



**BOARD MEETING AGENDA**  
**Monday, January 23, 2017**  
**Regular Meeting - 7:00 P.M.**

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

**Union Sanitary District**  
**Administration Building**  
**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. Pledge of Allegiance.

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3. Roll Call.

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- Motion 4. Approve Minutes of the Meeting of January 9, 2017.

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- Information 5. Monthly Operations Report for November 2016 *(to be reviewed by the Budget & Finance and Legal/Community Affairs Committee)*.

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6. Written Communications.

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7. Oral Communications.  
*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.*

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- Presentation 8. Presentation by East Bay Dischargers Authority (EBDA) General Manager Mike Connor.

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- Motion 9. Determine Date for Centennial Open House Event and Consider Options for Board Involvement in Event Planning.

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- Motion 10. Consider March 29, 2016, Claims Filed by Maria Del Carmen Bibiano and Fernando Trujillo for Asserted Losses Associated with Traffic Accident *(to be reviewed by the Legal/Community Affairs Committee)*.

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- Motion 11. Consider a Resolution of Application to LAFCO for Annexation No. U-293, Dumbarton Quarry Regional Park in the City of Fremont *(to be reviewed by the Legal/Community Affairs Committee)*.

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- Motion 12. Award the Construction Contract for the Digesters No. 1 and 3 Gas Isolation Valves Project to TNT Industrial Contractors, Inc. *(to be reviewed by the Engineering and Information Technology Committee)*.
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- Motion 13. Authorize the General Manager to Execute an Agreement and Task Order No. 1 with Carollo Engineers for the Primary Digester No. 3 Rehabilitation Project *(to be reviewed by the Engineering and Information Technology Committee)*.
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- Motion 14. Authorize the General Manager to Execute Task Order No.2 with West Yost Associates for the Force Main Corrosion Repairs Project – Phase 1 *(to be reviewed by the Engineering and Information Technology Committee)*.
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- Information 15. Check Register.
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- Information 16. Collection Services Preventative Maintenance Evaluation Report *(to be reviewed by the Engineering and Information Technology Committee)*.
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- Information 17. Committee Meeting Reports. *(No Board action is taken at Committee meetings):*
- a. Budget & Finance Committee – Thursday, January 19, 2017, at 12:30 p.m.
    - Director Handley and Director Lathi
  - b. Engineering and Information Technology Committee – Friday, January 20, 2017, at 9:30 a.m.
    - Director Kite and Director Toy
  - c. Legal/Community Affairs Committee – Friday, January 20, 2017, at 2:00 p.m.
    - Director Handley and Director Lathi
  - d. Audit Committee – will not meet.
  - e. Legislative Committee – will not meet.
  - f. Personnel Committee – will not meet.
  - g. Ad Hoc Subcommittee for Communications Strategy.
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- Information 18. General Manager's Report. *(Information on recent issues of interest to the Board)*.
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19. Other Business:
- a. Comments and questions. *Directors can share information relating to District business and are welcome to request information from staff.*
  - b. Scheduling matters for future consideration.
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20. Adjournment – The Board will adjourn to a Board Workshop in the Boardroom on Tuesday, January 31, 2017, at 6:00 p.m.
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21. Adjournment – The Board will then adjourn to the next Regular Meeting in the Boardroom on Monday, February 13, 2017, at 7:00 p.m.

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).  
 If the subject relates to an agenda item, the speaker should address the Board at the time the item is considered. If the subject is within the Board's jurisdiction but not on the agenda, the speaker will be heard at the time "Oral Communications" is calendared. Oral comments are limited to three minutes per individual, 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 of the agenda item.

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



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

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

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

**AGENDA**  
**Thursday, January 19, 2017**  
**12:30 P.M.**

Karen W. Murphy  
*Attorney*

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

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 January 23, 2017:
  - Monthly Operations Report for November 2016 – Financial Reports.

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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



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

**ENGINEERING & INFORMATION TECHNOLOGY  
COMMITTEE MEETING**  
Committee Members: Director Kite and Director Toy

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

**AGENDA**  
**Friday, January 20, 2017**  
**9:30 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.  
THE TELECONFERENCE LOCATION SHALL BE ACCESSIBLE TO THE PUBLIC.**

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 January 23, 2017:
  - Award the Construction Contract for the Digesters No. 1 and 3 Gas Isolation Valves Project to TNT Industrial Contractors, Inc.
  - Authorize the General Manager to Execute an Agreement and Task Order No. 1 with Carollo Engineers for the Primary Digester No. 3 Rehabilitation Project.
  - Authorize the General Manager to Execute Task Order No.2 with West Yost Associates for the Force Main Corrosion Repairs Project – Phase 1.
  - Collection Services Preventative Maintenance Evaluation Report.

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5. Adjournment

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). If the subject relates to an agenda item, the speaker should address the Board at the time the item is considered. If the subject is within the Board's jurisdiction but not on the agenda, the speaker will be heard at the time "Public Comment" is calendared. Oral comments are limited to three minutes per individual, with a maximum of 30 minutes per subject. Speaker's cards will be available and are to be completed prior to discussion of the agenda item.

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**THE PUBLIC IS INVITED TO ATTEND**



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

**LEGAL/COMMUNITY AFFAIRS COMMITTEE MEETING**  
Committee Members: Director Handley and Director Lathi

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

**AGENDA**  
**Friday, January 20, 2017**  
**2:00 P.M.**

Karen W. Murphy  
*Attorney*

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

1. Call to Order

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2. Roll Call

---

3. Public Comment

---

4. Items to be reviewed for the Board meeting of January 23, 2017:
  - Monthly Operations Report for November 2016 – Odor Report and Work Group Reports.
  - Consider March 29, 2016, Claims Filed by Maria Del Carmen Bibiano and Fernando Trujillo for Asserted Losses Associated with Traffic Accident.
  - Consider a Resolution of Application to LAFCO for Annexation No. U-293, Dumbarton Quarry Regional Park in the City of Fremont.

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5. Adjournment

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  
January 9, 2017**

**CALL TO ORDER**

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

**PLEDGE OF ALLEGIANCE**

**ROLL CALL**

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

STAFF: Paul Eldredge, General Manager  
Karen Murphy, District Counsel  
Sami Ghossain, Technical Services Manager  
James Schofield, Collection Services Manager  
Armando Lopez, Treatment and Disposal Services Manager  
Pamela Arends-King, Business Services Manager/CFO  
Robert Simonich, Fabrication, Maintenance, and Construction Manager  
Laurie Brenner, Business Services Coach  
Raymond Chau, Capital Improvement Programs Coach  
Michelle Powell, Communications and Intergovernmental Relations Coordinator  
Regina McEvoy, Assistant to the General Manager/Board Secretary

VISITORS: Jay Witherspoon, CH2M HILL Engineers, Inc.

**APPROVAL OF THE MINUTES OF THE MEETING OF DECEMBER 12, 2016**

It was moved by Secretary Lathi, seconded by Vice President Kite, to approve the Minutes of the Meeting of December 12, 2016. Motion carried unanimously.

**APPROVAL OF THE MINUTES OF THE SPECIAL MEETING OF DECEMBER 19, 2016**

It was moved by Vice President Kite, seconded by Director Fernandez, to approve the Minutes of the Special Meeting of December 19, 2016. Motion carried unanimously.

**WRITTEN COMMUNICATIONS**

There were no written communications.

## **ORAL COMMUNICATIONS**

There were no oral communications.

## **CONSIDER A RESOLUTION TO TERMINATE MAINTENANCE AGREEMENT FOR PASEO PADRE SANITARY SEWER LIFT STATION**

This item was reviewed by the Legal/Community Affairs Committee. District Counsel Murphy stated the District previously entered into a Maintenance Agreement for the Paseo Padre Sanitary Sewer Lift Station with Kaiser Development Company, Ardenwood Technology Park Associates I, Ardenwood Forest Venture, and Sutter Hill Limited, the owners of 43 lots in Local Improvement District No. 25. The Agreement provided that the costs incurred by the District in constructing the Paseo Padre Lift Station, as well as ongoing maintenance, replacement, and repair costs, would be paid by the lot owners. The Agreement and its obligations run with the land and are applicable to subsequent owners. The Agreement was recently brought to the attention of the District by a purchaser of one of the encumbered parcels. The District collected the construction costs for the Lift Station and ongoing operational costs for a short period of time, but did not collect any monies under the agreement for at least 20 years. The District has since included all costs associated with maintaining the Lift Station in its Cost of Service Analysis, and received the necessary revenue to maintain the station. Staff recommended the Board adopt a resolution to terminate the Maintenance Agreement for the Paseo Padre Sanitary Sewer Lift Station.

It was moved by Secretary Lathi, seconded by Vice President Kite, to Adopt Resolution No. 2795, Approving and Authorizing Execution of a Termination of the Maintenance Agreement for Paseo Padre Lift Station. Motion carried unanimously.

## **CONSIDER A RESOLUTION TO ACCEPT A SANITARY SEWER EASEMENT FOR TRACT 8158 – DARROW FARM, LOCATED NEAR MISSION BOULEVARD, WEST OF INTERSTATE 680, IN THE CITY OF FREMONT**

This item was reviewed by the Legal/Community Affairs Committee. Technical Services Manager Ghossain stated the project developer, Robson Homes, is constructing 24 residential units for Tract 8158 in the city of Fremont. Sanitary sewer service to the development will be provided by a new sewer main in Emory Terrace and Emory Common which will be connected an existing sewer main in an existing sanitary sewer easement off of Via San Dimas. The roadways of the development do not meet the City of Fremont street dimensions and structure setback requirements for public streets and were designated as private streets. Robson Homes, LLC has constructed the new sewer main and granted the District a sanitary sewer easement that provides for access, maintenance, and service of the sewer mains in the private roadways. Staff recommended the Board adopt a resolution to accept the sanitary sewer easement for Tract 8158 – Darrow Farm, located near Mission Boulevard, west of Interstate 680, in the city of Fremont.

Easements are generally accepted after the project is constructed, following final phase of construction.

It was moved by Director Toy, seconded by Secretary Lathi, to Adopt Resolution No. 2796, Accepting a Sanitary Sewer Easement for Tract 8158 – Darrow Farm, Located Near Mission Boulevard West of Interstate 680 in the City of Fremont, California. Motion carried unanimously.

**CONSIDER A RESOLUTION TO ACCEPT A SANITARY SEWER EASEMENT FOR TRACT 8207 – PALMDALE ESTATES PHASE 1A, LOCATED NEAR MISSION BOULEVARD, WEST OF SAINT JOSEPH TERRACE IN THE CITY OF FREMONT**

This item was reviewed by the Legal/Community Affairs Committee. Technical Services Manager Ghossain stated Robson Homes is constructing 15 single-family residential units for Phase 1A of Tract 8207 in the city of Fremont. Robson Homes, LLC has constructed new sewer mains within the private streets of the residential development, and has granted the District a sanitary sewer easement that provides for access, maintenance, and service of the new sewer mains in the private roadways. Staff recommended the Board adopt a resolution to accept a sanitary sewer easement for Tract 8207 – Palmdale Estates Phase 1A, located on Mission Boulevard west of Saint Joseph Terrace in the city of Fremont.

It was moved by Secretary Lathi, seconded by Director Toy, to Adopt Resolution No. 2797, Accepting a Sanitary Sewer Easement for Tract 8207 – Palmdale Estates Phase 1A, Located Near Mission Boulevard West of Saint Joseph Terrace in the City of Fremont, California. Motion carried unanimously.

**AUTHORIZE THE GENERAL MANAGER TO EXECUTE TASK ORDER NO. 2 WITH CAROLLO ENGINEERS FOR THE PLANT SOLIDS SYSTEM/CAPACITY ASSESSMENT**

This item was reviewed by the Engineering and Information Technology Committee. Technical Services Manager Ghossain stated the Plant's influent flows have been steadily decreasing while influent total suspended solids have been increasing. The treatment plant is currently rated for a treatment capacity of 33 MGD, which was based on lower influent solids concentrations than those currently experienced. Additionally, regulatory requirements to implement nutrient removal and other future projects may impact the Plant's operations and further affect treatment capacity. Phase 1 of the Project was to determine the current capacity of the treatment plant solids system, specifically for the removal of conventional pollutants, and also evaluated planning for potential changes in the future or treatment process improvements. Phase 2 of the Project will determine the current capacity of the liquids side of the treatment plant unit processes and methods for process optimization. Following completion of Phase 1 and Phase 2, a report will be generated to be used as a key component of the Plant Master Plan project that has already begun. Staff recommended the Board authorize the General Manager to execute

Task Order No. 2 with Carollo Engineers in the amount of \$279,698 for the Plant Solids System/Capacity Assessment.

It was moved by Vice President Kite, seconded by Director Fernandez, to Authorize the General Manager to Execute Task Order No. 2 with Carollo Engineers for the Plant Solids System/Capacity Assessment. Motion carried unanimously.

**AUTHORIZE THE GENERAL MANAGER TO EXECUTE AN AGREEMENT AND TASK ORDER NO. 1 WITH CH2M HILL ENGINEERS, INC. FOR THE ODOR CONTROL ALTERNATIVES STUDY**

This item was reviewed by the Engineering and Information Technology Committee. Technical Services Manager Ghossain introduced Jay Witherspoon, project manager of the Odor Control Alternatives Study from CH2M HILL Engineers, Inc. Previous odor control evaluations focused on technologies similar to existing technology at the District and fit within constraints of the existing property. Staff would like to hire a consultant to conduct additional air sampling, develop and run a new odor dispersion model, and focus on evaluating alternative odor control technologies not identified in previous odor control evaluations. A Request for Proposals for the Odor Control Alternatives Study was sent to seven firms. A panel consisting of engineering and operations staff reviewed the proposals and selected CH2M HILL for the Study due to their proposed team members' relevant experience, qualifications, and approach to the project. Staff recommended the Board authorize the General Manager to execute an Agreement and Task Order No. 1 with CH2M HILL Engineers, Inc. in the amount of \$139,801 for the Odor Control Alternatives Study.

It was moved by Director Fernandez, seconded by Vice President Kite, to Authorize the General Manager to Execute an Agreement and Task Order No. 1 with CH2M HILL Engineers, Inc. for the Odor Control Alternatives Study. Motion carried unanimously.

**CONSIDER A RESOLUTION TO ACCEPT THE CONSTRUCTION OF THE ALVARADO-NILES ROAD SANITARY SEWER REHABILITATION PROJECT FROM SAK CONSTRUCTION AND AUTHORIZE RECORDATION OF A NOTICE OF COMPLETION**

This item was reviewed by the Engineering and Information Technology Committee. Technical Services Manager Ghossain stated television inspections of the Alvarado Basin identified portions of the Alvarado-Niles Road trunk sewer as having extensive corrosion due to Hydrogen Sulfide. These sewers were installed in the mid 1960's using reinforced concrete pipe that is highly susceptible to corrosion. The Project rehabilitated approximately 9,200 linear feet of the existing reinforced concrete trunk sewer which runs from under the Alvarado-Niles Road Bridge in Fremont to the vicinity of the Alvarado-Niles Road and Western Avenue intersection in Union City. The Project also rehabilitated approximately 125 linear feet of existing cast iron pipe at four locations. SAK Construction substantially completed the Project on October 11, 2016, all punchlist work has been completed, and the District has assumed beneficial use of the Project. Staff

recommended the Board adopt a resolution to accept the construction of the Alvarado-Niles Road Sanitary Sewer Rehabilitation Project from SAK Construction, and authorize recordation of a Notice of Completion.

It was moved by Director Toy, seconded by Vice President Kite, to Adopt Resolution 2798, Accepting Construction of the Alvarado-Niles Road Sanitary Sewer Rehabilitation Project Located in the City of Union City, California, from SAK Construction, LLC. Motion carried unanimously.

### **REVIEW AND CONSIDER APPROVAL OF THE PRINCIPAL AND FINANCIAL ANALYST JOB SERIES**

This item was reviewed by the Personnel Committee. Business Services Manager/CFO Arends-King stated proposed modifications to the Senior Accountant and Principal Financial Analyst positions were evaluated and discussed at the Board workshop held December 19, 2016. A thorough study of the job duties for both positions was completed and it was determined the current positions were separate with little to no overlapping or sharing of job duties or knowledge. Staff proposed replacing the existing classification of Senior Accountant and Principal Financial Analyst with a new Accounting and Financial Analyst series. The new series would include the following three new positions: Accounting and Financial Analyst I and II and Senior Accounting and Financial Analyst. The Senior Accountant and Financial Analyst position would be filled, and either the Accounting and Financial Analyst I or II would be filled depending upon the qualifications of the candidate pool. Staff recommended the Board consider approval of the Accounting and Financial Analyst job series and salary range.

It was moved by Vice President Kite, seconded by Director Toy, to Approve the Accounting and Financial Analyst Job Series and Salary Range. Motion carried unanimously.

### **REVIEW AND CONSIDER APPROVAL OF REVISED CLASS DESCRIPTION AND SALARY FOR THE POSITION OF ASSISTANT TO THE GENERAL MANAGER/BOARD SECRETARY**

This item was reviewed by the Personnel Committee. Human Resources Manager Tolbert presented a desk item showing the redline of proposed changes to the existing job description for the Assistant to the General Manager/Board Secretary, and stated the desk item would be added to the Board meeting packet. The current Assistant to the General Manager/Board Secretary class description was modified to add the duties of overseeing the District records management program and records retention schedules, and maintain associated policies and documents as well as updated to clarify existing duties and responsibilities. It was proposed that the classification title change to Executive Assistant to the General Manager/Board Clerk. Based upon a salary survey and the additional duties, a salary adjustment increase was recommended. The proposed changes were presented for discussion at the Board workshop held December 19, 2016. Staff recommended the Board consider approving proposed

revisions to the Assistant to the General Manager/Board Secretary class description and salary.

It was moved by Director Toy, seconded by Vice President Kite, to Approve Revisions to the Assistant to the General Manager/Board Secretary Class Description and Salary. Motion carried unanimously.

### **REVIEW AND CONSIDER APPROVAL OF REVISED AND CURRENT PUBLICLY AVAILABLE PAY SCHEDULES**

This item was reviewed by the Personnel Committee. Human Resources Manager Tolbert stated CalPERS conducts random audits to ensure compliance with rules and regulations. CalPERS conducted an audit for the fiscal periods of July 1, 2011 through June 30, 2014. A final report was issued, and staff have been working with CalPERS to resolve the audit findings. Staff recommended the Board approve and sign the revised and current Publicly Available Pay Schedules presented in the Board meeting packet.

It was moved by Vice President Kite, seconded by Director Fernandez, to Approve and Sign the Revised and Current Publicly Available Pay Schedules. Motion carried unanimously.

### **INFORMATION ITEMS:**

#### **Check Register**

All questions were answered to the Board's satisfaction.

#### **Report on the East Bay Dischargers Authority (EBDA) Meeting of December 15, 2016**

Director Toy provided an overview of the report included in the Board Meeting Packet.

### **COMMITTEE MEETING REPORTS:**

The Legal/Community Affairs and Engineering and Information Technology Committee meetings were canceled due to a lack of quorum, and individual briefings were conducted. The Personnel Committee met.

A Board Workshop to review the proposed Ad Hoc Communications Strategy has been scheduled for January 31, 2017.

### **GENERAL MANAGER'S REPORT:**

General Manager Eldredge reported the following:

- The recent wet weather storms did not overload the Plant; the highest reported flow was 46 MGD.
- Staff will prepare an item to be presented at the next Board meeting to discuss dates for the 2018 Centennial Open House. Vice President Kite requested staff present options for Board involvement in planning the Centennial Open House.

- The General Manager will attend the California Association for Sanitation Agencies (CASA) Conference the week of January 17, 2017.
- EBDA General Manager Mike Connor will provide a presentation on the Singapore Water Conference he attended at the January 23, 2017, Board meeting.

**OTHER BUSINESS:**

There was no other business.

**ADJOURNMENT:**

The meeting was adjourned at 7:54 p.m. to the next scheduled Regular Board Meeting to be held in the Boardroom on Monday, January 23, 2017, at 7:00 p.m.

SUBMITTED:

ATTEST:

\_\_\_\_\_  
REGINA McEVOY  
BOARD CLERK

\_\_\_\_\_  
ANJALI LATHI  
SECRETARY

APPROVED:

\_\_\_\_\_  
TOM HANDLEY  
PRESIDENT

Adopted this 23<sup>rd</sup> day of January, 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:** January 17, 2017

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

**FROM:** Paul R. Eldredge, General Manager/District Engineer

**SUBJECT:** Agenda Item No. 5 - Meeting of January 23, 2017  
Information Item: **Monthly Operations Report for November 2016**

### **Background**

Attached are Monthly Operations Reports for November 2016. Staff is available to answer questions regarding information contained in the report.

### **Work Group Managers**

General Manager/Administration	Paul Eldredge	GM
Business Services	Pamela Arends-King	BS
Collection Services	James Schofield	CS
Technical Support	Sami Ghossain	TS
Treatment and Disposal Services	Armando Lopez	T&D
Fabrication, Maintenance, and Construction	Robert Simonich	FMC

### **ODOR COMPLAINTS:**

There was one odor complaint received by Collection Services in November 2016. The odor was reported in Fremont near Gomes Park by a County employee. District staff inspected the sewer mains ACFC channel, and storm drain manholes in the Gomes Park area and no sewer related odor was detected. Staff did note an organic odor emitting from cut grass debris lying along the fence lines near the easement path, and reported the findings to the County employee.

There were seven odor complaints received by the Treatment Plant in November 2016, all from the same Union City resident. Details regarding each of the seven complaints were included in the Board meeting packet.

**SAFETY:**

- We had a recordable injury where an employee twisted their ankle. The employee was on modified duty for a week then returned to full duty.
- The employee with the recordable injury from October started the month on modified duty and was then returned to full duty.
- We had 2 near misses. The first was water getting into electrical control panels outside the headworks. The equipment had to be replaced. The second near miss an electrical short in the gas compressor controls. Short was caused by work completed by an electrician.
- We received a comment on our Safety Blog about the problems controlling the temperature in the Admin building. Collections is looking for solutions to improve the situation.
- We completed the physicals for our 35 commercial drivers. We are looking into options for future medical exams to improve privacy during the exams.
- We received and installed 6 new AEDs. We now have 8 available if needed.

**STAFFING & PERSONNEL:****Other Completed Recruitments:**

- Recruitment for the Senior Accountant position was completed, but a candidate was not selected.

**Other Accomplishments:**

- The Leadership Training Team completed the "Team Building" training module for Leadership School.
- Sent out notices for Open Enrollment for FSA, Dental, and Voluntary Life.

**G.M. ACTIVITIES:** For the month of November, the GM was involved in the following:

- Met with the Ad Hoc Subcommittee for Communications Strategy.
- Attended the EBDA Managers Advisory Committee and EBDA Commission meetings.

Attachments: Odor Report and Map  
Hours Worked and Leave Time by Work Group  
Financial Reports  
Business Services  
Technical Services  
Collection Services  
Fabrication, Maintenance, and Construction  
Treatment and Disposal Services



## ODOR REPORT November 2016

### Collection Services

During the recording period from November 01, 2016 through November 30, 2016, there was one odor related service request received by Collection Services.

#### City: Fremont

##### **1. Complaint Details:**

Date: 11/4/2016

Location: VALDEZ PL

Wind (from): N/A

Temperature: 66 Degrees F

Time: 2:30 pm

Reported By: Greg Hilst, County Inspector

Wind Speed: 5 mph

Weather: Overcast

##### **Response and Follow-up:**

We inspected USD sewer mains, manholes and risers. We also inspected ACFC channel and storm drain manholes in the Gomes Park area. We found no detectable signs of any odors emanating from these areas. We did find an odor of organic nature which was coming from cut grassy debris lying along the fence lines along an easement path. We left a message on Greg Hilst's telephone recorder at 10:00 pm of our findings and told him to call back should he have any questions.

### Treatment Plant (Union City)

During the recording period from November 01, 2016 through November 30, 2016, there were seven odor related service requests received by the Treatment Plant.

##### **1. Complaint Details:**

Date: 11/4/2016

Location: MACKINAW ST

Wind (from): East

Temperature: 67 Degrees F

Tide Information:

High Tide Reading: 5.5 Ft/Time

High Tide Time: 3:33 PM

Time: 6:00 pm

Reported By: Sam Dua

Wind Speed: < 2 mph

Weather: Cloudy

Low Tide Reading: 0.1 Ft/Time

Low Tide Time: 11:46 PM

##### **Response and Follow-up:**

- USD Staff dispatched to complaint location? Yes
- Were any odors detected at the complaint location? No
  - If yes, was odor attributed to USD? N/A
- Were any odors detected at the Plant? Yes
  - If yes, what odors were found? Operator investigate Plant and a slight odor was detected at the rag bin. Odor was only noticeable within a 15 foot radius. Odor counteractant was applied as a precaution.
- Additional Information: None

## 2. Complaint Details:

Date: 11/9/2016

Location: MACKINAW ST

Wind (from): East

Temperature: 61 Degrees F

Tide Information:

High Tide Reading: 7.7 Ft/Time

High Tide Time: 8:17 AM

Time: 12:25 pm

Reported By: Sam Dua

Wind Speed: 5 mph

Weather: Sunny

Low Tide Reading: 2.1 Ft/Time

Low Tide Time: 2:28 PM

### Response and Follow-up:

- USD Staff dispatched to complaint location? Yes
- Were any odors detected at the complaint location? No
  - If yes, was odor attributed to USD? N/A
- Were any odors detected at the Plant? Yes
  - If yes, what odors were found? Operator investigated the Plant and detected a slight odor at the rag bin. Odor was only noticeable within a 15 foot radius of the bin. Odor counteractant applied as a precaution. Mild odor detected around secondary. Operator insured the PIIAN (misting) system was functioning properly.
- Additional Information: None

## 3. Complaint Details:

Date: 11/10/2016

Location: MACKINAW ST

Wind (from): NE

Temperature: 67 Degrees F

Tide Information:

High Tide Reading: 5.1 Ft/Time

High Tide Time: 9:07 PM

Time: 6:35 pm

Reported By: Sam Dua

Wind Speed: 0 mph

Weather: Cloudy

Low Tide Reading: 0.2 Ft/Time

Low Tide Time: 4:15 AM

### Response and Follow-up:

- USD Staff dispatched to complaint location? No
- Were any odors detected at the complaint location? N/A
  - If yes, was odor attributed to USD? N/A
- Were any odors detected at the Plant? Yes
  - If yes, what odors were found? Odor detected was not attributed to the Plant. Operator detected odors from the adjacent field with the animal enclosures.
- Additional Information: None

## 4. Complaint Details:

Date: 11/11/2016

Location: MACKINAW ST

Wind (from): Southeast

Temperature: 67 Degrees F

Tide Information:

High Tide Reading: 6.7 Ft/Time

High Tide Time: 9:04 AM

Time: 11:45 am

Reported By: Sam Dua

Wind Speed: < 4 mph

Weather: Cloudy

Low Tide Reading: 0.5 Ft/Time

Low Tide Time: 3:25 PM

### Response and Follow-up:

- USD Staff dispatched to complaint location? Yes
- Were any odors detected at the complaint location? Yes
  - If yes, was odor attributed to USD? No - TPO Coach met with the resident at the site and detected a vegetation smell.
- Were any odors detected at the Plant? No

- If yes, what odors were found? N/A
- *Additional Information:* Operators checked odor control system and didn't find any problems.

**5. Complaint Details:**

Date: 11/15/2016 Time: 3:28 pm  
 Location: MACKINAW ST Reported By: Sam Dua  
 Wind (from): East Wind Speed: 10 mph  
 Temperature: 61 Degrees F Weather: Cloudy  
 Tide Information:  
 High Tide Reading: 7.2 Ft/Time Low Tide Reading: -0.4 Ft/Time  
 High Tide Time: 12:14 PM Low Tide Time: 10:18 PM

**Response and Follow-up:**

- *USD Staff dispatched to complaint location?* No
- *Were any odors detected at the complaint location?* N/A
  - If yes, was odor attributed to USD? N/A
- *Were any odors detected at the Plant?* No
  - If yes, what odors were found? N/A
- *Additional Information:* Operators checked odor control system and didn't find any problems. Resident reported a bad smell and said he would call back in 15 minutes if it persisted. There were no additional calls after TPO Coach informed the resident the system had all been checked and was working properly. There were no unusual activities in the plant that would cause any odors.

**6. Complaint Details:**

Date: 11/23/2016 Time: 2:56 pm  
 Location: MACKINAW ST Reported By: Sam Dua  
 Wind (from): East Wind Speed: 7 mph  
 Temperature: 60 Degrees F Weather: Cloudy  
 Tide Information:  
 High Tide Reading: 6.0 Ft/Time Low Tide Reading: 0.4 Ft/Time  
 High Tide Time: 8:29 AM Low Tide Time: 4:07 PM

**Response and Follow-up:**

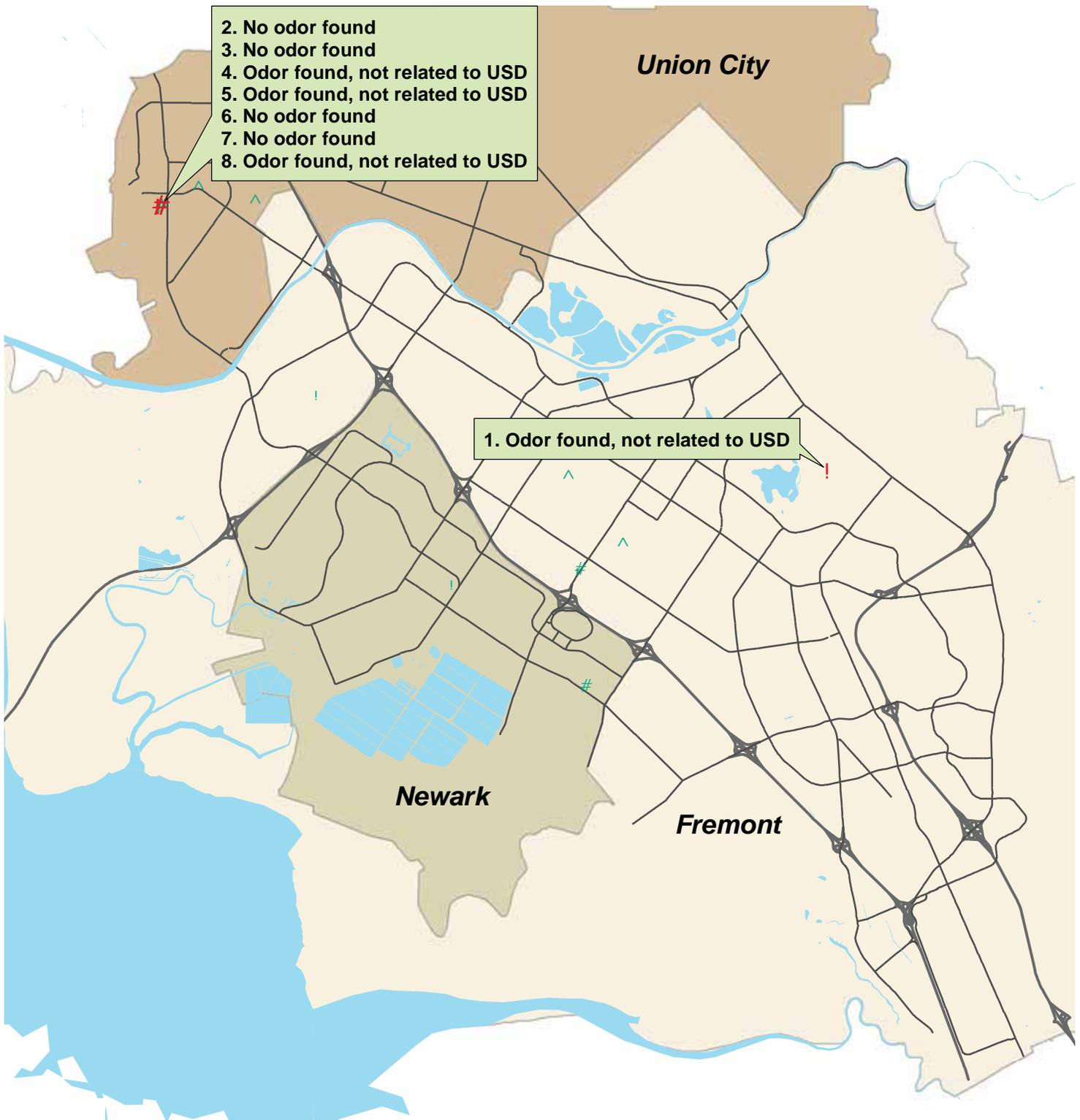
- *USD Staff dispatched to complaint location?* Yes
- *Were any odors detected at the complaint location?* No
  - If yes, was odor attributed to USD? N/A
- *Were any odors detected at the Plant?* Yes
  - If yes, what odors were found? Mild odor due to abandoned thickened primary sludge lines from construction were found containing sludge and were flushed out. Odor was only noticeable within a 15-20 foot radius of the bin. Operators checked odor control system and didn't find any problems.
- *Additional Information:* Investigated neighborhood near the complaint address and did detect a mild secondary smell along Seaport Drive. Staff verified PIIAN (misting) system was functioning properly.

**7. Complaint Details:**

Date: 11/27/2016 Time: 6:00 pm  
 Location: MACKINAW ST Reported By: Sam Dua  
 Wind (from): West Wind Speed: 8 mph  
 Temperature: 52 Degrees F Weather: Partly Cloudy  
 Tide Information:  
 High Tide Reading: 6.3 Ft/Time Low Tide Reading: 0.0 Ft/Time  
 High Tide Time: 10:43 AM Low Tide Time: 6:47 PM

**Response and Follow-up:**

- *USD Staff dispatched to complaint location?* No
- *Were any odors detected at the complaint location?* N/A
  - *If yes, was odor attributed to USD?* N/A
- *Were any odors detected at the Plant?* Yes
  - *If yes, what odors were found?* Odor detected was not attributed to the Plant. Operator detected odors from the adjacent field with the animal enclosures. Operators checked odor control system and didn't find any problems.
- *Additional Information:* Resident reported strong odor for about two hours.



**Legend**

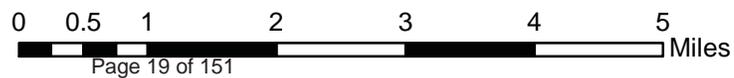
**Odor Complaints: November 2016**

- ^ Odor found, USD resolved (0)
- ! Odor found, not related to USD (4)
- # No odor found (4)

**Odor Complaints: Dec. 2015 to Oct. 2016**

- ^ Odor found, USD resolved (10)
- ! Odor found, not related to USD (4)
- # No odor found (8)

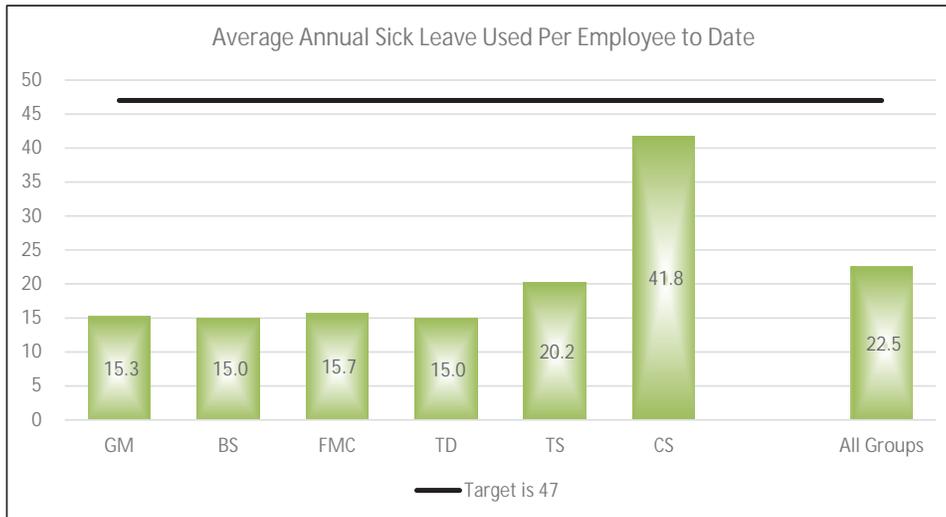
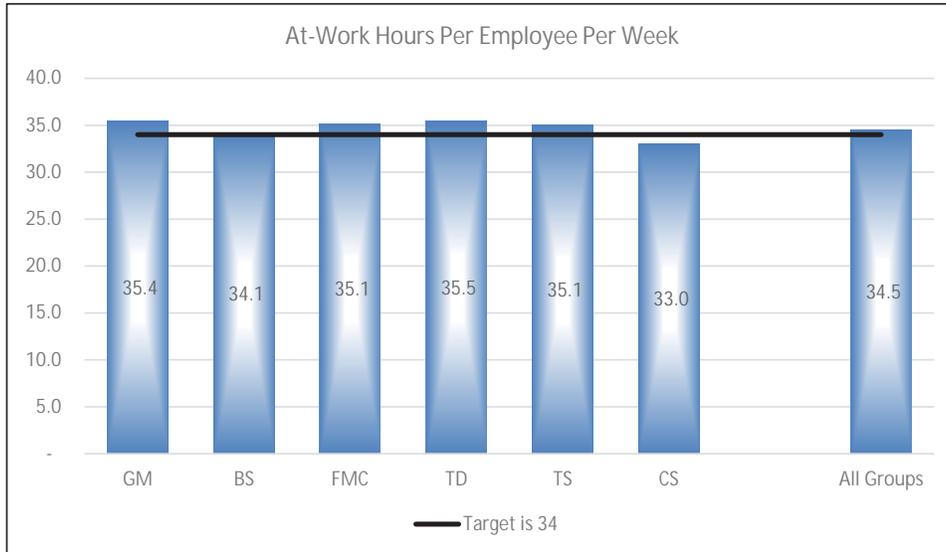
**Location of Odor Reports  
December 2015 to November 2016**



## HOURS WORKED AND LEAVE TIME BY WORK GROUP

June 30, 2016 through November 30, 2016

Weeks to Date: 22 out of 52 (42.31%)



**NOTES**

- (1) Regular hours does not include hours worked by part-time or temporary employees.
- (2) Overtime hours includes call outs.
- (3) Discretionary Leave includes Vacation, HEC, Holiday, MAL, FLEX, Funeral, Jury Duty, Military, OT Banked Use, Paid Admin., SLIP, VRIP, Holiday Banked Use leaves.
- (4) Sick Leave includes sick and catastrophic sick leaves as well as protected time off, of which the District has no discretion.

An employee using 15 vacation, 11 holiday, 2 HEC, and 5 sick days will work an average of **34.9** hours per week over the course of a year; with 20 vacation days, **34.2** hours per week.

**HOURS WORKED AND LEAVE TIME BY WORK GROUP**

June 30, 2016 through November 30, 2016

Weeks to Date: 22 out of 52 (42.31%)

Group	Average Number of Employees	AT-WORK HOURS		At-Work Hours Per Employee Per Week	LEAVE HOURS				Average Annual Sick Leave Used Per Employee To Date	FY16		
		Regular (1)	Overtime (2)		Discretionary (3)	Short Term Disability	Workers Comp	Sick (4)		Average Number of Employees	At-Work Hours Per Week Per Employee	Annual Sick Leave Used
GM	2	1,509.50	38.25	35.4	220.00	-	-	30.50	15.3	2	36.1	40.6
BS	22	16,403.25	0.50	34.1	2,477.08	64.17	-	330.30	15.0	22	35.1	21.4
FMC	23	17,309.08	339.33	35.1	2,498.17	-	71.00	360.75	15.7	22	35.3	52.4
TD	27	20,410.25	520.92	35.5	2,848.53	122.87	16.50	404.85	15.0	25	35.4	49.9
TS	32	24,465.20	52.39	35.1	3,127.05	2.68	-	645.07	20.2	32	34.6	40.8
CS	32	21,943.25	1,120.00	33.0	3,682.39	434.98	-	1,337.71	41.8	31	35.1	55.0
<b>All Groups</b>	<b>138</b>	<b>102,040.53</b>	<b>2,071.39</b>	<b>34.5</b>	<b>14,853.22</b>	<b>624.70</b>	<b>87.50</b>	<b>3,109.18</b>	<b>22.5</b>	<b>134</b>	<b>35.1</b>	<b>44.5</b>

**SICK LEAVE INCENTIVE PROGRAM TARGETS**

**≥34**

**≤47**

The Sick Leave Incentive Program target goals are 47 or less hours of sick leave per employee annually, and 34 or more hours of at-work time per week per employee.

**NOTES**

(1) Regular hours does not include hours worked by part-time or temporary employees.

(2) Overtime hours includes call outs.

(3) Discretionary Leave includes Vacation, HEC, Holiday, MAL, FLEX, Funeral, Jury Duty, Military, OT Banked Use, Paid Admin., SLIP, VRIP, Holiday Banked Use leaves.

(4) Sick Leave includes sick and catastrophic sick leaves, as well as protected time off, of which the District has no discretion.

An employee using 15 vacation, 11 holiday, 2 HEC, and 5 sick days will work an average of 34.9 hours per week over the course of a year;

with 20 vacation days, 34.2 hours per week.

**BUDGET AND FINANCE REPORT**

FY 2017

**Year-to-date as of 11/30/16**

33% of year elapsed

**Revenues**

	<b>Budget</b>	<b>Actual</b>	<b>% of Budget Rec'd</b>	<b>Audited Last Year Actuals 6/30/16</b>
Capacity Fees	\$8,935,000	\$2,937,304	33%	\$7,233,337
Sewer Service Charges	50,404,690	702,895	1%	50,112,564
Operating (Work Groups)	1,355,000	634,595	47%	1,233,675
Interest	475,500	232,818	49%	496,439
Misc. (LAVVMA pymnt, solar, Cogen rebates)	505,000	244,454	48%	408,913
<b>Subtotal Revenues</b>	<b>\$61,675,190</b>	<b>\$4,752,066</b>	<b>8%</b>	<b>\$59,484,928</b>
SRF Loan Proceeds (Thickener Proj.)	2,800,000	979,464	35%	3,385,590
<b>Total Revenues + SRF Proceeds</b>	<b>\$64,475,190</b>	<b>\$5,731,530</b>	<b>9%</b>	<b>\$62,870,518</b>

**Expenses**

	<b>Budget</b>	<b>Actual</b>	<b>% of Budget Used</b>	<b>Last Year Actuals</b>
Capital Improvement Program:				
Capacity Proj.	\$4,342,500	\$1,995,170	46%	\$3,009,426
Renewal & Repl. Proj.	10,327,500	5,315,209	51%	8,494,486
Operating	34,714,533	13,495,745	39%	31,895,499
Special Projects	2,132,098	184,314	9%	707,526
Retiree Medical (ARC)	583,771	291,886	50%	561,205
Vehicle & Equipment	662,220	3,310	0%	341,967
Information Systems	1,232,100	190,806	15%	854,511
Plant & Pump Stat. R&R	250,000	31,346	13%	272,479
Emerg. Fund (Sinkhole)	0	285	0%	2,208,595
Pretreatment Fund	7,000	4,134	59%	29,249
Cty Fee for SSC Admin.	106,000	0	0%	105,866
Debt Servicing:				
SRF Loans	3,127,110	2,842,433	91%	3,127,110
<b>Total Expenses</b>	<b>\$57,484,832</b>	<b>\$24,354,637</b>	<b>42%</b>	<b>\$51,607,919</b>
<b>Total Revenue &amp; Proceeds less Expenses</b>	<b>\$6,990,358</b>	<b>(\$18,623,108)</b>		<b>\$11,262,599</b>

**Operating (Work Group) Expenses**

	<b>Budget</b>	<b>Actual</b>	<b>% of Budget Used</b>	<b>Last Year Actuals</b>
Board of Directors	\$178,500	\$53,798	30%	\$133,294
General Manager/Admin.	957,678	303,672	32%	884,051
Business Services	5,275,645	1,969,417	37%	4,772,324
Collection Services	6,296,287	2,491,221	40%	5,873,909
Technical Services	5,511,940	2,240,832	41%	5,156,725
Treatment & Disposal Services	10,631,833	4,151,206	39%	9,506,339
Fabrication, Maint. & Construction	5,862,650	2,285,598	39%	5,568,856
<b>Total</b>	<b>\$34,714,533</b>	<b>\$13,495,745</b>	<b>39%</b>	<b>\$31,895,499</b>

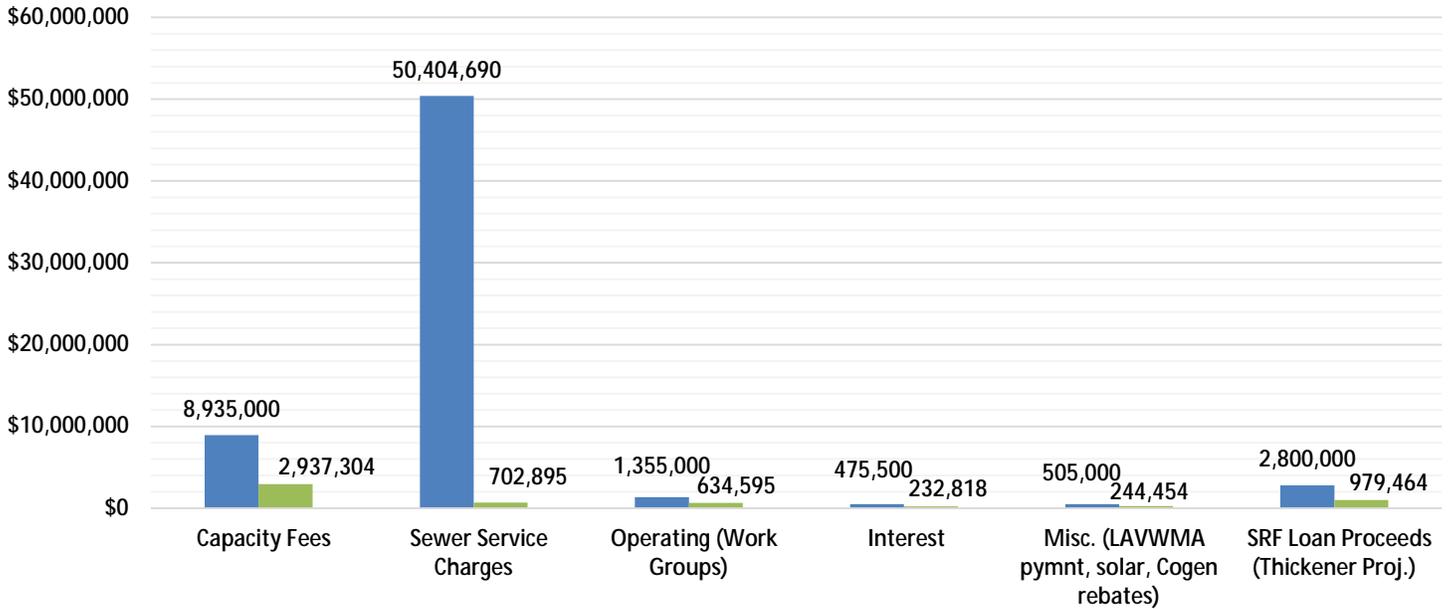
**Operating (Work Group) Expenses by Type**

	<b>Budget</b>	<b>Actual</b>	<b>% of Budget Used</b>	<b>Last Year Actuals</b>
Personnel (incl D&E)	\$23,912,246	\$9,538,726	40%	\$22,107,543
Repairs & Maintenance	2,022,630	870,617	43%	1,965,202
Supplies & Matls (chemicals, small tools)	2,424,140	821,019	34%	2,273,252
Outside Services (utilities, biosolids, legal)	6,029,045	2,223,035	37%	5,342,319
Fixed Assets	326,472	42,347	13%	207,183
<b>Total</b>	<b>\$34,714,533</b>	<b>\$13,495,745</b>	<b>39%</b>	<b>\$31,895,499</b>

**REVENUES EXPENSES REPORT**  
as of 11/30/16

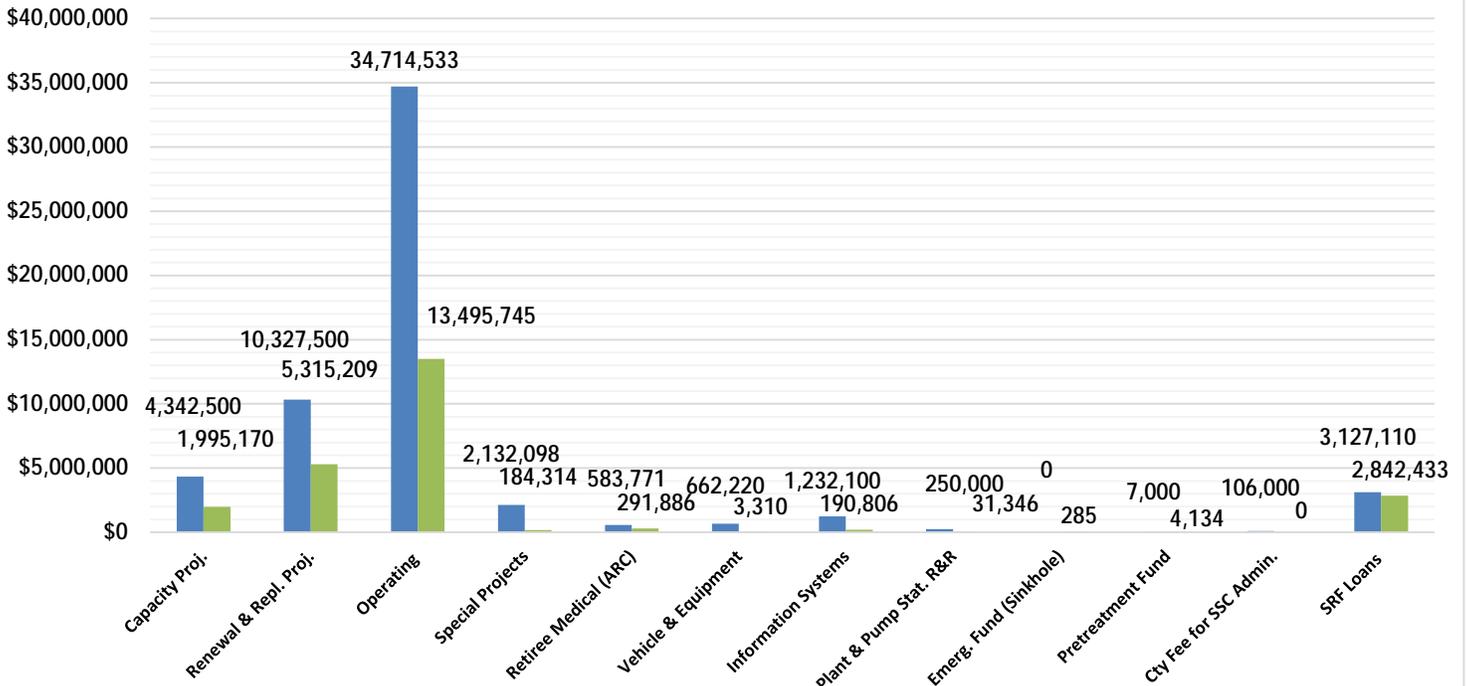
## Total Revenues

■ Budget ■ Actual



## Total Expenses

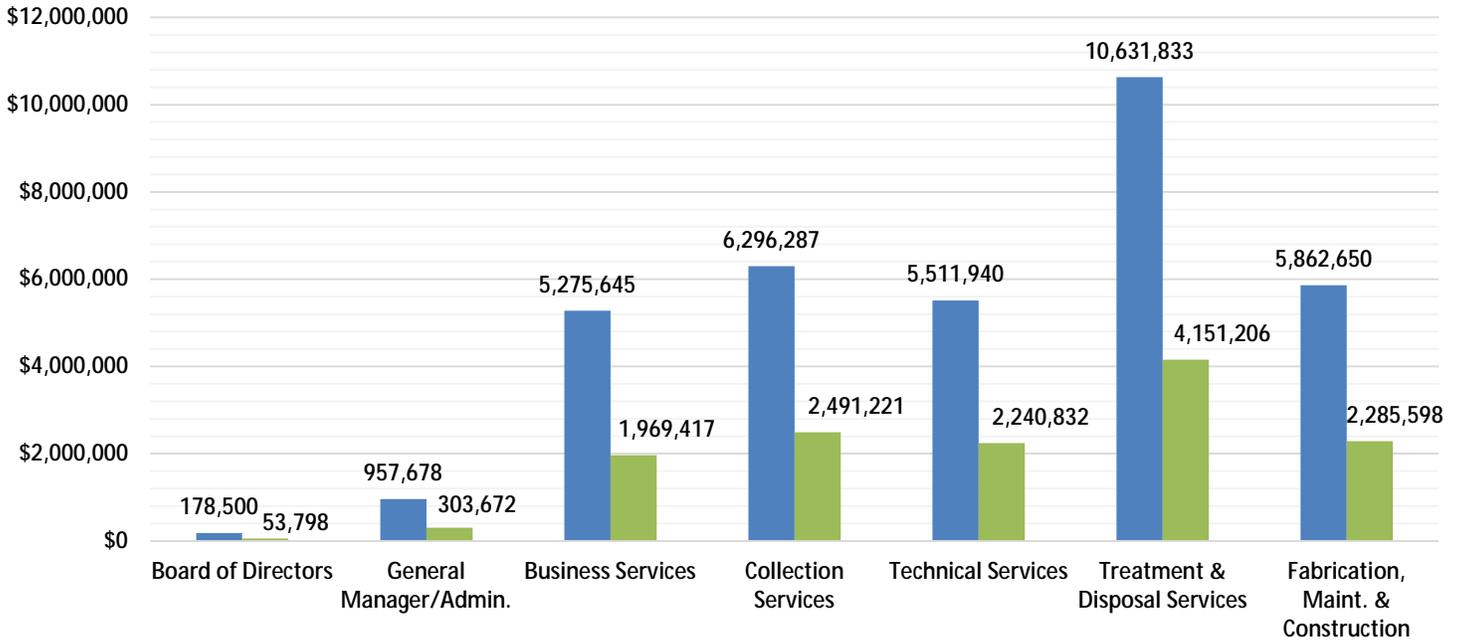
■ Budget ■ Actual



**REVENUES EXPENSES REPORT**  
as of 11/30/16

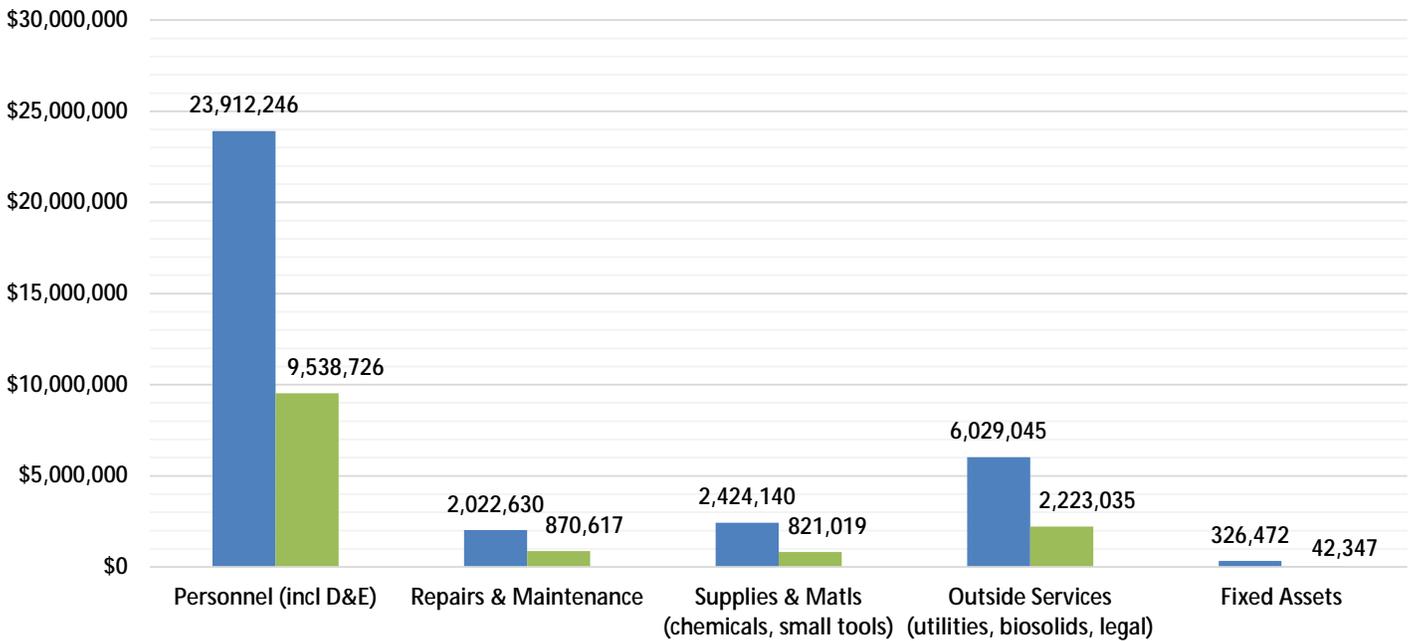
### Operating Expenses by Work Group

■ Budget ■ Actual



### Operating Expenses by Type

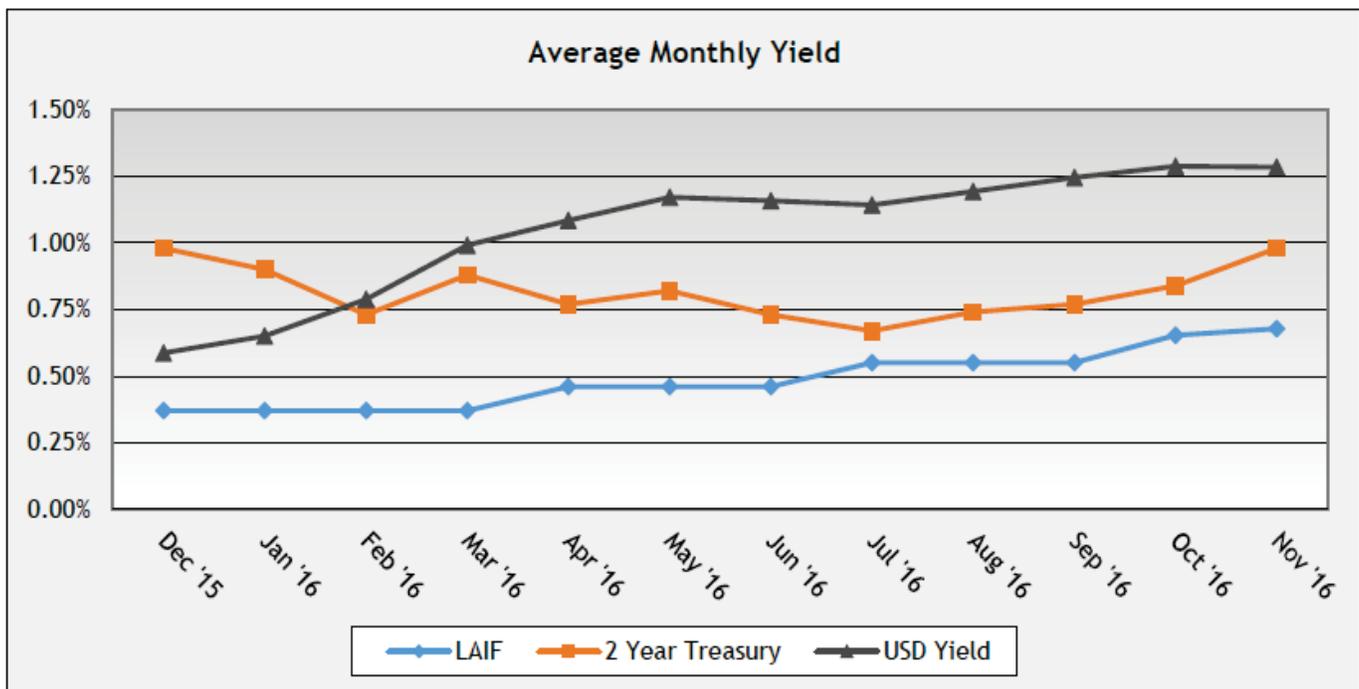
■ Budget ■ Actual



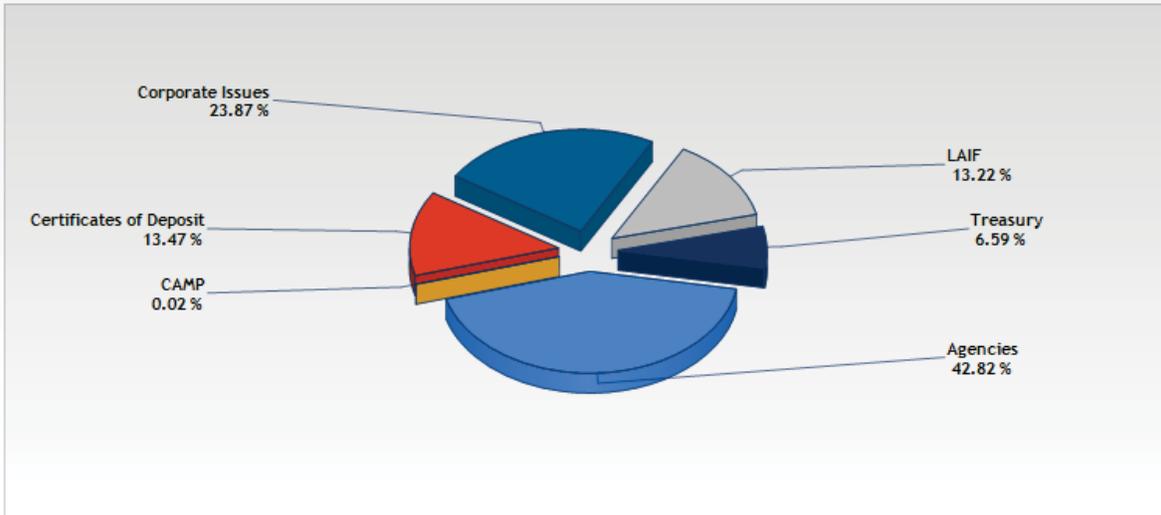
**Business Services Group  
November 2016**

- Recruitment for Lead Collection System Worker was completed; Franck Couto and Marco Lopez were promoted on 10/29/2016.
- Successful completion of planned (and unplanned) District Safety & and other Specialized Training
- The Leadership Training Team completed the “Team Building” training module for Leadership School.
- HR sent out notice for Open Enrollment for FSA, Dental and Voluntary Life
- New team (Finance and Acquisition Services Team) generated their charter and held several workshops to begin analyzing process flows.
- The comprehensive annual financial report (CAFR) for FY 2016 was completed.
- Completed multiple RFP’s/RFQ’s for internal customers

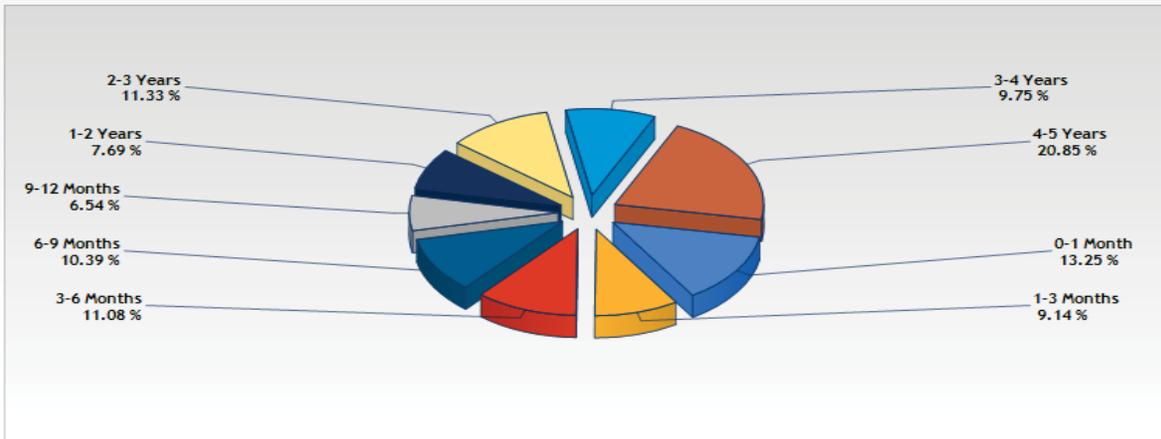
**Performance Measures for the USD Investment Portfolio**



### Portfolio Holdings Distribution by Asset Class



### Portfolio Holdings Distribution by Maturity Range



Maturity Range	Face Amount / Shares	YTM @ Cost	Cost Value	Days To Maturity	% of Portfolio	Market Value	Book Value	Duration To Maturity
0-1 Month	6,032,725.91	0.678	6,032,725.91	1	13.25	6,032,725.91	6,032,725.91	0.00
1-3 Months	4,061,000.00	0.848	4,164,264.35	64	9.14	4,072,511.65	4,072,321.60	0.18
3-6 Months	5,038,000.00	0.888	5,044,882.77	129	11.08	5,040,660.73	5,041,821.19	0.36
6-9 Months	4,721,000.00	0.936	4,734,399.00	245	10.39	4,721,553.76	4,726,598.17	0.67
9-12 Months	2,975,000.00	0.938	2,976,720.00	322	6.54	2,972,455.80	2,975,684.79	0.88
1-2 Years	3,496,000.00	1.107	3,500,410.00	480	7.69	3,488,008.24	3,498,658.67	1.30
2-3 Years	5,154,000.00	1.419	5,159,756.57	1,020	11.33	5,129,588.52	5,158,461.40	2.75
3-4 Years	4,248,000.00	2.069	4,439,145.28	1,299	9.75	4,371,091.84	4,415,007.06	3.36
4-5 Years	9,500,000.00	1.983	9,494,500.00	1,613	20.85	9,374,965.00	9,495,013.51	4.28
<b>TOTAL / AVERAGE</b>	<b>45,225,725.91</b>	<b>1.285</b>	<b>45,546,803.88</b>	<b>682</b>	<b>100</b>	<b>45,203,561.45</b>	<b>45,416,292.30</b>	<b>1.81</b>

**Union Sanitary District**  
**Board Report - Holdings**  
 Report Format: By Transaction  
 Group By: Asset Class  
 Average By: Cost Value  
**Portfolio / Report Group: All Portfolios**  
**As of 11/30/2016**

Description	CUSIP/Ticker	Credit Rating 1	Settlement Date	Face Amount/Shares	Cost Value	Coupon Rate	Market Value	YTM @ Cost	Next Call Date	Maturity Date	% of Portfolio
<b>Agencies</b>											
FFCB 1.17 5/16/2019-17	3133EF7L5	Moodys-Aaa	5/16/2016	1,000,000.00	1,000,000.00	1.170	993,970.00	1.170	5/16/2017	5/16/2019	2.20
FFCB 1.3 11/25/2019-16	3133EGBK0	Moodys-Aaa	5/25/2016	1,000,000.00	997,950.00	1.300	986,040.00	1.360		11/25/2019	2.19
FFCB 1.59 3/23/2020-17	3133EFR25	Moodys-Aaa	3/23/2016	1,000,000.00	1,000,000.00	1.590	998,870.00	1.590	3/23/2017	3/23/2020	2.20
FFCB 1.7 5/3/2021-17	3133EF5T0	Moodys-Aaa	5/3/2016	1,000,000.00	1,000,000.00	1.700	984,530.00	1.700	5/3/2017	5/3/2021	2.20
FHLB 0.8 5/17/2017	3130A4Q54	Moodys-Aaa	3/27/2015	1,000,000.00	1,001,690.00	0.800	1,000,450.00	0.720		5/17/2017	2.20
FHLB 0.9 9/28/2017	3130A5KH1	Moodys-Aaa	7/22/2015	1,000,000.00	1,001,140.00	0.900	1,000,040.00	0.847		9/28/2017	2.20
FHLB Step 3/15/2021-16	3130A7EG6	Moodys-Aaa	3/15/2016	1,000,000.00	1,000,000.00	1.000	996,740.00	2.216	12/15/2016	3/15/2021	2.20
FHLB Step 4/28/2021-16	3130A7PR0	Moodys-Aaa	4/28/2016	1,000,000.00	1,000,000.00	1.000	990,530.00	2.114	1/28/2017	4/28/2021	2.20
FHLB Step 4/28/2021-16	3130A7QX6	Moodys-Aaa	4/28/2016	1,000,000.00	1,000,000.00	1.250	988,490.00	2.021		4/28/2021	2.20
FHLMC 0.8 8/25/2017-16	3134G8L49	Moodys-Aaa	2/25/2016	1,000,000.00	1,000,000.00	0.800	998,390.00	0.800	2/25/2017	8/25/2017	2.20
FHLMC 1 7/25/2017	3134G3ZH6	Moodys-Aaa	6/24/2015	1,000,000.00	1,004,540.00	1.000	1,001,450.00	0.780		7/25/2017	2.21
FHLMC 1.25 10/28/2019-17	3134G8XQ7	Moodys-Aaa	4/28/2016	1,000,000.00	1,000,000.00	1.250	988,270.00	1.250	4/28/2017	10/28/2019	2.20
FHLMC Step 3/30/2020-17	3134G8ST7	Moodys-Aaa	3/30/2016	1,000,000.00	1,000,000.00	1.000	999,370.00	1.744	3/30/2017	3/30/2020	2.20
FHLMC Step 4/28/2021-16	3134G8VZ9	Moodys-Aaa	4/28/2016	2,500,000.00	2,500,000.00	1.250	2,459,775.00	2.116		4/28/2021	5.49
FHLMC Step 4/28/2021-16	3134G8Z28	Moodys-Aaa	5/10/2016	1,000,000.00	999,500.00	1.125	987,200.00	2.044	1/28/2017	4/28/2021	2.19
FNMA 1.25 1/30/2017	3135G0GY3	Moodys-Aaa	12/16/2015	1,000,000.00	1,004,790.00	1.250	1,001,300.00	0.820		1/30/2017	2.21
FNMA 1.5 6/16/2021-16	3136G3QX6		6/16/2016	1,000,000.00	995,000.00	1.500	970,430.00	1.604	12/16/2016	6/16/2021	2.18

Description	CUSIP/Ticker	Credit Rating 1	Settlement Date	Face Amount/Shares	Cost Value	Coupon Rate	Market Value	YTM @ Cost	Next Call Date	Maturity Date	% of Portfolio
FNMA Step 5/12/2021-17	3136G3MD4	Moodys-Aaa Moodys-Aaa	5/12/2016	1,000,000.00	1,000,000.00	0.900	997,270.00	1.851	5/12/2017	5/12/2021	2.20
<b>Sub Total / Average</b>				<b>19,500,000.00</b>	<b>19,504,610.00</b>	<b>1.162</b>	<b>19,343,115.00</b>	<b>1.534</b>			<b>42.82</b>
<b>CAMP</b>											
CAMP LGIP	LGIP4000	None	5/31/2011	9,845.35	9,845.35	0.640	9,845.35	0.640	N/A	N/A	0.02
<b>Sub Total / Average</b>				<b>9,845.35</b>	<b>9,845.35</b>	<b>0.640</b>	<b>9,845.35</b>	<b>0.640</b>			<b>0.02</b>
<b>Certificates of Deposit</b>											
Ally Bank 1.35 10/28/2019	02006LQ48	None	10/27/2016	248,000.00	248,000.00	1.350	247,006.76	1.350		10/28/2019	0.54
American Express Centurian 1.05 6/5/2017	02587DYJ1	None	6/5/2015	240,000.00	240,000.00	1.050	239,913.02	1.050		6/5/2017	0.53
Bank Hapoalim 0.85 2/17/2017	06251AL65	None	2/18/2016	248,000.00	248,000.00	0.850	248,046.10	0.850		2/17/2017	0.54
BankUnited NA 0.9 5/24/2017	066519BE8	None	11/24/2015	240,000.00	240,000.00	0.900	239,802.50	0.900		5/24/2017	0.53
Bar Harbor Bank 0.7 1/30/2017	066851TT3	None	6/30/2015	240,000.00	240,000.00	0.700	239,975.62	0.700		1/30/2017	0.53
Capital One Bank 1.5 10/26/2020	140420L99	None	10/26/2016	248,000.00	248,000.00	1.500	246,491.84	1.500		10/26/2020	0.54
Capital One National Asso Bank 1.25 8/28/2017	14042E6B1	None	8/26/2015	245,000.00	245,000.00	1.250	245,076.34	1.250		8/28/2017	0.54
Comenity Capital 1.25 4/11/2019	20033ASR8	None	10/25/2016	248,000.00	248,000.00	1.250	247,188.57	1.250		4/11/2019	0.54
Community Bank of the Chesapeake 0.75 8/8/2017	20350ABN0	None	6/8/2016	248,000.00	248,000.00	0.750	247,213.69	0.750		8/8/2017	0.54
Compass Bank 0.95 6/5/2017	20451PLE4	None	6/5/2015	240,000.00	240,000.00	0.950	239,789.09	0.950		6/5/2017	0.53
Discover Bank 0.75 1/3/2017	254672QZ4	None	7/1/2015	240,000.00	240,000.00	0.750	240,035.83	0.750		1/3/2017	0.53
First Bank of Richmond 0.7 8/2/2017	319267FK1	None	6/2/2016	248,000.00	248,000.00	0.700	247,148.69	0.700		8/2/2017	0.54
First Niagara Bank 1.1 10/30/2017	33583CSV2	None	10/30/2015	245,000.00	245,000.00	1.100	244,076.33	1.100		10/30/2017	0.54
Franklin Synergy Bank 0.85 12/11/2017	35471TCH3	None	6/10/2016	248,000.00	248,000.00	0.850	245,969.90	0.850		12/11/2017	0.54
Goldman Sachs Bank 1 10/16/2017	38148JQX2	None	4/27/2015	240,000.00	239,520.00	1.000	239,195.21	1.069		10/16/2017	0.53
JP Morgan Chase Bank 1.1 7/15/2019	48125Y5L4	None	7/15/2016	249,000.00	249,000.00	1.100	246,801.63	1.100		7/15/2019	0.55
Marlin Business Bank 0.85 8/24/2017	57116ALG1	None	2/24/2016	248,000.00	248,000.00	0.850	247,346.27	0.850		8/24/2017	0.54
	58403B2L9	None	10/28/2015	245,000.00	245,000.00	1.150	244,187.92	1.150		10/30/2017	0.54

Description	CUSIP/Ticker	Credit Rating 1	Settlement Date	Face Amount/Shares	Cost Value	Coupon Rate	Market Value	YTM @ Cost	Next Call Date	Maturity Date	% of Portfolio
Medallion Bank 1.15 10/30/2017											
Merrick Bank 0.9 5/19/2017	59013JLK3	None	11/19/2015	240,000.00	240,000.00	0.900	239,807.86	0.900		5/19/2017	0.53
Pacific Premier Bank 0.9 12/5/2017	69478QDG2	None	6/3/2016	248,000.00	248,000.00	0.900	246,128.34	0.900		12/5/2017	0.54
Peoples State Bank of Newton 0.7 6/15/2017	712490AC5	None	6/15/2016	249,000.00	249,000.00	0.700	248,429.69	0.700		6/15/2017	0.55
Santander Bank 0.8 2/17/2017	80280JLS8	None	2/17/2016	248,000.00	248,000.00	0.800	248,019.10	0.800		2/17/2017	0.54
TCF National Bank 0.85 8/17/2017	872278SH0	None	2/17/2016	248,000.00	248,000.00	0.850	247,363.31	0.850		8/17/2017	0.54
Wells Fargo Bank 1.15 7/22/2019	9497486R3	None	7/20/2016	249,000.00	249,000.00	1.150	247,110.76	1.150		7/22/2019	0.55
Wex Bank 0.85 5/19/2017	92937CDE5	None	11/20/2015	245,000.00	245,000.00	0.850	244,746.42	0.850		5/19/2017	0.54
<b>Sub Total / Average</b>				<b>6,135,000.00</b>	<b>6,134,520.00</b>	<b>0.968</b>	<b>6,116,870.79</b>	<b>0.971</b>			<b>13.47</b>
<b>Corporate Issues</b>											
American Express Credit 2.375 3/24/2017	0258M0DD8	Moody's-A2	5/25/2016	1,000,000.00	1,012,171.77	2.375	1,003,970.00	0.900		3/24/2017	2.22
Caterpillar Financial 1 3/3/2017	14912L5Z0	Moody's-A2	12/23/2014	1,313,000.00	1,307,603.57	1.000	1,311,883.95	1.190		3/3/2017	2.87
Chevron Corp 2.193 11/15/2019	166764AN0	Moody's-Aa2	2/26/2016	1,160,000.00	1,167,806.57	2.193	1,173,200.80	2.004		11/15/2019	2.56
General Electric Capital Corp 5.4 2/15/2017	36962G2G8	Moody's-A1	3/2/2015	1,085,000.00	1,179,514.35	5.400	1,094,765.00	0.890		2/15/2017	2.59
HSBC 4.875 8/24/2020	4042Q1AE7	Moody's-A1	5/17/2016	2,000,000.00	2,191,145.28	4.875	2,126,360.00	2.500		8/24/2020	4.81
JP Morgan Chase & Co 2 8/15/2017	48126EAA5	Moody's-A3	2/16/2016	1,000,000.00	1,008,859.00	2.000	1,004,510.00	1.400		8/15/2017	2.21
Royal Bank of Canada 1.2 1/23/2017	78010UNX1	Moody's-Aa3	10/2/2015	1,000,000.00	1,003,960.00	1.200	1,000,370.00	0.895		1/23/2017	2.20
Toyota Motor Credit 1.55 7/13/2018	89236TCP8	Moody's-Aa3	3/16/2016	1,000,000.00	1,002,490.00	1.550	1,000,660.00	1.440		7/13/2018	2.20
Toyota Motor Credit Corp 1.2 4/6/2018	89236TCX1	Moody's-Aa3	5/24/2016	1,000,000.00	1,000,360.00	1.200	996,070.00	1.180		4/6/2018	2.20
<b>Sub Total / Average</b>				<b>10,558,000.00</b>	<b>10,873,910.54</b>	<b>2.695</b>	<b>10,711,789.75</b>	<b>1.496</b>			<b>23.87</b>
<b>LAIF</b>											
LAIF LGIP	LGIP1002	None	4/30/2011	6,022,880.56	6,022,880.56	0.678	6,022,880.56	0.678	N/A	N/A	13.22
<b>Sub Total / Average</b>				<b>6,022,880.56</b>	<b>6,022,880.56</b>	<b>0.678</b>	<b>6,022,880.56</b>	<b>0.678</b>			<b>13.22</b>
<b>Treasury</b>											
T-Bond 0.5 3/31/2017	912828J92		3/9/2016	1,000,000.00	998,417.43	0.500	1,000,000.00	0.650		3/31/2017	2.19

Description	CUSIP/Ticker	Credit Rating 1	Settlement Date	Face Amount/Shares	Cost Value	Coupon Rate	Market Value	YTM @ Cost	Next Call Date	Maturity Date	% of Portfolio
T-Note 0.875 1/15/2018	912828H37	Moodys-Aaa	6/1/2015	1,000,000.00	1,001,560.00	0.875	999,180.00	0.815		1/15/2018	2.20
T-Note 0.875 11/15/2017	912828G20	Moodys-Aaa	6/24/2015	1,000,000.00	1,001,060.00	0.875	999,880.00	0.830		11/15/2017	2.20
<b>Sub Total / Average</b>				<b>3,000,000.00</b>	<b>3,001,037.43</b>	<b>0.750</b>	<b>2,999,060.00</b>	<b>0.765</b>			<b>6.59</b>
<b>Total / Average</b>				<b>45,225,725.91</b>	<b>45,546,803.88</b>	<b>1.411</b>	<b>45,203,561.45</b>	<b>1.285</b>			<b>100</b>

All investment actions executed since the last report have been made in full compliance with the District's Investment Policy.

The District will meet its expenditure obligations for the next six months.

Market value sources are the LAIF, CAMP, and BNY Mellon monthly statements.

Broker/Dealers: BOSCO, Inc.; Cantella & Co.; First Empire Securities; Ladenburg, Thalman & Co, Inc.; UBS Financial Services; Wells Fargo Securities.

Union Sanitary District  
 Transactions Summary  
 Board Report - Activity  
 Group By: Action  
 Portfolio / Report Group: All Portfolios  
 Begin Date: 10/31/2016, End Date: 11/30/2016

Description	CUSIP/Ticker	Face Amount/Shares	Principal	Realized Gain/Loss	Interest/Dividends	Coupon Rate	YTM @ Cost	Settlement Date	Total
<b>Interest</b>									
BankUnited NA 0.9 5/24/2017	066519BE8	0.00	0.00		1,088.88	0.900	0.000	11/24/2016	1,088.88
Bar Harbor Bank 0.7 1/30/2017	066851TT3	0.00	0.00		142.68	0.700	0.000	11/29/2016	142.68
Chevron Corp 2.193 11/15/2019	166764AN0	0.00	0.00		12,719.40	2.193	0.000	11/15/2016	12,719.40
Comenity Capital 1.25 4/11/2019	20033ASR8	0.00	0.00		263.29	1.250	0.000	11/14/2016	263.29
Community Bank of the Chesapeake 0.75 8/8/2017	20350ABN0	0.00	0.00		779.67	0.750	0.000	11/08/2016	779.67
FFCB 1.17 5/16/2019-17	3133EF7L5	0.00	0.00		5,850.00	1.170	0.000	11/16/2016	5,850.00
FFCB 1.3 11/25/2019-16	3133EGBK0	0.00	0.00		6,500.00	1.300	0.000	11/25/2016	6,500.00
FFCB 1.7 5/3/2021-17	3133EF5T0	0.00	0.00		8,500.00	1.700	0.000	11/03/2016	8,500.00
FHLB 0.625 11/23/2016	3130A3J70	0.00	0.00		3,125.00	0.625	0.000	11/23/2016	3,125.00
FHLB 0.8 5/17/2017	3130A4Q54	0.00	0.00		4,000.00	0.800	0.000	11/17/2016	4,000.00
FNMA Step 5/12/2021-17	3136G3MD4	0.00	0.00		4,500.00	0.900	0.000	11/12/2016	4,500.00
Franklin Synergy Bank 0.85 12/11/2017	35471TCH3	0.00	0.00		179.04	0.850	0.000	11/11/2016	179.04
Medallion Bank 1.15 10/30/2017	58403B2L9	0.00	0.00		239.29	1.150	0.000	11/30/2016	239.29
Merrick Bank 0.9 5/19/2017	59013JLK3	0.00	0.00		183.45	0.900	0.000	11/19/2016	183.45
Pacific Premier Bank 0.9 12/5/2017	69478QDG2	0.00	0.00		189.57	0.900	0.000	11/05/2016	189.57
Peoples State Bank of Newton 0.7 6/15/2017	712490AC5	0.00	0.00		148.04	0.700	0.000	11/15/2016	148.04
Safra National Bank 0.7 11/29/2016	78658QSF1	0.00	0.00		1,715.00	0.700	0.000	11/29/2016	1,715.00
T-Note 0.875 11/15/2017	912828G20	0.00	0.00		4,375.00	0.875	0.000	11/15/2016	4,375.00
Wells Fargo Bank 1.15 7/22/2019	9497486R3	0.00	0.00		243.20	1.150	0.000	11/20/2016	243.20
Wex Bank 0.85 5/19/2017	92937CDE5	0.00	0.00		1,049.81	0.850	0.000	11/20/2016	1,049.81
<b>Sub Total / Average</b>		<b>0.00</b>	<b>0.00</b>		<b>55,791.32</b>				<b>55,791.32</b>
<b>Matured</b>									
FHLB 0.625 11/23/2016	3130A3J70	1,000,000.00	999,000.00	1,000.00	3,125.00	0.625	0.000	11/23/2016	1,003,125.00
Safra National Bank 0.7 11/29/2016	78658QSF1	245,000.00	245,000.00		0.00	0.700	0.000	11/29/2016	245,000.00
<b>Sub Total / Average</b>		<b>1,245,000.00</b>	<b>1,244,000.00</b>	<b>1,000.00</b>	<b>3,125.00</b>		<b>0.00</b>		<b>1,248,125.00</b>
<b>Withdraw</b>									
LAIF LGIP	LGIP1002	400,000.00	400,000.00		0.00	N/A	0.000	11/14/2016	400,000.00
LAIF LGIP	LGIP1002	500,000.00	500,000.00		0.00	N/A	0.000	11/23/2016	500,000.00
<b>Sub Total / Average</b>		<b>900,000.00</b>	<b>900,000.00</b>		<b>0.00</b>				<b>900,000.00</b>

**MONTHLY OPERATIONS REPORT FOR THE MONTH OF NOVEMBER 2016**  
**TECHNICAL SUPPORT WORK GROUP SUMMARY**

**Capital Improvement Program**

**Thickener Control Building Improvements Project** – The contractor completed the installation of the new progressive cavity pumps, grinders, monorail system, process piping and valves. Installation of electrical conduits, wiring, heat tracing cable and insulation is currently in progress.

**Fremont and Paseo Padre Lift Stations Improvements Project** – The contractor continued the installation of electrical conduits and wiring at Paseo Padre Lift Station. The first lift pump at Paseo Padre Lift Station has been set into place.

**MCC and PLC Replacement Project, Phase 3** – The contractor completed the installation of the electrical circuit breakers for Lift Pump Nos. 7 and 8 (West Aeration Blower Room) variable frequency drives. The two drives were functionally tested and placed into operation.

**Plant Facilities Improvements Project** – Project is substantially complete. Contractor worked on punch list items.

**Chemical Tanks and Piping Replacement Project** – The contractor completed the excavation of new Hypo line.

**Aeration Blower Project** – Project closeout is in progress. Board acceptance will be at the December 12<sup>th</sup> Board meeting.

**Alvarado-Niles Road Sanitary Sewer Rehabilitation Project** – Project closeout is in progress.

**Pine St. Easement Improvements Project** – Project closeout is nearly complete. Board acceptance will be at the December 12<sup>th</sup> Board meeting.

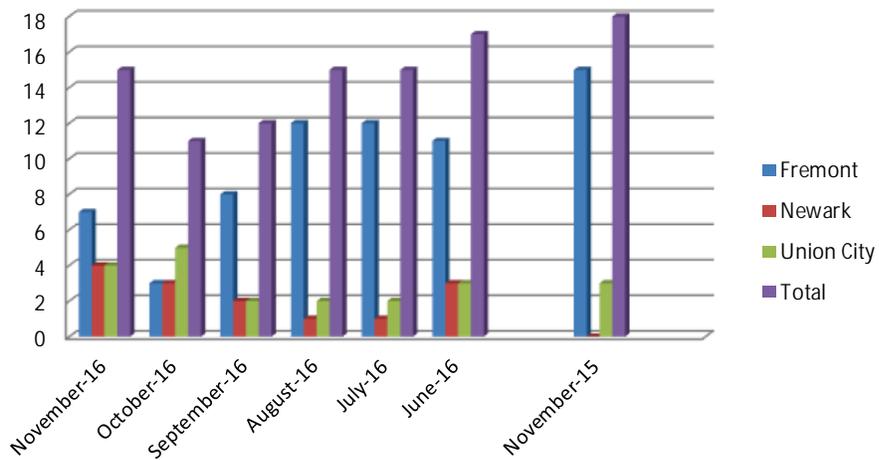
**Newark Backyard Sanitary Sewer Relocation Project, Phase 3** – Project is substantially complete. Staff is finalizing change order negotiations with contractor.

**Sludge Degritter System Project** – Review of degritter equipment submittal is in progress.

**Customer Service**

Trouble Calls dispatched from the Front Desk during business hours:

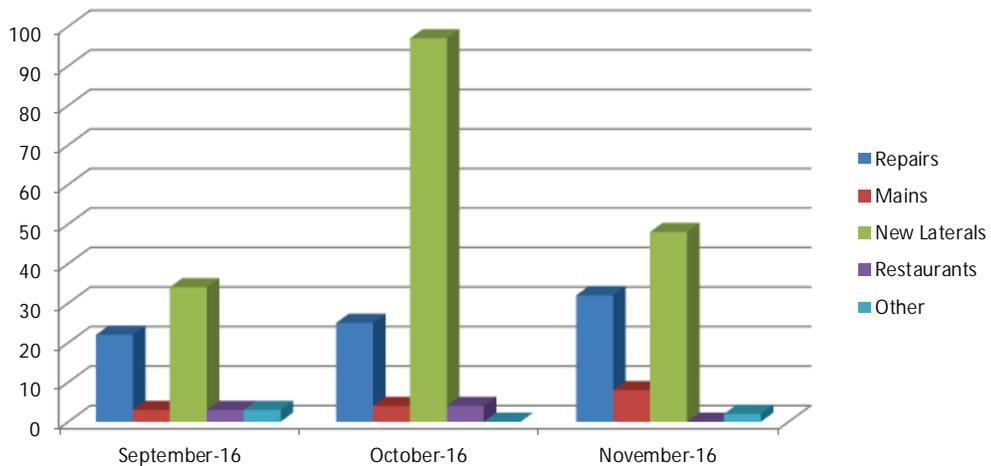
Month	Fremont	Newark	Union City	Total
November-16	7	4	4	15
October-16	3	3	5	11
September-16	8	2	2	12
August-16	12	1	2	15
July-16	12	1	2	15
June-16	11	3	3	17
November-15	15	0	3	18
6-Month Total				85



**Sewer Permits Issued**

Month	Repairs	Mains	New Laterals	Restaurants	Other
November-16	32	8	48	0	2
October-16	25	4	97	4	0
September-16	22	3	34	3	3

New Laterals - New residential lateral connections  
 Other - Non-residential construction (except restaurants)



**Communication**

- Designed USD informational presentation for Alameda County Special Districts Association meeting
- Shared CSDA’s Facebook check-in of USD’s presentation on USD Facebook page
- Co-branded FOG information with Republic Services for Union City Chamber December newsletter
- Continued participation in USD virtual tour video production planning
- Continued activity on Union City Chamber of Commerce Board of Directors – planning and executing Chamber’s December 8, 2016 “Holiday with the Cops” promotion and event
- Began planning for Centennial celebration 2018
- Member of CASA program committee – conference call to plan Open House/Plant Tours panel discussion at January 2017 conference
- Continued research regarding social media best practices
- Research regarding USD 2017 newsletter

**Environmental Compliance**

**Pollution Prevention Program**

USD’s Environmental Compliance team conducts pollution prevention inspections to restaurants, car wash businesses, and other commercial facilities. EC also conducts inspections and enforcement for the City of Fremont’s Environmental Services group. We conduct over 600 Stormwater compliance inspections every year to ensure that commercial facilities, including restaurants and auto shops, comply with City Ordinance requirements, and do not discharge pollutants to the creeks and bay.

For the past month, the EC team conducted 90 Stormwater (Urban Runoff), and 48 FOG (restaurant) inspections. During this reporting period, Inspectors identified 16 Stormwater and 7 FOG enforcement actions. Six (6) of the Stormwater enforcements resulted in administrative fines ranging from \$100 to \$500. One (1) of the administrative fines were for illicit discharges, and a total of 5 were for repeated violations.

**Urban Runoff Inspections and Enforcements**

November 2016	No. of UR Inspections	VW	WL	NOV	AF	LA	Total Enforcements	No. of Illicit Discharge/s	1
	90	3	0	7	6	0	16	% enforcement	17.7

**FOG Inspections and Enforcements**

November 2016	No. of FOG Inspections	VW	WL	NOV	AF	NOD	Total Enforcements	% enforcement	14.6
	48	2	5	0	0	0	7		

*Enforcements:*

*VW – Verbal Warning*

*WL – Warning Letter*

*NOV – Notices of Violation*

*AF – Administrative Fine*

*LA – Legal Action*

*NOD – Notice of Deficiency*

*AO – Administrative Order*

*C&D – Cease & Desist Order*

*SNC – Significant Non Compliance*

**Dental Inspections, School Outreach, and Plant Tours**

# of Dental Inspections	# of School Outreach Events including Sewer Science	# of Plant Tours
3	10	0

**Industrial Pretreatment**

The Industrial Pretreatment program has a number of pending permits as shown in the table below. USD inspectors are working with each of these companies to establish permitted industrial discharges.

**Pending Permits**

New Industrial/Groundwater Permits	Groundwater/Temporary
Mission Linen	Pacific Gas and Electric Company
TE Connectivity	
Seagate Technology LLC FRC	
Chemetall	

**Permits Issued**

Company Name	Date Permit Issued
Littelfuse, Inc.	11/22/16

**Industrial Closures**

Company Name	Date of Closure
Star Pacific #216	11/18/16

**Reports (Annual & Semi-Annual Pretreatment Report, Union City Report, etc.)**

Report Name	Date Report Completed and Submitted
None	

**Enforcement Action**

IU Name & Nature of Business	Comments	City	Parameter s Violated	Discharge concentration (mg/L)	USD/Fed Limit Violated (mg/L)	Enforcement (1)
Air Liquide Advanced Materials #013	Violation Date: 11/14/2016, Issued Date: 12/7/2016	Fremont	Chromium and Nickel	Chromium: 3.0 mg/L Nickel: 2.0 mg/L	Chromium: <2.0 mg/L Nickel: <1.0 mg/L	N016-013

(1) *WL – Warning Letter*                      *NOV – Notices of Violation*                      *AO – Administrative Order*  
*C&D – Cease and Desist Order*                      *SNC – Significant Non Compliance*                      *EM – Enforcement Meeting*

**Other - Training, Special Meetings, Conferences, IAC (topics)**

Activity	Date of Event	Attendees
BAPPG Steering Committee Meeting	11/9/15	Doug Dattawalker
MEDS Coalition	11/21/16	Doug Dattawalker

**Engineering/Construction**

No. of projects under construction: 10

	<b>Construction Projects</b>	<b>Capital (\$1000)</b>	<b>Scheduled Completion</b>	<b>Completed Scope</b>	<b>Completed Time</b>	<b>Comments for Nov. 2016 Activities</b>
1.	Thickener Control Building Improvements Project – Curtis	\$9,990	12/16	94%	99%	Installation of the new pumps, grinders, monorail system, process piping and valves has been completed.
2.	Fremont and Paseo Padre LSs Improvement - Derek	\$2,801	10/16	79%	100%	First lift pump at Paseo Padre Lift Station has been set.
3.	MCC and PLC Replacement Project, Phase 3 – Thomas	\$869	12/16	98%	96%	The variable frequency drives for Lift Pump Nos. 7 and 8 were functionally tested and placed into operation.
4.	Plant Facilities Improvements Project – Thomas	\$1,570	1/17	59%	89%	Contractor worked on the punch list.
5.	Chemical Tanks and Piping Replacement Project – Thomas	\$2,102	10/17	4%	25%	The contractor completed excavation for the new Hypo line.
6.	Aeration Blower Project – Curtis	\$1,065	8/16	100%	100%	Project closeout nearly complete. Board acceptance on Dec. 12 <sup>th</sup> .
7.	Alvarado-Niles Road SS Rehabilitation Project – Chris E.	\$3,026	10/16	100%	100%	Project closeout in progress.
8.	Pine St. Easement Improvements – Chris E.	\$156	10/16	100%	100%	Project closeout nearly complete. Board acceptance on Dec. 12 <sup>th</sup> .
9.	Newark Backyard SS Relocation Project Phase 3 –Andrew/Rollie	\$2,107	09/16	100%	100%	Staff finalizing change order negotiations with contractor.
10.	Sludge Degritter System Project – Kevin	\$1,436	10/17	2%	10%	Critical path submittals in progress.

## Design/Study

No. of projects in design/study phase: 11

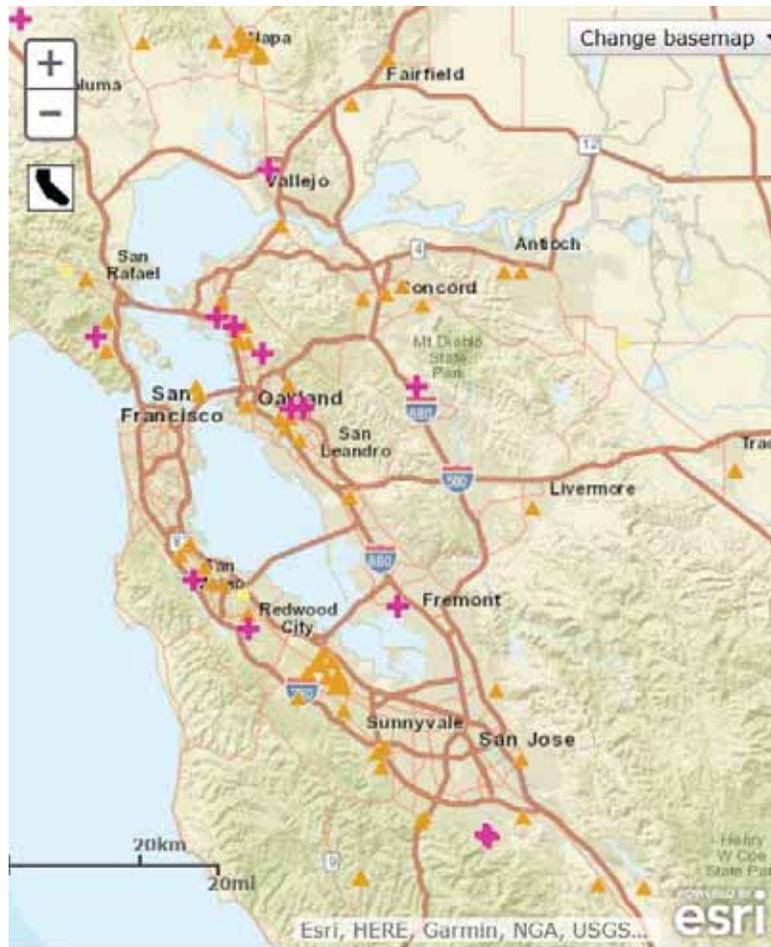
	Design/Study Projects	Capital (\$1000)	Scheduled Completion	Completed Scope	Completed Time	Comments for Nov. 2016 Activities
1.	Alvarado Basin Master Plan Capacity Assessment - Rollie	\$167	4/17	10%	17%	Obtained data for updating of flow model. Met with City of Fremont Planning.
2.	Plant Solids System / Capacity Assessment – Curtis	\$238	6/16	100%	100%	Phase 1 completed. Phase 2 to begin in Jan. 2017.
3.	Recycled Water Feasibility Study Update – Chris E.	\$130	12/16	99%	99%	Final report under State's Water Board review.
4.	Force Main Corrosion Repairs – Chris E.	\$26	12/16	70%	70%	Preliminary design in progress. Workshop complete.
5.	Headworks Knife Gate Valves 1-3 Replacement – Kevin	In-house	10/16	100%	100%	Bids opened on Nov. 30 <sup>th</sup> . Board will consider award of the construction contract on Dec. 12 <sup>th</sup> .
6.	Cogeneration Building HVAC Improvements Project - Derek	\$27	09/16	100%	100%	Project is ready to advertise but on hold pending resolution of current Cogen issues.
7.	Seismic Vulnerability Assessment, Phase 3 - Thomas	\$105	04/17	10%	20%	Consultant began review of the plans for the plant buildings that will be included in Phase 3.
8.	Standby Power Generation System Upgrade Project – Raymond/Kevin	\$175	05/17	0%	8%	Staff and consultant conducted predesign phase kickoff meeting on Nov. 30 <sup>th</sup> .
9.	Pavement Condition Assessment Project – Andrew	\$26	2/17	0%	25%	Staff and consultant conducted study kickoff meeting on Nov. 1 <sup>st</sup> .
10.	Force Main Condition Assessment – Andrew	\$121	10/17	0%	4%	Staff and consultant conducted study kickoff meeting on Nov. 29 <sup>th</sup> .
11.	Primary Digester No. 7 Project – Curtis	\$127	7/17	0%	3%	Staff and consultant will conduct the pre-design kickoff meeting on Dec. 8 <sup>th</sup> .

**COLLECTION SERVICES  
ACTIVITIES REPORT  
November 2016**

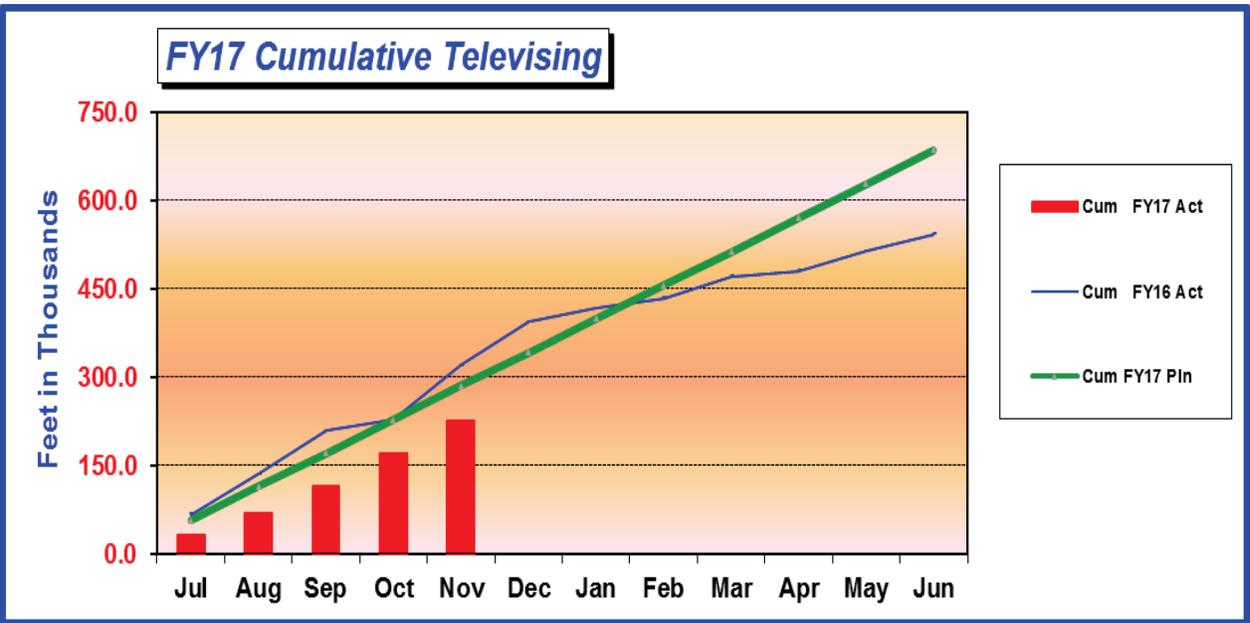
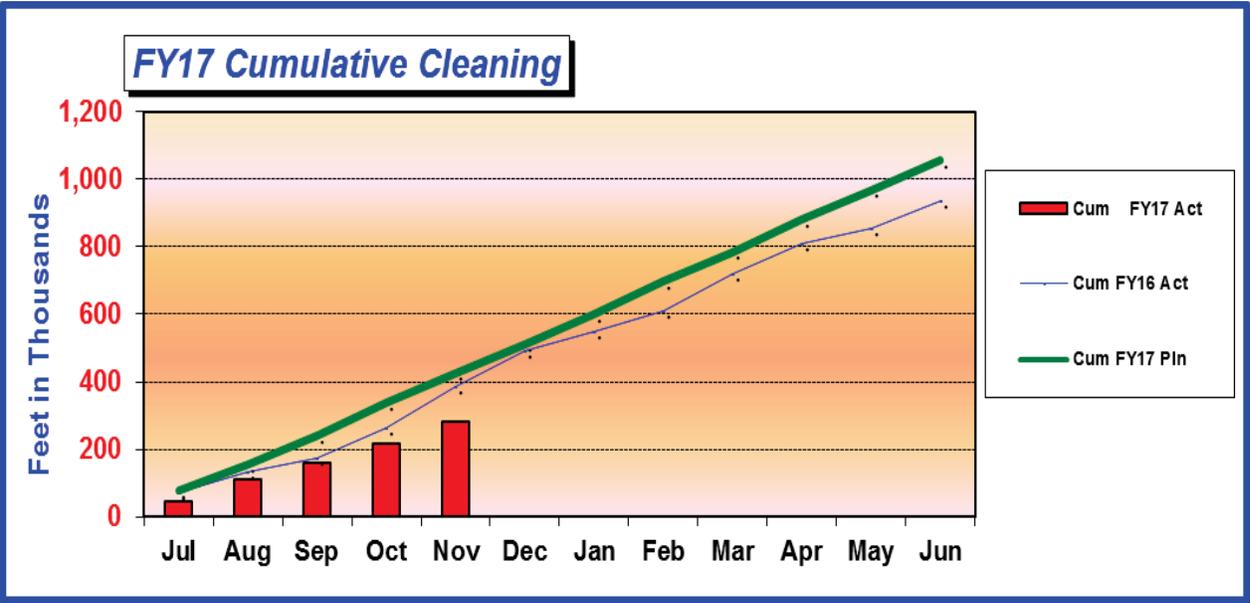
**Progress/Accomplishments**

- Category 1 Spill, 140 gallons 11/18/16 Newark
- Completed 13.0 miles of cleaning of sewer lines in November
- Completed 10.5 miles of televising of sewer lines in November
- Responded to 18 service request calls in November
- Completed a total of 4 main repairs in November
- Trainings
  - Excavation/Shoring Training
  - NASSCO Recertification
  - Ladder Safety

**Bay Area Spills for Same Time Period**

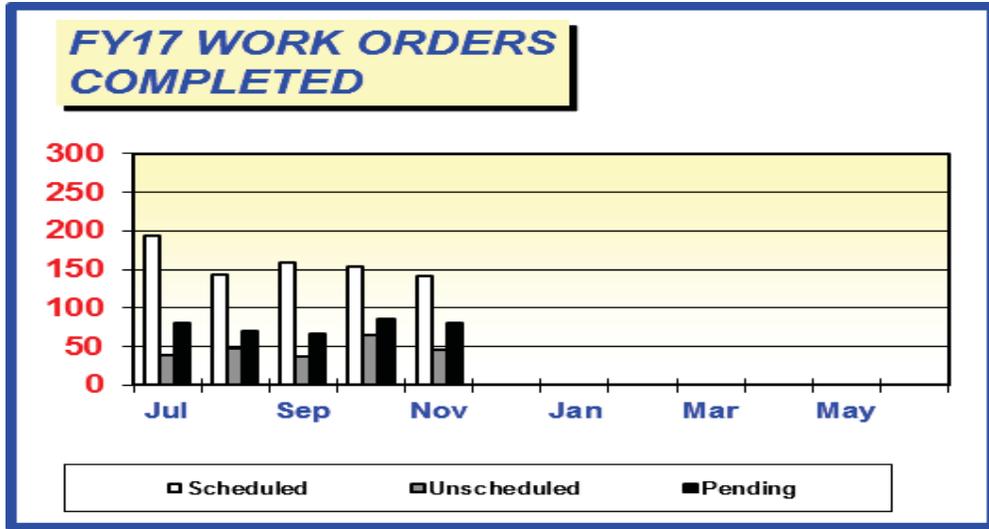


Performance Measures

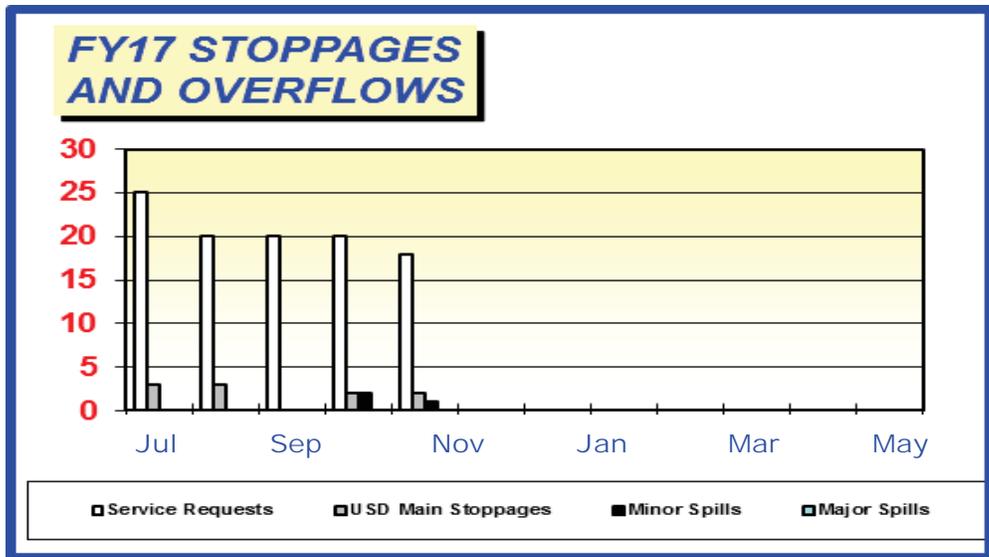


Other Collection Services Status Data:

Support Team Work Order Status:



C/S Maintenance Status:



**Fabrication, Maintenance and Construction  
Activities Report  
November 2016**

**Progress/Accomplishments**

- Completed 96% of preventive maintenance activities for the month of November
- Completed 127 corrective maintenance work orders for the month of November
- Irvington Pump Station Head Gate No. 2 hydraulic cylinder removal, overhaul and replacement
- Alvarado Pump Station Pump No. 4 installation
- Sample Pump No. 7 overhaul
- Relocate Piiian nozzles and hose to Secondary Clairifiers No. 5 & No. 6 handrail

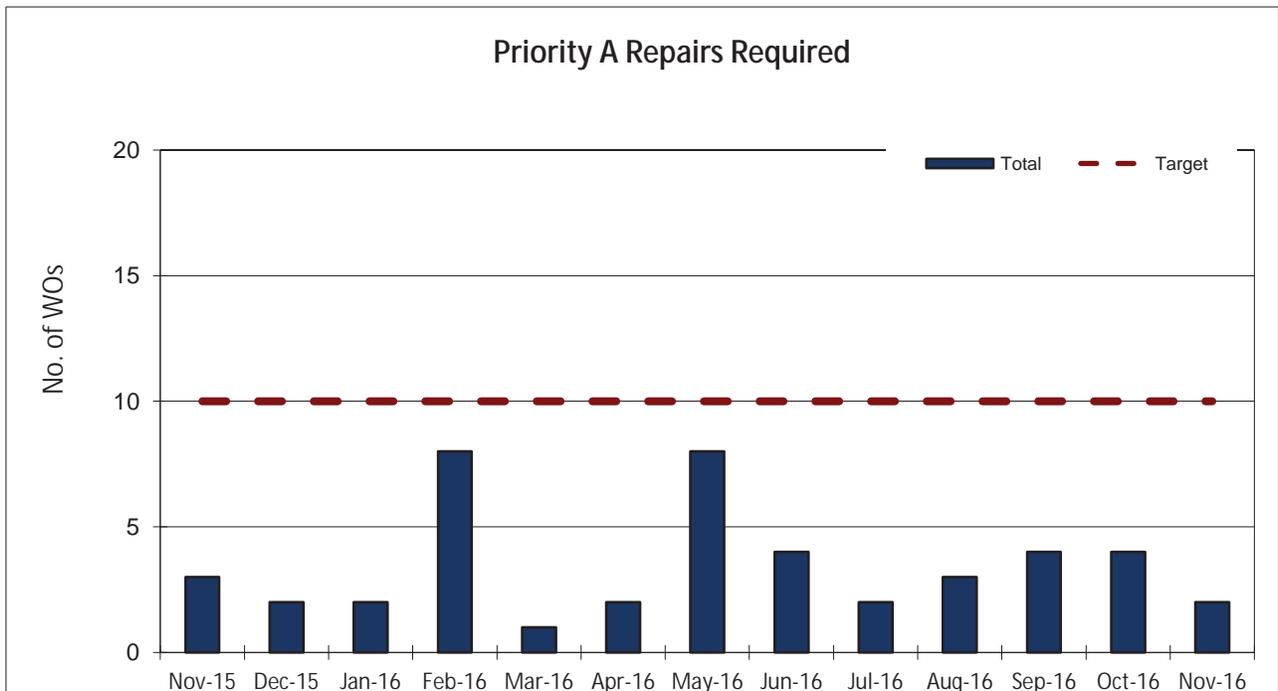
**Future Planning**

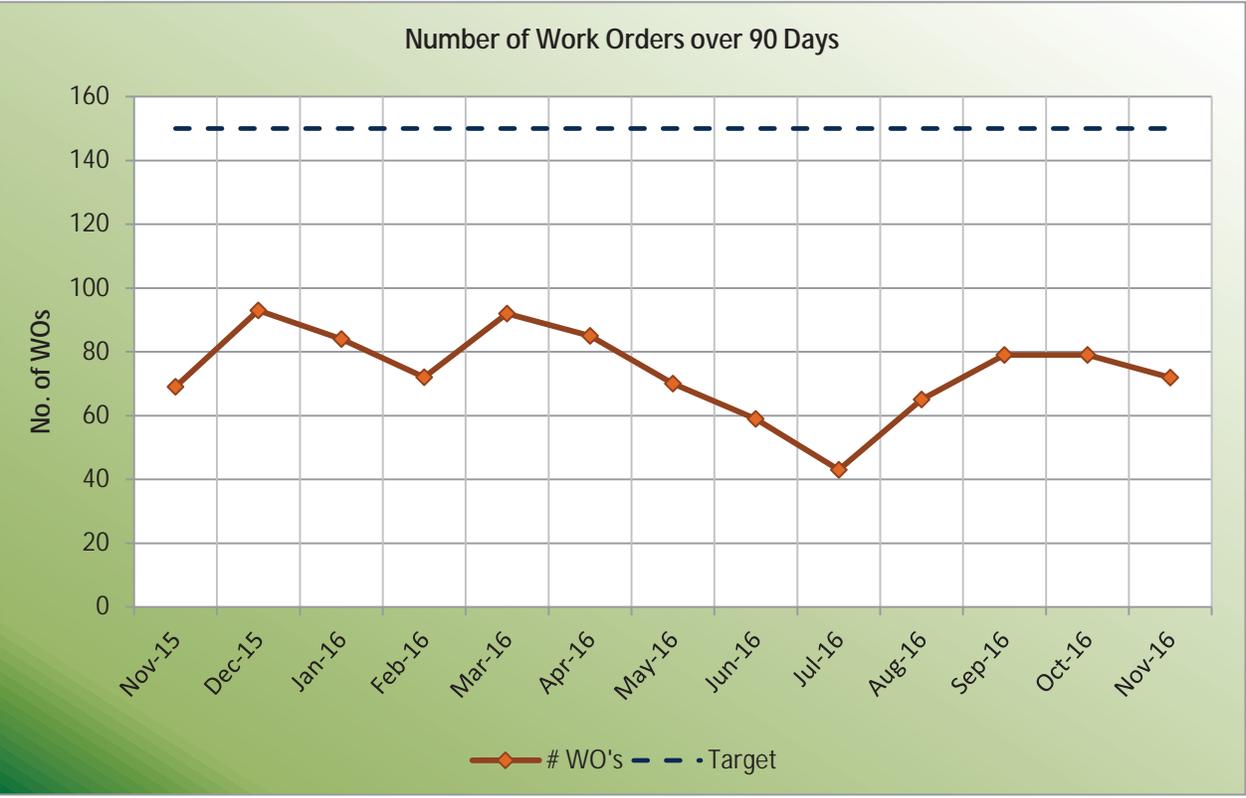
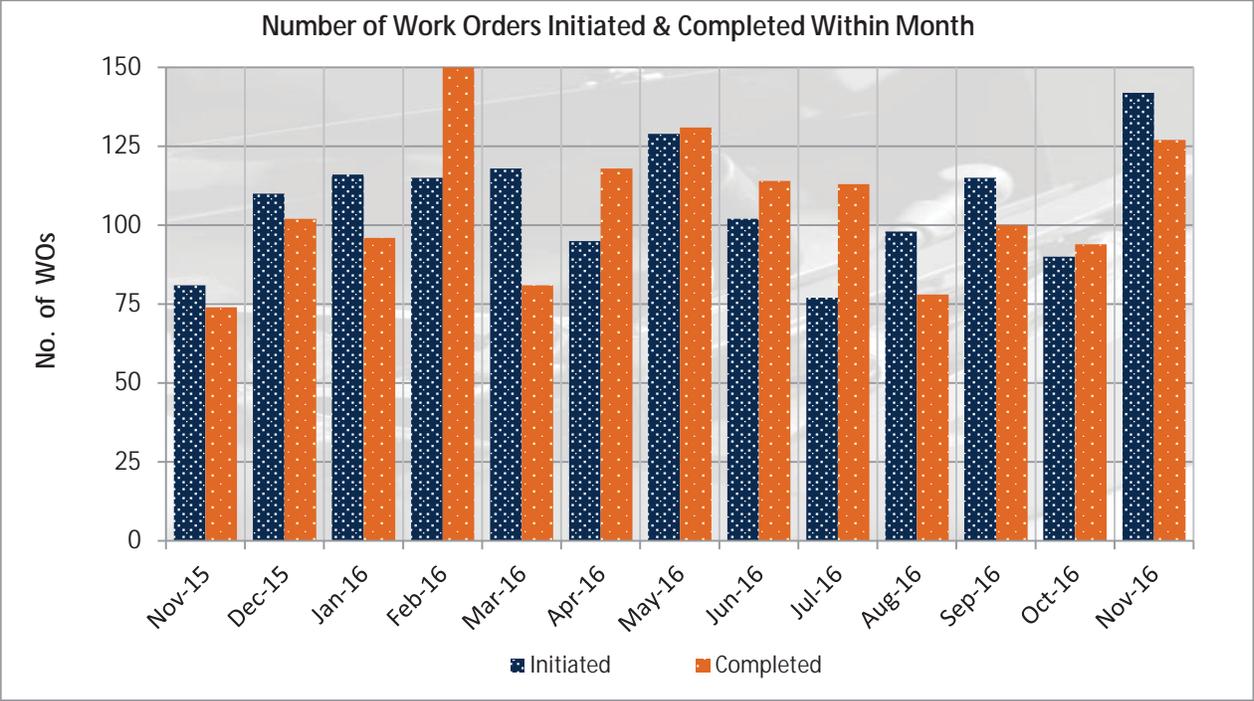
- Cogen source testing with Blue Ski Environmental
- Cogen No. 2 4K service
- GBT No. 3 Booster Pump Upsizing Trial
- CB2 Gate No. 1 Repair and Gates 5 & 6 Seal Replacement
- Water Champ guide rail modification

**Other**

- Mosa completed the pump station JCR and has been added to the on-call rotation

**Performance Measurements**





Treatment & Disposal  
Activities Report  
November 2016

### Progress/Accomplishments

- Maintained 100% compliance with NPDES permits.
- Completed 99% preventive maintenance activities for the month of November.
- Conducted multiple plant shutdowns to provide access for the relining of the 60" Primary Effluent pipeline by CIP.
- Conducted extensive sampling and analysis to evaluate organic loading to the Secondary Treatment system in an effort to troubleshoot poor effluent quality events.
- Provided staff wet weather training with artificially created high surge tower levels.
- Met with Dave Stoops of EBDA to discuss preliminary results from EBDA power billing evaluation.
- Provided data for Solida Capacity Assessment Phase II.
- Attended the RMP annual meeting.
- Discussed air permitting alternatives report with CIP.
- Reviewed the Carollo Modeling data and attended the solids capacity assessment workshop No. 2.

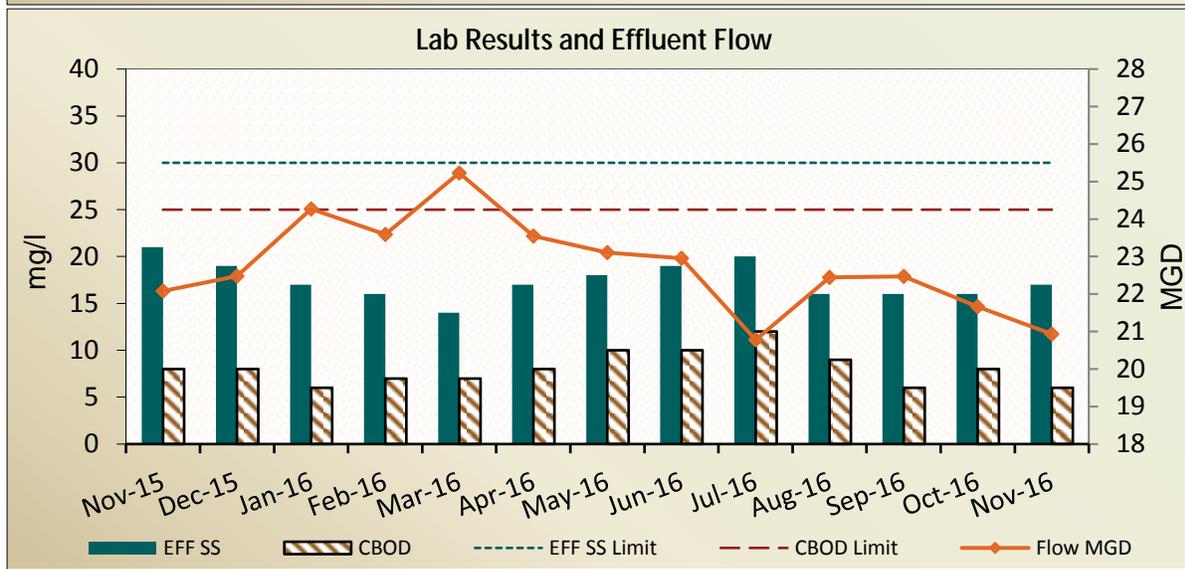
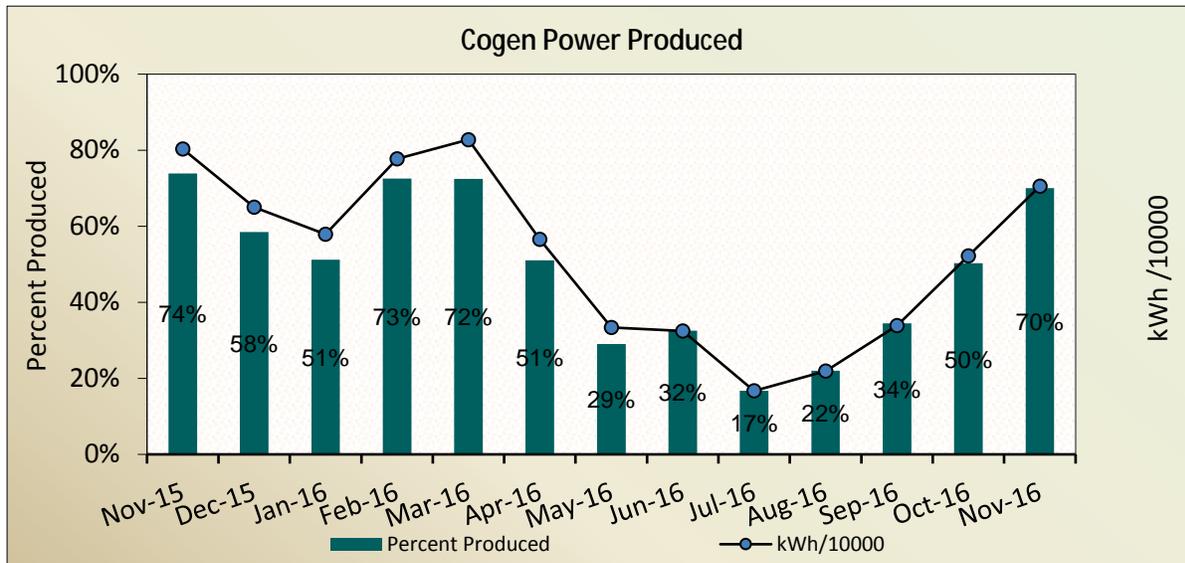
### Future Planning

- Finalize draft Codigestion report.
- Attend the BACWA meeting in January.
- Provide a response for to a request for information for the diester 7 design project.
- Conduct initial planning and logistics for the Xylem aeration membrane cleaning project.
- Conduct initial planning and logistics for the Volute thickener demonstration project.
- Present process control evaluation and modeling results to the TPO team members.

### Other

- Cogen system produced 70% of power consumed for the month of November.

## Performance Measurements



USD's Final Effluent Monthly Monitoring Results				
Parameter	EBDA Limit	Sep-16	Oct-16	Nov-16
Copper, µg/l	78	6.3	10.0	7.2
Mercury, µg/l	0.066	0.00226	0.00409	0.00572
Cyanide, µg/l	42	< 3.0	< 3.0	E 3.6
Ammonia- N, mg/L (Range)	130	35 - 46	38.1 - 40.4	32.2 - 43.7
Dioxin-Toxicity Equivalent (TEQ), µg/l	2.8 x 10 <sup>-8</sup>	not tested	not tested	not tested
Fecal Coliform, MPN/100ml (Range)				
• 5-Sample Geometric Mean	500	12 - 27	5 - 15	6 - 72
• 11-Sample 90th Percentile	1100	30 - 40	28 - 40	16 - 137
Enterococci *				
• 5-Sample Geometric Mean	242	< 10 - 10	10 - 11	11 - 13

E = Estimated value, concentration outside calibration range. For SIP, E = DNQ, estimated concentration.  
 \* Enterococci values are the weekly concentration range not the 5-Sample Geometric Mean range.



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

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

Karen W. Murphy  
*Attorney*

**DATE:** January 17, 2017

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

**FROM:** Paul R. Eldredge, General Manager/District Engineer  
Regina McEvoy, Executive Assistant to the General Manager/Board Clerk  
Michelle Powell, Communications and Intergovernmental Relations Coordinator

**SUBJECT:** Agenda Item No. 9 - Meeting of January 23, 2017  
**DETERMINE DATE FOR USD'S CENTENNIAL OPEN HOUSE EVENT; CONSIDER  
OPTIONS FOR BOARD INVOLVEMENT IN EVENT PLANNING**

### Recommendation

Staff recommends the Board discuss and finalize a date for the District's Centennial Open House Event in 2018, and consider options for Board involvement in planning the event.

### Background

Public outreach and raising the District's profile in the community are among our strategic goals. Following discussions at past Strategic Planning sessions, the Board decided in 2014 that the District would hold its first Open House sometime in 2015. An internal planning committee was formed to work on event logistics such as development of large equipment and display booths, planning for tours, and public notification. In May 2015, the District held its first public Open House.

During the Board discussion and debrief for the 2015 Open House, and more recently during the General Manager's performance evaluation, staff received Board direction to plan for an Open House in celebration of the District's centennial anniversary in 2018. The date of the District's actual centennial is May 27, 2018.

## **Discussion**

### **Event date:**

Finalizing an event date will be a cornerstone in moving forward with planning and scheduling. Previous discussions have resulted in consensus that May is an optimal month to hold the event due to the centennial date, weather conditions, and visitor convenience. Staff is of the opinion that April could be risky in regard to weather and varied spring break schedules for students. It was also noted that June brings graduations, concerts, and other end of the school year activities, as well as the beginning of vacation season.

Staff considered community activities that usually take place on weekends during the month of May:

- Cinco de Mayo events (May 5 & 6)
- Mother's Day weekend family activities (May 12 & 13)
- Memorial Day holiday weekend (May 26 – 28)

For these reasons, staff is recommending that the District's Centennial Open House celebration take place on Saturday, May 19, 2018.

### **Board involvement in event planning:**

An internal Open House planning committee, comprised of representatives from each workgroup, has convened and will meet weekly during regular business hours to prepare for the event. The committee includes members from the 2015 planning committee, with additional members to be added.

The Board of Directors may wish to consider the following options for involvement in planning the 2018 Open House:

1. Formation of an Ad Hoc subcommittee to receive information from the internal committee representatives and provide direction as-needed.
2. Appoint a Board member to attend and participate in weekly Open House planning committee meetings.
3. Staff would provide quarterly updates to the Board at future Board meetings.

It is the Board's discretion how they would like to proceed following discussion at the Board meeting.



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

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

Karen W. Murphy  
*Attorney*

**DATE:** January 9, 2017

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

**FROM:** Paul R. Eldredge, General Manager/District Engineer  
J. Leah Castella, Assistant General Counsel

**SUBJECT:** Agenda Item No. 10 – Meeting of January 23, 2017  
**Consider claim filed by Fernando Trujillo and Maria Del Carmen Bibiano**

### **Recommendation**

Deny Claim and send written notice of denial to claimant's attorney of record.

### **Background**

On March 23 2016, a 1984 catering truck and a 1997 Toyota Corolla were involved in a traffic accident on Mission Blvd. The "Cause" section of the Police Report stated that "an associated factor in this collision was the improper positioning of the manhole cover" owned by Union Sanitary District. The report also indicated that the accident was caused by one of the drivers following too closely behind an unknown vehicle.

On August 5, 2016, we received a claim from Fernando Trujillo and Maria Del Carmen Bibiano, attached as Exhibit A. The claim did not specify an amount of damages, and instead just indicated that the claimants were seeking compensation for damage to their truck, for bodily injury, and for pain and suffering. The District's insurance carrier (Carl Warren) is in contact with the claimant's attorney, but despite repeated requests, the claimant has not yet provided the District with any further information regarding the amount of their claim.

Because it has been more than 45 days since this claim was submitted, it is currently deemed denied by operation of law. When a claim is denied by operation of law, a claimant has two years to file a complaint. A public agency can, however, send a notice of rejection of claim

even after a claim is deemed denied by operation of law. By doing so, the agency can shorten the statute of limitations from two years to six months. Since Mr. Trujillo and Ms. Bibiano have failed to specify an amount for this claim, we recommend denying the claim and sending a notice of rejection of claim to their attorney of record.

**LAW OFFICE OF KATHERINE LIPEL**  
 16001 VENTURA BOULEVARD, SUITE 100  
 ENCINO, CALIFORNIA 91436  
 TEL: (818) 904-0100 FAX: (818) 904-9393  
 E-MAIL: INFO@LIPELAW.COM

August 5, 2016

**Via Facsimile (510)477-7509**

Union Sanitary District  
 Attention: Roslyn Fuller  
 5072 Benson Road  
 Union City, CA 94587

**RE: OUR CLIENTS : Fernando Trujillo & Maria Del Carmen  
 Bibiano**  
**DATE OF INCIDENT : 03/23/2016**  
**LOCATION : Mission Blvd. & Santa Teresa Terrance,  
 Fremont, CA**  
**TYPE : Auto v. Manhole**

NOTICE OF REPRESENTATION

Attention City Clerk:

Please be advised that our office has been retained to represent the above referenced clients in all aspects of their claim for injuries and damages arising out of the above-referenced loss. Enclosed is the duly executed designation form for your file. I have attached my clients' CLAIM FOR DAMAGES forms for your review.

Under the laws of the State of California we are entitled to know the amount of insurance coverage available for this claim. This matter will be expedited if you advise us of the amount at this stage of the proceedings rather than requiring us to sue your insured to obtain this information.

We hereby request that you forward the following to our offices: (1) all items of correspondence and other relevant document pertaining to the above referenced accident; (2) your written response to this letter of representation, and the amount of coverage available under the policy; (3) all items of correspondence, internal memoranda, investigatory reports, and other relevant documents pertaining to the above reference accident; (4) copies of the applicable provisions of the policy in effect on the date of the accident; and (5) a medical claim be opened.

Please do not communicate directly with our client in this matter, except with the express written permission of this office. Thank you for your courtesy and cooperation in this matter.

Sincerely,  
 LAW OFFICES OF KATHERINE LIPEL  
  
 Lana Liberman for Katherine Lipel, Esq.

KL/cm  
 Enclosures: Designations & Claim For Damages Forms

**LAW OFFICES OF KATHERINE LIPEL**  
 16001 VENTURA BOULEVARD, SUITE 100  
 ENCINO, CALIFORNIA 91436  
 TEL: (818) 904-0100 FAX: (818) 904-9393  
 EMAIL: INFO@LIPK.LAW.COM

**DESIGNATION**

**NAME OF CLIENT(S):** FERNANDO TRUJILLO

**DATE OF LOSS:** 3/23/2016

Pursuant of the Code of Regulation, Title 10, Chapter 5, Subchapter 7.5, Section 2695(c), I hereby designate Law Offices of Katherine Lipel as my representative of record. I hereby authorize the Law Offices of Katherine Lipel, its agents and employees, to handle my personal injury claim arising out of the above captioned incident.

This authorization shall be valid for two years from the date below unless renewed or revoked by the undersigned. Any and all prior authorizations are hereby revoked by the undersigned as of the date of this authorization.

Photo static copy of this authorization will be considered as valid as the original.

  
 \_\_\_\_\_  
 Client's Signature

03-29-16  
 \_\_\_\_\_  
 Date

\_\_\_\_\_  
 Client's Signature

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Client's Signature

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Client's Signature

\_\_\_\_\_  
 Date





Please submit claim form to:  
 Attn: Roslyn Fuller  
 Union Sanitary District  
 5072 Benson Road  
 Union City, CA 94587  
 Phone: (510) 477-7526  
 Fax: (510) 477-7509

**CLAIM FORM**

NAME OF CLAIMANT FERNANDO TRUSILLO

ADDRESS OF CLAIMANT 20259 SANTA MARIA AVE

CITY CASTRO VALLEY STATE CA PHONE (626) 236-3686

Owner   
 Renter/Lessee   
 Other   
 (Specify) \_\_\_\_\_

**WHEN DID DAMAGE/INJURY OCCUR?**

Date: 03/23/2016 Time: 10:56

**WHERE DID DAMAGE/INJURY OCCUR?**

Address or Nearest Cross Street: MISSION BVD @ SANTA TERESA TERRACE

City/State: FREMONT, CA

**HOW DID DAMAGE/INJURY OCCUR?** (Give full details; include name(s) of witness, if any; add supplemental sheets if required.)

MR. TRUSILLO WAS TRAVELING SB ON MISSION BVD IN LANE #2 SOUTH OF SANTA TERESA. AT THAT LOCATION THERE WAS A MAN HOLE IN THE LEFT TRACK OF THE #2 LANE. THE COVER OF THE MAN HOLE WAS LAYING VERTICAL IN THE MAN HOLE CREATING AN OBSTRUCTION. MR. TRUSILLO'S FRONT TIRE COLLIDED W/ THE MAN HOLE & HE LOST CONTROL & HIS VEHICLE OVERTURNED CAUSING HIM SEVERE INJURIES

**WHAT particular act or omission on the part of the District's officers or employees caused the injury or damage?**  
 IMPROPER POSITIONING OF THE MAN HOLE COVER

**WHAT DAMAGE/INJURIES DO YOU CLAIM RESULTED?**  
 BODILY INJURIES, PAIN & SUFFER, & PROPERTY DAMAGES

**TOTAL AMOUNT OF YOUR CLAIM on account of injury/damage?**  
 (Provide the dollar amount claimed, if said amount totals less than ten thousand dollars (\$10,000.00) as of the date of presentation of the claim (including the estimated amount of any prospective injury, damage, or loss, insofar as it may be known at the time of the presentation of the claim), together with the basis of computation of the amount claimed. Include paid bills, receipts, etc.)

Amount(s) Claimed: \$ PENDING UNKNOWN AT THIS TIME

Basis for computation:

**NOTE:** If the amount claimed exceeds ten thousand dollars (\$10,000.00), do not provide the dollar amount of the claim. However, please indicate below whether the claim would be a limited civil case (\$25,000.00 or less) or an unlimited civil case (over \$25,000.00).  
 Limited Civil Case       Unlimited Civil Case

Union Sanitary District

CLAIM FORM - Continued

**INSURANCE INFORMATION** (to be completed if this claim involves a motor vehicle) Has a claim for the alleged damage/injury been filed or will it be filed with your insurance carrier?  Yes  No

INFINITY INSURANCE COMPANY (205) 803-8301  
Name of Insurance Carrier Telephone Number

Address City State Zip Code

Policy Number 504610061874001 Deductible: \$ 0

Name of registered owner(s) of the vehicle: FERNANDO TRUSILLO

Vehicle Make: CHEVY Model: P30  
Year: 1986

**REPRESENTATIVE INFORMATION** (to be completed if the claim is filed by an attorney or representative)

KATHERINE LIPEL (818) 904-0100  
Name of Attorney/Representative Telephone Number

16001 VENTURA BLVD SUITE #100 CA 91436  
Address City State Zip Code

Is the claim filed on behalf of a minor?  Yes; if yes, please indicate:  No

Relationship to the minor Minor's date of birth

**Names and addresses of witnesses, doctors, and hospitals:**

1. PENDING

2.

3.

4.

5.

Union Sanitary District

CLAIM FORM - Continued

Provide other details here :

Four empty horizontal lines for providing other details.

PHOTOS:  Were Not Taken  Were Taken, number of photos; \_\_\_\_\_

Note: include all related photos with your claim

**Notice:**

Section 72 of the Penal Code Provides:

"Every person who, with intent to defraud, presents for allowance or for payment to any state board or officer, or to any county, town, city, district, ward or village board or office, authorized to allow or pay the same if genuine, any false or fraudulent claim bill, account, voucher, or writing, is guilty of a felony."

Section 911.2 of the Government Code requires that a claim of this nature be presented not later than 6 months after the accrual of the cause of action.

Section 911.4 provides that with respect to a claim not timely filed, a written application may be made to the public entity for leave to present this claim and that such application shall be presented within a reasonable time not to exceed one year after the accrual of the cause of action.

CLAIMANT SIGNATURE   
DATE 8/18/2016



Please submit claim form to:

Attn: Roslyn Fuller  
 Union Sanitary District  
 5072 Benson Road  
 Union City, CA 94587  
 Phone: (510) 477-7526  
 Fax: (510) 477-7509

## CLAIM FORM

NAME OF CLAIMANT MARIA DEL CARMEN BIBIANO

ADDRESS OF CLAIMANT 20259 SANTA MARIA AVE

CITY CASTRO VALLEY STATE CA PHONE (626) 236-3686

Owner

Renter/Lessee

Other

(Specify) \_\_\_\_\_

### WHEN DID DAMAGE/INJURY OCCUR?

Date: 03/23/2016 Time: 10:56

### WHERE DID DAMAGE/INJURY OCCUR?

Address or Nearest Cross Street: MISSION BLVD & SANTA TERESA TERRACE

City/State: FREMONT, CA

**HOW DID DAMAGE/INJURY OCCUR?** (Give full details; include name(s) of witness, if any; add supplemental sheets if required.)

MRS. BIBIANO WAS A PASSENGER IN A VEHICLE THAT WAS TRAVELING SB ON MISSION BLVD IN LANE #2 SOUTH OF SANTA TERESA. AT THAT LOCATION THERE WAS A MAN HOLE IN THE LEFT TRACK OF THE #2 LANE. THE COVER FROM THE MAN HOLE WAS LAYING VERTICAL IN THE MAN HOLE CREATING AN OBSTRUCTION. THE VEHICLE'S FRONT TIRES COLLIDED W/ THE MAN HOLE & LOST CONTROL OF THE VEHICLE & OVERTURNED CAUSING SEVERE INJURIES.

**WHAT particular act or omission on the part of the District's officers or employees caused the injury or damage?**  
 IMPROPER POSITIONING OF THE MAN HOLE COVER

**WHAT DAMAGE/INJURIES DO YOU CLAIM RESULTED?**  
 BODILY INJURIES, PAIN & SUFFER  
 DAMAGES

**TOTAL AMOUNT OF YOUR CLAIM on account of injury/damage?**  
 (Provide the dollar amount claimed, if said amount totals less than ten thousand dollars (\$10,000.00) as of the date of presentation of the claim (including the estimated amount of any prospective injury, damage, or loss, insofar as it may be known at the time of the presentation of the claim), together with the basis of computation of the amount claimed. Include paid bills, receipts, etc.)

Amount(s) Claimed: \$ PENDING UNKNOWN AT THIS TIME

Basis for computation:

**NOTE:** If the amount claimed exceeds ten thousand dollars (\$10,000.00), do not provide the dollar amount of the claim. However, please indicate below whether the claim would be a limited civil case (\$25,000.00 or less) or an unlimited civil case (over \$25,000.00).  
 Limited Civil Case       Unlimited Civil Case

Union Sanitary District

CLAIM FORM - Continued

INSURANCE INFORMATION (to be completed if this claim involves a motor vehicle) Has a claim for the alleged damage/injury been filed or will it be filed with your insurance carrier?  Yes  No

INFINITY INSURANCE COMPANY (205) 803-8301  
Name of Insurance Carrier Telephone Number

Address City State Zip Code

Policy Number 504610061874001 Deductible: \$ 0

Name of registered owner(s) of the vehicle: FERNANDO TRUSILLO

Vehicle Make: CHEVY Model: P30  
Year: 1986

REPRESENTATIVE INFORMATION (to be completed if the claim is filed by an attorney or representative)

KATHERINE LIPEL (818) 904-0100  
Name of Attorney/Representative Telephone Number

16001 VENTURA BLVD #100 Suite #100 CA 91436  
Address City State Zip Code

Is the claim filed on behalf of a minor?  Yes; If yes, please indicate:  No

Relationship to the minor Minor's date of birth

Names and addresses of witnesses, doctors, and hospitals:

1. PENDING

2.

3.

4.

5.





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

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

Karen W. Murphy  
*Attorney*

**DATE:** January 17, 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  
Rod Schurman, Associate Engineer

**SUBJECT:** Agenda Item No. 11 - Meeting of January 23, 2017  
**Consider a Resolution of Application to LAFCO for Annexation No. U-293,  
Dumbarton Quarry Regional Park in the City of Fremont**

### **Recommendation**

Consider adopting a resolution of application that requests the Local Agency Formation Commission of Alameda County (LAFCO) begin proceedings for Annexation No. U-293, Dumbarton Quarry Regional Park, located at 9600 Quarry Road in the city of Fremont.

### **Background**

Dumbarton Quarry Associates has submitted a request to annex the Dumbarton Quarry Regional Park, consisting of one parcel, Assessor Parcel Number 537-051-002-02, which comprises 91.01 acres, to the District. The area to be annexed is located on the north side of State Route 84, west of Paseo Padre Parkway and State Route 84 in the city of Fremont. The parcel to be annexed is adjacent to Annexation U-199, which was annexed to the District in 1984. A vicinity map is attached.

The Dumbarton Quarry Regional Park is a proposed recreational development that will include picnic and play areas, restroom facilities, turf meadows, overnight camping facilities with 63 recreational vehicle (RV) sites, 17 walk-in campsites and 20 car campsites, with a small store, laundry, and shower facilities to serve the campsites. A 13,000-square foot event center, a 150-person outdoor amphitheater and a one-half acre corporation yard and maintenance facility are scheduled for future construction.

The parcel to be annexed lies outside the District's current boundaries but is within the city of Fremont limits. Annexation of this parcel is needed to provide sanitary sewer service to the Dumbarton Quarry Regional Park's various facilities and RV sites. Service will be provided through the construction of a new private sanitary sewer main constructed by Dumbarton Quarry Associates.

In accordance with the California Environmental Quality Act (CEQA), the City of Fremont, as Lead Agency, has prepared and adopted a Mitigated Negative Declaration for the project. A Notice of Determination stating that "the project will not have a significant effect on the environment" was filed on November 26, 2013. USD is required to review the project as a Responsible Agency and use the environmental documents previously prepared by the City of Fremont to make its determination. Staff has reviewed these documents and finds that the environmental documents are adequate for consideration by the Board. Staff recommends that the Board concur with the City's determination that there will be no significant environmental impacts from the project.

The annexation is within the District's sphere of influence, and sewer service is available to serve the annexation. The District has adequate capacity, and there will be no adverse impact on the ratepayers by the proposed annexation.

PRE/SEG/RA/RS:ks

Attachments: Resolution  
Vicinity Map  
Annexation Area Legal Description  
Annexation Area Plat  
Annexation Request  
Annexation Questionnaire  
Notice of Determination (CEQA)

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

**A RESOLUTION OF APPLICATION BY UNION SANITARY DISTRICT  
REQUESTING THE LOCAL AGENCY FORMATION COMMISSION  
BEGIN PROCEEDINGS FOR ANNEXATION NO. U-293**

**BE IT RESOLVED**, by the Board of Directors of the UNION SANITARY DISTRICT, that

**WHEREAS**, the UNION SANITARY DISTRICT desires to initiate proceedings pursuant to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, commencing with Section 56000 of the California Government Code, for the annexation of territory to District boundaries; and

**WHEREAS**, notice of intent to adopt this resolution of application has been given to each interested and each subject agency; and

**WHEREAS**, the territory proposed to be annexed is uninhabited, and a description of the boundaries of the territory is set forth in Exhibit A attached hereto and by this release incorporated herein; and

**WHEREAS**, this proposal is consistent with the Sphere of Influence of the District; and

**WHEREAS**, it is desired to provide that the proposed annexation be subject to the following terms and conditions:

1. Payment of District Ordinance No. 25.6 Annex Fee of \$162 per acre.
2. The annexation of territory referred to herein does not guarantee capacity will be available in UNION SANITARY DISTRICT's sewer system to serve said territory at the time sewer construction permits are desired; and

**WHEREAS**, the reason for the proposed annexation is to provide sanitary sewer service to the proposed facilities and recreational vehicle campsites within the Dumbarton Quarry Regional Park, and;

**WHEREAS**, this Board certifies that this annexation has been reviewed in accordance with the provisions of the California Environmental Quality Act, and that the annexation of the property into the Union Sanitary District service area will have no adverse environmental impact as a result.

**NOW, THEREFORE, BE IT RESOLVED** that:

1. This Resolution of Application is hereby adopted and approved by the Board of Directors of the UNION SANITARY DISTRICT, and the Local Agency Formation Commission of Alameda County is hereby requested to take proceedings for the annexation of territory as described in Exhibit A according to the terms and conditions stated above and in the manner provided by the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000.
2. The UNION SANITARY DISTRICT Board of Directors does hereby request the Local Agency Formation Commission to waive the conducting authority for Annexation No. U-293.

Passed and adopted by the Board of Directors of UNION SANITARY DISTRICT at a regular meeting thereof held on the 23<sup>rd</sup> day of January, 2017, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ADOPTED: \_\_\_\_\_

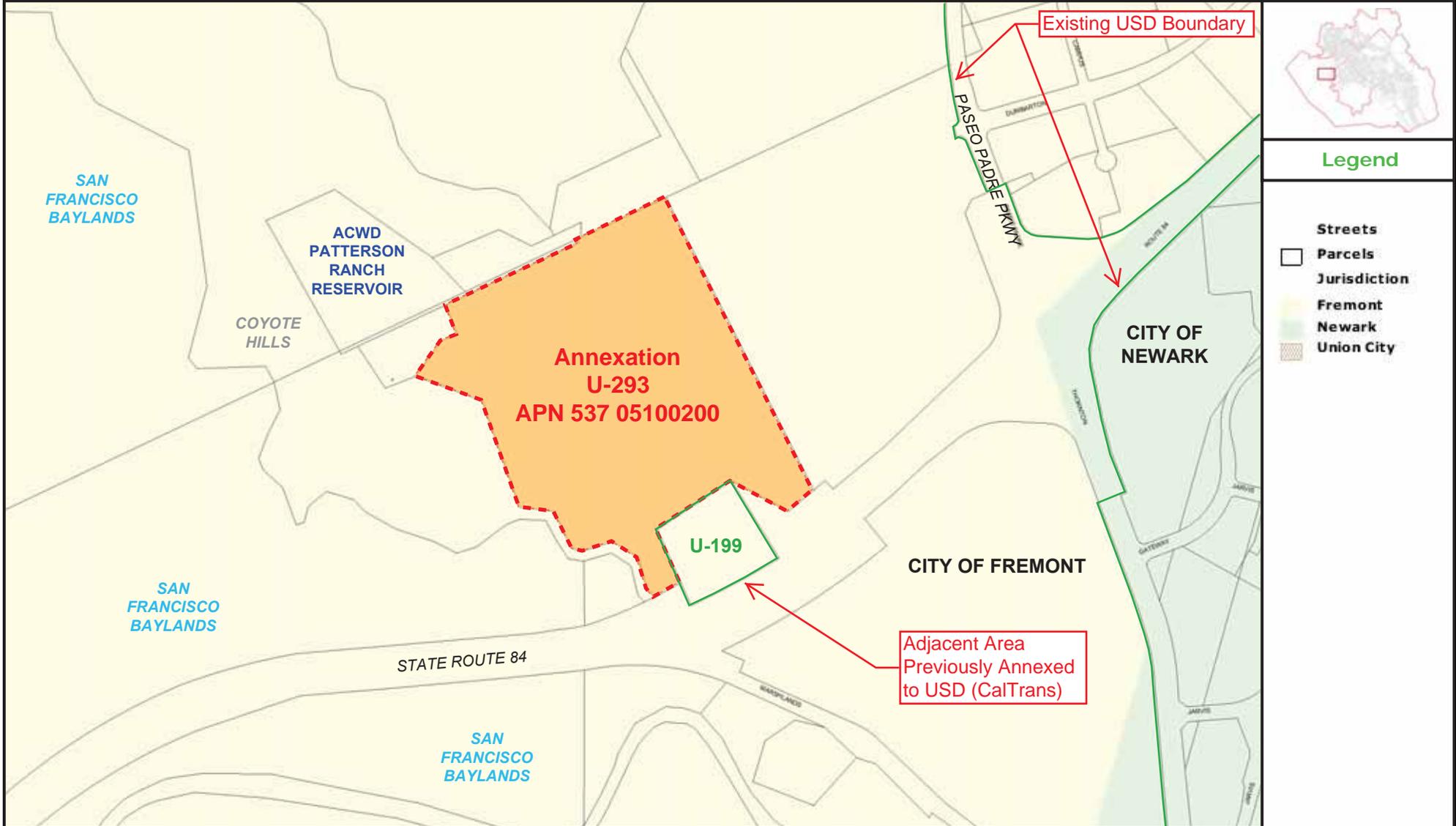
\_\_\_\_\_  
TOM HANDLEY  
President, Board of Directors  
Union Sanitary District

Attest:

\_\_\_\_\_  
ANJALI LATHI  
Secretary, Board of Directors  
Union Sanitary District

# Annexation U-293 Dumbarton Quarry Regional Park

## Vicinity Map



### Legend

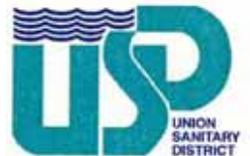
- Streets
- Parcels
- Jurisdiction
  - Fremont
  - Newark
  - Union City



### Disclaimer:

The information on this map is provided by Union Sanitary District (USD) for internal use only. Such information is derived from multiple sources which may not be current, be outside the control of USD, and may be of indeterminate accuracy. The information provided hereon may be inaccurate or out of date and any person or entity who relies on said information for any purpose whatsoever does so solely at their own risk.

### For USD use only



**EXHIBIT "I"**  
**DESCRIPTION OF ANNEXATION U-293**  
**TO THE UNION SANITARY DISTRICT**  
**PARCEL LOCATED IN THE CITY OF FREMONT, ALAMEDA COUNTY, CALIFORNIA**

ALL THAT REAL PROPERTY LOCATED IN THE CITY OF FREMONT, COUNTY OF ALAMEDA, STATE OF CALIFORNIA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

**BEGINNING** AT THE MOST NORTHERLY CORNER OF THE PROPERTY DESCRIBED IN THAT CERTAIN ANNEXATION NO. 199 ANNEXED TO THE UNION SANITARY DISTRICT BY LAFCO RESOLUTION NO. 1722 ADOPTED OCTOBER 22, 1984, AND RECORDED NOVEMBER 15, 1984 UNDER SERIES NO. 84-228839 OF OFFICIAL RECORDS OF ALAMEDA COUNTY, SAID POINT BEING COINCIDENT WITH THE SOUTHERLY LINE OF PARCEL 2 AS SHOWN ON PARCEL MAP 2299 RECORDED IN BOOK 98 OF PARCEL MAPS, AT PAGE 14, ALAMEDA COUNTY RECORDS,

THENCE LEAVING SAID NORTHERLY CORNER OF ANNEXATION NO. 199 AND CONTINUING ALONG THE SOUTHERLY, EASTERLY, NORTHERLY AND WESTERLY LINES OF SAID PARCEL 2, THE FOLLOWING TWENTYONE (21) COURSES:

1. SOUTH 68°58'22" EAST, 470.71 FEET,
2. THENCE ALONG A NON-TANGENT CURVE TO THE LEFT, FROM WHICH THE RADIUS POINT BEARS NORTH 35°32'12" WEST, HAVING A RADIUS OF 4710.29 FEET, THROUGH A CENTRAL ANGLE OF 02°49'51", AND AN ARC LENGTH OF 232.72 FEET,
3. NORTH 26°16'22" WEST, 2321.68 FEET,
4. SOUTH 65°41'35" WEST, 684.09 FEET,
5. SOUTH 24°18'25" EAST, 25.00 FEET,
6. SOUTH 65°41'35" WEST, 1020.60 FEET,
7. SOUTH 20°17'18" EAST, 224.29 FEET,
8. SOUTH 68°31'02" WEST, 121.10 FEET,
9. SOUTH 62°27'37" WEST, 9.93 FEET,
10. SOUTH 33°20'22" WEST, 9.56 FEET,
11. SOUTH 37°42'12" WEST, 309.85 FEET,
12. SOUTH 68°12'15" EAST, 511.62 FEET,
13. SOUTH 17°53'17" EAST, 788.98 FEET,
14. SOUTH 84°35'18" EAST, 247.56 FEET,
15. SOUTH 23°27'27" EAST, 186.47 FEET,
16. SOUTH 32°45'14" EAST, 124.91 FEET,
17. SOUTH 82°10'46" EAST, 52.89 FEET,
18. NORTH 75°20'21" EAST, 238.47 FEET,

**EXHIBIT "I"**  
**DESCRIPTION OF ANNEXATION U-293**  
**TO THE UNION SANITARY DISTRICT**  
**PARCEL LOCATED IN THE CITY OF FREMONT, ALAMEDA COUNTY, CALIFORNIA**

- 19. SOUTH 57°39'58" EAST, 219.80 FEET,
- 20. SOUTH 13°14'24" EAST, 218.45 FEET,
- 21. THENCE SOUTH 40°05'46" EAST, 75.16 FEET TO A POINT ON THE NORTHERLY LINE OF THE LANDS DESCRIBED IN THE FINAL ORDER OF CONDEMNATION, RECORDED MAY 10, 1982, SERIES NO. 82-068483, ALAMEDA COUNTY RECORDS

22. THENCE ALONG SAID NORTHERLY LINE, ALONG A NON-TANGENT CURVE TO THE LEFT, FROM WHICH THE RADIUS POINT BEARS NORTH 27°04'47" WEST, HAVING A RADIUS OF 3868.24 FEET, THROUGH A CENTRAL ANGLE OF 02°12'45", AND AN ARC LENGTH OF 149.37 FEET TO THE WESTERLY LINE OF SAID ANNEXATION NUMBER 199,

THENCE ALONG SAID WESTERLY LINE AND THE NORTHERLY LINE OF SAID ANNEXATION 199, THE FOLLOWING TWO (2) COURSES:

- 23. NORTH 23°47'28" WEST, 371.36 FEET,
- 24. THENCE NORTH 56°38'12" EAST, 633.79 FEET TO THE POINT OF BEGINNING,

CONTAINING 91.01 ACRES MORE OR LESS,

**END OF DESCRIPTION**

PREPARED BY

IAN BRUCE MACDONALD L.S. 8817  
(EXP. 12/31/2017)  
STATE OF CALIFORNIA



8/10/16

DATE

**MACKAY & SOMPS**

CIVIL ENGINEERING • LAND PLANNING • LAND SURVEYING  
5142 Franklin Drive Suite B, Pleasanton, CA. 94588-3355  
(925) 225-0690

REFERENCES TO THE EXISTING BOUNDARY LINES OF THE UNION SANITARY DISTRICT ARE PRIMARY CALLS. ANY BEARINGS AND DISTANCES REFERRED TO HEREIN SHOULD BE CONSIDERED ONLY SECONDARY.

THE BOUNDARY LINE OF THE TERRITORY IS SHOWN ON THE MAP OF "ANNEXATION U-293" TO THE UNION SANITARY DISTRICT, APPROVED BY LAFCO RESOLUTION No.

\_\_\_\_\_, ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 2014; SAID MAP WAS CERTIFIED BY THE COUNTY SURVEYOR ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 2014.

**EXHIBIT "I"**  
**DESCRIPTION OF ANNEXATION U-293**  
**TO THE UNION SANITARY DISTRICT**  
**PARCEL LOCATED IN THE CITY OF FREMONT, ALAMEDA COUNTY, CALIFORNIA**

THIS DESCRIPTION CONFORMS TO THE REQUIREMENTS OF THE ALAMEDA COUNTY  
LOCAL AGENCY FORMATION COMMISSION.

DANIEL WOLDESENBET, Ph.D., P.E.  
DIRECTOR OF PUBLIC WORKS  
COUNTY OF ALAMEDA

BY

---

MICHAEL RUBNER  
COUNTY SURVEYOR IN AND FOR THE  
COUNTY OF ALAMEDA  
L.S. 6843, EXPIRES: 09/30/16

# EXHIBIT "A"

ANNEXATION U-283  
TO UNION SANITARY DISTRICT  
BY LAFCO RESOLUTION NO. \_\_\_\_\_ ON \_\_\_\_\_  
CITY OF FREMONT  
ALAMEDA COUNTY, CALIFORNIA  
DECEMBER 28, 2015  
SCALE: 1" = 200'

**MACKAY & SOMPS**  
1500 FARMER ST., ALAMEDA, CA 94601 (510) 221-2086

THIS MAP CONFORMS TO THE REQUIREMENTS OF THE LOCAL AGENCY FORMATION COMMISSION OF ALAMEDA COUNTY.

DANIEL WOLDESEIBET, Ph.D., P.E.  
DIRECTOR OF PUBLIC WORKS

BY: MICHAEL RUBNER  
COUNTY CLERK IN AND FOR THE COUNTY OF ALAMEDA  
L.S. 6843, EXPIRES 09/30/16

THIS MAP, WHEN FILED, WAS ACCOMPANIED BY A CERTIFICATE OF COMPLETION AND CERTIFIED COPY OF THE BOUNDARY DESCRIPTION DELINEATED HEREON, AS REQUIRED BY SECTION 57203 OF THE GOVERNMENT CODE.

BY: MONA PALACIOS  
LAFCO EXECUTIVE OFFICER

THIS MAP IS FILED AT THE REQUEST OF THE UNION SANITARY DISTRICT AT \_\_\_\_\_ MINUTES PAST \_\_\_\_\_ M. ON THE DAY OF \_\_\_\_\_ 2014 IN BOOK \_\_\_\_\_ OF THE OFFICE OF THE COUNTY CLERK. THE CERTIFICATE OF COMPLETION, SURVEY NO. \_\_\_\_\_ AND BOUNDARY DESCRIPTION ARE RECORDED IN SERIES NO. \_\_\_\_\_ OF OFFICIAL RECORDS, ALL IN THE OFFICE OF THE RECORDER OF ALAMEDA COUNTY, CALIFORNIA.

PATRICK J. O'CONNELL  
COUNTY RECORDER

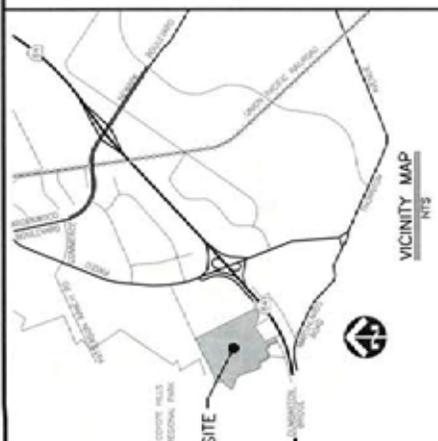
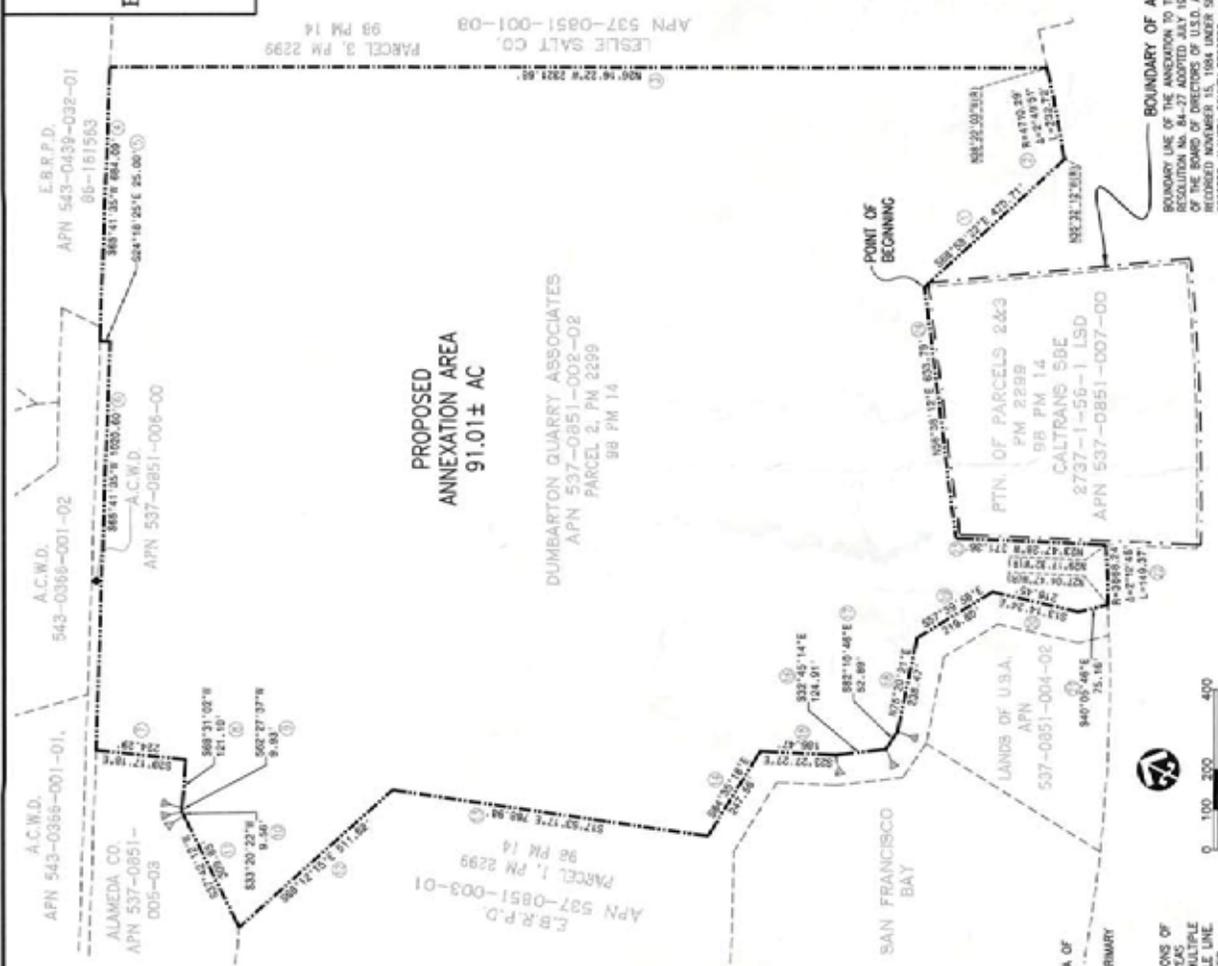
BY: \_\_\_\_\_  
DEPUTY COUNTY RECORDER

THIS MAP WAS PREPARED BY ME OR UNDER MY SUPERVISION.

BY: IAN MACDONALD, L.S. 0817  
LICENSE EXPIRES: 12/31/17



BOUNDARY OF ANNEXATION No. 199 TO USD  
BOUNDARY LINE OF THE ANNEXATION TO THE UNION SANITARY DISTRICT BY LAFCO RESOLUTION NO. 84-27 ADOPTED JULY 15, 1984 AND BY RESOLUTION NUMBER 1722 OF THE BOARD OF DIRECTORS OF U.S.D. ADOPTED OCTOBER 22, 1984 AND RECORDED NUMBER 15, 1984 UNDER SERIES NO. 64-72683 OF OFFICIAL RECORDS, ALAMEDA COUNTY RECORDS.



- LEGEND**
- EXISTING UNION SANITARY DISTRICT BOUNDARY
  - - - - BOUNDARY LINE OF NEW ANNEXATION
  - EXISTING LOTS AND R/W
  - UNION PACIFIC RAILROAD
  - ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
  - EAST BAY REGIONAL PARK DISTRICT
  - ANGLE PT.
  - ⑤ COURSE NUMBER
  - ⑤ POINT OF BEGINNING
  - ⑤ UNION SANITARY DISTRICT
  - PM PARCEL MAP

- NOTE:**
1. THE DIMENSIONS SHOWN HEREON WERE USED TO CALCULATE THE AREA OF REDRAWING.
  2. REFERENCE TO EXISTING UNION SANITARY DISTRICT BOUNDARIES ARE PRIMARY CALLS. ANY BEARINGS AND DISTANCES SHOWN HEREON SHOULD BE CONSIDERED SECONDARY.
  3. AS A DRAFTING CONVENTION, THE SMALL SEPARATIONS BETWEEN PORTIONS OF THE LINE WORK AROUND THE BOUNDARY OF THIS ANNEXATION AND AREAS OUTSIDE THE BOUNDARY OF THIS ANNEXATION WERE PROVIDED TO ALLOW SUFFICIENT CLEARANCE TO BE MAINTAINED. THESE CLEARANCES DO NOT AFFECT THE LINE. THESE LINES ARE TO BE CONSIDERED CONCURRENT EXCEPT WHERE NOTED.
  4. ALL DISTANCES SHOWN ARE GROUND LEVEL DISTANCES. MULTIPLY DISTANCES BY 0.9999276 TO OBTAIN GRID DISTANCES.



STATE HIGHWAY 84

**DUMBARTON QUARRY ASSOCIATES  
P.O. BOX 2922  
DUBLIN, CA 94568**

June 29, 2016

Board of Directors  
Union Sanitary District

Dear Board:

We, the undersigned, property owners or assigns request annexation of the property noted below into the Union Sanitary District.

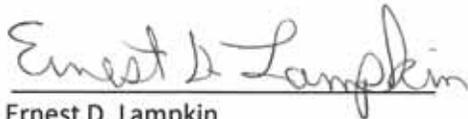
We understand and agree that annexation of said property into the Union Sanitary District does not guarantee capacity will be available in the District's sewer system to serve said property at the time sewer construction permits are desired.

We agree to pay the following:

- The necessary District processing fee
- The annexation fee (at the current rate of \$162 per acre<sup>0</sup>, with this application
- Processing fees for the Local Agency Formation Commission
- All other annexation related fees that may be charged by other governmental agencies and private entities.

Enclosed herewith is a copy of the preliminary plant and title report for the subject property.

Sincerely,



Ernest D. Lampkin  
Chief Financial Officer

Location of Property:

Address: 9600 Quarry Road, Fremont, CA 94550

Assessor's Parcel No.: 537-851-002-02

Enclosures:

Title Report

Preliminary Plat of Property

Assignment Letter from Property Owner (where applicable)

**UNION SANITARY DISTRICT  
ANNEXATION QUESTIONNAIRE**

- 1 Developers Name: Dumbarton Quarry Associates
- 2 Developer's Point of Contact: Adam Carvalho
- 3 Total Acreage of proposed Annexations: 91
- 4 Total Acreage of proposed Development: 91
- 5 Present use of land: Soil import site at former quarry
- 6 Proposed use of land: RV Park and Campground
- 7 Number of buildign units planned if residential: 63 RV Sites, 4 Restrooms, 1 Kiosk, 1 Store, 1 Event Center, 1 Corp Yard
- 8 Type of new building units: 63 RV Sites, 4 Restrooms, 1 Kiosk, 1 Store, 1 Event Center, 1 Corp Yard  
(Single family, Apartments, Townhouses, Condominiums, Mobile Homes, Commercial, Industrial, other)
- 9 If other than residential, the approximate Square footage of new buildings: 2 Restrooms-345sf, 2 showers 934 sf, kiosk 194 sf, store 579sf, event center 12,500sf, corp yard 4,800 sf. Total 20,631
- 10 Development Schedule:
- a) Rate: \_\_\_\_\_ per \_\_\_\_\_  
Units Month or Year
- b) Commencement Date: \_\_\_\_\_  
Month or Year
- c) Completion Date: \_\_\_\_\_  
Month or Year
- 11 Will this annexation create an island or territory surrounded by the District?  
Site is adjacent to district boundaries on the Southside (Caltrans)
- 12 Is this annexation contiguous to existing District Boundary lines?  
Yes
- 13 What environmental reviews, if any, have already been completed by the City for this development?  
Attach copies if any.  
Yes performed by City of Fremont during conditional use permit processing.

SIGNATURE  
PRINT NAME  
TITLE

Ernest D. Lampkin  
ERNEST D LAMPKIN  
CFO

DATE

6/29/16

Notice of Determination

Appendix D

To:

[X] Office of Planning and Research
U.S. Mail: Street Address:
P.O. Box 3044 1400 Tenth St., Rm 113
Sacramento, CA 95812-3044 Sacramento, CA 95814

[X] County Clerk
County of: Alameda
Address: 1106 Madison Street
Oakland, CA 94607

From:

Public Agency: Union Sanitary District
Address: 5072 Benson Road
Union City, CA 94587-2508
Contact: Rollie Arbolante, Customer Service
Phone: 510-477-7602 (rolliea@unionsanitary.ca.gov)

Lead Agency (if different from above):
City of Fremont, Planning Division
Address: 39550 Liberty Street
Fremont, CA 94538
Contact: Steve Kowalski, Associate Planner
Phone: 510-494-4532 (skowalski@fremont.gov)

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2012052059

Project Title: Dumbarton Quarry Regional Park

Project Applicant: Bob McCarric, Dumbarton Quarry Associates, 11155 Dublin Rd., Dublin, CA 94568

Project Location (include county): 9600 Quarry Rd., Fremont, Alameda County, CA (APN: 537-0851-002-02)

Project Description:

The applicant, on behalf of East Bay Regional Park District (EBRPD), has submitted an application for development of a former rock quarry into a 91-acre regional park facility including picnic areas with BBQ's, children's playground and play areas, trails, park furniture, parking lots, restroom facilities, and, irrigated and non-irrigated turf meadows. The project also includes overnight camping facilities with 63 recreational vehicle (RV) sites, 17 walk-in camp sites and 20 car-camp sites. A small store, laundry and shower facilities are also proposed to serve the campsites. The project also includes construction of 13,000 square foot event center and 150-person outdoor amphitheater with

This is to advise that the Union Sanitary District has approved the above (Lead Agency or Responsible Agency)

described project on and has made the following determinations regarding the above described project.

- 1. The project will not have a significant effect on the environment.
2. An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA. A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures were made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan was adopted for this project.
5. A statement of Overriding Considerations was adopted for this project.
6. Findings were made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at:

City of Fremont, Community Development Department, Planning Division, 39550 Liberty St., Fremont, CA 94538

Signature (Public Agency): Title: General Manager/District Engineer

Date: Date Received for filing at OPR:



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

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

Karen W. Murphy  
*Attorney*

**DATE:** January 17, 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. 12 - Meeting of January 23, 2017  
**Award the Construction Contract for the Digesters No. 1 and 3 Gas Isolation Valves Project to TNT Industrial Contractors, Inc.**

### **Recommendation**

Staff recommends the Board award the construction contract for the Digesters No. 1 and 3 Gas Isolation Valves Project (Project) to TNT Industrial Contractors, Inc. (TNT) in the amount of \$99,908. Funds for the project have been budgeted in the Renewal and Replacement Fund.

### **Background**

The primary digestion process produces digester gas that contains methane and hydrogen sulfide gases. Before the digester gas is utilized at the cogeneration engine generators and/or the heat loop boiler, it flows to the digester gas conditioning system where hydrogen sulfide, siloxanes, and moisture are removed from the gas. The remaining methane gas is then used as fuel by the cogeneration engine generators and/or the heat loop boiler.

There are six primary and two secondary digesters at the Plant. At each primary and secondary digester, the digester gas is collected from the top of each digester dome in individual stainless steel pipelines before combining the gas into the digester gas pipeline loop. The digester gas pipeline loop then transports the collected gas to the digester gas conditioning system located near the Cogeneration Building.

Digester No. 3 was originally constructed in 1962, and Digesters No. 1 and 2 were constructed during the 1978 plant expansion project. The three digesters were constructed in close proximity to each other. The individual digester gas pipelines from the dome of each of the three digesters are combined on the roof of Heating and Mixing Building No. 1 before connecting to the digester gas pipeline loop. Figure 1 shows the location of the digester facilities.

Currently, staff is unable to isolate the digester gas pipelines between the domes of Digesters No. 1 and 3 and the digester gas pipeline loop. As a result, if staff needs to take either Digester No. 1 or No. 3 out of service, the three digesters must be taken out of service together. Staff is able to isolate the digester gas pipeline from Digester No. 2 without affecting the operation of the other two digesters. The Plant's solids process does not have the capacity to allow the three digesters to be taken out of service at the same time and Digester No. 3 is scheduled to be taken out of service in Spring 2017 for cleaning.

### Scope of Work

Staff completed the Project's design. The two major scope items are the installation of a temporary bypass piping system at Digesters No. 1, 2, and 3 and the installation of digester gas isolation valves and associated piping components and pipe supports at Digesters No. 1 and 3.

### Bid Results

Staff advertised the Project for bids on December 13, 2016. Staff received and opened two bids on January 5, 2017. The bid results are summarized in the table below.

Contractor	Total Contract Price
TNT Industrial Contractors, Inc. Sacramento, CA	\$99,908
D.W. Nicholson Corporation Hayward, CA	\$121,400

Both bids came in below the Engineer's Estimate of \$125,000. TNT is the apparent low bidder with a bid of \$99,908, which is 21% below the Engineer's Estimate.

The Total Contract Price is the basis of award and includes the total base bid plus Bid Alternate A. Bid Alternate A will provide for 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 and equipment under construction. TNT submitted a bid amount of \$0 for this coverage. Staff recommends including this bid alternate in the construction contract.

Table 1 includes the bid tabulation sheet and shows detailed results of the two bids.

### **Bid Irregularity**

TNT's bid included a bid irregularity. The District bid documents require the bidder's three-year average of the Worker's Compensation Experience Modification (EMR) must not be greater than 1.1. TNT's EMR for 2016 was 1.0 but did not have EMRs to report for 2014 and 2015. Prior to 2016, TNT was self-insured since 2012 through the California Contractors Network (CCN) and the Worker's Compensation Insurance Rating Bureau (WCIRB) will not calculate an EMR for any self-insured group members.

Staff verified with the third party administrator for CCN that TNT did not have any losses reported from 2012 through 2016. As a result, if the WCIRB were to determine the EMR for TNT, it would be less than 1.0 and TNT's three-year average would be less than 1.1. Staff consulted with legal counsel, McInerney and Dillon about this anomaly. McInerney and Dillon advised that since TNT met the intent of the bid requirement, the District can waive this minor bid irregularity.

Staff reviewed TNT's bid and determined it to be the lowest responsive and responsible bid for the Project. TNT is a General Engineering Class A licensed contractor who has successfully completed water and wastewater treatment plant projects since 2014 for Napa Sanitation District, Elk Grove Water District, and Sacramento Regional County Sanitation District. Staff contacted these three agencies and received positive comments on TNT's performance on their projects. This will be TNT's first project with the District.

### **Construction**

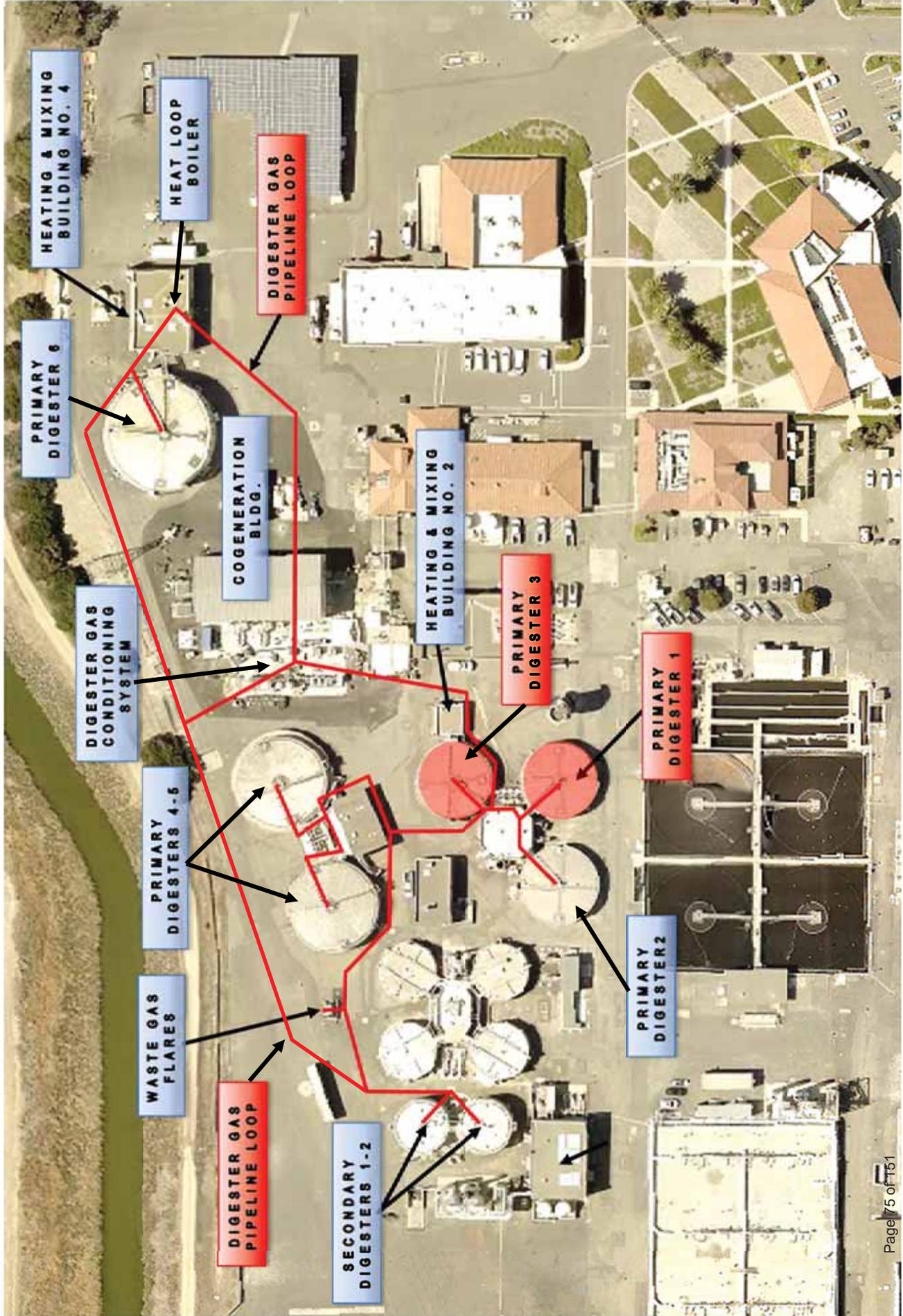
The Project's construction period will be 75 calendar days with an estimated completion in April 2017. Staff will provide construction management and inspection services.

Staff recommends the Board award the construction contract, including Bid Alternate A, for the Digesters No. 1 and 3 Gas Isolation Valves Project to TNT Industrial Contractors, Inc. in the amount of \$99,908.

RBC/SEG/RC/DC:ks

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

FIGURE 1 – PRIMARY DIGESTERS NO. 1 AND 3 GAS ISOLATION VALVES PROJECT



**Digesters No. 1 and 3 Gas Isolation Valves Project, Project No. 800-490**

**Bid Tabulation**

**Bid Opening: 2:00 pm, January 5, 2017**

**Engineer's Estimate: \$125,000**

Bid Item No.	Bid Item	Unit	Estimated Quantity	TNT Industrial Contractors, Inc.	D.W. Nicholson Corporation	Engineer's Estimate - Union Sanitary District
				Total Bid Price	Total Bid Price	Total Bid Price
1	Completion of all Work included as part of the Contract Documents for Digesters No. 1 and 3 Gas Isolation Valves Project No. 800-490, except as specified under Bid Item 2, for the amount of	LS	1	\$99,508	\$120,900	\$125,000
2	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	LS	1	\$400	\$0	Incl.
Bid Alternate A	Builder's Risk Insurance	LS	1	\$0	\$500	Incl.
<b>Contract Price (Total Base Bid and Bid Alternate A) - This is the basis of award</b>				<b>\$99,908</b>	<b>\$121,400</b>	<b>\$125,000</b>

**AGREEMENT FOR THE CONSTRUCTION OF**  
**Digesters No. 1 and 3 Gas Isolation Valves Project**  
**Project No. 800-490**

THIS AGREEMENT, made and concluded, in duplicate, this \_\_\_\_ day of January, 2017, between the UNION SANITARY DISTRICT ("District"), Union City, California, and TNT Industrial Contractors, Inc. ("Contractor"), License No. 622974.

W I T N E S S E T H :

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: Digesters No. 1 and 3 Gas Isolation Valves Project (Project No. 800-490) 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 ninety nine thousand nine hundred and eight dollars (\$99,908) (the "Contract Price") computed in accordance with Contractor's accepted proposal dated January 5, 2017, which accepted proposal is incorporated herein by reference thereto as if herein fully set forth. This sum includes the following bid alternate that has been accepted by the District and are hereby incorporated in the Agreement: Bid Alternate A. 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

Digesters No. 1 and 3 Gas Isolation Valves Project  
Project No. 800-490  
Agreement

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

Digesters No. 1 and 3 Gas Isolation Valves Project  
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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 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

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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 Digesters No. 1 and 3 Gas Isolation Valves Project  
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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.

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  
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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: (1) 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

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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 January, 2017.

CONTRACTOR

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

Joshua Twist  
President

Address: 3600 51st Avenue, Sacramento, California 95823

UNION SANITARY DISTRICT

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

Anjali Lathi  
Board Secretary

Address: 5072 Benson Road, Union City, California 94587

ATTEST:

\_\_\_\_\_

Karen W. Murphy  
Attorney for Union Sanitary District

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

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

Karen W. Murphy  
*Attorney*

**DATE:** January 17, 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. 13 - Meeting of January 23, 2017  
**Authorize the General Manager to Execute an Agreement and Task Order No. 1 with Carollo Engineers for the Primary Digester No. 3 Rehabilitation Project.**

### **Recommendation**

Staff recommends the Board authorize the General Manager to execute an Agreement and Task Order No. 1 with Carollo Engineers in the amount of \$158,813 for the Primary Digester No. 3 Rehabilitation Project (Project). 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 is scheduled to be cleaned in Spring 2017 and a condition assessment will be performed after the cleaning is completed. Primary Digester No. 3 was originally constructed in 1962 and was last taken out of service for cleaning and assessment in 2010. The District plans to rehabilitate Primary Digester No. 3 before placing the digester back into service.

## **Project Scope**

Staff identified the following major rehabilitation and modifications to include in the Project's final design:

- 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, etc.).
- Installation of a lining system on the interior of Primary Digester No. 3 to stop seepage of sludge through the cracks in the wall.
- Repair of concrete as needed based on 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.
- Replacement of overflow box piping. Evaluate modifications to the overflow box to allow surface-withdrawal and transfers of less dense and floating materials and minimize overflows from high digester levels due to density stratification.
- 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.
- Improvements to the lighting at Primary Digester No. 3 and Heating and Mixing Building No. 2.

## **Request for Proposals**

Staff prepared and issued a request for proposals to five consultants: Brown and Caldwell, Carollo Engineers, RMC Water and Environment, Water Works Engineers, and West Yost and Associates. All five consultants responded with proposals. Staff evaluated the proposals and selected Carollo due to their staff's experience in designing digester rehabilitation projects.

**Design Services**

Carollo prepared a scope of services for the design of the Project and the fee of Task Order No. 1 is summarized below:

<b>Task No.</b>	<b>Task Description</b>	<b>Fee</b>
1	Final Design – Project Management, Preparation of Contract Documents, and Design Submittal Meetings	\$144,022
2	Bid Period Services – Attend Prebid Conference and Preparation of Addenda	\$7,763
3	Optional Engineering Services – Pipe Routing Modifications and Addition of Selected Condition Assessment Recommendations	\$7,028
<b>Total Task Order Not to Exceed Fee</b>		<b>\$158,813</b>

Task Order No. 1 includes 781 hours of effort at a total not to exceed fee of \$158,813 or 10.2% of the preliminary construction cost estimate of \$1.55 million. For a project of this scope and size, staff estimated the design services to be approximately 9% to 12% of the cost estimate.

The task order includes an optional task for additional design services. Due to the limited space within the Heating and Mixing Building No. 2, Carollo may need to make significant modifications to the sludge recirculation piping beyond the initial conceptual designs provided by the District. In addition, Carollo may need to include additional repairs based on the findings of the condition assessment that will be performed by another consultant.

Carollo will complete the design of the Project by July 2017. Staff anticipates construction to begin Fall 2017.

Staff recommends the Board authorize the General Manager to execute an Agreement and Task Order No. 1 with Carollo Engineers in the amount of \$158,813 for the Primary Digester No. 3 Rehabilitation Project.

PRE/SEG/RC/DC:ks

Attachments: Figure 1 – Site Plan  
Task Order No. 1  
Agreement

FIGURE 1 – PRIMARY DIGESTER NO. 3 REHABILITATION PROJECT



# PRIMARY DIGESTER NO. 3 REHABILITATION PROJECT

TASK ORDER NO. 1

to

AGREEMENT

BETWEEN

UNION SANITARY DISTRICT

AND

CAROLLO ENGINEERS, INC.

FOR

PROFESSIONAL SERVICES

## 1. PURPOSE

The purpose of this Task Order No. 1 is to provide design and bid period services associated with the Project.

The District has six primary and two secondary digesters at the Alvarado WWTP that require periodic cleaning to remove accumulated debris and to maintain treatment capacity. Primary Digester No. 3 cleaning is scheduled for early spring 2017. A condition assessment will be performed by others after the cleaning is completed. The District plans to rehabilitate the digester before placing it back into service.

Anticipated major rehabilitation and modifications under the final design 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, etc.).
- Installation of a lining system on the interior of Primary Digester No. 3 to stop seepage of sludge through the cracks in the wall.
- Repair of concrete as needed based on the condition assessment performed by others.

- 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.
- Replacement of overflow box piping.
- Modifications to the digester gas piping on top of Primary Digester No. 3 to permit the continuous operation of the digester gas system while servicing digester gas handling equipment.
- 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. Evaluate and recommend a new replacement meter capable of providing more accurate flow readings of the digester gas.
- 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.
- Improvements to the lighting at Primary Digester No. 3, and Heating and Mixing Building No. 2.
- Modifications to the overflow box to allow surface-withdrawal and transfer of less dense and floating materials and minimize overflows from high digester levels due to density stratification.
- Associated demolition and modifications.

## 2. PROJECT COORDINATION

All work related to this Task Order shall be coordinated through the District's Project Manager, Derek Chiu.

### 3. SCOPE OF SERVICES

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

#### **TASK 1 – DESIGN SERVICES**

Engineer shall provide the following services:

##### Task 1.1 - Project Management

Engineer shall monitor and track overall project scope, budget, and schedule. Engineer shall prepare and submit a monthly progress report to the District which will include an invoice, show percentage of work completed, and the percentage of contract billed, summarize the work completed to during the month, and summarize the work to be completed during the following month.

##### Task 1.2 - Kickoff Meeting

Engineer shall conduct a one-hour Kickoff Meeting with key project participants. Engineer's staff in attendance will be limited to Principal-in-Charge, Project Manager, and Project Engineer. The meeting will present the initial design concepts for each project element and the schedule and budget, as well as communication and project team roles/responsibilities. After the Kickoff Meeting, Engineer shall conduct a site visit accompanied by the District Project Manager and other key District staff as necessary to obtain input from staff on design options.

##### Task 1.3 - Review of Condition Assessment Report

Engineer shall conduct a review of the Digester Condition Assessment Report prepared by others. Engineer shall recommend which, if any, of the recommendations in the report to include in the rehabilitation design work.

##### Task 1.4 – Preparation of Contract Documents

Engineer shall prepare and submit 50 and 90 percent and final design drawings, specifications and cost estimate for District review. Engineer shall incorporate District's review comments on the design submittals.

#### Assumptions:

- The District will provide front end documents for inclusion in the bid documents.

- Three levels of concrete repair will be shown with typical details: mild, moderate and severe. Based on the condition assessment report, Engineer shall estimate the area of each repair type. The bid form will list the estimated area and request a unit price for each repair type. The District shall monitor the actual repair work performed during construction and adjust the contract price accordingly. It is assumed no additional details beyond the three types of concrete repair will be required.
- No significant steel dome structural repairs will be required.
- No site civil work, such as yard piping or paving and grading, is anticipated. All piping replacement work will be shown on mechanical sheets.
- Structural modifications to Heating and Mixing Building 2 are not required.
- Mixing and overflow piping replacement will be similar to the existing piping configuration and will not require significant structural modifications.
- The Condition Assessment Report will be available for review by June 30, 2017.
- District will provide conceptual design for sludge recirculation piping modifications at least 3 days prior to Kickoff meeting.
- No temporary piping systems will be shown on the drawings. Temporary piping, if required, will be described in the specifications only.
- Digester gas piping modifications to allow continuous operation will use Carollo's standard twin PRV, redundant flame arrester and safety valve system.
- No modifications to Primary Digester No. 3 sludge level sensing will be provided.
- Electrical panel modifications will be limited to work required for new lighting and gas conditioning panel modifications.
- The purpose of the light improvements is to replace existing lights with more efficient LED lighting and to install new lighting at piping between Digester No. and Heating and Mixing Building No. 2 below the overflow box.
- The District will provide Engineer with review comments on the 50 and 90 percent design submittal within 3 weeks after receipt of submittal. The 50 and 90 percent Submittal Review Meeting will be conducted during the first review week.
- Drawings and specifications will conform to USD Capital Improvement Projects Design Standards, June 2013.

#### Task 1.5 - 50 and 90 Percent Submittal Review Meetings

Engineer shall conduct a 50 and 90 percent submittal review meeting to present the design including construction constraints and the construction cost estimate.

### **TASK 2 – BID PERIOD SERVICES**

Engineer shall support District's bidding efforts on an as requested basis. Anticipated services include preparation of addenda, if necessary.

#### Task 2.1 - Attend Pre-Bid Meeting

Engineer shall attend pre-bid meeting led by District staff. Engineer's role in meeting will be to answer questions related to technical requirements of the contract where answers are known and present in the documents, and accept any questions that may require further clarification through issuance of addenda.

#### Task 2.2 - Prepare Addenda

Engineer shall prepare up to two addenda and respond formally to contractor's submitted questions.

#### Assumptions

- District shall be the primary contact for the contractor's technical questions during the bid period.
- District will print and distribute bid documents and addenda.

### **TASK 3 – OPTIONAL ENGINEERING SERVICES**

#### Task 3.1 - Pipe Routing Modifications

Engineer will incorporate piping modifications deemed necessary and not identified in District provided conceptual design in the Contract Documents.

#### Assumptions

- Engineer shall review District provided conceptual sludge recirculation piping, mixing piping, digester gas piping modifications and make recommendations for tie-in locations and supports prior to 50% design.

### Task 3.2 - Addition of Selected Condition Assessment Recommendations

Engineer shall incorporate selected condition assessment recommendations in the Contract Documents by Addendum.

#### Assumptions

- Concrete repair strategy adopted for Contract Documents will be used to repair the damage identified in the condition assessment.

## 4. DELIVERABLES

### **TASK 1**

#### Task 1.1 - Project Management

- Monthly invoices and progress reports (pdf)

#### Task 1.2 - Kickoff Meeting

- Meeting Agenda and Minutes (pdf)

#### Task 1.3 - Review of Condition Assessment Report

- Technical Memorandum (pdf)

#### Task 1.4 - Preparation of Contract Documents

- Design submittal at the 50 and 90 percent completion, including progress drawings, progress technical specifications, and engineer's estimate of probable construction cost in electronic format (pdf). Hard copies will not be provided.
- Electronic drawings and technical specifications for the project will be submitted for the final submittal. Electronic specifications will be in Word and pdf format and electronic drawings will be in 11x17 and 22x34 and in pdf and AutoCAD 2007 format. Print ready pdf drawings and specifications will have digitally certified signatures.

Task 1.5 - 50 and 90% Submittal Review Meeting

- Meeting agenda and minutes (pdf)

**TASK 2**

Task 2.1 - Bid Period Services

- Original, stamped, addenda, as necessary.

**TASK 3**

Task 3.1 - Pipe Routing Modifications

- Included in the Contract Document submittals.

Task 3.2 - Addition of Selected Condition Assessment Recommendations

- Included in the Addendum.

5. DIGITAL SUBMITTAL REQUIREMENTS

The Engineer shall submit one electronic copy of the final base map that shows the project area in accordance with the following:

Digital files submitted shall be based on accurate coordinate geometry calculations and the California State Plane Coordinate System, Zone III in feet, NAD83. The digital file submitted shall be in AutoCAD Release 2000 or later, “.dwg” or “.dxf” (digital exchange format) format and shall be in one (1) drawing file containing all layers, illustrating all existing and proposed improvements within the project area as well as any off-site work associated with the project. Descriptive information (i.e. text) may be included in the appropriate layer, or added as a separate layer. Submitted digital files shall be in accordance with these minimum requirements, or as otherwise approved by the District. Submit these digital files on a CD or via an FTP site.

Each submittal shall be labeled with the project name, project number, company name, address and phone number.

All drawings shall use the California State Plane Coordinate System – Zone 3 in units of feet. The horizontal datum shall be the North American Datum of 1983 (NAD83) in units of feet and the vertical datum shall be the North American Vertical Datum of 1988 (NAVD88) in units of feet, or other datum as authorized by the District.

All files shall be uncompressed. Compressed files are acceptable only when using the WinZip utility or if the appropriate software to uncompress the data is provided.

All drawing files shall have a North orientation of vertical (i.e. toward the top of the page).

Layer colors, line types and line weights shall be left to the discretion of the Engineer.

Submitted AutoCAD files shall NOT contain external reference or nested external reference files. All external references shall be bound into the drawing.

## 6. EQUIPMENT AND PIPELINE SCHEDULES

The Engineer shall provide a schedule in the design plans that list the equipment to be demolished or replaced and new equipment to be installed in the Project. The schedule shall contain at a minimum the Hansen equipment number, equipment name, location, horsepower/size, and other pertinent information associated with the equipment.

The Engineer shall provide a schedule in the design plans that list the 6-inch minimum diameter underground pipelines to be demolished or replaced and new 6-inch minimum diameter underground pipelines to be installed in the Project. The schedule shall contain at a minimum the start and end points of the pipeline, diameter, length, material, schedule/thickness, coating, lining, type of joints, service, and test method/pressure.

## 7. PAYMENT TO THE ENGINEER

Payment to the Engineer shall be as called for in Article 2 of the Agreement. The billing rate schedule is equivalent to an overall labor multiplier of 3.21, including profit. Subconsultants and outside services will be billed at actual cost plus 5%; other direct costs will be billed at actual cost; and mileage will be billed at prevailing IRS standard rate.

Total charges to the DISTRICT not-to-exceed amount shall be \$158,813. 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.

Task Order / Amendment	Not to Exceed Amount	Board Authorization Required?	District Staff Approval
Task Order No. 1 – Design Services	\$158,813	Yes	Paul Eldredge
Total	\$158,813		

8. TIME OF COMPLETION

All work defined in this Task Order shall be complete in 185 calendar days after the execution of this Task Order and subject to the conditions of Article 3 of this Agreement. A summary of the anticipated schedule of work is as follows:

- Notice to Proceed (NTP) Issued to Engineer: February 1, 2016.
- Kickoff Meeting: The week of February 6, 2017.
- Submit 50 Percent Design Submittal: March 8, 2017.
- 50 Percent Review Submittal Meeting: March 15, 2017.
- Submit 90 Percent Design Submittal: May 17, 2017.
- 90 Percent Review Submittal Meeting: May 24, 2017.
- Final Design Submittal: June 21, 2017
- Bid Period (4 weeks): July 19, 2017
- Notice of Award (5 weeks): August 23, 2017

9. KEY PERSONNEL

Engineering personnel assigned to this Task Order No. 1 are as follows:

<u>Role</u>	<u>Key Person to be Assigned</u>
Principal-in-Charge	Scott Parker
Project Manager	Mike Dadik
Electrical Engineer	Beecher Engineering
Coating Specialist	Bay Area Coating Consultant

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 January \_\_\_\_\_, 2017 and therewith incorporate it as part of the Agreement.

DISTRICT

ENGINEER

UNION SANITARY DISTRICT

CAROLLO ENGINEERS, INC.

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

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

Name: \_\_\_\_\_

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

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

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

Name: \_\_\_\_\_

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

**DESIGN OF PRIMARY DIGESTER NO. 3 REHABILITATION PROJECT  
EXHIBIT A - LABOR AND BUDGET ESTIMATE  
UNION SANITARY DISTRICT**

Task	Task Description	SP	LPP	P	CAD	WP	Total Hours	Labor Cost	Other Direct Costs (ODC)					Total Cost	
									Subconsultants		PECE	Mileage			ODC Total
									Name	Amount	\$11.70	Trips	Amount		
1.0	Final Design														
	1.1 - Project Management	2	6	0	0	0	8	\$1,980			\$94			\$94	\$2,074
	1.2 - Kick off Meeting	4	4	8	0	0	16	\$3,560			\$187	2	\$91	\$278	\$3,838
	1.3 - Review of Condition Assessment Report	2	8	8	0	0	18	\$3,880	Beecher	\$13,125	\$211			\$211	\$4,091
	1.4 - Preparation of Contract Documents	13	64	285	250	19	631	\$104,510	BACC	\$1,850	\$7,383	1	\$46	\$22,404	\$126,914
	1.5 - 50% and 90% Design Submittal Meeting	4	8	20	0	0	32	\$6,640			\$374	2	\$91	\$465	\$7,105
	<b>Total:</b>	<b>25</b>	<b>90</b>	<b>321</b>	<b>250</b>	<b>19</b>	<b>705</b>	<b>\$120,570</b>		<b>\$14,975</b>	<b>\$8,249</b>		<b>\$228</b>	<b>\$23,452</b>	<b>\$144,022</b>
2.0	Bid Period Services														
	2.1 - Attend Pre-Bid Meeting	0	4	0	0	0	4	\$920			\$47	1	\$46	\$93	\$1,013
	2.2 - Preparation of Addenda	0	4	16	8	4	32	\$5,280	Beecher	\$1,050	\$374	1	\$46	\$1,470	\$6,750
	<b>Total:</b>	<b>0</b>	<b>8</b>	<b>16</b>	<b>8</b>	<b>4</b>	<b>36</b>	<b>\$6,200</b>		<b>\$1,050</b>	<b>\$421</b>		<b>\$92</b>	<b>\$1,563</b>	<b>\$7,763</b>
3.0	Optional Engineering Services														
	3.1 - Pipe Routing Modifications	0	2	12	8	2	24	\$3,880			\$281			\$281	\$4,161
	3.2 - Addition of Selected Condition Recommendations	0	2	8	6	0	16	\$2,680			\$187			\$187	\$2,867
	<b>Total:</b>	<b>0</b>	<b>4</b>	<b>20</b>	<b>14</b>	<b>2</b>	<b>40</b>	<b>\$6,560</b>		<b>\$0</b>	<b>\$468</b>		<b>\$0</b>	<b>\$468</b>	<b>\$7,028</b>
	<b>Grand Total:</b>	<b>25</b>	<b>102</b>	<b>357</b>	<b>272</b>	<b>25</b>	<b>781</b>	<b>\$133,330</b>		<b>\$16,025</b>	<b>\$9,138</b>		<b>\$320</b>	<b>\$25,483</b>	<b>\$158,813</b>

**Legend:**

SP Senior Professional - Parker  
LPP Lead Project Professional - QM (Dadik, Gupta)  
P Professional - (Gherini, Starr)  
CAD CAD Drafter/Graphics  
WP Word Processor

**Notes:**

1. Mult. 3.21
2. Mileage: Based on 85 miles round trip @ \$0.535/mile.
3. Subconsultant has a 5% mark-up.
4. Beecher - E&IC - \$204.75/hr.
5. Darrimon - Coatings specialist - \$102.90/hr.
6. PECE - Project equipment and communication expense

**PRIMARY DIGESTER NO. 3 REHABILITATION PROJECT**

AGREEMENT  
BETWEEN  
UNION SANITARY DISTRICT  
AND  
CAROLLO ENGINEERS, INC.  
FOR  
PROFESSIONAL SERVICES

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

WITNESSETH:

WHEREAS, District intends to construct the Primary Digester No. 3 Rehabilitation Project (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

CAROLLO ENGINEERS, INC.

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

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

Name: \_\_\_\_\_

Title: \_\_\_\_\_

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

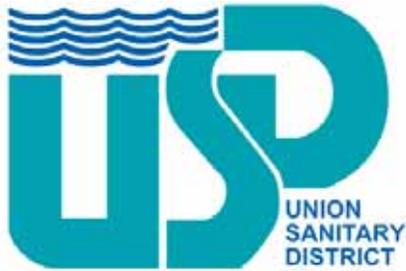
Date: \_\_\_\_\_

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

Name: \_\_\_\_\_

Title: \_\_\_\_\_

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:** January 17, 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  
Chris Elliott, Associate Engineer

**SUBJECT:** Agenda Item No. 14 – Meeting of January 23, 2017  
**Authorize the General Manager to Execute Task Order No. 2 with West Yost Associates for the Force Main Corrosion Repairs Project - Phase 1**

### **Recommendation**

Staff recommends the Board authorize the General Manager to execute Task Order No. 2 with West Yost Associates in the amount of \$113,464 for the Force Main Corrosion Repairs Project - Phase 1.

Funds for the project have been budgeted in the Renewal and Replacement Fund.

### **Background**

The District operates and maintains the transport system that consists of three pump stations and three lift stations and approximately 12½ miles of twin force main pipelines. The transport system conveys wastewater from the Irvington and Newark drainage basins to the Alvarado Wastewater Treatment Plant.

Force main facilities include 78 manholes along the pipeline alignment; please see attached Figures 1 and 2. Of the 78 manholes, 46 of them provide access into the force main pipelines via a manway inside the manholes, and each manway is sealed with a blind flange. At the other 32

manholes, appurtenances such as air release valves or blow off valves are connected to the blind flanges.

The air release valves are located at the higher elevations of the force main pipelines to allow air from the pipelines to vent in order to maintain the full hydraulic capacity of the pipelines. The blow off valves are located at the lower elevations of the force main pipelines to allow staff to drain the wastewater from the pipelines when there is a need to remove as much wastewater as possible, typically for a long-term outage for maintenance or construction activities. This doesn't happen very often but if there is a need to do so, staff will need to set up pumps and hoses to connect the blow off valves to the closest sanitary sewer manhole.

Over time, the presence of groundwater and the buildup of hydrogen sulfide gas in these force main manholes have caused many of the manways, blind flanges, and appurtenances to become corroded; please see Figures 3 through 7. This corrosion is of primary concern, as failure of any single element could precipitate a leak from the force main pipeline.

In 2015, staff performed visual inspection inside all 78 manholes, and conducted non-destructive testing on elements with the worst corrosion conditions. In 2016, staff hired Carollo Engineers to review the data collected during the inspections and testing and recommend a course of action. Carollo recommended that repairs are necessary and that any and all corroded elements within the 78 manholes be rehabilitated or replaced.

### **Request for Proposals**

Staff prepared a request for proposal and invited five consultants to submit a proposal for design services: Brown and Caldwell, Carollo Engineers, RMC Water and Environment, Water Works Engineers, and West Yost Associates. Staff received a lone proposal from West Yost Associates. The other consultants declined to submit proposals due to their inability to assign the appropriate staff to the project. Staff reviewed West Yost Associates' proposal and found the team to be qualified to provide design services for the Project.

### **Task Order No. 1 – Pre-design**

On October 26, 2016, staff executed an Agreement and Task Order No. 1 with West Yost Associates in the amount of \$25,855 for the preliminary design services for the Project. The purpose of the preliminary design was to compile and review all available data regarding the force main manholes and their corrosion conditions, prioritize all 78 manholes for repair, evaluate anticipated construction phasing based on known constraints, and prepare preliminary cost estimates. West Yost Associates prepared a technical memorandum summarizing this information, and outlined a plan to accomplish all the repairs in three (3) construction phases. Phase 1 will address corrosion repairs on the eastern force main's manholes.

**Task Order No. 2 – Final Design**

The scope of services for Task Order No. 2 includes project management, environmental compliance, detailed final design including plans and specifications, and bid period services.

The preliminary construction cost estimate for Phase 1 is between \$500,000 and \$550,000. The negotiated cost proposal is \$113,464. The total not-to-exceed fee for design services represents approximately 21% to 23% of the Phase 1 construction cost. Given the unique and unusual nature of the corrosion repairs, the environmental compliance work involved, and the relatively small construction cost, staff believes the fee is reasonable for a project of this scope and complexity. It is anticipated that the design-to-construction cost ratio would improve in Phases 2 and 3, since part of the design effort for Phase 1 would be applicable to the other phases.

The scope of services and their respective fees are summarized as follows:

<b>Task</b>	<b>Description of Work</b>	<b>Fee</b>
1	Project Management	\$10,950
2	Environmental Compliance	\$19,444
3	Design	\$73,375
4	Bid Period Services	\$9,695
	<b>Total Not-to-Exceed Fee</b>	<b>\$113,464</b>

Below is a summary of the task orders with West Yost Associates under the Project agreement:

<b>Task Order</b>	<b>Not-to-Exceed Fee</b>	<b>Board Authorization Required?</b>	<b>District Staff Approval</b>
Task Order No. 1	\$25,855	No	Sami E. Ghossain
Task Order No. 2	\$113,464	Yes	Paul R. Eldredge
<b>Total</b>	<b>\$139,319</b>		

Design of the Force Main Corrosion Repairs Project - Phase 1 is scheduled for completion in Spring 2017, with construction to follow in Summer 2017.

Staff recommends the Board authorize the General Manager to execute Task Order No. 2 with West Yost Associates in the amount of \$113,464 for the Force Main Corrosion Repairs Project - Phase 1.

PRE/SEG/RC/CE:ks

Attachments: Figures 1-2 – Location Maps  
Figures 3-7 – Photos  
Task Order No. 2

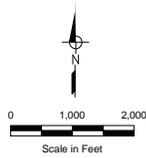




Notes:  
 1. Rating 1 requires immediate attention.  
 2. Rating 2 requires repair in 2-3 years.  
 3. Rating 3 requires repair after 3 years or place on PM schedule.

**Legend**

- |                               |                 |                               |
|-------------------------------|-----------------|-------------------------------|
| ⊕ Access Manhole              | ● Rating 1      | LS Lift Station               |
| ⊕ Access/Blow Off Combination | ● Rating 2      | PS Pump Station               |
| △ ARV                         | ● Rating 3      | WWTP Alvarado Treatment Plant |
| ○ Blow Off                    | ● Not Inspected | — Twin 33" Force Mains        |
|                               |                 | — Twin 39" Force Mains        |



**Figure 2**  
**Newark Pump Station to Alvarado Treatment Plant Manhole Condition Ratings**  
 Union Sanitary District  
 Force Main Manhole Corrosion Repairs

## FIGURES 3-7 (PHOTOS)

*Figure 3: Manway*



*Figure 4: Blind Flange*



## FIGURES 3-7 (PHOTOS)

*Figure 5: Valve*



*Figure 6: ARV Piping*



## FIGURES 3-7 (PHOTOS)

*Figure 7: Blowoff Tube*



**FORCE MAIN CORROSION REPAIRS PROJECT**

**(USD Project No. 800-491)**

**TASK ORDER NO. 2**

**to**

**AGREEMENT**

**BETWEEN**

**UNION SANITARY DISTRICT**

**AND**

**WEST YOST ASSOCIATES, INC.**

**FOR**

**PROFESSIONAL SERVICES**

**Dated October 26, 2016**

**1. PURPOSE**

The purpose of Task Order No. 2 is to authorize the final design and bid period services for Phase 1 of the Force Main Corrosion Repairs Project (Project). The purpose of the Project is to rehabilitate force main manholes as identified and prioritized during Task Order No. 1, Pre-design. Due to force main shutdown constraints and concurrent projects, the repairs will be split into multiple phases, spanning several construction seasons. Phase 1 is anticipated to consist of repairs to approximately 36 access, ARV, and blowoff manholes located on the east side of the twin force mains.

**2. PROJECT COORDINATION**

All work related to this task order shall be coordinated through the Union Sanitary District's (District's) Project Manager, Chris Elliott.

### **3. SCOPE OF SERVICES**

The task numbers in this Scope of Services relate directly to the costs presented in Item 7, Payment to the Engineer, and the schedule presented in Item 8, Time of Completion. Deliverables to be received by the District are described in Item 4, Deliverables. Optional tasks shown shall not be performed without authorization from the District.

#### **Task 1. Project Management**

This task includes project management activities, including day-to-day administration, progress meetings and technical reviews.

**Subtask 1.01—Project Administration.** Monitor progress of individual tasks, budgets, and schedule; and coordinate completion of work products.

**Subtask 1.02—Progress Meetings.** Attend up to one progress meeting to discuss and review progress and significant action items. Engineer shall prepare and submit meeting agendas and minutes.

**Subtask 1.03—Technical Reviews.** Technical reviews shall be conducted by the Principal-in-Charge, Project Manager, and a senior staff member not directly involved in the project.

#### **Task 2. Environmental Compliance**

The pre-design technical memorandum identified 13 manholes where rehabilitation activities may trigger the need for additional CEQA review and permitting from the resource agencies. This task includes further environmental evaluation for those 13 manhole locations to clarify and confirm any needed CEQA review and permitting requirements. This task does not include preparing an IS/MND or obtaining permits from the resource agencies. Such activities may be addressed later under an amendment should they be necessary.

**Subtask 2.01—Biological Resource Update.** In order to initially evaluate the manhole locations for potential biological issues, an analysis of current special-status species shall be conducted by Engineer's subconsultant to determine the types of species that have the potential for presence at work sites. This information is useful in determining specific potential impacts to biological resources and making detailed recommendations for reducing or avoiding impacts. This work shall be conducted by a biologist prior to the field reconnaissance, and shall include full species list updating and review along with GIS map preparation.

**Subtask 2.02—Meeting/Field Reconnaissance.** This subtask involves a one-day effort for a meeting at the District's office to review the project followed by a site reconnaissance of the 13 manhole locations attended by District staff and the project team. Access and probable rehabilitation activities at each location shall be reviewed. The CEQA, biological, and permitting issues at each site shall be evaluated. Details at each site shall be noted and photographs shall be taken.

**Subtask 2.03—Report Preparation.** Engineer's subconsultant shall prepare a CEQA Compliance and Biological Resources Evaluation Report. The report shall provide recommendations for CEQA compliance for the 13 manhole locations and shall identify which locations would have permitting requirements from the resource agencies. The report shall provide details for each work site including a description of existing conditions, the types of special-status species that have potential for being present, potential impacts to resources that could occur during construction, and recommendations for avoiding or reducing those potential impacts. A similar evaluation shall be conducted for sensitive habitat types such as wetlands or riparian areas. Regulatory permitting shall be addressed for each work site. The report shall be supported by species lists, maps, and photographs. A draft report shall be prepared for the District to review, and the final report shall incorporate the review comments received.

### **Task 3. Design**

This task includes services for permitting, field investigations, and preparing bid documents and cost estimates for the Project. Six sets of plans and specifications shall be submitted to the District for review at the 75 and 90 percent completion levels, and one set shall be submitted at the 100 percent completion level. Engineer shall address all comments in writing and submit one set of the final bid documents to the District for printing, bid advertisement, and distribution.

**Subtask 3.01—Agency Coordination & Permitting.** Engineer shall coordinate with various stakeholders including the City of Fremont, the City of Newark, the City of Union City, Alameda County Flood Control & Water Conservation District (ACFC&WCD), Union Pacific Railroad (UPRR), and private property owners. Engineer shall identify the necessary requirements for obtaining encroachment permits, right of entry agreements, and construction access. The District will pay for permitting fees and prepare right of entry agreements with private property owners.

#### Assumptions:

- Engineer shall prepare an ACFC&WCD encroachment permit application for District signature.

- Engineer shall complete a UPRR right of entry permit application on behalf of the District.
- It is anticipated that no temporary construction easements will have to be obtained since the force main alignment is entirely within existing permanent easements.
- Engineer shall coordinate with up to four (4) private property owners to identify requirements for construction access and right of entry agreements.

**Subtask 3.02—CAM-17 Metals Testing of Manholes.** Engineer's subconsultant shall conduct confined space entry of three (3) manholes to collect coating samples to analyze for CAM-17 Metals. One-half day of field investigations is anticipated. It is assumed that District staff will coordinate and assist with opening manholes and dewatering. Subconsultant shall provide a brief letter report summarizing the findings.

**Subtask 3.03—Design Drawings.** Drawings shall be prepared using AutoCAD conforming to the District's digital submittal guidelines. The design shall include appropriately scaled plans and details. It is assumed that approximately 10 drawing sheets will be prepared.

The Engineer shall create a drawing sheet(s) with a schedule or matrix that lists the manholes to be repaired, gives their descriptive or colloquial name for ease of future discussions, indicates which repair detail in the plans is applicable, includes any other pertinent information regarding the scope of work, and is organized to correspond with an adjacent overview map.

**Subtask 3.04—Specifications.** Specifications shall be prepared in Microsoft Word format. Engineer shall prepare bidding and contract requirements (Division 00), general requirements (Division 01), technical specifications (Division 02), and appendices in CSI format and based on District Standards. Engineer's subconsultant shall prepare the technical specifications for Concrete Chemical Injection Grouts and High Performance Coatings. District will provide boilerplate front end specifications in Microsoft Word Format.

**Subtask 3.05—Construction Cost Estimate.** Engineer shall develop a construction cost estimate at the 75, 90, and 100 percent design completion levels.

#### **Task 4. Bid Period Services**

The purpose of this task is to assist the District during the bidding phase of the Project. The District will advertise and distribute bid documents.

**Subtask 4.01—Pre-bid Meeting, Bidder Inquiries, and Bid Evaluation.** Engineer shall attend one pre-bid meeting, attend one site walk, and prepare meeting minutes for distribution. Engineer shall answer bidders' technical questions during the bid period. Engineer shall assist the District in bid evaluation.

**Subtask 4.02—Addenda.** Engineer shall prepare up to two addenda to be distributed by the District during the bid period.

**Subtask 4.03—Conformed Documents.** Engineer shall prepare conformed plans and specifications incorporating all addenda items.

#### **4. DELIVERABLES**

Project deliverables and their respective digital file formats are listed below:

- Meeting agendas (Microsoft Word) and minutes (Adobe PDF).
- Draft (Microsoft Word) and final (Adobe PDF) CEQA Compliance and Biological Resources Evaluation Report.
- ACFC&WCD encroachment permit application, UPRR right of entry permit application, and other permitting documents as necessary.
- Six sets of draft plans and specifications at the 75 and 90 percent completion levels.
- One set of plans and specifications at the 100 percent completion level (Adobe PDF).
- One set of final bid documents (Adobe PDF).
- Cost estimates at the 75, 90, and 100 percent completion levels (Adobe PDF).
- Drawing files in AutoCAD 2016 format submitted on a DVD or via FT site.
- Addenda (Microsoft Word and Adobe PDF), pre-bid meeting minutes (Adobe PDF), and email documentation of phone conversations with bidders.

#### **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, shall be on a time and materials cost basis for services provided, and shall be in accordance with the Billing Rate Schedule contained in Exhibit A (updated annually) except that subconsultants will be billed at actual cost plus 5%, outside services will be billed at actual cost, and mileage will be billed at the prevailing IRS

standard mileage rate. The billing rate schedule is comparable to a multiplier of 3.22 and a profit of 12.4 percent; the not-to-exceed amount shall be \$112,729. A summary of the anticipated distribution of cost and manpower between tasks is shown in Exhibit B.

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	\$25,855	No	Sami Ghossain
Task Order No. 2 – Phase 1 Design	\$113,464	Yes	Paul R. Eldredge
<b>Total</b>	<b>\$139,319</b>		

**8. TIME OF COMPLETION**

All work defined in this Task Order shall be completed in accordance with the following schedule and subject to the conditions of Article 3 of the Agreement:

<b>Design Schedule</b>	
<u>Milestone</u>	<u>Date</u>
Notice to Proceed	January 23, 2017
75% Design Submittal	February 10, 2017
90% Design Submittal	March 17, 2017
100% Design Submittal	April 7, 2017
Final Bid Documents	April 14, 2017

**9. KEY PERSONNEL**

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

<b>Role</b>	<b>Key Personnel</b>
Principal-in-Charge	John D. Goodwin
Project Manager	Thea Durbin

Project Engineer  
Environmental Permitting  
Corrosion Control Engineer

David Pezzini  
Paul Scheidegger, Scheidegger & Associates  
Manny Najar, V&A Consulting

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 January \_\_\_\_\_, 2017 and therewith incorporate it as part of the Agreement.

DISTRICT

ENGINEER

**Union Sanitary District**

**West Yost Associates**

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

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

Name: Paul R. Eldredge, P.E.

Name: John D. Goodwin

Title: General Manager/District Engineer

Title: Vice President



# 2017 Billing Rate Schedule

(Effective January 1, 2017 through December 31, 2017) \*

POSITIONS	LABOR CHARGES (DOLLARS PER HR)
<b>ENGINEERING</b>	
Principal/Vice President	\$273
Engineering/Scientist/Geologist Manager I / II	\$251 / \$263
Principal Engineer/Scientist/Geologist I / II	\$229 / \$243
Senior Engineer/Scientist/Geologist I / II	\$205 / \$215
Associate Engineer/Scientist/Geologist I / II	\$182 / \$195
Engineer/Scientist/Geologist I / II	\$147 / \$170
Engineering Aide	\$83
Administrative I / II / III / IV	\$75 / \$94 / \$114 / \$126
<b>ENGINEERING TECHNOLOGY</b>	
Engineering Tech Manager I / II	\$250 / \$260
Principal Tech Specialist I / II	\$230 / \$240
Senior Tech Specialist I / II	\$210 / \$220
Senior GIS Analyst	\$200
GIS Analyst	\$189
Technical Specialist I / II / III / IV	\$130 / \$150 / \$170 / \$190
CAD Manager	\$159
CAD Designer I / II	\$123 / \$138
<b>CONSTRUCTION MANAGEMENT</b>	
Senior Construction Manager	\$261
Construction Manager I / II / III / IV	\$159 / \$170 / \$182 / \$227
Resident Inspector (Prevailing Wage Groups 4 / 3 / 2 / 1)	\$138 / \$153 / \$170 / \$177
Apprentice Inspector	\$125
CM Administrative I / II	\$68 / \$91

- Hourly rates include Technology and Communication charges such as general and CAD computer, software, telephone, routine in-house copies/prints, postage, miscellaneous supplies, and other incidental project expenses.
- Outside Services such as vendor reproductions, prints, shipping, and major West Yost reproduction efforts, as well as Engineering Supplies, Travel, etc. will be billed at actual cost.
- Mileage will be billed at the current Federal Rate and Travel will be billed at cost.
- Subconsultants will be billed at actual cost plus 5%.
- Expert witness, research, technical review, analysis, preparation and meetings billed at 150% of standard hourly rates. Expert witness testimony and depositions billed at 200% of standard hourly rates.
- A Finance Charge of 1.5% per month (an Annual Rate of 18%) on the unpaid balance will be added to invoice amounts if not paid within 45 days from the date of the invoice.

\* This schedule is updated annually

## 2017 Billing Rate Schedule (continued)

(Effective January 1, 2017 through December 31, 2017) \*

### Equipment Charges

EQUIPMENT	BILLING RATES
Gas Detector	\$80/day
Hydrant Pressure Gage	\$10/day
Hydrant Pressure Recorder, Standard	\$40/day
Hydrant Pressure Recorder, Impulse (Transient)	\$55/day
Trimble GPS – Geo 7x	\$220/day
Vehicle	\$10/hour
Water Flow Probe Meter	\$20/day
Water Quality Multimeter	\$185/day
Well Sounder	\$30/day

\* This schedule is updated annually

West Yost Associates	P/V/P \$273 Goodwin	EM/SM/GM II \$263 McWilliams	SE/SS/SG II \$215 Durbin	AE/AS/AG I \$182 Pezzini	CAD II \$138	ADM IV \$126	Labor		Sub. V&A	Sub. SCHDG	Costs		
							Hours	Fee			Sub. w/ markup 5%	Other Direct	Total Costs
<b>PROJECT: Force Main Corrosion Repairs Project - Phase 1</b>													
<b>Task 1 Project Management</b>													
1.01 Project Administration	2		8				10	\$ 2,266	\$ 3,320		\$ 3,486		\$ 5,752
1.02 Progress Meetings	4		4				8	\$ 1,952			\$ 50		\$ 2,002
1.03 Technical Reviews	4	8					12	\$ 3,196					\$ 3,196
<b>Subtotal, Task 1 (hours)</b>	<b>10</b>	<b>8</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30</b>						
<b>Subtotal, Task 1 (\$)</b>	<b>\$ 2,730</b>	<b>\$ 2,104</b>	<b>\$ 2,580</b>					<b>\$ 7,414</b>	<b>\$ 3,320</b>		<b>\$ 3,486</b>	<b>\$ 50</b>	<b>\$ 10,950</b>
<b>Task 2 Environmental Compliance</b>													
2.01 Environmental Compliance	8		8				16	\$ 3,904		\$ 14,800	\$ 15,540		\$ 19,444
<b>Subtotal, Task 2 (hours)</b>	<b>8</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>						
<b>Subtotal, Task 2 (\$)</b>	<b>\$ 2,184</b>		<b>\$ 1,720</b>					<b>\$ 3,904</b>		<b>\$ 14,800</b>	<b>\$ 15,540</b>		<b>\$ 19,444</b>
<b>Task 3 Design</b>													
3.01 Agency Coordination & Permitting			24	24		4	52	\$ 10,032				\$ 200	\$ 10,232
3.02 CAM-17 Metals Testing of Manholes	1		2	8			11	\$ 2,159	\$ 8,586		\$ 9,015	\$ 50	\$ 11,224
3.03 Design Drawings	8		10	44	64		126	\$ 21,174			\$ 250		\$ 21,424
3.04 Specifications	8		24	20		20	72	\$ 13,504	\$ 13,218		\$ 13,879	\$ 250	\$ 27,633
3.05 Construction Cost Estimate	2		4	8			14	\$ 2,862					\$ 2,862
<b>Subtotal, Task 3 (hours)</b>	<b>19</b>	<b>0</b>	<b>64</b>	<b>104</b>	<b>64</b>	<b>24</b>	<b>275</b>						
<b>Subtotal, Task 3 (\$)</b>	<b>\$ 5,187</b>		<b>\$ 13,760</b>	<b>\$ 18,928</b>	<b>\$ 8,832</b>	<b>\$ 3,024</b>		<b>\$ 49,731</b>	<b>\$ 21,804</b>		<b>\$ 22,894</b>	<b>\$ 750</b>	<b>\$ 73,375</b>
<b>Task 4 Bid Period Services</b>													
4.01 Pre-bid Meeting, Bidder Inquiries, Bid Evaluation	2		8	8			18	\$ 3,722	\$ 1,856		\$ 1,949	\$ 50	\$ 5,721
4.02 Addenda	2		8	8		2	20	\$ 3,974					\$ 3,974
<b>Subtotal, Task 4 (hours)</b>	<b>4</b>	<b>0</b>	<b>16</b>	<b>16</b>	<b>0</b>	<b>2</b>	<b>38</b>						
<b>Subtotal, Task 4 (\$)</b>	<b>\$ 1,092</b>		<b>\$ 3,440</b>	<b>\$ 2,912</b>		<b>\$ 252</b>		<b>\$ 7,696</b>	<b>\$ 1,856</b>		<b>\$ 1,949</b>	<b>\$ 50</b>	<b>\$ 9,695</b>
<b>TOTAL (hours)</b>	<b>41</b>	<b>8</b>	<b>100</b>	<b>120</b>	<b>64</b>	<b>26</b>	<b>359</b>						
<b>TOTAL (\$)</b>	<b>\$ 11,193</b>	<b>\$ 2,104</b>	<b>\$ 21,500</b>	<b>\$ 21,840</b>	<b>\$ 8,832</b>	<b>\$ 3,276</b>		<b>\$ 68,745</b>	<b>\$ 26,980</b>	<b>\$ 14,800</b>	<b>\$ 43,869</b>	<b>\$ 850</b>	<b>\$ 113,464</b>



**UNION SANITARY DISTRICT  
CHECK REGISTER  
12/31/2016-01/13/2017**

Check No.	Date	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
163311	1/5/2017	20161114.1	SWRCB - STATE WATER RESOURCES	SRF LOAN #C065219110 - PRIMARY CLARIFIER	\$589,782.72	\$589,782.72
163345	1/12/2017	800394.28	GSE CONSTRUCTION CO INC	THICKENER CONTROL BLDG IMPROV PHASE II	\$343,062.10	\$343,062.10
163284	1/5/2017	392482016	FRANK A OLSEN COMPANY	ROTORK ACTUATORS FOR BUILDING 79	\$151,764.35	\$151,764.35
163339	1/12/2017	7010	DW NICHOLSON CORP	MCC & PLC REPLACEMENT - PHASE 3	\$65,131.34	\$79,512.44
	1/12/2017	7088		HYPO TANKS AND PIPING REPLACEMENT	\$14,381.10	
163312	1/5/2017	30104278	SYNAGRO WEST LLC	NOVEMBER 2016 BIOSOLIDS DISPOSAL	\$60,571.79	\$60,571.79
163282	1/5/2017	902881831	EVOQUA WATER TECHNOLOGIES	2,355 GAL HYDROGEN PEROXIDE	\$10,983.72	\$32,352.80
	1/5/2017	902883412		4,506 GAL HYDROGEN PEROXIDE	\$21,015.98	
	1/5/2017	902904539		DI WATER SYSTEM	\$353.10	
163366	1/12/2017	1100386	POLYDYNE INC	45,060 LBS CLARIFLOC C-6267	\$31,672.67	\$31,672.67
163274	1/5/2017	7823	CDW GOVERNMENT LLC	150 MICROSOFT OFFICE 365 LICENSES	\$30,919.15	\$30,919.15
163363	1/12/2017	37994	OWEN EQUIPMENT SALES	REPAIR PUMP LEAK TRUCK T3292	\$18,258.98	\$18,258.98
163346	1/12/2017	800394.28E	GSE CONSTRUCTION CO INC	THICKENER CONTROL BLDG IMPROV PHASE II - ESCROW PYMT	\$18,055.90	\$18,055.90

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163364	1/12/2017	761520161223	PACIFIC GAS AND ELECTRIC	SERV TO 12/22/16 NEWARK PS	\$16,489.71	\$17,442.13
	1/12/2017	666720161230		SERV TO 12/29/16 PASEO PADRE PS	\$240.54	
	1/12/2017	892820161230		SERV TO 12/29/16 HAYWARD MARSH	\$56.79	
	1/12/2017	898220161230		SERV TO 12/29/16 FREMONT PS	\$377.61	
	1/12/2017	224720161221		SERV TO 12/20/16 CS TRAINING TRAILER	\$35.01	
	1/12/2017	096020161230		SERV TO 12/29/16 CATHODIC PROJECT	\$47.90	
	1/12/2017	380420161230		SERV TO 12/29/16 CHERRY ST PS	\$194.57	
163365	1/12/2017	27549	PETERSON TRUCKS INC	DIAGNOSE & REPAIR TRUCK T3342	\$14,312.83	\$14,312.83
163358	1/12/2017	26912	MARK THOMAS & CO, INC	TEMP CONSTRUCTION INSPECTOR - 10/11 - 10/28/16	\$13,787.68	\$13,787.68
163281	1/5/2017	1995618C	DELTA DENTAL SERVICE	DECEMBER 2016 DENTAL	\$11,743.80	\$13,297.50
	1/5/2017	1995618A		DECEMBER 2016 DENTAL	\$1,553.70	
163275	1/5/2017	86794	CHAIN LINK FENCE & SUPPLY INC	Furnish and install 373 LF of chain	\$12,250.00	\$12,250.00
163271	1/5/2017	30156	CALIFORNIA WATER TECHNOLOGIES	43,840 LBS FERROUS CHLORIDE	\$3,909.03	\$11,448.52
	1/5/2017	30162		42,560 LBS FERROUS CHLORIDE	\$3,672.13	
	1/5/2017	30132		44,020 LBS FERROUS CHLORIDE	\$3,867.36	

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163314	1/5/2017	789951	UNIVAR USA INC	5,009 GALS SODIUM HYPOCHLORITE	\$2,212.22	\$10,937.48
	1/5/2017	787262		4,997 GALS SODIUM HYPOCHLORITE	\$2,206.93	
	1/5/2017	789226		5,010 GALS SODIUM HYPOCHLORITE	\$2,212.67	
	1/5/2017	789815		4,952 GALS SODIUM HYPOCHLORITE	\$2,187.05	
	1/5/2017	788975		4,797 GALS SODIUM HYPOCHLORITE	\$2,118.61	
163373	1/12/2017	23103	RMC WATER AND ENVIRONMENT	ALVARADO BASIN SEWER MASTER PLAN UPDATE	\$10,554.50	\$10,554.50
163259	1/5/2017	66542	3T EQUIPMENT COMPANY INC	6 LEADERHOSE COUPLINGS & 12 COUPLINGS	\$1,755.73	\$9,367.73
	1/5/2017	66543		10 T-HANDLE MANHOLE HOOK & 11 PIPEPATCH KIT - WINTER	\$7,612.00	
163273	1/5/2017	153892	CAROLLO ENGINEERS	FREMONT & PASEO PADRE LS IMPROVEMENTS	\$8,794.05	\$8,794.05
163331	1/12/2017	30179	CALIFORNIA WATER TECHNOLOGIES	43,940 LBS FERROUS CHLORIDE	\$3,906.42	\$7,782.73
	1/12/2017	30204		43,860 LBS FERROUS CHLORIDE	\$3,876.31	
163294	1/5/2017	37432220170101	LINCOLN NATIONAL LIFE INS COMP	LIFE & DISABILITY INSURANCE - JAN 2017	\$7,599.38	\$7,599.38
163338	1/12/2017	12083	DIABLO BOILER WORKS	BOILER RE ROLLING ON LOWER BANK TUBES	\$981.74	\$6,787.74
	1/12/2017	12007		DIABLO BOILER ANNUAL SERVICE	\$4,542.00	
	1/12/2017	12081		BOILER RE ROLLING ON LOWER BANK TUBES	\$1,264.00	
163384	1/12/2017	790883	UNIVAR USA INC	5,009 GALS SODIUM HYPOCHLORITE	\$2,212.22	\$6,636.66
	1/12/2017	791166		5,009 GALS SODIUM HYPOCHLORITE	\$2,212.22	
	1/12/2017	790603		5,009 GALS SODIUM HYPOCHLORITE	\$2,212.22	
163292	1/5/2017	33283	HARRIS & ASSOCIATES	NEWARK BACKYARD SS RELOCATION - PHASE 3	\$5,672.50	\$5,672.50

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163326	1/12/2017	9038644	AT&T	SERV: 11/20/16 - 12/19/16	\$4,774.70	\$4,997.32
	1/12/2017	9038666		SERV: 11/20/16 - 12/19/16	\$202.92	
	1/12/2017	9038642		SERV: 11/20/16 - 12/19/16	\$19.70	
163317	1/5/2017	6499	VON EUW TRUCKING	46.85 END DUMP HOURLY	\$4,778.70	\$4,778.70
163264	1/5/2017	5153229	ALL INDUSTRIAL ELECTRIC SUPPLY	ELECTRIC CAR CHARGING STATION	\$4,422.00	\$4,422.00
163359	1/12/2017	97096849	MCMASTER SUPPLY INC	1 AIR HOSE	\$21.65	\$4,409.46
	1/12/2017	94294541		ASTD PARTS & MATERIALS	\$23.41	
	1/12/2017	96897470		2 SELF-DRAINING BREATHER VENTS	\$195.14	
	1/12/2017	96967276		ASTD PARTS & MATERIALS	\$2,929.35	
	1/12/2017	96180970		1 VALVE STEM	\$11.43	
	1/12/2017	96483918		ASTD PARTS & MATERIALS	\$671.09	
	1/12/2017	94100052		1 AIR REGULATOR	\$39.51	
	1/12/2017	94131028		2 PULL HANDLES	\$34.10	
	1/12/2017	96017561		ASTD PARTS & MATERIALS	\$113.28	
	1/12/2017	94130160		ASTD SHIMS	\$237.43	
	1/12/2017	94285800		ASTD PARTS & MATERIALS	\$133.07	
163382	1/12/2017	130923	TOTAL WASTE SYSTEMS INC	DECEMBER 2016 GRIT DISPOSAL	\$4,371.83	\$4,371.83
163306	1/5/2017	47305040	ROBERT HALF INTERNATIONAL INC	TEMP LABOR-BRIONES, R., WKEND 12/09/16	\$4,049.53	\$4,049.53
163374	1/12/2017	1500	ROCKWELL SOLUTIONS INC	ASTD PARTS & MATERIALS	\$3,955.20	\$3,955.20

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163355	1/12/2017	4704	LATITUDE GEOGRAPHICS GROUP LTD	GEOCORTEX SWM RENEWAL	\$3,700.00	\$3,700.00
163316	1/5/2017	20170101	VISION SERVICE PLAN - CA	JANUARY 2017 VISION STMT	\$3,363.84	\$3,363.84
163371	1/12/2017	916002964719	REPUBLIC SERVICES #916	RECYCLE & ROLL OFF - DECEMBER 2016	\$3,290.50	\$3,290.50
163272	1/5/2017	16816639	CANON SOLUTIONS AMERICA INC	MONTHLY LEASE 6 CANON COLOR COPIERS	\$3,035.87	\$3,035.87
163362	1/12/2017	121600156	NBS	SEWER SERVICE CHARGE DATA SERV JAN - MAR 2017	\$2,940.08	\$2,940.08
163357	1/12/2017	1759	LIFTOFF, LLC	237 MIGRATION WIZ TOOLS FOR OFFICE 365 PROJECT	\$2,841.63	\$2,841.63
163266	1/5/2017	9011526	AT&T	SERV: 11/13/16 - 12/12/16	\$42.39	\$2,787.82
	1/5/2017	9011524		SERV: 11/13/16 - 12/12/16	\$755.50	
	1/5/2017	9086905		SERV: 11/10/16 - 12/09/16	\$1,837.82	
	1/5/2017	9011527		SERV: 11/13/16 - 12/12/16	\$65.65	
	1/5/2017	9011528		SERV: 11/13/16 - 12/12/16	\$86.46	
163270	1/5/2017	8501	BUCCANEER DEMOLITION INC	REFUND # 19528	\$2,500.00	\$2,500.00
163291	1/5/2017	3K3282	HARRINGTON INDUSTRIAL PLASTICS	1 2" VALVE SWING CHECK FLG PVC	\$717.84	\$2,488.58
	1/5/2017	3K3337		ASTD PVC PIPE & FITTINGS	\$1,125.37	
	1/5/2017	3K3283		ASTD PVC PIPE & FITTINGS	\$645.37	
163269	1/5/2017	11281456	BROWN & CALDWELL CONSULTANTS	STANDBY POWER SYSTEM UPGRADE	\$2,214.72	\$2,214.72
163385	1/12/2017	9777364261	VERIZON WIRELESS	WIRELESS SERV 11/21/16-12/20/16	\$2,209.64	\$2,209.64
163347	1/12/2017	85247064	HAMPTON INN & SUITES	PREPAY LODGING, MARTIN, RIVERA, TATOLA 2/6 - 2/10/17	\$2,038.32	\$2,038.32

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163308	1/5/2017	7650309100	RS HUGHES CO INC	ASTD PPE & SAFETY SUPPLIES	\$1,611.00	\$1,985.57
	1/5/2017	7650309101		7 X-LARGE CLASS 3 YELLOW JACKET WITH HOOD	\$374.57	
163325	1/12/2017	7009464074	APPLIED INDUSTRIAL TECHNOLOGIE	ODOR SCRUBBER 12 REBUILD	\$1,665.61	\$1,665.61
163383	1/12/2017	181427616	TRENCH PLATE RENTAL COMPANY	20 DAY CONCRETE K-RAIL RENTAL	\$792.50	\$1,585.00
	1/12/2017	181427716		20 DAY CONCRETE K-RAIL RENTAL	\$792.50	
163323	1/12/2017	4105755420161230	ALAMEDA COUNTY WATER DISTRICT	SERV TO: 12/29/16-MTR HYD 29389785	\$194.14	\$1,546.00
	1/12/2017	4105755620161230		SERV TO: 12/29/16-MTR HYD 18486436	\$258.23	
	1/12/2017	4105755720161230		SERV TO: 12/29/16-MTR HYD 19866542	\$291.96	
	1/12/2017	4105755320161230		SERV TO: 12/29/16-MTR HYD 19866546	\$194.14	
	1/12/2017	4105755520161230		SERV TO: 12/29/16-MTR HYD 19866544	\$379.66	
	1/12/2017	4105756020161230		SERV TO: 12/29/16-MTR HYD 33481982	\$227.87	
163261	1/5/2017	161204300	AIRTECH MECHANICAL INC	FILTERS FOR EQ BASIN SCRUBBER IPS	\$1,518.00	\$1,518.00
163354	1/12/2017	20170111	TODD JACOB	EXP REIMB: REGIS FOR INFORUM CONF & AIRFARE TO NY	\$1,496.40	\$1,496.40
163368	1/12/2017	254859	REALVNC LIMITED	SOFTWARE SUPPORT, 3 YEARS, 200 LICENSES	\$1,400.00	\$1,400.00
163348	1/12/2017	1747023	HANSON AGGREGATES INC	5.42 TONS 1/2 MED TYPE A AC-R	\$411.79	\$1,372.37
	1/12/2017	1748900		6.00 TONS 1/2 MED TYPE A AC-R	\$454.97	
	1/12/2017	1749378		6.68 TONS 1/2 MED TYPE A AC-R	\$505.61	
163342	1/12/2017	20170111	MICHAEL GILL	EXP REIMB: WAVECREST WEB REPORTING SERVICE RNWL	\$1,350.00	\$1,350.00
163375	1/12/2017	20170104	THERESA RODRIGUEZ	TUITION REIMB - FALL QTR 2016	\$1,252.45	\$1,252.45

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163298	1/5/2017	15801	NIXON-EGLI EQUIP OF S. CAL	9 ROOT SAW BLADES	\$1,201.61	\$1,201.61
163333	1/12/2017	4148	CDW GOVERNMENT LLC	NEW AP CHECK PRINTER	\$1,186.13	\$1,186.13
163293	1/5/2017	1431145	LIEBERT CASSIDY WHITMORE	LEGAL SERVICES - CALPERS AUDIT - UNIFORMS	\$1,145.00	\$1,145.00
163380	1/12/2017	3326049388	STAPLES CONTRACT & COMMERCIAL	ASTD JANITORIAL & BREAKROOM SUPPLIES - INVENTORY	\$17.60	\$1,107.66
	1/12/2017	3326049384		ASTD OFFICE SUPPLIES - INVENTORY	\$66.77	
	1/12/2017	3326049386		ASTD JANITORIAL & BREAKROOM SUPPLIES - INVENTORY	\$1,023.29	
163353	1/12/2017	1042890	INDUSTRIAL SAFETY SUPPLY	3 FLOW REGULATORS	\$1,093.95	\$1,093.95
163276	1/5/2017	3520065156	CHARTWELL STAFFING SVCS INC	TEMP LABOR-ALVARADO MURCIA, S., WEEK ENDING 12/04/16	\$949.60	\$949.60
163330	1/12/2017	20170105	LAURIE BRENNER	EXP REIMB: BS WORK GROUP RECOGNITION MEAL	\$850.29	\$850.29
163351	1/12/2017	602355314	HILLYARD/SAN FRANCISCO	ASTD JANITORIAL SUPPLIES	\$828.23	\$828.23
163379	1/12/2017	8122768122916	SIERRA SPRING WATER COMPANY	BOTTLESS COOLERS RENTAL	\$239.00	\$807.72
	1/12/2017	4868173122916		WATER SERVICE 12/02/16 - 12/29/16	\$568.72	
163334	1/12/2017	3520066608	CHARTWELL STAFFING SVCS INC	TEMP LABOR-ALVARADO MURCIA, S., WEEK ENDING 12/11/16	\$774.68	\$774.68
163372	1/12/2017	312697	RKI INSTRUMENTS INC	ASTD PARTS & MATERIALS	\$449.63	\$738.38
	1/12/2017	312698		1 CYLINDER, CI2, 10PPM IN N2,58L	\$288.75	
163341	1/12/2017	1083854289	G&K SERVICES CO	UNIFORM LAUNDERING SERVICE	\$288.73	\$661.98
	1/12/2017	1083854288		UNIFORM LAUNDERING & RUGS	\$357.55	
	1/12/2017	1083854290		ASTD DUST MOPS, WET MOPS & TERRY TOWELS	\$15.70	
163360	1/12/2017	20161231	NAPA AUTO PARTS	MONTHLY AUTO PARTS STMT - DEC 2016	\$661.45	\$661.45

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163297	1/5/2017	1189145	MOBILE MODULAR MANAGEMENT CORFFMC TRAILER RENTAL - DEC 2016		\$631.40	\$631.40
163280	1/5/2017	20161225.10	DALE HARDWARE INC	12/16 - ASTD PARTS & MATERIALS	\$613.06	\$613.06
163369	1/12/2017	4820	RED WING SHOE STORE	SAFETY SHOES - NOVAK, SHENK & M LOPEZ	\$602.13	\$602.13
163349	1/12/2017	3K3816	HARRINGTON INDUSTRIAL PLASTICS	ASTD PARTS & MATERIALS	\$590.26	\$590.26
163304	1/5/2017	312020	RKI INSTRUMENTS INC	EAGLE CALIBRATION SERVICE LEVEL 1	\$534.75	\$580.13
	1/5/2017	312344		1 CYLINDER, H2S/CO/CH4, LEL/O2, W/RED PLASTIC STRAW, 11L	\$45.38	
163361	1/12/2017	19064	NATEC INTERNATIONAL INC.	FIRST AID/CPR TRAINING - TPO NIGHTS	\$575.00	\$575.00
163381	1/12/2017	43422	STARLINE SUPPLY COMPANY	11 CS COMPOSTABLE UTENSILS	\$539.85	\$539.85
163340	1/12/2017	226278	ENVIRONMENTAL PRODUCTS & ACCES 2 VACTOR TRUCK PARTS		\$536.43	\$536.43
163305	1/5/2017	23031	RMC WATER AND ENVIRONMENT	AS NEEDED SUPPORT FOR PRETREATMENT PROGRAM	\$523.00	\$523.00
163285	1/5/2017	1083852353	G&K SERVICES CO	UNIFORM LAUNDERING & RUGS	\$257.33	\$507.27
	1/5/2017	1083852355		ASTD DUST MOPS, WET MOPS & TERRY TOWELS	\$15.70	
	1/5/2017	1083852354		UNIFORM LAUNDERING SERVICE	\$234.24	
163286	1/5/2017	8615	AFTAB GILL	REFUND # 19513	\$500.00	\$500.00
163299	1/5/2017	8687	SUNIL PATEL	REFUND # 19532	\$500.00	\$500.00
163307	1/5/2017	8754	ROOTER HERO	REFUND # 19529	\$500.00	\$500.00
163327	1/12/2017	1023797	BAY AREA NEWS GROUP EAST BAY	AD - DIGESTER 1-3 GAS ISOLATION VALVES	\$499.38	\$499.38

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163344	1/12/2017	9305329808	GRAINGER INC	CREDIT FOR 1 MOTOR, INV 9298995698	\$-325.71	\$499.07
	1/12/2017	9298995698		1 MOTOR	\$325.71	
	1/12/2017	9297681844		2 SPOOLS CABLE	\$499.07	
163318	1/5/2017	20170104.1	WEF-WATER ENVIRONMENT FEDERATI	WEF MEMBERSHIP R PIPKIN	\$247.00	\$494.00
	1/5/2017	20170104.2		WEF MEMBERSHIP A LOPEZ	\$247.00	
163319	1/12/2017	8659749	ABC IMAGING, INC.	DIGESTER 1-3 GAS ISOLATION VALVES	\$493.63	\$493.63
163301	1/5/2017	247116	PRESTIGE LENS LAB	SAFETY GLASSES - PORTEOUS	\$215.72	\$464.28
	1/5/2017	247127		SAFETY GLASSES - CULBERTSON	\$248.56	
163337	1/12/2017	201691231	DAILY JOURNAL CORPORATION	AD NAME: DIGESTER 1-3 GAS ISOLATION VALVES	\$435.00	\$435.00
163343	1/12/2017	1841077661	GOODYEAR COMM TIRE & SERV CTRS	1 TIRE	\$428.34	\$428.34
163328	1/12/2017	19705500	BECK'S SHOES	SAFETY SHOES: A. HERNANDEZ & V. PADILLA	\$409.48	\$409.48
163324	1/12/2017	6122291	ALPHA ANALYTICAL LABORATORIES	2 LAB SAMPLE ANALYSIS	\$55.00	\$400.00
	1/12/2017	6122204		19 LAB SAMPLE ANALYSIS	\$345.00	
163332	1/12/2017	4021023332	CANON SOLUTIONS AMERICA INC	MTHLY MAINTENANCE BASED ON USE	\$382.81	\$382.81
163295	1/5/2017	20161229	ARMANDO LOPEZ	EXP REIMB: WORK GROUP HOLIDAY GIFT	\$374.75	\$374.75
163352	1/12/2017	944720161228	HOME DEPOT CREDIT SERVICES	MONTHLY HARDWARE STMT - DEC 2016	\$116.51	\$363.19
	1/12/2017	7111780		ASTD HARDWARE SUPPLIES	\$246.68	
163313	1/5/2017	20170104	SHEILA TOLBERT	EXP REIMB: NCCIPMA MEMBERSHIP & ANNUAL CONFERENCE FEE	\$359.00	\$359.00

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163279	1/5/2017	272342	CURTIS & TOMPKINS, LTD	9 LAB SAMPLE ANALYSIS	\$133.30	\$352.40
	1/5/2017	272299		1 LAB SAMPLE ANALYSIS	\$60.00	
	1/5/2017	272339		13 LAB SAMPLE ANALYSIS	\$159.10	
163377	1/12/2017	29025	SAFETYLINE INC	ORANGE ANSI TOWING JACKET - DIOSDADO & SALDANA	\$331.36	\$331.36
163356	1/12/2017	20170110	CONGNA LI	EXP REIMB: WEF & CWEA MEMBERSHIP RENEWALS	\$305.00	\$305.00
163309	1/5/2017	85340220161221	SAN FRANCISCO WATER DEPT	SERVICE 11/19/16 TO 12/20/16	\$299.77	\$299.77
163320	1/12/2017	20170109	RICA AGBUYA	TUITION REIMB - FALL QTR 2016	\$287.04	\$287.04
163289	1/5/2017	9291728112	GRAINGER INC	1 UTILITY CART	\$278.26	\$278.26
163376	1/12/2017	1818558846	SAFELITE GLASS CORPORATION	REPAIR WINDSHIELD	\$275.75	\$275.75
163310	1/5/2017	1758668002	SAN LEANDRO ELECTRIC SUPPLY	7 CONDUIT KNOCK OUT HUB 3/4	\$248.43	\$248.43
163283	1/5/2017	123254	FITGUARD, INC.	PREVENTATIVE MAINTENANCE - EXERCISE CLUB EQUIPMENT	\$235.00	\$235.00
163278	1/5/2017	17613034983	CORIX WATER PRODUCTS INC	15 8" PIPE PLUGS	\$231.95	\$231.95
163329	1/12/2017	11656610	BLAISDELL'S	ASTD OFFICE SUPPLIES	\$20.90	\$221.75
	1/12/2017	11662040		ASTD OFFICE SUPPLIES	\$6.37	
	1/12/2017	11659750		1 HP LASERJET PRO	\$133.09	
	1/12/2017	11654110		ASTD OFFICE SUPPLIES	\$61.39	

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163268	1/5/2017	11646000	BLAISDELL'S	1 WALL CALENDAR	\$15.94	\$219.26
	1/5/2017	11646370		ASTD OFFICE SUPPLIES	\$15.94	
	1/5/2017	11649680		ASTD OFFICE SUPPLIES	\$11.85	
	1/5/2017	11641680		ASTD OFFICE SUPPLIES	\$86.23	
	1/5/2017	11639820		5 NOTEBOOKS	\$13.15	
	1/5/2017	11638650		ASTD OFFICE SUPPLIES	\$92.09	
	1/5/2017	11635270C		1 WALL CALENDAR CREDIT	\$-15.94	
163367	1/12/2017	247222	PRESTIGE LENS LAB	SAFETY GLASSES - PETERSON	\$211.34	\$211.34
163303	1/5/2017	3820	RED WING SHOE STORE	SAFETY SHOES - PORTEOUS	\$208.00	\$208.00
163387	1/12/2017	12045428165	WRA ENVIRONMENTAL CONSULTANTS	ALVARADO EQUALIZATION STORAGE BASIN	\$204.00	\$204.00
163290	1/5/2017	81355	H2O PRECISION INC	WATERJET CUT 1" HOLES IN 6 MANHOLE COVERS	\$180.00	\$180.00
163287	1/5/2017	2771634303	GLACIER ICE COMPANY INC	126 7-LB BAGS OF ICE	\$178.92	\$178.92
163265	1/5/2017	127796	ARISTA BUSINESS IMAGING	SERVICE CALL: HEW - HEWQ7814A	\$151.35	\$151.35
163315	1/5/2017	26900618	UPS - UNITED PARCEL SERVICE	FREIGHT FOR WATERCHAMP	\$148.25	\$148.25
163321	1/12/2017	1417	ALAMEDA COUNTY TREASURER	45 ASSESSOR'S MAPS	\$135.00	\$135.00
163335	1/12/2017	428848	CHEMETRICS INC	4 NITRITE VACU-VIALS	\$129.81	\$129.81
163386	1/12/2017	8047107608	VWR INTERNATIONAL LLC	3 BUFFER PH 4.01 32OZ & 2 BOTTLE SQUARE LG W/M HDPE 4L	\$111.70	\$111.70
163302	1/5/2017	12812G	R & S ERECTION OF S ALAMEDA	GATES OPENING & CLOSING AUTOMATICALLY	\$111.00	\$111.00
163378	1/12/2017	20170106	JAMES SCHOFIELD	EXP REIMB: NAVIGATING AN ENFORCEMENT ACTION WORKSHOP FEE	\$110.00	\$110.00

**UNION SANITARY DISTRICT  
CHECK REGISTER  
12/31/2016-01/13/2017**

Check No.	Date	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
163350	1/12/2017	24280	HAYWARD PIPE AND SUPPLY	21 FT PIPE & 1 GAL CUTTING OIL	\$106.49	\$106.49
163370	1/12/2017	85317	REMOTE SATELLITE SYSTEMS INT'L	IRIDIUM SVC FEE JANUARY 2017	\$97.90	\$97.90
163277	1/5/2017	428594	CHEMETRICS INC	1 TEST KIT	\$79.13	\$79.13
163336	1/12/2017	20170109	RICHARD CZAPKAY	EXP REIMB: LUNCH FOR WEBINAR	\$74.64	\$74.64
163296	1/5/2017	14533783	MATHESON TRI-GAS INC	1 CYLINDER PICKUP	\$73.91	\$73.91
163263	1/5/2017	4088644120161221	ALAMEDA COUNTY WATER DISTRICT	SERV TO: 12/21/16 - BOYCE ROAD	\$51.66	\$51.66
163300	1/5/2017	20170104	RIC PIPKIN	EXP REIMB: TEAM MEETING BREAKFAST RECOGNITION FOR WORK	\$50.50	\$50.50
163262	1/5/2017	20170103	ALAMEDA COUNTY TREASURER	HANDLING FEE - DIGESTER 1-3 GAS	\$50.00	\$50.00
163322	1/12/2017	20170110	ALAMEDA COUNTY TREASURER	NOTICE OF EXEMPTION - DIGESTER NO. 3 INSP & REHAB	\$50.00	\$50.00
163260	1/5/2017	66368	AIR & TOOL ENGINEERING COMPANY	TOOL REPAIR	\$47.23	\$47.23
163267	1/5/2017	87896581212252016	AT&T	SERV: 11/18/16 - 12/17/16	\$39.15	\$39.15
163288	1/5/2017	82310	GORILLA METALS	ASTD METAL, STEEL, STAINLESS & ALUMINUM	\$26.03	\$26.03

**Invoices:**

<b>Credit Memos :</b>	<b>2</b>	<b>-341.65</b>
<b>\$0 - \$1,000 :</b>	<b>132</b>	<b>36,592.93</b>
<b>\$1,000 - \$10,000 :</b>	<b>52</b>	<b>151,921.29</b>
<b>\$10,000 - \$100,000 :</b>	<b>15</b>	<b>350,129.15</b>
<b>Over \$100,000 :</b>	<b>3</b>	<b>1,084,609.17</b>
<b>Total:</b>	<b>204</b>	<b>1,622,910.89</b>

**Checks:**

<b>\$0 - \$1,000 :</b>	<b>70</b>	<b>24,985.77</b>
<b>\$1,000 - \$10,000 :</b>	<b>41</b>	<b>137,941.58</b>
<b>\$10,000 - \$100,000 :</b>	<b>15</b>	<b>375,374.37</b>
<b>Over \$100,000 :</b>	<b>3</b>	<b>1,084,609.17</b>
<b>Total:</b>	<b>129</b>	<b>1,622,910.89</b>



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

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

Karen W. Murphy  
*Attorney*

**DATE:** January 23, 2017

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

**FROM:** Paul R. Eldredge, General Manager/District Engineer  
James Schofield, Collection Services Manager

**SUBJECT:** Agenda Item No. 16 - Meeting of January 23, 2017  
Information Item: **Collection Services Preventative Evaluation Report**

### **Recommendation**

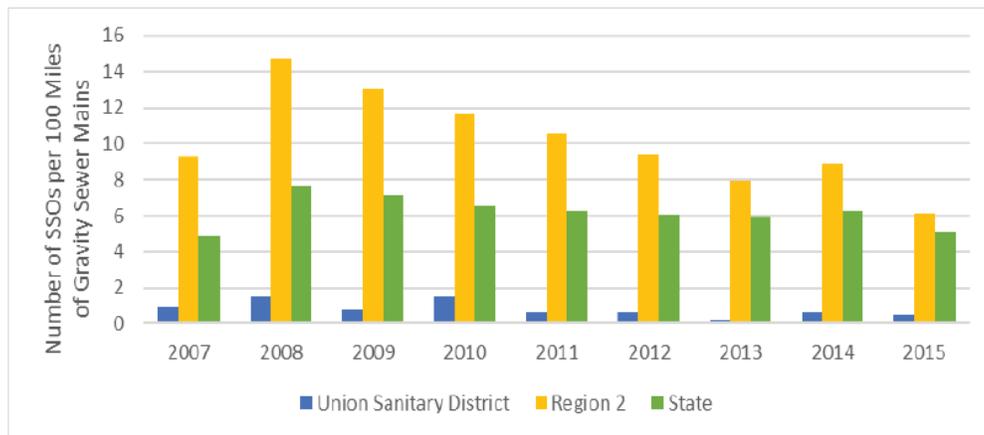
Information only.

### **Background**

The District's preventative maintenance program for the collection system currently utilizes a 72 month schedule. Essentially, the District's entire gravity system is cleaned and inspected every 72 months. The District have been utilizing this schedule for over 30 years. Although this schedule has met the needs of the District over the years, staff concluded that it was time to either confirm that the 72 month schedule was still desirable or if an alternate schedule and technologies should be further evaluated. The 72 month program has worked well for us as reflected in our spill rate compared to other agencies throughout the state (see figure 3 below).

Over the 30 years the District has accumulated sufficient data and history to better understand how the collection system performs. Staff has identified problematic areas of the system and have placed those on a more aggressive inspection and cleaning schedule or repaired the cause of the problem when possible. This includes the areas that are more susceptible to root issues than others.

**Figure 3. Sanitary Sewer Overflows (SSOs) per 100 miles of Gravity Sewer Mains**



*Source: CIWQS database 1/4/2016. Database includes all spills reported by the District since May 2007.*

As the District's system has aged, staff has noticed a significant increase in the number of both open trench and trenchless repairs identified during the inspection process. Staff has also observed a dramatic increase in the District's Root Control Program. The District's Root Control Program has grown over 250% over the last 10 years. This increase in repairs and root growth has resulted in a significant back log in construction, root control, and inspection work. The District retained West Yost and Associates to assist in the evaluation of the District's collections system, inspection and maintenance schedules, and evaluation of new technologies (cleaning and inspection equipment) as well as provide recommendations to optimize the District's current resources. West Yost performed a risk assessment calculation on each individual sewer main. This risk assessment evaluated the likelihood and consequence of a sewer failure. For this assessment a sewer failure is considered to be an event that could result in a sanitary sewer overflow (SSO). A sewer line with a high likelihood of failure would have a history of maintenance issues (i.e. grease, roots, etc.), structural issues (i.e. cracks, offsets, sags, etc.) or hydraulic capacity issues (i.e. surcharging). A sewer line with a high consequence of failure would be a line with the potential for high spill volume (i.e. trunk line), significant environment impact (adjacent to waters of the state) significant public exposure (i.e. school, parks, and public transit). Each of these categories were assigned a metric and a score was assigned to each of the District's lines. Each line then was placed into 5 different risk categories. The 5 categories are:

- Low Risk (A)
- Medium Low Risk (B)
- Medium Risk (C)
- Medium Risk (D)
- High Risk (E)

Over 60 percent of the District’s system is classified as Low to Medium Low Risk (475.2 miles). On the other end of the spectrum, 7.6 percent (59.8 miles) is classified as Medium High to High Risk.

**Table 9. Risk Assessment Results**

Miles of Gravity Sewer Mains		Likelihood of Failure					Total
		A (23 – 37)	B (38 – 50)	C (51 – 61)	D (62 – 79)	E (80-115)	
Consequence of Failure	A (27 – 41)	261.2	49.6	38.7	12.7	2.3	364.4
	B (42 – 56)	135.3	29.1	20.3	10.9	2.1	197.8
	C (57 – 86)	113.7	34.2	20.0	15.3	3.4	186.6
	D (87 – 104)	17.7	7.2	5.2	3.1	0.5	33.7
	E (105 – 135)	2.7	0.7	0.8	0.2	0.0	4.3
	Total	530.5	120.8	85.0	42.2	8.3	786.7

Risk Levels: Dark Green = Low, Light Green = Medium-Low, Yellow = Medium, Orange = Medium-High, Red = High

Because the majority of the District’s lines are in the low to medium risk categories, staff has increased their preventative maintenance schedule to 84 months.

This schedule increase is part of a two year pilot project. We will continue to monitor the lines in the pilot project to assure the increased maintenance schedule has no adverse impacts to our customers or spill rate. If the pilot is successful, staff will evaluate another schedule increase based on the studies of the original pilot.

We will continue the aggressive cleaning and inspection schedule the problematic lines are on; staff will also monitor those lines in the medium high to high risk categories.

This increased maintenance cycle will allow us to redirect some of our resources to focus on lowering our repair back log, maintain the District’s increasing root control program, and other tasks such as manhole and easement maintenance.

Staff also tasked West Yoast with the Comparison of Emerging Sewer Inspection Technologies. Some of the data provided by West Yost included: the use of an Autonomous CCTC Unit, CCTV w/Laser/Sonar, Pipe Penetrating Radar (PPR), and Acoustic Blockage Detection.

Collection Services is currently evaluating the use technologies for cost effectiveness and how they may fit in our daily operations.



News | January 10, 2017

## **Research From The AGU Fall Meeting: Groundwater Resources Around The World Could Be Depleted By 2050s**

Human consumption could deplete groundwater in parts of India, southern Europe and the U.S. in the coming decades, according to new research presented here today.

New modeling of the world's groundwater levels finds aquifers — the soil or porous rocks that hold groundwater — in the Upper Ganges Basin area of India, southern Spain and Italy could be depleted between 2040 and 2060.

In the U.S., aquifers in California's Central Valley, Tulare Basin and southern San Joaquin Valley, could be depleted within the 2030s. Aquifers in the southern High Plains, which supply groundwater to parts of Texas, Oklahoma and New Mexico, could reach their limits between the 2050s and 2070s, according to the new research.

By 2050, as many as 1.8 billion people could live in areas where groundwater levels are fully or nearly depleted because of excessive pumping of groundwater for drinking and agriculture, according to Inge de Graaf, a hydrologist at the Colorado School of Mines in Golden, Colorado.

"While many aquifers remain productive, economically exploitable groundwater is already unattainable or will become so in the near future, especially in intensively irrigated areas in the drier regions of the world," said de Graaf, who will present the results of her new research today at the 2016 American Geophysical Union Fall Meeting.

Knowing the limits of groundwater resources is imperative, as billions of gallons of groundwater are used daily for agriculture and drinking water worldwide, said de Graaf.

Previous studies used satellite data to show that several of the world's largest aquifers were nearing depletion. But this method can't be used to measure aquifer depletion on a smaller, regional scale, according to de Graaf.

In the new research, de Graaf and colleagues from Utrecht University in the Netherlands used new data on aquifer structure, water withdrawals, and interactions between groundwater and surrounding water to simulate groundwater depletion and recovery on a regional scale.

The research team used their model to forecast when and where aquifers around the world may reach their limits, or when water levels drop below the reach of modern pumps. Limits were considered “exceeded” when groundwater levels dropped below the pumping threshold for two consecutive years.

The new study finds heavily irrigated regions in drier climates, such as the U.S. High Plains, the Indus and Ganges basins, and portions of Argentina and Australia, face the greatest threat of depletion.

Although the new study estimates the limits of global groundwater on a regional scale, scientists still lack complete data about aquifer structure and storage capacity to say exactly how much groundwater remains in individual aquifers, she said.

“We don’t know how much water there is, how fast we’re depleting aquifers, or how long we can use this resource before devastating effects take place, like drying up of wells or rivers,” de Graaf said.

*SOURCE: American Geophysical Union*



## Sinkhole stops traffic on major Orinda street

**Posted:** Jan 11 2017 12:52PM PST **Updated:** Jan 11 2017 08:35PM PST

**ORINDA (KTVU)** -- Utility crews say it will take as many as three weeks to repair a sinkhole that opened after the recent heavy rains washed away part of a culvert near Miner and Camino Pablo roads, heavily traveled roadways that lead to homes and a nearby elementary school.

Workers spent several hours Wednesday assessing the damage caused by the sinkhole, which spans the entire width of Miner Road.

Two sewer lines under the road also broke, which sent sewage into the San Pablo Creek. Apparently, the ground beneath the sinkhole has washed away because of the heavy rainfall that has soaked the Bay Area in recent days.

Chris Carpenter with Central Contra Costa Sanitary District said it is not determined if the sewer lines broke before or as a result of the sinkhole, but said crews quickly installed a bypass sewer line.

Todd Fierner, an inspector for the city's Public Works Department, said the road is one of five primary streets in the city and the sinkhole, said to be 15-feet deep, would slow traffic.

It could have been devastating. It's big enough to swallow a whole car. It impacts a lot of residents," he said.

The Briones Reservoir facility serves as a source for East Bay MUD drinking water. MUD officials said there is no concern of any contamination to drinking water because of the amount of rain we've received and the amount of water in the reservoir. In addition, all water is treated in a 7-step process.

Orinda City Manager Janet Keeter said utilities would not be affected by the road closure and repairs, only the day to day traffic near Miner Road.

"We would appreciate the public's patience as we work through this project," Keeter said. "This is an unusual event. We are putting together what we consider a long term plan for the fix."

Residents say soaking rains flooded the intersection of Miner and Camino Lenada roads.

Said Jana Raines, who lives in the area: "The water was maybe 75 feet wide. It was just a lake."

She said the sinkhole wasn't noticeable until the water receded Wednesday morning. Firefighters responding to a call also noticed the sinkhole and stopped to assess the situation.

"There were coming to check on the neighbors," Raines said. "It could have been a lot worse."

***By KTVU reporter Allie Rasmus.***