



**BOARD MEETING AGENDA**  
**Monday, November 13, 2017**  
**Regular Meeting - 7:00 P.M.**

**Union Sanitary District**  
**Administration Building**  
**5072 Benson Road**  
**Union City, CA 94587**

**Directors**  
Manny Fernandez  
Tom Handley  
Pat Kite  
Anjali Lathi  
Jennifer Toy

**Officers**  
Paul R. Eldredge  
*General Manager/  
District Engineer*

Karen W. Murphy  
*Attorney*

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|             | 1.  | Call to Order.  |  |
|             | 2.  | Pledge of Allegiance.   |  |
|             | 3.  | Roll Call.  |  |
| Motion      | 4.  | Approve Minutes of the Meeting of October 23, 2017.   |  |
|             | 5.  | Written Communications.   |  |
|             | 6.  | Oral Communications.<br><small><i>The public may provide oral comments at regular and special Board meetings; however, whenever possible, written statements are preferred (to be received at the Union Sanitary District office at least one working day prior to the meeting). This portion of the agenda is where a member of the public may address and ask questions of the Board relating to any matter within the Board's jurisdiction that is not on the agenda. If the subject relates to an agenda item, the speaker should address the Board at the time the item is considered. Oral comments are limited to three minutes per individuals, with a maximum of 30 minutes per subject. Speaker's cards will be available in the Boardroom and are to be completed prior to discussion.</i></small> |  |
| Motion      | 7.  | Authorize the General Manager to Execute Task Order No. 2 with Brown and Caldwell for the Emergency Outfall Improvements Project <i>(to be reviewed by the Engineering and Information Technology Committee).</i>   |  |
| Motion      | 8.  | Authorize the General Manager to Execute an Agreement and Task Order No. 1 with Tanner Pacific, Inc for the Twin Force Main Relocation – Phase 1 Project <i>(to be reviewed by the Engineering and Information Technology Committee).</i>   |  |
| Motion      | 9.  | Award the Construction Contract for the Primary Digester No. 3 Rehabilitation Project to Monterey Mechanical Company <i>(to be reviewed by the Engineering and Information Technology Committee).</i>   |  |
| Motion      | 10. | Consider a Resolution to Accept the Construction of the Headworks Knife Gate Valves 1-3 Replacement Project from D.W. Nicholson Corporation and Authorize Recordation of a Notice of Completion <i>(to be reviewed by the Engineering and Information Technology Committee).</i>  |  |
| Direction   | 11. | Review and Provide Direction on USD Video and Virtual Plant Tour.   |  |
| Information | 12. | Board Expenses for the 1 <sup>st</sup> Quarter of Fiscal Year 2018 <i>(to be reviewed by the Budget &amp; Finance Committee).</i>   |  |

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| Information | 13. | Submission of Annual Report to Union City for Fiscal Year 2017 <i>(to be reviewed by the Legislative Committee)</i> . |
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| Information | 14. | Report on the East Bay Dischargers Authority (EBDA) Meeting of October 19, 2017. |
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| Information | 15. | Check Register. |
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| Information | 16. | Committee Meeting Reports. <i>(No Board action is taken at Committee meetings):</i> <ul style="list-style-type: none"><li>a. Legislative Committee, Wednesday, November 8, 2017, at 10:30 a.m.<ul style="list-style-type: none"><li>• Director Lathi and Director Toy</li></ul></li><li>b. Engineering and Information Technology Committee – Thursday, November 9, 2017, at 9:15 a.m.<ul style="list-style-type: none"><li>• Director Fernandez and Director Kite</li></ul></li><li>c. Budget &amp; Finance Committee – Friday, November 10, 2017, at 11:00 a.m.<ul style="list-style-type: none"><li>• Director Handley and Director Toy</li></ul></li><li>d. Legal/Community Affairs Committee – will not meet.</li><li>e. Personnel Committee – will not meet.</li><li>f. Audit Committee – will not meet.</li></ul> |
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| Information | 17. | General Manager’s Report. <i>(Information on recent issues of interest to the Board)</i> . |
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|  | 18. | Other Business: <ul style="list-style-type: none"><li>a. Comments and questions. <i>Directors can share information relating to District business and are welcome to request information from staff.</i></li><li>b. Scheduling matters for future consideration.</li></ul> |
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|  | 19. | Adjournment – The Board will adjourn to a Special Meeting in the Boardroom on Monday, December 4, 2017, at 7:00 p.m. |
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The facilities at the District Offices are wheelchair accessible. Any attendee requiring special accommodations at the meeting should contact the General Manager’s office at (510) 477-7503 at least 24 hours in advance of the meeting. THE PUBLIC IS INVITED TO ATTEND



**LEGISLATIVE COMMITTEE MEETING**  
Committee Members: Director Lathi and Director Toy

**Directors**  
Manny Fernandez  
Tom Handley  
Pat Kite  
Anjali Lathi  
Jennifer Toy

**AGENDA**  
**Wednesday, November 8, 2017**  
**10:30 a.m.**

**Alvarado Conference Room**  
**5072 Benson Road**  
**Union City, CA 94587**

**Officers**  
Paul R. Eldredge  
*General Manager/  
District Engineer*

Karen W. Murphy  
*Attorney*

1. Call to Order

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2. Roll Call

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3. Public Comment

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4. Items to be reviewed for the Board meeting of November 13, 2017:
  - Submission of Annual Report to Union City for Fiscal Year 2017.

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5. Adjournment

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Items reviewed at committee meetings will be included in the agenda packet for the upcoming Board meeting. No action will be taken at committee meetings.

The Public may provide oral comments at regular and special Board meetings; however, whenever possible, written statements are preferred (to be received at the Union Sanitary District at least one working day prior to the meeting).

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THE PUBLIC IS INVITED TO ATTEND

**Directors**

Manny Fernandez  
Tom Handley  
Pat Kite  
Anjali Lathi  
Jennifer Toy

**ENGINEERING & INFORMATION TECHNOLOGY  
COMMITTEE MEETING**

Committee Members: Director Fernandez and Director Kite

**Officers**

Paul R. Eldredge  
*General Manager/  
District Engineer*

**AGENDA**

**Thursday, November 9, 2017  
9:15 A.M.**

Karen W. Murphy  
*Attorney*

**Alvarado Conference Room  
5072 Benson Road  
Union City, CA 94587**

**THIS MEETING WILL BE TELECONFERENCED WITH DIRECTOR KITE FROM THE EXTERIOR OF  
35040 NEWARK BOULEVARD, NEWARK, CALIFORNIA.**

1. Call to Order

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2. Roll Call

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3. Public Comment

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4. Items to be reviewed for the Board meeting of November 13, 2017:
  - Authorize the General Manager to Execute Task Order No. 2 with Brown and Caldwell for the Emergency Outfall Improvements Project.
  - Authorize the General Manager to Execute an Agreement and Task Order No. 1 with Tanner Pacific, Inc. for the Twin Force Main Relocation – Phase 1 Project.
  - Award the Construction Contract for the Primary Digester No. 3 Rehabilitation Project to Monterey Mechanical Company.
  - Consider a Resolution to Accept the Construction of the Headworks Knife Gate Valves 1-3 Replacement Project from D.W. Nicholson Corporation and Authorize Recordation of a Notice of Completion.

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5. Adjournment

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THE PUBLIC IS INVITED TO ATTEND



**BUDGET & FINANCE COMMITTEE MEETING**  
Committee Members: Director Handley and Director Toy

**Directors**  
Manny Fernandez  
Tom Handley  
Pat Kite  
Anjali Lathi  
Jennifer Toy

**AGENDA**  
**Friday, November 10, 2017**  
**11:00 a.m.**

**Alvarado Conference Room**  
**5072 Benson Road**  
**Union City, CA 94587**

**Officers**  
Paul R. Eldredge  
*General Manager/  
District Engineer*

Karen W. Murphy  
*Attorney*

1. Call to Order

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2. Roll Call

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3. Public Comment

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4. Items to be reviewed for the Board meeting of November 13, 2017:
  - Board Expenses for the 1<sup>st</sup> Quarter of Fiscal Year 2018.

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5. Adjournment

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Items reviewed at committee meetings will be included in the agenda packet for the upcoming Board meeting. No action will be taken at committee meetings.

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THE PUBLIC IS INVITED TO ATTEND

**MINUTES OF THE MEETING OF THE  
BOARD OF DIRECTORS OF  
UNION SANITARY DISTRICT  
October 23, 2017**

**CALL TO ORDER**

President Kite called the meeting to order at 7:00 p.m.

**PLEDGE OF ALLEGIANCE**

**ROLL CALL**

PRESENT: Pat Kite, President  
Anjali Lathi, Vice President  
Manny Fernandez, Secretary  
Jennifer Toy, Director  
Tom Handley, Director

STAFF: Paul Eldredge, General Manager  
Karen Murphy, District Counsel  
James Schofield, Collection Services Manager  
Robert Simonich, Fabrication, Maintenance, and Construction Manager  
Armando Lopez, Treatment and Disposal Services Manager  
Sami Ghossain, Technical Services Manager  
Laurie Brenner, Business Services Team Coach  
Gene Boucher, Human Resources Manager  
Michelle Powell, Communications and Intergovernmental Relations Coordinator

VISITORS: Alice Johnson, League of Women Voters  
Roelle Balan, Tri-City Voice Newspaper

**APPROVAL OF THE MINUTES OF THE MEETING OF OCTOBER 9, 2017**

It was moved by Director Handley, seconded by Vice President Lathi, to approve the Minutes of the Meeting of October 9, 2017. Motion carried unanimously.

**APPROVAL OF THE MINUTES OF THE SPECIAL MEETING OF OCTOBER 16, 2017**

It was moved by Vice President Lathi, seconded by Director Toy, to approve the Minutes of the Special Meeting of October 16, 2017. Motion carried unanimously.

**SEPTEMBER 2017 MONTHLY OPERATIONS REPORT**

This item was reviewed by the Legal/Community Affairs and Budget & Finance Committees. General Manager Eldredge stated there were no odor complaints in

September 2017. Business Services Coach Brenner provided an overview of the September Budget and Finance Report. The General Manager added that the District received a \$2.06 million deposit pursuant to the Cherry Street Pump Station funding agreement.

### **WRITTEN COMMUNICATIONS**

There were no written communications.

### **ORAL COMMUNICATIONS**

There were no oral communications.

### **REVIEW AND CONSIDER APPROVAL OF FINANCIAL AUDIT POLICY NO. 2020**

This item was reviewed by the Audit Committee. Business Services Coach Brenner stated that suggested policy revisions were due to changes in requirements by the Government Accounting Standards Board (GASB) and new rules from the Office of Management and Budget (OMB) that went into effect after the date of the last review. Staff recommended the Board review and consider approval of Financial Audit Policy No. 2020.

It was moved by Secretary Fernandez, seconded by Vice President Lathi, to Approve Financial Audit Policy No. 2020. Motion carried unanimously.

### **CONSIDER AMENDED AND RESTATED EMPLOYMENT AGREEMENT BETWEEN UNION SANITARY DISTRICT AND PAUL ELDREDGE**

District Counsel Murphy noted that the General Manager's performance evaluation took place on September 26, 2017 and October 2, 2017. District Counsel Murphy explained the new agreement includes an increase in salary effective September 1, 2017, and conforms this latest amendment and two prior amendments from September 2015 and November 2016 into one amended and restated agreement for ease of reference. In conformance with new revisions to the government code, Counsel orally stated for the record the previous salary of \$261,697.25 and the new salary of \$275,436.09. Staff recommended the Board Consider the Amended and Restated Employment Agreement Between Union Sanitary District and Paul Eldredge.

It was moved by Director Handley, seconded by Secretary Fernandez, to Approve the Amended and Restated Employment Agreement Between Union Sanitary District and Paul Eldredge. Motion carried unanimously.

## **REVIEW AND APPROVE PROPOSED CHANGES TO POLICY NO. 3030, BOARDMEMBER BUSINESS AND TRAVEL EXPENSE**

This item was reviewed by the Legal/Community Affairs Committee. General Manager Eldredge stated that Policy 3030 was reviewed and updated last year; subsequently, the staff Reimbursement and Travel Policy No. 2050 was reviewed and updated to include a change to use of a daily per diem rate for meal reimbursement, based on averages calculated using the Federal General Services Administration (GSA) Meals and Incidental Expenses (M&IE) rates for the applicable year. The proposed changes to the Board policy incorporate the same language from policy 2050 and updates the “tips” portion of the policy to be consistent with staff Reimbursement and Travel policy 2050. Staff recommended the Board review and approve changes to Board Policy No. 3030, Boardmember Business and Travel Expense.

District Counsel noted that, after discussion at the committee meeting, staff will research whether state requirements or restrictions exist for elected officials regarding the amount they may spend on lodging while traveling on District business. Counsel stated that when Policy 3030 was previously reviewed it was in compliance with state law.

It was moved by Vice President Lathi, seconded by Director Toy, to Approve Proposed Changes to Policy No. 3030. Motion carried unanimously.

### **INFORMATION ITEMS:**

#### **Cal-Card Quarterly Activity Report**

Business Services Coach Brenner presented the July through September 23, 2017 Activity Report. All questions were answered to the Board’s satisfaction.

#### **Check Register**

All questions were answered to the Board’s satisfaction.

### **COMMITTEE MEETING REPORTS:**

The Legal/Community Affairs, Budget & Finance, and Audit Committees met.

Audit Committee – The General Manager reported out on the committee meeting and gave an overview of the District’s audit. He noted this was the District’s first year using the new auditor, as well as a first audit for many of the District’s Business Services staff. A draft audit is anticipated to be received November 8, 2017, and final filing date is planned for November 27, 2017. The CAFR is anticipated to be presented to the Board at its December 4, 2017 special meeting.

### **GENERAL MANAGER’S REPORT:**

General Manager Eldredge reported the following:

- Union City’s State of the City Luncheon will be held Tuesday, October 24, 2017.



- A new staff report category has been developed. "Direction" will be noted to the left of items in this category on Board meeting agendas.
- The General Manager will provide an email update to the Board regarding the Business Services Manager recruitment.
- The Board will be updated on the August 2017 CASA conference at a future meeting.

**OTHER BUSINESS:**

Director Handley suggested that in the next two or three months, the Board should hold a closed session to discuss EBDA. The General Manager and District Counsel will discuss options regarding scheduling.

**ADJOURNMENT:**

The meeting was adjourned at 7:29 p.m. to the next Regular Board Meeting in the Boardroom on Monday, November 13, 2017, at 7:00 p.m.

SUBMITTED:

ATTEST:

\_\_\_\_\_  
MICHELLE POWELL  
COMMUNICATIONS & INTERGOVERNMENTAL  
RELATIONS COORDINATOR

\_\_\_\_\_  
MANNY FERNANDEZ  
SECRETARY

APPROVED:

\_\_\_\_\_  
PAT KITE  
PRESIDENT

Adopted this 13<sup>th</sup> day of November 2017



**Directors**  
Manny Fernandez  
Tom Handley  
Pat Kite  
Anjali Lathi  
Jennifer Toy

**Officers**  
Paul R. Eldredge  
*General Manager/  
District Engineer*

Karen W. Murphy  
*Attorney*

**DATE:** November 6, 2017

**MEMO TO:** Board of Directors - Union Sanitary District

**FROM:** Paul R. Eldredge, General Manager/District Engineer  
Sami E. Ghossain, Manager of Technical Services  
Raymond Chau, CIP Coach  
Andrew Baile, Assistant Engineer

**SUBJECT:** Agenda Item No. 7 - Meeting of November 13, 2017  
**Authorize the General Manager to Execute Task Order No. 2 with Brown and Caldwell for the Emergency Outfall Improvements Project**

### **Recommendation**

Staff recommends the Board authorize the General Manager to execute Task Order No. 2 with Brown and Caldwell in the amount of \$225,812 for the design of the Emergency Outfall Improvements Project.

Funds for the Project are budgeted in the Renewal and Replacement Fund.

### **Background**

The District's Alvarado Effluent Pump Station (AEPS) normally pumps the final effluent from the Alvarado Wastewater Treatment Plant (WWTP) to the EBDA system where the combined effluent from the EBDA agencies is dechlorinated and discharged from the EBDA Common Outfall to Lower San Francisco Bay. The District has an NPDES permit to discharge final effluent to Old Alameda Creek during wet weather and when the capacity of the EBDA system is maximized. Final effluent is conveyed from the AEPS to the south channel of Old Alameda Creek, located west of the WWTP, through the Emergency Outfall pipeline that varies in diameter between 30 and 60 inches. A system of valves and piping located at the WWTP control the flow through the Emergency Outfall flap gate and into the creek. The District doses calcium thiosulfate to

dechlorinate the final effluent prior to discharging to the creek. Figures 1 shows a site plan of the WWTP final effluent system.

The creek is influenced by the tidal cycle; the Emergency Outfall flap gate is submerged below water during high tides and is exposed during low tides (Figure 2). This presents a maintenance issue as the water brings in sediment that routinely buries the flap gate and promotes vegetation growth, which then impedes the operation of the flap gate. The District currently inspects the flap gate every month and schedules staff to clear the sediment and vegetation growth when necessary. Figures 3 and 4 show the buildup of sediment and vegetation growth prior to the flap gate maintenance.

The purpose of this Project is to make improvements to the Emergency Outfall to reduce the maintenance activities associated with the Emergency Outfall flap gate and increase the reliability of the Emergency Outfall operation during wet weather events.

#### **Task Order No. 1 – Preliminary Design Services**

In September 2016, staff prepared a Request for Proposal to provide engineering design services for the Project and issued it to Brown and Caldwell (B&C), Carollo Engineers, Water Works Engineers, West Yost Associates, and Woodard & Curran. Staff received proposals from B&C and West Yost Associates. The other consultants did not submit proposals due to the unavailability of personnel. Staff reviewed the two proposals and selected B&C due to their project approach and past design experience with similar facilities.

On March 2, 2017, staff executed an agreement and Task Order No. 1 with B&C in the amount of \$91,363 to conduct predesign services for the Project. The predesign services included an initial screening of alternative improvements to the outfall, conceptual-level cost estimates, hydraulic analyses, evaluation of potential permitting requirements, and drawings that show the plan and profile of the alternative improvements. The preliminary construction estimate based on the conceptual-level design is approximately \$805,000.

#### **Task Order No. 2 – Final Design Services**

The final design will include the following features:

- A vertical offset in the existing pipe on the channel side of the levee to raise the outfall discharge elevation
- Possible rehabilitation of the existing CMP portion of the pipe
- A parallel redundant outfall pipeline extending from the outlet structure to approximately 10 feet inside the treatment plant site
- A concrete outlet structure with wingwalls and headwall and flap gates for isolation of the pipelines from tidal waters

- Slope erosion protection below outlet structure
- Means for draining the existing emergency outfall pipeline consisting of either a connection to existing plant drain facilities or provision of a manway to serve as a sump pump insertion point
- Abandonment of existing CMP portion of emergency outfall
- Restoration of levee to match existing conditions.

The scope of services and fees of Task Order No. 2 are summarized below:

<b>Task</b>	<b>Task Description</b>	<b>Amount</b>
1	Project Management – Maintain project budget and schedule, coordination with subconsultants and District, and prepare monthly invoices and reports	\$8,220
2	Surveying – Conduct field surveys and prepare legal descriptions and plats for one temporary construction easement and one permanent easement for the emergency outfall facilities	\$14,818
3	CEQA Compliance – Prepare an Initial Study and Mitigated Negative Declaration to assess potential environmental impacts	\$19,781
4	Geotechnical Investigation – Drill two soil borings, analyze soil type, analyze for potential contaminants, and recommend excavation, shoring, and backfill requirements	\$56,361
5	Final Design – Preparation of 50, 90, and 100 percent construction bid documents	\$112,148
6	Pipe Rehabilitation – Design the rehabilitation of the outfall pipeline section that was constructed of corrugated metal pipe	\$5,923
7	Bid Period Services -Attend pre-bid conference, prepare addenda, and respond to questions from bidders	\$8,561
	<b>Total</b>	<b>\$225,812</b>

Brown and Caldwell initially submitted a cost proposal for Task Order No. 2 with a not-to-exceed fee of \$254,915 and staff negotiated the fee to \$225,812. The not-to-exceed fee of \$225,812 is 28% of the preliminary construction estimate of \$805,000. The fee percentage rate is high, but is not unusual for projects that include geotechnical, environmental, and permitting efforts. For example, the Force Main Access Improvements Project that was constructed in 2009 had a 49% total design-to-construction rate that included both the predesign and final design phase effort.

The \$225,812 fee includes a budget of about \$92,000, or 40% for three subconsultants to perform the site surveys, environmental and permitting services, and geotechnical investigation services. This level of effort is required due to the location of the outfall pipeline in Alameda County and Flood Control and Water Conservation District's (ACFC&WCD) jurisdiction, the unknown type of soil near the creek and levee road, the need to acquire new pipeline and temporary construction easements, and the proximity of the Project to potentially environmentally-sensitive receptors. Due to the complexity of the Project, and the need to comply with the requirements and standards of both the District and ACFC&WCD, staff believes the design and total not-to-exceed fees to be reasonable.

The task order amounts for the Project's agreement with B&C are summarized in the table below:

<b>TASK ORDER</b>	<b>DESCRIPTION</b>	<b>AMOUNT</b>
1	Preliminary Design Services	\$91,363
2	Final Design Services	\$225,812
	<b>Total</b>	<b>\$317,175</b>

Staff anticipates the design to be complete by Fall 2018 assuming a 180-day period for completing the permit process. However, the design completion could be delayed if the permit agencies take longer to process the permits and the permit conditions issued to the District require additional design considerations.

Staff recommends the Board authorize the General Manager to execute Task Order No. 2 with Brown and Caldwell in the amount of \$225,812 for the design of the Emergency Outfall Improvements Project.

PRE/SEG/RC/AB:ks

Attachments: Figures 1 and 2 – Site Plans  
Figures 3 and 4 – Existing Outfall Flap Gate and Access Ramp Photos  
Figure 5 – Vertical Offset of New Outfall Pipeline Schematic  
Figures 6 and 7 – ACFC & WCD Outlet Structure Photos  
Task Order No. 2



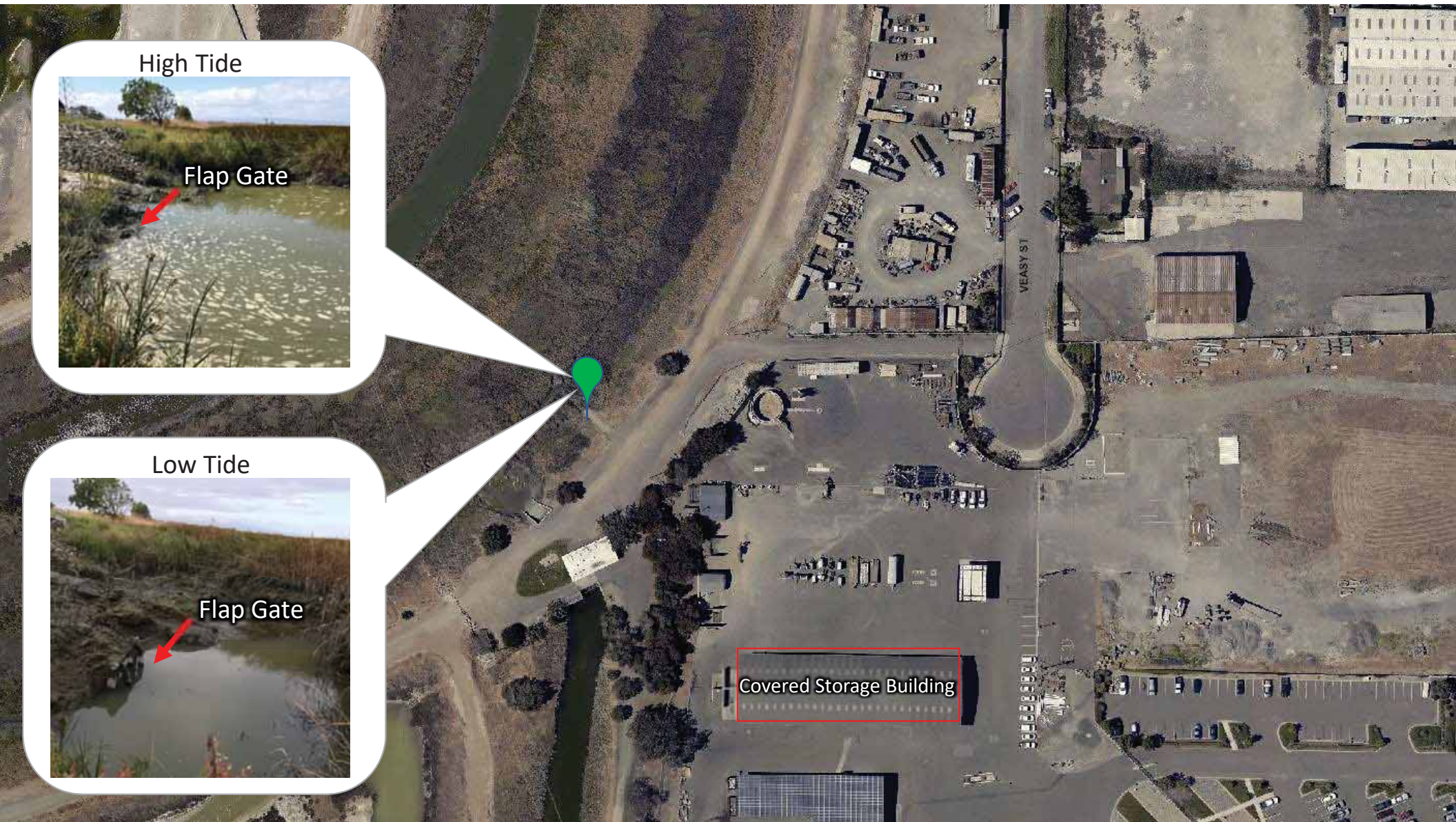
Figure 1: Site Plan



EBDA (Alvarado Effluent) Pump Station including pipelines to EBDA and the Emergency Outfall.



Figure 2: Emergency Outfall Improvements Site Location



Inset pictures show emergency outfall flap gate under current high and low tide conditions. Both photographs taken September 13, 2016.



Figure 3: Existing Outfall Flap Gate



The 2016 photograph was taken after maintenance had been performed, which included exercising of the flap gate and clearing of surrounding sediment. The 2017 photograph shows the current condition of the flap gate.

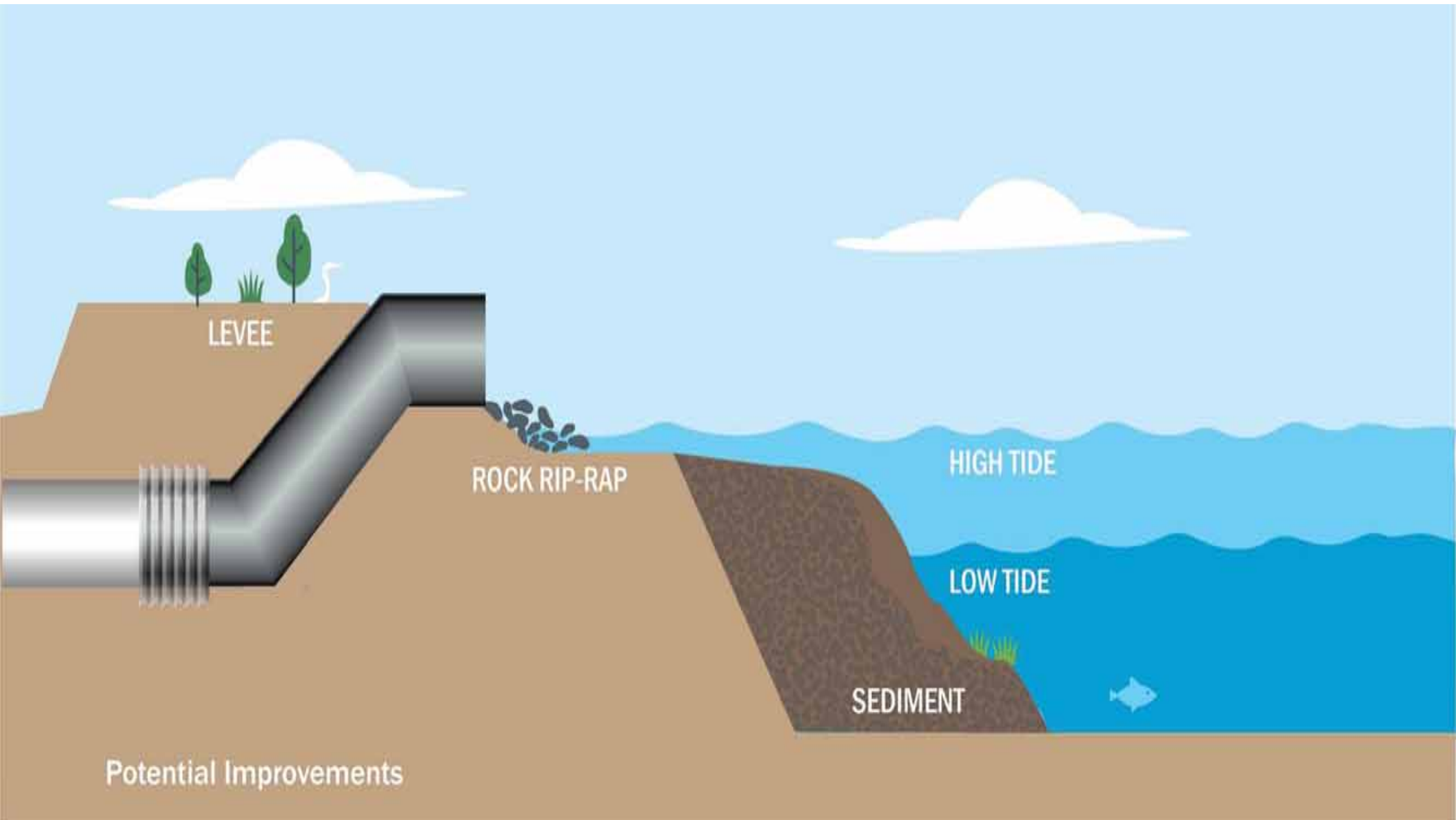


Figure 4: Access Ramp



Emergency Outfall Maintenance Ramp: Excavation spoils on side of ramp exhibiting vegetation growth.

Figure 5: Vertical Offset of New Pipe



Schematic of selected design from the preliminary design phase.



Figure 6: Existing ACFC&WCD Pump Station Outlet



Structure consists of concrete headwall, wingwalls and apron.



Figure 7: Existing ACFC&WCD Pump Station Outlet



The pump station discharges through flap gates in the headwall.

# EMERGENCY OUTFALL IMPROVEMENTS PROJECT

TASK ORDER NO. 2

to

AGREEMENT

BETWEEN

UNION SANITARY DISTRICT

AND

BROWN AND CALDWELL

FOR

PROFESSIONAL SERVICES

Dated March 2, 2017

## 1. PURPOSE

The emergency outfall discharges treated effluent into Old Alameda Creek. The flap gate at the end of the outfall pipe routinely becomes buried by sediment in the creek. This project will design improvements to the outfall to reduce maintenance requirements and increase the reliability of the outfall. The project also includes design of approximately 100 feet of redundant pipeline parallel to the existing emergency outfall.

The purpose of Task Order No. 2 is to provide professional engineering design and bid period services for the Emergency Outfall Improvements Project (Project). The Project will involve detailed design of improvements identified in the preliminary design conducted under Task Order No. 1, geotechnical investigation, property line adjustment and easement acquisition surveying support, CEQA compliance, and bid-period services. Construction period services are not included.

## 2. PROJECT COORDINATION

All work related to this task order shall be coordinated through the District's Project Manager, Andrew Baile.

## 3. SCOPE OF SERVICES

The task numbers in this Scope of Services are associated with the cost data presented in Exhibit A.

### Task 1: Project Management

The Engineer shall develop and maintain a project management plan, maintain project budget and schedule, coordinate with subconsultants and District, conduct internal project meetings, and prepare monthly invoices and project status reports.

#### Assumptions:

- Detailed design and bid period activities shall be completed within 10 months of Notice to Proceed.

#### Deliverables:

- Monthly Invoices and Project Status Reports

### Task 2: Surveying

The District intends to adjust the wastewater treatment plant property line, as well as acquire temporary and permanent easements for the emergency outfall facilities.

Kier & Wright, as a subconsultant to the Engineer, shall assist the District with filling out the Lot Line Adjustment Application and prepare the Plat & Legal Descriptions for the adjusted parcels and existing parcels for the Certificate of Compliance to be recorded by the District's Title Company. The District will be provided a Legal Description and Plat to be included within the Grant Deed prepared and recorded by the District's Title Company. This work will be based on the Title Reports for each affected parcel affected provided by the District, and revised property line identified by the District.

Kier & Wright, as a subconsultant to the Engineer, shall prepare legal descriptions and accompanying plats for one temporary easement and one permanent easement for the emergency outfall facilities.

## *Emergency Outfall Improvements Project*

Task Order No. 2

Page 3

### Assumptions:

- District will initiate contact with Alameda County Flood Control & Water Conservation District and actively participate in lot line and easement acquisition discussions.
- No legal or real-estate services, including appraisals, are included for negotiating lot line adjustment or easement acquisitions.
- Costs for Agency fees for the Lot Line Adjustment Application, Grant Deed preparation and Title Reports for each parcel affected are the responsibility of the District.
- No survey field work is included unless specifically identified. Additional survey services can be provided for an additional fee if there is need for survey fieldwork or filing of a record of survey.

### Deliverables:

- Plat and legal descriptions for adjusted and existing parcels for lot line adjustment
- Plat and legal description for one temporary easement
- Plat and legal description for one permanent easement

### Task 3: CEQA Compliance

An Initial Study / Mitigated Negative Declaration (IS/MND) will be prepared by Scheidegger & Associates with support from WRA, Inc., as a subconsultant to the Engineer. The IS/MND will include preparation of a draft IS for District review, a final IS/MND for public and agency review, and response to comments received. Because of the project location, the IS/MND will consider all issues on the CEQA checklist, but will be focused on those issues deemed to be applicable to the project with biological issues receiving the emphasis. A records search for cultural resources will be completed by the Northwest Information Center. Selected information from WRA's Biological Resource Assessment will be included in the text of the IS while the full Biological Resource Assessment report will be appended.

### Assumptions:

- Attendance of a District Board meeting will not be required.
- IS/MND filing fees to be paid by District.

### Deliverables:

- Draft Initial Study, electronic copy
- Final Initial Study/Mitigated Negative Declaration, 25 hard copies
- Written Response to Comments
- Additional Correspondence as Required

#### Task 4: Geotechnical Investigation

Fugro, Inc., as a subconsultant to the Engineer, shall conduct a geotechnical investigation at the emergency outfall in Old Alameda Creek to determine the characteristics of soils in the area of improvements. Potential mitigation measures will be incorporated into the design of improvements based on the outcome of the geotechnical investigation.

The geotechnical investigation will include a geotechnical review of available soil and geologic data, the drilling of two (2) exploratory borings through the levee near the outfall to determine the subsurface soil conditions in the levee, limited environmental testing of soils, and the preparation of a geotechnical investigation report. The following activities will be performed as part of this task:

- Review geotechnical and geologic site conditions based on the subsurface data from previous work near the site, existing geologic and seismic hazard maps, and other generally available related materials.
- Perform site reconnaissance to observe the existing site conditions from a geotechnical and geologic viewpoint.
- Perform two exploratory borings, one to a depth of 50 feet deep and the second to approximately 30 feet deep, and present the results in the geotechnical report. The soil cuttings shall be placed in drums and disposed of offsite. The cost of offsite disposal is included with this work.
- Collect up to eight (8) soil samples for testing from the upper 20 feet of the exploratory borings (4 each) proposed at the site. The purpose of the testing is to preliminarily evaluate onsite soils for the presence of contaminants. Please note that the groundwater is not being sampled or tested and the soil testing proposed herein would not be sufficient to profile the soil for waste disposal acceptance or an unrestricted reuse scenario. Soil samples will be tested for the following:
  - Total petroleum hydrocarbons as gasoline (TPHg) using EPA Method 8015m/8021
  - Total petroleum hydrocarbons as diesel and motor oil (TPHd and TPHmo) using EPA Method 8015m with silica gel cleanup
  - Volatile organic compounds (VOCs) using EPA Method 8260
  - Semi-volatile organic compounds (SVOCs) using EPA Method 8270 SIM
  - 17 Title 22 metals using EPA Methods 6020
  - Organochlorine Pesticides using EPA Method 8081
  - Polychlorinated Biphenyls (PCBs) using EPA Method 8082, and/or Asbestos using CARB 435 Method with 400-point count
- Identify the geotechnical and geologic conditions (e.g., soil, groundwater, fill thickness, potential for compressible soils, and geologic hazards such as surface fault rupture, seismic shaking and liquefaction) that could impact the outfall improvements project.



- Make recommendations for:
  - Site preparation, earthwork and pipeline subgrades
  - Buried pipe
  - Excavation of levee and repair in accordance with the U.S. Army Corps of Engineers recommendations
  - Corrosion and expansion characteristics of on-site soils
  - Erosion control on the levee slope
- Prepare a geotechnical report for the project summarizing the findings. This report will also include a summary of the environmental test results.

Assumptions:

- Borings will be located adjacent to the emergency outfall pipeline on the top of the levee or within the plant fence, and therefore, the site will be accessible by truck mounted drilling rig.
- Drums containing drill spoils and fluid will remain onsite following drilling while testing and disposal are arranged. An additional fee will be required if cuttings are found to contain hazardous materials requiring special disposal.
- Drilling is assumed to be completed in one (1) day based on normal working hours.

Deliverables:

- Draft Geotechnical Report
- Final Geotechnical Report

Task 5: Final Design

The Engineer shall develop contract documents and cost estimates for the project. The Engineer shall submit 7 sets of plans and specifications to the District for review at the 50, 90, and 100 percent completion levels. Specification submittal at the 50 percent level will include only a list of the anticipated specifications. Review meetings/workshops will be conducted at the 50 and 90 percent completion levels. Comments will be addressed in writing. The following activities will be performed as part of this task:

- Drawings – Drawings will be prepared using AutoCAD conforming to District digital submittal guidelines. The drawings will be prepared using the topographic survey conducted for the project in Task Order No. 1, commercially available aerial photography, and available record drawings provided by the District.
- Specifications – Specifications will be prepared in Microsoft Word format. BC will prepare technical specifications and make revisions as appropriate to the front-end specifications for the project in CSI format and based on

District Standards. District will provide the District's front end specifications (Divisions 0 and 1) in Microsoft Word Format.

- Cost Estimate – Opinions of probable construction cost will be developed at the 50 and 90 percent completion levels.

The design will include the following:

- A vertical offset in the existing pipe on the channel side of the levee to raise the outfall discharge elevation
- Possible rehabilitation of the existing CMP portion of the pipe
- A parallel redundant outfall pipeline extending from the outlet structure to approximately 10 feet inside the treatment plant site
- A concrete outlet structure with wingwalls and headwall and flap gates for isolation of the pipelines from tidal waters
- Slope erosion protection below outlet structure
- Means for draining the existing emergency outfall pipeline consisting of either a connection to existing plant drain facilities or provision of a manway to serve as a sump pump insertion point
- Abandonment of existing CMP portion of emergency outfall
- Restoration of levee to match existing conditions

Assumptions:

- The design shall conform to the applicable portions of the District's design standards. The Engineer shall notify the District of any deviations prior to implementation of the design elements. The District shall provide a copy of the design standards to the Engineer.
- Cofferdams for isolation of the work site will be the responsibility of the Contractor and their design will not be included
- Rehabilitation design of existing emergency outfall pipeline through the levee is not included
- Up to two site visits will be conducted during the design
- The District will provide one set of consolidated review comments on the Draft Design submittals.
- Opinions of probable construction cost will be developed in accordance with the American Association of Cost Engineers at the level of detail corresponding to the current completion level.
- Traffic control drawings will not be required.
- Sediment transport or HEC-RAS modeling of Old Alameda Creek is not included.
- The existing effluent pumping system will not be modified.
- The Engineer shall provide an updated system curve between the surge tower and the improved outfall for both low and high tide, assuming all flow is going to the outfall.
- Project meetings are anticipated to last two hours.

- Cathodic protection design is not included.
- Design activities will be suspended after the 50 percent completion level until the CEQA process is completed and all permitting conditions are known in order to allow any requirements to be incorporated into the 90 percent completion level design.
- Only minor comments of a typographical and editorial nature are anticipated on the 100 percent design submittal. Changes to design approach or the addition or subtraction of work items at after the 100 percent design submittal may require additional budget.

Deliverables:

- Draft plans and specifications at the 50, 90, and 100 percent completion levels, 7 sets each
- Opinion of probable construction cost at the 50 and 90 percent completion levels
- Meeting minutes from the 50 and 90 percent review meetings/workshops
- Final plans and specifications will be provided in electronic format for bid advertisement and distribution.

Task 6: Pipeline Rehabilitation

This task includes rehabilitation design for the existing portion of the emergency outfall pipeline from the improved outfall to approximately 10 feet inside the plant fence.

Assumptions:

- Internal pipeline inspection is not included in this task and is anticipated to occur when the outfall pipeline is dewatered during construction of the outfall improvements.
- Rehabilitation design of one pipeline rehabilitation technology shall be incorporated into the Bid Documents included in Task 5 and can be included as a revocable bid item.

Deliverables:

- One specification for pipeline rehabilitation incorporated into the project specifications.
- Incorporation of pipeline rehabilitation design into the plan sheets included in Task 5.

### Task 7: Bid Period Services

This task assumes that District will be responsible for bid advertising, contract document distribution, and review of bids. The Engineer will address bidder technical questions regarding the design during the bidding process. Bidder questions will be submitted to the District and the District will send to the Engineer questions for consideration. Responses to questions will be conveyed via addendum. Because the effort required to respond to bidder's questions is beyond Engineers' control, additional effort may be required for this task. Engineer will not exceed the task budget without prior written approval.

#### Assumptions:

- Pre-bid Conference. The District will prepare the agenda for the pre-bid conference. The Engineer shall attend one pre-bid conference and one site tour and provide a brief description of the project requirements.
- Bid Period Support. This task includes preparation of one addendum (if necessary). The addendum will be provided to the District in electronic format for the District to distribute.
- Conformed Documents. The Engineer shall incorporate the addendum items into the specific drawing and specification sections of the Bid Documents. The Engineer shall prepare the Conformed Documents with addendum information prior to contractor's "Notice to Proceed." The Engineer assumes a single update after all addendum additions.
- Estimated effort is budgeted at 52 hours.

#### Deliverables:

- One addendum in electronic format (PDF)
- Conformed Documents in electronic format (PDF)

## 4. DELIVERABLES

The deliverables under each task of Task Order No. 2 are summarized below:

#### Task 1:

- Monthly Invoices and Project Status Reports
- Meeting Minutes from Kickoff Meeting

Task 2:

- Plat and legal descriptions for adjusted and existing parcels for lot line adjustment
- Plat and legal description for one temporary easement
- Plat and legal description for one permanent easement

Task 3:

- Draft Initial Study, electronic copy
- Final Initial Study/Mitigated Negative Declaration, 25 hard copies
- Written Response to Comments
- Additional Correspondence as Required

Task 4:

- Draft Geotechnical Report
- Final Geotechnical Report

Task 5:

- Draft plans and specifications at the 50, 90, and 100 percent completion levels, 7 sets each
- Opinion of probable construction cost at the 50 and 90 percent completion levels
- Meeting minutes from the 50 and 90 percent review meetings/workshops
- Final plans and specifications, in electronic format for bid advertisement and distribution.

Task 6:

- One pipeline rehabilitation specification
- Pipeline rehabilitation incorporated into project plans

Task 7:

- One addendum in electronic format (PDF)
- Conformed Documents in electronic format (PDF)

5. NOT USED

6. NOT USED

7. PAYMENT TO THE ENGINEER

Payment to the Engineer shall be as called for in Article 2 of the Agreement. The Multiplier for this work shall be 3.22, the profit shall be 13 percent, and the not-to-exceed amount shall be \$225,812. A summary of the anticipated distribution of cost and manpower between tasks is shown in Exhibit A.

The following table summarizes the previously-executed and proposed task orders and amendments under the Agreement:

<b>Task Order / Amendment</b>	<b>Not to Exceed Amount</b>	<b>Board Authorization Required?</b>	<b>District Staff Approval</b>
Task Order No. 1 – Predesign Services	\$91,363	No	Paul Eldredge
Task Order No. 2 – Design Services	\$225,812	Yes	Paul Eldredge
<b>Total</b>	<b>\$317,175</b>		

8. TIME OF COMPLETION

All work defined in this Task Order shall be complete in 300 calendar days after the execution of this Task Order and subject to the conditions of Article 3 of this Agreement. The anticipated milestone dates are as follows:

Deliverable/Workshop	Anticipated Date
CEQA Compliance	4 months after Notice to Proceed
Geotechnical Investigation	2 months after Notice to Proceed
Survey	6 months after Notice to Proceed
50% Design Submittal	3 months after Notice to Proceed
90% Design Submittal	2 months after 50% comments received and 1 month after draft permits received
100% Design Submittal	4 Weeks after 90% comments received
Final Plans and specifications	2 Weeks after 100% comments received

9. KEY PERSONNEL

Key engineering personnel assigned to this Task Order No. 2 are as follows:

<u>Role</u>	<u>Key Person to be Assigned</u>
Principal-in-Charge	Grace Chow
Project Manager / Engineer	Colin Dudley
Permitting Support	Paul Scheidegger
Geotechnical Support	Fugro
Survey	Kier & Wright

Key personnel shall not be changed except in accordance with Article 8 of the Agreement.

IN WITNESS WHEREOF, the parties hereto have made and executed this Task Order No. 2 as of November \_\_\_\_, 2017 and therewith incorporate it as part of the Agreement.

DISTRICT

ENGINEER

Union Sanitary District

Brown and Caldwell

By: \_\_\_\_\_  
Paul R. Eldredge, P.E.  
General Manager/District Engineer

By: \_\_\_\_\_  
Grace Chow, P.E.  
Vice President

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Union Sanitary District (CA) -- Emergency Outfall Final Design																						
		Dudley, Colin O	Rouhani, Shouhreh	Belkows, Peter H	Foged, Nathan H	Cloyd, Delaney	Wilkins, Eric J	Dummer, Catherine A	McNamee, Danna E	Cardoso, Kevin S				Other Travel		Scheidegger Associates	Fugro	Kier & Wright				
Phase	Phase Description	PM	Project Assistant	Tech. Advisor QA/QC	Engineer (Scour/ Erosion)	Staff Engineer	Structural Engineer	Estimator	Word Processing	Drafting	Total Labor Hours	Total Labor Effort	APC		Total ODCs	Cost	Cost	Cost	Total Sub Cost	Total Expense Cost	Total Expense Effort	Total Effort
001	Project Management	\$174.81 20	\$108.40 20	\$288.43 7	\$228.33 0	\$112.27 0	\$188.33 0	\$173.71 0	\$107.53 0	\$164.25 0	47	7,853	368	0	0	0	0	0	0	0	368	8,220
002	Surveying	4	0	0	0	8	0	0	0	0	12	1,597	96	0	0	0	0	12,500	12,500	12,500	13,221	14,818
003	CEQA Compliance	4	0	0	0	12	0	0	0	7	23	3,196	184	0	0	15,620	0	0	15,620	15,620	16,585	19,781
004	Geotechnical Investigation	2	0	0	0	2	0	0	0	0	4	574	32	0	0	0	53,100	0	53,100	53,100	55,787	56,361
005	Final Design	130	0	38	24	140	80	32	28	167	639	106,886	5,112	150	150	0	0	0	0	150	5,262	112,148
006	Pipe Rehabilitation	16	0	2	0	20	0	0	0	0	38	5,619	304	0	0	0	0	0	0	0	304	5,923
007	Bid Period Services	16	0	4	0	16	0	0	0	13	49	8,119	392	50	50	0	0	0	0	50	442	8,561
GRAND TOTAL		192	20	51	24	198	80	32	28	187	812	133,845	6,488	200	200	15,620	53,100	12,500	81,220	81,420	91,969	225,812

Labor Multiplier: 3.2205

5 percent markup on Subconsultants

\$8/hr Associated Project Costs

Labor rates for 2018 will include a 3% escalation over 2017 labor rates. Escalation is included in the total labor effort above



**Directors**

Manny Fernandez  
Tom Handley  
Pat Kite  
Anjali Lathi  
Jennifer Toy

**Officers**

Paul R. Eldredge  
*General Manager/  
District Engineer*

Karen W. Murphy  
*Attorney*

**DATE:** November 6, 2017

**MEMO TO:** Board of Directors - Union Sanitary District

**FROM:** Paul R. Eldredge, General Manager/District Engineer  
Sami E. Ghossain, Manager of Technical Services  
Rollie Arbolante, Customer Service Team Coach

**SUBJECT:** Agenda Item No. 8 - Meeting of November 13, 2017  
**Authorize the General Manager to Execute an Agreement and Task Order No. 1 with Tanner Pacific, Inc. for the Twin Force Main Relocation – Phase 1 Project**

**Recommendation**

Staff recommends the Board authorize the General Manager to execute an Agreement and Task Order No. 1 with Tanner Pacific, Inc. in the amount of \$290,000 to provide construction management and inspection services for the Twin Force Main Relocation – Phase 1 Project. This project is funded by the developer, William Lyon Homes.

**Background**Development Background

In September 2011, the City of Newark approved the Dumbarton Transit-Oriented Development Specific Plan. The plan includes the construction of up to 2,500 residential units, a neighborhood retail center, future transit station, and necessary infrastructure to support these uses. William Lyon Homes (WLH) is the developer proposing to begin construction of 553 residential units for a portion of the development known as the Torian property.

The District owns and operates twin 33-inch diameter reinforced concrete force mains that convey wastewater flows from the Irvington Pump Station to the Alvarado Treatment Plant in Union City. The force mains traverse the development from south to north where it crosses an Alameda County Flood Control channel. The force mains continue within an easement on a proposed wetlands parcel and within the Hickory Street right-of-way, then within an easement

over two private properties, and finally across the City and County of San Francisco (CCSF) right-of-way and the San Mateo County Transit right-of-way before connecting to the Newark Pump Station.

Part of the Torian property development involves creation of a wetland preserve at the southwestern corner of the property to partially mitigate wetlands fill over areas. A portion of the USD force main runs beneath the proposed Wetland Reserve, and, as part of William Lyon Home's permitting for the Torian Project, the Regional Water Quality Control Board's 401 permit condition requires the developer to obtain authorization from the District Board.

#### Force main Relocation and Agreement

District staff required WLH to submit a feasibility report to investigate the impacts of the development on the existing force mains. The feasibility report was extensively reviewed, and a presentation was provided at a special Board workshop held March 9, 2015, with a follow-up staff report and resolution that was approved by the Board at the Board Meeting of April 13, 2015. Subsequently, the Board approved Resolution No. 2819, authorizing execution of a pipeline relocation agreement with WLH on October 16, 2017.

In addition to defining the phasing and the scope of work, the agreement, among other things, included the following:

- Construction Management selection and cost responsibility (USD selection; WLH cost)
- Construction work plan detailing protection of the existing force mains during construction
- Limits of the force main relocation, phasing of the work
- Demolition of the old Newark Treatment Plant as part of Phase I, at no cost to the District
- Details for a concrete cap, as an interim measure, to allow the construction of Hickory Street to take place while existing force mains are in operation

Construction will include the relocation of a portion of the District's twin force mains (see attached location map) as well as the construction of a concrete cap, to allow the construction of Hickory Street by William Lyon Homes, and the demolition of the old Newark Treatment Plant. Plans for both projects are nearing District approval.

#### **Construction Management and Inspection Services – Agreement and Task Order No. 1**

In September 2017, staff prepared a Request for Qualifications/Proposal to provide construction management services for the Project and issued it to Anchor CM, Harris and Associates, and Tanner Pacific, Inc. Brown and Caldwell, Covello, and Jacobs Engineering indicated they will not submit proposals due to the unavailability of personnel. Staff received proposals from the first three firms and selected Tanner Pacific, Inc., due to their project approach and past design experience with similar facilities.

The purpose of the Agreement and Task Order No. 1 is to authorize construction management and inspection services to Tanner Pacific, Inc. for three elements of the project:

- 1) Hickory Street Sanitary Sewer Force Main Concrete Cap,
- 2) The Twin Force Main Relocation – Phase 1, and
- 3) Demolition of the old Newark Treatment Plant.

The total negotiated cost for the proposed services is \$290,000 which represents 4.2% of the total estimated construction cost for all three elements of the project. In accordance with the Pipeline Relocation Agreement, WLH is ultimately responsible for the cost of construction management and will reimburse the District for the costs incurred under this task order.

The scope of work under Task Order No. 1 includes construction administration; facilitation of project meetings; processing of construction documents between the contractor, the design consultant, and the District; field quality control; coordination of field testing; and, project closeout inspection and paperwork.

The task order amount for the Project's agreement with Tanner Pacific, Inc. is summarized in the table below:

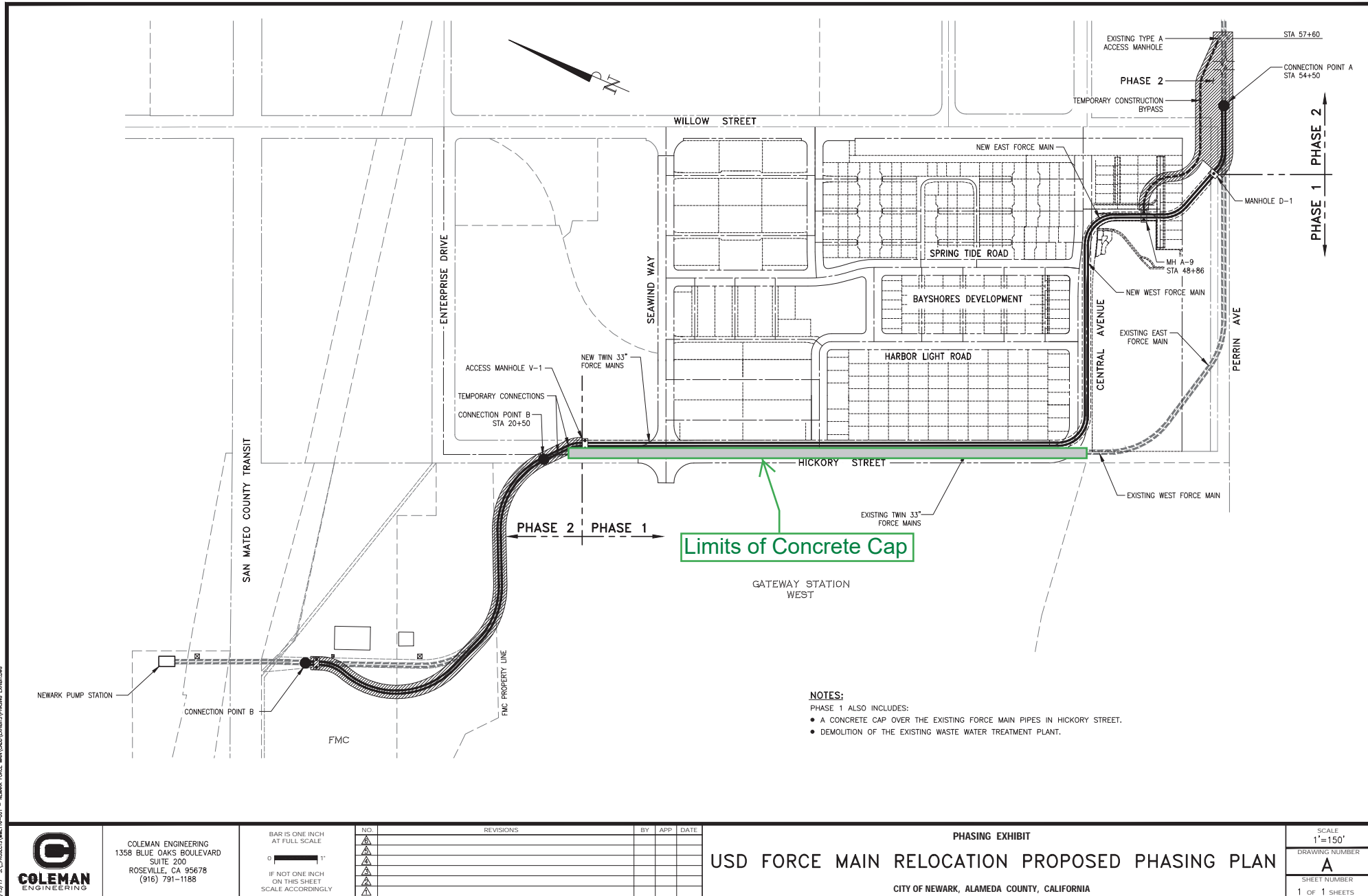
<b>TASK ORDER</b>	<b>DESCRIPTION</b>	<b>AMOUNT</b>
1	Construction Management Services – Phase 1	\$290,000
	<b>Total</b>	<b>\$290,000</b>

Staff anticipates the construction to be complete by Spring 2018 assuming a 180-day period for construction. Staff has reviewed the scope of work and deems it appropriate for the project. Staff recommends the Board authorize the General Manager to execute an Agreement and Task Order No. 1 with Tanner Pacific, Inc. in the amount of \$290,000 to provide construction management and inspection services for the Twin Force Main Relocation – Phase 1 Project.

PRE/SEG/RA:ks

Attachments: Location Map  
Task Order No. 1 including exhibits  
Agreement

# Twin Force Main Relocation - Phase 1 Location Map



# **TWIN FORCE MAIN RELOCATION PROJECT**

TASK ORDER NO. 1  
TO  
AGREEMENT  
BETWEEN  
UNION SANITARY DISTRICT  
AND  
TANNER PACIFIC, INC.  
FOR  
PROFESSIONAL SERVICES  
DATED NOVEMBER \_\_, 2017

## **1. PURPOSE**

The purpose of this Task Order No. 1 is to provide construction management and inspection services by Tanner Pacific, Inc., hereinafter referred to as “Engineer”, for the relocation of twin force mains owned by the Union Sanitary District, hereinafter referred to as “District”. The projects where construction management and inspection services are to be provided include the “Twin Force Main Relocation – Phase 1,” “Hickory Street Sanitary Sewer Force Main Concrete Cap,” and the demolition of the District’s abandoned Newark treatment plant, collectively hereinafter referred to as the “Project.”

## **2. PROJECT COORDINATION**

Activities under this task order shall be coordinated through the District’s Project Manager, Rollie Arbolante.

## **3. SCOPE OF WORK**

The Scope of Services for this task order are presented in Exhibit A.

## **4. DELIVERABLES**

Engineer shall provide the District with all project documentation identified in Exhibit A.

## 5. PAYMENT TO THE ENGINEER

Payment to the Engineer shall be as called for in Article 2 of the Agreement. Compensation shall be on an hourly basis with a not to exceed amount of \$ 290,000. The hourly rates and budget are presented in Exhibit B to Task Order No. 1 in accordance with current Tanner Pacific Rates.

The following table summarizes the previously executed and proposed task orders and amendments under the Agreement:

<b>Task Order / Amendment</b>	<b>Not to Exceed Amount</b>	<b>Board Authorization Required? (Yes/No)</b>	<b>District Staff Approval</b>
Task Order No. 1 – Construction Management	\$290,000	Yes	Paul Eldredge
<b>Total</b>	<b>\$290,000</b>		

## 6. TIME OF COMPLETION

All work and deliverables identified in this task order shall be completed and received by the District no later than 180 calendar days from the date of this task order.

## 7. KEY PERSONNEL

The Engineer's personnel assigned to Task Order No. 1 shall be as follows:

### ROLE

Project Manager, QA/QC  
Construction Manager  
Inspector  
Office Engineer

### KEY PERSONNEL TO BE ASSIGNED

Michael Jaeger  
David Jaworski  
Thomas Hanson  
Lisa Vance

Key personnel shall not be changed except in accordance with Article 8 of the Agreement.

IN WITNESS WHEREOF, the parties hereto have made and executed this Task Order No. 1 as of November \_\_\_\_, 2017 and therewith incorporate it as part of the agreement.

UNION SANITARY DISTRICT  
(DISTRICT)

TANNER PACIFIC, INC.  
(ENGINEER)

By: \_\_\_\_\_ By: \_\_\_\_\_

Name: Paul R. Eldredge, P.E. Name: William W. Tanner, P.E.

Title: General Manager/District Engineer Title: CEO

## **Exhibit A**

**Union Sanitary District  
Twin Force Main Relocation Project  
Tanner Pacific, Inc.  
Task Order No. 1 Scope of Services  
Construction Management & Inspection**

- I. Construction Manager: David Jaworski
  - A. Project Responsibilities
    - 1. Construction Administration
      - a. Provide administration and management services.
      - b. Act as the point of contact with all parties.
      - c. Establish, implement and maintain a system for tracking the construction project correspondence and documents using The Procore system.
      - d. Document all changes on the Construction Manager's conformed set of record drawings.
    - 2. Meetings
      - a. Prepare the agenda and facilitate the Preconstruction Meeting, progress meetings and other construction meetings required during the Project.
      - b. Prepare a Record of Discussion for all meetings and distribute at the start of each progress meeting.
    - 3. Submittals
      - a. Receive the submittals from the Contractor and Developer, and review the submittals for general conformity with the Contract requirements.
      - b. If obvious deficiencies are apparent in the submittal, send the submittal back to the Contractor and Developer for correction.
      - c. Route the submittal to Coleman Engineering, the District and its consultants for review, then route the reviewed submittal back to the Contractor.
    - 4. Requests for Information (RFI)
      - a. Receive all requests for information (RFIs) from the Contractor and determine if the request is valid; if not, Tanner Pacific will return the RFI to the Contractor.
      - b. Provide a response to the Contractor for any administrative and general RFIs.
      - c. Route the RFIs to Coleman Engineering and the District and its consultants, as applicable.
      - d. Review the response, verify acceptability of response and transmit the RFI response to the Contractor and Developer.
    - 5. Clarification Letters (CL)
      - a. Review design clarification.
      - b. Route the CL to Coleman Engineering; if appropriate, also route to the District and its consultants



## **Exhibit A**

**Union Sanitary District  
Twin Force Main Relocation Project  
Tanner Pacific, Inc.  
Task Order No. 1 Scope of Services  
Construction Management & Inspection**

6. Change Order Preparation, Negotiation & Processing
  - a. Discuss details of change with the District to confirm approach.
  - b. Prepare and issue the change request to the Contractor with the appropriate design documents from Coleman Engineering.
  - c. Negotiate change orders with the Contractor and Developer in conjunction with District.
7. Prepare Contract Change Orders (CCO) for execution by the District, the Developer and Contractor. Field Orders (FO) and Field Directives (FD), if directed by the District
  - a. In the event that the Contractor encounters a time sensitive problem where it is not practical to take time to negotiate a settlement, the CM will issue a FO. All work done under a FO will be completed on a time and material basis. The CM, the District and the Developer will execute the FO.
  - b. Field Directives will be issued to the Contractor when the directed work is to proceed under protest. A copy will be provided to the Developer for their reference.
8. Progress Payments, if directed by the District
  - a. Work with the District and the Developer to review and evaluate payment requests from the Contractor.
  - b. If the District wishes, provide written comments regarding the acceptability of the payment request after comparison to records of progress at the time of the request.
9. Scheduling
  - a. Review the initial baseline schedule and provide comments.
  - b. Review monthly schedule updates for accuracy.
  - c. Provide written comments to the Contractor and Developer on the project schedule.

**II. Field Inspection (Thomas "TJ" Hanson)**

**A. Project Responsibilities**

1. Field Observation (When in the field)
  - a. Provide field observation services to monitor compliance with Contract Documents and District standard specifications and details.
  - b. Prepare a daily observation report documenting all field activities, field crews, Contractor equipment, and field problems.

## **Exhibit A**

**Union Sanitary District  
Twin Force Main Relocation Project  
Tanner Pacific, Inc.  
Task Order No. 1 Scope of Services  
Construction Management & Inspection**

- c. Maintain the database, implemented by Tanner Pacific, for daily observation reports and photographs.
    - d. Provide photographic documentation of The Project prior to construction, and maintain photographs of field activities for status monitoring of the project.
  - 2. Coordinate Special Inspections
    - a. Maintain communication with the Developer/Contractor to confirm types and schedule for special inspection (concrete, reinforcing steel installation, soil compaction, etc.)
    - b. Contact the Developer's designated Special Inspection firm to schedule the appropriate inspector to be on site based on input from the Developer/Contractor to perform the required inspection.
    - c. Review Summary Report from the inspector to ensure the appropriate inspection took place and meets the contract requirements.
- III. Office Engineer Lisa Vance
  - A. Assist with Pre-Construction Tasks
    - 1. Take notes during Pre-Construction meeting
    - 2. Send Record of Discussion to all Attendees after review by CM
    - 3. Assist, as necessary, with Pre-Construction set up activities (trailer site, photo documentation, etc.)
  - B. Assist with Procore Site Set Up/Training
    - 1. Work with CM to set up site for document management
    - 2. Provide necessary training to Developer/Contractor/Designer staff for use of the Procore system
  - C. Assist with Document Review
    - 1. Work with the CM to evaluate submittals required to be reviewed to confirm all elements are included.
    - 2. Track and maintain submittal log
    - 3. Assist with coordinating review by Designer/Developer and USD as necessary
    - 4. Assist with forwarding responses to Contractor/Developer
    - 5. Assist with evaluation of RFI's (if any) to confirm appropriate.
    - 6. Work with CM to review RFI with USD and provide response to Developer/Contractor
    - 7. Assist Inspector with any documentation needs and with any additional field inspection, if required.

## **Exhibit A**

**Union Sanitary District  
Twin Force Main Relocation Project  
Tanner Pacific, Inc.  
Task Order No. 1 Scope of Services  
Construction Management & Inspection**

- D. Assist with Project Close Out
  - 1. Assist CM with formal Close-Out of Project Documents
  - 2. Assist with Corrective Work Item list near the end of the project
  - 3. Assist with establishing final project punch list
  - 4. Assist with final compilation of Record Drawings maintained by Inspector to be delivered to Designer for final AUTOCAD set of drawings for USD records.
  - 5. Assist with Procore Document extract to be provided to USD
- IV. Special Inspections and Testing (Developer/Contractor to contract these services)
  - A. Schedule and coordinate special inspections and materials testing, as needed. At a minimum:
    - a. Inspect backfill sampling and compaction testing
    - b. Inspect Concrete quality, if needed
  - B. The Developer/Contractor will contract for all other design related services.
- V. Project Closeout
  - A. The Contractor will furnish record drawings, which Tanner Pacific will review for accuracy and completeness.
  - B. Tanner Pacific will forward accepted Record Drawings to Coleman Engineering to prepare final Record Drawings in CAD.
  - C. Final Inspection and Punch List.
    - 1. Tanner Pacific, the District, Coleman Engineering (if necessary), the Developer and the Contractor will participate and provide input on final inspection.
    - 2. Tanner Pacific will prepare and issue the punch list with input from the District, Developer and Coleman Engineering.
    - 3. Tanner Pacific to provide the District and Developer with notification when all Punch List items are complete so District may notify Developer that they can formally accept the project for record purposes.
  - D. Tanner Pacific to provide the District with all project documentation electronically in PDF format, with record drawings in both CAD and PDF.
- VI. Warranty Coordination
  - A. The District will coordinate warranty work after the start of the warranty period.

**EXHIBIT B**  
**Union Sanitary District**  
**Twin Force Main Relocation - Task Order No. 1**  
**Tanner Pacific, Inc. - Staff Effort and Budget Estimate for Construction Management Services**  
**November 7, 2017**

		Budget			Construction					Close Out
		Hours	Rate	Amount	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18
<b>Construction Management Team</b>										
Project Manager	M. Jaeger (Allowance)			\$ 10,000						
Constructon Manager	D. Jaworski	440	\$ 200	\$ 88,000	80	80	80	80	80	40
Office Engineer	L. Vance	220	\$ 105	\$ 23,100	40	40	40	40	40	20
Inspector	TJ Hanson	980	\$ 165	\$ 161,700	180	180	180	180	180	80
<b>CM Subtotal</b>				\$ 282,800						
<b>Other Direct Costs</b>										
	Inspector Work Trailer	6.0	\$1,200	\$ 7,200	1	1	1	1	1	1
<b>ODC Subtotal</b>				\$ 7,200						
<b>TOTAL</b>		1,646		<b>\$ 290,000</b>	300	300	300	300	300	140

Base Contract % = 4.46%

**Notes & Assumptions:**

Construction Cost Estimate (Approximate): \$6,500,000  
NTP: 11/1/2017  
Construction Period (CDs): 150  
Substantial Completion: 3/31/2018  
Closeout: 4 weeks

1. Tanner Pacific's rates include all office expenses for home office telephone, computers, in-house reproduction and travel in the Bay Area in personal vehicles.
2. The Budget is based on an anticipated NTP of November 13, 2017.
3. The Budget includes some OT hours due to construction uncertainty on two projects. If OT does not occur it will not be billed.

# **TWIN FORCE MAIN RELOCATION PROJECT**

AGREEMENT  
BETWEEN  
UNION SANITARY DISTRICT  
AND  
TANNER PACIFIC, INC.  
FOR  
PROFESSIONAL SERVICES

THIS IS AN AGREEMENT MADE AS OF November\_\_\_\_\_, 2017,  
BETWEEN UNION SANITARY DISTRICT (hereinafter referred to as District), and  
TANNER PACIFIC, INC. (hereinafter referred to as Engineer).

WITNESSETH:

WHEREAS, William Lyon Homes (Developer) intends to relocate a portion of the District's twin force mains between the Irvington and Newark Pump Stations (hereinafter referred to as Project), and,

WHEREAS, District requires certain professional services in connection with the Project (hereinafter referred as Services); and

WHEREAS, Engineer is qualified and prepared to provide such Services;

NOW, THEREFORE, in consideration of the promises contained herein, the parties agree as follows:

## **ARTICLE 1 - SERVICES TO BE PERFORMED BY ENGINEER**

- 1.1 Specific Services and the associated scope of services, payment, schedule, and personnel will be defined in specific Task Order as mutually agreed by District and Engineer.
- 1.2 All Task Orders will by reference incorporate the terms and conditions of this Agreement, and become formal amendments hereto.

## **ARTICLE 2 - COMPENSATION**

2.1 Compensation for consulting services performed under this Agreement shall include:

- (1) Direct labor costs, multiplied by an agreed upon fixed factor (the Multiplier), to compensate for fringe benefits, indirect costs, and profit.
- (2) Non-labor direct project charge not included in the fixed factor and acceptable, without any markup.
- (3) Subconsultant costs, with a maximum markup of 5%.

Definitions are as follows:

- (a) Direct labor is salaries and wages paid to personnel for time directly chargeable to the project. Direct labor does not include the cost of Engineer's statutory and customary benefits, such as sick leave, holidays, vacations, and medical and retirement benefits nor the cost of the time of executive and administrative personnel and others whose time is not identifiable to the project.
- (b) Fringe benefits include Engineer's statutory and customary benefits, such as sick leave, holidays, vacations, medical and retirement benefits, incentive pay, tuition, and other costs classified as employee benefits.
- (c) Indirect costs are allocations of costs that are not directly chargeable to a specific engagement and are commonly referred to as Engineer's overhead. Indirect costs include provisions for such things as clerical support, office space, light and heat, insurance, statutory and customary employee benefits, and the time of executive and administrative personnel and others whose time is not identifiable to the Project or to any other project. Under no circumstances can the same labor costs be charged as direct labor and also appear at the same time as indirect costs, and vice versa.
- (d) The Multiplier is a multiplicative factor which is applied to direct labor costs, and compensates Engineer for fringe benefits and indirect costs (overhead) and profit.
- (e) Other non-labor direct project charges shall be included in the overhead and these charges include typical expenses as cost of transportation and subsistence, printing and reproduction, computer time and programming costs, identifiable supplies,

outside consultant's charges, subcontracts, and charges by reviewing authorities."

Alternatively, the District and the Engineer may agree to utilize the fully-encumbered hourly rates and fees for Services performed by the Engineer. These hourly rates and fees shall be based on the Engineer's rate schedule published at the time this Agreement or Task Order is executed and shall be attached to each applicable Task Order.

- 2.2 Reimbursement for mileage shall not exceed the prevailing Internal Revenue Service's standard mileage rate.
- 2.3 A *Cost Ceiling* will be established for each Task Order which is based upon estimated labor-hours and cost estimates. Costs as described above, comprising direct labor, overhead cost, and other direct costs, shall be payable up to a Cost Ceiling as specified in the Task Order. A *Maximum Fee Ceiling*, or *Task Order Firm Ceiling*, will also be established for each Task Order which includes the Cost Ceiling plus the Professional Fee.
- 2.4 Engineer shall invoice District monthly for the actual costs incurred, and a pro-rated portion of the Professional Fee for work performed during the previous month. If the Maximum Fee Ceiling is reached, the Engineer will complete the agreed-upon work for the Maximum Fee Ceiling. With District staff approval, labor hours may be reallocated within the tasks without renegotiation in such a manner so as not to exceed the Maximum Fee Ceiling.
- 2.5 The Engineer shall provide the District with a review of the budget amounts when 75 percent of the Cost Ceiling for any task has been expended. Engineer may request a revision in the Cost Ceiling for performance of this Agreement, and will relate the rationale for the revision to the specific basis of estimate as defined in the Scope of Services. Such notification will be submitted to the District at the earliest possible date. The authorized Cost Ceiling shall not be exceeded without written approval of the District.
- 2.6 The Professional Fee will not be changed except in the case of a written amendment to the Agreement which alters the Scope of Services. District and Engineer agree to negotiate an increase or decrease in Cost Ceiling and Professional Fee for any change in Scope of Services required at any time during the term of this Agreement. Engineer will not commence work on the altered Scope of Services until authorized by District.

- 2.7 Direct labor rates are subject to revision to coincide with Engineer's normal salary review schedule. Adjustments in direct labor rates shall not affect the firm ceiling without prior written authorization of the District.
- 2.8 District shall pay Engineer in accordance with each Task Order for Services.
- 2.9 Engineer shall submit monthly statements for Services rendered. District will make prompt monthly payments in response to Engineer's monthly statements.

### ARTICLE 3 - PERIOD OF SERVICE

- 3.1 Engineer's services will be performed and the specified services rendered and deliverables submitted within the time period or by the date stipulated in each Task Order.
- 3.2 Engineer's services under this Agreement will be considered complete when the services are rendered and/or final deliverable is submitted and accepted by District.
- 3.3 If any time period within or date by which any of the Engineer's services are to be completed is exceeded through no fault of Engineer, all rates, measures and amounts of compensation and the time for completion of performance shall be subject to equitable adjustment.

### ARTICLE 4 - DISTRICT'S RESPONSIBILITIES

District will do the following in a timely manner so as not to delay the services of Engineer.

- 4.1 Provide all criteria and full information as to District's requirements for the services assignment and designate in writing a person with authority to act on District's behalf on all matters concerning the Engineer's services.
- 4.2 Furnish to Engineer all existing studies, reports and other available data pertinent to the Engineer's services, obtain or authorize Engineer to obtain or provide additional reports and data as required, and furnish to Engineer services of others required for the performance of Engineer's services hereunder, and Engineer shall be entitled to use and rely upon all such information and services provided by District or others in performing Engineer's services under this Agreement.



- 4.3 Arrange for access to and make all provisions for Engineer to enter upon public and private property as required for Engineer to perform services hereunder.
- 4.4 Perform such other functions as are indicated in each Task Order related to duties of District.
- 4.5 Bear all costs incident to compliance with the requirements of this Section.

#### ARTICLE 5 - STANDARD OF CARE

- 5.1 Engineer shall exercise the same degree of care, skill, and diligence in the performance of the Services as is ordinarily provided by a professional Engineer under similar circumstance and Engineer shall, at no cost to District, re-perform services which fail to satisfy the foregoing standard of care.

#### ARTICLE 6 - OPINIONS OF COST AND SCHEDULE

- 6.1 Since Engineer has no control over the cost of labor, materials, equipment or services furnished by others, or over contractors', subcontractors' , or vendors' methods of determining prices, or over competitive bidding or market conditions or economic conditions, Engineer's cost estimate and economic analysis shall be made on the basis of qualification and experience as a professional engineer.
- 6.2 Since Engineer has no control over the resources provided by others to meet contract schedules, Engineer's forecast schedules shall be made on the basis of qualification and experience as a professional Engineer.
- 6.3 Engineer cannot and does not guarantee that proposals, bids or actual project costs will not vary from his cost estimates or that actual schedules will not vary from his forecast schedules.

#### ARTICLE 7 - SUBCONTRACTING

- 7.1 No subcontract shall be awarded by Engineer until prior written approval is obtained from the District.

#### ARTICLE 8 - ENGINEER-ASSIGNED PERSONNEL

- 8.1 Engineer shall designate in writing an individual to have immediate responsibility for the performance of the services and for all matters relating to performance under this Agreement. Key personnel to be assigned by Engineer will be stipulated in each Task Order. Substitution of any assigned person shall require the prior written approval of the District, which shall not be unreasonably withheld. If the District determines that a proposed substitution is not responsible or qualified to perform the services then, at the request of the District, Engineer shall substitute a qualified and responsible person.

## ARTICLE 9 - OWNERSHIP OF DOCUMENTS

- 9.1 All work products, drawings, data, reports, files, estimate and other such information and materials (except proprietary computer programs, including source codes purchased or developed with Engineer monies) as may be accumulated by Engineer to complete services under this Agreement shall be owned by the District.
- 9.2 Engineer shall retain custody of all project data and documents other than deliverables specified in each Task Order, but shall make access thereto available to the District at all reasonable times the District may request. District may make and retain copies for information and reference.
- 9.3 All deliverables and other information prepared by Engineer pursuant to this Agreement are instruments of service in respect to this project. They are not intended or represented to be suitable for reuse by District or others on extensions of this Project or on any other project. Any reuse without written verification or adaptation by Engineer for the specific purpose intended will be at District's sole risk and without liability or legal exposure to Engineer; and District shall indemnify and hold harmless Engineer against all claims, damages, losses, and expenses including attorney's fees arising out of or resulting from such reuse. Any such verification or adaptation will entitle Engineer to further compensation at rates to be agreed upon by District and Engineer.

## ARTICLE 10 - RECORDS OF LABOR AND COSTS

- 10.1 Engineer shall maintain for all Task Orders, records of all labor and costs used in claims for compensation under this Agreement. Records shall mean a contemporaneous record of time for personnel; a methodology and calculation of the Multiplier for fringe benefits and indirect costs; and invoices, time sheets, or other factors used as a basis for determining other non-labor Project charges. These records must be made available

to the District upon reasonable notice of no more than 48 hours during the period of the performance of this Agreement.

- 10.2 After delivery of Services (completion of Task Orders) under this Agreement, the Engineer's records of all costs used in claims for compensation under this Agreement shall be available to District's accountants and auditors for inspection and verification. These records will be maintained by Engineer and made reasonably accessible to the District for a period of three (3) years after completion of Task Orders under this Agreement.
- 10.3 Engineer agrees to cooperate and provide any and all information concerning the Project costs which are a factor in determining compensation under this Agreement as requested by the District or any public agency which has any part in providing financing for, or authority over, the Services which are provided under the Agreement.
- 10.4 Failure to provide documentation or substantiation of all Project costs used as a factor in compensation paid under Article 2 hereof will be grounds for District to refuse payment of any statement submitted by the Engineer and for a back charge for any District funds, including interest from payment; or grant, matching, or other funds from agencies assisting District in financing the Services specified in this Agreement.

## ARTICLE 11 - INSURANCE

Engineer shall provide and maintain at all times during the performance of the Agreement the following insurances:

- 11.1 Workers' Compensation and Employer's Liability Insurance for protection of Engineer's employees as required by law and as will protect Engineer from loss or damage because of personal injuries, including death to any of his employees.
- 11.2 Comprehensive Automobile Liability Insurance. Engineer agrees to carry a Comprehensive Automobile Liability Policy providing bodily injury liability. This policy shall protect Engineer against all liability arising out of the use of owned or leased automobiles both passenger and commercial. Automobiles, trucks, and other vehicles and equipment (owned, not owned, or hired, licensed or unlicensed for road use) shall be covered under this policy. Limits of liability for Comprehensive Automobile Liability Insurance shall not be less than \$1,000,000 Combined Single Limit.

- 11.3 Comprehensive General Liability Insurance as will protect Engineer and District from any and all claims for damages or personal injuries, including death, which may be suffered by persons, or for damages to or destruction to the property of others, which may arise from the Engineer's operations under this Agreement, which insurance shall name the District as additional insured. Said insurance shall provide a minimum of \$1,000,000 Combined Single Limit coverage for personal injury, bodily injury, and property damage for each occurrence and aggregate. Such insurance will insure Engineer and District from any and all claims arising from the following:
1. Personal injury;
  2. Bodily injury;
  3. Property damage;
  4. Broad form property damage;
  5. Independent contractors;
  6. Blanket contractual liability.
- 11.4 Engineer shall maintain a policy of professional liability insurance, protecting it against claims arising out of negligent acts, errors, or omissions of Engineer pursuant to this Agreement, in an amount of not less than \$1,000,000. The said policy shall cover the indemnity provisions under this Agreement.
- 11.5 Engineer agrees to maintain such insurance at Engineer's expense in full force and effect in a company or companies satisfactory to the District. All coverage shall remain in effect until completion of the Project.
- 11.6 Engineer will furnish the District with certificates of insurance and endorsements issued by Engineer's insurance carrier and countersigned by an authorized agent or representative of the insurance company. The certificates shall show that the insurance will not be cancelled without at least thirty (30) days' prior written notice to the District. The certificates for liability insurance will show that liability assumed under this Agreement is included. The endorsements will show the District as an additional insured on Engineer's insurance policies for the coverage required in Article 11 for services performed under this Agreement, except for workers' compensation and professional liability insurance.
- 11.7 Waiver of Subrogation: Engineer hereby agrees to waive subrogation which any insurer of Engineer may acquire from Engineer by virtue of the payment of any loss. Engineer agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation.

The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the District for all work performed by the Engineer, its employees, agents and subconsultants.

## ARTICLE 12 - LIABILITY AND INDEMNIFICATION

- 12.1 Having considered the risks and potential liabilities that may exist during the performance of the Services, and in consideration of the promises included herein, District and Engineer agree to allocate such liabilities in accordance with this Article 12. Words and phrases used in this Article shall be interpreted in accordance with customary insurance industry usage and practice.
- 12.2 Engineer shall indemnify and save harmless the District and all of their agents, officers, and employees from and against all claims, demands, or causes of action of every name or nature to the extent caused by the negligent error, omission, or act of Engineer, its agents, servants, or employees in the performance of its services under this Agreement.
- 12.3 In the event an action for damages is filed in which negligence is alleged on the part of District and Engineer, Engineer agrees to defend District. In the event District accepts Engineer's defense, District agrees to indemnify and reimburse Engineer on a pro rata basis for all expenses of defense and any judgment or amount paid by Engineer in resolution of such claim. Such pro rata share shall be based upon a final judicial determination of negligence or, in the absence of such determination, by mutual agreement.
- 12.4 Engineer shall indemnify District against legal liability for damages arising out of claims by Engineer's employees. District shall indemnify Engineer against legal liability for damages arising out of claims by District's employees.
- 12.5 Indemnity provisions will be incorporated into all Project contractual arrangements entered into by District and will protect District and Engineer to the same extent.
- 12.6 Upon completion of all services, obligations and duties provided for in the Agreement, or in the event of termination of this Agreement for any reason, the terms and conditions of this Article shall survive.
- 12.7 To the maximum extent permitted by law, Engineer's liability for District's damage will not exceed the aggregate compensation received by Engineer under this Agreement or the maximum amount of professional liability insurance available at the time of any settlement or judgment, which ever is greater.

### ARTICLE 13 - INDEPENDENT CONTRACTOR

Engineer undertakes performance of the Services as an independent contractor and shall be wholly responsible for the methods of performance. District will have no right to supervise the methods used, but District will have the right to observe such performance. Engineer shall work closely with District in performing Services under this Agreement.

### ARTICLE 14 - COMPLIANCE WITH LAWS

In performance of the Services, Engineer will comply with applicable regulatory requirements including federal, state, and local laws, rules, regulations, orders, codes, criteria and standards. Engineer shall procure the permits, certificates, and licenses necessary to allow Engineer to perform the Services. Engineer shall not be responsible for procuring permits, certificates, and licenses required for any construction unless such responsibilities are specifically assigned to Engineer in Task Order.

### ARTICLE 15 - NONDISCLOSURE OF PROPRIETARY INFORMATION

Engineer shall consider all information provided by District and all drawings, reports, studies, design calculations, specifications, and other documents resulting from the Engineer's performance of the Services to be proprietary unless such information is available from public sources. Engineer shall not publish or disclose proprietary information for any purpose other than the performance of the Services without the prior written authorization of District or in response to legal process.

### ARTICLE 16 - TERMINATION OF CONTRACT

- 16.1 The obligation to continue Services under this Agreement may be terminated by either party upon seven days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party.
- 16.2 District shall have the right to terminate this Agreement or suspend performance thereof for District's convenience upon written notice to Engineer, and Engineer shall terminate or suspend performance of Services on a schedule acceptable to District. In the event of termination or suspension for District's convenience, District will pay Engineer for all services performed and costs incurred including termination or



suspension expenses. Upon restart of a suspended project, equitable adjustment shall be made to Engineer's compensation.

#### ARTICLE 17 - UNCONTROLLABLE FORCES

- 17.1 Neither District nor Engineer shall be considered to be in default of this Agreement if delays in or failure of performance shall be due to uncontrollable forces, the effect of which, by the exercise of reasonable diligence, the nonperforming party could not avoid. The term "uncontrollable forces" shall mean any event which results in the prevention or delay of performance by a party of its obligations under this Agreement and which is beyond the control of the nonperforming party. It includes, but is not limited to, fire, flood, earthquake, storms, lightening, epidemic, war, riot, civil disturbance, sabotage, inability to procure permits, licenses, or authorizations from any state, local, or federal agency or person for any of the supplies, materials, accesses, or services required to be provided by either District or Engineer under this Agreement, strikes, work slowdowns or other labor disturbances, and judicial restraint.
- 17.2 Neither party shall, however, be excused from performance if nonperformance is due to uncontrollable forces which are removable or remediable, and which the nonperforming party could have, with the exercise of reasonable diligence, removed or remedied with reasonable dispatch. The provisions of this Article shall not be interpreted or construed to require Engineer or District to prevent, settle, or otherwise avoid a strike, work slowdown, or other labor action. The nonperforming party shall, within a reasonable time of being prevented or delayed from performance by an uncontrollable force, give written notice to the other party describing the circumstances and uncontrollable forces preventing continued performance of the obligations of this Agreement. The Engineer will be allowed reasonable negotiated extension of time or adjustments for District initiated temporary stoppage of services.

#### ARTICLE 18 - MISCELLANEOUS

- 18.1 A waiver by either District or Engineer of any breach of this Agreement shall not be binding upon the waiving party unless such waiver is in writing. In the event of a written waiver, such a waiver shall not affect the waiving party's rights with respect to any other or further breach.
- 18.2 The invalidity, illegality, or unenforceability of any provision of this Agreement, or the occurrence of any event rendering any portion or provision of this Agreement void, shall in no way effect the validity or

enforceability of any other portion or provision of the Agreement. Any void provision shall be deemed severed from the Agreement and the balance of the Agreement shall be construed and enforced as if the Agreement did not contain the particular portion or provision held to be void.

#### ARTICLE 19 - INTEGRATION AND MODIFICATION

- 19.1 This Agreement (consisting of pages 1 to 14), together with all Task Orders executed by the undersigned, is adopted by District and Engineer as a complete and exclusive statement of the terms of the Agreement between District and Engineer. This Agreement supersedes all prior agreements, contracts, proposals, representations, negotiations, letters, or other communications between the District and Engineer pertaining to the Services, whether written or oral.
- 19.2 The Agreement may not be modified unless such modifications are evidenced in writing signed by both District and Engineer.

#### ARTICLE 20 - SUCCESSORS AND ASSIGNS

- 20.1 District and Engineer each binds itself and its directors, officers, partners, successors, executors, administrators, assigns and legal representatives to the other party to this Agreement and to the partners, successors, executors, administrators, assigns, and legal representatives of such other party, in respect to all covenants, agreements, and obligations of this Agreement.
- 20.2 Neither District nor Engineer shall assign, sublet, or transfer any rights under or interest in (including, but without limitation, monies that may become due or monies that are due) this Agreement without the written consent of the other, except to the extent that the effect of this limitation may be restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement. Nothing contained in this paragraph shall prevent Engineer from employing such independent engineers, associates, and subcontractors as he may deem appropriate to assist him/her in the performance of the Services hereunder and in accordance with Article 7.
- 20.3 Nothing herein shall be construed to give any rights or benefits to anyone other than District and Engineer.

## ARTICLE 21 – INFORMATION SYSTEM SECURITY

When the District determines this article is applicable, the Engineer shall obtain written approval from the District representative prior to accessing District internal systems through real-time computer connections. Upon approval, the Engineer will use only in-bound connections to accomplish a legitimate business need and a previously defined and approved task. As a condition of approval, the Engineer shall:

- a) Be running a current operating system supported by the District with up-to-date security patches applied as defined in the District COE/Non-COE document.
- b) Have anti-virus software installed on his/her personal computer with up-to-date virus signatures.
- c) Have personal firewall software installed and enabled on their computer.
- d) Understand and sign the District's Electronic Equipment Use Policy, number 2160.

The District reserves the right to audit the security measures in effect on Engineer's connected systems without prior notice. The District also reserves the right to terminate network connections immediately with all Engineer's systems not meeting the above requirements.

## ARTICLE 22 – EMPLOYEE BACKGROUND CHECK

Engineer, at no additional expense to the District, shall conduct a background check for each of its employees, as well as for the employees of its subconsultants (collectively "Consultant Employees") who will have access to District's computer systems, either through on-site or remote access, or whose contract work requires an extended presence on the District's premises. The minimum background check process for any District consultant shall include, but not be limited to

1. California residents: Criminal Records (County and State Criminal Felony and Misdemeanor
2. Out of State residents: Federal criminal search of the National Criminal Database,

The background check shall be conducted and the results submitted to the District prior to initial access by Consultant Employees. If at any time, it is discovered that a Consultant Employee has a criminal record that includes a felony or misdemeanor, the Engineer is required to inform the District immediately and the District will assess the circumstances surrounding the conviction, time frame, nature, gravity, and relevancy of the conviction to the job duties, to determine whether the Consultant Employee will be placed or remain on a District

assignment. The District may withhold consent at its sole discretion. The District may also conduct its own criminal background check of the Consultant Employees. Failure of the Engineer to comply with the terms of this paragraph may result in the termination of its contract with the District.

#### ARTICLE 23 - EXCEPTIONS

No exceptions.

IN WITNESS THEREOF, the parties hereto have made and executed this Agreement as of the day and year first above written.

UNION SANITARY DISTRICT

TANNER PACIFIC, INC.

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: Paul R. Eldredge, P.E.

Name: Michael K. Jaeger, P.E.

Title: General Manager/District Engineer

Title: Principal

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**Directors**

Manny Fernandez  
Tom Handley  
Pat Kite  
Anjali Lathi  
Jennifer Toy

**Officers**

Paul R. Eldredge  
*General Manager/  
District Engineer*

Karen W. Murphy  
*Attorney*

**DATE:** November 6, 2017

**MEMO TO:** Board of Directors - Union Sanitary District

**FROM:** Paul R. Eldredge, General Manager/District Engineer  
Sami E. Ghossain, Manager of Technical Services  
Raymond Chau, CIP Coach  
Derek Chiu, Assistant Engineer

**SUBJECT:** Agenda Item No. 9 - Meeting of November 13, 2017  
**Award the Construction Contract for the Primary Digester No. 3  
Rehabilitation Project to Monterey Mechanical Company**

**Recommendation**

Staff recommends the Board award the construction contract for the Primary Digester No. 3 Rehabilitation Project (Project) to Monterey Mechanical Company in the amount of \$1,956,000. Funds for the project have been budgeted in the Renewal and Replacement Fund.

**Background**

The District has six primary and two secondary digesters at the Alvarado Wastewater Treatment Plant that require periodic cleaning to remove accumulated debris and to maintain treatment capacity. Primary Digester No. 3 was originally constructed in 1962 and was last taken out of service for cleaning and assessment in 2010, which was followed by some rehabilitation work, primarily on the digester dome. Staff removed Primary Digester No. 3 from service again in Spring 2017 for the purposes of cleaning it and re-assessing its condition. The District plans to rehabilitate Primary Digester No. 3 before placing the digester back in service.

On January 23, 2017, the Board authorized the General Manager to execute an Agreement and Task Order No. 1 with Carollo Engineers in the amount of \$158,813 to provide design services



for the Project. The Project also includes structural, mechanical, and electrical improvements at the Cogeneration Building and Thickener Control Building.

After Primary Digester No. 3 was cleaned, V&A Consulting Engineers completed a condition assessment of the structure in July 2017. The assessment revealed that the interior concrete walls and floors of the digester were in good condition. The exterior walls of the digester were in fair condition with some minor cracks and several small spalls with exposed, corroded steel reinforcement. The coating on the steel dome appeared to be in good condition with some minor corrosion at the sharp edges and crevices. Staff included these deficiencies in the Project's scope.

### **Scope of Work**

Carollo Engineers completed the design in August 2017. The Project's major elements are as follows:

- Repair of the foam insulation on the cover of Primary Digester No. 3.
- Recoating of the interior and exterior appurtenances of Primary Digester No. 3 (i.e., steel dome cover, center column, mixing nozzles, piping, covers, center water seal, and others).
- Installation of a lining system on the interior of Primary Digester No. 3 to stop seepage through the cracks in the wall.
- Repair of minor cracks, spalled concrete, and dome coating identified from the condition assessment.
- Addition of new circular viewports and the removal of existing rectangular ones.
- Addition of two new side manways to Primary Digester No. 3 to permit at-grade access into the digester.
- Replacement of the mixing piping between Primary Digester No. 3 and Heating and Mixing Building No. 2.
- Temporary removal of the center column of Primary Digester No. 3 and CCTV inspection of the two 14-inch diameter sludge pipelines under the digester.
- Modifications to the digester gas piping on top of Primary Digester No. 3.
- Modifications to the sludge recirculation piping at Heating and Mixing Building No. 2.
- Replacement of the existing digester gas flow meters at Primary Digesters No. 1, 2, and 3.
- Modifications to the electrical panel of the digester gas conditioning system blowers at the Cogeneration Building.
- Installation of new emergency lights at the Cogeneration Building, Thickener Electrical Building, and Heating and Mixing Building No. 1.
- Modifications of the piping, valves, pipe supports, and lighting power supply at the Thickener Control Building.

- Structural modifications to the thickener scum pits at the Thickener Control Building.
- Installation of new maintenance platform and associated piping and valves at the Thickener Control Building.

### **Bid Results**

Staff initially advertised the Project for bids on August 15, 2017, and opened a single bid on September 13, 2017. The bid, submitted by D. W. Nicholson Corporation, was in the amount of \$2,016,108, which was 15% higher than the Engineer's estimate of \$1,750,000. Staff reviewed the bid and determined that since only one bid was received and that the bid amount was higher than the Engineer's Estimate, it was difficult to evaluate whether the bid was indicative of the Project's scope or the lack of competition from other bidders. On October 9, 2017, the Board rejected the sole bid submitted by D. W. Nicholson Corporation.

Staff re-advertised the Project for bids on October 10, 2017. Staff modified the Project's bid documents by moving some of the scope of work from the base bid to bid alternates. The modification would allow the District to award only the work included in the base bid should the total bid amount, including the bid alternates, significantly exceed the Engineer's Estimate. The modification would also give staff an opportunity to evaluate whether the bid alternate amounts are reasonable given the complexity and criticality of the bid alternates' scope of work.

Staff received and opened three bids on October 31, 2017. The bid results are summarized in the table below and in the attached Table 1.

<b>Contractor</b>	<b>Total Base Bid Plus Bid Alternates A through H</b>
Monterey Mechanical Company Oakland, CA	\$1,956,000
D. W. Nicholson Corporation Hayward, CA	\$2,014,603
TNT Industrial Contractors Inc. Sacramento, CA	\$2,630,692
Engineer's Estimate	\$1,850,000

Staff used the Total Base Bid Plus Bid Alternates A through H to determine the lowest responsive and responsible bidder for the Project. Monterey Mechanical Company (MMC) was the apparent low bidder with a bid of \$1,956,000, which is \$106,000 or 5.7% above the Engineer's Estimate of \$1,850,000. Carollo reviewed their original Engineer's Estimate and updated it to \$1,850,000 for the re-advertised Project.

Staff believes MMC's bid to be indicative of the Project's scope as the two lowest bids were within 3% of each other. Staff reviewed MMC's bid alternate amounts and found them to be

reasonable. Even though the three bids were higher than the Engineer's Estimate, staff believes re-bidding the Project for a third time may not guarantee a lower bid and will further delay putting Primary Digester No. 3 back into service before the peak wet weather months of 2018-2019.

Staff reviewed MMC's bid and determined it to be the lowest responsive and responsible bid, which the contractor has verified and confirmed. No bid protests were received. MMC is a General Engineering Class A licensed contractor who has recently and successfully completed the Newark Pump Station Waterline Project in 2015 and the Force Main Improvements Phase II Project in 2012. Additional past projects completed for the District included the Sludge Thickeners 1 & 2 Rehabilitation Project, Pump Station Force Main Corrosion Repair Project, Digesters No. 5 and 6 Mixing Pumps and Heat Loop Improvements Project, Plant Mechanical Improvements Project, and Solids Handling Facilities Improvements Project. Staff has been satisfied with their work performance.

### **Bid Alternates**

The Project's bid schedule included eight bid alternates. Bid Alternate A provides the cost for the contractor to procure builder's risk insurance coverage. Builder's risk insurance is a special type of property insurance that indemnifies against the loss of or damage to a building or facility under construction.

Bid Alternates B through E are improvements at Primary Digester No. 3 and Heating and Mixing Building No. 2. Bid Alternate B provides for two new at-grade manways at Digester No. 3 to improve access into the digester for staff. Bid Alternate C is for replacement of overflow box piping at Digester No. 3. Bid Alternate D improves the drainage within Heating and Mixing Building No. 2. Bid Alternate E includes lighting improvements at Primary Digester No. 3 and Heating and Mixing Building No. 2.

Bid Alternates F through H are improvements at the Thickener Control Building. Bid Alternate F replaces the existing wind wall with new. Bid Alternate G adds new conduit for lighting in the building. Bid Alternate H modifies the 4W piping in the building to provide some redundancy for the seal water to the sludge pumps.

Staff recommends including all bid alternates, Bid Alternates A through H, in the construction contract.

### **Construction**

The Project's construction period will be 240 calendar days with an estimated completion in August 2018. At this time, staff will provide construction management and inspection services.

Staff recommends the Board award the construction contract for the Primary Digester No. 3 Rehabilitation Project, including Bid Alternates A through H, to Monterey Mechanical Company in the amount of \$1,956,000.

PRE/SEG/RC/DC:ks

Attachments: Figure 1 – Site Plan  
Table 1 – Bid Tabulation  
Agreement



FIGURE 1 – PRIMARY DIGESTER NO. 3 REHABILITATION PROJECT





**Primary Digester No. 3 Rehabilitation Project**  
**Table 1 - Bid Tabulation Sheet**

Primary Digester No. 3 Rehabilitation Project, Project No. 800-493  
 Bid Tabulation  
 Bid Opening: 2:00 pm, October 31, 2017  
 Engineer's Estimate: \$1,850,000

Item	Description	Quantity	Unit	Engineer's Estimate	Monterey Mechanical Company (Oakland, CA)		D. W. Nicholson Corporation (Hayward, CA)		TNT Industrial Contractors Inc. (Sacramento, CA)	
				Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
1	Completion of all Work included as part of Contract Documents for Project No. 800-493, except as specified under Bid Items 2-10, Appendix A, and Bid Alternates A-H	1	LS	\$ 1,089,000	LS	\$ 1,341,000	LS	\$ 1,199,700	LS	\$ 1,424,986
2	All work at Thickener Control Building, Digester No. 2, and Sludge Pump Rooms Nos. 1 and 3 as detailed in Appendix A, except as specified under Bid Alternates F-H	1	LS	\$ 229,000	LS	\$ 200,000	LS	\$ 281,200	LS	\$ 412,723
3	Allowance for time and material costs associated with any additional piping replacements as directed by the District.	1	LS	\$ 10,000	LS	\$ 10,000	LS	\$ 10,000	LS	\$ 10,000
4	Foam insulation repair on Primary Digester No. 3.	250	SF	\$ 20,000	\$ 204	\$ 51,000	\$ 151	\$ 37,850	\$ 184	\$ 46,000
5	Replacement of grating supports on Primary Digester No. 3.	42	LF	\$ 20,000	\$ 192	\$ 8,064	\$ 559	\$ 23,478	\$ 647	\$ 27,174
6	Structural concrete repair in Primary Digester No. 3: Type 1 Repair	200	SF	\$ 20,000	\$ 185	\$ 37,000	\$ 90	\$ 18,080	\$ 110	\$ 22,000
7	Structural concrete repair in Primary Digester No. 3: Type 2 Repair	200	SF	\$ 23,000	\$ 205	\$ 41,000	\$ 158	\$ 31,640	\$ 193	\$ 38,600
8	Structural concrete repair in Primary Digester No. 3: Type 3 Repair	50	SF	\$ 12,000	\$ 350	\$ 17,500	\$ 479	\$ 23,955	\$ 482	\$ 24,100
9	Structural concrete repair in Primary Digester No. 3: Polyurethane injection	300	LF	\$ 16,000	\$ 93	\$ 27,900	\$ 113	\$ 33,900	\$ 138	\$ 41,400
10	Cost for providing all shoring and bracing on all Bid Items above including but not limited to that as required by Sections 6700-6708 of the Labor Code	1	LS	\$ 31,000	LS	\$ 1,536	LS	\$ 600	LS	\$ 619
<b>Total Base Bid</b>				<b>\$ 1,470,000</b>		<b>\$1,735,000</b>		<b>\$1,660,403</b>		<b>\$2,047,602</b>
Bid Alternate A	Add Builder's Risk Insurance coverage described in Section 00800-Article 2.1.3a	1	LS	INCL.	LS	\$ 100	LS	\$ 5,000	LS	\$ 15,000
Bid Alternate B	Digester 3 At-Grade Manways	1	LS	\$ 154,000	LS	\$ 116,000	LS	\$ 59,200	LS	\$ 123,911
Bid Alternate C	Replacement of overflow box piping on the south side of Primary Digester No. 3	1	LS	\$ 25,000	LS	\$ 16,000	LS	\$ 39,800	LS	\$ 102,250
Bid Alternate D	Heating and Mixing Building No. 2 Floor and Drainage Modification	1	LS	\$ 45,000	LS	\$ 18,000	LS	\$ 64,600	LS	\$ 102,533
Bid Alternate E	Heating and Mixing Building No. 2 and Digester 3 Lighting Improvement:	1	LS	\$ 114,000	LS	\$ 30,000	LS	\$ 127,400	LS	\$ 47,998
Bid Alternate F	Thickener Control Building Wind Screen Replacemen	1	LS	\$ 23,000	LS	\$ 8,900	LS	\$ 13,700	LS	\$ 41,844
Bid Alternate G	Thickener Control Building Temporary Lighting Cord Replacemen	1	LS	\$ 6,000	LS	\$ 20,000	LS	\$ 20,500	LS	\$ 15,262
Bid Alternate H	Thickener Control Building 4W Piping Modifications	1	LS	\$ 13,000	LS	\$ 12,000	LS	\$ 24,000	LS	\$ 134,292
<b>Basis of Award: Contract Price (Total Base Bid + Bid Alternates A-H)</b>				<b>\$1,850,000</b>		<b>\$1,956,000</b>		<b>\$2,014,603</b>		<b>\$2,630,692</b>

## AGREEMENT FOR THE CONSTRUCTION OF

### Primary Digester No. 3 Rehabilitation Project

#### Project No. 800-493

THIS AGREEMENT, made and concluded, in duplicate, this \_\_\_\_ day of November 2017, between the UNION SANITARY DISTRICT ("District"), Union City, California, and MONTEREY MECHANICAL COMPANY ("Contractor"), License No. 388361.

#### WITNESSETH:

1. That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the District, and under the conditions expressed in the two bonds, bearing even date with these presents, and hereunto annexed, the Contractor agrees with the District, at his/her own proper cost and expense, to do all the work and furnish all the materials necessary to construct and complete in good workmanlike and substantial manner the project entitled: **Primary Digester No. 3 Rehabilitation Project (Project No. 800-493)** in strict conformity with the plans and specifications prepared therefor, which said plans and specifications are hereby specially referred to and by said reference made a part hereof.

2. Now, therefore, in consideration of the mutual covenants and agreements of the parties herein contained and to be performed, the Contractor hereby agrees to complete the work in accordance with the terms and conditions stipulated in the Contract Documents for the sum of **One Million Nine Hundred Fifty Six Thousand Dollars (\$1,956,000)** (the "Contract Price") computed in accordance with Contractor's accepted proposal dated October 31, 2017, which accepted proposal is incorporated herein by reference thereto as if herein fully set forth. This sum includes the following bid alternates that have been accepted by the District and are hereby incorporated in the Agreement: **A, B, C, D, E, F, G, and H**. Compensation shall be based upon the lump sum bid items plus the unit prices stated in the Bid Schedule times the actual quantities or units of work and materials performed or furnished. The further terms, conditions, and covenants of this Agreement are set forth in the Contract Documents, each of which is by this reference made a part hereof. Payments are to be made to the Contractor in accordance with the provisions of the Contract Documents and the Technical Specifications in legally executed and regularly issued warrants of the District, drawn on the appropriate fund or funds as required by law and order of the District thereof.

3. The District hereby promises and agrees with the said Contractor to employ, and does hereby employ, the said Contractor to provide the materials and to do the work according to the terms and conditions herein contained and referred to, for the Contract Price, and hereby contracts to pay the same at the time, in the manner and upon the conditions set forth in the Contract Documents; and the said parties for themselves, their heirs, executors, administrators, successors and assigns, do hereby agree to the full performance of the covenants herein contained.

4. The Contractor and any subcontractor performing or contracting any work shall comply with all applicable provisions of the California Labor Code for all workers, laborers and mechanics of all crafts, classifications or types, including, but necessarily limited to the following:

- (a) The Contractor shall comply with all applicable provisions of Section 1810 to 1815, inclusive, of the California Labor Code relating to working hours. The Contractor shall,

as a penalty to the District, forfeit the sum of twenty-five dollars (\$25) for each worker employed in the execution of the Contract by the Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any one calendar day and forty (40) hours in any one calendar week, unless such worker receives compensation for all hours worked in excess of eight (8) hours at not less than 1-1/2 times the basic rate of pay.

(b) Pursuant to the provision of California Labor Code, Sections 1770 et. seq., the Contractor and any subcontractor under him shall pay not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations. Pursuant to the provisions of California Labor Code Section 1773.2, the Contractor is hereby advised that copies of the prevailing rate of per diem wages and a general prevailing rate for holidays, Saturdays and Sundays and overtime work in the locality in which the work is to be performed for each craft, classification, or type of worker required to execute the Contract, are on file in the office of the District, which copies shall be made available to any interested party on request. The Contractor shall post a copy of said prevailing rate of per diem wages at each job site.

(c) As required by Section 1773.1 of the California Labor Code, the Contractor shall pay travel and subsistence payments to each worker needed to execute the work, as such travel and subsistence payments are defined in the applicable collective bargaining agreements filed in accordance with this Section.

(d) To establish such travel and subsistence payments, the representative of any craft, classification, or type of workman needed to execute the contracts shall file with the Department of Industrial Relations fully executed copies of collective bargaining agreements for the particular craft, classification or type of work involved. Such agreements shall be filed within 10 days after their execution and thereafter shall establish such travel and subsistence payments whenever filed 30 days prior to the call for bids.

(e) The Contractor shall comply with the provisions of Section 1775 of the California Labor Code and shall, as a penalty to the District, forfeit not more than two hundred dollars (\$200) for each calendar day, or portion thereof, for each worker paid less than the prevailing rate of per diem wages for each craft, classification, or type of worker needed to execute the contract. The Contractor shall pay each worker an amount equal to the difference between the prevailing wage rates and the amount paid worker for each calendar day or portion thereof for which a worker was paid less than the prevailing wage rate.

(f) As required under the provisions of Section 1776 of the California Labor Code, Contractor and each subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification, and straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work. Said payroll shall be certified and shall be available for inspection at all reasonable hours at the principal office of the Contractor on the following basis:

(1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.

(2) A certified copy of all payroll records enumerated in Paragraph 4(f), herein,

shall be made available for inspection or furnished upon request to the District, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the Department of Industrial Relations.

(3) A certified copy of all payroll records enumerated in Paragraph 4(f), herein, shall be made available upon request by the public for inspection or for copies thereof; provided, however, that a request by the public shall be made through the District, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to subparagraph 4(e) herein, the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the Contractor, subcontractors, and the entity through which the request was made. The public shall not be given access to the records at the principal offices of the Contractor.

The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the division.

Certified payroll records shall be submitted electronically as required under California Labor Code Section 1776 to the Labor Commissioner pursuant to California Code of Regulations Chapter 8, Section 16404.

Each Contractor shall file a certified copy of the records, enumerated in Paragraph 4(f) with the entity that requested the records within 10 days after receipt of a written request. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the District, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address, and social security number. The name and address of the Contractor awarded the contract or performing the contract shall not be marked or obliterated. The Contractor shall inform the District of the location of the records enumerated under Paragraph 4(f) including the street address, city and county, and shall, within 5 working days, provide a notice of change of location and address. The Contractor shall have 10 days in which to comply subsequent to receipt of written notice specifying in what respects the Contractor must comply with this Paragraph 4(f). In the event that the Contractor fails to comply within the 10-day period, he or she shall, as a penalty to the state or the District, forfeit one hundred dollars (\$100) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due. Responsibility for compliance with Paragraph 4(f) lies with the Contractor.

(g) The Contractor and any subcontractors shall, when they employ any person in any apprenticeable craft or trade, apply to the joint apprenticeship committee administering the apprenticeship standards of the craft or trade in the area of the construction site for a certificate approving the Contractor or subcontractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected; and shall comply with all other requirements of Section 1777.5 of the California Labor Code. The responsibility of compliance with California Labor Code Section 1777.5 during the performance of this contract rests with the Contractor. Pursuant to California Labor Code

Section 1777.7, in the event the Contractor willfully fails to comply with the provisions of California Labor Code Section 1777.5, the Contractor shall be denied the right to bid on any public works contract for up to three (3) years from the date noncompliance is determined and be assessed civil penalties.

(h) In accordance with the provisions of Article 5, Chapter 1, Part 7, Division 2 (commencing with Section 1860), and Chapter 4, Part 1, Division 4 (commencing with Section 3700) of the California Labor Code, the Contractor is required to secure the payment of compensation to its employees and for that purpose obtain and keep in effect adequate Workers' Compensation Insurance. If the Contractor, in the sole discretion of the District satisfies the District of the responsibility and capacity under the applicable Workers' Compensation Laws, if any, to act as self-insurer, the Contractor may so act, and in such case, the insurance required by this paragraph need not be provided.

The Contractor is advised of the provisions of Section 3700 of the California Labor Code, which requires every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code and shall comply with such provisions and have Employer's Liability limits of \$1,000,000 per accident before commencing the performance of the work of this Contract.

The Notice to Proceed with the Work under this Contract will not be issued, and the Contractor shall not commence work, until the Contractor submits written evidence that it has obtained full Workers' Compensation Insurance coverage for all persons whom it employs or may employ in carrying out the work under this Contract. This insurance shall be in accordance with the requirements of the most current and applicable state Workers' Compensation Insurance Laws. In accordance with the provisions of Section 1861 of the California Labor Code, the Contractor in signing this agreement certifies to the District as true the following statement: "I am aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the work of this contract."

A subcontractor is not allowed to commence work on the project until verification of Workers' Compensation Insurance coverage has been obtained and verified by the Contractor and submitted to the Construction Manager for the District's review and records.

(i) In accordance with the provisions of Section 1727 of the California Labor Code, the District, before making payment to the Contractor of money due under a contract for public works, shall withhold and retain therefrom all wages and penalties which have been forfeited pursuant to any stipulation in the contract, and the terms of Chapter 1, Part 7, Division 2 of the California Labor Code (commencing with Section 1720). But no sum shall be withheld, retained or forfeited, except from the final payment, without a full investigation by either the Division of Labor Standards Enforcement or by the District.

5. It is further expressly agreed by and between the parties hereto that should there be any conflict between the terms of this Agreement the instrument and the bid proposal of said Contractor, then this Agreement instrument shall control, and nothing herein contained shall be considered as an acceptance of the said terms of said proposal conflicting herewith.

6. The Contractor agrees to provide and maintain insurance coverage, and to indemnify and  
Agreement for the Construction of the Primary Digester No. 3 Rehabilitation Project



save harmless the parties named and in the manner set forth in Section 00800-2.0, **LIABILITY AND INSURANCE**, of the Supplementary General Conditions of the Specifications.

The duty of Contractor to indemnify and save harmless, as set forth herein, shall include a duty to defend as set forth in Section 2778 of the California Civil Code; provided, however, that nothing herein shall be construed to require Contractor to indemnify against any responsibility or liability in contravention of Section 2782 of the California Civil Code.

7. The Contractor shall diligently prosecute the work so that it shall be substantially completed within the time specified in Section 00800-1.1, **Time Allowed for Completion**.

8. Except as otherwise may be provided herein, Contractor hereby expressly guarantees for one (1) full year from the date of the substantial completion of the work under this agreement and acceptance thereof by the District, to repair or replace any part of the work performed hereunder which constitutes a defect resulting from the use of inferior or defective materials, equipment or workmanship. If, within said period, any repairs or replacements in connection with the work are, in the opinion of the District, rendered necessary as the result of the use of inferior or defective materials, equipment or workmanship, Contractor agrees, upon receipt of notice from District, and without expense to District, to promptly repair or replace such material or workmanship and/or correct any and all defects therein. If Contractor, after such notice, fails to proceed promptly to comply with the terms of this guarantee, District may perform the work necessary to effectuate such correction and recover the cost thereof from the Contractor and/or its sureties.

In special circumstances where a particular item of work or equipment is placed in continuous service before substantial completion of the Work, the correction period for that item may start to run from an earlier date. This date shall be agreed upon in writing by the Contractor and District on or before the item is placed in continuous service.

Any and all other special guarantees which may be applicable to definite parts of the work under this agreement shall be considered as an additional guarantee and shall not reduce or limit the guarantee as provided by Contractor pursuant to this paragraph during the first year of the life of such guarantee.

9. The Contractor shall provide, on the execution of this Agreement, a good and sufficient corporate surety bond in the penal sum of one hundred percent (100%) of the Contract Price, which bond shall be on the form provided by the District in Section 00610, **FORM OF PERFORMANCE BOND**, and be conditioned upon the faithful performance of all work required to be performed by the Contractor under this Agreement. Said bond shall be liable for any and all penalties and obligations which may be incurred by Contractor under this Agreement. The corporate surety bond shall be issued by a corporate surety that possesses a minimum rating from A. M. Best Company of A:VII and that is approved by the District. The corporate surety shall be authorized to conduct business in California. At its discretion, the District may request that a certified copy of the certificate of authority of the insurer issued by the Insurance Commissioner of the State of California be submitted by the surety to the District. At its discretion, the District may also require the insurer to provide copies of its most recent annual statement and quarterly statement filed with the Department of Insurance pursuant to Article 10 (commencing with Section 900) of Chapter 1 of Part 2 of Division 1 of the Insurance Code.

10. In addition to the bond required under Paragraph 9, hereof, Contractor shall furnish a good and sufficient corporate surety bond in the penal sum of one hundred percent (100%) of the

Contract Price, which bond shall be on the form provided by the District in Section 00620, **PAYMENT BOND**, and conform strictly with the provisions of Sections 9550 et seq. of the Civil Code, and all amendments thereto. The corporate surety bond shall be issued by a corporate surety that possesses a minimum rating from A. M. Best Company of A:VII and that is approved by the District. The corporate surety shall be authorized to conduct business in California. At its discretion, the District may request that a certified copy of the certificate of authority of the insurer issued by the Insurance Commissioner of the State of California be submitted by the surety to the District. At its discretion, the District may also require the insurer to provide copies of its most recent annual statement and quarterly statement filed with the Department of Insurance pursuant to Article 10 (commencing with Section 900) of Chapter 1 of Part 2 of Division 1 of the Insurance Code.

11. The Contractor may substitute securities for the amounts retained by the District to ensure performance of the work in accordance with the provisions of Section 22300 of the Public Contract Code.

12. The Contractor shall be provided the time period specified in Section 01340-2.0, **MATERIAL AND EQUIPMENT SUBSTITUTIONS**, for submission of data substantiating a request for a substitution of an "or equal" item.

13. As required by Section 6705 of the California Labor Code and in addition thereto, whenever work under the Contract involves the excavation of any trench or trenches five feet or more in depth, the Contractor shall submit in advance of excavations, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the shoring system standards established by the Construction Safety Orders of the Division of Industrial Safety in Title 8, Subchapter 4, Article 6, California Code of Regulations, the plan shall be prepared by a registered civil or structural engineer employed by the Contractor, and all costs therefore shall be included in the price named in the Contract for completion of the work as set forth in the Contract Documents. Nothing in this Section shall be deemed to allow the use of a shoring, sloping, or other protective system less effective than that required by the Construction Safety Orders. Nothing in this Section shall be construed to impose tort liability on the District, the Design Consultant, Construction Manager or any of their agents, consultants, or employees. The District's review of the Contractor's excavation plan is only for general conformance to the California Construction Safety Orders.

Prior to commencing any excavation, the Contractor shall designate in writing to the Construction Manager the "competent person(s)" with the authority and responsibilities designated in the Construction Safety Orders.

14. In accordance with Section 7104 of the Public Contract Code, whenever any work involves digging trenches or other excavations that extend deeper than four feet below the surface, the provisions of Section 00700-7.2, **Differing Site Conditions**, shall apply.

15. In accordance with Section 7103.5 of the Public Contract Code, the Contractor and subcontractors shall conform to the following requirements. In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or subcontractor offers and agrees to assign to the District all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act [Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code], arising from purchases of goods, materials or services pursuant to this Contract or the subcontract. Such assignment shall be made and become effective at the time the District tenders final payment to the Contractor, without further acknowledgment by the parties.

Agreement for the Construction of the Primary Digester No. 3 Rehabilitation Project

16. In accordance with Section 4552 of the Government Code, the Contractor shall conform to the following requirements. In submitting a bid to the District, the Contractor offers and agrees that if the bid is accepted, it will assign to the District all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act [Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code], arising from purchase of goods, materials, or services by the Contractor for sale to the District pursuant to the bid. Such assignment shall be made and become effective at the time the District tenders final payment to the Contractor.

17. Pursuant to Public Contract Code Section 7100, the acceptance by the Contractor of an undisputed payment made under the terms of the Contract shall operate as, and shall be, a release to the District, and their duly authorized agents, from all claim of and/or liability to the Contractor arising by virtue of the contract related to those amounts. Disputed contract claims in stated amounts may be specifically excluded by the Contractor from the operation of the release.

18. In accordance with California Business and Professions Code Section 7030, the Contractor is required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within 10 years of the date of the alleged violation. Any questions concerning the Contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

19. INDEMNIFICATION. To the fullest extent permitted by law, Contractor shall indemnify and hold harmless the District from any claims, choses in action or lawsuits, whereby any subcontractor, material or equipment supplier, laborer or any person who supplies work or materials to said work of improvement may claim damages, losses and expenses thereto arising out of or resulting from any claim for performance of work, including the legal defense of any stop notice action as well as attorney fees and costs. District may be required to engage separate legal counsel from that of the Contractor should District and Contractor be both named as defendants, cross-defendants or other parties to any such stop notice action in District's sole discretion. Contractor shall be fully liable for any judgment or damages resulting from any claim for stop notice relief or other liability regarding payment for materials, supplies, labor or equipment under this contract. In claims against any person or entity indemnified under this paragraph by an employee of Contractor, a subcontractor, anyone directly or indirectly employed by them for whose acts they may be liable, the indemnification obligation under this paragraph shall not be limited in amount or type of damages, compensation or benefits payable by or for the Contractor or a subcontractor. In all cases, indemnification shall include attorney fees and court costs.

Unless arising solely out of the active negligence, gross negligence or willful misconduct of the District or the Design Consultant, the Contractor shall indemnify, defend and hold harmless: (i) the District and its Board of Directors, officers, employees, agents and representative; (ii) the Design Consultant and its consultants for the Work and their respective agents and employees; and (iii) if one is designated by the District for the work, the Construction Manager and its agents and employees (collectively "the Indemnified Parties"). The Contractor's obligations hereunder include indemnity, defense and hold harmless of the Indemnified Parties from and against any and all damages, losses, claims, demands or liabilities whether for damages, losses or other relief, including, without limitation attorney's fees and costs which arise, in whole or in part, from the Work, the Contract Documents or the acts, omissions or other conduct of the Contractor or any subcontractor or any person or entity engaged by them for the Work. The Contractor's obligations

under the foregoing include without limitation: (i) injuries to or death of persons; (ii) damage to property; or (iii) theft or loss of property; (iv) stop notice claims asserted by any person or entity in connection with the Work; and (v) other losses, liabilities, damages or costs resulting from, in whole or part, any acts, omissions or other conduct of Contractor, any of Contractor's Subcontractors, of any tier, or any other person or entity employed directly or indirectly by Contractor in connection with the Work and their respective agents, officers or employees. If any action or proceeding, whether judicial, administrative, arbitration or otherwise, shall be commenced on account of any claim, demand or liability subject to Contractor's obligations hereunder, and such action or proceeding names any of the Indemnified Parties as a party thereto, the Contractor, at its sole cost and expense, shall defend the District and the Design Consultant in such action or proceeding with counsel reasonably satisfactory to the Indemnified Parties named in such action or proceeding. In the event that there shall be any judgment, award, ruling, settlement, or other relief arising out of any such action or proceeding to which any of the Indemnified Parties are bound by, Contractor shall pay, satisfy or otherwise discharge any such judgment, award, ruling, settlement or relief. Contractor shall indemnify and hold harmless the Indemnified Parties from any and all liability or responsibility arising out of any such judgment, award, ruling, settlement or relief. The Contractor's obligations hereunder are binding upon Contractor's Performance Bond Surety and these obligations shall survive notwithstanding Contractor's completion of the Work or the termination of the Contract.

IN WITNESS WHEREOF, the parties hereto have executed this agreement this \_\_\_\_\_ day of November 2017.

MONTEREY MECHANICAL COMPANY

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Address: 8275 San Leandro Street, Oakland, California 94621

UNION SANITARY DISTRICT

By: \_\_\_\_\_  
Manny Fernandez  
Board Secretary  
Address: 5072 Benson Road, Union City, California 94587

ATTEST:

\_\_\_\_\_  
Karen Murphy  
Attorney for Union Sanitary District

**Directors**

Manny Fernandez  
Tom Handley  
Pat Kite  
Anjali Lathi  
Jennifer Toy

**Officers**

Paul R. Eldredge  
*General Manager/  
District Engineer*

Karen W. Murphy  
*Attorney*

**DATE:** November 6, 2017

**MEMO TO:** Board of Directors - Union Sanitary District

**FROM:** Paul R. Eldredge, General Manager/District Engineer  
Sami E. Ghossain, Manager of Technical Services  
Raymond Chau, CIP Coach  
Kevin Chun, Associate Engineer

**SUBJECT:** Agenda Item No. 10 – Meeting of November 13, 2017  
**Consider a Resolution to Accept the Construction of the Headworks Knife Gate Valves 1-3 Replacement Project from D.W. Nicholson Corporation and Authorize Recordation of a Notice of Completion**

**Recommendation**

Staff recommends the Board consider a resolution to accept the construction of the Headworks Knife Gate Valves 1-3 Replacement Project from D.W. Nicholson Corporation and authorize the recordation of a Notice of Completion.

**Background**

The Headworks Building was constructed during the 1993 Plant Upgrade Project. The purpose of the Headworks Building is to combine all influent wastewater to the Alvarado Wastewater Treatment Plant (WWTP), measure the total flow quantity, and remove rags and large debris with mechanical bar screens. The influent wastewater enters the Headworks Building through three 42-inch diameter pipelines. Two of the pipelines transport wastewater from the outlying pump stations through the transport system's twin force mains, and the third pipeline transports wastewater from the on-site Alvarado Influent Pump Station (AIPS) which serves the Alvarado drainage basin.

On each of the 42-inch diameter pipelines, there is a knife gate valve with a motorized actuator to stop the influent wastewater during a WWTP shutdown or to isolate individual pipelines for



operation and maintenance needs. The valves are located in an underground valve box south of the Headworks Building. Figures 1 and 2 show the location of the Headworks Valve Box and the three pipelines.

In 2015, staff attempted to isolate the force mains during a WWTP shutdown but discovered the valve on the east force main did not seal completely when closed and that allowed wastewater to leak past it. Replacement of the valve's internal seat was difficult as it required removal of the valve to access the seat. Due to the size of the valve and the limited space inside the Headworks Valve Box, the removal required a contractor who specialized in rigging and lifting large equipment. Additionally, staff performed a condition assessment of the three knife gate valves and found heavy corrosion on the valve bodies due to wastewater leaks from the packing glands that seal around the valve stems to prevent leakage along the stems. Staff was unable to replace the packing material to stop the leakage as it required removal of the valve bonnet (valve cover). A new re-designed knife gate valve will allow easier replacement of the packing material in the future.

Because the valves are over 20 years old and are at or near the end of their useful life, staff determined the valves should be replaced. The three knife gate valves were also identified to be replaced in the most recent WWTP Renewal and Replacement Master Plan and Pump Station Master Plan.

Figures 3 through 5 show the Headworks Valve Box and the original knife gate valves.

On December 12, 2016, the Board awarded the construction contract for the Headworks Knife Gate Valves 1-3 Replacement Project in the amount of \$478,800 to D.W. Nicholson Corporation. The purpose of the project was to replace the three 42-inch knife gate valves at the Headworks. The project was designed in-house by staff.

### **Construction Contract**

Staff issued the Notice to Proceed to D.W. Nicholson on January 5, 2017, with a scheduled completion date of September 21, 2017. D.W. Nicholson substantially completed the Project on September 5, 2017, 16 calendar days earlier than the scheduled completion date. Construction management and inspection were performed by staff. Figures 6 through 9 include construction photos of the new and old knife gate valves being replaced during construction.

### **Change Order Summary**

The construction contract included two change orders in the amount of \$33,895, which is approximately 7.1% of the original contract amount.

Change Order No. 1 included the replacement of the AIPS Knife Gate Valve at Control Box No. 1 instead of the West Force Main Knife Gate Valve. During construction, Operations and Maintenance staff requested that the AIPS Knife Gate Valve at Control Box No. 1 be replaced under this project since the valve was found to be inoperable and is critical to the normal operation of Control Box No. 1. This change also required the installation and removal of a temporary bulkhead in Control Box No. 1 to isolate the AIPS force main, modification of the new gate valve stem for a deeper valve location, and multiple night shift construction activities. Staff will replace the West Force Main Knife Gate Valve when the two existing force main knife gate valves at Control Box No. 1 are replaced.

All negotiations have been completed and the change orders executed. A summary of the change orders is provided in Table 1.

**Table 1**  
**Change Order Summary**

<b>No.</b>	<b>Description</b>	<b>Amount</b>
1	Replacement of Alvarado Knife Gate Valve at Control Box No. 1	\$31,457
2	Corrosion repairs at East Force Main Pipe and Flanged Coupling Adapter Harness	\$2,438
	<b>Total Change Order Amount:</b>	<b>\$33,895</b>

D.W. Nicholson Corporation has completed all punchlist items and the District has assumed beneficial use of the Project.

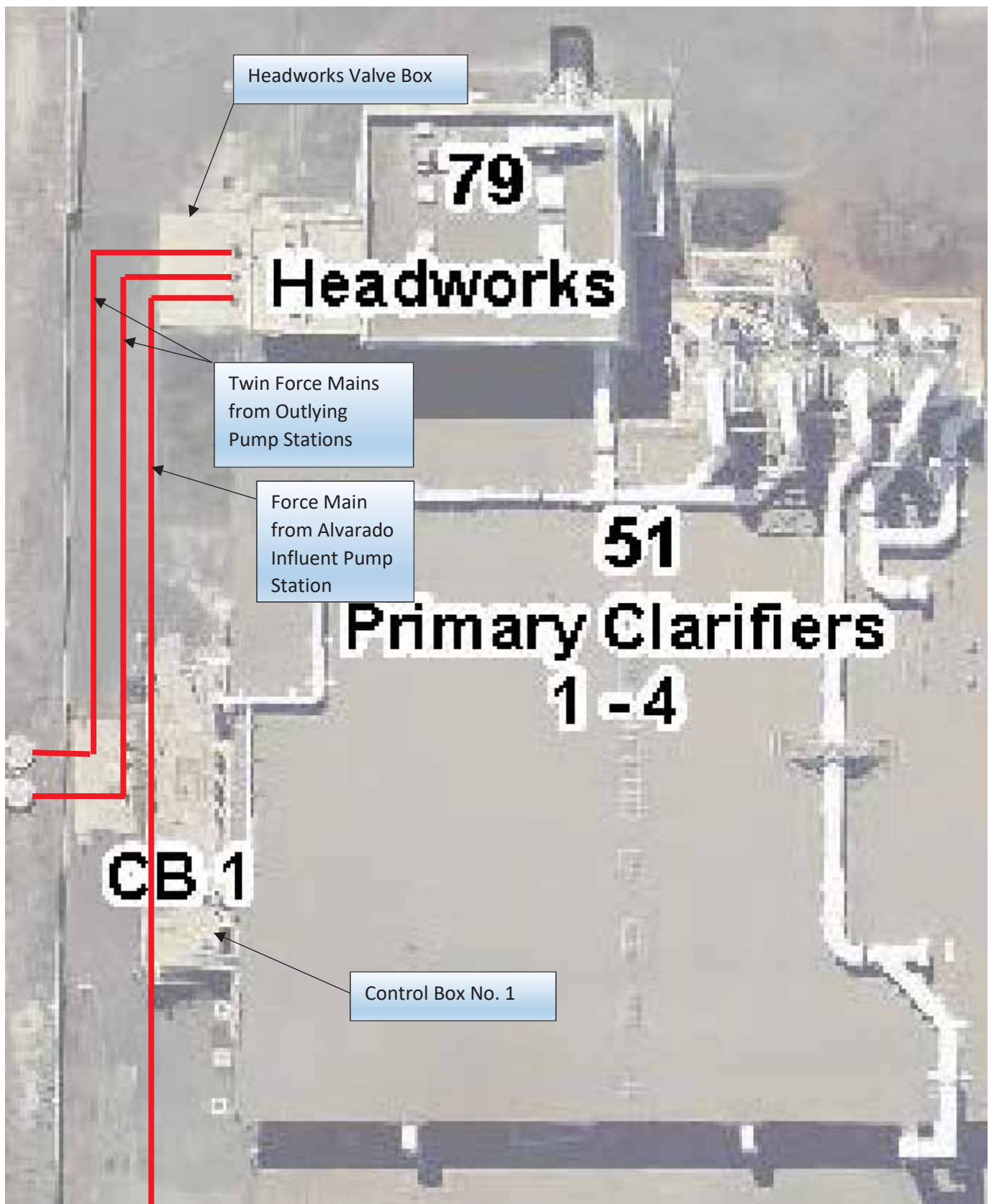
Staff recommends the Board consider a resolution to accept the construction of the Headworks Knife Gate Valves 1-3 Replacement Project from D.W. Nicholson Corporation and authorize the recordation of a Notice of Completion.

PRE/SEG/RC/KC:ks

Attachments: Figures 1 and 2 – Site Map  
Figures 3 through 9 – Photos  
Resolution  
Notice of Completion

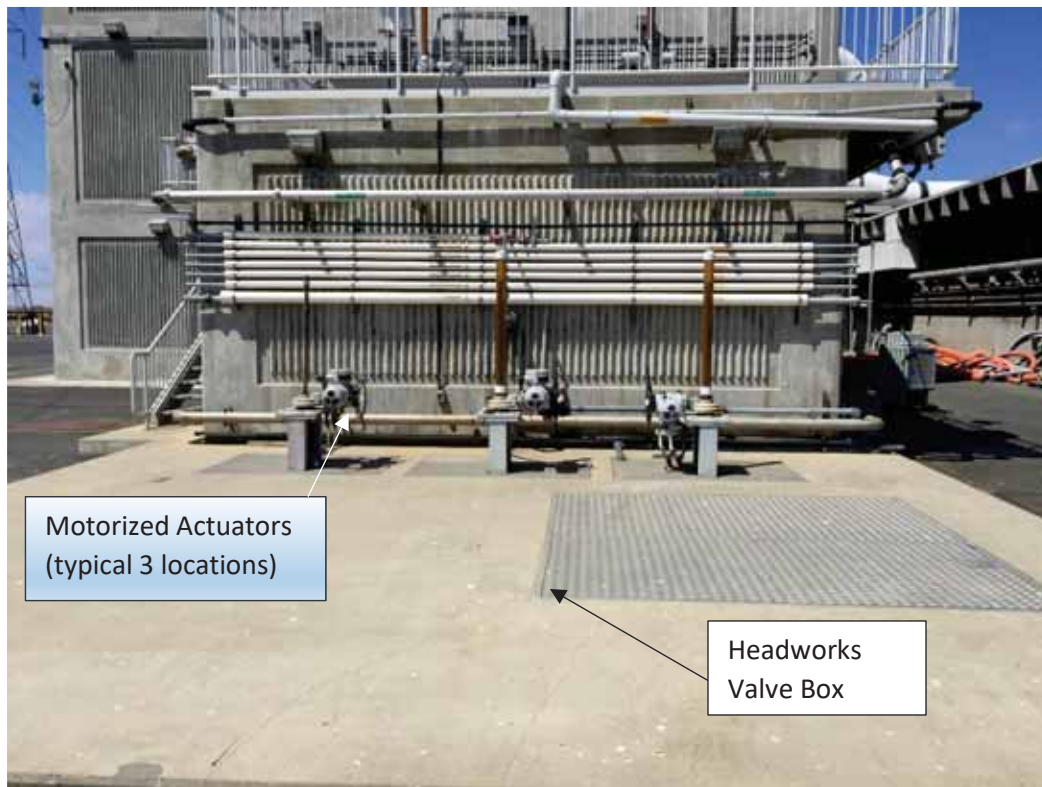


Figure 1 – Site Plan of Existing Force Mains Connecting at the Headworks Valve Box



*Figure 2 – Headworks Building and Headworks Valve Box*



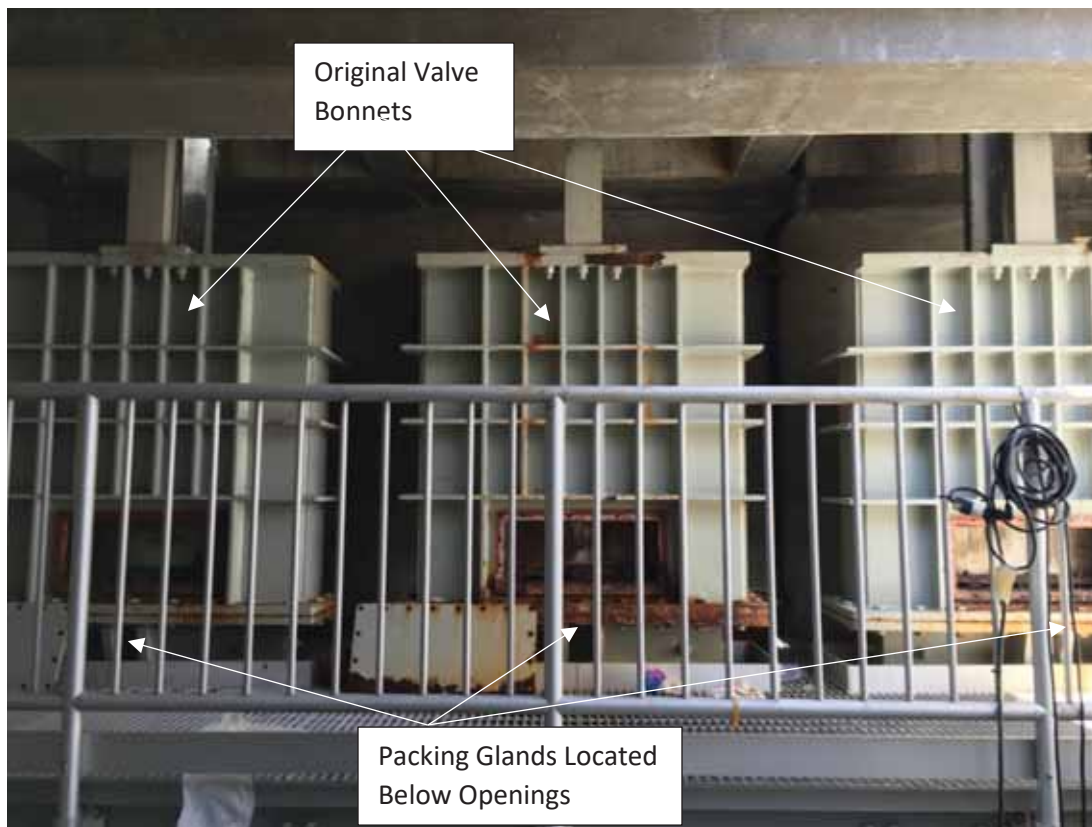


*Figure 3 – Exterior view of the Headworks Valve Box with the Headworks Building in the background*

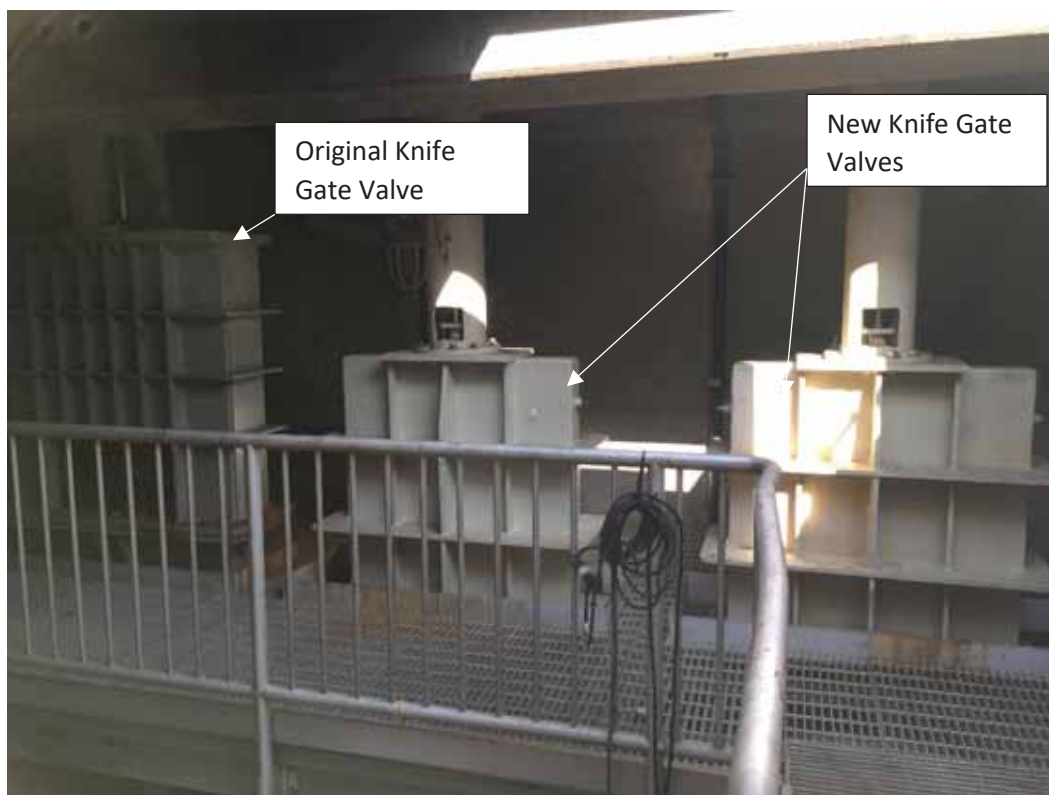


*Figure 4 – Interior view of the Headworks Valve Box with the original knife gate valves and 42" force main pipelines*





*Figure 5 – Interior view of the original knife gate valve bonnets showing corrosion at packing glands.*



*Figure 6 – Interior close-up view of the new knife gate valves*



*Figure 7 – New Alvarado Influent Pump Station Knife Gate Valve at Control Box No. 1*



*Figure 8 – Crane operations to remove one of the existing knife gate valves*



*Figure 9 – Crane operations to install one of the new knife gate valves*

**RESOLUTION NO. \_\_\_\_**

**ACCEPT CONSTRUCTION OF THE  
HEADWORKS KNIFE GATE VALVES 1-3 REPLACEMENT PROJECT  
LOCATED IN THE CITY OF UNION CITY, CALIFORNIA  
FROM D.W. NICHOLSON CORPORATION**

RESOLVED, by the Board of Directors of the UNION SANITARY DISTRICT that it hereby accepts the Headworks Knife Gate Valves 1-3 Replacement Project from D.W. Nicholson Corporation effective November 13, 2017.

FURTHER RESOLVED: That the Board of Directors of the UNION SANITARY DISTRICT authorize the General Manager/District Engineer, or his designee, to execute and record a "Notice of Completion" for the Project.

On motion duly made and seconded, this resolution was adopted by the following vote on November 13, 2017:

AYES:

NOES:

ABSENT:

ABSTAIN:

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PATE KITE  
President, Board of Directors  
Union Sanitary District

Attest:

---

MANNY FERNANDEZ  
Secretary, Board of Directors  
Union Sanitary District



**RECORDING REQUESTED BY  
AND WHEN RECORDED  
RETURN TO:**

**Regina McEvoy  
Union Sanitary District  
5072 Benson Road  
Union City, CA 94587**

NO RECORDING FEE – PER GOVERNMENT CODE SECTIONS 6103 & 27283 (R&T Code 11911)

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**NOTICE OF COMPLETION**

**NOTICE IS HEREBY GIVEN** by the **UNION SANITARY DISTRICT**, Alameda County, California, that the work hereinafter described, the contract for the construction of which was entered into on December 14, 2016, by said District and **D.W. Nicholson Corporation**, 24747 Clawiter Road, Hayward, CA 94545, Contractor for the Project, "Headworks Knife Gate Valves 1-3 Replacement Project", was substantially completed on September 5, 2017, and accepted by said District on November 13, 2017.

The name and address of the owner is the UNION SANITARY DISTRICT, at 5072 Benson Road, Union City, CA 94587.

The estate or interest of the owner is: FEE SIMPLE ABSOLUTE

The description of the site where said work was performed and completed is Union Sanitary District's Alvarado Wastewater Treatment Plant, located at 5072 Benson Road, Union City, CA 94587, County of Alameda, State of California.

The undersigned declares under penalty of perjury that the foregoing is true and correct.

Executed on \_\_\_\_\_ at UNION CITY, CALIFORNIA.

\_\_\_\_\_  
PAUL R. ELDREDGE, P.E.  
GENERAL MANAGER/DISTRICT ENGINEER  
UNION SANITARY DISTRICT



**Directors**

Manny Fernandez  
Tom Handley  
Pat Kite  
Anjali Lathi  
Jennifer Toy

**Officers**

Paul R. Eldredge  
*General Manager/  
District Engineer*

Karen W. Murphy  
*Attorney*

**DATE:** November 6, 2017

**MEMO TO:** Board of Directors - Union Sanitary District

**FROM:** Paul R. Eldredge, General Manager/District Engineer  
Sami E. Ghossain, Manager of Technical Services  
Michael Dunning, Environmental Compliance Coach  
Michelle Powell, Communications and Intergovernmental Relations Coordinator  
Doug Dattawalker, Environmental Compliance Inspector II

**SUBJECT:** Agenda Item No. 11 - Meeting of November 13, 2017  
**Review and Provide Direction on USD Video and Virtual Plant Tour**

**Recommendation**

Review quotes for edits to the Virtual Plant Tour video, and provide direction regarding next steps.

**Background**

Pursuant to previous Board Direction, staff developed a video showcasing USD and the treatment plant that is also intended to be used as a virtual tour of the treatment plant. The video was presented at the Board meetings held August 14, 2017 and September 26, 2017. The Board directed staff to obtain quotes for adding a FOG (fats, oils, and grease) call to action, additional animation showing the stages of treatment throughout the video, and lowering the volume of the background music throughout the video. The quotes are outlined below:

Quote 1: Addition of a FOG call to action with “fatberg” footage	\$2,775
Quote 2: Adding animation to show stages of treatment throughout the video	\$1,525

Quote 3: Reduce background music volume	\$375
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Quote 1 would involve shooting new footage, re-recording voiceover, and reinserting into final product.

Quote 2 would include new animation overlaid on an existing aerial or drone live action shot and would track the stage of treatment being shown with animated movement to the next stage.

Quote 3 would consist of re-syncing the music at a lower volume.

**Directors**

Manny Fernandez  
Tom Handley  
Pat Kite  
Anjali Lathi  
Jennifer Toy

**Officers**

Paul R. Eldredge  
*General Manager/  
District Engineer*

Karen W. Murphy  
*Attorney*

**DATE:** November 7, 2017

**MEMO TO:** Board of Directors - Union Sanitary District

**FROM:** Paul R. Eldredge, General Manager/District Engineer  
Laurie Brenner, Business Services Coach

**SUBJECT:** Agenda Item No. 12 - Meeting of November 13, 2017  
Information Item: **Board Expenses for the 1<sup>st</sup> Quarter of Fiscal Year 2018**

**Recommendation**

Information only.

**Background**

Please see attached the Board of Directors Quarterly Travel and Training Expenditure Report for the 1<sup>st</sup> quarter of Fiscal Year 2018.

**BOARD OF DIRECTORS**  
**QUARTERLY TRAVEL AND TRAINING EXPENDITURE REPORT**  
**1ST QTR, FISCAL YEAR 2018**

Board Members	Description	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Beginning Balance	Y-T-D Expense	Balance Available
FERNANDEZ, MANNY								
	<b>TOTAL</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>5000.00</b>	<b>0.00</b>	<b>5000.00</b>
HANDLEY, TOM								
	Registration Fee - Annual CASA Conference - San Diego, August 22-24, 2017	550.00						
	Airfare - Annual CASA Conference	149.96						
	Lodging - Annual CASA Conference	654.30						
	Mileage - Annual CASA Conference	21.03						
	Meals - Annual CASA Conference	29.18						
	Airport Parking - Annual CASA Conference	45.83						
	Rental Car - Annual CASA Conference	109.02						
	<b>TOTAL</b>	<b>1,559.32</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>5000.00</b>	<b>1,559.32</b>	<b>3440.68</b>
HARRISON, JENNIFER								
	<b>TOTAL</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>5000.00</b>	<b>0.00</b>	<b>5000.00</b>
KITE, PAT								
	<b>TOTAL</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>5000.00</b>	<b>0.00</b>	<b>5000.00</b>
LATHI, ANJALI								
	Union City Chamber of Commerce Spirit Awards Luncheon	45.00						
	<b>TOTAL</b>	<b>45.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>5000.00</b>	<b>45.00</b>	<b>4955.00</b>
	<b>GRAND TOTAL</b>	<b>1,604.32</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>25000.00</b>	<b>1,604.32</b>	<b>23395.68</b>

The Board of Directors' Quarterly Expenditure Report is attached as part of the check register in accordance with Board Member Business Expense policy adopted September 5, 1991



**Directors**

Manny Fernandez  
Tom Handley  
Pat Kite  
Anjali Lathi  
Jennifer Toy

**Officers**

Paul R. Eldredge  
*General Manager/  
District Engineer*

Karen W. Murphy  
*Attorney*

**DATE:** November 1, 2017

**MEMO TO:** Board of Directors - Union Sanitary District

**FROM:** Paul R. Eldredge, General Manager/District Engineer  
Armando Lopez, Manager, Treatment and Disposal Services  
Tim Grillo, Coach, Research and Support Team

**SUBJECT:** Agenda Item No. 13 - Meeting of November 13, 2017  
Information Item: **Annual Report to Union City Fiscal Year 2017**

**Recommendation**

Information only.

**Background**

Union City Use Permit UP-4-95 requires the District to submit a report annually to the City Manager's Office. The purpose of the report is to:

1. Document the existing wastewater treatment plant flow
2. Provide a projection of the plant flow for the following year
3. Review compliance with effluent discharge limits
4. Provide a status report on progress made in the development of any new treatment facilities outside of the Union City limits.

A copy of the District's annual report to Union City for FY 2017 is attached for review.





**Directors**  
Manny Fernandez  
Tom Handley  
Pat Kite  
Anjali Lathi  
Jennifer Toy

**Officers**  
Paul R. Eldredge, P.E.  
*General Manager*  
*District Engineer*

Karen W. Murphy  
*Attorney*

October 5, 2017  
Mr. Tony Acosta  
City Manager, City of Union City  
34009 Alvarado-Niles Road  
Union City, CA 94587

**SUBJECT: SUBMISSION OF ANNUAL REPORT FOR UNION SANITARY DISTRICT FOR FISCAL YEAR 2017**

Dear Mr. Acosta,

Pursuant to Union City use permit (UP-4-95), Union Sanitary District hereby submits its Annual Report for Fiscal Year 2017.

### **Introduction**

The Union City Planning Commission approved use permit No. UP-4-95 (Use Permit) on July 20, 1995, that allowed for the expansion of the Union Sanitary District (USD) Alvarado Wastewater Treatment Facility from a capacity of 35 million gallons per day (MGD) to 38 MGD. The Use Permit requires the District to submit an annual report to the City Manager's Office documenting the current wastewater flow received at the Alvarado Treatment Plant, a projection of flows for the next year, the current discharge limits imposed by the Regional Water Quality Control Board (RWQCB), and a status report on progress made toward development of a new facility outside of Union City limits (Condition 9).

A second condition (Condition 6) requiring an annual operations audit by an independent expert was eliminated by mutual agreement of Union Sanitary District's General Manager, Richard Currie, and Union City's City Manager, Larry Cheeves, in January 2005 following more than 10 years of perfect NPDES Permit compliance.

### **Background**

Union Sanitary District, founded in 1918, collects and treats wastewater from the communities of Union City, Newark, and Fremont, California. The District owns and operates a wastewater treatment plant located in Union City. Treated effluent is discharged through

5072 Benson Road Union City, CA 94587-2508  
P.O. Box 5050 Union City, CA 94587-8550  
(510) 477-7500 FAX (510) 477-7505  
[www.unionsanitary.com](http://www.unionsanitary.com)

the East Bay Dischargers Authority (EBDA) outfall into San Francisco Bay. A portion of the effluent is diverted to Hayward Marsh from the EBDA force main as a beneficial use of reclaimed wastewater.

The Alvarado Wastewater Treatment Facility was completed in 1981 and was originally rated for a design flow of 19.7 MGD. A Plant Expansion Project increased treatment capacity in 1985. A Plant Upgrade Project set the firm reliable treatment capacity at 33 MGD in 1997. The upgrade project replaced the original secondary treatment technology with three additional aeration basins, and included a new blower room, headworks, generator building, new digester and other miscellaneous improvements. Construction of a centrifuge dewatering facility was completed in 2004. Replacement of the treatment plant cogeneration system and its associated building was completed in 2015. Construction to renew and replace aging equipment is a continual and ongoing process.

#### **Current Wastewater Flow**

The following is a summary of the average dry weather flow (ADWF) and annual average daily flow (AADF) for recent fiscal years. The Alvarado treatment facility is permitted to treat an ADWF flow of 33 MGD under the current national pollution discharge elimination system (NPDES) permit. The ADWF is defined as the average flow during the summer months of May through September. The AADF is defined as the annual average daily flow throughout the fiscal year including both wet and dry seasons.

Fiscal Year	ADWF Permitted by NPDES, MGD	Actual ADWF, MGD	Actual AADF, MGD
2013	33	24.3	24.6
2014	33	24.1	23.5
2015	33	22.6	22.9
2016	33	21.9	22.8
2017	33	22.7	24.4

During FY17, an average effluent flow of 3.3 MGD was reused at the Hayward Shoreline Marsh.

#### **Projected Wastewater Flow**

The annual average daily flow (AADF) had been trending downward for several years due to the loss of some water intensive industries from the service area and to impacts from the drought and water conservation efforts by ACWD.

However, due to significant rainfall this past season, the average AADF for FY17 increased by 1.2 MGD compared to the average for FY16. The AADF for FY17 was 24.0 MGD. Due to the construction of additional housing in the service area and with a normal rainfall this upcoming winter, the AADF for FY18 is expected to remain constant.

#### **Discharge Compliance and Permit Limits**

The regional board reissued the NPDES permit for the East Bay Dischargers Association in 2017. The NPDES permit includes an effluent limit for ammonia at the combined final effluent discharged to the San Francisco Bay. It is currently easy to comply with this limit. However, we anticipate that future changes to the ammonia limit could require substantial improvements to the treatment plant for nutrient removal.

While the flows to the treatment plant have decreased over recent years, the mass loading of conventional pollutants and ammonia have increased. The District is conducting a capacity assessment study to determine actions necessary to maintain permit compliance in the future as the load of conventional pollutants and ammonia increase. Results from this are likely to result in the revision of some treatment plant equipment.

There were no violations of the EBDA Discharge permit in FY 2017. Union Sanitary District was presented with the Peak Performance Award (Platinum Award) from the National Association of Clean Water Agencies (NACWA) for Calendar Year 2016. The NACWA Platinum Award recognizes perfect National Pollutant Discharge Elimination System (NPDES) permit compliance for a consecutive five year period. This is the fourth consecutive year of receiving the Platinum Award. Union Sanitary District has been recognized through the Peak Performance Award Program for the past 24 years.

#### **Development of Facilities Outside Union City**

The District has no plans for construction of additional treatment outside the City of Union City.

If you have any questions or need additional information, please contact me at (510)477-7517 or email at [armandol@unionsanitary.ca.gov](mailto:armandol@unionsanitary.ca.gov).



Armando Lopez  
Manager, Treatment & Disposal Services



**Summary of the EBDA Commission Meeting**  
**Thursday, October 19, 2017, at 9:30 a.m.**

Prepared by: P. Eldredge

- Commissioners Becker, Cutter, Peixoto, Johnson, and Toy were present.
- The Consent Calendar was approved unanimously and included the Commission Meeting Minutes, List of Disbursements, and Treasurer's Report.
- The Commission unanimously approved the reports from the Managers Advisory, Financial Management, Regulatory Affairs, Operations & Maintenance, and Personnel committees. The following items were discussed:
  - **General Managers Report** - The General Manager advised the Commission that the Operations and Maintenance Committee is seeking approval of two funding resolutions. The General Manager then deferred his comments to specific agenda items.
  - **Managers Advisory Committee (MAC)** – The MAC discussed the transport system inspection and the peracetic acid pilot. The MAC also discussed at length the succession plan for the retiring General Manager.
  - **Financial Management Committee** met with the General Manager on October 17, 2017, and reviewed the September list of disbursements and Treasurer's Reports. The Committee reviewed the fiscal year 2017 final O&M costs for member agencies. Overall, EBDA spending in 2016/17 was over budget about 1% (\$52K), primarily due to an extremely wet weather season and bacterial regrowth in the transport system. EBDA's auditor, Maze and Associates, reviewed Statements of Auditing Standards No. 99 and 114 with the Committee.
  - **Regulatory Affairs Committee** met with the General Manager on October 17, 2017 and reviewed permit compliance. The Committee was updated on the Air Board's Rule 11-18 and the status of the bacterial issues.
  - **Operations and Maintenance (O&M) Committee** met with the General Manager on October 16, 2017. The Committee was updated on the status of the O&M activities at the EBDA facilities. Howard Cin reviewed the transport system inspection schedule for the week of October 23.

The Committee recommends adoption of the resolutions authorizing Amendment No. 1 to the Pump Repair Service Company agreement in the amount of \$35,855 and Amendment No. 4 to the Brown & Caldwell agreement for \$220,000.

- **The Personnel Committee** met on October 16, 2017 and discussed the post-retirement employment of EBDA's Superintendent of Operations and Maintenance. Staff is also requesting the Commission support waiving the 180-day wait period required by CalPERS. The Committee discussed the transition strategy for the retiring General Manager and developed some revised language for the job posting.

The Commission agreed that due to the time constraints it is prudent to post the General Manager opening the week of October 23. Member agency General Manager's will review the proposed job posting and provide comments by Monday, October 23. The job will be posted on industry websites including CWEA, CASA, and WEF. Union Sanitary District offered their Human Resources services to EBDA staff for the recruitment.

- **Resolution Authorizing the General Manager To Issue Amendment No. 1 to the Contract With Pump Repair Service Company Inc. Dated June 14, 2017, in the Amount of \$13,970 for a Total Not to Exceed Amount of \$35,855 for the Additional Work Necessary to Complete the Overhaul of the No. 6 Effluent Pump at the Alvarado Effluent Pump Station**

Commissioner Becker introduced a resolution authorizing Amendment No. 1 to the contract with Pump Repair Service Company Inc. in the amount of \$35,855 for the No. 6 Effluent Pump at AEPS. The motion was seconded by Commissioner Johnson and carried unanimously, 5-0.

Ayes: Commissioners Becker, Cutter, Toy, Johnson, and Chair Peixoto  
Noes: None  
Absent: None  
Abstain: None

- **Resolution Authorizing the General Manager to Issue Amendment No. 4 to the Contract with Brown and Caldwell for additional engineering services associated with the transport system condition assessment and to contract with the inspection contractors in the amount of \$220,000 for a total contract not to exceed amount of \$510,000**

Commissioner Becker introduced the resolution authorizing Amendment No. 4 to the Brown and Caldwell agreement in the amount of \$220,000 for the transport system inspection. The motion was seconded by Commissioner Cutter and carried unanimously, 5-0 (Johnson, Cutter, Toy, Becker, Peixoto; ayes).

Ayes: Commissioners Cutter, Becker, Toy, Johnson, and Chair Peixoto  
Noes: None  
Absent: None  
Abstain: None



**UNION SANITARY DISTRICT  
CHECK REGISTER  
10/14/2017-11/03/2017**

Check No.	Date	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
165878	10/26/2017	3073	EAST BAY DISCHARGERS AUTHORITY	O&M ASSESSMENT, OCT-DEC 2017	\$348,231.21	\$354,028.52
	10/26/2017	3067		O&M ASSESSMENT, FINAL BILLING FY 2016-2017	\$5,797.31	
165985	11/2/2017	20170925	SWRCB - STATE WATER RESOURCES	SRF LOAN #C065053110 - WILLOW/CENTRAL	\$108,384.73	\$248,018.43
	11/2/2017	20170925.1		SRF LOAN #C065045110 - LOWER HETCH	\$139,633.70	
165851	10/19/2017	30104618	SYNAGRO WEST LLC	CLEAN PRIMARY DIGESTER 3 & SECONDARY DIGESTER 2	\$128,950.00	\$128,950.00
165986	11/2/2017	30104645	SYNAGRO WEST LLC	AUGUST 2017 BIOSOLIDS DISPOSAL	\$54,010.55	\$125,187.81
	11/2/2017	30104635		SEPTEMBER 2017 BIOSOLIDS DISPOSAL	\$71,177.26	
165952	11/2/2017	300283	CITY OF FREMONT	OVERLAY 2016 MH RAISING	\$78,985.00	\$78,985.00
165846	10/19/2017	123483	SHAPE INCORPORATED	2 SITE WASTE PUMPS	\$69,537.60	\$69,537.60
165935	11/2/2017	11298492	BROWN & CALDWELL CONSULTANTS	PRIMARY DIGESTER NO. 7	\$7,743.89	\$27,995.27
	11/2/2017	11302427		PRIMARY DIGESTER NO. 7	\$20,251.38	
165854	10/19/2017	533620170922	US BANK CORP PAYMENT SYSTEM	MONTHLY CAL CARD STMT - SEPT 2017	\$26,993.38	\$26,993.38
165939	11/2/2017	161330	CAROLLO ENGINEERS	PLANT SOLIDS SYSTEM/CAPACITY ASSESSMENT	\$22,058.09	\$25,359.82
	11/2/2017	161236		RAS CONTROL INTERIM IMPROVEMENTS	\$3,301.73	
165814	10/19/2017	8710	DW NICHOLSON CORP	SOLAR CARPORT MONITOR	\$9,659.00	\$22,361.85
	10/19/2017	8540		HEADWORKS KNIFE GATE VALVES REPLACEMENT	\$12,702.85	
165834	10/19/2017	52481	NACWA	FY2018 MEMBERSHIP DUES (10/1/17 - 9/30/18)	\$18,600.00	\$18,600.00

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165940	11/2/2017	KMH5823	CDW GOVERNMENT LLC	RSA AUTHENTICATION MGR ANNUAL RENEWAL	\$1,621.20	\$17,067.20
	11/2/2017	KLV3556		RENEW VMWARE	\$15,446.00	
165927	11/2/2017	5171350	ALL INDUSTRIAL ELECTRIC SUPPLY	1 THERMAL IMAGING CAMERA	\$14,624.19	\$15,233.71
	11/2/2017	5171337		ASTD PARTS & MATERIALS	\$609.52	
165919	10/26/2017	17123	V&A CONSULTING ENGINEERS	DIGESTER NO. 3 INSP & REHAB	\$13,174.00	\$13,174.00
165868	10/26/2017	218038	BURKE, WILLIAMS & SORENSON LLP	CIP - AUGUST 2017	\$5,895.34	\$12,205.20
	10/26/2017	218040		COGEN - AUGUST 2017	\$3,012.51	
	10/26/2017	218039		LEGAL SERVICES INSURANCE CLAIM - AUGUST 2017	\$1,210.40	
	10/26/2017	218037		GENERAL LEGAL - AUGUST 2017	\$2,086.95	
165852	10/19/2017	833158	UNIVAR USA INC	4798 GALS SODIUM HYPOCHLORITE	\$2,353.82	\$11,820.60
	10/19/2017	840947		4800 GALS SODIUM HYPOCHLORITE	\$2,354.80	
	10/19/2017	840879		4698 GALS SODIUM HYPOCHLORITE	\$2,304.76	
	10/19/2017	841503		5000 GALS SODIUM HYPOCHLORITE	\$2,452.92	
	10/19/2017	840891		4799 GALS SODIUM HYPOCHLORITE	\$2,354.30	
165991	11/2/2017	843884	UNIVAR USA INC	4999 GALS SODIUM HYPOCHLORITE	\$2,452.41	\$11,797.51
	11/2/2017	843632		4599 GALS SODIUM HYPOCHLORITE	\$2,256.19	
	11/2/2017	843592		4801 GALS SODIUM HYPOCHLORITE	\$2,355.29	
	11/2/2017	844283		4949 GALS SODIUM HYPOCHLORITE	\$2,427.89	
	11/2/2017	843917		4700 GALS SODIUM HYPOCHLORITE	\$2,305.73	

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165923	10/26/2017	2033156	WEST YOST ASSOCIATES	HYPO TANKS AND PIPING REPLACEMENT	\$5,430.75	\$10,470.70
	10/26/2017	2033155		FORCE MAIN CORROSION REPAIRS - WEST	\$5,039.95	
165806	10/19/2017	159867	CAROLLO ENGINEERS	CHERRY STREET PUMP STATION CAPACITY PROJECT	\$10,466.47	\$10,466.47
165970	11/2/2017	103961	MUNIQUEIP, LLC	1 REBUILD KIT FOR APS PUMP MOTOR	\$9,738.34	\$9,738.34
165829	10/19/2017	245031	MACIAS GINI & O'CONNELL LLP	TEMP LABOR-ALGER, L. 9/1/2017-9/22/2017	\$9,534.00	\$9,534.00
165884	10/26/2017	127679	GOVERNMENT STAFFING SVCS. INC.	TEMP LABOR-SADEGHIAN, B. WK END 9/22/2017 & 9/29/2017	\$9,200.00	\$9,200.00
165802	10/19/2017	31805	CALIFORNIA WATER TECHNOLOGIES	42,700 LBS FERROUS CHLORIDE	\$4,502.91	\$9,113.78
	10/19/2017	31786		44,120 LBS FERROUS CHLORIDE	\$4,610.87	
165875	10/26/2017	96826	DEGENKOLB ENGINEERS	SEISMIC STUDY	\$8,621.93	\$8,621.93
165807	10/19/2017	9093	CHAMPION CLEANING SPECIALISTS	REFUND # 20386	\$2,500.00	\$7,500.00
	10/19/2017	8320		REFUND # 20384	\$2,500.00	
	10/19/2017	8385		REFUND # 20385	\$2,500.00	
165828	10/19/2017	15050	LOOKINGPOINT INC	RENEW EDGE FIREWALL SUBSCRIPTIONS	\$7,334.01	\$7,334.01
165917	10/26/2017	842254	UNIVAR USA INC	4796 GALS SODIUM HYPOCHLORITE	\$2,352.84	\$7,011.42
	10/26/2017	842240		4800 GALS SODIUM HYPOCHLORITE	\$2,354.80	
	10/26/2017	842869		4696 GALS SODIUM HYPOCHLORITE	\$2,303.78	



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165930	11/2/2017	10366081	AT&T	SERV: 09/13/17 - 10/12/17	\$757.02	\$6,837.13
	11/2/2017	10408287		SERV: 09/20/17 - 10/19/17	\$3,605.60	
	11/2/2017	10366084		SERV: 09/13/17 - 10/12/17	\$65.69	
	11/2/2017	10348325		SERV: 09/10/17 - 10/09/17	\$2,047.09	
	11/2/2017	10366085		SERV: 09/13/17 - 10/12/17	\$87.12	
	11/2/2017	10408309		SERV: 09/20/17 - 10/19/17	\$210.17	
	11/2/2017	10366083		SERV: 09/13/17 - 10/12/17	\$42.71	
	11/2/2017	10408285		SERV: 09/20/17 - 10/19/17	\$21.73	
165901	10/26/2017	240143277	PETERSON TRACTOR CO	COGEN ALTERNATIVE SPARK PLUGS	\$6,433.34	\$6,433.34
165795	10/19/2017	170901501	AIRTECH MECHANICAL INC	SERVICE CALL: BLDG 82 REPAIR ACTUATOR	\$1,784.44	\$6,335.94
	10/19/2017	170901500		SERVICE CALL: BLDG 70 SHUT OFF HOT WATER COILS	\$705.00	
	10/19/2017	170901497		SERVICE CALL: BLDG 70 REPLACE INDOOR BLOWER MOTOR	\$2,099.00	
	10/19/2017	170901502		SERVICE CALL: BLDG 70 REPAIRED BLOWER MOTOR	\$832.50	
	10/19/2017	170901504		SEP 2017: FILTER CHANGE BLDGS 54, 63, 81, 90	\$915.00	
165892	10/26/2017	21863	IEDA INC	LABOR RELATIONS CONSULTING 10/01/17-12/31/17	\$6,057.00	\$6,057.00
165798	10/19/2017	6202	BAY AREA COATING CONSULTANT	FORCE MAIN CORROSION REPAIRS - WEST	\$6,041.50	\$6,041.50
165859	10/26/2017	159004	ADVANCED CHEMICAL TRANSPORT	CONSULTING SVCS SEPTEMBER 2017	\$1,836.00	\$5,836.49
	10/26/2017	158772		HAZARDOUS MATERIAL MANAGEMENT	\$4,000.49	
165976	11/2/2017	24872	RMC WATER AND ENVIRONMENT	LOCAL LIMITS STUDY 2017	\$5,692.83	\$5,692.83

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165871	10/26/2017	161230	CAROLLO ENGINEERS	CHERRY STREET PUMP STATION CAPACITY PROJECT	\$884.10	\$5,598.05
	10/26/2017	161132		NEWARK PS MOD VALVE & BOOST LINE MODS	\$4,713.95	
165913	10/26/2017	20171020	STATE BOARD OF EQUALIZATION	SALES & USE TAX 7/17-9/17	\$4,969.00	\$4,969.00
165866	10/26/2017	10346	BRIOTIX, LIMITED PARTNERSHIP	FY18 DISTRICT ERGO TRAINING	\$4,650.48	\$4,650.48
165837	10/19/2017	8471873	OVIVO USA LLC	THICKENER 2 FIELD SERVICE	\$4,590.00	\$4,590.00
165949	11/2/2017	238815	FRANK A OLSEN COMPANY	2-3" DEZURIK PLUG VALVE/3-6" DEZURIK PLUG VALVES	\$4,571.66	\$4,571.66
165869	10/26/2017	31836	CALIFORNIA WATER TECHNOLOGIES	43,080 LBS FERROUS CHLORIDE	\$4,434.17	\$4,434.17
165793	10/19/2017	67345	3T EQUIPMENT COMPANY INC	10 PIPEPATCH KITS	\$4,379.03	\$4,379.03
165822	10/19/2017	3L4067	HARRINGTON INDUSTRIAL PLASTICS	ASTD PVC PARTS & MATERIALS	\$254.30	\$4,110.56
	10/19/2017	3L4007		ASTD PVC PARTS & MATERIALS	\$36.98	
	10/19/2017	3L3838		ASTD PVC PARTS & MATERIALS	\$2,897.57	
	10/19/2017	3L4100		ASTD PVC PARTS & MATERIALS	\$222.21	
	10/19/2017	3L4129		ASTD PVC PARTS & MATERIALS	\$275.87	
	10/19/2017	3L4068		ASTD PVC PARTS & MATERIALS	\$199.60	
	10/19/2017	3L4008		ASTD PVC PARTS & MATERIALS	\$224.03	



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165862	10/26/2017	4107361320170929	ALAMEDA COUNTY WATER DISTRICT	SERV TO: 9/29/17-MTR HYD 16320037	\$481.99	\$4,078.11
	10/26/2017	4107393120170929		SERV TO: 9/29/17-MTR HYD 16435270	\$801.70	
	10/26/2017	4107393220170929		SERV TO: 9/29/17-MTR HYD 16435275	\$672.20	
	10/26/2017	4107361120170929		SERV TO: 9/29/17-MTR HYD 15001101	\$481.99	
	10/26/2017	4107393520170929		SERV TO: 9/29/17-MTR HYD 16435269	\$676.25	
	10/26/2017	4107393420170929		SERV TO: 9/29/17-MTR HYD 15952331	\$481.99	
	10/26/2017	4107393020170929		SERV TO: 9/29/17-MTR HYD 15141193	\$481.99	
165914	10/26/2017	130998	TOTAL WASTE SYSTEMS INC	SEPTEMBER 2017 GRIT DISPOSAL	\$4,073.71	\$4,073.71
165903	10/26/2017	1176181	POLYDYNE INC	42,520 LBS CLARIFLOC WE-539	\$4,013.25	\$4,013.25
165973	11/2/2017	103870	PIIAN SYSTEMS LLC	6 - 5 GAL ODOR NEUTRALIZERS/24 CARTRIDGES	\$3,642.34	\$3,642.34
165832	10/19/2017	655101	MISSION CLAY PRODUCTS LLC	ASTD CLAY FITTINGS	\$3,510.46	\$3,510.46
165858	10/26/2017	47425	ABACUS PRODUCTS INC	3000 PLACEMATS	\$3,453.41	\$3,453.41
165911	10/26/2017	8063	SDES ALVARADO PORTUGUESE HALL	REFUND # 20427	\$3,300.00	\$3,300.00
165942	11/2/2017	17713030886	CORIX WATER PRODUCTS INC	15 MANHOLE FRAMES & COVERS	\$3,292.50	\$3,292.50
165912	10/26/2017	95783798	EMBASSY SUITES HOTEL SEATTLE-TACPREPAY LODGING-THERMOGRAPHY CERT-MARTIN, RIVERA, TATOLA,		\$3,161.20	\$3,161.20
165937	11/2/2017	17875569	CANON SOLUTIONS AMERICA INC	MONTHLY LEASE 6 CANON COLOR COPIERS	\$3,154.15	\$3,154.15

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165896	10/26/2017	47207451	MCMaster SUPPLY INC	STANDARD GALVANIZED PIPE	\$39.07	\$2,626.27
	10/26/2017	48353613		STANDARD GALVANIZED PIPE - CREDIT FOR INV 47207451	\$-15.14	
	10/26/2017	47552324		STANDARD GALVANIZED PIPE - CREDIT FOR INV 47175047	\$-39.07	
	10/26/2017	47555591		1 THERMOSTAT FOR HEATER	\$31.17	
	10/26/2017	47265999		6 CANS PAINT AND COATING REMOVER	\$72.70	
	10/26/2017	47240294		ASTD PARTS & MATERIALS	\$23.12	
	10/26/2017	48753812		ASTD PARTS & MATERIALS	\$1,358.66	
	10/26/2017	48370152		ASTD PARTS & MATERIALS	\$990.16	
	10/26/2017	47175047		STANDARD GALVANIZED PIPE	\$39.07	
	10/26/2017	47344918		STANDARD GALVANIZED PIPE - CREDIT FOR INV 47207451	\$-23.93	
	10/26/2017	48194384		ASTD PARTS & MATERIALS	\$150.46	
165957	11/2/2017	10666878	HACH COMPANY	ASTD LAB SUPPLIES	\$2,594.70	\$2,594.70
165794	10/19/2017	9048	ACCU-BORE DIRECTIONAL DRILLING	REFUND # 20383	\$2,500.00	\$2,500.00
165988	11/2/2017	8927	TEALICIOUS INC	REFUND # 20341	\$2,500.00	\$2,500.00
165888	10/26/2017	3L4242	HARRINGTON INDUSTRIAL PLASTICS	ASTD PVC PARTS & MATERIALS	\$1,248.04	\$2,331.90
	10/26/2017	3L4243		ASTD PVC PARTS & MATERIALS	\$1,083.86	
165900	10/26/2017	XCTZ029	PACHECO BROTHERS GARDENING INC	WEED ABATEMENT WORK OCTOBER 2017	\$915.00	\$2,280.00
	10/26/2017	XCTZ028		LANDSCAPE MAINTENANCE SERVICES OCTOBER 2017	\$1,365.00	
165876	10/26/2017	10191228379	DELL MARKETING LP C/O DELL USA	6 DELL ULTRASHARP DUAL MONITORS	\$2,177.32	\$2,177.32

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165850	10/19/2017	3354680029	STAPLES CONTRACT & COMMERCIAL	JANITORIAL SUPPLIES	\$727.63	\$2,159.80
	10/19/2017	3354680034		JANITORIAL/BREAKROOM SUPPLIES	\$84.29	
	10/19/2017	3354680032		JANITORIAL/BREAKROOM SUPPLIES	\$114.36	
	10/19/2017	3354680031		JANITORIAL/BREAKROOM SUPPLIES	\$1,233.52	
165804	10/19/2017	99028622	CALTROL INC	PRESSURE GAUGES	\$2,103.93	\$2,103.93
165800	10/19/2017	772394	BRENNTAG PACIFIC, INC.	3846 LBS SODIUM HYDROXIDE	\$1,994.23	\$1,994.23
165796	10/19/2017	5170401	ALL INDUSTRIAL ELECTRIC SUPPLY	1 REMOTE DISPLAY REPLACEMENT	\$1,917.53	\$1,917.53
165910	10/26/2017	7694845901	RS HUGHES CO INC	ASTD SAFETY SUPPLIES	\$150.58	\$1,834.95
	10/26/2017	7694845903		ASTD SAFETY SUPPLIES	\$115.68	
	10/26/2017	7694845900		ASTD SAFETY SUPPLIES	\$1,471.55	
	10/26/2017	7694845902		ASTD SAFETY SUPPLIES	\$97.14	
165979	11/2/2017	1815380001	SAN LEANDRO ELECTRIC SUPPLY	ASTD ELECTRICAL SUPPLIES	\$271.12	\$1,712.29
	11/2/2017	1812677003		ASTD ELECTRICAL SUPPLIES	\$103.01	
	11/2/2017	1812677002		ASTD ELECTRICAL SUPPLIES	\$1,338.16	
165819	10/19/2017	9551270383	GRAINGER INC	ASTD PARTS & MATERIALS	\$40.56	\$1,658.23
	10/19/2017	9554214420		ASTD PARTS & MATERIALS	\$1,609.19	
	10/19/2017	9553571168		ASTD PARTS & MATERIALS	\$8.48	



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165893	10/26/2017	PFY3541	IRON MOUNTAIN	OFF-SITE STORAGE AND SERVICE - SEPTEMBER 2017	\$965.79	\$1,560.06
	10/26/2017	PFU1053		OFF-SITE STORAGE AND SERVICE - SEPTEMBER 2017	\$325.94	
	10/26/2017	201428905		DATA/MEDIA OFF-SITE STORAGE - SEPTEMBER 2017	\$268.33	
165932	11/2/2017	1710101397	AVEPOINT PUBLIC SECTOR INC	DOCAVE 6 BACKUP AND RECOVERY	\$1,547.50	\$1,547.50
165946	11/2/2017	1311189	FERGUSON ENTERPRISES, INC.	12 WYES / 6 TEES	\$1,519.49	\$1,519.49
165843	10/19/2017	9309	ROOTER HERO	REFUND # 20388	\$500.00	\$1,500.00
	10/19/2017	8951		REFUND # 20389	\$500.00	
	10/19/2017	9234		REFUND # 20390	\$500.00	
165815	10/19/2017	280751	ENTHALPY ANALYTICAL LLC	35 LAB SAMPLE ANALYSIS	\$1,000.00	\$1,495.00
	10/19/2017	280674		30 LAB SAMPLE ANALYSIS	\$495.00	
165812	10/19/2017	20170925	DALE HARDWARE INC	09/17-ASTD PARTS & MATERIALS	\$1,484.26	\$1,484.26
165864	10/26/2017	9986	AMERICAN DISCOUNT SECURITY	09/01/17 - 09/29/17 GUARD AT DISTRICT GATE	\$1,483.50	\$1,483.50
165838	10/19/2017	817216	PACHECO BROTHERS GARDENING INC	ADDITIONAL WEED ABATEMENT WORK SEPTEMBER 2017	\$1,475.00	\$1,475.00
165799	10/19/2017	12177980	BLAISDELL'S	2 - SIT/STAND WORKSTATIONS	\$1,463.33	\$1,453.37
	10/19/2017	12177430		2 PK DRYLINE TAPE	\$9.26	
	10/19/2017	12177981		2 SIT/STAND STATION TALL USER EXTENSIONS	\$107.56	
	10/19/2017	12181270		ASTD OFFICE SUPPLIES	\$23.22	
	10/19/2017	12177980C		CREDIT: SIT/STAND WORKSTATION INSTALLATION INV 12177980	\$-150.00	
165835	10/19/2017	20170930	NAPA AUTO PARTS	MONTHLY AUTO PARTS STMT - SEP 2017	\$1,335.43	\$1,335.43

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165934	11/2/2017	12209840	BLAISDELL'S	1 ENTERED STAMP	\$7.67	\$1,245.73
	11/2/2017	12211160		ASTD OFFICE SUPPLIES	\$232.55	
	11/2/2017	12207630C		ASTD OFFICE SUPPLIES - CREDIT INV 12207630	\$-23.70	
	11/2/2017	12207631		1 PLANNER	\$22.49	
	11/2/2017	12216760		ASTD OFFICE SUPPLIES	\$52.29	
	11/2/2017	12216760C		ASTD OFFICE SUPPLIES	\$-4.16	
	11/2/2017	12177920		1 OFFICE CHAIR	\$459.76	
	11/2/2017	12207630		ASTD OFFICE SUPPLIES	\$237.60	
	11/2/2017	12177660C		ERGO OFFICE EQUIPMENT-CREDIT FOR INV 12177660	\$-85.00	
	11/2/2017	12177660		ERGO OFFICE EQUIPMENT	\$334.84	
	11/2/2017	12217800		2 BXS ANTIBIOTIC OINTMENT	\$11.39	
165895	10/26/2017	1448526	LIEBERT CASSIDY WHITMORE	LEGAL SERVICES - CALPERS AUDIT - UNIFORMS	\$1,165.00	\$1,165.00
165867	10/26/2017	94158	BRUCE BARTON PUMP SERVICE INC	1 SUMP PUMP	\$1,114.51	\$1,114.51
165881	10/26/2017	209200	FERGUSON WELDING SERVICE INC	REPAIR TRAILER BUMPER	\$1,066.63	\$1,066.63
165956	11/2/2017	93476445	H & E EQUIPMENT SERVICES INC	EQUIP RENTAL: REACH LIFT 10/9 - 10/11/2017	\$1,037.19	\$1,037.19
165825	10/19/2017	38027211	KELLY SERVICES INC	TEMP LABOR-LUU, A. WK END 9/24/2017	\$1,036.20	\$1,036.20
165894	10/26/2017	39026631	KELLY SERVICES INC	TEMP LABOR-LUU, A. WK END 10/01/2017	\$1,036.20	\$1,036.20
165961	11/2/2017	40026909	KELLY SERVICES INC	TEMP LABOR-LUU, A. WK END 10/8/2017	\$1,036.20	\$1,036.20
165947	11/2/2017	202	FORMULA DESIGN	USD PUBLIC WEBSITE SCHEDULE APPLICATION-RETAINER	\$1,000.00	\$1,000.00



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165809	10/19/2017	20170928	COMMUNICATION & CONTROL INC	UTILITY FEE/ANTENNA RENTAL	\$975.20	\$975.20
165967	11/2/2017	48803812	MCMaster SUPPLY INC	1 STAINLESS STEEL BAR	\$22.71	\$970.41
	11/2/2017	48923281		2 RECHARGEABLE BATTERIES	\$102.80	
	11/2/2017	48816889		ASTD PARTS & MATERIALS	\$284.10	
	11/2/2017	47958868		1 HELICAL INSERT ASSORTMENT TOOL	\$73.24	
	11/2/2017	48706450		1 WASHDOWN ENCLOSURE	\$221.32	
	11/2/2017	48114183		2 CABLE SUPPORT GRIPS	\$92.92	
	11/2/2017	49164637		10 STEEL PADLOCKS	\$134.23	
	11/2/2017	48848800		ASTD PARTS & MATERIALS	\$39.09	
165926	11/2/2017	9068543772	AIRGAS NCN	5 CYL WELDING GAS	\$462.96	\$959.00
	11/2/2017	9068543771		3 CYL ARGON	\$496.04	
165848	10/19/2017	4868173100517	SIERRA SPRING WATER COMPANY	WATER SERVICE 09/06/17 - 10/03/2017	\$709.14	\$957.87
	10/19/2017	8122768100517		BOTTLESS COOLERS RENTAL	\$248.73	
165874	10/26/2017	201303541	COVELLO GROUP INC	THICKENER CONTROL BUILDING IMPROVEMENTS PHASE II	\$942.23	\$942.23
165836	10/19/2017	20171018	SHAWN NESGIS	EXP REIMB: CGA ANNUAL CONF REG - PHOENIX	\$900.00	\$900.00
165865	10/26/2017	12173610	BLAISDELL'S	1 OFFICE CHAIR	\$518.75	\$833.84
	10/26/2017	12190110		3 BINDERS	\$9.55	
	10/26/2017	12201970		ASTD OFFICE SUPPLIES	\$184.85	
	10/26/2017	12193870		ASTD OFFICE SUPPLIES	\$120.69	

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Check No.	Date	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
165885	10/26/2017	9560131758	GRAINGER INC	20 COIN CELL LITHIUM 3V BATTERIES	\$4.39	\$832.96
	10/26/2017	9561792764		1 BOLT ON CIRCUIT BREAKER	\$825.70	
	10/26/2017	9557686046		1 PVC PLUG	\$2.87	
165980	11/2/2017	20171030.1	JOHN SEO	TRAVEL REIMB: LODGING, MILEAGE-ICP TRAINING	\$462.52	\$827.09
	11/2/2017	20171030.2		EXP REIMB: PER DIEM, SHUTTLE-ICP TRAINING	\$364.57	
165882	10/26/2017	10061	FREMONT EXPRESS COURIER SVC	COURIER SVCS: SEP 2017 DAILY MAIL/3 BOARDMEMBER DELIVERY	\$790.00	\$790.00
165824	10/19/2017	20171017	TODD JACOB	EXP REIMB: LODGING, PER DIEM, MILEAGE-MISAC CONF	\$773.34	\$773.34
165801	10/19/2017	7540	BURLINGAME ENGINEERS INC	1 MILTON ROY MAINTENANCE KIT	\$772.67	\$772.67
165821	10/19/2017	1836343	HANSON AGGREGATES INC	10.15 TONS 1/2 MED TYPE A AC-R	\$762.24	\$762.24
165993	11/2/2017	7703	VON EUW TRUCKING	23.62 TONS 3/4" CL II AB	\$758.25	\$758.25
165989	11/2/2017	20210261	TELEDYNE ISCO INC	SAMPLING SUPPLIES	\$726.55	\$726.55
165898	10/26/2017	1443291	MOBILE MODULAR MANAGEMENT CORFFMC TRAILER RENTAL - OCT 2017		\$693.63	\$693.63
165907	10/26/2017	7106	ROCHESTER MIDLAND CORPORATION	HOT WATER LOOP SERVICE	\$687.46	\$687.46
165920	10/26/2017	7634	VON EUW TRUCKING	24.01 TONS 3/4" CL II AB	\$656.14	\$656.14
165883	10/26/2017	6083158354	G&K SERVICES CO	UNIFORM LAUNDERING SERVICE	\$271.47	\$646.31
	10/26/2017	6083158355		ASTD DUST MOPS, WET MOPS & TERRY TOWEL	\$17.22	
	10/26/2017	6083158353		UNIFORM LAUNDERING & RUGS	\$251.42	
	10/26/2017	6700095090		2 EA SLASH POCKET JACKETS-VONG	\$106.20	

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165953	11/2/2017	6083160954	G&K SERVICES CO	UNIFORM LAUNDERING SERVICE	\$380.51	\$633.57
	11/2/2017	6083160955		ASTD DUST MOPS, WET MOPS & TERRY TOWELS	\$17.22	
	11/2/2017	6083160953		UNIFORM LAUNDERING & RUGS	\$235.84	
165863	10/26/2017	20170910	AMAZON.COM LLC	9/17 - ASTD OFFICE SUPPLIES	\$630.55	\$630.55
165873	10/26/2017	40931	CLAREMONT BEHAVIORAL SERVICES	NOV 2017 EAP PREMIUM	\$625.60	\$625.60
165844	10/19/2017	3077866002	S & S SUPPLIES & SOLUTIONS	20 HARD HATS WITH BRIMS	\$612.41	\$612.41
165902	10/26/2017	20171023	PETTY CASH	PETTY CASH REPLENISHMENT	\$612.21	\$612.21
165823	10/19/2017	602708503	HILLYARD/SAN FRANCISCO	ASTD JANITORIAL SUPPLIES	\$172.38	\$606.26
	10/19/2017	602708502		ASTD JANITORIAL SUPPLIES	\$433.88	
165861	10/26/2017	9948428216	AIRGAS NCN	CYLINDER RENTAL	\$599.18	\$599.18
165897	10/26/2017	171052	METROMOBILE COMMUNICATIONS INC	ANNUAL RADIO SERVICE - OCTOBER 2017	\$599.08	\$599.08
165833	10/19/2017	24017655	MOTION INDUSTRIES INC	ASTD PARTS & MATERIALS	\$441.88	\$594.15
	10/19/2017	24018908		5 BELTS	\$152.27	
165974	11/2/2017	20171026	LOUIS RIVERA III	EXP REIMB: CAR RENTAL-SMRP CONF	\$255.84	\$570.84
	11/2/2017	20171023		PER DIEM ADVANCE-THERMOGRAPHY CERTIFICATION LEVEL 1	\$315.00	
165899	10/26/2017	12054427	CITY OF NEWARK	ENCROACHMENT PERMITS-CS-SUSSEX PL/NEWARK BLVD.	\$570.00	\$570.00
165870	10/26/2017	21499266	CARBOLINE COMPANY	PAINT & RELATED PAINT SUPPLIES	\$551.96	\$551.96



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165817	10/19/2017	6083155746	G&K SERVICES CO	UNIFORM LAUNDERING SERVICE	\$271.47	\$539.16
	10/19/2017	6083155745		UNIFORM LAUNDERING & RUGS	\$251.42	
	10/19/2017	6083155747		ASTD DUST MOPS, WET MOPS & TERRY TOWEL	\$16.27	
165966	11/2/2017	20171027	REGINA MCEVOY	TRAVEL REIMB: LODGING, SHUTTLE, PER DIEM-CSDA CONF	\$536.74	\$536.74
165969	11/2/2017	24019830	MOTION INDUSTRIES INC	6 AIR FILTER ELEMENTS	\$520.71	\$520.71
165915	10/26/2017	958409890	TPX COMMUNICATIONS	WIRELESS INTERNET BACKUP - OCTOBER	\$513.69	\$513.69
165826	10/19/2017	1493	KEN GRADY CO INC	1 MSA 02 SENSORS	\$511.34	\$511.34
165860	10/26/2017	9283	ABDUL & LILA AHRARY	REFUND # 20426	\$500.00	\$500.00
165908	10/26/2017	9139	ROOTER HERO	REFUND # 20420	\$500.00	\$500.00
165909	10/26/2017	9327	ROSAS BROTHERS CONSTRUCTION	REFUND # 20419	\$500.00	\$500.00
165916	10/26/2017	9320	RB TRAVIS	REFUND # 20407	\$500.00	\$500.00
165948	11/2/2017	11501	CITY OF FOSTER CITY	2 JOB POSTINGS	\$500.00	\$500.00
165978	11/2/2017	9152	ROOTER HERO	REFUND # 20441	\$500.00	\$500.00
165924	10/26/2017	20171019	YORKE ENGINEERING LLC	PREPAY SEMINAR: LI, C.-BAAQ REGS, PERMITTING & COMPLIANCE	\$499.00	\$499.00
165931	11/2/2017	292237001	AUTO BODY TOOLMART	ASTD PARTS & MATERIALS	\$498.25	\$498.25
165958	11/2/2017	1838348	HANSON AGGREGATES INC	6.13 TONS 1/2 MED TYPE A AC-R	\$463.59	\$463.59
165921	10/26/2017	8080093485	VWR INTERNATIONAL LLC	LAB SUPPLIES	\$57.57	\$459.08
	10/26/2017	8080086583		LAB SUPPLIES	\$401.51	
165805	10/19/2017	4023785075	CANON SOLUTIONS AMERICA INC	MTHLY MAINTENANCE BASED ON USE	\$457.76	\$457.76

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Check No.	Date	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
165995	11/2/2017	14420	WESTERN MACHINE & FAB INC	2 MOUNTING PLATES / 1 SHAFT	\$444.49	\$444.49
165827	10/19/2017	20171012	CONGNA LI	EXP REIMB: PE LIC REG/WEF & CWEA MEMBERSHIP RENEWAL	\$435.00	\$435.00
165996	11/2/2017	27859	WILEY PRICE & RADULOVICH LLP	LABOR & EMPLOYMENT LAW FEES	\$432.50	\$432.50
165872	10/26/2017	62485	CITYLEAF INC	PLANT MAINTENANCE - OCT 2017	\$431.86	\$431.86
165840	10/19/2017	332911	RKI INSTRUMENTS INC	2 OXYGEN SENSORS/1 PLUG IN SENSOR	\$428.03	\$428.03
165963	11/2/2017	20171026	DUNG LU	EXP REIMB: AIRPORT PARKING, PER DIEM, MILEAGE	\$423.24	\$423.24
165811	10/19/2017	44861290001	CRESCO EQUIP RENTALS & AFFIL	EQUIP RENTAL: 16/18" CONCRETE SAW	\$419.62	\$419.62
165982	11/2/2017	20171031.1	AARON SHONG	EXP REIMB: AIRPORT PARKING-SMRP CONF	\$91.80	\$406.80
	11/2/2017	20171031		PER DIEM ADVANCE-THERMOGRAPHY CERTIFICATION LEVEL 1	\$315.00	
165925	11/2/2017	67746	AIR & TOOL ENGINEERING COMPANY	SMALL EQUIPMENT REPAIRS AND SERVICE	\$394.50	\$394.50
	11/2/2017	67415		2 WATER ATTACHMENT KITS	\$670.37	
	11/2/2017	67776		CREDIT-2 WATER ATTACHMENT KITS INV 67415	\$-670.37	
165831	10/19/2017	47001693	MCMaster SUPPLY INC	20 ZINC-PLATED STEEL CARABINER	\$58.46	\$392.37
	10/19/2017	47114090		ASTD PARTS & MATERIALS	\$333.91	
165847	10/19/2017	20171013	AARON SHONG	PER DIEM EXPENSE - SMRP CONF	\$378.00	\$378.00
165803	10/19/2017	576472	CALTEST ANALYTICAL LABORATORY	2 LAB SAMPLE ANALYSIS	\$377.00	\$377.00
165994	11/2/2017	8080202924	VWR INTERNATIONAL LLC	LAB SUPPLIES	\$83.23	\$357.98
	11/2/2017	8080150803		LAB SUPPLIES	\$164.03	
	11/2/2017	8080157813		LAB SUPPLIES	\$110.72	



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Check No.	Date	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
165950	11/2/2017	16113	FREMONT CHAMBER OF COMMERCE	MEMBERSHIP DUES	\$350.00	\$350.00
165880	10/26/2017	903282437	EVOQUA WATER TECHNOLOGIES	DI WATER SYSTEM	\$345.00	\$345.00
165889	10/26/2017	25778	HAYWARD PIPE AND SUPPLY	ASTD PARTS & MATERIALS	\$340.44	\$340.44
165928	11/2/2017	21877	ALLIED FLUID PRODUCTS CORP	ASTD PARTS & MATERIALS	\$339.74	\$339.74
165941	11/2/2017	54723118	CINTAS CORPORATION	2 WINTER JACKETS - K VONG	\$321.08	\$321.08
165965	11/2/2017	20171023	SCOTT MARTIN	PER DIEM ADVANCE-THERMOGRAPHY CERTIFICATION LEVEL 1	\$315.00	\$315.00
165977	11/2/2017	49386683	ROBERT HALF INTERNATIONAL INC	TEMP LABOR-MUSGRAVE, E. WK END 10/06/2017	\$313.91	\$313.91
165856	10/19/2017	8049921778	VWR INTERNATIONAL LLC	LAB SUPPLIES	\$81.63	\$304.09
	10/19/2017	8080056810		LAB SUPPLIES	\$222.46	
165945	11/2/2017	1000482235	ENVIRONMENTAL EXPRESS	2 PKS DIGESTION VESSELS	\$290.07	\$290.07
165905	10/26/2017	19820	RED WING SHOE STORE	SAFETY SHOES: L. CARDENAS/M. LUNA	\$273.94	\$273.94
165839	10/19/2017	252054	PRESTIGE LENS LAB	SAFETY GLASSES - LU	\$273.28	\$273.28
165904	10/26/2017	132130	PREFERRED ALLIANCE INC	SEPTEMBER 2017 SERVICE FEE	\$261.36	\$261.36
165842	10/19/2017	20171016	JAMIE ROJO	PER DIEM ADVANCE - 2017 CALPERS EDUCATIONAL FORUM	\$252.00	\$252.00
165972	11/2/2017	20171002	GUSTAVO OSEGUERA	EXP REIMB: PER DIEM FOR CARBOLINE TRAINING	\$252.00	\$252.00
165987	11/2/2017	20171002	TIMOTHY TEALE	EXP REIMB: PER DIEM FOR CARBOLINE TRAINING	\$252.00	\$252.00
165816	10/19/2017	11454	CITY OF FOSTER CITY	1 JOB POSTINGS	\$250.00	\$250.00
165922	10/26/2017	6012226	WEST SAFETY SERVICES INC	E911 CLOUD SERVICE	\$250.00	\$250.00
165818	10/19/2017	1841080888	GOODYEAR COMM TIRE & SERV CTRS	4 TIRES	\$248.45	\$248.45

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165944	11/2/2017	281115	ENTHALPY ANALYTICAL LLC	4 LAB SAMPLE ANALYSIS	\$240.00	\$240.00
165849	10/19/2017	20171001	SPOK INC	OCTOBER 2017 PAGER SERVICE	\$237.37	\$237.37
165845	10/19/2017	20171006	RANDY SCHWARTZ	TRAVEL REIMB: CAR RENTAL, AIRPORT PARKING TRI STATE CONF	\$211.55	\$211.55
165990	11/2/2017	1694337	TOTAL FILTRATION SERVICES INC	ASTD PARTS & MATERIALS	\$204.88	\$204.88
165954	11/2/2017	2774728405	GLACIER ICE COMPANY INC	138 7-LB BAGS OF ICE	\$202.86	\$202.86
165886	10/26/2017	20171023	TIMOTHY GRILLO	EXP REIMB: 1 COPY NELAC INSTITUTE 2016 LAB STANDARDS	\$195.00	\$195.00
165992	11/2/2017	20171025	AUDREY VILLANUEVA	EXP REIMB: PER DIEM, SHUTTLES-IPACS USER MTG	\$191.74	\$191.74
165938	11/2/2017	21500072	CARBOLINE COMPANY	PAINT & RELATED PAINT SUPPLIES	\$191.09	\$191.09
165933	11/2/2017	349590	BAY AREA BARRICADE SERVICE INC	4 CS WHITE MARKING PAINT	\$188.77	\$188.77
165955	11/2/2017	9567322442	GRAINGER INC	1 ROLLER LAPTOP CASE	\$141.28	\$185.40
	11/2/2017	9566428844		1 SET KNEE PADS/ 1 INDUSTRIAL PENLIGHT	\$44.12	
165971	11/2/2017	20171031	SHAWN NESGIS	EXP REMIB: SAFETY RAFFLE PRIZES-OCT & NOV 2017	\$179.94	\$179.94
165857	10/19/2017	4632	ZELAYA DESIGNS	PUBLIC OUTREACH	\$163.50	\$163.50
165808	10/19/2017	250404	CLARK'S HOME AND GARDEN INC	1 YD CONCRETE 6SK	\$153.65	\$153.65
165813	10/19/2017	371133	DLT SOLUTIONS, LLC	AWS CLOUD STORAGE - AUGUST 2017	\$147.81	\$147.81
165984	11/2/2017	20171031	ROBERT SIMONICH	EXP REIMB: AIRPORT PARKING-SMRP CONF	\$144.00	\$144.00
165943	11/2/2017	44946820001	CRESCO EQUIP RENTALS & AFFIL	EQUIP RENTAL: 16/18" CONCRETE SAW	\$140.05	\$140.05
165960	11/2/2017	20046	ICE SAFETY SOLUTIONS INC	SERVICE: 5 FIRST AID KITS / 4 AEDS	\$122.50	\$122.50
165879	10/26/2017	280933	ENTHALPY ANALYTICAL LLC	4 LAB SAMPLE ANALYSIS	\$120.00	\$120.00

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165968	11/2/2017	39817	METROMOBILE COMMUNICATIONS INC	ANNUAL RADIO SERVICE - NOVEMBER 2017	\$110.78	\$110.78
165890	10/26/2017	602718962	HILLYARD/SAN FRANCISCO	1 CS 6" PLATES	\$91.38	\$110.70
	10/26/2017	602724278		1 BX ENZYMATIC RIMSTICKS	\$19.32	
165964	11/2/2017	20171030	MATTHEW LUBINA	EXP REIMB: MILEAGE CWEA EVENT	\$101.65	\$101.65
165887	10/26/2017	267468	HANIGAN COMPANY INC	1 LOT BUSINESS CARDS: RODRIGUES, J	\$28.68	\$101.22
	10/26/2017	267469		2 LOTS BUSINESS CARDS: SILVA, K & RODRIGUEZ, T	\$72.54	
165906	10/26/2017	20171023.1	LOUIS RIVERA III	EXP REIMB: PARKING-SMRP CONF	\$96.06	\$96.06
165981	11/2/2017	20171031	ELOY SEPULVEDA	EXP REIMB: MILEAGE CWEA EVENT	\$95.55	\$95.55
165797	10/19/2017	1764619	ANALYSTS, INC.	4 LAB SAMPLE ANALYSIS	\$92.30	\$92.30
165983	11/2/2017	20171030	PAUL SIMMONS	EXP REIMB: MILEAGE CWEA EVENT	\$92.23	\$92.23
165820	10/19/2017	20171016	TIMOTHY GRILLO	EXP REIMB: SAFETY RECOG LUNCH FOR R&S	\$85.72	\$85.72
165810	10/19/2017	20171018	MITCHELL COSTELLO	EXP REIMB: TEAM SAFETY INCENTIVE PROG TPO TEAM	\$78.54	\$78.54
165936	11/2/2017	261816	STATE OF CALIFORNIA	2 NEW HIRE FINGERPRINTS	\$64.00	\$64.00
165951	11/2/2017	116527687	FREMONT URGENT CARE CENTER	1 DOT PHYSICAL	\$63.00	\$63.00
165830	10/19/2017	143913	MCIVORS HARDWARE	1 DRILL	\$60.08	\$60.08
165962	11/2/2017	20171031	DANIELLE LEMOS	EXP REIMB: LIVESCAN FEE PRE-EMPLOYMENT	\$57.00	\$57.00
165877	10/26/2017	615320171020	DISH NETWORK	NOV 2017 - SERVICE FEE	\$55.90	\$55.90
165929	11/2/2017	7102390	ALPHA ANALYTICAL LABORATORIES	1 LAB ANALYSIS	\$55.00	\$55.00
165891	10/26/2017	5723339	HOSE & FITTINGS ETC	ASTD PARTS & MATERIALS	\$51.70	\$51.70



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165959	11/2/2017	536870	HULBERT LUMBER SUPPLY	ASTD LUMBER SUPPLIES	\$39.49	\$39.49
165918	10/26/2017	98XW53407	UPS - UNITED PARCEL SERVICE	SHIPPING CHARGES W/E 10/07/17	\$35.60	\$35.60
165975	11/2/2017	333874	RKI INSTRUMENTS INC	14 FILTER ELEMENTS	\$34.57	\$34.57
165855	10/19/2017	9793629448	VERIZON WIRELESS	WIRELESS SERV 09/02/17-10/01/17	\$26.96	\$26.96
165841	10/19/2017	49284018	ROBERT HALF INTERNATIONAL INC	TEMP LABOR-MUSGRAVE, E. BACKGROUND FEE	\$25.00	\$25.00
165853	10/19/2017	98XW53397	UPS - UNITED PARCEL SERVICE	SHIPPING CHARGES W/E 09/30/17	\$18.99	\$18.99

**Invoices:**

Credit Memos :	8	-1,011.37
\$0 - \$1,000 :	216	68,115.54
\$1,000 - \$10,000 :	90	293,170.92
\$10,000 - \$100,000 :	13	428,026.77
Over \$100,000 :	4	725,199.64
<b>Total:</b>	<b>331</b>	<b>1,513,501.50</b>

**Checks:**

\$0 - \$1,000 :	120	46,996.22
\$1,000 - \$10,000 :	65	238,252.21
\$10,000 - \$100,000 :	15	372,068.31
Over \$100,000 :	4	856,184.76
<b>Total:</b>	<b>204</b>	<b>1,513,501.50</b>

News Feature | October 6, 2017

## New Wastewater Project In California Sports The Latest Conservation Tech



By *Peter Chawaga*, Associate Editor, Water Online



As wastewater treatment operations continue to transition themselves into “resource recovery facilities” and become leaders in energy and water conservation, a new project in California has emerged.

The City of Rialto’s wastewater treatment plant is now the site of a new technology that could become a “must have” for leaders in sustainability.

“Funded through a \$1.56 million grant from the California Energy Commission, BDP EnviroTech will build and operate in partnership with Veolia a new technology developed by BDP designed to provide both substantial improvement in energy and water consumption when compared with traditional wastewater treatment technologies,” per a press release on the development. “The demonstration project will be operated for 12 months before officials evaluate its success.”

The 200,000-gallon-per-day project should be ready to begin operation in December, when the existing treatment tank in Rialto will be converted for the new technology.

“The concept combines two separate processes in the wastewater treatment process in one tank, instead of two, which results in economies which include energy and water usage,” according to Eric Li, CEO of BDP EnviroTEch, as reported by *The Sun*.



This project is one step in a multi-faceted revamp being undertaken in Rialto.

“The demonstration project is coming online at the same time the City of Rialto is undergoing a major upgrade of its wastewater treatment plant,” according to the press release. “The repairs and improvements are being completed as part of a long-term concession agreement between the City and Rialto Water Services... The repairs and upgrades are needed to ensure the plant meets federal water quality discharge requirements for decades to come as well as to meet anticipated increases in treatment capacity.”

To read about similar projects visit Water Online’s Water Reuse Solutions Center.

*Image credit: "Rialto Ca.," ProudDigital Media © 2009, used under an Attribution 2.0 Generic license: <https://creativecommons.org/licenses/by/2.0/>*

# San Francisco Chronicle

## SF embarking on major projects to bolster sewer system

By Dominic Fracassa *October 21, 2017*



**San Francisco Sewer serviceman Fred Gonzales works inside the sewer system under the 300 block of Ellis Street, which dates to 1866.**

Every year, before autumn gives way to winter in San Francisco, the crews tasked with the unrelentingly dirty business of inspecting and maintaining the city's nearly 1,000 miles of sewer pipes set to work.

To help ensure the city's aged sewer system can withstand the annual deluge of water brought on by seasonal rains, crews from the San Francisco Public Utilities Commission descend beneath the city's streets, searching for evidence of damage and defects.

In San Francisco's Tenderloin district one recent morning, a PUC crew hoisted a manhole cover on Ellis Street, opening up a passage into a portion of the city's sewer system, first built in 1866.

The rounded brick walls of the muggy, 3-foot-high, pitch-black tunnel were thick with sopping-wet grime. They seemed to breathe in places where clusters of cockroaches huddled together. A small stream of sewer water sluiced down a channel running the length of the pipe, carrying all manner of soggy debris to a treatment plant, where it is cleaned and sent into the bay. By winter, the pipe will be impassible, awash in as much as 12 feet of sewer water.

Unlike any other coastal city in California, San Francisco uses a combined sewer system, collecting, transporting and treating both wastewater and rain runoff with the same set of pipes. Using combined systems was common practice for urban sewers built before the turn of the 20th century, said PUC General Manager Harlan Kelly Jr., when wastewater and rainfall both were typically dumped into nearby bodies of water.

For all its grubby duties, in recent years San Francisco's sewer system has become the vanguard of the city's efforts to mitigate the effects of climate change over the next 80 years. The PUC is in the midst of a huge, decades-long overhaul of the infrastructure that makes up the city's sewer system, an upgrade city officials hope will prevent catastrophic flooding for generations to come.

Chief among the utility agency's long-term goals for the \$6.9 billion project are improving San Francisco's ability to cope with sea-level rise and withstand the growing number of increasingly intense rainstorms meteorologists anticipate will buffet much of the country in coming years. The recent hurricanes that devastated Texas, Florida and Puerto Rico this year serve as stark reminders of the kind of climate events San Francisco needs to prepare itself for, Kelly said.

"Everything we're looking at is with an eye to climate change," he said. "You can't fight Mother Nature. You have to adapt."

The city treats an average of 60 million gallons of water on dry days and 575 million gallons a day when it rains, said Karen Kubick, the PUC's program director for the sewer improvement initiative. But because the city's sewers capture rainwater and wastewater together, they can more easily be overwhelmed in times of sustained, heavy rainfall.

There is already a persistent risk, Kubick said, that the city's water-management system could be swamped by a combination of heavy storms and king tides, when sea levels rise 12 inches higher than normal.

"If sea levels rise as anticipated, and we were to have a king tide, and a major storm walloped us, our system could be overwhelmed," Kubick said. "Our system wasn't designed to handle these types of extreme events."

The PUC's improvement program will be rolled out in phases through 2032. The improvements themselves — everything from replacing outdated sewer pipes to raising critical electrical systems in treatment plants in anticipation of the higher sea waters — are designed to respond to how San Francisco's climate could look in the year 2100.



**Sewer serviceman Fred Gonzales gets set to enter the sewer system under the 300 block of Ellis Street in San Francisco.**

Given current conditions, by that time, climate models predict, ocean levels could have risen between 36 and 66 inches, Kubick said.

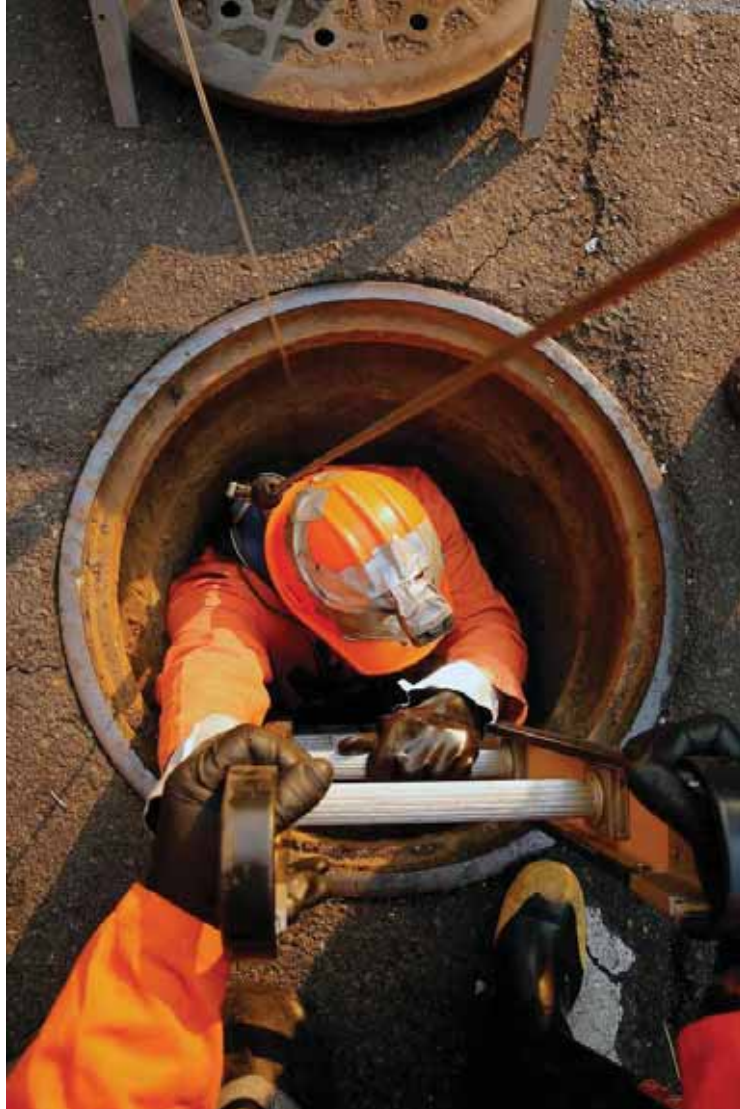
“With a long-term view on planning, things will work out a whole lot better because you’re not making decisions in a crisis,” said Richard Luthy, a professor of civil and environmental engineering at Stanford.

But as the sea rises and as storms may dump more and more water on the city, San Francisco is already contending with an urgent need to improve the ways it rids itself of storm water.

“If we do end up with larger or more intense storms, that’s going to make it harder for the PUC to manage all of that water coming into the system,” said David Sedlak, a UC Berkeley civil and environmental engineering professor and co-director of the Berkeley Water Center.

Through 2032, the PUC intends to spend \$444 million on a variety of projects to manage storm water throughout the city, including installing rain gardens designed to capture rainfall and divert it into the ground, keeping it from flowing into the sewer system.





**Workers make their way to the sewer system below the 300 block of Ellis Street.**

The PUC also expects to break ground next year on the two single-largest sewer improvement projects. Both are tied to the city's Southeast Treatment Plant, the 65-year-old workhorse of San Francisco's sewer system in the Bayview-Hunters Point area, treating about 80 percent of the city's sewage.

In January, the PUC is planning to start construction on a new, \$359 million "headworks" facility — where the sewage treatment process begins. According to the PUC, the current headworks facility can't adequately filter the debris and sand out of the sewer water passing through it, and it's having trouble controlling odors. Next summer, the PUC will also begin construction on a new, \$1.27 billion facility for treating solid waste.

To help pay for the sewer-system upgrades, the PUC has sought low-interest loans from federal and state sources, but ratepayers will foot the bill for the bulk of the projects' expense. Chris



Colwick, a PUC spokesman, said that the sewer-improvement program will represent a large portion of the agency's request to raise utility rates next year.

"We are currently assessing the needs and cost of this much-needed upgrade, which will be a key part of our proposed rates package that will become effective, after a thorough public review process, on July 1, 2018," Colwick said in an email.

But the long-term benefits of upgrading and modernizing the city's sewer infrastructure will vastly outweigh the costs, Sedlak said. "We already have programs to slowly replace pipes as they wear out so we don't get leaks. But the kinds of capital improvement projects like what San Francisco is doing come along once in a generation.

"With climate change, it would be foolish to build what we built in the middle of the 20th century."

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## Sausalito sewage plant upgrade underway



Jeffrey Kingston, right, general manager of the Sausalito-Marin City Sanitary District, and district engineer Kevin Rahman check on a new retention tank last month at the treatment plant. (James Cacciatore/Special to the Marin Independent Journal)

By [Mark Prado](#), Marin Independent Journal

Posted: 10/23/17, 4:07 PM PDT

A \$28 million project at a sewage plant at Fort Baker will help improve the quality of treated water it sends into San Francisco Bay, a benefit to the environment, backers say.

The Sausalito-Marin City Sanitary District's plant is just south of Sausalito at Fort Baker. It's a picturesque, if malodorous, site on a slope overhanging the bay on 7 acres leased from the National Park Service. The agency serves about 18,000 people in Southern Marin, primarily in Sausalito, the Tam Valley and National Park Service areas.

After inspections in late 2007, the U.S. Environmental Protection Agency in 2008 ordered several Southern Marin sewage agencies to fix chronic problems including spills, sewer maintenance and a network of aging pipes. Now that work is occurring.

“This will result in better water quality and that’s good for the bay, good for the environment and it’s the right thing to do,” said Jeffrey Kingston, general manager of the agency.

The expansion project will upgrade the wastewater treatment plant, improve the quality of water discharges while improving the district’s ability to prevent sewage spills into the bay.

“Generally speaking, we want to avoid stormwater sewer overflows,” said Bill Johnson, the state Regional Water Board’s National Pollutant Discharge Elimination System program manager. “One of the problems some plants have during wet weather is a lack of capacity to treat all its flow.”

The work at the Sausalito-Marín City Sanitary District will help it hold more water and have it treated to a higher standard before it is sent into the bay.

Specifically, that will be done by constructing a headworks — an initial filter to remove grit and other debris — and upgrading water quality to a tertiary standard before it is released. Presently, the district’s plant only treats water to a secondary treatment, a step down from the tertiary standard. Treatment towers and pumps will be refurbished, which will regulate flow storage and minimize peak flow rates and spills.

“It’s an upgrade that will increase capacity from 6 million to 9 million gallons a day,” Kingston said. “This is all part of a reliability upgrade.”

The upgrade was ordered by the U.S. Environmental Protection Agency in 2008 in the wake of spills among several agencies in Southern Marin to address chronic sewage spills, improve sewer maintenance and implement long-term programs to renew aging sewer pipes.

Deteriorated conditions of the sewer systems became evident when heavy rains overwhelmed the systems, causing over 5 million gallons of sewage to flow into Richardson Bay and San Francisco Bay that year.

In addition to the Sausalito-Marín City Sanitary District, the orders were issued to Sewerage Agency of Southern Marin, Almonte Sanitary District, Alto Sanitary District, the city of Mill Valley, Homestead Valley Sanitary District, Richardson Bay Sanitary District, the city of Sausalito and Tamalpais Community Services District.

The EPA is assessing the plans and reports submitted by the nine agencies. The process will include a review of each agency’s annual report, which was due Oct. 15. Through this regular review process, EPA determines whether each system is in full compliance and if the orders can be terminated. The agency is expected to complete the review by Dec. 31, officials at the EPA said.

The Sausalito-Marín City Sanitary District's project is anticipated to be completed by June 2019. The project's general contractor is Colorado-based Flatiron West Inc.

The work is being financed with a \$35 million bond that is being paid for by a sewer charge that averages about \$850 annually per household. In 2009 those fees in Sausalito were as low as \$215 annually. But the EPA order forced increases.

"It's a great project," said Marin Supervisor Kate Sears. "Water quality in the bay is so important."

### **About the Author**

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## **City considers financing \$900M sewer project**

### **San Mateo discusses Clean Water Program and rate hikes for capital improvement program**

By Samantha Weigel, Daily Journal staff  
October 24, 2017

Drumming up ways to finance a \$900 million infrastructure program is no small task for a municipality and San Mateo is in the midst of deciding how residents should contribute toward the Clean Water Program.

The city is upgrading its sewer system with an overhaul of its wastewater treatment plant and improvements to its conveyance system. Residents already faced a 36 percent sewer rate hike this year and, in an effort to avoid needing such high increases again, the City Council may be willing to tweak its traditional financing model if it softens the blow to consumers.

Officials were initially hopeful low-interest state revolving loans would be the primary source of much-needed capital for the project. But steep competition for funding is prompting the city to consider traditional, and more costly, financing options.

The City Council met last week to discuss changes to sewer rates and financing options for the multi-million dollar capital improvement program. The city plans to apply for about \$700 million in the state revolving loan funds but, with no guarantees, officials must consider alternate means, said Cathi Zammit, senior engineer and manager of the Clean Water Program.

"The state revolving loan fund program has a very high demand and the demand for funding has far exceeded their supply of funding available. So we are challenged with competing with other agencies for these funds," Zammit said. "In order to take a proactive approach on the financing, we don't want to depend on the state revolving loan funds."

San Mateo officials say they can't afford to postpone the Clean Water Program improvements. The city is under a cease and desist order it prohibit untreated sewage from leaking into the Bay — which is known to occur during intense storms.

"This is to meet our regulatory requirements and replace the aging infrastructure we have," said Public Works Director Brad Underwood. "Those are the key points we've got to keep pushing forward to get these projects completed."



San Mateo clearly isn't alone in its plans to upgrade decades-old infrastructure as other municipalities are also seeking these lower-cost state revolving loan funds.

"It's the state of infrastructure throughout the state," Underwood said.

State loans could save millions of dollars in interest and the city has already submitted two applications with it anticipating to ask for more. In the meantime, staff is evaluating traditional bonds to keep the project afloat.

Typically, the city uses an encumbrance model to bond for the full amount of the project at once, which in the case of the Clean Water Program is predicted to result in higher rate increases over a shorter period of time. Another option the council is leaning toward is a "cash-flow" model. This would involve issuing bonds periodically to cover the annual cost of improvements, which would lead to lower rate increases but over a longer period of time, according to a staff report.

Because the city would have more of its funding tied up at once with an encumbrance model, it's predicted to mean San Mateo could miss out on \$45 million it could have otherwise earned through investments, according to the city.

Whatever financing options the city chooses, the loans will ultimately be paid off by users of the system through sewer rates.

### **Effects on ratepayers**

As part of last week's study session, the council considered altering how it charges customers.

The change was prompted by the five-year drought as water conservation ultimately marked a setback to the city's anticipated sewer fund revenue. That's because the current rate structure is based entirely on usage, meaning water consumption is directly tied to sewage treatment. The reduction prompted the city to hike sewer rates 36 percent in an effort to make up for the shortfall.

Last week, the council opted for a hybrid system that includes a fixed fee and a volumetric-based rate. Incorporating a flat charge isn't expected to affect what the average customer pays. However, that model may end up reducing what those who use a lot of water pay while increasing rates for more conservation-conscious customers, according to the city.

Underwood said including a fixed-rate component is appropriate because all customers rely on the infrastructure, regardless of how much wastewater an individual generates.

"The sewer system is not about water conservation. We have to have a system in place no matter how much water people utilize," Underwood said.

In striving to balance needs with costs, the council may also set sewer rates for multiple years at a time.

The five-year rate structure would be regularly re-evaluated annually to determine if any adjustments are needed to cover costs.

The cash-flow model would entail the city awarding construction contracts without full funding in place. The initial predicted rate increases would be 14 percent hikes the first two years starting 2019, followed by 13 percent the next two years, and 12 percent increases the follow three years, according to a city report. One risk in issuing bonds annually is that interest rates could fluctuate resulting in unknown costs.

An encumbrance model has the city securing funding for the entire cost of the project upfront before awarding construction contracts. The projected rate increases would be 32 percent for the first two years starting 2019, followed by five years of 7 percent increases, according to the city.

Both options target a 4 percent increase in 2026.

For the average household, a hybrid model of a fixed component and volumetric-based rate would translate to their current \$61.55 monthly bill increasing to about \$61.93 in 2019 and up to \$119.50 five years later, according to the city.

But there's still more discussion and public hearings to be had before any changes could go into effect. Staff is expected to return with a rate proposal early next year, followed by public hearings in the spring. If approved, the new rates would go into effect July 2018, Zammit said.

"The council prefers to use the cash-flow approach for bonding because it helps to spread out revenue increases over a longer period of time," Zammit said. "We are trying to balance all of these factors as we move forward with the financing."

Construction on the Clean Water Program is expected to ramp up in the coming years with an overhaul of the treatment plant on Detroit Drive in San Mateo before the program culminates around 2026. The \$900 million program includes improvements to the conveyance system, an underground storage basin to temporarily hold wastewater during extreme storms and capabilities to recycle water at the plant.

Visit [cleanwaterprogramsanmateo.org](http://cleanwaterprogramsanmateo.org) for more information.

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## **Fairfield**

# Plan to treat sludge from Palo Alto at Fairfield-Suisun Sewer District site advances

By [Ryan McCarthy](#) | October 25, 2017

FAIRFIELD — Trucking sludge from Palo Alto for treatment on property of the Fairfield-Suisun Sewer District advanced Monday with directors for the sewer district approving a letter that makes the district a partner in a proposal to Palo Alto for the work.

Palo Alto plans to decommission incinerators for its sludge and seeks a five-year solution for processing the material starting next fiscal year, said a staff report to Fairfield-Suisun Sewer District directors.

Lystek International Limited Organic Material Recovery Center operates a site on the sewer district property in Fairfield and the sewer district has digestion capacity that could be made available to preprocess the sludge, the report said.

Lystek has asked the district to be part of Lystek's proposal to Palo Alto, the staff report said.

Approval by directors followed a staff review that noted Palo Alto now burns its sludge to ash but increased air quality regulations complicate that activity.

Benefits for the sewer district in working with Lystek include increased methane production, which will reduce operating costs by reducing or eliminating the purchase of natural gas to fuel cogeneration engines and make electricity, the staff report said.

The proposal would also advance the partnership between Lystek and the sewer district as an organic waste service provider for the Bay Area, bringing in additional revenue from outside the district, according to the report.

Potential problems include more materials to process, more operating costs and the greater risk of failing digesters, the report said.

Up to 25,000 tons a year would be hauled from Palo Alto to Fairfield for treatment if Lystek's proposal is accepted.

That would about double what the sewer district now processes, directors were told.