CUPERTINO SANITARY DISTRICT SANITARY BOARD MEETING WEDNESDAY, SEPTEMBER 15, 2021

AGENDA

In accordance with Executive Order N-33-20, meeting to be held at 7:00 p.m. via teleconference [call 1 (866) 899 - 4679 Conference Access Code: 251566821] and anyone interested may also call in. The District Office at 20863 Stevens Creek Blvd, Suite 100, Cupertino is closed.

1. ROLL CALL

2. PUBLIC COMMENTS

THIS PORTION OF THE MEETING IS RESERVED FOR PERSONS DESIRING TO ADDRESS THE BOARD ON ANY MATTER NOT ON THE AGENDA. SPEAKERS ARE LIMITED TO THREE (3) MINUTES.

ALL STATEMENTS REQUIRING A RESPONSE WILL BE REFERRED TO STAFF FOR FURTHER ACTION. IN MOST CASES, STATE LAW WILL PROHIBIT THE BOARD FROM MAKING ANY DECISIONS WITH RESPECT TO A MATTER NOT LISTED ON THE AGENDA.

3. CLOSED SESSION

A. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION in accordance with government code section Paragraph (1) of Subdivision (d) of Section 54956.9, existing litigation. Name of Case: County Sanitation District 2-3, West Valley Sanitation District, Cupertino Sanitary District, Burbank Sanitary District and the City of Milpitas v. The City of San Jose, The City of Santa Clara and Does 1 through 50 inclusive.

4. MINUTES & BILLS

- A. APPROVAL OF THE MINUTES OF SEPTEMBER 1, 2021
- B. APPROVED MINUTES OF AUGUST 18, 2021
- C. PAYMENT OF BILLS AND APPROVAL OF FINANCIAL STATEMENT
- D. DIRECTOR'S MONTHLY TIMESHEETS

5. CORRESPONDENCE

- A. CITY OF SAN JOSE AND SANTA CLARA VALLEY WATER EFFORTS TOWARD PURIFIED WATER PROJECT
- B. COUNTY OF SANTA CLARA TREASURY INVESTMENT PORTFOLIO STATUS

CUPERTINO SANITARY DISTRICT SANITARY BOARD MEETING WEDNESDAY, SEPTEMBER 15, 2021

6. MEETINGS

NONE

7. REPORTS

- A. TELECONFERENCE MEETING OF THE SAN JOSE/SANTA CLARA TREATMENT PLANT TECHNICAL ADVISORY COMMITTEE (TAC) HELD ON SEPTEMBER 7, 2021
- B. TELECONFERENCE MEETING OF THE SAN JOSE/SANTA CLARA TREATMENT PLANT ADVISORY COMMITTEE (TPAC) HELD ON SEPTEMBER 9, 2021
- C. SANTA CLARA COUNTY SPECIAL DISTRICTS ASSOCIATION MEETING HELD ON SEPTEMBER 13, 2021

8. UNFINISHED BUSINESS

A. COVID-19 UPDATES

9. NEW BUSINESS

A. ELECTRICAL IMPROVEMENTS AT CRESCENT, SALEM, AND PIERCE LIFT STATIONS.

10. STAFF REPORT

- A. FUTURE DEVELOPMENT PROJECTS
- **B. PEAK FLOW REDUCTION**
- C. SILICON VALLEY FALL FESTIVAL HELD ON SEPTEMBER 11, 2021
- D. MONTHLY MAINTENANCE REPORT

11. CALENDAR ITEMS

A. NEXT REGULAR DISTRICT BOARD MEETING IS SCHEDULED TO BE HELD ON WEDNESDAY, OCTOBER 6, 2021

12. ADJOURNMENT

Item 4.A.

CUPERTINO SANITARY DISTRICT BOARD MEETING WEDNESDAY, SEPTEMBER 1, 2021

The Sanitary Board of the Cupertino Sanitary District convened this date at 7:01 p.m. This meeting was conducted in accordance with the Executive Order N-33-20 via teleconferencing. The District office at 20863 Stevens Creek Blvd, Suite 100, Cupertino was closed.

1. ROLL CALL:

President Saadati called the meeting to order, and the following proceedings were had to wit: Roll call was taken, with the following members in attendance:

Directors present: Angela S. Chen, Taghi S. Saadati, William A. Bosworth, John M. Gatto, and Patrick S. Kwok.

Staff present: District Manager Benjamin Porter, Deputy District Manager Robert Woodhouse, and Counsel Marc Hynes. Mark Thomas Principal Sasha Dansky joined after the closed session.

District Consultant: Richard Tanaka

Public: None

2. PUBLIC COMMENTS:

There were none.

3. CLOSED SESSION:

President Saadati adjourned the regular meeting session and opened the closed session at 7:02 p.m. Manager Porter and Deputy Manager Woodhouse were excused from the closed session.

A. Conference with legal counsel – Existing Litigation in accordance with government code section Paragraph (1) of Subdivision (d) of Section 54956.9, existing litigation. Name of Case: County Sanitation District 2-3, West Valley Sanitation District, Cupertino Sanitary District, Burbank Sanitary District, and the City of Milpitas v. The City of San Jose, The City of Santa Clara, and Does 1 through 50 inclusive.

Closed session was adjourned at 7:14 p.m. and the regular meeting was called to order. District Manager Porter and Deputy District Manager Woodhouse rejoined the regular meeting. There was no reportable action.

4. MINUTES:

- A. On a motion by Director Bosworth, seconded by Director Chen, by a vote of 4-0-1 the minutes of Wednesday, August 18, 2021, were approved. Director Gatto abstained due to his absence from the meeting.
- B. By consensus, the Minutes of Wednesday, August 4, 2021, are to be Noted & Filed.

CUPERTINO SANITARY DISTRICT BOARD MEETING WEDNESDAY, SEPTEMBER 1, 2021

5. CORRESPONDENCE:

There was none.

6. MEETINGS:

- A. Manager Porter plans to attend the teleconference meeting of The San Jose/Santa Clara Treatment Plant Technical Advisory Committee (TAC) scheduled to be held on September 7, 2021.
- B. Director Kwok plans to attend the teleconference meeting of The San Jose/Santa Clara Treatment Plant Advisory Committee (TPAC) scheduled to be held on September 9, 2021.
- C. Director Bosworth plans to attend the teleconference meeting of Santa Clara County Special Districts Association scheduled to be held on September 13, 2021.

7. REPORTS:

There were none.

8. UNFINISHED BUSINESS:

A. Manager Porter reported on COVID-19 updates.

9. NEW BUSINESS:

- A. The Board reviewed the Board Memo regarding Uniform Replacement. On a motion by Director Chen, seconded by Director Kwok, by a vote of 5-0-0 the Board authorized staff to purchase new uniform shirts at a total cost of \$2,074.00.
- B. The Board discussed TPAC Representation. Director Gatto nominated Director Kwok to take his place on the TPAC committee and nominated Director Chen for the alternate member role. On a motion by Director Kwok, seconded by Director Bosworth, by a vote of 5-0-0 the Board approved.

10. STAFF REPORTS:

- A. Manager Porter reported on Future Development Projects the Marina Plaza project. Staff had a meeting with the project team to understand how the project has changed since it was initially approved in 2015. Staff made preliminary recommendations regarding laterals and water meters.
- B. Manager Porter reported on Peak Flow Reduction and presented a draft brochure that describes the I/I Program. The brochure will be available at the Cupertino Fall Festival on September 11, 2021. The final version of the brochure will be sent to the Board members.

Deputy Manager Woodhouse discussed the status of the Smoke Testing Program. All the field work was completed last week, which was two weeks ahead of schedule. No significant defects were found in the five sewer basins where smoke testing was performed. Most of the defects were missing covers for the cleanouts on laterals.

CUPERTINO SANITARY DISTRICT BOARD MEETING WEDNESDAY, SEPTEMBER 1, 2021

The consultant V&A only spent one half of their budget for the smoke testing. The remaining funds (\$95,000) will be used on more focused lateral smoke testing in areas of the 2018 smoke testing program that did not produce smoke in 2018 and the 2022 wet weather flow monitoring program, which will be completed from January to March 2022.

11. CALENDAR ITEMS:

	The next regular District Board meeting is scheduled to be held on Wednesday, 2021.	September 15,
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2. ADJOURNMENT:	
On a motion properly made and seconded	, at 7:58 p.m. the meeting was adjourned.
Secretary of the Sanitary Board	President of the Sanitary Board

CUPERTINO SANITARY DISTRICT BOARD MEETING WEDNESDAY, AUGUST 18, 2021

The Sanitary Board of the Cupertino Sanitary District convened this date at 7:00 p.m. This meeting was conducted in accordance with the Executive Order N-33-20 via teleconferencing. The District office at 20863 Stevens Creek Blvd, Suite 100, Cupertino was closed.

1. ROLL CALL:

President Saadati called the meeting to order, and the following proceedings were had to wit: Roll call was taken, with the following members in attendance:

Directors present: Angela S. Chen, Taghi S. Saadati, William A. Bosworth, and Patrick S. Kwok. Director John M. Gatto was on excused absence.

Staff present: District Manager Benjamin Porter, Deputy District Manager Robert Woodhouse, and Counsel Marc Hynes.

District Consultant: Richard Tanaka

Public: None

2. PUBLIC COMMENTS:

There were none.

3. CLOSED SESSION:

President Saadati adjourned the regular meeting session and opened the closed session at 7:01 p.m. Manager Porter and Deputy Manager Woodhouse were excused from the closed session.

A. Conference with legal counsel – Existing Litigation in accordance with government code section Paragraph (1) of Subdivision (d) of Section 54956.9, existing litigation. Name of Case: County Sanitation District 2-3, West Valley Sanitation District, Cupertino Sanitary District, Burbank Sanitary District, and the City of Milpitas v. The City of San Jose, The City of Santa Clara, and Does 1 through 50 inclusive.

The closed session was adjourned at 7:10 p.m. and the regular meeting was called to order. District Manager Porter and Deputy District Manager Woodhouse rejoined the regular meeting.

There was no reportable action.

4. MINUTES & BILLS:

- A. On a motion by Director Kwok, seconded by Director Chen, by a vote of 4-0-0 the minutes of Wednesday, August 4, 2021, were approved as written.
- B. By consensus, the Minutes of Wednesday, July 21, 2021, are to be Noted & Filed.
- C. The Board reviewed July payable warrants and financial statements. The Board requested a table of the major tasks and subtasks in the Peak Flow Reduction program including hydraulic modeling,

CUPERTINO SANITARY DISTRICT BOARD MEETING WEDNESDAY, AUGUST 18, 2021

smoke testing, flow transfer negotiations with the City of Sunnyvale, investigation of flow conveyance and storage options, plus more detail for the costs for each task of the program. The Board also requested a monthly summary of staff hours per person working on the management, engineering, and maintenance and repair of the system, including inspectors, engineers, administration, and management. On a motion by Director Kwok, seconded by Director Chen, by a vote of 4-0-0, the financial statement and payment of bills were approved as written.

D. Board members will submit their August timesheets to Manager Porter.

5. CORRESPONDENCE:

A. The Board reviewed correspondence from the City of San Jose regarding Sewer Use Ordinance. San Jose asked the District to review our sewer use ordinance and make any revisions to be in alignment with the City of San Jose ordinance.

6. MEETINGS:

- A. District Manager Porter plans to attend the teleconference meeting of the San Jose/Santa Clara Treatment Plant Technical Advisory Committee (TAC) to be held on September 6, 2021.
- B. Director Kwok plans to attend the teleconference meeting of the San Jose/Santa Clara Treatment Plant Advisory Committee (TPAC) to be held on September 9, 2021.

7. REPORTS:

- A. Directors Chen, Kwok and Bosworth reported on the CSRMA Training for Management and Employee Training held August 11, 2021, in San Diego, CA.
- B. Director Bosworth reported on the CASA Annual Conference held August 11-13, 2021 in San Diego, CA.
 - a. Directors Chen and Bosworth reported on the CSRMA Board of Directors meeting. Cyber security is a big issue; Mark Thomas should assess risk to District.
 - b. District Counsel Hynes reported on Attorney's Committee meeting. In the future, all will need to demonstrate that workers are paid prevailing wage rates, not just construction contracts.
 - c. Director Kwok reported on Other conference sessions.

8. UNFINISHED BUSINESS:

Manager Porter reported on COVID-19 updates. Remote meetings may continue past the end of this year.

CUPERTINO SANITARY DISTRICT BOARD MEETING WEDNESDAY, AUGUST 18, 2021

9. NEW BUSINESS:

A. The Board discussed the Silicon Valley Fall Festival to be held September 11, 2021. The District may want to develop outreach to the community about the Peak Flow Reduction and I/I Program. The Board also considered what type of demonstrations and handouts to have.

The Board suggested that we provide a QR code that links to the District website where we post information on the Peak Flow Reduction and I/I Program. If possible, staff could present a video of smoke testing outcomes. Staff to check with V&A to see if they have a video of smoke testing.

10. STAFF REPORTS:

- A. District Manager Porter reported on Future Development Projects—Vallco Installer's Agreement. On a motion by Director Chen, seconded by Director Bosworth, by a vote of 4-0-0 the Installer's Agreement was approved with change.
- B. District Manager Porter and Deputy Manager Woodhouse reported on the Peak Flow Reduction. Staff suggested that Board authorize District Manager to sign the amendment to the existing agreement with Akel Engineering. The value of the amendment is \$22,640. On a motion by Director Chen, seconded by Director Bosworth, by a vote of 4-0-0 the Board approved authorization of the contract amendment.
- C. District Manager Porter reported on the monthly maintenance report.

11. CALENDAR ITEMS:

A. The next regular District Board meeting is scheduled to be held on Wednesday, September 1, 2021.

12. ADJOURNMENT:

On a motion properly made and seconded, at 8	:52 p.m. the meeting was adjourned.
Secretary of the Sanitary Board	President of the Sanitary Board

Sheet 1 of 2

CUPERTINO SANITARY DISTRICT

MONTHLY FINANCIAL REPORT THROUGH JUNE 2022

(2nd Month of Operations - 16% into FY Operations) FISCAL YEAR: July 1, 2021 to June 30, 2022

EXPENSE SUMMARY REPORT

Account Name	Account Number	BUDGET	Prior Expenses	Amount Payable	Total To Date Expenses	Remaining Balance	% Expended To	Comments
				AUG SERVICES			Date	
PERATING EXPENSES								
Loan Payments	41000	\$1,200,542	\$0.00	\$0.00	\$0.00	\$1,200,541.67	0.0%	None this month
Directors Fees	41030	\$38,000	\$1,622.20	\$4,398.24	\$6,020.44	\$31,979.56	15.8%	
Gasoline, Oil & Fuel	41060	\$3,000	\$0.00	\$0.00	\$0.00	\$3,000.00		None this month
Insurance	41060	\$170,000	\$3,785.08	\$3,714.94	\$7,500.02	\$162,499.98	4.4%	
Memberships	41080	\$57,000	\$8,085.95	\$2,458.50	\$10,544.45	\$46,455.55	18.5%	
Office Rent	41090	\$4,800	\$400.00	\$400.00	\$800.00	\$4,000.00	16.7%	On Target
Operating Expenses	41100	\$3,000	\$108.00	\$0.00	\$108.00	\$2,892.00	3.6%	None this month
Operating Expenses - Credit Card Transactio	n							
Fees	41100-1	\$6,000	\$359.10	\$523.50	\$882.60	\$5,117.40	14.7%	August Credit Card Processing Fees
Contractual Services:		70,000	7777	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7	70,		
Outfall Maintenance	41113	\$71,000	\$0.00	\$0.00	\$0.00	\$71,000.00	0.0%	None this month
T.P. Oper. & Maint.	41114	\$6,675,375	\$1,668,844.00	\$0.00	\$1,668,844.00	\$5,006,531.00	25.0%	
Professional Services:								
Management Services	41121	\$550,000	\$31,050.30	\$37,624.03	\$68,674.33	\$481,325.67	12.5%	On Target
SSMP Certification and Implementation	41121	\$100,000	\$127.00	\$0.00	\$127.00	\$99,873.00	0.1%	On Target
Engineering Services	41122	\$1,300,000	\$115,948.84	\$111,328.07	\$227,276.91	\$1,072,723.09	17.5%	On Target
Inflow/Infiltration Reduction	41122	\$500,000	\$82,505.12	\$65,781.72	\$148,286.84	\$351,713.16	29.7%	Peak flow reduction program; Akel Engineering Progress Payment #2
Plan Ckg. & Insp.	41123	\$300,000	\$13,760.77	\$12,996.40	\$26,757.17	\$273,242.83	8.9%	On Target
Legal - Consultant Services	41124	\$36,000	\$4,300.00	\$3,600.00	\$7,900.00	\$28,100.00	21.9%	Richard Tanaka - Consulting Services for August 2021
Legal - District Counsel	41124	\$60,000	\$2,250.00	\$0.00	\$2,250.00	\$57,750.00	3.8%	August billing not yet submitted
Legal - Common Interest Group (CuSD								
Advance Pay)	41124	\$1,014,000	\$0.00	\$113,537.34	\$113,537.34	\$900,462.66	11.2%	Hunton Andrews, LLP - June legal services
Legal - Common Interest Group (CuSD								
Share)	41124	\$286,000	\$0.00	\$32,023.35	\$32,023.35	\$253,976.65		Hunton Andrews, LLP- June legal services
Audit	41125	\$12,000	\$0.00	\$0.00	\$0.00	\$12,000.00	0.0%	
Printing & Publications	41130	\$28,000	\$0.00	\$0.00	\$0.00	\$28,000.00	0.0%	None this month
Repair and Maintenance		\$3,900,000						
Repairs	41150	\$450,000	\$11,020.07	\$42,341.49	\$53,361.56	\$396,638.44		On target; 2021 Overlay repairs
Maintenance	41151	\$3,450,000	\$289,378.79	\$237,954.80	\$527,333.59	\$2,922,666.41		On target
Travel & Meetings Staff	41170	\$15,000	\$0.00	\$0.00	\$0.00	\$15,000.00	0.0%	None this month
Travel & Meetings BOD	41170	\$18,000	\$2,380.00	\$3,771.91	\$6,151.91	\$11,848.09	34.2%	BOD Travel Expense Reimbursements - CASA Conference
Utilities	41190	\$70,000	\$5,194.60	\$1,217.18	\$6,411.78	\$63,588.22	9.2%	On Target
Refunds & Reimbursements:								
Miscellaneous	41201	\$50,000	\$0.00	\$0.00	\$0.00	\$50,000.00	0.0%	None this month
Connection Fees	41201	\$2,000	\$0.00	\$0.00	\$0.00	\$2,000.00	0.0%	
Checking & Inspection	41202	\$3,000	\$0.00	\$0.00	\$0.00	\$3,000.00	0.0%	
Emergency Funds	48000	\$250,000	\$6,991.95	\$4,955.60	\$11,947.55	\$238,052.45	4.8%	Three emergencies this month (one from AB/JDD and two from Able)
Consolidated Election	48001	\$0	\$0.00	\$0.00	\$0.00	\$0.00	0.0%	
OTAL OPERATING EXPENSES	10001	\$16,722,717	\$2,248,111.77	\$678,627.07	\$2,926,738.84	\$13,795,977.83	17.5%	· · · · · · · · · · · · · · · · · · ·
APITAL EXPENSES		,,- • •	v=,= ·-, · · · · · · ·	+,····	,,,-	, , ,	570	
District Sewer Capital & Support	46041	\$1,000,000	\$63.50	\$190.50	\$254.00	999,746.00	0.0%	Engineering Expenses for Wolfe Road Main Sewer Relocation
Treatment Plant Capital	46041	\$1,000,000	\$1,017,799.00	\$190.50	\$1,017,799.00	7,412,422.00	12.1%	
Outfall Capital	46042 46042	\$8,430,221 \$1,095,045	\$1,017,799.00	\$0.00	\$1,017,799.00	1,095,045.00	0.0%	None this month
District Equipment	46042	\$1,095,045	\$4,050.16	\$4,533.51	\$8,583.67	1,095,045.00	5.7%	
	46043	\$300,000	\$4,050.16	\$4,533.51	\$8,583.67	300,000.00	0.0%	Nebrand Fump for Florence Pump Station (Snape)
Replacement Fund	40044							
OTAL CAPITAL EXPENSES		\$10,975,266	\$1,021,912.66	\$4,724.01	\$1,026,636.67	\$9,948,629.33	9.4%	
OTAL EXPENSES		\$27,697,983	\$3,270,024,43	\$683,351.08	\$3,953,375.51	\$23,744,607.16	14.3%	

CUPERTINO SANITARY DISTRICT

MONTHLY FINANCIAL REPORT THROUGH JUNE 2022 (2nd Month of Operations - 16% into FY Operations) FISCAL YEAR: July 1, 2021 to June 30, 2022

REVENUE SUMMARY REPORT

Account Name	Account Number	BUDGET	Prior Receipts	Current Month Receipts	Total Amount Received	Remaining Balance to	% Earned To Date	Comments
				Aug Receipts		Collect		
OPERATING REVENUES								
Service Charges								
Handbilling	31010	\$574,901.00	\$0.00	\$0.00	\$0.00	\$574,901.00	0.0%	None this month
Tax Roll	31010	\$18,647,000.00	\$0.00	\$0.00	\$0.00	\$18,647,000.00	0.0%	None this month
Permit Fees	31020	\$75,000.00	\$12,441.32	\$4,400.00	\$16,841.32	\$58,158.68	22.5%	Thirteen payments received this month; Forty-six payments received to date
Connection Fees	31031	\$300,000.00	\$0.00	\$11,034.00	\$11,034.00	\$288,966.00	3.7%	One payment received this month
Capacity Fees	31032	\$450,000.00	\$0.00	\$5,212.00	\$5,212.00	\$444,788.00	1.2%	One payment received this month
Pump Zone Fees	31033	\$20,000.00	\$0.00	\$0.00	\$0.00	\$20,000.00	0.0%	None this month
Checking & Inspection Fees	31040	\$300,000.00	\$12,300.00	\$8,700.00	\$21,000.00	\$279,000.00	7.0%	Twenty payments received this month; Fifty-one payments received to date
Annexation	32010	\$2,500.00	\$0.00	\$0.00	\$0.00	\$2,500.00	0.0%	None this month
Interest	32050	\$200,000.00	\$0.00	\$24,789.57	\$24,789.57	\$175,210.43	12.4%	Q4 FY2020-2021
City of San Jose Credit(s)	32091	\$500,000.00	\$0.00	\$0.00	\$0.00	\$500,000.00	0.0%	None this month
Legal - Common Interest Group (Tributaries)	32092.1	\$1,014,000.00	\$42,646.29	\$350,000.00	\$392,646.29	\$621,353.71	38.7%	Payment from City of Milpitas for unpaid CIG/Tribs Share of Costs
Legal - Common Interest Group								
(2% Admin Fees)	32902.2	\$14,000.00	\$870.33	\$0.00	\$870.33	\$13,129.67	6.2%	
Refunds/Reimbursements - Misc.		\$10,000.00	\$0.00	\$0.00	\$0.00	\$10,000.00	0.0%	None this month
Lateral Construction	32093	\$15,000.00	\$0.00	\$0.00	\$0.00	\$15,000.00	0.0%	None this month
TOTAL OPERATING REVENUE		\$22,122,401.00	\$68,257.94	\$404,135.57	\$472,393.51	\$21,650,007.49	2.14%	
		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%	Reserve Account
TOTAL OPERATING REVENUE		\$22,122,401.00	\$68,257.94	\$404,135.57	\$472,393.51	\$21,650,007.49	2.14%	

CASH ACCOUNT SUMMARY

		Replacement	Comingled	Cal Bank	Loan Balance	
Date	Operating Fund	Fund	Fund	Trust Acct	with interest *	Net Cash
FY 2020-21 Balance	\$18,598,059.22	\$3,000,000.00	\$15,598,059.22	\$1,258,057.67	\$1,107,676.36	\$20,963,793.25
July 31, 2021	\$16,183,910.31	\$3,000,000.00	\$13,183,910.31	\$1,279,657.80	\$1,107,694.57	\$18,571,262.68
August 31, 2021	\$14,986,161.40	\$3,000,000.00	\$11,986,161.40	\$1,290,453.41	\$1,107,713.99	\$17,384,328.80

FOR CAL BANK SUMMARY, SEE ATTACHED DETAIL.

CALIFO	RNIA BAI	NK AND '	TRUST	ACCOUNT	SUMM	ARY AS	OF 8/31/2	2021	
		Total Interest Earned or	Interest or		Interest or Refund Prorated to			Checking Acct Balance	
		Refund	Refund		\$600K	District Portion		(Credit Card	
		Received from	Prorated to	Loan Balance	District	of Savings	Total Savings	Payments	TOTAL AT CAL
Cal Bank Activitie	. c	CSJ	Loan Balance	w/Interest	Savings	Balance	balance	Received)	BANK
		000	Louir Balarioo			Balanco		,	
	Check Amount			\$10,000,000.00			\$10,000,000.00	=	\$10,000,000.00
101 San Jose 10/16/2019	\$2,180,309.00			\$7,819,691.00			\$7,819,691.00		\$7,819,691.00
102 San Jose 10/16/2019	\$29,515.44			\$7,790,175.56			\$7,790,175.56		\$7,790,175.56
103 Tesco 11/20/2019	\$17,707.00			\$7,772,468.56			\$7,772,468.56		\$7,772,468.56
104 Shape 11/20/2019	\$108,814.78			\$7,663,653.78			\$7,663,653.78	=	\$7,663,653.78
105 Tesco 12/18/2019	\$169,018.00		***	\$7,494,635.78			\$7,494,635.78	3	\$7,494,635.78
106 Con Quest 12/18/2019	\$385,242.58	\$30,683.35	\$30,683.35	\$7,140,076.55			\$7,140,076.55		\$7,140,076.55
107 San Jose 1/15/2020	\$6,966,355.00			\$173,721.55			\$173,721.55		\$173,721.55
Interest through 3/31/20		\$6,823.36	\$6,823.36				\$180,544.91		\$180,544.91
Deposit 4/16/2020		·		\$180,544.91		\$600,000.00		\$2,996.28	\$783,541.19
Balance as of 5/30/2020		\$179.37	\$41.50	\$180,586.41	\$137.87	: ' ' :			\$786,469.09
Balance as of 6/30/2020		\$197.98	\$45.80	\$180,632.21	\$152.18				
Balance as of 7/31/2020		\$191.84	\$44.37	\$180,676.58	\$147.47				\$818,846.85
Balance as of 8/31/2020		\$154.53	*	\$180,712.33	*	8 ' ' '		, -,	\$829,488.68
Balance as of 9/30/2020		\$25.62		\$180,718.25		8 ' ' '			\$837,353.47
Balance as of 10/31/2020		\$25.62	\$5.93	\$180,724.18			' '	\$67,713.45	\$849,033.32
Balance as of 11/30/2020		\$26.47	\$6.12	\$180,730.30				\$80,097.89	\$861,444.23
Balance as of 12/31/2020		\$26.47	\$6.12	\$180,736.42	\$20.35	\$600,636.39	\$781,372.81	\$89,436.48	\$870,809.29
Balance as of 1/31/2021		\$24.83	\$5.74	\$180,742.17	\$19.09	\$600,655.47	\$781,397.64	\$99,672.14	\$881,069.78
Balance as of 2/28/2021		\$23.98	\$5.55	\$180,747.71	\$18.43	\$600,673.91	\$781,421.62	\$108,211.86	\$889,633.48
Balance as of 3/31/2021		\$28.26	\$6.54	\$180,754.25	\$21.72	\$600,695.63	\$781,449.88	\$121,953.35	\$903,403.23
Balance as of 4/30/2021		\$22.27	\$5.15	\$180,759.40	\$17.12	\$600,712.75	\$781,472.15	\$135,672.77	\$917,144.92
Balance as of 5/31/2021		\$11.99	\$2.77	\$180,762.18	\$9.22	\$600,721.96	\$781,484.14	\$153,926.10	\$935,410.24
Deposit - CSJ Refund 6/22/2021		\$1,415,667.34	\$926,903.93	\$1,107,666.11	\$488,764.41	\$1,089,486.37			
Balance as of 6/30/2021		\$20.34	\$10.25	\$1,107,676.36		\$1,089,496.46		\$168,561.21	\$2,365,734.03
Balance as of 7/31/2021		\$36.12		\$1,107,694.57		\$1,089,514.37			\$2,387,332.03
Balance as of 8/31/2021		\$38.53	\$19.42	\$1,107,713.99		\$1,089,533.48		=	\$2,398,131.28
		·	·	, , ,			, , ,	, ,	. , ,
TOTAL OR BALANCE AMOUNT	\$9,856,961.80	\$1,454,208.27	\$964,675.79	\$1,107,713.99	\$489,533.48	\$1,089,533.48	\$2,197,211.35	\$200,919.93	\$2,398,131.28

CUPERTINO SANITARY DISTRICT WARRANTS PAYABLE - September 15, 2021

WARRANT NUMBER	<u>FUND</u>	AMOUNT	PAYEE	<u>DESCRIPTION</u>	
N/A	M&O	\$ 4,398.24	ADP	Directors' Salary	
19212	M&O	\$ 992.08	Dooley Insurance Services	Insurance - Group Life & Dental	
19213	M&O	\$ 2,722.86	Network Adjusters	Insurance - Gen. Liability (Deductible)	
19214	M&O	\$ 2,458.50	East Bay Muni-BACWA	Memberships	
N/A	M&O	\$ 523.50	CalBank Credit Card Processing Fees	Operating Exp Credit Card Processing Fees	
19215	M&O	\$ 345,730.58	Mark Thomas	Office Rent	400.00
				Management Services	37,624.03
				Engineering Services	111,328.07
				Peak Flow Reduction	41,626.72
				Plan Checking & Inspection	12,996.40
				Repairs	8,582.49
				Maintenance	128,616.74
				Utilities	1,052.70
				Emergency Funds	3,312.93
				District Sewer Capital & Support	190.50
19216	M&O	\$ 24,155.00	Akel Engineering	Peak Flow Reduction	
19217	M&O	\$ 3,600.00	Richard K. Tanaka	Legal - Consultant Services	
19218	M&O	\$ 145,560.69	Hunton Andrews Kurth, LLP	Legal - CIG/Tribs (CuSD Advance Pay)	113,537.34
				Legal - CIG/Tribs (CuSD Share)	32,023.35
19219	M&O	\$ 8,228.91	Tritech Software/CentralSquare	Maintenance - Lucity	
19220	M&O	\$ 9,257.21	Aqua Natural	Maintenance	
19221	M&O	\$ 28.49	Grainger	Maintenance	
19222	M&O	\$ 314.25	Home Depot	Maintenance	
19223	M&O	\$ 55.58	City of Cupertino	Maintenance	
19224	M&O	\$ 8,648.64	RotoRooter	Maintenance	
19225	M&O	\$ 87,749.15	Able Underground Construction	Maintenance	52,967.48
				Repairs	33,759.00
				Emergency	1,022.67
19226	M&O	\$ 30,457.50	AB/JDD Plumbing Heating & AC	Maintenance	29,837.50
				Emergency	620.00
19227	M&O	\$ 906.10	Angela Chen	Travel & Meetings BOD	
19228	M&O	\$ 923.24	Bill Bosworth	Travel & Meetings BOD	
19229	M&O	\$ 1,121.77	Patrick Kwok	Travel & Meetings BOD	
19230	M&O	\$ 820.80	Taghi Saadati	Travel & Meetings BOD	
19231	M&O	\$ 56.63	City of Santa Clara Utilities	Utilities	
19232	M&O	\$ 107.85	San Jose Water Company	Utilities	
19233	M&O	\$ 4,533.51	Shape Inc.	District Equipment	
TOTAL WAR	RANTS	\$ 683,351.08	=		

Pk Flow Red. Total: \$ 65,781.72 Mark Thomas, Akel Engineering

Maintenance Total: \$ 237,954.80 Mark Thomas, TriTech, Aqua Natural, Grainger, Home Depot, Roto Rooter, ABLE, AB/JDD

<u>Utilities Total:</u> \$ 1,217.18 Mark Thomas, Santa Clara Utilities, San Jose Water

Emergency Total: \$ 4,955.60 Mark Thomas, AB/JDD, Able

EMERGENCY DETAILS:

Roto-Rooter - no emergencies this month **Able** - two emergencies this month

AB/JDD Plumbing - one emergency this month

Item 5.A.



Clean Water • Healthy Environment • Flood Protection

BOARD OF DIRECTORS

John L. Varela (District 1)

Barbara F. Keegan (District 2)

Richard P. Santos (District 3)

Linda J. LeZotte (District 4)

Nai Hsueh (District 5)

Tony Estremera / Chair (District 6)

Gary Kremen / Vice Chair (District 7)

The Honorable Chappie Jones Vice Mayor of San José 200 East Santa Clara Street, 18th Floor San Jose, CA 95113

CHIEF EXECUTIVE OFFICER

Rick L. Callender, Esq.

CLERK OF THE BOARD

Michele L. King, CMC

Dear Vice Mayor Jones:

September 1, 2021

I would like to take this opportunity to thank you, Councilmember Jimenez, staff from Mayor Sam Liccardo's office, and staff from Councilmember David Cohens office, for your time and effort as we work jointly to advance the use of purified water.

Furthermore, I would like to capture some points that were raised from our informal discussions throughout August and establish some of those as agreed upon guiding principle and next steps in order to achieve some level of progress from our joint meetings.

First and foremost, I am very pleased with the agreement from both parties for Santa Clara Valley Water District (Valley Water) and City of San Jose staff to return to the negotiating table with an agreed-upon facilitator that would help our organizations address terms for water, land lease, Reverse Osmosis concentrate management, and the integration agreement. It is our intention that the elected officials that have participated in recent discussions shall also be present in these facilitated meetings. It is my hope that this would lead to concurrence on informal deal points for future consideration by our full Board and your full City Council.

I also want to reiterate the commitment from both parties for staff to provide draft "term sheets" for use in the aforementioned facilitated discussions. Let me also memorialize my verbal commitment to explore compensation from Valley Water for City staff time on this critical proposed capital project. In addition, there was a commitment to establish regular updates and also consultation with the Treatment Plant Advisory Committee (TPAC).

Lastly, we all agreed to regular check-ins with the elected officials from each respective body, in order to ensure progress is made, and that policy direction is vetted with the decision-makers in order to avoid long delays with deal points that may or may not need further guidance and/or clarification. Let me also take this opportunity to acknowledge that in our last conversation, we arrived at a consensus that the timeline to have an agreement in place will be by the end of the 2021 calendar year.

We look forward to our continued discussions as we build on your leadership towards City Council action and appreciate your effort towards making progress on this important project. Thank you for your time and consideration, it is greatly appreciated.

Sincerely,

Tony Estremera

Chair, Board of Directors

kn:fd

cc: San Jose Council and City Manager, Santa Clara Council and City Manager, TPAC 0831a-l

RULES COMMITTEE: 09/08/21

ITEM: G.2



Memorandum

TO: RULES AND OPEN

GOVERNMENT COMMITTEE

FROM: Vice Mayor Chappie Jones

Councilmember David Cohen Councilmember Sergio Jimenez

SUBJECT: City of San José and Santa Clara

Valley Water Efforts Toward Purified Water Project **DATE:** September 1, 2021

Approved

Date: August 26, 2021

Ocil Colon Sergio frico

RECOMMENDATION

- 1. Coordinate with the Santa Clara Valley Water District (Valley Water) to immediately select a mutually agreed upon subject matter expert to facilitate negotiation meetings between the City of San José and Valley Water.
- 2. Both parties are to enter the first negotiation meeting with a clear, concise, and detailed term sheet which would clarify negotiation outcomes for January 2022.
- 3. Accept a written letter from Valley Water indicating Valley Water's commitment to pay for City support services for an amount adequate to fund all costs incurred by the City to support negotiation of new agreements including legal services and a facilitator; and authorize the City Manager to negotiate and execute a Master Agreement for Valley Water's payment for City services required to support negotiations related to the purified water project consistent with the City Council's direction from April 13, 2021.
- 4. Continue to hold check-in meetings, as needed, comprised of elected officials and/or representatives from the San José City Council and Valley Water Board of Directors.
- 5. Provide verbal reports of progress from San José City staff to the Transportation & Environment Committee and Treatment Plant Advisory Committee.
- 6. Place this item on the September 14, 2021 Council Agenda for action.

ANALYSIS

This memorandum is a result of continued conversations between the City of San José and Valley Water regarding purified water efforts in Santa Clara County. Both the City of San José and Valley Water acknowledge the importance of prioritizing the pursuit of expanded recycled water use to increase local, drought-resilient supply and reduce reliance on imported water.

Taking into consideration the lack of significant process pertaining to previous direction given by the San José City Council earlier this year, we are recommending that city staff work with Valley Water to

RULES AND OPEN GOVERNMENT COMMITTEE

September 8, 2021

Subject: City of San José and Santa Clara Valley Water Efforts Toward Purified Water Project

Page 2

immediately select a mutually agreed upon facilitator to expedite the negotiation process, while taking into consideration Council direction from April 20th 2021. Mutually agreed upon would ideally require both parties to propose a few candidate facilitators and ultimately agree upon the proposed candidate. In addition, both parties would enter the first negotiation meeting with a clear, concise, detailed term sheet which would clarify negotiation outcomes for January 2022. Valley Water has agreed to provide a written letter indicating their willingness and commitment to provide financial resources to compensate for costs incurred by the City. On or about April 2021, the City provided a draft Master Agreement for payment of City services to support negotiation for Valley Water's consideration.

Throughout the negotiation process, we recommend that elected officials from the City of San José and Valley Water have check-in meetings to provide additional guidance if necessary and receive updates from staff regarding progress. These meetings are not intended to be a venue for negotiations between the elected officials and staff. Additionally, it is beneficial for city staff to provide verbal reports of progress to T&E and TPAC to ensure the inclusion of major stakeholders throughout the negotiation process.

The City and Valley Water share a history of working together. This project constitutes a continuation of this working history to increase the usage of recycled water, similar to Valley Water's collaborative efforts with the City of Palo Alto and Mountain View. A reliable supply of clean water is necessary for the environmental, economic, and social well-being of Santa Clara County and it is important that we continue working together to develop locally controlled, drought-resilient supplies.

The signers of this memorandum have not had, and will not have, any private conversation with any other member of the City Council, or that member's staff, concerning any action discussed in the memorandum, and that each signer's staff members have not had, and have been instructed not to have, any such conversation with any other member of the City Council or that member's staff.

Item 5.B.

County of Santa Clara

Finance Agency Controller-Treasurer Department

County Government Center 70 W. Hedding Street, East Wing, 2nd Floor San Jose, California 95110-1705 (408) 299-5200 FAX (408) 288-9237



August 30, 2021

DocuSigned by: Submitted by: 88c2 Maigaret Olaiva, Acting Finance Director

TO: BOARD OF TRUSTEES, SANTA CLARA COUNTY SCHOOL DISTRICTS

BOARDS OF DIRECTORS, SANTA CLARA COUNTY SPECIAL PURPOSE DISTRICTS

DocuSigned by:

FROM: MARIA OBERG, ASSISTANT CONTROLLER-TREASURER

Maria Oberg

SUBJECT: COUNTY OF SANTA CLARA TREASURY INVESTMENT PORTFOLIO STATUS

RECOMMENDATION

Receive and file the June 30, 2021 Detailed Investment Portfolio Listing.

DISCUSSION

In compliance with the State of California Government Code as amended by Chapters 783 and 784, Statutes of 1995 and in compliance with County Policy, the Santa Clara County Treasury Investment Portfolio Report as of June 30, 2021 is submitted for your review and acceptance.

The attached detailed investment reports list each investment of the County Treasury Pool, as well as individual reports for specific investment funds that each school district or special district has in the County Treasury. The reports include the respective purchase and maturity dates, par value, amortized cost, market value, and yield to maturity for each investment.

A summary of market value versus cost is provided below for Commingled Investments of the County Pool.

Increase Market Value Cost (Decrease) Percent Commingled Investments 0.40% \$ 9,828,655,640 \$ 9,867,890,267 \$ 39,234,627

Board of Supervisors: Mike Wasserman, Cindy Chavez, Otto Lee, Susan Ellenberg, Joe Simitian

County Executive: Jeffrey Smith

TO: SANTA CLARA COUNTY SCHOOL DISTRICTS AND SPECIAL PURPOSE DISTRICTS Page 2

The yield of the Pool on June 30, 2021 was .76%. As a comparison, on June 30, 2021 the yield of a 6-month Treasury Bill was .05%. A two-year Treasury Note was .25%. The State of California Local Agency Investment Fund (LAIF) yield was .26%.

Attached with the current investment strategy is a schedule that lists the average weighted maturities and yield for the Commingled Investment Pool. Charts outlining investment concentration and distribution of bond maturities are provided for the Pool. Also included is a chart showing the one-year history of the Pool along with interest rates offered by selected comparable instruments.

Securities are purchased with the expectation that they will generally be held to maturity, hence unrealized gains or losses are not reflected in the yield calculations.

The market values of Pool securities were taken from pricing services provided by Bank of New York Mellon, Bloomberg Analytics, dealer quotes, and an independent pricing service.

A combination of maturing securities, new revenues, and tax receipts will adequately cover the anticipated cash flow needs for the next six months. Cash flows are continually monitored and are considered paramount in the selection of securities purchased for the Pool.

Attachments:

June 30, 2021 Quarterly Investment Report

Board of Supervisors: Mike Wasserman, Cindy Chavez, Otto Lee, Susan Ellenberg, Joe Simitian County Executive: Jeffrey Smith



Cupertino Sanitary District

Memo

Item 9.A.

To: Board of Directors

From: Benjamin Porter, District Manager-Engineer

Date: September 15, 2021

Re: ELECTRICAL IMPROVEMENTS AT CRESCENT, SALEM, AND PIERCE

PUMP STATIONS

Summary:

On August 27, 2021, District inspector met up with St. Francis Electric at Crescent Court, Salem, and Pierce Pump Stations. The purpose of this meeting was to show the St. Francis technician the electrical work that needs to be done.

Currently, maintenance and regular monitoring of these stations and electrical components inside the wet well is unsafe and requires extensive manpower. To ensure the safety of crewmembers and reduce labor cost, staff recommends improvements to minimize confined space entry, which requires a minimum of three inspectors for each entry into the live wet well to check electronic components. Staff recommends relocating the existing junction boxes to the exterior. See attached As-Built files with work highlighted in yellow and the cost proposal for the scope of work from St. Francis Electric. The following information provides more details of the scope of each station.

Crescent Court Pump Station:

1. The fixed floats and ultrasonic transducer are going bad and should be replaced with the better floats and transducers we use for the other stations

Salem Pump Station:

- 1. The pump cables are connected inside the wet well, making it unsafe to reconnect when changing pumps.
- 2. The connectors inside the wet well for the pumps are going bad and need to be removed.
- 3. The floats and transducer share one small pipe from the wet well to the control cabinet, making it impossible to pull one wire through when there is a problem.
- 4. The pipes from the wet well to the cabinet bring in gas from the wet well causing the electrical components to corrode, so a junction box should be installed.

Pierce Pump Station:

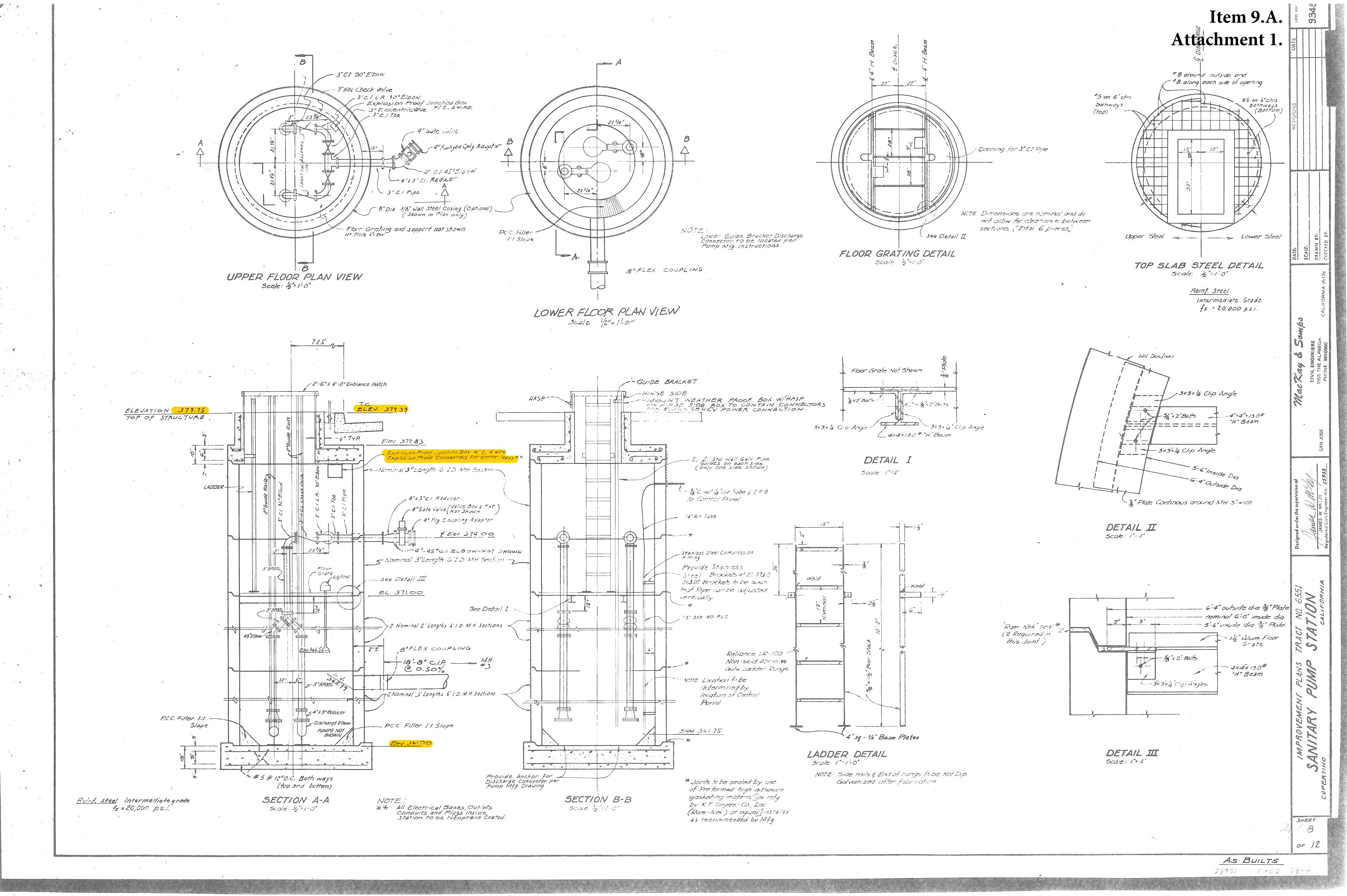
- 1. The pump cables have been spliced and have the same plug connections in the wet well as Salem. The connectors are going bad.
- 2. There are too many bends and turns to pull the cables through to the cabinet when there is need to replace a pump or float.
- 3. The floats and transducers all share the same pipe, making it impossible to pull only one through when they need to be replaced.
- 4. There is no junction box between the wet well and cabinet, causing the gasses to get in the cabinet and cause corrosion. It is also unsafe.

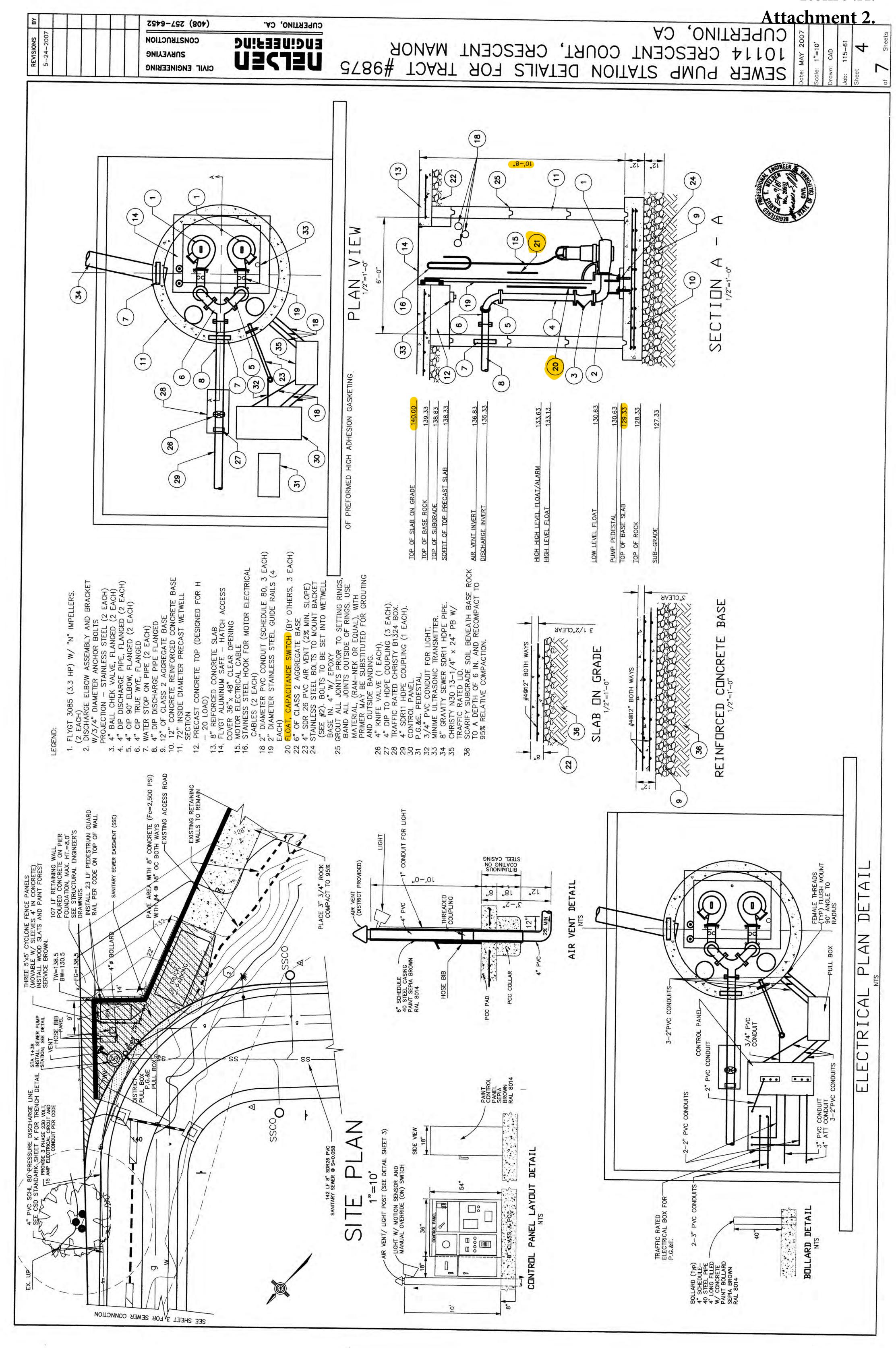
Recommendation:

To authorize staff to proceed with this work.

Attachments:

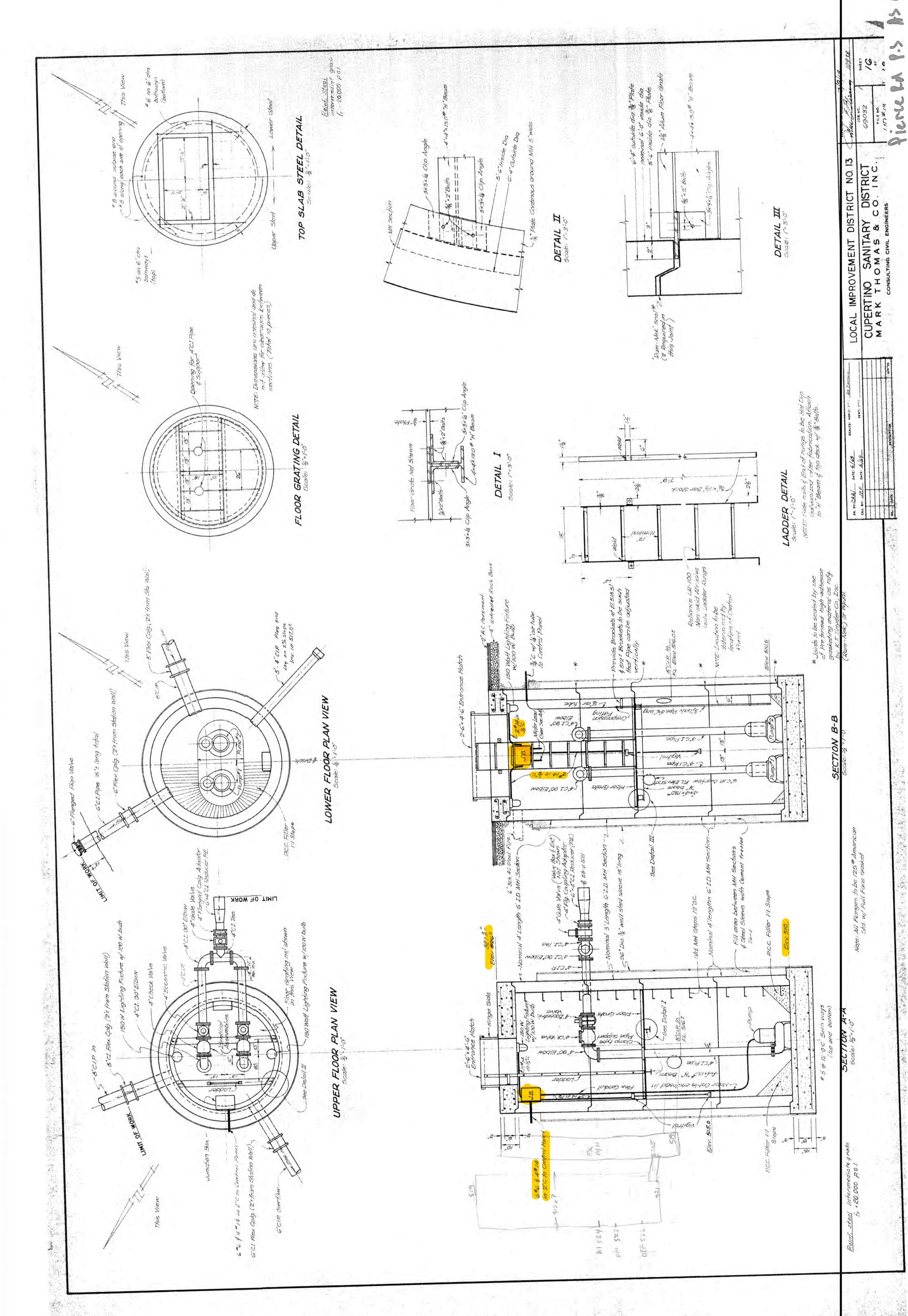
- 1. As-Built Plan Crescent Pump Station
- 2. As-Built Plan Salem Pump Station
- 3. As-Built Plan Pierce Pump Station
- 4. Proposal from St. Francis Electric





יום שמש לה מת במת המו המו המו בא מם לה מכי לכי כל כתחו

Item 9.A. Attachment 3.



Item 9.A. Attachment 4.



September 7, 2021

Cupertino Sanitary Lift Stations

Base Bid

ITEM	DESCRIPTION	UNIT	QTY	PRICE	TOTAL
1	CRESENT LIFT STATION IMPROVEMENT WORK - Remove/label floats, remove EXPO unit, Install floats, install eye bolts, install transducer, pull wire, duct seal pipes. (One electrician (1) day)	LS	1	\$ 2,695.00	\$ 2,695.00
2	SALEM LIFT STATION IMPROVEMENT WORK - Saw cut concrete 4", remove concrete, core well (1)Lg (4) Sm, Install Cristy N9 w/lid, pull wire, conduit, backfill & concrete, re-pull (3) ex floats, re-pull ex transducer, seal pipes, demo existing. Includes concrete off haul. (One electrician 2 days, Two laborers (2) days).	LS	1	\$ 10,840.00	\$ 10,840.00
3	PIERCE LIFT STATION IMPROVEMENT WORK - Saw cut asphalt, remove asphalt, core well (1) Lg (4) Sm, Install Christy N9 w/lid, pull wire, conduit, backfill & asphalt, re-pull (3) ex floats, re-pull transducer, seal pipes, demo existing. Includes asphalt off-haul. (One electrician 2 days, Two laborers (2) days).	LS	1	\$ 10,585.00	\$ 10,585.00
4					\$
5					\$ -
6					\$ -
7					\$ -
8					\$ -
9					\$ -
10					\$ -
11					\$ -
12					\$ -

If you have any questions please contact Monica Kint @ 510-639-0639 ext. 257

mkint@sfe-inc.com

975 Carden St. San Leandro, CA 94577 Lic. #1003811 Exp. 5/31/23 DIR Reg. # 1000022208



CUPERTINO SANITARY DISTRICT

XPSWMM HYDRAULIC MODEL REVIEW

Final

July 2021





July 30, 2021

Cupertino Sanitary District 20863 Stevens Creek Boulevard, Suite 100 Cupertino, CA 95014

Attention: Bob Woodhouse, P.E.

Deputy District Manager, Mark Thomas

Subject: XPSWMM Hydraulic Model Review – Technical Memorandum

This technical memorandum (TM) documents the review of the Cupertino Sanitary District (CuSD) XPSWMM hydraulic model. The CuSD XPSWMM hydraulic model was developed by Mark Thomas and Co Engineers (Mark Thomas) and is used to simulate dry and wet weather flow conditions in its sanitary sewer system.

In support of evaluating upcoming development and a potential future infiltration and inflow (I/I) reduction study, Akel Engineering Group (Akel) was asked to review the XPSWMM model for accuracy and consistency with general modeling practices. This TM documents the results of this review and includes the following sections:

- Previous Reports and Data Collection
- Model Review
 - Physical Characteristics
 - Flow Development
 - Flow Monitoring Program
 - Model Calibration
- Recommended Model Enhancements
- Conclusions and Next Steps

1.0 PREVIOUS REPORTS AND DATA COLLECTION

CuSD staff provided critical background reports and information in support of the Model review. This included the following:

 Flow Modeling Analysis, Homestead Flume Outfall to City of Santa Clara (December 2019). This report provided an overview of the CuSD sanitary system and a summary of the model development and validation process.

- 2016 Flow Monitoring Program Report and Data. The 2016 Flow Monitoring Report and monitor data, originally prepared by Villalobos and Associates (V&A), was provided as part of the model calibration review.
- XPSWMM Model Scenarios. The following XPSMM model scenarios were provided by CuSD staff for review: dry weather calibration, wet weather calibration, wet weather evaluation (design storm basis).
- Other Assumption/Background Documentation. Multiple workshops were conducted with CuSD staff to develop a greater understanding of the assumptions and background regarding the model development and use.

2.0 MODEL REVIEW

This section summarizes the results of the XPSWMM model review, which included the following key areas: physical characteristics, flow development, flow monitoring program, and model calibration.

2.1 Physical Characteristics

The purpose of the physical characteristic review is to determine the basis of development for the following components of the hydraulic model:

- Pipelines: Diameter, inverts, connectivity.
- Manholes: Inverts.
- Lift Stations: Wet well geometry, wet well inverts, pump head and flow.

2.1.1 Pipeline/Manholes Review

According to CuSD staff the information for the modeled pipelines and manholes was extracted from GIS records in or before the year 2013. This information included pipeline diameters, pipeline and manhole inverts, and system connectivity. Additional field survey was performed as part of the model development process to estimate flow splits at points where multiple downstream pipelines connected to a single manhole. As a part of this review CuSD staff provided an example of the records prepared during this pipeline connectivity survey.

The review indicates that the modeled pipeline diameters, inverts, and connectivity are consistent with typical modeling practices. Additionally, the original data sources and other verification elements are considered a valid basis for model development.

2.1.2 Lift Station Review

The Model includes numerous lift stations. Each lift station consists of a wet well, pump, and force main. CuSD staff provided a lift station inventory as part of the review, which documented the location, flow capacity, and wet well volume of each lift station.

Currently, a majority of the modeled pumps share the same pump curve. Based on a review of the modeled pump operations, this results in flows for certain pump stations that exceed the rated firm station capacity. However, in general the review indicates that the lift stations are modeled in a manner consistent with typical modeling practices.

2.2 Flow Development

The Model includes the two types of flow conditions: dry weather and wet weather. The following sections discuss the review of the basis of flows, allocation methodology, and flow verification.

2.2.1 Dry Weather

The dry weather flows serve as the baseline flow condition for any hydraulic model. Typically, a hydraulic model includes, at minimum, two dry weather flow conditions: Average Dry Weather Flow (ADWF) and Peak Dry Weather Flow (PDWF). The ADWF condition is used during the calibration process to accurately model the daily variation in flows discharged to the sewer system by existing users. The PDWF condition is used to evaluate the capability of the sewer system to convey maximum expected dry weather flows within predetermined criteria.

Basis of Flows

According to CuSD staff the Model includes one dry weather flow condition, which is based on the ADWF estimated in the 2016 V&A flow monitoring report (2016 FM Report). The 2016 FM Report documents the average dry weather flow for each monitored subarea of the CuSD service area.

Allocation Methodology

According to CuSD staff each metered basin received the dry weather flow allocation at the manhole where the flow monitor was installed. A 24-hour diurnal pattern was extracted from the flow monitoring data and applied to this allocation manhole, to represent the flow variation over the course of the day.

Flow Verification

CuSD staff indicated that the modeled ADWF was validated as part of the dry weather model calibration

2.2.2 Wet Weather

The wet weather flows reflect the impact of rainfall dependent inflow and infiltration (RDII) contributed to the sewer system in addition to the dry weather baseline flows. Typically, a hydraulic model includes, at minimum, wet weather flow conditions that are based on the following rainfall events: Wet Weather Calibration Event (recurrence interval varies) and Wet Weather Design Event (typically 10-Year 24-Hour). The calibration rainfall event is based on flow monitoring data and use to ensure the hydraulic model accurately simulates the sewer system's response to rainfall. The wet weather design event is used to evaluate the capability of the sewer system to convey the peak wet weather flows within predetermined criteria.

Basis of Flows

According to CuSD staff the Model includes two wet weather flow conditions: a calibration event based on the 2016 V&A FM program and a design storm event for evaluation purposes. Each wet weather event includes a dry weather flow component that is based on the calibrated ADWF flows as well as an RDII component that is the product of the modeled rainfall and the wet weather calibration parameters (RTK factors).

Allocation Methodology

Wet weather flows are modeled for each metered subarea of the CuSD existing system. The allocation of these flows for each basin varies between the calibration and design events. These differences are summarized as follows:

- Calibration Event: The 2016 V&A FM Report estimates the total rainfall for each metered subarea. This total rainfall and varying hourly intensity is converted to a unique hyetograph for each metered subarea within the model.
- Design Event: The NOAA Atlas 14 mapping utility was used to estimate the 10-Year 24-Hour rainfall at the centroid of each metered subarea. According to the 2019 Modeling Report a temporal rainfall pattern based on Santa Clara County design standards was applied. The design rainfall pattern and 10-Year 24-Hour rainfall volume was combined for each basin to create a unique hyetograph for each metered subarea within the model.

Manhole Subcatchment Area

An additional component of wet weather modeling is the manhole subcatchment area. Typically, hydraulic modeling software estimates RDII flows at each modeled manhole. The subcatchment area parameter quantifies the assumed watershed tributary to each manhole. The Model assumes a standard one acre watershed area for each modeled manhole.

Flow Verification

The wet weather flows were verified as part of the wet weather model calibration. Historical flow statistics indicate that the estimated peak wet weather flows from the 10-Year 24-Hour design storm event are reasonable.

2.3 Flow Monitoring Program

Flow monitoring data from the 2016 V&A FM program was the key basis for calibrating the Model under both dry and wet weather flow conditions. The flow monitoring program conducted by V&A consisted of a 28-site 9-week flow monitoring program from January 28, 2016 to March 31, 2016. The flow monitoring program captured multiple rainfall events, with intensities ranging between a 2-Year 8-Hour and 5-Year 3-Day event. An initial event (March 4-7) was used to quantify inflow rates while a subsequent rainfall event (March 11 to 13) was used for estimating infiltration rates.

A review of the flow monitoring report and data indicate that it is an adequate basis for wet weather calibration.

2.4 Model Calibration

Model calibration is a critical component of model development. The calibration process ensures that the hydraulic model reflects the operational characteristics of the real-world sewer system under varying flow conditions. Typically two model calibration efforts are performed: dry weather calibration and wet weather calibration. The dry weather calibration ensures the variation in baseflow during a 24-hour period matches the real-world conditions. The wet weather calibration ensures the sewer system accurately responds to rainfall. The dry and wet weather calibration efforts for the Model are summarized in the following sections.

2.4.1 Dry Weather Calibration

As discussed previously the ADWF documented in the 2016 V&A FM Report for each monitored subbasin was allocated at the manhole representing the monitor location. The hourly variation in flow for each basin, as documented in the 2016 FM Report data, was used to develop a diurnal curve for the allocated dry weather flows. The hourly modeled dry weather flows were compared to the hourly ADWF data. Edits were made to the model diurnal curve in the event there was deviation between the model and actual flow data.

2.4.2 Wet Weather Calibration

A key component of wet weather calibration is the RTK parameters. These parameters characterize the amount of rainfall that enters the sewer system, the amount of time it takes for the rainfall to enter, and the amount of time that the rainfall remains in the system. The initial RTK parameters for the Model were developed using software developed by the Environmental Protection Agency (EPA) that analyzes flow monitoring data and rainfall information to characterize the rainfall response of each monitored subbasin. These initial RTK parameters and rainfall information for the calibration storm event were added to the Model for each monitored subbasin. After running the Model, the modeled peak flows at each monitor location were compared to the monitoring data for the storm event. The RTK parameters were modified until the modeled peak flow closely matched the recorded peak flow.

In general, the review of the wet weather calibration scenario indicates the modeled peak flows are within an acceptable tolerance of the recorded peak flows. However, it was observed that there is a sustained flow response in the model after the peak rainfall occurs, which may result in an overconservative flow estimate under design storm conditions.

3.0 RECOMMENDED MODEL ENHANCEMENTS

Based on the results of the model review several model enhancements have been identified. These recommended enhancements have been categorized as follows:

- Category 1: Improve Model Defensibility
- Category 2: Align with Typical Modeling Practices
- Category 3: Include in Future Model Update

The following sections summarize each recommended enhancement identified during the Model review and provide the enhancement categorization.

3.1 Physical Characteristics

The recommended enhancements for the Model's physical characteristics are summarized as follows.

Category 2 Enhancements

Individual Lift Station Pump Curves: It is recommended that the Model be updated with
individual pump curves for each lift station pump. This ensures each modeled pump is
operating within its design flow range and allows for updates to the model as pumps are
upgraded or rehabilitated.

Category 3 Enhancements

- Variable Area Wet Wells: CuSD staff indicated that several wet wells have non-circular geometry, or separate wet wells for dry and wet weather flows. The Model currently uses a constant area to estimate the wet well volume as the depth changes. Updating the wet wells to a variable area volume estimate would more accurately model the real-world conditions and ensure pump operations are more consistent with current operating procedures.
- Update Model to Most Recent GIS: CuSD staff indicated that the model was most recently updated in or before 2013. It is recommended that the Model pipelines be compared to the most recent GIS records to ensure the model is up to date with any recent construction.

3.2 Flow Development

The recommended enhancements for the Model's flow development are summarized as follows.

Category 1 Enhancements

Redistribute Average Dry Weather Flows: The Model currently includes ADWF
consolidated at single manholes that reflect the flow monitor locations. This methodology
results in no flow in upstream portions of the system as well as any collection mains that
convey flow to the trunk mains. It is recommended that the ADWF documented in the 2016
V&A report be distributed throughout the sanitary system by flow monitoring basin to more
accurately model the flows in the modeled system.

Category 2 Enhancements

 Develop Peak Dry Weather Flow Scenario: Typically, wet weather flows govern the sizing of sewer system pipelines. However, separate capacity criteria are usually developed for peak dry weather flows to ensure that the sewer system has adequate

- capacity to convey peak flows under dry weather conditions as well. It is recommended that the Model be updated to include a peak dry weather flow scenario.
- Update Manhole Subcatchment Area: Each modeled manhole currently has a 1-acre subcatchment area, which is used in the calculation of RDII flow under wet weather flow conditions. This methodology is acceptable for calibration and evaluation of existing sewer system infrastructure. However, should the system be extended to service areas of future growth the 1-acre catchment area methodology may incorrectly estimate the total contributed RDII flow from the new growth area. It is recommended that the manhole subcatchment area be updated based on the areas tributary to each manhole.

Category 3 Enhancements

Infiltration Baseflow for Wet Weather Evaluation: The Model baseflow is unchanged
from ADWF conditions in the Wet Weather Evaluation scenario. While this is acceptable
practice sometimes the baseflow is increased by a factor to account for the effect of
antecedent moisture in the sewer system watershed, which appears as infiltration flow in
the sewer system during a rainfall event. A maximum month wet weather flow peaking
factor may be developed from historical flow statistics and applied to the ADWF baseflow
in a Wet Weather Evaluation scenario.

3.3 Flow Monitoring

There are currently no recommended enhancements to the flow monitoring program used as the basis of the model development and calibration.

3.4 Calibration

The recommended enhancements for the Model's calibration are summarized as follows.

Category 1 Enhancements

• Update Wet Weather Calibration: The wet weather model calibration only reviewed modeled and recorded peak flows, adjusting RTK values until the flows were within an acceptable tolerance. Typically, the modeled and recorded flows are compared for the entirety of the storm event to ensure that the sewer system responds to the storm event for its entire duration and not only under peak rainfall conditions. A review of the modeled RTK parameters indicated that the Model overestimates the moderate and long-term response of the sewer system to the rainfall event, meaning flows following the peak of rainfall remain higher than would be expected when compared to the actual recorded flows.

Category 2 Enhancements

 Update Dry Weather Calibration: As discussed in Section 3.2 it is recommended that the ADWF baseflows be redistributed throughout the sanitary system by monitored subbasin.
 Following this redistribution it is recommended that the dry weather flow calibration be revisited, as the diurnal patterns for the monitored subareas will likely need to be updated to account for flow attenuation between the various points of discharge and the monitor location.

4.0 CONCLUSIONS AND NEXT STEPS

The CuSD XPSWMM hydraulic model is used to evaluate the existing sanitary system under dry and wet weather flow conditions. In support of evaluating capacity for upcoming development and a potential I/I reduction study, Akel was asked to review the XPSWMM model for accuracy and consistency with general modeling practices.

The review found that in general the model is based on typical modeling practices and is an acceptable basis for capacity evaluation. Several model enhancements are recommended as part of this review, some of which are expected to increase the defensibility of the model. Other recommended enhancements are intended to align the model with typical modeling practices or are recommended as part of a future model update.

The enhancements intended to improve the defensibility of the model are described as follows:

- Redistribute Average Dry Weather Flows: It is recommended that the estimated average dry weather flows for each subbasin be distributed to each manhole within the respective subbasin area.
- Update Wet Weather Calibration: It is recommended that the Wet Weather Calibration
 be updated to reflect a storm-duration calibration, which includes calibrating both the peak
 modeled flow as well as the system response following the peak flow occurrence.

We extend our thanks to you; Benjamin Porter, District Manager; and Esteban Delgadillo, Sanitary Engineer; whose courtesy and cooperation were valuable in reviewing and completing this study.

Sincerely,

AKEL ENGINEERING GROUP, INC.

Tony Akel, P.E.

Principal

Sanitary Sewer Customers: Know Your Responsibilities

According to Cupertino Sanitary
District's Operations Code Section
6207, it is illegal for sanitary sewer
customers to discharge storm water,
surface water, ground water, roof
runoff, subsurface drainage, (including
interior and exterior foundation
drains uncontained commercial or
industrial cooling water, or unpolluted
industrial process waters to any
sanitary sewer.

For additional I/I related information, please visit:



Cupertino Sanitary District

20863 Stevens Creek Blvd. Suite 100 Cupertino, CA 95014

Phone: 408-253-7071 Fax: 408-253-5173

E-mail:

bporter@cupertinosanitarydistrict..org

Inflow & Infiltration Reduction Program

Cupertino Sanitary District is proud to lead this effort.





What is Sewer Infiltration and Inflow (I/I)?

Sewer systems are designed to convey sanitary flows to the water pollution control plant for treatment so the treated water can be discharged into San Francisco Bay. Stormwater drainage systems are designed to convey stormwater (runoff from rainfall) to the creeks that flow into San Francisco Bay. Inflow and Infiltration (I/I) is defined as the stormwater and groundwater that enter a sewer system and significantly limit the ability of the sewer system to convey sewer flows.

Groundwater (infiltration) seeps into sewer pipes through holes, cracks, joint failures, and faulty connections. Stormwater (inflow) rapidly flows into sewers via roof drain downspouts, foundation drains, storm drain cross-connections, and through holes in manhole covers. Sewer system pipes can be surcharged when they are forced to transport more flow than they are designed for and may result in an overflow of the sewer during extreme rainfall events.

Why is Sewer I/I a Problem?

Cupertino Sanitary District estimates that I/I makes up 45-50 percent of peak flows in the sewer system during wet weather flow – and that much of this I/I originates on private property. If I/I is ignored, it will cost our community millions of dollars to remove and will restrict any new development projects in the District. CuSD has an ongoing program to identify and reduce the quantity of I&I in the District's sewer system.

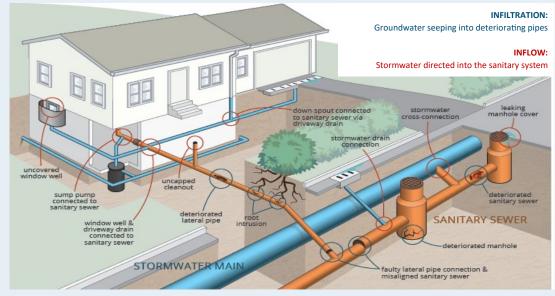


Image Source: Illinois American Water—Wastewater Service (https://bit.ly/38R0xyi)

CuSD Inflow Infiltration Reduction Program

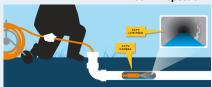
The purpose of the program is to reduce the amount of peak wet weather flow entering the District's sanitary sewer system. Reduction of I/I in the system has the potential to lower the risk of sanitary sewer overflows and decrease the costs of conveying and treating wastewater. The District is implementing I/I reduction feasibility studies and analysis in peak flow project areas to measure the cost-effectiveness of I/I reduction. The program is on a scale large enough to potentially offset the need for larger conveyance or storage facilities. The program is implemented in four phases: Phase 1: Find I/I sources; Phase 2: Fix Sources of I/I; Phase 3: Measure Wet Weather Flows; Phase 4: Model Wet Weather Flows.

Find Sources of I/I

The District uses Sewer System Evaluation
Surveys (SSES) to examine the condition of sewers
located on the private/public property lines to
identify the likely sources of I/I. SSES methods
include smoke testing and closed circuit television
(CCTV) inspection.

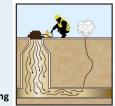
CCTV cameras are robotically sent down sanitary sewer lines and along each side sewer to record a video of sewer conditions. CCTV inspections can identify breaks, root intrusion, leaking water and deteriorating conditions.

CCTV Inspection



Smoke Testing involves pumping smoke through sewers from manholes in streets and observing where the smoke exits. The exiting smoke can indicate a broken pipe, or where the roof or

foundation drains might be illegally connected to the sewer system.



Smoke Testing

Fix Sources of I/I

Once the sources of I/I have been identified, then the defects that are allowing I/I to enter the sewer system will be repaired. The primary focus of this repair will be in fixing broken pipes, manholes, and joint connections. Another focus would be on reducing the amount of I/I that enters the sewer system from storm events by disconnecting roof drain downspouts and other building or yard drains that may be directly connected to the sewer and capping the cleanouts.

Measure Sewer Flows During Rainfall Events

Flow Monitoring



Flow is measured with metering equipment to determine the rainfall that

enters the sewer system. Flow Monitoring can help to identify areas of high flows during a rainfall event, indicating the presence of inflow, infiltration, or both.

Model Peak Flows

Metered flows are used as input to a hydraulic model of the Cupertino sewer system. The model will be used to determine how I/I flows impact the capacity and peak flow in the system and to assess whether there is sufficient capacity available to accommodate new development in the community.

As a Homeowner, what can you do to reduce I/I?

As a property owner, you can reduce inflow and infiltration from your property in the following ways:

- Inspect your roof gutters and downspouts to see if they are connected to the sewer system. If so, have them
 disconnected and re-direct the roof runoff to a concrete splash-plate or gravel bed at the base of your house.
- 2. Avoid planting trees and shrubs over sewer pipes. The roots can damage the structure of the sewer pipe and allow I/I to enter the sewer system.
- Make sure that there are caps on your yard drain cleanouts. Many older homes have a sewer cleanout cap that homeowners removed to drain surface water. Lawn mowers have tendency to break the plastic caps.
 Replacement caps are available at your local hardware store.
- 4. Ensure the basement drains and sump pumps are not connected to the sanitary sewer. Basement drains and sump pumps should be connected to the stormwater drainage system instead.
- 5. Make sure there are no missing caps in your household plumbing system that can generate odors. Replacement caps are available at your local hardware store.
- 6. Replace any leaky, broken sections of the sewer pipe (sewer lateral) that are located on your property.
- 7. Have a plumber inspect your sewer lateral for root intrusion and cracks.
- 8. Make repairs to sewer lateral.

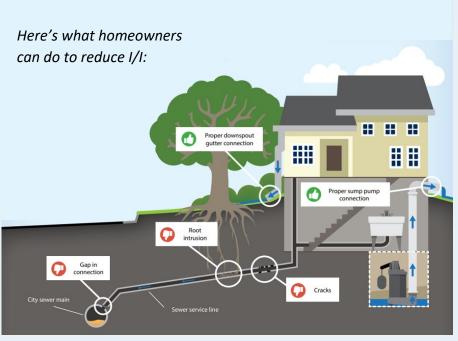
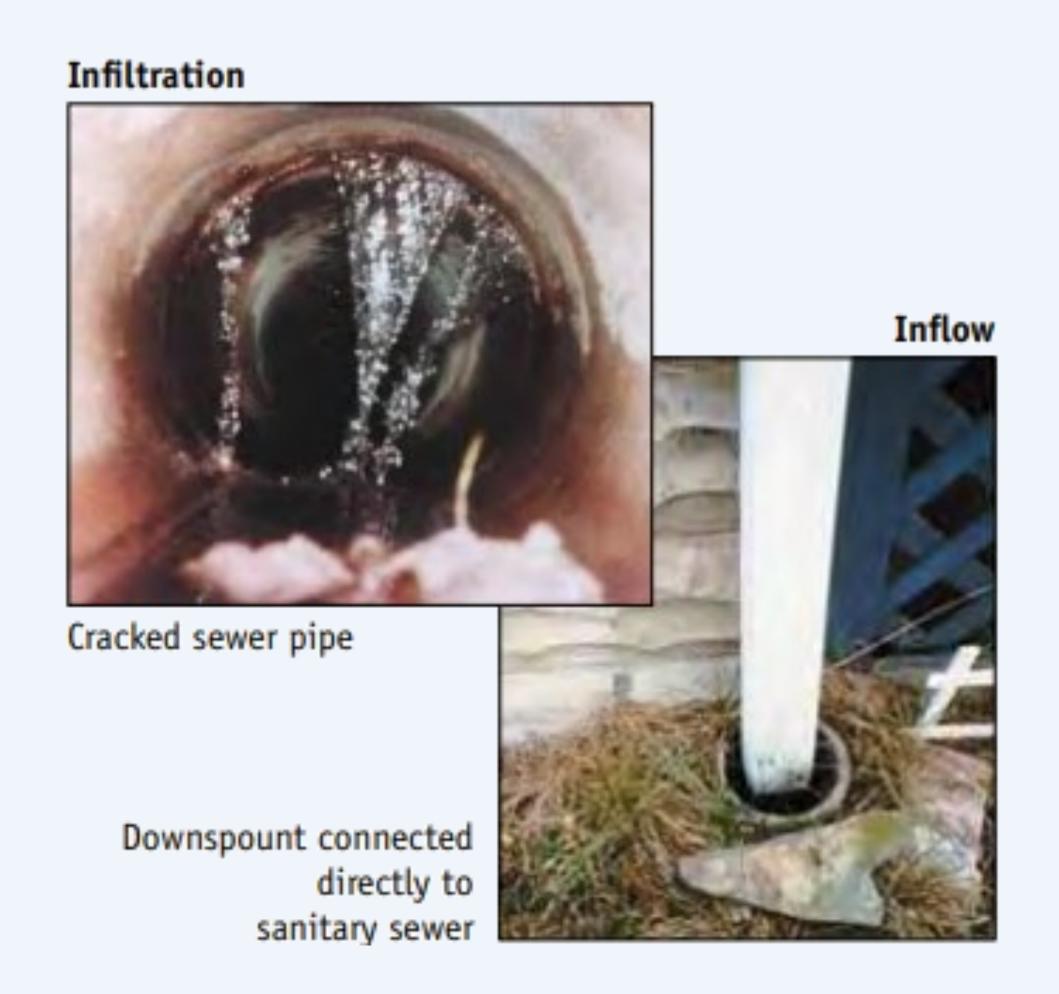


Image Source: Metropolitan Council, St. Paul, MN —Wastewater Service (https://bit.ly/3kYj80S)

Inflow & Infiltration Reduction Program

What is Sewer Infiltration and Inflow (I/I)?



Inflow and Infiltration (I/I) is defined as the stormwater and groundwater that enter a sewer system and significantly limit the ability of the sewer system to convey sewer flows.

If I/I is ignored, it will cost our community millions of dollars to remove and will restrict any new development projects in the District.

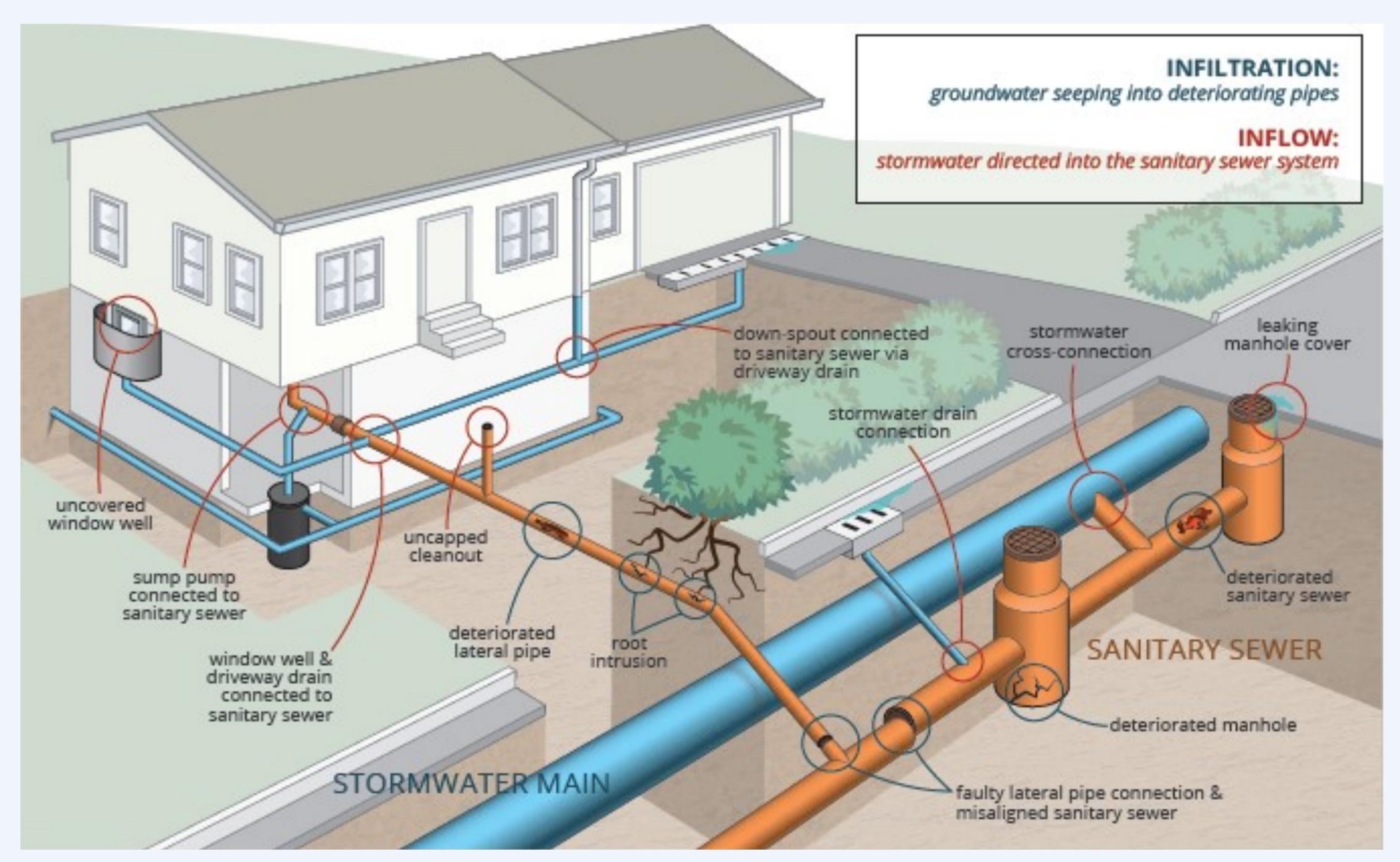


Image Source: Illinois American Water—Wastewater Service (https://bit.ly/38R0xyi)

Inflow & Infiltration Reduction Program

What is Being Done to Reduce I/I?

The District is implementing I/I reduction feasibility studies and analysis in peak flow to measure the cost-effectiveness of I/I reduction. The program is on a scale large enough to potentially offset the need for larger conveyance or storage facilities. Proper downspout gutter connection Proper sump pump connection Root intrusion Gap in connection Cracks City sewer main Sewer service line

Image Source: Metropolitan Council, St. Paul, MN —Wastewater Service (https://bit.ly/3kYj80S)

As a property owner, you can reduce I/I from your property.

Ask one of our reps for a brochure to find out how.

Item 10.D.

SSOs

							Volume of Wash Water Used
Start Date	<u>Location</u>	Cause of SSO	<u>Cat</u>	Main/Lat	Spill Volume (Gal)	Spill Recovered (Gal)	<u>(Gal)</u>
8/27/2021	10500 Ann Arbor Ave, Cup	Roots	3	Lat	7	7	200

PLSDs (Private Lateral Sewage Discharge)

						Volume of Wash Water Used
Start Date	<u>Location</u>	Cause of PSLD	<u>Main/Lat</u>	Spill Volume (Gal)	Spill Recovered (Gal)	<u>(Gal)</u>
None						
110116						

Emergency Calls - Causes

Call Rec'd Business Hours	# of Calls	Call Rec'd After Hours	# of Calls	<u>Call Rec'd Weekend</u> # of Calls
Root Intrusion	2	Root Intrusion	0	Root Intrusion 0
Onsite	0	Onsite	1	Onsite 0
Grease	0	Offset	0	Offset 1
Debris	0	Debris	0	Grease 0
Others	2	Others	0	Others 2
Offset	0	Pump Station	1	Pump Station 2
Total:	4	Total:	2	Total: 5

Repairs

<u>Address</u>	Main/Lat	Description of Work
Florence PS	PS	Rebuilt new spare pump #6
Fargo Dr L5-51 - L5-52	Main	Spot repair of 8' of 6"VCP replaced w/SDR-26 + new wye from 240' - 248'
Greenwood Ct 3277-6 - 3277-3	Main	Spot repair of 6' of 8" VCP replaced w/SDR-26 from 293' - 299' w/CIPP
Greenwood Ct 3277-7 - 3277-6	Main	Spot repair of 6' of 8" VCP replaced w/SDR-26 from 170' - 176'
La Mar Dr 2153-9 - 2153-10	Main	Spot repair of 6' of 8" VCP replaced w/SDR-26 from 234' - 240'

Mainline Maintenance

												FY2021-22	FY2021-22 Annual	% Complete (YTD/Annual
Size of Pipe	4"	6"	8"	10"	12"	14"	15"	16"	18"	> 20"	Total	YTD	Schedule	Schedule)
Mainline Cleaning (ft)	0	21,524	63,954	1,947	328	413	1,354	0	0	0	89,520	247,267	987,432	25%
Easement Cleaning (ft)	0	629	13,442	1,033	0	413	0	0	0	0	15,517	28,131	159,062	18%
CCTV (ft)	0	1,285	11,073	0	0	0	0	0	0	0	12,358	17,834	207,880	9%

Lateral Maintenance

		FY2021-	FY2021-22	% Complete
		22	Annual	(YTD/Annual
Activity	# of Laterals	YTD	schedule	schedule)
Cleaning	420	819	4,247	19%
ССТУ	13	26		
Inspection	28	51		

FOG Inspection - Limited due to Restaurant closures (COVID -19)

		YTD	FY2021-22 Annual	% Complete (YTD/Annual
	# of Inspections	FY2021-22	Schedule	schedule)
Performed	29	49		
Completed	22	34	283	12%
Follow up Needed	4			

SEPTEMBER 2021

09/01: 1st Regular Meeting

09/07: TAC

09/09: TPAC

09/11: Silicon Valley Fall Festival

09/13: SCCSDA Meeting

09/15: 2nd Regular Meeting

	SEPTEMBER 2021								
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday			
			1 1 st Regular Meeting	2	3	4			
5	6	7	8	9	10	11			
	HOLIDAY	TAC		TPAC		SV Fall Festival			
12	13	14	15	16	17	18			
	SCCSDA		2 nd Regular Meeting						
19	20	21	22	23	24	25			
26	27	28	29	30					

OCTOBER 2021

10/04: TAC

10/06: 1st Regular Meeting

10/14: TPAC

10/20: 2nd Regular Meeting

Saturday	Friday	Thursday	Wednesday	Tuesday	Monday	Sunday
	1	,	,	,	,	,
,	8	7	1st Regular Meeting	5	TAC TAC	3
14	15	TPAC	13	12	11	10
23	22	21	2 nd ²⁰ Regular Meeting	19	18	17
30	29	28	27	26	25	24
						31

NOVEMBER 2021

11/03: 1st Regular Meeting

11/09: TAC

11/11: TPAC

11/17: 2nd Regular Meeting

	NOVEMBER 2021									
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday				
	1	2	1 st Regular Meeting	4	5	6				
7	8	TAC	10	TPAC	12	13				
14	15	16	2 nd ¹⁷ Regular Meeting	18	19	20				
21	22	23	24	25	26	27				
28	29	30								