   (1) Decrease the Aeration Tanks and Blower Rehabilitation appropriation to the Environmental Services Department by $18,000,000;
   (2) Decrease the Urgent and Unscheduled Treatment Plant Rehabilitation appropriation to the Environmental Services Department by $4,500,000;
   (3) Decrease the Advanced Facility Control and Meter Replacement appropriation to the Environmental Services Department by $4,000,000; and
   (4) Increase the Digester and Thickener Facilities Upgrade appropriation to the Environmental Services Department by $26,500,000.

The proposed recommendation is scheduled to be approved by the City Council on June 12, 2018.

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 **August 9, 2018, 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, May 17, 2018 at 4:00 p.m.

1. ROLL CALL

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

Committee Members: Debi Davis, Dev Davis, Marsha Grilli, Steven Leonardis, Dave Sykes, Pat Kwok (alternate) Kathy Watanabe (alternate), Lan Diep (4:02pm)

Absent: Sam Liccardo

Due to Chair Liccardo's absence, Committee Member Debi Davis was Acting Chair.

2. APPROVAL OF MINUTES

A. April 12, 2018
Item 2.A. was approved to note and file.
Ayes – 8 (Debi Davis, Dev Davis, Lan Diep, Marsha Grilli, Steven Leonardis, Dave Sykes, Pat Kwok (alternate) Kathy Watanabe(alternate)
Nayes – 0
Absent – 1 (Liccardo)

3. UNFINISHED BUSINESS/REQUEST FOR DEFERRALS

4. DIRECTOR'S REPORT

A. Director's Report (verbal)

- Monthly Progress Report
  Director Romanow noted the inclusion of the monthly progress report in the packet as well as the fact that the California Association of Public Information Officers gave its top award, the EPIC Award in the category of Video Production, Long Video, Large Population for our eight minute video of the RWF, "Behind the Flush: Protecting our Health, Bay and Economy."

5. AGREEMENTS/ACTION ITEMS

A. Report On Bids And Award Of Construction Contract For 7757 – Advanced Facility Control And Meter Replacement - Phase 1 Project At The San José-Santa Clara Regional Wastewater Facility

Staff Recommendation:

(a) Report on bids and award of a construction contract for 7757-Advanced Facility Control and Meter Replacement - Phase 1 Project to the low bidder, C. Overaa & Co., for the base bid and Add Alternate Nos. 1 to 4, in the amount of $5,790,000, and approve a 20 percent construction contingency in the amount of $1,158,000.

(b) Adopt a resolution authorizing the Director of Public Works to negotiate and execute one or more change orders in excess of $100,000 for the duration of the project, not to exceed the total contingency amount approved for the project.

This item is scheduled for consideration by the City Council on May 22, 2018.

Deputy Director Julia Nguyen presented.

Committee Member Grilli would like the City of Milpitas to be kept up to date.

On a motion made by Committee Member Dev Davis and a second by Committee Alternate Pat Kwok, TPAC recommended approval of staff's recommendation for Item 5.A.

Ayes – 8 (Debi Davis, Dev Davis, Lan Diep, Marsha Grilli, Steven Leonardis, Dave Sykes, Pat Kwok (alternate) Kathy Watanabe(alternate)
Nayes – 0
Absent – 1 (Liccardo)

B. Five- Year 2019-2023 Proposed Capital Improvement Program

Staff Recommendation: TPAC approval of the San José/Santa Clara Regional Wastewater Facility Control Proposed Five-Year 2019-2023 Capital Improvement Program.

The San José/Santa Clara Regional Wastewater Facility Proposed Five-Year 2019-2023 Capital Improvement Program is scheduled for Council

consideration on June 12, 2018, and for adoption on June 19, 2018.

Director Romanow requested that this item be voted on but that item 5.C. be deferred to a Special TPAC meeting on June 4.
Administrative Officer Allen Fong and Deputy Director Julia Nguyen presented.
Committee Alternate Pat Kwok had a question about different programs.
Allen Fong answered the questions.

On a motion made by Committee Member Dev Davis and a second by Committee Member Dave Sykes, TPAC recommended approval of staff's recommendation for Item 5.B.

Ayes – 5 (Debi Davis, Dev Davis, Lan Diep, Dave Sykes, Kathy Watanabe(alternate)
Nayes – 3 (Grilli, Kwok, Leonardis)
Absent – 1 (Liccardo)

C. 2018-2019 Proposed Operating Budget

Staff Recommendation: TPAC approval of the San José/Santa Clara Regional Wastewater Facility Proposed Operating Budget.

The San José/Santa Clara Regional Wastewater Facility Proposed Operating Budget is scheduled for Council consideration on June 12, 2018, and for adoption on June 19, 2018.

On a motion made by Committee Member Leonardis and a second by Committee Alternate Kwok, TPAC recommended deferral of this item to a Special TPAC Meeting on June 4, 2018.

Ayes – 8 (Debi Davis, Dev Davis, Lan Diep, Marsha Grilli, Steven Leonardis, Dave Sykes, Pat Kwok (alternate) Kathy Watanabe(alternate)
Nayes – 0
Absent – 1 (Liccardo)

D. 8641 – South Bay Water Recycling Pump Station HVAC Project

Staff Recommendation:
Report on bids and award of contract for the 8641 - South Bay Water Recycling Pump Station Heating, Ventilation, and Air Conditioning Project to the low bidder, Blocka Construction Inc., in the amount of $406,000 and approve a

contingency in the amount of $40,600.

This item is scheduled for consideration by the City Council on May 22, 2018.

On a motion made by Committee Member Grilli and a second by Committee Member Dev Davis, TPAC recommended approval of staff's recommendation for Item 5.D.

Ayes – 8 (Debi Davis, Dev Davis, Lan Diep, Marsha Grilli, Steven Leonardis, Dave Sykes, Pat Kwok (alternate) Kathy Watanabe (alternate)
Nayes – 0
Absent – 1 (Liccardo)

E. Discharge Regulations and Future Impacts on the San José- Santa Clara Regional Wastewater Facility

Staff Recommendation:
Accept the annual update on regulatory items related to the San José-Santa Clara Regional Wastewater Facility.

This item was accepted by the Transportation and Environment Committee on May 7, 2018, and is scheduled to be considered by the City Council at a date to be determined.

Environmental Sustainability Manager, Ken Davies, presented.
Committee Member Debi Davis asked for clarification regarding allocation of funding.
Committee Alternate Pat Kwok asked for a copy of the presentation.

This report was accepted by Consensus.

6. OTHER BUSINESS/CORRESPONDENCE

7. STATUS OF ITEMS PREVIOUSLY RECOMMENDED FOR APPROVAL BY TPAC

A. Master Consultant Agreement with Black & Veatch for Owner's Advisor Services for the 8142- Yard Piping Improvements Project at the San Jose- Santa Clara Regional Wastewater Facility

Staff Recommendation:

Approve a Master Consultant Agreement with Black & Veatch to provide owner's advisor services for the 8142 – Yard Piping Improvements Project at the San José-Santa Clara Regional Wastewater Facility from the date of execution through June 30, 2026, in a total amount not to exceed $9,750,000 subject to the appropriation of funds.

The proposed recommendation was approved by the City Council on April 24, 2018.

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

Staff Recommendation:

Approve master service agreements for consultant engineering services with HydroScience Engineers, Inc. and MNS Engineers, Inc. for a term through June 30, 2020 for a total maximum compensation of $750,000.

The proposed recommendation will be approved by Council at a date to be determined.

C. Open Audit Recommendations from the Audit of Environmental Services Department Consulting Services

Staff Recommendation:
Review and accept the status of open audit recommendations from the September 2017 Audit of Environmental Services Department Consulting Services: Agreements Require Additional Oversight

The proposed recommendation will be approved by Council at a date to be determined.

Item 7.A., 7.B. and 7.C. was approved to note and file.
Ayes – 8 (Debi Davis, Dev Davis, Lan Diep, Marsha Grilli, Steven Leonardis, Dave Sykes, Pat Kwok (alternate) Kathy Watanabe(alternate)
Nayes – 0
Absent – 1 (Liccardo)

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.

Item 8.A. was approved to note and file.

Ayes – 8 (Debi Davis, Dev Davis, Lan Diep, Marsha Grilli, Steven Leonardis, Dave Sykes, Pat Kwok (alternate) Kathy Watanabe(alternate)
Nayes – 0
Absent – 1 (Liccardo)

9. MISCELLANEOUS

A. The next Special TPAC Meeting is on **June 4, 2018, at 4:00 p.m**., City Hall, Room 1734.

10. OPEN FORUM

11. ADJOURNMENT

A. The Treatment Plant Advisory Committee adjourned at 4:53 p.m.

Sam Liccardo, Chair

TREATMENT PLANT ADVISORY COMMITTEE

MINUTES OF THE
SAN JOSÉ/SANTA CLARA
TREATMENT PLANT ADVISORY COMMITTEE
San José City Hall, T-1734
Thursday, June 4, 2018 at 4:00 p.m.

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, John Gatto, Marsha Grilli, Pat Kolstad, Steven Leonardis, Dave Sykes, Sam Liccardo (4:04 p.m.), Lan Diep (4:05 p.m.)

Absent: Dev Davis

2. AGREEMENTS/ACTION ITEMS

A. 2018-2019 Proposed Operating Budget

Staff Recommendation:

Staff Recommendation: TPAC approval of the San José/Santa Clara Regional Wastewater Facility Proposed Operating Budget.

The San José/Santa Clara Regional Wastewater Facility Proposed Operating Budget is scheduled for Council consideration on June 12, 2018, and for adoption on June 19, 2018.

Director Kerrie Romanow presented along with Assistant Finance Director Lisa Taitano.
Committee Member Gatto had a question about the Biosolids Program Manager role as well as what the rationale behind the Southbay Water Recycling Operating Fund.
Director Kerrie Romanow and Assistant Finance Director Lisa Taitano answered and clarified those questions. Additionally, Assistant Environmental Services Director Ashwini Kantak made further clarifications.
Chair Member Sam Liccardo asked for clarification regarding Disposition options. Assistant Environmental Services Director Ashwini Kantak explained what the options were.
Chair Member Sam Liccardo also gave Environmental Services a hand for a

lower vacancy rate.
Committee Member Gatto asked if there were any outside audits conducted and Assistant Finance Director Lisa Taitano shared that outside audits were conducted and available on the City of San José website.

On a motion made by Committee Member Kolstad and a second by Committee Member Debi Davis, TPAC recommended approval of staff's recommendation for Item 2.A.

Ayes – **5** (Debi Davis, Lan Diep, Pat Kolstad, Sam Liccardo, Dave Sykes)
Nayes – 3 (Gatto, Grilli, Leonardis)
Abstain – 0
Absent – 1 (Dev Davis)

B. 86 Construction Contingency Increase for the 7382-Digester and Thickener Facilities Upgrade Project at the San José-Santa Clara Regional Wastewater Facility Consulting

(a) Approve a $25,000,000 increase to the construction contingency amount of $28,490,625 for a revised total contingency amount of $53,490,625 and increasing the contract not-to-exceed amount from $136,415,625 to a total revised contract amount not-to-exceed $161,415,625 for the 7382 – Digester and Thickener Facilities Upgrade Project.

(b) Adopt the following 2017-2018 Appropriation Ordinance Amendments in the San José- Santa Clara Treatment Plant Capital Fund:
   (1) Decrease the Aeration Tanks and Blower Rehabilitation appropriation to the Environmental Services Department by $18,000,000;
   (2) Decrease the Urgent and Unscheduled Treatment Plant Rehabilitation appropriation to the Environmental Services Department by $4,500,000;
   (3) Decrease the Advanced Facility Control and Meter Replacement appropriation to the Environmental Services Department by $4,000,000; and
   (4) Increase the Digester and Thickener Facilities Upgrade appropriation to the Environmental Services Department by $26,500,000.

This item is scheduled for consideration City Council on June 12, 2018.

Public Works Principal Engineer John Cannon presented.
Committee Member Debi Davis questioned the issues of delay and design build. She questioned if Risk Management options were discussed prior to the project and how this would be remedied.

Assistant Environmental Services Director Ashwini Kantak explained what the options were and that there would be a discussion with the contractor regarding who would pay for what issues. However, Committee Member Dave Sykes answered that the option was that right now, the project needed funding to continue. It was agreed that a follow up to this item would be done at a later TPAC meeting.

On a motion made by Committee Member Debi Davis and a second by Committee Member Pat Kolstad, TPAC recommended approval of staff's recommendation for Item 2.B.

Ayes – **6** (Debi Davis, Lan Diep, Marsha Grilli, Pat Kolstad, Sam Liccardo, Dave Sykes)
Nayes – 1 (Leonardis)
Abstain – 1 (Gatto)
Absent – 1 (Dev Davis)

3. OPEN FORUM

4. ADJOURNMENT

A. The Treatment Plant Advisory Committee adjourned at 4:37 p.m.

Sam Liccardo, Chair

TREATMENT PLANT ADVISORY COMMITTEE

San José-Santa Clara Regional Wastewater Facility

Capital Improvement Program
Monthly Status Report: April 2018

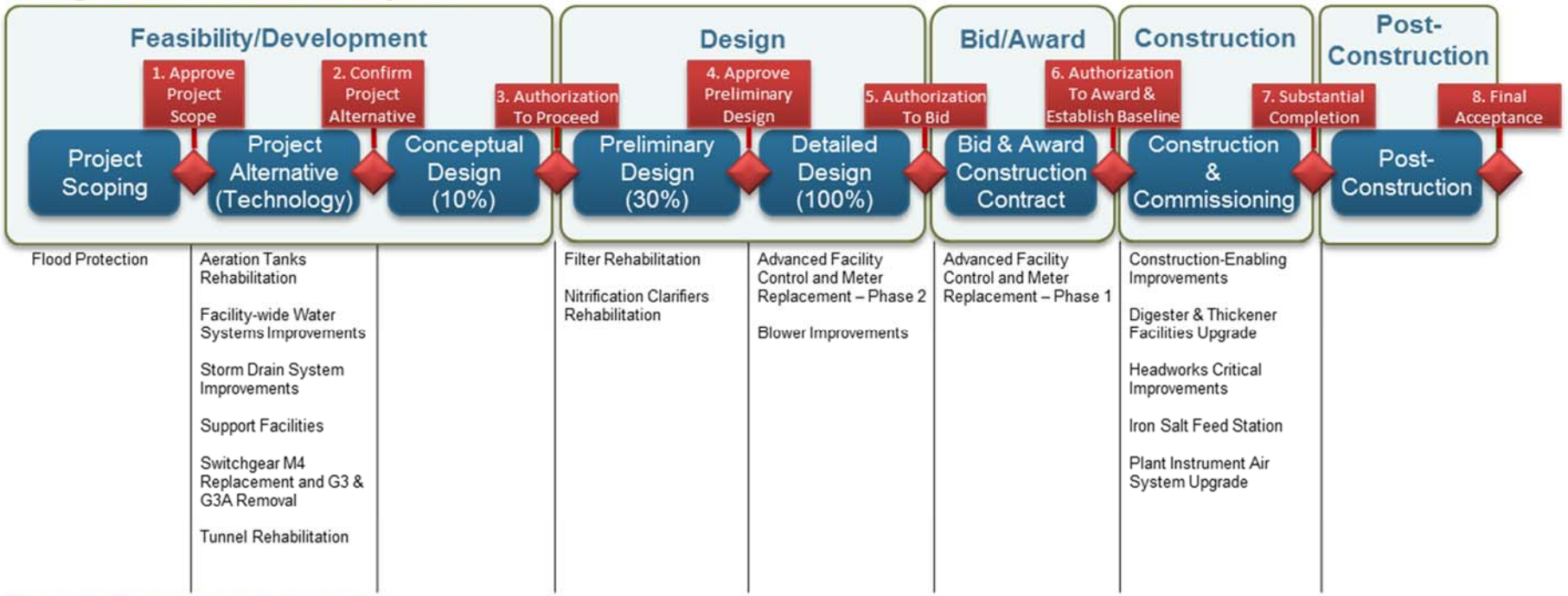
June 7, 2018

This report summarizes the progress and accomplishments of the Capital Improvement Program (CIP) for the San José-Santa Clara Regional Wastewater Facility (RWF) for April 2018.

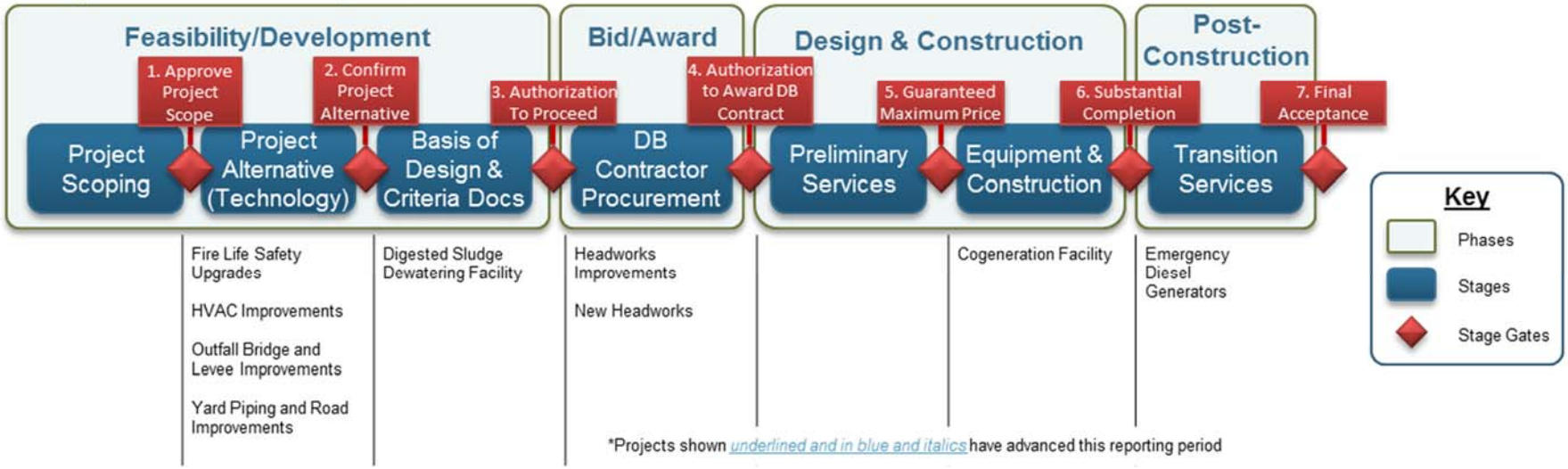
Report Contents

Project Delivery Model

Design-Bid-Build Active Projects



Design-Build Active Projects



*Projects shown underlined and in blue and italics have advanced this reporting period

Program Summary

April 2018

The City advanced the New Headworks and Headworks Improvements projects through Stage Gate 4: Authorization to Award Design-Build Contract. New Headworks will replace the original duty headworks facility (Headworks 1)—which has been in operation for over 50 years and reached the end of its useful life—with a new duty headworks facility (Headworks 3). Headworks Improvements will modify and rehabilitate the backup and wet-weather headworks facility (Headworks 2). The projects (Headworks Project) will be implemented as a single design-build (DB) contract to reduce project cost, duration, and risk. The overall project budget is currently forecast at $145.5 million and the project is scheduled to complete by September 2022.

The City completed the condition assessment of 18 existing RWF buildings' heating, ventilation, and air conditioning (HVAC) systems as part of the HVAC Improvements Project and began condition assessment of the outfall flow meters, bridge, and weir structures as part of the Outfall Bridge and Levee Improvements Project. The City continued detailed design of the Blower Improvements Project and notified five construction contractors that they had prequalified to bid on the project. The project team anticipates completing the design and construction bid documents in June 2018.

The Iron Salt Feed Station Project contractor addressed a number of commissioning and start-up issues and restarted operational testing. The Construction-Enabling Improvements Project contractor continued to address several outstanding items. The Headworks Critical Improvements Project contractor completed all work associated with the new bar screens and prepared to commence operational testing. The Plant Instrument Air System Upgrade Project contractor completed the connection and testing of a second 480-volt main feeder line and the configuration of the distributed control system. The Cogeneration Facility Project design-builder continued early site work, including demolition and excavation for the new building foundations, and reached the 90 percent design milestone. The Digester and Thickener Facilities Upgrade Project contractor completed all work associated with the 100 million gallons per day temporary pumping and pipeline system. This temporary system will enable the contractor to re-route flows during this year's dry season while replacing a corroded 78-inch settled sewage pipeline. Work on the EPA approved Phase 2 plan to remove PCB caulking, grout, shotcrete, and concrete from the digester area began and is anticipated to be completed by June 2018.

The County recorded the City's Notice of Completion and Acceptance (NOCA) this month for the Emergency Diesel Generators Project.

Additionally, staff presented the CIP Semiannual Status Report, highlighting progress for July through December 2017, to the Transportation and Environment Committee (T&E), and made the following recommendations to the Treatment Plant Advisory Committee (TPAC) and City of San José Council (Council): (1) award a Master Consultant Agreement (MCA) for Owner's Advisor services for the Yard Piping and Road Improvements Project; and (2) accept the CIP Semiannual Status Report. All recommendations were approved.

Look Ahead

The following key activities are forecast for May and June of 2018:

- Project teams will seek stage gate approval for the following projects:
    1. Blower Improvements Project – Stage Gate 5: Authorization to Bid;
    2. Aeration Tanks Rehabilitation Project – Stage Gate 2: Confirm Project Alternative; and
    3. Headworks Critical Improvements Project – Stage Gate 7 – Substantial Completion.
- The City will shortlist DB entities for the Digested Sludge Dewatering Facility Project based on their Statement of Qualifications and then advertise a Request for Proposal to the shortlisted entities;
- The City will execute the Definitive Contract Amendment (DCA) for the Cogeneration Facility Project and the design-builder will conduct factory acceptance testing of the new cogeneration engines;
- The Filter Rehabilitation Project team will complete the 30 percent design and perform a value engineering study;
- The Iron Salt Feed Station, Headworks Critical Improvements, and Plant Instrument Air System Upgrade projects will reach Beneficial Use;
- Staff will make the following recommendations to TPAC and Council: (1) award the Advanced Facility Control and Meter Replacement – Phase 1 Project construction contract; (2) accept the annual update on Discharge Regulations and Future Impacts on the RWF; (3) approve and adopt the proposed 2019-2023 CIP Budget; (4) award three special inspection MCAs for various CIP projects; (5) award the Headworks Project DB contract; and (6) approve the Digester & Thickener Facilities Upgrade Project construction contingency increase.

Program Highlight – Value Engineering

Value Engineering (VE) is a creative and independent process which is focused on adding "value" to major public works projects, where value is defined as the ratio of function to cost. VE has been widely used in the construction industry for many years with the following positive results:

- Reduced construction time;
- Improved constructability (ability to construct);
- Improved quality;
- Safer operations;
- Resolution of stakeholder issues;
- Reduced operating costs;
- Reduced capital costs; and
- Mitigated or lowered risks

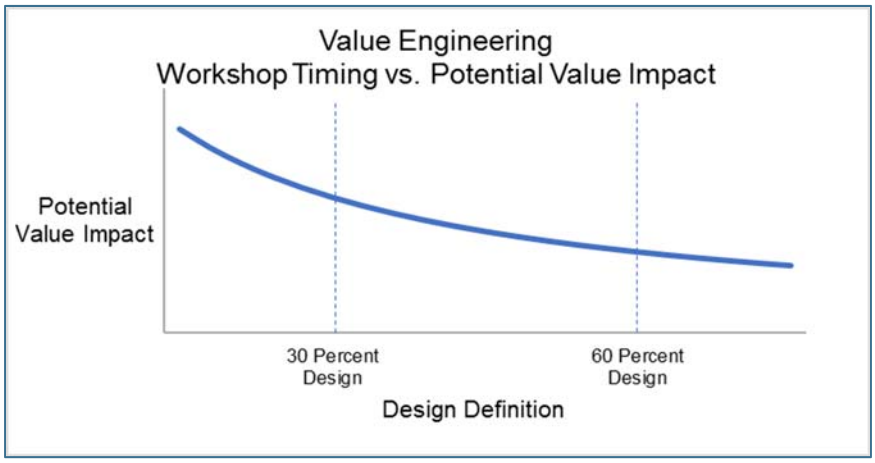


Figure 1: Value Engineering Impact

The greatest potential impact on improving project value occurs early in the design process, as depicted in Figure 1. The CIP requires all capital projects with a construction estimate of $10 million or more to conduct a VE study at the 30 percent design milestone. A second study may also be conducted at the 60 percent design milestone if the project's construction estimate exceeds the available project budget.

The CIP VE studies are conducted by an independent multi-disciplined team of professionals with expertise in the project scope. The CIP has retained two firms to conduct VE studies on a rotating basis. The VE team uses an international standard value methodology and works through the following six-phase process in a multi-day workshop format:

1. Information Phase
2. Function Analysis Phase
3. Creative Phase
4. Evaluation Phase
5. Development Phase
6. Presentation Phase

Each VE study results in recommendations to improve quality and value. The CIP project team then evaluates the recommendations and selects which recommendations will be incorporated into the project design.

The CIP's first VE study was completed in June 2017 for the Blower Improvements Project at the 30 percent design (see Figure 2). The study was performed by a six-person team with expertise in the VE process, blower design and operations, electrical design, constructability, and cost estimating. The team developed 120 initial ideas for potential changes to the design. The team selected 10 proposals as best alternatives. The VE team then developed these alternatives into workable solutions, which they presented to the CIP project management team. The CIP reviewed the recommendations internally and directed the design consultant to implement the recommendations believed to be cost effective and prudent. The VE process resulted in savings of $3.8 million in capital costs for the project.

Two more VE studies are scheduled to be performed this year on CIP projects at 30 percent design completion:

1) Filter Rehabilitation Project in June 2018; and
2) Nitrification Clarifier Rehabilitation Project in July 2018.

Figure 2: Blower Improvements Project Value Engineering Final Report

Program Performance Summary

Eight 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 have been reset for this fiscal year.

Program Key Performance Indicators – Fiscal Year 2017-2018

KPI	Target	Fiscal Year to Date			Fiscal Year End		
		Actual	Status	Trend	Forecast	Status	Trend
Stage Gates	80%	100% 15/15[1]			100% 18/18[2]		
Measurement: Percentage of initiated projects and studies that successfully pass each stage gate on their first attempt. Target: Green: >= 80%; Amber: 70% to 80%; Red: < 70%							
Schedule	90%	0% 0/1			50% 2/4[4]		
Measurement: Percentage of CIP projects delivered within 2 months of approved baseline Beneficial Use Milestone.[3] Target: Green: >= 90%; Amber: 75% to 89%; Red: < 75%							
Budget	90%	67% 2/3[5]			75% 3/4		
Measurement: Percentage of CIP projects that are accepted by the City within the approved baseline budget.[3] Target: Green: >= 90%; Amber: 75% to 89%; Red: < 75%							
Expenditure	$247M	$198M			$309M[6]		
Measurement: CIP FY17-18 committed costs. Target: Committed cost meets or exceeds 70% of planned Budget. 70% of $354M = $247M. Therefore Green: >=$247M; Amber: $194M to $247M; Red: < $194M							
Procurement	80%	100% 3/3			100% 4/4		
Measurement: Number of consultant and contractor procurements advertised compared to planned for the fiscal year. Target: Green: >= 80%; Amber: 70% to 79%; Red: < 70%							
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							
Staffing[7]	80%	100% 15/15			100% 15/15		
Measurement: Number of planned positions filled for the fiscal year. Target: Green: >= 80%; Amber: 70% to 79%; Red: < 70%							

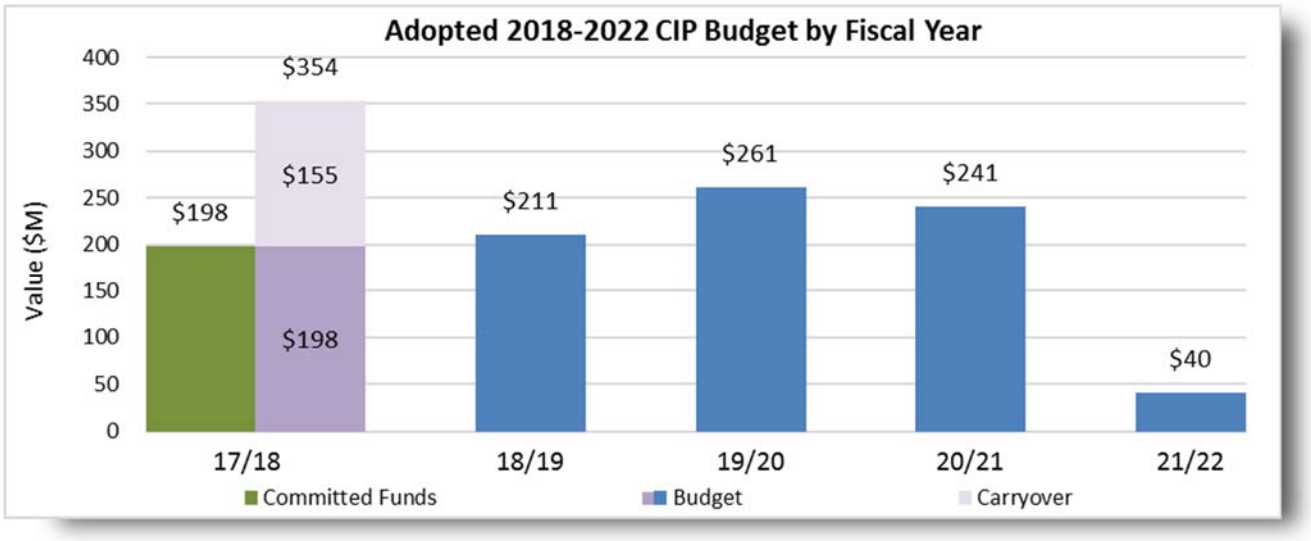
Notes

1. The Headworks Project successfully completed Stage Gate 4: Authorization to Award DB Contract.
2. The fiscal year-end count has been updated to reflect a decrease in the number of planned stage gates due to project schedule revisions.
3. The baseline Beneficial Use date and the baseline budget for each project are established at construction contract award and execution.
4. The Construction-Enabling Improvements Project team no longer anticipates achieving Beneficial Use this fiscal year and has been removed from this fiscal year's Schedule KPI.
5. The City accepted the Emergency Diesel Generators Project with project expenses within the approved baseline budget.
6. The fiscal year-end expenditure forecast increased by approximately $1 million due to revised encumbrance estimates.
7. The staffing KPI is measured quarterly and represents CIP recruitments planned for the fiscal year. This KPI measurement does not account for staff turnover throughout the fiscal year.

Program Budget Performance Summary

This section summarizes the cumulative monthly budget performance for fiscal year (FY)17-18 based on the 2018-2022 CIP.

Adopted 2018-2022 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 non-personal expenses that do not require a contract.

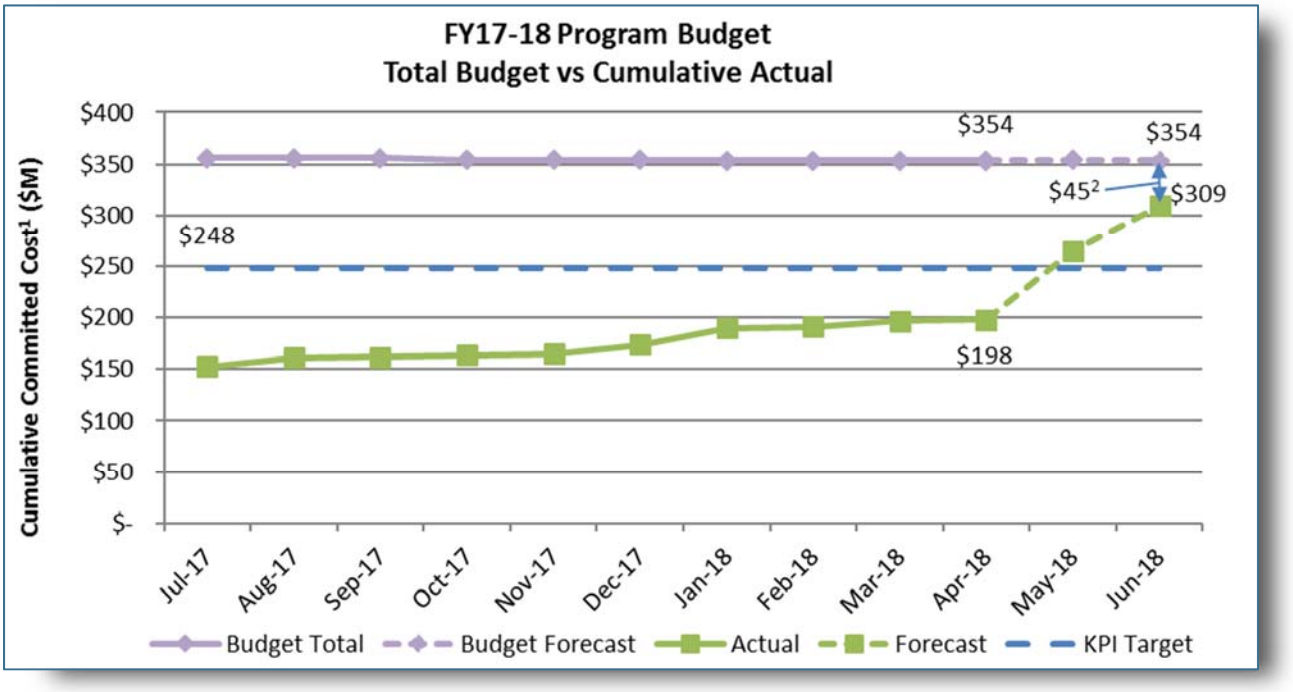
Encumbrance**:** Financial commitments such as purchase orders or contracts that are committed to a vendor, consultant, or contractor**.** An encumbrance reserves the funding within the appropriation and project.

The FY17-18 budget is $238 million, which consists of $198 million in new funds and $40 million in rebudgets. For purposes of this monthly report, the adopted FY17-18 budget is adjusted from $238 million to $198 million due to excluding certain appropriations that are not measured as part of the expenditure KPI. Excluded appropriations include Urgent and Unscheduled Treatment Plant Rehabilitation, SBWR Extension, Debt Service Repayment for Plant Capital Improvement Projects (San José only debt service), Public Art, State Revolving Fund Loan Repayment, City Hall Debt Service Fund, Clean Water Financing Authority Debt Service Payment Fund, Equipment Replacement Reserve, and Ending Fund Balance. Similar adjustments have been made to the budgets for FY18-19 through FY 21-22. In October, the fall cleanup action increased the FY17-18 budget by $3 million.

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.

Fiscal Year 2017-2018 Program Budget Performance

The FY17-18 budget is comprised of approximately $198 million in new funds plus encumbrance carryover of $155 million for a total of $354 million. This excludes Reserves, Ending Fund Balance, Debt Service, South Bay Water Recycling, Public Art, and Urgent and Unscheduled Rehabilitation items.



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. Construction contracts that are not expected to be awarded in FY17-18:
        i. Blower Improvements Project
        ii. Fire Life Safety Upgrades Project
    b. Several consultant service orders planned for award in FY17-18 are now expected to be awarded in FY18-19:
        i. Filter Rehabilitation Project – detailed design work
        ii. Facility-wide Water Systems Improvements Project - preliminary and detailed design work
        iii. Tunnel Rehabilitation Project – feasibility/development work
    c. Several other minor encumbrances for consultant services are either lower than budgeted or are anticipated to be awarded in FY18-19.
    d. Several authorized positions remain vacant, resulting in lower predicted personal services expenses than budgeted.
3. The FY17-18 budget includes three recurring appropriations (Preliminary Engineering, Equipment Replacement, and Plant Infrastructure Improvements) that total approximately $3.66 million. These appropriations are included in the budget to implement minor capital improvement projects that may be needed during the fiscal year. No major expenditures or encumbrances are currently planned against these appropriations.

Project Performance Summary

There are currently six active projects in the construction phase and one projects in the post-construction phase, with an additional 19 projects in feasibility/development, design, or bid and award phases (see PDM, page 2). All active projects are listed in the tables below. 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. Emergency Diesel Generators	Post-Construction	Jul 2017[3]	●	◆
2. Iron Salt Feed Station	Construction	May 2018	●	◆
3. Headworks Critical Improvements	Construction	Jun 2018	●	●
4. Plant Instrument Air System Upgrade	Construction	Jun 2018	●	●
5. Construction-Enabling Improvements	Construction	Jul 2018	●	◆
6. Cogeneration Facility	Design & Construction	Mar 2020[4]	●	●
7. Digester and Thickener Facilities Upgrade	Construction	Jul 2021	◆	◆

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 page 11 and 12.
3. Actual Beneficial Use date.
4. The project construction Beneficial Use date will be baselined once the contractor submits their construction schedule.

Project Performance – Pre-Baselined Projects

Project Name	Phase	Estimated Beneficial Use Date[1]
1. Advanced Facility Control & Meter Replacement Phase 1	Bid and Award	Dec 2020
2. Headworks Improvements	Bid and Award	Sep 2022
3. New Headworks	Bid and Award	Sep 2022
4. Blower Improvements	Design	Nov 2021
5. Filter Rehabilitation	Design	Oct 2022
6. Advanced Facility Control & Meter Replacement Phase 2	Design	Dec 2022
7. Nitrification Clarifiers Rehabilitation	Design	Dec 2023
8. Outfall Bridge and Levee Improvements	Feasibility/Development	Dec 2020
9. Switchgear M4 Replacement and G3 & G3A Removal	Feasibility/Development	Jan 2022
10. Storm Drain System Improvements	Feasibility/Development	Jul 2022
11. Fire Life Safety Upgrades	Feasibility/Development	Sep 2022
12. Flood Protection	Feasibility/Development	Sep 2022
13. Digested Sludge Dewatering Facility	Feasibility/Development	Oct 2022
14. HVAC Improvements	Feasibility/Development	Mar 2023
15. Facility-wide Water Systems Improvements	Feasibility/Development	Aug 2023
16. Aeration Tanks Rehabilitation	Feasibility/Development	Aug 2025
17. Support Facilities	Feasibility/Development	Dec 2026
18. Tunnel Rehabilitation	Feasibility/Development	Jan 2027
19. Yard Piping and Road Improvements	Feasibility/Development	Jan 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.

Significant Accomplishments

Biosolids Package

Digester Thickener and Facilities Upgrade

- Contractor Walsh Construction completed the installation of a backup transformer and training of O&M staff for the settled sewage (SES) pipeline reroute system. All equipment associated with the SES reroute system is now installed.

Facilities Package

Cogeneration Facility

- Design-builder CH2M completed significant site demolition, excavation, compaction, and backfill work, preparing the site for electrical duct bank installation and a concrete slab pour in May.
- The City and CH2M finalized the DCA, which is anticipated to be executed in May.
- The City received the 90 percent design submission and conducted the 90 percent design review workshop.

Facility-wide Water Systems Improvements

- Design consultant Kennedy/Jenks (K/J) submitted a draft technical memorandum on future water systems hydraulic modeling and analyses for City review. The City will hold a project workshop in May to review the findings.

Fire Life Safety Upgrades

- Design consultant K/J led a project workshop with City staff to review condition assessment findings.

HVAC Improvements

- Design consultant K/J completed condition assessment work of 18 RWF buildings. The consultant will document the findings in the condition assessment report and hold a project workshop to review the findings in June 2018.

Outfall Bridge and Levee Improvements

- Design consultant AECOM used a dive team to perform underwater condition assessment work at the outfall flow meters, bridge, and weir locations. The consultant will next perform an on-site topographical survey and a geotechnical investigation.

Yard Piping and Road Improvements

- Council approved the award of a Master Consultant Agreement (MCA) for owner's advisor services to Black and Veatch. The MCA is for a total amount not to exceed $9.75 million through June 2026.

Liquids Package

Blower Improvements

- The City prequalified five construction contractors to bid on the project, which is expected to be advertised in June.

Headworks Critical Improvements

- Contractor Overaa Construction completed work on the bar screens, which allowed operational testing to begin in May, and completed the installation of two new actuators and associated electrical work.
- The project team finished establishing the testing plan and protocols.

Headworks Improvements and New Headworks

- The project team successfully completed Stage Gate 4: Authorization to Award Design Build Contract and anticipate recommending award of a DB contract to TPAC and Council in June 2018.

Power and Energy Package

Plant Instrument Air System Upgrade

- Contractor Anderson Pacific completed the connection and testing of a second 480-volt main feeder line and the configuration of the distributed control system.

Emergency Diesel Generators

- The City accepted the project on April 26. The project team will seek approval of Stage Gate 8: Final Acceptance in July 2018.

Explanation of Project Performance Issues

Construction-Enabling Improvements

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 for several weeks from October 2016 through April 2017. Teichert has been granted 47 extra work days for weather-related delays. Teichert has also been granted additional time to remove and replace asphalt pavement in damaged areas of Zanker Road; install traffic-rated pull boxes for the streetlight system; install underground conduits for the fiber optic system; and make additional changes.

Delays in completing the installation of portable trailers required for the project continue to impact the schedule. Installation of the utilities, access ramps, and canopy systems is underway. Teichert estimates that it could take several more weeks to obtain required materials and schedule necessary subcontractors, which could result in another six to nine weeks to complete the installation and setup of the trailers. These delays would place the Beneficial Use date in July 2018. The City notified Teichert that the number of contract work days has been exceeded and that liquidated damages are in effect. By the end of this reporting month, liquidated damages were $216,000.

Digester and Thickener Facilities Upgrade

This project has encountered numerous unforeseen conditions including required design modifications to address seismic forces and the discovery of hazardous materials.

These unforeseen conditions are impacting the project schedule and cost. The City has negotiated contract change orders for the following conditions, resulting in an estimated six-month delay to the Beneficial Use date:

- Major corrosion of a below-ground 78-inch settled sewage pipeline and junction structure is impacting the dissolved air floatation tank piping connections, two new pressurization flow boxes, and utility relocation work. The contractor has postponed all repairs until a temporary pumping system can be safely installed during the 2018 dry season.
- A 36-inch biochemical oxygen demand pipe was obstructing the new sludge screen building foundation. The contractor has removed this pipe and relocated several gas drain vaults and associated piping.
- Multiple conflicts between contract work and existing water, natural gas, digester gas, landfill gas, storm drain, and sanitary sewer pipelines require numerous relocations. The contractor has completed necessary relocations and modifications, including rerouting and other design changes to the new digester gas pipe rack footings.
- BAAQMD venting restrictions have delayed digester work by approximately six months. The contractor has now completed the temporary digester gas connections and the system is now operational.

In November 2017, Council approved a contingency increase of $15 million. The City has issued change orders against the increased contingency for delays associated with the above conditions, including an increase of 140 working days to the project schedule.

The following additional outstanding issues are currently being evaluated and are expected to result in additional costs and delays:

- Digester structural redesign: The design consultant has completed the revised structural drawings to address seismic issues. The contractor has provided a cost proposal associated with the revised structural drawings for the City's review.
- Hazardous material mitigation: Testing of soils and concrete for PCBs is complete. The consultant has prepared a hazardous material survey report summarizing the sampling results. The project team has determined disposal options. Excavation and removal of PCB-contaminated soil is in progress.

A second contingency increase is pending Council approval in June for additional costs associated with the seismic redesign, hazardous material remediation, and schedule delays.

An estimated delay of 276 working days based on the contractor's latest submittal is now reflected in the revised Beneficial Use date of July 2021. City staff is evaluating this estimated delay.

Emergency Diesel Generators

This project reached Beneficial Use in July 2017; final acceptance is anticipated by spring 2018. The schedule shows a project completion delay of approximately one year from the Notice to Proceed (NTP) completion date. The City granted a schedule addition of 189 working days through the change order process due to additional scope. The project has extended beyond the original schedule due to the following factors:

- Caterpillar, the supplier of the emergency diesel generator system, took longer than expected to develop the controls and network switches that interface with existing RWF controls. Caterpillar has completed their outstanding items. Peterson Control completed their outstanding items and has obtained O&M final signoff.
- Additional time was required for PG&E to review the third-party protective devices testing report and schedule the witness test for the new emergency diesel generators. PG&E has now completed this work.

- A no-cost time extension change order was required to split the commissioning sequence into two phases and ensure RWF backup power during engine modification work. The contractor completed both phases of the project, including modifications to the existing EG1 engine; an eight-hour load test for the four new generators; installation of the fueling and diesel exhaust fluid systems; and upgrades to the existing EG2 and EG3 engines and M4 switchgear.

The contractor has reached a settlement with the City on liquidated damages and the City issued NOCA for the project on April 26.

Iron Salt Feed Station

The Iron Salt Feed Station Project construction has been delayed by eight months due to a combination of heavy winter rain in 2016-17; longer than anticipated time to fabricate the double containment pipeline and leak detection system; some piping modifications to resolve a pump operational issue at the ferric chloride station; and the installation of additional piping to allow O&M staff to temporarily dose polymer at an alternate location. In addition, operational testing and commissioning of the new equipment has taken longer than anticipated to fine-tune the control program, identify and resolve pump drop-off issues, and address issues with the new flow meter and level sensor. Staff anticipate that the project will reach Beneficial Use in May 2018.

Project Profile – HVAC Improvements

Most heating, ventilation, and air conditioning (HVAC) equipment in the RWF buildings has exceeded its service life. Replacement parts are becoming scarce. The HVAC system is a vital building function providing cooling for sensitive equipment, ventilation of work space, as well as comfort to occupants. Frequent repairs of old HVAC equipment increase maintenance costs and decrease system reliability. Rehabilitating the HVAC system will improve system performance, efficiency, and reliability, and a more comfortable environment for building occupants.

The project scope includes:

- Replacing the original boilers, chillers, and cooling tower used to produce heating hot and chilled waters with new high efficiency equipment;
- Upgrading or replacing the existing air handler systems that circulate airflow throughout the buildings (see Figures 3 and 4); and
- Replacing the existing exhaust fans with new appropriately sized equipment providing improved ventilation and efficiency.

Figure 3: Aging Air Handler Unit

Figure 4: Heavily Corroded Air Handler Unit

In December 2017, the City authorized design consultant Kennedy Jenks (K/J) to start work on the project. In April, K/J completed the condition assessment of the HVAC systems in 18 RWF buildings. The consultant will hold a project workshop to review the condition assessment results in June.

The project will be delivered using the low-bid design-build method. K/J will develop the 30 percent design documents for a low-bid DB contract. The DB contractor will then finalize the design and build the improvements in compliance with the new mechanical and energy codes, including modifications necessitated by changes that have occurred in building use at the RWF throughout the years.

The project team expects to begin construction in the fall 2020 and reach Beneficial Use in spring 2023. The total project budget is currently $12.8 million.

Regional Wastewater Facility Treatment – Current Treatment Process Flow Diagram

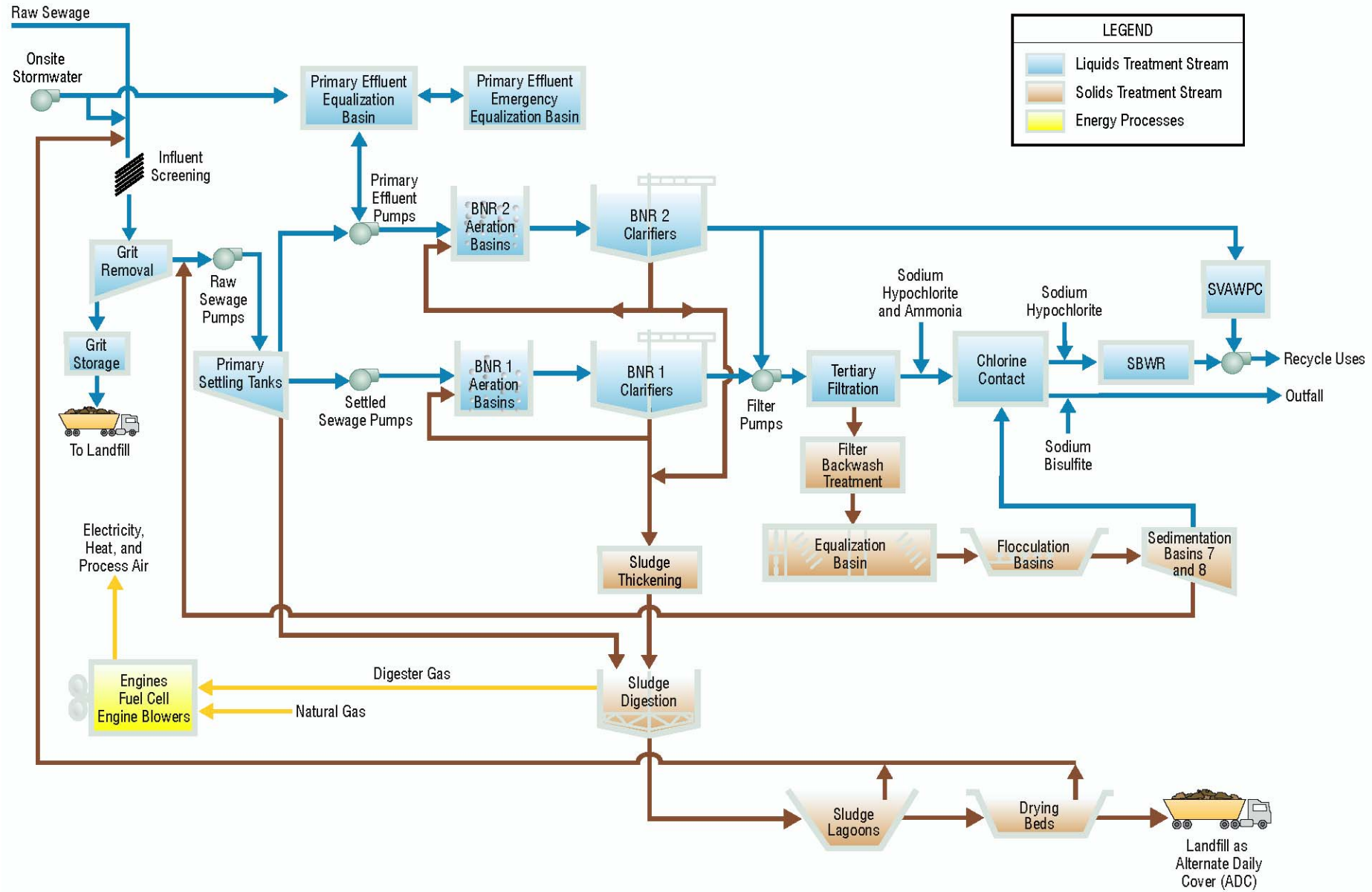


Figure 5 – Current Treatment Process Flow Diagram

Regional Wastewater Facility Treatment – Proposed Treatment Process Flow Diagram

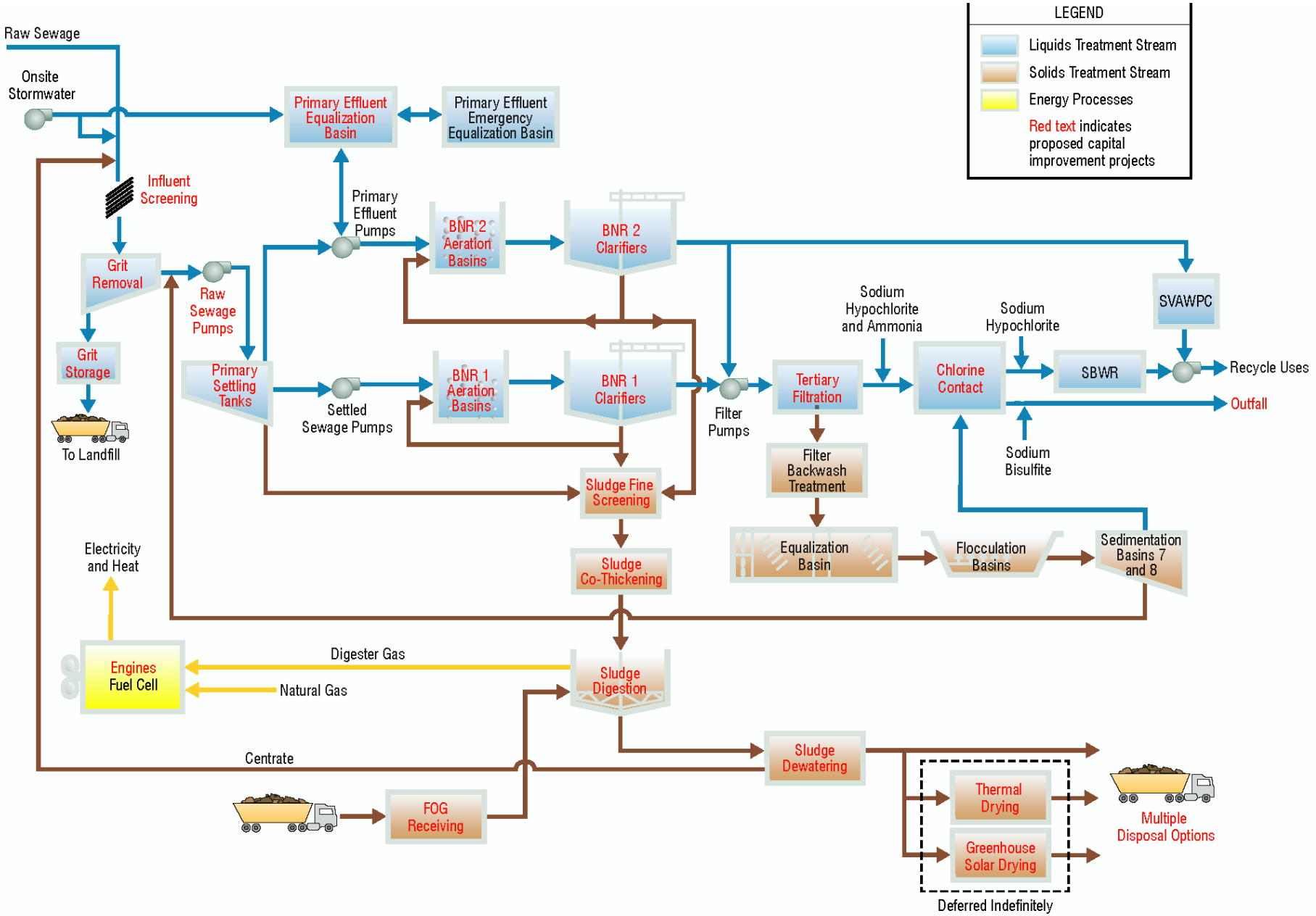


Figure 6 – Proposed Treatment Process Flow Diagram

Active Construction Projects – Aerial Plan

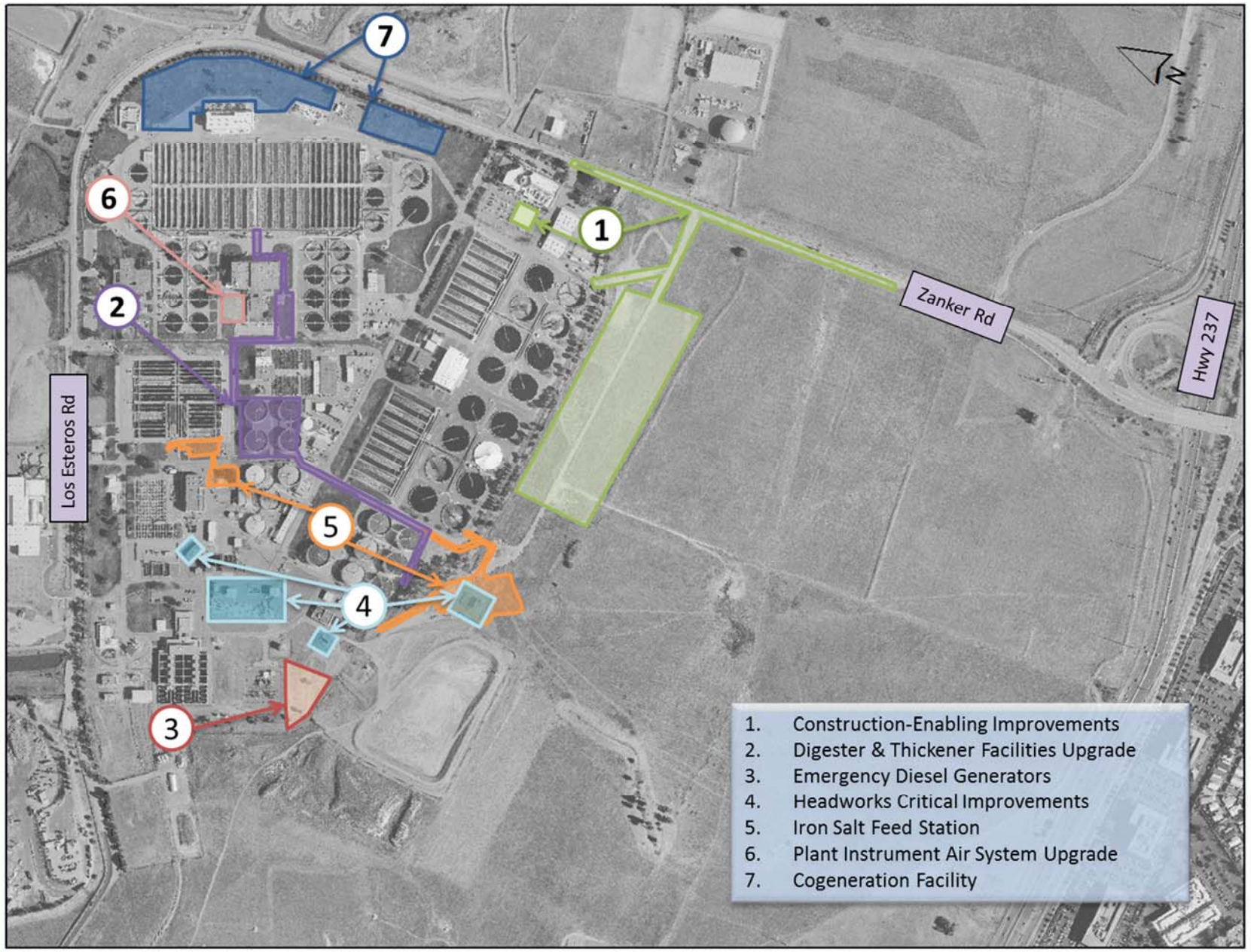


Figure 7: Active Construction Projects

COUNCIL AGENDA: 06/19/18
FILE: 18-660
ITEM:

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL

FROM: Kerrie Romanow
Matt Cano

SUBJECT: **SEE BELOW**

DATE: May 29, 2018

Approved D.DSyL Date 6/7/18

SUBJECT: 8753 – MASTER CONSULTANT AGREEMENTS WITH CONSTRUCTION TESTING SERVICES, INC.; SIGNET TESTING LABS, INC.; AND CONSOLIDATED ENGINEERING LABS FOR SPECIAL INSPECTION AND MATERIALS TESTING SERVICES FOR THE SAN JOSÉ-SANTA CLARA REGIONAL WASTEWATER FACILITY CAPITAL IMPROVEMENT PROGRAM

RECOMMENDATION

Approve Master Consultant Agreements with Construction Testing Services, Inc.; Signet Testing Labs, Inc.; and Consolidated Engineering Labs for special inspection and materials testing services for various capital improvement projects at the San José-Santa Clara Regional Wastewater Facility, from the date of execution through December 31, 2023, in a total amount not to exceed $3,000,000 for each agreement, subject to the appropriation of funds.

OUTCOME

Approval of master consultant agreements will provide the San José-Santa Clara Regional Wastewater Facility (RWF) Capital Improvement Program (CIP) with the ability to obtain on-call special inspection and materials testing services to support various capital improvement projects. These services are needed to ensure construction projects are performed in accordance with special inspection and testing requirements of the San José Municipal Code (SJMC) and the California Building Code (CBC). Approval of these agreements will not result in any physical changes to the environment, as the City Council will need to take additional actions before construction on any capital projects commences.

BACKGROUND

The RWF CIP is currently undertaking numerous capital projects to rehabilitate and upgrade the RWF. The CIP includes 23 projects, with a construction value estimated at more than $700 million that will be under construction over the next five years. Many of these projects are expected to require special inspection and testing services for structural steel, concrete, masonry and wood construction, as well as soils, foundation elements, seismic resistance, sprayed fire-resistant materials, coatings, insulation & finish systems, fire-resistant penetrations and joints, and smoke control systems.

The Code Inspectors and the Materials Testing Laboratory staff from the Department of Public Works (DPW) normally provide special inspection and material testing services for Capital Improvement projects. However, those City resources lack sufficient capacity, certifications, or expertise to efficiently perform many of the specialist tasks needed to support the upcoming volume of work expected in the RWF CIP. Special inspection and materials testing consultant services are required to ensure construction projects can proceed as scheduled and will be performed in accordance with the SJMC and CBC.

The RWF CIP currently has special inspection master agreements with Construction Testing Service, Inc. and Signet Testing Labs, Inc., with not-to-exceed amounts of $500,000 and $700,000, respectively. Both agreements will soon be exhausted for services required for current projects under construction. New master consultant agreements are needed to replace the previous agreements.

ANALYSIS

On November 27, 2017, the City issued a Request for Qualifications (RFQ), on BidSync, seeking on-call special inspection and materials testing services for various CIP projects. The City received five Statements of Qualifications (SOQ) by the December 22, 2017, submittal deadline.

A Technical Evaluation Panel, consisting of representatives from the Departments of Public Works and Environmental Services evaluated and ranked the SOQs in accordance with the procurement process set forth in the RFQ. Each panel member evaluated the SOQs using a consistent scoring matrix based on the firm's expertise, experience, approach, and Local/Small Business Enterprise status. Each firm received a total score comprised of their SOQ score and Local Business Enterprise (LBE)/Small Business Enterprise (SBE) status as shown below:

Description	Weight
SOQ	
Submittal Responsiveness	Pass/Fail
Minimum Qualifications	Pass/Fail
Expertise	25
Experience	40
Project Approach	25
Local Business Enterprise (LBE)	5
Small Business Enterprise (SBE)	5
TOTAL	**100**

The final ranking and rounded scores for each firm were as follows:

Rank	Firm	Expertise	Experience	Approach	LBE	SBE	Total
1	Construction Testing Services, Inc.	23.8	39.5	24.5	5.0	0.0	**92.8**
2	Signet Testing Labs, Inc.	22.9	36.3	23.5	0.0	0.0	**82.7**
3	Consolidated Engineering Laboratories	19.5	35.5	23.8	0.0	0.0	**78.8**
4	CTE Cal, Inc.	18.5	33.3	19.2	0.0	0.0	**71.0**
5	Intertek-PSI	18.8	25.0	19.7	5.0	0.0	**68.5**

All five firms met the minimum qualifications and their SOQs were deemed responsive. In accordance with City policy, ten percent of the total evaluation points were reserved for local and small business enterprise status. Only two firms qualified for the Local Business Enterprise (LBE), and none of the firms qualified for the Small Business Enterprise (SBE) status.

Staff recommends approval of master agreements with the top three firms, Construction Testing Services, Inc., Signet Testing Labs, Inc., and Consolidated Engineering Laboratories. The top three consultants demonstrated a high level of technical expertise and extensive experience in special inspections and materials testing services at RWF or similar water/wastewater treatment facilities in California. All three top ranking consultants are on the list of recognized consultants by the City of San Jose's Planning, Building and Code Enforcement Department. Given the significant volume of construction planned over the next five years, the CIP will need the combined resources of all three special inspection consultants to ensure that there will be sufficient specialty inspection and testing resources to provide timely services for the projects in construction at the RWF.

The consultant under each master agreement will provide on-call special inspection and materials testing services through authorized service orders for a variety of CIP projects to ensure compliance with the requirements of the SJMC, CBC, and the contract documents for the

particular project. Specific services to be authorized under individual service orders may include, but are not limited to: submittal reviews; inspection and testing of structural steel, welding, pre-stressing tendons, reinforced concrete, epoxy anchor bolting, structural masonry, soils, foundation elements, fire-resistant materials, exterior insulation & finish systems, smoke control systems, instrumentation and control systems equipment; and provision of confined space entry and rescue.

Assignment of service orders will be made on a rotational basis for the three firms. Maintaining consultant continuity on each project will be an important consideration while issuing service orders. For each service order, staff will negotiate the scope of work, deliverables, schedule, and cost with the selected firm. In the event negotiations are unsuccessful, staff may negotiate with the next firm in the rotation to perform the work. The City may elect to issue a service order for urgent work or other circumstances (special expertise, familiarity with project, available staff, etc.) to the more qualified firm.

The term of the agreements will be from the execution date through December 31, 2023, unless terminated earlier pursuant to its terms.

EVALUATION AND FOLLOW-UP

No additional follow up action with the Council is expected at this time. All service orders issued under these agreements greater than $100,000 will be reported to Treatment Plant Advisory Committee (TPAC) on the monthly summary of procurement and contract activity and the quarterly CIP agreement and service order summary. A progress report on this and other RWF capital projects will be made to the Transportation and Environment Committee and City Council on a semiannual basis. Monthly progress reports on the RWF CIP will also be submitted to TPAC and posted on the City's website.

POLICY ALTERNATIVES

Alternative #1: Direct City staff to provide the required services with in-house resources from the DPW.
Pros: Increased work options for DPW staff.
Cons: DPW staff does not possess the capacity, technical expertise or industry certifications needed for the anticipated projects, which could lead to possible construction delays or ineffective, incomplete inspections.
Reason for not recommending: The City would need to hire multiple new staff members with knowledge and expertise in a variety of inspection and materials testing disciplines. This would add time and cost to the project, and would likely result in releasing newly hired staff at the completion of the project, when their services would no longer be required.

PUBLIC OUTREACH

The RFQ was advertised on BidSync on November 27, 2017. This memorandum will be posted on the City's website for the Council Agenda of June 19, 2018. This item is scheduled to be heard at the TPAC meeting on June 14, 2018.

COORDINATION

This agreement and memorandum have been coordinated with the City Manager's Budget Office, the City Attorney's Office, Finance Department, and the Planning, Building and Code Enforcement Department.

COMMISSION RECOMMENDATION/INPUT

This item is scheduled to be heard at the June 14, 2018 TPAC meeting. A supplemental memo with the committee's recommendation will be included in the amended June 19, 2018, City Council meeting agenda.

FISCAL/POLICY ALIGNMENT

This project is consistent with the Council approved Budget Strategy to focus on rehabilitating aging RWF infrastructure, improve efficiency, and reduce operating costs. This project is also consistent with the budget strategy principle of focusing on protecting our vital core services.

COST SUMMARY/IMPLICATIONS

1. AMOUNT OF RECOMMENDATION: $9,000,000

Construction Testing Services, Inc.	$3,000,000
Signet Testing Labs, Inc.	$3,000,000
Consolidated Engineering Laboratories	$3,000,000
TOTAL	$9,000,000

2. COST ELEMENTS OF AGREEMENT/CONTRACT: The consultant's services are reimbursed on an hourly rate schedule in the master agreement for the involved consultant personnel.

3. SOURCE OF FUNDING: San José/Santa Clara Treatment Plant Capital Fund (512).

4. FISCAL IMPACT: The projects that will use these agreements are funded through the San Jose-Santa Clara Treatment Plant Capital Fund and will have no impact on the San Jose-Santa Clara Treatment Plant Operating Fund (Fund 513) or the General Fund.

5. PROJECT COST ALLOCATION: The cost for consultant services performed for a project will be allocated per the allocations of that project in accordance with the recommendations set forth in the Capital Project Cost Allocations Technical Memo (Carollo Engineers, March 2016).

BUDGET REFERENCE

Services performed by the consultants under these agreements will be authorized by service orders. An appropriation is not required for execution of these master consultant agreement, but is required for each service order authorized under these agreements. Future funding is subject to the annual appropriation of funds and, if needed, will be included in the development of future year budgets during the annual budget process.

CEQA

Not a Project, File No. PP17-003, services that involve no physical changes to the environment. The projects that will be assigned to special inspection consultants will have undergone CEQA approval on a project-by-project basis.

/s/
KERRIE ROMANOW
Director, Environmental Services

/s/
MATT CANO
Director, Public Works

For questions, please contact Ashwini Kantak, Assistant Director, Environmental Services Department at 408-975-2553.

COUNCIL AGENDA: 06/19/18
FILE: 18-895
ITEM: 7.2

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL

FROM: Kerrie Romanow
Matt Cano

SUBJECT: SEE BELOW

DATE: May 29, 2018

Approved D-DSyC Date 6/8/18

SUBJECT: APPROVAL OF A DESIGN-BUILD CONTRACT WITH CH2M HILL ENGINEERS, INC. FOR THE HEADWORKS PROJECT AT THE SAN JOSÉ-SANTA CLARA REGIONAL WASTEWATER FACILITY

RECOMMENDATION

1. Adopt a resolution adopting the Addendum to the Environmental Impact Report for the San José-Santa Clara Regional Wastewater Facility in accordance with the California Environmental Quality Act (CEQA), as amended, and adopting a related Mitigation Monitoring and Reporting Program.

2. Approve the design-build contract with CH2M Hill Engineers, Inc. for the Headworks Project at the San José-Santa Clara Regional Wastewater Facility in an amount not to exceed $5,666,354 for the performance of preliminary services under the contract.

3. Approve a design contingency in the amount of $566,635 for City-approved changes to the scope of preliminary services.

4. Adopt a resolution authorizing the City Manager or his designee to:

    a. Negotiate and execute a separate amendment to the contract to allow CH2M Hill Engineers, Inc. to proceed with subsurface investigations prior to the City's execution of the definitive contract amendment in an amount not to exceed $1,000,000;

    b. Approve a construction contingency in the amount of $1,000,000 for City-approved changes to the scope of the subsurface investigations.

    c. Execute change orders in excess of $100,000 up to the amount of the approved contingency for changes to the scope of the preliminary services work or subsurface investigations.

OUTCOME

Approval of staff's recommendations will allow for preliminary services for the Headworks Project to be performed, pursuant to the design-build contract, by CH2M Hill Engineers, Inc., (CH2M) and will allow extensive subsurface investigations to be performed. This will allow further refinement of the Guaranteed Maximum Price (GMP) before it is presented to Council in 2019. The design and construction contingencies will provide funding for additional work and unforeseen conditions that may be necessary for the proper completion of the preliminary services and subsurface investigations.

EXECUTIVE SUMMARY

The existing headworks facility at the San José-Santa Clara Regional Wastewater Facility (RWF) consists of two separate structures that serve to protect downstream processes and equipment by removing debris and grit from the raw sewage entering the facility. Headworks 1 has been in operation for over 50 years, while Headworks 2 was commissioned in 2008. The RWF Capital Improvement Program (CIP) has identified the need for a new headworks structure (Headworks 3) to replace the aging Headworks 1 and has outlined improvements required for Headworks 2 to improve operational reliability and performance.

In May 2015, the City selected the progressive design-build project delivery method for the Headworks Project due to its complexity, unknown site conditions, and the presence of multiple project interfaces. In March 2017, the City began a two-step selection process for procurement of the design-builder. The first step involved prequalifying the proposers, while the second step consisted of evaluating technical proposals and interviewing proposers. In February 2018, CH2M was determined to be the highest-ranked proposer. CH2M has been successfully working with the City for the past 18-months on the Cogeneration Facility design-build project and has maintained a local office in San José for the last 30 years. Their major contracting partner, Kiewit, has more than 55 years' experience in Northern California and was the general contractor on the 2008 Headworks 2 project at the RWF.

A design-build contract has been negotiated with CH2M for preliminary services, which include preliminary investigations, development of the design to a 60-percent level, and development of the GMP. These services are expected to take 18 months. Based on the price and contract terms established as part of the preliminary services, and following approval of the GMP and the definitive contract amendment (DCA), the design-build work will begin and will include completing the design to 100-percent and construction of the Project. This work is expected to take 36-months. The contract also requires enrollment in the City's Owner Controlled Insurance Program (OCIP) and allows early work packages to be issued during the preliminary services in order to reduce risk and improve schedule. Staff has already identified the need for an early work package (EWP) to investigate subsurface conditions in order to reduce the risk of discovering unknown conditions during construction. The large construction contingency for the

subsurface investigations has been added in case critically damaged infrastructure is discovered that requires immediate repair.

Staff is requesting approval of preliminary services, authorization to negotiate and execute the first EWP, and approval of associated City-held contingencies as summarized below:

Preliminary Services (Design-Builder)	$5,666,354
Design Contingency (Owner-controlled)	$566,635
Early Work Package No. 1 Not-to-Exceed Limit	$1,000,000
Construction Contingency (Owner-controlled)	$1,000,000
Total Not-To-Exceed Amount	**$8,232,989**

The Project's current budget can be broken down as follows:

Design (Preliminary Services)	$5,700,000
Construction/Design-Build Work	$100,000,000
Design/Construction Contingency (Owner-controlled) (15%)	$15,100,000
Total Design and Construction	**$120,800,000**
Project Delivery	$20,800,000
Total Project Budget	**$141,600,000**

Completion of the first EWP and the Basis of Design Report (BDR) in early 2019 will allow the design-builder to provide a more accurate estimate of the GMP. Staff will return to Council at that time to recommend a GMP not-to-exceed amount and seek delegation of authority to the City Manager to negotiate and execute the final contract terms and any additional early work packages that may be identified.

BACKGROUND

Project Description

Preliminary treatment, the first step in the RWF treatment process, is provided by the headworks facility, which removes inorganic material such as sticks, stones, grit and sand from the influent wastewater to protect and reduce wear on downstream processes and equipment. Key components of the facility include pumps, mechanical screens, screenings compactors, grit removal systems, and grit washing systems. Due to the consistency and corrosivity of the incoming sewage, the mechanical and electrical equipment must be robust, reliable, and in some instances, explosion-proof. In addition, the headworks must be able to respond to a wide range of hydraulic loading conditions to account for daily and seasonal fluctuations.

The existing headworks facility consists of two separate structures, Headworks 1 and Headworks 2. Headworks 1 includes single-rake screens, grit removal through use of aerated grit chambers and detritor systems, screenings and grit handling facilities, and pumping facilities. Headworks 1 has been in operation for over 50 years and has a rated capacity of 271 million gallons per day

(mgd). Headworks 2, which was commissioned in 2008, has a rated capacity of 160-mgd and includes multi-rake screens, vortex grit removal units, screenings and grit handling facilities, and a pump station.

With the aging Headworks 1 facilities 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 evaluations identified the need for a new duty headworks facility (Headworks 3) to replace Headworks 1, and outlined modifications required for Headworks 2 to improve operational reliability and performance so that it can continue to serve as the backup and wet-weather headworks. The CIP defined and sequenced the work in two parts: 1) Headworks Improvements, and 2) New Headworks, collectively called the Headworks Project (Project), with the following scope of work:

- Headworks Improvements:
  - Repairs and modifications to several existing raw sewage influent structures
  - Improvements to the Emergency Basin Overflow Structure and Basin
  - Modifications to the existing headworks-related piping to direct raw sewage and in-plant recycle flows to the new headworks and to provide additional capacity
  - Two new recycle flow pump stations
  - Improvements to Headworks 2

- New Headworks:
  - Influent and effluent piping to and from the new headworks
  - Screenings removal and handling system
  - Grit removal and handling system
  - Septage receiving station
  - Raw sewage pump station
  - Odor control system
  - Ancillary support systems (site work, utilities, electrical, and instrumentation).

The existing Headworks 1 will be abandoned and isolated, however, decommissioning of this facility is not in the scope of this Project. **Attachment A** shows the location of the existing Headworks 1 and 2 facilities and anticipated location of the new Headworks 3 facility.

Project Delivery Method

Due to the regional nature of the RWF, capital projects are subject to State law (as opposed to the City's Charter and Municipal Code). On January 1, 2015, a number of statutory revisions to State law governing the use of the design-build method for capital projects took effect (State Law).[1] The revisions allowed the use of design-build by special districts, local and state agencies for projects valued over $1,000,000 as long as their respective governing bodies approved. Subsequently, on March 24, 2015, City Council adopted a resolution approving the use of low bid design-build and progressive design-build as possible delivery methods for

[1] The statutory revisions included changes to the California Government Code, Health and Safety Code, and the Public Contract Code.

projects in the RWF's CIP and delegated authority to the Directors of Environmental Services and Public Works to determine the appropriate delivery method for each project. As part of this process, staff would keep City Council and the Treatment Plant Advisory Committee (TPAC) apprised about the decision-making process through informational memos for all projects proceeding with a design-build delivery method.

In May 2015, the City selected the progressive design-build delivery method for the Project due to its complexity, unknown site conditions, and presence of multiple project interfaces. This delivery method provides a single point of responsibility for both design and construction, and increases the potential for innovative solutions to complex issues. The contract under this delivery method includes preliminary services work and design-build work. Preliminary services include preliminary investigations, development of the design to a 60-percent level, and development of the GMP. Based on the price and contract terms established as part of the preliminary services, and following approval of the GMP and the DCA, the design-build work will begin and will include completing the design to 100-percent and construction of the Project. In December 2015, the City selected CDM Smith to assist the City by serving as the owner's advisor for the Project[2].

Project Schedule
The preliminary services work is projected to take 18 months and the subsequent design-build work is anticipated to take 36 months. Key milestones include:

- July 2018 – Notice to Proceed for preliminary services
- April 2019 – Return to City Council for approval of GMP not-to-exceed amount and additional EWPs
- December 2019 – Completion of GMP negotiations and definitive project submittal
- January 2020 – Notice to Proceed for construction/design-build work
- December 2023 – Project completion

Project Budget
The Project's current budget can be broken down as follows:

Design (Preliminary Services)	$5,700,000
Construction/Design-Build Work	$100,000,000
Design/Construction Contingency (Owner-controlled) (15%)	$15,100,000
Total Design and Construction	**$120,800,000**
Project Delivery	$20,800,000
Total Project Budget	**$141,600,000**

The $105.7 million estimate for the design-builder is based upon the design concepts contained in the Project Definition Report (representing approximately a 5-percent design level) that was

[2] December 1, 2015 Council Memo for owner's advisor services:
http://sanjose.granicus.com/MetaViewer.php?view_id=&event_id=1475&meta_id=544246

developed by the owner's advisor and refinement of the estimate will be made as the design progresses. If necessary, budget adjustments will be made after completion of the BDR and first EWP, when a more definitive scope and cost estimate will be available.

Possibilities exist during the design process to "value engineer" the project, evaluate life-cycle costs, and validate scope and cost elements. In addition, the design-build process allows the contractor to participate in the design development and review process to further add value to the project. During development of the Definitive Project Submittal (DPS), there will be an opportunity to evaluate construction costs through a transparent, open-book process. The owner's advisor will assist in validating the proposed costs to ensure the City receives a fair and competitive price to construct the Project.

ANALYSIS

Design-Builder Selection Process

The City used a two-step selection process for procurement of the design-builder, in accordance with Public Contract Code, Sections 22160-22169 (State Law), which governs certain local agency design-build projects. The first step involved shortlisting teams based on qualifications. As part of this step, a Request for Qualifications (RFQ) was advertised on May 24, 2017, and Statements of Qualifications (SOQs) were received on July 12, 2017 by interested proposers. The RFQ consisted of a pre-qualification questionnaire intended to address the minimum general requirements that should be met by design-build firms (acceptable safety record, licenses and registrations, workers compensation history, etc.) and a requirement to list key personnel including their project experiences. The RFQ also required that the design-build firm had completed design-build projects similar in nature to the Project and were financially capable of performing the work.

Of the four firms that submitted SOQs, three firms were shortlisted and invited to participate in the Request for Proposals (RFP) process:

- CH2M HILL Engineers, Inc. (with Kiewit as the major contracting partner)
- HDR\Alberici (a proposed joint venture between HDR and Alberici Constructors)
- Overland Contracting (Black & Veatch Engineers with Overaa Construction)

The second step consisted of the submission and evaluation of technical proposals. As part of this step, an RFP was issued on November 8, 2017 and proposals were received from the three shortlisted firms on December 21, 2017.

State Law allows the use of "best value" as a design-builder selection method so that competitive proposals can be evaluated by using the criteria and selection procedures specifically identified in the RFP. "Best value" selection is done through an evaluation of objective criteria that may include, but not be limited to price, features, functions, life-cycle costs, experience, and past performance. Responsive proposers are ranked based on a determination of the best value provided to the City. Key elements reviewed and scored during the RFP process included:

- Technical and management approach to meet Project objectives;
- A design-build price consisting of a preliminary services fee, general conditions fee, and design-builder fee;
- Approach to how life-cycle cost will be addressed during the project cost evaluation process;
- A bonding capacity of at least $100 million;
- Ability to meet all insurance mandates as dictated by the RFP;
- Strategy for local subcontracting, commitment to providing a skilled and trained workforce, and labor peace; and
- The City's small and local business preference.

The selection panel, consisting of representatives from Environmental Services, Public Works, and a local labor representative, evaluated the written proposals based on the key elements above and held interviews with the three candidate firms on February 7, 2018. Evaluations were based on the following criteria and scoring:

Description	Weight
Project Approach	20
Review of Indicative Design	10
Subcontracting and Workforce	5
Life-cycle Cost	2
Price	8
Local Business Enterprise (LBE)	5
Small Business Enterprise (SBE)	5
SOQ Score Carryover	20
Interview	25
TOTAL	**100**

The final ranking and rounded scores for each firm were as follows:

Rank	1	2	3
Firm	CH2M HILL Engineers, Inc	HDR\Alberici	Overland Contracting
Project Approach	16.38	15.63	10.38
Review of Indicative Design	8.63	7.63	5.50
Subcontracting and Workforce	3.63	3.75	3.13
Life-cycle Cost	1.65	1.65	1.30
Price	6.43	6.41	7.43
Local Business Enterprise (LBE)	5.00	5.00	5.00
Small Business Enterprise (SBE)	0.00	0.00	0.00
SOQ Score Carryover	14.06	14.80	14.54
Interview	22.20	16.50	16.00
TOTAL	**77.97**	**71.36**	**63.27**

The selection panel unanimously ranked CH2M as the highest ranked firm to implement the Project. While all three firms were well qualified, CH2M distinguished itself from the other proposers during the interview phase by demonstrating a clear understanding of Project objectives, outlining innovative approaches to completing the Project, and confirming their highly experienced professionals were dedicated to the success of the Project. The CH2M team consists of a project manager and team leaders with extensive design-build experience, including the design and construction of headworks facilities.

CH2M has been successfully working with the City over the last 18 months on the Cogeneration Facility progressive design-build project and has maintained a local office in San Jose for the last 30 years. Their major contracting partner, Kiewit, has more than 55 years' experience in Northern California and was the general contractor for the RWF's Headworks 2 project that was commissioned in 2008.

Design-Builder Contract Negotiations
A draft design-build contract was included in the RFP. This form of agreement was initially developed by staff and the City Attorney's Office in consultation with attorneys from the City's outside counsel (Hawkins Delafield & Wood LLP) for the Cogeneration Facility project and then tailored to the Headworks Project, while incorporating lessons learned from the Cogeneration Facility project.

Upon establishment of the proposer rankings, the City formed a team to negotiate the design-build contract with CH2M in order to finalize the terms of the agreement. The team implemented a negotiation strategy that sought to achieve the following goals:

- Develop a fixed and fair fee consistent with industry standards that ensures the City receives services commensurate with cost;
- Achieve scope, schedule and budget requirements;
- Allow for collaboration and project innovation to maximize value to the City;
- Equitably allocate risk and reward;
- Maximize transparency of cost;
- Provide opportunities for small/local/disadvantaged business participation.

Key contract elements that have been part of the negotiations are listed in **Attachment B**, along with detailed definitions for each term. Although the terms of the contract apply to the entire Project, staff is requesting approval of only the preliminary services, authorization to negotiate and execute the first EWP, and associated City-controlled contingencies as summarized below:

Preliminary Services (Design-Builder)	$5,666,354
Design Contingency (Owner-controlled)	$566,635
Early Work Package No. 1 Not-to-Exceed Limit	$1,000,000
Construction Contingency (Owner-controlled)	$1,000,000
Total Not-To-Exceed Amount	**$8,232,989**

The preliminary services to be performed under this contract will include initial investigations of existing site conditions, development of the basis of design report, detailed design to a 60-percent completion level, and development of the definitive project submittal, which will include the guaranteed maximum price, and lead to the definitive contract amendment that will contain the terms and conditions for the design-build work to complete the Project. As part of their submittal, CH2M was required to submit a lump-sum fee for preliminary services. Staff recommends a City-controlled design contingency of 10 percent to cover costs for City-approved changes to the preliminary services scope.

The purpose of first EWP is to perform intensive subsurface investigations to reduce the risk of discovering unknown conditions during construction. Although a certain level of subsurface investigations will be conducted as part of the preliminary services, construction equipment is needed to perform exploratory trenching and, therefore, requires a construction-type contract (i.e., an early work package) that includes requirements for insurance, bonding, and safety that are not included in the preliminary services portion of the contract. A construction contingency of $1,000,000 has been included in the event that the investigations discover critically damaged infrastructure that requires immediate repair, as has been the case with other recent CIP projects.

EVALUATION AND FOLLOW-UP

Following the completion of the Basis of Design Report and first EWP in early 2019, which will more clearly define the Project, staff will return to Council to seek delegation of authority to the City Manager to negotiate and execute the DCA that will allow the design-build work and any additional EWPs to begin for the agreed upon GMP.

A progress report on this and other RWF capital projects will be made to the Transportation and Environment Committee and City Council on a semiannual basis. Monthly progress reports of the RWF CIP will also be submitted to the Treatment Plant Advisory Committee (TPAC) and posted on the City's website.

POLICY ALTERNATIVES

Alternative #1: Approve the contract to authorize preliminary services, but do not authorize the City Manager to negotiate and execute the contract for first EWP.
Pros: Postpones Council approval of EWP until scope and fee are completely defined.
Cons: Delaying implementation of the subsurface investigations delays information gathering that will be critical to development of an accurate GMP.
Reason for not recommending: Staff recommends authorizing $1,000,000 of Early Work Packages at this time to minimize risk and develop information to improve the cost certainty of the GMP. Additional authorization for more EWPs may be requested, if beneficial, as part of the next Headworks Council Memo to be submitted in the first half of 2019.

Alternative #2: Approve the Contract to authorize Preliminary Services and to authorize the City Manager to amend the contract for Early Work Packages, and the GMP.
Pros: Allows early start of Early Work Packages which will provide better certainty regarding the GMP, and eliminates the need to return to Council if the initial budget is adequate.
Cons: Based on feedback from the three proposers during the proposal phase, there is uncertainty regarding project costs, thus the GMP recommendation to Council for approval at this point in time will need to be conservative to cover these uncertainties.
Reason for not recommending: Staff recommends waiting until completion of the BDR and Early Work Package No. 1 before authorizing the GMP to allow time to properly develop the scope and budget of the GMP so that a more accurate value can be provided to Council.

PUBLIC OUTREACH

The RFQ was advertised on BidSync on May 24, 2017. This memorandum will be posted on the City's Council Agenda website for the June 19, 2018, Council Meeting following the TPAC meeting on June 14, 2018. Information about the procurement was shared during a vendor open house event held at the RWF on February 8, 2017, which was well-attended by prospective consultants and contractors. Information from this event was posted to BidSync and the CIP Document Library on the City's website.

COORDINATION

This memorandum has been coordinated with the Planning, Building and Code Enforcement Department, City Attorney's Office, Finance Department, and City Manager's Budget Office.

COMMITTEE RECOMMENDATION/INPUT

This item is scheduled to be heard at the June 14, 2018 TPAC meeting. A supplemental memo with the Committee's recommendation will be included in the amended June 19, 2018 City Council meeting agenda.

FISCAL/POLICY ALIGNMENT

This Project is consistent with the Council-approved budget strategy to address rehabilitation and replacement of critical infrastructure and equipment at the RWF and to improve operational efficiency.

COST SUMMARY/IMPLICATIONS

1. AMOUNT OF RECOMMENDATION: $5,666,354

2. COST ELEMENTS

Preliminary Services (Design-Builder)	$5,666,354
Design Contingency (Owner-controlled)	$566,635
Early Work Package No. 1 Not-to-Exceed Limit	$1,000,000
Construction Contingency (Owner-controlled)	$1,000,000
Total Not-To-Exceed Amount	**$8,232,989**

3. SOURCE OF FUNDING: 512 - San José-Santa Clara Treatment Plant Capital Fund

4. FISCAL IMPACT: O&M costs are not anticipated to change significantly. The Project involves replacing the aging Headworks 1 with a new Headworks 3 of similar capacity. However, newer, more efficient, equipment will result in increased screenings and grit removal that will result in increased hauling costs. The contract requires a life-cycle cost analysis for the design, at which time the anticipated O&M costs will be further defined.

5. PROJECT COST ALLOCATION: In accordance with the recommendations set forth in the Capital Project Cost Allocations Technical Memorandum (Carollo Engineers, March 2016), this project is allocated 100% to flow.

BUDGET REFERENCE

The table below identifies the fund and appropriations to fund the contract recommended as part of this memo and remaining project costs, including project delivery, construction, and contingency costs.

Fund #	Appn #	Appn. Name	Total Appn	Amt. for Contract	2017-2018 Adopted Capital Budget Page	Last Budget Action (Date, Ord. No.)
512	7448	Headworks Improvements	$2,336,000	$849,953	V-288	10/17/2017 Ord. No. 30014
512	7449	New Headworks	$7,290,000	$4,816,401	V-289	10/17/2017 Ord. No. 30014
Total Current Funding Available			**$9,626,000**	**$5,666,354**		

Services performed by CH2M under this contract will be authorized by Notice to Proceed. An appropriation is not required for the execution of this design-build contract, but is required for each contract authorization. There is adequate funding available in 2017-2018 to issue preliminary services. Future funding is subject to appropriation and, if needed, will be included in the development of future year budgets during the annual budget process.

CEQA

File No. PP17-046. An Addendum to the Environmental Impact Report for the San José - Santa Clara Water Pollution Control Plant Master Plan (SCH# 2011052074) was completed for the Project and posted to the City's website and the City's NewsFlash website on March 15, 2018 and is available at http://www.sanjoseca.gov/index.aspx?NID=6051. **Attachment C** includes the Mitigation Monitoring and Reporting Program (MMRP)

/s/
MATTHEW CANO
Director of Public Works

/s/
KERRIE ROMANOW
Director, Environmental Services

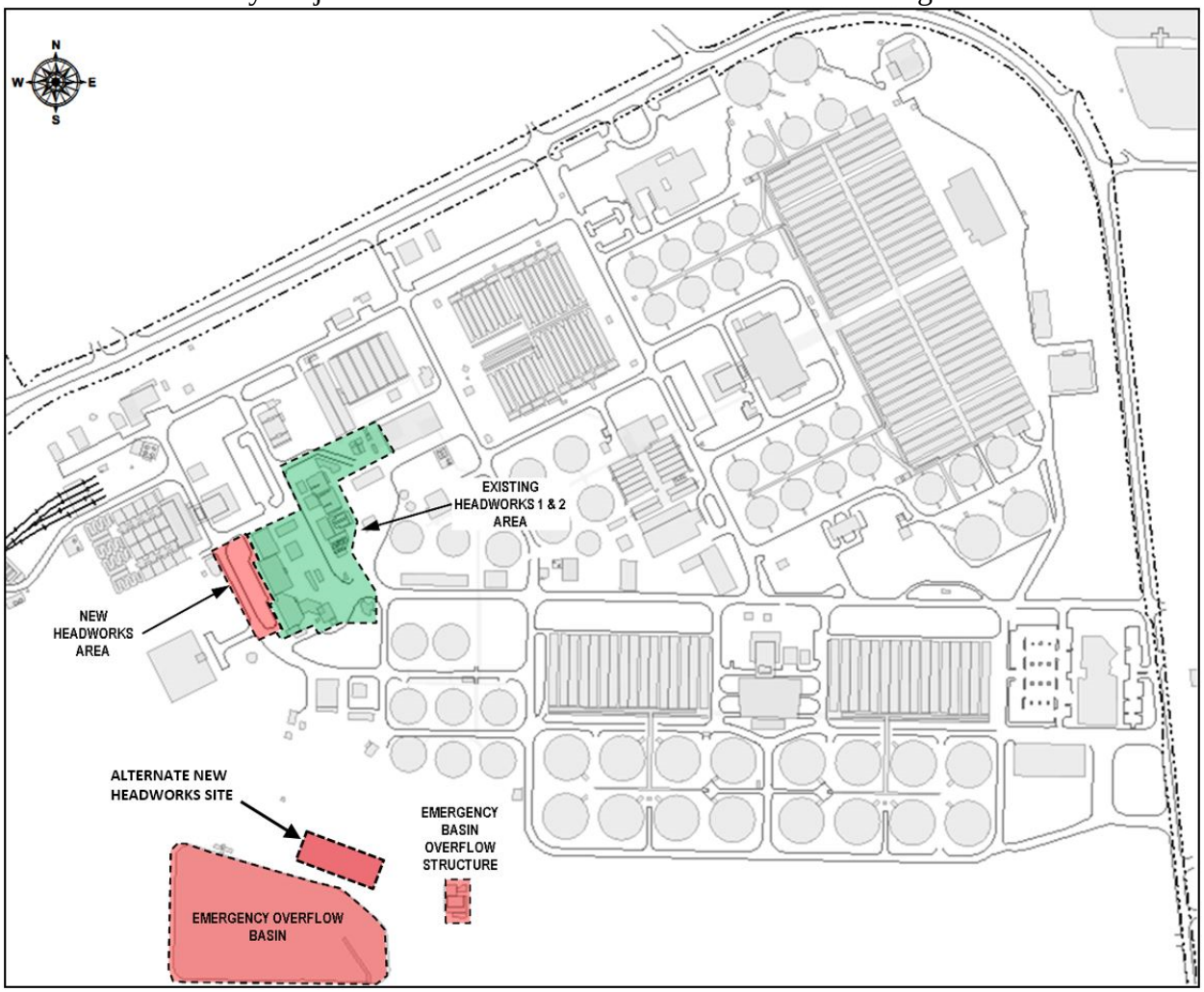
For questions, please contact Kapil Verma, Principal Engineer, Department of Environmental Services, at (408) 635-4045.

Attachment A: Headworks Project Site Map
Attachment B: Key Contract Elements and Terms
Attachment C: Mitigation Monitoring and Reporting Program

ATTACHMENT A

Headworks Projects Site Map

New Headworks Facility Project Location within the San José-Santa Clara Regional Wastewater Facility



ATTACHMENT B

Key Contract Elements and Terms

1. Preliminary Services –These services include preliminary investigations of existing site conditions, development of the Basis of Design Report, detailed design to a 60-percent completion level, and development of the Definitive Project Submittal (DPS), which will include the Guaranteed Maximum Price (GMP), and lead to the Definitive Contract Amendment (DCA) that will contain the terms and conditions for the Design-Build Work to complete the Project.

   As part of their submittals, proposers were required to submit a lump-sum fee for the Preliminary Services that was incorporated into the proposal rankings and further reviewed during contract negotiations. The agreed upon amount for CH2M to perform the Preliminary Services is $5,666,354.

2. Definitive Project Submittal (DPS) – As part of the Preliminary Services, the Design-Builder is obligated to develop the design of the Project to a level sufficient to produce the Definitive Project Submittal. The DPS shall be completed and submitted to the City on a timely basis and shall remain a firm offer by the Design-Builder for at least 90 days. The DPS shall include and be based upon the technical specifications, acceptance standards, and all other information, analysis, findings, and reports developed by the CH2M during the performance of the Preliminary Services, and shall be prepared in accordance with the contract standards. The DPS shall include a price submittal, a technical submittal, a commercial terms submittal, and an additional information submittal.

3. Definitive Contract Amendment (DCA) - The Design-Build Work to be performed following the completion of the Preliminary Services will be defined in the Definitive Contract Amendment. The DCA will: (1) set a GMP for the Design-Build Price, including Early Work Packages; (2) set a schedule for completion of the Design-Build Work; (3) define the technical specifications and guaranteed performance capabilities for the Project, (4) establish the Transition Services and associated fee; (5) establish the insurance requirements for the Design-Build Work; and (6) amend other terms and conditions of the Contract necessary to accomplish the foregoing. The parties may, at the City's discretion, agree to convert the GMP into a lump sum price, subject to the not-to-exceed Project costs authorized by the City Council.

   Should the parties fail to agree to the Definitive Contract Amendment, the City is under no obligation to proceed with any further work by CH2M, except in accordance with unfinished Early Work Packages. The parties may, however, negotiate to enter a separate agreement with CH2M to fully complete the design and/or provide other services so the City can solicit bids for the construction of the Project by separate contractors using the design-bid-build delivery method.

4. Early Work Packages (EWPs) - The Contract allows the City to issue Early Work Packages before the parties execute the Definitive Contract Amendment if the work can

be done prior to design completion and if the EWPs will reduce risk or schedule. Besides the first EWP for exploratory trenching to reveal unknown conditions, other potential EWPs for the Project include procurement of equipment and piping, utility pot-holing, and design services to advance design from 60% to 100%. EWPs will require separate amendments to the Contract, and will contain appropriate terms and conditions for CH2M's performance of the work and obligations should the parties fail to agree to the Definitive Contract Amendment.

5. Design-Build Work –The DPS and DCA define the price and contract terms for the work that will include completing the design to 100-percent and construction of the Project. At the City's discretion the Design Build Work, may also include Transition Services in the form of operations assistance by the design-builder to assist the City with the transition to the new facilities. A subset of the Design Build Work, known as Early Work Packages, may be issued during the Preliminary Services phase in order to reduce risk and improve schedule.

6. Guaranteed Maximum Price (GMP) - The Contract sets forth a process to allow the City and CH2M to negotiate a GMP for the Design-Build Work. The GMP includes all costs for the performance of the Design-Build Work, and may not be adjusted except for specified reasons such as uncontrollable circumstances, changes to the Contract's technical specifications, and City-directed changes. Except for funding of the Early Work Packages, the City will not commit construction funds until the GMP has been successfully negotiated.

7. Design-Build Price – The Design-Build Price shall be an amount equal to the sum of 1) Design-Build Costs, 2) Design-Builder Fee, and 3) General Conditions fee, and it shall not exceed the Guaranteed Maximum Price. Further definition of these elements is provided below:

    a. Design-Build Costs – These costs include all reasonable and necessary costs paid or incurred by the Design-Builder in the proper performance of the Design-Build Work (including Commissioning and Acceptance Testing and costs resulting from the occurrence of the risks assumed by the Design-Builder under the Design-Build Contract) that (1) are described in and meet the requirements of the Design-Build Contract, and (2) are not Unallowable Costs.

    b. Design-Builder Fee –The Design-Builder Fee is an amount attributable to profit, risk, mark-up and general or indirect overhead with respect to the Design-Build Work, and includes an amount attributable to the cost of additional insurance required from enrolled parties and excluded parties, but shall exclude an amount attributable to the reduction in the Design-Builder's insurance costs due to eligibility for the OCIP coverages and other coverages provided by the City.

        This fee is calculated as a percentage of the Design-Build Costs minus the cost of Project-specific insurance and performance and payment bonds. As part of their submittals, proposers were required to submit a Design-Builder Fee percentage, which was incorporated into the proposal ranking and further reviewed during contract negotiations. CH2M submitted a Design Build fee percentage equal to 9.5% of the Design-Build Costs. Staff believes this fee is competitive with the current

construction market conditions and complexity of this Project. Typical fees for projects of this size and complexity range from 8% to 12% for the Design-Builder Fee.

c. General Conditions Fee – The Design-Builder's compensation for the General Conditions Costs is limited to the General Conditions Fee. Design-Build Costs shall not include any General Conditions Costs. General Conditions Costs consist solely and exclusively of costs incurred for the following items with respect to the Design-Build Work:

- Design-Builder employee supervisory and administrative personnel costs
- Field office and construction supply costs for Design-Builder staff only
- Temporary amenities for Design-Builder Headworks Facility Site activities
- Site cleanup
- Construction trade training program

This fee is calculated as a percentage of the Design-Build Costs minus the cost of Project-specific insurance and performance and payment bonds. As part of their submittals, proposers were required to submit a General Conditions Fee percentage, which was incorporated into the proposal ranking and further reviewed during contract negotiations. CH2M submitted a General Conditions Fee percentage equal to 9.5% of the Design-Build Costs. Staff believes this fee is competitive with the current construction market conditions and complexity of this Project. Typical fees for projects of this size and complexity range from 6% to 10% for the General Conditions Fee.

8. Shared Savings – If the Design-Build Work comes in under the GMP, the Contract entitles CH2M to a 30% share of the difference. The City will retain the remaining 70% of this amount. This serves as an incentive to keep costs down and manage Design-Builder contingency use appropriately.

9. Liquidated Damages - The Contract includes liquidated damages for delay. The daily amount for liquidated damages will be negotiated as part of the Definitive Contract Amendment. Currently the contract states: "The aggregate liability of the Design-Builder, with respect to any liquidated damages…shall not exceed an amount equal to 25% of the Design-Build Price." This is higher than the typical industry standard of approximately 10%, therefore, it is anticipated that the liquidated damages percentage may be decreased during the negotiation of the Definitive Contract Amendment, at which time the parties will be in a better position to assess the potential damages associated with a schedule delay not due to Uncontrollable Circumstances.

10. Dispute Resolution – This contract requires formal partnering between the City and Design-Builder for the duration of the project. Consistent with the City's Dispute Avoidance and Dispute Resolution Policy (S.J.M.C. Chapter 14.06), the Contract provides that either the City or CH2M may voluntarily initiate a request for non-binding mediation in the event that other partnering opportunities available under the Contract are unsuccessful. Mediation is not mandatory and either the City or CH2M may elect to proceed with litigation in the event a dispute cannot be resolved by the project team.

Because the nature of design-build contracts is collaborative, significant disputes are less likely to occur, and it is anticipated that mediation and/or litigation is highly unlikely and would only happen if all other cooperative efforts by the Project team fail.

11. Project Contingencies - The Project includes two City-controlled Contingencies: (1) a design contingency to cover costs for City-approved changes to the scope of Preliminary Services, and (2) a construction contingency to cover unanticipated costs of the Design-Build Work that are not CH2M's responsibility under the Contract. The construction contingency covers typical construction issues such as differing site conditions, force majeure events, and City-directed change orders. Expenditure of the City-controlled contingency will require a change order to be negotiated and executed by the City Manager or his designee.

    The Contract also provides for a Design-Builder Contingency, which will be negotiated by the parties and established as part of the Definitive Contract Amendment. It covers unforeseen costs of the Design-Build Work that neither CH2M's design manager nor the contractor could predict when the GMP was established. CH2M is entitled to receive payment from the Design-Builder Contingency with the City's right to monitor and verify the use of the funds. The Design-Builder Contingency is contained within the GMP and is typically 4% to 10% of the construction costs. CH2M will be responsible for costs in excess of this contingency unless the Contract otherwise entitles them to compensation. The amount not expended from the Design-Builder Contingency will return to the City.

12. Insurance – CH2M will be required to enroll in the City's Owner Controlled Insurance Program (OCIP) approved by City Council in June 2017. The OCIP provides commercial general/excess liability and workers' compensation insurance for all Contractors, regardless of tier, that are approved for participation in the insurance program. Additional coverages for builder's risk and pollution liability insurance are provided by the City outside of the OCIP:

    Contractors of any tier are required to maintain insurance coverage that protects the City from liabilities arising from the Contractor of any tier's operations performed away from the project site, for types of coverage not provided by the OCIP, and for operations performed in connection with excluded parties operating under Contractor or any tier's operations control or direction.

    The City shall pay all premiums associated with the OCIP coverages and the other coverages provided by the City. The Design-Builder shall pay all other premiums, including the premiums for the Additional Insurance Required from Enrolled Parties and Excluded Parties. The Required Insurance shall be in place concurrent with the execution and delivery of this contract and remain in effect for the periods specified in the contract. The Design-Builder's liability insurance, including professional liability, shall not include any design-build or similar exclusions that would compromise coverages because of the design-build nature of the work to be performed pursuant to this contract.

13. Subcontracting and Self-Performance - CH2M has submitted a draft subcontracting plan that will be included in the contract and further developed during the Preliminary Services phase. This plan provides an overview of CH2M's proposed approach to

engage subcontractors to support CH2M in the execution of the Project; identifies the type of work or trades that will be required to complete the Project; describes the methods the Design-Builder will utilize to engage local subconsultants and subcontractors; and describes the methods the Design-Builder will utilize to engage with subconsultants and subcontractors classified as disadvantaged business enterprises.

CH2M intends to maximize, to the greatest extent possible, local San José and Santa Clara County firms' participation in the Project through an outreach program that will be coordinated with the City's existing outreach program. CH2M intends to ensure that local firms and small, disadvantaged and women-owned business enterprises are made aware of all opportunities available to them to subcontract on the Project in-line with their interest, capabilities and areas of expertise, and to utilize such firms to the maximum extent possible consistent with this plan. This plan is intended to provide sufficient information on Project opportunities that will be available and communicate how local firms can participate or express an interest in bidding for those opportunities.

As identified in its proposal, CH2M has named Kiewit as their key contracting partner for the Project. CH2M and Kiewit intend to self-perform up to 50% of the construction work with market price validation by the owner's advisor. The balance of the work will be competitively bid out by CH2M in accordance with contract requirements. CH2M's subcontracting plan will outline all work items to be self-performed and work to be bid out and awarded to subcontractors. Notwithstanding proposals to self-perform work, the Contract allows the City to require CH2M to competitively bid out any or all of the work in compliance with applicable law.

14. Skilled/Trained Workforce and Labor Peace Plan - Part of the RFP process to select a design-builder was the evaluation of the proposer's strategy for local subcontracting, commitment to providing a skilled and trained workforce, and labor peace plan. A representative of Sheet Metal Worker's Local Union No. 104 was a member of the interview panel that selected CH2M and Kiewit as the top ranked design-build team.

    Ensuring a skilled and available workforce will be critical to successfully delivering the Project. CH2M and Kiewit possess a large skilled labor pool that will be key to ensuring on time project delivery with the highest levels of quality and craftsmanship. Kiewit maintains agreements with California registered apprenticeship programs and has successfully placed apprentices from various programs on their jobs. State Law, under which this project will be performed, mandates certain apprenticeship requirements that will be adhered to under the Contract.

    Avoiding labor disputes and disruptions is another significant factor in delivering the Project in a timely manner. This Project requires the payment of local prevailing wages and requirements regarding prevailing wage are included in the contract. Kiewit is signatory to all trade unions required to complete the Project and has delivered more than a dozen union-staffed water and wastewater projects in the Bay Area, each of which was completed with no labor disruptions. A Project Labor Agreement is not required under the contract however the CH2M and Kiewit team is committed to preventing labor disputes, conflicts and work stoppages on this Project.

15. Acceptance – Acceptance means demonstration by the Design-Builder that the Acceptance Test has been conducted, the Acceptance Standards have been demonstrated and all other Acceptance Conditions have been achieved.

16. Transition Services - The Contract includes provisions for providing Transition Services, following Project acceptance if desired by O&M. In this event, CH2M would provide services generally consisting of monitoring and advising on the City's operations and maintenance of the Headworks Facility for a six-month or one-year period. Establishment of the Transition Services and the fee to be charged will be negotiated as part of the Definitive Contract Amendment. Payment for the Transition Services will be made from the construction contingency.

MITIGATION MONITORING AND REPORTING PROGRAM

San José-Santa Clara Regional Wastewater Facility Headworks Improvements and New Headworks Project Addendum

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

March 2018

Planning File No. PP17-046

P R E F A C E

Section 21081 of the California Environmental Quality Act (CEQA) requires a Lead Agency to adopt a Mitigation Monitoring and Reporting Program whenever it approves a Project for which measures have been required to mitigate or avoid significant effects on the environment. The purpose of the monitoring or reporting program is to ensure compliance with the mitigation measures during Project implementation.

The Addendum to the Environmental Impact Report for the San José-Santa Clara Water Pollution Control Plant Master Plan concluded that implementation of the Project could result in significant effects on the environment and mitigation measures are required as a condition of Project approval. This Mitigation Monitoring and Reporting Program addresses those measures in terms of how and when they will be implemented.

This document does *not* discuss those subjects for which the Addendum concluded that the impacts from implementation of the Project would be less than significant.

The City of San José hereby agrees to fully implement the Mitigation Measures described below which have been developed in conjunction with the preparation of an Addendum for the proposed project. The City understands that these mitigation measures or substantially similar measures shall be adopted as conditions of approval to avoid or significantly reduce potential environmental impacts to a less than significant level, where feasible.

The following abbreviations are used:

BAAQMD = Bay Area Air Quality Management District
CCR = California Code of Regulations
CDFW = California Department of Fish and Wildlife
CEQA = California Environmental Quality Act
CFR = Code of Federal Regulations
CM = Construction Management Resources Team
DTSC = Department of Toxic Substance Control
ESD = Environmental Services Department
ET= Environmental Team Project Lead
HASP = Health and Safety Plan
HCP = Santa Clara Valley Habitat Conservation Plan
NAHC = Native American Heritage Commission
OSHA = Occupational Safety and Health Administration
PM = San José-Santa Clara Regional Wastewater Facility Capital Improvements Program - Project Manager
PBCE = Planning, Building and Code Enforcement
RWQCB = Regional Water Quality Control Board
SCCDEH = Santa Clara County Department of Environmental Health
SCVHA = Santa Clara Valley Habitat Agency
SVOCs = semi-volatile organic compounds
USACE= U.S. Army Corps of Engineers
USFWS = U.S. Fish and Wildlife Service
VOCs = volatile organic compounds

MITIGATION MONITORING AND REPORTING PROGRAM
HEADWORKS IMPROVEMENTS AND NEW HEADWORKS PROJECT

Impact No.	Impact Summary	Mitigation Measures	Implementation Actions	Implementation Schedule	Responsible Party/Actions	Reviewing and Approving Party/Actions
AIR QUALITY						
AIR-1	The proposed Project could violate an air quality standard or contribute substantially to an existing or projected air quality violation.	**Bay Area Air Quality Management District (BAAQMD) Basic Construction Measures** During Project construction, the City, through its construction contractor(s), shall ensure that the following BAAQMD construction control measures are implemented. • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. • All haul trucks transporting soil, sand, or other loose material off-site shall be covered. • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 mph. • All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. • All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator. • Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours.	1. Ensure that contract documents include a requirement for BAAQMD Basic Construction Measures. 2. Monitor to ensure that contractor implements measures in contract documents: • Include discussion of this mitigation measure in contractor environmental training sessions. • Post signage. • Maintain site inspection checklists. • Review contractor's equipment tuneup and emissions logs. • Notify PM and ET of non-compliance and ensure corrective action.	1. Design 2. Construction	1. Project Manager (PM) 2. Construction Management (CM)	1. Environmental Team (ET) 2. ET
BIOLOGICAL RESOURCES						
BIO-1	The Project could have a substantial adverse effect, either directly or through habitat modifications, on raptors and migratory birds.	**Mitigation Measure BIO-1a: Raptor and Migratory Bird Nest Measures.** If possible, construction shall be scheduled between September 1st and January 31st (inclusive) to avoid the nesting season. If Project construction is scheduled during breeding bird season (February 1st–August 31st, inclusive), City's Environmental Services Department (ESD) or its contractor shall retain a qualified wildlife biologist to conduct a survey for nesting raptors and migratory bird nests within 7 days of the start of construction or after any construction breaks of 14 days or more, within 7 days prior to the resumption of construction. Surveys shall be performed for the Project area and for suitable habitat within 300 feet. If an active nest is discovered, a no-disturbance buffer zone around the nest tree (or, for ground-nesting species, or nests identified on Facility buildings, the nest itself) shall be established. The no-disturbance zone shall be marked with flagging or fencing that is easily identified and avoided by the construction crew, and shall not affect the nesting birds. In general, the minimum buffer zone widths shall be as follows: 100 feet (radius) for non-raptor species and 300 feet (radius) for raptor species; however, the buffer zone widths may be adjusted if an obstruction, such as a building, is within line-of-sight between the nest and construction. Buffer zone widths and other avoidance measures may be modified based on consultation with CDFW and the USFWS. Buffer zones shall remain in place as long as the nest is active or young remain in the area and are dependent on the nest.	1. If possible, schedule construction between September 1st and January 31st (inclusive). 2. Contract a qualified biologist to conduct surveys for nesting raptors and migratory birds within 7 days of start of project construction or within 7 days of start of construction after any construction breaks of 14 days or more (if construction commences between February 1st and August 31st, inclusive). If active nests are located during survey, establish buffer zones and consult with USFWS/CDFW as required. 3. Monitor to ensure that contractor implements measures in contract documents regarding buffer zones and avoidance measures established by biologist and/or USFWS/CDFW: • Include discussion of this mitigation measure in environmental training sessions. • Maintain site inspection logs. • Notify PM and ET of non-compliance and ensure corrective action.	1. Construction 2. Within 7 days prior to construction 3. Construction	1. PM 2. ET and qualified biologist 3. ET or biological monitor	1. ET 2. CDFW, USFWS 3. ET

MITIGATION MONITORING AND REPORTING PROGRAM HEADWORKS IMPROVEMENTS AND NEW HEADWORKS PROJECT						
Impact No.	**Impact Summary**	**Mitigation Measures**	**Implementation Actions**	**Implementation Schedule**	**Responsible Party/Actions**	**Reviewing and Approving Party/Actions**
BIOLOGICAL RESOURCES (cont.						
BIO-1 (cont.)		If California black rails are detected during surveys, the City's ESD or Planning, Building and Code Enforcement (PBCE) Senior Environmental Planner shall consult USFWS staff to identify the appropriate avoidance measures prior to start of construction. The project proponent shall be responsible to ensure that USFWS and/or CDFW protocols and requirements are implemented prior to the start of construction. Construction activities that are scheduled to begin outside the breeding season (September 1st through January 31st, inclusive) can proceed without surveys. If possible, all necessary tree and vegetation removal shall be conducted before the start of breeding bird season to minimize the opportunity for birds to nest at the Project site and conflict with Project construction activities. ESD shall notify the PBCE Senior Environmental Planner when the mitigation actions will occur for approval prior to the start of construction.	4. Submit reports, if applicable, to USFWS/CDFW per consultation requirements.	4. Construction	4. ET	4. USFWS, and/or CDFW
			5. Submit survey reports and any final compliance report, if applicable.	5. Construction	5. ET	5. PBCE
		Mitigation Measure BIO-1b: Minimize Light Pollution. Lights at the Project site (during construction and operation) shall be directed downward and shielded pursuant to Condition 7 of the Santa Clara Valley Habitat Conservation Plan (HCP) to ensure that no fugitive light spills out into natural lands and interferes with typical avian behavior. ESD and/or Public Works qualified personnel shall inspect lighting plans and/or specifications. ESD shall notify PBCE Senior Environmental Planner when the mitigation actions will occur for approval prior to the start of construction.	1. Lighting design of proposed facilities shall meet mitigation measure requirements. Light plans shall comply the Santa Clara Valley HCP Condition 7, including lighting measures. Submit lighting plans to ESD and/or Public Works qualified personnel for approval and copy to PBCE.	1. Design	1. PM	1. ET
			2. Light pollution shall be minimized during construction in accordance with the requirements of the mitigation measure and as included in contract documents.	2. Construction	2. CM	2. ET
			3. Monitor to ensure that contractor implements light pollution control as specified.	3. Construction	3. CM	3. ET
BIO-2	The Project could have a substantial adverse effect, either directly or through habitat modifications, on Western burrowing owls located at or near the Project site.	**Mitigation Measure BIO-2: Western Burrowing Owl Measures.** To avoid or minimize direct impacts of Project activities on western burrowing owls, the City shall ensure the following procedures are implemented consistent with the HCP. This survey methodology is consistent with accepted survey protocols for this species. ***1. Habitat Survey*** a) Western burrowing owl habitat surveys shall be required in the Project area in all HCP modeled occupied habitat. Surveys are not required in sites that are mapped as potential burrowing owl nesting or only overwintering habitat. Modeled habitat types may change throughout the permit term based on the best available scientific data. Habitat surveys are required in both breeding and non-breeding seasons. b) Qualified biologist(s) shall conduct a pedestrian survey of the Project area and accessible areas within 250-feet of the Project area. Pedestrian survey transects shall be spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines shall be no more than 50 feet and can be reduced to account for differences in terrain, vegetation density, and ground surface visibility. Poor weather may affect the biologist's ability to detect burrowing owls; therefore, the biologist shall avoid conducting surveys when wind speed is greater than 20 kilometers per hour and there is precipitation or dense fog. The biologist shall map areas with burrows or burrow complexes that could support burrowing owls and all burrows that may be occupied (as indicated by tracks, feathers, egg shell fragments, pellets, prey remains, or excrement).	1. Retain a qualified biologist to conduct a habitat survey to map areas with burrows or burrow complexes that could support burrowing owls or occupied burrows in all HCP mapped occupied habitat. If suitable habitat is identified, perform two pre-construction surveys within 250 feet of construction activities, between 2 to 14 days prior to ground disturbing activities pre-construction surveys and establish buffer zones around active nests.	1. Pre-construction	1. ET/Qualified Biologist	1. ET/Habitat Agency, (CDFW)
			2. If suitable habitat is identified, ensure that requirements for compliance with nesting bird buffer zones, if needed, are included in contract documents.	2. Design	2. PM	2. ET
			3. If avoidance of active nests is not feasible and construction occurs in breeding season, prepare an Avoidance, Minimization and Monitoring Plan for CDFW approval. If avoidance measures are not feasible, coordinate with CDFW for passive relocation.	3. Pre-construction	3. ET/Qualified Biologist	3. CDFW

Impact No.	Impact Summary	Mitigation Measures	Implementation Actions	Implementation Schedule	Responsible Party/Actions	Reviewing and Approving Party/Actions
BIOLOGICAL RESOURCES (cont.						
BIO-2 (cont.)		c) To avoid impacts to owls from surveyors, owls and/or occupied burrows shall be avoided by a minimum of 150 feet wherever practical to avoid flushing occupied burrows. Disturbance to occupied burrows shall be avoided during all seasons. d) If suitable habitat is identified during the habitat survey, and if the Project does not fully avoid impacts to the suitable habitat, preconstruction surveys shall be required. Suitable habitat is fully avoided if the project footprint does not impinge on a 250-foot buffer around the suitable burrow. **2. *Preconstruction Surveys*** a) A qualified biologist shall conduct preconstruction surveys in all suitable habitat identified in the habitat surveys within 250 feet of construction activity, between 14 and 4 days prior to initiating ground disturbance related to Project construction activities. The 250-foot buffer zone shall be surveyed to identify burrows and owls outside of the Project area which may be impacted by factors such as noise and vibration (heavy equipment) during project construction. As burrowing owls may recolonize a site after only a few days, time lapses between Project activities shall require subsequent take avoidance surveys including but not limited to a final survey conducted no more than 2 days prior to ground disturbance to ensure absence. A minimum of two surveys shall be conducted (if owls are detected on the first survey, a second survey is not needed). b) The preconstruction survey shall be a minimum of 3 hours, beginning 1 hour before sunrise and continuing until 2 hours after sunrise (3 hours total) or beginning 2 hours before sunset and continuing until 1 hour after sunset. Additional time may be required for large project sites. **3. *Avoidance Measures*** The City shall employ avoidance measures described below to avoid direct take of individual burrowing owls during Project construction. *Breeding Season Avoidance Measures - February 1 to August 31* a) If preconstruction surveys identify evidence of Western burrowing owls within 250 feet of the Project area during the breeding season, the Project proponent shall avoid all nest sites that could be disturbed by Project construction activities during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups foraging on or near the site following fledging). Avoidance shall include establishment of a 250-foot no-disturbance buffer zone around active nest sites by a qualified biologist. b) If active nests cannot be avoided, construction may occur within 250 feet of active nest sites if 1) the nest is not disturbed, and 2) the Project proponent develops and implements an Avoidance, Minimization, and Monitoring Plan, subject to approval by CDFW the Habitat Agency overseeing the HCP. The plan shall incorporate the following criteria: i. A qualified biologist shall monitor the owls for at least 3 days prior to Project construction to determine baseline nesting and foraging behavior (i.e., behavior without construction). The same qualified biologist shall monitor the owls during construction and find no change in owl nesting and foraging behavior in response to construction activities.	4. Monitor prior to and during Project construction as required by the mitigation measure. 5. Monitor to ensure that contractor implements measures in contract documents regarding avoidance measures established by the biologist: • Include in environmental training. • Monitor site inspection logs. • Notify PM and ET of non-compliance and ensure corrective actions. • Submit monthly compliance reports. 6. Submit final compliance reporting documentation 7. Submit Avoidance, Minimization and Monitoring Plan report, if required, to CDFW.	4. Construction 5. Construction 6. Post-construction 7. Post-construction	4. CM/Qualified Biologist 5. CM/ET 6. ET/CM 7. ET	4. ET 5. ET 6. PBCE 7. PBCE

Impact No.	Impact Summary	Mitigation Measures	Implementation Actions	Implementation Schedule	Responsible Party/Actions	Reviewing and Approving Party/Actions
BIOLOGICAL RESOURCES (cont.						
BIO-2 (cont.)		ii. If there is any change in owl nesting and foraging behavior as a result of Project construction activities, these activities shall cease within the 250-foot buffer. Construction shall not resume within the 250-foot buffer until the adult owls and juveniles from the occupied burrows have moved out of the project site. iii. If monitoring indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use by owls, the no-disturbance buffer zone may be removed. The biologist shall excavate the burrow to prevent reoccupation after receiving approval from CDFW. *Non-Breeding Season Avoidance Measures – September 1st to January 31st (inclusive)* a) If preconstruction surveys identify evidence of Western burrowing owls within 250 feet of the Project area during the non-breeding season (September 1st to January 31st, inclusive), the Project proponent shall establish a 250-foot no-disturbance buffer around occupied overwintering burrows as determined by a qualified biologist. b) If occupied burrows cannot be avoided, construction may occur within 250 feet of overwintering burrows sites if: i. A qualified biologist monitors the owls for at least 3 days prior to construction to determine baseline foraging behavior (i.e., behavior without construction). ii. The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities. iii. If there is any change in owl nesting and foraging behavior as a result of construction activities, these activities shall cease within the 250-foot buffer. iv. If the owls are gone for at least one week, the Project proponent may request approval from the HCP Habitat Agency for qualified biologist to excavate usable burrows to prevent owls from re-occupying the site. After all usable burrows are excavated, the no-disturbance buffer zone shall be removed and construction may continue. Monitoring must continue as described above for the non-breeding season as long as the burrow remains active. ***4. Construction Monitoring and Environmental Training*** During construction, the no-disturbance buffer zones shall be established and maintained where applicable and based on the Project Avoidance, Minimization, and Monitoring Plan. A qualified biologist shall monitor the site consistent with the requirements described in the Avoidance Measures, described above, to ensure that buffers are enforced and owls are not disturbed. The qualified biological monitor shall prepare and perform an environmental training for all Project personnel on the avoidance procedures, buffer zones, and protocols in the event that a burrowing owl flies into an active construction zone. ***5. Passive Relocation*** If avoidance measures described above cannot be implemented with the Project, Passive Relocation shall be implemented according to the protocol described in the HCP and in coordination with, and approval by CDFW.				

MITIGATION MONITORING AND REPORTING PROGRAM HEADWORKS IMPROVEMENTS AND NEW HEADWORKS PROJECT						
Impact No.	**Impact Summary**	**Mitigation Measures**	**Implementation Actions**	**Implementation Schedule**	**Responsible Party/Actions**	**Reviewing and Approving Party/Actions**
BIOLOGICAL RESOURCES (continued)						
BIO-3	The Project could have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	**Mitigation Measure BIO-3a: Avoidance and Protection of Jurisdictional Waters.** Access roads, work areas, and infrastructure shall be sited to avoid and minimize direct and indirect impacts to jurisdictional features. Prior to the beginning of any construction-related activities, the following measures shall be applied to protect potential jurisdictional features: 1. A protective barrier (such as silt fencing) shall be erected around water features adjacent to the Project at the "top of bank" or at the feature boundary to isolate them from Project activities and reduce the potential for incidental fill, erosion, or other disturbance; 2. Signage shall be installed on the fencing to identify sensitive habitat areas and restrict construction activities; 3. No equipment mobilization, grading, clearing, or storage of equipment or machinery, or similar activity shall occur at the Project site until a representative of the City has inspected and approved the protection fencing; and 4. The City shall ensure that the temporary fencing is continuously maintained until the Project is completed. 5. Drainage from all proposed facilities where chemical spills could occur during Project operation shall be directed away from sensitive resources and/or include other measures to minimize potential for release of potential pollutants to the environment.	1. Ensure that wetlands are clearly designated on site plans and requirements for minimizing impacts to wetlands are included in contract documents.	1. Design	1. PM	1. ET
			2. Install construction fencing around designated wetlands according to delineation created by qualified biologist, and ensure that contractor erects signage for protection of environmentally sensitive areas.	2. Construction	2. CM/ET	2. ET
			3. Monitor to ensure that contractor implements measures in contract documents: • Include in contractor environmental training • Maintain site inspection logs • Notify PM and ET of non-compliance and ensure corrective action	3. Construction	3. CM/ET	3. ET
			4. Submit final compliance reporting documentation, if applicable.	4. Construction	4. ET	4. PBCE
		Mitigation Measure BIO-3b: Regulatory Approval and Wetlands Restoration. If it is determined during the design phase that impacts on wetland habitat cannot be avoided, the City's ET shall obtain permits and approvals from the Santa Clara Valley Habitat Agency (SCVHA), USACE, RWQCB, and/or CDFW, as applicable. In order to ensure that the Project results in no net loss of wetland habitat functions and values, the City shall compensate for the loss of wetland resources through on-site restoration/ creation, off-site protection and enhancement of riparian and wetland habitat, and/or purchase of mitigation credits consistent with the terms and conditions of USACE Regional General Permit 18 for implementation of covered activities in the HCP. On-site or off-site habitat restoration/creation and/or purchase of mitigation credits consistent with the terms and conditions of USACE Regional General Permit 18 shall be determined in consultation with the resource agencies, as applicable. The City shall prepare a mitigation plan, which shall include monitoring applicable requirements and success criteria.	1. Obtain permits and approvals if impacts on wetland habitat cannot be avoided.	1. Design	1. ET	1. SCVHA, USACE, CDFW, RWQCB
BIO-4	The project could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	**Compensate for Removal of Protected Trees.** As part of the project condition of approval, the trees to be removed shall be replaced on-site or off-site at the accepted ratios or through payment of an in-lieu fee to Our City Forest to compensate for the loss of the trees. Protected trees that are lost shall be replaced at a minimum of four 24-inch box trees per tree removed. Tree replacement amounts shall be subject to the City's Arborist and/or PBCE, who would determine the final mitigation for impacts to protected trees. Replacement trees shall be planted in a suitable location on Facility property or on other City property, to be identified by the City Arborist and approved by PBCE.	1. Requirements for tree replacement or payment of in-lieu fees in accordance with City policies and guidelines shall be included in contract documents. Include the City's Tree Replacement Ratio information in the contract documents, if applicable.	1. Design	1. PM	1. ET
			2. Monitor contractor for compliance with tree replacement as specified by City policies and guidelines.	2. Construction	2. CM	2. ET
			3. Submit final compliance reporting documentation, if applicable.	3. Construction	3. ET	3. PBCE

MITIGATION MONITORING AND REPORTING PROGRAM HEADWORKS IMPROVEMENTS AND NEW HEADWORKS PROJECT						
Impact No.	**Impact Summary**	**Mitigation Measures**	**Implementation Actions**	**Implementation Schedule**	**Responsible Party/Actions**	**Reviewing and Approving Party/Actions**
BIOLOGICAL RESOURCES (continued)						
BIO-5	The Project could conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	**Mitigation Measure BIO-2: Western Burrowing Owl Measures**, as described above.				
CULTURAL RESOURCES						
CUL-1	Implementation of the project could cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.	**Mitigation Measure CUL-1a: Inadvertent Discovery of Archaeological Resources.** If prehistoric or historic-era archaeological resources are encountered by construction personnel during Project implementation, all construction activities within 100 feet shall halt and the contractor shall notify ESD personnel and the PBCE Senior Environmental Planner. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; stone milling equipment (e.g., mortars, pestles, hand stones, or milling slabs); and battered stone tools, such as hammer stones and pitted stones. Historic-era materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. The City's ESD or its contractor shall retain a Secretary of the Interior-qualified archaeologist to inspect the findings within 24 hours of discovery. If it is determined that the Project could damage a historical resource as defined by CEQA (CEQA Guidelines §15064.5), construction shall cease in an area determined by the archaeologist until a mitigation plan has been prepared, approved by the PBCE Senior Environmental Planner, and implemented to the satisfaction of the archaeologist (and Native American representative if the resource is prehistoric, who would be identified by the Native American Heritage Commission [NAHC]). If the Native American representative identifies the find as a tribal resource, ESD or its contractor shall proceed to Mitigation Measure CUL-1b. For archaeological resources, the archaeologist, in consultation with the PBCE Senior Environmental Planner and the City's Historic Preservation Officer, shall determine when construction can resume. The preferred mitigation shall be preservation in place. If preservation in place is not physically or financially feasible, mitigation shall be data recovery through excavation. If preservation in place is selected as mitigation, the mitigation shall be accomplished through one of the four following means: (1) modifying the construction plan to avoid the resource; (2) incorporating the resource within open space; (3) capping and covering the resource before building appropriate facilities on the resource site; or (4) deeding the resource site into a permanent conservation easement. If preservation in place is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan to the satisfaction of the PBCE Senior Environmental Planner to recover the scientifically consequential information from the resource prior to any excavation at the resource site. Treatment for most of the resources that could be encountered shall consist of (but shall not necessarily be limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.	1. Ensure that measures related to archaeological discoveries are included in contract documents.	1. Design	1. ET and PM	1. ET
			2. Ensure that all personnel complete environmental training prior to beginning work. Monitor to ensure that the contractors implement measures in contract document.	2. Construction	2. ET and CM	2. ET
			3. Evaluate the potential discovery and advise the ET as to the significance of the discovery. If warranted, proceed with measures that may include the following: a. On-site preservation of resource; b. Archaeological monitoring program with prior review/approval of ET or c. Archaeological testing program with prior review/approval of ET.	3. Construction	3. CM and qualified archeologist	3. ET PBCE, in consultation with City's Historic Preservation Officer (if there are archeological or tribal resources)
			4. Prepare a Final Archaeological Resources Report if warranted. Submit to ET for review and approval.	4. Construction	4. ET and qualified archeologist	4. PBCE
			5. Ensure that contract documents include measures related to discovery of human remains.	5. Design	5. ET and PM	5. ET

MITIGATION MONITORING AND REPORTING PROGRAM HEADWORKS IMPROVEMENTS AND NEW HEADWORKS PROJECT						
Impact No.	**Impact Summary**	**Mitigation Measures**	**Implementation Actions**	**Implementation Schedule**	**Responsible Party/Actions**	**Reviewing and Approving Party/Actions**
CULTURAL RESOURCES (continued)						
CUL-1 (cont.)		**Mitigation Measure CUL-1b: Inadvertent Discovery of Tribal Cultural Resources.** The Native American representative shall make recommendations to the City for the appropriate measures to treat the tribal cultural resource which shall be implemented in accordance with Section 15064.5 of the CEQA Guidelines.	1. Evaluate the potential discovery and advise the ET as to the significance of the discovery.	1. Construction	1. Native American representative, ET	1. PBCE
CUL-2	The project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	**Mitigation Measure CUL-2: Inadvertent Discovery of Paleontological Resources.** If paleontological resources, such as fossilized bone, teeth, shell, tracks, trails, casts, molds, or impressions are discovered during ground-disturbing activities, work shall stop in that area and within 100 feet of the find and the contractor shall notify ESD personnel and the PBCE Senior Environmental Planner. ESD or its contractor shall retain a qualified paleontologist to inspect the findings within 24 hours of discovery to assess the nature and importance of the find and, if necessary, develop appropriate treatment measures in conformance with Society of Vertebrate Paleontology standards, and in consultation with the PBCE Senior Environmental Planner.	1. Evaluate the potential discovery and advise the ET as to the significance of the discovery.	1. Construction	1. Qualified paleontologist, ET	1. PBCE
CUL-3	Implementation of the project could disturb human remains, including those interred outside of formal cemeteries.	**Mitigation Measure CUL-3: Inadvertent Discovery of Human Remains.** If human remains are encountered by construction personnel during project implementation, all construction activities within 100 feet shall halt and the contractor shall notify the PBCE Senior Environmental Planner. ESD shall contact the Santa Clara County Coroner to determine whether or not the remains are Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner shall contact the NAHC within 24 hours. The NAHC would then identify the person or persons it believes to be the most likely descendant from the deceased Native American, who in turn would make recommendations to the City for the appropriate means of treating the human remains and any associated funerary objects which shall be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.	1. Include in environmental training. Monitor to ensure that the contractor implements measures in contract document including reporting human remains if encountered and suspending work in the vicinity.	1. Construction	1. ET and CM	1. ET
			2. Confirm identification of human remains, if needed. If human remains are confirmed, perform required coordination and notifications.	2. Construction	2. ET and qualified archaeologist	2. ET
			3. Monitor to ensure the appropriate disposition of human remains.	3. Construction	3. ET and qualified archaeologist	3. ET
			4. Submit final compliance report, if applicable.	4. Construction	4. ET	4. PBCE
TRIBAL CULTURAL RESOURCES						
TRC-1, TRC-2	Implementation of the project could cause a substantial adverse change in the significance of an tribal cultural resource pursuant to §21074.	Implement **Mitigation Measures CUL-1a. Inadvertent Discovery of Archaeological Resources and CUL-1b. Inadvertent Discovery of Tribal Cultural Resources, and CUL-3: Inadvertent Discovery of Human Remains.** See Cultural Resources section, above.				
HAZARDS AND HAZARDOUS MATERIALS						
HAZ-1	The Project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, and is located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard to the public or the environment.	**Mitigation Measure HAZ-1a: Pre-Construction Hazardous Materials Assessment.** Prior to construction, ESD or its contractor shall ensure that a limited soil and/or groundwater investigation is performed at proposed construction work areas to characterize soil and groundwater quality. If the results reveal soils and/or groundwater contamination exist in excess of applicable regulatory screening levels (Environmental Screening Levels or California human health screening levels) for the proposed site use, the City shall contact the appropriate regulatory agency (the Santa Clara County Department of Environmental Health [SCCDEH], RWQCB, or DTSC), as appropriate. ESD or its contractor shall complete subsequent site investigations and/or remedial activities required by the regulatory agency to ensure that residual impact, if any, shall not pose a continuing significant threat to groundwater resources, human health, or the environment. The results of the pre-construction hazardous materials assessment shall be incorporated into the Site Health and Safety Plan prepared in accordance with Mitigation Measure HAZ-1b, below, and the Soil and Groundwater Management	1. Evaluate project location with respect to known underground fuel tank leaks or spills and proximity to landfills. Assess need for subsurface sampling to evaluate potential presence of contaminants.	1. Feasibility / Development	1. ET and ESD's Hazardous Material Specialist	1. ET and ESD's Hazardous Material Specialist
			2. If warranted, retain a qualified environmental professional to prepare a workplan, conduct soil and groundwater sampling, and report results. Report shall provide recommendations for agency consultation and/or additional cleanup, depending upon findings.	2. Feasibility / Development	2. ET and qualified environmental professional	2. ET and ESD's Hazardous Material Specialist (RWQCB, DTSC, SCCDEH)
			3. Ensure that contract documents include site-specific sampling report and/or general information about potential soil and groundwater contaminants anticipated. If warranted, include site cleanup in project and prepare final cleanup report.	3. Design	3. PM and ET	3. ET

MITIGATION MONITORING AND REPORTING PROGRAM
HEADWORKS IMPROVEMENTS AND NEW HEADWORKS PROJECT

Impact No.	Impact Summary	Mitigation Measures	Implementation Actions	Implementation Schedule	Responsible Party/Actions	Reviewing and Approving Party/Actions
HAZARDS AND HAZARDOUS MATERIALS (continued)						
HAZ-1 (cont.)		Plan prepared in accordance with Mitigation Measure HAZ-1c, below, to determine whether: specific soil and groundwater management and disposal procedures for contaminated materials are required; excavated soils are suitable for reuse; and construction worker health and safety procedures for working with contaminated materials are required.	4. A copy of the pre-construction hazardous materials assessment shall be submitted to the PBCE Senior Environmental Planner for approval.	4. Construction	4. CM and ET	4. PBCE
		Mitigation Measure HAZ-1b: Health and Safety Plan. ESD or its contractor shall retain a qualified environmental professional to prepare a site-specific Health and Safety Plan (HASP) in accordance with federal OSHA regulations (29 CFR 1910.120) and Cal/OSHA regulations (8 CCR Title 8, Section 5192). Because anticipated contaminants vary depending upon the location of proposed improvements in the Project area and may vary over time, the HASP shall address site-specific worker health and safety issues during construction. The HASP shall include the following information: • Results of sampling conducted in accordance with Mitigation Measure HAZ-1a. • All required measures to protect construction workers and the general public by including engineering controls, monitoring, and security measures to prevent unauthorized entry to the construction areas and to reduce hazards outside of the construction areas. If prescribed contaminant exposure levels are exceeded, personal protective equipment shall be required for workers in accordance with state and federal regulations. • Required worker health and safety provisions for all workers potentially exposed to contaminated materials, in accordance with state and federal worker safety regulations, and designated qualified individual personnel responsible for implementation of the HASP. • The contractor shall have a site health and safety supervisor fully trained pursuant to hazardous materials regulations be present during excavation, trenching, or cut and fill operations to monitor for evidence of potential soil contamination, including soil staining, noxious odors, debris or buried storage containers. The site health and safety supervisor must be capable of evaluating whether hazardous materials encountered constitute an incidental release of a hazardous substance or an emergency spill. The site health and safety supervisor shall implement procedures to be followed in the event of an unanticipated hazardous materials release that may impact health and safety. These procedures shall be in accordance with hazardous waste operations and regulations and specifically include, but are not limited to 1) immediately stopping work in the vicinity of the unknown hazardous materials release; 2) notifying SCCDEH, RWQCB, or DTSC; and 3) retaining a qualified environmental firm to perform sampling, remediation, and/or disposal. • Documentation that HASP measures have been implemented during construction. • Provision that submittal of the HASP to ESD, or any review of the contractor's HASP ESD, shall not be construed as approval of the adequacy of the contractor as a health and safety professional, the contractor's HASP, or any safety measure taken in or near the construction site. The contractor shall be solely and fully responsible for compliance with all laws, rules, and regulations applicable to health and safety during the performance of the construction work.	1. Ensure that contract documents include preparation of a Health and Safety Plan and documentation of compliance in accordance with the mitigation measure.	1. Design	1. PM	1. ET
			2. Review contractor's Health and Safety Plan.	2. Design / Construction	2. PM and CM	2. ET
			3. Monitor compliance by the contractor, report non-compliance or discovery of suspect hazardous materials to PM and ET. Ensure corrective action, sampling, remediation and/or disposal as warranted. (Note contractor is solely responsible for health and safety of its employees).	3. Construction	3. CM and ET	3. ET and ESD's Hazardous Material Specialist
			4. A copy of the HASP shall be submitted to the PBCE Senior Environmental Planner.	4. Construction	4. CM and ET	4. PBCE

MITIGATION MONITORING AND REPORTING PROGRAM
HEADWORKS IMPROVEMENTS AND NEW HEADWORKS PROJECT

Impact No.	Impact Summary	Mitigation Measures	Implementation Actions	Implementation Schedule	Responsible Party/Actions	Reviewing and Approving Party/Actions
HAZARDS AND HAZARDOUS MATERIALS (continued)						
HAZ-1 (cont.)		**Mitigation Measure HAZ-1c: Soil and Groundwater Management Plan.** If hazardous materials or contaminated soil and groundwater above regulatory screening levels are identified under the pre-construction hazardous materials assessment, done in accordance with Mitigation Measure HAZ-1a, ESD shall require the construction contractor to prepare and implement a Soil and Groundwater Management Plan, that specifies the method for handling and disposal of contaminated soil and groundwater prior to construction. The Soil and Groundwater Management Plan shall establish the sampling and laboratory analysis program which may include the following: 1) analysis of subsurface soil samples within the Project site for total petroleum hydrocarbons (as gasoline, diesel, and waste oil), Title 22 metals, and volatile organic compounds (VOCs) or any other chemicals of concern to evaluate the potential presence of contamination; 2) groundwater samples if subsurface excavations are anticipated to require dewatering; and 3) additional analyses for VOCs and semi-volatile organic compounds (SVOCs) for groundwater samples collected at construction locations within 1,000 feet of adjacent landfills. The Soil and Groundwater Management Plan shall include all necessary procedures to ensure that excavated materials and fluids generated during construction are stored, managed, and disposed of in a manner that is protective of human health and in accordance with applicable laws and regulations. The Plan shall include the following information. • Step-by-step procedures for evaluation, handling, stockpiling, storage, testing, and disposal of excavated material, including criteria for reuse and offsite disposal. All excavated materials shall be inspected prior to initial stockpiling, and spoils that are visibly stained and/or have a noticeable odor shall be stockpiled separately to minimize the amount of material that may require special handling. In addition, excavated materials shall be inspected for buried building materials, debris, and evidence of underground storage tanks; if identified, these materials shall be stockpiled separately and characterized in accordance with landfill disposal requirements. If some of the spoils do not meet the reuse criteria and/or debris is identified, these materials shall be disposed of at a permitted landfill facility. • Procedures to be implemented if unknown subsurface conditions or contamination are encountered, such as previously unreported tanks, wells, or contaminated soils. • Procedures for containment, handling and disposal of groundwater generated from construction dewatering, the method to be used to analyze groundwater for hazardous materials likely to be encountered and the appropriate treatment and/or disposal methods. The Pre-Construction Hazardous Materials Assessment (HAZ-1a), Health and Safety Plan (HAZ-1b), and Soil Management Plan (HAZ-1c) shall be submitted to the PBCE Senior Environmental Planner for approval.	1. Ensure that contract documents include a Soil and Groundwater Management Plan meeting the requirements of the mitigation measure and requirement for submittal of final compliance report documenting disposal of materials. 2. Review contractor's Soil and Groundwater Management Plan. 3. Monitor compliance by the contractor, report non-compliance or discovery of suspect hazardous materials to PM and ET. Ensure corrective action, sampling, remediation and/or disposal as warranted. 4. Review contractor's final compliance report and retain all manifests for hazardous waste disposal. 5. A copy of the Soil and Groundwater Management Plan shall be submitted to the PBCE Senior Environmental Planner.	1. Design 2. Design / Construction 3. Construction 4. Construction 5. Construction	1. PM 2. PM, CM, and ESD's Hazardous Material Specialist 3. CM and ET 4.CM 5. ET and ESD's Hazardous Material Specialist	1. ET 2. ET and ESD's Hazardous Material Specialist 3. ET and ESD's Hazardous Material Specialist 4. ET and ESD's Hazardous Material Specialist 5. PBCE
HAZ-2	Construction requiring closure of Zanker Road could interfere with the use of Zanker Road during evacuation of the Facility.	Implementation of **Mitigation Measure TR-1**, described below in Transportation and Circulation, notifying Facility personnel of the temporary closure of Zanker Road and instructing personnel to evacuate using Mike Tocce Lane.				

MITIGATION MONITORING AND REPORTING PROGRAM HEADWORKS IMPROVEMENTS AND NEW HEADWORKS PROJECT						
Impact No.	**Impact Summary**	**Mitigation Measures**	**Implementation Actions**	**Implementation Schedule**	**Responsible Party/Actions**	**Reviewing and Approving Party/Actions**
TRANSPORTATION AND CIRCULATION						
TR-1	The temporary closure along Zanker Road south of the Facility operational area would increase traffic volumes on the detour roadways..	**Mitigation Measure TR-1: Implement Project Traffic Control Plan.** ESD or its contractor(s) shall prepare and implement a Traffic Control Plan to reduce traffic impacts on the roadways at and near the work site, as well as to reduce potential traffic safety hazards and ensure adequate access for emergency responders. ESD or its contractor(s) shall coordinate development and implementation of this plan with City departments (e.g., Emergency Services, Fire, Police, Transportation), as appropriate. To the extent applicable, the Traffic Control Plan shall conform to the Caltrans' *California Manual on Uniform Traffic Control Devices*, Part 6 (Temporary Traffic Control)[1] and San José Public Works Department's Temporary Traffic Control Manual.[2] The Traffic Control Plan shall include, but not be limited to, the following elements: • Circulation and detour plans to minimize impacts on local road circulation during road and lane closures. Flaggers and/or signage shall be used to guide vehicles through and/or around the construction zone. • Identifying truck routes designated by City of San José and Santa Clara County. Haul routes that minimize truck traffic on local roadways shall be utilized to the extent possible. • Controlling and monitoring construction vehicle movement through the enforcement of standard construction specifications by onsite inspectors. • Scheduling truck trips outside the peak morning and evening commute hours to the extent possible. • Limiting the duration of road and lane closures to the extent possible. • Notifying Facility personnel of the temporary closure of Zanker Road and instructing personnel to evacuate using Mike Tocce Lane during Zanker Road closure. • Maintaining pedestrian and bicycle access and circulation during project construction where safe to do so. If construction activities encroach on bicycle routes or multi-use paths, advance warning signs (e.g., "Bicyclists Allowed Use of Full Lane" and/or "Share the Road") shall be posted that indicate the presence of such users. • Identifying detours for bicycles and pedestrians, where applicable, in all areas affected by project construction. • Storing all equipment and materials in designated contractor staging areas on or adjacent to the worksite, such that traffic obstruction is minimized. • Implementing roadside safety protocols. Advance "Road Work Ahead" warning and speed control signs (including those informing drivers of State legislated double fines for speed infractions in a construction zone) shall be posted to reduce speeds and provide safe traffic flow through the work zone. • Coordinating construction administrators of police and fire stations (including all fire protection agencies). Operators shall be notified in advance of the timing, location, and duration of construction activities and the locations of detours and lane closures, where applicable. • Repairing and restoring affected roadway rights-of way to their original condition after construction is completed.	1. Incorporate into contract documents a requirement that contractor prepare a traffic plan in accordance with requirements of Coordinated Transportation Management Plan and this measure	1. Design	1. PM	1. ET
			2. Review contractor's traffic control plan	2. Pre-construction	2. PM and CM	2. CM
			3. Monitor to ensure that contractor implements measures in contract documents. Report noncompliance to PM and ET and ensure corrective action.	3. Construction	3. CM	3. CM
			4. Submit final compliance reporting documentation, if applicable.	4. Construction	4. ET	4. PBCE

[1] California Department of Transportation (Caltrans), *California Manual on Uniform Traffic Control Devices for Streets and Highways – Part 6: Temporary Traffic Control*, amended November 7, 2014.
[2] City of San José, Public Works Department, *Temporary Traffic Control Manual*, September 27, 2005, available online at http://www.sanjoseca.gov/index.aspx?NID=3464, accessed October 2015.

MITIGATION MONITORING AND REPORTING PROGRAM HEADWORKS IMPROVEMENTS AND NEW HEADWORKS PROJECT						
Impact No.	**Impact Summary**	**Mitigation Measures**	**Implementation Actions**	**Implementation Schedule**	**Responsible Party/Actions**	**Reviewing and Approving Party/Actions**
MANDATORY FINDINGS OF SIGNIFICANCE						
C-TR-1	The Project could have transportation impacts that are individually limited, but cumulatively considerable.	**Mitigation Measure C-TR**: **Implement Coordinated Transportation Management Plan.** Prior to construction, the City's contractor(s) shall develop a Coordinated Transportation Management Plan and work with other projects' contractors and appropriate City departments (e.g., Emergency Services, Fire, Police, Transportation) to prepare and implement a transportation management plan for roadways adjacent to and directly affected by the Project as well as planned Facility improvements and land uses, and to address the transportation impact of the overlapping construction projects within the vicinity of the Project. The transportation management plan shall include, but not be limited to, the following requirements: • Coordination of individual traffic control plans for the Project with nearby projects. • Coordination between the Project contractor and other project contractors in developing circulation and detour plans that include safety features (e.g., signage and flaggers). The circulation and detour plans shall address: – Full and partial roadways closures – Circulation and detour plans to include the use of signage and flagging to guide vehicles through and/or around the construction zone, as well as any temporary traffic control devices – Bicycle/Pedestrian detour plans, where applicable – Parking along public roadways – Haul routes for construction trucks and staging areas for instances when multiple trucks arrive at the work sites • Protocols for updating the transportation management plan to account for delays or changes in the schedules of individual projects. • A comprehensive and continual outreach program to notify affected citizens (i.e. residents of Alviso, commuters, etc.) of all construction activity and roadway closures for the duration of the projects.	1. Prepare a Coordinated Transportation Management Plan to outline requirements of project-specific transportation plans. 2. Incorporate into contract documents a requirement to ensure that contractor prepare a traffic plan in accordance with requirements of Coordinated Transportation Management Plan and this measure. 3. Monitor to ensure that contractor implements measures in contract documents. Report noncompliance to PM and ET and ensure corrective action.	1. Feasibility / Development 2. Design/Pre-Construction 3. Construction	1. CM and PM 2. PM 3. CM	1. CM 2. ET 3. CM
SOURCE: San José-Santa Clara Regional Wastewater Facility Headworks Improvements and New Headworks Addendum, March 2018.						

COUNCIL AGENDA: 6/19/18
FILE: 18-833
ITEM:

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL

FROM: Kerrie Romanow

SUBJECT: **SEE BELOW**

DATE: May 29,2018

Approved [signature] Date 6-5-18

SUBJECT: REPORT ON BIDS AND AWARD OF CONTRACT FOR 8684– POND A18 SOUTH GATE LEVEE REPAIR.

RECOMMENDATION

Report on bids and award of a construction contract for 8684 Pond A18 South Gate Levee Repair to the apparent low bidder Sweetwater Construction, Inc. for the base bid in the amount of $217,493 and approval of a construction contingency of 15 percent in the amount of $32,624.

OUTCOME

Award of this construction contract will allow for the necessary work to complete the Pond A18 South Gate Levee Repair Project (Project) at the San José-Santa Clara Regional Wastewater Facility. Approval of a 15 percent contingency will provide funding for any unanticipated work necessary for the completion of the project.

BACKGROUND

Pond A18 is owned and managed by the San Jose/Santa Clara Regional Wastewater Facility (RWF). It is surrounded by levees whereas the flow of water is managed by two hydraulic gate structures referred to as the North and South Gates.

A recent Geotechnical Engineering evaluation and condition assessment report has identified several critical issues at the South Gate Structure and adjacent levee. The results indicate that if the issues are not addressed urgently, the structure and associated levee would be at risk of failure. In addition, the heavy rainfall and high tide event during winter of 2016-2017 further deteriorated the levee condition.

This project is for the repair of failing sections of the levee on each side of the Pond A18 South Gate Structure using vertical sheet piles driven into the bay mud. This repair work required approval and permits from multiple regulatory agencies. Per requirements set in these permits, all work must be done during summer months and low tide events. In addition, all work must be completed by October 15, 2018 before the wet season begins. In preparation for the narrow construction window, City has already purchased required sheet piles for this repair work and they are currently stored on site for contractor use.

ANALYSIS

The bid process was initiated and a "Notice to Contractors" inviting qualified contractors to submit bids was posted on BidSync and San Jose Post Record on April 4, 2018. Two (2) bid packages were received and opened on April 27, 2017 with the following results:

Contractor	**Location**	**Bid Amount**	**Variance Over / (Under)**	
			Amount	**Percent**
Engineer's Estimate	----	**$281,000**	----	-----
Sweetwater Construction, Inc.	Benicia, CA	$217,493	$ (63,507)	(22.6%)
Condon Johnson & Associate, Inc..	Oakland, CA	$299,930	$18,930	6.7%

After the bid opening, City staff noticed clerical input error on the unit price for three items on the Bid Schedule of Quantities submitted by Sweetwater Construction, however the extensions were adding up correctly to the Total Bid Base. The clerical errors were verified with the bidder by the procurement team and was subsequently corrected on the Bid schedule of Quantities. Therefore, the Total Base Bid from Sweetwater Construction, Inc. remains unchanged and is correct as submitted.

The low bid for this solicitation came from Sweetwater Construction, Inc. and is 22.6% lower than the Engineer's Estimate.

Engineer's estimate anticipated a wider range of price variability than a typical public works project due to the specialized nature of the work (sheet pile installation on a levee in a marine environment) and the environmental monitoring and mitigation requirements of the project which could have some impacts on contractor productivity. The engineers estimate contained some conservatism to account for this anticipated variability.

City staff considers the amount of $217,493 reasonable for the work involved and recommends awarding the Pond A18 South Gate Levee Repair to Sweetwater Construction, Inc.

Construction contingencies for capital projects are established by Council Resolution No. 71319:

a. 5 percent of the total contract amount for street, sidewalk or park projects:
b. 10 percent of the total contract amount for utilities and building projects;
c. 15 percent of the total contract amount for building renovation projects;
d. Such other amount as may be approved by the City Council for a particular project.

Staff recommends a contingency of fifteen (15) percent for this project, to account for the complexities associated with the levee and existing gate structure repairs, environmental restrictions and the required monitoring from various permitting agencies that could impact duration and completion of the project.

EVALUATION AND FOLLOW-UP

No subsequent City Council action on this issue is necessary.

PUBLIC OUTREACH

To solicit contractors, this project was advertised in the *San José Post Record* and the complete bid package and project information was made available on *BidSync*. This memorandum will be posted on the City's website for the Council Agenda of June 19, 2018.

COORDINATION

This project and memorandum have been coordinated with the City Manager's Budget Office and the City Attorney's Office.

COMMISSION RECOMMENDATION/INPUT

This item is scheduled to be heard at the June 14, 2018 TPAC meeting. A supplemental memorandum with the committee's recommendation will be included in an amended June 19, 2018 City Council meeting agenda.

COST IMPLICATIONS

1. AMOUNT OF RECOMMENDATION/COST OF PROJECT: $217,493

Project Delivery*	$447,140
Construction	$217,493
Contingency	$32,624
City Purchased Material (Sheet Piles)	$180,147
Total Project Costs	**$877,404**

** Project delivery includes $246,576 for design and bid, $155,564 for consultant construction support services including required environmental monitoring, $45,000 construction management & inspection. The estimated high project delivery cost mainly due to specialized nature of the project requiring environmental permitting from multiple agencies, monitoring and mitigation.*

2. COST OF AGREEMENT/CONTRACT: $217,493
3. SOURCE OF FUNDING: 513 – San José-Santa Clara Treatment Plant Operating Fund
4. OPERATING COSTS: This contract will have no additional impact on the San-José-Santa Clara Treatment Plant Operating Fund or the General Fund.

BUDGET REFERENCE

The table below identifies the fund and appropriations proposed to fund the contract recommended as part of this memorandum and remaining project costs, including project delivery, construction, and contingency costs.

Fund #	Appn #	Appn. Name	Current Total Appn	Amt for Contract	2017-2018 Adopted Operating Budget Page	Last Budget Action (Date, Ord. No.)
513	0762	NP/EQUIP-ENVIRONMENTAL SVCS	$34,082,102	$217,493	1037	10/17/2017 30014

CEQA

Mitigated Negative Declaration, File No. PP17-046

/s/
KERRIE ROMANOW
Director, Environmental Services

For questions please contact Ashwini Kantak, Assistant Director, Environmental Services Department at 408-975-2553.

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

MAY 1 - MAY 31, 2018

	Description of Contract Activity [1]	Fiscal Year	Req#/ RFP#	PO#	Vendor/Consultant	Original $ Amount	Start Date	End Date	Additional $ Amount	Total $ Amount	Comments
1	SODIUM BISULFITE	17-18	24253	54305	UNIVAR USA INC	560,000	07/01/18	06/30/18	80,000	640,000	
2	CATHODIC PROTECTION SYSTEM TESTING, MAINTENANCE AND REPAIR FOR THE SOUTH BAY WATER RECYCLING PIPELINE AND THE POTABLE MUNICIPAL WATER SYSTEM AS NEEDED.	17-18	24402	54537	CORRPRO COMPANIES INC	195,000	08/01/17	07/31/18	22,000	217,000	SBWR
3	WELDING EQUIPMENT SERVICE, COMPRESSED GASES & RELATED SUNDRIES	17-18	26008	55764	AIRGAS USA LLC	100,000	03/17/18	03/16/19			60K RWF MAINT & 40K WSP LAB
4	CA STATE CONTRACT VEHICLE PURHCASES	17-18	26496	80575	DOWNTOWN FORD	741,041	05/23/18	12/31/18			$154,682 ESD: *F150 CREW CAB 4X4 (RWF OPS-RSM) *(3) F150 CREW CAB SB 4X2 (RWF PAINT, ELEC & INSTR) *FORD TRANSIT 350 CARGO LONG WB 148" (WSP-SOURCE CONTROL)
5	SERVICE ORDER NO. 02: M4 SWITCHGEAR REPLACEMENT AND G3 & G3A SWITCHGEAR REMOVAL	17-18		AC 27586	BROWN & CALDWELL	668,597	5/10/18	6/30/21			MASTER AGREEMENT TERM: 5/20/16-6/30/21, $5M

[1] This report captures completed contract activity (Purchase Order Number, Contract Term, and Contract Amount)