

**CUPERTINO SANITARY DISTRICT
SANITARY BOARD MEETING
WEDNESDAY, OCTOBER 4, 2023**

AGENDA

The meeting will be held in person at 7:00 p.m. in the Stevens Creek Office Center, Suite 100, 20863 Stevens Creek Boulevard, Cupertino, California and via virtual teleconference.

Anyone interested may attend in person, by phone [call 1 (866) 899 - 4679 Conference Access Code: 251566821], or virtually <https://global.gotomeeting.com/join/251566821>.

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 20, 2023
- B. APPROVED AMENDED MINUTES OF AUGUST 16, 2023

5. CORRESPONDENCE

NONE

6. MEETINGS

- A. REGULAR MEETING OF THE SAN JOSE/SANTA CLARA TREATMENT PLANT TECHNICAL ADVISORY COMMITTEE (TAC) TO BE HELD ON MONDAY, OCTOBER 9, 2023
- B. REGULAR MEETING OF THE SAN JOSE/SANTA CLARA TREATMENT PLANT ADVISORY COMMITTEE (TPAC) TO BE HELD ON THURSDAY, OCTOBER 12, 2023

7. REPORTS

NONE

**CUPERTINO SANITARY DISTRICT
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8. UNFINISHED BUSINESS

- A. FORUM PUMP STATION ODOR MITIGATION
- B. INFLOW/INFILTRATION REDUCTION
- C. FINAL ANNUAL REPORT
- D. EMPOWER RETIREMENT PLAN/CALSAVER

9. NEW BUSINESS

- A. VIA REGINA FORCE MAIN
- B. AKEL AGREEMENT - AMENDMENT NO. 3

10. STAFF REPORT

- A. FUTURE DEVELOPMENT PROJECTS
- B. PUMPKIN-FIESTA STORM DRAIN

11. CALENDAR ITEMS

- A. NEXT REGULAR DISTRICT BOARD MEETING IS TO BE HELD ON WEDNESDAY,
OCTOBER 18, 2023

12. ADJOURNMENT

CUPERTINO SANITARY DISTRICT BOARD MEETING WEDNESDAY, SEPTEMBER 20, 2023

The Sanitary Board of the Cupertino Sanitary District convened this date at 7:00 p.m. This meeting was conducted at the District office at 20863 Stevens Creek Blvd, Suite 100, Cupertino. Participation was also available via videoconference.

1. ROLL CALL:

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

Board Members present: Angela S. Chen, Patrick S. Kwok, Taghi S. Saadati, David A. Doyle, and William A. Bosworth.

Absent: None

Staff present: District Manager Benjamin Porter, Deputy District Manager Bob Woodhouse, District Administrative Clerk Frankie Martinez, and Counsel Marc Hynes.

Public:

Bill LeClerc and Bill Hirschman with Ledor, to hear Item 9.A. – Request to Amend Resolution No. 1314

Meg and John Monroe, to discuss Item 9.B. – Forum Odor Control Plan

2. PUBLIC COMMENTS:

There were none.

On motion by Director Chen, seconded by Director Doyle, by a vote of 5-0-0, items 9.A, 9.B, and 10.A. were moved up on the agenda.

9.A. – Request to Amend Resolution No. 1314

The Board discussed Resolution No. 1314, Approving Annexation to the District of Land Identified as APN 503-46-006 and 503-46-007 and Conditionally Allowing Connection of Said Property Pending Completion of Annexation Proceedings. When first approved, APN 503-46-005 was left out of the Resolution by oversight. The property owners requested that the District amend the Resolution to add APN 503-46-005. After discussion by the Board and comments from members of the public, LeClerc and Hirschman, on motion by Director Saadati, seconded by Director Bosworth, by a vote of 5-0-0, the Board approved amendment to Resolution No. 1314, adding APN 503-46-005, as originally noted on the annexation application to LAFCO.

Guests Bill LeClerc and Bill Hirschman left the Board meeting at 7:12 p.m.

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9.B. – Forum Odor Control Plan

Manager Porter reported on District Staff’s actions to investigate and attempts to mitigate the ongoing problem of sewer odor at Forum 1 & 2 pump stations. After discussion and comments by members of the public, Meg and John Monroe, on motion by Director Saadati, seconded by Director Chen, by a vote of 5-0-0, the Board approved Staff’s recommendation to pilot test odor control technology at Cristo Rey pump station, not to exceed a cost of \$50,000, and instructed Staff to include investigation of pump noise reduction at Forum, and continue further structural investigations at Forum.

Guests Meg and John Monroe left the Board meeting at 7:38 p.m.

10.A. – Peak Flow Model

Deputy Manager Woodhouse reported on the hydraulic model used to estimate peak flow. Flow monitoring was done during Covid lockdown. Modeling scenarios were developed for dry weather and wet weather flow. Additional scenarios will be developed to consider full occupancy of non-residential users and future buildout. The model was reviewed, revised, and calibrated by a third party consultant. Three basins showed significantly high I/I and deserve additional investigation. Director Doyle asked staff to provide a summary of the future actions for the peak flow reduction project. There was no Board action.

Deputy Manager Woodhouse left the Board meeting at 8:00 p.m.

3. CLOSED SESSION:

There was no closed session.

4. MINUTES & BILLS:

A. Approval of the Minutes of August 16, 2023

On a motion by Director Chen, seconded by Director Bosworth, by a vote of 5-0-0, the minutes of the regular meeting held on Wednesday, August 16, 2023, were approved with revision.

B. Approved Minutes of August 2, 2023

By consensus, the Minutes of Wednesday, August 2, 2023 are to be Noted & Filed.

C. Payment of Bills and Approval of Financial Statements

The Board reviewed August payable warrants and financial statements. Directors Doyle and Saadati asked for clarification on some invoices and were satisfied with Staff’s response. On a motion by Director Doyle, seconded by Director Saadati, by a vote of 5-0-0, the financial statements and payment of bills for August were approved as written.

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D. Director's Monthly Timesheet

The Board members submitted their September timesheets to Manager Porter.

5. CORRESPONDENCE:

A. The Forum HOA

The Board reviewed the correspondence, which relates to Item 9.B. – Forum Odor Control Plan.

6. MEETINGS:

A. Manager Porter plans to attend the regular meeting of the San Jose/Santa Clara Treatment Plant Technical Advisory Committee (TAC) to be held Monday, October 9, 2023.

B. President Kwok plans to attend the regular meeting of the San Jose/Santa Clara Treatment Plant Technical Advisory Committee (TPAC) to be held on Thursday, October 12, 2023.

7. REPORTS:

A. Cupertino Fall/Fun Festival held September 9, 2023 at Memorial Park, Cupertino, CA

Directors Kwok, Sadaati, and Bosworth attended the festival, along with staff. The festival was a lot smaller than previous years, attendance was low, and booth traffic was very low.

B. Santa Clara County Special Districts Association Meeting Held on Monday, September 11, 2023

Director Bosworth reported Marc Landgraf of Santa Clara Open Space Authority was a special guest speaker, in celebration of its 30th anniversary.

C. Regular Meeting of the San Jose/Santa Clara Treatment Plant Technical Advisory Committee (TAC) Held on Monday, September 11, 2023

Manager Porter reported.

D. Regular Meeting of the San Jose/Santa Clara Treatment Plant Advisory Committee (TPAC) Held on Thursday, September 14, 2023

President Kwok reported.

E. California Association for Sewer System Excellence (CASSE) General Meeting Held on September 14, 2023 in Sacramento, CA

Deputy Manager Woodhouse attended. Manager Porter reported.

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8. UNFINISHED BUSINESS:

A. Loan Payoff

Manager Porter reported to the Board that there is no penalty for early loan payoff.

B. Draft Annual Report

The Board reviewed the Draft Annual Report. Staff is to finalize graphics and bring back to the Board for approval.

9. NEW BUSINESS:

A. Request to Amend Resolution No. 1314 - Moved to top of the agenda, after Public Comments.

B. Forum Odor Control Plan - Moved to top of the agenda, after Public Comments.

C. Request to Attend the California Special Districts Association 2023 Board Secretary/Clerk Conference to be held November 6-8, 2023 in Monterey, CA

Staff member Frankie Martinez requested to attend the Board Secretary/Clerk Conference in Monterey, CA. On a motion by Director Bosworth, seconded by Director Chen, by a vote of 5-0-0, the Board approved attendance.

10. STAFF REPORTS:

A. Peak Flow Model – This item was moved up to the top of the agenda, under Public Comments.

B. Pumpkin Fiesta Storm Drain Project – Manager Porter reported.

C. Future Development Projects – Manager Porter reported.

D. Monthly Maintenance Summary Report – Manager Porter reported.

11. CALENDAR ITEMS:

A. The next regular District Board meeting is scheduled to be held on Wednesday, October 4, 2023. Counsel Hynes will be absent, his partner will be attending in his place.

12. ADJOURNMENT:

On a motion properly made and seconded, at 8:56 p.m. the meeting was adjourned.

Secretary of the Sanitary Board

President of the Sanitary Board

CUPERTINO SANITARY DISTRICT BOARD MEETING
WEDNESDAY, AUGUST 16, 2023
AMENDED

The Sanitary Board of the Cupertino Sanitary District convened this date at 7:00 p.m. This meeting was conducted at the District office at 20863 Stevens Creek Blvd, Suite 100, Cupertino and via virtual teleconference.

1. ROLL CALL:

President Kwok 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, Patrick S. Kwok, Taghi S. Saadati, David A. Doyle, and William A. Bosworth.

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

District Consultant: Richard K. Tanaka

Public: None

2. PUBLIC COMMENTS:

There were none.

3. CLOSED SESSION:

President Kwok adjourned the regular meeting session and opened the closed session at 7:05 p.m. Manager Porter was excused from the closed session.

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.

Board action: There was no reportable action.

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

4. MINUTES & BILLS:

- A. On a motion by Director Bosworth, seconded by Director Chen, by a vote of 5-0-0, the minutes of the regular meeting held on Wednesday, August 6, 2023, were approved as written.
- B. By consensus, the Minutes of Wednesday, July 19, 2023 are to be Noted & Filed.
- C. The Board reviewed July payable warrants and financial statements. The Board requested that staff give regular updates on special projects, and look at PG&E bills for pump stations. On a motion by Director Saadati, seconded by Director Doyle, by a vote of 5-0-0, the financial statements and payment of bills for July were approved as written.

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AMENDED

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

5. CORRESPONDENCE:

There was none.

6. MEETINGS:

- A. Manager Porter plans to attend the regular meeting of the San Jose/Santa Clara Treatment Plant Technical Advisory Committee (TAC) to be held Monday, September 11, 2023.
- B. It is to be determined who, if anyone, will attend the regular meeting of the San Jose/Santa Clara Treatment Plant Technical Advisory Committee (TPAC) to be held on Thursday, September ~~24~~14, 2023.

7. REPORTS:

- A. Director Chen reported on the CSRMA training held August 9, 2023 in San Diego, CA. Topics included digitizing maps, and drone/sensors to replace smoke testing. Director Saadati reported on Smartcover.
- B. The Board reported on the CASA 68th Annual Conference held August 9-11, 2023 in San Diego, Ca. President Kwok reported on emergency drills.
 - 1. Director Chen reported on the CSRMA Board of Directors meeting.
 - 2. Counsel Hynes reported on the attorney's meeting. A topic of interest included AB1023, an ADU Legislation to keep provisions for payments to sanitary districts.

8. UNFINISHED BUSINESS:

- A. The Board discussed the Local Agency Formation Commission (LAFCO) warrant pertaining to share of costs.

9. NEW BUSINESS:

- A. The Board reviewed the Fifth Amendment to Hunton Andrews Legal Services Agreement. On a motion by Director Chen, seconded by Director Saadati, by a vote of 5-0-0, the Board approved the amendment.
- B. The Board reviewed the Draft Annual Report. Staff is to make edits and changes and bring 2nd draft back to the Board.

10. STAFF REPORTS:

- A. Manager Porter reported on Future Development Projects.
- B. Manager Porter reported on the monthly maintenance summary report.

CUPERTINO SANITARY DISTRICT BOARD MEETING
WEDNESDAY, AUGUST 16, 2023
AMENDED

11. CALENDAR ITEMS:

- A. The next regular District Board meeting is scheduled to be held on Wednesday, September 6, 2023. Directors Chen and Doyle will be absent.

12. ADJOURNMENT:

On a motion properly made and seconded, at 8:46 p.m. the meeting was adjourned.

Secretary of the Sanitary Board

President of the Sanitary Board

Our Mission:

- ▶ To protect the public health and environment.
- ▶ To provide for safe and cost-efficient collection of sewage waste.
- ▶ To provide for effective conveyance to the Treatment Plant.



20863 Stevens Creek Boulevard
Suite 100
Cupertino, CA 95014

Phone: 408.253.7071 Fax: 408.253.5173
www.cupertinosanitarydistrict.org



Maintaining a Healthy Sewer System **Item 8.C.**

We continue to see an excessive amount of paper towels, rags, and disposable wipes in the collection system. Toilet paper readily breaks down in the system and does not cause issues. However, other paper products do not break down as easily and can create blockages in your private lateral and the public sewer.

Help us keep our sewers healthy. Remember to never flush wipes, paper towels or tissues because they clog our pump stations and our pipes! The District has 16 pump stations and it is a major maintenance issue, resulting in additional costs to maintain the sewer system.

- ▶ To learn more, go to www.cupertinosanitarydistrict.org where you will find additional information and links to recent media coverage, or contact us at (408) 253-7071.

Keep Your Sewer Pipes Flowing! **DO NOT FLUSH ANYTHING BUT TOILET PAPER**

Flush it!



**No Trash
or Toilet!**



Trash it!



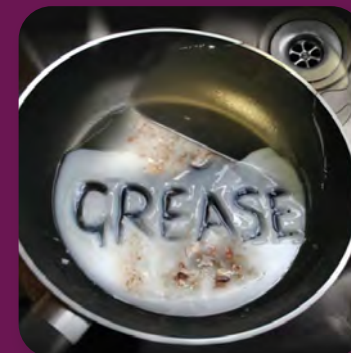
CUPERTINO

SANITARY DISTRICT



2023

ANNUAL REPORT

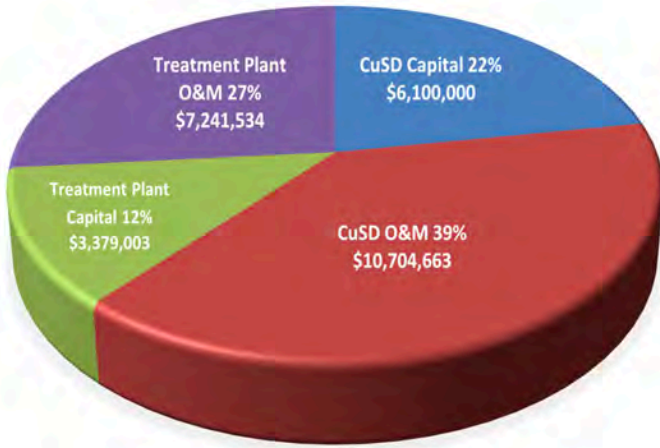


FOG... Fats, Oil, Grease
Stop the Clog! DON'T flush FOG
down your toilet or sink.

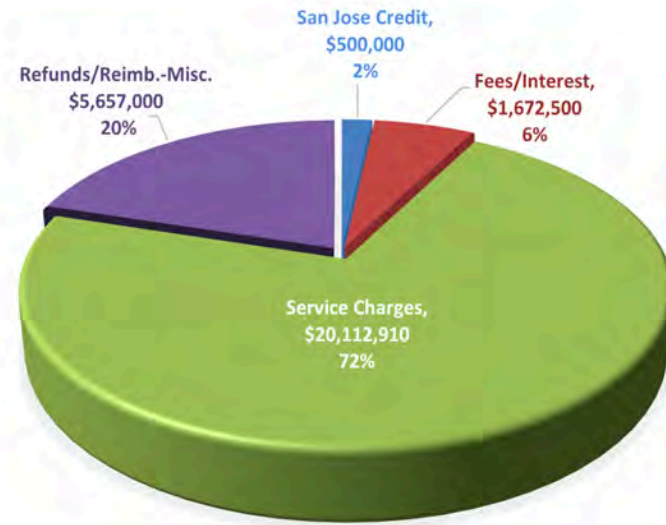
**WIPE IT, CAN IT,
COOL IT, TOSS IT!**

Facts and Figures

Expenses for FY 2023-24



Revenue for FY 2023-24



Notable Accomplishments

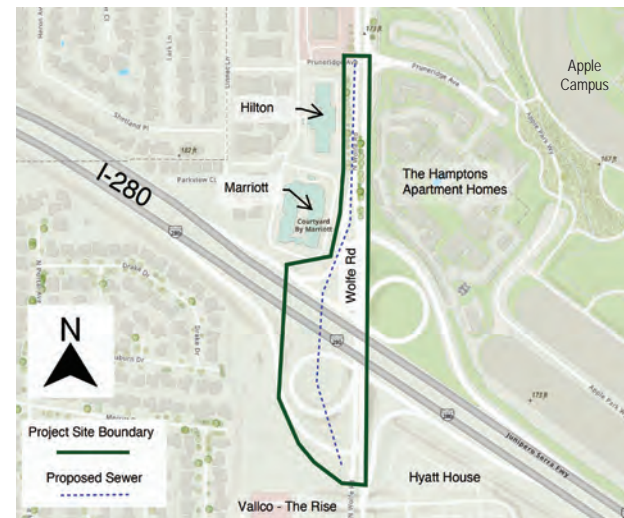
- The District continues its operations and maintenance of sewer mains and laterals. Please do your share to help us keep our sewer system running smoothly.
- Completed repairs for all pipes with significant structural defects within close proximity to creeks
- Installed one additional permanent emergency generator for one of the District's pump stations

What's New?

Wolfe Road Sewer Relocation Project March 2023 – December 2023

The Santa Clara Valley Transportation Authority (VTA), in cooperation with the City of Cupertino and the California Department of Transportation (Caltrans), propose to modify the Wolfe Road Interchange on Interstate 280 (I-280) in the City of Cupertino. The VTA project will replace the existing freeway overcrossing at North Wolfe Road in Cupertino and the new overcrossing structures will be located in the current location of an existing Cupertino Sanitary District sewer mainline.

Cupertino Sanitary District is required to re-locate its existing 15-inch sanitary sewer main within the Caltrans right of way at Wolfe Road in Cupertino due to the planned I-280 interchange project.



- For more information on this project, visit our website: www.cupertinosanitarydistrict.org

What does Cupertino Sanitary District do for You?

Cupertino Sanitary District services over 59,000 customers within the communities of Cupertino, portions of Saratoga, Sunnyvale, Los Altos and unincorporated areas within Santa Clara County.

CuSD covers approximately 15 square miles, with more than 22,000 residential and business units. The District owns and manages over one million lineal feet of sewer mains, half million lineal feet of sewer laterals, 17 pump stations, 4,000 manholes and flushing inlets, and one equipment storage facility. CuSD conveys nearly 5 million gallons of waste-water daily from our customers for treatment at the San Jose/Santa Clara Regional Wastewater Facility.

Customers within the District receive:

- 24/7 Sewer Emergency Response
- Annual Sewer Maintenance of Sewer Lower Laterals and Street Mains
- Continuous Sewer System Repairs and Improvements to Maintain a Healthy Sewer System
- Customer Support and Transparency



Who's Responsible for What?

Homeowner's Responsibility

The owner is responsible for the "Upper Lateral" portion of the House Lateral. If a blockage occurs within the property line, then the homeowner must take responsibility to hire a plumber to remove the blockage.

A Property Line Clean Out is required by the District to service Lower Laterals. It is the owner's responsibility to have one installed, properly maintained, and accessible at all times.

House Lateral



Lower Lateral
The District maintains the Lower Lateral from the cleanout at the property line to the main line.

Upper Lateral
The property owner maintains the Upper Lateral.

District's Responsibility

The District is responsible for the maintenance and service of the lower portion of the lateral and the main sewer line. If a property line cleanout does not exist, the District will not be able to access our portion of the lateral. It is the responsibility of the homeowner to have a cleanout installed at the property line.



Memo

Item 9B

To: Board of Directors
From: Benjamin T. Porter, District Manager-Engineer
Date: October 4, 2023
Re: Akel Engineering Amendment No. 3 for Hydraulic Modeling

Background

The Cupertino Sanitary District utilizes the XPSWMM Hydraulic Modeling software to simulate existing and future flows throughout its sanitary sewer system. The software allows the District to model different buildout scenarios and shows how those scenarios react to rainfall events of varying intensities. The model was constructed using the District's GIS for the network (pipes and manholes) and the measured flows from the 2016 Inflow & Infiltration (I/I) Study performed by V&A.

Akel Engineering completed a review of the District's hydraulic model and found that, in general, the model is based upon typical modeling practices and is an acceptable basis for capacity evaluation. Several model enhancements were recommended by Akel Engineering that will increase the defensibility of the model.

Akel Engineering recommended other minor enhancements which are intended to greater align the model with typical modeling practices as part of a future model update. The enhancements intended to improve the defensibility of the model are described as follows:

- **Complete Dry Weather Model Calibration:** It is recommended that the estimated average dry weather flows for each subbasin be distributed to each manhole within the respective subbasin area.
- **Complete Wet Weather Model 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.
- **Prepare Technical Memorandum:** The technical memorandum will document the hydraulic model calibration approach and results.

The District’s existing agreement with Akel Engineering includes the tasks described above in addition, via amendment to performing the model calibration for dry and wet weather flows. All tasks have been completed for the original contract and amendments.

It was important that the District’s model be calibrated to coincide with modeling and planning efforts by the City of Santa Clara. District Staff and Akel worked together to develop a scope of work that included an enhanced role by Akel to complete the calibration, instead of assisting with the effort. Akel completed the effort with support from District staff. This led to an expedited completion of the calibration. Labor costs that would have been incurred from District staff were incurred from the consultant. The table below provides the task list for the Cupertino Sanitary District XPSWMM Model Calibration by Akel Engineering in coordination with District staff. The scope includes the following major tasks:

Background Review	
Model Review	This task consists of reviewing the current status of the model, distribution of average dry weather flows and critical model parameters.
Flow Data Review	This task consists of reviewing 2021 - 2022 Flow Monitoring Report and data.
Complete Dry Weather Model Calibration	
Allocate Average Dry Weather Flows	This task consists of allocating average dry weather flows in the hydraulic model based on water billing records and existing land use.
Calibrate Peak Dry Weather Flows	This task consists of calibrating peak dry weather flows for 28 basins and the permanent flume. This task will include creating or updating weekday/weekend diurnal peaking patterns for each basin.
Complete Wet Weather Model Calibration	
Calibrate Peak Wet Weather Flows	This task consists of calibrating peak wet weather flows for 28 basins and the permanent flume using the RTK Unit Hydrograph approach.
Prepare Technical Memorandum	
Prepare Draft and Final Technical Memorandums	This task consists of preparing draft and final technical memorandums documenting the hydraulic model calibration approach and results.
Project Management and Meetings	
Project Management and Meetings	This task consists of project management activities and team meetings.

All tasks that were part of the Agreement and amendments with Akel have been completed within the budget.

Now that the model calibration has been completed, the model is available for the following objectives: district engineering staff will assess the impacts of future growth scenarios and occupancy, the impacts of future I/I reduction programs, and the future wet weather flows at the flume, and coordinate with the City of Santa Clara to determine their need for capacity improvements to convey the flows from the District to the San Jose – Santa Clara Water Pollution Control Plant.

Staff requests additional assistance from Akel Engineering with the following As-Needed tasks to achieve the objectives described above:

Task 1.1 Respond to questions from other agencies and their consultants (e.g., City of Santa Clara or Woodard and Curran).

Task 1.2 Assist with the true 2040 Build-out model run scenario that accounts for full buildout of the district and a non-hybrid work scenario (i.e., all offices occupied) and the 10-year design storm.

The fee estimate for the As-Needed Services is shown below. The cost for this amendment is \$25,000.

**Cupertino Sanitary District
As-Needed Hydraulic Modeling Support
Scope of Work and Fee Estimate**

PRELIMINARY

Task No.	Task Description	Scope of Work	Hours					Costs	
			Senior Engineer	Principal Engineer	Senior Engineer	Associate Engineer	GIS Technician	Total	Total
			\$201	\$253	\$209	\$187	\$138		
	Assumptions and Exclusions	<p>Assumptions</p> <ul style="list-style-type: none"> The District will provide a list of hydraulic modeling questions or inquiries in tabular format for Task 1.1. Tasks 1.1 and 1.2 include three (3) 1-hour meetings for discussions, clarifications or progress updates. The District will coordinate with their Planning Department and complete a Buildout Land Use assessment that identifies areas of change/growth as well as corresponding buildout demands for Task 1.2. Task 1.2 assumes areas of change/growth will be provided to Akel in GIS format and consist of relevant information such as existing/buildout land uses and buildout demands. The demand projections for average dry, peak dry and peak wet weather flows will be provided by District Staff based on appropriate design criteria/sewer flow coefficients. <p>Exclusions from the As-Needed Scope of Work:</p> <ul style="list-style-type: none"> Buildout land use inventory and assessment. Buildout demand projections using appropriate design criteria/sewer flow coefficients. Existing and buildout capacity evaluation to document deficiencies. Developing capacity improvements to meet District's target level of service. Technical Memorandum detailing buildout scenario development and analysis. 							
Task 1.1	Responding to Questions	<p>This task includes responding to questions from other agencies and their consultants (i.e. City of Santa Clara or Woodard and Curran).</p> <p>Deliverable: A brief email with a table documenting responses.</p>	6	6				12	\$3,204
Task 1.2	Assist with Build-Out Scenario Development	<p>This task includes assisting the District staff with the development of a true 2040 future scenario that accounts for the full buildout of the District and a non-hybrid work conditions (i.e all offices occupied) and the 10-year design storm. This task will include:</p> <ul style="list-style-type: none"> Updating existing hydraulic model demands with buildout demands provided by the District. Simulating one worst-case peak wet weather flow scenario. Performing a quality control check of the buildout peak wet weather flow scenario. <p>Deliverable: 2040 True Buildout Peak Wet Weather Flow Scenario in EPASWMM5 format.</p>	8	8	40	45.5	4.5	106	\$21,762
Total			14	14	40	45.5	4.5	118	\$24,966



9/28/2023

Once the As-Needed Services are complete the District will be able to accurately determine the worst case design flows in the system (peak wet weather flow at the flume) that represents the maximum occupancy of available office space for average dry weather flows, applying a peaking factor based upon measured diurnal flows to estimate peak dry weather flows and then applying the 10-year, 24 hour design storm.

Recommendation:

Staff recommends the Board authorize the District Manger to execute amendment No. 3 with Akel Engineering with a not-to-exceed amount of \$25,000.

Attachments:

1. Akel Engineering Amendment No. 3

AGREEMENT FOR MANAGEMENT AND ENGINEERING SERVICES

AMENDMENT No. 3

THIS AMENDMENT No. 3, dated October 4, 2023, to the Agreement dated May 5, 2021, by and between CUPERTINO SANITARY DISTRICT OF SANTA CLARA COUNTY ("District"), and Akel Engineering Group, Inc., a California corporation ("Consultant"), is agreed as follows:

The Cupertino Sanitary District utilizes the XPSWMM Hydraulic Modeling software to simulate existing and future flows throughout its sanitary sewer system. The software allows the District to model different buildout scenarios and shows how those scenarios react to rainfall events of varying intensities. The current version of the model was constructed using the District's GIS for the network (pipes and manholes) and the measured flows from the 2016 and 2022 Inflow & Infiltration (I/I) Studies performed by V&A.

Akel Engineering recently completed a calibration of the District's hydraulic model. Akel performed the calibration of the sanitary sewer model using EPASWMM5 with collaboration and input from District staff. Both dry weather and wet weather conditions were calibrated and the results of that calibration can be found in the Akel Model Calibration Report. The wet weather calibration was calibrated using two rainfall events.

The current amendment is an As-Needed Services agreement to use the District's existing Sewer System Hydraulic Model to provide on-call hydraulic modeling support. The following sub- tasks will be completed:

Task 1.1 Respond to questions from other agencies and their consultants (e.g., City of Santa Clara or Woodard and Curran).

Task 1.2 Assist with the true 2040 Build-out model run scenario that accounts for full buildout of the district and a non-hybrid work scenario (i.e., all offices occupied) and the 10-year design storm.

NOW, THEREFORE, it is agreed as follows:

- 1. Scope of Services.** Subject to the direction and approval of District, Consultant shall perform As-Needed services as described below. All services shall be performed to the reasonable satisfaction of the District. The scope includes the following tasks:

Task 1.1 - Respond to questions from other agencies and their consultants (e.g., City of Santa Clara or Woodard and Curran).

Task 1.2 – Assist with the true 2040 Build-out model run scenario that accounts for full buildout of the district and a non-hybrid work scenario (i.e., all offices occupied) and the 10-year design storm - District staff will perform the land use development

assessment and assess the buildout demands. Akel Engineers will perform the buildout modeling using the development information provided by the District. The objective will be to complete a worst case scenario (peak wet weather flow at the flume) that represents the maximum occupancy of available office space for average dry weather flows, applying a peaking factor based upon measured diurnal flows to estimate peak dry weather flows and then applying the 10-year, 24 hour design storm. Additional alternatives may be developed with future task orders. Assumptions and exclusions for the As-Needed Services are as follows:

Assumptions:

- The District will provide a list of hydraulic modeling questions or inquiries in tabular format for Task 1.1.
- Tasks 1.1 and 1.2 include three (3) 1-hour meetings for discussions, clarifications or progress updates.
- The District will coordinate with their Planning Department and complete a Buildout Land Use assessment that identifies areas of change/growth as well as corresponding buildout demands for Task 1.2.
- Task 1.2 assumes areas of change/growth will be provided to Akel in GIS format and consist of relevant information such as existing/buildout land uses and buildout demands. The demand projections for average dry, peak dry and peak wet weather flows will be provided by District Staff based on appropriate design criteria/sewer flow coefficients.

Exclusions:

- Buildout land use inventory and assessment.
- Buildout demand projections using appropriate design criteria/sewer flow coefficients.
- Existing and buildout capacity evaluation to document deficiencies.
- Developing capacity improvements to meet District's target level of service.
- Technical Memorandum detailing buildout scenario development and analysis.

The fee estimate for the As-Needed Services is shown on Attachment 1. The cost for this amendment is \$25,000.

Once the As-Needed Services are complete the District will be able to accurately determine the worst case design flows in the system (peak wet weather flow at the flume) that represents the maximum occupancy of available office space for average dry weather flows, applying a peaking factor based upon measured diurnal flows to estimate peak dry weather flows and then applying the 10-year, 24 hour design storm.

IN WITNESS WHEREOF, the parties have executed this Agreement the day and year first above written.

**CUPERTINO SANITARY DISTRICT
OF SANTA CLARA COUNTY**

By: _____
District Manager

PRINCIPAL-IN-CHARGE:
Akel Engineering Group, Inc

By: _____
Tony Akel, Principal

Attachment 1 - Akel Engineering Amendment Task List and Fee estimate.

**Cupertino Sanitary District
As-Needed Hydraulic Modeling Support
Scope of Work and Fee Estimate**

PRELIMINARY

Task No.	Task Description	Scope of Work	Hours					Costs	
			Senior Principal Engineer	Principal Engineer	Senior Engineer	Associate Engineer	GIS Technician	Total	Total
			\$201	\$253	\$259	\$107	\$136		
	Assumptions and Exclusions	<p>Assumptions</p> <ul style="list-style-type: none"> The District will provide a list of hydraulic modeling questions or inquiries in tabular format for Task 1.1. Tasks 1.1 and 1.2 include three (3) 1-hour meetings for discussions, clarifications or progress updates. The District will coordinate with their Planning Department and complete a Buildout Land Use assessment that identifies areas of change/growth as well as corresponding buildout demands for Task 1.2. Task 1.2 assumes areas of change/growth will be provided to Akel in GIS format and consist of relevant information such as existing/buildout land uses and buildout demands. The demand projections for average dry, peak dry and peak wet weather flows will be provided by District Staff based on appropriate design criteria/sewer flow coefficients. <p>Exclusions from the As-Needed Scope of Work:</p> <ul style="list-style-type: none"> Buildout land use inventory and assessment. Buildout demand projections using appropriate design criteria/sewer flow coefficients. Existing and buildout capacity evaluation to document deficiencies. Developing capacity improvements to meet District's target level of service. Technical Memorandum detailing buildout scenario development and analysis. 							
Task 1.1	Responding to Questions	<p>This task includes responding to questions from other agencies and their consultants (i.e. City of Santa Clara or Woodard and Curran).</p> <p>Deliverable: A brief email with a table documenting responses.</p>	6	6				12	\$3,204
Task 1.2	Assist with Build-Out Scenario Development	<p>This task includes assisting the District staff with the development of a true 2040 future scenario that accounts for the full buildout of the District and a non-hybrid work conditions (i.e all offices occupied) and the 10-year design storm. This task will include:</p> <ul style="list-style-type: none"> Updating existing hydraulic model demands with buildout demands provided by the District. Simulating one worst-case peak wet weather flow scenario. Performing a quality control check of the buildout peak wet weather flow scenario. <p>Deliverable: 2040 True Buildout Peak Wet Weather Flow Scenario in EPASWMM5 format.</p>	8	8	40	45.5	4.5	106	\$21,762
Total			14	14	40	45.5	4.5	118	\$24,966



9/28/2023

**CUPERTINO SANITARY DISTRICT
MEETING/EVENT SCHEDULE**

Item 11.A.

OCTOBER 2023

10/04: 1st Regular Meeting
 10/09: TAC
 10/12: TPAC
 10/18: 2nd Regular Meeting

OCTOBER 2023						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4 1 st Regular Meeting	5	6	7
8	9 TAC	10	11	12 TPAC	13	14
15	16	17	18 2 nd Regular Meeting	19	20	21
22	23	24	25	26	27	28
29	30	31				

NOVEMBER 2023

11/01: 1st Regular Meeting
 11/06: TAC
 11/09: TPAC
 11/15: 2nd Regular Meeting
 11/23-24: Holiday-Office Closed

NOVEMBER 2023						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 1 st Regular Meeting	2	3	4
5	6 TAC	7	8	9 TPAC	10	11
12	13	14	15 2 nd Regular Meeting	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	HOLIDAY - CLOSED	

DECEMBER 2023

12/04: SCCSDA
 12/06: 1st Regular Meeting
 12/11: TAC
 12/14: TPAC
 12/20: 2nd Regular Meeting
 12/25: Holiday-Office Closed

DECEMBER 2023						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4 SCCSDA	5	6 1 st Regular Meeting	7	8	9
10	11 TAC	12	13	14 TPAC	15	16
17	18	19	20 2 nd Regular Meeting	21	22	23
24	25 HOLIDAY - CLOSED	26	27	28	29	30
						31